

# EMERGENCY PREPAREDNESS HANDBOOK



## HOW-TO-DO-IT MANUAL FOR FAMILIES

WEST JORDAN, UTAH  
2004  
EMERGENCY PREPAREDNESS PLAN  
FOR THE  
WEST JORDAN MOUNTAIN VIEW STAKE

# EMERGENCY PHONE NUMBERS

Non-Emergency Number	840-4000
Fire Department	911 or Non-emergency 840-4000
Police Department	911 or Non-emergency 840-4000
Ambulance	911 or Non-emergency 840-4000
Poison Control Center	1-800-456-7707
Questar Gas	1-800-541-2824
Utah Power (outage hotline)	1-877-548-3768
City of West Jordan 8000 South Redwood Road, West Jordan, UT 84088	1-801- 569-5020
Telephone Security (To report obscene phone calls, Open 8:00 A.M.-5:00 P.M.) After receiving an obscene phone call, dial *69 and the call will be traced for you. There is \$.75 charge per trace.	1-800-541-3386
Special Needs Center (Deaf/Voice)	1- 800-223-3131
Highway Patrol	1- 801-887-3800 or 911
Road Conditions State Wide	1-800-492-2400
Sheriff's Office	911 or Non-emergency 840-4000
Irrigation Water Committee Member	_____
Family Doctor	_____
Family Pharmacy	_____
Home Teachers	_____ _____
Visiting Teachers	_____ _____
Quorum Leader	_____
Bishop	_____
Other	_____ _____

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## EMERGENCY BROADCAST SYSTEM

The following local radio stations are members of the National Emergency Broadcast System:

They will be on the air with information and instructions in the event of an emergency. KSL in Salt Lake City has a reliable generating capability.

<u>STATION</u>	<u>FREQUENCY</u>	<u>PHONE</u>
KSL	1160 AM	575-7600
KJZZ	Channel 14	537-1414

## EMERGENCY PREPARATION RESOURCES

Church leaders can help families learn to respond to emergencies by familiarizing them with information about emergency preparedness available through many sources. Church publications that help members prepare for emergencies include *Essentials of Home Production and Storage* (32299); *Family Home Evening Resource Book* (31106), pages 322-340; and articles published in Church magazines.

### From Church Magazines

- ▶ Call-for-Help Card Friend, Oct 1994, pg 21
- ▶ Earthquake Drill Ensign, Dec 1994, 58-59
- ▶ Emergency Savings the "Centsible" Way Ensign, Feb 1992, 65
- ▶ Exploring: Emergency Preparedness: Greater Than Gold Friend, Feb 199, 38-39
- ▶ Helping Children Cope with Emergencies Ensign, Jun 1998, 74-75
- ▶ Look to the Future with Optimism Ensign, Apr 1997, 22-27
- ▶ Preparing for Emergencies Ensign, Dec 1990, 59-61
- ▶ Safe Water in Emergencies Ensign, Feb 1986, 70-71
- ▶ The Good Neighbor List Ensign, Feb 1994, 73
- ▶ What Is Our Role When We Have Planned Adequately and Others Have Not? Ensign, Apr 1993, 53-54
- ▶ When Disaster Strikes Ensign, Aug 1994, 71
- ▶ When the Lights Go Out... Ensign, Jun 1992, 71

### **From Instructional Materials**

- Coping with a Blackout Family Home Evening Resource Book 1997, pg 334
- Earthquake Preparation 1997, pg 336-37
- Emergency Supplies 1997, pg 322-23
- Emergency Telephone Numbers 1997, pg 323-24
- Mouth-to-Mouth Resuscitation 1997, pg 324-26
- Protecting Your Home against Fire 1997, pg 332-33
- Treating Bleeding 1997, pg 330-32
- Treating Shock 1997, pg 328-30
- Water Safety Skills 1997, pg 339-40

**Church of Jesus Christ of Latter-day Saints Emergency Preparedness Website:  
[www.providentliving.org](http://www.providentliving.org)**

# **SERVICES PROVIDED BY DISASTER ASSISTANCE CENTERS**

In time of major emergency, disaster relief agencies will pool their services. Together, they will comprise "One-stop Centers for Emergency Relief". These centers are set up in areas convenient for you and your neighbors. In a major earthquake, response may not be available for sometime.

## **AGENCY OR ORGANIZATION      SERVICES PROVIDED**

### **PRIVATE RELIEF AGENCIES:**

American Red Cross Salvation Army	Advice and assistance in satisfying immediate needs such as food, shelter, clothing, medical supplies, and welfare inquiry
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### **LOCAL GOVERNMENT AGENCIES:**

City/County Tax assessor	Advice and assistance in obtaining Property tax relief for losses resulting from the disaster
Consumer Protection Agency	Protection against unscrupulous business practices of contractors and merchants
Health Departments	Advice and assistance in matters related to health and sanitation problems resulting from disaster
Welfare Department	Distribution of food stamps under State Dept. of Social Services and the U.S. Dept. of Agriculture, Food and Nutrition Division

### ***Private Service Assistance Groups such as cleanup and transportation***

### **STATE GOVERNMENT AGENCIES:**

Employment Department  relating	State unemployment payments and disaster unemployment assistance; guidance  to new employment and providing temporary labor
Department of Social Services.	Distribution of food stamps; redirection or continuation of normal services to welfare recipients
Franchise Tax Board	Advice and assistance in obtaining tax relief for disaster casualty losses
Department of Veteran Affairs.	Assistance to individuals whose home or farms are financed under Cal-Vet programs

## **FEDERAL GOVERNMENT AGENCIES:**

Federal Emergency Management Agency	Agency designated to coordinate disaster responses (FEMA)
Small Business Admin. (SBA)	Assistance in obtaining loans for repair, rehabilitation, or replacement of damaged or destroyed business property
Dept. of Housing and Urban Dev. (HUD)	Temporary housing or other emergency shelter; temporary mortgage or rental payment for persons faced with loss of their residences because of disaster related financial hardships
Farmers Home Administration Department of Agriculture (FmFa)	Assistance in obtaining loans for: essential operating costs; land restoration; repair or aged structures, property, equipment, and livestock
Internal Revenue Service (IRS)	Advice and assistance in obtaining income tax relief for disaster casualty losses
Social Security Administration	Assistance to SS recipients in expediting delivery of checks delayed by the disaster; assistance in applying for SS disability and survivor benefits
Veterans Administration (VA)	Assistance to home owners whose homes are financed through VA loans; information on VA hospitalization
Young Lawyers Section (YLS) American Bar Association	Legal assistance to families with disaster related problems

## **INTRODUCTION**

The Personal and Family Preparedness Committee of the Bonneville 1st Ward originally compiled the information in this book. We are deeply indebted to them. The West Jordan Utah Mountain View Stake has modified and re-edited some of the information. Updates and minor changes where necessary and applicable to the West Jordan Utah Mountain View Stake.

It is our hope that families will read this booklet not only once but several times, so that everyone becomes thoroughly familiar with the actions proposed herein. Then, if an emergency should develop, they may act quickly and decisively, taking the proper steps to save themselves and others and to minimize property damage.

We do not know what lies in the future, nor do we intend to alarm or upset. The probability of any of the emergencies listed in this booklet happening to our stake members is very remote. Nevertheless, we must be prepared. We urge you to prayerfully consider this information and modify it to conform to your family circumstances.

The contents of this booklet are intended to assist individuals and families in coping with emergency hazards. However, final decisions on preparation for or actions during an emergency are the sole responsibility of individuals. No one knows your needs or can take care of you better than you can – nor does any one else have that responsibility. Information and examples contained in this booklet are provided for illustration and advice only. Therefore, the stake or its committee members assume no liability.

## PURPOSE OF THIS BOOK

For many years, the General Authorities of the church have given us wise counsel about being prepared for times of hardship and disaster. They have put together plans and resources to provide some help during these emergencies. As a part of their plan, they have counseled us to provide for ourselves and our families. The first resources and responsibility lies with the individual, then the family, and then the church. In considering the issue of emergency preparedness, we recognize that to cover every aspect of every disaster would be impossible, but we feel that some good basic information may be helpful in reviewing your preparation and encouraging further preparation on your part.

You will notice that the section of long-term food storage is not very long. We recognize the church has produced some wonderful manuals, both for basic food storage and recipes for using this food. We encourage you to use these manuals for your long-term storage and food preparations.

The emphasis of “this manual” is to give you information about being prepared with some other necessities when facing an emergency. We encourage you to take this information, review your preparedness, learn more, improve on it, discuss it, practice the skills and prepare your families in all ways to be ready at all times. We would encourage you to use your family councils and family home evenings regularly for this purpose. We hope that you will develop your own emergency preparedness plan.

We would like to thank all those who have put their time and effort into the production of this manual. We hope that you will seriously study the issues and the needs of your family and prepare in a steady manner. Please be wise in your decisions. Do not overtax your family resources or be fanatical. May the Lord’s blessings be with you as you prepare.

Sincerely,

West Jordan, Utah, Mountain View Stake Presidency

# CHAPTER 1

## TEACHINGS OF THE BRETHEREN

**L. Tom Perry** – October Conference 1980

Having a one-year-supply must be moved up on the family priority list. How it is obtained must be considered again. Can more of it be the result of our own labors in making our own clothes, increasing our garden yield, and preserving our own food?  
Ensign, Nov. 1980 – Pages 8-9

**Spencer W. Kimball** – April Conference 1976

Quoted again in October Conference 1980

We encourage you to grow all the food you feasibly can on your own property. Berry bushes, grape vines, fruit trees- plant them if your climate is right for their growth. Grow vegetables and eat them from your own yard.

Ensign, May 1976 – p. 124

Ensign, Nov. 1980 – p. 32-33

**Ezra Taft Benson** – October Conference 1980

For over forty years, in the spirit of love, members of the Church have been counseled to be thrifty and self-reliant; to avoid debt; pay tithes and a generous fast offering; be industrious; and have sufficient food, clothing, and fuel on hand to last at least one year. Today there are compelling reason to reemphasize this counsel... the Lord has decreed global calamities for the future and has warned and forewarned us to be prepared. For this reason the brethren have repeatedly stressed a “back-to-basics” program for temporal and spiritual welfare. Today I emphasize a most basic principle: Home Production and Storage.

Ensign, Nov. 1980 – p. 32-33.

**Orson Hyde** – Quoted on October Conference 1980

There is more salvation and security in wheat than in all the political schemes of the world.

J.D. 2:207,

Ensign, Nov. 1980 – p. 33

**Brigham Young** – Quoted in October Conference 1980

If you are without bread, how much wisdom can you boast, and of what real utility are your talents, if you cannot produce for yourselves and save against a day of scarcity those substances designed to sustain your natural lives?

J.D. 8:68

Ensign, Nov. 1980 – p. 33.

**Harold B. Lee** – Quoted in October Conference 1980

Perhaps if we think, not in terms of a years supply of what we ordinarily would use, and think more in terms of what it would take to keep us alive in case we didn't have anything else to eat, that would be very easy to put into storage for a year....just enough to keep us alive in case we didn't have anything else to eat we wouldn't get fat on it, but we would live; and if you will think in terms of that kind of annual storage rather than a whole years supply of everything that you are accustomed to eat which, in most cases, is utterly impossible for the average family, I think we will come nearer to what President J. Reuben Clark, Jr., advised us way back in 1937.

Ensign, Nov. 1966

Ensign, Nov. 1980 p.33

**Ezra Taft Benson** – October Conference 1980

You do not need to go into debt, may I add, to obtain a year's supply. Plan to build up your food supply just as you would a savings account. Save a little for storage each paycheck. Can or bottle fruit and vegetables from your gardens or orchards. Learn how to preserve food through drying, and possibly freezing. Make your storage a part of your budget. Store seeds and have sufficient tools on hand to do the job. If you are saving and planning for a second car or a T.V. set or some items which merely add to your comfort or pleasure, you may need to change your priorities. We urge you to do this prayerfully and to **DO IT NOW!** I speak with a feeling of urgency. I have seen what the days of tribulation can do to people.

Too often we bask in our comfortable complacency and rationalize that the ravages of war, economic disaster, famine, and earthquake cannot happen here. Those who believe this are either not acquainted with the revelations of the Lord, or they do not believe them. Those who smugly think these calamities will not happen, that they will somehow be set aside because of the righteousness of the saints, are deceived and will rue the day they harbored such a delusion.

The Lord has warned and forewarned us against a day of great tribulation and given us counsel, through his servants, on how we can prepare for these difficult times. Have we heeded his counsel? Let us be in a position so we are able to not only feed ourselves through the home production and storage, but others as well.

May God bless us to be prepared for the days which lie ahead, which may be the most severe yet.

Ensign, Nov. 1980 p. 33

**Marion G. Romney** – October Conference 1978

Now I would like to repeat what you have heard a thousand times, more or less, about taking care of yourselves. You ought to now, more than at any time since we have been in this welfare work, make sure that you are prepared to go through a period of stress on the resources you have provided for yourselves. The necessity to do this may come any day. I hope it doesn't come too soon, in fact, I hope it doesn't come in my lifetime. But it will come sooner or later.

Never forget, this matter of providing for yourselves, even though you don't hear as much about it now as you did a few years ago. Remember that it is still a fundamental principle, one that has been taught the Saints ever since they came to these valleys of the mountains. We have always been urged to provide ourselves with enough supplies in the day of harvest to

last us until the next harvest. Be sure that you do so. Do it in your own way but be prepared to take care of yourselves through a period of need.

I don't know how things will work out. People say to me, "What will we do? If we have a year's supply and nobody else has anything, it will be gone in a day." Well, it will last as long as it lasts, but I'm not worried about that. If I do what the Lord tells me to do, and you do what the Lord tells you to do, he will take care of us all right.

Ensign, May 1979 – p. 94.

**Victor L. Brown** – October Conference 1980

Our concern and the thrust of my message, which has been repeated from this pulpit many times, is that the welfare program rests on the basic principles of personal and family preparedness, not on Church preparedness. We are concerned that because the Church program includes production projects, canneries, bishops storehouses, Deseret Industries, and other visible activities, our people are mistakenly led to believe these things replace the need for them to provide for themselves. This is simply not so...

We are deeply concerned about the welfare of our people and recognize the potential privation and suffering that will exist if each person and family does not accept the word of the Lord when He says, "Prepare every needful thing" and "It must needs be done in mine own way." May I again implore you priesthood and relief society leaders to see that all members of the Church everywhere understand that responsibility they have for their own welfare, that our people will be blessed to live provident and righteous lives.

Ensign, Nov. 1980 – p. 81.

**Bruce R. McConkie** – April Conference 1979

I stand before the Church this day and raise the warning voice. It is a prophetic voice... it is a voice calling upon the Lords people to prepare for the troubles and desolations which are about to be poured out upon the world without measure. For the moment we live in a day of peace and prosperity but it will not ever be thus. Great trials lie ahead. All of the sorrows and perils of the past are but a foretaste of what is to be. And we must prepare ourselves temporally and spiritually.

Be it remembered that tribulations lie ahead. There will be wars in one nation and kingdom after another until war is poured out upon all nations and two hundred million men of war mass their armaments at Armageddon... There will be earthquakes and floods and famines. The waves of the sea shall heave themselves beyond their bounds, the clouds shall withhold their rain, and the crops of the earth shall wither and die.

**James E. Faust** – April Conference 1986

The counsel to have a year's supply of basic food, clothing, and commodities was given fifty years ago and has been repeated many times since. Every father and mother are the family's storekeepers. They should store whatever their family would like to have in the case of an emergency. Most of us cannot afford to store a year's supply of luxury items, but find it more practical to store staples that might keep us from starving in case of emergency.

Ensign, May 1986 – p. 22

**Russel M. Nelson** – April Conference 1986

An important part of the Lords storehouse is maintained as a year's supply, stored, where possible, in the homes of faithful families of the church.

Ensign, May 1986 – p.27

## **Ezra Taft Benson** – October Conference 1987

I ask you earnestly, have you provided for your family a year's supply of food, clothing, and, where possible, fuel? The revelation to produce and store food may be as essential to our temporal welfare today as boarding the ark was to the people in the days of Noah.

Ensign, Nov. 1987 – Pages 48-49

## **President Gordon B. Hinckley - October Conference 2001**

“Occasions of this kind (September 11, 2001) pull us up sharply to a realization that life is fragile, peace is fragile, civilization itself is fragile. The economy is particularly vulnerable. We have been counseled again and again concerning self-reliance, concerning debt, concerning thrift. So many of our people are heavily in debt for things that are not entirely necessary. When I was a young man, my father counseled me to build a modest home, sufficient for the needs of my family, and make it beautiful and attractive and pleasant and secure. He counseled me to pay off the mortgage as quickly as I could so that, come what may, there would be a roof over the heads of my wife and children. I was reared on that kind of doctrine. I urge you as members of this Church to get free of debt where possible and to have a little laid aside against a rainy day.

We cannot provide against every contingency. But we can provide against many contingencies. Let the present situation remind us that this we should do.

As we have been continuously counseled for more than 60 years, let us have some food set aside that would sustain us for a time in case of need. But let us not panic nor go to extremes. Let us be prudent in every respect. And, above all, my brothers and sisters, let us move forward with faith in the Living God and His Beloved Son.

Great are the promises concerning this land of America. We are told unequivocally that it “is a choice land, and whatsoever nation shall possess it shall be free from bondage, and from captivity, and from all other nations under heaven, if they will but serve the God of the land, who is Jesus Christ.”  
Ether 2:12

This is the crux of the entire matter—obedience to the commandments of God.

The Constitution under which we live, and which has not only blessed us but has become a model for other constitutions, is our God-inspired national safeguard ensuring freedom and liberty, justice and equality before the law.

I do not know what the future holds. I do not wish to sound negative, but I wish to remind you of the warnings of scripture and the teachings of the prophets which we have had constantly before us.

I cannot forget the great lesson of Pharaoh's dream of the fat and lean Kine and of the full and withered stalks of corn.

I cannot dismiss from my mind the grim warnings of the Lord as set forth in the 24th chapter of Matthew.

I am familiar, as are you, with the declarations of modern revelation that the time will come when the earth will be cleansed and there will be indescribable distress, with weeping and mourning and lamentation.  
D&C 112:24

Now, I do not wish to be an alarmist. I do not wish to be a prophet of doom. I am optimistic. I do not believe the time is here when an all-consuming calamity will overtake us. I earnestly

pray that it may not. There is so much of the Lord's work yet to be done. We, and our children after us, must do it."

"By failing to prepare you are preparing to fail." Benjamin Franklin

"Men succeed when they realize that their failures are the preparation for their victories."  
Ralph Waldo Emerson

"I will prepare and some day my chance will come." Abraham Lincoln

"Luck is what happens when preparation meets opportunity." Seneca

"Too often we bask in our comfortable complacency and rationalize that the ravages of war, economic disaster, famine and earthquakes cannot happen here. Those who believe this are either not acquainted with the revelations of the Lord, or they do not believe them."  
Ezra Taft Benson

"Be prepared in all things against the day when tribulations and desolation's are sent forth upon the wicked." D&C 39:8

"As long as I can remember, we have been taught to prepare for the future and to obtain a year's supply of necessities. I believe the time to disregard this counsel is over. With the events in the world today, it must be considered with all seriousness. Create a plan if you don't already have one, or update your present plan. We are not in a situation that requires panic buying, but we do need to be careful in purchasing and rotating the storage that we are putting away." L. Tom Perry

"In fair weather prepare for foul." Thomas Fuller

"Luck favors the mind that is prepared." Louis Pasteur

"To be prepared is half the victory." Miguel De Cervantes

"Before everything else, getting ready is the secret to success." Henry Ford

"The time to repair the roof is when the sun is shining." John F. Kennedy

Without rice, even the cleverest housewife cannot cook. Chinese Proverb

THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

OFFICE OF THE FIRST PRESIDENCY

47 EAST SOUTH TEMPLE STREET. SALT LAKE CITY UTAH 84150-1000

January 20, 2002

To: General Authorities; Area Authority Seventies; Stake, Mission, and District Presidents; Bishops and Branch Presidents

Dear Brethren:

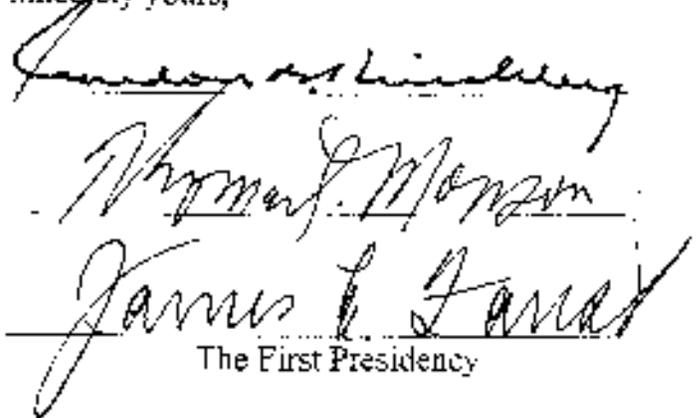
Home Storage and Financial Reserves

Priesthood and Relief Society leaders should teach the importance of home storage and securing a financial reserve. These principles may be taught in ward councils or on a fifth Sunday in priesthood and Relief Society meetings.

Church members can begin their home storage by storing the basic foods that would be required to keep them alive if they did not have anything else to eat. Depending on where members live, those basics might include water, wheat or other grains, legumes, salt, honey or sugar, powdered milk, and cooking oil. When members have stored enough of these essentials to meet the needs of their family for one year, they may decide to add other items that they are accustomed to using day to day.

Some members do not have the money or space for such storage, and some are prohibited by law from storing a year's supply of food. These members should store as much as their circumstances allow. Families who do not have the resources to acquire a year's supply can begin their storage by obtaining supplies to last for a few months. Members should be prudent and not panic or go to extremes in this effort. Through careful planning, most Church members can, over time, establish both a financial reserve and a year's supply of essentials.

Sincerely yours,

  
James E. Faust  
The First Presidency

## CHAPTER 2

### GENERAL INSTRUCTIONS ON PERSONAL AND FAMILY PREPAREDNESS

#### HAVE A FINANCIAL PLAN

##### Pay A Full Tithing

The most important step toward achieving financial well-being is to pay tithing first—no excuses and no exceptions. President Gordon B. Hinckley counseled: “Some of you have money problems. I know that. There is never enough money in your homes. I know that. You are struggling to get along. What is the cure? The only thing I know of is payment of tithing. ... It was God who made the promise that He would open the windows of heaven and pour down blessings upon those who walked honestly with Him in the payment of their tithes and offerings, and He has the capacity to keep His promise.” Inspirational Thoughts, Ensign, Aug 1997, 6

##### Save Some Each Pay Check

Elder L. Tom Perry of the Quorum of the Twelve Apostles explained: “After paying your tithing of 10 percent to the Lord, you pay yourself a predetermined amount directly into savings. ... It is amazing to me that so many people work all of their lives for the grocer, the landlord, the power company, the automobile salesman, and the bank, and yet think so little of their own efforts that they pay themselves nothing.” Becoming Self-Reliant, Ensign, Nov 1991, 66

These savings must remain untouchable except for specific purposes like education, missions, retirement, or legitimate emergencies.

Keep in mind that the more automatic the savings or investment program, the better. It only requires one decision. After that, the deposit takes place automatically with each paycheck. Also, the best savings plans are those based upon a percentage of income rather than a fixed amount of money. For many people, automatic savings plans are already available at work. These include IRAs or 401k's and is often coupled with an employer-matching program.

A good time to increase these contributions would be in conjunction with a pay raise. The money is then transferred into savings before you receive it and it is not missed.

##### Create A Budget

President N. Eldon Tanner (1898–1982) once stated: “I am convinced that it is not the amount of money an individual earns that brings peace of mind as much as it is having control of his money. Money can be an obedient servant, but a harsh taskmaster.” Constancy amid Change, Ensign, June 1982, 4

Budgeting provides economic freedom because it allows us to control our money rather than allowing our money to control us.

When preparing a budget remember that it must be written to reflect an accurate record of all income and expenses. Some people who have never written a budget before are shocked when they see where their money actually goes. They are amazed at how just a few small purchases can add up over a short time. However, they will not accurately know how much money went to eating out, movies, groceries, or bills unless they keep track by writing it down.

Budgeting as a family provides the perfect opportunity for parents to guide their children in the proper use of money.

Finally, to adjust for life's inevitable changes a budget must be reviewed and revised regularly. With a typical family, if more than six months go by without the budget being reviewed or revised, it is generally not an effective tool.

## **Avoid Unnecessary Debt**

The problem is, most of us don't have enough cash to pay for a home, a car, or an education. Commenting on incurring debt, President Hinckley counseled "Reasonable debt for the purchase of an affordable home and perhaps for a few other necessary things is acceptable. But from where I sit, I see in a very vivid way the terrible tragedies of many who have unwisely borrowed for things they really do not need." Believe, Ensign, Aug 1992, 6

President Rueben J. Clark explained: "Interest never sleeps nor sickens nor dies; ... Once in debt, interest is your companion every minute of the day and night; you cannot shun it or slip away from it; you cannot dismiss it; it yields neither to entreaties, demands, or orders; and whenever you get in its way or cross its course or fail to meet its demands, it crushes you." [Conference Report, Apr 1938, 103](#)

Reduce the number of credit cards you have and use them only when you have the cash saved to immediately pay off the balance each month. The ease of obtaining and using credit cards beguiles their destructive potential. Don't fall into the trap of thinking, "I'll buy it now and figure out a way to pay for it later." Lane V. Erickson, Bankruptcy Attorney has learned that, "credit card debt is the number one cause of bankruptcies filed by individuals." In addition to cutting back on credit cards, families should shun all other types of short-term, high-interest loans.

## **Eliminate Debt**

President Hinckley advised: "Get out of debt and rid yourself of the terrible bondage that debt brings. ... Discipline yourselves in matters of spending, in matters of borrowing, in practices that lead to bankruptcy and the agony that comes therewith." To Men of the Priesthood, Ensign, Nov 2002, 58

President Ezra Taft Benson suggested a sound program for eliminating debt. He advised, "Let us use the opportunity we have to speed up repayment of mortgages and to set aside provisions for education, possible periods of decreased earning power, and emergencies the future may hold." This could be done by paying more than just the minimum payment due on a debt. Any surplus amount prepaid would reduce the principal owed on the mortgage. Applying the prepayment to the principal reduces both the total interest and the total number of payments over the life of the loan.

Prepayment is especially useful when numerous debts exist if the "roll-over" technique is used. Under this technique, the prepayment is applied to the smallest debt first until it is completely paid for. Once the smallest debt is paid off, the money used toward the smallest debt is rolled over to the next smallest debt until it too is paid off. This continues until all debts, small and large, are completely paid.

## **Have An Insurance Plan**

With ever increasing medical costs, a good health insurance and long term disability plan should be a part of your financial stability and emergency plan. Most employers provide some type of health plan for their employees as a part of their benefits package.

A good life insurance policy provides support for a family at the death of a loved one. These funds will offset the costs of burial as well as give time for the many adjustments needed during the transition of the family. Financial stability brings peace and support to the family as decisions and adaptations are made. Education, updating job skills, or restructuring of child care all take time and financial support. The increased financial resources are necessary during this redefining period.

Many financial planners suggest an umbrella liability policy to supplement their home owners and auto insurance. They are available at a minimal cost and will be an added protection for your assets.

## **Have A Living Will – Not only for yourself, but also for your dependents**

A Living Will is a legal document that recognizes the right of an adult to give written instructions to physicians, hospitals, and other medical care providers regarding life-sustaining and other medical procedures.

For information and forms contact:

SNL Information Center

P.O. Box 57220, Salt Lake City, UT 84157-0220

(801) 264-1060

## **Have A Trust Or A Will**

For information, the best resource is an attorney.

## **Identity Theft – An Attorney’s Advice**

A corporate attorney sent the following out to the employees in his company.

- 1) The next time you order checks have only your initials (instead of first name) and last name put on them. If someone takes your checkbook, they will not know if you sign your checks with just your initials or your first name, but your bank will know how you sign your checks.
- 2) When you are writing checks to pay on your credit card accounts, DO NOT put the complete account number on the “For” line. Instead, just put the last four numbers.
- 3) Put your work phone # on your checks instead of your home phone. If you have a PO Box use that instead of your home address. If you do not have a PO Box, use your work address. Never have your SS# printed on your checks.
- 4) Place the contents of your wallet on a photocopy machine. Do both sides of each license, credit card, etc. You will know what you had in your wallet and all of the account numbers and phone numbers to call and cancel. Keep a photocopy in a safe place. I also carry a photocopy of my passport when I travel either here or abroad. We’ve all heard horror stories about fraud that’s committed on us in stealing a name, address, Social Security number, credit cards. Unfortunately, I, an attorney, have firsthand knowledge because my wallet was stolen last month. Within a week, the thieves ordered an expensive monthly cell phone package, applied for a VISA credit card, had a credit line approved to buy a Gateway computer,

received a PIN number from DMV to change my driving record information online, and more. But here's some critical information to limit the damage in case this happens to you or someone you know:

- a. We have been told we should cancel our credit cards immediately. But the key is having the toll free numbers and your card numbers handy so you know whom to call. Keep those where you can find them.
- b. File a police report immediately in the jurisdiction where your credit cards, etc. were stolen. This proves to credit providers you were diligent, and this is a first step toward an investigation (if there ever is one).
- c. Call the 3 national credit reporting organizations immediately to place a fraud alert on your name and Social Security number. I had never heard of doing that until advised by a bank that called to tell me an application for credit was made over the Internet in my name. The alert means any company that checks your credit knows your information was stolen, and they have to contact you by phone to authorize new credit. By the time I was advised to do this, almost two weeks after the theft, all the damage had been done, and the thieves threw my wallet away. This weekend someone turned it in. It seems to have stopped them dead in their tracks.

Here are the numbers you always need to contact about your wallet and any identity has been stolen.

- 1) Equifax: 1-800-525-6285
- 2) Experian (formerly TRW): 1-888-397-3742
- 3) Trans Union: 1-800-680-7289
- 4) Social Security Administration (Fraud Line): 1-800-269-0271

Be willing to share this information, it could really help someone that you care about.

## **EMERGENCY SUPPLIES**

Each family unit should store a year's supply of food, clothing, water (20 gallons per person), and where possible, fuel. In the event of a major disaster, our very lives may depend upon whether or not we have preparedness items. The Brethren have been urging us for many years to so equip and supply ourselves. If we should have need of these items during an emergency and come up wanting, we would have no one to blame but ourselves. In addition to these long-term storage items, each family should also have an emergency preparedness kit in which is packed all the items the family would need to survive for one week. These kits are the heart and core of survival in a major disaster because neither the Church nor the government will be able to mobilize relief supplies in less than 4-7 days. This kit should include, but not be limited to, the following items:

- 1) Food, which required no refrigeration or cooking
- 2) One change of clothing for each family member
- 3) Water (at least 1 gallon water per person per day)
- 4) First aid supplies (including instruction books)
- 5) Medications required by family members (insulin, heart pills, etc.)
- 6) Bedding (sleeping bags or blankets)
- 7) Valuable papers and documents
- 8) Games for children – reading materials for adults (scriptures etc.)
- 9) Infant care items if necessary
- 10) Tools (ax, shovel, etc.)

At the end of this section are several lists of things to include in an emergency preparedness kit. These lists contain suggested items and quantities, however, your family is unique and you should prepare your own kit to contain items tailored to your families needs. The important things to bear in mind regarding your kit is that it be stored in an easily accessible place known by all family members and that it be portable so that it could be picked up at a moments notice.

The family should discuss and practice orderly and efficient evacuation of their residence. At the time of a disaster, they will then be prepared to evacuate immediately.

Each individual in the family should know where to go, what to take and for whom he is responsible. A prearranged family gathering place designated in case a disaster strikes when family members are scattered between work, school, shopping, etc., and the family residence destroyed.

Each family member should know how to contact community emergency resources (fire, police, ambulance, poison control center, etc.) if communication is possible.

Each individual (excluding infants and small children) trained in basic first aid.

Each individual or family owning an automobile should keep it in good repair and the gas tank always at least halfway full.

Each family should carry adequate insurance and maintain an inventory of household possessions.

# **FIRE PROTECTION AND FIRE FIGHTING**

Fires are a special hazard in a time of disaster. They may start more easily and the help of the fire department may not be readily available. Therefore, it is essential that you:

- 1) Know the fire prevention rules and be especially careful not to start fires
- 2) Know how to put out small fires yourselves
- 3) Have on hand simple tools and equipment needed for fire fighting

## **AFTER A NATURAL DISASTER**

Use extreme caution when entering or working in buildings that may have been damaged or weakened by the disaster, as they may collapse without warning. There may be gas leaks or electrical short circuits.

DO NOT take lanterns, torches or flames of any type into buildings that have been flooded or otherwise damaged by a natural disaster, since there may be leaking gas lines or flammable materials present.

Many FLASHLIGHTS are not explosion proof!!

Stay away from fallen or damaged electrical wires, which may still be dangerous.

Check for leaking gas pipes in your home. Do this by smell or with a soapy water solution applied to the gas pipes with a paintbrush. If there is a leak, the soapy water will make bubbles. **NEVER** check for leaks using a match or candle. If you detect gas:

- 1) Open all windows and doors
- 2) Turn off the main gas valve at the meter
- 3) Leave the house immediately
- 4) Do not turn on or of any electrical switch or appliance
- 5) Notify the gas company or the police or fire department
- 6) Do not re-enter the house until you are told it is safe to do so

## **WHEN IN DOUBT – GET OUT!!**

If any of your electrical appliances are wet, first turn off the main power switch in your house, then unplug the wet appliance, dry it out, reconnect it, and finally, turn on the main power switch (Caution: Don't do any of these things while you are wet or standing in water). If fuses blow or circuit breakers trip when the electric power is restored, **turn off the main power switch** again and then inspect for short circuits in your home wiring, appliances and equipment.

Check your food and water supplies before using them. Foods that require refrigeration may be spoiled if electric power has been off for some time. Also, do not eat food that has come in contact with floodwaters. Be sure to follow the instructions of local authorities concerning the use of food and water supplies.

If needed, get food, clothing, and medical care or shelter at the West Jordan Utah Mountain View Stake Center or the Red Cross station or from local government authorities.

Stay away from disaster areas. Sight seeing could interfere with first aid or rescue work, and may be dangerous as well.

Write, e-mail, fax, or telephone your relatives, after the emergency is over, so they will know you are safe. Otherwise local authorities may waste time locating you – or if you have evacuated to a safer location, they may not be able to find you at all. However, do not tie up the phone lines if they are still needed for official emergency calls.

Do not pass on rumors or exaggerated reports of damage.

Follow the advice and instructions of your local government on ways to help yourself and your community recover from the emergency. The Salt Lake County Civil Defense Director has indicated to us that in the event of a major disaster we would be basically on our own to fare the best we can. Therefore, it is extremely important that in such an emergency we follow the instructions of the local church leaders. Relief will be organized along priesthood lines.

## **WHAT IS “PSYCHOLOGICAL READINESS”?**

“Psychological Readiness” means that you are mentally prepared to meet a crisis and are just as important as physical preparedness. Many people try to avoid thinking about earthquakes or other forms of disaster because it creates a great deal of apprehension. As you walk through the process of becoming better informed and prepared, some of your fears may actually increase, while others are laid to rest. Fortunately, intellectual and physical control encourages emotional control and will lead to less stress during the event.



This is critical, because during a calamity, your survival can depend upon how you cope with emotional stress and shock. If you have thoroughly thought out the possibilities in an emergency ahead of time, it will help you to control your panic reactions, make correct decisions and assist others.

Children are especially vulnerable to psychological trauma if they have had no preparedness training. Help them to understand earthquakes and other types of disasters; how to appropriately respond in a variety of situations and where to seek adult assistance. Make plans and rehearse them. Afterwards, reassure children. Do not leave them unattended and encourage them to talk about the experience and their feelings.

We certainly can't simulate a severe earthquake, but we can stimulate your imagination towards the consequences of one. This kind of “mind-set” must be a daily fact of life. If you implant the “correct” mind responses ahead of time, you have a much greater chance of surviving and acting appropriately during a disaster. You may never have to cope with a disaster, but in case you do, everything depends on knowing how!

## **FAMILY COUNCIL – THE PLACE TO BEGIN**

As a family, you need a sound plan for earthquake and other types of disaster survival – another kind of “insurance” just in case of a severe earthquake or other disaster with all its many consequences should strike. Your family survival plan will:

- ...Assure you of better protection and more self-reliance in case of a major disaster or emergency.
- ...Provide you with an adequate supply of food, water, clothing, medical supplies, and equipment.
- ...Inform each family member of his responsibilities in an emergency.

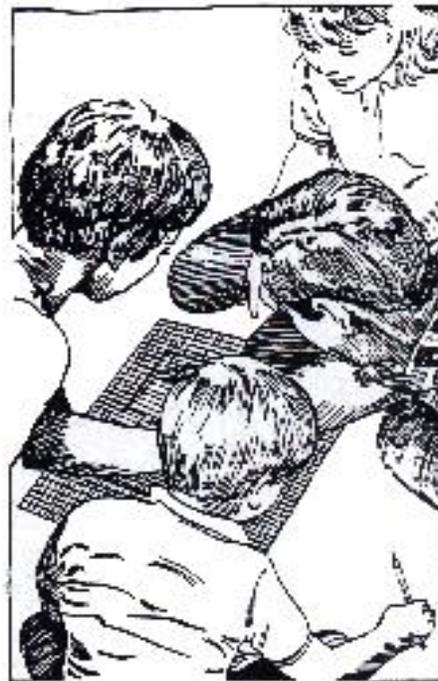
Ideally, you will help prepare your family members for their own protection through thorough and sensitive education, done calmly and in a matter-of-fact manner BEFORE AN EARTHQUAKE OR OTHER DISASTER STRIKES. You should give basic instruction on earthquake and other possible disasters to your children as soon as they are old enough to understand.

Your chances of survival will be much higher if your family knows what to do and is trained to act as a unit. You can use the “team” concept that everyone has a vital job in emergencies. You must discuss and formulate your family preparation plans. Develop exercises or activities, which will make your instructions more clear. Rehearse them. You may choose a game-like format, but make sure your family knows that the purpose of these exercises is a serious one, learning to meet and cope with any disaster or emergency, which may affect your home and family. In short:

- DEVELOP A FAMILY PLAN
- ASSIGN RESPONSIBILITIES
- ESTABLISH ACCOUNTABILITY
- REHEARSE YOUR FAMILY PLAN
- THEN PUT YOUR PLAN ON PAPER

This will help you to learn where supplies are located; remember all escape routes and utility turn off locations. **Post the completed plan along with the check list** where family members, baby sitters and neighbors can use it before and during emergencies.

1. Sketch the floor plan of the place where you live. Show a second way to exit from each room (and if you need special equipment, where it is stored).
2. Make notations or areas where emergency food, water, first aid kit and fire extinguishers are stored.
3. Mark location of gas, water (house & street) and electricity turn-off, including wrench and other necessary tools.
4. Indicate location of family’s outdoor meeting place.
5. Note safest place to be in each room – during an earthquake.
6. Locate hazards in your home and how they can be corrected.
7. List Out-of-State Family Contact’s name and phone number.
8. List the date your plan was prepared and the date for its next revision.





# West Jordan City



## SUGGESTED TOPIC FOR FAMILY DISCUSSION

- 1) How can we prepare ourselves to respond in a positive, appropriate manner during and after a disaster? (learn home or away from home)
- 2) Who will be responsible for giving orders, for rounding up family members and getting them started on their emergency tasks without any delay? Who is the backup person to give the emergency orders?
- 3) Where are the locations in our home that represent potential danger during and offer the most protection?
  - a. Do we need to rearrange the way things are stored?
  - b. Do we have beds that are located under windows that could be moved?
  - c. What appliances and furniture needs to be secured?
- 4) How shall we rehearse our earthquake response plans? (have family earthquake drills periodically. Evaluate your drills and decide how you can improve your performance).
- 5) If we become separated indoors, where will we plan to meet outdoors?
- 6) What are the best escape routes from our house if regular exits are blocked? Pay special attention to rooms located above or below the main floor.) What are our search and rescue plan?
- 7) Are we prepared to evacuate our home in one-half hour or less if need be?
- 8) How can we practice fire prevention all year? What is our plan in case of fire? What actions will we take to protect our home from fire after and earthquake?
- 9) Do we want to purchase earthquake insurance? We will need to weigh the cost and benefits?
- 10) What should we do if an earthquake strikes when we are at:
  - a. Work
  - b. School
  - c. Best friend's house
  - d. On the freeway
  - e. At the market
  - f. At a football game
  - g. In a theater
- 11) The nearest emergency shelter is located – our house, school or place of work?
- 12) What is our plan if we are in separate parts of the city during a severe earthquake?
- 13) What are the best ways to reunite our family after an earthquake?
- 14) Which out-of-state relatives or friend will serve as our “family contact center” where others can get in touch or leave messages? Teach children this phone number.
- 15) What is the **Civil Defense** plan for major emergencies in our area?
- 16) Are there any special hazards near our home? Are we in a possible inundation area in case of dam failure or flash flood?

- 17) How can we get our neighbors involved in similar preparedness planning? Cooperative efforts among neighbors can save lives and property in times of disaster!
- 18) How can we develop the ability to be self-sufficient if we are isolated from help?
- 19) How much ready cash will we need? Banks may be closed over a large geographical area.
- 20) What emergency supplies do we need to assemble? Who should be responsible for this task?
- 21) Where will we store our emergency supplies?
- 22) What is the Emergency Broadcast System (EBS)? Why should we tune in after a disaster?

### **As You Make Your Plans, Imagine Living Conditions Under Each of These Three Possibilities:**

1. Your house suffers some damage – broken windows, fallen plaster, minor roof damage, bricks toppled. Some of your utilities have been disrupted but you can stay in the house.
2. Your house is so badly damaged that it is unsafe for occupancy. You must not stay in the house but could “camp out” in your own backyard or nearby open area or safe shelter.
3. Your house and the entire neighborhood have been declared unsafe and you must relocate a distance from home for a period of time, say two weeks.

As you hold your family counsels and discuss these topics be sure to do so in an informed and calm atmosphere. The purpose of these discussions is to educate family members on their responsibilities during an emergency and to train them in what to do to insure the safety of not only themselves but of the entire family.

Children often do not totally understand what grown-ups are talking about, but they do understand the emotions that are expressed. Please take special steps to avoid doing or saying anything that will cause feelings of alarm or fear in children. Be sure to instill within them a sense of well being and confidence. Help them to know what regardless of the situation they will know how to handle it.

Every member of your family should be totally familiar with a number of predetermined family gathering places. Children especially should be periodically reminded of where these places are. In the advent of an emergency, children need to know where their parents will be waiting for them. This will decrease their anxiety and allow them to cope more effectively with the disaster.

The next page list different areas of assembly that your family should be familiar with and know where to meet under what kind of circumstances.

## **ASSEMBLY PLANS**

**Family** - Each family should have an assembly area immediately outside of their home, such as a tree, streetlight, etc. This location is where every family member will go if the home should catch on fire. This will prevent time being wasted searching for family members who are safe and could save the life of the would-be searcher.

Each family should also have prearranged assembly area designated in case a disaster should destroy the family residence while the family members are scattered between work, school, shopping, etc. This could be the church meeting house, a close friend or relative's home or a particular spot in a city park.

Every family should also designate an out-of-state Family Contact. A person who family members can report their location and condition in case of a general disaster or evacuation.

**Ward/Stake** - In the event of a major disaster, the West Jordan Utah Stake Center located at 2690 West 7000 South will be assembly point for all stake members regardless of the location of their ward meeting house. These buildings will serve as an emergency medical center and as a coordinating center for search and rescue operations, mass feeding station, and cleanup coordination as needed. These operations will be coordinated with stake and government efforts.

## **24-HOUR POCKET SURVIVAL KITS**

If you plan a trip or hike to the out-of-doors, or if you are going to be traveling anywhere by car where you will be away from civilization for many miles, you should carry the basic essentials of life and rescue. Emergencies occur when you least expect them. Sudden storms both winter and summer can be disastrous. Survival during these emergencies is difficult for even the experienced. A properly prepared emergency kit could prevent a cold night in the snow or possibly save a life.

The first few hours of any wilderness or storm survival emergency will be the most important. Decisions made during this period usually determine life or death. Only you can act to solve that problem. It is your body and your problem.

The types of weather storms that such a survival kit could be useful in combating are as follows:

- Rain - Cold and wetness can cause extreme body heat loss
- Wind - Cools the body and blows away heat faster than the body can produce it
- Blizzard - Cold, heat loss, mobility threatened, mental stress
- Sun - Body heat gain, dehydration, blindness, burns
- Darkness - Loss of direction, mobility, heat loss, mental stress, fear

Weather, however, is not the only enemy to combat during times of emergency or crisis. The human body itself may pose tremendous obstacles to overcome. Listed below are the major body enemies, in their order of importance, or destructive ability.

- Yourself - The mind controls the body, self-confidence, attitude, fears, determination, imagination, ability, skills, panic
- Injury - Affects the priorities of life, mobility, skills and dexterity, compounding the problem of acquiring the necessities of life

## **Preparing for Temperature Changes**

The human body has a very narrow temperature tolerance, only about six degrees. Any change in temperature will affect the normal production of the life energies in the cells.

An individual in an unexpected emergency must recognize the challenge or threat to his life, must react to the body's problem indicator, must ascertain the priorities to maintain life, and must combat the body's enemies that threaten life. A simple survival kit like the one listed below can help solve many of the problems a person would encounter if caught in a storm unexpectedly. Commercial survival kits are available but are also quite expensive. With a little ingenuity and for less than a dollar, you can make your own.

**STORAGE CAN:** Any small, clean, can will do, such as a Band-Aid can. Use this to carry items listed below. The lid can be made watertight by sealing with several wraps of electrical tape.

**CANDLE:** Half of a Christmas candle or plumber's candle will help kindle a fire or heat water. Fire starters made from tightly rolled paper soaked in paraffin will also work well.

**BUTANE LIGHTER:** Any small butane lighter (like Bic or Cricket cigarette lighter) will work fine to light fires.

**MATCHES:** A penny box or strike-anywhere matches water proofed by coating with wax or nail polish.

**GARBAGE BAG:** Thirty-gallon size. Pull up over legs and tuck into pockets to protect legs from wind and rain. These bags can be used for shade from the sun also.

**LEAF BAG:** Seven-bushel size fits a 6 ft. man. Cut a hole in the sealed end for face or head. Cover head if possible (not face).

**TAPE:** May be used to close face opening, patch clothing, as emergency bandage and to secure top and bottom bags against rain and wind.

**FOOD:** Six to twelve cubes of sugar will give instant energy needed to move muscles for heat production. A bouillon cube, ration bar and milk tablet will also provide energy and will store well. Wrap all in plastic.

**WATER:** Due to the size of this small kit it is impossible to carry water. However, a half dozen Iodine Tablets can be added to purify water found in streams or in puddles.

**FISHING EQUIPMENT:** 50 ft. of heavy test fishing line (nylon), lures, flies, sinker and hooks.

**WIRE:** Five to ten feet of light flexible wire for snares. 18-gauge will do.

**WHISTLE:** To let searchers know where you are. It is much easier to blow a whistle than to yell for help.

**ALUMINUM FOIL:** Two sheets 12 inches square or larger to make drinking and cooking utensils.

**PENCIL & PAPER:** For messages to searchers giving directions as to where you may be headed if you are forced to travel.

**COMPASS:** To determine direction of travel.

QUARTERS: For phone calls.

MISC.: Small mirror, one-sided razor blade, or small knife, three Band-Aids, Toilet Paper.

In survival situation's you must draw on all your resources. Your powers of reasoning and outdoor techniques play a crucial role in the outcome of unforeseeable predicaments. **Add your own personal survival kit and a little common sense and you will come out ahead.**

## CHAPTER 4

## 72-HOUR EMERGENCY SURVIVAL KIT

There are many reasons why families should prepare 72-Hour Emergency Survival Kits for every member of their family. In many types of natural disasters, there is no time to organize the supplies necessary for evacuation. Often the police or other civil authorities may drive through a neighborhood and warn individuals to evacuate immediately, giving no time to gather anything except something that you can grab as you run. Accidental chemical spills from trains or trucks may release toxic or explosive fumes so dangerous that time equates to the life and death of the unsuspecting residents of the neighborhood. Mudslides, flash floods, and many other natural disasters may require evacuation of the home within two to three minutes. In time of need, it is too late to gather the needed supplies. Take time now to gather what ever your family needs to survive for three days (72 Hours) based upon the assumption that those items are the only possessions you will have. Include food, water, clothing, shelter, and a source of heat packed into a container small enough and light weight enough for each family member to carry his own kit. Store these kits in a closet near the front door or some other easily accessible place where you can quickly grab them on the way out the door.

The 72-HOUR Emergency Kit should be “individually tailored” to meet the basic survival needs of your family for three days. Most families prefer to store their emergency supplies in one location that is relatively safe, yet easily accessible if evacuation is required. Items may be stored in a 32-gallon trashcan, suitcase, duffle bag, footlocker, storage pull cart or individual backpack as desired. Be creative and make your kit work for you and your family.

Why pack a kit for 72 hours? What is so special about that number? In the event of an emergency, it would require at least 72 hours before governmental forces could be mobilized to feed you and your family. The Utah Civil Defense Director has even suggested that families prepare a two week kit, because in a wide spread major disaster it could take that long to get things organized.

### FORMULA For Putting Together a 72-HOUR Food Supply:

The following formula will give a rough indication of the amount of foods your family will need to store to take care of your emergency needs. Remember that in a time of emergency you will not be able to eat all of the things you are accustomed to eating. Include items designed to sustain life and provide nutritional support for all bodily functions. These items “**must be rotated**” on a regular basis to preserve freshness. As the old items need rotating, eat them so that you will know what your 72-hour emergency diet would be like. If you find that some foods are too objectionable then substitute some other food in their place until over time you are storing items that not only sustain life but which you and your family also enjoy eating.

One of the mistakes that many people make when organizing a 72-Hour Emergency Survival Kit is that they forget that they may have to carry it. They often pack their supplies in what they call an “Emergency Garbage Can.” By the time enough provisions are gathered together for the entire family the garbage can may weigh over a hundred pounds. The family feels secure that they have everything they will need. However, if they ever had to use it, it would be impossible to pick up. What ever you pack your kit in be sure that it is easily portable and that every member of the family has their own kit in case individuals became separated from one another. Backpacks are the most convenient and portable containers available. These can be purchased or made from a pair of old Levi’s, with a drawstring through the waist and the legs made into straps.

To compute the amount of food your family will need, simply multiply:

$$\underline{\hspace{2cm}} \text{ Number in family times 3 (days)} = \underline{\hspace{2cm}} \text{ Meals}$$

_____ Meals X 2 Servings-meat or protein products	= _____ servings
_____ Meals X 2 Servings-Milk or dairy products	= _____ servings
_____ Meals X 4 Servings-fruit and vegetables	= _____ servings
_____ Meals X 4 Servings-breads and cereals	= _____ servings

For each child, add 4 extra servings of milk foods for the 72-hour period.

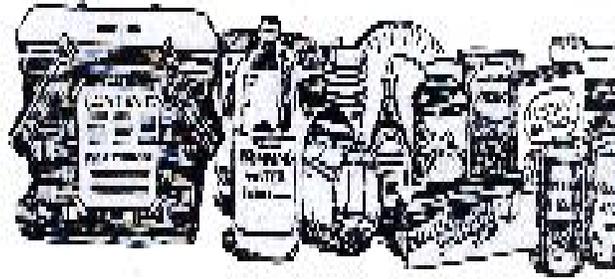
For each teenager add 8 extra servings of milk foods for the 72-hour period.

The following guidelines should help you determine which foods your family should consider storing for your 72-hour kit. Remember that there is no perfect food or groups of foods so use these guidelines to select foods your family will enjoy eating while satisfying the nutritional needs and storable qualities necessary.

- 1) Select nutritious foods your family will enjoy, and rotate them in your home food supply. Buy your emergency supply a few items at a time, to avoid strain on your weekly budget.
- 2) Make the majority of the foods, or at least the first day's menus, edible without any heat or cooking. Choose foods requiring little or no water for preparation.
- 3) Provide a means of cooking those foods that need heat – for example: a Sterno stove, a 3-lb. empty can to use as a cooking container, a 1-lb. can for mixing juices and pudding, a spoon for stirring, and a supply of matches in a waterproof container. A saucepan with water will heat small cans of food (label removed). Then the same water can be used for clean up.
- 4) Choose foods, which are easy to store, and which have high nutritional value. Use mostly dried and instant-type foods with some canned goods. (Canned items are heavy to carry). Include vitamins or other supplements if desired.
- 5) Select foods, which will keep for at least 6 months in a cool dark place.
- 6) Stock a 72-hour food supply, which is compact enough to store in a backpack or container, for one person to carry. More than one container is suggested, if your family is large.
- 7) Store **bottled drinking water** in addition to the food supply, allowing at least 1½ gallons of water for each person.
- 8) Do not forget other non-food items, which would make the serving of meals possible and convenient. Be conservative – do not include the kitchen sink!
- 9) Quantity foods like instant milk, oatmeal, hot chocolate mix can be measured out in one-meal portions and stored in sealed plastic bags. Be very careful to expel all excess air before sealing.
- 10) Choose or package foods into one serving or one-meal size, to eliminate leftovers.
- 11) Label each food in the food supply with the date of purchase or last date it should be used. (make sure you specify which date you mean)

**IN SHORT: BE ABLE TO PRODUCE THREE DAYS OF GOOD MEALS FOR YOUR FAMILY ANYWHERE WITH A MINIMUM OF TIME, EQUIPMENT, HEAT OR ENERGY, AND WATER.**

A complete 72-Hour Emergency Kit should include many things other than food. A sample inventory of items to include is contained below:



**FOOD:** Store ready-to-eat items that do not require heating or water. Nutrition “is not” the most critical factor. Store foods that are convenient to use, which store well, and give high energy.

The following menu will supply 2,100 calories per day and most of the essential nutrients. The quantities listed are amounts per day:

- Meats: ¼ lb. per person: Tuna, Sardines, Spam and Vienna Sausages (any canned meat or Beef Jerky)
- Peanut Butter (¼ lb.)
- Canned Juice (12 oz.)
- Dried Fruits (½ lb.)
- Graham Crackers ( ½ lb.)
- Powdered Milk ( ¼ lb.)

This may be augmented with other foods such as:

- |                                       |                               |
|---------------------------------------|-------------------------------|
| Military K-Rations                    | <u>Individual Packets of:</u> |
| Military C-Rations                    | Canned Milk                   |
| Canned Fruit                          | Instant Oatmeal               |
| 3 Gallons of water                    | Dried Soups or Stews          |
| Sugar Cookies                         | Instant Pudding               |
| Sweetened Cereals                     | Granola Bars                  |
| Hard Candy                            | Hot Chocolate                 |
| Prepared Meals in-one                 | Kool-Aid (Presweetened)       |
| Soups and Stews                       | Herbal Teas                   |
| Cheese/Crackers                       | Peanut Butter                 |
| Nuts, trail mix, raisins, dried fruit | Infant Food                   |

## **Non Food Emergency Items for 72 HOUR KIT**

Instructional Manual on Emergency Preparedness (such as this booklet)  
Container for 72 Hour Kit  
Pocket Survival Kit (see page 36)  
Battery Powered Radio with extra batteries  
Flashlight and extra batteries  
Matches – waterproofed, butane lighter  
Emergency Candles  
Signal flares  
Extra eyeglasses  
Paper cups, plates, utensils  
Compass, whistle  
Tent/tarp for shelter  
Rain Poncho, Hand warmers  
Extra Clothing, work gloves, shoes (heavy, comfortable), hat, coat  
Sleeping bags/blankets/bedrolls (wool, thermal, space)  
Plastic bags and ties  
Duct tape  
Cash money (small bills and change)  
Toilet paper, paper towels, aluminum foil  
Tooth brush and tooth paste  
Sugar free gum and hard candy  
Disinfectant (bleach, Pine sol)  
Feminine hygiene needs  
Diapers, Baby wipes  
Hand cream lotion (antibacterial)  
Soap-Waterless hand cleaner/sanitizer  
Paper cups, plates, plastic utensils  
Can opener and utility knife  
Ax, shovel, pipe wrench, adjustable wrench  
Paper and pencils  
Water (1½ gal/person/day)  
Water filter, with spare filter cartridges  
Water purification tablets, small bottle  
Books, puzzles, games, crafts, needlework, etc.  
Personal documents: Scriptures, genealogy records, legal documents (birth certificates will, insurance policies, drivers' license) Patriarchal blessing, extra car/house keys  
Send one copy of legal papers to out-of-state contact  
Establish an out-of-state 24 hour telephone contact  
Map of your area

## **Pocket Survival Kit**

Water proof container for first aid kit  
Consecrated Olive Oil  
First aid manual First Aid merit Badge book or Scout Handbook  
Aromatic Spirits of Ammonia  
Water purification tablets  
Table salt, baking soda  
Aspirin, Tylenol, etc. (for both children and adults)  
Cotton ball/swabs  
Eye drops  
Nasal Spray  
Petroleum jelly (Vaseline)  
Diarrhea medication (Kaopectate, milk of magnesia)  
Laxative  
Prescriptions - Medications  
Safety pins  
Needle and thread  
Tweezers  
Adhesive and/or paper tape  
Hydrogen Peroxide  
Bandages  
Gauze roll  
Coban elastic bandages (or Ace Bandage)  
Heavy string, fishing line  
Tetanus immunization every 5-8 years.  
Antiseptic cream  
Burn ointment (for minor burns only)  
Rubbing Alcohol  
Iodine  
Band-Aids  
Triangular bandages (at least 2)  
O.B. Kit if wife is pregnant  
Q-tips  
Spray on artificial skin-type disinfectant  
Other medical items specific to your family needs

The items in the 72-Hour kit listed in the preceding pages should meet the needs of most families. Use hobbies and entertainment your family likes to do, ready to eat foods you family will eat and individual medication as required by your own family members. Families with small children should also include some games that will entertain them like coloring books and crayons, storybooks, table games, etc. Also, include items such as blankets, pacifiers, bottles and diapers.

### **SAMPLE MENU FOR 72-HOUR KIT**

<u>BREAKFAST</u>	<u>LUNCH</u>	<u>DINNER</u>
------------------	--------------	---------------

**FIRST DAY:**

Granola Bar	Graham Crackers	Beef Jerky or Baked Beans
Vienna Sausages	Peanut Butter	Soda Crackers
Instant Orange Drink	Jelly/Cheese Spread	Canned Carrots
Chocolate Milk	Dried Apple Snacks	Fruit Leather
Dried Fruit or Nuts	Powdered Milk	Powdered Milk or Drink

**SECOND DAY**

Instant Oat Meal	Dehydrated Soup Mix	Canned Beef Stew
Brown Sugar	Almonds	Rye Crisp Crackers
Prunes	Ramen Noodles	Canned Whole Kernel Corn
Hot Chocolate	Peaches	Instant Pudding
	Powdered Milk	Powdered Milk or Drink

**THIRD DAY**

Spam	Tuna	Chili
Wheat Thin Crackers	Graham Crackers	Crackers
Instant Orange Drink	Dry Chicken Soup Mix	Hard Candy
Fruit Leather	Tomato Juice or V-8	Powdered Milk or Drink

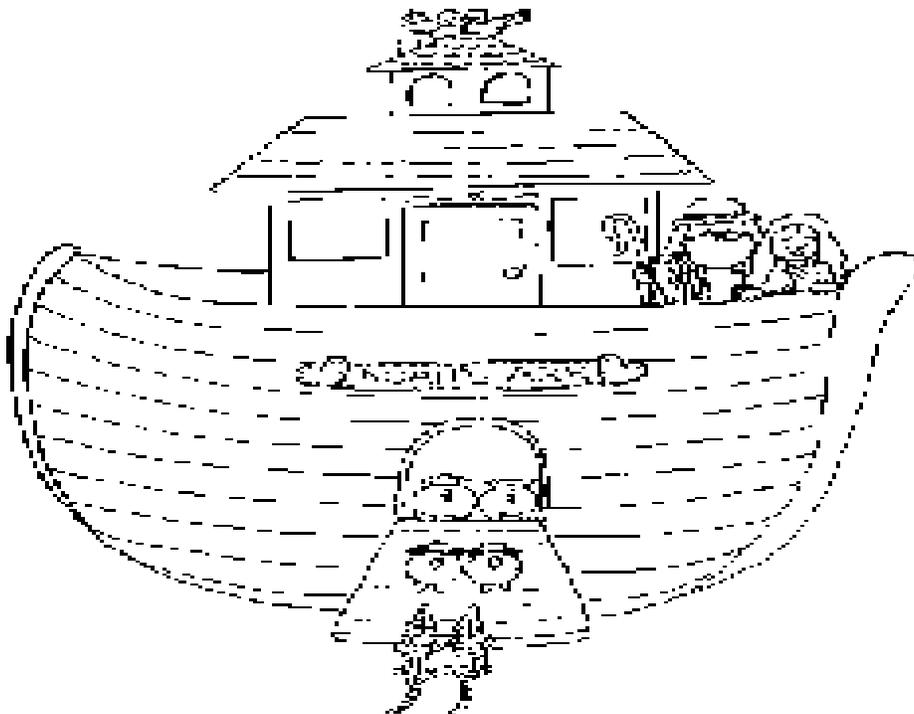


**"CARRY OUT" FOODS FOR EVACUATION\***

If you prefer to carry really **high-energy** lightweight foods in your backpack you might consider:

- Powdered Milk
- Instant Orange Drink (Vitamin C enriched)
- Dried Apricots or Raisins & Apples
- Peanut Butter or Whole Almonds
- Turkey or Beef Jerky (Optional)
- Graham Crackers
- Honey (Optional)
- Pure Water (if needed)
- Compact water filter
- Tomato Juice
- Instant Oatmeal
- Hard Candy
- Chewing Gum
- Sugar Cubes
- Shredded Coconut
- Granola Bars
- Fruit Leathers
- Solid Dextrose
- Dry Soup Mixes
- Freeze Dried Meals
- Sugar Cookies

A 72-Hour supply of these lightweight foods for one person will weigh around 4 pounds, (not counting liquids) and can easily fit into a small backpack. A high protein, high energy spread for graham crackers can be made by blending the dry powdered milk, peanut butter and honey.



## GUIDELINES FOR PUTTING TOGETHER A WELL BALANCED 2-WEEK EMERGENCY FOOD SUPPLY

Type of Food	Amount for 1 day per person	Amount for 2 weeks per person	Useful Buying Information
Milk  Cheese	2 cups per adult 4 cups per child  1-1 1/3 oz.	7 quarts per adult 14 quarts per child  1 lb. 3 oz.	1 qt. Milk is equal to: 14 oz evaporated milk or 3-3 1/2 oz. Dry milk
Canned Meat, Fish or Poultry.  Dried Eggs Cooked dry Peas and Beans  Nuts	2 servings	28 servings (8-9 lbs.)	One serving equals: 3 oz. Meat, poultry, fish. 3/4 oz. Dried meat 2 eggs dried 8 oz. Mixture with rice, vegetables, etc. 5 oz. Condensed soups with meat 1 cup cooked dried peas, beans. 1/2 cup nuts 4 tbsp. Nut butters.
Fruits and Vegetables. Juices: Orange, Grapefruit, Tomato (vitamin C source)	3-4 servings Serving = 1/2 Cup  1/2 - 1 Cup	42-46 Servings (5-7 lbs.)  56-112 oz. (Two 46 Oz. Cans)	One serving equals: 4 oz. Canned fruits, vegetables. 1-1/2 oz. Dried fruits. 4-8 oz. Canned fruits
Cereal and Baked Goods.  Crackers and Cookies	3-4 servings Servings equals: 1 slice bread 1/2 - 1 Cup cooked cereal & pasta 2/3 cup cooked rice 6 sq. graham crackers 2 rye wafers	42-56 servings (5-7 lbs.)	One serving equals: 1/2 - 1 oz. Dry cereal 1 oz. Crackers 1 oz. Cookies. 3/4 oz. Pasta 3/4 oz. Rice
Fats and Vegetables Oils		Up to 1 lb. or 1 pint per person	Amount depends on extent of cooking possible. Choose types requiring no refrigeration
Salt Sugar Flour	2 tsp. 2 tsp. 1 oz.	4 oz. (1/4 lb.) 4 oz. (1/4 lb.) 1 lb.	1 lb. box for 4 persons 1 lb. box for 4 persons 5 lb. bag for 4-5 persons
Sweets		1-2 lbs.	Hard candy, gum, jam, jelly, instant pudding, syrup, honey etc.
Miscellaneous	According to family practices and extent of cooking possible		Herb tea, Cocoa, seasonings, bouillon products, soda, vinegar, baking powder, mustard, catsup etc.

\* Avoid foods that increase thirst.

\* One-Meal servings will discourage spoilage resulting from un-refrigerated leftovers.

\* Because of lack of refrigeration, avoid using foods which spoil quickly, like mayonnaise, salad dressings, creamed foods, etc. **Do not forget WATER...**

## **Quick and Simplified 72-HOUR KIT**

Place each day in a gallon plastic bag. Add plastic spoon and napkin where needed and

### **REMEMBER YOUR WATER.....**

DAY ONE:	Breakfast	Fruit, Oatmeal Bar and Boxed Dried Fruit
	Lunch	Applesauce Cup and Crackers w/Peanut Butter
	Dinner	Soup (pop-top) and Pretzels
DAY TWO:	Breakfast	Granola Bars and Fruit Juice
	Lunch	1 oz. Beef Jerky and Vitamin C Fruit Drops
	Dinner	Cup O' Soup and Cheddar Cheese Crackers
Day THREE:	Breakfast	Granola Bar
	Lunch	Applesauce and 1 oz Nuts
	Dinner	Ramen Noodles and Fruit Cup

Include hard candy and Vitamin C fruit drops for snacks.

Spoons, toilet paper/wipes, toothbrush/paste, soap, comb, personal requirements

Comfort Kit: card game, writing/coloring materials, gum, reading material, etc.

# CHAPTER 5

## LONG TERM STORAGE - 1 YEAR SUPPLY

The gospel of Jesus Christ teaches independence, industry, thrift, and self-respect. Latter-day Saints have been counseled to be prepared to care for themselves and their families in time of need.

Planned storage in the home will assist the membership of the Church to be self-sustaining in time of need. The likelihood of accident, illness, or unemployment faces nearly every family at one time or another. Wars, depressions, and famines, as well as earthquakes, floods, and tornadoes are possibilities to consider in planning for the care and protection of the family.

The home production and storage program is an integral part of the Church welfare services but is undertaken individually, according to the needs of each member. Its application, therefore, differs in relation to circumstances, but the responsibility of preparedness remains solely upon the individual family. The vast majority of commodities in the Bishop's Storehouse system of the Church must be found within the homes and basements of individual families.

A primary consideration is the storage of foods. No particular recommendations are made as to the kinds or amounts of food to be stored because of the varying factors involved, such as locale, availability of products, climate, special diets, and the number of family members and their ages. What each one does in adapting a program of home production and storage is an individual matter.

Home storage of food should begin with basic items that will sustain life in an emergency if there was nothing else available to eat. Later, after these are obtained in adequate amounts, consideration could be given to storing foods that are ordinarily eaten. The choice of foods to store must be based upon the food value and a storage quality along with individual tastes and needs.

Proteins, vitamins, minerals, and certain fats are essential for the maintenance of good health. Many foods that are adaptable for long-term storage either lack certain essential vitamins or lose vitamins during storage. When only basic foods are stored, therefore, they need to be supplemented with foods (fruit and vegetables) that will supply adequate amounts of vitamins C & A.

The following basic items might be considered for storage. Indicated with the items is the approximate amount of each needed to sustain an average woman for one year as emergency storage. More would be needed for a man and less for children.

Grains (Wheat, Rice, Corn, etc.)	300 lbs	Flour	100 lbs
Powdered milk (nonfat)	100 lbs	Oil/Shortening	2 gal
Sugar or Honey	100 lbs	Salt	5 lbs
Beans & legumes	150 lbs	Baking Powder	1 lb

These items, used exclusively, provide a diet that supplies approximately 2,300 calories per day, which is recommended for an average woman twenty-five years old. The above-suggested quantities may be proportionately reduced as other foods are added.

To the basic foods listed, others may be added according to availability, cost, and individual taste. Those frequently chosen are the dried legumes (peas, beans, peanuts, lentils) – which are high in protein and store well – vegetable oils or shortening, dried fruits and vegetables, and canned meats and fish. Dehydrated and freeze-dried foods may be included, however foods preserved in this way are more expensive, but they store well and better retain their vitamin content.

A diet of the items listed above may be different than the one you are accustomed to eating. You should eat more of these items now so that your system may adjust to them. For example: tortillas made from flour, oil, baking powder, salt and water are much easier to make and will cook much quicker than bread.

People in highly mobile situations, such as college students, armed services personnel, or those who have small homes with little storage area, may find it more difficult to store a year's supply of food, clothing, or fuel. This does not release them from the obligation of doing their best to be prepared for an emergency. Often in rather limited space, basic food items such as wheat, nonfat dried milk, sugar or honey, and salt can be stored. Closets, attics, space under beds, or even space made available by family or friends can be utilized for food storage. It is better to have food storage sufficient for a few months than to have no storage at all.

As has been indicated, the food storage program is to be adapted on an individual basis. The Church neither sponsors nor endorses any commercial products or firms. Successful food storage is dependent on the following:

- 1) Quality of products. Obtain the top grade whenever possible.
- 2) Proper containers. Usually metal storage cans or heavy plastic containers with air-tight lids are best.
- 3) Storage facilities. Areas that will permit easy access, usability, and temperature control are best.
- 4) Temperature. Foods store best at from forty to sixty degrees Fahrenheit. (Foods may be stored in a higher temperature range, but the shelf life diminishes in proportion to the higher temperature.)
- 5) Rotation. This is fundamental to a successful storage program in preventing spoilage and minimizing loss of food value and flavor. Use a "magic marker" and date your foods.

Specific information regarding foods and variable storage factors in given localities may be obtained from local government agencies, colleges, universities, or those professionally engaged in food businesses.

Acquiring a year's supply should be done in an orderly and systematic manner, consistent with a family's income. Borrowing money to acquire food storage is not advocated.

Sufficient durable clothing also could be included in a home storage program to take care of the requirements of a family for at least a year's time. This clothing should accommodate the needs for the seasonal periods.

It is wise also to store fabrics, thread, needles, and other sewing items. The provident housewife will take advantage of sales of materials suitable for making the clothing her family may require and will store her purchases until such time as they are needed. Savings are also possible in keeping clean, used clothing on hand which can be remodeled or cut down for a younger member of the family, or refurbished.

If possible, a reserve of fuels (coal, oil, wood, etc.) should be part of the storage plan. Various types of supplementary heating and cooking units some of which are portable are available on the market. Those should be selected that would, in an emergency, serve both for the preparation of foods and for warmth.

In addition to the aforementioned storage items, first aid articles, prescribed medicines (as directed by a physician), soaps and cleaning agents, matches, and other such necessary items may be considered. A reserve of bedding should be included.

Care should be exercised in selecting items and arranging for storage. Wise budgeting will help minimize costs and will permit savings. Replenish supplies as they pass their expiration dates or as they are needed.

Security through the home storage program can be strengthened by the observance of further counsel that:

- 1) We live righteously
- 2) We avoid debt
- 3) We practice thrift
- 4) We have a willingness to work

All members are encouraged to participate in the home production and storage program in order to provide for their own.

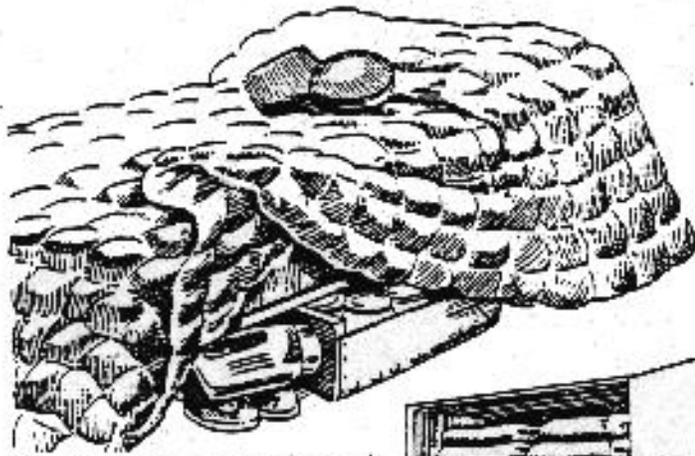
*“But if any provide not for his own, and especially for those of his own house, he hath denied the faith and is worse than an infidel”.* Timothy 5:8

(Adapted from a publication of the Church of Jesus Christ of Latter-Day Saints entitled: “Essentials of Home Storage” printed in October of 1973 – publication = PGWE0370 10/73 185M.

## STORAGE OF FOOD, WATER AND OTHER SUPPLIES

Remember, the best storage areas are cool, dry and dark

Extra storage space is often hard to find. Be creative in choosing storage containers, arrangements and locations. Select several areas around your home for storing reserve food and other supplies – don't put all your eggs in one basket! Keep in mind that certain items, when tossed about and mixed together can become toxic (example: household ammonia & chlorine bleach) and should be stored in widely separated areas.



• Under a bed or behind a couch

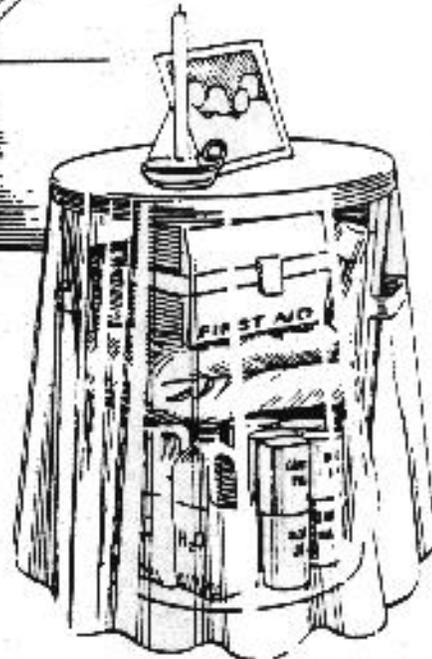


• Behind a drape



• In a closet

• Up off cement floors in garage and outbuildings



• Store items in a flat top trash barrel and cover with floor length tablecloth.

# **GARDENING**

Gardening is a very essential part of emergency preparedness. It is much better to learn how to keep and grow a garden now, while it may not be needed, than waiting until it is an emergency. Besides being healthier and better for you, freshly grown vegetables taste much better than the ones you buy in the store. If you are unable or unwilling to grow a garden now, you should at least have the seeds and tools ready to grow a garden. The following is a list of facts about seeds and a Vegetable Planting Guide for Salt Lake County.

## **SOME FACTS ABOUT SEEDS**

### **Open-pollinated seed**

Open-pollinated seed is produced by allowing a large number of plants to freely cross several generations. Only similar plants are allowed to contribute pollen and make seed for the next generation; any offspring that do not conform to the desired traits are culled before they can contribute pollen (This, process is known as roqueing). The resulting seed can be expected to produce offspring similar to the parent plants.

### **Hybrid seed**

Hybrid seed is produced by crossing two open-pollinated varieties. The parent types are generally highly inbred, so they will express their genetic traits uniformly. Hybrids tend to be more vigorous than open pollinated varieties (a phenomenon known as *hybrid vigor*). You can save seed from hybrid plants, but because the parent plants are no longer inbred their offspring may display a wide variety of genetic traits and the resulting crop may not be very uniform. It is possible to produce an open-pollinated variety from hybrids by allowing several different hybrids to cross freely for several generations (roqueing out undesirable plants).

### **Storing Seed**

If you keep your seed dry and as cool as possible, you can use the same seed (in most cases) for several years. Put them in an airtight container in your refrigerator or other cool storage area (a storage temperature of 40-50 degrees is ideal). Putting silica gel packets or powdered milk in with them will keep the humidity lower. It is not necessary to vacuum pack or to freeze your seed to obtain fairly good storage results. When you are ready to use the seed, remove the container from storage and let it warm up before opening to minimize condensation on the inside of the container.

### **Long-lived Seeds**

These may be expected to maintain good viability for 5 years or more. Beets, broccoli, Brussels sprouts, cauliflower, cabbage, collards, kohlrabi, chicory, endive, escarole, radicchio, cucumber, kale, lettuce, melons, mustard, peppers, radish, rutabaga, sunflower, tomato, and turnip.

### **Medium-lived Seeds**

These may be expected to maintain good viability for at least 3 years: Beans, carrot, celery, chard, corn eggplant, parsley, peas, pumpkin, salsify scorzonera, and squash.

### **Short-lived Seeds**

These are generally not recommended for using for more than one season, but will usually still be acceptable the second year if kept cool and dry: Leek, onion, parsnip, and spinach.

## **Handy tips**

Try covering slow or hard to germinate seeds like carrots and parsnips with a board or a 1/4 inch layer of mulch or peat moss to help keep the soil damp and soft. After 1 week, check under the board daily. As soon as the seeds begin to sprout, remove the board.

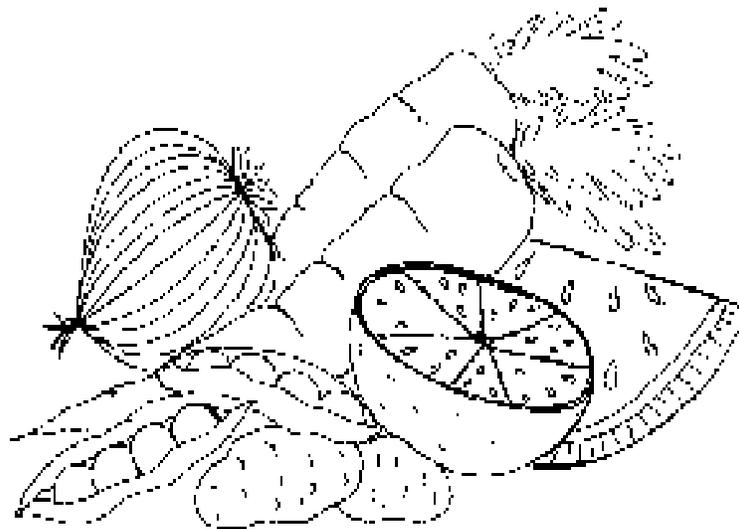
Beans, peas, and corn may be soaked overnight before planting to hasten germination.

Peas will rot in the ground if kept too wet. A trick the "old-timers" used was to run a stream of water down the furrow before planting their peas. They would then sow the seed in the furrow (usually quite thick) and then cover the seed with loose soil and not water again until the peas came up.

Planting 2 rows of peas or bush beans 8 or 10 inches apart may be better than a single row. The plants in the 2 rows tend to support one another.

Crops such as carrots and potatoes that prefer cooler conditions can be planted on the east side of a taller crop like corn for earlier shade in the afternoon.

Corn should be planted with at least 3 rows together for best pollination.



## NORTHERN UTAH VEGETABLE PLANTING GUIDE

Vegetable	Amt seed for 50 ft row	Depth in inches	Distance between rows in Inches	Inches apart in row after thinning	When to plant ft row	Days to harvest	Approx yield per 50	Remarks
Asparagus	1	36-40	18	Mar-May	3 Yrs	17#		Sow in beds. Transplant after 1yr
Beans, Bush	1/2#	1.5-2	18-30	2-3	Apr-May	45-65	3/4 bu	Keep picked to prolong harvest
Beans, Pole	1/2#	1.5-2	36-48	4-6	Apr-May	60-70	1 bu	Keep picked to prolong harvest
Beets	1/2 oz	5-1	12-18	2	Mar-May	55-65	1 bu	
Broccoli*	1/8 oz	.5	24-36	14-18	Mar-May	80-100	50#	
Brussel Sprouts*	1/8 oz	.5	24-36	12-18	Mar-May	100-110	15 qts	
Cabbage	1/8 oz	.5	24-36	12-20	Mar-May	90-150	75#	
Carrots	1/8 oz	.25-.5	12	1-2	Mar-May	60-80	1 bu	
Cauliflower*	1/8 oz	.5	24-36	12-20	Mar-May	70-120	30 Heads	
Cucumbers	1/8 oz	1	48-72	12-36	Apr-July	55-65	50#	Keep picked to prolong harvest
EggPlants*	1/16 oz	.25-.5	36	18-24	Apr-June	95-110	60 fruit	
Kohlrabi	1/8 oz	.5	18-24	3-4	Mar-May	60-70	40#	
Lettuce, Leaf	1/50 oz	.5	12-18	4-6	Mar-May	45-60	35#	
Lettuce, Head	1/50th oz	.5	18-24	12-14	Mar-May	55-80	50 Heads	
Muskmelons	1/8 oz	1	48-72	12-36	May-July	75-100	35 fruit	
Okra	1/4 oz	1	28-36	15-18	Apr-July	50-60		Pick young pods
Onion, Seeds	1/8 oz	.5	12-24	2-3	Mar-May	100-165	1 bu	
Onion, Sets	1.5#	1-2	12-24	2-3	Mar-May	95-120	1 bu	Green onions 50-60 days
Parsnips	1/8 oz	.5	18-24	34	Mar-May	100-120	1 bu	Keep seed moist
Peas	1/4#	1-2	18-30	2-3	Apr-June	65-85	1 bu	
Peppers*	1/16 oz	.25	24-36	18-24	Apr-June	110-130	150 fruits	
Potatoes	5#	4-6	24-36	12	Mar-May	90-105	2 bu	
Popcorn	1 oz	1	36	12	Apr-July	100-110	50#	
Pumpkins	1/4 oz	1	72-96	30-48	May-June	95-120	40 fruit	
Radishes	1/3 oz	.5	12	1-2	Apr-May	20-50	50#	
Rhubarb	25roots	3	36-60	24-36	Mar-May	2 years	150 stalks	Does best here in shade
Rutabagas	1/4 oz	.5	18-24	3-6	Mar-May	80-90	50#	
Spinach	1/4 oz	.5	12-14	2-4	Mar-May	40-65		
Squash (Summer)	1/4 oz	1	36-60	24-48	Apr-July	50-60		
Squash (Winter)	1/4 oz	1	72-96	48	Apr-June	85-120	30 fruit	
Sunflowers	1/6 oz	1	36-48	16-24	Apr-June	80-90	25 heads	Space wide for large heads
Sweet Corn	1/8#	2	30-36	10-14	Apr-July	55-90	48 ears	July planting is usually best
Sweet Potato	plants		36-48	12-18	May	120		Needs light soil, keep moist
Swiss Chard	1/4 oz	1	18-36	8-18	Mar-May	55-65	35#	
Tomatoes*	1/16 oz	.5	36-60	18-36	Apr-May	60-90	3 bu	
Turnips	1/3 oz	.5	15-18	1-3	Mar-May	45-60	1 bu	
Watermelons	1/8 oz	1	60-72	24-60	Apr-June	80-100	15 fruit	

\* Transplants preferred over seed for earlier harvest. Amounts and dates on this chart are estimates and are intended to be used only as a guide. Planting dates are approximate for Salt Lake County.

# CHAPTER 6

## **FAMILY EMERGENCY WATER SUPPLY**

During times of serious emergency, the normal water supply to your home may be cut off, or become so polluted that it is undrinkable. In fact, a supply of stored water could be your most precious survival item! Again, the time to prepare is **NOW**, not after disaster and disruption strike.

Health department and public water safety officials use many safeguards to protect the sanitary quality of your drinking water. However, this protection may break during emergencies caused by natural disaster.

You and your family may then be on your own to provide a safe and adequate water supply. If you have to leave your home, finding and decontaminating, water will be a major problem. Remember that typhoid fever, dysentery, diarrhea, and infectious hepatitis are diseases often associated with unsafe water. Do not take a chance! Under serious disaster conditions, ***NO WATER CAN BE PRESUMED SAFE AND ALL DRINKING AND COOKING WATER SHOULD BE PURIFIED, FILTERED, AND DISTILLED.***

**AN INTEGRAL PART OF ANY WATER STORAGE SUPPLY SHOULD BE A HIGH QUALITY WATER FILTER. BE SURE TO HAVE A FAMILY SIZE FILTER, AS WELL AS SMALL, PORTABLE FILTERS AND SPARE FILTER CARTRIGES. (refer to page 54)**

Most people need two quarts of water per day though one quart per day will sustain life. Considering washing and other uses, a gallon a day per person is not too much. The exact quantity depends on the size of the person, amount of exertion, weather and perspiration loss. If there are family pets, include sufficient additional water for them.

A family of four would thus need at least 28 gallons of pure water for their 2-week reserve supply. With careful use, this amount would be sufficient for drinking, food preparation, and brushing teeth. Water for clean-up purposes is also desirable if space is available.

In a disaster, water lines are often cracked or broken and impure substances pollute the water. Immediately after a major natural disaster, prevent contamination to your home water supply by shutting off the valve that leads to the water main. Does everyone in your home know where this valve is and how to turn it off? Do not take a chance if the water from your tap is cloudy or has an unpleasant smell. **PURIFY AND FILTER YOUR WATER BEFORE USING!!**

There are several other sources of liquid if your water is turned off – water drained from the hot water tank (most tanks contain 30-60 gallons of usable water), dipped from the toilet flush tank (not the bowl), melted ice cubes, canned fruit and vegetable juices, and liquid from other canned goods. However, your supply of extra pure water is by far the best resource. Commercially bottled drinking water is available in sealed plastic containers, or you can easily purify it yourself for very little money.

Drain the hot-water heater monthly, allowing water to run until it flows clear. This process will ensure that it remains free of mineral and rust deposits and will save fuel.

If your home is multi-level, you can drain the existing water in the pipes by gravity flow for use during emergencies. Do this by first turning off the water at the main valve. Then open a faucet on the top floor to let air into the system and drain water from a faucet located at the lowest level.

To draw emergency water from a water heater:

- 1) Turn off the gas/electric supply to the heater.
- 2) Close the main water valve to your home on the inlet water valve at the top of the water heater.
- 3) Open any hot water faucet to allow air to get into the tank.
- 4) Drain water into a container by opening the drain plug or faucet at the bottom of the heater.
- 5) If this does not work disconnect the hot water line at the top of the tank to allow air to get into the tank.
- 6) Never turn on the electricity or gas until the intake valve is reopened and the water heater is full of water.

## **LOCATING USABLE WATER OUTDOORS**

**All of the methods described above for obtaining water outdoors will only yield non-potable (non-drinkable) water. One of several methods must purify it. Be familiar with all of them and obtain the supplies necessary to implement several of them.**

Just because you may not see water flowing freely in streams or rivers, or find any in lakes or ponds does not mean that there is no water to be found. If you know how to find water outdoors, it is very plentiful even when it may appear that none is available. Most moisture will be found in shallow depressions or on the sloping side of a hill. The steep side of hills has a faster runoff and less area for water collection. The water table is usually close to the surface. Look in the following places for usable water. Remember, however, that this water is not potable, that is, it is not drinkable in its present state. It must be purified and filtered before it can be used for drinking purposes. See instructions for doing this in the next few pages.

- 1) Search at the base of cliffs and rocks where abnormal amounts of vegetation are thriving.
- 2) Search in dry mud holes. The bends in riverbeds usually provide the easiest source. You will probably have to dig to reach water.
- 3) Look, anywhere the ground is damp or muddy.
- 4) Dig where patches of salt grass, cattails, greasewood, willows, or elderberries grow in low spots.
- 5) Dig a hole in the ground 12 to 24 inches deep and wait for water to seep into it. If the dirt in the hole is moist yet no water is seeps into it, scoop up the mud; wring it in a cloth to force out the water. Catch the drops in a container, purify, and filter.
- 6) Arise before dawn, mop up dew from rocks and plants with a cloth, and wring it into a container. If cloth is not available, use dry grass. You will collect about a quart an hour. Remember to purify then filter it before use.
- 7) Cut or slice the top off large cacti and mash the center or pulp with a stick. The pulp is wrung to obtain water. Carry cut slices of pulp as an emergency water source.

- 8) Tap a tree by drilling a hole about 3 inches deep and inserting, a hollow stem or straw. Maples, birch, aspen, and white pine are best and produced drinkable quantities from February through April. Wild grape vines one inch or more in diameter will also produce drinkable quantities of water. Notch them six or eight feet above your drinking notch to allow air to enter the stem.
- 9) Throw a plastic sheet over the top of leafy trees and bring the ends together to drain into a container. This way you will catch evaporation and dew which will drain into the container.
- 10) Some vines and green plants can be chewed or sucked but will not sustain life. Be sure you know edible types.

## **HOW TO PURIFY WATER FOR DRINKING**

Water contaminated with radiation particles, dirt, bacteria, or other pollutants requires purification consisting of a two-step process. First, it must be clean of all physical impurities such as dirt and debris. Then it must be made biologically safe to drink.

Use one of the following methods for removing physical pollutants:

### **1) Settling:**

To clear muddy water let it stand for 12 to 24 hours. This will allow any sediment to sink to the bottom of the container. A handful of clay soil in each gallon of water will help this settling process.

### **2) Siphoning:**

This process will eliminate most particles and silt from the water. Elevate the polluted water above another container and run a piece of braided yarn, string of cloth, string or hose with a piece of cotton or cloth in it as a filter. If yarn or string is used it helps to soak them in water first to get the process started. Dirt and debris will not be soaked up, but will remain in the top container.

### **3) Straining:**

This is the fastest way of eliminating physical pollutants from water but be sure that your straining material is fine enough to trap all the sediment or you may be disappointed in the results. Use piece of cloth, paper towels, or even layers of grass and charcoal.

Once the physical pollutants have been removed the job is only half done. These physical pollutants, though unpleasant to the taste, are usually quite harmless. The important task is now to make the water safe to drink by eliminating or killing the microbiological pollutants. There are five main methods of accomplishing this.

### **1) Tablets:**

Water purification tablets (Halazone tablets), are available in most drug stores and sporting goods stores and are recommended for your first aid kit. 4 tablets will purify 1 quart of water. Water purification tablets have a shelf life of 2 years and lose their effectiveness if allowed to get damp.

### **2) Iodine:**

A 2% solution of tincture of iodine, as found in most first aid kits, can be added to polluted water. Use 12 drops of tincture of iodine per gallon of water.

### 3) Chlorine:

Liquid household chlorine bleach can be used to purify water provided the label says that it contains hypochlorite as its ONLY active ingredient. Do not use granular or powdered forms of household bleach, they are poisonous!! To treat water, add 8 drops of bleach per gallon of water. Liquid bleach loses strength over time, rotate bleach to keep fresh. If bleach is over a year old, the amount used should be doubled. Two-year old bleach should not be used.

**Do not add bleach to water that is intended for long-term storage**

Purchase an eyedropper to add bleach or iodine. Keep it for this purpose only. When using either chlorine bleach or iodine mix thoroughly by stirring or shaking the water in the container. Let stand for 30 minutes. A slight chlorine odor and taste should be detectable in the water. If not, repeat the dosage and let stand for an additional 15 minutes before using. Iodine added to the water will also have a strong taste. IF WATER IS CLOUDY – DOUBLE THE DOSAGE.

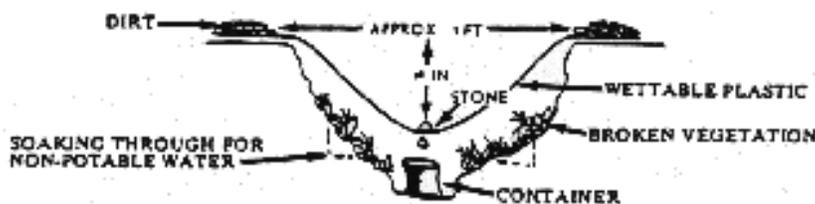
### 4) Boiling :

Water that is boiled vigorously for 5 minutes is usually safe from harmful bacterial contamination, adding one additional minute for each 1000 feet of altitude. In the Salt Lake area this means we should boil water a minimum of 8 minutes. To improve the taste of boiled water, add charcoal from the fire or first aid kit. This will not only improve the taste but also remove objectionable odors. Let the water stand for 45 minutes. Then pour it back and forth to mix air with it, giving the water a fresh not flat taste.

### 5) Solar Still or Distillation:

A solar still (or other form of distillation) is the only method of purifying water that eliminates both the physical and the microbiological pollutants at the same time. To make a Solar Still, dig a hole in the ground about two feet in diameter and about 18 inches deep. Place a cup or other clean container in the center of the hole (see the diagram below). Cover the hole with a piece of plastic and place rocks or soil around the edges to seal the hole from outside air circulation. Place a small rock in the center of the plastic directly over the cup.

As the sun's rays strike the plastic it will warm the soil, evaporate the water in it,



CROSS SECTION OF SOLAR STILL

condense it on the plastic and cause it to drip into the cup. A still of this type could yield about one quart of water per day. If necessary, contaminated water and even urine or other non-potable water could be added to the soil to speed the process.

A drinking tube can be fastened to the drinking cup and extended to the outside of the still but this is optional.

Two of these stills in operation in even the driest deserts will produce enough water for one person each day. Placing green plants, sliced cactus or other moist objects in the pit will increase the amount of water produced.

## **PRECAUTIONS**

- 1) If no water is available DO NOT EAT because eating uses up the bodies water reserve in the digestion process
- 2) **Store water in your stomach rather than the canteen!** Many have died from dehydration with water still in their canteens. Drink at consistent intervals whether thirsty or not when in extremely dry or desert surroundings.
- 3) Water polluted by animals or mud tastes bad, but is harmless when boiled 5 to 10 minutes or when purified by the other methods outlined above
- 4) When in desert areas do not travel on foot during the heat of the day. Always walk slowly when you do travel.
- 5) Drinking blood or urine increases dehydration of the body because of the high salt and mineral content. If necessary soak clothing in urine to cool the body by evaporation when in desert conditions.
- 6) Do not drink water from swimming pools. The chlorine level is too high and will kill beneficial bacteria in the digestive tract causing temporary diarrhea. This water can be used for washing and for pouring down toilets.

### **WATER PURIFICATION TABLE**

	Clean Water	Cloudy Water
<b>Liquid Chlorine</b> 4-6 % (Common household laundry bleach).	2 drops per quart 8 drops per gallon 440 drops or 4 ½ tsp. per 55 gallon water	4 drops per quart 16 drops per gallon 880 drops or 9 tsp. Per 55 gallon water
<b>Tincture of Iodine</b> 2% (from medicine chest or first aid kit.)	3 drops per quart 12 drops per gallon	6 drops per quart 24 drops per gallon
Halazone Tablets (Water purification tablets)	4 tablets per quart 16 tablets per gallon	

## **WATER STORAGE FACTS**

Tests over the past several years have demonstrated that water may be stored for indefinite periods of time without spoilage if simple precautions are taken. Water storage for emergency use is extremely important because water is more essential than food in sustaining life during emergency periods. You can live for several days without food but it is impossible to survive more than a few days without water. Here are the facts and instructions on the storage of safe water.

**Containers:** Jugs, bottles, jars or other containers made of glass or polyethylene (heavy, hard plastic) with tight-fitting caps or tops are the most suitable (metal containers, with the exception of proper canning containers, and soft plastics such as water bed bladders, have the disadvantage of possible corrosion or of giving the water an unpleasant taste). Some plastics, such as those used to make milk bottles, are biodegradable and will gradually self destruct within a relatively short time period causing them to leak, so don't use them. Empty two liter pop bottles make excellent containers. Be sure that all containers must be thoroughly clean.

**Quantities:** At least one gallon per day per person for a two week period, or a minimum of 14 gallons per person, for drinking and food preparation.

**Sources:** For drinking preferably the source normally being used by the family. The family members are accustomed to its taste and mineral content.

If there is any doubt as to the bacterial safety of water for storage, it must be purified by boiling vigorously for 10 minutes or by adding laundry bleach (liquid) in accordance with the instructions on the label of the bleach bottle. Generally, one-half teaspoon will purify 5 gallons of cloudy water. **Do not add bleach to water that is intended for long-term storage.** Add it, if necessary, only at the time of use. If possible, filter after.

**Supplemental Sources:** Supplemental emergency water for drinking, washing, food preparation and for sanitation can be obtained from hot water tanks, toilet tanks, or other utility sources within the building. Also drink fruit juices, soft drinks or water packed foods, such as tomatoes.

**Shelf Life:** If stored in clean containers and if safe bacterially at the time of storage, water will remain safe because disease organisms tend to die out with storage. Thus, the longer the water is stored the safer it will become from the bacteriological standpoint.

Potable water stored in glass or polyethylene containers will remain safe, but may change somewhat in appearance, taste, or odor. Although some of these qualities may be disagreeable, they will not harm you. Stored water should be checked every few months to determine whether containers have leaked or if any undesirable characteristics have developed in appearance, taste or odor. If so the water may be replaced.

Because water quality varies throughout the country, no set rule can be given for shelf life. Current experience shows, however, that some water taken directly from a tap and stored several years in glass or polyethylene containers cannot be distinguished by appearance, taste or odor from freshly drawn water from the same tap.

## **How to Store Water Naturally and Organically**

Dr. John R. Christopher has this to say about storing water organically. These opinions are his own and are included here for the information of those who are interested in this perspective.

“First and foremost, use the purest water possible, either distilled or reverse osmosis. By using pure water, you begin with no bacteria, chemicals or minerals which will harm the water after sitting for long periods of time. Storing the water can be done differently depending on what it is to be used for. The water to be used for drinking should be stored in a lot of small containers (up to 5 gallons each). Do not use plastic containers, as the water will draw out properties in the plastic. Clean your containers with chlorine and rinse clean with pure distilled water or any type of pure water. Fill container with pure water, up to the top, so as not to have any air bubbles (do not add chlorine, etc.), then seal with lid and change every 6 months.”

“The use of chlorine should only be used in water you will not drink. Chlorine is a poison and in large amounts will kill you. In small amounts it will still poison the body. It gets filtered out through the kidneys, causing long-term kidney damage, as well as the skin, which can cause irritating side effects.”

“Chlorine is a bacterialcide. It kills bacteria, both good and bad. If you continue to drink chlorinated water, your body will be defenseless in fighting off bad bacteria because all that will be left is the super resistant bacteria, which is resistant to any kind of antibiotic available. This is the same scenario as the antibiotics being used today. Store water in bigger containers for bathing, washing, etc., and use small amounts of chlorine to kill the bacteria.” Dr. John R. Christopher, David Christopher M.H., The School of Natural Healing.

By distilling your water, or by using a high quality water filter, you can remove contaminants or chemicals from your water. This way, you can treat your water supply with a purifier and then filter or

distill it out before consumption. **A good filter is a must for your home water supply, and a portable filter is a must for your 72 hour kits.**

Water filters remove more dangerous contaminants than any other purification method, and they are uniquely designed to work with municipally treated water. The water they are able to produce is not subject to phthalate contamination, and they are able to remove cryptosporidium from drinking water.

There are many types of water filtration products and systems on the market today, each with its advantages and limitations. Consider your family's needs and budgets as you check out various options, such as, Faucet Filters, Countertop Filters, Whole House Filtration Systems, Pitcher Filters, Refrigerator Filters, Camping/Portable Filters.

Research indicates that **SOLID BLOCK CARBON FILTERS** are absolutely the best and most effective filters available. Carbon absorption or carbon filter alternatives are less expensive and therefore are widely used for home water treatment. Carbon filters remove disagreeable odors and tastes, including chlorine, from a water source, which makes carbon filters well-suited for municipally treated water.

### **There are two types of carbon filter systems:**

**Granular Activated Carbon** is very effective at removing gases and many chemicals. It has some limited success in stopping microorganisms, but will not be useful at protecting the water from dissolved solids, hardness, or heavy metals. As well, chemicals can re-contaminate the system if the filter becomes saturated with impurities it has absorbed.

**Solid Block Carbon** allows water to pour through an intricate carbon maze that removes coli form, bacteria, lightweight VOC's and pathogenic cysts such as giardia. Because solid black carbon is so dense, it does not allow the growth of bacteria within the filter, nor does it suffer from the channeling problems of granular activated carbon. However, the block filter needs to be replaced more frequently. Only a few carbon filter systems have been certified for the removal of lead, asbestos, volatile organic compounds and coli form. Make sure you read the labels.

### **Suggested Water Filters for Emergency Preparedness Purposes are:**

**Pitcher Filters** – These familiar and economical filters come in a variety of plastic shapes with two chambers. Pour the water from the tap into the top, and freshly filtered water seeps through into the lower chamber. Replacement filters often last about 3 months. Clean the pitcher regularly to prevent waste and scum buildup.

**Refrigerator Filters** – These units provide cooled and well-filtered water from inside. Most appliance brands provide fridge filters or have the capability for filter installations.

**Camping/Portable Filters** – These versatile, convenient and sometimes packet-sized filtering systems are great for travel, emergencies, and other remote applications. Many portable devices filter out bacteria or virus threats, and can take care of other pollutants greater than 0.2 microns. Beware of compact systems with poor flow rates, and stiff pumps. When you're out in the woods, traveling a distant land or in an emergency situation, reliability and durability are most important.

## **CHAPTER 7**

## **EMERGENCY SANITATION**

At all times and under all conditions, human beings must have sufficient water, adequate food and proper sanitation in order to stay alive and healthy. When people are living under emergency conditions – even for a week or two – water and food may be scarce and it may be difficult to maintain normal sanitary conditions. Water and food supplies may have to be “managed” – that is, taken care of, kept clean, and rationed to each person. Sanitation also may have to be managed and controlled, perhaps by setting up emergency toilets and rules to insure that they are used properly.

## **CARE AND USE OF WATER SUPPLIES**

Under emergency conditions the average person would need at least 1 quart of water or other liquid per day to drink, but more would be useful (to allow some for washing, etc.) Therefore a rationing plan might be required in your home or community. (Some communities may continue to have potable water available and families could relax their rationing plans).

As explained in the section on water storage, properly stored water may keep fresh for an indefinite period. Use this water first. In addition to water stored in containers, there is usually other water available in most homes that is drinkable.

Use stored water and other uncontaminated water first. In necessary, “Suspicious” water – such as cloudy water from regular faucets or perhaps some muddy water from a nearby stream, pond, or puddle – can be used after it has been purified and filtered.

If you are asked to shut off the service valve that controls the water supply to your home, or if the taps do not flow following a disaster, turn off all the water outlets. These include taps or faucets, valves on pipes supplying float-controlled equipment such as flush toilets, air-cooling equipment, and heating equipment. Then when the water comes on again your home will not be flooded as these flotation devices sometimes stick after they have been allowed to dry out.

Turn off the gas or electricity that supplies your hot-water heater after closing your home water service valve, or when your water supply is interrupted for any other reason. Otherwise, if the limited supply of water remaining in your hot-water storage tank continues to be heated, an explosion may occur. Also, if no more water can reach the tank, continued heat will soon muddy its contents through oxidation and make the water useless for washing or drinking purpose.

If your water service is cut off following enemy attack or other natural disaster, do not try to telephone or otherwise communicate with your local water department or Water Company. The officials in charge will already be doing all they can to restore your service. Complaints will only add to their burdens. Besides, you will be using telephone lines that are needed for other emergencies.

Once service is restored, the water from your faucets may have a strong chlorine taste. Do not worry about this. It is a sign that extra precautions are being taken for your safety. If there is any doubt about leaks in the water mains or other possible sources of contamination, more chlorine than usual will be added to the water supply by health officials to make sure that it is safe.

Be alert for instructions regarding water usage from your public health officials, or from the water department itself. These are the proper authorities to advise you on the safety of your water supplies. Their instructions will be relayed to you by messengers, radio, mobile loudspeakers, handbills, or newspaper stories. Don't listen to or pass on any rumors about the safety of your water supply. Pay attention to official instructions only.

## **CARE AND USE OF FOOD SUPPLIES**

Except for growing children and pregnant women, most people could do quite well in an emergency situation on half the food intake they are accustomed to receiving.

It is especially important to be sanitary in the storing, handling, and eating of food so as to avoid digestive upsets or other more serious illness such as typhoid, dysentery, and diarrhea, and to avoid attracting vermin. Be sure to:

- 1) Keep all food in covered containers.
- 2) Keep cooking and eating utensils clean.
- 3) Keep all garbage in a closed container or dispose of it outside the home when it is safe to go outside. If possible, bury it. Avoid letting garbage or trash accumulate inside the shelter, both for fire and sanitation reasons.
- 4) Wash your hands and utensils frequently. Have a supply of waterless hand sanitizer.
- 5) Prepare only as much food as will be eaten at each meal.
- 6) Paper cups and plates are handy things to have if the water supply is cut off, because they need not be washed and can be burned with the rubbish. Paper towels and napkins are good, too, when laundry needs cannot be met.
- 7) Refrigerators and home freezer units should be kept closed as much as possible once the services they depend on are cut off. The foods they contain will keep longer if you plan your meals well in advance so that you won't have to open the doors any oftener than necessary. If the gas or electric service is not restored within 12 hours, eat or cook the most perishable meats in your refrigerator before they spoil. If foods show signs of decomposition, throw them out before they contaminate other foods that keep better.
- 8) Food will keep in home freezer units, after they are shut off, for varying periods depending on the amount and kind of food, the temperature at which it was kept, and the construction of the freezer. Frozen meats and other frozen foods can be preserved for later use by cooking them soon after they have thawed or by quick re-freezing before they have completely thawed.

Official instructions regarding food will be issued locally in the event of an emergency. These instructions will tell you the type of disaster and its effect upon milk and other foods. Follow official instructions closely. Don't listen to rumors, and don't pass them on to others.

## **DISPOSAL OF GARBAGE AND RUBBISH**

Garbage may sour or decompose, rubbish (trash) will not, but offers disposal problems in an emergency. Garbage, or any mixed refuse containing garbage, must be carefully stored and handled if odor and insect nuisances are to be prevented. Since rubbish alone is fairly easy to dispose of, garbage should be kept separate from it and not mixed. The following suggestions will make it easier for you to take care of the refuse problem:

- 1) Garbage should be drained before being placed in storage containers. If liquids are strained away, garbage may be stored for a longer period of time without developing an unpleasant odor. After straining, wrap the garbage in several layers of old newspapers before putting it into your container. This will absorb any remaining moisture. A tight-fitting lid is important to keep out flies and other insects.

- 2) You should keep one or more 20-gallon cans on hand for emergency use, if possible. If you live in an apartment building, get the largest kitchen garbage container for which you have space.

Final disposal of all stored garbage and refuse can be accomplished in the following manner provided there is no danger from radioactive fallout:

- 1) All stored garbage should be buried if collection service is not restored and if unpaved yard areas are available – keep a shovel handy for this purpose. Do not dump garbage on the ground, because it will attract rats, skunks and other scavengers. Dig a hole deep enough to cover it with at least 18 to 24 inches of dirt, which will prevent insect breeding and discourage animals from digging it up.
- 2) Do not establish a community dump without permission from the proper authorities. Garbage dumps quickly become infested with rats capable of carrying disease germs over a wide area. If necessary, local authorities will pick sites where refuse may be left for supervised burning or burial as soon as conditions permit.
- 3) Other rubbish may be burned in open yard areas or left at dumps established by local authorities. Flatten your cans to reduce their bulk. Do not deposit ashes or rubbish in streets or alleyways without permission. Such materials may interfere with the movement and operation of fire fighting and other emergency equipment.

## **SEWAGE DISPOSAL**

Proper management of toilet facilities during times of emergency may have greater affect on your health than any other single element of sanitation.

Unsanitary toilet conditions can be lethal, yet with proper planning and precautions it is very easy to insure good health.



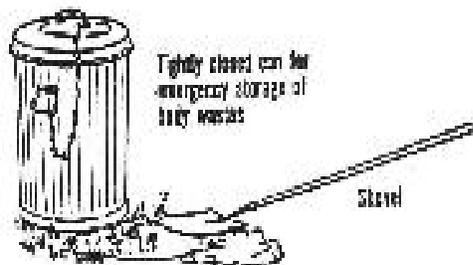
Water Flush toilets cannot be used, of course, when water service is interrupted. The water remaining in the fixture is not sufficient to flush the wastes down the sewer. Clogging may result.

Even if water is available, local authorities may ask you not to use toilets, washbasins, and other fixtures connected with soil pipes. The sewer mains may be broken or clogged, which would make it impossible to carry off the wastes. Or water may be needed for fire fighting. It is therefore necessary for every family to know emergency methods of waste disposal.

An emergency chemical toilet consisting of a water tight container with a snug-fitting cover should be an integral part of your preparedness program. It could be a garbage container, or a pail or a 5 gallon plastic bucket. If the container is small, a larger container like a 20 or 30 gallon garbage can, also with a tight fitting lid, should be available to empty the contents into for later disposal. If possible, both containers should be lined with plastic bags or garbage can liners. NEVER deposit human waste or garbage on the open ground. If you have no other alternative for disposal, it is safe to bury waste in trenches 24-30 inches in depth.



Every time someone uses the toilet, he should pour or sprinkle into it a small amount of regular household disinfectant, such as creosol, pine sol, chlorine bleach, baking soda, Alcohol, powdered lime, or laundry detergent, to keep down bacteria and germs. After each use, the lid should be replaced.



## **EMERGENCY CHEMICAL TOILET**

The following items should be stored together inside a five-gallon plastic bucket. The bucket will serve as the toilet during an emergency.

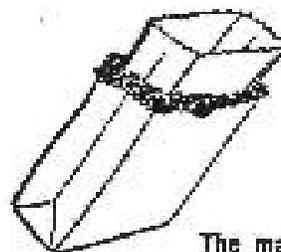
5-Gallon plastic bucket  
(with tight fitting lid).  
Liquid chlorine bleach  
Pine sol  
2 boxes baking soda  
2 boxes trash can liners  
(8-10 gallon size)  
1 bag powdered lime

1 Box garbage can liners  
(30 gallon size)  
6-8 rolls toilet paper  
Sanitary napkin and belt  
Tampons  
Paper towels  
1 bar hand soap or waterless hand sanitizer  
Baby wipes

Where radioactive fallout does not present a hazard, several families may construct a temporary pit privy in the yard for use. This offers a good method of waste disposal over extended periods of time. The structure need not be elaborate, so long as it provides reasonable privacy and shelter. The pit should be made fly-proof by means of a tight-fitting riser, seat, and cover. A low mound of earth should be tamped around the base of the privy to divert surface drainage and help keep the pit dry. A bag of powdered lime with a scoop inside the bag will enable a small amount of lime to be sprinkled over the waste after each use. This will help reduce noxious odors. Accumulated waste should be covered with not less than 12 inches of earth when the privy is moved or abandoned.

Persons in city apartments, office buildings, or homes without yards should keep a supply of waterproof containers on hand for emergency waste disposal.

Homemade soil bags may also be used and are easily made by putting one large grocery bag inside another, with a layer of shredded newspaper or other absorbent material between. Apartment dwellers should have sufficient grocery bags on hand now for possible emergencies. If you have a baby in your home, it is best to keep an ample supply of disposable diapers on hand for emergency use. If these are not available, emergency diaper needs can be met by lining rubber pants with cleansing tissue, toilet paper, scraps of cloth, or other absorbent materials.



The materials  
to make  
soil bags

# CHAPTER 8

## **EMERGENCY HEATING, LIGHTING & COOKING**

During emergencies every facet of our lives becomes disrupted. Things which we normally take for granted suddenly become of major importance in sustaining our lives or in making life much more comfortable. One of the most basic of all the elements around us, and which we probably take for granted the most, is fuel. Fuel is used to keep us warm in the winter, cool in the summer, prepare our food, and lights our homes. In our modern society we are used to just flipping a switch and having the lights come on. This action has become so common place in our lives that we do it automatically upon entering a dark room without even realizing we have done it. At the flip of another switch our furnace comes on to keep us warm. The constant vigilance of our furnace thermostat even makes it so convenient that we only have to turn the furnace on once at the beginning of the winter and then forget about it until the spring when we turn it off again. Cooking is just as easy, the turning of a dial on a gas range, the pressing of a button on an electric range, or the use of a microwave oven prepares our food without our having to worry about where the heat will come from.

During even a minor emergency one or all of these conveniences may be unusable. For many of us this may cause true panic. How do you keep warm when it is below freezing and the furnace is out of commission? How do you get a hot meal when stove or microwave doesn't work? Remember that in an emergency your home will probably not be the only one affected so you may not be able to simply run to the neighbor's home for temporary help. Let's examine the alternatives which you can pursue now so that proper preparations can eliminate the chaos and panic which lack of planning will surely create.

### **HEATING:**

During the winter it is essential that adequate heat be provided. The human body, unlike that of animals, is not capable of producing sufficient internal heat to keep you alive when the temperature drops below about 50 degrees. Therefore you must assist the body with either insulation to retain the heat - such as blankets, coats, sleeping bags, etc. - or you must provide an outside source of heat, such as fire. Unfortunately, many of us have had no experience in proper fire building and would therefore become totally frustrated by our attempts, give up and then die of exposure and hypothermia; or we would succeed in burning the house down and then die of exposure and hypothermia.

Furthermore, we have been counseled by our Church leaders to store a year's supply of fuel, where possible. This seems impossible for most of us. Five tons of coal or enough wood to last a year would completely fill our back yards, not to mention the fact that few of us have stoves in which to burn it, and the fact that many cities are passing ordinances restricting the use of coal and wood burning stoves. What about the person who lives in a condominium or the 15th floor of a high rise apartment building in Chicago, New York, or Los Angeles? How do you store a year's supply of fuel when you have no place to store it? The answers are really quite simple. With a little planning, using systematic buying and by taking advantage of the wasted space which every home or apartment has, you can actually comply with this commandment fairly economically. With proper planning you will spend about as much on a year's supply of fuel as you presently do for just one month during the most severe part of the winter. One thing must be kept in mind however; you are not trying to store enough fuel to heat your entire home or apartment to 80 degrees for the entire winter.

The object in fuel storage is to provide enough heat to keep you and your family alive if you are deprived of your normal source of heat. To accomplish this you need to plan on heating only one room or a small portion of your home. Be sure that you can seal off all the entrances to that room by closing the doors or, if there is no door in the opening, by hanging blankets where the doorway leads to another room. Reflective plastic sheeting, such as the new "Space Blankets" used by back packers,

forms an excellent reflective surface to keep the heat in the room. They can be purchased for \$2.00 or \$3.00 each and can be taped to the walls and ceiling and hung over windows and doors to form a "home within your home." - Plan on heating only this small portion and you can easily store that amount of fuel in even the smallest of apartments. Be sure to insulate all windows with blankets and/or aluminum foil to keep the cold out and the heat reflected back into the room. Cover all doorways with blankets or other insulating materials to retain heat. The question now becomes what type of fuel to burn?

### **Charcoal**

Most families have a small charcoal burning cooker such as a hibachi or barbeque. **NEVER** use a charcoal burning device indoors. When charcoal burns it is a voracious consumer of oxygen and will quickly deplete the oxygen supply in your little "home within a home." Furthermore, as it burns it produces vast amounts of carbon monoxide which is a deadly poison. If you make the mistake of trying to heat your home by burning charcoal it could prove fatal to your entire family. **NEVER** burn charcoal indoors!

### **Coleman Fuel (White Gas)**

Many families have camp stoves which burn Coleman Fuel or white gasoline. These stoves are fairly easy to use and produce a great amount of heat. However they, like charcoal, produce vast amounts of carbon monoxide. **NEVER** use a Coleman Fuel stove indoors. It could be a fatal mistake to your entire family.

### **Wood and Coal**

Many homes have a fireplace and wood burning stoves and inserts are becoming more and more popular. They produce a great amount of heat and are safe to use indoors when properly installed. In addition to providing warmth they also provide a great amount of emotional security. Sitting next to a crackling fire can be very comforting and reassuring. Most fireplaces however, were built for aesthetics and emotional appeal, in practical application they are very poor sources of heat when your furnace doesn't work because most of the heat goes up the chimney rather than into the room.

Wood burning stoves on the other hand, can produce great amounts of heat. They are engineered and designed for heat production rather than aesthetics. Many units are designed to double as a cooking surface and are very practical from this perspective.

There are two great disadvantages to heating with wood and coal in fireplaces and stoves. 1) They are very *inconvenient* to use on a daily basis. Most women and small children are intimidated by the prospect of having to build a fire and become frustrated in their attempts to get it lit. Then there is the problem of how to dispose of the ashes it produces. This is not a problem when the stove is only used occasionally to create a nostalgic atmosphere but it is quite a different matter when it is used as the only source of heat. Ash disposal can be a dirty and dangerous job. Many fires are caused each year by improperly disposing of ashes from wood and coal burning stoves that had a live ember still smoldering. 2) To produce enough heat to keep you warm through an entire winter you would have to store a great amount of fuel. Wood is particularly difficult for most families to store because of the space it takes up. Most backyards are not large enough to store a year's supply of wood and still have room to be used for any other purpose. Wood is probably the most expensive fuel there is if you have to buy it. The BTU value of wood as a ratio to dollars spent is less than any other fuel available. Coal, though it requires less storage space for the same BTU value, still requires a lot of room for storage. Wood and coal are simply not a practical source of heat for the average family and are certainly out of the question for apartment and condominium dwellers.

## **Kerosene**

Kerosene is the cheapest of all the storage fuels and is also the most forgiving if you make a mistake. Kerosene is not explosive as is gasoline and Coleman Fuel. You can even extinguish charcoal briquettes by dousing them with kerosene (providing there is no flame). Kerosene stores well for long periods of time and by introducing some fuel additives it can be made to store even longer. However, do not store it in metal containers for extended time periods unless they are porcelain lined because the moisture in the kerosene will rust through the container causing the kerosene to leak out. Most hardware stores and home improvement centers sell kerosene in five gallon plastic containers which store for many years. A 55 gallon drum stored in the back yard, or ten 5 gallon plastic containers (which will easily store under your bed), will provide fuel enough to last an entire winter if used sparingly. **CAUTION:** if you store kerosene indoors be sure the container will not leak. Many plastic containers are sealed so you must puncture the spout rather than simply unscrewing the lid. These are the best types of containers for indoor storage. Fifty-five gallons of kerosene will cost only about \$100.

To burn kerosene you will need a kerosene heater. There are many models and sizes to choose from but remember that you are not trying to heat your entire home. The larger the heater the more fuel you will have to store. Most families should be able to get by on a heater that produces about 9,600 BTU's of heat, though kerosene heaters are made that will produce up to 25,000 to 30,000 BTU's. If you have the storage space to store the fuel required by these larger heaters they are excellent investments, but for most families the smaller heaters are more than adequate. When selecting a kerosene heater be sure to get one that can double as a cooking surface and source of light. Then when you are forced to use it, be sure to plan your meals so that they can be cooked when you are using the heater for heat, rather than wasting fuel used for cooking only.

When kerosene burns it requires very little oxygen, compared to charcoal. You must crack a window about 1/4 inches to allow enough oxygen to enter the room to prevent asphyxiation. During combustion, kerosene produces carbon dioxide not carbon monoxide, therefore it is not poisonous and is safe to use indoors. To prevent possible fires you should always fill it outside. The momentary incomplete combustion during lighting and extinguishing of kerosene heaters can cause some unpleasant odors. To prevent these odors from lingering in your home always light and extinguish the heater out-of-doors. During normal operation a kerosene heater is practically odorless.

## **Propane**

Propane is another excellent fuel for indoor use. Like kerosene, it produces carbon dioxide as it burns and is therefore not poisonous. It does consume oxygen, so be sure to crack a window when burning propane. Always store propane out of doors and check with the fire marshal in your area of learn the laws governing propane storage.

A gallon of propane contains 91,500 BTU's of heat. Many families have a bar-b-queue set that uses propane in 5 gallon bottles. If you purchased a small 10,000 BTU propane heater and connected it to a 5 gallon bottle and used it sparingly it would last about 3 to four days depending upon the temperature outside. A larger 100 pound cylinder (which contains 23 gallons) would last for about two weeks. These cylinders cost about \$90 empty and require about \$20 to fill them. Larger cylinders can be purchased which must be permanently mounted on concrete or cinder block pads. The larger the cylinder the lower the cost will be for the container based upon per gallon of storage capacity.

Propane stores indefinitely, having no known shelf life. Propane stoves and small portable heaters are very economical, simple to use and closest to approximating the type of convenience most of us are accustomed to using on a daily basis.

## **Newspaper**

Newspaper logs make a good and inexpensive source of fuel. You may prepare the logs in the following manner:

0Use about eight pages of newspaper and open flat.

1Spread the stack, alternating the cut sides and folded sides.

2Place a 1-inch wood dowel or metal rod across on end and roll the paper around the rod very tightly. Roll it until there are 6-8 inches left to roll, and then slip another 8 pages underneath the roll. Continue this procedure until you have a roll 4-6 inches in diameter.

3With a fine wire, tie the roll on both ends. Withdraw the rod. Your newspaper log is ready to use. Four of these logs will burn about 1 hour.

## **LIGHTING:**

During an emergency you may be without electric lighting. Since most of us have never had to rely upon any other form of lighting we may not be aware of other options available. Most of the alternatives require a fire or flame, use caution. More home fires are caused by improper usage of fire as used for light than for any other purpose.

### **Cyalume Sticks**

Cyalume sticks are the safest form of indoor lighting available but very few people even know what they are. Cyalume sticks can be purchased at most sporting goods stores for about \$2.00 per stick. They are a plastic stick about four inches in length and a half inch in diameter. To activate them simply bend them until the glass tube inside them breaks, then shake the mix the chemicals inside and it will glow a bright green light for up to eight hours. Cyalume is the only form of light that is safe to turn on inside a home after an earthquake. One of the great dangers after a serious earthquake is caused by ruptured natural gas lines. If you flip on a light switch or even turn on a flash light you run the risk of causing an explosion. Cyalume will not ignite natural gas. Cyalume sticks are so safe that a baby can even use them for a toy.

### **Candles**

Every family should have a large supply of candles. They are a good source of light and are the least expensive of all the methods of providing light. However, candles are extremely dangerous indoors because of the high fire danger - especially around children. Be sure to store a goodly supply of wooden matches.

**Trench Candles:** Trench candles can be used as fireplace fuel or as a candle for light. To make trench candles:

1. Place a narrow strip of cloth or twisted string (for a wick) on the edge of a stack of 6-10 newspapers.
2. Roll the paper very tightly, leaving about  $\frac{3}{4}$  inch of wick extending at each end.
3. Tie the roll firmly with string or wire at 2-4 inch intervals.
4. With a small saw, cut about 1 inch above each tie and pull the cut sections into cone shapes. Pull the center string in each piece toward the top of the cone to serve as a wick.
5. Melt paraffin in a large saucepan set inside a larger pan of hot water. Soak the pieces of candle in the paraffin for about 2 minutes.
6. Remove the candles and place on a newspaper to dry.

## **Flash Light**

Flash lights are excellent for most types of emergencies except in situations where ruptured natural gas lines may be present. Never turn a flash light on or off if there is any possibility of ruptured gas lines. Go out side first, turn it on or off, and then enter the building. The three main problems with relying upon flash lights is that they give light to very small areas, the batteries run down fairly quickly during use, and batteries do not store well for extended time periods. If you use flash lights be sure to use L.E.D. bulbs in them because they last much longer and give off several times more light than regular flash light bulbs and use much less energy. Krypton or halogen bulbs are much brighter, but do not last as long as L.E.D. bulbs.

**Kerosene Lamp**

Kerosene lamps are excellent sources of light. They burn bright and are inexpensive to operate. The main problem with using kerosene lamps is failure to properly trim the wicks and using the wrong size chimney.

Wicks should be trimmed in an arch, a "V", an "A" or straight across the top. Failure to properly trim and maintain wicks will result in smoke and poor light.

The higher the elevation the taller the chimney should be. Most chimneys that come with kerosene lamps are made for use at sea level. At about 4,500 feet above sea level the chimney should be about 18 to 20 inches high. If your chimney is not as tall as it should be, you can improvise by wrapping aluminum foil around the top of it and extending it above the top. This will enable the light to still come out of the bottom portion and yet provide proper drawing of air for complete combustion. If the chimney is too short it will result in smoke and poor light.

**Propane and Coleman Lanterns**

Camp lanterns burning Coleman Fuel or propane make excellent sources of light. Caution should be used in filling and lighting Coleman lanterns because the fuel is highly volatile and a flash type fire is easy to set off. Always fill them outside. Propane on the other hand is much safer. It is not as explosive and does not burn quite as hot. Either one of them are very reliable and should be an integral part of your preparedness program. Be sure to store plenty of extra mantles and matches.

Consider carefully how you will provide fuel for your family for heating, cooking, and lighting during times of emergencies. Next to food, water, and shelter, energy is the most important item you can store.

<u>Fuel</u>	<u>Amount</u>	<u>Burning Time</u>
White Gas Lanterns	1 quart	10-12 hours
Two Mantle	1 quart	16-18hours
Single Mantle	1 quart	45 hours
Kerosene Lanterns	¾ x 4"	2 1/3 hours
Candles	7/8 x 4"	5 hours
	2 x 9"	63 hours

**COOKING:**

Whether an emergency should happen during winter or summer preparation and cooking of food will always require fuel. There is much greater flexibility in choosing the source of fuel for cooking than there is for heating the home. Cooking, even in the most miserable of weather, can be done out of doors and can therefore be done using fuels that could not safely be used inside. To conserve your cooking fuel storage needs always do your emergency cooking in the most efficient manner possible. Don't boil more water than you need, extinguish the fire as soon as you are finished, plan your meals ahead of time to consolidate as much cooking as possible, during the winter cook on top of your heating unit while heating your home, and cook in a pressure cooker or other fuel efficient container as much as possible.

It is even possible to cook without using fuel at all. For example: to cook dry beans you can place them inside a pressure cooker with the proper amount of water and other *ingredients needed* and place it on your heat source until it comes up to pressure. Then turn off the heat, remove the pressure cooker and place inside a large box filled with newspapers, blankets or other insulating materials. Leave it for two and a half hours and then open it, your meal will be done, having cooked for two and a half hours with no heat. If you don't have a large box in which to place the pressure cooker simply wrap it in several blankets and place it in the corner.

<u>Heaters</u>	<u>Amount</u>	<u>Burning Time</u>
Catalytic	5 quarts	18-20 hours
	3 quarts	12 hours
White Gas	2 quarts	18-20 hours
Stoves	3 ½ pint	4 hours
(Two burner)	aerosol can	

### **Sterno**

Sterno fuel, a jellied petroleum product, is an excellent source of fuel for inclusion in your backpack as part of your 72-Hour Kit. Sterno is very lightweight and easily ignited with a match or a spark from flint and steel, but it is not explosive. It is also safe for use indoors.

A sterno stove can be purchased at any sporting goods store and will retail between \$3.00 and \$8.00 depending upon the model you choose. They fold up into a very small, compact unit ideal for carrying in a pack. The fuel is readily available at all sporting goods stores and many drug stores. One can of sterno fuel about the diameter of a can of tuna fish and twice as high, will allow you to cook six meals if used frugally.

Sterno is not without some problems. It will evaporate very easily, even when the lid is securely fastened. If you use sterno in your 72-Hour Kit you should check it every six to eight months to insure that it has not evaporated beyond the point of usage. Because of this problem it is not a good fuel for long term storage. It is a very expensive fuel to use compared to the other fuels available but it is extremely convenient and portable.

### **Coleman Fuel (White Gas)**

Coleman Fuel, or white gasoline, when used with a Coleman stove is another excellent and convenient fuel for cooking. It is not as portable nor as light weight as Sterno but produces a much greater BTU value. Like Sterno, Coleman Fuel has a tendency to evaporate even when the container is tightly sealed so it is not a good fuel for long term storage. Unlike Sterno, however, it is highly volatile; it will explode under the right conditions and should therefore never be stored in the home. Because of its highly flammable nature great care should always be exercised when lighting stoves and lanterns that use Coleman Fuel. Many serious burns have been caused by carelessness with this product. Always store Coleman Fuel in the garage or shed, out of doors.

### **Charcoal**

Charcoal is the least expensive fuel per BTU that the average family can store. Remember that it must always be used out of doors because of the vast amounts of poisonous carbon monoxide it produces. Charcoal will store for extended periods of time if it is stored in air tight containers. It readily absorbs moisture from the surrounding air so do not store it in the paper bags that it comes in for more than a few months or it may be difficult to light. Transfer it to an air tight metal or plastic containers and it will keep almost forever.

Twenty-five or thirty dollars worth of charcoal will provide all the cooking fuel a family will need for six to eight months if used sparingly. To get the maximum benefit of your stored charcoal it is essential that you learn to cook by using only a briquette at a time instead of the heaping mounds generally used by barbeques then, when you are finished cooking, extinguish the briquettes by placing them in an air tight container to smother them or douse them with water to put them out and then let them dry. They will then be reusable.

One of the nice things about charcoal is that you can regulate the heat you receive from it. Each briquette will produce about 40 degrees of heat. If you are baking bread for example and need 400 degrees of heat for your oven, simply use 10 briquettes.

To conserve heat and thereby get the maximum heat value from your charcoal, you must learn to funnel the heat where you want it rather than letting it dissipate into the air around you. One excellent way to do this is to cook inside a cardboard oven. Sounds crazy but it works just fine. Take a cardboard box, about the size of an orange crate, and cover it with aluminum foil inside and out. Be sure that the shiny side is visible so that maximum reflectivity is achieved. Turn the box on its side so that the opening is no longer on the top, but is on the side. Place some small bricks or other non-combustible material inside upon which you can rest a cookie sheet about two or three inches above the bottom of the box. Place ten burning charcoal briquettes between the bricks (if you need 400 degrees), place the cookie sheet on top of bricks to serve as a rack or support for your cooking vessels, and then place your bread pans or what ever else you are using on top of the cookie sheet. Prop a covered cardboard lid over the open side, leaving a large crack for air to get inside (charcoal needs a lot of air to burn) and bake your bread, cake, cookies, etc. just as you would in your regular oven. The results will amaze you.

### **Wood and Coal**

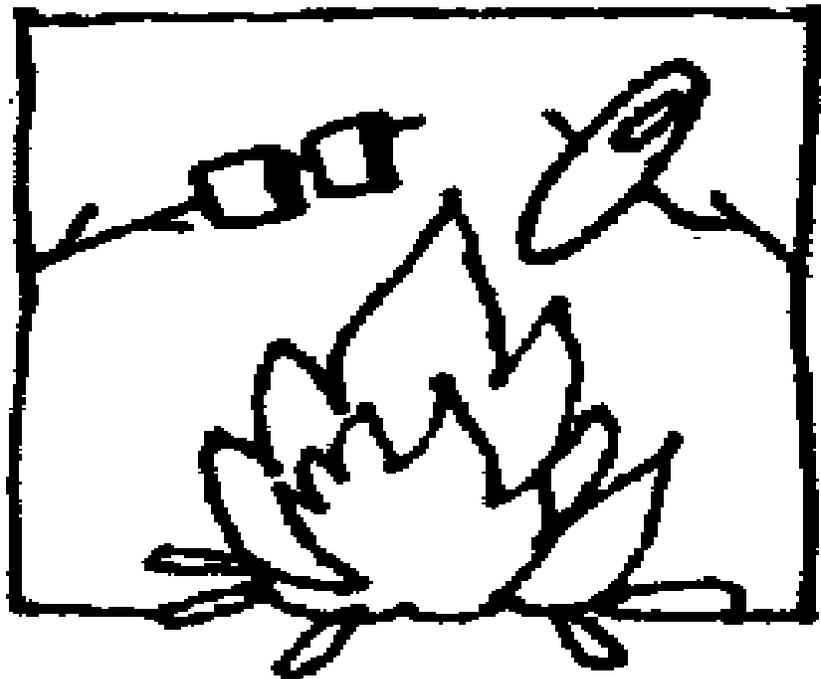
Many wood and coal burning stoves are made with a cooking surface. These are excellent to use indoors during the winter because you may already be using it to heat the home. In the summer time however, they are unbearably hot and are simply not practical cooking appliances for indoor use. If you choose to build a camp fire on the ground out of doors be sure to use caution and follow all the rules for safety. Little children, and even many adults, are not aware of the tremendous dangers that open fires may pose.

### **Kerosene**

Many kerosene heaters will also double as a cooking unit. In fact it is probably a good idea to not purchase a kerosene heater that cannot be used to cook on as well. Follow the same precautions for cooking over kerosene as was discussed under section on heating your home with kerosene.

### **Propane**

Many families have propane camp stoves. These are the most convenient and easy to use emergency cooking appliances available. They may be used indoors or out. As with other emergency fuel sources, cook with a pressure cooker whenever possible to conserve fuel.



## **Dutch Oven Cooking**

They say that the pioneers brought Dutch ovens across the plains. While only the very essentials were packed on the wagons to make the journey to the west, Dutch ovens were included. This tells us that they were important to pioneer life.

## **Dutch Oven Initial Seasoning (Preparation)**

1 Brillo pad or SOS pad  
1 roll paper towels

1 can shortening (cheap works well)

Preheat oven to 200 degrees.

1. Wash Dutch oven with very warm water and soap. Scrub all over using SOS pad.
2. Fill Dutch oven with very hot tap water until full, and then let it overflow with water running out, carrying remaining soap with it.
3. Empty clean water out of Dutch oven. Be careful not to scald yourself.
4. Dry Dutch oven, inside and outside, thoroughly.
5. Rub inside and outside of Dutch oven with a thin layer of shortening.
6. Place inside preheated oven. Let it cook for approximately 30 to 45 minutes.
7. Remove Dutch oven and wipe out inside with paper towels or newspaper.
8. Next, apply a generous amount of shortening inside and outside of Dutch oven and replace in the oven. Allow to cook approximately 45 minutes.
9. After cooking, wipe excess grease out.
10. Repeat No. 8 and No. 9.
11. After this last cooking, wipe out grease and apply a fresh layer of grease inside.

After seasoning, the best thing you can do is cook something really greasy. Any deep-fried food is a great suggestion. After cooking whatever you deep-fry, wipe out and reapply shortening. The second thing you should cook is a highly seasoned meat – chili, sloppy burgers, anything like this. I like to start with bacon to really deeply flavor the Dutch oven. Repeat this seasoning recipe if you burn something and cannot get rid of the burnt taste.

To clean a Dutch oven, simply scrape the scraps of food out of it with a spatula or spoon. Then place the oven in the campfire for a few minutes to warm it well. When it is nicely warmed, place it on a firm surface such as a picnic table. Sprinkle table salt into it, pour a little oil in and use paper towels to rub the oil and salt around the inside of the oven. The salt is an abrasive, and the oil the lubricant. If your oven was well seasoned to begin with, the food will come right out. Clean out the salt with more paper towels. Your oven should be clean. Once the oven is clean, place a paper towel in the bottom of the oven to absorb any moisture that might try to sneak in and rust the oven.

The general rule of thumb is to use twice as many briquettes as the oven is in diameter. For example, if the oven is a 14 inch oven, you would use 28 briquettes. Put half on top of the oven (right on the lid), and half underneath the oven. When stacking the ovens, use briquettes between each layer. If you have a campfire, you can also use wood coals from the fire. Just place some coals on top of the oven, and place some underneath.

## **Dough Tips**

Good Dutch oven breads seem to be a rarity. However, marvelous corn breads, biscuits, rolls, and sourdough loaves are surprisingly easy to perfect in the old black pot. The larger the oven the better when it comes to cooking breads. A 14 – inch oven serves nicely to produce 3 loaves of bread or up to 3 dozen rolls or biscuits. To successfully brown breads, however, you must alter the cooking process for the last five to eight minutes of the traditional 25-30 minutes, 350° baking time.

First, put a light coat of oil on the interior of a cool oven (including the lid), and let the rolls or bread complete their final rise in the oven prior to applying the coals. Second, place the oven on the coals with the proper number of coals on top as noted earlier. (Remember: no coals directly under the center of the oven.) Third, when there are five to eight minutes left in the cooking time, lift the lids, lightly brush the tops of the breads with butter, replace the lid, then take all the coals from under the oven and distribute them evenly on the top. With all the heat now on the lid, check the bread every couple of minutes until you think it looks perfect. After brushing the coals and ashes from the lid, remove it, tilt the oven over a bread board, and your perfect bread will gently fall out.

### **Garden Vegetables Tips**

Garden vegetables are a magnificent addition to any Dutch oven dinner. Most Dutch oven vegetables are prepared in a sauce of some type, but they may be steamed or boiled as you would on a traditional stove. However, if you choose to bake or roast Dutch oven vegetables, they should cook for approximately three minutes per inch of oven diameter. A 10-inch oven full of squash should cook for about 30 minutes, a 12-inch oven full for 36 minutes. Vegetables to be cooked in sauces, such as sour cream potatoes, broccoli in cheese sauce, or new peas and potatoes in white sauce, should be brought to a rapid boil first, the water discarded, the sauce added, then baked for the proper time noted for vegetables.

### **Cooking Meats**

Meats prepared in a Dutch oven are delectable. They have a flavor and aroma you will never duplicate using any other cooking method. While the taste is always exquisite, some Dutch oven users have difficulty producing a visually appealing meat form inside the steamy oven. The secret is simple: regardless of the spice and flavorings you use on any meat or poultry, always brown the meat first.

To brown the meat, place some oil, bacon, or any fatty item in the hot oven to produce a good covering of oil on the bottom, heat the oven, then put the meat you want to cook in the oven and sear or brown it well. This will seal in natural juices and provide the outer texture and color more typical of grilled or fried meats. Once the meat is well browned on all sides, drain off any leftover fat dripping, add whatever seasonings you like, put on the lid, and cook the meat for 30 to 35 minutes per pound of beef, pork, or lamb, or 25 to 30 minutes per pound of poultry.

# Dutch Oven Recipes

## Dutch Oven Rolls

4 cups scalded milk	1 cup water	3 Tbs. yeast
1 cup sugar	2 cubes butter	1 ½ Tbs. salt
4 eggs	12-13 cups bread flour	

Scald milk (do not boil). Add butter to milk and let it melt. Dissolve yeast in warm water with a sprinkle of sugar added. (Set aside) Add milk mixture to 4 cups flour, salt and sugar and mix. Add yeast mixture and more flour. Just slightly mix until blended. Add eggs and add all but 3 cups flour. Dough will be sticky. Cover and let rise until double. Add rest of flour of flour until dough is still soft but easy to work with. Line a 14 or 16 inch Dutch oven (you will need several) with tin foil and spray with non stick cooking spray. Roll bits of dough into balls (a little bit bigger than a golf ball). Place in Dutch oven so almost touching. Pour ¼ to ½ cup melted butter over rolls. Cover and let rise until double. While dough is, rising get coals ready. For a 14 inch Dutch oven you will need 10 coals on the bottom and 18-20 coals on the top. A 16 inch oven will need 12 coals on bottom and 20-22 coals on top. Cook 20 minutes.

You can make Navajo tacos with dough. Flatten balls and fry in pan with oil. You can eliminate the eggs for more bread-like rolls. Also, dough can be divided and rolled into (3) 24" strips and braided. Then put in foil lined oven around outer edge. Melt ¼ - ½ cup butter and pour over bread. Bake with coals the same only at least ½ hour to 45 minutes for bread loaf.

*Hint: It works best if you do not mix or roll dough very much. Some kneading and mixing is needed but keep to a minimum.*

## Scones

1 Tbs. dry yeast	2 cups warm water	¼ cup sugar
2 tsp. salt	1/3 cup powdered milk	2 Tbs. butter
4-5 cups flour (substitute 3 cups white and 2 cups whole wheat flour)		Oil for frying

Sprinkle yeast over warm water. Add sugar, salt and milk. Mix well. Stir in 2 cups flour and butter. Beat until smooth, 3-4 minutes. Add more flour until a soft dough forms. Knead 3-5 minutes until smooth. Let rise for 1 hour or until doubled. Punch down. Heat 3" of oil to 350 degrees in large Dutch oven. Pinch off small balls of dough and flatten. Fry for 3-4 minutes per side until golden. Drain on towels.

NOTE: There are several Dutch Oven Recipe Books available if you want to pursue this option for cooking. A couple of suggestions are:

- 1) Cooking the Dutch Oven Way by Woody Woodruff
- 2) Outdoor Dutch Oven Cookbook by Sheila Mills

# CHAPTER 9

## FIRST AID OVERVIEW

All families that have children should complete a \*Authorization of Consent to Treatment of Minor form (see page 72) for each of their children and file it with their schools, doctor's office, hospital, baby sitter, or other places where the child is likely to be when a personal injury may occur when the parents are not around. Include with this form a brief history of any known medical problems your child may have such as allergies to certain medication, recurring medical ailments, etc. An example of this kind of form and the type of information it should include is provided on the last page of this chapter.

**“First Aid”** is a term that is very familiar to almost every person in the United States. Most individuals have been exposed to some form of first aid training during their life. This brief presentation of first aid is intended only as a form of review for those who have had some training in earlier years. For those who have not received any previous training it is recommended that either a course in first aid be taken or that you purchase a good book on first aid published by the American Red Cross or other similar organizations.

*FIRST AID IS EMERGENCY CARE GIVEN TO SICK OR INJURED PERSONS.*

*PURPOSES:*

- TO SAVE LIFE
- TO PREVENT FURTHER INJURY

Depending on the type of emergency, you will have to make a quick decision of what to do first and what not to do.

## AUTHORIZATION OF CONSENT TO TREATMENT OF A MINOR

**NOTE:** Each child needs separate copies of this form on file at each school, doctor's office, hospital, babysitter, family emergency file, etc. Keep a list of locations on file, in case you need to make changes. You are encouraged to reproduce, as many copies of this form as necessary.

(1) (We) The undersigned, parent(s) of \_\_\_\_\_ a minor, do hereby authorize \_\_\_\_\_ as agent(s) for the undersigned to consent to an x-ray examination, anesthetic, medical or surgical diagnosis or treatment and hospital care which is deemed advisable by, and is to be rendered under the general supervision of any physician and surgeon licensed under the provision of the Medicine Practice Act on the Medical Staff of \_\_\_\_\_ Hospital, or \_\_\_\_\_ M.D. (Family Physician)

This authorization shall remain effective until \_\_\_\_\_ 20\_\_\_\_, unless sooner revoked in writing and delivered to said agent(s).

Dated: \_\_\_\_\_ Guardian: \_\_\_\_\_

Witness: \_\_\_\_\_ Guardian: \_\_\_\_\_

### FOR PATIENT'S PROTECTION

1) ALLERGIES AND SENSITIVITIES: Are there reactions to:

Penicillin or antibiotics?	Y N	_____
Morphine, Codeine, Demerol?	Y N	_____
Novocain or other anesthetics?	Y N	_____
Aspirin, Empirin or pain remedies:	Y N	_____
Sulfa drugs?	Y N	_____
Tetanus or other serums?	Y N	_____
Adhesive tape?	Y N	_____
Iodine or Mentholate?	Y N	_____
Any other drug or medication?	Y N	_____
Any foods, egg, milk, chocolate?	Y N	_____

2) DRUGS TAKEN RECENTLY: (within past six months)

Cortisone?	Y N	_____
ACTH?	Y N	_____
Anticoagulants?	Y N	_____
Tranquilizers?	Y N	_____
Hypertensive? (high blood pressure)	Y N	_____

3) Has patient ever received treatment for  
Asthma, Rheumatism or Rheumatic Fever? Y N \_\_\_\_\_

## **GENERAL FIRST AID RULES**

- 1) Keep the victim lying down; his head level with body until you have made some assessment of the problem.

Three exceptions to this rule:

- a. If the victim is in severe shock – place on back with legs slightly elevated
- b. If victim is vomiting or bleeding from the mouth and is semiconscious and there is danger of victim aspirating this material, place him on his stomach with head tilted to one side and lower than feet
- c. Shortness of breath – if victim has a chest injury or respiratory obstruction, place him in a sitting or semi-sitting position

- 2) Examine the victim for hemorrhage (serious bleeding), asphyxiation (suspended breathing), and shock, all of which require immediate treatment. In fact, these are the three primary tasks of First Aid:

- a. Begin artificial resuscitation
- b. Stop severe bleeding
- c. Prevent or reduce shock

- 3) Do not move the victim more than is absolutely necessary. Remove clothing only enough to determine the extent of injuries. It is preferable to rip or cut clothing to remove it (removing in conventional manner may compound the injuries if they are severe).

- 4) Keep the victim reassured and as comfortable as possible.

- 5) If the victim's injury is extensive, it is best not to let them see it.

- 6) Do not touch open wounds.

- 7) Do not give unconscious persons any solid or liquid by mouth.

- 8) Do not move the victim unless necessary to move from further harm or injury. If you must move the victim, do it keeping the lengthwise axis of the body straight.

- 9) Keep the injured person warm, but not overly hot.

**REMEMBER, by far, the greater number of injuries will require a minimum of effort on your part and a maximum of judgment and self-control to prevent doing too much!!!**

## **FIRST AID TOPICS**

### **STROKE OR HEART ATTACK?**

#### **Is It A Stroke?**

This might be a lifesaver if we can remember the three questions! Sometimes symptoms of a stroke are difficult to identify. Unfortunately, the lack of awareness spells disaster for the stroke victim. A stroke victim may suffer brain damage when people nearby fail to recognize the symptoms of a stroke. Now doctors say any bystander can recognize a stroke by asking three simple questions.

0 Ask the individual to smile

1 Ask the person to raise both arms

2 Ask the person to speak a simple sentence

If the person has trouble with any of these tasks, call 911 immediately and describe the symptoms to the dispatcher.

After discovering that a group of non-medical volunteers could identify facial weakness, arm weakness and speech problems, researchers urged the general public to learn the three questions. They presented their conclusions at the American Stroke Association's annual meeting last February. Widespread use of this test could result in prompt diagnosis and treatment of the stroke and prevent brain damage.

#### **Is It A Heart Attack?**

Note – a cardiologist says if everyone who gets this e-mail sends it to 10 people, you can bet that at least one life will be saved, so read this...it could save your life!

Let's say it's 6:15 P.M. and you're driving home (alone of course) after an unusually hard day on the job. You're really tired, upset, and frustrated. Suddenly you start experiencing severe pain in your chest that starts to radiate out into your arm and up into your jaw. You are only about five miles from the hospital nearest your home.

Unfortunately you don't know if you'll be able to make it that far. You have been trained in CPR, but the guy that taught the course did not tell you how to perform it on yourself.

#### **How To Survive A Heart Attack When Alone**

Since many people are alone when they suffer a heart attack, without help, the person whose heart is beating improperly and who begins to feel faint, has only about 10 seconds left before losing consciousness. However, these victims can help themselves by coughing repeatedly and very vigorously. A deep breath should be taken before each cough, and the cough must be deep and prolonged, as when producing sputum from deep inside the chest.

A breath and a cough must be repeated about every two seconds without let-up until help arrives, or until the heart is felt to be beating normally again. Deep breaths get oxygen into the lungs and coughing movements squeeze the heart and keep the blood circulating. The squeezing pressure on the heart also helps it regain normal rhythm. In this way, heart attack victims can get to a hospital on time.

## **BREATHING FAILURE**

**Causes:** Blocked air passages  
Insufficient oxygen in the air  
Inability of the blood to carry oxygen  
Paralysis of the breathing center in the brain  
Compression of the body

A person who has stopped breathing is not necessarily dead, but is in critical danger. Life is dependent upon oxygen, which is breathed into the lungs and then carried by blood to every body cell. Since body cells cannot store oxygen, and since the blood can hold only a limited amount, death will surely result from continued lack of breathing. Oxygen must be provided in 3-6 minutes or damage to brain cells or death will result.

The heart may continue to beat for a time after breathing has stopped and the blood may still be circulated to the body cells. Thus, for a few minutes there is a chance to save a life, by means of artificial resuscitation.

Breathing failure is recognized by absence of breathing movements or by a bluish tint to the lips, tongue and/or fingernails. Rescue breathing should be performed immediately if a person stops breathing.

- 1) Survey the scene to be sure it is safe
- 2) Tap their shoulder and shout, "Are you ok, can you hear me". If no response, have someone call 911 and start rescue breathing as follows:
  - a. Open airway by tipping head back while lifting jaw
  - b. LOOK, LISTEN and FEEL for breathing and if not noted, check mouth for foreign matter or dentures, then clean out
  - c. Re-tilt the head back so that the chin is pointing upward. **This is the most important action you can take to enable a person to breathe again and may alone help the victim to start breathing.** Pinch nose closed and give two (2) rescue breaths through the mouth until chest rises.
  - d. Check for pulse by placing index and middle finger on the side of the neck for no more than 10 seconds.  
**If a pulse is present, give:**  
**1 breath every 5 seconds for adult**  
**1 breath every 3 seconds for children**  
**1 breath every 3 seconds for infants**  
Repeat until the victim begins to breathe on his own, help arrives or you are too exhausted to continue.
- 3) Check for severe bleeding and stop it if found, using pressure bandage/dressing and if soaked, place more over the top of the original, never remove any, once placed on wound. **NOTE:** if no pulse is present when it is checked then full cardio pulmonary resuscitation (CPR) must be started. Very simply, this is the compression of the sternum (breastbone) of the affected individual in timely unison with rescue breathing. Although it is beyond the limits of this first aid outline, we highly recommend you and your family takes the time and enrolls in a CPR class from the American Red Cross or a similar organization.

## **CHOKING**

Choking occurs when food or other foreign objects become lodged in the throat or airway. If the choking person can talk or cough hard enough to dislodge the object, do not interfere. If they are coughing weakly, cannot speak, gasping for breath or having violent fits of coughing, perform the Heimlich Maneuver immediately. Other times to perform the Heimlich Maneuver are when the person asks for help or they make the universal choking sign.

Choking on food is the sixth leading cause of accidental death in the U.S.A. Over 3,000 and as many as 6,000 deaths occur each year. The usual slap on the back does not help very much, but Dr. Henry J. Heimlich, a thoracic surgeon from Cincinnati, has developed a treatment, which is easy to administer and is quite safe if administered properly. Choking occurs when food is sucked into the windpipe instead of being swallowed. Onlookers often, mistake the symptoms for those of a heart attack and administer inappropriate treatment.

The most important thing is to make sure the victim is choking, but the choking victim cannot talk. Therefore, if the patient is still conscious, one must quickly ask questions that can be answered by shaking or nodding the head – but QUICKLY. The choking patient will soon collapse.

The Maneuver forces air that is in the lungs out through the windpipe, dislodging obstruction and can be done with the patient in the standing or sitting positions or with the patient lying on his back.

### **What to Look For:**

- 1) Can not speak or breathe
- 2) Turn Blue (Heimlich Sign: Hand to neck signals: (“I am choking”))
- 3) Collapses

### **Maneuver While Standing**

Stand behind the victim and make a fist. Place the thumb end of the fist against the abdomen of the victim, with the fist definitely below the rib cage, between the belly button and rib cage, but well below the rib cage. Place the other hand over the fist and pull up and in, quickly. The force should depend on the amount required to move enough air to remove the obstruction.

In order to prevent injury from using more force than is necessary, one may wish to start with minimal force and increase with each attempt. It may be necessary to repeat the Maneuver four or five times. With small children, use only the fingers to apply pressure.

### **Maneuver While Sitting**

When the victim is sitting, the chair can provide a good brace or support to perform the Maneuver.

### **Maneuver While Lying Down**

If the victim has collapsed, or if the victim is so large that the person applying the treatment is unable to reach around the victim, the victim should be placed on the floor on his back. The person applying the treatment quickly straddles the hips of the victim, places one hand over the other and with the heels of the hands well below the rib cage (between the rib cage and the belly button) quickly pushes up and in. Remove the food quickly after it is expelled. Also, the patient may vomit, so quickly turn him on his side after treatment.

After all, there is very little time. Death or brain damage will occur in just a few minutes. You must act fast. A physician should examine the victim after a choking episode and treatment.

## Maneuver If Alone

This can be administered to yourself by placing the hands as if standing behind a victim and then letting you fall over a soft chair or sofa.

## Universal Distress Signal

Placing the hand to the throat is an almost automatic response of someone choking. This will convey the message, "I am choking." Teach the Maneuver to every member of your family so that they may react quickly to save the life of another.

## NOTE: A person choking on food will die in 4 minutes!!!

The victim should see a physician immediately after the rescue. Performing the maneuver could result in injury to the victim, however, he will survive.

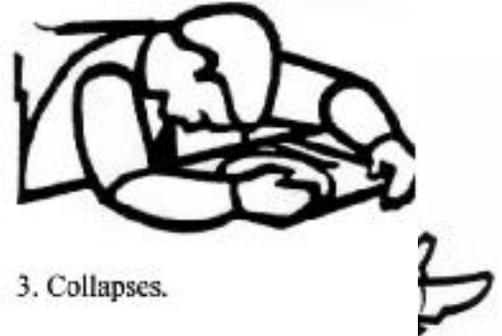
### What to Look For:



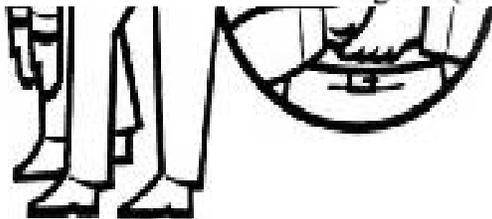
1. Can not speak or breathe.



2. Turns Blue  
(Heimlich Sign: Hand to neck signals: ("I am choking"))



3. Collapses.



## SPRAINS AND STRAINS

### SPRAINS

A sprain occurs when ligaments or tendons near a joint are torn or stretched. (Ligaments and fibrous tissue that prevent bones from popping out of the joint). Tendons-thick strands of tissue that connect muscles to bones.)

**Symptoms:** pain on movement, swelling and/or discoloration

### **Care of Sprains**

- 1) Apply cold pack, especially during the first half hour
- 2) Elevate
- 3) Do not use or walk on injured part if it causes discomfort or pain
- 4) Treat the same as a closed fracture

## **STRAINS**

Strains are caused by over stretching a muscle or tendon. A common strain caused by lifting heavy objects incorrectly is the Back Strain. Signs of a strain may include intense pain, slight swelling and difficulty moving or using the affected part.

### **Care of Strains**

- 1) Rest injured part
- 2) Apply cold packs and elevate injured area. For back strain try applying moist heat to the area.
- 3) Get medical help, especially if pain persists

**NOTE:** Because symptoms of sprains and strains are closely related to those of a fracture, an X-ray may be acquired to rule out the possibility of a broken bone.

## **FRACTURES/BROKEN BONES**

A fracture is a crack or break in a bone. There are 2 types of fractures: an open fracture and a closed fracture. An open fracture consists of the bone breaking through the surface of the skin revealing the bone. An open fracture may bleed heavily and become infected. A closed fracture does not break the surface of the skin, but it may damage the tissue immediately under the skin. Fractures are not always easy to detect. The only sure way to know is by an X-ray. Recognizable symptoms of fractures are crookedness, discoloration, swelling, grating, exposed bone, inability to move the part and severe pain.

### **Signs of a CLOSED Fracture**

- a. Swelling
- b. Tenderness to touch
- c. Deformity
- d. Discoloration

### **Treatment for CLOSED Fracture**

- a. Keep broken bone ends from moving
- b. Keep adjacent joints from moving
- c. Treat for shock
- d. See Section #4 below on splinting

### **Treatment for OPEN Fracture**

- a. Do not move protruding bone ends
- b. If bleeding, control bleeding by direct pressure on wound

- c. Treat same as closed fracture after bleeding is controlled

## Splinting

- a. Place one hand above and one hand below fracture to support it
- b. Splint the limb in the position you find it, do not attempt to set
- c. CAREFULLY secure the splint to the limb
- d. Treat for shock



## SPLINTING OVERVIEW

A splint can be made from boards, folded newspaper, a pillow, folded blankets or towels. Make sure the splint does not limit circulation in any way and the knots are not on the injured area. **CAREFULLY** secure splint on the immobilize joints **above and below the broken bone**. Seek medical attention as soon as possible.

## DISLOCATIONS

A dislocation is the separation of the bone from its joint.

**Symptoms:** Include deformity, pain and loss of function

**Care:** Do not try to set the joint. Immobilize and support affected part as in the treatment for fractures. Apply cold packs to keep the swelling at a minimum. Seek immediate medical attention.

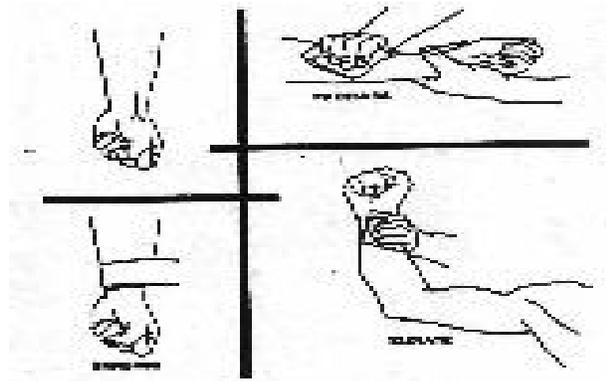
## BLEEDING

- 1) Apply direct pressure on the wound
- 2) Elevate the wounded area if an arm or leg is bleeding
- 3) Apply pressure on the supplying artery of the arm or leg if steps 1 and 2 do not stop the bleeding
- 4) **Only as a last resort of life saving measure, apply a tourniquet to stop bleeding. Once applied, a tourniquet MUST NOT be loosened except by a physician.**

**Note:** Make sure you mark (on the patient) the time the tourniquet is applied. The limb usually needs attention within 20 to 30 minutes to save the limb.

## INTERNAL BLEEDING

Treat for shock and seek medical help as soon as possible.



## HEAD INJURIES

### Symptoms of Head Injuries

- a) May or may not be conscious
- b) Unconsciousness may be delayed ½ hour or more
- c) Bleeding from mouth, nose or ears
- d) Paralysis of one or more extremities
- e) Difference in size of pupils of the eyes

### **First aid for Head Injuries**

- a) No stimulants or fluids
- b) Don't raise his feet – keep victim FLAT
- c) Observe carefully for stopped breathing or blocked airway
- d) Get medical help immediately
- e) When transported – gently, lying flat
- f) Position head to side so secretions may drool from corner of mouth
- g) Loosen clothing at neck

## **SHOCK**

### **Symptoms of shock**

- a) Pale, cold, clammy skin
- b) Weak, rapid pulse
- c) General body weakness

### **Always treat a victim for shock by:**

- a) Laying the victim down
- b) Covering him with a blanket to avoid chilling
- c) Raise the head and shoulders if the victim has difficulty in breathing
- d) If medical help will not be available within 30 minutes, give a lukewarm solution of water consisting of ½ glass doses of ¼ teaspoon salt and 1/8 teaspoon baking soda every 15 minutes

**Never** give fluids if victim is nauseated, has penetrating abdominal wound, or requires surgery

## **HEAT EXPOSURES**

These conditions start with heat cramps, then heat exhaustion and finally heat stroke (a medical emergency). Heat cramps are muscle spasms caused by the loss of electrolytes through sweating and are a warning sign to rehydrate (drink fluids) and cool down as soon as possible. If one fails to heed this warning sign, the next condition to follow is heat exhaustion, which may lead to dizziness, fainting, weakness, nausea, heavy sweating and possibly pale clammy skin. Do not continue your activity in the heat if this occurs. Get into a shaded area, rehydrate, loosen clothing, apply cool compresses and if the symptoms continue, seek medical help as soon as possible. Lastly, though not common, heat stroke may evolve and is a medical emergency identified by signs of red hot dry skin, lack of sweating, rapid heart rate, confusion, unconsciousness and possibly convulsions. If any of these symptoms are noted, immediately cool the victim by removing as much clothing as possible, place them in cold water, rehydrate as able, raise their head and shoulders, watch for shock and obtain medical help as soon as possible!!!

**NOTE:** In emergencies, I have found the following acronym helpful in differentiating the treatment for shock and heat stroke.

**“IF THEY ARE PALE RAISE THEIR TALE (feet).  
IF THEY ARE RED RAISE THEIR HEAD”.**

## **BURNS**

## Degrees of Burns

- a) 1<sup>st</sup> degree – skin is red and tender (as in sunburns)
- b) 2<sup>nd</sup> degree – blisters develop. Never break or open blisters
- c) 3<sup>rd</sup> degree – deep tissue damage

## First aid for 1<sup>st</sup> and 2<sup>nd</sup> Degree Burns – exclude air by:

- a) Submerge in cold water – the best thing to do
- b) Apply a cold pack
- c) Cover with a thick dressing or plastic
  - 1) Do not use plastic on the face
  - 2) After using cold water or ice pack, cover the burn area with a thick dry sterile dressing and bandage firmly to exclude air

## First aid for 3<sup>rd</sup> Degree Burns

- a) Apply a thick dry sterile dressing and bandage to keep out air
- b) If large area, wrap with clean sheet or towel
- c) Keep burned hands and feet elevated and get medical help immediately
- d) Treat the same as shock victim, giving fluids as indicated and warmth if necessary

## First aid for Chemical Burns

- 1) Wash chemical away with water
- 2) Acid or alkali burns of the eye
  - a) Wash eye thoroughly with plain water for 5-15 minutes
  - b) If the victim is lying down, turn head to side. Hold the lid open and pour from inner corner outward
  - c) Have victim close the eye, place eye pad over lid, bandage and get medical help as soon as possible

## WOUNDS/CUTS

Some wounds and cuts are minor, and some are very serious. For major wounds that bleed a lot or are very deep, the person may need to see a doctor. However, you can treat most minor wounds at home without medical help. You can treat minor wounds and give initial treatment for major wounds by learning the following five basic steps:

1. **Stop the bleeding.** Put any clean cloth (towel, handkerchief, gauze, etc.) over the wound. Press down on the cloth for at least three minutes.
2. **Wash the wound.** This is the most important thing you can do to prevent infection and to help the wound heal quickly. First wash your hands well with soap and water and rinse them in a sanitizing solution or purified water. Then wash the wound with disinfectant soap and purified water.
3. **Clean out dirt particles.** If there are flaps of skin, lift them gently with sterile tweezers. Squirt, spray, or pour purified water on the wound to clean it completely. Do not put alcohol, tincture of iodine, or mentholated directly on a wound. These things hurt the flesh and slow the healing process.
4. **Close the skin.** A fresh wound less than twelve hours old will heal faster if the edges of the skin are held together. If the wound or cut is severe, a health worker may need

to stitch it. However, you can close many wounds with a butterfly bandage made of adhesive tape.

5. **Dress and cover the wound.** Antiseptic or antibiotic ointment can be put on the wound when it is clean and closed. Cover the wound gently with a clean covering such as gauze, toilet paper or a sterilized cloth bandage.

**Get medical help to treat wounds that are infected.**

Sometimes wounds become infected. If they do, they need to be treated by a medical provider ASAP. Signs and symptoms of infection include pain, redness, warmth, pus, swelling; bad smell and fever over 100°.

## **BEE STINGS**

- Remove the stinger – It has venom sac attached so you will want to remove it, but do not try to pull it out. Pulling it out will squeeze more venom into the sting. Take a blunt edged object such as a credit card, knife or fingernail and gently scrape the stinger and whisk it out.
- Keep the area clean – A child's own germs getting into the wound could cause infection. Wash the area several times the first day and a few days after. Infection usually occurs 3-4 days after the sting.
- Cool it – Put an ice cloth on the site for 10-30 min, you can also use a cold-water wash cloth. This will help with itching, pain and tenderness.
- Make a paste – A paste of baking soda and water applied for 15-20 min. can help reduce pain
- Apply Antiperspirant – Apply a deodorant that contains aluminum chlorohydrate. This will relieve pain and itching
- Swab with Ammonia – Dab a bit of household ammonia on a cotton ball and swab the sting. This will help relieve pain and itching as well
- Try an antihistamine – This can help reduce side effects of stings such as swelling, pain, allergic reactions, etc.
- Give pain relief – Tylenol (or other pain reliever) can help reduce side effects as well

**Get medical help** if there is swelling over a large area, difficulty breathing, throat lightness, nausea, vomiting, dizziness, hives, fainting or pain with swelling that lasts more than 72 hours.

## **INSECT & SPIDER BITES**

0Keep the area clean – Wash with soap and water 2-3 times a day & apply antibiotic cream

1Soothe with ice – Apply an ice pack or cold wash to soothe the itch

2Make a paste – Apply baking soda paste for 15-20 min. to soothe itch & pain

3Treat pain – Administer (acetaminophen) as needed

**Get medical help** if there is a deep blue-purple mottled area around the bit, surrounded by a whitish halo and an outer ring of redness (Brown Recluse). If muscle spasms, tightness, stiffness or abdominal pain (Black widow).

## **TICKS**

Grasp the tick with fine-tipped tweezers pull slowly. DO NOT burn; apply Vaseline or nail polish to the tick. Wash the bite area and apply antibiotic ointment. If you cannot remove the tick or part of it remains imbedded, get medical help. Not all ticks carry Lyme disease. If rash or flu-like symptoms appear, see your health care provider immediately

## **EPILEPSY**

- 1) Allow the victim to have the seizure. Do not attempt to put anything in their mouth!!
- 2) Remove or pad objects that may injure the victim during the attack
- 3) Be aware of the possibility of a breathing emergency, though this is rare
- 4) Ask all unnecessary bystanders to leave and provide explanation of what has happened and give general support to victim at the end of seizure

## **ELECTRIC SHOCK**

- 1) Do not touch the victim if he is still in contact with the electricity
- 2) Turn off the power source if possible, but never attempt a rescue until you are sure the area is completely safe
- 3) When able, check for stopped breathing and administer artificial resuscitation if needed
- 4) Treat for shock

## **GENERAL SKIN CARE**

### **The following things are signs of skin disease:**

- 0Swelling or inflammation
- 1Itching or stinging
- 2Areas that feel hot to the touch
- 3Infected sores with pus
- 4Pain or a burning sensation
- 5Rashes or dry, scaly patches
- 6Areas that blister, crust, or ooze
- 7Sores that heal slowly

**Three simple treatments** that you can use in your home to treat mild skin problems:

**Hot Compress** – For swelling, inflammation, pain, skin that feels hot to the touch, or push, apply hot compresses. You can make hot compresses in the following way:

Boil water and allow it to cool just enough so that it is still hot but you can hold your hand in it. Fold a clean cloth so it is slightly larger than the area you want to treat. Moisten it in the hot water. Put the cloth over the affected skin. Cover the cloth with a sheet of thin plastic or cellophane. Wrap the cloth and the plastic with a towel. Keep the affected part raised above the body if possible. Put the cloth in hot water again whenever it becomes cool.

**Cold Compresses** – For itching, stinging, blistering, crusting, or oozing of clear fluid, apply cold compresses. You can make cold compresses in the following way:  
Soak cloths in cool water and white vinegar (two tablespoons of vinegar in one liter of boiled or chlorinated water). Apply cloths to the affected area several times a day. After several days, when

the affected area feels better and has formed new skin, mix talc and water (one part talc to one part purified water). Spread the mixture lightly over the skin. When the new skin begins to thicken or to flake, rub on a little vegetable oil or baby oil.

**Protection from Sunlight** – When any signs of skin disease appear on parts of the body that are normally exposed to the sun, protect the affected area from sunlight.

A health worker should treat serious skin infections. You should see a health worker whenever the following things happen:

- A skin disease gets worse with home treatment rather than healing.
- The lymph nodes behind the ears, under the chin, in the armpits or in the groin become swollen.
- A red line on or under the skin appears near the infected area and follows the blood vein in the direction of the heart.
- The affected area begins to smell bad.
- The individual develops a fever greater than 100 F

## **FEVER, DIARRHEA AND DEHYDRATION**

Fever and diarrhea are caused by germs, getting into the body, through dirty hands, impure food and/or water and exposure to others that are already ill. If not treated, fever and/or diarrhea can lead to poor nutrition and/or dehydration, both of which can be life threatening, especially to the very young, the very old and those that are immune suppressed or have long-term illnesses.

A high fever can be very dangerous, especially in a child. Do not wrap a child in a blanket when he/she has a fever...this can make the child sicker. When a person has a fever, you can do several things to bring the body temperature back to normal:

- Loosen or remove clothing
- Sponge the body with cool water
- Give the person a proper dose of Tylenol or other pain reliever containing acetaminophen
- Give the person liquids frequently

When you eat or drink, your intestine prepares water, salts and nutrients to be carried by the blood to all parts of the body. When you have diarrhea, your intestine does not work properly. It lets too much water pass through so quickly that the body cannot use it. This results in poor nutrition. Dehydration and poor nutrition from diarrhea often cause death, especially among small children.

When a person has diarrhea, he needs a lot of liquid or he may become dehydrated and die. If someone in your family has mild diarrhea, you should give them lots of liquids to drink. As soon as he is able to eat, you should give them soft foods that are easy to digest such as soup, creamed cereals, cooked bananas or mashed potatoes. If you are nursing an infant who gets diarrhea, do not stop breastfeeding the child. Breastfeeding helps prevent diarrhea and dehydration.

If a person has very bad diarrhea or has had diarrhea for several days in a row, they can become dehydrated. This is especially true for small children. Some of the symptoms of severe diarrhea and dehydration are the following:

- 0Frequent bowel movements that the person cannot control
- 1Watery stools
- 2Little urine or dark yellow urine
- 3Fast, weak pulse
- 4Flushed, dry skin

- 5 More than normal thirst
- 6 Dry mouth and tongue
- 7 Sunken or dry eyes
- 8 Lethargy
- 9 Irritability and confusion

If someone in your family has diarrhea and has two or more of these symptoms, you should give them oral rehydration solution. You can buy oral rehydration solution in a grocery store or pharmacy. It may come in powdered form that you can mix with purified water, or it may be a liquid (Pedialite).

You can also make a simple oral rehydration solution at home (see directions below). Give the person small sips of the solution every 5 min. even if he vomits, until he begins to urinate normally. The drink can be given with fruit juices as flavoring. Thin vegetable soup can also be used.

## **Replacing body fluids**

2 Tablespoons Sugar + ½ teaspoon salt + 1 liter water (about 1 quart)

or

2 Fistfuls sugar + 3 pinches salt + 1 liter water (about 1 quart)

**Give small sips (even with vomiting) until urination returns to normal**

## **POISONING**

No one wants to see someone poisoned, but it still happens over a million times a year. As a result, you should be very concerned about possible poisoning in your home, especially accidental poisoning of small children.

Suspect a poisoning when somebody suddenly becomes sick or behaves in an unusual manner and there is no explanation for the illness or abnormal behavior. If you take enough of anything, it can be poisonous.

The most critical period is the first hour or two after the poisoning occurs.

**Remove poisons from contact with eyes, skin or mouth.**

- EYES:** Gently wash eyes with plenty of water (or milk) for 10 to 15 minutes with the eyelids held open. Remove contact lenses and again wash the eyes. Do not allow victim to rub the eyes.
- SKIN:** Wash poisons off the skin with large amounts of plain water. Then wash the skin with a detergent if it is possible. Remove and discard all contaminated clothing.
- MOUTH:** Look into the victim's mouth and remove all tablets, powder, plants, or any other material that you find. Also, examine for cuts, burns, or any unusual coloring. Wipe the mouth out with a cloth and wash thoroughly with water.

- Remove victim from contact with poisonous fumes or gases
- Get the victim into fresh air
- Loosen all tight-fitting clothing
  
- If the victim is not breathing, you should start artificial resuscitation immediately and do not stop until the victim is breathing well or help arrives
- Use oxygen if available

- Send someone else to call for help

If a **caustic poison** has been swallowed, you should dilute it by giving 1 or 2 glassfuls of milk (or water if milk is not available).

## **CALL YOUR DOCTOR OR THE POISON CONTROL CENTER – 1-800-222-1222**

- 1) Identify yourself and your relationship to the victim.
- 2) Describe the victim by name, age, and sex.
- 3) Have the package or poison in your hand and identify exactly as best as you can what the victim took and how much they took.

***Call for information even if you are not sure. Keep calm. You have enough time to act, but don't delay unnecessarily.***

### **INDUCE VOMITING ONLY IF:**

**You are instructed to do so by your doctor or the Poison Center, but never** if the victim  
Is unconscious  
Is having a convulsion (fits)  
Has swallowed a strong caustics or corrosives. **If it burns going down it will burn coming up!**  
has swallowed any form of petroleum product. Severe danger of aspiration

### **HOW TO INDUCE VOMITING**

#### **If you are instructed to use IPECAC:**

Give the victim one tablespoon of Ipecac syrup followed by a glass (8 oz.) of liquid (water, juices, etc.). Then give additional liquid as tolerated. If the patient has not vomited within 15 or 20 minutes, give another tablespoon of Ipecac and more water.

#### **DON'T WASTE TIME TRYING OTHER WAYS TO MAKE THE VICTIM VOMIT**

Tickling the back of the throat with your fingers, a spoon, or some other object is not very effective. Do not use salt water. It is potentially dangerous.

## **FIRST AID KIT AND ASSISTANCE**

Skills learned in a first aid course will enable one or more of your family members to minister to you and your neighbors in time of emergency. First aid knowledge greatly enhances your family's ability to be self-reliant. It is useful for everyday emergencies as well as for disaster situations.

The first aid kit as suggested below can easily be included on family outings or used for everyday problems at home. Be sure to keep it well and freshly stocked. This first aid kit is different from the one listed in the section on 72-hour survival kits.

The kit and first aid book should be stored together in an easy-to-reach location. The kit contents should fit the needs of your family. Filling a small toolbox, fishing tackle box or Tupperware container with those things your family needs may be better than buying a pre-assembled kit.

## **A VERY SIMPLE FIRST-AID BOX** **MIGHT HAVE THE FOLLOWING ITEMS IN IT:**

- A roll of good quality toilet paper in its original wrapper (for drying wounds or cuts that have been cleaned)
- A bar or bottle of disinfectant soap (for cleaning cuts and scrapes)
- A liter of purified water (boiled or chlorinated)
- A small bottle of alcohol (for disinfecting around, not in, cuts and for sterilizing scissors, needles, and thermometers)
- A small bottle of antiseptic (for use on wounds)
- Pieces of clean cloth that are carefully wrapped so they will stay clean
- Tylenol (or other pain reliever containing acetaminophen) for reducing pain & fever
- A thermometer with instructions
- A packet of dry ingredients for oral re-hydration solution or similar solutions such as Pedialyte
- Adhesive tape
- A jar of sterile petroleum jelly (Vaseline)
- Tube of antibiotic ointment
- Scissors or a knife

## **OTHER USEFUL SUPPLIES:**

Assorted Bandages  
Tweezers  
Needles & Thread  
Safety Pins (assorted)  
Dental Floss  
Space Blankets  
Rubber Gloves  
Snake Bite Kit  
Soap  
Cold Packs  
Heavy String  
\*Triangular Bandages  
\*\*Cravat Bandages

Gauze Pads  
Pencil & Paper  
Slings  
Sanitary Napkins  
Plastic Sheeting  
Matches/Lighter  
Medicine Dropper  
First Aid Handbook  
(Red Cross/Boy Scout)  
Hydrogen Peroxide  
Smelling Salts  
Baking Soda  
Water Purification Tabs

Cotton Swabs  
Chlorine Bleach  
Vicks  
Salt Tablets  
Aerosol Burn Spray  
Antibiotic Ointment  
Laxatives  
Nasal Spray  
Benadryl  
Hand Lotion  
Iodine  
Eye Drops  
Ear Drops

\*To make a **triangular bandage**, start with a square piece of unbleached muslin or an ordinary piece of cotton cloth 36-40 inches square. Fold it diagonally from the corner to cut on the fold. This makes two bandages.

**\*\*To make a cravat bandage, start with one triangle. Fold a 1 ½-inch hem along the base, placing the apex or point of the triangle underneath the hem. This bandage is again folded lengthwise.**

Uses for Triangular Bandage

Head  
Hand  
Foot  
Sling

Uses for Cravat Bandage

Sprained Ankle  
Splint or stabilize an arm  
Splint or stabilize a leg

**LABOR AND DELIVERY**

## **CHILDBIRTH**

In the event that a wide spread natural disaster should strike our area there would be several expectant mothers who would go into labor either because it is time or they would experience premature delivery because of the shock and trauma they have experienced in the disaster. Inasmuch as hospitals and other medical facilities would not be accessible or perhaps even be nonexistent it is necessary that a thorough understanding of the birthing process be had to insure as safe and as easy a birth as possible under the circumstances. Birth is a natural event and should not be feared, even if no medical facilities, doctors, or nurses are available. The following guidelines are intended to assist you in this natural process and will be applicable to most births. It is especially important to remember that during times of natural disaster great care should be taken to insure proper sanitary conditions are maintained during childbirth.

### **LABOR IS DIVIDED INTO THREE STAGES:**

- 1) First stage – The womb contracts by itself to open and to bring the baby down to the birth canal
- 2) Second stage – The mother pushes (bears down) with the contractions of the womb to help the baby through the birth canal and out into the world
- 3) Third stage – The afterbirth is expelled

### **First Stage**

In this early part of labor it is often helpful for the mother to keep occupied as long as she does not get too tired. She should be patient and clam, relaxing as the contractions come and go and breathing slowly and deeply during the contractions as they become stronger. Emptying the bowels and frequent urination will help to relieve discomfort. The mother will know she is in true labor if she has regular contractions of the womb which are prolonged and become stronger and closer together. When she knows the baby is on the way, she should choose a place to have the baby that will be clean and peaceful. She should be able to lie down or sit in a leaning position (with her back well supported).

The following events occur as part of the first stage of labor and delivery.

- 1) The state of dilation; the first signs may be only noticeable to the mother – dull, low backache and irregular cramping pains (contractions in the lower abdomen).
- 2) As labor progresses, the contractions become stronger, last longer, and become more regular. When the contractions recur at regular 3-4 minute intervals and last from 50-60 seconds, the mother is in the latter part of the first stage.
- 3) The contractions will get stronger and more frequent. Occasionally the mother may make an involuntary, deep grunting moan with contractions. The delivery of the baby is now imminent.

During “First Stage: those helping the mother should know how to time the contractions. This information will give them an idea as to how far into labor the mother is and how much time remains until the baby comes.

Place a hand on the mother’s abdomen just above the umbilicus. As contractions begin, you will feel a hardening ball. Time the interval from the moment the uterus begins to harden until it completely relaxes. Time the intervals in minutes between the start of one contraction and the start of the next contraction. As labor progresses this time will decrease.

## **DON'T LEAVE THE MOTHER ALONE**

Do not attempt to wipe away vaginal secretions, as this may contaminate the birth canal. The bag of water may rupture during this stage of labor and blood-tinged mucous may appear.

At the end of the first stage, the mother may feel tired, discouraged, and irritable. This is often referred to as “transition” and is the most uncomfortable part of labor and such feelings are perfectly normal. The mother may have a backache, may vomit, may feel either hot or cold (or both at the same time), and may tremble. Firm hand pressure on the lower back by those attending the mother may help to relieve the backache. Alternately, the mother may prefer to lean her back against a firm surface. Deep rhythmical breathing helps to relieve annoying symptoms. The discomfort seldom lasts for more than a dozen contractions.

When the womb is (almost) fully opened, the baby may enter the birth canal, and there may be a vocalized catch in the mothers breathing when she has a contraction. This will signal the onset of the second stage.

## **Second Stage**

The contractions of the second stage are often of a different kind. They may be further apart and the mother usually feels inclined to bear down (push) with them. When she gets this feeling she should take a deep breath as each contraction comes, hold her breath and gently push. There is no hurry here. The mother should feel no need to exert great force as she pushes. She may want to push with several breaths during each contraction. After it passes, a deep sigh (cleansing breath), will help her recover her breath. She should then rest until the next contraction. She may even sleep between contractions.

The following are general instructions for the second stage of labor:

- 1) Be Calm! Reassure the mother and be prepared to administer first aid to both the mother and the baby (possible respiratory and cardiac resuscitation for the baby and hemorrhage control and prevention of shock for mother).
- 2) Prevent onlookers from crowding around the mother.
- 3) Use sterile materials or the cleanest materials available. Clean towels or parts of the mother’s clothing can be used. Place newspaper under the mother if it is available. If she must lie on the ground, place a blanket or other covering under her.
- 4) In order to prevent infection, refrain from direct contact with the vagina.
- 5) Prepare for the delivery by assisting the mother to lie on her back with her knees bent and separated as far apart as possible. Remove any constricting clothing or push it above her waist.
- 6) When the baby’s head reaches the outlet of the birth canal, the top of the head will first be seen during contractions but will then become visible all the time. The mother will

now feel a stretching, burning sensation. She must now no longer push during the contractions, and to avoid this, should pant (like a dog on a hot day). This will allow the baby's head to slide gently and painlessly out of the canal. If possible allow the head to emerge between contractions. This will prevent the mother's skin from tearing and will minimize trauma to the baby's head. It is important that the mother pant instead of pushing until both of the baby's shoulders have emerged.

## **DELIVERY OF THE BABY**

As the baby's head emerges, it is usually face down. It then turns, so that the nose is turned towards the mother's thigh. Support the baby's head by cradling it in your hands. Do not pull or exert any pressure. Help the shoulders out. For the lower shoulder (which usually comes first), support the head in an upward position. As the both shoulders emerge be prepared for the rest of the body to come quickly. Use the cleanest cloth or item available to receive the baby.

Make a record of the time and approximate location of the birth of the baby.

With one hand, grasp the baby at the ankles, slipping a finger between the ankles. With the other hand, support the shoulders with the thumb and middle finger around its neck and the forefinger on the head (Support but do not choke). Do not pull on the umbilical cord when picking the baby up. 'Raise the baby's body slightly higher than the head in order to allow mucous and other fluid to drain from its nose and mouth. BE VERY CAREFUL, as newborn babies are very slippery.

The baby will probably breathe and cry almost immediately. If the baby doesn't breathe spontaneously, very gently clear the mouth of mucous with your finger and stimulate crying by gently rubbing its back. If all this fails, give extremely gentle mouth-to-mouth resuscitation. Gently pull the lower jaw back and breathe gently with small puffs (a minute). If there seems to be excess mucous, use your finger to gently clear the baby's mouth.

The mother will probably want to hold the baby. This is desirable. If the umbilical cord is long enough, let her hold the baby in her arms. If the cord is short, support the baby on the mother's abdomen and help her hold it there.

It is of benefit to the baby and makes the afterbirth come with less bleeding if the baby can be allowed to suckle at the breast as soon as it is born. The cord should not be cut until the afterbirth has completely emerged.

## **Third Stage**

The placenta delivery or afterbirth is expelled by the womb in a period of a few to several hours after the baby is born. No attempt should be made to pull it out using the cord. Immediately following the afterbirth, there may be additional bleeding and a few blood clots. The womb should feel like a firm grapefruit just below the mother's navel. If it is soft, the baby should be encouraged to nurse, and the mother may be encouraged to gently massage the womb (others may do this for her if she feels too weak). These actions will cause the womb to contract and lessen the chances of bleeding.

The baby has some danger of getting an infection through the cut cord, so it should not be cut until sterile conditions are available. If there is a possibility of getting medical help within a few hours, do not cut the cord but leave it and the afterbirth attached to the baby. If there will be no medical help, wait until the afterbirth is out, or at least until the cord is whitened and empty of blood. After the baby begins breathing, the cord should stop pulsating and become limp. As the placenta separates from the uterus, the cord will appear longer. Wait for the delivery of the placenta. It will usually be about 10 minutes or longer before the placenta is delivered (though it could be a few hours). Never pull on the cord. When the placenta appears, grasp it gently and rotate it clockwise. Then tie the cord in two

places – about six inches from the baby using strips of material that has been boiled or held in a hot flame.

The placenta and attached membranes must be saved for a doctor's inspection. Leaving the cord and placenta attached to the baby is messy but safe. Save all soiled sheets, blankets, cloths, etc., for a doctor's examination. Check the amount of vaginal bleeding; a small amount (1 to 2 cups) is expected. Place sanitary pads; or other sanitary material over the vaginal and perineal areas. Then cover mother and baby but do not allow them to overheat. Continue to check the baby's color and respiration. The baby should not appear blue or yellowish. When necessary, gently flick your fingers on the soles of the baby's feet; this will encourage it to cry vigorously, thus filling his lungs with oxygen and promoting the cardio-vascular system to function properly.

The mother will probably need light nourishment and will wish to rest and watch her baby. She should keep her hands away from the area surrounding the birth outlet. If uncontaminated water is available, she may wish to wash off her thighs. She may get up and go to the bathroom or seek better shelter. All care should be taken to avoid introducing infection into the birth canal. The mother can expect some vaginal discharge for several days. This is usually reddish for the first day or so but lightens and becomes less profuse within a few days.

Stay with the mother until relieved by competent personnel. This is a relatively dangerous period for the mother, as hemorrhage and shock may occur.

Almost all emergency births are normal. The babies typically thrive and mothers recover quickly. It is very important when assisting with all emergency deliveries that you continually reassure the mother and attempt to keep her calm.

# CHAPTER 10

## **EMERGENCY DISASTER PREPAREDNESS**

Every day, millions of people wake up, go to work, take kids to school, farm their land or go to ball games. But every so often, the unexpected will happen; and earthquake, a fire, a chemical spill on the highway or some other emergency. Routines change drastically, and people are suddenly aware of how fragile their lives can really be.

Disasters make national headlines, but most emergencies that seriously affect cities, towns and rural communities do not get this kind of publicity – even though hundreds of thousands of lives are disrupted every year. Each disaster has lasting effects – people are seriously injured, sometimes killed, and property damage runs into the billions of dollars. Prepared families can reduce the fear, inconvenience and losses that surround a disaster. They can be ready to evacuate their homes, make their stays in public shelters more comfortable and know how to take care of their basic medical needs. They can even save each other's lives.

If a disaster threatens your community, local government and disaster-relief organizations will try to help. But you need to be prepared as well. Local officials may be overwhelmed after a major disaster, and emergency response personnel may not be able to reach you right away. What you do to prepare can make a difference. After most disasters, you and your family should be ready to be self-sufficient for at least three days – this may mean providing for your own shelter, first aid, food water and sanitation.

Use this information as your foundation for disaster preparedness and safety. Some of the recommended actions are general and supplemented by specific instructions from your local government. Add to this information any items that concern your own family's preparedness.

The next time disaster strikes, you may not have much time to act. Prepare now for a sudden emergency. Learn how to protect yourself and cope with disaster by planning ahead. The following list of information will help you get started. Discuss these ideas with your family, and then prepare your own emergency plan. Post the plan where everyone will see it, i.e., on the refrigerator or bulletin board. For additional information about how to prepare for hazards in your community, contact your local emergency management or civil defense office and/or American Red Cross chapter.

- √ Call your Emergency Management Office or American Red Cross
- √ Find out which disasters could occur in your area
- √ Ask how to prepare for each disaster
- √ Ask how you would be warned of an emergency
- √ Learn your community's evacuation routes
- √ Ask about special assistance for elderly or disabled
- √ Ask your workplace about emergency plans
- √ Learn about emergency plans for your child's school or day care

## **CREATE AN EMERGENCY PLAN**

- Discuss with children the dangers of fire, severe weather, earthquakes and other emergencies
- Discuss how to respond to each disaster that could occur
- Discuss what to do about power outages and personal injuries
- Draw a floor plan of your home. Mark two escape routes from each room
- Post emergency telephone numbers near the telephones
- Learn how to turn off the water, gas and electricity at main switches
- Teach children how and when to call 911, police, and fire

- Instruct household members to turn on the radio for emergency information
- Pick one out-of-state and one local friend or relative for family members to call if separated by disaster (it is often easier to call out-of-state than within the affected area)
- Teach children how to make long distance telephone calls
- Pick two meeting places:
  1. A place near your home in case of fire
  2. A place outside your neighborhood in case you cannot return home after a disaster
- Keep family records in a water – and fire – proof container

## **Take a Basic First Aid and CPR Class**

### **Prepare a Disaster Supply Kit**

Assemble supplies you might need in an evacuation. Store them in an easy-to-carry container, such as a backpack or duffle bag. Include:

- Supply of water (one gallon per person per day). Store in an un-breakable sealed container. Identify the storage date and replace every six months
- Supply of non-perishable packaged or canned food and a non-electric can opener
- A change of clothing, rain gear and sturdy shoes
- Blankets or sleeping bag
- First Aid kit and prescription medications
- Extra pair of glasses
- Battery-powered radio, flashlight and extra batteries
- Credit cards and cash
- Extra set of car keys
- List of family physicians
- List of important family information: the style and serial number of medical devices such as pacemakers
- Special items for infants, elderly or disabled family members

### **Escape Plan**

In a fire or other emergency, you may need to evacuate your house, apartment or mobile home in a moment's notice. You should be ready to get out fast.

Develop an escape plan by drawing a floor plan of your residence. Using a black or blue pen, show the locations of doors, windows, stairways, and large furniture. Indicate the location of emergency supplies, disaster supplies kit, fire extinguishers, smoke detectors, collapsible ladders, first aid kits and utility shut off points. Next, use a colored pen to draw a broken line charting at least two escape routes from each room. Finally, mark a place outside of the home where household members should meet in case of fire. Be sure to include important points outside, such as garages, patios, stairways, elevators, driveways and porches. If your home has more than two floors, use an additional sheet of paper. Practice emergency evacuation drills with all household members at least two times each year.

## **Home Hazardous Hunt**

- In a disaster, ordinary items in the home can cause injury and damage. Anything that can move, fall, break or cause a fire is a potential hazard.
- Repair defective electrical wiring and leaky gas connections.
- Fasten shelves securely.
- Place large, heavy objects on lower shelves.
- Hang pictures and mirrors away from beds.
- Brace overhead light fixtures.
- Secure water heater. Strap to wall studs.
- Repair cracks in ceilings or foundations.
- Store weed killers, pesticides and flammable products away from heat sources.
- Place oily polishing rags or waste in covered metal cans.
- Clean and repair chimneys, flue pipes, vent connectors.

## **If You Need To Evacuate**

- Listen to a battery-powered radio for location of emergency shelters.
- Follow instructions of local officials.
- Wear protective clothing and sturdy shoes.
- Take your Disaster Supplies Kit. Lock your home.
- Use travel routes specified by local officials.

## **If You Are Sure You Have Time**

- Shut off water, gas and electricity if instructed to do so.
- Let others know when you left and where you are going.
- Make arrangements for pets. Animals cannot go to shelters.

## **Prepare An Emergency Car Kit**

- Battery powered radio and batteries
- Flashlight and batteries
- Blanket
- Booster Cables
- Fire Extinguisher (5 lb., A-B-C type)
- First Aid Kit and manual
- Tire repair kit and pump
- Bottled water and non-perishable high energy foods, such as granola bars, raisins and peanut butter.

## **Fire Safety**

- Plan two escape routes out of each room.
- Teach family member to stay low to the ground when escaping fire.
- Teach family members never to open doors that are hot. In a fire, feel the bottom of the door with the palm of your hand. If it is hot, do not open the door. Find another way out.
- Install smoke detectors. Clean and test smoke detectors once a month.
- Change batteries at least once a year.
- Keep a whistle in each bedroom to awaken household members in case of fire.
- Check electrical outlets. Do not overload outlets.
- Purchase a fire extinguisher (5 lb., A-B-C type).
- Have a collapsible ladder on each upper floor of your house.
- Consider installing home sprinklers.

## **The Car**

- Make a point to keep the tank full.
- Keep tools in the trunk.
- Keep the car mechanically sound and ready to use.
- Keep supplies in the car for use in an emergency. These could include: jumper cables, blankets, first aid kit, 72 hr food kit, flashlight, etc.

## **At Work**

- Read the company's evacuation plan and know where to meet after an emergency.
- Know where exit routes, fire extinguishers, and medical kits are located.
- Assemble supplies and have them stored in desk.
- Carry a list of important phone numbers in wallet.

## **At Home**

- The water heater is strapped to the wall.
- Know where to shut off the water, power and gas and have placed the tools at each location.
- Anything that would have fallen on heads, secure to the wall.
- The bleach and ammonia moved to separate locations.
- Know the unsafe locations in the house
- Have an emergency plan and know escape routes and meeting places.
- Emergency lighting installed in selected outlets.
- Know the location of the nearest police, fire station and hospital.
- Know which neighbors have medical experience.
- Talk with neighbors about emergency preparedness.
- Give neighbors keys to the house and tell them how to turn off utilities.
- Give neighbors list a list of your important phone numbers.
- Conduct a home evacuation drill.
- Teach children how to get help from neighbors and 911.
- Each family member carries a family photo.
- Evaluate what supplies your family needs to store.
- Have the proper amount of water stored for emergency use.
- Have stored cooking items for emergency use.
- Have stored emergency items to use as shelter.
- Have a first aid kit.
- Have stored emergency lighting equipment.
- Have stored items to keep in touch with the world.
- Have positioned tools that I will need in an emergency.
- Have stored sanitation supplies.
- Have stored supplies for the baby.
- Have stored miscellaneous supplies including money for emergency use.

## **OTHER DISASTERS TO CONSIDER AND PREPARE FOR:**

### **Chemical Threat**

A chemical attack is the deliberate release of a toxic gas, liquid or solid that can poison people and the environment. Watch for signs of a chemical attack such as many people suffering from watery eyes, twitching, choking, having trouble breathing or losing coordination. Many sick or dead birds, fish or small animals are also cause for suspicion. If you see signs of a chemical attack, quickly try to define the impact area of where the chemical is coming from, if possible. Take immediate action to get away from the affected area.

If the chemical is inside a building where you are, try to get out of the building without passing through the contaminated area. Otherwise, it may be better to move as far away from where you suspect the chemical release is and “shelter-in-place”. If you are outside when you see signs of a chemical attack, you must quickly decide which way is the fastest to get away from the chemical threat. Consider if you can get out of the area or if it would be better to go inside a building and follow your plan to “shelter-in-place”.

If your eyes are watering, your skin is stinging, you are having trouble breathing or you simply think you may have been exposed to a chemical, immediately strip and wash. Look for a hose, fountain or any source of water. Wash with soap, if possible, but do not scrub the chemical into your skin. Seek emergency medical attention.

## **Nuclear Threat**

A nuclear blast is an explosion with intense light and heat, a damaging pressure wave and widespread radioactive material that can contaminate the air, water and ground surfaces for miles around. While experts may predict at this time that a nuclear attack is less likely than others, terrorism by its nature is unpredictable. If there is a flash or fireball, take cover immediately, below ground if possible, though any shield or shelter will help protect you from the immediate effects of the blast and the pressure wave. In order to limit the amount of radiation you are exposed to, think about shielding, distance and time. If you have a thick shield between yourself and the radioactive materials, it will absorb more of the radiation and you will be exposed to less. Similarly, the farther away you are from the blast and the fallout, the lower your exposure. Finally, minimizing time spent exposed will also reduce your risk.

## **Radiation Threat (Dirty Bomb)**

A radiation threat or “Dirty Bomb” is the use of common explosives to spread radioactive materials over a targeted area. It is not a nuclear blast. The force of the explosion and radioactive contamination will be more localized. While the blast will be immediately obvious, the presence of radiation may not be clearly defined until trained personnel with specialized equipment are on the scene. As with any radiation, you want to try to limit your exposure. Think about shielding, distance and time.

## **Biological Threat**

A biological attack is the deliberate release of germs or other biological substances that can make you sick. Many agents must be inhaled, enter through a cut in the skin or be eaten to make you sick. Some biological agents, such as anthrax, do not cause contagious diseases. Other, like the smallpox virus, can result in diseases you can catch from people.

Unlike an explosion, biological attack may or may not be immediately obvious. While it is possible that you will see signs of a biological attack, as was sometimes the case with the anthrax mailings. It is perhaps more likely that a local health care worker will report a pattern of unusual illness or there will be a wave of sick people seeking emergency medical attention. You will probably learn of the danger through an emergency radio or TV broadcast or some other signal used in your community. Perhaps you will get a phone call, or emergency response worker may come door-to-door. If you become aware of an unusual or suspicious release of an unknown substance nearby, it does not hurt to protect yourself. Quickly get away. Cover your mouth and nose with layers of fabric that can filter the air but still allow breathing. Examples include: two to three layers of cotton such as a t-shirt, handkerchief or towel. Otherwise, several layers of tissue or paper towels may help. Thoroughly wash with soap and water and contact authorities.

At the time of a declared biological emergency, if a family member becomes sick, it is important to be suspicious. However, do not automatically assume you should go to a hospital emergency room or that any illness is the result of the biological attack. Symptoms of many common illnesses may

overlap. Use common sense, practice good hygiene and cleanliness to avoid spreading germs, and seek medical advice.

## **STORM THREATS**

### **If a Warning is Issued, the Storm is Imminent** **Know Winter Words of Warning**

1. WINTER WEATHER ADVISORY issued when winter weather conditions, such as cold, ice and snow, are expected to hinder travel, cause inconveniences.
2. FREEZING RAIN is forecast when expected rain is likely to freeze as soon as it strikes the ground, creating a coating of ice on roads and walkways.
3. WINTER STORM WATCH means that severe winter weather is possible.
4. WINTER STORM WARNING means that heavy snow, sleet or freezing rains are expected.
5. BLIZZARD WARNING means that heavy snow, winds and dangerously low temperatures are expected. A blizzard can cause severe weather conditions.

### **Before The Storm**

1. Arrange for emergency heat supply in case of power failure.
2. Prepare automobile, battery-powered equipment, food, heating fuel and other supplies.
3. Prepare a winter survival kit. You should have the following items in your car: blankets or sleeping bags, flares, high energy foods (candy, raisins, nuts, etc.), first aid kit, flashlights, extra batteries, extra clothing, knives, compass, emergency candles and matches, maps, jumper cable, tow chain, shovel, windshield scraper, sack of sand.
4. Your car will help you keep warm, visible, and alive should you be trapped in a winter storm. A lighted candle will help keep you from freezing.
5. Always keep car fuel tank above half full.

### **During and After the Storm**

1. Dress warmly. Wear multiple layers of protective, loose-fitting clothing, scarves, mittens and hoods. Cover the mouth and nose to protect lungs from extremely cold air.
2. Avoid travel, but if you become stranded, stay in your vehicle – keep it ventilated, bundle up, light an emergency candle for warmth, occasionally change positions and DON'T PANIC.
3. Avoid overexertion. Heart attacks are a major cause of deaths during and after winter storms. Shoveling snow or freeing stuck vehicles can be extremely hard work. Don't overdo it!
4. Beware of the chill factor if winds are present.
5. Be prepared for isolation at home. If you live in a rural area, make sure you can survive at home for a week or two in case a storm isolates you and makes it impossible for you to leave.

### **Protect Yourself**

1. When a thunderstorm or lightning threatens, get inside a home or large building or inside an all-metal vehicle (not convertible). Stay indoors and do not venture outside unless "absolutely" necessary.
2. Stay away from open doors and windows, fireplaces, radiators, stoves, metal pipes, sinks and plug-in appliances.
3. Don't use plug-in electrical equipment such as: hair dryers, electric blankets or electric razors during the storm.

4. Except for emergencies, do not use the telephone during the storm. Lightning may strike telephone lines outside.
5. If outside, with no time to reach a safe building or an automobile follow these rules:
  - a. Do not stand underneath a natural lightning rod such as a tall, isolated tree in an open area.
  - b. Avoid projecting yourself above the surrounding landscape, as you would do if you were standing on a hilltop, in an open field, on the beach, or fishing from a small boat.
  - c. Get out of the water and off small boats.
  - d. Get away from tractors and other metal farm equipment.
  - e. Stay away from wire fences, clotheslines, metal pipes, rails, exposed sheds or anything that is high that would conduct electricity. Some of these could carry electricity to you from some distance away.
  - f. Don't use metal objects like fishing rods and golf clubs. Golfer's cleated shoes are particularly good lightning rods.
  - g. Stay in your automobile if you are traveling. Automobiles offer excellent lightning protection.
  - h. Get off and away from motorcycles, scooters, golf carts and bicycles.
  - i. If no buildings are available, your best protection is a cave, ditch or canyon, or under head-high clumps of trees or shrubs.
  - j. If only isolated trees are nearby, your best protection is to crouch in the open, keeping twice as far away from isolated trees as the trees are high.
  - k. When you feel the electrical charge – if your hair stands on end or your skin tingles – lightning may be about to strike. Drop to the ground immediately.

## **First Aid**

1. Persons struck by lightning receive a severe electrical shock and may be burned, but they carry no electrical charge and may be handled safely.
2. A person "killed" by lightning can often be revived by prompt mouth-to-mouth resuscitation, cardiac massage, and prolonged artificial respiration.
3. In a group struck by lightning, the apparently dead should be treated first; those who show vital signs will probably recover spontaneously, although burns and other injuries may require treatment.

## **THREAT OF POWER OUTAGE**

### **Before the Power Outage**

1. Learn location of fuse box or circuit breaker.
2. Store candles, flashlights and extra batteries in a handy place.
3. Have food and water supplies on hand, since the outage may last awhile.
4. Know the location of all camping equipment (stove, lantern, sleeping bags). You may need them. Make sure the equipment is operational and that you know how to use them.

REMEMBER THAT CAMPING EQUIPMENT REQUIRING GASOLINE, PROPANE, WHITE GAS, COLEMAN FUEL OR CHARCOAL BRIQUETS SHOULD NOT BE USED INSIDE THE HOUSE – ONLY OUTSIDE.
5. Keep adequate supply of fuel on hand, Propane, white gas, gasoline and Coleman fuel must not be stored or used in the house or garage, as they are too volatile. Only kerosene may be used in the house and stored in direct sunlight and is limited in quantity to one 55-gallon drum on a person's property.

6. Keep your refrigerator well defrosted. Built-up ice works against your freezer.

### **During the Power Outage**

1. Unplug all your appliances. The surge of power that comes when power is restored could ruin your appliances.
2. Turn off all but one light switch.
3. A major problem during an outage is food thawing in the refrigerator or freezer. Open the door only to take food out, and do so as quickly as possible. If you have access to dry ice, place in a cardboard box and then on top of the food.
4. When using camping equipment during an outage, remember to do so outside. Use only a fireplace, a properly installed wood stove, or a new style kerosene heater used in a safe area with the room vented, i.e., fresh outside air coming into the room.
5. Report any downed lines.
6. Do not allow children to carry lantern, candles or fuel.

### **After the Outage**

1. When power is restored, plug in appliances one by one, waiting a few minutes in between each one. This may prevent an overload on the system.
2. Be patient. Energy may first be restored to police and fire departments and hospitals.
3. Examine your frozen food. If it still contains ice crystal, it may be refrozen. If meat is off color or has an odd odor, throw it away.

## **HIGH WIND THREAT**

### **Preparation**

1. Survey your home and/or property. Take note of materials stored, placed, or used, which in the event of high winds could become missiles and destroy other structures or be destroyed. Devise methods of securing these materials where they will still be accessible for day-to-day needs.
2. Keep radio and/or TV on and monitor for wind advisories
3. If possible, board up, tape or shutter all windows (leave some ventilation).
4. Draw some water for emergency use in the event water service is interrupted.
5. Have a supply of flashlights, spare batteries, candles, first aid equipment, medicines, etc. available for emergency use.
6. Secure outdoor furniture, trash cans, tools, etc.

### **During High Winds**

1. Take shelter in hallways, closets, and away from windows.
2. Stay out of areas where flying objects may hit you or destroy your place of refuge.

### **After Winds Subside**

1. Inspect for structural damage.
2. Check all utilities for damage and proper operation.
3. Monitor radio and television for instruction from local authorities.
4. Report damage and needs to local authorities.

## **NATURAL GAS THREAT**

1. Check house piping and appliances for damage
2. Check for fires or fire hazards
3. Do not use matches, lighters or other open flames.
4. Do not operate electrical switches, appliances or battery-operated devices if natural gas leaks are suspected. This could create sparks that would ignite gas from broken lines
5. If gas line breakage is suspected, shut off the gas at the meter. This should be done, however, only if there is a strong smell of natural gas or if you hear gas escaping
6. Wear heavy shoes in all areas near broken glass or debris. Keep your head and face protected from falling debris
7. Turn on a battery-operated radio (if no gas leaks are found) or car radio to receive disaster instructions
8. Do not use your telephone except in extreme emergencies situations

## **FLOOD THREAT**

### **Preparation**

1. Listen to local radio or TV for weather information
2. If you are asked to evacuate, shut off main power switch, main gas valve and water valve. Follow local evacuation plan and routes.
3. Do not attempt to drive over a flooded road, as it might be washed out. While you are on the road, watch for possible flooding at bridges, dips and low areas.
4. Watch out for damaged roads, slides and fallen wires
5. Drive slowly in water, use low gear
6. If driving and vehicle stalls, abandon it immediately and seek higher ground
7. Do not attempt to cross a stream on foot where water is above your knees

### **Before Flood**

1. Know the elevation of your property in relation to flood plains, streams, and other waterways. Determine if your property may be flooded
2. Make advance plans of what to do and where to go
3. Store food, water, and critical medical supplies (prescriptions, insulin, etc.)
4. Fill your car with gas in case you must evacuate
5. Move furniture and essential items to higher elevation if time permits
6. Have a portable radio and flashlights with extra batteries
7. Open basement windows to equalize water pressure on foundations and walls
8. Secure house
9. Consider flood and earthquake insurance

### **After the Flood**

1. Remain away from evacuated area until public health officials and building inspector have given approval
2. Check for structural damage before entering
3. Make sure electricity is off, watch for electrical wires
4. Do not use an open flame as a light source because of possibility of escaping gas. Use flashlights. Beware of dangerous sparks.

5. Do not use food that has been contaminated by floodwater
6. Test drinking water for portability

## **FIRE THREAT**

### **Preparation**

1. Make sure home is free of combustible materials.
2. Don't run wires under carpets or rugs
3. Know avenues of escape. Have a Family Plan and have frequent fire drills
4. Have a place to meet – so no one tries to go back into a burning building looking for someone needlessly
5. Have a fire extinguisher in house and car
6. Have escape ladders for all windows higher than eight feet off the ground (especially for children)



### **During A Fire**

1. If you are outside, do not return to the house for anything
2. Go to the nearest house or building and call your fire department by dialing 911  
REPORT THE ADDRESS AND TYPE OF FIRE, LISTEN TO AND FOLLOW INSTRUCTIONS
3. If you are inside and have time, make sure everyone is out
4. If anyone else is home, report to the meeting place, then see that the telephone call to the fire department is made
5. If you are in a closed room or office, do not open the door without first feeling it or the door knob. If it is warm or hot, do not open it, but unlock it to assist rescue or fire personnel.
6. If there is smoke coming under the door, use clothes, sheets, etc. to stop the smoke from coming in
7. If you are at home and there is a window, stay close to the floor and exit through the window, using the escape ladder if necessary
8. If you should catch on fire, do not run. Drop to the ground and start rolling over and over to smother the flames.
9. If you see someone on fire, use a coat or blanket, etc., not your bare hands to smother the flames
10. Watch to see that children don't go back inside to rescue a pet or prize possession
11. Turn off the gas and electricity, if possible, from the outside of the house
12. In a public building, follow the established evacuation procedures

### **After A Fire**

1. Do not re-enter the building until appropriate authorities have given permission
2. Plan and practice a family drill at least once a year

# **EARTHQUAKE THREAT**

## **Preparation Before An Earthquake**

1. Store water and food supply.
2. Organize a 72 hour portable emergency kit.
3. Bolt down or provide strong support for water heaters and other appliances.
4. Consider earthquake insurance.

## **During An Earthquake**

1. **STAY CALM !!**
2. If you are indoors, stay inside and find protection in a doorway, or crouch under a desk or table, away from windows or glass dividers; avoid masonry wall (brick) and chimneys (fireplaces).
3. If outside: stand away from buildings, trees, and telephone and electric lines.
4. If on the road drive away from underpasses and overpasses; stop in a safe area; stay in the vehicle.
5. If in an office building: stay next to a pillar or support column or under a heavy table or desk.

## **After An Earthquake**

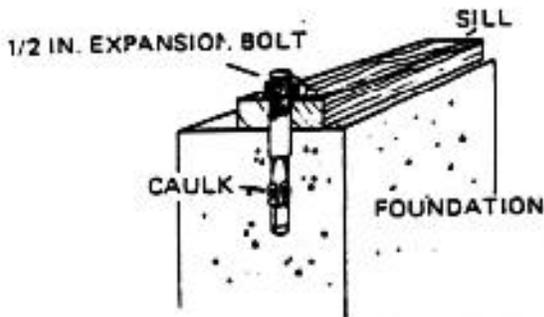
1. Check for injuries. Provide first aid.
2. Check for safety – gas, water, sewage breaks; check for downed electric lines; turn off interrupted utilities as necessary; check for building damage and potential safety problems during aftershocks, such as cracks around chimney and foundation; check for fires.
3. Clean up dangerous spills.
4. Wear shoes.
5. Tune radio to an emergency station and listen for instructions from public safety agencies.
6. Use the telephone only for emergencies.
7. As soon as possible, notify your family that you are okay.
8. Do not use matches or open flames in the home until you are sure there are no gas leaks.
9. Don't turn light switches off and on. Sparks created by the switch contacts can ignite gas fumes.
10. In public buildings, follow evacuation procedures immediately and return only after the building has been declared safe by the appropriate authorities.

## STRUCTURAL STABILITY OF YOUR HOME

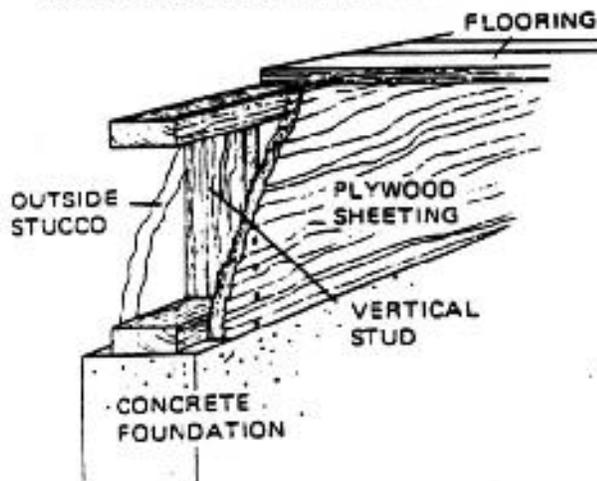
If your home is of conventional wood frame construction (including stucco) it will probably be relatively resistant to earthquake damage, particularly if a single story.

However, there are some important structural features which will ensure greater stability.

- Check for foundation bolts. If your home or building was constructed before 1940 it probably does not have bolts securing the wood frame structure to the concrete foundation. These older homes can be strengthened by adding expansion bolts at the foundation



- Determine if the vertical studs that extend from the foundation up to the first floor are exposed on the inside. This construction method produces a weak link in the house structure and is particularly dangerous in multi-story buildings. Nail plywood sheathing onto the vertical studs to strengthen the walls.

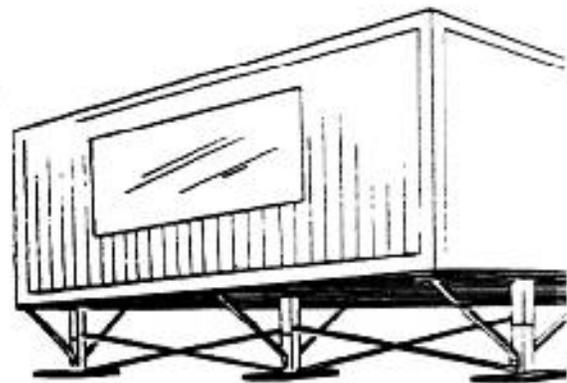


Consult a structural engineer for advice if you have any of the following conditions.

- Brick foundation (especially houses built prior to 1940)
- Brick houses, brick or stone veneers on wood frame houses, and brick higher than the waist
- High chimneys which may need replacing, removal or bracing.
- Large window areas on exterior walls, particularly two or more story homes.
- Split-level house with room over the garage. The wall at the back of the garage and around the garage should be made of plywood
- Unusual, dramatic architecture, particularly on steep slopes.

### Mobile Homes

- Foundations beneath mobile homes need to be reinforced and the undercarriage of the home tied securely to the foundation. If not, the mobile home will be thrown off its foundation even during small tremors.
- Doublewide mobile homes should be tied together if the two units are of different weight, they will settle differently and tend to pull apart in the event of an earthquake.



In a new construction, alterations or additions, follow building codes to minimize earthquake hazards. Sites for construction should be selected and engineered to reduce the hazard of damage from an earthquake.

## SUGGESTED METHODS FOR SECURING FURNITURE AND APPLIANCES

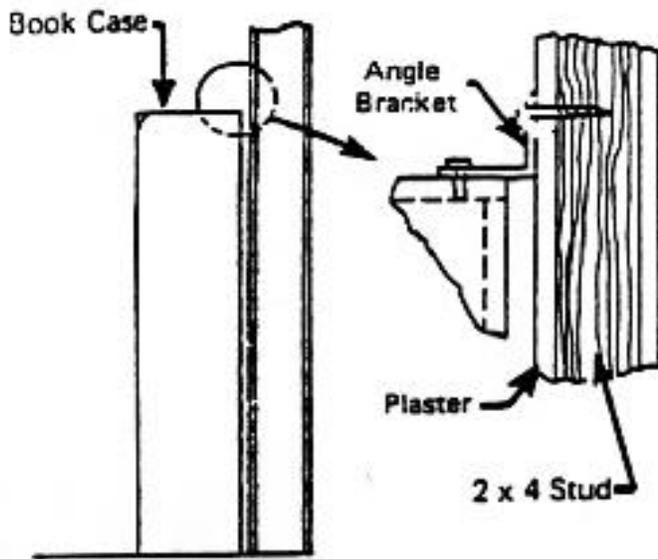


FIG. 1. This is one good way to secure book cases and top heavy or tall furniture.

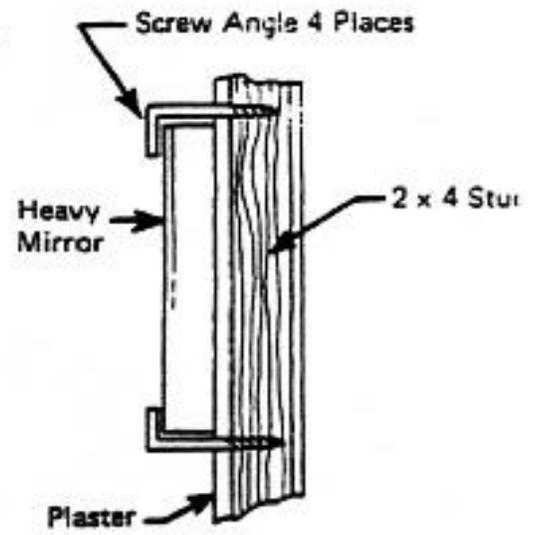


FIG. 2. This is one way to increase stability of heavy mirrors and wall hangings.

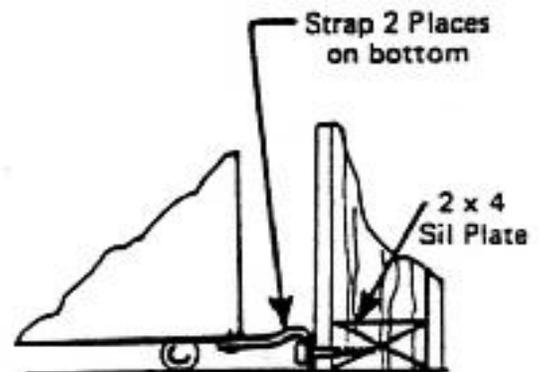
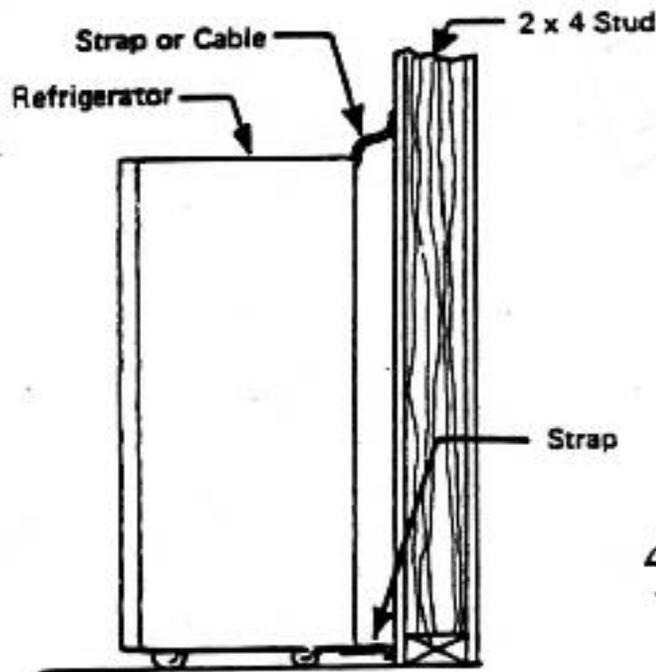


FIG. 3. Large appliances may be effectively restrained as shown.

For greatest stress resistance, incorporate a degree of flexibility when securing appliances and furniture. Flexible lines should be installed to avoid breaking.

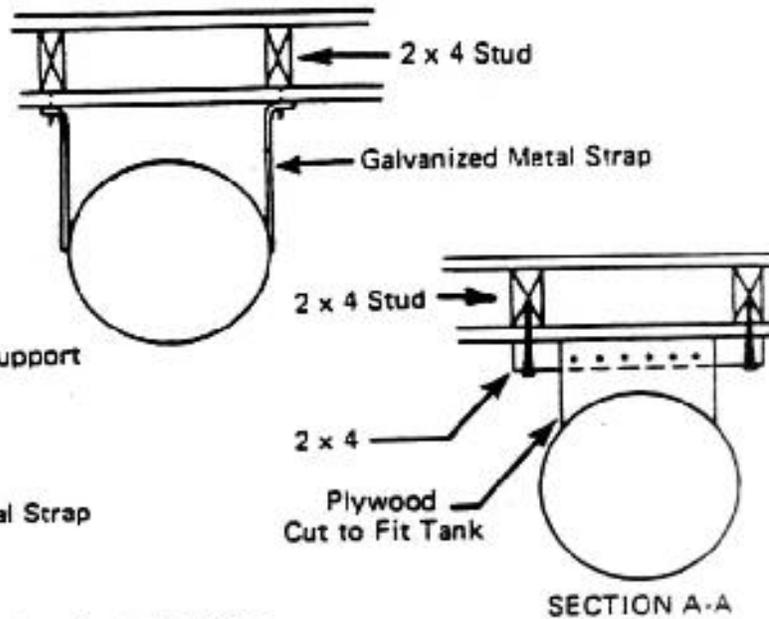
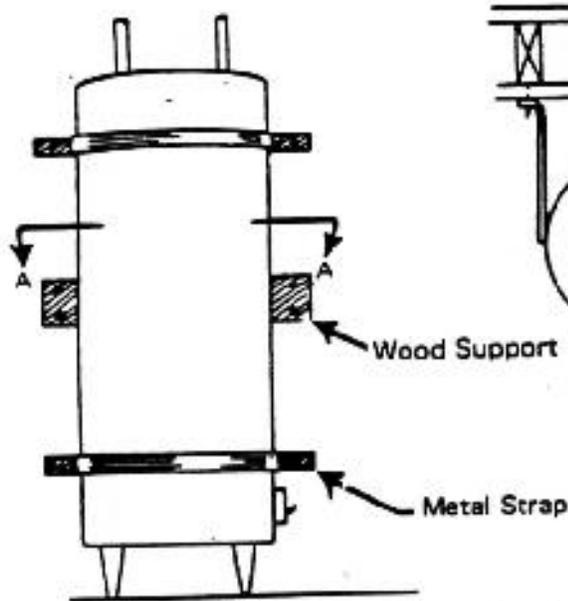


FIG. 4. This system may be used to anchor a hot water heater.

FIG. 5. Hanging plants, pictures, etc. need strong attachments. Close open hooks.

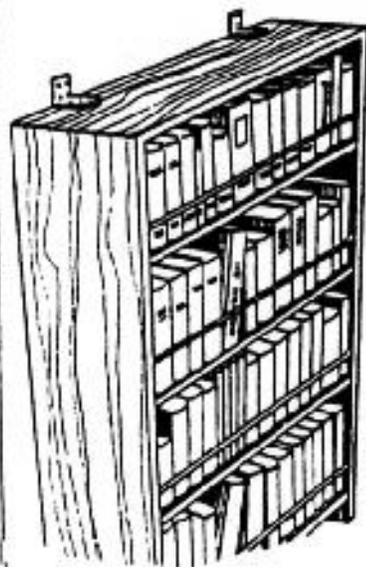


FIG. 6. Metal or wood guardrails will help keep objects from sliding off open shelves.



Guillotine



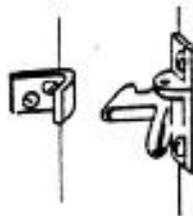
Bolt action



Hook and Eye



Locks that close automatically



This one latches

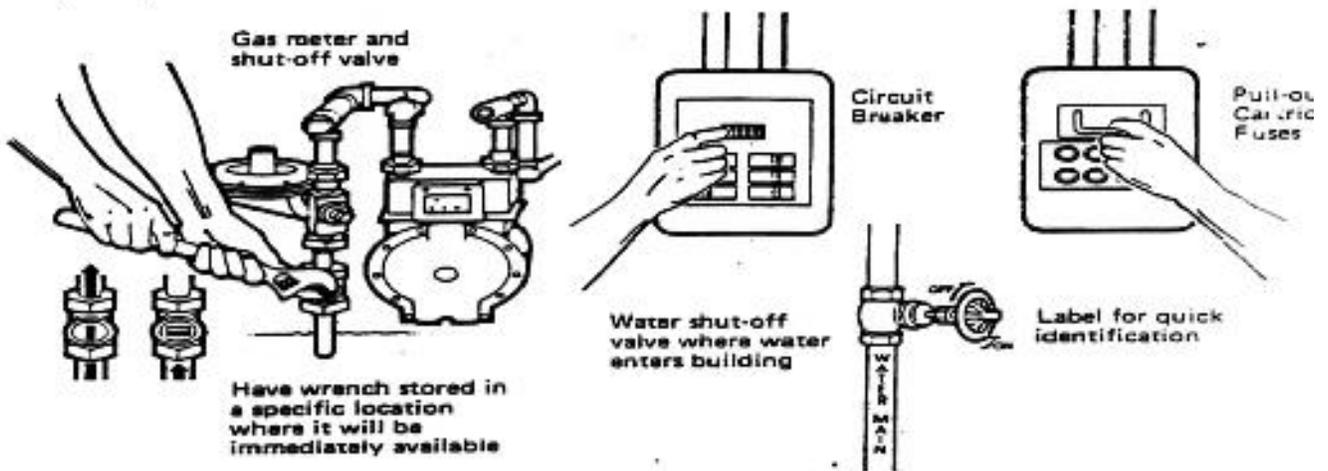


This one turns to oper

FIG. 7. Install positive (mechanical) latches on cabin and cupboards.

## HOW TO SHUT OFF WATER, GAS AND ELECTRICITY IN EMERGENCIES

(Examples illustrate most common types of shut off valves and switches — yours may be different)



## **FAMILY MEMBER RESPONSIBILITIES**

This is a suggested check list of preparedness tasks. In front of each item, indicate which family members are responsible for the following actions. You should adapt the list to fit your situation. Consider making a photocopy of this list, and post it and review it with your family.

- 0 Assemble car and office mini-survival kits
- 1 Select sturdy shoes and place in accessible locations
- 2 Assemble special personal needs, such as Medications and special foods, etc.
- 3 Duplicate and store an extra set of car keys
- 4 Have on hand an extra set of eye glasses
- 5 Flashlights and batteries for family
- 6 Battery powered Radio, w/extra batteries
- 7 Check water, food and first-aid supplies every 6 months (General Conference)
- 8 Know how to turn off all utilities (electric, gas and water)
- 9 Check house for hazardous furniture arrangements (heavy objects over bed, etc.)
- 10 Secure unstable bookcases, furniture (put heaviest objects on lower shelves)
- 11 Check around outside house for possible hazards (overhanging tree limbs, etc.)
- 12 Take photos and/or video tape of your household items for insurance record
- 13 Practice preparedness plans every 6 months (fire, earthquake, quick evacuation drills)
- 14 Every 6 months check First Aid Kits (family and individual)
- 15 Train in First Aid, CPR and CERT
- 16 Keep immunizations current (if you believe in them) (DPT)
- 17 Keep medical releases current and valid directives to physicians and living wills
- 18 Safely store vital records. Have back-up copies stored off-site
- 19 Maintain 5 gallon plastic sanitation buckets. Include plastic garbage bags and waterless hand sanitizer
- 20 Store family and individual drinking water supplies (72 hours, 2 weeks) with purification and filtration devices included for each
- 21 Prepare individual (backpack) and family 72 hour survival food supply

## FAMILY MEMBER RESPONSIBILITIES

### After An Earthquake

Name \_\_\_\_\_

Care of children (or invalid or elderly)	
Search for injured and/or trapped family members	
Render emergency first aid (person who has taken course)	
Search for fires and other household hazards	
Head up firefighting effort, if necessary	
Turn off water, gas and electricity, if necessary (Be sure all pilots are relit when gas service is restored)	
Head up house inspection crew to look for structural damage	
Corral pet(s)	
Check with neighbors for injuries, fire, cooperative assistance	
Supervise clean-up crew (debris, broken glass, etc.)	
Cook and serve first meal when needed	



### In Case of Emergency Evacuation

Name \_\_\_\_\_

Care of children (or invalid or elderly)	
72-hour water supply	
72-hour food supply	
First aid kit	
Battery operated radio and extra batteries	
Flashlight and extra batteries	
Container with vital family records	
Get-away clothing	
Car and House keys	
Money	
Securing house and car	
Other items on Evacuation Priority List	

REMEMBER, IN AN EMERGENCY SITUATION:



*Assess the facts!*  
*Think of others!*  
*Keep your head!*  
*Act calmly and directly!*

**NOTES**