Social Chaos Survival Guide

2004 Edition

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Chapter 1:
Police State, USA

Since you purchased this manual with an eye toward protecting yourself should any of a number of “unthinkable” events happen to you and your family, I know I don’t have to sell you on the great potential for disaster in our modern age. Nevertheless, a few points are in order before we venture into the nitty gritty how-to of the following chapters.

Probably the most important point is that the best gear you can have is already sitting between your ears. People often forget this and try to get help when they should be engaged in some do-it-yourself, lift-yourself-up-by-your-own-bootstraps work. While it’s good to have emergency workers, neighbors, and friends to fall back on, you need to avoid the “victim” mentality that our culture and government have indoctrinated us with. Sometimes emergencies happen when the police, medical help, or what-have-you can’t get there in time to help. In such a do-or-die situation, you’d better be ready to help yourself or at least die trying, rather than going to the great beyond with a pitiful whimper.

The Chinese have an old curse which, loosely translated, is: May you live in interesting times. We have been so cursed.

The attacks of September 11, 2001 were shocking and horrifically destructive. But they could have been worse. Much worse. Future terrorist attacks may employ nuclear or biological weapons that could spread death, destruction, fear, and panic throughout America.

Embattled CIA Director George Tenet testified to Congress in 2004 that Osama bin Laden’s Al Qaeda terrorist network has regrouped since 9-11. According to Tenet, terrorists are plotting a “spectacular” attack on the United States. Tenet believes that, based on interrogations with captured Al Qaeda henchmen, a biological attack is the most immediate danger.

Terrorists may launch attacks on the U.S. designed to coincide with and distort the outcome of a major political event (such as the presidential election in November 2004). On March 11, 2004, on the eve of Spain’s national election, Islamic militants bombed Madrid passenger trains, killing nearly 200 people. In the aftermath, frightened Spanish voters threw out the pro-U.S. ruling party (which had been expected to retain power). It was a victory for the terrorists.

The highly respected Strafor Intelligence Report projects that sometime before the November 2004 elections in the United States, terrorists are likely to attack — as a means of removing George W. Bush from office.

Some 140 years ago, our land saw brother fighting brother in a bloody civil war that many historians see as the first “modern” war involving strategic destruction of cities and manufacturing. Unfortunately racism coupled with religious and political hatred from all factions make the possibility of a future civil war in our land a prospect that isn’t too hard to imagine. With places like Rwanda and Bosnia demonstrating how brutal
such fighting can be, one doesn’t have to be a pessimist to suggest a similar war in the US might slaughter millions before grinding to an end.

Go back a few hundred years and you find our American land under the control of a despot, with abuse from foreign troops leading to a revolution that brought forth the Bill of Rights and our Constitution. With the rapid dismantling of much of our military and the transference of power to NATO and the UN, it isn’t hard to imagine a future when this condition might return to our shores.

It’s an unfortunate truth that men will treat their fellow men worse than animals if an authority at the head of government gives them the least bit of encouragement. A few religious or ethnic differences are all that are needed to spur the most barbarous of actions.

Governments have warred on their own citizens with alarming regularity, as the victims of the Nazi, Stalin, Cambodian, and Mao purges attest by the millions. Though on a much smaller scale, our own country is now stained by similar innocent blood as testified to by the Davidians who were killed during the U.S. government’s violent siege of their property outside Waco. Ditto for the protestors at Wounded Knee and the Weaver family at Ruby Ridge (the latter group receiving several million dollars in outside settlements so our FBI could avoid a wrongful death suit).

It doesn’t take much of an imagination to suggest that a few changes in policy and leadership could bring on a deadly, Big Brother nightmare here in the US. Little wonder that American Historian Gore Vidal once quipped, “Most of today’s terrorists can be found within our own governments, federal, state and local.”

A War on Terrorists or a War on Citizens?

You may not be a terrorist, but the government assumes that you could be. Everyone is treated as a potential terrorist, even 85 year-old grandmothers. That’s because targeting those segments of the population most likely to contain terrorists (i.e., young Muslim men of Middle Eastern descent) for special scrutiny would be politically incorrect. So the government is targeting each and every one of us.

In the months following the September 11th terrorist attacks, over 2,000 people (many of whom were U.S. citizens) were imprisoned by the FBI or police on suspicion of having terrorist connections. Only two were actually charged with a crime related to September 11, according to the International Society for Individual Liberty. Basic due process rights have been systematically subverted.

Our freedoms are eroding. It’s almost as if our own government is doing the terrorists’ dirty work. Osama bin Laden himself was quoted as saying in October 2001, “I tell you, freedom and human rights in America are doomed. The U.S. government will lead the American people, and the West in general, into an unbearable hell and a choking life.”

The USA Patriot Act of 2001 was the first giant leap toward tyranny in the name of fighting terrorism. Some provisions of the dense law may prove useful to the FBI and CIA in apprehending terrorists. But other provisions have precious little to do with terrorism and much to do with trampling traditional civil liberties. The full ramifications of the Patriot Act on privacy and freedom may not be known for years.

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How the USA Patriot Act Threatens Constitutional Rights

The terrorist attacks of 2001 spurred a panic-stricken Congress to pass the so-called USA Patriot Act, a massive bill with a name that suggests anyone speaking out against it must not be a patriotic citizen. The bill was hastily signed into law by President George W. Bush with hardly any public debate on what was actually in the bill.

In truth the bill was the proverbial "kitchen sink," with some useful things, some bad things, and some downright frightening things thrown into it. During the 1970s and during the Clinton years, liberals enacted reforms preventing the FBI from basic information-sharing on relevant issues pertaining to national security while weakening the CIA. The USA Patriot Act opens the door to greater information-sharing among the FBI, CIA, and other crucial government agencies. Unfortunately, it opens a whole lot of other doors, too. The Act:

• Permits the government to spy on web surfing, including terms entered into search engines simply by getting a judge anywhere in the U.S. to give the go ahead.
• Gives federal agents the right to examine any student’s college records.
• Gives federal authorities the power to use wiretaps without the approval of a judge, instead only requiring that the wiretap be based on the promise from law enforcement authorities to a judge that there was “relevance” in creating the tap.
• Allows for the use of “roving” wiretaps, which enable FBI agents to tap any phones that a suspect might be expected to use.
• Enables federal agents to intercept and read e-mails (essentially reinstating the notorious Carnivore e-mail scanning system).
• Permits federal agents to conduct “sneak and peek” searches of a person’s private property before notifying the suspect of the search.
• Sanctions the use of “secret searches” under which investigators do not provide notification before or after the search, keeping the event entirely secret.
• Creates provisions for a DNA database of (for starters) violent criminals.

Patriot Act Does NOT Make America Safe from Terrorism

Big Government Republicans are out of touch with their own party’s core principles when they suggest that the package of rejected Clinton-era citizen surveillance schemes now known as the “USA Patriot Act” suddenly became “good” -- simply because it was passed by Republicans.

Fortunately, many on Capital Hill who voted for the law are having second thoughts and in recent months have voted to repeal some elements of the Patriot Act.

Due to controversy over the USA Patriot Act generated by the conservative alternative media and falling support in Congress favoring renewal of key elements of the Patriot Act, the Administration has launched a public relations offensive—including the dispatch of Attorney General John Ashcroft on a multi-city tour to ally public concerns.

Unfortunately, Attorney General John Ashcroft’s speaking tour emphasized soft-ball questions mostly from carefully-selected audiences of law-enforcement officers (whose powers are greatly expanded by the USA Patriot Act). Instead of confronting widespread concerns about the new law, Ashcroft has implied that critics of the USA Patriot Act -- even long-standing conservative allies noted for their strong support of national defense -- are terrorist sympathizers (David Keene of the American Conservative Union, for example, has written a column lamenting the Attorney...
General's troubling propensity to cast aspersions on conservative critics of the USA Patriot Act).

Here's the situation: Far from being "fringe" malcontents, opponents of the USA Patriot Act include nearly 200 local communities that have passed anti-Patriot Act resolutions. Groups from across the political spectrum are opposed -- such as the American Conservative Union and the ACLU, as well as the conservative Free Congress Foundation.

Passage of the USA Patriot Act was driven primarily by fear. The World Trade Center still smoldered as Attorney General John Ashcroft warned Congress that future terror attacks were imminent. He also represented that immediate passage of the USA Patriot Act would help thwart the expected attack.

Most members of Congress did not read the 312-page Patriot Act (which modified 15 major statutes involving search and seizure, citizen surveillance and money laundering). The result is a dangerously vague law subject to draconian rule-making by bureaucrats. Worse, it passed via a closed door "deliberative" process with no conference committee, no committee reports and no final hearings to include the views of opponents. Which means that activist judges will have few benchmarks by which to gauge the intentions of the legislation's drafters -- and thus little basis (or reason) to overturn future excesses in the law's implementation.

The Treasury Department's anti-"money laundering" enforcers and the IRS have vastly expanded their information-acquiring abilities as a consequence of the Patriot Act. There's no telling to what heights (or depths) information gathering will be taken in future administrations. Corrupt administrations such as those of Richard Nixon and Bill Clinton have used the IRS to gather information about political enemies and initiate audits and/or criminal investigations against these enemies. Thanks to the Patriot Act, a future President Hillary Clinton will be able to unleash the IRS and the FBI to identify and harass the most vulnerable members of the "vast right-wing conspiracy."

Many conservatives in Congress decided to vote for the USA Patriot Act after "sunset" provisions were inserted into the bill that set expiration dates for some of the Act's most draconian provisions. Consequently, at the end of 2005, the government would lose much of its legal authority to spy on citizens. Governments don't like to surrender power, and the Justice Department will undoubtedly put up quite a fight to retain each and every one of the powers conferred by the Patriot Act. "The Patriot Act has been an extremely useful tool, a demonstrated success, and we don't want that to expire on us," said a senior Justice Department official.

Target: Financial Privacy

The hastily passed USA Patriot Act of 2001 contains provisions that make it easier for federal agents to track and seize the financial assets not only of suspected terrorists, but of anyone who happens to engage in "suspicious" financial transactions. As of this writing, the Treasury Department (under which the Internal Revenue Service operates) is assembling task forces and churning out new anti-money-laundering regulations that threaten the financial privacy of every law-abiding citizen.

Obviously, no one objects to the government raiding the financial holdings of terrorists. But, one wonders, why are task forces and regulations being introduced that can be applied to a broad range of "money laundering" activities that have no connection whatsoever to terrorism? Could it be that the IRS simply wants to seize more tax money — under the pretense of "fighting terrorism"?

On October 23, 2001, Under Secretary of the Treasury Peter Fisher delivered a speech to a group of bankers in which he outlined the government's plans to monitor and track a copious amount of financial
transactions. Of course, the government would have to rely on banks themselves to do much of the dirty work. As Fisher acknowledged,

We at the Treasury are not at the front lines in these efforts, you [bankers] are. The important question is not how you can help us but, rather, whether we are doing the right things to help you. The cameras and the microphones may point at the podiums in Washington, but you are on the front lines of our most important objectives.

After the terrorist attacks, President Bush asked Secretary O'Neill to lead the global campaign to deny terrorist groups access to the international financial system, to impair their ability to fundraise and to expose, isolate and incapacitate the terrorists' financial resources. These efforts are unprecedented in their scope and intensity.²

The U.S. government claims to have frozen $115 million in assets of 210 terrorists or terrorist supporters, but officials admit they still have not been able to get a hold of most of al Qaeda's assets.³ Thus, despite brand-new intrusive and sophisticated federal methods of monitoring the financial activities of law-abiding Americans, the cash flow through al Qaeda terrorist cells continues to be largely untraceable. Terrorist assets are generally not in freezable or monitorable banks accounts or institutions. Rather, they have long since been transferred to untraceable commodities, such as diamonds and gold.

Once the feds consolidate citizen surveillance controls over conventional methods of commerce (bank accounts, credit cards and all lending institutions), we may expect a similarly sweeping assault against citizens who have gold or diamond assets, all in the name of pursuing terrorists. Indeed, in September 2002, the U.S. Treasury Department took a step in that direction as it announced that it will create another new money-laundering task force. Deputy Treasury Secretary Ken Dam, in testimony before the House Financial Services Committee, suggested that the Treasury Department will be issuing new regulations to try to track non-paper assets such as gold and diamonds.

**Internal Passport System Moves Forward**

Without so much as a debate in Congress, federal bureaucrats are creating a traveler "scoring" system that checks deeply into the background of each air travel passenger, and assigns them a "risk assessment. Known as CAPPS II, the secretive system checks a traveler's credit purchases, credit reports, their legal/tax status and other records that might suggest a "terrorist" connection.

As critics have predicted, the feds plan to use CAPPS II for purposes far beyond that of "identifying terrorists." The Transportation Security Administration (TSA) recently announced that CAPPS II would be expanded to cover "law-enforcement" issues.

Of course, what the politicians don't say is that due to such "mission creep," CAPPS II will almost certainly (eventually) be used to deny travel to people who have offshore bank accounts, own precious metals, owe back taxes, are classified as dead-beat dads, stand accused of any number of petty infractions, or have political views that are deemed "pro-terrorist."

Once perfected, the CAPPS II system can easily be expanded to cover all aspects of travel, where eventually you will need a bureaucrat's permission to board a train or bus, rent a car, or check into a hotel.

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State or federal authorities may one day be able to “electronically” revoke your driver’s license, close your bank account, and otherwise cut you off from civilization until you meet their demands.

If you own your own land and can live off it (strategies for self-sufficiency will be explored later in this manual), you won’t be dependent on obtaining government “permission” to travel and function in society.

**Bureaucrats Have New Tools to Harass Pro-Freedom Groups**

Should “President” Hillary re-take the reins of power, she will have vastly expanded powers that will make the first Clinton Administration’s use of the IRS against conservative organizations seem like “the good old days.” A Hillary White House could easily apply new open-ended definitions of “terrorism” to crack down on any political organization with a member who has violated any state or federal law – even misdemeanors. At particular risk are the following sorts of groups:

- Tax protestors (these include people who advocate non-compliance with America’s draconian tax requirements and people who interpret the incoherent tax laws differently than the IRS).
- Organized militias.
- Religious fundamentalists (including Christian groups that might be deemed “extremist” by the government).
- Anti-abortion activists.
- Gun enthusiasts.
- Foreign policy radicals (including anti-UN or anti-war crusaders).
- Property rights organizations (except the tepid, inside-the-beltway think tanks).
- Conspiracy buffs (UFO cover ups, “CIA shot Kennedy,” “Israel unleashed 9-11,” etc.)
- Racists and “racial pride” groups (including, these days, just about any non-historical organization that prominently displays the politically incorrect Confederate flag).
- Anti-establishment political parties, such as the Libertarian Party.

If staying off the government’s radar screen is a top priority for you, then the above ten types of organizations should absolutely, positively not list you as a member. Not at your home address, anyway. When joining organizations that may be controversial or suspicious in the eyes of the government (or a future government), use a fictitious or altered version of your name (initials only, perhaps) and a mail drop other than your home or business (for example, use a mail box you rent from the UPS Store or other mailing and packaging outfit).

The government is now tracking hundreds of private advocacy groups and compiling lists of their members. Under Section 215 of the Patriot Act, a single threat made by telephone to an abortion clinic by a pro-fetus rights activist could compel every political organization of which that person is a member to be forced to surrender their membership lists.

Section 802 of the Patriot Act says that domestic terrorism includes any illegal acts which are “dangerous to human life,” or which are “intended to intimidate or coerce a civilian population or influence the policy of a government by intimidation or coercion.” The language is so vague that individuals could be classified and treated as “terrorists” for participating in a political demonstration where a fist-fight breaks out.

The *Financial Privacy Report* has documented how similar laws have been used to arrest anti-abortion activists, seize the assets of some defense attorneys and even detain six year olds for making “terrorist” threats.
Seeds of an Emerging Police State

The fact that government has used the terrorist attacks as an excuse to unleash its surveillance capabilities to monitor and track U.S. citizens makes one wonder: what will happen if an even more horrifying wave of attacks occurs in the future?

The likely answer is unsettling. Even before September 11, the U.S. government was busy making plans to respond to a major terrorist attack. Michael Wermuth, head of a group advising the government on how to react to a nuclear, chemical, or biological terrorism attack was making these recommendations (in public, no less):

- The attorney general and the defense secretary should call in soldiers to cities to keep order.
- The military should be engaged directly in arrests within U.S. borders.
- The military should conduct search and seizure within the U.S.
- The military should be in charge of intelligence collection for law enforcement purposes.
- The military should enforce quarantines. 4

As commentator Paul Craig Roberts aptly noted, this sort of draconian strategy for dealing with terrorist threats “prepares the way for superstates ruled by unaccountable elites that turn countries into provinces and the 50 American states into administrative zones for the government in Washington, D.C.”

Drills have been conducted in a number of major U.S. cities to teach local governments how to operate in tandem with the Federal Emergency Management Agency (FEMA) and the Department of Defense in instituting martial law in the aftermath of a major terrorist attack.

Meanwhile, the Bush Administration is developing a “shadow government” that would assume power in the event of a catastrophic attack on Washington, D.C. Few details are known at the time of this writing about this shadow government or what sorts of powers it may assume. Government-funded think tanks in Washington, D.C. have gotten together to form the Continuity of Government Commission, which is drawing out plans for such things as the appointment of unelected individuals to serve in Congress (more on this scheme later).

Dictatorship through Executive Order

The power of the President to issue executive orders (a power not expressly granted by the Constitution) is extremely dangerous. Since they can be issued without consulting Congress or informing the public, and since they effectively have the full force of law, executive orders are a means by which a future President might impose rule by decree — a dictatorship in the United States.

A number of little-known executive orders have been issued by Presidents over the years (the practice seems to have begun in earnest with President Kennedy) that provide for the imposition of

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command-and-control authoritarian measures in the event of a declared national emergency.

President Richard Nixon took things to the extreme, seemingly thumbing his nose at every provision of the Bill of Rights via executive orders. His Executive Order 10996, for example, provides for government control of the media. Other Nixon executive orders enable the government to:

- Seize all power plants, fuels, and minerals (10997).
- Take over farms and food distribution (10998).
- Transport civilians to areas to form work brigades (11000).
- Relocate any populations within U.S. borders (11004).
- Control all railroads, waterways, and storage facilities (11005).

Each of these executive orders are still on the books. They have not been repealed by succeeding Presidents.

After Nixon resigned from office, President Ford might have been expected to undo some of the abuses of power Nixon plotted out with his executive orders. Instead, Ford piled on even more executive orders to make the government’s potential hold over the public even more complete.

The most sweeping of these is the secretive Executive Order 11921. Only a few copies were distributed. It is no longer available from the Government Printing Office or from the White House. It might still be found in some libraries.

The preamble of the order reads: “WHEREAS our national security is dependent upon our ability to assure continuity of government, at every level, in any national emergency type situation that may confront the nation...” And then, based on that dramatic rationale, it goes on to curtail basic freedoms, one by one.

President Ford’s Executive Order 11921 gives the government the power to effectively shut down all private communications. Part 4 outline a “Censorship Agreement” between the Department of Defense and the General Services Administration. Section 27 of Part 4 gives the Defense Department and Federal Communications Commission control of all devices capable of emitting electromagnetic radiation — radios, CBs, cellular phones, and possibly computers.

Ford’s executive order made it so the government can control anything and everything whenever a President decides to declare a national emergency. If your family needs food, then you must stand in line and have the right ID. If you want to engage in business, you must have the government’s blessing first. If you want to travel anywhere, you’ll need permission. If you want to communicate with anyone, the government will want to know why. There’s even a provision in Executive Order 11921 establishing that the government may confiscate “excess and surplus real and personal property” (guns, gold, furniture, automobiles, etc.) that federal bureaucrats think they need more than you do.

Anything the government might now or in the future regard as “contraband,” such as large sums of cash, should not be kept at home, but should instead be hidden in a well-secured location.

The Nixon and Ford executive orders seemed to give the government everything it could possibly need to control the population in a crisis. But more executive orders were still forthcoming. Jimmy Carter added Executive Order 12149, and Ronald Reagan added 12472. Bill Clinton added a string of “environmental” executive orders. These didn’t limit Nixon’s and Ford’s handiwork. They added to it, carefully covering a few points omitted in the original documents.
The Bush Administration’s Push for Secrecy

President George W. Bush could have invoked any of the above-mentioned emergency powers when he declared a national emergency after September 11, 2001. The question is: who will be President when the next terrorist attack hits us?

Imagine the powers a future President Hillary Clinton may try to assume during a declared national state of emergency. Confiscating guns, seizing control of health care, censoring the “vast right-wing conspiracy”... these are all things Hillary has dreamed of doing for years. These are things she could do and undoubtedly would try to do if she were President during an “emergency.”

Unfortunately, President Bush has signed executive orders of his own that will help future Presidents grab power and even conceal their actions from the public. On November 1, 2001, the President issued an executive order (13233) restricting public access to presidential documents. Ironically, on the White House web site (http://www.whitehouse.gov/news/orders), Executive Order 13233 is not even listed among the other orders Bush has signed. Apparently, it’s not something the White House is especially proud of.

Then on March 25, 2003, Bush issued Executive Order 13292, which expands the sort of material the government may deem “classified,” “secret,” or “top secret.” The order eliminated the previous standing presumption that “if there is significant doubt about the need to classify information, it shall not be classified.” Now, apparently, everything is presumed to be secret. Executive Order 13292 also makes it harder for formerly classified material to be declassified.

Lamented one concerned journalist in Reason magazine:

No doubt, protecting the American people does occasionally require secrecy, but expanding the scope of secret activities makes it difficult for the public, the press, or even Congress to know whether or not the agencies are performing effectively and within the confines of our constitutional rights. The Bush administration has made this oversight task even more difficult by allowing agencies to classify more and more information as top secret and by restricting Freedom of Information Act inquiries.

“Continuity of Government”: Blueprint for Tyranny

President Ford’s Executive Order 11921 emphasized the need for “continuity of government, at every level, in any national emergency type situation that may confront the nation.” Toward that end, groups of Washington insiders are proposing the autocratic appointment of legislators during a crisis — effectively abolishing the Constitution’s guarantee of a republican form of government. The so-called Continuity of Government Commission (COGC) knows that filling the chambers of Congress with unelected members would be unconstitutional, so the Commission is pushing for a constitutional amendment to make it possible.

The continuing panic over terrorism may indeed convince enough lawmakers to amend the Constitution beyond recognition.

Influential Washington think tanks such as the Brookings Institution say a “Continuity of Government” amendment is necessary due to the terrorist threat. If a catastrophic attack hits the nation’s capitol, killing a large number of legislators, how would Congress be able to resume its functions?

The Constitution already provides the answer. Article 1, Section 2 gives state governors that authority to hold special elections to fill vacancies in the House. There are other mechanisms in place to make sure the laws are enforced. What about the need to quickly pass new laws? Well, instead of rushing to pass another liberty-eroding Patriot Act, perhaps if Congress isn’t able to act for a while, we’d be spared from such draconian and dangerous legislation. Terrorism has never been legal, and the government already has everything it needs to combat it without the enactment of more laws.

It’s true that the risk of a catastrophic terrorist attack is very real and shouldn’t be ignored. But civilization has never existed without risk. With proposals like the COGC, fear-mongers are attempting to carve away the pillars of civilization (freedom, openness, the presumption of innocence) in the impossible pursuit of insulating us completely from the risk of terrorism. No matter how much power the government acquires, you can never depend on it to protect you. Ultimately, you’ll have to take steps to protect yourself from the unthinkable, which is what this manual is all about.

**Other Dangers**

I’m reminded of the many survivors of disasters that I’ve seen through the years who say, “We never thought it could happen here.”

This type of complacency is one of the dangers we must all face up to. One of the clichés of the survival movement is that each citizen should “prepare for the worst and hope for the best.” Yet this little homily is a whole lot better than the hide-your-head-in-the-sand approach of “it can’t ever happen here.” All too often, disaster can and will happen wherever you are; failure to prepare properly for such disaster just makes things worse.

I’ve also noticed that the “we never thought it would happen here” folks often should have known trouble was coming. Too often they are the people who built homes on the flood plain near a river that had a history of flooding. Or knew about Joe Postal Worker who had been muttering about getting even for days before he came to work with a gun. Or they knew about the school kid that liked to torture animals and had been wondering what it would be like to kill someone — and then decided to find out. These “we never thought it would happen here” people should have known that it could happen and that trouble was coming. Had they been alert to the potential for trouble and had they done something to head it off, lives and property might have been saved.

Instead they just hoped nothing would happen. They looked back at recent events and, since nothing bad had occurred, made the false assumption that history always predicts the future, creating a crystal ball that guaranteed no problems in their destiny.

So then I’m reminded of how I think that if nothing like a natural or man generated disaster has happened before it seems unlikely anything serious will happen. But I can see that all the indicators are in place for things to be bad if the dominos fall in just the right pattern.

The question: If guys close to the problem and familiar with its ramifications are concerned, should I (and you) be concerned, too?

Even though Y2K proved to be a virtual paper tiger, I think we need to be preparing for this type of problem. It is just a matter of time before cyber-terrorism starts to take place on a large scale. Already the US military (and undoubtedly those of other countries) is working both on defensive as well as offensive ways to bring countries to their knees by knocking out computer and communication resources. No doubt terrorists worldwide are also thinking along these avenues.
Such terrorism doesn’t need to be hi-tech either. A band of six terrorists, armed with shotguns, could station themselves in the middle of nowhere under power lines that feed major portions of any state. At an agreed-upon minute, all could simply fire their guns at the glass insulators holding power cables in place. Instant blackout and one that would take a while to fix, especially if each gunner went down the row of power poles blazing away for ten or fifteen minutes. The blackout itself might even spread through several states as the grid became unbalanced. Multiply the number of terrorists by ten and you could plunge the whole country into a blackout with just a few dollars of ammunition.

Much the same thing could be done to our natural gas supplies, telephone system, or a variety of other services we take for granted. Terrorists with dynamite could wreck more havoc. And we haven’t even mentioned hackers that might initiate similar acts by taking the computers controlling various systems offline.

One could argue it is more a matter of time rather than if it is going to happen.

Somewhere along the line, one crisis or another will create social chaos in a city or community where you may work or live. Whether it’s a computer disaster, a natural disaster, terrorism, or a government out of control, few will be adequately prepared to deal with it. This manual will help you make sure that you are prepared.

**The Stage Is Set**

Sooner or later you are almost certainly going to get caught in a situation where your reaction could very well spell the difference between keeping what you have or losing it, and perhaps even the difference between survival and death.

In the past, manuals like these have been written to deal with one or another or several such problems. Because of the wide range of dangers present these days, my thrust is going to be different. I’m going to give you the knowledge to fire up that important tool between your ears. My aim is to help you do more than just survive. I’ll show you how to become independent and successful, whether you’re dealing with day-to-day problems or all-out disaster scenarios.

With a little knowledge and planning, you should be able to do more than just get by, to just survive. Your goal should be to become as self-reliance as possible and to learn how to spot trouble ahead of time so you can avoid threats altogether.

Perhaps the most important skill you must acquire is learning to spot threats before they become serious. More than a few people have gone down because they failed to perceive the dangers in time to react. They didn’t evacuate before the storm, didn’t duck into a shelter before the bombs rained down, or didn’t turn around when they saw the road block. Their failure to spot danger and act quickly cost them their lives.

It’s also important to understand that although dangers can’t always be avoided, the idea that no problem is too big to run away from is not without its merits. Medals are pinned on the chests of brave men who don’t run from danger in battle, but many are alive today because they turned and ran from a rapist, mugger, or other criminal intent on crime. More than a few are alive because they didn’t battle the lion, didn’t try to out-gun a gunman, or didn’t poke a stick in a hornet’s nest of government agents. Sometimes it’s better to live to fight another day. Get into the mind set that some things are worth fighting for, but many are not.

Your life, your property, and your liberty are worth protecting and defending — and fighting for if necessary. You’ll learn secrets for actualizing these objectives in later chapters.

This manual is different from the typical survivalist’s guide. I’m not going to recommend that you quit
your job and move into the sticks. I’m not going to suggest that you need to stockpile all sorts of weapons (though you might want to buy one or two — as outlined later in this book). I’m not going to teach you how to build bombs or blow up tanks. The goal of this publication is to show you how to become independent and secure while staying as much in the mainstream of society as you desire.
Chapter 2: Total News Independence

If you can't spot something dangerous in the road ahead, chances are you'll run into it. That's why sane people drive with their lights on at night and keep their eyes on the road when they're behind the wheel. Failure to do so invites disaster.

Unfortunately much of our culture has found ways to turn off the headlights on your car or distract your eyes from the road. They do it because they can make a quick buck from your ignorance or keep themselves in power, telling you when to turn, slow down, or steer clear to avoid the obstacles ahead.

Today large segments of our culture are blind to looming problems and may soon crash if they continue without thinking or looking at what is going on around them. Even if you aren't such a person, others may bring you down when the pileup occurs.

The situation is even more dangerous because a large segment of our population has a vested interest in encouraging you to remain blind to potential problems. It is in their best interests to keep you that way. Until you learn who these people are and why they are intent on keeping you blind to the dangers ahead, you will remain in peril. For this reason, we need to take a detour to examine these people and organizations.

Propaganda

The first step toward turning on your headlights and removing your blinders is to understand that the idea of a "free press" in the US is mostly myth. The organizations that are supposed to act as checks to government excesses have gone along with a roughshod ride over the Constitution.

If you think this isn't so, then you shouldn't feel bad. Most of us have been taken in by this confidence game more times than we'd like to admit. But for all practical purposes, the so-called free press and many corporations and government officials are all one and the same group, helping each other out all the while behind the scenes.

Of course this marriage of power between the news media, corporations, and politicians is well hidden. Because none of them can afford to have the fact that there is no large independent press become known to the public. Once this fact becomes known, they lose the ability to control people through propaganda; the kings are seen parading without the concealment of their lies and distortions, exposed naked in the light of truth.

The truth is that the presses and airwaves are only free to those who control them. The advent of underground information sources such as newsletters, short-wave talk radio shows, and Internet news have placed pressure on the mainstream news organizations to hide less and less information from the public.
But this is a recent happenstance and seldom brings out the whole truth and almost never tells what is really going on behind the scenes.

You don’t have to dig far to see how international corporations, the media, and the politicians are all hand-in-glove. For example, three-quarters of the stocks of CBS, ABC, and NBC are held not by individuals but by banks. Bank of America, Citibank, Bankers Trust, Chase Manhattan, and Morgan Guaranty Trust hold these stocks; these banks appoint the representatives who sit on the boards of the major networks. Just eight corporations control most of what you might see or hear on the airwaves in the way of news in many urban areas; these corporations control the three major television networks (CBS, NBC, ABC), own some 40 subsidiary TV stations, control over 200 cable TV systems, and have more than 60 radio stations.

These same eight corporations have also covered the print industry. They control 59 magazines (including Time and Newsweek), have chains of newspapers (including the New York Times, the Wall Street Journal, the Los Angeles Times, and the Washington Post). They also command 41 book publishers and a few other media enterprises thrown in for good measure.

To see how this works, just check into who has the final say within a major news source. If you look at CBS news, you’d discover that it has board members representing ITT, IBM, Philip Morris, Dow Corning, J. P. Morgan, Rand, AT&T, Chase Manhattan, Citibank, Alcoa, Bulova, Carnegie Corporation, and Metropolitan Life. Or the Washington Post whose board of directors’ includes individuals from IBM, Johnson & Johnson, Bank of New York, Bankers Trust, Heinz, General Electric, and Coca-Cola.

As Eric Alterman, reporter for The Nation, put it,

“Of course, owing to a recent wave of media takeovers, the networks themselves are hard to locate. GE owns NBC, Disney owns ABC, Westinghouse owns CBS and Time Warner owns CNN. While these corporations have enormous advertising budgets and spend millions on public relations, they are not in the business of responding to individual grievances. This is all the more frustrating to people as these same networks increasingly involve themselves in tabloid tactics and hidden “gotcha” type reporting, while simultaneously pretending to be above reproach, both practically and ethically.”

Christine Triano of The Institute for Alternative Journalism noted the dangers of such control in the hands of so few:

There’s a specific danger inherent in having a handful of global corporations controlling most of the ways people get their information. Problems come up when ownership of the content and the conduit (the way that information is put out there - television, newspapers, radio, books, movies) is all being decided by a Disney or a Time Warner. It feeds right into civic life, public debate, politics, what happens federally, locally, regionally. It affects what issues are considered important and what people’s perceptions of those issues are.

Ben Bagdikian, after studying the small number of corporations running the entertainment and news industry in the US, noted that, “Media power is political power. There is a dangerous change in the philosophy of the airwaves to permit the growth of corporations and the deregulation of the government to the point of decimating the consumer.”

As Howard Rosenberg wrote in the Los Angeles Times:

In the 1990s, for example, NBC was already part of giant General Electric Company by the time the Walt Disney Company absorbed ABC, Westinghouse Electric Corporation consumed CBS and Time Warner, Inc., acquired Ted Turner’s Archipelago of media interests. Thus GE, Disney, Westinghouse, and Time Warner — the largest media company on the planet — now control,
along with numerous other entities, NBC News, ABC News, CBS News and 24-hour CNN, respectively. Meanwhile, NBC joined with Bill Gates' Microsoft Corporation in creating cable's all-news MS-NBC and Rupert Murdoch's mammoth News Corporation has Fox Television, the Fox News Channel, 20th Century Fox, TV Guide, Harper Collins, the New York Post, major newspapers in England, Australia and New Zealand, massive TV systems in Italy and Asia, and somewhere, probably a partridge in a pear tree.

With the major segments of the entertainment and news industry owned by large corporations, it isn't hard to see how stories might be slanted. Nor is it hard to see why politicians might be more interested in helping the large corporations with legislation and the like; failure to do so not only cuts out campaign contributions from these organizations, it also puts you on the bad side of the mainstream press, which can act as the large corporations' attack dogs, for all intents and purposes.

**The Unclear and Present Danger**

This has led to the situation where the press and liberal politicians aren't only cozy with each other (Hillary Clinton's suggestion that there is a vast, right-wing conspiracy notwithstanding), they are often one and the same. Little wonder then that people like former Clinton aide George Stephanopoulos easily made the transfer from the man pushed in front of the cameras to lie for the President to a "valued journalist" in just a matter of days.

Noted for his blatant and often outrageous lies and "corrections" to the press and American public, Stephanopoulos would be the last person you would expect to be welcomed to an objective news organization.

Yet look what happened. He went from the Clinton White House staff to become an ABC News analyst with hardly anyone in the mainstream press raising an eyebrow or voicing concern.

This isn't a rare case. Another example is Dotty Lynch who became a CBS Senior Political Editor. Before this transformation, Lynch began as a researcher for the NBC News election unit in 1968, then moved on to become the vice president of Cambridge Survey Research (which did polling for the presidential campaigns of George McGovern and Jimmy Carter), then handled polling for Ted Kennedy (during his run for President and served as Director of Survey Research for the Democratic National Committee in 1981-1983).

By 1984 Lynch was coordinating polling for Gary Hart's ill-fated bid for the Presidency and, after Hart shot his mouth off once too often and got caught with a bimbo, went to work for the equally comatose Mondale-Ferraro campaign. Lynch was a liberal campaign worker through and through, demonstrating the ability to pick a loser time and again. Just the material that was called for (apparently) to become a "political editor" at CBS.

This interchangeability of White House officials, campaign workers, pollsters, political hacks and reporters is a good indication of how strong the so-called "adversarial relationship" between these two groups really is. In public editors and reporters may make a show of being on a different side from the government, but as we'll see in a moment, when the pay checks are being issued, the money going into their pockets is likely to be coming from one or both of the supposedly opposite sides.

While not all reporters and editors are super liberals, they come close. A Freedom Forum poll of US journalists discovered that 89 percent of Washington reporters voted for Clinton in the 1992 presidential election; among newspaper editors in the US, 60 percent voted for Clinton (remember that in this same election, only 43 percent of voting Americans voted for Clinton). The Freedom Forum poll also found that only 2 percent of reporters and 6 percent of editors actually described themselves as conservatives; 22 percent of reporters described
themselves as liberals. The moderate-to-liberal camp totaled 59 percent of reporters and 10 percent of editors. A mere 9 percent of reporters and 25 percent of editors described themselves as conservative or moderate-to-conservative.

More disturbing is the fact that apparently reporters do not see themselves as "reporters." Ninety-six percent of reporters polled saw their role as that of "educating" the public. Sixty-two percent saw their role as "sometimes to suggest potential solutions to social problems". Obviously people intent on educating people assume that those who listen or read their reports are somehow inferior and in need of educating. And those intent on discovering "solutions to social problems" are not reporters but would-be leaders, shaping and molding public opinion to reach a goal that the news "reporter" sees as worthy of achieving.

Think about this. At least 96 percent of the reporters whose stories you read or hear think they have a duty to "educate" you, and this same group is overwhelmingly liberal in their political ideals. Can you expect an unbiased view from such people? And that isn't even taking into consideration the pressures being exerted on news rooms to modify stories to suit the needs of the multinational groups that own the news companies.

Remember that nearly all the major news you hear is potentially slanted, designed to convey an agenda that reporters (or the companies in charge of them) wish to convey. You should expect that most of what you see and hear from mainstream news departments will be designed to "educate" you.

Little wonder, then, that we have had the spectacle of a Pulitzer-winning newsman rigging explosive charges in trucks to be sure they burn on cue during the filming of investigative reports, footage of automatic weapons or explosive bullets substituted in gun footage to "educate" the public to the dangers of firearms, or faked footage at Food Lion stores to convince consumers that the business engages in unsafe food handling practices. When you're "educating" the public, telling the truth is an option.

As writer Bill Frezza has noted,

Unfortunately, this "fourth branch" of government [the mainstream press] was driven by a business model that could not help but foster a symbiotic relationship between the press and the very people they were supposed to watch. In addition, the false scarcity created by government spectrum policy resulted in an oligopoly of broadcast networks whose interests were far more common than diverse. While the outward appearance of an adversarial press was maintained, in fact the media took care to protect the people and institutions from which they drew their power and influence.

In short, the press can't bite the hand that gives away free air frequencies to broadcast, and the politicians can't afford to antagonize the press too much for fear the public will start seeing the legislators in bad light. And neither group can afford to have the businesses that virtually own them get hacked off, either.

The mainstream news isn't the protector of our society. Nor is it the "free press." Rather it is too often a tool of big corporations and big government. As such, it is the cheerleader for things that make the corporations and government more secure. And nothing makes these groups more secure than lessening the rights of individual citizens.

The Dangers of a Controlled Press

The current mainstream press evolved into this hand-in-glove operation with the advent of big government and the consolidation of worldwide corporations. Each made the others possible and all supported the others, much like a three-legged stool. As Frezza noted,
“Old media” [that is, the mainstream press] and hard times created the imperial presidency when Franklin D. Roosevelt transformed a constitutionally limited government of enumerated powers into an unbridled leviathan. As federal power grew, escaping the fetters crafted by the founders, mass media played a key role in molding public opinion. Gulled by brilliant propagandists, the citizenry abandoned its instinctive distrust and invested its faith not just in elected rulers but in a new class of pundits, journalists and opinion leaders who, they were told, could be trusted to serve as disinterested watchdogs over the burgeoning central power.

Once in power, media empires (and the corporations behind them) have an incentive to lie or at least distort the truth in an effort to keep in power, sell widgets, or stay out of public scrutiny for shady dealings. They reason (and rightly so) that anyone buying one of the new medium’s products is that less likely to spend money on the old media.

If enough people start buying these upcoming products, the coffers of the media will be emptied. When we’re talking about the multi-million (or even billion) dollar empires of the likes of Time-Warner or other media giants. Personal computers and the Internet are cutting into TV watching, radio listening, and magazine reading.

The solution for the established media? Bad mouth the new guy, telling everyone who will read or listen that this new-fangled thing will be the death of civilization as we know it.

This tactic isn’t new.

When the first comic books came out, many in the book industry warned that soon kids would no longer be able to read; some of those comic book readers eventually put a man on the moon. The next generation was told that radio and TV would bring an end of civilization as we knew it — attention spans would dwindle and no one would be able to think coherently; that generation created today’s personal computers and the programs that run them. That generation also strung together the many different components that became the Internet.

As might be expected, today all the old media (TV, radio, and print) are busy proclaiming that the new medium, in this case the Internet, is going to ruin our society (at least that is the claim when they aren’t telling everyone how to find their Web site). Like the past, these assaults threaten to introduce something that has also been carried out before: Censorship.

What? Censorship in the US? You bet. In the 1950s, congress held hearings about what should and should not be in comic books; soon a board was created and many “adult comics” came to an end with the few that survived transforming themselves into magazines. TV and radio also are limited in what they can broadcast over the airwaves; language, nudity, and so forth are heavily regulated (though some might argue not heavily enough). I won’t debate the good or the bad of censorship — only that it has and will take place in the US.

The idea that people can print and say what they want in the various forms of media is not correct, though we certainly come close to achieving this situation in some outlets such as cable, books, magazines, and so forth. Provided you have enough money to create such media.

Bringing us to the “dangers” of the Internet to both governments as well as the old media. Because this new medium has made it possible for anyone to set up a “Web page.” All you have to do is pay an Internet service provider to store you files on his server, then buy a program that makes it possible to create Web pages. Instantly you can write whatever you want and let the whole world read it.

That means everyone has become their own electronic publisher. Suddenly the presses (albeit “virtual presses”) really are free.
Little wonder the press and various Congressmen are calling for censorship. To protect the public, of course. And to be sure the right people are heard and the right companies continue to make money.

In 1998 historian Gore Vidal noted the need of both the mainstream press and the government (which he calls the "global empire") to clamp down on the Internet in order to keep control of information, and thereby the people in America:

How great a threat is the global community created by the Internet to the American empire? I should like to think terminal, as the empire has wrecked our society -- $5 trillion of debt, no proper public education, no health care -- and done the rest of the world incomparable harm.

But in the next few years, the empire is going to strike back at the Internet in the interest of protecting our children from porn, drugs and terrorism — all of which the U.S. government will claim is being peddled by the Internet. There is not a trick they won’t pull to get control. After all, what better way to control everyone’s mind, or at least the input of information?33

Fortunately censorship of this new medium isn’t easy. Today’s Internet knows no national boundaries and it is becoming too huge for even a government agency to manage, with nearly a million new pages being added each day according to some estimates. Short of shutting the whole thing down, it would be impossible to keep any material from being downloaded in the US from a site in Australia, Europe, or Africa — well outside the jurisdiction of the US government.

That doesn’t mean that attempts won’t be made to catch people doing such things. Or to see what material they may be storing on their computer. Or sending to their friends with e-mail. Given the old media’s interest in tarring the Internet as a danger, and our government’s interest in reducing privacy and freedom in order to make the work of bureaucratic watchdogs easier, this is a concern you should take seriously.

The battle is on to keep information suppressed. But the Internet is growing by leaps and bounds, perhaps fast enough to make control or censorship of it impossible. But it will be a close race over the next few years; a crisis — real or imagined — might be exploited to curtail or control use of the Internet by citizens.

The international corporations, politicians, and mainstream press all fear the Net. It is the source that revealed Clinton’s wrong doings when every major news source was painting rosy pictures of the criminals in the White House. As Frezza put it,

The Internet imposes no limitations on content and hence requires no manipulating or manipulated editors. The Internet’s business model will not create a symbiosis with the nation’s rulers because it has no unified business model. It is a diverse, decentralized, irreverent, snarling watchdog that our founding fathers certainly would have loved.

It isn’t hard to imagine a crisis that would enable Joe Public to feel fine about giving up major rights in order to help fight crime or terrorism. Especially with corporate-controlled media and politicians telling him it would be the patriotic thing to do.

In order to prepare for problems, you have to see them coming. Yet it is impossible to see anything other than what politicians and the big corporations behind the media establishment want them to see. This makes it nearly impossible to act because you only have a distorted notion of what is going on. This is bad during day-in-and-day-out activities; it could be disastrous during a national emergency or other major crisis. Then having a distorted view could cause you to react poorly.
Where the Road Leads

Now the question you have to ask yourself is whether you want to continue blindly down the road the press, politicians, and corporations are guiding us down. The road could lead to an Orwellian society where our every move and conversation is observed by government snoops.

If you think we are a long way from Big Brother, then you aren't aware of the technology being put into place. BI, Inc., in Boulder, CO markets a bracelet called JurisMonitor; this system has been adopted in 26 states to monitor the whereabouts of criminals that are under “house arrest.” It permits those convicted of a crime to be kept under house arrest since they can be tracked at all times to be sure they are where they belong. With a slight modification, this technology could be added to cellular phones, ID bracelets, or whatever the press and government decide it should be, to track all citizens, not just criminals.

Unfortunately Joe Public could easily be convinced such actions were for his own good. Such tracking bracelets might take the place of a charge card, Social Security card, and other “smart card” features. “You’ll never be without these cards again. No need to carry a wallet, no way to lose your cards,” we’d be told before having our bracelets permanently welded into place. The unit might even have a panic button that would dial 911 during an emergency; people would be lining up to get one (lest you think this latter feature is a bit of science fiction, such a device is now available and used on some college campuses.)

The near future may even see tracking devices injected under the skin of citizens — for their own good, of course. Such devices are already in limited use with animals. And a few human beings have them as well. The Gen-Etics company in England is currently making an under-the-skin chip, marketing their advertising at the rich who might be targeted by kidnappers. Among those the company mentions as potential buyers are Leonardo DiCaprio and Robert De Niro. Already the chips are in use among Israeli’s secret service, the Mossad.

It isn’t hard to imagine such chips becoming the status symbol of the near future should the rich stars of Hollywood lead the way toward such a fad. The government might easily mandate them after that, giving each citizen a way to identify himself that could not be easily stolen by thieves, or counterfeited. It could be keyed to the owner’s social security card, locks, and credit system; no more lost keys, stolen credit cards, or impersonations.

The only catch is that Big Brother will have a fantastic tool with which to track citizens. That’s no problem if the government is benevolent. Yet too often as we’ve seen this century, governments are anything but benevolent.

Legal authority John B. Mitchell has this picture of the near future:

I imagine it as a World War II propaganda film, all in black and white. It portrays the enemy nation, a nation whose values are so odious to our own that we all but shiver as we watch. Stronger than the fear and repulsion that we feel, however, is the quiet assurance within each of us that this enemy nation must be stopped, no matter the sacrifice in lives and materials.

This film portrays a society in which the police are everywhere, unrestrained by any laws but their own. On street corners and in workplaces they approach citizens asking for identification. In bus, train, and air terminals the police are present, asking to look at tickets and to inspect personal belongings. Airplanes and buses are held under police orders and denied permission to leave for their destinations until groups of armed police board and request identification papers of each passenger and ask to search their bags.

And everywhere the police are looking, searching. Their helicopters, equipped with high powered cameras and viewing devices, hover over neighborhoods and factories. In the countryside, teams of
police climb over fences posted "No Trespassing," walk through fields, and peer into outbuildings surrounding farmhouses. In the city, they sift through the garbage citizens have left on the curbs in front of their dwellings. They pore over the bank records of citizens and keep track of the phone numbers of all telephone calls to and from their homes.

They send informants with recording devices into private homes and furtively place electronic monitors on vehicles of citizens so they can better trace their movements. And always they are with their sniffing dogs which, looking for the scent of whatever is currently forbidden, are set upon whatever packages or belongings that the citizens take out in public.

All this, however, is not really some WWII propaganda film, and it does not take place in some remote fascist state. This is current America. Or, at least, it is the negative that exists behind the picture of what we see as America. And, like all negatives, it is as real as the photograph.

**You Are Here**

Where does all this leave us?

Getting the news from regular channels or expecting the government to do anything to help you become independent is a doubtful proposition at best. The mainstream news, politicians, and big corporations will have your best interests in mind only if it helps them out. Otherwise you can’t really trust them to act in your interests. You can’t depend on them to tell you the truth.

That leaves you pretty much on your own in many situations, including many types of emergencies. You’re responsible for looking out for number one. The government may do it when the need arises, but don’t depend on it and don’t expect the response to be quick or even of much help. Whether you’re talking about federal emergency workers or your local police, governments tend to clean up after a disaster rather than prevent it or protect citizens who are in danger.

This manual will give you much of the information you need to protect yourself from a variety of emergencies from a melt down of society and government to a localized disaster such as a storm, flood, or earthquake. But before we start looking at these specifics, you need to know where to go in order to obtain essential data that will tip you off to approaching dangers (whether racial strife, terrorist threats, or government infringement on our liberties).

For real early warning information you must go to "underground," secondary sources of news. These underground information sources include independent web sites, short-wave radio broadcasts from small stations, some talk radio programming (especially that from small, privately owned operations), newsletters, and manuals from small presses (like the one you’re reading now). These can give you a wide range of data not available through normal channels. If you want to be able to learn what is really going on around you, as well as to be alert to potential dangers, you need to tap into all these sources.

The advantage of these underground news sources is that the people producing them don’t have a single agenda to support government or large business. By keeping a wide range of information flowing, you can weigh and judge what appears to be going on. Over time you’ll learn what the biases of various sources are and when they can most likely be trusted and when they may be out in left field. Little by little you’ll gain a more realistic view of what is going on around you.

This will also enable you to spot approaching dangers. While the government may not want the public to see some dangers that leaders are failing to address, the underground news sources don’t have any overwhelming
need to keep things secret. That means you may get an advance warning of such dangers.

Conversely, if the government and mainstream news are crying that terrorists, drug dealers, or whatever the current bugaboos may be are so threatening that rights must be curtailed and new laws passed, the underground press will be there to help you determine whether this is so, or whether it is yet another smoke screen to blind you to what is really going on.

As such the collection of diverse information that makes up the underground press provides a real check and balance to both big business and the politicians, and also forces the mainstream to be more careful in trying to mislead the public (remember how the then almost unknown Matt Drudge revealed the whole Monica Lewinsky matter early in 1998 when the major news magazine with the information had decided to simply sit on the story and keep it from the public).

Of all these sources, the one that is becoming more extensive by the day is the Internet. Currently it is pretty much uncontrolled in the “free world” with only China and some Islamic countries able to keep tight hold on its use. But because segments of it are giving people a true view of what is going on around them, the pressure is on to close down sites through charges of pornography, claims that sites are giving out terrorist information, or protests of copyright violations.

That censorship might be unconstitutional or based on trumped-up charges may not make a great difference since the diversified nature of the Net is also its weakness. Since most Internet providers are small, they can’t afford a lengthy court battle. The mere threat of legal action by government or mainstream press agencies might cause them to remove material from their sites. That would create censorship in practice if not in name. But until this happens, you can exploit the Internet to gain access to news sources other than those offered by the mainstream press.

Proper Mind Set

Before going deeper into this manual, you may wish to stop a moment and reflect on what’s been covered thus far. Because failure to get into the proper frame of reference will leave you dependent on the mainstream media, government, and international corporations, which see you as a commodity to be “processed.” Until you realize that they are using you as much as you might want to use them, you’ll wander about blind, swayed by the subtle propaganda they have perfected and use to bombard us with compelling lies, day-in and day-out.

You must realize that though the truth may be within many news stories and reports, it is often carefully distorted, spun, or glossed over to prevent you from gaining the wrong lesson or drawing the wrong conclusions. You must understand that the purpose of much entertainment is to distort your views and perceptions as well as to distract you from viable sources of truth, such as underground radio programs, small presses, and the Internet.

Challenge all you read, see, and hear. Understand that the major media outlets are selling products and commodities, not necessarily delivering the truth.

The Crowd Mentality

Unfortunately most of us are happy to be lulled into security. We become good consumers both of unneeded products as well as a blinded, wasteful lifestyle by our unquestioning consumption of entertainment and “news” from the mainstream media. This is understandable. Going out on a limb and admitting that the truth is hard to discover is troubling. Thinking that your government may not have your best interests at heart turns the
world from a safe, benevolent place to one filled with potential dangers.

This wish to ignore the truth and follow the crowd and the culture is hard to overcome. Yet if an effort isn't made to free yourself, you can't be your own person, you have no way to make choices based on the facts. Instead you act through reflexes honed by the conditioning you've received from the media. You and your family will make bad choices and waste a fortune, trying to wear the same clothes, drive the same cars, and live in the same type of houses that the celebrities on TV and in the movies enjoy. You'll believe the lies presented to you and will live in the trap designed to separate you from your money.

The lie that the government will always take care of you, or that you can always find a solution to your problem if you spend enough cash can be deadly during a crisis. During emergencies people often expect the government to dig them out, feed them, or prevent looters from overrunning them. In the worst of cases, their bodies are found by the government "rescuers" when help finally arrives, too late for the trusting souls who never thought of taking actions to help themselves. (Perhaps the most compelling stories of such actions came in the aftermath of the Hiroshima bombing; the Japanese citizens tried to go to work when they were burnt and their buildings totally destroyed, often going into areas that lead to their deaths as they blindly went about their expected duties, seduced by the idea that things would return to normal if they continued about their daily routine.)

So the second rule of thumb is to be prepared to react to problems and deal with them on your own. Because when things break down, the benevolent government we've been told will always be there most likely won't be there. At least not soon enough to prevent your death if you don't take actions on your own.

Today our schools and businesses are teaching students and workers to be dependent on teams and the government. We are taught to trust the press and elected officials. You must overcome this indoctrination and also attempt to re-educate your spouse and children. Otherwise they may become dangers, thwarting your attempts to become self-reliant.

This work toward changing your mind set isn't easy. But it is the most important step you can take in becoming truly independent. Question your old assumptions about the media and government. And remember that both can become dangerous to you. You need to question things quietly, doing your best to keep a low profile. Because, as we've seen, our government can and will come down hard on those who rock the boat too much.

**Getting Information**

Since the mainstream press is virtually an arm of international corporations and the government (all three are slowly merging into one interconnected entity), getting the truth can be tricky. It is possible that governments and corporations will bend and modify the news to suit their needs.

For example, if riots and looting are going on, some cities will minimize the problem, fearful of losing tourists or convention goers. Likewise the state and federal government may minimize the problem to avoid getting potential voters agitated. After all, worried people might demand change; complacent people will be happy with things as they are.

Conversely, a government intent on passing draconian legislation might exaggerate the size and danger of a terrorist group, civil disturbance, or other problem. In this case the public might be fed false information to generate demands that something be done — and the government can then respond with the suspension of some rights, passage of new laws, or whatever is on the agenda.

Not knowing what is really going on could put you in a dangerous situation. You might, for example, go shopping in an area where rioting and looting is about to spread. Or you might stay at home when it was perfectly
safe to travel, misled by exaggerated stories of the danger. Not knowing what is really going on can be inconvenient and even dangerous.

Unfortunately there is no quick-and-dirty way to gain all the information you may want. However there are ways to get a much fuller view than the mainstream media offer. As noted above, the key is to get away from the media that are controlled by international corporations and move toward the smaller operations that are beyond the control of these groups. Among these outlets are short-wave radio programs or talk radio programs produced at small stations, publications from small presses, and articles posted on the Internet.

Of course these outlets may also be biased and some are not to be trusted. But, as we’ve seen, the same is true in spades with the mainstream outlets most Americans trust. The secret is to sample a wide range of information sources, weighing and judging over time which are most apt to bring you accurate stories. Gradually you’ll find which ones are unreliable and which ones deliver stories that are accurate. Discontinue wasting time on the erroneous sources and sample new groups to see if there are other reliable outlets you’re unaware of. Little by little you’ll gain a number of trusted sources that will enable you to get a true view of what’s going on in the world.

This information can then alert you to coming problems, warn you of government actions that may be of danger to you, and help you avoid risks that the government and mainstream press are trying to hide or gloss over. When you start gaining such information, you will be ahead of the curve, able to anticipate dangers and take actions to avoid them.

If you don’t have a quality radio that gets AM and FM stations as well as short-wave broadcasts, get one. You can find one at your local Radio Shack or discount store. Even if you don’t use it on a daily basis, having such a radio available to you makes it possible to keep an outside contact with the world should there be a major catastrophe that shuts down most communications. Because such an emergency will most likely shut down the power grid as well, be sure to always stock spare batteries to keep your radio running without household electricity.

Second, get an Internet account if you don’t already have one and learn how to use a “browser” to surf the Web. Use a search engine to locate obscure sources of information, then bookmark the sites so you can find them quickly. Don’t trust any news source on the Internet until you’ve had time to see how accurate its stories are over time. Don’t waste time with sources that aren’t trustworthy. And don’t make the mistake of only using the sites created by the mainstream media (these latter places are set up for free on the Net in an attempt to keep you away from the other sources of news. Don’t get suckered into thinking these are the only places you need to go).

**Government Tracking**

Currently it is difficult to track who is going to what sites on the Internet. However it would be possible to automate tracking systems and keep tabs on what ISPs (Internet service providers) were being used to access a controversial site. Government computers could then access the ISP records of what account is being used to cough up the visitor’s name. This could be done faster than it took to read this paragraph, and done from anywhere in the world if the equipment were in place.

This would make it possible for a Big Brother government to quickly create lists of potential trouble makers. The creation of such lists would undoubtedly lead to more ominous actions.

Should our country reach this point, then you may need to find other less dangerous sources of information or ways to access the Net without leaving a digital trail leading back to you. Currently there are people working on technology that would permit anonymous Web surfing. Just as there are probably bureaucrats lobbying for the ability to track where you are visiting on the Net.
In fact there may have been one attempt to test out such technology. Visitors to the federal agencies pages created by the Veterans Affairs, FEMA, and NSF were surprised that “cookies” were automatically retrieving personal data from the visitor’s hard drive. Just as suspiciously, after the non-profit agency, OMB Watch, alerted the public to the fact, the three agencies quickly ceased setting cookies. While this all may have been an innocent mistake (many business sites also use cookies to keep track of visitors), it is somewhat troubling to see what might become common practice in the near future.

**Be Prepared**

Once you’ve laid the groundwork outlined in this chapter, you’re set to make serious plans and gain the knowledge you need to self-sufficiently face everyday emergencies as well as the end-of-the-world-as-we-know-it scenarios. As you look at the next few chapters, remember that many people have made the mistake of preparing for major and total disasters only to discover that the “end is near” is in their own personal lives, rather than in the form of a natural disaster, riot, or other apocalyptic happenstance.

One example of such a situation can be seen in the 1970s survival guru, Mel Tappan. Tappan was a banker who became convinced that modern civilization would soon collapse due to the tensions growing in the Cold War, monetary problems worldwide, and a skyrocketing crime rates. Not illogically, he assumed it was just a matter of time before civilization as we knew it would collapse.

Tappan wrote about his feelings of imminent doom in a number of magazines, especially those devoted to gun and survival topics. He soon garnered a huge following in what would become the Survivalist movement. Eventually Tappan got into the survival business in a big way, penning *Survival Guns* and creating a newsletter that contained his suggestions for preparing and dealing with the disasters that many were convinced would be coming.

He soon amassed a small fortune and purchased a farm in Oregon where he set up a self-sufficient ranch complete with garden, goats, and an arsenal large enough to fight off the hordes that might attempt to take his land from him should law-and-order go down the tubes. The catch was that in moving to the middle of nowhere, Tappan had also placed himself far away from a hospital. That made his heart attack fatal.

All his guns, knowledge, and survival know-how didn’t do him any good when personal crisis came into his life.

It’s impossible to say that he would have survived had he stayed in the city. He might have suffered a heart attack that would have been fatal regardless of what medical attention he had received. Or he might have been hit by a car, killed by a mugger, or contracted a fatal lung disease due to the smog.

Yet one has to wonder if being near a hospital might have made all the difference and whether he might be alive today had he been closer to help during his hour of need.

There are several important lessons to be learned here. One is that you can never really be totally self-reliant. Sooner or later you’ll need other people to help you, either through a barter or money exchange for services or through friendships you have established. Being the Lone Ranger is not the way to go if you’re planning on surviving a variety of challenges, including the unexpected or those that arise from health complications.

Another important point is that moving out to the bonnies and raising goats, planting fruit trees, and hoeing a garden may be an idyllic solution that might even give you an edge in some problems. But it isn’t the
easy way out and probably would leave you in grave danger, from a large band of outlaws descending on your
land to a stroke or heart attack that demands rapid action. Just one unexpected problem can transform you from
independence to full dependence on the service of others.

While the theme of this manual is to make you not just a survivor but a winner that is a self-reliant as
possible, you can never be totally self-reliant. At your time of need, you better have an infrastructure of friends
and trusted professionals in place or you’re going to be hurting.

That said, the next few chapters will take a detailed look at some of the services and professionals you need
to have in case of an emergency, as well as how to determine if they are the best and right people to be working
with. Having these lined up ahead of time means they’ll be there when you really need them.
Chapter 3:

Bulletproof Your Finances

Few Americans alive today have ever lived through a severe economic depression. Consequently, as far as most are concerned, depressions are a thing of the past. The federal government now knows how to use fiscal and monetary policy to prevent depressions. The Great Depression came and went, and now, except for minor recessions, there’s really nothing to worry about.

Right?

The media’s and the government’s favorite “experts,” raised on a steady diet of Keynesian economics, assume that a prolonged and severe economic downturn is all but impossible in this day and age. Our economy is too big and diverse, they say. And if there were a serious problem, the Federal Reserve would work its magic. And Congress would always be able to revive a sluggish economy by cutting taxes and/or boosting government spending, which it can do on a virtually unlimited basis through borrowing and printing money.

Despite what the intellectual/media/political establishment constantly propounds about the U.S. economy being “depression-proof,” the very policies that have been implemented to stave off recessions and depressions may end up triggering a depression of massive proportions.

There ain’t no such thing as a free lunch. Decades of inflation, runaway government spending, and the piling up trillions of dollars worth of debt have been designed at each stage to give the appearance of prosperity — at the cost, ultimately, of genuine economic health.

The government is working like mad right now to ensure that we don’t have to pay the price for decades of economic folly. But make no mistake: Alan Greenspan and politicians and bureaucrats who are “in the know” about things are privately trembling with fear. They wonder how much longer their grand scheme will hold up. The whole economy could go down the tubes before the next election, or five years from now, or twenty. The whole economy could go up in smoke tomorrow morning if terrorists unleash a weapon of mass destruction on an American city.

It’s possible that the economy will continue chugging along indefinitely, despite the terrorist threat, despite our being weighed down by mountains of debt, and despite depending on the shaky foundation of the U.S. fiat dollar. It’s possible. But the point is that you can’t count on it. The entire economy, including the currency itself, rests ultimately on nothing but promises made by governments and banks. And they’ve made far more promises than they can possibly keep. A coming economic day of reckoning is a very real possibility that you must be prepared for, because most people won’t be.
The Government's Reckless Spending Binge

Over the past 30 years, the U.S. government has grown eight times larger, far outpacing the growth rate of the economy as a whole. The national debt is a mind-boggling $7 trillion. It will surge in the years ahead to astronomical proportions. The war on Iraq, yet another massive senior-vote-buying scheme in the form of new Medicare prescription drug benefits, and some of the most wasteful, pork-filled Congressional spending in history have combined to create the biggest budget deficits in history. We could see actual, unofficial annual budget deficits of $1 trillion beginning next year (the deficits will “officially” be about half that much).

Washington acts as though we can just keep spending and borrowing and spending and borrowing forever and ever. They ignore the fact that financing trillions upon trillions of dollars of spending means enormous interest payments. The politicians don’t plan to ever actually pay down the national debt ($7,000,000,000,000 and growing at a rate of $1.6 billion per day). They’ve allowed it to grow beyond any generation’s ability to handle. They think they can get away with paying interest only every year and turning the U.S. budget into one massive pyramid scheme whereby the present generation pays for the previous generation’s spending (via interest payments) and the present generation’s spending gets put off to the next generation, and so on.

America’s spendthrift politicians are putting the long-term health of the economy at risk. They are addicted to spending not only our money, but money we don’t even have — the money of future generations. Instead of trimming down bloated bureaucracies, the U.S. Congress is arrogantly and recklessly pushing through record spending increases. Who are they fooling? Apparently, enough voters to get them re-elected.

In the 2000 presidential debates, then candidate George W. Bush accused Al Gore of being a “big spender.” Talk about the pot calling the kettle black! Under Bush’s watch, total government spending, even non-defense spending, has grown at a faster rate than it did under Clinton. Bush hasn’t vetoed a single spending bill or proposed the abolition of a single government agency. Whereas only a few years ago leading Republicans such as Bob Dole were calling for the abolition of the Department of Education, President Bush has asked for and received record spending increases for that Department that dwarf anything Clinton ever proposed.

President Bush has signed into law the largest new federal welfare program since Lyndon Johnson’s Great Society in the form of a new Medicare prescription drug benefit. The National Taxpayers Union has reported that Medicare will soon cost taxpayers hundreds of billions more each year and consume 10% of Americans’ taxable payroll by 2019, with costs spiraling upward at unsustainable levels into the future as the population ages.

A massive new welfare benefit added to a massive government program that is already headed toward insolvency makes no sense, fiscally or economically. It doesn’t pass the “common sense” test. But it is the icing on the cake for a group of Congressmen who have been spending taxpayers’ money as rapidly, as wastefully, and as irresponsibly as drunk teenagers splurging with their parents’ credit cards. They buy whatever feels good and whatever will make them popular with their peers. They’re spending money that’s not theirs — money that may not even exist. It doesn’t matter to them, because it doesn’t seem real to them. The only thing that has any reality to them is their immediate desire to spend. They don’t consider the long-term consequences of their short-term gratification.

The watchdog group Citizens Against Government Waste, which tracks and reports wasteful government spending, called 2003 “the worst year of pork-barrel spending in history.” Going even further, Nobel laureate economist George Akerlof lamented, “I think this is the worst government the United States has ever had in its more than 200 years.”
It’s certainly the most expensive, most bureaucratic, and most intrusive government we’ve ever had. But as a recent study showed, 95% of Congressmen think the federal government is too small. That’s right, too small. The National Taxpayers Union released a study on October 31, 2003 in which it reported that for the 107th Congress, out of 435 members of the House of Representatives, only 26 had voted to reduce overall government spending. Not a single U.S. Senator out of 100 supported bills that would have cut overall government spending.

The Coming Budget Crisis

The Bush Administration will present rosy scenarios of budget surpluses in the not-too distant future, but I’m not inclined to believe them. The government’s budgetary and economic numbers are highly suspect. As the conservative McAlvany Intelligence Advisor reported (October 2003):

All government economic data is falsified and has as much reality as the Mad Hatter in Alice in Wonderland. Government employment, GDP, and inflation statistics are all lies. For example, in a recent reporting period, government reports show that $133 billion of GDP came from purchases of computer/ peripherals. However, corporations have only spent $15 billion on such purchases — that’s the real money amount. The other $118 billion was fictional, made-up (i.e., bold-faced lie).

The government lies about the economy and employs accounting tricks to make the federal deficit seem smaller than it really is. Government accountants use hundreds of billions of dollars in Social Security money (which is supposed to be off-budget) to offset deficits that are at least double what is officially reported. Not included in government projections of a $450 billion deficit are massive spending on Iraq and forthcoming Medicare prescription drug expenditures. If all likely spending for the next few years was taken into account, it’s doubtful that even the biggest tax hike in history could balance the budget (in the long run, it would only make things worse).

You simply can’t trust any economic or budgetary data produced by the U.S. government. In 2001, the Office of Management and Budget (OMB) projected budget surpluses for 2003 and beyond. Now we’re facing multi-trillion dollar deficits in the coming years. The OMB is being as optimistic as possible; it’s even understating deficits that are already on the books. Opines global investing icon Jim Rogers, “If you or I kept our books the way the U.S. government does, we would be thrown in jail.”

What the Future May Bring

So what do Washington’s shenanigans have to do with your financial future? Plenty! The multi-trillion dollar fraud that our government is perpetrating could lay the groundwork for an economic disaster, as the currency loses its value, taxes go up (as they surely must despite a temporary reprieve), businesses move overseas, millions of Americans are put out of work, and foreign investors pull hundreds of billions of dollars out of the country — sending securities markets into a devastating downward spiral.

Politicians are used to living in a fantasy world where they can cut taxes and at the same time commit to spending trillions of new dollars on programs that are already overextended. Washington will probably be able to keep the Ponzi scheme going for a few more years. But pretty soon, reality will catch up with Congress and with the American people.

Spending on Social Security, Medicaid, and Medicare currently accounts for about 9% of our gross domestic product (and nearly 40% of the U.S. government’s budget). With the inclusion of a new Medicare
prescription drug benefit, these programs' share of the GDP will double in just 30 to 35 years to 18% of total GDP. Eventually, interest on the national debt and Social Security and Medicare obligations will be so high a proportion of the nation's GDP that our economy will be brought to its knees under the weight of oppressive taxation and the endless layers federal redistributive bureaucracies.

At that point, a desperate Congress might turn to full-fledged, command-and-control socialism to try to get the economy moving. Or it might promote hyperinflation in a desperate attempt to "monetize" its way out of its debt and its obligations. There's no telling how a future panic-stricken government might act. But drastic economic and political changes in this country could be in store.

Unlike most Americans, you'll be prepared for them. You won't be dependent on the decisions of U.S. politicians. You'll have acquired precious metals and put some of your money in safe, offshore accounts. (I cover the ins and outs of precious metals and offshore investing in subsequent chapters.)

**A Nation Drowning in Debt**

The United States is the most debt-ridden nation on Earth. And it's not just the politicians who are borrowing massive amounts of money to finance excessive spending. American consumers are in over their heads as well. The debt borne by governments, businesses, and households in America has skyrocketed from a "mere" $4 trillion in 1980 to ten times that amount in 2003 — $40 trillion and growing. That $40 trillion worth of debt is three times our total GDP!

The last time our debt load approached 300% of the economy was during the Great Depression. Over a period of several painful years, that debt was cleaned out. Sooner or later the "borrow and spend" mentality will catch up with consumers, businesses, and governments. Many state governments, such as California, are already beginning to feel the crunch (states can't create money out of thin air like the Feds can).

Americans are hooked on credit cards. The average household has more than seven different credit cards with several thousand dollars in total charges. Consumer debt is growing at the rate of more than 5% a year. The economy is growing at only 1.5% a year. Even upper-middle class Americans who seem to be living the good life are piling up credit card debt at dangerous levels and are struggling to make ends meet just as much as poorer working families.

Enticed by short-term stock market gains, more and more investors are trading on margin (borrowing funds from their broker). The National Association of Securities Dealers (NASD; [http://www.nasd.com](http://www.nasd.com)), a non-profit industry watchdog/regulatory group, reported:

Investor purchases of securities "on margin" have grown dramatically in recent months. As NASD recently reported, the amount of debt taken on to buy securities reached $174 billion in July [2003], an increase of over 25% since the beginning of the year. Some commentators see this growth as a sign that the speculative trading of the late '90s may be returning.

The year 2003 saw an unprecedented mortgage refinancing boom as interest rates plunged to 40-year lows. By refinancing, homeowners were able to pocket some extra cash. Many have already spent the money on consumer goods, which has made the economy look stronger. But it's not real growth. If the economy should take a dive in the coming months, thousands of homeowners who took equity out of their homes and then spent it could be faced with foreclosure. If mortgage interest rates rise significantly (as they almost inevitably will given that they've already reached rock bottom), the housing market could be in for a shock.
If trends continue, America’s banks could be in serious trouble. The housing bubble could burst, spelling doom many for current homeowners stuck with huge mortgages. Government-sponsored mortgage giants Freddie Mac and Fannie Mae, which are being investigated for accounting irregularities, could be forced to absorb billions in mortgage defaults (columnist Michelle Malkin has warned that “the potential fall of Freddie Mac or Fannie Mae could rival the savings and loan collapse of the 1980s”). The stock market could crash as debt-ridden Americans cash out their IRAs and 401(k) plans to try to pay their mortgages and other bills.

Whatever happens, whenever it happens, it won’t be pretty. As spiraling debt loads become more and more unmanageable for more and more Americans as interest rates rise, homes will be lost; families will be torn apart.

Over-spending Americans are declaring bankruptcy at an alarming rate. Nearly two million could declare bankruptcy in 2003, which would be an all-time high (breaking the record set in 2002). As the debt bubble continues to grow, look for bankruptcies to accelerate.

You can protect yourself by recognizing that debt is a form of bondage. If you are to be and remain financially independent in the coming tumultuous years, you must break free of debt. Most people won’t cut back on their spending until they’re already in deep trouble. You’d be wise to cut back on your spending now, living frugally but comfortably. Don’t assume that you’ll be able to maintain your current standard of living in the future. But know that if you save smartly today, you’ll be much better equipped to weather any future economic storms. Those who are burdened down with debt will be the most vulnerable, as they are now.

**Fiscal Restraint for Your Budget**

America has become a nation obsessed with consumption. When we have spending money, we buy things we don’t need. When we don’t have spending money, we run up our credit cards or take out home-equity loans to buy things we don’t need. Never before in our history have we spent more and saved less. Consumer debt now exceeds savings, giving us an effective national net savings rate of zero.

Politicians are even less responsible. The pork barrelers in Congress are spending, taxing, and borrowing the country into oblivion. With a $7 trillion+ national debt, it’s costing hundreds of billions annually just to pay interest on it. And with massive budget deficits projected well into the future, the politicians are piling even more on top of the oppressive debt instead of paying down the principal.

If you manage your finances like Washington does — spending excessively, borrowing heavily, and ignoring the consequences — then you won’t achieve financial security. You’ll be a slave to your money rather than having your money work for you. Nothing is more financially crippling than debt. A wise man once said, “He who understands interest earns it. He who doesn’t understand interest pays it.”

The easiest and often the most effective way to boost the amount of money you have available for investing is to cut your spending. Don’t be ashamed of being “cheap.” When you spend less, you get more. Let those who don’t understand this principle call you “cheap” all they want. You’ll be able to afford to grow your wealth, while others will be mired in a paycheck-to-paycheck existence for the rest of their lives. They’ll have to work well into their golden years just to make ends meet. You’ll be living the good life.

Before you undertake to systematically reduce your spending, it’s helpful to be aware of exactly how you’re spending your money. Take some time to review your total expenses for a month. Include big, recurring expenses such as mortgage payments and small incidental expenses such as movies and drinks. Drinks are a substantial expense for most people that can add up at the end of the month to a lot more than
you might think. Is it really worth spending $3.00 on lattes every morning ($90.00/month)? Or $15.00 on drinks when you go out every Friday evening ($780.00/year)? Maybe it is for you. But it’s hard to determine until you add up the numbers and see them for yourself. Take account of what you’re spending on drinks and other small items per month and make sure it’s a reasonable amount. Of course, one of the biggest expenses for most families is taxes. This is often an area where you can enjoy substantial savings (see Chapter 8), as most Americans overpay the IRS.

When seeking opportunities to save money, remember that everything is negotiable. Always try to negotiate a better deal on big-ticket items such as automobiles, furniture, insurance policies, even hotel rooms. It is a waste of time to go through the Sunday paper looking for a coupon that might save you 30 cents on ketchup. But a little time spent negotiating directly with salespersons can potentially save you hundreds, sometimes thousands of dollars on a single purchase.

If, despite your best efforts to cut expenses, you find that you’re still living paycheck-to-paycheck with little or no money to set aside for emergencies, then what you need is a way to increase your income. Consider starting a home-based business. You needn’t attend to it on a full-time basis. Even a business that you spend only a few hours on one day a week (perhaps selling at the flea market, consulting, tutoring, or whatever you enjoy) can give you enough extra cash to put you over the top. Plus, with a business, you’ll get access to a tremendous amount of new tax deductions that could actually lower your overall tax burden even as you’re bringing in more money. Those who are completely dependent on a single employer for all their income may find themselves completely destitute during an economic crisis.

**America’s Fragile Banking System**

If the U.S. economy is to decline in a major way, one of the first sectors of the economy to hemorrhage will be the banking industry. The U.S. banking system, for all its superficial strength and power, is surprisingly fragile. Even a relatively minor panic could cause the entire banking system to collapse under its own weight.

When you deposit money into your checking account, you’re effectively agreeing to loan the bank that money. Your “deposit” isn’t held at the bank on your behalf. Your account statement is a statement of the amount of money the bank owes you, not the amount of money you (or even necessarily the bank) actually have.

While technically banks are required to keep 10% of total customer deposits on reserve, the Federal Reserve has essentially allowed banks to skirt this requirement altogether. Banks use crafty accounting practices to give the appearance of meeting the reserve requirements, even though everyone involved knows they don’t. For example, banks will “sweep” customer deposits into account structures that aren’t subject to reserve requirements. Some banks keep only enough cash on hand to cover what they regard as normal day-to-day withdrawals.

In addition to loaning out more than 90% of customer deposits, banks can “create” their own money to loan out by issuing bonds and taking on other forms of debt at the corporate level. Some banks effectively loan out more than 100% of money that they have on deposit. Think about that. Your bank deposits are backed up, ultimately, by nothing but IOUs.

The system seems to work fine as long as people pay back their loans and there’s never a mad rush among account holders to get their money out. But some banks make bad loans. And banks do fail. During the Great Depression, some 10,000 banks shut their doors. In 2001, the panic-stricken government of Argentina froze all bank deposits, preventing millions of citizens from getting their own money. It could happen again in America.
Recently, Superior Bank of Illinois went under with $1.6 billion in customer deposits. Some of those who had deposits in excess of $100,000 were unable to recoup their losses. Bank accounts are normally insured only up to $100,000. But even that insurance could be meaningless in the event of a money panic that crippled the entire system.

**Take Your Money and Run?**

The Federal Deposit Insurance Corporation (FDIC) insures individual bank accounts up to $100,000. FDIC insurance is designed to protect you from the risk of an individual bank failure that has resulted from bad loans, mismanagement, etc. FDIC insurance is not designed for or equipped to insure against a system-wide default. And in the event of a nationwide banking catastrophe, the FDIC would not have anywhere near enough money to make up for millions of account holders’ losses.

Perhaps the federal government would step in and pick up the tab anyway. But there’s no guarantee. It’s more likely that at the first sign of trouble, federal regulators would “freeze” all bank accounts and prevent customers from making withdrawals. Or they would impose hefty taxes on all withdrawals to “encourage” people to keep their money in. Either way, you’d be hurt.

You can insure against the risks of the banking system by keeping gold and silver coins in your home (strategies for acquiring gold and silver coins are discussed later in this manual). Precious metals can easily be exchanged for cash or used as a substitute for cash.

You can add additional protection and flexibility by keeping emergency cash in your home. Most people only carry enough money in their wallet to cover a few days of ordinary expenses and use their ATM card to get cash on an as-needed basis. But if your bank shuts down, your ATM card won’t work. It’s better to keep up to several weeks worth of emergency cash locked away in a safe place in your home at all times. You never know when (if ever) you might need it, but you’ll sleep better at night knowing it’s there.

I don’t suggest that you go out and close all your bank accounts tomorrow morning. Although there is always some risk involved in loaning out money to a bank in the form of holding an account there, the risk is not (at this point in time) severe enough to warrant drastic action. What I do suggest is that you be prepared for a potential crisis in the banking system and take precautions to limit your exposure to risk.

There’s no reason to assume any unnecessary risks. How do you pick a bank that will most likely weather a run or other problem? This isn’t easy. However there are a few organizations that have made your job easier.

- Bauer Financial Reports (1-800-388-6686)
- Sheshunoff Information Services (1-800-456-2340)
- Weiss Research, Inc. (1-800-289-9222; http://www.weissratings.com)
- Bank Rate Monitor (561-627-7330)
- Veribanc (1-800-837-4226; http://www.veribanc.com)

These independent organizations rate banks according to strength, management, and stability. Checking with these groups to see what banks have the best rating in your area is wise.

Never do your banking with any institution that is not an FDIC member bank. Although FDIC insurance doesn’t provide absolute protection, it does at least provide some measure of protection. And as you’ll see, there are ways to expand the scope of the insurance coverage beyond $100,000.
If you are married and have more than $100,000 on deposit in a joint bank account, the portion of your holdings that exceeds $100,000 will not be covered by FDIC insurance. However, if you take out another account at that same bank in your own name, it will be covered for up to $100,000 as well. So don’t put more than $100,000 in a joint bank account when you can split it up and get another $100,000 in FDIC coverage in a different account.

All your accounts taken together at any given FDIC-member bank are insured up to $100,000. But you are not actually limited to $100,000 of FDIC coverage. In fact, there is no limit to the amount of one person’s money that the FDIC may insure. Your coverage is limited to $100,000 at any one given bank — but there’s nothing to stop you from opening accounts at multiple banks and getting $100,000 worth of coverage at each one.

Of course, the FDIC would like you to keep your money at one institution so that it is only liable for up to $100,000 of your money. If you had $100,000 in ten different banks, the FDIC could be covering $1 million. That’s because insurance coverage is based on the amount of your money held at each individual financial institution, not on the total amount of money you have among various banks.

Spread out your holdings among multiple banks to maximize FDIC coverage and minimize risk.

Surviving Economic Turmoil

In the late 1920s, stock-market mania sent stock prices and price/earnings ratios soaring to unprecedented levels. The Great Depression soon followed. P/E ratios didn’t surpass the 1929 high of 32.6 until the late 1990s. By January 2000, the P/E ratio of the S&P 500 was an incredible 44.3, the culmination of the biggest bubble in U.S. stock market history.

The post-1929 stock market collapse and the ensuing depression were correlated with interest-rate increases. Today, long-term interest rates are already rising. Short-term interest rates can only go up from where they’re at now. The Fed insists it has no plans to raise rates and is perhaps willing to follow Japan in keeping rates semi-permanently low. But the borrowing needed to finance growing budget deficits and the specter of near-term inflation may push rates up anyway. Then what?

The worst-case scenario is a new Great Depression. Alternatively, we might see a “soft” depression in which the economy and financial markets decline and stagnate for a protracted period of time but don’t crash dramatically. Although not one economist in a hundred right now would think a depression in the next few years to be very likely, economists’ predictions are notorious for being wildly amiss. When a depression hits, it comes almost by definition as a great surprise to everyone, including the experts. Depressions take hold and have such devastating impacts precisely because nobody is prepared for them.

I can’t peer into a crystal ball anymore than anyone else can, but the ominous trends I’ve described in this chapter lead me to the inescapable conclusion that the risk of a massive economic meltdown is greater today than it has been in decades. It is a risk, not a certainty; but I want to be certain that I’m protected against it.

I’ve been accused of being an alarmist. I’ve been accused of being a pessimist who talks too much doom and gloom. Actually, I’m an optimist. I firmly believe that I will prosper in the coming years. I believe that you can, too.

I can afford to be optimistic, because I know that I’ll be prepared for whatever the future may bring. If a catastrophic terrorist attack leads to chaos in banking and financial systems, I won’t panic. If the
government devalues the currency into oblivion, my money (gold, silver, foreign currencies) will grow in value. If another Great Depression unfolds, I won’t be depressed. All the journalists and analysts and politicians who never saw the depression coming most certainly will be depressed, and so will the millions of Americans whom they misled.

You and I won’t be among them.

**U.S. Treasury Securities: (Nearly) 100% Safe**

The government never has defaulted on its debt obligations, owing to its ability to extort and print money on an as-needed basis. However, I don’t quite believe those who say government securities are 100% safe.

The adage that past performance does not guarantee future success is still valid with regard to U.S. government securities. All investments carry risk. There is a chance that the government will fail to honor its obligations for any of a number of reasons. Other countries, such as Russia, have defaulted in recent years, leaving investors with worthless pieces of paper. Imagine if a nuclear bomb was detonated in Washington, D.C., destroying the U.S. Treasury Department. A future left-wing administration may try to close gaping budget deficits by targeting “the rich” and imposing a 95% tax on all government bond distributions and redemptions. Or it may do the unthinkable and default on its debt obligations. There is also a risk that the government will inflate the currency to pay its bills, rendering bonds sold during previous years worth less and less.

Government bonds are safe enough to make up a sizable portion of your portfolio. However, those who bet everything on the government keeping its promises are taking an enormous risk.

**Gold: The Ultimate Safe Harbor**

A truly balanced investment portfolio must include gold, and ideally some silver as well. Gold and silver currently have tremendous growth potential. But growth isn’t the primary reason to invest in precious metals. Indeed, in some years, their price will go down, and you’ll lose money. But regardless of the economic conditions of the moment, precious metals offer you something that no paper asset can: objective value, as proven through thousands of years of human history.

No matter where you are in the world or what economic trends or circumstances may exist, you can count on the fact that gold and silver will be valuable commodities. The stocks you now hold may not be worth the paper they’re printed on 30 years from now. The value of all of your cash assets could be destroyed by inflation or an economic or political crisis. Moreover, any assets that you hold through financial institutions can be monitored by the IRS and potentially seized.

Gold and silver assets, by contrast, can often be kept totally private. You can lock your gold and silver away in a safe place for decades and not have to worry much about creditors or nosy government bureaucrats discovering it. In addition, you don’t have to worry about whether your gold will still be valuable when it comes time to give it to your children, or sell it, or barter with it. Gold has been a rare and highly valued commodity for thousands of years and will continue to be for thousands more.
A Hedge Against Inflation and Market Volatility

There is nearly $17 trillion tied up in stocks and $21 trillion in bonds. Total gold bullion investments, by contrast, amount to less than $100 billion. Quite frankly, gold has gone out of favor with investors. It’s been castigated as a relic of the past by Wall Street insiders, who continue to insist that stocks and bonds (i.e., promises from corporations and governments) are all you’ll ever need. Less than 2% of Americans allocate any portion of their portfolio to gold. The other 98% are betting everything on paper assets.

That only a small proportion of investors hold any gold, which altogether amounts to only a few billion dollars, suggests to me that there is tremendous upside potential. If stock-market weakness and/or currency weakness convinced another 2% of investors to get into gold, the dollar price of gold could soar. If a major currency crisis hit and central banks throughout the world began stockpiling reserves of gold or went to the gold standard entirely (in which paper dollars are redeemable for gold), the price of gold could explode to heretofore unseen levels.

Any number of scenarios might play out in which buying gold at today’s relatively low prices could make you rich years from now. Of course, it’s possible that gold won’t experience any dramatic price increases during your lifetime. That’s okay, too. You’ll still be getting the protection that only gold can provide.

Having precious metals gives you a hedge against inflation and the volatility of financial markets. The stock market crash of 2000-2002 wiped out billions of dollars of wealth, much of it held by individual investors who watched their retirement dreams slip away. Millions of people, acting on faith, put their money in “dot com” companies that had never offered viable business plans. It was a classic case of an irrational mania.

Much uncertainty lies ahead. America’s roughly 85 million stock-market investors are hoping that another bubble (of overvalued stocks) won’t burst on them.

You may have heard financial experts tell you that while investing in the stock market for the short-term is risky, in the long-term it’s safe. The truth of the matter is that investing in stocks will always be risky. After the stock market crash of 1929, a great many stocks didn’t survive, leaving investors who failed to pull their money in time with nothing. Of those stocks that did survive, they didn’t return to their pre-October 1929 levels until, on average, 36 years later. More recently, after stocks fell in the late 1960s, they didn’t fully recover until the boom of the mid 1980s. When will we see pre-2000 levels in the Nasdaq again? If history is any guide, probably much later than most people think.

If you were diversified with gold prior to 2000, you wouldn’t have lost half your investment principal (or more) due to the protracted market crash. You wouldn’t today have to worry about when the market will bounce back to its earlier highs.

Certainty in an Age of Uncertainty and Terrorism

The 2001 terrorist attacks on the World Trade Center shut down the stock market for several days. During that time, investors were unable to trade, effectively freezing billions of dollars of wealth and locking out millions of Americans from their own assets. To be sure, the closed stock market was a minor inconvenience compared to the loss of life inflicted by the Islamic jihadists. But given that government officials believe another terrorist attack is inevitable, you should be very cautious about putting money into the stock market.
New York City remains at risk of being attacked by terrorists or by rogue dictators who’d love to
finish the job the September 11th hijackers started. Next time, the destruction could be far more severe.
Imagine a nuclear device being set off in Times Square. Even a relatively small, crudely constructed bomb
containing nuclear material could instantly kill tens of thousands, force an evacuation of Manhattan, and
render portions of the city uninhabitable for years. If a military-grade nuclear bomb is dropped on New York
City, you can forget about any stock-market investments you had. You won’t be able to sell stock for an
indefinite period of time. When the market finally reopens, you’ll face the prospect of leaving your money
in, in the midst of a wrecked economy, or pulling your money out for pennies on the dollar.

You won’t face such dire prospects if you have gold. Don’t wait for the next terrorist attack to
protect you and your family from financial ruin. If you have gold, you’ll always be prepared to survive
financially in the aftermath of any crisis.

**The Inherent Worthlessness of U.S. Fiat Currency**

The dollar bills (Federal Reserve Notes) in your wallet have no intrinsic value. They are merely
pieces of paper whose worth is established by government fiat. We can be reasonably sure that our money
will retain most of its value next week and probably next month, but what about next year? What about ten
years from now? Or twenty? Or fifty? The longer the time horizon, the greater the likelihood that political or
economic chaos could erupt and the less certainty we can have that our dollars will still be working for us.

When President Richard Nixon took U.S. currency off the gold standard completely in 1971, dollar
bills lost all their intrinsic value. All that backs our money now is the government’s promise that it is legal
tender. The continued value of a dollar is based entirely on continuing economic and political stability that
can’t be predicted with certainty in the long term. The U.S. dollar, like so many other currencies that have
been removed from the objectivity of gold and thrown into the subjective realm of politics, could one day
decome worthless.

For thousands of years, gold and silver have been used as money or as backing for paper currency.
Only in the most recent of times has fiat money become the primary way of exchanging value worldwide.
The world now operates on the “dollar standard.” Yet few people realize just how fragile the dollar is.
George Bernard Shaw put it rightly when he said, “You have to choose between trusting in the natural
stability of gold and the honesty and intelligence of members of the government.”

The fact that the global economy is ultimately based on little more than political promises should be
cause for concern. Through the 1990s, it seemed that there was little to be concerned about. But as we have
recently discovered, much of the apparent strength of the U.S. and other major economies has been shown to
be phony, or at least exaggerated.

Will the fiat-based global economy inevitably suffer a collapse? It’s impossible to say, but the risk is
very real.

The surest way to guard against such a risk is by having gold. Gold can always be used in lieu of fiat
currency in just about any part of the world. And if the currency collapses, you can bet that people will rush
to gold, making anyone who already has substantial amounts of gold in their possession instantly wealthy.
Alternative, 100% Legal Private Currencies That Are Backed by Gold

If you are tired of depending on Federal Reserve Notes, there are currently alternative currencies available. You can actually convert your traditional dollar bills into exchangeable certificates backed 100% by gold or silver. The leading provider of this type of underground currency is a non-profit organization called the National Organization for the Repeal of the Federal Reserve Act (NORFED), which circulates the “Liberty Dollar.”

The Liberty Dollar is a certificate that guarantees the holder ownership to a specific quantity of gold or silver stored in an insured warehouse. The $10 certificate is backed by 1 Troy ounce of .999 pure silver; the $5 by a half ounce; and the $1 by one-tenth ounce. The $500 certificate is backed by an ounce of fine gold.

To get some Liberty Dollars of your own or to find out if there are any redemption centers near you, contact NORFED:

3819 East Morgan Avenue
Evansville, IN 47715
888-421-6181
http://www.norfed.org

An alternative to the Liberty Dollar is “e-gold” (321-956-1200; http://www.e-gold.com). With an e-gold account, you can store and send or receive specific weights of gold electronically. In addition to gold, you can set up an account with silver, platinum, or palladium. E-gold, Ltd. promises that “all e-metal in circulation shall be backed 100% at all times with unencumbered metal in allocated storage.” The company has been in business since 1996 and does not practice “fractional reserve banking,” meaning that every e-gold customer has the security of knowing that his account balance corresponds directly to a specific amount of gold in its insured storage facility.

Another way to own gold “virtually” without having to make a large initial investment is through GoldMoney (1-866-311-3447; http://goldmoney.com). When you purchase GoldMoney, you’re buying gold held remotely in a secure storage facility in London that is insured by Lloyd's of London. You can easily buy gold from your checking account or transfer the cash value of your gold directly into your checking account.

Owning GoldMoney or e-gold is like having a savings account denominated in gold. It helps protect you against the risks of inflation, currency devaluation, and bank failures. A gold-denominated electronic account can be more convenient, more flexible, and more liquid than other methods of gold ownership. As such, e-gold, GoldMoney, and/or Liberty Dollars can play a supporting role in your precious metals investments.

However, these accounts should not substitute entirely for the physical ownership of gold. I recommend keeping actual gold coins around in case of emergency. If you’re not able to log on to a computer or don’t have time to wait for a bank transfer, or if the government decides to crack down on electronic gold, you need something to fall back on.

You may be wondering if privately issued metals-backed “currency” is legal. According to the U.S. Treasury Department, it is. Claudia Dickens, a spokeswoman for the Treasury Department’s Bureau of Engraving & Printing, has stated, “as long as it doesn’t say ‘legal tender,’ there’s nothing wrong with it.” Only government-issued currency is considered to be “legal tender,” but there’s no law that says citizens
can’t exchange gold or silver (electronically or through a warehouse receipt) for goods and services.

**How to Invest in Precious Metals**

While convenient “virtual” precious metals ownership has its place, it can never substitute for the ownership of actual, physical silver and gold.

It makes sense to allocate about 20 percent of a safety-oriented investment portfolio to gold and silver at all times. Prior to the onset of the Great Depression, those who had at least 20 percent of their investment holdings in gold were able to live through the Depression without becoming beggars. As stocks collapsed from September 1929 to April 1932, the price of gold shot up 70 percent.

During today’s volatile economic times, it would be wise to invest more heavily in precious metals in the aggressive portion of your portfolio. It wouldn’t be unreasonable to allocate up to one-third of your assets to precious-metals-related investments. Later, if a bull market in stocks emerges, you can always sell some gold and use the money to invest more heavily in stocks. But for now, gold and silver have the dual advantages of being safer than stocks and in a position to grow in value faster than stocks in the coming years. In times of severe economic disruptions, such as depressions or hyperinflation, people will generally flock to gold more so than silver. Gold assets, therefore, should make up the largest portion of your precious metals acquisitions.

If you are investing for the short term, gold can have severe ups and downs. During the inflationary 1970s, when the dollar lost nearly half its value, the price of silver, and especially of gold, soared. Through the stock market surge of the 80s and 90s, gold suffered. Since 2000, gold has yielded impressive returns. I don’t know what the price of gold will be next year, but I do know that decades from now, gold will still be a highly valued commodity.

You can obtain gold in “paper” form by purchasing precious metals mutual funds. These enable you to have some of the security of precious metals without actually having to store your own gold, silver, etc. These funds invest in mining companies and other businesses that tend to benefit from surging gold prices. However, a disadvantage of precious metals funds is that you’re still exposing yourself somewhat to the risks of a market collapse and of a poorly (or fraudulently) managed fund. Perhaps of greater concern is the loss of financial privacy that comes with any paper asset.

For privacy reasons and for maximum insulation from any economic chaos that may ensue in the coming years, nothing beats having actual precious metals in your immediate possession. Gold and silver come in a variety of sizes for investors. If you have a bundle of money to spend, you might consider bullion bars. For most people, however, gold and silver coins are most convenient. Plus, they are much easier to exchange or sell.

In addition to gold and silver, platinum and palladium coins are available. Platinum, being extremely rare, is difficult to acquire and riskier to own over the long run. Palladium is also risky. Consider relatively small holdings in these more exotic metals only after you’ve built up a considerable stash of gold and silver.

Both silver and gold appear to be sound “growth” investments at this point in time. They suffered during the bull stock market of the 80s and 90s, but now the tide has turned in their favor. Precious metals tend to run counter-cyclical to cash-based financial markets. But they have enjoyed gains in 2003 despite a stock market run-up. We could be in the early stages of a multi-year bull market in gold that will make up for all the declines of the previous 20 years.
How You Can Profit from Silver and Gold Coins

There are many different types of silver and gold coins, and some are definitely better than others from an investing standpoint. Some coins are worth only what their precious-metal content amounts to. These are the safest types of coins to own. Other coins have additional historical value to collectors.

"Numismatics" — coins that have a high historical value and a low metal value — are risky, because in an economic crisis, such coins could actually lose value relative to coins that have objective value in their gold, silver, etc. Numismatics may rise more rapidly in value than gold bullion during a major gold boom, but don’t let that profit potential blind you to the primary purpose of gold investing, which is safety and security. It is the actual gold content of coins that guarantees their long-term worth, not the particular historical or collectible “premium” that you pay when you buy numismatic coins. There’s nothing wrong with adding numismatics to your portfolio, but plain, boring bullion coins that carry little or no premium above their actual melt value should form the foundation of your gold investment.

Coin investing and coin collecting are two separate things. If you are a collector, you’ll be spending a lot of time poring over books and price guides and keeping up with the ever-changing trends in the collecting market. You’ll maintain your collection for its historical, esthetic, or sentimental value. If you are a precious-metals investor, on the other hand, you may not have any particular interest in coins aside from what they actually do for your financial security and well-being.

For precious metals investing, you can’t go wrong with U.S. silver and gold Eagles. Minted by the U.S. Treasury Department, these coins are legal tender, and their weight and purity are guaranteed by the government. If somehow the currency collapsed sometime in the future and you were forced to barter for goods and services, these coins would be the most widely recognized and accepted.

Another type of coin you might use to supplement your precious-metals investment is ninety-percent coin (known also as “nineties” or “junk coin”). These consist of dimes, quarters, and halves minted before 1965 and are 90% pure silver by weight. Silver dollars (minted before 1936) can also be good investments; although due to their historical value, they carry a considerable premium above the actual value of their silver content.

How to Keep Precious Metals Transactions Invisible to the IRS

Assuming that protecting your financial privacy is important to you (it should be!), you’ll surely want to minimize the chances of generating paper trails on any purchase of important long-term assets like precious metals. The best way to pay is with cash. The IRS and other branches of the U.S. Treasury Department are increasingly able to pry into records kept by credit card companies and banks. Any personal check, cashier’s check, or credit card transaction could be monitored and scrutinized by government bureaucrats.

A precious-metals dealer will probably demand that you fill out a form providing detailed information about yourself if your transaction exceeds a certain amount. That amount used to be $10,000. But now that the federal government, empowered by new anti-money laundering legislation, is stepping up its efforts to track and freeze terrorist assets, dealers may keep records of transactions of $3,000 or more and report them to the Treasury Department’s Financial Crimes Enforcement Network (FinCEN).

If you have several thousand dollars available to invest, you may wish to break your purchase down by making relatively small purchases from a number of different suppliers. However, if you’d rather avoid
the headaches and complications of going through multiple merchants, then locate one supplier who is reputable and will strictly protect your privacy (specifically ask about what information is kept on file and under what circumstances any of it will be reported to the government).

The same cautions apply when you are selling precious metals to dealers. Among the transactions that may trigger a dealer to file IRS Form 1099-B, Proceeds From Broker and Barter Exchange Transactions:

- Gold bars totaling 1 Kilo (32.15 troy oz.) or more.
- Silver bars totaling 1000 troy oz. or more.
- Platinum bars totaling 25 troy oz. or more.
- Palladium bars totaling 100 troy oz. or more.
- U.S. 90% silver coins totaling $5,000 or more (any combination of dimes, quarters, or half-dollars).
- Krugerrands, Maple Leafs, or Mexican Onzas in lots of 25 or more.

Keep in mind that the above are only generally accepted guidelines. Some brokers may file a form 1099-B with the IRS based on smaller transactions. Some coin dealers will not file any reports on customers who sell them numismatic coins (with a collectible premium of more than 15%), but will file reports on non-numismatic bullion coins. Be sure to check with the individual dealer to ascertain his policy on reporting precious metals transactions.

Even if no forms are filed with the Internal Revenue Service, you may still be liable for taxes. The IRS will just have a harder time identifying the tax owed absent your voluntary reporting of it. Ultimately, it is your responsibility to report any income that the law obligates you to report.

**Secure Storage for Your Precious Metals**

There are a number of options for storing your gold or other precious metals. Which one is best for you depends on factors such as the overall value of your investment, whether you have children, and the size and ownership status of your home.

The simplest solution is to store your precious metals in a safe place in your home. If you’re just starting out and have only a few hundred dollars to invest, then it’s obviously not cost-effective to spend hundreds of dollars on an installed, fireproof safe. Instead, putting your valuables in a special box somewhere that doesn’t call attention to itself is probably adequate. However, if you live with roommates or have kids who bring over friends unsupervised, you might have better peace of mind by putting your precious metals in a safe-deposit box at a bank.

Using a safe-deposit box might also be an attractive option if you have several thousand dollars worth of precious metals to store and want to guard against the possibility of a burglary. But when you’re dealing with huge amounts of value with which you are hedging your future, it’s never a good idea to put all your eggs in one basket. Instead, reduce your risk of loss by having at least two storage locations. One should be your home.

But, you may be asking, isn’t a safe-deposit box the safest place to put valuables? Why not simply entrust the bank and its protective vault and high-tech security systems to guard all your precious metals? There are a number of reasons why you shouldn’t put all of your gold in a safe-deposit box. What if you need to access your gold immediately, but the bank is closed due to a holiday? What if the bank turns over your assets to the government because the IRS thinks you haven’t paid your taxes? What if a person commits identity theft and manages to get into your safe-deposit box? What if your bank fails (you can discover how
safe your bank is using the resources described earlier in this chapter? There are many more scenarios that, taken individually, might seem far-fetched. But when taken together, they add up to a level of risk that shouldn't be taken lightly.

Another way to own precious metals is to purchase an interest in the metals held by a coin dealer, investment firm, or bank. At first glance, this appears to be the easiest way to get into precious-metals ownership. You'll have virtually no hassles. You don't have to handle or even see the metal you'll be buying. But therein lays the problem. You can't be sure you're not being cheated. And in an emergency situation when everyone wanted to get their interest in the precious metals out, or if the company declares bankruptcy, you may be left with a worthless piece of paper — which is presumably what you were trying to insure against by getting into precious metals! You'll also be sacrificing some privacy by having your holdings "on the books" with a company that could be pressured by the IRS or some other government agency into forking over your information or even your gold if a lien is presented.

If you do decide to own precious metals "remotely," be aware that in addition to the storage fees you'll have to pay, you should also take out insurance to protect against loss due to negligence by the firm or some sort of catastrophe that destroys their holdings. Again, anything you can do to spread out your risk is wise, so if you have large amounts of holdings in storage at a remote facility, try to keep some stored at home and perhaps some stored in a safe-deposit box as well.

**What if the Government Confiscates Gold Again?**

Federal authorities once went so far as to ban the private ownership of gold. It's not difficult to see why gold poses a threat to the political establishment. Its value is objective. It can often be concealed, bought, sold, or exchanged privately without generating paper trails for tax collectors to follow. Precious metals represent the very strength and independence of the individual citizen that most modern politicians loathe.

In 1933, President Franklin Delano Roosevelt issued an executive order prohibiting the private ownership of gold bullion and most gold coins (some rare coins of great value to collectors were exempted). The government proceeded to confiscate privately held gold in order to "fix" the price of gold. Some people lost a lot of their wealth during gold prohibition. But those who managed to hide their gold from the authorities saw its value rise. They could have sold their gold for a nice profit when it became legal to do so once again.

Now that U.S. currency is off the gold standard, politicians can manipulate prices in any number of ways. They can create money out of thin air. So the government would gain little by undertaking the expensive effort of seizing privately held gold. It is unlikely that a gold confiscation would be ordered in the foreseeable future. But decades from now, who knows? Anything could happen.

If the government orders the confiscation of gold bullion and gold coins, "numismatic" coins would almost certainly have to be exempted (as they were in 1933). Numismatics are coins that have a high historic or collectible value above and apart from the value of the metal they contain. In 1985, Congress authorized the minting of gold coins by the Treasury Department and declared all such gold coinage to be numismatic (Gold Bullion Coin Act of 1985). Numismatics are specifically exempt from any law that deals with the confiscation of privately held gold. Therefore, if you hold American gold Eagles (either full ounce, half ounce, quarter ounce, or tenth ounce), you should be safe. American silver Eagles are also considered, by law, to be numismatics (Liberty Coin Act of 1985). However, any future Congress can change the law at its whim.

You can protect yourself by storing at least some significant portions of your gold within the
confines of your own home. It is unlikely that any government is going to be able to thoroughly search each and every home for gold. It is more likely that government agents would go through precious-metals storage facilities and safe-deposit boxes, where they are sure to come away with plenty of loot.

It is possible, however, that you could be the victim of a random search or that law enforcement officials will obtain a search warrant for some reason or another and invade your home. To reduce the likelihood of being the target of a gold-confiscation operation (either by the government or burglars), don’t show off your gold to friends or neighbors. Try to keep your children unaware of your gold stash. Only your spouse needs to be fully aware of where the gold is and how to access it, in case something unforeseen happens to you. You might also want to inform one or two trusted friends or relatives if you’re sure they can keep a secret.

If you have your safe well concealed, no burglar or government agent may ever find it. If it’s a small safe, you have a number of options. One of the simplest is to put it under some insulation in your attic or crawl space. This may not be practical depending on how your house is designed. But there are many other options. Think creatively. Can you create an inconspicuous hiding space under the floor? Inside a wall? In the garage or basement?

If you’re not confident that your safe can be stored securely inside your house, then bury it in the ground. Pick a spot that can be identified clearly years from now based on landmarks on the property. The deeper you place the safe (or other water-tight container) the more secure it will be. The downside is that it will also be more difficult to access, should you need to get at it in a pinch.
Chapter 4:

**Insure Your Assets**

Insurance is essential for surviving turbulent times. Without it, you can lose everything in just one fire, earthquake, hurricane, burglary, or terrorist attack. You can be transformed from a rich man to a pauper in just a few seconds if you lack insurance. But with it, even the most serious of disasters can be overcome.

Insurance may be the pessimist’s nightmare; you’re betting something will go wrong so you can collect while a major institution, working with tables and charts, figures that chances are good nothing will go wrong so they’ll make money, or at least come out ahead in the long run. Of course with some insurance, eventually the pessimist is going to win; life insurance will eventually pay off if you keep paying the premiums.

In theory a person could save money and have a good chance of coming out ahead. The catch is there is also a chance that he would be one of the ones to have tragedy strike. At that point it is better to have gambled on losing a little over time rather than losing a bundle all at once in the form of health care costs, a lost home, or the death of a family member. In such a situation, having the dollars come in to help ease the already serious problem is a giant plus. (I’ve been told that folks with insurance also have lower death rates; insurance agents claim this is from the fewer worries — though it may be from the fact that such people take better care of themselves overall and therefore are more apt to buy insurance.)

Don’t skimp on insurance. But also be sure you don’t waste your money on useless features an agent may want to force on you. Remember that an insurance agent is sold on his product and will also gain more money in commissions if he can sell you a larger policy. This makes him the last person you want to consult with when deciding how much insurance you really need to buy.

While you don’t want to be under-insured, you also don’t want to waste your money on unneeded coverage. Study the sections that follow before purchasing additional insurance or new policies. Then make a careful assessment of what you need.

**Health Insurance**

One type of insurance that everyone should have is health insurance. NBC News reported in 2003 that 18,000 people die every year because they lack health coverage. As more and more Americans are losing their jobs, many are taking a dangerous gamble by going without insurance.

Unfortunately, health insurance is one of the costliest types of insurance. Annual health insurance premium increases have been far outpacing inflation in recent years. If you have an individual health plan, then the situation is even worse, because as you age the insurance company will raise your rates. The rates insurance companies charge to healthy 60 year-olds are often many times greater than what they charge to 25
year-olds. If you’re on the younger end of the scale, you might save a lot of money by opting out of your employer’s single-rate group health plan and shopping for your own policy.

No matter how you get your health insurance, make sure you have it. There is nothing more important than your health. Hospital bills can run into the hundreds of thousands of dollars. Think about how tragic it would be if you or your family were wiped out financially or were unable to pay for necessary medical care.

**Home Insurance**

Nothing can set a family back quicker than the loss of a home and all the possessions in it. Even if you rent, if you fail to get an insurance policy to cover your losses, you’ll be up the creek should there be a fire or other disaster.

Unfortunately there have been so many charlatans trying to bilk insurers that the industry has taken somewhat of a “guilty until proven innocent” attitude about what has been lost in a disaster. If they can find proof that the object existed, they’ll pay for it. But they won’t take your word on the priceless mink coat that vanished in the flames or the collectors coins that are now a mass of fused metal. So the most important first step is to take an inventory of all your personal possessions.

You can do this inventory on paper or a computer program, but these don’t have a lot of “pull” with an insurance investigator. A better bet is to make copies of all the invoices and receipts you receive for big-ticket items, then use a camera to take snapshots of the entire house, including your guns, cash, jewelry, computers, and other expensive items a criminal is likely to steal or which might not survive a fire.

Any camera will work for this, though a video camera with a built-in mike is perfect for the job as you can give a running commentary as your tour your home. This makes it pretty hard to dispute what was in your home and — should you be forced to go to court — gives you a big edge with a judge and jury when they actually see what you claim needs replacement.

Important point: Make several copies and keep each in a separate location. Try to have them in different towns so that if a major disaster wipes out your area (which could happen in this age of contaminants and terrorist nuclear weapons), you will still be able to produce a copy to prove what you had. Among the best places to keep such tapes are in the hands of relatives living some distance from you and in a safe deposit box at a bank.

Policies come in a variety of flavors. Unfortunately you can choose the wrong one and get shortchanged when it is time for the insurance company to cough up cash. One such mistake is to buy coverage that will pay back the “actual cash value” for lost property. This means the insurance company can rule that your TV, being four years old, is only worth a fraction of what you paid for it. That’s great if you plan on shopping for a new TV at garage sales. But the money won’t buy a new TV anywhere else. And this goes for your furniture, computer, and so forth until you discover you have a payment that will only buy a fraction of what you lost.

On the other hand, if you purchase a “replacement cost policy” the company will pay you what it would cost to purchase a comparable item. While they may not pay full value for out-dated equipment (like an old computer, for example), you’ll generally come pretty close to being able to go out and buy new items to replace those that have been lost. Obviously a replacement cost policy is the way to go.

There are a number of different insurance packages you will encounter when you’re getting ready to buy a policy. The various types offer limits on coverage, so it is a good idea to understand which is which and how much coverage you need. Otherwise you’re apt to discover that after losing you home to a flood or riot that, that
specific disaster isn’t covered — and you’re not going to get a cent for the loses.

Read through policies looking for one key word: “exclusions” or variations thereof. These are things not covered by a policy. Sometimes exclusions will also limit the amount of coverage. For example firearms losses above $200 might be excluded. Jewelry, cash, or other items may be excluded or have a maximum amount after which you’ll have no coverage. Often this won’t matter as you’ll not max out. But if you do have more than is covered, get a rider added to the policy to give additional coverage.

If you run a business from your home, materials and equipment used in that business may also be excluded. Be sure to check this and get additional coverage. While this can be done with a separate policy for the business, it is generally cheaper to add it on. If you must go with a second policy, get it with the same company; this makes it impossible for one company to claim that something should have been covered by the other insurance company. If everything is covered by the same company, you’ll get paid from one or the other policy.

Many insurance policies will have an inflation rider that automatically increases your coverage based on the inflation rate. This boosts your premiums over time, but also keeps you from being under insured. You should also consider getting additional coverage as you get salary increases, a spouse gets a job, or other factors that translate into improvements in your home or more valuable personal property.

Two exclusions with most home insurance policies are damages that result from earthquakes and floods. Unless you’re in an area where neither is even remotely possible, you should consider getting a rider added to your policy to give you coverage for these. If you can’t get a rider for flood insurance, you should be able to get it through your agent from the federal government via the HUD (the Department of Housing and Urban Development).

The various types of home insurance policies may have a variety of names, but generally the insurance industry has adopted more or less standard policies that include:

HO-1 (Homeowner’s One) which gives coverage for damages from fire, lightning, wind, hail, explosions, riots, civil disturbances, vehicles smashing into your home (including automobiles and aircraft), smoke, vandalism, theft. The only thing to watch for is that these policies vary and cover only what is listed. If something isn’t specifically listed, you are not covered for it, nor are you covered for anything that is excluded like “an act of God” (which is generally seen as something so freakish or unusual as to be totally unexpected — say a meteor the size of an airplane wiping your town off the map).

HO-2 (Homeowner’s Two) covers most of the items of HO-1 policies plus damages caused by falling objects (like a crate dropped from a plane), ice/snow/sleet, collapse of a structure, flooding, explosions (of the types listed in the policy), frozen plumbing, power surges, and problems with appliances in the home.

HO-3 (Homeowners Three) is probably the most common in the US. It covers nearly all the risks to a home as well as structures around it. The only thing not covered in this policy are items specifically excluded in it. Among the most common of these exclusions are damages from earthquakes, floods, termites, landslides, war, tidal waves, and nuclear accidents. These policies also give some coverage to loss of personal belongings but not total coverage (always check such a policy to see how much coverage it actually gives for these items).

HO-4 (Homeowners Four) is somewhat of a misnomer since it isn’t for home owners but rather for renters, giving only coverage of possessions from causes specifically identified by the policy. The coverage will usually be the same as HO-3 and should be replacement cost as noted above. Because the amount of coverage is determined by your estimate of what you own, great care
should be taken to get as close as possible to the actual replacement costs; failure to do so may
give you a lower premium, but when you suffer a loss the insurance company will cut the
payments by that amount as well so you’ll come up short if you have “economized” in this way.

HO-5 (Homeowners Five) takes up where HO-3 leaves off, giving you extended coverage on your
personal belongings. This increases the premiums, but also guarantees you’ll come closer to
getting the full amount of money you need to start over should you lose everything. Some
companies don’t offer an HO-5 policy as such, instead adding riders to HO-3 policies. While this
comes close to giving you the same coverage, it doesn’t do as well in most cases. So when you
have the choice in upgrading a policy or when shopping for a new company, go with HO-5 if
possible.

HO-6 (Homeowners Six) is designed for those with condominiums or co-op apartments. As
such it is similar to HO-4 but gives coverage only for specific dangers listed in the policy.
Most often the condo association or board of directors will opt for an HO-6 policy to cover a
building, making it a package deal for the members. However the coverage sometimes isn’t
adequate for the building, causing everyone to be “short changed” when it comes time to
settle up for damages. Consequently if you’re covered by such a policy, you should check to
see if it will really protect you and also consider purchasing a rider to protect yourself should
the board or association assess a fee from the occupants for any uninsured losses.

Sometimes you can save money in premium payments if your house has certain features. Included are
how close it may be to a fire hydrant or fire station, whether you install smoke alarms in it, if you have a
burglar alarm system, and so forth. Often agents aren’t forthcoming about these since they can make more
money selling you a more expensive policy. Check.

Also the savings involved over several years may pay for the installation of an alarm system. In such
a case you may not save a lot of money in the short run, but will have additional protection not only of your
home but your family members as well.

In such a case the savings might be priceless, especially in the case of a house fire where members get
out in time to keep from being injured, thanks to the smoke alarms you put in. Remember that if premiums
are lowered, it is because the catastrophe being insured against is less apt to happen.
That means you’re that much safer if you install the devices or make the required changes to obtain the
savings.

The Payoff

Unfortunately many people get shortchanged by insurance companies which try to keep their bottom
lines high by minimizing how much they pay for losses. The first step to prevent this is to be sure that your
records aren’t destroyed in the same catastrophe that takes your home and its contents. If the agent sent out to
assess the damage knows you’ll have trouble proving the value of what you had or even that you had it, he
will attempt to pay you as little as possible. And he’ll even try to do that if you do have documentation.

If you have the documentation and you feel you’re being cheated, don’t settle up in a hurry to get
some money. Use your credit cards, handouts from relief workers, or whatever to get by while you fight for
what’s owed you. Don’t take money and sign documents saying all is “even Steven” no matter what. Instead
hold out for what’s owed you and hire a lawyer if necessary (or act as your own as outlined elsewhere in this
manual).

Of course taking legal action may cost you money. So be careful that it won’t take more than you’ll
gain. And don’t go to the other extreme and try to hold out for the last dollar; settle when the money is
getting into the ballpark of what you think you need.

If you have disputes with an insurance company, the problems will often stem from the company's appraiser's estimates. You can bolster your claim that these estimates of damage were low by contacting the American Institute of Real Estate Appraisers and/or the American Society of Appraisers and asking them to recommend an independent professional appraiser near you.

You will have to pay a fee for the appraisal service (unlike the free appraisal from your insurance company), but you'll also be getting an appraisal from someone that doesn't stand to gain in underestimating your losses. Often the payment to the appraiser will be a part of your final settlement (be sure to check on just how he will be paid before hiring him).

If your home is too damaged to stay in, your insurance company will normally pay for your hotel bills and additional costs you incur in eating out (as compared to what the company estimates you would spend eating at home). However there are dollar limits to both so be careful not to overstep your bounds or expect to make payments out of pocket. Usually there are time limits as to how long this coverage will continue after which you'll be on your own. Read the fine print in your policy so you are aware of these limitations.

There are times when you may not want to go to a hotel, even if your home is severely damaged. One of these would be when there is the possibility of looters or thieves taking materials from the site. In such a case one or two family members may wish to "camp out" near the home to keep an eye on things. In such a case an inexpensive tent, sleeping bags, and an inexpensive air mattress may be all you need. Also be aware of the idea of presenting a "show of force" as outlined elsewhere in this manual.

If you are strapped for cash, or want to limit the amount you spend on home insurance, you can cut the amount of coverage somewhat. Probably the most you would want to cut back to would be to carry 80 percent replacement cost for both the dwelling and its contents. If you have less than 80 percent, the insurance company can legally cut back on the amount they pay you. Often this consists only of the actual cash value or a percentage of the replacement cost.

Obviously this is going to cost you big time if you lose your entire home and contents. So don't gamble on saving a few bucks this way because it could really backfire.

**Auto Insurance**

Auto insurance coverage is measured in ratios of injury/death coverage. For example, a policy might be listed as having "50/100/50" coverage in a specific area. The first two numbers indicate the coverage for personal injury. What this means is that for individuals involved in wrecks the company covers you for $50,000 for any single person you injure or kill by accident with $100,000 of coverage if more than one person is injured or killed. Because of the high costs of medical treatments, it is obvious that you need more than the old "50/100" coverage for injuries and death; get at least a 100/300 ($100,000 for individuals or $300,000 for several persons injured or killed).

The insurance company pays for any damages, injuries, or claims successfully made through lawsuits against you resulting from the accident you were involved in. Anything beyond that point you pay for out of pocket. It is hard to be overinsured in such a case. Given the low cost of insurance, don't try to save money in this area.

Coverage for property damage is figured in a similar manner, with the last number representing the amount given out for property damage. For example in a three division figure such as 100/300/50, there would be
$100,000 available for bodily injury protection for one person, $300,000 to be paid out for injuries sustained to two or more people, and $50,000 to cover property damage. As with medical coverage, should a person sue you, you would have up to $50,000 of your legal expenses paid for by the insurance company.

Injury costs to the owner of the insurance are not covered in the above figures. These will be covered in the personal injury section of the policy. These can be any amount offered by the insurance company. Again, given medical costs and the severe injuries that can result, it is wise to have a lot of coverage here. However, coverage that isn’t covered by your car insurance will often fall to your health insurance company — if you have such coverage. The time to find out is ahead of time, not after the wreck.

Many states now have laws that discourage driving without insurance. However you will still see an occasional wreck in which one driver is uninsured. Unfortunately this most often happens when that driver has had his licenses suspended, the car has been stolen and the criminal has neither license or insurance, or the other driver has minimal insurance that won’t cover all the expenses racked up in a major accident. In many such cases he will be both poor and uninsured; taking him to court will not gain you any money and there will be little if any money through insurance. You’re apt to pay for your injuries from out of pocket if they exceed the coverage you have. And unfortunately your insurance company may take you to court to be sure they pay a minimum amount.

The way around such happenstance’s is to get coverage that will protect you if you’re involved in an accident with an under insured or uninsured driver. The maximum you can obtain is generally limited to the amount of bodily injury protection you have. Go for the maximum if this is the case, or get even more if it is available (and it is with some companies).

Unfortunately you often have to hire a lawyer to file a claim under the uninsured/under insured portion of your policy, even though you have coverage. At this point if you’re lucky the insurance company will negotiate a settlement. If not, you may go to arbitration (more on tactics to win court cases elsewhere in this manual). One key thing to remember in arbitration is that if you use common law arbitration, results can be appealed to a court, causing additional delay and costs.

Leading to some small print you need to read on your policy. If your insurance company only allows common law arbitration with cases involving under insured or uninsured accidents, then you should find another company that permits other types of arbitration. Otherwise you could see some large expenses and delays of several years before you get money.

One more tip: With some home owners and rental insurance policies, there is an option to get additional under insured/uninsured coverage for your automobile. Often this can be a good and even less expensive way to increase your coverage. Check you policy and see if this money-saver is available.

There are often other ways to lower your payments for car insurance. Often agents won’t be aggressive in telling you about these since they lower the amount of money taken in. Among the savings are lowered payments if your child is limited in how often they drive the car as well as lowered payments if your child has good grades in school. Payments may also be lowered if the amount of driving done with the vehicle is less than normally seen by most people.

One other tricky point involves the deductibles you have on your car. These spell out the initial amount of damage you’re responsible for. For example with a $500 deductible, you would pay for any damage below $500. With a fender bender that costs $1,500, the company would pay for $1000 and you would pick up the $500 not covered by your deductible. The thing to remember with deductibles is that the higher the deductible, the less the premium.

As cars get older, the collision coverage becomes less and less of a good buy since the insurance company will only pay your repair costs up to what the fair market value of the car is. That means you might be in an
accident that does enough damage to your car to entail $5,000 in repairs. However if the insurance company determines that a similar old car would only have a market value of $3,000, that’s all you’ll get — less the deductible in most cases.

Consequently as the market value of your car drops, you’re generally better off dropping the collision insurance and instead diverting the money to additional liability and injury coverage.

The last area of coverage you should have is comprehensive. This covers things that aren’t the result of an actual accident such as damage to the car through theft, vandalism, or fire; this also covers items stolen from the car, such as might be the case if someone jimmys the trunk open or breaks out a window to snatch packages you left on the back seat. As with collision coverage, the higher the deductible with comprehensive coverage, the lower your premiums.

Now there are some areas where you can get into hot water very quickly. One is if someone drives your car who isn’t listed on your policy. For example, if you loan your car to a neighbor or your teenage daughter decides to let her date drive the car. In such a case the person will probably be covered by your policy if they have a wreck. However legal complications can arise and you may even discover yourself involved in a lawsuit with your company or the one representing others injured in the accident. Your best advice is to have a clear-cut rule that doesn’t allow anyone outside your family to drive the vehicle (and be sure all members of the family who will drive the vehicle are listed on your policy).

If an unlisted driver is involved in an accident and you luck out and you insurance company pays the bills, you can be certain such generosity won’t be extended again. So be sure that person (as well as anyone else) doesn’t ever get behind the wheel of a car you’re insuring again, or list them as one of the drivers of the vehicle on your policy and be prepared to pay additional costs.

**Disability Insurance**

With modern medicine getting better, and people living longer, one might assume that there would be fewer disabled people. In fact much the opposite is happening because many of those who might have died at one time now survive — but with greatly diminished capacities. While one can not argue that such people would be better off dead (most don’t think they would be!), they often aren’t able to resume their normal activities and may become unemployable.

In such a case they go from a bread winner to a liability in terms of bringing in income for a family. Little by little all the family’s savings is exhausted, the home sold, and the standard of living goes to rock bottom. According to insurance company statistics, even if a person eventually recovers and goes back to work, if he is disabled for six months, the chances are good that he will remain unable to get a job for another 4-5 years. That’s a long time to go without bringing in any cash.

Disability insurance takes up the slack when you can’t work due to an injury or illness, giving you a source of income during this period. You may already have some coverage from your employer — but be sure to check to see whether you do and how much income it would actually provide. Some policies give you only a fraction of what you earn if you become disabled; if your employer is offering such a package, then you should augment it with a second policy you purchase on your own.

Usually there is an “elimination period” during which you won’t be paid if disabled. The best deals on disability insurance are generally found with a 60 days waiting period. That means that you should also have enough money in a savings account to tide you over for two months, or, as a poor second choice, a credit card that could be used for this purpose.
Premiums charged for disability policies vary according to your age, sex, occupation, and income. You’ll never be able to get a disability insurance policy for your full income; generally it is set to 50 to 70 percent of your monthly income. This potential reduction of your income, coupled with added medical costs, is an important factor to keep in mind when planning for such a mini-disaster in your life.

One plus is that if you pay for the disability insurance yourself, currently income from your disability policy is tax free. Sometimes employers will trade their disability coverage for cash if you’ll then be purchasing your own coverage with disability insurance. This gives you a greater tax advantage, meaning it will be putting additional money into your pocket in the long run.

In the eyes of the insurance companies, disability is much like pregnancy. A person is either disabled or not disabled, there’s no central ground. If you’re able to get around, the insurance company will expect you to get back to work. The solution to this situation is the “residual rider” which can be added to most disability policies. It makes it possible for you to work just part time and receive a partial disability payment.

The only catch is that it can also be expensive; if you have a job that requires maximum expenditures of energy (say a UPS delivery person who has to pick up and carry heavy packages), then you should consider this rider. If, on the other hand, most of your job entails “paper pushing”, then you could probably get by without it.

As with other policies involving health matters, you may be required to take a physical before being insured. After you’ve passed that hurdle, many policies permit you to increase your coverage each year for two to four years by up to 10 percent without dictating another physical (with an increase in premiums for the additional coverage). This can be a bargain, to take advantage of, especially if you encounter health problems during that time that may eventually become disabling.

For example, if you suffered a mild heart attack, increasing your insurance by the maximum amount would make sense because after that you probably won’t be able to gain more additional coverage from the company.

Bringing us to another important point: Be sure any disability insurance you get has a “guaranteed future insurability.” That means you’ll be able to increase your coverage with increases in pay. This costs extra but is worth the advantages such a disability policy gives you. Some policies will also have a “COLA” (cost of living) rider; this shouldn’t be confused with the guaranteed future insurability clause, though it does offer some advantages and will often give stepped increases of coverage with no additional physical exams.

One must-have with disability insurance is a clause that guarantees the policy is renewable. If this is lacking, the insurance company can cancel the policy at any time — which it will do if it appears you’re on a downhill trip in your health. Just when you are about to need the policy, the company will most likely cancel it. Ditto if you are injured and then go back to work with the possibility of having a relapse. If the policy has a guaranteed renewable clause, that can’t happen.

The policy should also be “noncancellable”. While this sounds like the same thing as a guaranteed renewable clause, it actually means something quite different. It means the premium rate stated on the policy will remain the same and can’t be raised. Don’t confuse these two clauses or assume that one guarantees the other. Both should be in the policy if it is to give you real protection.

Finally, it is a good idea to make some “fall back” plans that would permit you to start another line of work or business should the one you’re currently engaged in come to an end, or you become too disabled to carry on with your current line of work. This will give you an added edge should you be unable to continue working as you are now. It would also give you an edge should an economic downturn or technological change put you out of work.
Today everyone should not expect to continue in any line of work for more than a few decades; always have a "fall back" position you can go to that will continue to bring in money for you and your family.

**Life Insurance**

Sooner or later you'll die. Your passing can be a great disaster to your family if you don’t plan properly and leave them without a viable source of income and support after you are gone. Or, if you’ve planned properly, you can turn your death into a less brutal time of grieving followed by gratefulness at how well you planned to meet your family’s needs, even after you have gone. The key to taking this latter path is to have a good life insurance policy.

Life insurance gives benefits to your family after you die. More importantly, it will give this protection if you die prematurely before you can amass a good inheritance to pass down to your survivors. You will need less coverage as your estate becomes more valuable, though even then you may wish to have coverage as a method of circumventing inheritance taxes since many life insurance benefits aren't taxed and can’t be designated to go to whoever is listed on a policy. In such a case you might even have several different insurance policies to distribute wealth to a number of different people.

There are a number of types of life insurance policies and some will be more useful in some situations while being an unwise choice in others. Often term insurance will be the best buy, especially if you’re young to middle aged. However there will be instances when Whole Life Insurance, Universal Life Insurance, Variable Life Insurance, or a Single Premium Life Insurance policy will make good sense to buy. (There are other types of policies as well, but most are variants of these five types.)

**Term Insurance**

Term insurance is often the best deal available to you in the form of life insurance. Policies will provide coverage for a specific period of time, usually in five year increments. If you die during the period the insurance is covering you, the insurance company pays off the policy. If you outlive the period you’re covered, then you will get nothing from the policy.

The catch to this is that most insurance salesmen will try to convince you that you’re better off buying another form of insurance so you’ll have money paid back to you should you outlive your policy. But the tricky part of this is that the premiums on such insurance is higher. If you have better ways to invest the money (such as a retirement fund, a business, or other endeavors), chances are good you’ll be able to do better investing your own money while getting term insurance to cover all bases.

There are two forms of term insurance: Renewable and non-renewable. Non-renewable means that after the policy expires you must take another physical and file another health questionnaire; this might make it impossible to get more coverage after the policy expires should you have a downturn in your health, an important factor that should make you think carefully before buying a non-renewable policy.

On the other hand these policies will generally have lower premiums. So if you only need coverage for the period covered by the non-renewable policy then this is probably your best bet.

With renewable term insurance you will automatically be eligible to get a new policy even if you have developed potentially serious health conditions during the period covered by your original policy. This can be an important factor and makes renewable the best choice for anyone wanting to extend their coverage over a long period of time.
Some term policies are also “convertible.” This means they can be converted from term insurance to whole life, universal life, or variable life. Because the insurance company will generally make more money off one of these latter policies, getting convertible term insurance won’t cost you much if any more; it will give you added flexibility should you discover that investing money on your own isn’t working well.

Furthermore, as you get older, term insurance becomes less of a bargain. Often you can obtain as much or more nonterm insurance for the same amount as you can get with term insurance. That means switching over will give you the benefits of these other policies at a slightly reduced price. (This also demonstrates that term insurance isn’t always the best and only choice in all situations.)

If there’s any chance that you will be converting your term insurance into another form of insurance, be sure to investigate the company’s other policies. A few companies do most of their business in term insurance and offer very good deals. However their other policies are very inferior to those offered by other companies. In such a case locking yourself into doing business with them is a poor step.

If you think you might want to convert your term policy into Whole, Universal, or Variable life insurance, then it is better to pay a little more for the term insurance while giving yourself more room for change should it be needed (more on these other forms of life insurance in a moment). Don’t always shop just for the lowest price with term insurance; look at the company’s other products as well.

When you purchase term insurance, you can get “Level Term Insurance” or “Decreasing Term Insurance.” Level term gives the same coverage for the entire period of the policy, meaning that if you die during that time, the payoff will be for the same amount at any point. The catch to this is that as you get older, you’re more apt to die. So to maintain the level of coverage, your premiums will increase.

With Decreasing Term Insurance, the payments remain the same while your coverage decreases. That means considerably less will be paid to the beneficiaries should you die toward the end of the length of coverage as opposed to dying on the first day you were covered.

Decreasing Term Insurance is ideal if you’re buying a policy to cover a diminishing financial commitment. For example, if you bought a house, buying a Decreasing Term policy would make sure the mortgage would be paid off should you die while not wasting any of your money in larger-than-necessary premium payments.

Other Forms of Life Insurance

Whole Life, Universal, Variable, and Single Premium Life Insurance, are permanent insurance policies while term is often employed only until you’ve amassed enough of an inheritance and savings to make insurance unnecessary. Unless you have trouble saving money or amassing wealth, term insurance should be the first type you consider buying.

It won’t be suggested (or even mentioned in most likelihood) by a life insurance agent because he won’t make nearly as much money on it. But because it only pays off in the event of your death, and is covering you when you’re less apt to die, the premium to benefit ratio is much greater, giving you a lot more coverage for your dollar. This benefit diminishes as you become older; often companies will switch you from a term insurance policy to another type without need of a physical or meet other requirements called for with a new policy. This is good to keep in mind should your insurance needs change.

Whole Life is the type of policy most people purchase. With it you will pay a monthly premium. Part of this goes toward the actual insurance coverage (which is comparable to term insurance) with a small percentage
going toward the company’s profits and costs. The rest is invested in the form of long-term securities, generating more money for the company as well as the insured; at the end of the policy, the money generated by this investment is then used as a lump sum payment. The policy also permits the insured to borrow against the “cash value” of this investment or receive some of the money when the policy is discontinued.

Universal Life Insurance is another form of Whole Life insurance. Only instead of investing a portion of the premium in long-term securities, the insurance company puts it into money market funds. This causes the cash value portion of the policy to grow at a variable rate. During times when the economy is booming, it can generate a lot of money. On the other hand the value may grow more slowly if the economy is in the dumps.

Variable Life Insurance is another variation of Whole Life; it invests a portion of the premiums in a split of options, more or less chosen by the policyholder. With this type of policy, some risk is involved since investments may go sour, especially if the policy invests money in an aggressive manner; on the other hand, if the economy is booming, a lot of wealth can quickly be created with this type of policy, and it will be protected as life insurance, usually free from inheritance taxes and the like when the policy comes due at death.

Often if the policy is “cashed in,” the money will also be free from tax or taxed at a lower rate, giving some additional benefits with this policy (be sure to check ahead of time to be sure that legislation or regulations haven’t erased such advantages).

**Insurance Tricks**

Because life insurance is set up as a contract, it can be manipulated in a variety of ways. Because it is similar to personal property, it can also be “given” and assigned in a variety of ways. Of course there are limitations; for example assignment (transfer of the cash benefits of a policy to another person) may be limited with some policies.

Assuming that assignments aren’t limited on a policy, it becomes possible to transfer wealth to other people through an insurance policy in one of two ways. The first is “absolute assignment” which basically gives the ownership of the policy to another person. In this case it is as if they have taken the policy out on you. Even though you may pay for the benefits and have bought the policy, when you die the money doesn’t become part of your estate but rather goes directly to them, thereby circumventing estate taxes and the like.

Obviously this makes a quick and useful transfer of wealth when it may be most needed by your survivors, business partners, or whoever. This policy can also be created and paid for by a business on key personnel, making it possible for a family business or other operation to recover more quickly from the loss of key personnel.

The other variation is the “collateral assignment” which transfers certain rights to the person using it. Usually this will be employed as security for a loan or some other debt. For example, if you were to purchase a business worth millions of dollars, and that business might become worthless upon your death, then the bank might take out a policy on you to be sure that they wouldn’t lose all their investment in you should you die prematurely.

**What to Watch For**

Regardless of the type of life insurance you buy, there are some key things to look for. One essential with a Whole Life policy is an “automatic loan provision.” This makes it possible for the premium on most policies to be paid automatically from the policy should you fail to pay your premiums on time. This makes it impossible for the policy to lapse, even if you are on vacation and forget to make payments, lose your job and can’t make
payments, or are lying in a coma somewhere unaware of anything.

Of course this provision won’t make the policy go on forever without any cash being put into it; it will continue only as long as the policy has enough cash value (built up by previous payments) in it. While this provision is only available with Whole Life Insurance, a similar system should be available with Universal and Variable policies (only in this case the accumulated proceeds are utilized in paying the premium).

Another essential is that the policy have a “grace period”, the time that is permitted to go by without payment of the premium before the policy lapses. Since it is easy to forget and miss a payment, you want a policy with at least a 31-day grace period to keep you from losing all coverage should this occur. Unfortunately many companies will take advantage of those who forget to pay, especially if it appears that you are in bad health or are nearing the end of your life expectancy.

*Never* buy a policy without a grace period or you could be without coverage when you can least afford it.

You should have a policy with a reinstatement clause. This permits a person who failed to pay his premiums on time, and who therefore let the policy expire, reactivate the life insurance policy within a specified amount of time (most often 3 years). The only catch to such a clause is that usually you must still be insurable. Some limitations may also appear since this will, in effect, be a new policy. Premiums may be higher and the “suicide clause” will start over (more on this in a moment)

Another important provision in a policy is the “incontestable clause.” This prohibits the company from denying a claim after a specific period of time (most often one or two years); once this period has passed, payment is due even if there is doubt about conditions surrounding your death.

For example, if you took out a policy and the next day were killed in a plane explosion, the insurance company might hold up payment, claiming that you had killed yourself (a factor that generally makes payment void if the suicide occurs during the first year or two of a policy). However if they are unable to prove their case, then they would be forced to pay after two years (or whatever the incontestable clause sets as the time limit). It should be noted, however, that if later evidence came to light that proved you had killed yourself, the company might bring a lawsuit to get the money back since fraudulent claims would void this clause.

This clause could also force the company to pay up, even if there is some question about whether you are dead or the conditions surrounding your death. This could be important if you were missing and presumed dead; in such a case an unethical company might hold up payment, claiming there was no actual proof that you were dead. Likewise in the case of the policy taken out the day before the plane explosion, it might keep the company from claiming your widow had planted a bomb in your luggage to collect on the policy and therefore could not benefit from it. If the incontestable clause is in the policy, they’ll have to cough up when their time runs out and they have been unable to prove their contentions.

Under most state laws, insurance companies must include a provision that permits them to delay payments by up to 6 months. This delay of payment of the cash surrender or loan value of a policy is designed to avoid a run on cash from people pulling money out of policies during a severe economic emergency, thereby causing insurance companies to go under. As such it is a good provision. However you should keep this in mind; during a protracted economic crisis, you might not be able to get to this money when it is most needed.

During the first 2 years of a life insurance policy, suicide is generally not covered. This provision protects the company and most likely also helps keep the suicide rate down — or at least delay it by 2 years. Should a person purchase a policy and then commit suicide during that period, the company will only give back the premiums paid and any interest that they may have accrued. However after this period is over, death from suicide is also covered in most policies.
Some policies, especially older ones, have an “aviation clause” that excludes deaths from airplane accidents. As such accidents have become less frequent, most policies now cover death from airline or even private plane accidents. If you have an older policy with such an exclusion, consider contacting your insurance company to ask them to eliminate the clause. Chances are they will and may even be ignoring the exclusion. While your chances of dying in an airplane accident are very small, having this extra bit of coverage is good, especially if you travel a lot.

Most policies will have a few other exclusions. War is most often excluded and there may be some other exclusions as well. It is good to be aware of these and you may even wish to “shop around” for policies that have fewer exclusions.

**Borrowing Against a Policy**

If you have a policy other than term insurance, as noted earlier it is possible to borrow against the cash value accrued by the money the insurance company has invested. However such borrowing is limited in that it can’t exceed the cash value portion of the policy as of the next policy “anniversary” from the time it was purchased. Furthermore, the interest will be that spelled out in the contract.

Often this will be a good deal, but not always if the interest rate is higher than that being offered by banks, so care should be taken in looking for a quick loan from these policies. If the loan is not repaid for one reason or another, then the death benefit payment is reduced by the amount of the loan plus the interest owed on it. With all loans the interest is deducted from the money when it is paid out; that means you need ask for a loan slightly greater than the amount you actually need.

With Universal and Variable Life, it is also possible to take money from the cash value by making a withdrawal. This avoids any interest payments, though there will generally be a $25 administrative fee for each withdrawal.

Non-forfeiture options in a policy you can borrow against give you protection should you wish to stop paying premiums or decide to surrender the policy. In such a case you would obtain the “cash surrender value” consisting of the total amount of cash the policy could pay you (or a smaller portion of that should you not need the full amount). Most policies will have at least a small amount of cash value after just a few years of being in force, a source of cash that some people forget about. When you take this cash out, you can exercise the cash value option of your policy. In such a case the policy is no longer in force, but you also have no further obligations to make payments.

Let’s suppose you reach 65 (or some other age specified on the policy) and haven’t borrowed from your policy, then you will have a paid up life insurance policy (let’s say of $100,000 in this example) with a cash value (let’s say of $65,000). At that point you may take the cash value of your policy, in this case pocketing the $65,000. Or you can elect to leave the cash there, keeping the policy in force with additional payments until your death, at which point the $100,000 would be paid to the beneficiaries.

With most policies you could also exercise a second non-forfeiture option known as “Reduced Paid-Up Insurance.” In this case you can elect to take the cash value portion of your policy as paid up insurance with the face amount reduced. This would be a good option should you need less insurance coverage.

The third option offered by most policies with a non-forfeiture option is to get extended term insurance in exchange for the cash value of the life insurance policy. This might be a good option if you need the full amount of the coverage but don’t wish to continue to pay premiums.
Dealing with Dividends

With the exception of term insurance, most policies pay dividends on the money being invested. You have several different ways to treat these. One is to take the dividends in cash, an option that is good when the policy is fully paid. If this isn’t the case, then you’re better off applying the dividends toward future premiums, thereby paying the policy off sooner than would normally be the case, especially if the investments made by the insurance company pay off well.

The third option is to leave the dividends with the insurance company to accumulate as interest, thereby treating your policy somewhat like a savings account. This works well when interest rates are high. However if the rates are low, the return may be poor. Furthermore, the dividends count toward gross income and are taxable, making them less attractive as an investment for most people. Unless you can see a real advantage to this option, it’s usually best to avoid it.

Another option is to apply the dividends toward the purchase of additional whole life insurance (known as “paid up additions” in the insurance industry). In such a case you may need to provide proof of insurability, though some policies may waive this requirement.

The final option that is offered by a few companies is to purchase one-year term insurance with the dividends (this is known as a “split dividend” in the insurance industry). The amount of term insurance is usually limited to the net cash value of the policy. This might be a useful option if you discovered you had a terminal illness and wouldn’t outlive the year. In such a case being able to get this extra coverage would give your heirs an additional payment upon your death.

Choosing the Beneficiary

The beneficiary is the person or people that the proceeds of a life insurance policy will go to upon the death of the insured. A revocable designation of a beneficiary can be changed by the insured over time.

For example, during the first part of a policy a husband might designate his spouse and children as the beneficiaries; when he grew older and the children left home and could care for themselves, he might change the policy so his wife was the sole beneficiary, thereby assuring that she would have enough money to care for her in old age when she couldn’t work. Generally it is wise to use a revocable designation with an insurance policy to cover all bases should things change in your life.

An irrevocable designation is used to lock in beneficiaries, making them more or less a joint owner of the policy. This might be used if a person is being insured by a bank or business. In such a policy it is necessary for the irrevocable beneficiary as well as the owner of the policy to make changes in it should a loan against cash value be needed or changes of assignments be called for. Obviously this type of policy is very limited and not ideal if you’re looking for maximum flexibility and control.

Payment Options

There are a number of options available with many policies that permit payments back to the insured and/or his beneficiaries when the life insurance policy becomes payable. The most common of these is the lump sum payment which gives the whole amount and that is the end of things.

However there may be times when other options are better to take. One of these settlements is known as the Interest Option which leaves the entire amount of the proceeds with the insurance company. The company
then pays the money back at a guaranteed interest rate, with even more being paid back should the company’s investments do better than average. Under this plan the beneficiary can withdraw the funds at any time, making it possible to get to the money should it be needed in a hurry (the 6-month delay of payment mentioned above being applicable in many cases — a point to keep in mind).

Another settlement option is the Fixed Amount Option which provides the beneficiary with a fixed sum each month until the money is exhausted. In such a case interest also accrues on the money that remains with the insurance company until all the money is paid out, so the total will be greater than the original face amount owed. This would be ideal for a person with fixed payments to make since the money would be protected by an institution and interest paid on it with no need to reinvest the money or otherwise handle it.

That said, the sum remaining with the insurance company under a Fixed Amount Option isn’t quite as secure as it would be in a bank since that money is covered by federal insurance; should the insurance company go under, it is conceivable that the money would be lost. That means if you’re looking at a period of adverse economic conditions, you might be wise to take the money in a lump sum and invest it in a bank; the interest would be lower, but the money would be protected.

The third type of settlement is the Fixed Period Option which pays the beneficiary equal payments over a fixed period of time. Under this system excess interest earned will increase the amount of the payments.

Some companies will also offer a Life Income Option which provides the beneficiary with payments for the rest of their life. This payment is calculated against the life expectancy of the beneficiary; should he live a long time, a lot of extra money could be accrued under this arrangement.

There are two types of Life Income. Under one, known as “Pure Life Income,” the money is paid for the rest of the beneficiary’s life and then comes to an end with their death. With the “Life Income With Period Certain” version of this option, the proceeds are paid to the beneficiary until his death; however if he dies before a specified period of time, the payments continue to a second payee. This could be a better deal if someone had a family history that suggests he won’t live during the specified period (usually 10 or 20 years), had a terminal illness, or a similar situation.

There are a number of other variations with the Life Income Option. Probably the best route is to explore them fully when they become necessary and available, rather than trying to sort them out ahead of time. Furthermore, some company’s may have additional variants of these available by the time they are actually needed.

Quick Recovery

Even if you have the best insurance coverage in the world, you can lose a lot of time and money if you’re not prepared to quickly recover and get on with your life after a catastrophe. This is especially true in businesses where bills may keep mounting while revenue doesn’t come in because the business can’t quickly get back up onto its feet.

With businesses based on computerized systems, a pile of blackened computers in a burnt-out building can be akin to a death warrant. If all the company’s files go up in smoke, they may no longer be able to reach customers, suppliers, or other essential data.

The key to avoiding this is to carefully back things up.
Whether you’re protecting a business or your home, it’s a good idea to have hard copies of all documents that might be needed following any sort of disaster. Copies of birth certificates, social security cards, insurance policies, and the like would speed up recovery from fires, tornadoes, or the like. And having papers to prove your ownership of a business, home, or vehicle would be useful should government or corporate computer files be damaged by terrorists or some future problem. Even Xerox copies of the original would be much better than nothing. Put valuable documents (or copies) in a safe-deposit box or other secure location.

If you don’t have an off-site source or fireproof safe to store things in, you can do what one insurance agent I know does. After inspecting the damage from numerous fires, he realized there was one place that was almost never damaged: The inside of a freezer. There area was cool to start with, remained airtight during most fires, and was well insulated to keep contents from overheating. Now he stores his important papers in a box kept in the freezer.

**Finding a Safe Insurer**

It pays to shop around for the best price on insurance policies, as they vary widely from company to company. However, it doesn’t pay to sacrifice safety or customer service in order to save a few dollars. Always go with a reputable, financially secure company.

You can check out a prospective insurance company through rating services such as Moody’s, Standard & Poor’s, and Weiss Ratings. Their reference books can be found at many public libraries. Any insurance agent should also be able to provide a company’s rating upon request. The most financially sound insurance companies will be rated “AA” or better (“A-” or better with Weiss Ratings). Don’t settle for anything less from an insurance company.

Insurance is not an area where it pays to take chances. Yet many people unwittingly do just that when they buy policies from financially unstable companies. Insurance companies can and do go under, leaving their policyholders in the dust. In the early 1990s, several million Americans were caught holding policies issued by failed life insurance companies, some of them very large companies.

Just because it’s a big-name company that runs lots of commercials doesn’t mean it’s safe. State Farm and Geico are currently very safe companies because their financial statements are sound, not because they run good ad campaigns. Other well-known companies aren’t so sound. Weiss Ratings gave an “E” rating (its lowest mark) on September 26, 2003 to the following life insurance companies: Conseco, Colonial Penn, Washington National, Key Life, and several others.

If you have a policy with a “D” rated or lower insurer, consider canceling it and switching to a different company as soon as possible. You can visit Weiss Ratings on the Internet (http://www.weissratings.com) or call their office (1-800-289-9222) to purchase safety reports on your insurance company and your bank.

**Getting Good Deals on Insurance**

There are many ways to shop for insurance. You can buy direct from some insurance companies (Progressive and Geico, for example). This can be a quick and efficient way of getting a policy when you know exactly what you need. Otherwise, you might find it useful to buy a policy through an agent. Some agents work for only one company, while other agents are able to obtain policies from multiple companies.
It’s usually to your advantage to deal with an agent who isn’t tied to only one company.

If you’re Internet-savvy, you can get instant insurance quotes and even purchases policies right online. My favorite online insurance marketplaces are:

- Quotesmith (http://www.insure.com; http://www.quotesmith.com)
- InsWeb (http://www.insweb.com)
- Esurance (http://www.esurance.com)
- ReliaQuote (http://www.reliQUOTE.com)
- EHealthInsurance (http://www.ehealthinsurance.com)

The drawback to some of these Internet quoting services/brokers is that they tend to want a lot of personal information from you before they’ll actually give you a quote. For privacy reasons, don’t submit your Social Security number to a web site in order to get a quote. Only provide your SSN when it’s required on an application form for a policy you’ve already decided upon. For health insurance quotes, EHealthInsurance is good in that it will let you browse various policies based on a minimal amount of general information (age, zip code, smoker status, etc.).

**Insurance Rip-offs to Avoid**

The best insurance buys are the policies with the largest umbrellas. The more they cover, the more cost-effective they are. It wouldn’t make any sense to take out separate policies on your legs, your heart, your eyes, your lungs, etc., when you can cover your entire body under one health plan. Similarly, it makes little sense to get separate policies for your sofa, your big-screen television, your dishwasher, etc. Get everything covered under a good homeowner’s or renter’s insurance policy, which includes any necessary riders to cover particular items.

Don’t let any salesman talk you into unnecessary insurance, warranties, or so-called protection plans. When you buy electronics equipment or appliances, you’re almost always covered by a manufacturer’s warranty. The additional warranty coverage promoted by retailers is usually unnecessary and always costly — in other words, it’s a rip-off. Save the money and keep it in a savings account that you can draw on when you need to replace worn-out equipment or appliances. Given that computer products and many other types of electronic appliances are constantly falling in price and increasing in quality, having to buy occasional brand new replacements for faltering, outdated equipment shouldn’t be too painful.

Whenever you rent a car, the sales agent will try to get you to purchase additional insurance. In most cases, this coverage will simply duplicate the coverage you already have with your automobile policy. Additional rental coverage may be automatically provided by your credit card issuer(s). Check to make sure that’s the case and then always pay for rental cars with the credit card that provides the most insurance coverage. The insurance offered by rental companies is quite expensive. Take the figure they quote you per day and then multiply it by 365. You may be astounded by how much the annual premium would be for this coverage, which you probably already have in some form anyway!

Extended warranties on new or used cars are usually a rip-off. Extended warranties (especially when packaged into dealer financing) are often more profitable for dealers than the vehicles themselves. That’s because the vast majority of the people who buy an extended warranty never get out of it what they put in. The dealers have this all figured out beforehand. Some dealers lie and claim that you need to buy a warranty in order to get financing or in order to get a better deal on financing. Insurance may indeed be required in order to take out a car loan, but extended warranties are not.
If you value the peace of mind offered by a warranty, then please shop around for one before buying anything offered by a car dealer. Companies such as Warranty Direct (1-800-632-4222; http://www.warrantydirect.com) sell customized warranty packages that may provide more coverage for less cost than what your dealer offers. Warranty Direct has been in business for many years, is a member of the Better Business Bureau, and is reinsured by an "A" rated insurer. Watch out for web sites that claim to sell warranties. There are a lot of warranty scams being run on the Internet!

One of my biggest insurance pet peeves is the insurance offered by the U.S. Postal Service on items it delivers. The cost of Postal insurance keeps rising, but the coverage offered doesn’t. It now costs $1.30 to insure something for up to $50. If you need more than $1,000 worth of coverage, you’ll shell out $11.20 plus $1.00 for each $100. I used to insure expensive items when insurance costs were more reasonable, but the rates now are well beyond what I consider reasonable. Moreover, the Post Office will make you jump through hoops and provide “evidence” before you can collect anything in the event that the Post Office mishandles a package. If you want to make sure your package arrives at its destination, purchase Delivery Confirmation — not a bad deal at just $0.45 per package (Priority Mail). With Delivery Confirmation, you can at least get a refund of your postage should the Post Office lose your package.

When shipping expensive items, I recommend using FedEx or UPS, both of which offer superior package tracking and tend to handle parcels more carefully than the Post Office. In addition, they automatically include a small amount of insurance coverage at no extra cost (and give you the option to buy additional insurance). UPS currently offers extra insurance at $0.35 per $100 — about a third of the cost of Postal insurance. This, in my view, is a reasonable expense to incur when shipping valuable items.
Chapter 5:

Medical Self-Reliance

As noted previously, you can be living in the Survivalist dream land with your arsenal of guns, garden, and goats and still die for lack of proper medical care. In fact, chances are good you’ll die of a medical condition of one sort or another rather than in a natural or manmade calamity. So it’s a good idea to learn some basic medical skills (so you can care for your family as well as provide extra support until they can get professional medical assistance), as well as secure a good doctor who will keep you in good shape in the here-and-now as well as being there should you need him during a personal or widespread emergency.

In this chapter we’ll take a look at how to locate a good doctor, specialists, and hospitals to keep you in good health every day. This is important since maintaining your health will insure that you’re in peak condition during any sort of an emergency. Being in good shape could be important should medical help be curtailed during a long-term problem such as an economic breakdown or war; in such situations your chances of finding quality care are slim to none in many areas of the world.

Good health also promotes good thinking since you’re not distracted by pain or other worries. Just as importantly, being in good health can also guarantee that you’ll be able to endure more physical hardships that may result during various emergencies.

Getting into good physical condition is a key move you need to make as you prepare to become self-reliant.

It is also important to find ways to maintain your health during an emergency. For this reason you should be sure not to put off elective treatments which might become serious if, for some reason, you were unable to obtain quality medical care during a crisis. Having a tooth that you put off getting filled or an appendix that the doctor said “might” get better could become a serious matter if you lost access to health care. And such loss is common during many types of emergencies as well as war, civil unrest, and the like.

During a protracted disaster, health care may be available at a very high price.

Medical Help

Whether you’re in the middle of a massive natural disaster, or have just discovered you’ve had a stroke or other medical emergency, having good medical help could spell the difference between becoming another sad statistic or continuing to enjoy life. On a day-to-day basis, having access to good medical help can be essential in remaining self-reliant rather than becoming crippled — or dead.
In an emergency when medical supplies may be in short demand, being a “local” with medical files at the doctor’s office can put you at the head of the line. That could be important if injuries have resulted from natural disasters or less-than-friendly encounters with riots or the like. In such a case, having established a medical connection in your community could be an important plus.

Even on an “everyday” basis, having good medical help could be a life-and-death matter. Remember Tappan. In this chapter we’ll take a look at how to get good medical help in the best — and perhaps worst — of times. Elsewhere in this manual we’ll look at last-ditch methods of dealing with medical problems when quality care may not be available.

**The Best Doctor**

Unfortunately there are good doctors and there are also a few bad eggs. Go to a skilled doctor and your chances of making a speedy recovery for any given ailment will be considerably better than the national average for both survival and recovery. And go to a marginal doctor and chances are good you’ll be one of those “mistakes” that gets buried.

You need to find a good doctor now so he’ll be available to you when you need him. Such doctors are in demand and are often forced to limit the number of new patients they’ll take on. That means you need to get into the select number they treat or risk being short-changed by an average or below-average physician.

When you start looking for one of these extra-special doctors, you need to forget most of the advice you’ll see in magazines and books about finding the best doctor. In the past there have been a number of “best doctor” books and articles that, if you followed their advice, did little more than send you to the door of a good salesman. Just how poor this advice can be was recently demonstrated by doctor Arthur Hartz, University of Iowa professor of family medicine.

His team of researchers checked lists of surgeons in the “best doctors” books and compared their successful surgeries to their ranking in the books. To do this, they created a list of coronary artery bypass graft surgeries in New York, Pennsylvania, and Wisconsin. The failure rate of each physician (a failure being the death of the patient) was compared with the average number of deaths among patients with similar risk being factored into the equation. When the actual success was then compared to the best doctor lists being published and it was discovered that there was no correlation between the two.

The “best doctors” often weren’t the best doctors.

Hartz wrote that there was “no evidence that best doctor surveys identify good clinicians.”

In an article Hartz published in the *American Journal of Public Health*, he speculated that best doctor surveys were more influenced by a physician’s status than skill. What the surveys were actually measuring were abilities as a lecturer, researcher, and/or administrator as well as social standing. As Hartz put it, “A good researcher and administrator does not necessarily make a good clinician.”

Hartz then set out to discover who the best doctors really were and how a person could locate them. His findings can be employed to get you the best medical treatment you can find.

The short of Hartz’s findings were that the single best indicator of how well a surgeon will do in any given operation is the amount of experience the doctor had. “We found that the best measure of a good doctor is experience — the number of patients a doctor treats.” While obviously this can’t be used as a hard and fast rule in all surgical situations, it does make sense by conventional wisdom. The old saw that “practice makes perfect” seems to apply in this case.
Primary Care and GPs

As is too often the case, bureaucracy and government agencies (or, worse yet, bureaucratic government agencies) have managed to make simply going to the best doctor difficult to do. If you’re operating under a managed health care plan or have medical insurance, chances are you’ll have lots of red tape to deal with before you can adopt a quality doctor as your own.

However you will often have some leeway as to which doctor you can choose. In such a case, even though you can’t select a doctor outside your HMO or primary care provider system, you can choose between several. Often using the tricks outlined in this chapter, you can greatly improve the medical service you’ll receive by selecting the best of the doctors you have to choose from.

One good strategy to use is to try to select a General Practitioner (GP) rather than a specialist, and then have him recommend a specialist if your medical condition warrants it. This is wise to do because many specialists are too specialized, often failing to spot medical problems that lie outside of their area of expertise.

Today’s GPs are trained in internal medicine, pediatrics, obstetrics, gynecology, general surgery, and psychiatry. This makes it possible for them to deal with a wide range of problems you or members of your family may face. It also enables them to determine whether what is ailing you is common or will require a specialist.

About the only time that you wouldn’t want a GP as your main doctor would be if you have a special medical condition. In such a case you might want to make a different type of doctor your primary care giver. For example, if you have a heart problem, you might want to have a heart specialist as your primary care giver so he would be on top of new medications, drug interactions, and so forth that might apply to your condition.

In such cases a good choice of doctors is an internist. An internist is a doctor who diagnosis and treats diseases in adults. Internists don’t perform surgery but rather either treat problems with medications, changes in diet, and so forth. If this won’t do the trick, then they refer you to another specialist.

One key point to remember is that internists often have a subspecialty dealing with problems of a specific organ or part of the body. If you have chronic heart problems, for example, finding an internist that specializes in heart problems would put you way ahead of the game if he became your primary care giver. Among the areas internists specialize in are heart, lungs, diabetes, and arthritis; some also specialize in specific age groups such as adolescents or the elderly, making these physicians ideal for treating you or family members in these groups.

Once you locate a good doctor, you don’t need to wait until you get sick to see him. Instead set him up as your primary care giver ahead of time and then visit him for a checkup. This will give you a chance to see how he dovetails with your view of things, how open he is to discussing problems, and how helpful he can be in giving suggestions.

Your life may be in this doctor’s hands down the road, whether during a wide-ranging disaster or a personal medical emergency. You don’t want to be dealing with someone you don’t feel comfortable with when you really need help. If the doctor doesn’t seem ideal, then seek out another GP on the list of possibilities.

Getting the Best

Some of the work toward getting a good GP or other doctor to be your primary care giver will be done for you by your insurance company (assuming you have one). That’s because the list of doctors’ names sent you by your insurance company won’t contain doctors having problems; doing so is a quick way to entail expensive
lawsuits. That means they'll have weeded out some of the really bad eggs for you. (And if you don't have health insurance, you might want to obtain such a list from a friend who does, just to get the names of the doctors on it since this will help assure that you are selecting the best doctor available.)

This isn't the only trick you can use to secure a doctor.

Another is to obtain a very old list of doctors who are primary care givers and compare it to a newer list. Doctors that have been on the list for a long time have had a clean enough record to stay on the list. You’ll also have an added benefit in knowing which doctors have been practicing longer; remembering that the deciding factor in how well doctors do is how much experience they have under their belt, knowing that a doctor has been in practice for some time is a key indicator that he is a good choice.

Getting this list isn’t always easy. However some individuals who are in the same company insurance plan as you are may have such records squirreled away in their home records (often tossed into a drawer unread). Check with some coworkers; you may find one that has a list. A call to your local employer’s office might also yield some old lists that were stored away and forgotten; or a reference copy that can be Xeroxed. A call to the insurer’s office might also yield a list.

Consulting physicians you know for a referral or suggestions is apt to give you a faulty suggestion as this is the basic problem behind the “good doctor” lists; the person recommended is apt to be the be best BS artist, rather than the physician that quietly goes about his work, doing an excellent job without fanfare. However you can change this situation by carefully weighting the questions you ask to give you the information you want. Instead of asking which doctor he thinks is the best, ask which doctor has been practicing the longest in your area and which one handles the most of the type of cases you're concerned with.

These questions will yield the name of the doctor that is most apt to be the best in any given area. Likewise, if you need a doctor to refer you to a specialist, ask him which doctor has had the most experience in dealing with cases like yours.

This same technique can be employed to ferret information on which doctor is likely to be the best when you’re talking to friends, relatives, or business associates. If you live in a small town, you might even employ this technique by calling the local newspaper with your questions.

A call to the local hospital may also yield useful information. Ask which doctors have been working with the hospital the longest, which surgeons are busiest, and so forth.

If you’re in a large city, the local medical society should be able to tell you which members have been with it the longest. And those members are the doctors who are likely to have the most experience, again yielding a clue as to which doctors are likely to give you the best work.

Lawsuits and Malpractice

Derelict physicians sometimes continue to practice for years even after numerous lawsuits, unethical behavior charges, and negligent actions. This is possible because of the lobbying effects of medical professionals as well as the tendency of doctors to cover for their colleagues.

This cover up of mistakes costs many patients their lives.

While the numbers of really poor doctors is low, they chalk up a huge number of lawsuits; a study done
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in Pennsylvania found that more than 25 percent of malpractice payments were being made by just 1 percent of practicing physicians in that state. Obviously you don't want to select a doctor from that one percent. Nor do you want one that has a few "problems" from time to time.

It's pretty easy to determine if any given doctor has had past problems along these lines. Simply contact your state medical board or local health department and ask if the physician has ever been disciplined for negligent or unethical behavior. You can locate the phone number of the local health department in the phone book; they can give you the number of your state's medical board.

When you contact these organizations, be sure to find out why a doctor was disciplined; occasionally a physician will break rules to cut through bureaucratic red tape in order to help his patient. In such a case a doctor having an infraction for this reason might actually be a superior doctor. Remember that not all disciplinary action is negative. On the other hand, most disciplinary action will be negative. And when a doctor has chalked up several such incidents, you can bet he's probably having serious troubles when it comes to dealing with patients.

A trip to your country court house will enable you to check through local court records to see if a doctor at the top of your list has been sued. While a lawsuit isn't a sure indicator of malfeasance given the large numbers of suits being brought forward these days, it is a danger flag. Even more damning is a judgment against a doctor; this most likely means that the physician should be crossed off your list.

The National Practitioner Data Bank keeps tabs on doctors who have been disciplined for unprofessional practice, have been noted as displaying unprofessional behavior, or who have been forced to make malpractice payments. This list is only open to hospitals which are required to check their doctors every two years. The list isn't open to the public, but if you have connections to anyone working on a hospital administrative staff, you might be able to find out how your doctor measures up on this list.

The Federation of State Medical Boards keeps track of serious disciplinary actions against doctors across the country. You can access this information to see whether a particular physician has been disciplined. To do this you need to locate the agency in your state that handles the doctors' licensing. You can obtain the name and phone number for this agency by calling the Federation of State Medical Boards at 817-868-4000 and asking for the number of the state agency in your area. Calling the number should give you the information you need.

The book, *Questionable Doctors*, is published by the Public Citizens' Health Research Group (1600 20th Street, Northwest, Washington DC, 20009 202-588-1000). This manual lists doctors the group believes may be guilty of malpractice or who otherwise have been involved in questionable cases or incidents.

Obviously a doctor on this list is less than ideal to select to help with your health problems and should be crossed off you list. In addition to buying the book from the Public Citizen's Health Research Group, you can also find it in many public libraries.

**Lab Work**

During a protracted disaster that disrupts delivery of goods, chances are good that medical labs will run out of the supplies needed to conduct their work. However it is also likely that the better labs will continue to do tests longer and may even have personnel who will know how to improvise and work around shortages. For this reason having a doctor who has access to a good lab will give you an edge both on an everyday basis as well as during a disaster.

That said, you can narrow your list of doctors some more by determining what type of "support" a doctor
has in addition to his practice. Because much of today’s medicine is dependent on good lab work and hi-tech equipment, whether or not a doctor has access to these assets can determine how well he can treat his patients. Lab work is a prime consideration since mistakes here can cause failure to spot a serious condition or even cause a misdiagnoses.

Checking the quality of a medical lab isn’t easy. However you can often tell much by simply visiting one, sitting in the waiting room for a while (perhaps on the pretense that you’re waiting there to meet someone if you’re challenged on why you’re there). Does the lab seem organized or do people seem a bit hectic? Are people cheerful or a bit grim and edgy? Is the operation neat and organized, or ragged around the edges? If you can observe the staff, do they appear to be using rubber gloves and masks or other protective gear (which also helps prevent contamination of samples and tests)? Are patients kept waiting or handled efficiently?

While simply watching lab staff isn’t going to give a definite answer to how competent they are, often a lab that seems to be running poorly or which doesn’t seem orderly is slopping through tests or taking reckless shortcuts.

You can also find out a lot about the track record of a medical lab by talking to people in your community. If you hear “horror stories” of workers who don’t seem to know how to draw blood, gave the doctor the wrong results, etc., then you can bet the lab has some problems. (I decided not to use a certain doctor after talking to a friend whose wife had a baby 7 months after the local medical lab assured her she wasn’t pregnant.)

**Hospital Access**

A doctor who only has access to a poorly run hospital isn’t going to be able to offer his patients the care they might otherwise receive. Poor nurses or equipment can quickly overcome the best efforts of a good physician. So what hospital he’s connected to is another important consideration (there will be more on how to rate hospitals later in this manual).

What this all means is that it is important to determine which of your top choices in doctors are affiliated with a large, well-equipped hospital. Check to see if they are either a staff member or can work at the hospital as an “attending physician” (a title that permits them to admit patients to the hospital). If your doctor doesn’t have either of these titles, then he must have you see another doctor who does if you’re to be admitted to a hospital.

If the doctor treating you will also be performing a procedure at a hospital, the physician must be affiliated with the hospital. Many doctors are affiliated with several hospitals, meaning they have met those hospitals’ requirements and are allowed to treat patients in them. In addition to suggesting the doctor is qualified for such work, this also makes it possible for him to place you in a hospital that is better suited to a medical problem you have down the road.

Since most hospitals are good at treating some types of conditions (and not so good at treating others), having a doctor that is affiliated with several hospitals improves the likelihood that you’ll be placed in a hospital better suited to treating you, rather than simply the only hospital that your doctor can operate in.

This can be an important distinction and is one that you should keep in mind since the quality of care you may receive for any given condition can vary greatly from one hospital to the next.

**Bedside Manner**

There’s a catch to your list of “best doctor” which you create by finding out which physician has the best
track record. The catch comes in the fact that as a human being, dealing with a doctor who’s a human being, you need someone who you can talk to and work with freely. The best doctor in the world isn’t going to do you much good if he won’t listen to what you have to say about your symptoms and condition. For this reason you should be concerned about the personal manners or “bedside manner” a doctor displays when he’s around you.

In a survey conducted by Louis Harris and Associates for The Commonwealth Fund in 1993, researchers discovered that 41 percent of women and 27 percent of men (from a sample of 4,500 patients) had changed physicians because of dissatisfaction with the care they had received. Not only that, 25 percent of women and 12 percent of men said they felt they’d been talked down to by their doctors with almost 17 percent of the women and 7 percent of men had a physician tell them that their medical problems were psychosomatic. Obviously this poor patient/doctor interface isn’t going to result in quality care.

So after you’ve narrowed your personal best-doctor list down to one or two doctors, a visit to their office is in order. Since it wouldn’t hurt to get a check up (I’m betting you haven’t had one in some time if you’re like most Americans), that’s a good pretense to use in meeting with your doctor to sense him out. If you discover his bedside manner is less than ideal, change doctors.

Ideally your doctor will be professional and to the point, but also willing to listen to what medical difficulties you’re experiencing. He should ask questions to define his diagnosis more fully, and also be able to explain what is going on in terms you can understand.

Some very good doctors are not good speakers. Their instructions may be a bit murky or imprecise. The physicians may still be excellent doctors, but be sure to ask questions to clarify anything you don’t quite understand. A “So what you’re saying is...” is a good way to start so you can be sure to get the information you need.

Part of choosing a good doctor should involve your feelings about him; if you feel uncomfortable with a doctor, then that’s enough reason to drop him. You must feel comfortable with a doctor for him to work well with you.

You can also tell a lot about a doctor by the staff he and those in his practice hire. If his staff is courteous, neat, and efficient, then there’s a good support team that the doctor can build a quality practice around. And most likely the doctor will also display the qualities he expects from his staff.

One final thing to look for. It is a tragic truth that some physicians become drug addicts. They have access to medications and often have to push themselves to perform around the clock for days on end. Some turn to drugs. Obviously a doctor whose mind is clouded by drugs is not the person to whom you want to entrust your health — and perhaps your life.

**Doing Your Part**

For reasons that don’t make sense, patients often withhold information from their doctors, perhaps out of fear that telling him will lead him to conclude there is something seriously wrong. Or sometimes patients may have habits that are harmful and which they’re rather not admit to.

Such information is often vital to making an informed diagnosis. Withholding the information can be harmful to your health and will also waste your physician’s time. You should also remember that information your doctor is given should remain confidential so you should avoid yielding to the temptation to hold back pertinent data that might apply to your medical condition.
One of the big problems with today’s medicine is not with the doctor or the medical system but the patient. Patients are notorious for not taking their medications properly or otherwise failing to follow a doctor’s advice. This means that some of the best medical advice has been wasted, falling on ears that seemingly have little between them. Don’t be one of the many foolish patients who gets the best of advice and then goes ahead and suffers due to his own ignorance.

Oddly enough, some people put off contacting a physician when they’re experiencing very serious problems. Obviously this isn’t the way to protect your health. Be sure to get in touch with him immediately if medication makes you feel worse or your condition doesn’t seem to be improving as quickly as predicted. Never hesitate to call your physician’s office to find out what changes are needed.

**When to See Your Doctor**

During an protracted disaster, health care may be available at a very high price. In such a situation, knowing what problems will most likely get better on their own and which you can put off having taken care of can be important. You shouldn’t be afraid to “wait out” minor sniffles and ailments that aren’t overly threatening.

Likewise, you should be aware of what conditions are life-threatening and demand immediate attention. In such a case a seemingly minor symptom may actually be indication of a possibly serious problems. In such a case you need to pay the higher costs demanded by health professionals to get immediate help — even if it means working through a black market, bartering, or even getting around draconian laws put into place by a local gang leader, government bureaucrat, or other thug that may be ruling during a local breakdown of law and order (which can occur if a disaster is widespread and of long duration).

Because of the additional physical and emotional stress brought on by a disaster, heart problems are more common among those who have endured such a situation. For this reason you should be alert to any signs of heart problems in yourself as well as those around you. The danger signals:

- Severe shortness of breath.
- Tightness in your chest.
- Heart palpitations.
- Dizziness or faintness.
- Feeling sick to your stomach.
- Chest pain or pain in your arms or jaw (most often on the left side). A rupture in your aorta (aortic aneurysm), may produce severe chest pain (or may also be a more subtle pain). Both are life threatening and require immediate attention.
- Sharp chest pain that worsens with a deep breathing or coughing. This pain signals blockage of the pulmonary artery (pulmonary embolism).

Anyone experiencing any of these symptoms should immediately stop any strenuous activities and get medical help. It also appears that taking aspirin can help minimize damage to the heart muscle during a heart attack. For this reason you might employ aspirin as a stop-gap treatment until you can get medical help. However this is very much like using a band-aide to patch a severed artery; it may help, but certainly isn’t the solution to the problem. Heart attacks require medical attention for a full recovery.

Another health problem that is apt to appear during times of stress is a stroke. This is caused when blood vessels in the brain hemorrhage or vessels feeding blood to the brain become blocked. In either case brain cells are damaged with more and more damage often taking place as the condition remains untreated. Warning signs
include:

- Loss of speech, trouble talking, or problems in understanding other's speech.
- Sudden weakness or numb feeling in your face, an arm, or a leg, usually only on one side of your body.
- Sudden blurring, dimming, or loss of vision, especially if it occurs only in one eye and not the other.
- Abrupt and very severe headache that is normally not experienced and which has no apparent cause.
- Any unexplained dizziness, unsteadiness on your feet, or a sudden loss of balance that causes a fall. This symptom will usually be accompanied by one or more of the others listed above.
- There are other warning signs that signal the need for quick help. While these aren't quite as life threatening as the above problems, they still call for immediate attention. These include:
  - Sudden, severe, unfamiliar stomach or abdominal pain. If such pain lasts longer than 30 minutes, it indicates a need for immediate medical attention. Intense pain in the upper abdomen may be a perforated stomach ulcer or ruptured spleen. Sharp pain extending up under the right shoulder is indicative of a gallstone attack. Appendicitis may produce a dull pain around your navel with tenderness on the lower right side of your abdomen.
  - Pelvic pain during urination or an intense pain extending downward from your side toward your groin. This pain will often signal a kidney stone. Pregnant women experiencing abdominal pain and cramping, accompanied by dizziness and vaginal bleeding, could be experiencing a ruptured ectopic pregnancy. Either dictates immediate treatment.
  - Sudden and severe pain in the arms or legs accompanied by paleness and coldness in the region. This pain is symptomatic of a blocked artery. A blood clot in a deep vein (most often in a leg) will cause tenderness, pain, swelling and/or a fever. Immediate treatment is essential since the clot could break loose and lodge in a lung.
  - Broken bones or inability to gain normal functioning of arms or legs (including fingers and toes), or the inability to use appendages without severe pain. These problems indicate broken bones or torn ligaments. While these may heal on their own, chances are the person will be deformed in the process and will not regain full use of the limb involved. For this reason these problems dictate immediate medical attention as well.

Even during the best of times, doctors don't have a magic bullet to switch on your immune system to rid it of cancer. During a disaster when resources are limited, the ability to treat cancer will most likely be minimal. However some forms of cancer are easily treated at their onset; for this reason you must get help immediately if you or a family member is suffering from any of the following symptoms. These include:

- An unusual lump on your body (or which can be felt under your skin).
- Unusual bleeding.
- Altered bowel habits.
- Recurrent abdominal cramps or pain.
- Unexplained anemia, or unexplained weight loss.

**Evaluating Hospitals**

Since surgeons and doctors often need to work in hospitals, you also need to evaluate the hospital or hospitals they have access to, to be sure they are up to standards. As with many other things in this book, the time to locate the best hospitals in your area is before an emergency, rather than waiting until the phone lines are down or you're out of time to do any research.
Contacting your local hospitals by phone can also give you a wealth of information. This may take a little doing and a few phone calls since many hospitals are quite busy. Best bet is to call when the staff is unlikely to be overly busy. With many hospitals this would be early in the working day, around 8:30 or 9 AM.

With modern hospitals one of the dangers to patients is picking up an infection while in the hospital. Such infections often plague those who are weak or who have undergone surgery; in such a case they may slow recovery and sometimes even prove to be fatal. To reduce the likelihood of such infections, some hospitals place patients with contagious diseases on one floor with surgery patients on a floor of their own with separate personnel attending them.

This helps prevent the spread of disease from patient to patient as doctors and nurses make their rounds as well as minimizing the chance of pathogens being transferred through the air. That means one question you ask is whether the hospital observes this practice.

You should also ask what other measures they take to prevent the spread of disease. Among the possible measures include the use of HEPA filters in any forced air systems (most hospitals use individual heating and cooling units rather than forced air, so this probably won’t be a possibility), use of special disinfectants, and an aggressive training policy that reminds nurses and other staff to wash their hands regularly before dealing with patients. While these are all fairly straightforward and simple steps, unfortunately not all hospitals practice them — and patients suffer because of it.

Another question to ask: Does the hospital offer general or specialized care? Today there are somewhere around 6,500 hospitals in America. Most of these are general hospitals, meaning they’re designed to deal with any medical problem that might need to be treated. These hospitals are good, but by and large they aren’t outstandingly good at any one task.

While you may not be able to take advantage of them during an emergency, there are hospitals that specialize in some types of cases. And because the doctors and staff do a lot of work in these specialized areas, they gain more experience and — since we’ve seen this translates into greater skills — offer a patient a better chance of being successfully treated.

Only about 1 in 6 hospitals now specializes here in the US. But if you can find one that specializes in your type of problem, that’s where you need to head, especially if you’re facing a life-threatening problem. In such a case traveling to a hospital that specializes in a particular disease or condition could be an important step.

Hospitals sometimes specialize in treating a unique group of patients rather than specializing in any given disease. For example a “children’s hospital” will be full of doctors who specialize in working with infants and children. Others work with veterans, the elderly, and so on. This may be of use to you if you have a disease that is compounded by complications associated with the age or other group you’re in. For example, if you were elderly and had arthritis as well as heart trouble, going to a geriatric hospital might make sense.

Another area where specialized hospitals have an edge over general hospitals is that they have the newest equipment for dealing with a specific disease and their staffs are familiar with the latest procedures. This may not be the case with general hospitals. However this specialized care translates into potential problems. The greater expense of treatment may mean some procedures aren’t covered by medical insurance; if the hospital is not conveniently located, dictating that you travel some distance to get to them and if complications arise, the staff may not be well trained to deal with the problem.

You should be aware that some facilities are “teaching hospitals”, also known as “community hospitals.” These act as training grounds for physicians and other health professionals. Because of this, these hospitals are nearly always affiliated with a medical school which will generally be within a short driving distance from the school. Patients going to such a hospital will be scrutinized not only by student doctors, but by the highly
knowledgeable teachers at the school as well. These doctors will be familiar with the cutting edge technology and latest treatments.

A lot of “experts” suggest these are the best hospitals to check into. But are they? It depends on whether the teachers have lots of experience and whether they’re actually engaging in hands-on treatment of large numbers of patients rather than delegating the work to their students. In fact the quality may actually be lower than that received in a hospital where the doctors meet with patients on a daily basis. So while in theory a prestigious teaching hospital should give superior treatment to patients, this may not always be the case.

**Trick Questions**

There are a few trick questions you can ask to “cut to the chase” very quickly. One such question to ask when you’re looking for the best hospital is how its referral network works. This system permits hospitals to send patients to specialists at other hospitals or other medical facilities. This can be important should you run into a complication that the hospital can’t handle. It is especially important that a hospital has a good referral network if it specializes in just a few types of medical treatments. A hospital that does not have a large referral network may try to fix complications in-house, using doctors that are less than familiar with the newest or appropriate treatments.

Another trick question you should ask is whether the hospital accepts Medicare patients — even if you’re not a Medicare patient yourself. The reason for this is that some hospitals fail to meet government standards through bad billing practices, poor care, or any of a long list of negatives. When this happens, the government suspends the hospital from accepting Medicare patients until the situation is changed. Some hospitals don’t accept Medicare patients because they don’t specialize in such care, they don’t want to fool with the paperwork, or whatever.

For this reason you should follow up with hospitals which don’t accept Medicare patients by contacting your state’s health department and asking if the hospital was suspended and, if so, why it has been suspended. If it has been suspended or is on probation, then chances are you’ll be much better off in a different hospital.

Another question is to ask if the hospital has modern pain management systems in place. This is more than a matter of comfort; research has shown that patients who aren’t in a lot of pain actually heal and recover more quickly after surgery. Hospitals that have their patients “tough it out” or which dole out pain killers as if doing so will somehow hurt the patient are way behind the curve. Hospitals should be able to provide patient-administered pain medication through intravenous infusion pump or other means. Be sure the hospital you’ll check into is one of these.

Also determine whether operating room services, x-rays, labs, and other emergency services are available at all hours, not just business hours. Complications leading to an emergency often can’t be easily solved unless your doctor can get quick results from a lab or take x-rays to see what’s going on inside you. Having to wait until the next morning or — worse yet — over the weekend might make the difference between getting the problem fixed and dying. Ideally your hospital will also have a mobile X-ray machine that can be brought into the patient’s room without moving the patient to an X-ray room.

**More Questions**

As you narrow your quest for a good hospital, there are more questions you can ask to ascertain how good a facility is:

- What is the patient/nurse ratio? Ideally the ratio will be 3 to 6 patients per nurse in regular care units with intensive care unit (ICU) ratios being 1 or perhaps two patients per nurse.
What is the ratio of Licensed Practical Nurses (LPNs) to registered nurses (RNs). (Nationwide the average is 4 to one; obviously the more RNs available, the better quality patients can expect due to the higher skills necessary to become an RN.)

What percentage of the staff is board certified in the medical area they practice in? (The higher the number the better.)

Does the hospital have an infection control practitioner on its staff? (With some hospitals having serious problems with infections spreading between patients, this is no small consideration. Currently about one in twenty patients pick up a disease while in the hospital; it is believed that one third to half of these could have been prevented if the hospital staff had been doing its job correctly.)

Does the hospital have a patient representative or ombudsman? (This person handles patient complaints and works to get the cause of complaints “fixed” so there will be no future problem. Hospitals without such personnel often are less “patient friendly” than one might hope.)

Are there social workers on the staff? (Since a hospital stay — especially when a life-threatening illness is involved — can be hard on both the patient and family, it is good if there is someone at the hospital who can help the family with emotional, physical and/or other needs as well as direct them to social and financial support services that may be available.)

What hours can patients make and receive phone calls? (Restrictions may give you lonely hours and even cause you to miss or fail to be able to give important instructions to your family. Ideally you should be able to phone any time day or night.)

Can the hospital accommodate special diet requests? (If you have a special diet, or wish to maintain a religious diet, this can be an important consideration.)

Are visitors permitted to bring you food from outside? (Hospital food is notoriously bad; often restrictions against bringing food from outside is a tip-off that the food is even worse than usual.)

Ask to see a current menu to get an idea of what is available; don’t just ask what they “usually have” as you’ll be told a list of the best things they’ve served in the past, not what is normally served daily. A menu will give you a better idea of what’s available.

What are the visiting hours and are there restrictions on who can visitor? (This is tricky; because children often carry more diseases than adults, restrictions on when and what age of children can visit is a good thing. The more restrictions on visitation, the better for the most part.)

Will the hospital provide you with training to ease your recovery after you are discharged? (The answer should be “yes” and you should also get brochures and easily understood instructions as well.)

What follow-up services will be available from the hospital after discharge? (These could include home care, therapy, x-rays, etc.; check with your doctor to see what might be needed following your hospital stay and then check with the facility to be sure the services will be provided.)
Love of Money

You should also determine whether a hospital is non-profit or in business solely as a money-making machine. Nonprofit hospitals are set up to serve the communities they’re in. That’s not always true of a corporation intent on making money by keeping costs down is in charge of it. In such a case, one might expect that services could become strained as the pressure was exerted to keep costs down. Not all nonprofit hospitals are ideal; government hospitals, especially those operated by the military, are less than perfect in many cases. On the other hand a community facility operated by a religious group or other voluntary organization might be expected to be ahead of others in the quality of service offered.

Proprietary hospitals are created to make money.

This doesn’t necessarily make them bad, but you should view them with a critical eye. Consumer groups maintain that for-profit facilities are more apt to discharge patients too early or skip necessary tests and procedures. Among the for profit health care institutions, the HMOs (Health maintenance organizations) are becoming the most common.

HMOs contractually links doctors, hospitals, and insurance plans into a whole that is intent on making money. The catch is that with the goal being to make money, the patient becomes an expense whose service can be cut back to increase profits. This situation has lead to horror stories like assembly line practices where doctors are to only speak to patients for ten minutes and “drive thru” maternity wards. Fortunately the public outcry has been slowing the progress toward even worse service. And nonprofit HMOs have been doing fairly well at taking care of patients, though some of these have also cut corners to the point of hurting their service records.

The good news in all this is that the horror stories that have come from the HMO cost cutting pressures has led to many states passing legislation designed to protect patients. These laws vary from state to state with Connecticut generally considered to have the most pro-patient laws in place; Texas has gone so far as to make it possible for patients to sue HMOs for malpractice. It seems likely that other states will follow suit on this, perhaps with the federal government eventually jumping on the bandwagon as well.

JCAHO

One hospital rating system that can be very useful is the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). JCAHO is an independent, nonprofit organization which conducts a quality assessment of about 80 percent of hospitals in American once every three years. Of these, about 5,000 hospitals and another 6,000 other health care facilities (including outpatient facilities) are accredited by the organization.

Because JCAHO accreditation is not connected to the government, hospitals can operate without JCAHO approval. The catch is that most of those health facilities that operate without JCAHO are not up to the standards one might hope for. Therefore you’re wise to search for the health-care providers who do meet JCAHO standards in order to be assured of a higher level of care.

Accreditation is entirely voluntary, but can not be achieved unless a hospital meets at least minimum standards in most of the 28 different performance areas JCAHO covers (among these are patient care, medication use, operative procedures, staff standards, laboratory performance, emergency services, and infection control).

Ninety percent of the hospitals accredited by JCAHO have “Accreditation with Recommendations for Improvement”; this means at least one important area of the standards is not quite as good as it ideally should be. To remain accredited, the health facility must alleviate this problem and come up to standards by a specified
deadline. The remaining health facilities are the all-around best and you’d be wise to get into one of these if you can.

Four percent have “Full Accreditation,” meaning the JCAHO found the hospital met all standards in all performance areas. Another four percent have an “Accreditation with Commendation,” an even higher standard awarded to facilities demonstrating outstanding overall performance. Obviously these would be the most ideal to get into, though with only four percent of the hospitals in the US meeting this standard, finding such a facility may not be easy.

One designation that may not be what it appears is the “Provisional Accreditation” granted to a new hospital. JCAHO gives this if the facility demonstrates satisfactory compliance with the early survey. However since the actual status is only determined after two more surveys within six months of the hospital’s opening, the Provisional Accreditation is a bit shaky and shouldn’t garner much status when you’re weighing the merits of hospitals.

Around one percent of hospitals get JCAHO’s “Conditional Accreditation.” This means the facility is performing only marginally and must correct the problem areas within a specified period of time or lose its accreditation. Obviously such hospitals are not much better than those that aren’t accredited (and might even be inferior). Therefore even if a hospital boasts that it is accredited by JCAHO, you should check to be sure it isn’t operating under a Conditional Accreditation.

You can easily access the ratings since JCAHO rulings are open to the public. To find a hospital’s accreditation status, simply call JCAHO (at 1-630-792-5000 or 1-630-792-5811). If you want even more information about a hospital, you can purchase an individual hospital performance report from JCAHO (cost is $30 per report).

**Final Step**

Even if the hospital looks good on paper, you should still “check it out” in the flesh to see whether it appears to be living up to its reputation. Very rarely hospitals are able to pull the wool over inspectors eyes; more often administrators change and, in the process of cutting costs and reducing staff, the hospital’s level of care drops precipitously. The time to discover such changes for the worse are before you check in, not after.

Does the hospital look clean? Do the workers seem alert and happy? Is the person at the front desk cheerful? If the waiting rooms, rest rooms, or patient care rooms look unkempt, then it is safe to bet sanitation is suffering as well. If the staff is unhappy, chances are they’re not giving the best service possible and perhaps are even goofing off on the job.

Also note whether patients have areas they can “roam” in since getting out of bed and moving around often speeds up recovery. Are there places where patients sit outside of their rooms? Does the hallway have railings to help shaky patients steady themselves as they walk? Is there a patient lounge or court yard that can be visited?

Also check to see if the hospital is conveniently located. Is there ample parking or is it crowded and cramped? Is the neighborhood the hospital is located in kept up or run down and perhaps dangerous (danger spilling over into emergency rooms or hospital waiting rooms is the last thing you want to worry about if you’re ill)? Does there appear to be adequate security to keep troublemakers out of the building? If you’re in a large city, is the hospital accessible by public transportation? This might make it easier for your family to visit you — or for you to go home on your own. Also check to be sure that visior parking is affordable or, more ideally, free.
One way to inspect a hospital (without appearing to be doing so) is to watch for special dieting, parenting, or other educational programs offered to the community by the hospital. These give you a chance to not only visit the hospital (often after visiting hours), and see how smoothly it is running but also to meet staff members.

While, as noted earlier, you can’t really judge medical expertise by how impressive a medical figure is in person, you may still be able to gain some important impressions on how qualified — or unqualified — the staff appears to be. When you visit, keep your eyes and ears open. Often you can find out a lot about a hospital by seeing how the staff is operating late in the evening after many of the doctors have gone home along with the visitors.

Important Strategies

One place that a few extra dollars can be well spent is in obtaining a private room rather than a bed in a semiprivate room. While you will often have to pay a little extra for a private room, there are a lot of advantages. If you have a private room, you’re going to be exposed to less potential infections both from the other patient as well as the people who come to visit him.

There won’t be twice as many doctors and nurses going in and out, thereby also lessening the chance of exposure to infection. From a medical standpoint, this can be significant. Not having another patient in the room with you will also enable you to get more rest. The TV won’t be on when you’re trying to sleep, nor will a perfect stranger be trying to engage you in conversation when you should be taking it easy and recuperating.

During a crisis when sanitation may be less than perfect in a hospital, having a private room might be a real plus for regaining your health. In such a situation you should also have as many procedures done on an outpatient basis as is possible. With poor sanitation, hospitals could become death traps to those with weakened immune systems — which is pretty much the normal state for those who have to enter a hospital.

Some patients become money machines for hospitals and doctors. Almost like hi-tech vampires, the hospitals suck these people dry of all the funds they had to spend on medical work — then the victim dies. Twenty-eight percent of Medicare costs are incurred not over 28 percent of the patient’s time on the program but rather during the last year of the patient’s life. In other words, most of the money spent doesn’t lead to a recovery but rather death. And there’s a lot more than dollars and cents here. Because anyone who’s seen a person filled with tubes and placed on life support knows it is anything but pleasant for most patients during the last year when all the debts are incurred.

It’s believed that around 10,000 Americans are kept on life support equipment, even though there is no indication they’ll recover. They often are first placed on a respirator, even though chances of their recovery are slim; later they are taken to intensive care units, still with no hope for recovery. This is done at the price of around $275 per day for the stay in ICU. Cost to keep these patients in the vegetative state runs around 1 billion dollars a year. The horrible part to this story is that there is no indication that terminally ill patients are any worse off at home than they are in the hospital.

To avoid squandering their wealth during their last year of life — being filled with tubes and mind-dulling drugs, many patients have opted for a legal fix. This enables them to avoid being one of the terminal patient money machines for a doctor or hospital. The fix is a legal document known as a “living will” which describes under what conditions you want to be kept alive and under what conditions you should be allowed to die naturally. The time to create this document is well before you go into the hospital. You should create it even for a minor operation since sometimes complications transform minor procedures into major disasters.

The living will you’ll have created will express your wishes regarding life support and health care
decisions. Coupled with someone who you've designated as your health care power of attorney, this could keep the hospital from bilking you out of a fortune during the last hours of your life. Unfortunately this form varies from state to state. However many hospitals are required to give you such a form to fill out. Best bet is to go and get one of these forms now, well before you need it. (A few states have passed laws making it impossible to refuse extraordinary resuscitative measures unless two physicians have declared you to be terminally ill. This might be a consideration when choosing what state you retire to.)

*Extra Protection*

There are extra steps you can take to protect yourself.

Many larger cities already have blood storage systems that permit individuals to give their own blood and have it stored; it seems likely that in other areas arrangements could be reached to have your blood stored (perhaps bartering some of it in the process to “buy” space and storage time). Since AIDS and other blood-born diseases have become prevalent, and since supplies of blood can become scarce during a protracted emergency, it wouldn’t hurt to build up your own “blood bank” that will permit you to save your own blood over time. This could then be used should you have any sort of surgery during a crisis.

Such blood might also be employed for black market barter should you decide your life is more important than obeying laws that endanger it, though I certainly am not suggesting that you break any laws that might be in place during such a situation. You would have to weigh your need and the seriousness of the situation and decide for yourself.

It would be wise to be aware of the blood types of various members of your family and whether some can give blood to others without problem. This would give you another edge should you be in a situation where blood is in short supply for surgeries or treatment of blood loss.

Any medications that members of your family need should also be amassed so you can get by for at least several months without going to the pharmacy to buy more. Some diseases permit a gradual reduction of medications. If you have such a condition, discuss with your doctor what the minimum dosage might be and then work toward using minimal amounts, or reducing them to that level should the medication come into short supply. Also attempt to learn of herbs or other treatments that may be effective for treating your condition (we’ll be looking at some of these in the next chapter); these might then be employed should you no longer be able to obtain the proper medication.

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Good health can’t be bought. It is valuable during the best of times and could be invaluable during an emergency when you need to operate at peak ability. Take care of yourself now so you will be at your best should your life and those around you depend on your physical abilities.
Chapter 6:
DIY Medicine 101

First, a disclaimer: Nothing in this chapter should be construed as professional medical advice or be used to substitute for medical care from a physician. Any time professional medical help is available to treat a serious problem, use it.

That said, during a protracted disaster, or during times of shortage, quality medical help may be hard or impossible to find. In such a situation, your ability to treat injuries and illness might be paramount to surviving. The ability to treat yourself and your family will also increase your morale and cohesion during an emergency. It can also give you the ability to help neighbors and friends, perhaps even becoming a barterable skill if you are in a protracted economic downturn or other major setback to our culture. The truth is that just one person with a fair amount of basic medical knowledge can make a difference in the lives of those around him.

Medical Martial Law

The little-known Bioterrorism Act was signed into law in June 2002. Like most “anti-terrorism” bills, this one was full of provisions that seem to have nothing to do with terrorism. The Bioterrorism Act empowers the Food and Drug Administration to heavily regulate or ban the importation of food and control the distribution of drugs that could be used to treat diseases resulting from biological attacks.

FDA overreaching is nothing new, however. And it’s not the greatest threat to medical freedom in this country.

Members of the Bush Administration are working behind the scenes to institute medical “martial law” in the event of a crisis. Federal bureaucrats are urging states to adopt what they call “Model State Emergency Health Powers” legislation (the biggest cheerleader is Health and Human Services Secretary Tommy Thompson). In the event of a major health crisis, this legislation would empower a governor to quarantine population centers as well as establish state control over all private and public assets at the discretion of public health officials.

As Thompson explained to a group of various state lawmakers, “We need not only a strong public health infrastructure and a full stockpile of medical resources, but also the legal and emergency tools to protect our citizens in a time of crisis. That’s true at both the federal and state levels.”

The sweeping emergency powers include control of private media outlets, rationing of medicine and food, and price quotas and controls. The law provides for the confiscation of property, including guns. Public health officials would be granted police powers to order mandatory medical examinations of private citizens and make refusal to be vaccinated a criminal offense. Emergency health powers would also grant

government the power to forcibly quarantine individuals or groups of individuals, with or without notice, in a variety of facilities deemed acceptable by the state.

Bureaucrats who, in the course of implementing emergency powers cause death or bodily injury to private citizens, are specifically exempted from liability.

The creation of extra-constitutional emergency provisional powers has drawn little public attention because it is being enacted on a state-by-state basis. In practice, however, the activation of such emergency powers would be a distinction without a difference, since the states are falling in line with federally initiated emergency plans.

As of this writing, Model State Emergency Health Powers legislation has passed in about half of state legislatures. A law professor who helped draft the model legislation for the Centers for Disease Control and Prevention said that he expects that virtually all states will eventually adopt all or parts of the proposed law. This isn't surprising considering that enactment of this model legislation will be tied to federal funding for highways.

If a future "emergency" government seizes control of medical facilities and imposes rations and quotas on medical care, you'll need to be able to take charge of your own health needs.

**Prevention**

Prevention is always better than medicine. Yet in many situations, people's brains seem to shut down and they behave like savages, quickly losing all semblance of hygiene and common-sense practices. The results are infections and sometimes run-away plagues that might have been prevented with the simplest of practices.

Remember that in any situation, cleanliness is an important factor in preventing infection and disease. A daily shower with hot water and scap is most ideal for keeping your skin free of infections as well as promoting overall health. Water can be heated in containers or even by the sunlight if you exercise a little ingenuity.

I've seen "solar-heated showers" created with two-liter soda pop bottles hung in a tree; the cap was loosened, allowing a slow trickle past the pressure relief grooves cut in most bottles. The trickle of water that had been warmed in the sun provided a short but satisfactory stream after being wedged and tied in a tree limb. An old shower curtain was hung around the shower for privacy. A little ingenuity was all that was needed.

Remember, too, that bathing water does not have to be pure to be useful. Water that isn't suitable for drinking may still be used for bathing, provided a little care is exercised to keep it out of the eyes, ears, nose and mouth and away from open wounds — though disinfected water is more ideal. For example, if you are near the ocean, saltwater can be employed to wash.

Likewise water that might have too many nitrates or other contaminants to be suitable for drinking could be employed for washing. The only water you want to avoid is that which might contain parasites or bacteria.

If water is in short supply, "sponge baths" with a cloth and soapy water work well. In such a situation, special attention should be given to the feet, armpits, crotch, hands, and hair because these areas are prime areas for infestation and infection. If water is really scarce, you can take an "air bath" by removing as much of your clothing as practical and expose your body to the sun and air for at least 1 hour.

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— a practice that kills many bacteria and molds that might otherwise grow on your skin. Just be careful not to overdo and get sunburned.

When water is slightly more abundant, proper bathing strategies can minimize waste. Showers can use much less water than sit-down baths, and have the advantage of actually getting the bather cleaner. To save water, use just a small amount of water to moisten the skin, and then turn off the water before lathering up the skin. Only after the skin has been cleaned should you then rinse off. This makes it possible to get fully clean without using a lot of water.

It isn’t too hard to make soap from animal fat and wood ashes. To do this, extract grease from animal fat by cutting the fat into small pieces and cooking them in a pot. Add enough water to the pot to keep the fat from sticking as it cooks. Cook the fat slowly, stirring frequently. After the fat is rendered, pour the grease into a container to harden.

Next place ashes in a container with a spout near the bottom. Pour water over the ashes and collect the liquid that drips out of the spout in a separate container. This liquid is the potash or lye (treat it gingerly as it will burn the skin). You can also obtain lye by pouring a mixture of ashes and water through a straining cloth.

The final step is to mix two parts grease to one part potash in a non-aluminum cooking pot. Place this mixture over a fire and boil it until it thickens. After the mixture, which is now soap, cools, the semi-liquid can be used. If you want bars of soap, then pour the liquid soap into a pan, allow it to harden, and cut it like fudge into crude bars. Soap might also become a good barter item if a disaster becomes long term.

**Clean Hands**

Unfortunately, readily available antibiotics have caused many Americans to abandon the simplest precautions that might prevent the spread of disease. The best practice for preventing the spread of disease is one such precaution: Simply washing the hands. If you keep your hands clean, you’ll greatly reduce the changes of spreading disease, contaminating foods, or infecting wounds.

Be sure you and those around you always wash their hands after handling any material that is likely to carry germs -after visiting the latrine, after caring for the sick, and before handling any food, food utensils, or drinking water. Be sure they also keep fingernails closely trimmed and clean; a majority of bacteria on the hand can be found under the nails, and often these remain even after the hands are washed.

Habits such as placing the fingers in the mouth, spitting on the ground, or placing pencils or other objects in the mouth should all be discouraged as they have the potential for spreading disease. Care should be taken to kill flies, cockroaches, or other creatures that might spread disease. Be sure screens are on all open windows or doors and encourage people to not leave doors open so flies or other insects can enter living areas.

Remember: The bacteria and viruses you can’t see can kill. Failure to prevent their spread may cost you or your family their lives during a period when medical help is hard to come by.

Keeping your hair clean is also important. Fleas, lice, and other parasites have trouble establishing themselves when hair is washed regularly. Shorter hair is easier to keep clean and also less apt to get caught in machinery or present other dangers. For this reason you may wish to crop everyone’s hair during a protracted emergency. However some diplomacy needs to be exercised in this matter, forcing people to cut their hair short may be more demoralizing than leaving it long and running a slightly greater risk of infestations. Use some common sense in this matter.

Clean clothing and bedding will also reduce the chance of skin infection as well as to decrease the danger
of parasitic infestation. Clean your outer clothing whenever it becomes soiled. Wear clean underclothing and socks each day. If water is scarce, “air clean” your clothing by shaking, airing, and sunning it for 2 hours.

If you are using a sleeping bag, turn it inside out after each use, fluff it, and air it. In very cold weather, it is possible to take clothing and bedding outside and leave it there for a short time; shaking and moving it around will then cause grease and dirt to fall from it after it has “clumped” due to the cold temperatures. Such cleaning isn’t complete, but can make a big improvement.

Most people take brushing their teeth for granted — and fail to do this during a protracted emergency. Big mistake. You should thoroughly clean your mouth and teeth with a toothbrush at least once each day. Ideally you’d also floss, though this can be hard unless dental floss is available.

You can improvise a fair toothbrush substitute by creating a chewing stick. First find a twig about 20 centimeters long and 1 centimeter wide. Chew one end of the stick to separate the fibers. Once these bristly fibers are exposed, you can use them to brush your teeth thoroughly. A slightly less satisfactory solution is to wrap a clean strip of cloth around your fingers and rub your teeth with it to wipe away food particles.

Toothpaste can be improvised with small amounts of baking soda, salt, or soap (the latter being most ideal with a non-perfumed or homemade soap — as outlined above). Rinse your mouth with water. Flossing your teeth with string or fiber helps oral hygiene.

There is no way to completely fix a cavity. However you can help keep the problem from getting worse by creating temporary fillings by placing candle wax, tobacco, aspirin, hot pepper, tooth paste or powder, or portions of a ginger root into the cavity. Make sure you clean the cavity by rinsing or picking the particles out of the cavity before placing a filling in the cavity, sterilizing it with mouthwash or alcohol if possible (and if this isn’t too painful).

**Stand By Me**

During most emergencies, you’ll most likely be on your feet more than normal. That means you may develop some serious foot problems if you’re not careful.

The first step is to be sure you have shoes that are comfortable and which have been broken in. I’ve seen people with brand new shoes in their emergency gear or “bug-out bag” they’ve created for emergencies. They’d be better off with an old pair of shoes that they’ve worn for some time.

My advice is to get a pair of sneakers or work shoes that you’ve been using for a long while, put them in your emergency kit, and then go buy a new pair of shoes for everyday use. That way you’ll have a pair of shoes that will serve you well when you need them. Barring that, be sure to pick shoes carefully when doing labor, walking any distance, or facing other emergency situations.

Be sure to also wash and massage your feet daily if you’ve been on them for some time. Trim your toenails straight across to avoid ingrown nails from developing. Be sure to wear an insole if needed and always keep your feet as dry as possible. Clean socks that are the right size will help keep problems from developing.

Always wear socks in shoes to help prevent fungus problems. Foot or talcum powder can help keep your feet dry as well as discourage many problems. When possible, apply a padding material around the blister to relieve pressure and reduce friction.

If blisters develop, don’t open them; as this can cause infection. If blisters break before they are noticed, be sure to wash them off and treat them with an antibiotic. Remember: any broken blister should be treated as an
open wound.

To avoid having the blister burst or tear under pressure and cause a painful and open sore, lance and drain it. However this should be done carefully to avoid infection. The needle should be sterilized by holding it in a flame or using a disinfectant on it. After draining the blister, use an antibiotic on it (because there will now be openings where you lanced it) and then place sterile padding around it to keep the skin intact over the area if possible.

**Rest**

Emergencies often call for strenuous, immediate action. However when you’re facing an extended emergency (as opposed to one that comes and goes in a matter of minutes), you need to resist the tendency to drive yourself until you finally drop in exhaustion.

Such reactions of working until you drop are what often leads to a spate of heart attacks, heat stroke, or other serious health problems produced by strain and too much exertion following a disaster. It is hard to do, but you must pace yourself and encourage those around you to do likewise. Otherwise you’re apt to have additional problems because of health complications.

A good rule of thumb is to adopt the US Army’s age-old practice of giving troops at least 10 minutes of rest during each hour of daily activities. This should be seen not as an option, but a necessary minimum. During very hot or cold weather, or in conditions that are demanding great exertion, this time should be extended.

**Waste Management**

Another potential health problem that will result during a protracted disaster can occur when proper latrines are not available. If the water and/or sewage system is broken down, be sure you create a proper facilities to deal with waste. Failure to do so will soon result in the spread of disease and even serious plagues not normally seen in the US.

As an expedient, encourage people to dig “cat holes” and then cover their waste with dirt. Garbage and other waste that will attract vermin should also be buried. As soon as possible, you should strive to dig and establish rock-lined latrines which are covered by screened “outhouses” to keep flies and rats out of the area.

Wood ash from fires can be placed on human waste to help minimize smell. When necessary, these latrine pits can be filled with dirt and new systems created, depending on how heavily they are being used.

Take great care to place latrines downhill from your water supply. Also keep latrines well away from wells and other sources of water so run-off from rains and ground seepage won’t contaminate your water supply. All water, regardless of how far away from your latrine, should be purified using methods outlined elsewhere in this manual. Also remember that you never know who else may have a system upstream which could seep into your water system. Purify all water before drinking it.

**Medical Emergencies**

A doctor should always be used when available. If medical help is not accessible, then you may need to act on your own. Emergencies that demand immediate attention include those involving breathing problems, severe bleeding, and shock (review the conditions listed in the previous chapter to get a handle on the various symptoms that indicate the need for immediate attention).
Most breathing problems are caused by an obstruction of the airway. Sometimes this will be foreign matter such as food in mouth or throat that obstructs the opening to the trachea. Other times it may be the result of a face or neck injuries, or inflammation and swelling of mouth and throat which can be the result of an allergic reaction as well as inhaling smoke, flames, or irritating vapors.

When a victim is having breathing problems, you should first be sure that the head is moved back so the neck isn’t bent or resting on the chest. Sometimes this will open up the passage enough that a person will be able to breathe when they were having troubles.

If a person is unconscious or has lost control of their muscles, the tongue will sometimes drop back somewhat into the throat and block the passage of air to the lungs. In such a case, tilting the patient forward and/or inserting a finger into the mouth to move the tongue forward may cure the problem.

Severe bleeding from any major blood vessel in the body is extremely dangerous. The loss of just 1 liter of blood will produce moderate symptoms of shock with the loss of 2 liters producing life-threatening shock; the loss of 3 liters or more is generally fatal. Large amounts of blood can be lost quickly, so it is essential to stop bleeding from a vein or artery immediately.

Shock is an acute stress reaction that arises when cardiac output is insufficient to gain enough blood pressure to supply an adequate blood supply to the organs and tissues. This can occur with loss of blood as well as other types of injuries and conditions.

**Life-Saving Response Tactics**

Possibly the greatest killer in medical emergencies is panic. Often people panic and fail to do the obvious thing, forgetting how to stop things from going from bad to worse. When dealing with a medical emergency you must remain calm (or at least force yourself to appear calm) and also reassure the victim, keeping him as calm and quiet as possible.

While reassuring the victim and those around you, rapidly perform a physical exam. This will help you catch what may be causing the problem. For example, you might find a person with a wound on their chest, appearing to be going into shock. If you immediately start treating the wound to keep him from going into shock, you could miss the fact that the wound is a penetration wound, and that there’s a worse “hole” in his back which will cause him to bleed to death if you only deal with the obvious. While it would seem that such complications would be rare, in fact they are common and easily overlooked. Take a few moments to inspect your “patient” to be sure you know what you’re dealing with.

The next point is that you must treat symptoms starting with the gravest then move to the less threatening. For example, if a victim has stopped breathing and is also bleeding from a number of minor wounds, you would first restore his breathing and then concentrate on his wounds.

Do things in the wrong order and you’ll be treating a dead patient. (The only exception to this is a person who is bleeding from an arterial wound; in such a case the loss of blood may be great enough to cause death before oxygen starvation to the brain does. However this is the only exception.) So almost any time you see a person having problems breathing, that is the first problem you should deal with before moving on to other serious problems.

You should first check to see if the victim has a partial or complete airway obstruction. If he can cough or speak, allow him to clear the obstruction naturally. Stand by, reassure the victim, and be ready to clear his airway and perform mouth-to-mouth resuscitation should he become unconscious. If his airway is completely
obstructed, administer abdominal thrusts until the obstruction is cleared.

If the victim can’t be helped with the above step, use a finger to quickly sweep the victim’s mouth clear of any foreign objects, broken teeth, dentures, food, or whatever. This may be enough to restore breathing.

For an unconscious person to be able to breathe, he needs to have his head tilted back slowly, jaw forward and open, and the lips parted. You may be able to help by moving the victim slightly if he is unconscious. However care should be taken to minimize movement so that internal injuries, a broken back, or other complications aren’t made worse by your actions.

If possible, you should visit your hospital or other health care facilities which offer courses on how to administer CPR (Cardiopulmonary resuscitation) in conjunction with the American Heart Association and the Red Cross. It is hard to “learn on the job” in resuscitating a person who has stopped breathing; what looks easy on paper isn’t so easy in reality. The basic technique involves positioning the head and neck (generally this can be achieved by placing a fist behind the victim’s neck when he is on his back and then tilting the head slightly back to open his airway. You should then check to be sure the airway isn’t blocked (if you haven’t done this already).

You then pinch his nose closed with your thumb and forefinger and then blow two complete breaths into his lungs. Sometimes this will clear any problem enough that he can breath on his own.

After the second breath, watch his chest as his lungs deflate. You should be able to see his chest fall and should be able to hear air being exhaled or feel it coming from his mouth. If not, then the airway is blocked. You must remove this blockage before continuing.

If his lungs are filling and unfilling, but breathing was not started when you gave him two quick breaths, then you need to maintain the victim’s breathing by performing mouth-to-mouth resuscitation. CPR may be necessary after cleaning the airway, but only after major bleeding is under control.

There is danger of the victim vomiting during mouth-to-mouth resuscitation. In such a case the vomit will block the airway if not cleared away. Rotate the patient on his side and clear his mouth before continuing, repeating this process as needed, checking periodically for vomit, clearing as necessary. Drowning victims should also be monitored to be sure water is not filling their airways, again turning them on their side to let the liquid run out.

**Stopping the Bleeding**

Light bleeding is a good thing since it helps clear a wound of bacteria as well as form a protective layer over the wound as the blood clots upon exposure to the air. However when a wound is too serious to rapidly close itself, blood loss will continue until it becomes a life-threatening problem. For this reason you should strive to stop serious bleeding immediately, especially since you will lack the facilities to replace blood through a transfusion.

The most serious external bleeding occurs when an artery is cut. Arteries carry blood away from the heart and through the body; a cut artery issues bright red blood from the wound in distinct spurts or pulses that correspond to the rhythm of the heartbeat. Because the blood in the arteries is under high pressure, an individual can lose a large volume of blood in a short period when significant damage to an artery occurs. Therefore, arterial bleeding is the most serious type of bleeding and if not controlled promptly, can quickly prove fatal.
Venous blood is returning to the heart through blood vessels called veins. A steady flow of dark red, maroon, or bluish blood characterizes bleeding from a vein. You can usually control venous bleeding more easily than arterial bleeding. Capillaries are the extremely small vessels that connect the arteries with the veins. Capillary bleeding most commonly occurs in minor cuts and scrapes. This type of bleeding is not difficult to control and is seldom immediately serious (though the possibility of infection makes any wound potentially serious over time).

External bleeding is controlled and stopped by applying direct pressure to the wound, by placing indirect (pressure points) pressure on veins or arteries feeding to the wound, by elevation of the area where the wound has occurred, by digital legation, or by applying a tourniquet.

Direct pressure is the best way to control external bleeding and should be attempted first. To do this you apply pressure directly over the wound. The pressure must be firm enough to stop the bleeding and must be maintained long enough to “seal off” the damaged surface. This means the pressure must be maintained for up to 30 minutes. After that time a pressure dressing can be applied to continue to keep it from bleeding. This type of bandage consists of a thick dressing of gauze or other suitable material applied directly over the wound and held in place with a tightly wrapped bandage. This bandage should be tighter than an ordinary compression bandage but not so tight that it impairs circulation to the rest of the limb.

Important: Once you apply a pressure dressing, do not remove it for 1 or 2 days, even when the dressing becomes blood soaked; apply another bandage over it, but do not remove the bandage. After this time you can remove and replace the bandage with a smaller dressing. If you are unable to reach medical help, then the dressing should be changed daily, watching for any signs of infection.

Raising an injured extremity as high as possible above the heart’s level slows blood loss by aiding the return of blood to the heart and lowering the blood pressure at the wound. While elevation alone will not control bleeding from a serious wound, it can help and may enable you to control bleeding by direct pressure over the wound. (The exception to this rule is in treating a snakebite in which case bleeding will be slight and the extremity should be kept lower than the heart to reduce the spread of any poison that may have been injected into the wound.)

Pressure points are areas where arteries are close to the surface of the skin and over a bone. This makes it possible to push at these points to seal off the blood flow through the vessel. By picking a pressure point “upstream” from a wound, you can slow the arterial flow enough to stop bleeding by applying a pressure bandage. Pressure point control is not as effective for controlling bleeding as direct pressure will seldom be of use by itself. However it may be useful in reducing the problem you’re dealing with.

The rule for locating pressure points is to apply pressure at the end of the joint just above the injured area. For example, on hands, feet, and head, this will be the wrist, ankle, and neck, respectively. With most such wounds, too much pressure won’t be a problem. However it will with a head wound; too much pressure on the neck for too long may cause unconsciousness or even death.

You can maintain pressure points by placing a round stick in the joint, bending the joint over the stick, and then keeping it tightly bent by lashing or by having the victim hold it in place if he’s able to do so. By using this method to maintain pressure, it frees your hands to work in other areas.

Digital legation will often stop major bleeding immediately or slow it down. You apply this with a finger or two at the bleeding end of the vein or artery that has been cut. Maintain the pressure until the bleeding stops or slows down enough to apply a pressure bandage, elevation, and so forth. The catch to this is that sometimes the blood flow will obscure the view of the severed vein or artery. However often it can be located by watching for where the blood is coming from.
A tourniquet is your last resort and should be avoided if possible because of its potential for tissue damage to the limb when the blood to it is shut off. Use a tourniquet only when direct pressure over the bleeding point and all other methods did not control the bleeding. Obviously a tourniquet should never be placed around the neck, unless you’re treating someone you don’t want to hear from again.

If you leave a tourniquet in place too long, the damage to the tissues can progress to gangrene, with a loss of the limb later. An improperly applied tourniquet can also cause permanent damage to nerves and other tissues at the site of the constriction.

If you must use a tourniquet, place it around the extremity, between the wound and the heart, 5 to 10 centimeters above the wound site. Never place it directly over the wound or over a bone that may be fractured. Use a stick as a handle to tighten the tourniquet and tighten it only enough to stop blood flow — and no more. When you have tightened the tourniquet, bind the free end of the stick to the limb to prevent unwinding.

After you secure the tourniquet, clean and bandage the wound. If you are by yourself, you should never remove or release an applied tourniquet because the sudden rush of blood may cause you to pass out and then bleed to death. If you are with someone, then ideally the tourniquet pressure should be released every 10 to 15 minutes for 1 or 2 minutes.

**Dealing with Shock**

You should expect shock in anyone that has a serious injury, especially if there’s been some loss of blood. Therefore you should treat all injured persons as if they will be going into shock. That means that if the victim is conscious, place him on a level surface with the lower extremities elevated 15 to 20 centimeters; this forces more blood to the head helping the victim to remain conscious.

If the victim is unconscious, place him on his side or abdomen with his head turned to one side to prevent choking on vomit, blood, or other fluids. If you are unsure of the best position, place the victim perfectly flat.

Once the victim is in a shock position, do not move him. Maintain body heat by insulating the victim from the surroundings and, in some instances, applying external heat if the temperature is cool or cold. If the victim is wet, remove all the victim’s wet clothing as soon as possible and replace with dry clothing. Improvise a shelter to insulate the victim from the weather if necessary.

There are a variety of ways to keep a victim warm, depending on what facilities you have, what utilities may be on, and so forth. You can use warm liquids or foods, a pre-warmed bed or sleeping bag, another person, warmed water in plastic soda bottles or canteens, hot rocks wrapped in clothing, or fires on either side of the victim to provide external warmth.

If the victim is conscious, slowly administer small doses of a warm salt or sugar solution if available, to help build up blood fluids and electrolyte levels. If the victim is unconscious or has abdominal wounds, do not give fluids by mouth. Have the victim rest for at least 24 hours.

If you are by yourself and have suffered a serious injury, you should also prepare to go into shock. You can overcome this by lying in a depression in the ground, behind a tree, or any other place out of the weather, with your head lower than your feet until help arrives or you recover.

If you are caring for a victim, reassess your patient constantly and also reassure him that he’ll be getting better if he’s conscious.
Fixing Fractures

A variety of broken bones and related injuries may be encountered. These include fractures (broken bones), dislocations, and sprains.

Fractures fall into two categories. One is the compound fracture in which the bone protrudes through the skin and complicates the actual fracture with an open wound. When dealing with such a compound fracture, you must first set the fracture and then treat the wound as any other open wound. The simple fracture has no open wounds; in this case you simply set the bone. In both cases the bone must remain in place so it can heal; this means immobilizing the area for several weeks.

Fractures aren’t always easy to spot. The signs and symptoms of a fracture are pain, tenderness, discoloration, swelling, deformity, loss of function, and grating (a sound or feeling that occurs when broken bone ends rub together). The danger with a fracture is the severing or the compression of a nerve or blood vessel at the site of fracture. For this reason minimum manipulation should be done to reposition the two ends of the bone.

If you notice the area below the break becoming numb, swollen, cool to the touch, or turning pale, and the victim shows signs of shock, a major vessel may have been severed. In such a case you must control this internal bleeding and rest the victim for shock as well as replace lost fluids.

Often you must maintain traction during the splinting and healing process in order to keep the muscles attached to the bone from pulling it into the wrong position. You can effectively pull smaller bones such as the arm or lower leg into place by hand. If you’re by yourself, you can create traction by wedging a hand or foot in the V-notch of a tree and pushing against the tree with the other extremity. Once the appendage is in the proper position and alignment, you then splint the break.

With very strong muscles such as those holding a broken thighbone (femur) in place, it will be difficult to maintain traction during healing. You can make an improvised traction splint using natural material as follows: Get two forked branches or saplings at least 5 centimeters in diameter. Measure one from the patient’s armpit to 20 to 30 centimeters past his unbroken leg. Measure the other from the groin to 20 to 30 centimeters past the unbroken leg. Make sure that both extend an equal distance beyond the end of the leg. Pad the two splints. Notch the ends without forks and lash a 20- to 30-centimeter cross member made from a 5-centimeter diameter branch between them.

Using available material (vines, cloth, or whatever you have available), secure the splint around the upper portion of the body and down the length of the broken leg. With available material, you then fashion a wrap that will extend around the ankle, with the two free ends tied to the cross member. Place a 10- by 2.5-centimeter stick in the middle of the free ends of the ankle wrap between the cross member and the foot. Using the stick, twist the material to make the traction easier.

Continue twisting until the broken leg is as long or slightly longer than the unbroken leg. Lash the stick to maintain traction. With such a system you may lose traction over time because the material will weaken. For this reason you should check the traction periodically, changing or repairing the splint while a helper maintains the traction manually for a short time.

Dislocations occur when bones go out of proper alignment by popping out of place. These misalignments can be extremely painful and can cause an impairment of nerve or circulatory function below the area affected. You must place these joints back into alignment as quickly as possible. Signs and symptoms of dislocations are joint pain, tenderness, swelling, discoloration, limited range of motion, and deformity of the joint.

Dislocations are treated by reduction, immobilization, and rehabilitation. Reduction or “setting” a bone
means placing the bones back into their proper alignment. You can use several methods, but manual traction or the use of weights to pull the bones are the safest and easiest. Once performed, reduction decreases the victim’s pain and allows for normal function and circulation. Without an X-ray, you can judge proper alignment by the look and feel of the joint and by comparing it to the joint on the opposite side of the victim’s body.

**Immobilization** is nothing more than splinting the dislocation after reduction. You can use any field-expedient material for a splint or you can splint an extremity to the body to hold it in place.

There are important guidelines you must follow in splinting a fracture or dislocation. Always splint above and below the fracture site. Be sure to pad splints to reduce discomfort. Check circulation below the fracture after making each tie on the splint.

To rehabilitate the dislocation, remove the splints after 7 to 14 days. Gradually use the injured joint until fully healed. A broken bone will need to remain splinted for 3 to 4 weeks.

**Sprains**

Sprains may create the pain associated with a fracture or dislocation. However they are caused by the over-stretching of a tendon or ligament rather than a problem with the bone itself. The signs and symptoms are pain, swelling, tenderness, and discoloration of the skin and underlying tissues (black and blue).

When treating sprains, the old first-aid acronym to use is “RICE”: Rest the injured area; Ice (if available) for 24 hours (then heat after that); Compression-wrapping and/or splinting to help stabilize; and Elevation of the affected area.

**Bites and Stings**

More than a few people are sent to the hospital by insects, ticks, and spider bits or stings. These pests become a serious hazard if medical help isn’t readily available. They not only cause irritations, but they are often carriers of diseases that cause severe allergic reactions in some individuals. Ticks can carry and transmit diseases, such as Rocky Mountain spotted fever and Lyme disease, and are common in many parts of the United States.

Ticks and mosquitoes are also “vectors” that can be employed to deliver biological warfare diseases. Thus, while now rare in the US, one might see mosquitoes carrying malaria, dengue, and many other diseases. Some of these diseases might also make their way into the US should theories about global warming actually prove to be true.

Flies can spread disease from contact with infectious sources; following disasters when sanitation becomes poor, they often spread sleeping sickness, typhoid, cholera, and dysentery. Fleas can transmit plague; lice can transmit typhus and relapsing fever.

Keeping these pests away from you is the best line of defense. Be sure screens on doors and windows remain intact, use netting and insect repellent if available, and wear the maximum amount of clothing when outdoors. If you get bitten or stung, do not scratch the bite or sting, it might become infected.

Every emergency kit should be stocked with insect repellent. Unfortunately most are not. You’d be wise to purchase some before an emergency. If you live in an area with mosquitoes, you’d have an excellent barter item
if you have more than you need.

While not nearly as effective as commercial products, make-do repellents can be created by applying the expressed juice of wild garlic or onion to the skin, placing sassafras leaves in your home, or burning or smudging cattail seed hair fibers around your living space.

If you're in an area that is infested with ticks or leeches, be sure to inspect your body at least once a day to ensure there are no such parasites attached to you. If you find ticks attached to your body, cover them with a substance, such as Vaseline, heavy oil, or tree sap, that will cut off their air supply. Without air, the tick releases its hold, and you can remove it — at least that's the theory (I have seen this fail in real life with the tick actually dying but remaining attached to the skin).

Take care to remove the whole tick. Use tweezers or needle-nosed pliers if you have them. Grasp the tick where the mouth parts are attached to the skin, taking care not to squeeze the tick’s body (which can force contaminated blood from the creature back under the skin). Rather than pulling the tick straight out, roll the twisters or pliers over to lever it out of the skin; this reduces the chances of having the tick’s head break free and remain in the skin where it will create an infection.

After removing a tick, wash your hands thoroughly and clean the wound daily until it is healed.

*Treating Insect Bites and Stings*

If national or regional plagues spread by insects or ticks becomes a problem, the government might take action through immunizations or administration of antibiotics. In such a case you’d be wise to take advantage of the services. The common fly-borne diseases are usually treatable with penicillin or erythromycin. Most tick-, flea-, louse-, and mite-borne diseases are treatable with tetracycline.

If you obtain antibiotics through a circuitous route (which can happen when black markets are in operation during a widespread disaster), most tetracycline is manufactured in 250 milligram (mg) or 500 mg tablets. If you cannot remember the exact dose rate to treat a disease, 2 tablets, 4 times a day for 10 to 14 days will usually kill any bacteria.

Bee and wasp stings can be dangerous, especially if numerous or if the person stung has an allergy to the poison. If stung by a bee, immediately remove the stinger and venom sac, if attached, by scraping with a fingernail or a knife blade. Do not squeeze or grasp the stinger or venom sac, as squeezing will force more venom into the wound. Wash the sting site thoroughly with soap and water to lessen the chance of a secondary infection.

If you know or suspect that you or a family member are allergic to insect stings, always carry an insect sting kit with you. Buy several kits now, before a disaster occurs that will make it impossible to get such medications.

You can relieve the itching and discomfort caused by insect bites by applying a cold compress to the area. Other expedient treatments include placing a cooling paste of mud and ashes on it (being careful not to apply this to an open wound that could become infected). Some report relief by applying the sap from dandelions to a bite or sting and others swear by crushed cloves of garlic or onions.

Black widow spider bites are rare. The spider can be identified by a red hourglass on its abdomen. Only the female bites, and it has a neurotoxic venom. The initial pain is not severe, but severe local pain rapidly develops. The pain gradually spreads over the entire body and settles in the abdomen and legs. Abdominal cramps and progressive nausea, vomiting, and a rash may occur as can weakness, tremors, sweating, and salivation. Anaphylactic reactions can occur. Symptoms begin to regress after several hours and are usually gone.
in a few days.

Those bitten by this spider can go into shock so the victim should be observed and CPR may be necessary. Clean and dress the bite area to reduce the risk of infection. An antivenom is available — if you have access to medical help.

Over the last few decades the brown house spider or brown recluse spider has migrated northward into much of the US. This small, light brown spider is identified by a dark brown violin on its back. There is no pain, or so little pain, that usually a victim is not aware of the bite. But within a few hours a painful red area with a mottled cyanotic center appears. Necrosis does not occur in all bites, but usually in 3 to 4 days, a star-shaped, firm area of deep purple discoloration appears at the bite site. The area turns dark and mummified in a week or two. The margins separate and the scab falls off, leaving an open ulcer. Secondary infection and regional swollen lymph glands usually become visible at this stage.

The outstanding characteristic of the brown recluse bite is the formation of this ulcer that does not heal but persists for weeks or months. In addition to the ulcer, there is often a systemic reaction that is serious and may lead to death. Reactions (fever, chills, joint pain, vomiting, and a generalized rash) occur chiefly in children or debilitated persons.

Scorpions are all poisonous to a greater or lesser degree. There are two different reactions, depending on the species. With some there will be a severe local reaction only, with pain and swelling around the area of the sting. This may be accompanied by a prickly sensation around the mouth and a thick-feeling tongue. Severe systemic reaction, with little or no visible local reaction may occur.

Systemic reactions to scorpion stings can include respiratory difficulties, thick-feeling tongue, body spasms, drooling, gastric distention, double vision, blindness, involuntary rapid movement of the eyeballs, involuntary urination and defecation, and heart failure. Death is rare, occurring mainly in children and adults with high blood pressure or illnesses. Treat scorpion stings as you would a black widow bite.

**Snake Bites**

The chances of being bitten by a poisonous snake are small. And many times when poisonous snakes bite, they fail to inject their venom into a person, especially if the bite occurs through clothing. However during flooding, earthquakes, or other disasters where natural habitats are disturbed, there may be large numbers of snakes appearing where normally they would not be seen. Because most poisonous snakes prey on mice and rats, keeping the numbers of these varmints down will also reduce the chances of your encountering a poisonous snake.

Deaths from snakebites are rare. More than one-half of the snakebite victims have little or no poisoning, and only about one-quarter develop serious systemic poisoning. Nevertheless, a snakebite is a very frightening event and preventive measures should always be taken.

Whenever possible, the snake which bit a person should be killed and identified; the teeth pattern of the bite can also be used to determine whether or not a snake was poisonous. Bites from a nonpoisonous snake will show rows of teeth. Bites from a poisonous snake may have rows of teeth showing, but will have one or more distinctive puncture marks caused by fang penetration.

Since many non-poisonous snakes will also bite if disturbed, it may be that much of the worry can be dismissed when the snake is found to be non-poisonous. However if a snake cannot be killed or is not easily identified, and the bite itself isn’t clear enough to be identified, then the bite should be treated as if it were
poisonous to be on the safe side.

A bite wound, regardless of the type of animal that inflicted it, can become infected from bacteria in the animal’s mouth; given the fact that snakes hunt rodents that may carry disease, this is no small concern. With nonpoisonous as well as poisonous snakebites, this local infection is responsible for a large part of the residual damage that results. For this reason all snake bites (as well as other animal bites) should be carefully cleaned and disinfected; the patient should be watched for diseases which may result days or even weeks later.

With poisonous snake bites, the primary concern is to limit the amount of eventual tissue destruction around the bite area. Snake venom not only contain poisons that attack the victim’s central nervous system (neurotoxins) and blood circulation (hemotoxins), but also digestive enzymes (cytotoxins) to aid in digesting their prey. These poisons can cause a very large area of tissue death, leaving an open wound. This condition could lead to amputation if not treated.

Shock and panic in a person bitten by a snake can also affect the person’s recovery. Excitement, hysteria, and panic can speed up the circulation, causing the body to absorb the toxin quickly. Signs of shock occur within the first 30 minutes after the bite. Symptoms of a poisonous bite may be spontaneous bleeding from the nose and anus, blood in the urine, pain at the site of the bite, and swelling at the site of the bite within a few minutes or up to 2 hours later. Breathing difficulty, paralysis, weakness, twitching, and numbness are also signs of neurotoxic venom; these signs usually appear 1.5 to 2 hours after the bite.

If you determine that a poisonous snake bit an individual, immediately reassure the victim and keep him still to minimize the spread of poison. You should prepare for the possibility of the victim going into shock and should encourage him to drink lots, even excessive amounts, of fluids (if you have the capability to give a fluids intravenously, that would be ideal but will be out of the capabilities of most readers).

To reduce any complications caused by swelling of the body, be sure to have a victim remove watches, rings, bracelets, or other constricting items. You should then clean the bite area. Bites to the extremities are less apt to be a problem than a bit to the thorax; a bit to the face or neck can be especially dangerous with swelling causing difficulty in breathing. In these latter cases, you may need to administer mouth-to-mouth resuscitation or CPR.

If the bite is on an extremity, you can use a constricting band between the wound and the heart to reduce the spread of the poison. Care should be exercised since too tight a band will cause more tissue damage rather than lesson it, due to the lack of blood flow to the area of the bite.

The poison should be removed when possible by using a mechanical suction device or by squeezing. First make deep cuts at the bite site if medical help is over one hour away (or non-existent). In such a case make an incision no longer than 6 millimeters and no deeper than 3 millimeters over each puncture, cutting just deep enough to enlarge the fang opening, but only through the first or second layer of skin.

To draw the blood — and poison — from the cuts, place a suction cup over the bite so that you have a good vacuum seal. Suction the bite site 3 to 4 times and then stop. The best suction device is that found in a snake bite kit. However you can improvise with a plastic 2 litter bottle or other plastic container capable of creating a vacuum over the bite. If a suction device is not available, you can use mouth suction.

This should be reserved as a last resort if you can’t reach medical help and only if you do not have open sores in your mouth. Spit the envenomed blood out and rinse your mouth with water afterward. Suction can draw out just 25 to 30 percent of the venom so it is not a cure but will help. If large blisters later form around the bite site, open and drain these, being careful as the liquid will contain venom.
After drawing contaminated blood, be very careful as the poison in it can damage sensitive tissue such as that of the eye, perhaps even causing blindness. Wash thoroughly and avoid touching your face.

Following this treatment, the victim must be observed and symptoms treated. If infection appears, keep the wound open and clean. Use heat after 24 to 48 hours to help prevent the spread of local infection. Heat also helps to draw out an infection. Keep the wound covered with a dry, sterile dressing. Have the victim drink large amounts of fluids until the infection is gone.

**Dealing with Various Injuries**

There are a variety of wounds which you may encounter and be forced to treat during an emergency. Any open wound can be dangerous since it is a potential site of infection. Skin diseases, frostbite, trench foot, and burns as well as puncture wounds and cuts can all be common during a protracted — or even short term — emergency. Always examine a wound carefully, especially those caused by a sharp object, gun shot, or projectile since these may have a smaller “exit wound” and can be easily overlooked and left untreated.

Your first step should be to cleaning the wound as soon as possible after it occurs. Remove clothing away from the wound and thoroughly clean the skin around the wound. Rinsing (not scrubbing) the wound with large amounts of water under pressure is about the only sure way to rid it of bacteria. Ideally you’ll use fresh, soapy water for this.

However, if you are in a bind for water, you can use fresh urine; the urine from a healthy adult is almost totally free from dangerous bacteria and viruses, so this is not as dangerous as it may sound.

When medical help is not available, the “open treatment” of wounds is the safest since it is less apt to create infections that can’t be easily treated. This system leaves the wound open rather than closing it with suturing or a tight bandage. The downside is that this will create a larger scar. However leaving the wound open allows the drainage of any pus resulting from infection.

As long as the wound can drain, it generally will not become life-threatening, regardless of how unpleasant it looks or smells. In short, using this treatment may leave a scar but will often save the patient.

The first step in open treatment is to cover the wound with a clean dressing. Place a bandage on the dressing to hold it in place. Change the dressing daily to check for infection. If a wound is gaping, you can bring the edges together with adhesive tape cut in the form of a “butterfly” or “dumbbell.” However you don’t want the skin to overlap or be held tightly together in such a case. Remember than drainage of the wound is essential to avoid a serious internal infection.

If you have topical antibiotics, they can reduce the chances of infection. Dry garlic powder can also help, due to its high content of sulfur which will kill many bacteria (this shouldn’t be used on those who are allergic to sulfa drugs, however).

If you are unable to get medical help, some degree of wound infection is almost inevitable. Pain, swelling, and redness around the wound, increased temperature, and pus in the wound or on the dressing indicate infection is present. To treat an infected wound, place a warm, moist compress directly on the infected wound. Change the compress when it cools, keeping a warm compress on the wound for a total of 30 minutes. Apply the compresses three or four times daily.

If you wound becomes infected, it should be drained from time to time. Open and gently probe the infected wound with a sterile instrument to open a route for the pus to drain from the wound. Then dress and
bandage the wound. Because of fluid loss, those with an infected wound should drink a lot of water. Continue this treatment daily until all signs of infection have disappeared.

There is one last-ditch treatment for a wound that does not go away even with the treatment of antibiotics and drainage. This is known as “maggot therapy” and is currently in use in hospitals in the US, although it isn’t widely publicized due to the bad associations most people have with flies and fly larvae. And it is not without its hazards since you have no way of controlling what bacteria the flies laying the eggs that will become maggots may be. But the plus is that maggots will eat only dead, damaged flesh, leaving healthy flesh alone for the most part. That means they can be employed to clean out a wound in a way that is impossible with any medical procedure yet devised.

If you decide to chance this, you first expose the wound to flies for one day and then cover it. Check daily for maggots. Once maggots develop, keep wound covered but check daily to see how the wound looks. When it appears to be nearly cleared of dead and contaminated tissue, you carefully remove all maggots so they won’t start eating healthy tissue. Increased pain and bright red blood in the wound indicate that the maggots have reached healthy tissue and it is past time to clean the critters out.

To clean the wound, flush it repeatedly with sterile water (or fresh urine if water is scarce). This flushing should remove all the maggots. Check the wound every four hours for several days to ensure all maggots have been removed. Once you are certain the wound is clear of all maggots, bandage it and treat it as any other wound. It should heal normally.

Skin Diseases

Bathing regularly or taking a “sun bath” as outlined elsewhere will help prevent many skin diseases. However when people are under stress, sanitation is less than ideal, and if you are exposed to those who may not be keeping their skin rigorously clean, chances are good you’ll develop some skin diseases or ailments. These will consist of any of a variety of boils, fungal infections, and rashes. While these rarely develop into a serious health problem, they cause discomfort and should be treated as a method for keeping up morale if for no other reason.

With boils you should apply warm compresses to bring the boil to a head. Once a head is formed, use a sterile knife, wire, needle, or similar item to open and drain it (metal instruments can be sterilized by holding them in a flame for some time if alcohol or other disinfectants are not available). Once the boil has been opened and drained, you should thoroughly clean out any remaining pus using soap and water. You should then cover the boil site, checking it periodically to ensure no further infection develops.

Fungal infections are most likely when the skin is moist and unexposed to sunlight. So your first line of treatment is to keep the skin clean and dry, and expose the infected area to as much sunlight as possible. Although the area may itch, you should avoid scratching as this may damage tissue and will also spread the spores from the fungus. Antifungal powders, lye soap, chlorine bleach, alcohol, vinegar, concentrated salt water, and iodine have been used with varying success to treat fungal infections; however great caution should be exercised with these since they can cause tissue damage that can lead to other, worse problems.

Skin rashes can result from a variety of causes and effective treatment is to first determine the cause of the problem. This determination may be difficult even in the best of situations. However you may gain clues for treatment from the environmental conditions that seem to promote it. This leads to the traditional method of treating rashes by opposites: If it is moist, keep it dry; if it is dry, keep it moist. Sometimes this will work, though not always.

It is important for those suffering from a rash to resist the temptation to scratch it. Use a compress of
vinegar or tannic acid derived from tea or from boiling acorns or the bark of a hardwood tree to dry weeping rashes.

Keep dry rashes moist by rubbing a small amount of Vaseline, rendered animal fat, or grease on the affected area. Always treat rashes as open wounds and clean and dress them daily.

**Solving other Medical Problems**

In cold areas frostbite will often be seen, especially if proper clothing is scarce or people are forced to go without heat. Light frostbite involves only the skin that takes on a dull, whitish pallor. Deep frostbite extends to a depth below the skin in which case the tissues become solid and immovable. Feet, hands, and exposed facial areas are particularly vulnerable to frostbite.

The best route is to avoid frostbite. Everyone in a group should be instructed to watch for the tell-tale visual signs that frostbite is setting in by a loss of skin color. For those outside alone, periodically cover the nose and lower part of the face with mittens and breath warm air through the open mouth. Obviously the less skin exposed to the elements the better, especially when the wind is blowing.

Because a sense of feeling will be gone from frostbitten skin, you should never try to thaw the affected areas by placing them close to an open flame; doing so will compound the injury with a burn. Rather gently rub the area in lukewarm water (avoiding hot water to keep from burning the skin).

You can also help the area recover by drying it after warming it with water and then placing an area of the body that is unaffected over it. For example, a frostbitten nose might be covered with the palm of the hand. This will warm it at body temperature.

Trench foot results from many hours or days of exposure to wet or damp conditions at a temperature just above freezing. The nerves and muscles sustain the main damage, but gangrene can occur in extreme cases. At worse the flesh dies and it may become necessary to have the foot or leg amputated. The best prevention is to keep your feet dry. Use extra socks and water-proof boots if available. Wash your feet daily and put on dry socks once you reach a dry area.

Burns are often more common during emergencies, especially if people are forced to build fires to keep warm and to cook. The first step is to cool the burning skin with ice or water; soaking the area for a short time will help place moisture back into tissue and also lesson the pain. (The only exception to this rule would be for a burn from white phosphorous, a chemical used in some weapons. For burns caused by white phosphorous, pick out the white phosphorous with tweezers; do not douse with water.)

Regular burns will also be helped if dressings are soaked for 10 minutes in a boiling tannic acid solution (obtained from tea, inner bark of hardwood trees, or acorns boiled in water). Cool the dressings and then apply over burns.

Burns should be treated as you would an open wound. Be sure to replace fluid loss by drinking lots of liquids. In very serious burns to the face or chest, it may be necessary to maintain an airway and treat the victim for shock.

Heatstroke is the breakdown of the body’s heat regulatory system that maintains the normal body temperature so it skyrockets to 105 degrees F. Although it is often preceded by other heat injuries, such as cramps or dehydration, it may occur before these problems become apparent.

Signs and symptoms of heatstroke include a swollen, beet-red face; reddened whites of eyes; lack of
sweating despite the heat. In extreme cases the victim loses consciousness or suffers delirium; these will be accompanied by pallor, a bluish color to lips and nail beds (cyanosis), and skin that is cool to the touch with the victim suffering from severe shock.

Treatment of the shock is essential while cooling the victim as rapidly as possible. You may cool a victim by placing him under a stream of water or in a cold bath. If one is not available, an expedient is to douse the victim with urine, water, or at the very least, apply cool wet compresses to all the joints, especially the neck, armpits, and crotch while being especially sure to wet down the victim’s head (heat loss for the human body is greatest through the scalp so cooling this area will have the most immediate effect). The victim should be encouraged to drink fluids (including very lightly salted water) and can be fanned to further lower his temperature.

As the heat stroke victim recovers, he may experience vomiting, diarrhea, and shivering. In bad cases he may try to struggle with those helping him and may shout as well. In extreme cases prolonged unconsciousness is not unheard of. Rebound heatstroke can occur within 48 hours after the first onset of this problem. Those caring for the victim should be ready to administer CPR should cardiac arrest occur.

Hypothermia results in cold conditions. This condition is marked by the body’s failure to maintain a temperature of 97 degrees F, instead dropping below what is normal. Dehydration and lack of food and rest predispose a person to hypothermia. Unlike heatstroke, you must gradually warm the hypothermia victim, first getting him into dry clothing and replacing lost fluids.

Diarrhea is a common, debilitating ailment caused by a change of water and food. The most serious cases are caused by drinking contaminated water, eating spoiled food, becoming fatigued, and/or using dirty dishes. Obviously you can do a lot to avoid these latter causes and thus improve your condition considerably.

If you get diarrhea, the best solution is an anti-diarrhea medicine; stocking up before an emergency with over-the-counter medications for this malady is wise. If you don’t have medication, you can limit your intake of fluids for 24 hours. Then drink one cup of a strong tea solution every 2 hours until the diarrhea slows or stops (the tannic acid in the tea helps to control the diarrhea).

Other make-do medications for diarrhea include a solution of one handful of ground chalk, charcoal, or dried bones and treated water; apple pomace or the rinds of citrus fruit can be added in equal portions to the mixture to make it more effective. Take 2 tablespoons of the solution every 2 hours until the diarrhea slows or stops.

Intestinal parasites can be picked up if you fail to wear shoes in areas with hookworms. Close proximity to infected animals can also spread parasites to human beings as can eating under-cooked meat or raw vegetables contaminated by raw sewage or human waste used as a fertilizer. Obviously it is important to wash thoroughly before preparing food and to be sure it comes from a safe source and is thoroughly prepared.

**Medical Supplies**

While it is possible to improvise bandages from rags that have been cleaned, or (as we’ll see in a moment) create a variety of improvised medications, you’ll be better off if you create an emergency kit with ample medical supplies. Sulfur-based antibiotics, anti-fungal agents, and a variety of pain killers are available right now for a song at the nearest drug store without any need for a prescription. Lay in a good store of bandages and medications and it could become worth its weight in gold during a protracted emergency. These materials make good barter items as well.

Among the medications to consider stockpiling are iodine (both liquid as well as purification tablets),
Mercurochrome tincture, aspirin, ibuprofen, and various salves and ointments. The eye drops designed for use with gas-permeable contact lens are somewhat germicidal and can therefore deal with a variety of eye infections (get a type that can be used as a “soaking solution” as well as a wetting solution). Pain-killer and antiseptic spray cans of medication are also useful.

Also consider collecting spare toothbrushes, toothpaste, and dental floss. These cost little but could pay off in a big way by keeping your teeth in shape during a long-term disaster. Imagine having a toothache that can’t be cured until the tooth rots out and you’ll have the idea of what a bargain these items could be.

Finally, be sure to stock up on special medications needed for any member of your family. If these are prescription, try to get several months of spare supplies and then “rotate” it, using the oldest containers first and replacing each as it is used to keep up your supply.

Go to your medicine cabinet and note everything that would be good to have during a shortage. Then go out and stock up now while it is available.

**Improvised Antibiotics and Medications**

You would be well advised to stock up on over-the-counter medications before any emergency. And if you can gain prescription medications beforehand, so much the better. The best medications in the world are useless if you don’t have them.

But all is not lost if you are without any commercial antibiotics. Because there are many substances which will kill bacteria while doing little harm to human beings.

Water purification tablets contain iodine which is a powerful germicide. By increasing the amount dissolved in water (by using 5 to 15 tablets in a liter of water rather than the recommended amount), you can produce an antiseptic for rinsing wounds.

Garlic powder is a powerful germ killer and was used extensively on the battlefront before antibiotics became available. You can create a garlic extract or rub a freshly cut clove over the wound. To create the extract, boil cut cloves in water, then strain the vegetable matter out and use the liquid to rinse an affected area.

Salt water will also kill bacteria. Use 2 to 3 tablespoons per liter of water. Other useful germ killers include bee honey (straight or dissolved in water) as well as refined sugar (straight or dissolved in water). In the southern US, sphagnum moss contains enough iodine to kill bacteria; be sure to boil this material so it will be free of germs. Again, use noncommercial, prepared materials with caution.

Another substance with antibacterial properties is colloidal silver. The cheapest and most useful form of colloidal silver is that made from your own colloidal silver generator (it’s not a terribly difficult process). It can be applied topically to wounds or ingested to help fight off infections.

The tannic acid in tea is often useful for treating problems. If you don’t have tea available, you can boil the inner bark of a hardwood tree for 2 hours or more to release the tannic acid. Tannic acid is also found in acorns.

Parasitic infections of the bowels can generally be avoided if you’re careful. However, should you become infected and lack proper medicine, you can use home remedies that will have varying results. These work by changing the environment of the gastrointestinal tract to repel, damage, or stun parasites so they can be expelled from the body.

Among these remedies are:
• Salt water: Dissolve 4 tablespoons of salt in 1 liter of water and drink. Do not repeat this treatment.

• Tobacco: Eat 1 to 1.5 cigarettes. The nicotine in the cigarette will kill or stun the worms long enough for your system to pass them. If the infestation is severe, repeat the treatment in 24 to 48 hours, but no sooner.

• Kerosene: Drink 2 tablespoons of kerosene but no more. If necessary, you can repeat this treatment in 24 to 48 hours. Be careful not to inhale the fumes as they can cause lung irritation.

• Hot peppers: Peppers are effective only if they are a steady part of your diet. You can eat them raw or put them in soups or rice and meat dishes. They create an environment that is prohibitive to parasitic attachment.

• Moderate doses of tea made from tansy (*Tanacetum vulgare*) or from wild carrot leaves will rid you of some worms or intestinal parasites. Great care should be exercised in identifying wild carrots as several poisonous plants have very similar leaves. When in doubt, don’t be tempted to take a chance with your life.

**Improvised Plant Medicines**

There is no way that you’re going to walk through a city park and find plants that will replace medications you might normally buy in the drug store. Even if you live in the wilds, you still won’t find enough varieties to cover many medical needs.

However there are some common plants in many areas that can be pressed into service for a variety of tasks. While these may be inferior to store-bought medications, they have the plus of being available during a protracted disaster. And the old saying that something is better than nothing is germane in such a situation. (That said, stocking up with medications now before an emergency strikes is the best option to pursue.)

Before looking at specific medications you can create, it is good to be familiar with the various terms used. A poultice is formed from crushed leaves or other plant parts, sometimes heated to liquefy the oils in the leaves, which is applied to a wound or sore either directly or after wrapping the plant material in cloth or paper.

An infusion, tisane, or tea is a preparation of medicinal herbs for internal or external application. A small quantity of the herb is placed in a container and hot water poured over it, letting it steep (either covered or uncovered) so the chemicals in the plant material can dissolve into the water.

Decoction is the extract of a boiled down or simmered herb leaf or root. It is created by adding herb leaf or a root to water and then bringing them to a sustained boil or simmer, drawing chemicals into the water. The average ratio is about 28 to 56 grams (1 to 2 ounces) of herb to 0.5 liter of water.

Expressed juice is simply a liquid or sap squeezed from plant material and either applied to the wound or made into a medication.

Salves are made by mixing the expressed juices of these plants with animal fat or vegetable oils.

It should be noted that in addition to taking time to be prepared, many natural remedies will take longer to work then will medicines you are used to. Where a medication may produce results in a half hour or even just
minutes, natural remedies will have to be allowed to work over time.

Finally, there are a variety of “remedies” that are totally unproven or dubious at best. I’ve not included these but rather concentrated on the few that are scientifically valid and which are known to work. During a survival situation you don’t have time for hocus pocus. Furthermore, the human body is often able to heal on its own — provided people aren’t treating it with “cures” that don’t work and which may even hinder recovery.

Specific Remedies

The material that follows is only for emergency use when proper medications and trained medical help is unavailable.

Antiseptics that can be employed to cleanse wounds, sores, or rashes can be created from the expressed juice from wild or domestic onion or garlic, or the expressed juice from chickweed leaves or the crushed leaves of dock. You can also make antiseptics from a decoction of burdock root, mallow leaves or roots, or white oak bark. All these medications are for external use only as they may be poisonous on deep wounds.

Sedatives that will help a person relax or fall asleep may be useful for those recovering from a disease or injury. You can create a mild sedative by brewing a tea made from mint leaves or passionflower leaves. Saint John’s Wart also has sedative properties.

Anti-fungal washes can be created with a decoction of walnut leaves or oak bark or acorns; these can be used to successfully treat ringworm and athlete’s foot. Apply frequently to the site, alternating with exposure to direct sunlight for maximum results.

There are also some specific diseases and ailments that can be targeted with herbal remedies:

- **Diarrhea.** You can treat this ailment by drinking tea made from the roots of blackberries and their relatives. White oak bark and other barks containing tannin are also effective. However, use them with caution when nothing else is available because of possible negative effects these chemicals can have on the kidneys. You can also stop diarrhea by eating white clay or campfire ashes. Tea made from cowberry, cranberry, or hazel leaves often works as well.

- **Hemorrhaging.** Medications that will reduce or stop bleeding can be formed from a poultice created from puffball mushroom, from plantain leaves, or most effectively from the leaves of the common yarrow or woundwort (*Achillea millefolium*).

- **Fever** can be treated with a tea made from willow bark, an infusion of elder flowers or fruit, linden flower tea, or elm bark decoction.

- **Colds and sore throats** will be helped with a decoction made from either plantain leaves or willow bark. You can also use a tea made from burdock roots, mallow or mullein flowers or roots, or mint leaves.

- **Aches, pains, and sprains** can be treated with externally applied poultices or salves of dock, plantain, chickweed, willow bark, garlic, or sorrel.

- **Itching** from insect bites, sunburn, or plant poisoning rashes can be relieved by applying a poultice of jewelweed (*Impatiens biflora*) or witch hazel leaves (*Hamamelis virginiana*). The jewelweed juice will help when applied to poison ivy rashes or insect stings. It works on sunburn nearly as well as
- Hemorrhoids can be treated with external washes from elm bark or oak bark tea, from the expressed juice of plantain leaves, or from a Solomon’s seal root decoction.

- Constipation can be relieved by drinking decoctions from dandelion leaves, rose hips, or walnut bark. Eating raw daylily flowers will also help.

- Gas and cramps may be treated with a tea made from carrot seeds (which act as an anti-flatulent); use tea made from mint leaves to settle the stomach.
Chapter 7:
Stocking Up

There are some basic tools and supplies you should have on hand to stay self-reliant, even during a disaster. Having these available gives you a huge edge during an unexpected emergency. Should a dangerous situation be perceived to be coming (whether an economic meltdown or approaching hurricane), this will also permit you to remain at home instead of being in the crowds of panic shoppers who often don't get what they want and do often run into trouble. As people panic and get reckless or less fearful of being caught when committing criminal acts, being able to stay close to home during such a period is both comforting to other family members and a lot safer as well.

The main consideration in amassing tools is that they be usable even if the power is down. Having a complete machine shop full of the latest gadgets won't be worth a thing if you don't have the power to make them work. If you plan on using electrical equipment, then be sure you have generators or other sources of energy to power them. If you need fuel to run generators, then have plenty of that squirreled away as well since obtaining it might become very difficult.

If you have the choice, get hand tools rather than power tools. Many Americans have invested in power screwdrivers, drills, and even glue guns. Should the power go down, many owners of such equipment will discover they are nearly as good as nothing when it comes to getting the job done. Hand tools may be slower, but they are there when you need them and often more precise as well.

Most of the tools you might need during an emergency are as close as your nearest hardware store. Even more “exotic” tools can easily be ordered through the mail.

It’s possible to create a list of items you might need during an emergency. But I can’t do this for you. You should sit down and give some serious thought to your family’s needs. Consider your skills and also how many people are available to help out. If you have five members and all can weld a hammer, then it wouldn’t hurt to have at least two hammers and maybe even to have five. Think about what you might need to do repair work as well as what skills you have that might make special purpose tools worth having. If, for example, you became proficient at operating a chainsaw back when you were in high school, then that skill might be put to good use during a period of emergency. Buying a good chainsaw if your budget permits would make sense.

Conversely, if you don’t know that most chainsaws need to be constantly lubricated, or that they’re extremely dangerous during the “bounce back” then you shouldn’t invest in one unless you have time to learn its dangers and how best to handle it. Don’t buy tools because you’d like to be able to operate them, but rather because you know how to use them or are willing to put in time now to learn how. Hoping to learn during an emergency isn’t a wise course to take and can be very dangerous with much equipment.

After you’ve created a list of tools you might need, study it and then prioritize it. If you need to buy any tools, get the ones that would be most needed first and then, as your budget permits, add the less essential tools to your shop. Also keep in mind parts that might be needed should the tool get extensive use. Having extra blades,
bits, or what have you will enable you to continue working for a long time. Also be sure you have the proper oils needed to lubricate the tool.

With supplies, you need to consider what each family member uses during the course of a week and then figure out how much you need to sustain your standard of living for several months without needing to restock. To gain these supplies you’ll need to spend an extra month’s worth of your budget. However after this one-time expenditure, simply buying the same amount each month to replace your supplies will enable you to be stocked up while not adding any more expenses to your monthly expenses. If your budget doesn’t permit a one-time splurge, then gradually build up your stocks starting with the essentials and working your way to the nonessentials.

There are many things that we take for granted and which are quite inexpensive now but would be almost impossible to manufacture during a protracted disaster, or which might not be shipped into an area cut off from the outside world by earthquake, hurricane, or other wide-spread problem. Don’t forget to stock up on these as they are inexpensive and plentiful now; they also make good barter items. Among those you should consider are needles and thread, matches, toilet tissue, paper towels, Kleenex, sanitary napkins/tampons, pre-moistened towelettes, ammunition, brushes, and combs as well as common over-the-counter medications. Don’t forget to stock any medicine or medical supplies which family members may occasionally need and try to purchase spare prescription eye glasses if anyone in your family has a strong correction.

Entertainment during a protracted downturn in the economy can also be a problem. Try to opt for less expensive entertainment that will keep users occupied over long periods of time. Those that take minimal expenditure of resources are also good. For example, a book that can be read many times without electricity is a better buy than a video cassette that will only remain interesting for two hours and requires a TV, VCR, and electricity to operate. Games like Monopoly, chess, and checkers are also good choices since they can be played by wide age groups, are durable, and can remain entertaining with extended use. Also be sure you have plenty of pencils, pens, and paper.

Reading will take on a new urgency when the information may make the difference between life and death later on. (Books can also be useful as insulation — stored along walls they will help keep a room at a constant temperature while keeping the cold — or heat — out.) Investing in a good set of encyclopedias, dictionaries, and a Bible is a wise move.

Tools

A good array of tools will handle a variety of tasks. Among the most important tools and kits to have are:

- Wood-working equipment: chisels, rasps, planes, saws, and the like.

- Hammers and mallets: Several sizes of hammers, ball peen hammers, and a good rubber mallet.

- Screwdrivers: including both standard and Phillips head; if you can find a “Yankee Screwdriver” this can speed up your work.

- Files: These are useful for making other tools — get a lot of spares and a variety of shapes. Most people have too few files and don’t realize that they will wear out over time, especially with heavy use.

- Whetstones: Necessary for keeping tools sharp. Get a variety of shapes so you can sharpen all types of tools.
• Saws: in addition to a wood saw, be sure you have a hacksaw and coping saw. Also stock up on spare blades for the two latter.

• Knives: get a variety of sizes and blade shapes.

• Pliers: Get several good needle-nosed pliers as well as standard pliers. Vice grip pliers can also be very useful.

• Vises and Clamps: It is hard to have too many clamps which can be used as “instant welds” for broken equipment in addition to their more conventional use. A good vise is essential for serious metal work.

• Wrenches: Get a set of standard wrenches and several sizes of adjustable wrenches. Get two pipe wrenches as well.

• Crow-bars and wrecking tools: These are essential if you’re in an area that has earthquakes, hurricanes, or tornadoes.

• Hand-Powered drills, staple guns, and miscellaneous tools (you’ll need to figure your needs here).

• A good wheel barrel which can be used to transport a variety of heavy loads over short distances. This tool is good for moving earth, helping clear rubble, and any of a variety of other tasks. It doesn’t need to be expensive. The “bargain basement” styles made of light sheet metal generally work well, provided you take care to keep them from rusting through.

I know one nationally famed figure who buys nails and screws by the caseload, storing them in his basement in case of an protracted economic downturn. He figures they will be worth their weight in gold at that point. I’m not sure this isn’t overdoing things a bit. But it would certainly be better to have too many screws, nails, and staples rather than not enough. While such fasteners could be handmade or pulled from wreckage, this is a very time-consuming proposition at best (I know because as a child my family was so poor this was where I thought all nails and screws came from). Also be sure to store various oils, grease, and lubricants which you may need to keep your equipment up and running.

Metal tools which may be stored for long periods of time should be protected from rust with a liberal coating of Outers “Metal Seal” which is available in most gun stores in a spray can. Buy lots of this as it will enable you to keep your tools in pristine shape, even if stored away for long periods of time. (Nothing is as discouraging as seeing a fine tool pockmarked by rust.)

If you know how to use a grinder, lathe, or milling machine, such an ability could be invaluable for making equipment as well as giving you a skill that could be bartered for food or other needs. However give some thought as to how such equipment might be powered. A generator is probably the best solution, though in the not-too-distant past, this type of equipment was powered with foot treadles and other muscle-driven systems. Power invertors make it possible to run equipment from a car battery. However such systems dictate running the engine if the equipment is run for long, making for a pretty wasteful system. Given the high cost of an inverter necessary to run hand tools, you should probably bite the bullet and buy a power generator instead.

Masking tape, duct tape (get a lot), wire, nylon rope, and various types of glues can give you the ability to repair or patch up equipment. Consider getting a propane torch, solder, flux, and a lot of spare tubes of fuel too. For joining or repairing heavy canvas, leather, tarps, etc., an awl is nearly essential; these tools are also quite inexpensive.

Don’t forget to have a sewing kit with scissors, safety pins, straight pins, needles, and lots of strong
thread. During a protracted emergency, clothing and canvas equipment will probably need to be repaired since it won’t be easily replaced.

**Firearms**

Sometimes carrying a gun can be more dangerous than being unarmed; guns can now be detected by government officials and the police using metal detectors as well as special cameras that can see through clothing to spot hidden weapons. Carrying a concealed weapon without a permit for it can quickly land you in a world of trouble in today’s Brave New World.

It is important to note that in most deaths caused by run-ins between often innocent citizens and out-of-control government agents, most occur when a citizen has a gun in his hand. Unfortunately many government agents are trained to shoot first and ask questions later; they’re taught to shoot to kill, and too often they do so — even when they have the wrong house address or have over-stepped their legal bounds.

Likewise over the last few years, most “survivalists” have gotten into trouble because they were armed. Once you pick up a firearm, you must be ready to use it first or suffer the consequences. Picking it up when facing a policeman or soldier is a bad move if you’re not going to use it to good effect. And even then, you’ll most likely be shot by another agent or dumped in jail as an “example” for the rest of the public.

The sad truth is that, as much as you may want to be macho man and carry a firearm to protect yourself and your family, often you are better off putting your hands on your head and surrendering. This is always true when facing superior military forces and usually true if a criminal has “got the drop” on you. (The only exception would be if you know that troops are shipping you off to a death camp or will be executing you without a trial; in such a case fighting to the death is a better option as you may kill enough of your enemies to make it harder for them to murder other innocent people.)

Another mistake many people make is thinking the “best gun there is” will make them the best fighter ever. The best weapon, combat experts will tell you, is not the fancy assault rifle, expensive pistol, or the newest submachine gun. The best weapon is what is at hand and the one you’re familiar with. If you know how to use even a bar of soap (which dropped into a sock can be a devastating weapon in the hand of a skilled fighter), it will do the job much better than anything that is not available or which you can’t operate properly.

If you get a firearm, you must practice with it until you’re as good as possible with it. And you’re better off with a small pistol you’re comfortable and familiar with than the biggest, baddest, most expensive assault rifle ever made which you can’t operate by second nature.

You should always remember that you can never be truly disarmed, short of being paralyzed. Almost anything at hand can be turned into a deadly weapon. Law enforcement personnel have been killed with a sharpened pencil jabbed into the lower neck; that bar of soap in a sock trick has probably killed as many criminals in prison fights as knives ever did. Samson slew a mob of armed soldiers with the jaw-bone of an ass; you can do the same if you are determined.

It should also be noted that as long as criminals or government officials have firearms, any determined man can as well, even if all the guns have been made illegal and rounded up long ago. All that is needed is the determination to take a firearm from its owner.

Since those with firearms can’t be fully alert at all times, that soap in a sock can be brought to bear to make the determined man the proud new owner of a firearm. I’m not suggesting that you do this, but you should be aware that it is impossible to really disarm any population provided the will to fight is still alive. And you
should also remember that just because you have a gun, that doesn’t mean someone with a little know-how and a hidden weapon up his sleeve won’t be able to take it away from you if you let him get close and lower your guard.

The legal aftermath of defending yourself can be almost as dangerous as a gunfight; if you’re in an area where liberals are in control, then chances are good you’ll be tried both in the press and hassled by government officials as well. Your best defense is to say nothing until you have a lawyer. Say no more to the press than “I’m completely innocent, I have no other comments.” Don’t hide your face from the cameras or do anything that makes you look guilty. With the police you say even less, “I want a lawyer, I’m not talking until I have a chance to consult him.”

If you’re lucky and have defended yourself with a gun, you’ll never have to appear in court. It’s quite possible that the police and the legal system will feel that you were acting in self-defense (especially if you have been careful to not fire your weapon unless you were forced to do so). If you do have to go to court, it is still better than being dead, dying in front of your family at the hands of a worthless nobody.

Following a gunfight, you should call the police and simply report that there has been a shooting and then give the address. Do not say anything else that might be used against you as the phone call will be taped. Never say you were sorry you shot and/or killed someone, that you were only trying to wound him, or whatever. Statements like that are the stuff that put innocent men behind bars. And more than a few innocent men are behind bars today because they said enough foolish things to put themselves there.

Shooting someone is not a pleasant task. Blood splatters, wounds are hideous. Even if a man dies from gunshot, it often isn’t quick or clean like in the movies. Most often shooting victims live, but they suffer a lot before the medics whisk them off to the emergency room.

On the other hand, the tortured suffering you or your family members might go through at the hands of a criminal are almost impossible to imagine. Our society has created depraved individuals without conscience who enjoy making their victims suffer before letting them die. You need to keep this in mind should you be called to defend yourself and your family. Any hesitation will be used against you. When it comes time to defend yourself, it is quite literally do or die.

A criminal may feign surrender, may keep his weapon hidden until he can use it before you can react, or may even play dead. Don’t lower your guard, don’t fall for the tricks. If you have to defend yourself, do so ruthlessly. Otherwise you and your family will most likely die horrible deaths.

**Handling the Deadly Tool**

In some situations having a gun in your hands is paramount to signing your own death warrant. This is especially true when government troops or SWAT-trained police officers are in an area. These people are trained to shoot on sight rather than take chances. That means if you have a firearm, you are seen as the enemy. (This is why using American troops on US soil to “fight the war on drugs” or do similar duties is so dangerous; these people are trained to kill, not take people to jail to see if they are innocent or guilty.)

If you are in an area under martial law, or see National Guard, Army, or SWAT troops in an area, immediately put down your weapon. If you can do so without being seen, consider hiding it as well to avoid having it confiscated. It is no accident that unintentional shootings can and do take place with soldiers in civilian settings. Don’t become one of these sad statistics.

When troops aren’t in an area, you may wish to wear a handgun in a holster. This is generally
better than trying to carry a rifle or shotgun, neither of which lend themselves to doing other chores and cleanup in the aftermath of a disaster. When the police and/or National Guard is not around, having a firearm with you may serve as a deterrent to keep looters and others away. But be careful and don’t become complacent in thinking the mere presence of a firearm will protect you. It won’t.

At this stage of technology, there are no weapons which can quickly stop an armed man without gravely injuring or even killing him. While the anti-gun crowd likes to suggest that tear gas, stun guns, and the like are as effective as guns, in truth they aren’t and even when debilitating, don’t take affect before a determined attacker can kill you. Knives, clubs, and other weapons are also hard to use and permit an assailant too close with you before they can be used. Furthermore most are apt to kill if you bring an attack to a halt, making them little more human than a firearm.

If you’re unfamiliar with firearms, have a limited budget, or live in an apartment in the middle of a city, then your armament can be minimal and you’ll probably be better off than if you spent a bundle on the guns listed below. In such a case I’d recommend getting a revolver chambered for the best defensive round (more on this in a moment) and maybe a cheap .22 rifle for potting pigeons or other small animals for food — though you could probably get by fine without the latter. This would give you the ability to defend yourself without costing you a lot of money.

The best caliber weapon for self defense is the .357 Magnum; in actual shootings it outperforms every other handgun. While you may have been told that recoil of this cartridge is excessive, in fact it is not — and shouldn’t be confused with Dirty Harry’s .44 Magnum, a larger caliber that really is hard to control. With new models of revolvers having synthetic, rubberized grips, recoil is easily controlled. Practice at a range with some good ear muffs on (which will help prevent flinching) and you’ll soon be able to handle the revolver and hit your target with cool efficiency.

The very best choice of revolvers for this caliber is the Ruger GP-100 series of guns; Colt and Smith & Wesson also make good revolvers in this caliber, but the Ruger is stronger and also carries a lower price tag. A longer barrel will give you the ability to hit targets with more power at longer ranges. However shorter barrels make carrying the weapon easier so you will probably want to compromise on the size of gun you end up with.

While you’ll most likely only need several hundred rounds of ammunition for your defensive pistol, if it is your only firearm, get 500 rounds or more for your piece of mind. The last thing you want is to be out of ammunition during a protracted time of lawlessness. Defensive ammunition should always have hollow-point bullets; otherwise it may not stop an opponent and missed shots are apt to over penetrate structures or ricochet, presenting dangers to bystanders. Winchester, Federal, and CCI are companies that offer consistently good ammunition that performs well in combat.

You should also get some “speed loaders” so you can reload a revolver quickly if you have to. Most gun fights end with one or two shots. But being able to reload quickly is a comforting thing, and could be essential if you discover yourself in that battle that goes well beyond the one or two shots.

In the next section I’m going to look at firearms with greater capabilities than the revolver I’ve recommended here. But for most readers, I feel a revolver and good training with it will be superior than a whole assortment of “assault rifles” and other gear which most likely won’t be needed, can be awkward to use, and might even attract unwanted attention from government authorities when they realize you own it.

When you purchase your firearm (whether a revolver or one of the guns listed below), be sure to get a cleaning kit along with plenty of spare cleaning patches and several extra brushes. Good cleaning/lubricating fluids to use for your rifle are Breakfree CLP and Tri-Lube; both can be used for cleaning stores. Take care to not over lubricate any firearm as this will cause it to pick up dirt and will
actually cause more wear and tear in the long run.

**Serious Work**

For serious defensive work, not just any gun will do. Ideally it will accommodate a cartridge that's capable of quickly stopping an attack and must be capable of maintaining its accuracy whether you're firing 5 shots or 500. It must be easy to operate and clean as well as very reliable. Ideally it would also be capable of making accurate shots out to 300 yards away (yes, combat takes place at such distances); this latter feature is often sacrificed for ease of carry, however (i.e., a pistol is chosen rather than a rifle).

The best caliber for combat is the .223 Remington (or 5.56mm NATO). Nearly all the Western military powers are adopting this cartridge for their battle rifles. They all use it because it's effective over the normal combat ranges (300 yards or less with 150 yards being the normal outside range); in a pinch these rifles can engage targets out to 1,000 yards with deadly effect (cities blocks in distance). That means you need to be very wary of anyone carrying a rifle; he can “reach out and touch” you from distances that make it hard to even spot him.

In the US, semiauto versions of many of the best military assault rifles are currently available for purchase by citizens and can be owned by anyone who is eligible to purchase any other type of rifle. Semiauto fire (one shot per one pull of the trigger) is most ideal for defensive use. Automatic fire is quite wasteful of ammunition; unless you have a military supply line behind you, you couldn’t afford to use an automatic weapon to defend yourself. Too, there is a lot of red tape and money involved in purchasing an automatic weapon. Semiauto firearms can be fired rapidly enough to give a heavy volume of firepower if it is needed in close combat.

Currently, the best of the modern assault rifles is the AR-15. Although the AR-15 (“M16” is its military designation) gained a reputation as being unreliable in Vietnam, this was due to faulty ammunition and poor maintenance rather than any fault in the design of the rifle. Since these problems have been addressed, the rifle is now quite dependable; during recent trials by NATO, the AR-15 proved to be more reliable than any other rifle.

A number of companies make good semiauto models of the AR-15, but the best are still those from Colt. Runner up to Colt is the Bushmaster/Quality Arms guns. If you’d like a less military looking firearm, then the Ruger Mini-14 is a good — and much less expensive — second choice. The rifle “looks” like a conventional hunting rifle but is actually a tough enough for military use.

If your budget is limited, get just one good rifle and 3 or 4 thirty-round magazines, and a lot of ammunition. Most people make the mistake of spending lots of money for guns and then buy only a box or two of ammunition. In fact if you ever need to use a firearm for self defense, you can’t have too much ammunition. Having 1,000 rounds per rifle wouldn’t be out of line in my mind.

Large capacity magazines give you the firepower you may need when an armed group attacks you. While aimed fire is important, aimed fire without the ability to put a lot of it out in a short time will do little to protect you from a savage group of people. Be sure you have at least 3 thirty-round magazines per rifle. While President Clinton and the liberals in Washington have passed a ban on manufacturing magazines of this capacity, a lot were made and these can currently be purchased for a reasonable price.

Most modern guns are so tough that I don’t think you’ll need a spare parts kit for any recommended in this manual. The main thing is to slavishly follow the operator’s manual in terms of takedown and cleaning. Don’t yield to the temptation to take it apart beyond where the manufacture recommends and do be sure to keep it oiled according to recommendations. Do this and the firearm should outlast you and perhaps even your children if some grubby politician doesn’t decide to take it from them.
Loaded magazines can be stored for 6 months or more without damage to the magazine spring. But it would be wise to leave magazines in storage unloaded or to rotate which ones you have loaded on a 6 month schedule so the springs don’t take on a set. Also, be sure to test out all your magazines; many magazines don’t work and finding out about it in the middle of a fight isn’t ideal to say the least.

You will need something to carry spare magazines in. Don’t carry metal magazines in pockets; a bump on the magazine lips can damage them to the point that they won’t function properly. The best way to carry magazines is in the magazine pouches designed for the US Military; 30-round AR-15 and Mini-14 magazines will both fit into these. These 3-magazine pouches are also readily available from military surplus companies for very reasonable prices. The pouches can be clipped onto almost any belt though you may prefer to buy a military nylon belt to put them on. You can find these along with slings and other accessories at your local gun shop.

Your next firearm purchase should be a .22 rifle. Probably the best choice is a Ruger 10/22 with Marlins coming in second. While I prefer semiauto actions, they aren’t always the most reliable with all .22 LR cartridges. For this reason a bolt action or even single shot rifle wouldn’t be a bad choice when you’re shopping for a .22 rifle.

Although sometimes recommended for self defense, the .22 is not ideal for such use. It doesn’t have a great enough range and it doesn’t “down” an opponent quickly enough to keep him from killing you before he succumbs to his wounds. A .22 rifle would be very useful for odd chores such as foraging, dealing with packs of dangerous animals, or killing pests.

You can hardly get too much .22 LR ammunition; my first choice is the CCI “Stinger” for all-round use and the CCI CB Caps for quiet shooting of pests or taking of small game at close range.

All types of ammunition must be stored in a cool, dry place. Self life for ammunition is 30 to 40 years and will be much longer if the ammunition isn’t exposed to heat. It’s possible to reload ammunition, but this requires special equipment as well as bullets, primers, and powder. Reloading is fun, but not something you should plan on doing during an emergency. My advice is to buy the ammunition and store it, concentrating on other tasks during a crisis.

After you have purchased a good defensive rifle and a .22 rifle, you may wish to consider adding a good self-defense pistol to your purchases. While a pistol will never be capable of “matching” a rifle in combat, sometimes you’ll need to be using both hands to work and may not be able to carry a rifle. In such a case, a pistol is ideal since it can be worn and brought into action in a moment’s notice to buy you enough time to make a hasty retreat from danger. Too, a pistol can be concealed on your person if you need to do so.

In addition to the .357 Magnum (as mentioned earlier), there are some other handguns you may wish to consider. These are “semiautomatics” which fire with lighter trigger pulls and automatically reload themselves after each shot, reducing felt recoil in the process. These guns are more resistant to dirt, lay down greater numbers of shots before needing to be reloaded, and are a bit more durable than revolvers; this is why all the militaries in the world have switched to them. The downside is that they’re also more complicated to operate and slightly more prone to accidental shootings if you aren’t fully familiar with how to handle them.

The best choices of cartridges for semiauto pistols are the .40 S&W and the 9mm Luger (also known as the 9mm Parabellum); of the two, the .40 S&W is best since it is nearly as effective as the .357 Magnum mentioned earlier. As with rounds used in the revolver, the defensive ammunition you purchase should always have hollow-point bullets; otherwise it may not stop an opponent and missed shots are apt to over penetrate structures or ricochet, presenting dangers to bystanders.

Semiauto pistols available for these rounds can be purchased with large-capacity magazines — do so as
this will give you an added edge should you be trapped in a protracted gun battle. Among the best choices are the Ruger P series of guns, the Taurus 9mm guns, the Beretta 92, and the Sig-Sauer pistols (in that order).

You’ll only need several hundred rounds of ammunition for your defensive pistol since any encounters you make will be quickly over. Be sure you buy ammunition with hollow-point bullets as these are essential for combat: Winchester, Federal, and CCI are companies that offer consistently good ammunition that performs well in combat. Do get a couple of extra magazines with any of the semiauto pistols or some speed loaders for your revolver.

Whatever firearms you end up with, be sure that you and your spouse and older children know how to operate them. Practice will enable you to defend yourselves if the need should ever arise. Also be sure that the guns stay out of your younger children’s reach and that children understand how dangerous guns are. An inexpensive gun safe can be purchased at Wal-Mart for under $200. If you think your children are worth this much, you shouldn’t hesitate to buy one and keep your guns and ammunition locked in it when they’re not in use.

**Clothing**

Fashion becomes less important during a crisis. Many people are happy even to be clothed at all. For this reason you may wish to haunt some garage sales to build up supplies of old clothing. In such a case your worry is to get the right size, not an attractive style or color. During a protracted disaster, clothing could become a problem years down the road. One way of delaying the problem is to purchase a lot of tough clothing, shoes, and underwear since these will be hardest to replace or make.

Work gloves should also be high on your list of things to buy and don’t forget to purchase some heavy coats for each member of the family. You need to purchase clothing remembering that lack of power may make heating or cooling your home nearly impossible for long stretches of time.
Chapter 8:

**Water**

In this chapter and the next we'll take a look at the two essentials you need for basic survival: Water and food. Some of these sources may not be ideal in your situation; some may be too disgusting for you to even consider (like eating insects). However even those which might not produce water or food you wish to consume may be employed to keep a pet alive (an important consideration from a morale standpoint) or to create materials that can be bartered or traded for supplies you need. For example, if you discover that the water you can obtain from a shallow well is too contaminated to drink, you might employ it for flushing stools or (perhaps) bathing; or it could be bartered to others for such purposes.

Next to the air you breathe, water is most essential for survival.

Your body loses water through normal body processes (sweating, urinating, and defecating); to remain healthy, that water has to be replaced. The average adult needs about 2 to 3 liters of water daily to replace this loss. However this amount can go up with warm weather, intense activity, or high altitude; when a person has been injured or is sick, the amount of water needed can go up dramatically. You'll also need additional water for cooking, cleaning, and other activities.

Dehydration results if the loss of water exceeds your intake. The first sign of this problem is a decrease in efficiency; coupled with an injury, lack of water will make a person susceptible to severe shock. Just a loss of 5 percent loss of your body fluids will cause thirst, irritability, nausea, and/or weakness. A 10 percent loss results in dizziness, headache, inability to walk, and a tingling sensation in the limbs. A 15 percent loss results in dim vision, painful urination, swollen tongue, deafness, and a numb feeling in the skin. A loss greater than 15 percent of body fluids may result in death.

You can gain a rough idea of how much fluid loss a person has suffered by monitoring their pulse and breathing rate (assuming they are in good health). In an adult, with a 0.75 liter loss the wrist pulse rate will be under 100 beats per minute and the breathing rate 12 to 20 breaths per minute. With a 0.75 to 1.5 liter loss the pulse rate will be 100 to 120 beats per minute and 20 to 30 breaths per minute. With a 1.5 to 2 liter loss the pulse rate will be 120 to 140 beats per minute and 30 to 40 breaths per minute. Vital signs above these rates are dangerous and demand immediate and advanced care. Of course your goal should always be to avoid any such dangers if at all possible rather than letting them develop in the first place.

Probably the best indicator that you need water is thirst. However as the problem grows greater, there will be other tell-tale signs and symptoms: Dark urine with a very strong odor, low urine output, dark, sunken eyes, fatigue, emotional instability, loss of skin elasticity, delayed capillary refill in fingernail beds, and a trench line down center of tongue.

It's better not to get into a dehydrated state. The solution is to drink small amounts of water at regular intervals each hour even when you aren't thirsty. This will prevent dehydration and also enable you to cope with physical and mental stresses and the severe conditions that can result in a survival situation. Be sure everyone in
your group is drinking enough liquids to maintain a urine output of at least 0.5 liter every 24 hours.

In any situation where food intake is low, you need to increase your liquid intake to compensate for the loss of water normally found in food. In such a situation you should drink on an average 6 to 8 liters of water per day. In an extremely hot climate, a person can lose 2 liters of water per hour! Under extreme heat, you should double your water intake. If you are engaged in physically strenuous activity (try to do this in the shade or at night), plan on tripling your water intake.

With high losses of water you start to lose various body salts known as “electrolytes.” While an average diet can usually keep up with these losses, in extreme heat (or when illness cases dehydration), additional sources need to be provided. One partial solution to this problem is to add 0.25 teaspoon of salt to each liter of water that will be drunk. This will provide a concentration that the body tissues can readily absorb. However a good diet is essential to provide other electrolytes; eating well is important when you’re having excessive loss of water.

You should always drink water when eating since it is essential to the digestion process. Also be sure to acclimatize to your environment. Don’t attempt to do heavy work the first hot day that rolls around; or do heavy labor during the first few days you’re entering a cold environment. If you’re in an area of the country where the temperatures swing at the peak of summer and winter, it’s important to observe this rule. In such situations, the rule of thumb is to conserve sweat not water. Limit sweat-producing activities but drink lots of water.

**When Water Is Scarce**

If you’re in a sticky situation where water is scarce, you can employ a few tricks to get by. But these are short-term fixes. Eventually you’ll need adequate water. So use these only to buy time so you can move to a better location where water is available, locate another source of water, wait until the city water is restored, or whatever. Don’t use these tactics as a fix that permits you to sit tight. Eventually you’ll have to have more water or you and your family will die slow, painful deaths.

The first step is to ration your water — in a sensible manner. In order to get by on limited quantities of water, you must help your body conserve by avoiding any and all unnecessary physical activities and avoiding direct exposure to sunlight.

You can reduce your daily intake to a half liter per person by adding 2 teaspoons of salt per liter to the water. This will reduce tendencies toward severe dehydration for at least a week, provided you keep water losses to a minimum.

**Finding Water**

Ideally you’ll have sources of water lined up for emergencies. Two-liter soda-pop bottles make ideal water containers; modern plastic milk cartons do not because the plastic will eventually rot since it is biodegradable. Additional water can be found in your hot-water tank and the storage tanks on toilet stools. Homes with swimming pools or ponds can also be sources of water, provided it is sterilized so it will be made safe and hasn’t been treated with chemicals containing large amounts of metals. However if the disaster you’re facing is protracted and your city doesn’t manage to get its water supply running, finding water could become essential.

In some areas water lies close to the ground. You can often discover these by studying the lay of the land. Anywhere that has a hillside or two towering over it will have some water running through it at least following a rain. Some types of vegetation will also tip you off to water.

Cottonwood trees, willows, cattails, and similar plants all require that water be close to the surface in order
for the plants to live. In the case of willows and cottonwoods, ground water will often be within ten to fifteen feet of the surface. While digging a well is tough work, it is possible to carry out in such locations. (Well digging is dangerous; you should shore up the walls as you dig down to prevent a cave in.)

In hilly country with rock outcrops, springs can often be found in cliff sides. You should scout your area beforehand to determine if there are any such springs nearby. Streams, brooks, or other sources of water should also be noted. Even if these aren’t close enough to be used by your family, knowing where these sources are might enable you to help others obtain water during a protracted crisis; such information would be greatly appreciated and would also enable you to conserve your water for your own family, rather than being placed in a position where you have to give up water or see someone die of thirst.

Even if you don’t have access to natural water, there are ways to harvest the moisture from plants or even from the air. In areas with heavy dew, it is possible to collect significant amounts of water. To carry out this harvest, tie rags or tufts of fine grass around your ankles and those of family members and simply walk through dew-covered grass before sunrise. As the rags or grass tufts absorb the dew, wring the water into a container. Repeat the process until you have a supply of water or until the dew is gone. This is a laborious process; however, it is sometimes possible to obtain a significant amount of water this way.

Insects can often lead you to a source of water contained in plants. If you see bees flying to or a string of ants trudging toward a hole in a tree, it may contain a large cavity that is filled with water. This can be siphoned out with plastic tubing or sometimes scooped out with an improvised dipper.

You can also stuff cloth in the hole to absorb the water and then wring it out. Strain the water through a cloth to remove insects and debris. Water sometimes gathers in tree crotches or rock crevices. In arid areas, bird droppings around a crack in the rocks may indicate water in or near the crack.

Some vines and plants contain water. However you need to approach plant liquids with caution since they can contain poisons. Generally if a liquid in a plant is sticky, milky, or bitter tasting, it is not safe to eat. You can get water from plants with moist pulpy centers by cutting off a section of the plant and squeezing or smashing the pulp so that the moisture runs out, catching the liquid in a container.

Plant roots may provide water; dig or pry the roots out of the ground, cut them into short pieces, and smash the pulp so that the moisture runs out to be caught in a container. Fleshy leaves, stems, or stalks may contain water. (Often this moisture is more efficiently captured using the solar still method outlined below.)

In very warm climates, you may have access to coconuts. The milk from green (unripe) coconuts can be used as a thirst quenched. However, the milk from mature coconuts contains an oil that acts as a laxative so you should drink it in moderation only. Generally coconuts won’t be a steady source of water since these will quickly be harvested by people living in the area during an emergency.

Palms, such as the Bari, coconut, sugar, rattan, and nips, contain liquid. Bruise a lower frond and pull it down so the tree will “bleed” at the injury, yielding a supply of water. Do not keep the sap from plants longer than 24 hours. It begins fermenting, becoming dangerous as a water source.

In urban areas, there can be a wealth of water collected on rooftops, ponds, or drainage ditches. By carefully channeling what would normally be run off into barrels, pits, or other storage systems, you can save enough water to get you through the mini-droughts between rainfall. In the not too distant past, many houses in the US had stone-lined pit cisterns into which rain water from the roof was channeled.

Likewise rain barrels, positioned under downspouts, often supplied enough water for gardening. There was no running water in such households, yet they got by without the need to dig a well or make a trek to the town’s public well to draw water. If you live in an area with periods of heavy rainfall, you can improvise a large
Pond or other system that water can be stored in.

Plastic sheeting available at most lumber yards makes it possible to minimize the seepage from such ponds without the need to line it with rock and cement. Covering the surface of the storage unit is not always easy, but doing so will minimize evaporation and give you a much larger source of water over time.

**Solar Stills**

If you have a fair amount of sunlight during the day, you can create a crude but efficient solar still that will remove and collect water automatically from plant material you place in it or even from the earth itself. Scrap plastic and some knowhow is all you need in the way of materials to make one of these. Because of the low water output you’ll likely see from such a still, you’ll need at least three for each person you wish to provide drinking water for.

There is one potential danger with these. You don’t want to try to draw water from a poisonous plant as the oils that make it dangerous will also be collected in these stills. Poison ivy, poison sumac, and similar plants are the most likely to be encountered. However there are a variety of plants that are slightly poisonous, so be sure to stick to collecting plants that you are certain are safe. It is better to be too cautious than sick or dead.

The plus side of this is that it doesn’t take much time or effort to collect water this way (as compared to harvesting dew, cutting trees, or digging roots, anyway). Each still you create will be able to yield 0.5 to 1 liter of water during a 24 hour cycle, so you’ll probably need to build several to supply your water needs if this is the only source you have. Because these require vegetable matter to extract water from, you’ll also need to be in an area with abundant plant material to draw from or be prepared to move the still operation from place to place — which generally isn’t too ideal unless you’re traveling.

One of the simplest of these devices is the aboveground still, placed on a sunny slope on which to place a clear plastic bag. You’ll need green leafy vegetation to draw the water from and a small rock or other weight. You simply fill the bag with air by turning the opening into the breeze or by scooping air into it. Then you fill the plastic bag half to three-fourths full of green leafy vegetation, being careful to remove all hard sticks or sharp spines beforehand so the bag won’t be punctured.

Place a small rock or similar item in the bag and then close and tie the mouth securely leaving the maximum amount of air space inside. If you have a piece of tubing, a small straw, or a hollow reed, insert one end in the mouth of the bag before you tie it securely and then crimp, tie off, or plug the tubing so that air will not escape (this tubing will allow you to drain out condensed water without untying the bag).

Place the bag, mouth downhill, on a slope in full sunlight. Position the mouth of the bag slightly higher than the low point in the bag. Once you’ve positioned the bag, shake it so the rock works itself into the low point in the bag. Now leave it. The sunlight will pull the moisture from the plants while heating up the inside of the bag. When the moisture hits the side of the bag, it will cool and condense into water and then run down the side of the bag to collect in a pool at the cooler base of the bag where the rock is.

After the bag has been in the sun for several hours, you can get the condensed water from your solar still by loosening the tie around the bag’s mouth tipping the bag so that the water collected around the rock will drain out; you can then retie the mouth securely and reposition the still to allow further condensation, continuing this until most of the moisture has been extracted. If the sunlight is still available, you can then change the vegetation in the bag to extract more water.

A below-ground still is more durable than a bag still and can also process more vegetable material at a
time. To make a below-ground still, you need a shovel, a container to catch the water, a clear plastic sheet, a drinking tube, and a rock or other weight. You should create this still where you believe the soil will contain moisture (such as a dry stream bed or a low spot where rainwater has collected). The soil should be easy to dig, and sunlight must hit the site most of the day.

After digging a bowl-shaped hole about 1 meter across and 60 centimeters deep, you add a small sump in the center of the hole to hold your water container. Size it to keep the container upright. The tubing is placed so one end remains at the bottom; you may form a loose overhand knot in the tubing to keep it in place or use a short piece of wire or string to secure it. After placing the container upright in the sump, you then extend the other end beyond the lip of the main hole you’ve dug.

A plastic sheet is next placed over the hole. It is held in place and made airtight by covering its edges with soil. Finally you place a small rock in the center of the plastic sheet. Check to be sure that the rock causes the sheet to sag so its lowest point is directly over the water collection container inside. The center of the plastic sheet should now be below ground level, forming an inverted cone with the rock at its lowest point over the container. Be sure the plastic cone does not touch the sides of the hole because the earth will absorb the condensed water that will form. Your final step is to crimp or plug the tube so moisture can’t escape.

Now you wait. Water in the damp earth will evaporate as the temperature in the still grows hotter. When it hits the plastic, it will condense and then run down the underside until it reaches the lowest point where it will drip down, falling into your container. You can drink water without disturbing the still by using the tube as a straw.

The still will work just fine without any plants, but you will have to move to a new location that has damp earth if it is to continue to work. However if you’ve chosen a good location for the still, water seeping into the area from the earth around it, or up from ground water near the surface, may supply you with water for some time. To augment your belowground still, you can place plant material around the central water collecting container.

This still can also be employed to purify polluted water provided the pollutant isn’t overly volatile as such contaminants will evaporate along with the water and be deposited in the water you collect with a solar still (or any other evaporative system). On the other hand, if contaminants are particulate matter, it can be readily removed by using this system. This system also works very well with salt water or other contaminants which won’t evaporate but may be dissolved in the water.

To process such water, dig a small trough outside the still hole about 25 centimeters from the still’s lip, and about 25 centimeters deep and 8 centimeters wide. Pour the polluted water into the trough being to avoid spilling any polluted water around the rim of the hole where the plastic sheet touches the soil. The water soaks into the earth with the soil filtering out much of the pollution in the process. The water eventually soaks into earth and works its way into the still pit. Once there, it evaporates and on the plastic and drains into the container. This process works extremely well when your only water source is salt water.

Obviously you could make a more sophisticated solar still with window glass or large, stiff sheets of plastic and a wood frame. However the efficiency isn’t going to be a lot greater than what you can achieve with the plastic sheeting. And if someone steals or damages these improvised units, you won’t be out of much more than a few cents worth of plastic.
Purifying Water

Rainwater collected in clean containers or in plants is usually safe for drinking. However once it runs down the roof and through a rain gutter, or has collected on the earth or in ponds, springs, streams, or whatever, it is going to collect bacteria and other pollutants. For this reason you need to develop a method for making it safe to drink. Otherwise sooner or later you’ll become sick and/or be infested with a variety of parasites.

Additionally, it isn’t rare for the water treatment plants in cities to become damaged or stop functioning during floods or other major disasters. The water may still be delivered to your home, but it is no longer safe to drink. In such a case you have an unlimited supply of water — and can use it if you have a way to make it safe.

At the very least you should use water purification tablets. Ideally you would boil the water. Buy some water purification tablets now while they’re available. These can be bought for a song at the camping section of your local Wal-Mart or nearest outdoor store and will make your life immeasurably easier during an emergency. Be sure to follow the directions provided.

You’ll probably see purification tablets based on chlorine compounds and others based on iodine; the iodine tablets don’t taste as good but do a better job of killing parasites. My advice is to live with the bad taste and be safer. (One trick is to mix Kool-Aid or other instant drinks into the water to mask the taste of the iodine.)

You can also employ 2 percent tincture of iodine to purify water. Use 5 drops of 2 percent tincture of iodine in every liter of clear water; if the water is cloudy or cold, use 10 drops. Be sure to let the water stand for 30 minutes before drinking so the chemical has time to kill all the germs.

In a pinch you can use liquid bleach (“Clorox”) to purify water using this same ratio if the bleach is at full strength. However, as with the iodine tablets, it isn’t quite as effective at doing its job. (On the other hand, most cities use chlorine to sterilize city water, so arguably you’ll be as safe as you are now.)

Boiling water is also very effective. The water will taste flat and boiling it creates heat; the latter is a plus in the winter and a minus during the summer. Boil water for 15 minutes at a complete boil (don’t count the time it simmers).

Don’t risk drinking water that is not sterilized by boiling or chemical treatment. Doing so opens you up to dysentery, cholera, typhoid, and other similar diseases that usually spread following a wide-spread disaster. Furthermore you can pick up flukes or other parasites that can make your life very, very miserable.

Filtration

Sometimes water will be so muddy, stagnant, or foul smelling that you can’t drink it even if you boil or chemically sterilize it. In such a case you will need to process the water to make it palatable. The first step is to remove it from wherever you find it, place it in a clean container and set it aside to stand for 12 hours.

After this you can filter it through several centimeters or layers of filtering material such as sand, crushed rock, charcoal, or cloth held in a clay planter, plastic soda bottle with the end cut out, or even a pillow case or an article of clothing. (You can also use the below-ground still as noted above to filter water with the earth.)

If the water is still foul smelling, you can remove the odor by adding charcoal from a wood fire. If you do this, be sure to let the water stand for 45 minutes before drinking it. Pouring it through cloth to strain out the carbon particles is also a good idea.
This water should always be sterilized with chemicals or by boiling. Filtration as outlined here will not purify tainted water.

**Gray Water**

Unfortunately, most of us have grown up in a culture which wastes water. Most of us fail to recycle water that could be reused, sending it down the sewer without a second thought. But this luxury may be too expensive to continue if you face a serious water shortage. In such a case, your survival and quality of life could depend on instituting a good water recycling system.

One of the easiest of these to create is “gray water” recycling. Gray water is the term used for water that has been used to wash clothing or to bathe in. It is no longer fit for drinking, but can be employed for flushing stools or watering a garden without much danger (unless you’re dealing with water that might contain serious contaminants — for example gray water from a medical facility where dangerous bacteria or viruses might reside).

Diverting the water to the proper source takes some extra plumbing and planning as well as some storage buckets and tanks if you want to get really serious about this. Obviously the time to get such a system in place is before an emergency hits that creates a water shortage.

You should also be aware that in some cities ordinances have been passed to prohibit this practice; such ordinances are hard to enforce and might very well be found to be illegal if taken to court. Provided the person operating a “pirate gray water system” keeps a pretty low profile, the chances of being found out would be slim. You may wish to ignore such laws if you’ll not be reselling your home and are interested in improving your circumstances during an emergency. It’s your call, not mine. (For the record, I don’t urge you to violate any laws. But I’ve certainly broken a few in my life, and I know many good and decent people who do likewise in this overly litigious, intrusive-bureaucrat-filled, Big-Government-dominated country of ours.)
Chapter 9:

Food

During an emergency, food is not as immediately critical as water; most healthy adults can (theoretically) live several weeks without food. However such a course isn't ideal and eventually you'll need an adequate amount to stay healthy. Without food your mental and physical capabilities will deteriorate rapidly, and you will become weak.

Food replenishes the substances that your body burns and provides energy, vitamins, minerals, salts, and other elements essential to good health. There are psychological components with food as well: it helps morale and acts as a reward when people have been working. In fact much of our culture is built around sitting down with friends and eating. If you can maintain this custom, you'll go a long way toward building up the morale of your family so you can cope with a variety of emergencies.

Calories are a useful measurement of the heat and potential energy a food will give a person. This makes it possible to quickly calculate how much food and in what amounts you need. The rule of thumb is that an average person needs around 2,000 calories per day to function at a minimum level. When this amount can't be reached, or if a lot of physical activity dictates a great amount, then the body will start to burn fat and or protein stored in it for energy.

One trick to keep in mind in such a situation is that if you continue to be active physically, your body will tend to burn fat rather than cannibalize protein for energy. That means you'll lose less strength during a time of scarcity. If you discontinue all physical activity because food is scarce, then your muscles will deteriorate. The only catch to this is that you burn more energy with the exercise so you won't be able to go quite as long without food as if you stopped all activity. (You may have to gage your situation in order to decide which route to take during a protracted emergency.)

Plant foods are good sources of carbohydrates which the human body employs for most of its energy. Many plants also provide enough protein to keep the body at normal efficiency; among the best plant foods that will supply protein (along with useful fats) are nuts, seeds, and grains. Roots, green vegetables, and plant food containing natural sugar will provide calories and carbohydrates that give the body natural energy.

Often plants will be sources of food when meat is unavailable. Grain and other food staples can be stored indefinitely; storing meat is a hard proposition, especially if electrical power isn't available. And harvesting plant food from the environment around you is often much easier than finding suitable animals that can be hunted or trapped and then butchered. Furthermore the food preparation is easy; many plants can be eaten raw but most meat demands cooking both to be palatable as well as to avoid parasites or bacteria.

If you're scrounging for food, you can often obtain plants more easily and more quietly than meat. This is extremely important if local laws prevent hunting or discharge of a firearm, or if there are people who might attempt to steal food from you if they knew you had some. In such a situation, being able to quietly gather food can be an important plus. (There are a few tricks you can employ to get meat even in the middle of a city,
however, as we'll see in a bit.)

Of course the big plus of meat and dairy products is that they are more nourishing than plant food. If you have a chance to obtain meat, do so. Unfortunately many Americans will pass over sources of meat which would satisfy immediate food needs; eating insects, reptiles, or wild birds doesn’t seem like a viable option. (With proper processing, many people will eat these foods, however. This is an important point to keep in mind should food really become scarce.)

Your body can process vegetable proteins and synthesize them into the various proteins needed to build muscle and other tissues. This is most efficiently done with a mix of vegetable proteins (such as wheat combined with a legume of some sort). In fact the eight essential amino acids that are used to synthesize a complete protein are all to be found in wheat, though at lower levels than in meat. In fact it is possible for the human body to go for long periods of time even with a diet limited mostly to grain products. While such a monotonous diet would probably gradually lead to deficiencies in some vitamins and minerals, it could be employed during an emergency.

A more efficient way of getting the eight essential amino acids your body needs to create proteins is simply to mix grains with various legumes. Adding small amounts of meat to a mostly vegetarian diet will also do the trick. This method of eating has been employed for centuries by the poor in the Middle East and elsewhere. Most grains including wheat don’t have much fat in them. However fat can also be created from the carbohydrates in grain by the body (as many an unhappy dieter has discovered). Grain will be lacking in some vitamins and minerals, however. For this reason it would be wise to stock up on multi-vitamin/mineral supplements for emergency use.

**Food Storage**

A food storage system is your best bet for dealing with a short to medium-length disaster that may cause food supplies to become scarce. With US grocery stores stocking only enough food for two days maximum, any disruption of supply chains could quickly cause shortages, especially if people panic and strip store shelves bare. During non-emergency times, food is plentiful in the US as well as many other areas of the world. This is the time to stock up, rather than waiting until the danger is imminent. Buying when food is plentiful will save you money and help those who aren’t so prudent be able to obtain food since you won’t be vying with them for it during the time preceding a disaster.

Just how much food you should stock is going to be up to you. You’ll need to consider the storage space you have and how long you want to be able to feed yourself without the need of outside help. Then you’ll have to sit down and decide how much your pocketbook will allow.

When you get ready to buy food to lay aside for an emergency, it is important to consider the shelf life of various foods. After this period is exceeded, the food may still be edible, but its nutritional value slowly drops over time. With some foods, the shelf life is very short; others are longer with a few having nearly infinite shelf lives.

Obviously purchasing foods with longer shelf lives means less care is needed in “rotating” food stores (i.e., eating your old stocks of food and replacing it with new food). The longer the shelf life of food you store for an emergency, the less time you have to spend replenishing and rotating it. If you purchase food with a nearly infinite shelf life, you can “buy and forget” it for all practical purposes.

In addition to the savings in time that will result by not having to rotate or otherwise worry about your food supply, a nearly infinite shelf life for your supplies means that even if an emergency where the food is needed never occurs in your lifetime, you can pass it on to children or grandchildren as an inheritance. This
“lifeboat” remains viable and could preserve your family line either now or somewhere in the future.

The foods that have the longest shelf lives are also currently the cheapest to buy. That means you can actually build up a larger store of food for your family and even your neighbors while saving money and lowering the amount of care required in maintaining your stores. About the only downside to the long-shelf-life foods is that they generally require more food preparation time. While this may be somewhat of a problem during the first few days of an emergency, as time passes it may become a plus as it will keep family members busy in preparing the food for eating — something to consider when many forms of entertainment families have grown accustomed to are suddenly gone.

**Canned Foods**

Canned foods have the shortest shelf life of all processed foods. After 6 months, most start to taper off in their nutritional content; they’re still edible for a year or more; they just won’t supply the nutrients you would expect them to normally have. The only exceptions to this rule are canned meats and non-citrus fruits; these can be stored for up to a year before their contents start to lose food value. Canned foods will sometimes have problems with rusting, or when labels become loose and drop off due to damp conditions or even highly humid conditions. Because canned foods are stored in oil or water, they also are heavy on a per-gram-of-food-value basis making them tough to move around when it comes time to rotate large numbers of them.

The six-month shelf life of canned foods puts a limit on the amount of food you can store: 6 months. Otherwise you’ll have to constantly discard and replace cans. While this might be a viable option if you want to make regular contributions to a food kitchen or some similar charity, it isn’t much of an option for most people. Furthermore, most of us don’t have enough space to store 6 months worth of food.

Ideally you’ll keep some extra canned food on hand for an emergency. But if you want a buy-and-forget emergency food supply, then canned foods are not the way to go.

**Other Processed Foods**

Some commercial foods have storage lives of nearly a year. These include bouillon, instant cream, nuts, cereals, and hydrogenated (or antioxidant treated) fats/vegetable oil. Vegetable oils last longer than lard or similar products and are better for you health-wise. Olive oil lasts the longest and may be used after several years if care is taken to keep it cool and away from exposure to the light.

Pasta products (dried spaghetti, macaroni, noodles, etc.) have shelf lives of two years. All types of flour will also have shelf lives of two years. The big plus of pasta and flour is that they are inexpensive and they can be used to create a wide variety of food with the addition of a few simple ingredients and spices. Pastas and flour will require some preparation time, though not as much as the grains and other long-term unprocessed foods listed below.

The downside to these foods is that you once again are presented with the need to either rotate and use supplies or otherwise dispose of them within a year or two. You can’t build up large stocks of more than your family can consume without wasting your money. This means that while you will want to have these supplies — perhaps in fairly large quantities — there is an upper limit to how much can be stored.
Freeze-Dried and Dehydrated Foods

Freeze-dried and dehydrated foods have storage lives of five to six years or — with modern canning techniques and the use of inert gases to fill the space in cans — up to ten years. These have the added plus of tasting better than many canned foods and, most importantly in an emergency situation, these foods are quick and easy to prepare provided you have a good source of water. Be sure you do if you opt for these types of food. Ideally you’ll heat these foods to make them more palatable.

Similar handy food system for emergency use are the MARES (Meals, Ready to Eat) developed for the US Military. Unlike freeze-dried and dehydrated foods, MARES come in plastic packets, precooked in water or oil. As their name suggests, they are ready-to-eat right out of their plastic containers. MARES are available at some camping stores and many military surplus stores — though care has to be taken with these since they may be outdated.

MARES are not as compact or light as freeze-dried or dehydrated foods since they are packed in the water and oils needed to reconstitute them. If you’re concerned about the space your stored food will take up, or if you want to be able to travel light during an emergency, then MARES aren’t the best choice. According to recent tests conducted by the US Army, MARES stored at 60 degrees Fahrenheit will last for 130 months; those stored at 70 degrees, 100 months; those at 80 degrees, 76 months; and at 90 degrees, 55 months. Obviously if you do decide to purchase any of these, you can greatly extend the shelf life of your MARES by storing them at cool temperatures.

Freeze-dried foods, dehydrated foods, and MARES are very convenient. But they also carry a high price tag when compared to other types of food. So you need to give some careful thought as to how much “bang for the buck” you want to get when storing food. If you need to have quick and easy-to-use foods, then these may be the way to go. If you’re on a limited budget then you may wish to go with other types.

Long Storage Food

Some foods can be stored for a very long time. Among the best of these items are coffee, tea, cocoa, candy (provided it’s nearly 100 percent sugar), salt, sugar, honey, salt, and spices. Over time they may lose some of their taste but simply increasing amounts used in cooking or whatever gets around this problem. The only exception to this is with a few spices which may deteriorate over time; you should taste test spices and candy every few years to be sure it isn’t time to replace it. With most, however, provided you keep them cool and dry, they’ll last forever.

You’ll want to store a lot of salt. It can be used as a barter item and is essential for processing foods and making them palatable. Not only that, it is essential for good health — something many people may learn the hard way if they ever go through a period when this commodity becomes scarce. Generally a person needs about one sixth of an ounce (about 5 grams) to one third of an ounce of salt per day.

It would be hard to have too much salt and sugar during a protracted period of economic downturn or national crisis. Provided you protect these two items from moisture and, in the case of sugar, various pests, they will last forever.

If you’re going to store grains for processing (more on this in a moment), then you should also store packets of dry yeast. While it is possible to create cultures of yeast from “sour dough” that is stored for this purpose and a portion of which is then added to bread dough to make it rise, this is not an easily learned skill. It would be wise to have a number of packets of yeast available until you master the technique of creating your own yeast. These packets will also become valuable for bartering purposes. Leaving dough exposed to the air might allow you to create a culture of yeast that could be used in baking. But this will take a while and its easier to
create stock from a bit of dough that already has yeast in it. Packets of yeast that remain in a cool, dry spot will store for many years.

Unprocessed Foods

Unprocessed grains give you the most for your money. And when they are stored properly, they last almost forever. This makes them ideal for many people who have the space to store them. At the time of this writing it is possible to buy enough food to feed a family of four for one year for just a few thousand dollars.

Once the food is purchased and stored away in a basement in the air-tight plastic containers it comes in, it can be forgotten about until it is needed. The storage life of wheat that's kept sealed and dry is easily hundreds if not thousands of years. Dried beans, soybeans, oats, barely, and other grains will all last for at least a lifetime if you take care to keep them cool and dry. Dried corn has a shelf life of several decades.

The only caveat with grains and beans is that they are also appetizing to mice, rats, and a variety of insects. If you buy your grain packed in an inert gas inside plastic buckets, this takes care of the insect and mouse dangers. However rats will occasionally chew through these plastic containers; be sure to place poisons and traps around your store if there is any chance such vermin could reach it.

You can purchase these grains from farmers or farmer co-ops and then go through the fuss and bother of adding inert gas or insecticides to it on your own. But the savings are small, it needs to be re-treated yearly, and it is an overall hassle. My advice is to buy the pre-packed grain in the handy 5-gallon buckets and then tuck it away somewhere for if and when you need it.

While you can boil grains and legumes to make them edible, being able to grind both gives you a lot more options in how they can be cooked. Furthermore, the ability to create flour that can be baked into bread makes it possible to create rations that can be stored and carried. This ability gives you an important plus during and emergency: You can hike or travel some distance from your home base while carrying ready-to-eat food with you, producing it yourself as needed. A tiny loaf of bread or biscuits may not seem like much to you now, but when food is scarce they can become a godsend.

If you have some meat to add to your food, then a variety of soups are easily made from legumes, quickly helping to extend the complete proteins in the meat and aid in the creation of more protein that's easily used by your body from the legumes; adding wheat or rice to your soup will make it even more nutritious by expanding the number of amino acids in it. If you have wheat, it can also be employed like rice, substituted or cooked in the same manner (the taste is different, but not too much so and easy to get used to).

Grinding wheat to various consistencies makes it possible to create a variety of pastries from whole wheat bread down to cookies or pie crusts made from finely ground flour. There are a variety of ways to grind wheat into flour (or legumes for soup “filler”). The best way is to use a grinder designed for the purpose.

While an electric mill will make short work of grinding grain into flour, the possibility that the power will be down during an emergency coupled with the additional motorized mechanism that can break, makes a hand-powered unit considerably more attractive for emergency use.

If you lack a mill, you can improvise a variety of hand-powered systems to crack wheat and turn it into flour. The easiest is a crude system made of three-foot long or longer pieces of iron pipe. With three or four of these pipe sections lashed together with tape or cord, it is possible to place about three inches of wheat into a can, place the can on a concrete surface, and then drop the pipe onto the wheat, gradually beating it into four with consecutive dropping of the pipe onto the wheat. This is a slow process, but should be kept in mind if large amounts of flour are needed or your mill has broken.
When grinding flour, remember that the finer it is, the less laxative effect it will have when to those eating it. This is an important point to remember when you are forced to switch from the current American diet of highly processed, fine flour wheat products to whole-wheat, courser ground flour. This is especially important to remember when grinding flour that will be consumed by young children and babies; it is essential that flour be very fine so they can properly digest it.

If the flour you produce is a mix of course and fine, you can filter out the larger particles by using screening boxes. These are simply frames with window screen, netting, and other materials tacked over the opening. Flour is sifted through these screens, starting with larger mesh and worker toward smaller ones until only the finest of flour is sifted through.

**Sprouting**

Sprouting legumes or wheat will quickly allow you to create a salad — perhaps augmenting it with scrounged vegetables from a garden or even eatable “weeds” and plants you’ve discovered and gleaned from your area. While food poisoning that results from contaminated sprouts is pretty much limited to commercial growers who contaminate their grain, care should be taken to keep grain that will be sprouted clean and free from bacteria and mold. Always wash before handling the seeds and sprouts and be sure the water you place on them is uncontaminated.

Sprouts transform much of their carbohydrates into more useful chemical compounds — including some essential vitamins. For example, wheat, when sprouted, goes from low levels of vitamin C to higher levels; 100 mg of wheat sprouts will supply almost a third of USDA Recommended Daily Dosage of vitamin C. Sprouts don’t supply a lot of vitamin A unless they are permitted to mature to a state in which they are dark green; it’s wise to find another source for this vitamin rather than rely on sprouts for this purpose if you don’t let them grow long enough to reach this point.

Most sprouts can be eaten raw; however not all have tastes that are palatable to most people when eaten without cooking. Alfalfa, radish, mung bean, sunflower seeds, clover, and cabbage are good when eaten raw; kidney beans, Pinto beans and other miscellaneous beans are much better cooked. Lentils, soy beans, green peas and wheat can be eaten raw or cooked. Cooking also destroys some of the bacteria that can contaminate sprouts; if you are using them to feed those who are sick, very young, or the elderly, cooking can be a safety measure worth considering.

You can sprout seeds in a variety of ways. The easiest is to place the seeds in a large container filled with about a half cup of seeds. (the container needs to be four times the capacity of the seeds you place in it since the sprouts will take up more volume than the dry seeds do). This is filled with water for 2 to 12 hours (larger seeds needing longer periods for the water to soak into them).

The water is then drained and the seeds rinsed off and then placed in a warm, dark area with the bottle upside down on a towel so the remainder of the water can drip out of the container. Don’t seal the mouth of the jar and place it on its side after the water has drained from it. Keep it in a dark area with a temperature of 70 degrees F. Rinse the seeds twice a day, being careful to drain them thoroughly each time.

In two days the sprouting should begin; as they grow, you can expose them to indirect sunlight for a few hours to speed things up. When the sprouts are two to three inches long, they’re ready for consumption.
**Food Requirements**

The amount of food needed by a person will vary according to the temperature and physical activities involved. But in general a good rule of thumb is at least 3,000 calories per adult per day. For more precise figuring, you can go with RDA figures; however there is some question as to whether these are actually realistic; for example the RDA for protein is for a 175 pound man is about 63 Grams (with about the same amount for a 138-pound woman); yet in "real life" this is about double what most people actually need. On the flip side, it now appears that the RDA for some vitamins is too low for fighting off cancer and other diseases.

Since getting a balanced diet during an emergency can be iffy, it is probably best to store vitamin tablets along with any food supplies. This makes it possible to eat a less varied diet and still get all that’s needed to maintain health. Be sure to check the expiration dates and try to use the tablets before they go bad, rotating your storage to keep quality tablets available at all times.

While you can figure that children will need somewhat less food than adults, this isn’t always the case. When growing rapidly, they actually need 2 to 3 times more protein than an adult by weight if they are to remain healthy. For this reason it is better to figure children’s rations as being equal to an adult’s — this may give you surplus food but will help you avoid not figuring how much you need and coming up short.

**Living Off the Land**

Back in the 1960s, the “back to nature” folks often appeared at college campuses or other forums to lecture about how it was possible to find all the food you needed in the wilds. For those who knew better, such “facts” often were laughable; living off the land isn’t any picnic and the food is anything but palatable. Fortunately few people actually tried to put the information to the test. And those who did didn’t venture far beyond the nearest McDonald’s.

That said, it is possible to augment your food supplies somewhat with wild food or even cultivated “ornamental” plants that are actually eatable. But scavenging for food this way isn’t easy, especially so since there will be others attempting to do the same thing, harvesting what they see you harvest until there is little left to be had. If you ever look at an area where the population has been limited in their travel due to war or other conditions, one thing sticks out: Every tree and perhaps even every blade of grass will be missing. All the plants will have been pulled up to eat (often with disastrous results when uneatable or poisonous plants are ingested) or as fuel.

So don’t plan on being able to exist for long on food you glean from an urban area. The population density will soon reduce the plants and animals to zero if the disaster goes on for any length of time.

You should also be sure to accurately identify plants before using them as food. Otherwise your newfound wisdom of which plants are poisonous may be paid for with your life. For example, poison hemlock has killed people who mistook it for its relatives, wild carrots and wild parsnips. There are worse things than starving; just ask anyone who has watched a person die after ingesting a poisonous mushroom.

There are ways to determine if unidentifiable plants will be immediately harmful to you (it is impossible to be sure that the long-term effects of having such plants in your diet will fail to be detrimental, however). The key to testing the safety of plants is what has come to be known as the Universal Edibility Test. You can use this to determine which plants you can eat and those to avoid. However before getting to how to use this test, there are some important caveats to note. Because even if a plant is eatable, in some situations it won’t be safe to eat.
For example, plants growing near homes and occupied buildings or along roadsides may have been sprayed with pesticides. Plants growing in contaminated water or in water containing *Giardia lamblia* and other parasites are contaminated themselves if eaten raw (boiling or otherwise cooking such plants will make them safe from these parasites). Some plants can also develop extremely dangerous fungal toxins; grains that have been stored under damp conditions are especially prone to this. To lessen the chance of accidental poisoning, do not eat any fruit that is starting to spoil or any foods that have mildew or fungus growing on them.

It's also possible for plants of the same species to differ in their compounds content because of genetic or environmental factors. One example of this is the foliage of the common chokecherry. Some chokecherry plants have high concentrations of deadly cyanide compounds while others have low concentrations or none.

Some parts of plants are safe while others may be poisonous. Cherry plants, for example, have safe fruit but their leaves are highly toxic, having high levels of cyanide. And the cherry plant isn't alone in containing this poison: Be sure to avoid any weed, leaves, or seeds with an almond-like scent, a characteristic of the cyanide compounds.

Plants that are safe for those who are acclimatized to them may cause gastric distress in other individuals. If you are sensitive in this way, avoid unknown wild plants or, if you must add them to your diet, do so gradually. If you are extremely sensitive to poison ivy, then you should also avoid products from related plants which include any parts from sumacs, mangoes, and cashews.

Remember, too, that eating large portions of any plant food on an empty stomach may cause diarrhea, nausea, or cramps. Anyone who has consumed too many green apples or wild onions will be able to vouch for the need of moderation. Even after testing plant food and finding it safe, eat it in moderation.

Some edible plants must be processed before you can safely consume them. For example acorns and water lily rhizomes are very bitter due to the high concentrations of tannin compounds. However boiling them in several changes of water will usually remove these bitter properties by diluting the tannin. In such a case you can transform these plants into viable food sources.

Other edible plants have high concentrations of oxalate compounds, also known as oxalic acid. Oxalates produce a sharp burning sensation in your mouth and throat and can damage the kidneys. Yet baking, roasting, or drying usually destroys these oxalate crystals. (Among the best-known of wild plants having oxalic acid in them are the jack-in-the-pulpit or ‘Indian turnip,” whose fruit you can eat only after removing these crystals by slow baking or by drying.)

One rule of thumb for all wild plants that appear edible is to cook them. While processing may destroy some food value, it will also destroy some of the chemical compounds that might otherwise be dangerous to you. However you still should avoid some plants since even cooking won’t make them safe to eat.

Among the plants best left alone unless you are absolutely certain what they are, are those in the mushroom family. The only way to tell if a mushroom is edible is by positive identification. There is no room for experimentation and because symptoms of the most dangerous mushrooms don’t appear for several days, it is easy to consume and encourage others to do so as well, only to become ill. And by that time it is generally too late to reverse the usually fatal effects to the nervous system.

You can also come out ahead if you start learning now about the plant life of the areas where you live. Often there will be old-timers who have a working knowledge of edible wild plants in your area; some colleges even teach classes on this subject. Also remember that many garden plants become weeds in areas where a garden once was planted and has since been abandoned.
If you know how to spot garden plants, you may discover edible "domesticated" plants hiding out in corners of lawns, among shrubs, and so forth. While you won’t get a steady supply of food from such sources, you can augment your meals with some fresh snacks from time to time.

**Universal Edibility Test**

With the above cautions in mind, remember that there are many plants which will cause severe discomfort, extreme internal disorders, and even death if you taste just a tiny sample of them. Therefore, if you have the slightest doubt about a plant’s edibility, you would be best to avoid it. However if you are desperate for food, you can apply the Universal Edibility Test before eating any portion of it; this will usually help you determine whether the food is safe to eat — but not always (as in the case of mushrooms which should never be experimented with).

Before testing a plant for edibility, make sure there are enough plants to make the testing worth the risk. If the plant is scarce, the possibility of making a mistake or suffering adverse effects isn’t justified. On the other hand, if a plant is to be found in abundance and you feel it may be edible, then taking the risk and testing it might be a worthwhile choice. Remember that in testing a plant, each part of a plant (roots, leaves, flowers, and so on) requires more than 24 hours to test. Just because one part is edible does not mean the rest of the plant is safe to eat.

To avoid potentially poisonous plants, stay away from any wild or unknown plants that have:

- Milky or discolored sap.
- Beans, bulbs, or seeds inside pods.
- Bitter or soapy taste.
- Spines, fine hairs, or thorns.
- Dill, carrot, parsnip, or parsley-like foliage.
- An almond scent in woody parts and leaves.
- Grain heads with pink, purplish, or black spurs.
- Three-leaved growth pattern.

While there are a few exceptions to this rule (including some garden plants), using the above criteria as eliminators when choosing plants for the Universal Edibility Test will help you avoid plants that are potentially toxic to eat or even to touch.

To avoid being made sick by molds or other contaminants, use only fresh vegetation which appears in good health. Also be sure to wash the plant in treated water so it will be free of any surface contaminants and bacteria.

You first step is to visually inspect the plant. If it displays any of the characteristics of a potentially dangerous plant (as outlined above), then it should be discarded as a possible choice for testing or consumption. Next you should smell the plant for strong or acid like odors. If either is present, the plant should not be tested further.

Ideally you should boil, bake, or otherwise cook the plant. However if you do this, remember that it may not be safe to eat raw. If a plant passes the test in its cooked condition, this doesn’t make it safe in the raw form.

After processing the food by cooking (if you opt for this), you next hold a piece of it against a sensitive area of your skin (usually the inside of your wrist) for 15 minutes. During this time you should experience no irritation, burning, or stinging. If any of these occur, it is obvious that the plant will be harmful if consumed.

If the plant passes the above portions of your testing, next touch a small teaspoon portion of the plant to
your lips. Wait for five minutes to see if this contact causes any burning or other irritation. If any of these occur, discontinue the testing.

Your next step for a promising plant is to place a small portion on your tongue, holding it there for a couple minutes. It is important that you do not swallow any of the plant juices during this time. Concentrate on what you're doing. If any burning or irritation occurs, the plant is unsafe and should be ruled out as a possible food source. Thoroughly rinse out your mouth, taking care to spit out the water used rather than swallowing it.

Next step for a plant that passes the above hurdles is to thoroughly chew a teaspoon portion of the plant part. Do not swallow any of the plant or its juices. If you experience a reaction, discontinue the test. Rinse out your mouth if the plant fails to pass this section of the test.

If the plant has passed thus far, you now need to wait for eight hours without eating any other food. Monitor yourself for cramps, nausea, vomiting, or other abdominal irritations. If any occur, induce vomiting and then drink plenty of water to dilute any poisons that may remain in your body. Obviously any plant that has caused such irritations should be discarded from your list of potentially edible plants.

If no problems have been experienced for eight hours, try eating one half cup of the plant, newly prepared in the same fashion as the plant was during your previous testing. After eating it wait another eight hours. If no ill effects occur, the plant part is edible when prepared in the same fashion as tested.

Remember that all you have determined is that the part of the plant you tested is edible in the cooked form you used. You will need to re-test other parts of the plant as well as other forms of processing or in the raw form before you can be sure it is totally safe. Remember that some plants have both edible and poisonous sections, and that some are dangerous in their raw form. Even after the plant is determined to be edible, eat it in moderation to avoid cramps, diarrhea, and other gastric problems.

**Some More Rules**

There are some more basic "rules" that will help you determine if a plant is safe to eat. These can help you narrow your search for foods but will not replace the Universal Edibility Test. Remember that these are guidelines only and do not necessarily mean that any given plant is safe. Testing is essential if you're to avoid poisoning yourself or others.

Berries may, or may not, be safe to eat. If you are familiar with a local plant, then you can most likely identify it by sight and safely eat it. However if you have any doubt, err on the side of caution. You can tell a lot about the potential safety of a berry by its color. In general, green, yellow, and white berries as a group are only 10 percent likely to be edible — that means 90 percent of such berries are potentially dangerous to consume.

Red berries are on the average 50 percent edible while purple, blue, or black berries are 90 percent edible. What this means is that if you have to choose between testing a white berry or a plant with black berries, you're more apt to find an addition to the plants you can use for food if you test out the black berry.

Aggregate berries (i.e., those looking like a collection of tiny globes united into one berry) are almost 99 edible as a group. While you might find one that is dangerous (so you should always test them), your chances of success are very great with these. Among the better known plants in this group are the mulberry, thimbleberry, raspberry, and blackberry.

Some parts of a plant should be tested before others because of the food energy they can supply to you.
Usually the most energy-rich parts are the roots, seeds, and nuts as well as the fruits and berries. Testing these parts ahead of the stalks and leaves is a good route to take if you're desperate for food.

**Common Edible Plants**

There are so many edible plants that it is impossible to create a list that is anywhere close to being complete in a manual this size. However here are some of the more common edible plants that you may find in temperate zones:

- Amaranth (*Amaranthus retroflexus* and other species)
- Arrowroot (*Sagittaria* species)
- Asparagus (*Asparagus officinalis*)
- Beechnut (*Fagus* species)
- Blackberries (*Rubus* species)
- Blueberries (*Vaccinium* species)
- Burdock (*Arctium lappa*)
- Cattail (*Typha* species)
- Chestnut (*Castanea* species)
- Chicory (*Cichorium intybus*)
- Chufa (*Cyperus esculentus*)
- Dandelion (*Taraxacum officinale*)
- Daylily (*Hemerocallis fulva*)
- Marigolds (the domesticated flower is edible — though many find the pungent taste too much)
- Nettle (*Urtica species*)
- Oaks (*Quercus species*)
- Persimmon (*Diospyros virginiana*)
- Plantain (*Plantago* species)
- Pokeweed (*Phytolacca americana*)
- Prickly pear cactus (*Opuntia* species — be sure to remove the thorns!)
- Purslane (*Portulaca oleracea*)
- Rose hips (the seed pod that is left behind after the flower withers — be sure the plant hasn’t been treated with insecticide)
- Sassafras (*Sassafras albidum*)
- Sheep sorrel (*Rumex acetosella*)
- Strawberries (*Fragaria* species)
• Sunflower (seedheads only; dry roasting these makes them more palatable)
• Thistle (*Cirsium* species)
• Tulips (the bulbs only)
• Water lily and lotus (*Nuphar, Nelumbo*, and other species)
• Wild onion and garlic (*Allium* species)
• Wild rose (*Rosa* species)
• Wood sorrel (*Oxalis* species)

In tropical areas of the US, some of these plants may also be available for consumption:

• Bamboo (*Bambusa* and other species)
• Bananas (*Musa* species)
• Breadfruit (*Artocarpus incisa*)
• Cashew nut (*Anacardium occidental*)
• Coconut (*Cocos nucifera*)
• Mango (*Mangifera indica*)
• Palms (various species)
• Papaya (*Carica indica*)
• Sugarcane (*Saccharum officinarum*)
• Taro (*Colocasia* species)

And in desert areas of the US, some of these edible plants may be encountered:

• Acacia (*Acacia farnesiana*)
• Agave (*Agave* species)
• Cactus (various species)
• Date palm (*Phoenix dactylifera*)
• Desert amaranth (*Amaranthus palmeri*)

It should be noted that many of the above plants will be more palatable if eaten as tender shoots or during certain parts of the year. You should also be aware that sometimes plants are misidentified by locals who may call a plant “sheep sorrel” (or whatever) when in fact it is a completely different plant. In such a circumstance you might think a plant listed below is the same one the locals call by that name; this could be a tragic mistake. So be sure a plant is properly identified before consuming it, even if it is listed above.

Some seaweeds are also safe to eat. However due to potential pollution, it is essential that you carefully wash and prepare these before eating. Seaweed, like all plants, may become dangerous if it isn’t fresh. For this reason you should not attempt to eat any plants that have washed onshore or which may be spoiled or decayed.

However it is possible to dry freshly harvested seaweed and then consume it later, a point to keep in mind if you live near the ocean. Usually the easiest varieties to dry are those that are thin and tender; these can be left in
the sun to dry or crisped over a fire. Dried seaweed can later be used in soups or sprinkled over food.

Boil thick, leathery seaweeds for a short time to soften them and then eat them as a vegetable or with other foods. You can eat some varieties raw after testing for edibility, but given the potential for contamination, you’re generally better off cooking seaweed.

Here is a list of seaweeds that are edible (including a few that may also be found in fresh or brackish water):

- Dulse (*Rhodymenia palmata*)
- Green seaweed (*Ulva lactuca*)
- Irish moss (*Chondrus crispus*)
- Kelp (*Alaria esculenta*)
- Laver (*Porphyra species*)
- Mojaban (*Sargassum fulvellum*)
- Sugar wrack (*Laminaria saccharina*)

### Foodscaping

There are a number of plants which can serve both as ornamental plants and food crops. Going to the trouble of using these around your home will give you an added edge during any emergency that might make food scarce. These plants have a small drawback in the fact that they may attract pests. But most actually attract wildlife which will feed on the plants when you don’t take the time to harvest the food. Some of these animals can also serve as food during an emergency, giving you a two-for-the-price-of-one situation.

Some of the plants listed in this section won’t grow in all areas. So be sure to check to see how well it will thrive before selecting any. Most gardening stores won’t sell plants that won’t thrive and therefore will discourage you from buying marginal choices. A check with your local county extension agent may also reveal helpful information.

Among the trees that can be employed as a source of food are figs (including the Celest, Texas Everbearing, Brown Turkey varieties), pecans (Cheyenne, Choctaw, Native pecan), peaches, (Sentinel, Loring, Red Glob, Ranger), walnuts (Black or English), pears (Orient, Sorsui, Moonglow) and persimmons (Tane-Nashi, Eureka, Tamopan, Hachiya). Remember that most “ornamental” varieties of these trees, especially the pears, don’t bear fruit.

Shrubs, bushes, and vines that provide food include the Blueberry (Tiftblue, Woodard), pomegranate (Wonderful), current, bay laurel (Rosemary), blackberry (Brazos, Cherokee, Womack, Navaho), and grape (Seibel 9110, Flame, Himrod, Champanel). Some groundcovers can also be used for food; among these are strawberry, thyme, and mint (Corsican, Cuttingham, spearmint).

There are also a huge variety of herbs that can be grown in most areas including alliums, basil, chamomile, feverfew, dill, fennel, kale, lavender, oregano, parsley, rosemary, sage sorrel, thyme and a huge variety of pepper plants.

Some vegetables have an attractive appearance that make them suitable for edible landscaping as well.
Included in this group are asparagus, chard, the Jerusalem artichoke, cabbage, kale, kohlrabi, and lettuces. Additionally tomatoes, onions, and other vegetables can be interspersed with marigolds or other flowering plants to camouflage them. This makes it possible to have a flower garden that also yields fruit, making it both attractive as well as productive.

Window boxes, window mini-greenhouses, and gardens or full-scale backyard greenhouses are possible options you should also consider. While such projects are out of the scope of this manual, and may not lend themselves to the situation you’re in, they can be useful if you have the land, time, and talent to produce food on your own. The time to gain this experience is long before any emergency. Ideally you’d also secure non-hybrid seeds for your garden; these permit growing new crops from the seeds from previous crops.

**Preparation of Plant Food**

Although some plants or plant parts are edible raw, you must cook others to be edible or palatable. Edible means that a plant or food will provide you with necessary nutrients, while palatable means that it actually is pleasing to eat. Many wild plants are edible but barely palatable, making it necessary to modify them through cooking in order to really make them a staple of your diet. So often the trick is to transform what is simply edible into something palatable.

Among the traditional methods of improving the taste of plant food are soaking, boiling, cooking, or leaching. The first two don’t need much explaining. Leaching does. This process entails crushing the plant, placing it in a strainer, and then pouring boiling water through it or immersing it in running water. This process leaches out harmful or bitter-tasting chemicals, leaving behind the plant material that is edible. (One good example of how this can be used to transform an almost inedible plant into worthwhile food is with acorns.)

To some extent this same process can be done by boiling food and then changing the water one or more times. With food having only a mildly bad taste, this may remove the bitterness from them. Boiling leaves, stems, and buds will also often make them tender enough to easily consume. Boiling, baking, or roasting tubers and roots will help them taste better and also will remove caustic oxalates from some roots like those in the *Arum* family. Some nuts, such as chestnuts, are good raw, but taste better roasted.

Seeds and grains that you have discovered to be safe to eat can usually be eaten raw if immature. But once they dry out, they are hard to chew and digest, dictating that they be boiled or ground into meal or flour before they are consumed.

Finally, it should be noted that the sap from many trees such as maples, birches, walnuts, and sycamores has a viable amount of sugar in it. By cutting small strips in the bark of these trees, it is possible to place a container on them and collect the sap as it dribbles out. This sap may be used to sweeten some food.

To really get the sugar into a useful form, you must boil these saps down to a syrup. However this is a long process, taking about 35 liters of maple sap to make one liter of maple syrup. This works if you’re heating your home with a fire and can place a kettle of the sap over it for slow processing. Otherwise you’ll probably find that processing sap into syrup is more trouble than it is worth.

**Hunting and Trapping**

Hunting is not an efficient way to gather food; trapping will usually gain you more food with less expenditure of time and energy as well as resources. Buying a few small animal traps now could pay off in a big way during an emergency. If you have large numbers of rabbits, squirrels, and birds in your area (and even many
urban areas have these animals in abundance). You have the potential of collecting meat that can be employed in a soup or other foods to augment your larder.

Furthermore, even minute amounts of meat added to a vegetarian diet often makes it possible for the body to better utilize amino acids. Even if you can't get meat that is of use to you, it may be that you can harvest some to feed to your pets — an important consideration if your family has grown attached to a cat or dog.

Harvesting small game doesn't call for a powerful rifle or shotgun. In fact an air gun or .22 rifle loaded with "22 CB Caps" can be employed to down small animals while making so little noise that no one will be aware of what is going on (except for you and your prey).

While, again, I don't recommend that you hunt illegally or discharge a firearm within city limits, you might decide obeying obsolete laws is less important than feeding your family during a crisis, especially when your sniping at the small animals will go unnoticed by the authorities. (During a protracted national emergency, I would not be surprised to see Robins and other small "protected song birds" harvested illegally, becoming "Cornish game hens" in many areas of the country.)

CB Caps as well as inexpensive .22 rifles can be purchased at a gun shop or most Wal-Marts. A good air rifle can be purchased with even less expense and no red tape in most parts of the US. If you go this latter route, get one of the more powerful and accurate guns that is capable of bringing an animal down with a clean kill.

Oddly enough, the .22 CB cap is actually a bit quieter than many air rifles when fired; it also has considerably more energy than many air guns. However one is a firearm and the other considered a toy by many people. For this reason the air rifle may be a better bet in many urban areas with various regulations restricting the use of a firearm.

Many urban areas have pigeons galore; these can be harvested for food, as can almost any bird. Horses, dogs, and cats are also employed for food even though many find this repulsive. But the survival of your family may outweigh your need to obey the laws and taboos of current society. Don't forget these possible sources of food.

Unless you have the chance to take large game, concentrate your efforts on the smaller animals, due to their greater abundance in almost any area, whether urban or rural. Smaller animals are also easier to prepare and nearly any small animal is edible, with only a few exceptions. Larger, herding animals, such as deer and elk may seem like attractive targets for food purposes. But they are difficult to trap and almost impossible to stalk and shoot without attracting attention. And the amount of meat they provide could be more than you could easily store unless you have refrigeration or are prepared to salt, dry, or otherwise preserve it.

While you can eat almost any small animal, one obstacle is overcoming your natural aversion to a particular food source. Historically, people in starvation situations have resorted to eating almost everything imaginable for nourishment. A person who ignores an otherwise healthy food source due to a personal bias, or because he feels it is unappetizing, is risking his own survival.

Although it may prove difficult at first, you may need to force yourself to eat what is available to maintain your health. You should also consider hiding the "source" of food from others in your group, preparing the meat away from the living quarters and perhaps even adding it to the "stew" or other food when others aren't keeping close tabs. The old saw that wild game "tastes like chicken" suggests that you might want to rename cat meat as "squirrel meat," "pigeons" might become "Cornish game hens," and so forth. While I don't believe misleading people is normally a good thing, you may be forced to bend the truth during an emergency.
Food that Creeps and Crawls

Insects are abundant in most areas and are easily caught. If consumed they can provide 65 to 80 percent protein per serving as compared to 20 percent for beef. No, they aren’t overly appetizing, but they could be an important food source during a crisis. There are a few to avoid: Any adults that sting or bite, hairy or brightly colored insects, caterpillars with a strong odor, and insects with a pungent smell; these may be poisonous. Also avoid all spiders and common disease carriers such as cockroaches, ticks, flies, and mosquitoes.

Rotting logs lying on the ground are excellent places to look for a variety of insects including ants, termites, beetles, and grubs (beetle larvae); most of these are edible. Do not overlook insect nests on or in the ground. Grassy areas, such as fields, are good areas to search because the insects are easily seen. Stones, boards, or other materials lying on the ground provide the insects with good nesting sites. Check these sites. Most insect larvae are also edible.

Insects such as beetles and grasshoppers that have a hard outer shell will generally have parasites; this means it is essential to cook them before eating. You can eat most other insects raw. To prepare the insects, remove any wings and barbed legs and then cook them if necessary for your tastes or because they may have parasites. You can also grind a collection of insects into a paste and then mix them with edible vegetation or bread and cook them to improve their taste. Surprisingly, the taste varies from one species to another. Wood grubs are bland, while some species of ants store honey in their bodies, giving them a sweet taste.

Earthworms (Annelidea) are an excellent protein source. Dig for them in damp humus soil or watch for them on the ground after a rain. After capturing them, drop them into clean, potable water for a few minutes so they will naturally purge or wash themselves out. Once they have done this, you can eat them raw or cook them.

Frogs and salamanders are easily found around bodies of fresh water. Frogs seldom move from the safety of the water’s edge. At the first sign of danger, they plunge into the water and bury themselves in the mud and debris. There are few poisonous species of frogs which you will not likely encounter in the US; however you should know to avoid any brightly colored frog or one that has a distinct “X” mark on its back.

While frogs are edible, toads are poisonous. Care should therefore be taken not to confuse the two. Normally toads will be found in drier environments. They have fatter bodies than frogs and a blunt nose. Usually their skin is less smooth than a frog’s. Frogs are seldom far from water while toads are often well away from any source of water except when mating.

Salamanders are nocturnal and can usually be spotted with a flashlight or other source of light. They can range in size from a few centimeters to well over 60 centimeters in length. Look in water around rocks and mud banks for salamanders. All salamanders can be eaten.

Reptiles are a good protein source and relatively easy to catch. You should cook them, but in an emergency, you can eat them raw. While reptiles may have parasites, being cold-blooded, reptiles do not carry the blood diseases of the warm-blooded animals.

Not all turtles are edible. The box turtle should not be eaten because it feeds on poisonous mushrooms and may build up a highly toxic poison in its flesh which even cooking will not destroy. Also avoid the hawksbill turtle, found in the Atlantic Ocean; it has a poisonous thorax gland.

Poisonous snakes, alligators, crocodiles, and large sea turtles are dangerous and probably best left alone unless you are really desperate for meat.
Food that Swims

Freshwater shrimp range in size from 0.25 centimeter up to 2.5 centimeters. They can form rather large colonies in mats of floating algae or in mud bottoms of ponds and lakes. Crayfish are akin to marine lobsters and crabs and are also edible; they have a hard exoskeleton and five pairs of legs, the front pair having oversized pincers.

Crayfish are active at night, but you can locate them in the daytime by looking under and around stones in streams. You can also find them by looking in the soft mud near the bank, watching for the chimney-like breathing holes above their nests. You can catch crayfish by tying bits of offal or internal organs to a string. When the crayfish grabs the bait, pull it to shore before it has a chance to release it.

Saltwater lobsters, crabs, and shrimp can be found from the surf’s edge out to water 10 meters deep. Shrimp may come to a light at night where you can scoop them up with a net. You can catch lobsters and crabs with a baited trap or a baited hook. Crabs will approach bait placed at the edge of the surf, where you can trap or net them. Lobsters and crabs are nocturnal and caught best at night.

Mollusk bivalves, similar to our freshwater mussel and terrestrial and aquatic snails are found worldwide under all water conditions. River snails or freshwater periwinkles are plentiful in rivers, streams, and lakes of northern coniferous forests. These snails may be pencil point or globular in shape.

In fresh water, look for mollusks in the shallows, especially in water with a sandy or muddy bottom. Look for the narrow trails they leave in the mud or for the dark elliptical slit of their open valves. Near the sea, look in the tidal pools and the wet sand. Rocks along beaches or extending as reefs into deeper water often bear clinging shellfish. Snails and limpets cling to rocks and seaweed from the low water mark upward. Large snails, called chitons, adhere tightly to rocks above the surf line.

Mussels usually form dense colonies in rock pools, on logs, or at the base of boulders. Steam, boil, or bake mollusks in the shell. They make excellent stews in combination with greens and tubers.

Do not eat mollusks raw as some carry parasites and all can be contaminated with dangerous bacteria. One other caution: Mussels may be poisonous in tropical zones during the summer and should therefore be avoided. You should also avoid eating shellfish that are not covered by water at high tide as these may become full of bacteria toxins that won’t be removed by cooking.

Fish present another good source of protein and fat. In some areas fish are usually more abundant than mammal wildlife, and you can usually capture them without attracting unwanted attention. To be successful at catching fish, you must know their habits: Fish tend to feed heavily before a storm; they are not likely to feed after a storm when the water is muddy and swollen; light often attracts fish at night; when there is a heavy current, fish will rest in places where there is an eddy, such as near rocks; fish gather where there are deep pools, under overhanging brush, and in and around submerged foliage, logs, or other objects that offer them shelter.

There are no poisonous freshwater fish, though some catfish species have sharp, needle like protrusions on the dorsal fins and barbs which can inflict painful puncture wounds that may quickly become infected. Handle catfish with care.

Freshwater fish should never be eaten raw due to parasites they may contain. Be sure to cook them thoroughly. Saltwater fish caught within a reef or within the influence of a freshwater source should be cooked as a precaution. Any marine life obtained farther out in the sea will generally not contain parasites because of the saltwater environment and can be eaten raw in a pinch — though cooking will certainly make them more palatable.
Certain saltwater species of fish have poisonous flesh and should be avoided. In some species the poison occurs seasonally. In others, it is permanent. Examples of poisonous saltwater fish are the porcupine fish, triggerfish, cowfish, thorn fish, oilfish, red snapper, jack, and puffer. The barracuda, while not actually poisonous itself, may transmit ciguatera (fish poisoning) if eaten raw.

**Larder of the Air**

All species of birds are edible, although the flavor will vary considerably. You should consider skinning any fish eating birds you catch as this will improve their taste. As will be noted later, other processing may be necessary to avoid disease when harvesting these animals.

As with any wild animal, understanding a bird's common habits will give you an edge in catching them. You can take pigeons, as well as some other species, from their roost at night by hand; in urban areas, birds often roost under eaves or in the attics and roofs of buildings. Watching where they settle just before nightfall will often lead you to a large harvest of birds that are easily captured. Birds which nest or roost in low trees can also often be easily captured at night.

During the nesting season, some species will not leave the nest even when approached making it practical to capture them with your bare hands, though a small net will make the job easier. Many birds tend to follow regular flyways going from the roost to a feeding area, to water, and so forth. Careful observation should reveal where these flyways are and indicate good areas for catching birds by stretching nets across the flyways. Roosting sites and water holes are some of the most promising areas for trapping or snaring.

If you find a nest, remove all but two or three eggs from the clutch, mark the eggs you leave with a dab of paint, nail polish, Whiteout, or even mud so you can tell which you leave behind. Then mark the area where the nest is so you can easily find it again. The bird will continue to lay more eggs to fill the clutch, permitting you to keep removing fresh eggs, leaving the ones you marked behind. This can give you a steady stream of eggs for some time.

**Game Animals**

Mammals are excellent protein sources and, for most Americans, the most palatable and least disgusting of food sources after fruits and vegetables. There are some drawbacks to capturing mammals, primarily because it is hard to do so without attracting attention. This may not be a problem. However if food is scarce or you're trying to keep a low profile for one reason or another, bagging an animal for food may be tough without attracting attention. Setting up traps or snares is often the safest bet in such cases, though not without problem since these may be detected and stolen — perhaps along with the game trapped in by them.

Unlike most of the animal sources of food listed above, most mammals present danger far out of proportion to their size. All mammals have teeth and nearly all will bite in self-defense, so that even a squirrel can inflict a serious wound. Not only that, any bite presents a serious risk of infection with lingering doubts as to whether or not a person might also be at risk for rabies. The most dangerous animals are those defending their young. And most mammals that are cornered or trapped will also fight.

On the plus side, all mammals are edible with a few possible exceptions. Two are the polar bear and bearded seal which may have toxic levels of vitamin A in their livers during some parts of the year — but your chances of meeting are slim. The only other danger is the platypus, native to Australia and Tasmania, which has poisonous glands. Scavengers such as the possum can carry diseases so if you are forced to eat such creatures, careful cleaning and cooking is dictated. But basically, anything you encounter with a fur coat and walking on
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The sound of a rifle shot or shotgun can quickly bring unwanted attention. Not so with an air rifle or a .22 rifle (not a pistol) loaded with .22 CB Caps. In such a case you can fire from a concealed position without attracting attention, especially if there is masking noise of automobiles or other racket to help cover up the slight report from the muzzle.

Leaving the gun behind, concealed in your hiding spot and then casually going into the open and snatching your catch when no one is watching completes your harvesting of food. If you're in a city with plenty of squirrels or pigeons, this technique can be employed for some time to quickly obtain meat. You can hunt in your yard, atop an apartment building roof, or even in a public park, provided you're careful not to let anyone see you with your firearm (and remember it might be mistaken for a full-powered rifle and you for a sniper).

If time is limited or game less plentiful, then you may have the luxury of being able to wait around in a blind to bag your prey. In such a case, trapping or snaring wild game is a good alternative. Several well-placed traps have the potential to catch much more game than a man with a rifle is likely to shoot.

Once again it is important to understand the habits of the animals you want to capture. Since mammals tend to be smarter than other game you may go after, you also have to take care not to alarm the prey by leaving signs of your presence, or even allowing them to see you with a trap.

Traps are designed for specific animals. While you may on occasion accidentally capture the wrong animal, generally you'll only catch those the trap is designed to capture. That means you must design or buy a trap designed for a specific animal.

Placement of a trap is critical. You should learn to look for runs and trails used by your game; placing a trap at such a spot will almost guarantee capture. Failure to do so almost guarantees failure. Watch for tracks, droppings, chewed or rubbed vegetation, and (with fowl), nesting or roosting sites. Keep in mind that a trail will show signs of use by several species and will be rather distinct; a run is usually smaller and less distinct and will only contain signs of one species.

If you're trying to trap a specific animal, you're more apt to get it on a run where the trap won't be sprung or pushed away when a much different animal (or even a man) goes down the trail. Also be on the lookout for feeding and watering areas; often runs and trails will be found leading to a watering hole.

Most animals have bedding areas, water holes, and feeding areas with trails leading from one to another. Once you've found such places, you should position your traps and snares where the animal will pass.

Do not use freshly cut, live vegetation to construct a trap or snare. Freshly cut vegetation will "bleed" sap that has an odor the prey will be able to smell, alarming the animal so it won't approach the area.

You must remove or mask the human scent on and around a trap you set for mammals. Although birds, reptiles, and other creatures won't be alarmed by the scent of man, nearly all mammals depend on smell even more than on sight to be alerted of dangers. That means even the slightest human scent on a trap will alarm a mammal and cause it to avoid the area. While removing the scent from a trap is difficult, masking it is relatively easy.

One easy masking material is the fluid from the gall and urine bladders of previous kills (do not use human urine as this will repeal animals). Mud, particularly from an area with plenty of rotting vegetation, is also good for masking human scent. Use it to coat your hands when handling the trap and to coat the trap when setting it. Smoking the trap parts is an effective means to mask your scent; simply hold it in the smoke of an open fire for
a few moments. You can also remove human scent by letting a trap “weather.” Just set it in the open for a few
days, taking care not to handle it.

If you’re worried about someone detecting your trap or snare and possibly robbing it of game and even
stealing the trap, then you need to conceal it. On the other hand, you must avoid creating a disturbance that will
alarm the animal and cause it to avoid the trap. Ideally you’ll use brush or grass to hide a trap or snare; if you must
dig, remove all fresh dirt from the area as this is apt to be avoided by animals and detected by man. When you
position the trap, camouflage it as naturally as possible to prevent detection by a human being as well as to avoid
alarming the prey.

Traps or snares placed on a trail or run should channel the animal into a small pass where the trap is set to
improve the chance that it will be caught. You can construct a funnel-shaped barrier extending from the sides of
the trail toward the trap, with the narrowest part nearest the trap. To avoid alerting the prey, this should be as
inconspicuous as possible. The big plus of channeling the trail is that as the animal gets to the trap, it cannot turn
left or right and thus continues into the trap, even if it has become suspicious that something is wrong; few wild
animals will back up, preferring to face the direction of travel. You can use this tendency to your advantage.

The channel does not have to be an impassable barrier. You only have to make it inconvenient for the
animal to go over or through the barrier. For best effect, the side barriers should reduce the trail’s width to just
slightly wider than the targeted animal’s body. Maintain this constriction at least as far back from the trap as the
animal’s body length, then begin the widening toward the mouth of the funnel.

Another way to increase your chance of catching an animal is to bait the trap (and when catching fish, you
must bait nearly all traps to meet with success). Success with an unbaited trap demands careful placement in a
good location; a baited trap can actually draw animals to it. The bait should be something the animal knows but is
not so readily available in the immediate area.

One bait that works almost universally well on small mammals is peanut butter. Salt is also a good bait;
some people regularly salt an area during good times so they know animals will come to the area during bad. This
almost guarantees that game will be available should it be needed. When using such baits, placing the bait in areas
without the trap will give the prey a chance to sample it and help individuals avoid associating the food or salt
with danger. The animal will then overcome some of its caution before it gets to the trap.

If you set and bait a trap for one species but another species takes the bait without being caught, try to
determine what the animal was. Then set a proper trap for that animal, using the same bait. Once you have
successfully trapped an animal, you will have food and bait for several more traps in the form of the meat and
organs you can’t use for food.

**Trapping and Snaring Strategies**

Traps and snares can be an efficient and low-effort way to harvest game. Traps are designed to catch and
hold or to catch and kill. Snares are traps that incorporate a noose to accomplish either function.

Traps and snares work by choking, hanging, or entangling prey. A single trap or snare will commonly
incorporate two or more of these principles and will be powered by a simple mechanism. Simplicity is the key in
making traps and snares; the more complicated they become, the more apt they are to fail and the longer they take
to create and set up.

The mechanisms that provide power to the trap can be the energy of the struggling animal, the force of
gravity, or a bent sapling’s tension. The other key part is the trigger. When planning a trap or snare, determine how
it should affect the prey, what is the source of power, and what will be the most efficient trigger. Getting the
A simple snare consists of a noose placed over a trail or den hole and attached to a firmly planted stake. If the noose is some type of cordage placed upright on a game trail, use small twigs or blades of grass to hold it up so the animal can slip its head or a foot into it. If you’re in a bind for working materials, filaments from spider webs are excellent for holding nooses open because they can support weight but will break easily when an animal stumbles into the noose.

Make sure the noose is large enough to pass freely over the animal’s head. As the animal continues to move forward, the noose then tightens around its neck. At this point the animal panics and struggles, causing the noose to tighten. This type of snare usually does not kill the animal so you should be prepared to dispatch it when checking the snare. Wire is superior to cords for a snare since it is less apt to be seen by the animal and will also fail to loosen when the animal becomes worn out and quits struggling.

While a wire loop “slip knot” can be employed for a snare, many pros who use a snare employ a small piece of L-shaped metal with a hole on each end. One end of the snare wire is tied to a hole and then the wire looped through the other hole to form a loop. The advantage of this is that if the animal tires and quits struggling, the wire is less apt to slip loose due to the right angle of the metal holding it.

A drag noose can be employed on an animal run through heavy brush. To create this, place forked sticks on either side of the run and lay a sturdy cross member across them. Tie the noose to the cross member and hang it at a height above the animal’s head, taking care to keep it high enough that the animal can’t get one foot into the noose. With this trap once the animal gets its head through the loop and the noose tightens, the panic lunge by the animal will then dislodge the cross member from the forked sticks and drag it along. The surrounding vegetation quickly catches the cross member and the animal becomes entangled.

A squirrel pole is a long pole placed against a tree in an area showing a lot of squirrel activity. Several wire nooses are placed along the top and sides of the pole so that a squirrel trying to go up or down it will have to pass through one or more of them. The nooses should be 5 to 6 centimeters in diameter to fit over the animal’s head and placed about 2.5 centimeters off the pole. Place the top and bottom wire nooses 45 centimeters from the top and bottom of the pole to prevent the squirrel from getting its feet on a solid surface once it is captured (the squirrel will chew through the wire if it can get solid footing).

Most animals would avoid such a trap, but squirrels are naturally curious. After an initial period of caution, they will try to go up or down the pole and, in the process, get caught in a noose. The struggling animal will soon fall from the pole and strangle. Oddly enough other squirrels will often try to see what has happened so you may catch several squirrels at once. You can also use multiple poles to increase the catch.

The Ojibwa bird pole trap has been employed by American Indians for centuries. It should be placed in a relatively open area away from tall trees, ideally close to a feeding area, nesting sector, or a watering hole. The pole should be 1.8 to 2.1 meters long with all limbs and foliage trimmed away; make it from a hardwood, not a resinous pine or similar wood. Sharpen the upper end to a point, then drill a small diameter hole 5 to 7.5 centimeters down from the top. Cut a small stick 10 to 15 centimeters long and shape one end so that it will almost fit into the hole — this will be the perch.

Now you erect the long pole, planting one end in the ground with the pointed end up. Select a small weight about equal to the weight of the targeted species (you don’t want too heavy of a weight as this may cause the cord to cut the feet off the bird, allowing it to escape and then later die without being harvested); tie the weight to a length of cordage.

Pass the free end of the cordage through the hole, and tie a slip noose that covers the perch. You then tie a single overhand knot in the cordage and place the perch against the hole, allowing the cordage to slip through the
hole until the overhand knot rests against the pole and the top of the perch. The tension of the overhand knot against the pole and perch will hold the perch in position.

Next spread the noose over the perch, ensuring it covers the perch and drapes over on both sides. Most birds prefer to rest on something above ground and will land on the perch. As soon as the bird lands, the perch will fall, releasing the overhand knot and allowing the weight to drop. The noose will tighten around the bird’s feet, capturing it.

Unlike most traps and snares, a noosing wand requires an operator and some time. However it can be useful for trapping roosting birds or small mammals. It consists of a pole (as long as you can effectively handle) with a slip noose of wire or stiff cordage at the small end. To catch an animal, you slip the noose over the neck of a roosting bird and pull it tight. You can also place it over a den hole and hide in a nearby blind. When the animal emerges from the den, you jerk the pole to tighten the noose and thus capture the animal. You will need to carry a stout club along with the noosing wand so you can quickly dispatch animals you capture.

Finally, mention should be made of the bottle trap. It won’t be of much use for capturing human food, but can catch mice and voles which might be employed as bait or for pet food.

To create such a trap, dig a hole 30 to 45 centimeters deep that is wider at the bottom than at the top. Make the top leading to it as small as possible. Place a piece of bark or wood over the hole with small stones under it to hold it up 2.5 to 5 centimeters off the ground. Mice or voles will hide under the cover to escape danger and fall into the hole. They cannot climb out because of the wall’s backward slope. Use caution when checking this trap because snakes will sometime enter it to eat the trapped rodents. Obviously this trap can be created simply by burying a bottle with a medium-sized mouth — which is how such traps were first made.

There are a wealth of other home-made traps. But the ones above are probably the best. An even better bet is to purchase some quality snares and traps beforehand. These can usually be found at a gun shop or sporting goods store and, if not on hand, these businesses can generally order them for you.

**Killing Your Catch**

The quick dispatch of animals you capture is essential both to avoid making them suffer as well as to avoid attracting unwanted attention or alerting other animals (or people) that you are taking game. If you’re trapping mammals, the tool used for this purpose should also allow you to kill the creature from a safe distance.

Most professional trappers use a small pistol or rifle loaded with a .22 Short rimfire cartridge. These rounds are smaller than the .22 LR and create a very soft report; they work in most .22 rifles or pistols, though their low power will dictate hand operation with most semiauto mechanisms. With very small animals, the .22 CB Cap or even a powerful air rifle might also be employed for this purpose. Placement of the bullet is critical with these cartridges; it must hit the animal square in the brain or the base of the skull to quickly take it out of action.

A long club may also be employed to dispatch animals as can a spear or similar device. A machete, hoe, or shovel might also be used as a makeshift instrument to kill small animals.

**Fishing**

Sport fishing and capturing large numbers of fish for food are quite different endeavors for most people. If you’re needing food, you probably can’t waste your time sitting for hours on the bank of a pond or river waiting for a fish to bite and be reeled in. Instead you’ll need to do some “quick and dirty” fishing that normally isn’t employed by
fishermen and which might even be illegal under normal times. (I am not suggesting that you break any laws: however if your family is starving you may decide that obeying such laws is not in your best interests.)

While you can improvise fishhooks, the best bet is to buy a large quantity now while they are plentiful and cheap. If you have failed to do this, field-expedient fishhooks can be created from safety pins, needles, wire, small nails, or any piece of metal. You can also use wood, bone, thorns, flint, or shells. None of these are as effective as commercially produced hooks — buy some now if you can.

The bank line is the most efficient method of capturing fish — and also illegal in many areas. To create a bank line, just a small length of line is secured to a small branch (which acts as the fishing pole) and the branch is shoved into the bank to keep it secure. The other end of the line has a small sinker added to it along with a baited hook. The big plus of the bank line is that a string of these poles can be put into place and left unattended. Check them in a few hours and remove the catch from lines that have captured fish.

Years ago I discovered a string of such lines, put into place by a poacher. I never would have spotted them had I not been looking for a muskrat along the banks. The lines were secured to tree roots near the bank. The nylon cords were nearly invisible and the lack of poles kept from giving away their positions. I pulled a couple of the lines to the surface and discovered that old padlocks, bolts, and other scrounged materials were being used for weights along with the ever popular earthworm as bait.

I left the lines undisturbed and never reported them to the local game warden since I suspected they were being employed by a poor family in the area to secure food for their children. The area had a lot of foot traffic due to the railroad running about 10 yards from the edge of the water; kids and hikers regularly trekked by the lines, but I’d be willing to bet that the owner of the lines and I were the only ones that ever knew about them.

In most areas of the US, gill nets are illegal to use for fishing. However if you can buy one through a sporting goods store or gun shop, you might wish to do so, perhaps telling the seller that you won’t be using it except in an emergency or — if you don’t think the seller will buy that — creating a cover story about going fishing in the Bahamas or some other exotic locale whose laws the businessman is likely to be unfamiliar with.

Fish traps are also often illegal but might be of use during an emergency. These generally work by creating a funnel shaped opening that leads into a larger body. A fish noses down the funnel and then is unable to find the way back out quickly, giving you time to capture it by pulling the trap ashore from time to time.

Spear fishing is also generally illegal when it involves freshwater fish. However you might, again, consider it if your family is starving. While you can make a suitable spear from a long, straight sapling, a better bet is to buy a metal spear with hooks on its prongs; these help prevent the fish from wriggling free after being struck by the spear. Often you can buy these commercially as “frog spears.” Obviously they are also useful for catching frogs.

To spear fish, find an area where fish either gather or where there is a fish run. Place the spear point into the water and slowly move it toward the fish. Then, with a sudden push, impale the fish on the stream bottom. If you don’t have a hooked frog spear, then do not try to lift the fish with the spear, as it with probably slip off and you will lose it. Instead hold the spear with one hand and grab and hold the fish with the other.

Despite its name, you should not throw the spear since the chances of hitting a fish are small and you may easily damage or even loose your spear. Instead keep it in hand with the points below water (so the refraction of the water won’t distort where the point is in relation to your prey).

If there are a lot of fish, you can go “chop fishing” at night. However this system will attract attention and may be illegal where you are — a combination apt to get you into trouble. To do this, a light is employed to attract fish. Then a machete or similar tool is used to slug the fish, using the dull, back edge of the blade to stun them. Once the fish is stunned, it is picked out of the water (a fish net will aid in this process). One variation on this is
Food

dynamite fishing, another system that is generally best not attempted due to the attention it garners.

Also illegal but possible is to poison fish. The poison must work on the fish while not tainting their meat. Often plants containing rotenone are used for this since this poison stuns or kills cold-blooded animals while not harming humans who eat the meat from the fish. The poison is placed in a pond or headwater of small streams containing fish and then the fish are harvested when they float to the surface.

Unfortunately plants rich in rotenone aren’t plentiful in the US; among the tropical plants that might be found in Southern states are: *Derris elliptica* (shrubs or woody vines with the substance in the roots) and *Tephrosia* (a small shrub with beanlike pods which has high concentrations in its leaves and stems). Another poison which can be employed is lime, often available in agricultural areas; a large quantity thrown into the water will give you a good haul of fish. Crushed green husks from butternuts or black walnuts can also be thrown into the water to poison fish.

**Preparing Game for Eating**

It is essential to prepare game properly. And take pains never to eat food that is spoiled. When in doubt, throw it out.

Fish can be a little tough to judge as to how fresh they are, due to their smell; generally signs of spoilage in fish are sunken eyes, a worse than usual or peculiar odor, and suspicious color. Gills should be red to pink. Scales should be a pronounced shade of gray, not faded.

Dents should not remain in the fish’s flesh after pressing it with your thumb. The skin of the fish should not feel slimy, but rather moist or wet. If the fish has a sharp, peppery taste, or leaves a metallic taste in the mouth, don’t eat it. Fish spoils quickly after death, especially on a hot day. Prepare fish for eating as soon as possible after catching it.

To prepare a fish, cut out the gills and large blood vessels that lie near the spine. You should gut fish that is more than 10 centimeters long; do this by making a slit down its belly, from throat to tail, and then pulling out its entrails. Finally scale or skin the fish.

You can cook a fish in a variety of ways. If you have an open fire and not much in cooking facilities, you can simply impale a whole fish on a stick and cook it over an open flame. At the other extreme, you can fillet it (cutting away the meat from the bony spine and ribs), bread it, and fry the fish. For maximum food value, boil the fish with the skin on; since most fats and oil are under the skin, this will minimize their loss. You can also use the juices from cooking as broth or, if you’re repealed by the smell and taste, as something to feed to a pet.

I have heard of people packing fish into a ball of clay and bury it in the coals of a fire until the clay hardens. Once cooked, breaking the clay ball open exposes the flaky meat while making it possible to eat without scaling or skinning. This will work if you have soil with lots of clay — but not with sandy or other types of soil.

For longer storage, fish can be smoked. To do this, cut off the head and remove the backbone. Follow the methods outlined later for smoking meat, including fish.

To prepare a snake, first cut off its head and bury it (snakes can bite for hours or even days after being beheaded, so be sure not to leave the head lying around). Cut the skin down the body 15 to 20 centimeters and then peel the skin back. Once the peeling is started, you can grasp the skin in one hand and the body in the other and pull the two apart, skinning it in one stroke with smaller snakes; with large, bulky snakes, it may be necessary to slit the belly skin to get it clear of the meat. Remove the entrails and discard them, then cut the snake into small
sections and boil or roast it.

Birds should be cooked as you would chicken. After killing the bird, remove its feathers by either plucking or skinning; dropping the bird into boiling water will make this process easier (keep in mind that birds may be contaminated with a variety of bacteria — be sure the pot you drop them into before plucking can be thoroughly sterilized afterward). Pluck the bird if you need to maximize its food value as much of its fat is stored in the skin.

After plucking or skinning the bird, open up the body cavity and remove its entrails. If you need the maximum amount of meat, save the craw (in seed-eating birds), heart, and liver which can all be eaten. Next cut off the feet and head. Cook by boiling or roasting over a spit.

Scavenger birds can also be eaten. However because of the diseases and parasites that most carry, boil them at least 20 minutes to kill all these potential pathogens. Then cook the bird however you wish.

Game animals should be cleaned near a stream if possible to minimize contamination and the collection of flies in the area. First hang the animal up by its hind legs and cut its throat; this allows much of the blood to drain from the carcass, improving taste and also minimizing your chances of getting too much iron in your diet. Next place the carcass belly up and split the hide from throat to tail, cutting around all sexual organs. If the animal has musk glands, remove those at this point to avoid tainting the meat.

With or smaller mammals, cut the hide around the body and insert two fingers under the hide on both sides of the cut and pull both pieces off. When cutting the hide, insert the knife blade under the skin and the turn the edge of the blade up so that only the hide gets cut and not the meat. This will also prevent cutting hair and getting it on the meat. Work upward from the underside of the hide.

After skinning the animal, you next remove the entrails from smaller game by splitting the body open and pulling them out with the fingers, including those in the chest cavity. With larger game you’ll need to cut the gullet away from the diaphragm and roll the entrails out of the body. Next cut around the anus, then reach into the lower abdominal cavity, grasp the lower intestine, and pull to remove.

Remove the urine bladder by pinching it off and cutting it below the fingers; if you spill urine on the meat, wash it to avoid tainting the meat. Save the heart and liver and cut these open and inspect for signs of worms or other parasites. After skinning several animals, you’ll also be able to tell if it is diseased by inspecting the liver’s color. The liver’s surface should be smooth and wet and its color deep red or purple. If the liver appears diseased, discard the organ. Even if the liver is diseased, you can still generally eat the muscle tissue of the animal.

To continue cut along each leg from above the foot to the previously made body cut and then remove the hide by pulling it away from the carcass, cutting the connective tissue where necessary. Next cut off the head and feet. With larger game animals you’ll need to cut the carcass into manageable pieces.

If such a reduction in size is necessary (and it will be with a deer or other large animal), first slice the muscle tissue connecting the front legs to the body; this task is generally pretty easy as there are no bones or joints connecting the front legs to the body on four-legged animals. Now cut the hindquarters off where they join the body; to do this you must cut around a large bone at the top of the leg and cut to the ball and socket hip joint. Cut the ligaments around the joint and bend it back to separate it.

Now remove the large muscles (the tenderloin) that lie on either side of the spine. Separate the ribs from the backbone (there is less work and less wear on your knife if you break the ribs first, then cut through the breaks).
Chapter 10: Heating and Cooking Essentials

You can cook large meat pieces over a spit, boil, or treat them like any meat you'd brought home from the market. You can stew or boil smaller pieces, particularly those that remain attached to bone after the initial butchering, as soup or broth. You can cook body organs such as the heart, liver, pancreas, spleen, and kidneys using the same methods as for muscle meat.

You can also cook and eat the brain (the only exception would be with squirrels since some are reported to carry a nerve disease similar to the "mad cow disease" that can be transferred to human beings even after cooking).

When refrigeration or other storage methods aren't available to keep meat, you may wish to smoke, dry, or process it in a variety of other ways so it can be preserved for a longer period.

One simple way to do this is to smoke the meat. Ideally you'd create a smoke house to smoke meat. However you can create an expedient smoke house by simply building any sort of enclosure around a campfire. The fire itself doesn't need to be big or hot, only smoky. Use hardwoods, not resinous wood like pine which will ruin the meat. Ideally the wood will also be somewhat green. If it is too dry, soak it in water so it will burn less efficiently and produce more smoke.

The meat to be smoked should be cut into thin slices, no more than 6 centimeters thick, and draped over a grill or other framework. Make sure none of the meat touches another piece and be sure the fire doesn't get too hot and remains consistently smoky. Continue to smoke the meat for twenty-four hours. Once smoked, it should last about 1 week. If you extend the length of smoking to two days (with continuous smoke wafting up on the meat) it will be preserved for 2 to 4 weeks.

Drying meat will also preserve it for a longer time. First cut it into 6-millimeter strips with the grain. Hang the meat strips on a rack in a sunny location with good air flow. Keep the strips out of the reach of animals and cover them with netting to keep flies and other insects off the meat. The time necessary for drying will depend on the amount of sunlight, temperature, and humidity. Allow the meat to dry thoroughly before eating. Properly dried meat will have a dry, crisp texture and will not feel cool to the touch.

You can also preserve meats using the freezing or brine and salt methods. In cold climates, you can freeze and keep meat indefinitely (just remember that freezing is not a means of preparing meat — you must still cook it before eating). You can soak meat in brine or saltwater with the solution completely covering the meat; this permits storing the meat for some time. You can apply salt directly to small strips of meat to preserve it. With any of these methods involving salt, be sure to thoroughly wash off the salt before cooking.
**Wood Burning**

Having a house that can be at least partially heated by wood and being in an area where you can harvest wood, would put you halfway home as far as your energy needs are concerned following a nuclear war. Though getting wood is a hassle, you could use it for heating your house and cooking much of your food.

If possible, you should improve the efficiency of your wood-burning fireplace or stove (or get one installed) now, while you can. Remember that the old-fashioned fireplace is not nearly as good as a wood stove for heating. Fireplaces send a large percentage of your heat up the chimney. If you’re cutting wood by hand, this is an important consideration.

A fireplace “insert” will improve the efficiency of your fireplace. If you don’t yet have a wood-heating system, keep efficiency in mind when you purchase one. Also, don’t get a system which needs electricity to circulate the heat. Generally any dealer who can sell you a high-efficiency fireplace will be able to sell you other venting equipment that will improve your ability to heat your whole home. If you’re in an area with cold winters, don’t skimp here.

In bitter cold, consider sealing off the room with the fireplace or other heat source with plastic sheeting. This room can then serve as the community bedroom during the worst nights. Privacy will be lost, but that won’t seem so important when the temperatures are dipping.

Cold weather can also mean frozen pipes. Be sure you shut off and drain the water from your pipes if it isn’t possible to maintain the temperature above freezing throughout your home and basement.

During most major emergencies, the electric grid will go down. Plan on this being the case. If the natural gas and electricity remain online during a crisis, cooking isn’t going to be much of a chore for you and you’ll be better off than you thought you’d be. However if these utilities are off (as they might be during a terrorist attack) and you haven’t planned ahead, things will become grim. Cooking will become a major headache and the quality of food produced will go from refined to crude. And if you need electricity to heat your home, or electricity is needed to regulate a gas system, you’re really going to be up the creek if you didn’t plan ahead and line up another system to use. (I recommend owning at least two portable generators and firing them up every two or three months to make sure they’re in good working order.)

Since natural gas tends to remain up and running longer than electrical utilities, if you have a nearby natural gas line, then installing a gas oven in your kitchen would give you a slight edge during emergencies. Propane or other types of ovens might have an even greater utility, provided you’ve purchased extra fuel and have it available. Most heating systems now employ electronic thermostats or even spark plugs to regulate and/or ignite gas. That means even if you heat your home with gas, chances are good you’ll not have gas heat when the electric grid goes down.

If these utilities and gas supplies aren’t available, then you’ll have to get by with a simple camp fire, a wood-burning stove, fireplace, or a camping stove for your cooking and heating needs. Whatever method of emergency heat you adopt, your whole family should learn how to operate it, gaining skills with it before an emergency rather than during it.

A very useful system in the form of two “burners” not unlike those found atop most kitchen ranges can be found in the form of camp stoves produced by Coleman and other companies. While the models that require special fuel are less than ideal for emergency use, those that use unleaded gasoline are a good bet since they use very little fuel and gasoline (at least in small amounts) is almost always available.

These stoves offer a high degree of regulation from a low flame to maximum size making it possible for people used to a gas range to quickly adopt their cooking habits. In fact you could even place one of these camp
stoves atop the range in the kitchen so everything would more or less be "in the same old place" during an emergency (just be sure the stove is vented properly — through a nearby window or some other method of bringing in fresh air and expelling the carbon monoxide the stove may produce).

Stoves that operate on wood or other "found" flammable materials have the advantage of offering heat almost anywhere on the face of the earth. The better designed of these types of portable stoves direct the heat upward to quickly heat up dishes placed on their grills. Twigs, wood chips, paper, grass, or even cow dung can all be employed for fuel with one of these stoves. The catch to these is that regulating the heat is tricky; they're more suitable to producing charcoaled "rustic" dishes than well-cooked, refined plates. However they are certainly a step beyond a campfire or trying to cook at a fireplace.

Another recent cooking stove that has hit the market is the "Volcano" outdoor cook stove. This unit is extremely well insulated, making it possible to cook on a wooden table without damaging the surface of the wood. About the only downside to this unit is that it is designed to work with charcoal only (though other materials can be used in a pinch with varying results). The small stove comes with a variety of accessories and costs $120. It's available from the Volcano Corporation (3450 West 8550 South, West Jordan, UT 84088; 801-566-5496).

If you go with a charcoal grill, camp stove, or other unit designed for outdoor use, be very certain that you are venting the unit properly (when in doubt, cook outdoors). In the past during electrical outages, people have asphyxiated themselves by attempting to use such units indoors. Don't add your name to this tragic list.

To Build a Fire

If you can do so, stock up on matches and Bic lighters. You can't have too many in most emergencies and they make excellent barter items in protracted disasters.

Sometimes you may not have your handy Bic or two (match) sticks to rub together. In such a case your ability to create a flame through other methods may be essential if you are to cook your food, light the darkness, and stay warm. With fire you can purify water, sterilize bandages, signal for rescue, or many other things that might be essential. The ability to build a fire can bring you from the crudest form of living to a more advanced and comfortable plateau. In really serious situations, the ability to start a fire can make the difference between living and dying.

Of course fire can cause problems, as well. If a garden plant out of place is a weed, then a fire at of place is a deadly disaster. Fire at night can draw looters or other unwanted visitors. It can burn down your home and injure those who fail to control it. Improperly vented, the fire will produce carbon monoxide that may poison and kill you. Remember that a tiny flame can quickly grow into a monster that can cause irreversible harm.

To build a fire, it helps to understand the basic principles of a fire. Most fuel does not burn directly; rather the gas produced when it is heated burns. And only when this gas can be combined with oxygen in the air. Normally this process is pretty much automatic: the material is heated to gaseous state by the ongoing fire and the air around the flame supplies the oxygen.

However there are times when one or more of these will be missing, and at that point making a fire is impossible. For example water on the fuel will keep its temperature below where it is needed to turn to gas and the oxygen can't reach any gas to produce a flame. Remember that heat, fuel, and oxygen are all needed for a fire, and that removing any one of these will extinguish a fire.

With these things in mind, the ideal place to build a fire is in a dry spot that is protected from the wind. This may sound painfully obvious to you, yet many people fail to locate a proper location before going to great
lengths to collect wood and attempt to start a fire. Be sure you first find a good location and then go about creating your fire.

You also need to keep your fire away from material that will burn. Inside that means your stove, fireplace, or whatever must not be too close to walls or floors. And it also means that those gaining warmth from a fireplace or campfire must take care not to get clothing, sleeping bags, or whatever too close to the flames. If you are in a wooded or brush-covered area, take care to clear the brush and scrape the surface soil from the spot you have selected.

A good rule of thumb is to leave at least 1 meter in diameter around any fire. Anything inside that circle must be fireproof. Greater distance is required if there is any wind. If wood is being used that “crackles”, throwing sparks about, then everyone should be alert to the possibility of a secondary fire being started from a spark.

The heat from a fire can be directed where you want it. Since the natural direction of heat is upward, placing pots or whatever needs to be heated above the flame is the most common way of heating things.

Flames also create radiant heat that can be reflected, somewhat like light, from one direction to another. The best way of directing heat using this method is to construct a fire wall using logs or rocks; this goes on the side you don’t want the heat to go and reflects it back across the fire.

Such a wall will also reduce flying sparks and drifting smoke by cutting down on the amount of wind blowing into the fire. (Never build a firewall with wet or porous rocks as they may explode when heated. Also remember that a wall made from wood may catch fire if placed too close to the flames.)

You can build a fire over a snow-covered or muddy surface by using green logs to make a dry base for your fire. This isn’t the most ideal of situations but can be done. It should also be noted that trees with wrist-sized trunks are easily broken in extreme cold; such wood isn’t good for burning but is ideal for collecting the green logs to build the fire on as well as for creating make-do shelters in a hurry.

**Fire Building 101**

Always light your fire from the upwind side so the heat will travel toward the fuel and the smoke away from your face. Try to minimize the amount of smoke your eyes are exposed to as eventually some people will develop an allergy to wood smoke if exposed to enough of it. Make sure to lay in a good supply of tinder, kindling, and fuel before you start building you fire so that you can keep it going as long as needed.

If you have a match, cigarette lighter, or other easy method of starting a fire, use it. Ideally matches would be kept in a waterproof container. Be sure to protect the striker area of the matchbox as well, because it becomes hard to impossible to strike a match in many environments if this isn’t available.

Convex lens can also be employed on bright, sunny days; among the instruments having such lens are binoculars, cameras, telescopic sights, or magnifying glasses as well as the glasses of those who are farsighted (but not the lens of those who are near sighted). Angle the lens so it is parallel to the sun and direct its rays in the smallest spot possible on the tinder. Hold the lens over the same spot until the tinder begins to smolder and then gently blow or fan the tinder into flame. Once the tinder bursts into flame, be sure to get the kindling on it right away.

A “Metal Match” or other system can be employed to generate sparks that will ignite tinder. To do this place a flat, dry leaf under your tinder with a portion exposed to where the sparks will be headed. Place the tip of
the metal match on the dry leaf, holding the metal match in one hand and a knife in the other. Scrape your knife against the metal match to produce sparks. The sparks will hit the tinder and cause it to smolder, at which point you blow it into a flame and then place kindling on it.

Vehicle batteries can be employed to generate a spark, though getting tinder to ignite is sometimes tough. One trick is to separate a filament from a wire cable and let a current run though it, heating the wire super hot while tinder is piled over it. You might also add a few drops of gasoline to the tinder — though great care needs to be exercised with such flammable materials.

I have heard of people using gunpowder to start a fire. But I suspect this won’t work with modern powders — it might have with black powder, but modern powders don’t burn well in the open. Furthermore, extracting the powder from a cartridge is not without its dangers.

Flint and steel when struck together produce sparks. However finding a piece of flint suitable for this is not always easy. The quality of steel is also important. Stainless steel is poor at producing sparks while carbon steel is the best.

Fire-plows work by rubbing a hardwood shaft back and forth in a base form of softer wood. A bow and drill uses a small bow to twirl a stick (the drill) on a softer base. I’ve used both techniques to start fires but only to be sure I knew how to do it. Neither is quick or easy. Those who try these methods generally make it a point never to have to use them during an emergency.

**Important Points**

To build a fire, you need to work from small, easily burnt material to larger pieces of wood that will supply a steady heat. The smallest material you need to create your first flame is known as tinder — any dry material that ignites with little heat. Tinder can be anything from toilet tissue or lint to moss or tiny wood shavings. It must be fine, very flammable, and absolutely dry.

Once the tinder starts burning, its heat is transferred to kindling to increase the fire’s temperature to the point that wood or other material can be ignited. Kindling is usually simply small twigs or bark, though wood shavings, parts of wood shingles, or other small, thin pieces of wood are ideal for this.

You can also help things along. One way of doing this is to add a combustible fuel to the kindling or on the wood. The most dangerous of these are gasoline or alcohol. Not recommended in most cases but something to consider if it is essential to start a fire quickly and you’ve taken adequate precautions to keep the fire from getting out of control.

Another method is to use wax, fat, or cooking oil to spur the fire along. One old trick for creating fires when camping is to place rolled up strips of cardboard in a can so the edge of the cardboard is toward the top of the can. Wax or paraffin is then poured over it and allowed to harden.

To start a fire, a match or hot ember is placed on the top of the cardboard which ignites and then burns like a candle as the wax moves into the flame. This rapidly sets the rest of the cardboard on fire which burns quickly as more and more wax wicks into it. Provided kindling and then wood is rapidly placed over the growing flames, a campfire is formed in short order. (This can may also be employed for cooking small meals or for heating MARES or the like without the need to build a campfire.)

Many hikers and campers also carry a sealed tube of tinder with them. This makes it possible to simply collect twigs and firewood from an area and build a fire without the need to collect tinder (which is generally hard to find).
You can improve the chances of a small fire by piling wood into a teepee shape with the tinder and kindling at the middle toward the base of the fire pit. As the teepee burns, the outside logs will fall inward, feeding the fire. More wood is simply piled on the outside of this burning pyramid as the inner wood is consumed. The only catch to this is that the wood on the outside tends to reflect the heat back into the fire so it isn’t as warm as some other types. However because the heat is retained in the fire, this type of fire burns well even with wet wood.

A lean-to fire is created by leaning the wood against a rock or green pole. The fire burns with much of the heat reflected out away from the rock or pole. Chances are that after you’ve built a few fires, you’ll discover your own style of doing things. The key is to find a system that works and produces the results you need. Then stick with it.

Never use green or wet wood if you can avoid it. Do use seasoned hardwood for fuel, if possible. The less pine or other wood with high levels of creosote in them, the better. Wet wood can be dried by placing it near a fire; wood found on the ground will generally be damp, even if the exterior appears to be dry.

If you’re hiking, collect kindling and tinder along the trail rather than waiting until the last minute. These are especially hard to find at nightfall, so have them in hand when you need them. If mosquitoes or flies are a problem, add some of the plants which are natural insect repellents to your kindling (these plants are listed elsewhere in this manual).
Chapter 11:

Surviving a Terrorist Attack

Ever since the September 11, 2001 terrorist attacks, we’ve witnessed a steady erosion of our liberties. At the same time, we’re as vulnerable as ever to a potentially catastrophic attack. The reason is that our government finds it easier to clamp down on our freedoms at home than to identify and address the real nature of the threat abroad.

The Bush Administration regards Islam as a peaceful religion. President Bush, in fact, has gone out of his way to praise Islam. On the first anniversary of September 11, the President declared that Islam “is a faith that has made brothers and sisters of every faith of every race. It’s a faith based on love, not hate.” That’s the “politically correct” view of Islam that the government wants us all to accept and celebrate.

Government officials are calling on Americans to be respectful of Muslims and are steadfastly refusing to engage in any kind of “profiling” that would focus security resources on Muslims and individuals of Middle Eastern descent. Most Muslims are no different from most Christians or most Jews or most Buddhists...so we’re told. It’s only a handful of “extremists” who have hijacked and perverted the teachings of the Koran (the Bible of Islam)...so we’re told.

Muslim countries tend to have very high birthrates. Saudi Arabia reportedly has the most rapid population growth in the world, with the average family having six children. The religion of Islam is spreading rapidly in virtually every part of the globe, including, ominously, in the United States, where it is the fastest-growing religion. Indeed, after three centuries of dormancy, Islam is expanding outward, across borders, in every direction, everywhere.

It’s crucial to understand that this trend will mean that future terrorist attacks are more likely to take place. Suicide bombings, biological attacks, and even nuclear attacks are possible right here on U.S. soil in the coming years.

What can you do to protect yourself from these threats posed by vicious Islamists? This chapter will explore a number of simple, effective steps you can take to survive a terrorist attack.

The True Nature of Islam

Islam is an all-encompassing philosophy. For believers, Islam is everything. It is culture. It is politics. It is life. They cannot fathom the idea of separation of church and state or freedom of religion. Freedom as such is dangerous, because it allows for individuality and dissent. Islam demands strict conformity and obedience. This is why Islamic countries tend to be dictatorships, and why Islam poses a threat to freedom wherever it spreads.

Despite the fact that Muslim countries (Afghanistan, Sudan, Somalia, Iraq, Iran, Saudi Arabia,
Pakistan, etc.) are almost universally primitive, backward, barbaric places, cultural relativists in the media and in the government have nothing but praise for Islam, a supposed religion of peace.

But the actual teachings of the Koran tell a different story. The Koran itself (and therefore Islam) advocates violence toward “infidels” (non-believers). Note these excerpts from the tell-it-like-it-is analysis of Paul M. Weyrich and William S. Lind in “Why Islam is a Threat to America and the West,” which quotes directly from the Muslim Koran:

- Sura 9:1-6: “…fight and slay the pagans wherever ye may find them, and seize them, beleaguer them, and lie in wait for them in every stratagem [of war].”
- Sura 5:36-38: “The punishment of those who wage war against God and His Apostle, and strive with might for mischief through the land is execution, or crucifixon, or the cutting off of hands and feet from opposite sides, or exile from the land.”

Consider these excerpts from the Hadith, the collection of sayings and acts of Mohammed, the central figure of Islam, stoking the fires of jihad (holy war) that likely motivated the September 11th terrorists:

- 4:50: “Mohammed said, ‘A single endeavor [of fighting] in Allah’s cause in the forenoon of the afternoon is better than the world and whatever is in it.’”
- 4:72: “Nobody who likes to enter paradise likes to go back to the world even if he got everything on earth, except a Mujahid [in the service of the jihad] who wishes to return to the world so that he can be martyred ten times because of the dignity he receives [from Allah].”
- 4:220: “I have been made victories with terror…know that paradise is under the shade of swords.”

Most Muslims aren’t active terrorists. That’s certainly true. But it’s only true because most Muslims don’t take a literal interpretation of the Koran.

The true nature of Islam is not peaceful coexistence with other religions. Its aims are to eradicate freedom through ultra-strict Islamic law — and to terrorize those who reject its dogmas through jihad. It doesn’t matter that most Muslims seem to reject a literalist interpretation of Islamic doctrines. All it takes is a minority of fundamentalists to do what they regard as Allah’s work.

Writes Paul Weyrich of the Free Congress Foundation:

The news media and the political establishment that predominates in Washington are simply very resistant to acknowledging the truth about Islam. The fact is that while there are many Muslims who may lead peaceful lives — for now -- a literal reading of the Qur’an and other key Islamic texts leaves no doubt that violence is to be inflicted upon those who do not believe.

The Latest Word on the Terrorist Threat

Experts on global terrorism predict that another attack on America will happen in the not too distant future. Former Senator Warren Rudman, who co-authored a report warning of an impending terrorist attack on America months before September 11, 2001, predicted on NBC’s Meet the Press (June 29, 2003) that

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there will be another major terrorist strike within five years.

Al Qaeda is still operational and is still a threat. The terror network is attempting to capitalize on rising anti-American sentiment that erupted in the “Arab street” in response to the American invasion of Iraq. (In Pakistan, for example, thousands of war protestors gathered in city streets chanting “Death to America!” and burning American flags and effigies of President Bush.)

For some Islamic zealots, the attacks of September 11 didn’t go far enough. In May 2003, Saudi cleric Nasir bin Hamad al-Fahd issued a declaration encouraging terrorists to unleash mass death and destruction in the United States. The Muslim leader stated that it would be a good thing if someone dropped a bomb killing 10 million Americans and bringing horrific destruction to their lands.\(^\text{10}\)

Nation of Islam czar Louis Farrakhan issued this threatening statement in anticipation of the war on Iraq: “The United Kingdom and the United States must receive a divine warning, just as the Holy Qur’an says a Warner was sent to every nation.... You don’t warn people unless something terrible is coming down and you want to warn people to repent and avoid the consequences of wrongdoing.”\(^\text{11}\)

Terrorists may seek to avenge the American liberation of Iraq and/or launch attacks in the hope of forcing American troops out of Iraq. Islamic fanatics would like ultimately to transform the newly liberated country into an Islamist totalitarian regime like Afghanistan under Taliban rule.

Regardless of their particular motivation at any given time, terrorists will continue to plot attacks against Americans. According to Secretary of Defense Donald Rumsfeld, future acts of terrorism on U.S. soil are inevitable. “We do face additional terrorist threats,” Rumsfeld warned a Senate committee in May 2002. “The question is not if, but when, and where and how.”\(^\text{12}\)

Here we have one of the most important figures in the War on Terrorism essentially admitting that our government cannot prevent future terrorist strikes against us. That means that if you want prevent yourself from being a victim of terrorism, you can’t depend on the government to be of much help. You have to take matters into your own hands.

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**Surviving a Nuclear Attack**

At the dawn of the atomic age, Robert Oppenheimer tried to warn civilization of the threats of nuclear technology. He feared that one day nuclear weapons would become so easy to produce that non-military groups would acquire them as use them to terrorize populations and even destroy entire cities. A recently unclassified CIA report confirms that non-state actors are coming closer and closer to being able to produce, deliver, and detonate nuclear bombs completely outside the purview of any government. It is quite conceivable that terrorist cells operating in terror-friendly Middle Eastern countries will be able to acquire nuclear materials in the near future.

Dangerous regimes can be contained. But when it comes to terrorists who seek not any negotiable political objective, but only death and destruction, deterrence is nearly impossible.


Unfortunately, nuclear-armed Russia, which is no longer considered an immediate threat to the United States, is nevertheless a potential source for terrorists to acquire weapons of mass destruction. Russia has cozied up to terrorist-backed regimes such as Iran, providing that country (and, it would seem, the terrorists it harbors) with economic resources. The day may come (if it hasn’t already) when Russia agrees to trade portions of its 22,000 nuclear warheads with governments that, in turn, would be more than happy to let some of those weapons slip into the hands of terrorists.

Perhaps an even more ominous concern is Pakistan, which controls an estimated 35-60 nuclear warheads. While Pakistan is officially regarded as an ally in the War on Terrorism, Islamic primitivism and fervent anti-Americanism have swept through much of the country. The dictatorship of Pervez Musharraf is believed to be fragile. Musharraf could be toppled at any time by its nuclear rival India, by radicals within his own government, by a group of Muslim militants, or by a popular uprising. There’s no telling what the new government would do with the country’s nuclear weapons or how secure the arsenal would be during a coup.

Terrorist sympathizers within the present Pakistani government (yes, there are many) may even conspire to enable terrorists to obtain nuclear weapons. Consider: Pakistan’s Army Chief of Staff Mohammad Aziz Khan recently denounced President Pervez Musharraf for cooperating with the U.S. on terrorism. Khan, who has many loyal supporters inside the Pakistani military, made plain his sympathy with Osama bin Laden’s twisted cause, telling stunned reporters: “America is the number one enemy of the Muslim world.” (Pakistan’s military backed the terrorist-dominated Taliban regime in neighboring Afghanistan before it was ousted from power by U.S. forces following September 11, 2001).

Even assuming that terrorists are unable to obtain military-grade nuclear weapons in the near future, a crude nuclear attack could still be carried out with a homemade “dirty bomb.” A so-called dirty bomb would involve using conventional explosives (TNT) to spread radioactive material. Such a device could wipe out entire city blocks and force the evacuation of millions.

Radioactive material could be stolen from hospitals, power plants, research centers, and many other places. Since 1992 there have reportedly been more than 175 cases of terrorists and criminals smuggling or attempting to procure radioactive material. But terrorists don’t necessarily need to even get their hands on nuclear material to create a nuclear catastrophe. They might cause radioactive material to be released from a nuclear power facility — perhaps via a truck bomb, perhaps via a plane crash, perhaps via some other means.

The nuclear threat is real. It won’t end as suddenly as the collapse of the Soviet Union, or the fall of the Taliban, or the overthrow of Saddam Hussein. We must be prepared to deal with the threat of nuclear terrorism now and into the future.

Are You Radioactive?

To ensure that you are able to respond appropriately to a nuclear emergency, one of the most essential pieces of equipment to have is a radiation meter. With it, you can detect areas where radioactive material may have accumulated in the aftermath of a nuclear disaster. Even if a news report claims that there is no danger in your area, you’ll want to test for yourself. Radioactive material may have been picked up in a gust of wind and been deposited on your land — even though surrounding lands may have tested “clean.”

Be sure to get a high-range meter (300 R/hr) that can pick up the kind of radiation that would be emitted by a nuclear bomb. You’ll want a meter that runs on standard batteries (you should, of course, always have fresh batteries available for flashlights, radiation meters, etc. in the event of an emergency).

A dosimeter is another useful item to have. Instead of measuring the level of radiation at any given time and location, this device measures the total amount of radiation it has been exposed to since being “set.” A dosimeter can be important in gauging whether you’ve been hit with dangerous amounts of radiation.

Dosimeters are generally about the size of a small ink pen. They should be worn around the waist or around the neck for best results. When shopping for dosimeters, look for one that reads up to 600 Roentgens (REMs). A dosimeter can be reset numerous times to begin measuring from zero, but you don’t want one that can be reset too easily (i.e., accidentally).

Here are some merchants that specialize in radiation meters and dosimeters:

- Dosimeter Corporation of America, 5 Eastmans Road, Parsippany, NJ 07054, 1-800-322-8258, http://www.dosimeter.com
- NDS Products, 111 Anderson St, Pasadena, TX 77506, info@ndsproducts.com, http://www.ndsproducts.com

Potassium Iodide

One of the most toxic compounds that is released through nuclear explosions or nuclear power plant leaks is radioactive iodine, which is absorbed by the thyroid gland. When large amounts of radiation accumulate in the thyroid, cancer is likely to develop.

Taking potassium iodide (or potassium iodate, which is a nearly identical compound) in the event of fallout will saturate the thyroid gland with stable iodine, thereby preventing dangerous radioactive iodine from being absorbed.

The American Thyroid Association recommends that individuals living within 50 miles of a nuclear facility have immediate access to potassium iodide.\(^\text{14}\) Individuals living in or regularly traveling to Washington, D.C., New York City, Los Angeles, or other key American cities or landmarks should also consider retaining their own supplies of potassium iodide. Even if you live in a remote location, it’s not a bad idea to keep potassium iodide tablets on hand so you can be sure you are protected no matter where you are traveling or what unforeseen circumstances present themselves.

In the event being exposed to or at risk of being exposed to nuclear radiation, take 85 to 130 mg of potassium iodide as soon as possible. Repeat this dosage daily for 10 to 14 days. Infants should be given approximately half the regular dosage.

Potassium iodide should not be taken regularly as a “preventative” measure. Doing so could cause serious health problems. It should be saved for emergency situations only.

Potassium iodide/iodate probably won’t be found at your local drug store. But it is available from specialty suppliers. Among them are:

- Picou Builders Supply, 235 N. Airline Hwy, Gonzales LA 70737,
Shelter from Nuclear Fallout

If you’re really serious about being prepared for the worst-case scenario, then you might want to consider erecting a fallout shelter on your property.

A fallout shelter can double as a storm shelter; but regular storm shelters won’t necessarily protect you from nuclear debris. A great deal of planning must go into the construction of a nuclear fallout shelter. Such a shelter must be constructed of thick steel or concrete and (ideally) be buried in the ground. It must be able to accommodate an entire household for several days in the event of a nuclear emergency.

Obviously, air circulation is a concern. To prevent radioactive material from entering the shelter, it must be sealed tightly. But to prevent the shelter’s inhabitants from suffocating or succumbing to heat stroke (warm bodies crowded into a small area can quickly cause temperatures to rise), air must be able to flow into the shelter.

The solution is an intake vent with a cover over it to prevent dust from falling directly into the shelter. An air pump with a filter will probably be necessary to produce adequate airflow and minimize the risk of breathing in radioactive dust from outside.

Unless you are a Bob Vila, you’re probably better off purchasing a fallout shelter from a company that specializes in such things rather than attempting to do it yourself. In addition to fallout shelters, some specialty manufacturers offer nuclear blast shelters, which are designed to be strong enough to protect against the impact of a nuclear explosion. If you live close to a major city or military base, you might want the extra protection offered by a blast shelter. Whatever your particular needs, there are a few companies out there that can help meet them. Among them are:

- Radius Engineering, 222 Blakes Hill Road, Northwood, NH 03261, (603)942-5040, http://www.radiusdefense.com
- Kleen Air Technologies, P.O. Box 4145, Frisco, CO 80443, (970)668-0219, http://www.undergroundshelter.com
- F-5 Storm and Fallout Shelters, 348 Delmus McMurray Road, Baskin, LA 71219, (318)248-2994, http://www.f-5stormshelters.com
- B. C. Barton & Son, P.O. Box 67, Granville Iron Works, Hainge Road, Tividale, OLDBURY, B69 2NJ, United Kingdom, 044 (0)121 557 2272, http://www.bartonshelters.com

Whatever It Takes

Considering that having your own fallout shelter may be impractical for you for a variety of possible
reasons, you can at least develop some sort of plan in your own mind for how you’d protect yourself and your loved ones in the event of a nuclear emergency. Perhaps you have a basement that could easily be converted into an emergency shelter. Perhaps you have a friend or neighbor who could provide refuge. Perhaps you could hunker down in the basement of a nearby church or in a large building.

The important thing is to do whatever it takes to minimize your exposure to radioactive dust. And it doesn’t necessarily take much to significantly enhance your preparedness. For example, a relatively inexpensive investment in a set of gas masks that offer protection for your family’s eyes and lungs in the event of a nuclear, chemical, or biological catastrophe might be the most crucial investment you could ever make.

Ultimately, your level of preparedness must depend on your financial situation, your assessment of the risk level you face considering your location (if you live in Washington, D.C., your preparation will be different than if your home is in Williston, North Dakota), and other relevant factors.

**Biological Terrorism**

Among the most likely ways that terrorists will strike in the future is with biological weapons. While no terrorist group is known to yet possess nuclear weapons due to the difficulty in obtaining them, it would be comparatively easy for any terrorist to obtain deadly biological agents.

Molecular biologists comprise a small, elite subset of the U.S. scientific community. What’s striking is that these scientists are nearly uniform in their belief that Western countries are extremely likely to experience a major bio-terror attack in the coming years.

It’s not something that our government likes to talk about, because the potential of a modern day plague to reap untold domestic chaos and economic turmoil.

*Washington Post* columnist Anne Applebaum notes that there are already 20,000 labs in the world where a single person could synthesize any existing virus. In that same 20,000 labs, five people with $2 million can create an enhanced pathogen—meaning a virus that will be able to infect even those people who have been immunized with conventional vaccines, and kill perhaps a billion of them.

To illustrate the danger, that same five people could spend an additional $3 million to build a lab from scratch, using commercially available equipment purchased off the Internet.

A biological attack could come from a lab in any country, but the origin of the assault would be nearly impossible to determine. In short, the technology is becoming available for hidden attackers to kill millions of Americans with complete impunity, free from the threat of retaliation.

On June 22-23, 2001, the Johns Hopkins Center for Civilian Biodefense Studies, in conjunction with the Center for Strategic and International Studies, conducted an exercise at Andrews Airforce Base. The results of the exercise, code-named “Dark Winter,” foreshadowed a catastrophe, including: vaccine shortages, panicked flight spreading the pathogen, overwhelmed medical facilities and draconian emergency “containment” measures by the authorities.

A close analysis of the Dark Winter exercise reveals that federal contingency planners and academics are sketching draconian emergency plans that will literally decide who will die, and who will get access to the government’s limited stocks of vaccine. These elites will emerge as protectors of the public health in a bio-terror emergency — a situation in which the bulk of the general public will be “contained” in areas designated as contaminated, and left to fend for themselves.
There are ways in which you can protect yourself from bioterrorism in spite of the government. First, though, let’s take a closer look at the specific threats. Any number of disease-causing viruses and germs could potentially be used to inflict a large number of casualties. Among most likely candidates for germ warfare are smallpox, botulism, plague, and anthrax.

**Smallpox**

Over the course of human history, few diseases have been more feared or more deadly than smallpox. The virus has infected and killed hundreds of millions of people, far more than the Black Death that claimed one-third of Europe’s population during the Middle Ages.\(^\text{15}\)

Smallpox’s incubation period (the time between first acquiring the infection and the first appearance of its symptoms) is approximately 12 days. Theoretically, if the virus were unleashed, thousands of people could become infected and, in turn, infect thousands more people before anyone knew the virus was being spread.

The first symptoms that begin to appear include fever, headache, fatigue, and vomiting. Soon thereafter, a rash of red lesions will become visible on the face and arms. Within two weeks, the pus-filled lesions will begin to crust, and scabs will appear. There is no effective treatment for smallpox, although if the vaccine is given immediately after exposure, it can in some cases prevent illness. Smallpox is deadly in nearly one out of every three cases.\(^\text{16}\)

In 1979, smallpox was declared by the World Health Organization to be eradicated. But not necessarily for good. The fact is that most of the world is susceptible to smallpox, should it be unleashed again. Even adults who received smallpox vaccines during childhood would be at risk because the vaccine loses its effectiveness over time. Researchers estimate that fewer than one in five people in Western countries have immunity to smallpox.\(^\text{17}\)

There are rogue states that possess smallpox and could wage biological warfare with the virus or pass it along to terrorists. North Korea and Iraq are believed to possess smallpox as part of their biological weapons programs. Other countries that are suspected of having retained at least some specimens of the smallpox virus include China, Cuba, India, Iran, Israel, Pakistan, Russia, and Yugoslavia.\(^\text{18}\)

**Botulism**

Botulism is a muscle-paralyzing disease caused by a toxin made by *Clostridium botulinum* — a bacterium commonly found in the soil. The bacteria form spores which allow them to survive in a dormant state until they are exposed to conditions that can support their growth.

Botulism can be acquired through flesh wounds, but outbreaks have typically been spread through

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\(^\text{18}\) Tucker, 211.
contaminated food. Cooking temperatures over 180 degrees are usually recommended for meats in order to destroy bacteria. Botulism can be acquired through fruits and vegetables as well. In fact, the largest outbreak in the U.S. in the past century occurred in 1977 when 59 people became ill from poorly preserved jalapeno peppers.

According to the Working Group on Civilian Biodefense,

The botulinum toxin is the single most poisonous substance known...[and] poses a major bio weapons threat because of its extreme potency and lethality; its ease of production, transport and misuse; and the potential needs for prolonged intensive care in affected persons...a single gram of [botulinum] toxin, evenly dispersed and inhaled, would kill more than one million people, although technical factors would make such dissemination difficult.19

Terrorist states such as Iran, Iraq, North Korea, and Syria are believed to be interested in using botulinum toxin as a component of their biological weapons programs. After the Persian Gulf War, Iraq admitted to the United Nations' inspection team that it had produced 19,000 liters of concentrate botulinum toxin, of which approximately 10,000 liters had been loaded into military weapons.20, 21

Pneumonic Plague

Plague, the notorious "Black Death," has a long history of inflicting massive casualties and fomenting social panic and chaos. The first great plague pandemic erupted in Egypt in AD 541 and wreaked havoc in parts of Africa, Asia, and Europe over the next four years. In 1346, the Black Death claimed more than 13 million Chinese and as many as 30 million Europeans.22

Plague results from an infection of the Y. pestis bacterium. Plague can take the form primarily of either bubonic (spread through rats and fleas) or pneumonic (transmitted directly from person-to-person through coughing and sneezing).

Used in an aerosolized form, pneumonic plague poses a serious biological threat. According the CDC, "If used as weapons, [pneumonic plague spores] could cause disease and death in sufficient numbers to cripple a city or region. These agents also comprise the top of the list of 'Critical Biological Agents.'"23

Scientists regard pneumonic plague as a serious threat for several reasons.

- The germ is readily available throughout the world.

Anthrax

Anthrax is an acute infectious disease caused by the spore-forming bacterium *bacillus anthracis* — derived from the Greek word for coal, *antrakis*, because the disease causes black, coal-like skin lesions.

Three antibiotic drugs that can be used to treat an anthrax infection — Ciprofloxacin (Cipro), penicillin, and doxycycline — may not be effective unless they are taken before or very shortly after exposure to the bacteria. The difficulty in fighting anthrax, coupled with its deadly potential and the ease with which it can be obtained, make the bacteria attractive to terror-minded followers of Osama bin Laden.

According to Congressional hearings that took place just six days before September 11, 2001,

The Office of Technology Assessment estimated that 100 kilograms of anthrax released upwind of a large American city — the model being Washington, D.C. — could cause between 130,000 and 3,000,000 deaths, depending on the weather and other variables. This degree of carnage is in the same range as that forecast for a hydrogen bomb.

Although there is legitimate concern as well about the possible use of chemical weapons, they are far less effective pound per pound and extremely difficult to deploy over large areas. Ten grams of anthrax can produce as many casualties as a ton of a chemical nerve agent ... 24

Anthrax infections in humans usually occur in one of the following forms: inhalational, cutaneous, or intestinal. Symptoms of the disease vary depending on how a person contracts the disease, but they typically occur within several hours after the initial exposure. The symptoms can be deadly within a week.

When a few letters laced with anthrax spores were sent through the mail in late 2001, the amount of damage the bacteria can cause became apparent to all Americans. Hundreds of people were put on antibiotics. Buildings were shut down for months. People across the country became paranoid at the sight of any “powdery substance.” And all this was the result of just a few contaminated letters.

In Case of an Anthrax Outbreak

One of the most important things you can do to improve your chances of surviving a germ-warfare attack is to strengthen your immune system. Though not widely known, a natural protein compound called

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24 Testimony of Donald A. Henderson, MD, MPH, Director the Center for Civilian Biodefense Studies at Johns Hopkins University, before the U.S. Senate Foreign Relations Committee, September 5, 2001.
dimethylglycine (DMG) can help you survive an anthrax attack. DMG has been shown to stimulate the immune system. Specifically, DMG increases antibody production.

DMG has a wide variety of uses. Athletes, for instance, use it for energy, endurance, and muscle development. Because athletes tend to suffer from weakened immunity after strenuous exercise, they gain the additional benefit of DMG’s immune-enhancing properties.

Recent research has found that DMG has an especially powerful impact against anthrax. In the event of an anthrax attack, DMG could very well save your life. Even if it doesn’t prevent or cure an anthrax infection, it could at least keep you alive long enough to obtain antibiotics.

It makes sense to keep some DMG in your medicine cabinet as insurance, especially if you reside within a major metropolitan area that may be targeted by terrorists.

**Colloidal Silver to the Rescue**

Something else that can help protect you in the event of a bio-terrorist attack is a remarkable substance called colloidal silver. Neither the U.S. government nor the nation’s largest pharmaceutical companies want you to use colloidal silver, because it is effective enough to threaten America’s highly regulated, highly centralized medical drug cartel.

It is true that if certain bureaucrats at the Food and Drug Administration had their way, colloidal silver would no longer be available. But it’s also true that colloidal silver’s anti-bacterial, anti-viral, disease-fighting properties have been scientifically proven.

In scientific circles, the term “colloid” refers to a substance that consists of ultra-fine particles suspended in a medium of different matter. Colloidal silver is simply a solution of tiny particles of silver suspended in water. The particles are typically 0.01 to 0.001 microns in diameter (about four-hundred thousandths to four millionths of an inch). Approximately one billion of these particles can fit into a cube 0.04 inches in size.

Medically, colloids have several advantages. Vitamin companies have discovered that minerals in a colloidal solution are absorbed far more completely than the same minerals in pill form. Likewise, properly prepared colloidal silver is far superior to other forms of ingestible silver.

Colloidal silver can be effective in killing germs and curing diseases when used in the right strength. It can be made at home using a very simple procedure. Despite the tremendous practical advantages of colloidal silver, the government doesn’t want you to have it.

Fortunately, though, the FDA has so far been unable to ban colloidal silver. Because colloidal silver was marketed before 1938, it was “grandfathered in” along with other drugs created before the FDA Act. Still, many merchants are afraid to sell it, and most big drug companies are afraid to produce it.

The government and the drug companies would like you to believe that colloidal silver is dangerous. But it’s far less dangerous than a lot of the prescription drugs that have the FDA’s seal of approval.

The only probable side effect of colloidal silver is a loss of “friendly” bacteria. Colloidal silver, like antibiotics, kills some of the digestive flora in the intestinal tract. But silver is far less disruptive of digestive bacteria than most antibiotics. The plentiful bacteria in the digestive tract seem to be able to withstand silver

to a larger extent than foreign bacteria. Any loss of helpful bacteria that colloidal silver may cause can be made up for by eating yogurt or taking probiotic supplements.

Unlike antibiotics, colloidal silver does not promote the development of more virulent strains of germs; nor does it weaken the immune system. Moreover, there are no known drug-interaction hazards associated with colloidal silver. And, unlike the continued use of antibiotics, regular use of colloidal silver does not harm the liver, kidneys, or other organs.

If you have doubts about the medical value of silver, consider that even today it is still a common practice for hospitals to use a silver nitrate solution as a topical eye drop to prevent eye infections in newborns.

Colloidal silver has antiviral, antifungal, and antibacterial properties, so it can treat virtually any type of infection. In fact, no microorganism put through laboratory testing has been able to stay alive longer than six minutes after being exposed to colloidal silver. Colloidal silver can be taken internally, dropped into the ears, eyes, or nose, or applied topically to cuts and wounds.

Citizens who have colloidal silver readily available may be better equipped to defend themselves against a bioterrorist attack. A major outbreak would cripple medical facilities, making antibiotics or any form of treatment difficult to obtain. Colloidal silver could provide your immune system with the assistance it needs to fight an infection of anthrax, pneumonic plague, botulism, or other condition. At the very least, it could “buy time” until you’re able to obtain professional treatment.

The FDA suggests that colloidal silver would be useless in the event of a biological attack. But former CIA microbiologist Larry C. Harris — a man who knows a thing or two about biological warfare — has affirmed that colloidal silver is effective against a myriad of biological agents, including anthrax.

**How to Use and Obtain Colloidal Silver**

Colloidal silver can be prepared in concentrations ranging from 3 to 20 parts per million (ppm). Anything less than 3 ppm may be too weak to have much of an effect. Anything stronger than 20 ppm may be toxic. Among those who have studied colloidal silver extensively, most agree that somewhere around a tablespoon to an ounce per day of 5-10 ppm colloidal silver can be used as a safe and effective method of preventing infectious illness and boosting overall immunity. If an infection does take hold, it may be advantageous to take several ounces of colloidal silver daily until the infection is gone.

If prepared and taken properly, colloidal silver can give you what your doctor won’t: a safe, inexpensive, and highly effective weapon against disease.

You might be able to find a few medicinal silver products at specialty stores. Some manufacturers claim that their products contain colloidal silver. But you should be skeptical about any manufactured “colloidal silver” product. Chances are it isn’t the real thing. Many people confuse colloidal silver with

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28 You should always seek professional medical treatment for a serious infection. Neither the author nor the publisher of this manual can provide medical advice. The information contained in this manual is for informational purposes only and should be approached with due caution.
inferior silver salt compounds. Even if the colloidal silver product is genuine, it has undoubtedly lost much of its potency through the manufacturing process and the time spent sitting on the shelf.

Colloidal silver should always be produced by the electro-colloidal/non-chemical method. During this process, the silver particles and water have been completely “colloided.” In other words, they are evenly dispersed and held in suspension by an electrical current sent through the combination.

The surest, most cost-effective way to obtain fresh, high-quality colloidal silver is to make it yourself. Don’t worry; it’s not a complicated process at all and doesn’t require expensive equipment. In fact, you can obtain your own colloidal silver home generator for under $200 from a reputable distributor.

American Lantern Press is pleased to offer readers of this manual a complete colloidal silver home generator kit for the rock-bottom price of $149! It comes with everything you need to get started, including two 99.9% pure silver rods (a $20 value) — enough to make gallons of colloidal silver.

The generator itself is powered by a standard 9-volt battery, which means it can be used in emergencies, power outages, and camping trips. Since colloidal silver can purify water for drinking, this is a tremendous advantage.

Included with your generator is an information-packed manual, written by a medical expert, which covers the nuts and bolts of colloidal silver and gives a complete overview of its numerous medical applications. The manual provides essential tips on how to prepare, store, and use your colloidal silver solution to get the most out of it. You won’t find this important information in any bookstore!

You can get your very own colloidal silver generator and companion manual for just $149. It’s risk free. If you are not 100% satisfied with the generator, return it within 30 days for a full refund. To place your order, please call 1-800-800-1865.

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**Protective Clothing**

Gas masks and protective suits, hoods, and boots can help protect your from exposure to biological, chemical, and nuclear material.

Having gas masks in your home is highly recommended, no matter where you live. They’re easy to obtain, easy to store, and are inexpensive considering the level of protection they offer. A gas mask can protect you from air contaminated with chemical, biological, or nuclear material, and give you enough time to get to a safe location.

In the event of a terrorist attack, you’ll ideally want to be able to protect your entire body. Exposed skin can be burned in the case of a chemical attack, infected in the case of a biological attack, or become radioactive in the case of a nuclear attack. A personal protective suit of professional quality can completely insulate you from the outside world. Some of the best suits are made of tyvek material produced by Dupont. 3M also makes outstanding suits, masks, respirators, etc.

The following is a partial list of retailers that sell gas masks and protective suits:


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30 As of this writing. Prices are subject to change. Call 1-800-800-1865 to verify the current price or place an order for your own colloidal silver home generator.
• Brenton Safety, 242 Shaw Road, S. San Francisco, CA 94080, 1-800-733-4333, http://www.brentonsafety.com
• A1 Safety, 372 Centre Street, Middleboro, MA 02346, (847)351-3080
Chapter 12: Natural Disasters

While you should be concerned about run-away governments, economic collapses, and terrorism, a natural disaster could be just as bad, if not worse. These occurrences can range from minor inconveniences to horrific disasters, depending on where you are and how severe the conditions are. Like most of the other eventualities in this book, you are always best advised to prepare for the worst and hope for the best. Worst-case scenario would be a giant asteroid colliding with Earth and rendering most of the planet uninhabitable. There’s not much we can do about that. So let’s examine some types of natural disasters that are more likely to affect you and ways in which you can protect your family from them.

Earthquakes

Earthquakes are powered by underground volcanic forces as well as the breaking and shifting of rock beneath the surface of the earth. These movements cause sudden ground motion that results in the shake, rattle, and roll of an earthquake. Although this movement can cause fissures and other dangers, most injuries that result from earthquakes are caused by falling objects and broken glass. More rarely people fall from windows or down stairways. But actual ground movement doesn’t present much danger in itself.

Because of the movement of the ground, major earthquakes can destroy utility lines. Consequently power and telephone lines are often down and gas, sewer, and water mains broken. Communications will be lost and the ability of police units to travel and fire fighters to respond will come to a halt. Runaway fires and crime can follow in the wake of an earthquake. Secondary dangers may present themselves in the form of landslides, ruptured dams, and collapsing structures, sometimes brought down by the “after shocks” (secondary earthquakes) that often accompany an earthquake. If an earthquake occurs near or under water, it may also generate seismic waves called tsunami or (mistakenly) tidal waves.

Much of the US is prone to earthquakes with thousands of small quakes occurring every year. Most of these are too small to be felt, though they can be recorded with equipment designed for this purpose. Although earthquakes occur most frequently in states west of the Rocky Mountains, most notably in California and Alaska during this century, the most violent known quakes have actually occurred in the central US. Fortunately this area was not settled during the previous quakes.

The bad news is that most people are unaware of the dangers in the area around the Mississippi; building codes aren’t designed to make many structures earthquake proof. For this reason the next “big one” may cause extensive damage and injury if it happens East of the Rockies instead of in California where everyone expects it.

Among the most earthquake-prone areas of the US are California, Charleston (SC), and the central US in
the area of the New Madrid Seismic Zone. Interestingly New York is in an earthquake fault area and some experts predict a significant earthquake in this area within the next 50 years.

**Quake Defenses**

There are a few tricks you can use to minimize damage to your home or business. Your first step, however, is to secure earthquake insurance coverage. After that, check that your home has the base frame sections securely bolted to the foundation; this keeps the structure from wiggling off its foundation during an earthquake (and also will secure it against problems in high winds, a consideration if you’re in an area with hurricane and/or tornado potential).

If the structure has a stone or brick facade, this should be anchored to the frame as well to prevent it from collapsing on someone during an earthquake. If you own a brick or stone house that has no iron reinforcement bars, consider selling it as damage during a quake is likely to be extensive.

To minimize damage and risk to those in your home, move heavier objects and books to lower positions on shelves; secure appliances like refrigerators and hot water heaters to walls; secure cabinets and shelving to walls; and anchor tall furniture like china cabinets or curio cabinets to walls; and try to secure computers and other equipment so they can’t be shaken to the floor. Cabinets with expensive crystal or china can be secured with “child proof locks” so the doors can’t easily flop open, spilling the contents to the floor.

In your garage be sure any hazardous chemicals are secure and heavy tools and equipment anchored so it can’t fall. Identify shutoff valves for your gas, water, and electricity and be sure all family members know how to turn them off. Use a non-sparking wrench (aluminum or plastic) on gas turnoff valves to avoid a fire hazard. Also avoid attempting to turn your gas back on yourself as this can be dangerous under some conditions.

If possible use flexible piping to appliances as well as the toilet stool and sinks. These will flex rather than rupture, thereby helping to avoid water damage from leaks.

If you have a business, consider installing seismic switches on equipment that might become dangerous during an earthquake; this will cause it to shut down automatically should there be an earthquake. You may also wish to purchase emergency power equipment to bring your operation back online, especially since this may reduce the chances of being looted.

Businesses should also inventory supplies with an eye toward continuing operation even if supplies are interrupted. Ideally you would also create vendor mutual aid agreements for post-earthquake operations where practical. Make duplicate records of customer lists and other data and store them off site if possible.

Be sure your business building meets codes and consider hiring a structural engineer to see if additional steel bracing, framing or other reinforcement might be in order to minimize damages. If you have a large operation, train an emergency team that will be available during any given shift. Finally, be sure employees are aware of what their response should be to an earthquake; have primary and secondary escape routes from the building and an assembly area where a “nose count” can establish that everyone is out of the building.

Large businesses (as well as households) should stock response kits including water, food, first-aid kits, flashlights, work gloves, and sanitation supplies. If possible have a battery powered radio so local news and announcements can be monitored. Finally think about how you will handle missing persons searches should they be necessary.
Dealing with the Aftermath of a Terrible Tremble

Following an earthquake, you should be sure everyone under you care is safe and outside of any structure that might be or become dangerous during an aftershock. Be sure power, gas, and water lines are shut off to prevent further damage.

Later be sure to secure your belongings from looters and so a rainstorm or other condition won’t cause further damage. Immediately establish temporary dump sites for debris as you clean up an area so secondary injuries won’t occur from nails, glass shards, or similar objects. Be wary of special dangers presented by hazardous materials like cleaning chemicals or gasoline. Also be aware that a fire, if permitted to get out of control, could spread unchecked due to the lack of water for fire-fighting and the inability of equipment to travel through rubble-filled streets.

If you’re in an area that could have an earthquake, now is the time to start working toward minimizing your losses. Unfortunately, there are no reliable early warning systems for quakes. They strike any time, taking all by surprise.

Flooding

When you are considering buying a home or business, you should go to a library and check a geological map of the area to see where the flood plains are. Then avoid moving into those areas. Also notice the lay of the land when you’re looking for a new property; if it is smack dab in the middle of a valley or other low area, chances are good run-off flooding will occur during a heavy rainfall. Such damage can be severe, even though the water is only flowing for a few minutes. Other dangers to watch for are buildings built on hillsides where mudslides occur, areas under dams, and regions through which creeks or snow-fed streams flow.

Flooding are normally created by heavy rainfalls, thunderstorms, or snow thaws that lead to more water than the ground can quickly soak up. The overflow occurs over a span of several days as the water collects and spreads into lower areas. Sometimes rainfall is so intense that this buildup doesn’t occur, however. In such a case a flash flood develops, often raising levels of streams and other areas to dangerous levels in just minutes.

Weather bureaus will often give you advance notice of the danger of flooding. A flood watch indicates a flood is possible within the designated area of the watch; a flood warning means the flood is in the process of occurring in the designated area or that it will strike in a short time. You should be aware of these conditions and take action.

Your best protection next to picking an area that is less flood-prone is to purchase flood insurance. You may also take measures to flood proof a structure by building reinforcing walls around it as well as inside the basement. Adding watertight doors in lower rooms coupled with “sump pumps” can reduce the damage flooding may cause. Expedient measures such as sandbagging can be effective, but are prone to failure and shouldn’t be employed other than as a last ditch measure.

Private and business records, expensive goods, and hard-to-replace materials like photographs and heirlooms should be moved to higher locations or removed from the building entirely if time permits. Businesses should also consider storing records off site for more rapid recovery following a flood.

Be sure to monitor television and radio broadcasts during possible flooding. You may also wish to invest in a “weather alert” radio that automatically turns itself on to issue a report from the US Weather Bureau when it has serious conditions to report.
Following a flood, be careful of dangers like disease, snakes, and insects that may have been displaced by the water. Also be sure equipment and lights are totally dry before powering them up to prevent damage and danger.

**Hurricanes**

Hurricanes are powerful, circular storms created when air over the ocean absorbs moisture and rapidly rises in temperature. Soon wind speeds in excess of 74 miles per hour may develop. This system generates fierce rains and strong winds that rotate around its "eye", the center of the storm. Because hurricanes are powered by moisture and heat, they can rapidly lose strength with landfall. However because of the size of the system, it can cause flooding and massive destruction before this occurs. During that time tornadoes may be spawned by the wind and flooding and other wind damage may result.

Hurricanes are a fact of life for those living along the East Coast, with the greatest activity occurring in the southeastern US as well as the Caribbean. Damage can be done from Texas northward into Canada. The identical type of storm also occurs in the western Pacific Ocean, including Hawaii, where the storms are called typhoons (except for name, the two are identical in cause and effect). The hurricane season generally occurs from June through November with peak activity falling in August and September, though this may vary somewhat according to ocean temperatures.

During the recent hurricane seasons, authorities have encouraged evacuation of areas that may be in the path of a hurricane. Some authorities have even threatened to arrest people who fail to follow such orders. However because most authorities do not yet have the authority to make such arrests, they have been ignored by residents in areas involved. How long this situation will last remains to be seen; if a storm results in a number of deaths, politicians may pass law making it illegal to ignore evacuation orders (a somewhat ominous situation since a contrived emergency could be used to force people to leave an area).

This is not to say that it is wise to ignore warnings and sit tight. If you’re a tourist or live in a mobile home or other structure that might not weather the high winds of a hurricane, then you should not stay in the area. And you should also bear in mind that even the most hurricane-proof structure could be damaged by the tornadoes that sometimes spring up during the high winds of the storm.

If you are unsure about the safety of staying put during a storm, hire a structural engineer to inspect your home or business. He will be able to assess a structure's integrity to see if the roof is secure and that the walls will withstand the raging winds of such a storm.

Do not try to sit tight if a hurricane is approaching unless you’re totally sure of your abilities to get through it unharmed. In addition to having emergency supplies including flashlights, battery powered radios, food, and water, you should be sure that your home will remain intact. Windows should be covered with plywood if storm-proof shutters aren’t mounted on the building (and be sure storm-proof shutters really are such). Be alert to possible tornadoes, don’t go outside during the storm, and be aware of the fact that a calm followed by another wave of high winds will occur if the eye of the storm passes over your area. Buildings near the ocean or areas that may suffer from flooding should not be occupied during a hurricane.

If you live in an area that has a hurricane season, be sure to check your insurance to see what damages are and aren’t covered. If possible, increase your coverage if there are gaps in it.

When a hurricane is moving in, be sure to stay abreast of developments by monitoring radio broadcasts and other news. Also be careful not to be misled by dire predictions of the mainstream media which is often more intent on garnering larger ratings and making reporters appear heroic in “risking their lives” to report on the storm.
A better source of information is the National Weather Bureau whose broadcasts can be monitored on special radios available from most discount and electronic stores.

A hurricane watch means conditions are favorable for creating a hurricane within 36 hours from the time the watch is issued. A hurricane warning means that a hurricane is likely to reach a specified area within 24 hours from when the warning is issued.

Have your supplies well in hand long before the hurricane season starts; don’t be one of the ill-prepared majority that races out to buy candles and bottled water, hoping the supplies won’t be exhausted before they grab theirs. Also be sure that you have emergency medical supplies. Ideally you’ll also have an emergency generator, especially if you need to operate a sump pump to keep water from flooding your basement.

Following a storm, check for downed power lines that may be a shock hazard. Also be alert for leaking gas lines, broken glass, or hazardous chemicals that may have been spilled by the storm. Trees or damaged structures may present a danger in the form of objects that are apt to fall.

Safe drinking water may not be available following a hurricane and sewer systems may not work properly. If damage is not severe, take pictures of damage for the insurance adjuster and then make quick repairs to safeguard against rain damage, looting, or other problems.

**Tornadoes**

Tornadoes form as the result of high winds created when hot land surfaces are exposed to a sudden cooling coupled with a sideward wind. Air heated by the earth moves upward while cold air drops to the earth, the sideward wind causes the two to swirl into a violent engine of circular motion that can create small areas moving at several miles per hour. This wind and the material it hurls around cause damage and injuries to those who come close to it.

Most tornadoes cover a very small area, often only a hundred yards or less wide. However tornadoes that cause a much wider swath of damage are not unheard of. Generally these winds will travel on the ground only a short distance, leapfrogging areas before coming back to earth. However it also isn’t rare for one to remain on the ground, cutting a deadly swath for miles.

Having grown up in tornado country, I know that there are few structures that can truly withstand such forces, though concrete structures will come close. However even these are dangerous to be in since windows will be blown in with the pressure created by a tornado’s winds. These are propelled like deadly glass knives, slashing anyone unfortunate enough to be in their path. In fact these high winds are capable of driving small sticks or straw into solid walls — or human flesh.

Obviously the best tactic for surviving such a storm is to be in an area that is protected from both its wind as well as the missiles that may be hurled by it. This is practical in the basements of most buildings. If it is below ground and you can’t see a window, you’re probably safe from the dangers of a tornado.

You should have a home and business with a basement if you live in tornado country (which is basically the Central US along with coastal areas of the US — though anywhere in the country can have a tornado with these storms occurring in all 50 states at one time or another). Unfortunately homes in the most tornado-prone parts of the country are sometimes constructed without a basement. This greatly reduces the chances of occupants of surviving a direct hit. However chances can be improved by moving to inner rooms or hallways that don’t have windows.
Outdoors things are a bit more worrisome. If you’re in a car, you need to get out as the storm can lift the vehicle, tossing it some distance and shattering the windows in the process. Don’t be tempted to “outrun” a tornado as they are very unpredictable and it is easy to watch the storm and plow into another car or object. Furthermore, these storms may kick up enough dirt to make it impossible to drive when they are near — a bad situation if you’re hurtling down the road at 70 miles an hour.

Your best bet is to stop at a concrete overpass and get up in the corner of overpass, beneath the roadway above. Other possible spots where you would be safe from a passing tornado include culverts or other structures built of reinforced concrete or covered by earth. In a real scrape, you can get down in a ditch and hope the tornado doesn’t pass directly over you; given the small area covered by most tornadoes, the odds are in your favor. Nevertheless it is wise to lie face down in the ditch, covering your head with your arms in case a few missiles head your way.

It is wise to monitor the radio during tornado season (which is basically from April through September, though this varies according to the part of the country your in); be especially alert during very warm weather when thunderhead cloud formations can be seen in your area since these formations are created by the same conditions that may lead to a tornado.

Tornado watches mean that the conditions are ripe for a tornado; a tornado warning means a tornado has actually been detected by radar or an on-ground spotter trained by the US Weather Bureau. The likely areas the tornado will transverse are issued with these warnings. If you’re in such an area, it pays to heed such warnings.

I once lived next to an old timer who was able to predict the advent of a tornado hours before the weather bureau did or before any thunderheads formed in the sky. “Sounds like a tornado,” he would tell me. I at first assumed that he had heard a watch issue on the radio — only I soon discovered that wasn’t the case. Time and again he’d unerringly say “Sounds like a tornado” or “Better batten down the hatches tonight, could be a twister.” And sure enough, one would more likely than not be in the area later on.

Finally I asked him how he knew there would be a tornado. “It sounds like a twister,” he said.

“Listen.”

“All I hear’s the wind blowing,” I said.

“That’s right. But listen to how it’s blowing. First it gusts, then it gets dead still, then it blows hard again. That’s the warning. That’s the sound.”

Since then I’ve learned to pay heed to the sudden gusts followed by a sudden deadness that now puts a little dread in my bones. Because now I know when it “sounds like a twister” as well.
Chapter 13:

When People Go Wrong

During tough economic times and/or periods of mass fear, panic, and hysteria, crime tends to soar as people become desperate and irrational. Many people in our society no longer have any self control. The only thing that keeps them in check is fear of being caught by the police or shot by an angry homeowner or spouse (depending on the nature of their crime). The moment law and order break down, or the opportunity presents itself to commit a crime or engage in violence without being caught, they will engage in horrendous acts of depravity and violence.

Some of these people are classic sociopaths, individuals without any apparent conscience or shame. Others have mental problems or histories of drug abuse. Others simply see crime as a way to make a quick buck at someone else’s expense.

Your coworker or your next-door neighbor could be dangerous under the right (or wrong) conditions. Most people who are victims of violence are attacked by someone they know, not a random stranger. Learning how to deal with criminals and unstable or potentially dangerous people can help you get through life in modern society without being a victim.

Workplace Violence

Workplace violence has been blown out of proportion by the mainstream media. However workplace violence does occur. And it may be more apt to occur in the future because of the coverage the media gives it.

I have no facts and figures to back it up, but it seems to me that violence if more apt to happen where criminals know victims are going to be unarmed. Areas with signs showing a school or workplace is “gun free” seems rather like a notice that an area is full of potential unarmed victims. If you’re in such an area, or have a child going to a school there (since all public schools have been so transformed by federal law), then you or your children should be especially vigilant to potential dangers.

Recent spates of violence at workplaces and schools have had one plus: They’ve created a profile of the person most likely to engage in such acts. Learning to spot potential perpetrators of violence may give you an edge in avoiding them, not confronting them, and/or reporting your worries to those in charge. Because of the many adverse effects violence in the workplace has on workers performance, companies that might otherwise turn a deaf ear toward worker complaints will often stand up and listen to fears of violence.

The profile for a violent offenders in a workplace is pretty standard:

- A male.
- Around 35 years of age.
• A past history of violent behavior.
• Suffers from psychological disorders or torments.
• Is a substance abuser.
• Uses profane and aggressive language.
• Threatens violence.

Of course not everyone who commits violence will exhibit all of these traits (and vice versa). However, the more of these traits you see, the more apt you are to have a person who will go off the deep end when he feels enough pressure or other pushes toward violence.

Most violent acts don’t happen out of the blue. This person involved in school or workplace violence often feels mistreated by the authorities or system an institution or business is built around. At the workplace he may file trivial grievances against fellow workers or supervisors. He will often brag to co-workers or fellow students about his harmful intentions. With youngsters he’ll often have a history of abusing animals. When enough pressure is applied to this person, he will make a violent response to it, striking out at the person he sees as the center of the current trouble, but also often attacking those in the area as well, perhaps killing indiscriminately after the initial threshold has been crossed.

Elements in the workplace that increase the pressures on such individuals appear to contribute to the problem. Personal or societal problems, job-related stress, work overload, poor ratings, downsizing, relocation, or replacement of permanent employees with temporaries can all increase the worries and pressures on any worker. With those who may become violent, these can become factors that drive them over the edge.

High risks of violence occurs in companies that have recently undergone a major reorganization or restructuring, have seen a change in senior management, or have demanded higher levels of performance from workers. Other serious risks are created when the gap between the highest and lowest levels of pay is increased, labor management friction is increased, or other factors that lower morale have occurred. Inadequate training programs, instability in the business place, poor performance review, and poor programs to maintain ethics can also increase the tendency toward violence in the workplace.

Finally the problem will be compounded if the business doesn’t take steps to head off potential problems. Poor screening of individuals being considered for work will often let those displaying all the danger signs to enter the organization without any further investigation into their background or troubles. Then vague policies regarding substance abuse and violence coupled with lax or arbitrary rules and procedures will keep them in place, even though they may be engaged in harassing other workers or customers.

In such a case a worker with a problem may become a ticking time bomb, waiting for one more irritation to set him off.

Taking Action

If you operate a business that has not taken steps to investigate the histories of workers or identify conditions at your workplace that might spark violence, do it now. (And if you work for a business that isn’t taking the actions outlined in this section, get in touch with management and insist that they start taking such actions.) Putting off the changes needed for even a day could prove disastrous. Set up a policy to screen prospective employees and review the records of those already on staff, with an eye toward spotting the danger signs listed above.

Also be leery of employment histories with gaps; these may indicate a problem at a former place of work,
or time off for jail time or treatment for a drug addiction or mental illness. Do check for police record and felony convictions. If conditions warrant it, you might even consider drug testing (though this opens a whole different can of ethical and moral worms).

A business should create a pleasant working environment to prevent triggering violent outbursts by workers as well as customers. Everyone should be treated with respect. Employees should not feel helpless; they should have the opportunity express their ideas and even have some say on changes that may be made at the business.

Workers should be informed of what is and is not acceptable workplace behavior. You should also institute protective measures to minimize the risk of violence: Personnel should be escorted to their cars after dark, ID badges employed in large organizations to keep out intruders as well as identify those who may be acting in a criminal manner. Security personnel should act to protect individuals while not creating a feeling among workers that they are in a “police state.” You should also consider access control of various areas, use of TV monitoring systems, and so forth so security personnel can spot potential troubles and take care of them before they become serious.

Administrative offices, resource offices, and other areas where staff members who may be seen as being “to blame” for perceived slights should have exit/escape routes. A policy for dealing with a dangerous individual should be established with an eye toward containing him so he can’t freely roam an area with a gun. You should also enable staff to quickly exit to safety in such a situation. While you can’t make everyone totally safe, you can increase their chances through locking systems, large counters that are hard to gain access to or climb over, and similar systems that will slow down or isolate a violent person until security personnel can gain control over them.

Because workers are often aware of potential problems before the administrative staff, institute a process for employees and management to report problems. Be sure those making reports aren’t placing themselves in danger of reprisals, and also be sure that your security personnel are able to track threats. Also have a mechanism in place for reporting troubles to the police should the situation warrant it.

When a worker is found with a potential problem, you should also provide counseling. If you have a large operation, you should work toward providing an EAP (employee assistance program). Supervisors should be trained to head off violent confrontations and also be shown the best ways to handle dangerous situations that could occur. Take advantage of experts who will come to your business to give seminars on such techniques.

If Violence Occurs

If the worst happens and violence occurs, a business should attempt to keep employees away from reporters to keep stories from growing with the telling, as well as to avoid potential lawsuits caused by misinformation about individuals involved in the problem. Instead a single spokesperson should be sent to give a press conference. Reporters and others should never be allowed into an area that might be considered a crime scene by the police.

In the aftermath of a violent incident, a company should provide counseling and other support for its employees. This should also be extended to family members, survivors, or customers who may have been involved in the trouble or who are connected to those involved. You should never hide facts or try to gloss over problems. Instead be honest while instilling the fact that you are committed to creating a safer environment.
The Political Left Pushes America toward Race War

White liberals seek out every opportunity to stir up resentment and hatred in minority communities. White liberals relish every opportunity to create more “victims” so they can position themselves as saviors and create support for their Big Government agenda.

On black radio stations during the 1998 Missouri Senate race, Democrats ran commercials implying that Republican candidates, and white society in general, are linked to the Ku Klux Klan: “When you don’t vote, you let another church explode. When you don’t vote you allow another cross to burn.”

Democrats have pushed (and continue to push) the lie to black voters that Al Gore’s election was stolen as a result of intimidation tactics by white conservatives. After the swearing in of President George W. Bush, Democrat Party boss Terry McAuliffe addressed 50 “civil rights” leaders, telling them that “Al Gore carried Florida [he, in fact, did not, as later investigations proved, and would not have even if he had gotten all the recounts he demanded] and won the 2000 election. Profiling on the highway has now moved to the voting booth.”

McAuliffe, hand-picked by the Clintons to run the DNC, is boosting votes for the Democrat Party by stoking racial polarization, undermining the legitimacy of our economic, electoral, and criminal justice systems in the eyes of millions of black voters, and otherwise agitating for future widespread racial extortion and violence against whites, Jews, Asians, and other groups that black racists hold a grudge against.

In 2001, riots broke out in Cincinnati after a white police officer shot a black suspect. Al Sharpton arrived on the scene and called for “a national response and real change, not just telling us to quiet down.” Violence continued to flare up in Cincinnati’s predominantly black neighborhoods for weeks.

America’s new race war is being waged not only by thugs in the streets, but in the political arena as well. The truth of the matter is that in this age of political correctness, the alleged sensitivities and arbitrary demands of “minority groups” take precedence over individual rights and the rule of law.

So-called “civil rights leaders” Al Sharpton and Jesse Jackson are targeting Americans everywhere for racially motivated, government-backed extortion schemes.

Meanwhile, Nation of Islam czar Louis Farrakhan and his militant followers are rapidly spreading their message of hate throughout black America, creating a potentially explosive situation in America’s cities — and even raising serious national security concerns. You see, Farrakhan foments not only anti-white racism, but also global hatred for America, antipathy toward its war on terrorism, and support for its enemies. In the coming years we could witness both racial and religious riots as “Muslim rage” takes to the streets.

Dealing with Riots and Looting

There are several key facts to remember when dealing with rioters or looters. One is that these criminals generally work outside their neighborhood. While the distance from one to the other may be small, you rarely have to worry about neighbors or others close to your home or business engaging in these activities. In fact those around you will often be your first line of defense in dealing with looters or rioters.

Second, looters and rioters are not brave individuals, nor do they have much self control. They prefer to operate when no authority figure is around to stop or identify them. They prefer the cover of darkness if possible to ply their trade.
These factors can all be used to counter these individuals as well as to be alert to periods when these activities may occur (such as during a major power failure).

For example, the lack of self control and predilection to work in darkness makes it possible to avoid most incidents involving these individuals by simply traveling and conducting your business early in the morning when these criminals are “sleeping it off” from the day before.

During the riots that ran through one large city in the 1960s, I met a delivery man that conducted his business in areas that saw the worst of the rioting without incident. “I just got up at five in the morning and hit the road, calling my clients to let them know I’d be coming through early. I never ran into a problem or even saw a rioter. All I saw was the burnt out buildings and broken bottles on the road.”

You can use this tactic, too. The only exception might be during the initial outbreak of such events if they are triggered by a court case or other incident.

For example, for weeks before the LA riots of the early 1990s, the press had been showing films of the beating of Rodney King almost non-stop. Any time you see such stories that seem intent on stirring up trouble, be on the lookout and be careful what routes you take. Most towns have areas that are prone to violence; staying out of these during tense periods is a good tactic to follow.

With most situations where looting and rioting occur, you can expect that eventually order will be restored (barring a complete collapse of a government). Outside help will eventually reach your area following most disasters. The trick is surviving until help arrives, minimizing the dangers looters may present, and also avoiding breaking the law in defending your home or business so you won’t be prosecuted afterward.

This latter point is one that some people fail to take into account; while prosecutions for defending your property following a civil disturbance are rare, they could occur, especially if you live in an area that is anti-gun ownership or in which politicians are interested in gaining votes from the group that comprised most of the rioters. In such a case you might be hung out to dry to gain a few votes for the official.

Show of Force

You can’t stop a riot — often not even government troops can do that. But you can often divert the mobs involved in civil unrest, making them see that they’d be better off going somewhere other than to your business or home to ply their trade. You can normally cause looters and rioters to avoid your area by what has come to be known in police and military circles as a “show of force.”

A show of force puts things on the animal level — and mobs are much like a giant, out-of-control animal; it is rather like the classic case of one gorilla beating its chest to warn that he’s stronger than the others, or a dog baring its fangs with a low growl. Fights rarely occur, instead the message is sent that unless you want serious trouble, you’d better back off.

Our natural inclination when facing rioters is to run and hide. That may be the right route to take if you’re not on home turf. A hasty retreat will often save your bacon and keep you out of legal trouble afterward. The heroic, Hollywood response of fighting against unstoppable odds looks grand on the silver screen, but is destined to fail in real life.

On the other hand, if you’re at home or in a business, the worst thing you can do is turn off the lights and hope the crowd goes by. Because your signal is all wrong. You’ve given the looters the cover of darkness and said that no one is going to put up a fight, defend the place, or be around to identify the criminals to police later.

Instead your response should be to light up the place, with electric lights should you have power or a
generator, or with flashlights, candles, and battery powered lamps if the power is down. This sends the message: We’re secure enough to let you know we’re here and we’re not afraid. In itself this signal is a warning growl that makes you seem dangerous to anyone foolish enough to push you.

The next step in your show of force is to display your fangs. For mankind, this means some sort of weaponry. For most of us, it means firearms — though it could be chains, ball bats, machetes, or even rakes. The message is that you’re willing to shed some blood and risk your life to defend your turf. Since other places won’t be doing this, rioters will normally go away.

Your show of force can be augmented if you enlist all family members and neighbors. The more people who appear to be armed and dangerous, the less chance you are to have problems. (I know one individual who has invested in cheap plastic water guns and pellet guns. He’s painted these to resemble real guns — only when you hold them and see how lightweight they are is the effect broken. He plans on distributing these to young family members and neighbors without firearms should riots break out in his area. They’ll put on a show of force that will be rivaled only by the National Guard.)

The effect of the show of force can be further enhanced if all the members of your group are linked by some type of tag or uniform. You don’t want this to resemble police or National Guards uniforms (both might attract attacks from a few criminals mixed in with looters or rioters and you might also later be charged with impersonating government officials).

It can be simple: A red arm band, similarly colored clothing, even baseball hats worn a certain way; if you are watching over a business, have all the employees wear clothing with the company logo if possible. Most criminals, especially young ones, are used to spotting the “colors” and special look-alike wear of gang members. They’ll notice if you have “tagged” your group and will be all the more apt to steer clear of your area.

Should you be forced to defend your turf (and you should be prepared to do this, even though chances are good you will not need to), having everyone in the neighborhood have a distinguishing badge also makes it possible to quickly recognize friend from foe. Easy identification of who belongs in the neighborhood is also a plus if the police come into the area. When they see that those living in the area are trying to defend themselves, chances are they’ll not hassle them (as might be the case if the firearms appeared to be in the hands of a bunch of potential looters).

As mentioned elsewhere in this manual, National Guard troops may be in a shoot-first-and-ask-questions­later mode during a riot. That means if you see police units in SWAT gear or guardsmen, all firearms should immediately be lowered and ideally hidden from sight.

If you hear gunfire, those with fake guns should immediately retreat to a safe area and those with firearms should be prepared to act, either repelling armed looters or hiding their weapons if the shooting is being done by government personnel. Rioters and looters seldom use firearms so chances are good you won’t be facing armed criminals unless you’re really looking at a total breakdown in society.

Fire is a common tool employed by rioters to destroy things. You should also be sure to keep buckets of water, fire extinguisher, and any hoses or other fire-fighting equipment ready to use. Water hoses can also be employed to discourage rioters, though this will also anger them and may actually escalate a situation into one of conflict.

If you have a business with an inventory that is easily stolen and will appeal to criminals (such as jewelry, electronic gear, and so forth), then you should take some additional protective steps. Start with the lights, uniforms, and armament if possible, though the latter should be limited to security personnel, high-level staff, or others that you trust to handle weapons safely and without breaking the law.

Time permitting, board up display windows at ground level and remove valuable merchandise back into
the store so it’s out of sight. Inside the store, doors that aren’t in use should be locked and elevators shut down to limit access to various parts of the store.

Very large stores should issue hand-held radios so personnel can communicate with each other and a “spotter” should be placed on the roof to watch for trouble. The spotter should be unarmed and instructed to get out of sight when National Guard units are in the area (so they don’t mistake him for a sniper) or when any type of shooting is taking place. Businesses with employees protecting them should contact the police to let them know that the business is being manned by employees; this may not be practical, however, if police lines are tied up, as they are likely to be during civil unrest.

**Law and Order**

Even during a riot, you can’t open fire on looters without provocation. You should contact an attorney now to find how far you can go in defending yourself and your property. In most parts of the US, you’ll be limited to firing only if you believe that you or those around you are in physical danger.

That means you might shoot a looter if he’s about to throw a firebomb into your home or business or if you think those about to break in might do you harm. It doesn’t mean you can fire into a crowd that’s walking in the street or running away from you after seeing that you’re about to open fire on them if they don’t leave.

Choose firearms employed for defensive purposes wisely. Once you’ve fired, the bullets can’t be called back. They will travel onward, hitting whoever is in their path, whether the person is about to attack you or is running away, guilty of intent to murder you or simply an innocent bystander. If you shoot the wrong person, you are the criminal in the eyes of the law.

**Tyrants and Despots**

Finally, it should be noted that the “law” can become your enemy when the government goes bad. Unfortunately such transformations from benevolent governments to dangerous dictatorships have been all too common throughout history, with the 20TH Century being no exception. You should therefore be aware that a government’s solution can quickly go from containing and apprehending criminals toward doing the same for troublemakers, those with different viewpoints, or those who simply happen to be in an “inferior” race.

Such transformation don’t happen overnight — though a military coup can come close to achieving this. Most happen as part of a gradual process with the people slowly being conditioned to put up with more and more intrusion and suspension of freedoms for some promised greater good or to deal with a national problem (real or manufactured by the government).

When you see such transformations occurring to the point that a person can be arrested or killed for what are basically trumped up charges, then be ready to leave the country involved in such atrocities or fight to regain your freedoms. Unfortunately flight has met with greater success than fighting in the 20TH Century, something to keep in mind should you find yourself in such a nation.

Whether or not the US is headed in such a direction remains to be seen. There are ominous signs with cases in which the police or other government agents abuse their powers, confiscating or even killing without justification. Should such practices become the norm, it will be time to take action as dictated by your conscience.

Failure to do anything is apt to turn you into the next victim of the government thugs.
Chapter 14:
When You Must Escape

Before you haul off and buy a new car, there are some important considerations you need to make about how it might serve your needs during an emergency.

One prime consideration is that the vehicle could be essential for escaping a problem. While it is generally best to hunker down and wait out a problem, there are a few emergencies that dictate flight. For example, a toxic leak of gas, a nuclear melt-down at a reactor, or similar problem might create a situation where staying put would be a death warrant. In such a case being able to flee your area would be essential.

If such a situation occurs, you will need to get out quickly, ahead of the pack. Otherwise you will risk being trapped in gridlock. Should that happen within the area of the danger, you’ll be dead meat.

That means you’ll need a vehicle capable of traveling long distances without requiring maintenance. Ideally it would also be capable of navigating the worst type of roads weather in your area might create and perhaps even capable of traveling over rough terrain should you have to “improvise” a road.

However the best vehicle isn’t going to permit escaping danger if you don’t make a few preparations beforehand. The secret to getting out quickly is to be able to react in a concerted manner.

Family members should be aware of the actions they have to take to get home quickly. For instance, each member should have a small “bug out bag” that can be grabbed on the way to the door. So before we take a look at how to select the best vehicle for your needs, lets take a look at the tools you need to move quickly when the time comes.

Bug-Out Bags

The bug-out bag is hardly a new idea. Bums in the 1930s carried all they owned in a small bag that was thrown across the back, perhaps balanced by a small stick that could also be employed as a makeshift weapon against dogs or fellow bums. And most peasants fleeing an area will be carrying a small sack of their most precious belonging. The tendency of people fleeing an area is to quickly gather up what they need and head for the door, rather than leaving empty handed.

The catch is that sometimes the right things aren’t snatched up during the panic of evacuation. You might get on the road and discover that you should have picked up a jug of water rather than the can of pickled pigs feet, or whatever.

This is where the bug-out bag comes in. The first time I saw mention of these was from a guy that had
been around CIA agents in Vietnam. Apparently the agents had bug-out bags filled with the supplies they might need should an area be overrun and they had to escape into the jungle in a hurry. The bag carried rations, water, medical kits, and ammunition. All the agent had to do was grab it and his pistol or rifle and head for the door, confident that he'd have what he needed to operate in the jungle.

This same tactic of having a pre-packed bag of essentials makes sense in an age when any city might become hostage to a terrorist attack or see a major spill of toxic chemicals. In such situations, the ability to grab what you need and boogey on out the door is a prime survival tool.

I feel that even children should have a bug-out bag and be taught to grab it if there's an emergency.

If you travel a lot, or work some distance from your home, then a bug-out bag of essentials should be kept in a closet or locker at your place of work or in the trunk of your car. Ideally you'll also have some water and freeze-dried food or other nourishment stored in the bag to tide you over should you be forced to "hunker down" or travel some distance.

Your bug-out bag may be as simple as a duffel bag picked up at the local Wal-Mart or it could be an expensive backpack. If you're going to be walking around with it in the office, then you might opt for a "soft briefcase" that won't attract too much attention. Ideally it will have a shoulder strap of some sort so it could be worn at least for a short time with both hands free for other tasks.

What goes into your bug-out bag will be determined by where you're headed. If you're going into the wilds, then you'll need camping equipment and a lot of skill. Your bag should include proper clothing, matches, snares, knives, and the like with a firearm suitable for hunting and an ax or the like. If you're headed to an urban area, your bug-out bag might have much different materials packed into it; freeze-dried food, a credit card, and perhaps a passport.

Regardless of the destination, the bug-out bag should contain a compact first aid kit, water purification tablets, a good pocket knife, matches, cash and gold and silver coins. You can also carry additional equipment in your vehicle, but don't fail to have a bug-out bag since you might be forced to leave your vehicle behind somewhere along the line if it breaks down. In such a case, having a bug-out bag available might enable you to quickly get out of the area before any danger can close in.

Don't make your bug-out bag too heavy to carry by hand should you be forced to abandon your car. Do put any special medication you may need, contact lenses cleaning kits, or whatever special needs you may have since finding such "on the move" would be very hard indeed.

One survival expert I talked to said the two most important essentials in his bug-out bag were a cellular phone and a .357 Magnum. Something to think about.

When Not to Flee

The "flight or fight" reflex to danger is innate to human beings. Unfortunately neither is always the correct response. It can be a big mistake if there will be gridlock on the roads, or if you're unsure that there will be supplies for you when you reach your destination. Usually if you feel like bugging out of an area, so will everyone else. The only way you'll make it out is to be ahead of the pack and to have a destination that is going to welcome you.

Without both you will become a refugee, trapped on the open road with thousands like you competing for what little there is, or rounded up and placed in a "camp" at your destination. Unless you have a family member, vacation home, or some other refuge where you're headed, you're going to be dependent on the good will of those
living in the area to help you. If the disaster is small, this may work. If it is an severe economic downturn, war, or other catastrophe, then you may end up in very poor straits.

If things really become bad in the US, then fleeing the country might be necessary. However given the fact that the US is the powerhouse of the world, expecting that your destination will welcome you or be any better off is optimistic to say the least. However, to keep all bases covered, a current passport for each member of your family would be good to have available. (If you don’t already have a passport, get the forms from your local US post office now and start the process of getting them into the system. The issuing of passports could become a problem during a real crisis, so don’t put off getting them.

If you’re facing a disaster that will make the land unlivable for a time, then fleeing may be a necessity. Hurricanes, chemical spills, nuclear reactor meltdowns might be such situations. On the other hand if your home remains livable and your position defendable, fleeing may not be the solution.

Don’t let your emotions and feeling that you must flee an area dictate your actions. Think carefully before abandoning much of what you own to leave for what you hope will be a better situation. Because chances are that when you get to where you’re going, you’ll discover you’re worse off than before.

Before looking at more common modes of transportation, mention should be made of the fact that a boat could be employed to travel during many emergencies. This wouldn’t, of course, be ideal for hurricanes or other natural disasters, but might be useful if your need is to simply get away from a government or are without a home for some time.

If you have a large boat or yacht, you might also have the option of sailing away from danger. If your sailing vessel were large enough, you could stock it with supplies. However there would be limits to where you could go. Furthermore, you might run into problems with patrol boats from various governments worried about refugees, drug smugglers, or whatever.

The Lay of the Land

Studying the roads in your area can enable you to have the best ways of escape in mind ahead of time. A little careful map study will also help you locate alternate routes of escape. Knowing alternate routes might help you avoid sections of road that could be jammed by other people fleeing for their lives.

When planning alternate routes, you should also explore the area ahead of time to see if there are features not on the map. For example, old timber roads, railway beds (where the tracks have been removed), or abandoned roads might all be employed as routes if you drive around a few trees and crash through some brush. Dry river beds, dry storm drainage ditches, or other features might also become your road in a pinch.

A few cars and trucks also have wheel bases that match the width of train tracks; if you’re fortunate enough to have one of these, deflating the tires slightly will enable you to “travel the rails” once you find a crossing that allows you to maneuver your vehicle onto them. Of course this can be a dangerous practice since a train can come barreling down the track (in front of or behind you); you would need to be very careful in using this tactic. Having a bicycle pump or other way of reinflating your tires would also be an essential to this plan — and a good idea even if you don’t plan to ride the rails in this manner.

The type of vehicle you’re driving is also an important factor to keep in mind. If you have a heavy van then you’ll be limited to where you can go; on the other hand a 4-wheel drive might blaze its own trail if needed. A small compact car might squeeze through areas larger vehicles couldn’t get through, perhaps even employing sidewalks as make-do roads. Likewise a motorcycle or even a bicycle might be able to reach places that even a jeep
When You Must Escape

couldn’t get into.

Take into consideration the type of vehicle you have, and then try to use its characteristics to your advantage. Remember, too, that you can combine some vehicles. For example, you might carry a motorcycle on the back of a motor home. This could give you some added capabilities such as sending ahead a scout or abandoning your main vehicle and taking a secondary one.

Some features will improve the ability of your vehicle to maneuver and give protection. Power steering, locks controlled from the driver’s seat, power windows, and high-intensity headlights will add extra safety to your vehicle.

Good tire tools should be in the vehicle and at least two flashlights, a first aid kit, and a good spare tire and tire repair kit so you can deal with emergency break downs on your own. Spare cans of oil and a siphon tube might come in handy as well.

Good, up-to-date maps and an accurate compass are essential in many areas unless you’ve been a native in the district and know it well. Road maps don’t show all the features that might be useful; detailed geological maps for most areas in the US are currently available from the US Geological Survey (east of the Mississippi River, order from the Branch of Distribution, US Geological Survey, 1200 Eads St., Federal Center, Arlington, VA 22202 and west of the Mississippi, from Branch of Distribution, US Geological Survey, Box 2528, Federal Center, Denver, CO 80225); these maps are also available in many camping and sporting goods stores.

Roadblocks

One thing you should be especially watchful for is a roadblock.

While roadblocks set up by government troops or the police should never be run (at least not if there is any semblance of a just government in place), this isn’t true when the road block has been put in place by criminals or rioters. Anyone who watched the films of the LA Riots that followed the Rodney King trials has seen a graphic example of this; those who stopped long enough for rioters to get to their car were often dragged out and beaten. Obviously you should never stop when there might be a danger in doing so.

The sooner you spot a roadblock, the easier it is to avoid or escape. If traffic is suddenly very heavy on the road in the opposite direction from the path you’re taking, it may be a sign that there’s a roadblock ahead. Some drivers may flash their lights to warn others of the fact. This sudden increase of traffic and some light flashes may be the only warning you get before your sight the roadblock — and those manning it sight you; if it is set up well it will be just around a corner or at the bottom of a hill, making it hard for people to see it and turn around before getting within reach of those who set it up.

The amount of traffic on the road will determine the type of turn that can be made to avoid a roadblock. If the traffic is light and you’re some distance from the roadblock, you can simply make a wide U turn. If you’re close to the roadblock, perhaps even spotted by those manning it, then everyone can slow down rapidly, reversing their direction with a Y turn or a “boot legger’s turn” (where the vehicle backs up rapidly, and then the wheel is cramped suddenly to the side, creating a half turn at which point the steering wheel is whipped the opposite direction and the accelerator hit).

If you’ve come very near a roadblock because it was well positioned at the base of a hill or around a curve, watch out for electronically-controlled barriers that can be lifted from the pavement behind you to block your escape; also watch for spring-loaded spikes that drop down when a car goes over them in one direction but puncture the car tires when someone goes over them from the other direction.
If you think you might have passed any such barriers, then your only choice is to speed on or find an alternate around the obstacle. Trying to back track will slash your tires or leave you in a crumpled wreck.

Don’t get into the habit of thinking you can only drive on the road. Many times a roadblock is set up only on the road; driving in the ditch or through a field will easily bypass the obstacle. Keep your wits about you and your eyes open and you’ll often discover that a roadblock is more in the mind of those setting it up than a concrete reality.

(The only time I’ve ever had a reason to avoid a roadblock it was easily accomplished. The folks who had set it up did so on a long stretch of road. By watching the traffic well ahead of us, I noted that something was up. When I saw people on foot around the stopped cars, I quickly slowed down and turned at the next exit, making a detour around the problem spot and traveling on without incident. There was nothing hard about this; yet at least 20-some cars headed into the area and were stopped when they might easily have avoided the situation. Being aware of what is going on around you can save a lot of trouble.)

If you can’t avoid a roadblock, chances are good you can crash through it, provided it isn’t formed of concrete or heavily armored vehicles. If it’s formed of barrels or gates, you should be able to shove through it, though some damage will be done to your lead vehicle and you will place your people in a lot of danger.

Wooden fence or empty barrel barricades are going to be the easiest to get through, though barrels of sand or water will do a lot of damage and can quickly slow you down. If the roadblock is created with a car angled across the road, the point to aim for is the lighter end of the vehicle; if there are two cars, go for the lighter one at its lightest end. Remember: The less mass you have to move, the easier it is to get through the barrier.

With most cars and trucks, the least amount of mass is at the rear end of the vehicle; the exception to this is with vehicles having an engine in their rear. If you smash into the lighter end of a car or truck, the vehicle blocking your path rotates around its heavier end, acting like a revolving-door.

If the roadblock is made of cars which are in contact with each other, the tactic of hitting the light section of one of them may not work since the other car blocks the rotation. In this configuration, the secret is to hit the center area between the two cars. A fast strike here with a heavy vehicle will rotate both cars with a jarring crash; the chances of success are not as great and you need a lot of weight and speed to plow through two vehicles that are touching each other.

If the roadblock is formed with dump trucks, concrete road dividers, or similar heavy objects, don’t even try to ram it because you probably won’t get through and even if you do, you’ll suffer extensive damage to your vehicle. Reversing your direction or trying to go around the barrier is the only option, no matter how hopeless it may appear.

Motorcycles

I’ll have to admit that I’m not a big motorcycle fan. While these vehicles are certainly a lot of fun, the few people I’ve known who rode these for any time soon had falls. Three that come to mind include two broken arms and legs (on one individual), a nearly severed face following a trip through barbed wire, and a back full of ruptured disks that never fully recovered. There are advantages in traveling on a motorcycle, but the dangers generally outweigh them in my mind.

If you decide to risk life and limb on one of these vehicles, be sure it has ample storage compartments and racks on it so you can carry a lot of supplies with you. Do wear a helmet, leather jacket and pants, and other protective gear. Do be sure you get a bike that can go off-road without problems, otherwise you might just as well stick with a car.
One advantage to having a motorcycle is being able to weave in and out of traffic and negotiate tight spaces that four-wheelers can’t. If there’s a mass exodus to flee the coastline or flee a city under siege, the roads and highways may be jammed bumper-to-bumper for miles and miles. Cars will be stuck, but motor bikes might be able to navigate in between traffic lanes or on the shoulder.

**Bicycles**

Bicycles are lightweight and relatively inexpensive. That makes them easy to buy, transport, and use. They greatly enhance your ability to travel beyond easy walking distances while not requiring fuel and only minimal maintenance. With a few simple modifications they can be used to carry groceries or supplies, giving you the capability of getting to work or bringing home groceries even if gasoline is in short supply or you can no longer afford to own a car.

If you don’t have a bicycle for each member of your family, get one. It doesn’t need to be expensive — in fact it is better if it’s beat up and cheap since that makes it less apt to be stolen. Shop some garage sales and chances are you’ll pick up some for a song (two in our garage cost less than $5 a piece and both were in top working order — just dusty and used).

Today’s bikes aren’t as durable as models of the 1950s; those bikes had only one gear and a brake on the pedal system. That made them almost trouble free and I can’t, in my childhood memories, ever recall knowing anyone who ever had problems other than a flat tire.

That changed with the need of Americans to own “European style” bikes with gears and hand brakes, two giant leaps backward in my opinion. Most riders use only one gear after riding a while and playing around with the system; only if you are in a mountainous area does a complicated gear system make much sense. And those nifty hand brakes have a tendency to flip riders over when the front one engages and the rear does not. And both brakes and gears have a great tendency to wear out or fail.

That said even these mechanical drawbacks of new models are easily repaired and adjusted. Do buy extra brake pads for your bikes as these wear out quickly (unlike the old 1950s-style brakes… Can you tell I was sold on those as a kid?). When buying a bike, unless you have some great need for umpteen gears, buy a bicycle with as few gears as possible; this makes fewer parts to go out of whack, making maintenance that much easier.

Because you may be driving a bike through broken glass or off-road through thorns, you need to give special attention to ways of keeping the wheels inflated. The best solution is a foam inner tube that replaces the air-inflated standard tube. These are sometimes found at Wal-Mart or bike shops, though some of the latter stores are a bit snobbish about ordering these for you (the Europeans apparently have no thorns or broken glass in their part of the world, and most certainly would not be bothered by deflated tires in any case).

A second solution to the problem is a thick goop that hardens when exposed to air. Putting such a material in a tire makes it seal small punctures. This material can also be found in discount stores and bike shops as well as Tru-Value and other hardware stores under a variety of trade names. To use it you simply remove the valve stem of the tire, let the air out of the tire, and then pump some of the goop into the tire. After replacing the valve stem and re-inflating the tire, it should remain inflated for the life of the tire provided you don’t get a really big gash.

A bike rack over the rear tire and another on the handle bars is an excellent idea as it permits carrying pretty large loads without much effort. It is also possible to wear a backpack to carry loads on a bike, but this takes a lot of joy out of riding; strapping loads to the bike makes more sense to me.

Do wear a helmet, gloves, and shoes when you ride a bike. Doing so will help you avoid a serious injury when you take a spill on a bike — which will happen sooner or later if you ride much.
Aircraft

Space doesn’t permit going into great detail about aircraft. However suffice to say that there is now a huge market of used non-commercial planes in the US. Many of these carry price tags below that of a new used car. And unlike cars, a plane that is kept in service must meet very stringent inspections in order to remain in use. That means by checking the service and government inspection record of a plane, you can be sure that it has been certified safe to fly.

This means that for not much money you could be traveling from place to place at several hundred miles an hour without fighting traffic, enjoying the scenery as you fly rather than bucking traffic. You arrive at your destination fresh and relaxed rather than tired and frazzled. Yes, you do have to rent a car or take a taxi to go to your final destination from the airport. But this is a small price to pay for shaving hours off a long trip and traveling in so much greater safety.

During an emergency an airplane could be the ultimate escape vehicle. It could take you almost anywhere in the US with a few refueling hops. And might even take you out of the country should things really heat up.

If you’ve ever had a yen to get to where you’re going at a faster clip, enjoy flying, and want the added capability of being able to fly, check with some private pilots and instructors in your area. Chances are good you’ll be pleasantly surprised at how inexpensive it is to own a plane. You’ll also find some enthusiastic folks who are more than happy to show you the ropes in obtaining your pilot’s license and in locating an inexpensive, quality used plane of your own.
Chapter 15:

Toward Self-Sufficiency

The last chapter to this manual hasn’t been written yet — it’s being created by independent people like you as we enter the Brave New World of post-9-11 America. As you continue to think along the lines outlined in this manual, gather more information from the sources that have been given to you, and make your preparations, you’ll undoubtedly come up with new solutions of your own and ways to live in style even during the worst of times.

That should always be your goal: To do more than just survive. To go beyond that and prosper even under the most adverse of conditions.

Hopefully the “unthinkable” will never happen to you or your family. But with the great potential for disasters in our modern age, you and I both know this isn’t a safe bet. The only way to win in the game of living long and prospering is to cheat the odds, pulling a few cards and other tricks out of your baggy sleeves to beat Mother Nature, out-of-control governments, terrorists, and other dangers at their own games. Being independent means outsmarting those who would ham you and remaining unobtrusive so they will overlook you when searching for victims.

Remember that the most important tool you have is sitting between your ears. All the great achievements of mankind have come from people who sat down and thought things out. Don’t underestimate your abilities to solve problems with do-it yourself, lift-yourself-up-by-your-own-bootstraps solutions.

Even when you’re all alone with no government emergency workers, neighbors, or friends to fall back on, you can still get through the worst of conditions with a little know-how and determination. Never sink into the “victim” mentality that our culture and government have indoctrinated us with.

Of course all the thought in the world isn’t going to do you any good if you don’t couple it with action. My advice is to get to work right now, making your first step toward collecting some of the gear listed in this book if you don’t already have it.

Little by little you can go through the other tasks suggested in this manual. Little by little you will become even more independent than you are now. You’ll become that much better at coping with serious problems of all sorts.

You’ve already taken that first step toward independence by reading this manual. Now you’re ready to embark on your journey toward self-sufficiency.
Appendix:

Healing Herbs to Have Around at All Times

Herbs are nature’s medicines. Herbs that you are familiar with (and others that you may not be) offer tremendous disease-fighting benefits — without most of the side effects associated with man-made drugs.

Some herbs are not exactly appetizing and are best taken in supplement form. Other healing herbs make great additions to some of your favorite foods, adding flavor and promoting wellness at the same time. Oregano, basil, dill, rose geranium, and garlic are among the flavorful herbs that have valuable antioxidant properties.

Herbs have thousands of years of history behind them. They have been used by cultures throughout the world to treat infections and promote well-being. Herbs were used extensively by the ancient Greeks, Egyptians, and Chinese, as well as by Native Americans.

Ancient herbal healing methods that not too long ago could have been dismissed as mere superstition now have credible scientific support. Herbal medicine, properly understood and practiced, is not based on superstition or mysticism or folklore, but on objectively proven results.

The fact of the matter is that herbs do work. They contain powerful compounds that we still don’t fully understand and certainly can’t reproduce ourselves. These amazing compounds have been shown sometimes to work better than popular prescription and over-the-counter drugs at treating particular conditions.

Herbs aren’t marketed as effectively as pharmaceuticals, but that’s irrelevant to gauging their medicinal value. Pharmaceutical drugs can be patented and advertised on the basis of the symptoms and conditions they may be able to treat. Manufacturers of herbal products are severely limited by federal law as to the sort of information they can include in their advertising. For example, the herb goldenseal cannot be sold as an “immune booster” or a “germ killer” even though it’s both.

The government and the drug companies don’t want you to know about the healing power of herbs. But herbs are too important for you to ignore or dismiss.

Some herbs, such as garlic, can be taken on a daily basis to promote immune functioning and general wellness. Other herbs, such as echinacea, are great at helping to fight off colds and other infections.

Although natural herbs are generally safe and have few side effects, if taken in quantities above the recommended dosage, they can be harmful. Pregnant women, those suffering from chronic conditions, and those on prescription drugs should consult with a physician before undergoing any herbal treatments. Some herbs may react adversely with some drugs.
**Ashwagandha**

Also referred to as “Indian ginseng,” ashwagandha helps build up the body’s inner strength, boosting its ability to fight off infectious diseases. Ashwagandha’s roots, leaves, and berries contain high levels of free amino acids, the protein “building blocks” that energize immune and muscle cells.

Ashwagandha activates lymphocyte cells and other pathogen exterminators. The herb has been shown to have anti-inflammatory, antibacterial, antiviral, and antifungal properties. It can be used to treat virtually any infectious disease problem.

When combined with garlic, ashwagandha seems to be an even more forceful immunity enhancer.

*Dosage: Take a standardized extract in the form of 500 mg capsules three times a day.*

**Echinacea**

“Echinacea,” writes Dr. James A. Duke, a leading expert on medicinal plants, “is the herbal equivalent of vitamin C.... Whether you have a cold, a sore throat, the flu, bronchitis, or anything in between, you want echinacea.”

Indeed, echinacea (also known as purple coneflower) contains antibacterial, antiviral, and immune-enhancing chemicals. Scientists still don’t know how each of these chemicals specifically affects the immune system. What is known is that echinacea stimulates disease-fighting white blood cells.

It is not recommended that you take this potent herb on a daily, continual basis. Rather, it’s best to keep it handy for use in case symptoms of an infection appear. You may also want to use echinacea during the height of the winter flu season, or during any period in which you think you may be vulnerable to coming down with an infection, as a preventative measure.

Echinacea is one of the most popular medicinal herbs in the U.S. and is widely available in a variety of forms, including liquid, capsules, and tablets.

*Dosage: At the onset of cold or flu symptoms, take the manufacturer’s full daily recommended dosage until symptoms abate.*

**Elderberry**

Elderberries come from a shrub native to Europe. The edible berries are rich in vitamin C, which the immune system requires in order to perform at its best. Elderberry also contains flavonoids that protect cells against damage.

This herb was used by Hippocrates, the father of medicine, back in the fourth century B.C. It has for centuries been used in diverse parts of the world to treat colds and flus. Modern studies have confirmed elderberry’s antiviral properties.

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Unlike pharmaceutical drugs, elderberry helps rather than hinders your immune system and has virtually no side effects. Elderberry is widely available in the form of capsules and liquid extracts.

**Dosage:** Take 500 mg of standardized extract two to three times daily.

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**Garlic**

Many special powers have been attributed to garlic through the ages. In addition to warding off vampires, garlic has been said to cure illnesses, boost energy and brainpower, and expand life expectancy. Indeed, garlic can do all of these things (though its effectiveness against vampires might be disputed!).

Garlic not only adds zest to your favorite meals, but it also protects you from lethal diseases. As a natural antibiotic and antiviral agent, garlic can help ward off many types of infections. As if that wasn’t enough, garlic has properties that protect against heart disease and cancer, two of the biggest killers in the United States.

Garlic contains a number of sulfur compounds. Among them are diallyl disulfide, diallyl trisulfide, and allicin. These substances all play different parts in promoting health and immunity. The chemical allicin, which is found in garlic and onions, has cancer-fighting properties. Scientists have observed that allicin intercepts carcinogens before they can attack cells.

Garlic is a surprisingly strong germ eradicator. It is capable of killing streptococcus, staphylococcus, E. Coli, and a number of other disease-causing bacteria. Additionally, some parasites (such as hookworm and roundworm), fungi, and viruses can be destroyed by the chemical compounds contained in garlic.

Garlic is especially effective against the flu. To help ward off the flu, colds, and other infections, you may wish to consider taking garlic on a regular basis. Garlic enhances your body’s production of antibodies, thus helping your immune system fight off infections.

Many who take garlic for health reasons (and garlic is today one of the most popular herbal supplements) prefer taking partially deodorized garlic tablets instead of eating actual garlic cloves.

Fresh garlic delivers the maximum health benefits. But it is pungent and does cause fiery breath! Instead of undertaking the unpleasant job of eating garlic raw, you might try adding garlic to pizza, pasta, soups, and chicken and seafood dishes. In addition to adding more flavor, you’ll be adding to your health.

**Dosage:** Chew two to six garlic cloves daily (the high end will give you the maximum benefit) or take 800 mg tablets two to four times a day.

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**Ginseng**

Asian ginseng (*Panax ginseng*) has been described as “the ultimate tonic.” The herb has been used for thousands of years to enhance immunity, boost athletic and sexual performance, improve mental functioning, and increase longevity.

Take ginseng to promote overall wellness and to protect against the ravages of infectious disease. Researchers have found that ginseng promotes the production of interferon, a compound the body makes to
literally "interfere" with the ability of viruses to spread and cause infections.

Ginseng may also combat high blood pressure, but there is conflicting evidence about ginseng’s effectiveness at reducing blood pressure.

There is better evidence in support of ginseng’s use to impede the growth of cancer cells. In animal studies, ginseng was found to be effective in fighting cancer, especially when used in conjunction with radiation therapy.

Although ginseng is generally regarded as safe, individuals struggling with asthma or insomnia should avoid ginseng, as it may exacerbate such problems.

Dosage: Adhere to manufacturer’s guidelines.

**Goldenseal**

Native Americans used the goldenseal root as a dye, an insect repellent, an eyewash, a treatment for respiratory problems, and a treatment for skin diseases. Today it is appreciated as one of nature’s most powerful antibiotics and immune-system boosters.

Goldenseal’s potency comes from the chemical berberine (also found in barberry). This antimicrobial substance kills salmonella, E. Coli, staphylococcus, streptococcus, and other nasty germs. Goldenseal’s berberine is also effective against many kinds of fungi and protozoa. Viruses, meanwhile, usually aren’t directly harmed by goldenseal.

The berberine in goldenseal plays another role in promoting health. It stimulates the immune system (and this can help ward off viral infections such as the cold and flu). In addition to energizing white blood cells, goldenseal increases blood supply to the spleen, helping it produce chemicals that aid the immune system’s functioning as blood is filtered.

Because goldenseal contains potent compounds, overuse of this herb can lead to troubles such as nausea, vomiting, and in rare instances cardiac arrest. If taking goldenseal regularly, include two to three day intervals in which you don’t take the herb on at least a monthly basis.

Dosage: Follow manufacturer’s guidelines; do not exceed maximum recommended dosage.