

Emergency Preparedness Manual



“Organize yourselves; prepare every needful thing...”

D&C 88:119

1st Edition

PHONE NUMBERS FOR EMERGENCY USE

For POLICE/FIRE/AMBULANCE

CALL-----911---AND DON'T HANG

UP!!!!!!

Dads' work/Cel_____

Mom's work/Cel_____

Poison Control_____

Doctor_____

Dentist_____

School Phone_____

Home Teachers_____

Bishop—(XXX)XXX-XXXX (Home) (XXX)XXX-XXXX (office)

Ward Communication Center--(XXX)XXX-XXXX

County Information_____

FAMILY MEETING PLACES

{1}_____

{2}_____

{3}_____

Other family member phone
numbers_____

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“Prepare for the Days of Tribulation”

**President Ezra Taft Benson
of the Quorum of the Twelve Apostles**

Ensign, Nov 1980, Conference Talk

For over forty years, in a 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 reasons to reemphasize this counsel. We heard it done effectively in that great welfare meeting this morning. May I add just a word?

Members of the Church are feeling the economic pinch of higher taxes and inflation coupled with conditions of continuing recession. Some have come to their bishops seeking assistance to pay for house payments, car loans, and utilities.

Unfortunately, there has been fostered in the minds of some an expectation that when we experience hard times, when we have been unwise and extravagant with our resources and have lived beyond our means, we should look to either the Church or government to bail us out. Forgotten by some of our members is an underlying principle of the Church welfare plan that “no true Latter-day Saint will, while physically able, voluntarily shift

from himself the burden of his own support” (Marion G. Romney, in Conference Report, Oct. 1973, p. 106).

One of the first principles revealed to father Adam when he was driven out of the Garden of Eden was this: “In the sweat of thy face shalt thou eat bread, till thou return unto the ground” ([Gen. 3:19](#)). All we obtain in life of a material nature comes as a product of labor and the providence of God. Work alone produces life’s necessities.

In saying this, I am aware of and sympathetic to the plight of many young families who are struggling to make ends meet. They are faced with the financial burden of providing for the three great necessities of life: food, clothing, and shelter. I am also sympathetic to the situation of widows and other sisters who rear families alone. By revelation, the Lord made provision for their care and support. (See [D&C 83:1–2, 4–6](#).)

More than ever before, we need to learn and apply the principles of economic self-reliance. We do not know when the crisis involving sickness or unemployment may affect our own circumstances. We do know that 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. Have you ever paused to realize what would happen to your community or nation if transportation were paralyzed or if we had a war or depression? How would you and your neighbors obtain food? How long would the corner grocery store—or supermarket—sustain the needs of the community?

Shortly after World War II, I was called by the First Presidency to go to Europe to reestablish our missions and set up a program for the distribution of food and clothing to the Saints. Vivid in my memory are the people who got on trains each morning with all kinds of bric-a-brac in their arms to go out to the countryside to trade their possessions for food. At evening time, the train station was filled with people with arms full of vegetables and fruits, and a menagerie of squealing pigs and chickens. You never heard such a commotion. These people were, of course, willing to barter practically anything for that commodity which sustains life—food.

An almost forgotten means of economic self-reliance is the home production of food. We are too accustomed to going to stores and purchasing what we need. By producing some of our food we reduce, to a great extent, the impact of inflation on our money. More importantly, we learn how to produce our own food and involve all family members in a beneficial project. No more timely counsel, I feel, has been given by President Kimball than his repeated emphasis to grow our own gardens. Here is one sample of his emphasis over the past seven years:

“We encourage you to grow all the food that you feasibly can on your own property. Berry bushes, grapevines, 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).

Many of you have listened and done as President Kimball counseled, and you have been blessed for it. Others have rationalized that they had no time or space. May I suggest you do what others have done. Get together with others and seek permission to use a vacant lot for a garden, or rent a plot of ground and grow your gardens. Some elders quorums have done this as a quorum, and all who have participated have reaped the

benefits of a vegetable and fruit harvest and the blessings of cooperation and family involvement. Many families have dug up lawn space for gardens.

We encourage you to be more self-reliant so that, as the Lord has declared, “notwithstanding the tribulation which shall descend upon you, ... the church may stand independent above all other creatures beneath the celestial world” ([D&C 78:14](#)). The Lord wants us to be independent and self-reliant because these will be days of tribulation. He has warned and forewarned us of the eventuality.

President Brigham Young said, “If you are without bread, how much wisdom can you boast, and of what real utility are your talents, if you cannot procure for yourselves and save against a day of scarcity those substances designed to sustain your natural lives?” (In *Journal of Discourses*, 8:68.)

Food production is just one part of the repeated emphasis that you store a provision of food which will last for at least a year wherever it is legally permissible to do so. The Church has not told you what foods should be stored. This decision is left up to individual members. However, some excellent suggestions are available in the booklet produced by the Church entitled “Essentials of Home Production & Storage”. There are also booklets available on gardening from BYU.

From the standpoint of food production, storage, handling, and the Lord’s counsel, wheat should have high priority. “There is more salvation and security in wheat,” said Orson Hyde years ago, “than in all the political schemes of the world” (in *Journal of Discourses*, 2:207). Water, of course, is essential. Other basics could include honey or sugar, legumes, milk products or substitutes, and salt or its equivalent. 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.

Elder Harold B. Lee counseled,

“Perhaps if we think not in terms of a year’s 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 last would be very easy to put in storage for a year ... just enough to keep us alive if we didn’t have anything else to eat. We wouldn’t get fat on it, but we would live; and if you think in terms of that kind of annual storage rather than a whole year’s 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.” (In Welfare Conference, 1 October 1966.)

There are blessings in being close to the soil, in raising your own food even if it is only a garden in your yard and a fruit tree or two. Those families will be fortunate who, in the last days, have an adequate supply of food because of their foresight and ability to produce their own.

The counsel from Church authorities has been consistent over the years and is well summarized in these words:

“First, and above and beyond everything else, let us live righteously. ...

“Let us avoid debt as we would avoid a plague; where we are now in debt, let us get out of debt; if not today, then tomorrow.

“Let us straitly and strictly live within our incomes, and save a little.

“Let every head of every household see to it that he has on hand enough food and clothing, and, where possible, fuel also, for at least a year ahead. You of small means put

your money in foodstuffs and wearing apparel, not in stocks and bonds; you of large means will think you know how to care for yourselves, but I may venture to suggest that you do not speculate. Let every head of every household aim to own his own home, free from mortgage. Let every man who has a garden spot, garden it; every man who owns a farm, farm it.” (President J. Reuben Clark, Jr., in Conference Report, Apr. 1937, p. 26.)

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 pay-check. Can or bottle fruit and vegetables from your gardens and 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 TV set or some item which merely adds to your comfort or pleasure, you may need to change your priorities. We urge you to do this prayerfully and *do it now*.

I speak with a feeling of great urgency. I have seen what the days of tribulation can do to people. I have seen hunger stalk the streets of Europe . I have witnessed the appalling, emaciated shadows of human figures. I have seen women and children scavenge army garbage dumps for scraps of food. Those scenes and nameless faces cannot be erased from my memory.

I shall never forget the Saints of Hamburg who appeared on the verge of collapse from starvation, or their small children whom I invited to come to the stand as we emptied our pockets of edibles. Most had never seen these items before because of the wartime conditions. Nor can I forget the expectant and nursing mothers whose eyes watered with tears when we gave them each an orange. We saw the terrible physical and social side effects of hunger and malnutrition. One sister walked over a thousand miles with four small children, leaving her home in Poland . She lost all four to starvation and the freezing conditions. Yet she stood before us in her emaciated condition, her clothing shredded, and her feet wrapped in burlap, and bore testimony of how blessed she was.

I cannot forget the French Saints who, unable to obtain bread, used potato peelings for the emblems of the sacrament. Nor will I ever forget the faith of the Dutch Saints who accepted our suggestion to grow potatoes to alleviate their own starving conditions, and then sent a portion of their first harvest to the German people who had been their bitter enemies. The following year they sent them the entire harvest. The annals of Church history have seldom recorded a more Christlike act of love and compassion.

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 somehow will 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 be prepared for these difficult times. Have we heeded His counsel?

I bear you my testimony that President Heber J. Grant was inspired of the Lord in establishing the Church Welfare program. The First Presidency was inspired when they made the first public announcement in 1936 and declared the prime purpose of Church welfare was “to help the people help themselves” (in Conference Report, Oct. 1936, p. 3).

I bear witness to that inspired counsel from 1936 to the present day that the Saints lay up a year's supply of food. When President Spencer W. Kimball persistently admonishes the members to plant gardens and fruit trees and produce our own food, he is likewise inspired of the Lord.

Be faithful, my brothers and sisters, to this counsel and you will be blessed—yes, the most blessed people in all the earth. You are good people. I know that. But all of us need to be better than we are. 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. In the name of Jesus Christ, amen.

Letter From Our Bishop:

July 2012

Dear Brothers and Sisters:

This booklet has been provided to help each family and household prepare for possible emergency situations and to help individual Ward members and leaders know their responsibilities during an emergency. To be effective it must be studied and the principles inside applied BEFORE the emergency occurs not during or after.

To help each family/household prepare, Family Home Evening lessons are included in the Appendix. These may be used as is and expanded to fit each family/household's needs.

This booklet;

1. Explain the Individual, Family, and Ward Leaders responsibilities during various natural and manmade disasters and how to prepare for them.
2. The means and methods of communication during emergencies.
3. Contains checklists to help in emergency preparedness which should be completed by each family or single households in the Ward.
4. Contains Family Home Evening Lessons that can be used or altered to help the families become prepared, teach children and calm fears when disaster strikes.
5. How to Start a Neighborhood Watch. Know your neighbors.

Why read this booklet and follow its direction?

“...if ye are prepared ye shall not fear.” D & C 38:30

Panic and fear are enemies to survival during a disaster. If the Families and Leaders of the Ward practice the principles of Self Reliance and Preparedness in this booklet then lives will be saved, those of your family, friends, and neighbors. Peace of mind will follow and IF a disaster hits, the work of saving lives and property will be accomplished successfully.

Sincerely,

Bishop Xxx Xxxxxx

INTRODUCTION

PREPARING FOR EMERGENCES

The scriptures and the prophets have given repeated warnings that destructive events will occur in our lifetimes. Only preparation, both spiritual and temporal, can dispel fear of these disasters.

Individual members and families should prepare to be as self-reliant as possible in times of emergency.

Sometimes, members acting as groups under Priesthood leadership can offer significantly more help during and after an emergency than they can be acting individually. The readily available manpower and leadership of Church units may be vital assets to communities in their times of greatest need.

MEMBER TRAINING

The primary responsibility to prepare for and respond to emergencies rests with individual members and families. The Church encourages members to set aside a year's supply of food, clothing, and where possible, fuel; to develop the ability to respond to emergencies; and to be familiar with books and articles about emergency preparedness available in local bookstores and libraries. There are also church publications that help members in their efforts to become prepared including those in the Family Home Evening Resource Book, and articles published in the Church magazines.

WHY HAVE AN EMERGENCY PREPAREDNESS PLAN?

There are three important reasons why having a plan has become necessary at this time:

1. To help Church leaders understand and implement the Gospel principles, organization, policies and procedures of emergency preparedness.
2. To get individuals and families to be self-reliant and prepared for whatever each day may bring.
3. To be trained and prepared as a unit to meet the emergency needs that are larger than single family situation, requiring accurate and timely action to avoid suffering.

Since emergencies do not always happen to "someone else" we need to develop confidence in handling all types of emergencies, from the mere loss of utilities to fire, flood, earthquake, illness and loss of income.

While local emergency plans and resources are commendable, we may not always be able to count on these resources to provide for us. There is a possibility that supplies and shelter provided by these agencies may be too inadequate to meet our needs.

DON'T OUR FAMILIES DESERVE THE BEST WE CAN DO?

The information included in this booklet is not intended to be all inclusive but an aid to individuals and families in family preparedness.

All of us should be seriously pursuing a program of individual and family preparedness.

The following guidelines are listed for individuals and families:

1. Establish a system for knowing where family members are.
2. Know how to contact community emergency resources such as fire department, police and ambulance services.

3. Maintain fire extinguishers in easily accessible places and know how to service them and use them.
4. Know how to protect property by shutting off gas, electricity, and water.
5. Know and practice the fastest and safest means of evacuating the house.
6. Prepare a 72 hour emergency kit of food, clothing, water and first aid supplies.
7. Important family documents and other valuables should be properly stored and easily accessible.
8. Store a year's supply of food, clothing and if possible, fuel.
9. Store a year's supply of garden seeds.
10. Store a two-week emergency supply of water.
11. Develop skills that would be useful during emergencies.
12. Know how to report the family's condition to the home teacher after an emergency. Include information about injuries, or deaths, property damage, help needed (medical, food, clothing, shelter), and any assistance that family members can give to others.

SUGGESTIONS FOR FAMILIES WITH SMALL CHILDREN

Parents are responsible for preparing to care for their children in emergencies, but the idea of a disaster might frighten a young child. If the planning is done in a matter-of-fact manner, like a fire-drill at school, and if the parents take a positive approach, these lessons need not cause undue alarm. The following suggestions may help younger children understand the importance of family preparedness.

1. Tell the story of Noah, explaining that Noah built the Ark because he was obedient to the Lord, and he wanted his family to be safe. The children may construct an ark with blocks or a box. Talk about the supplies they need in it to feed the animals and care for Noah's family.
2. New toys, such as crayons, small cars, or paper dolls could be purchased especially for the survival kit to arouse the interest of children.
3. A dinner prepared and eaten by candlelight or "lantern-light" could be enjoyed by the family, as well as helping to prepare for similar situations. A simple menu of bread, cheese, milk and fruit could be served.
4. Show the children where the flashlights are kept and teach them to use them if they are ever at home when the power is off.
5. Make plans so that children coming home unexpectedly from school--when no one is Home they will be able to enter the house---(such as a hidden key, or a neighbor they can visit).

Once your family planning is complete, do not dwell on the subject unnecessarily, but plan to review the plans periodically---at least yearly. See Appendix A for family Home Evening Suggestions.

Spiritual Preparation: The Holy Ghost and the Priesthood

The majority of this handbook deals with temporal preparation. We would be derelict in our duties not to mention the importance of spiritual preparations for they will be more important in an emergency than the temporal. After all, our bodies are temporary while our spiritual selves ARE eternal.

In fact God told Joseph Smith that all things are spiritual:

Wherefore, verily I say unto you that all things unto me are spiritual, and not at any time have I given unto you a law which was temporal; neither any man, nor the children of men; neither Adam, your father, whom I created. D&C 29:34

Pres. Henry B. Eyring in his October 2005 Conference talk spoke of the importance of spiritual preparation:

Most of us have thought about how to prepare for storms. We have seen and felt the suffering of women, men, and children, and of the aged and the weak, caught in hurricanes, tsunamis, wars, and droughts. One reaction is to ask, "How can I be prepared?" And there is a rush to buy and put away whatever people think they might need for the day they might face such calamities.

But there is another even more important preparation we must make for tests that are certain to come to each of us. That preparation must be started far in advance because it takes time. What we will need then can't be bought. It can't be borrowed. It doesn't store well. And it has to have been used regularly and recently.

What we will need in our day of testing is a spiritual preparation. It is to have developed faith in Jesus Christ so powerful that we can pass the test of life upon which everything for us in eternity depends. That test is part of the purpose God had for us in the Creation. General Conference October 2005 Henry B. Eyring Of the Quorum of the Twelve Apostles

In the April 1981 First Presidency Message Pres. Marion G. Romney stated:

What, then, does it mean to be prepared? Someone proposed a serious question to me a few years ago by asking, "What is the most important item to have stored in your year's supply?" My response was seriously given—"personal righteousness."

How does spiritual preparation and personal righteousness help in a disaster? Will it feed a starving family member, give water to the thirsty or stop a bleeding artery? No but it could lead to personal revelation from God to what to do in an emergency, calm your

fears and give a priesthood holder the power to heal a sick or injured family member or friend.

Revelation cannot be bought in big box store, nor can the comfort of the Holy Ghost be stored in a #10 can or the power to heal be raised in a garden. These blessings are obtained through daily prayer, scripture study and a daily struggle to avoid temptation and sin. How valuable would it be during an emergency to know where missing family members were and if they were safe? How to escape a dangerous situation? Where to take your family for safety? God is ready and willing to give us the personal revelation that may save us and our family members in an emergency. All we have to do is be worthy to receive it.

God promised us that He would, through the Holy Ghost, guide us as to what we should do and where we should go:

Go your way whithersoever I will, and it shall be given you by the Comforter what you shall do and whither you shall go. D&C 31:11

In time of need God would also help us remember those things that we will need in times of danger:

But the Comforter, which is the Holy Ghost, whom the Father will send in my name, he shall teach you all things, and bring all things to your remembrance, whatsoever I have said unto you. John 14:26

Nephi also taught this principle to the Nephites:

For behold, again I say unto you that if ye will enter in by the way, and receive the Holy Ghost, it will show unto you all things what ye should do. 2 Ne 32: 5

Again:

And I was led by the Spirit, not knowing beforehand the things which I should do. 1 Ne 4:6

Another name of the Holy Ghost is The Comforter. Jesus promised that if we loved him, kept His commandments and asked, we would receive the Comforter.

14 If ye shall ask any thing in my name, I will do it.

15 If ye love me, keep my commandments.

16 And I will pray the Father, and he shall give you another Comforter, that he may abide with you for ever;

17 Even the Spirit of truth; whom the world cannot receive, because it seeth him not, neither knoweth him: but ye know him; for he dwelleth with you, and shall be in you.

18 I will not leave you comfortless: I will come to you. John 14: 14-18

It would be very important to not only receive knowledge and personal revelation during an emergency but also have the comforting influence of the Holy Ghost to help us cope through those hard times.

Another important promise of worthy Latter-Day Saints is to have ministering Angels to help us and our loved ones. Elder Jeffrey R. Holland taught us in 2008 that God is ready to send us angels to comfort and to help in personal emergencies:

Usually such beings are not seen. Sometimes they are. But seen or unseen they are always near. Sometimes their assignments are very grand and have significance for the whole world. Sometimes the messages are more private. Occasionally the angelic purpose is to warn. But most often it is to comfort, to provide some form of merciful attention, guidance in difficult times.

In the course of life all of us spend time in “dark and dreary” places, wildernesses, circumstances of sorrow or fear or discouragement. Our present day is filled with global distress over financial crises, energy problems, terrorist attacks, and natural calamities. These translate into individual and family concerns not only about homes in which to live and food available to eat but also about the ultimate safety and well-being of our children and the latter-day prophecies about our planet. More serious than these—and sometimes related to them—are matters of ethical, moral, and spiritual decay seen in populations large and small, at home and abroad. But I testify that angels are still sent to help us, even as they were sent to help Adam and Eve, to help the prophets, and indeed to help the Savior of the world Himself. Matthew records in his gospel that after Satan had tempted Christ in the wilderness “angels came and ministered unto him.” (Matthew 4:11) Even the Son of God, a God Himself, had need for heavenly comfort during His sojourn in mortality. And so such ministrations will be to the righteous until the end of time. As Mormon said to his son Moroni, who would one day be an angel:

“Has the day of miracles ceased?

“Or have angels ceased to appear unto the children of men? Or has he withheld the power of the Holy Ghost from them? Or will he, so long as time shall last, or the earth shall stand, or there shall be one man upon the face thereof to be saved?

“Behold I say unto you, Nay; for ... it is by faith that angels appear and minister unto men. ...

“For behold, they are subject unto [Christ], to minister according to the word of his command, showing themselves unto them of strong faith and a firm mind in every form of godliness.” Moroni 7:35–37, 30....

My beloved brothers and sisters, I testify of angels, both the heavenly and the mortal kind. In doing so I am testifying that God never leaves us alone, never leaves us unaided in the challenges that we face. “[N]or will he, so long as time shall last, or the earth shall stand, or there shall be one man [or woman or child] upon the face thereof to be saved.” (Moroni 7:36) On occasions, global or personal, we may feel we are distanced from God, shut out from heaven, lost,

alone in dark and dreary places. Often enough that distress can be of our own making, but even then the Father of us all is watching and assisting. And always there are those angels who come and go all around us, seen and unseen, known and unknown, mortal and immortal.

May we all believe more readily in, and have more gratitude for, the Lord's promise as contained in one of President Monson's favorite scriptures: "I will go before your face. I will be on your right hand and on your left, ... my Spirit shall be in your [heart], and mine angels round about you, to bear you up." (D&C 84:88) In the process of praying for those angels to attend us, may we all try to be a little more angelic ourselves—with a kind word, a strong arm, a declaration of faith and "the covenant wherewith [we] have covenanted." (D&C 90:24) Perhaps then we can be emissaries sent from God when someone, perhaps a Primary child, is crying, "Darkness ... afraid ... river ... alone." To this end I pray in the sacred name of Jesus Christ, amen. October 2008, Elder Jeffrey R. Holland, Of the Quorum of the Twelve Apostles

Elder Holland mentioned that God would send us both heavenly and mortal angels in time of need. WE are those mortal angels that will assist our family, friends and neighbors in time of emergency. In order for us to be God's angels we must be prepared ourselves, both spiritually and temporally. To be an angel and serve those in need we first must be prepared with our own food storage, first aid kits, and to have our home prepared for an emergency then we can help others in need and be their angel. We can be mortal angels by giving comfort to those who suffer and, as Priesthood holders, give blessing to those in need.

This brings us to the last form of spiritual preparation which is the power IN the priesthood. We all know the power OF the priesthood. With it God created the heavens and the earth and all things on it. There is no limit to the power of the priesthood. On the other hand the individual power IN the priesthood is limited by our degree of righteousness or purity. John H. Groberg of the First Quorum of the Seventy taught this principle in 2001:

Just as clean wires, properly connected, are required to carry electrical power, so clean hands and pure hearts are required to carry priesthood power. Filth and grime slow or prevent the flow of electrical power. Unclean thoughts and actions interfere with individual priesthood power. When we are humble, clean, and pure of hand, heart, and mind, nothing righteous is impossible.

In His love for us, God has decreed that any worthy man, regardless of wealth, education, color, cultural background, or language, may hold His priesthood. Thus, any properly ordained man who is clean in hand, heart, and mind can connect with the unlimited power of the priesthood. I learned this lesson well as a young missionary years ago in the South Pacific.

My first assignment was to a small island hundreds of miles from headquarters, where no one spoke English, and I was the only white man. I was given a local companion named Feki who was then serving a building mission and was a priest in the Aaronic Priesthood.

One afternoon we heard cries of anguish and saw a family bringing the limp, seemingly lifeless body of their eight-year-old son to us. They wailed out that he had fallen from a mango tree and would not respond to anything. The faithful father and mother put him in my arms and said, “You have the Melchizedek Priesthood; bring him back to us whole and well.”

Though my knowledge of the language was still limited, I understood what they wanted, and I was scared. I wanted to run away, but the expressions of love and faith that shone from the eyes of the parents and brothers and sisters kept me glued to the spot.

I looked expectantly at my companion. He shrugged and said, “I don’t have the proper authority. You and the branch president hold the Melchizedek Priesthood.” Grasping at that straw, I said, “Then this is the duty of the branch president.”

No sooner had I said this than the branch president walked up. He had heard the commotion and returned from his garden. He was sweaty and covered with dirt and mud. I turned and explained what had happened and tried to give the young boy to him. He stepped back and said, “I will go and wash and put on clean clothes; then we will bless him and see what God has to say.”

In near panic, I cried, “Can’t you see? He needs help now!”

He calmly replied: “I know he needs a blessing. When I have washed myself and put on clean clothes, I will bring consecrated oil, and we will approach God and see what His will is. I cannot—I will not—approach God with dirty hands and muddy clothes.” He turned and left me holding the boy. I was speechless.

Finally he returned, clean in body and dress and, I sensed, in heart as well. “Now,” he said, “I am clean, so we will approach the throne of God.”

That marvelous Tongan branch president, with clean hands and a pure heart, gave a beautiful and powerful priesthood blessing. I felt more like a witness than a participant. The words of the Psalmist came to my mind: “Who shall ascend into the hill of the Lord? ...

“He that hath clean hands, and a pure heart.”⁴ On that tiny island a worthy priesthood holder ascended into the hill of the Lord, and the power of the priesthood came down from heaven and authorized a young boy’s life to continue.

With the fire of faith glowing from his eyes, the branch president told me what to do. Much additional faith and effort was required, but on the third day that little eight-year-old boy, full of life, was reunited with his family.

I hope you understand and feel these truths. This was a tiny island in the midst of a huge ocean—with no electricity, no hospital, no doctors—but none of that mattered. For in addition to great love and faith, there was a branch president who held the Melchizedek Priesthood, who understood the importance of cleanliness of hand and heart and its outward expression in cleanliness of body and dress, who exercised the priesthood in righteousness and purity according to the will of God. That day his individual power in the priesthood was sufficient to connect with the unlimited power of the priesthood over earthly life.

Brethren, that connection is available to all of us, no matter where, when, or under what circumstances we live, so long as our hands, hearts, and minds are clean and pure. There is no individual power in the priesthood outside of individual purity.

God, who is full of light, life, and love, wants us to hold and properly use His priesthood so we can transmit that light, life, and love to all about us. On the other hand, Satan, the prince of darkness, wants to hold back light, life, and love as much as he can. Since there is nothing Satan can do about the power of the priesthood, he concentrates his energy on trying to limit our individual power in the priesthood by attempting to dirty our hands, hearts, and minds through abuse, anger, neglect, pornography, selfishness, or any other evil he can entice us to think or do. He knows if he can sufficiently soil us individually, he can, to that degree, keep us from the purity needed to properly exercise the priesthood and thus bring more light, life, and love to this earth and all the inhabitants thereof—past, present, and future.

Oh, brethren, please don’t sell your precious priesthood birthright for a mess of X- or R-rated pottage. Remember, the sand castles we build on the beaches of mortality, no matter how elaborate, will eventually be washed away by the tide. Only purity of hand, heart, and mind will allow us to tap into the ultimate power of the priesthood to truly bless others and eventually be able to build eternal mansions more beautiful and lasting than we can presently imagine. April 2001 General Conference, John H. Groberg, Of the First Quorum of the Seventy.

As priesthood holders personal righteousness is the most important aspect of spiritual preparation. With the power of and IN the priesthood we will be able to bless our family members, friends and neighbors in times of emergency and calamities. Personal righteousness and purity will also give us the power of the Holy Ghost, revelation and comfort, which will be needed in the coming hard times. Everyone who is prepared both temporally and spiritually will be God's angels to those in need and to assist His heavenly angels during any emergency.

Catching the Vision of Self-Reliance

Many members might think of welfare as a program to help members in temporarily difficult circumstances. But the intent of the Church's welfare plan is much more vast; it also involves promoting self-reliance as a way of life. President Thomas S. Monson has taught that self-reliance—"the ability, commitment, and effort to provide the necessities of life for self and family" ¹—is an essential element of our temporal and spiritual well-being.

A mere desire to become self-reliant is not enough. We must make a conscious, active effort to provide for our own needs and those of our families. ² Bishop H. David Burton, Presiding Bishop, reminds us that when we have done all we can to be self-reliant, "we can turn to the Lord in confidence to ask for what we might yet lack." ³ Being self-reliant allows us to bless others. Elder Robert D. Hales of the Quorum of the Twelve Apostles says, "Only when we are self-reliant can we truly emulate the Savior in serving and blessing others." ⁴

Self-reliance involves several facets of a balanced life, including (1) education, (2) health, (3) employment, (4) family home production and storage, (5) family finances, and (6) spiritual strength.

1. Education

The Lord commands us to "seek learning, even by study and also by faith" (D&C 88:118). President Gordon B. Hinckley (1910–2008) taught: "We believe in education. This Church encourages education. There is incumbent upon every member of this Church, as a mandate from the Lord, to get all the education you can get. . . . There is incumbent upon the Latter-day Saints a dictum from the Lord Himself to educate our minds and our hands." ⁵

Gaining an education was the goal of Roberto Flete Gonzalez of the Dominican Republic, who enrolled in college shortly after returning from his mission. His father agreed to cover his living expenses so that Roberto could focus on his studies, but a short time later, Roberto's father died, leaving the family in a dire financial situation.

Roberto quit school and began working to support himself, his mother, and his sister. He wondered how he'd ever be able to finish school.

Weeks later President Hinckley announced the Perpetual Education Fund (PEF), "a bold initiative" that would help youth in developing areas "rise out of the poverty they and generations before them have known." ⁶ Roberto applied for and was granted a PEF loan, which allowed him to continue his studies. This opportunity not only helped with

immediate finances, but it also helped Roberto have the faith to marry and form an eternal family because he knew he would be able to provide for them.

Roberto finished medical school while serving as a bishop and became the first Church member on the National Board of Dominican Medical Schools. But the best results, he says, have been at home. “There have been changes in my family as we are now further removed from the cycle of poverty,” he says. “I am grateful that my son won’t have to live the same way I did because we’ve stepped out of that cycle.”

For more information, visit the Education and Literacy section of providentliving.org and visit besmart.com, a website to help Latter-day Saint youth prepare for higher education.

2. Health

Because we are created in the image of God (see [Genesis 1:27](#)), our bodies are temples and should be treated with care and respect (see [1 Corinthians 3:16–17](#)). The Word of Wisdom, found in Doctrine and Covenants 89, is the Lord’s code of health and was revealed to Joseph Smith in 1833. It teaches that we should eat nutritious foods and avoid harmful substances. Apostles and prophets have since taught that we should shun all substances or practices that harm our bodies or minds and that could lead to addiction.

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Sainimere Balenacagi of Fiji learned this lesson as a teenager when she was attending a wedding with some friends who were not members of the Church. Many people there, including Sainimere’s friends, were drinking and smoking and invited her to drink. “I was taught my whole life to live the gospel standards, so I rejected the offer without hesitation,” Sainimere says.

She knows that the blessings of adhering to the Word of Wisdom go beyond physical health. “I have found extra protection in the sense that I am able to make better choices because of the closeness of the Holy Spirit. I see clearly that standards do not restrict our freedom; they protect us from consequences that lead to restricted freedom.”

For more information, see the Physical Health section of providentliving.org.

3. Employment

In many wards and branches, finding employment is the most pressing need members face as they strive to become self-reliant. Priesthood quorums and ward council members can help these members. They should work closely with these individuals, identifying helpful community resources, mentors who can personally assist those in need, and available job opportunities. The power of members working together in faith to bless those in need will often lead to successful employment.

In some areas of the world, the Church has established employment resource centers. Currently, there are more than 300 centers in 56 countries that offer services such as career workshops, networking meetings, and individual job counseling. The new Church website ldsjobs.org also provides resources for job seekers, employers, and Church leaders.

“Our Heavenly Father asks only that we do the best we can—that we work according to our full capacity, however great or small that may be.”

—President Dieter F. Uchtdorf

After Oséias Portinari of Brazil was laid off at work, he spent more than two months searching for a new job. Unable to find a position, he volunteered at his local employment resource center in São Paulo. Helping others in their job searches offered

Oséias an opportunity to improve his own interviewing and job search skills. He took the career workshop several times and eventually became an instructor. To his surprise, as he diligently served others, Oséias soon began to receive calls from prospective employers, which led to gainful employment.

Oséias is grateful for Church resources that give unemployed members a better vision of life. He says, “I know that as we put in effort, the Lord opens doors.”

For more information, visit ldsjobs.org, employment.lds.org, or your nearest employment resource center.

4. Family Home Production and Storage

In 2007 the Church introduced *All Is Safely Gathered In: Family Home Storage*, a pamphlet that provides a simplified approach to family home storage. The First Presidency encourages members worldwide to focus on having a basic supply of food and water and some money in savings. Members can begin by producing or purchasing a few extra items and setting aside a little money each week as their circumstances allow. Following this pattern over time, members can establish a home storage supply and a financial reserve suitable for their needs. ⁸

After learning of this counsel, the Lugo family of Valencia, Venezuela, felt inspired to begin their own home storage. Each week they began setting aside a small amount of food, water, and money. Even with their limited resources, they were able to gather a modest reserve after only a few months. Later that year a workers’ strike in Venezuela put many local workers’ jobs in jeopardy. Brother Omar Lugo was among those who eventually lost their jobs.

It took nearly two years for Brother Lugo to find new employment. During that time, Brother Lugo and his family lived on their savings and food storage. Despite the difficult challenges of unemployment, the Lugos experienced peace and comfort because they were prepared. They faced the uncertain future with confidence, knowing they had followed the counsel to gradually build their home storage. ⁹

*For more information, visit the Family Home Storage section of providentliving.org or refer to the pamphlet *All Is Safely Gathered In: Family Home Storage*.*

5. Family Finances

Another aspect of provident living is wisely managing income and expenses. The First Presidency has counseled:

“We urge you to be modest in your expenditures; discipline yourselves in your purchases to avoid debt.

“If you have paid your debts and have a financial reserve, even though it be small, you and your family will feel more secure and enjoy greater peace in your hearts.” ¹⁰

Successful family finances begin with the payment of tithes and offerings. When members put the Lord first, they are better able to care for themselves and others.

Another part of successful financial management involves knowing your income and expenses and controlling money rather than letting it control you. When Devon and Michaela Stephens of Arizona, USA, created a budget, they had only a vague idea of how much money they spent each month. But making a budget with specific categories helped them “come out of the clouds and down to earth,” Michaela says. “It was alarming to find we had less money than we thought, but it was also intensely exhilarating to suddenly feel that we had firm control of what we had.”

“All of us are responsible to provide for ourselves and our families in both temporal and spiritual ways. To provide providently, we must practice the principles of provident living: joyfully living within our means, being content with what we have, avoiding excessive debt, and diligently saving and preparing for rainy-day emergencies.”

—Elder Robert D. Hales

*For more information, visit the Family Finances section of providentliving.org or refer to the pamphlet *All Is Safely Gathered In: Family Finances*.*

6. Spiritual Strength

Spirituality is essential to our temporal and eternal well-being. We all experience trials. Striving to increase our spirituality will help us face these trials well and give us hope for better days.

Nirina Josephson-Randriamiharisoa of Madagascar currently lives in France while she pursues her education. When she first arrived, she struggled with loneliness and homesickness. “I sought for solace through prayer, scripture reading, and the gentle whisperings of the Holy Spirit,” says Nirina. “These things brought me closer to Heavenly Father and the Savior, and I felt peace.”

In time Nirina made friends and participated in activities within and outside the Church and found happiness. But then some tragic news from home shook her world. “One morning I received a message telling me that my brother had died. I had no idea I could feel such sadness. In the days and weeks that followed, I struggled through moments of loneliness, anger, and despair. Doing even the most basic things became serious challenges.”

A few months later, a close friend also passed away. The added sorrow increased Nirina’s already-heavy burden. For just a moment Nirina considered not attending church, but then she remembered that the same things that had buoyed her in her earlier difficulties could bolster her now.

“As I had when I first moved to France, I sought comfort in prayer, scripture reading, and the Holy Ghost. Through this I discovered more strongly that the Spirit and the doctrine of eternal families can bring us comfort and that the Atonement of Jesus Christ has a real effect in our lives,” she says. “Whatever trials we face, there are no ‘dead ends’ with the Lord. His plan is a plan of happiness.”

*For more information on self-reliance and provident living, see *Providing in the Lord’s Way: Summary of A Leader’s Guide to Welfare*, available in many languages at providentliving.org.*

Related Addresses

- Ezra Taft Benson, “[Pay Thy Debt, and Live](#),” *Ensign*, June 1987.
- Richard C. Edgley, “[This Is Your Phone Call](#),” April 2009 general conference.
- Keith B. McMullin, “[Lay Up in Store](#),” April 2007 general conference.
- Gordon B. Hinckley, “[The Perpetual Education Fund](#),” April 2001 general conference.

Notes

1. *Providing in the Lord’s Way: Summary of A Leader’s Guide to Welfare* (booklet, 2009).
2. See Thomas S. Monson, “[Guiding Principles of Personal and Family Welfare](#),” *Tambuli*, Feb. 1987, 3; *Ensign*, Sept. 1986, 3.

3. H. David Burton, “The Blessing of Work,” *Liahona*, Dec. 2009, 37; *Ensign*, Dec. 2009, 43.
4. Robert D. Hales, “A Gospel Vision of Welfare: Faith in Action,” in *Basic Principles of Welfare and Self-Reliance* (booklet, 2009), 2.
5. Teachings of Gordon B. Hinckley (1997), 724.
6. Gordon B. Hinckley, “The Perpetual Education Fund,” *Liahona*, July 2001, 62; *Ensign*, May 2001, 52.
7. See, for example, Russell M. Nelson, “Addiction or Freedom,” October 1988 general conference; M. Russell Ballard, “O That Cunning Plan of the Evil One,” *Liahona* and *Ensign*, Nov. 2010, 108.
8. See *All Is Safely Gathered In: Family Home Storage* (pamphlet, 2007).
9. See “Family Home Storage: A New Message,” *Liahona*, Mar. 2009, 12–13; *Ensign*, Mar. 2009, 58–59.
10. *All Is Safely Gathered In: Family Finances* (pamphlet, 2007).

Emergencies:

This section contains emergencies we may be faced with in our homes, neighborhood, city or nation. They are listed in probability of occurrence with the most likely events first and the least likely last. The events are described, what to do, how to prepare for each event and if evacuation is necessary and how.

A. Injuries and First Aid:

The most probable and common emergency in the home is an illness or injury which would require immediate attention. First aid is the provision of initial care prior to the arrival of professionally trained Medics, Nurses and Doctors. This “First aid” can be the difference that can save the life of a loved one.

The key aims of first aid are:

Preserve life: the overriding aim of all medical care, including first aid, is to save lives.

Prevent further harm: also sometimes called prevent the condition from worsening, or danger of further injury, this covers both external factors, such as moving a patient away from any cause of harm, and applying first aid techniques to prevent worsening of the condition, such as applying pressure to stop a bleed becoming dangerous.

Promote recovery: first aid also involves trying to start the recovery process from the illness or injury, and in some cases might involve completing a treatment, such as in the case of applying a plaster to a small wound.

It is strongly recommended that at least one member of the family receive First Aid/CPR training.

The following are common injuries and illnesses and the First aid required for them:

Amputation

Traumatic amputation is the loss of a body part -- usually a finger, toe, arm, or leg -- that occurs as the result of an accident or injury.

Considerations

If an accident or trauma results in complete amputation (the body part is totally severed), the part sometimes can be reattached, especially when proper care is taken of the severed part and stump.

In a partial amputation, some soft-tissue connection remains. Depending on the severity of the injury, the partially severed extremity may or may not be able to be reattached.

There are various complications associated with amputation of a body part. The most important of these are bleeding, shock, and infection. See also: Wounds

The long-term outcome for amputees has improved due to better understanding of the management of traumatic amputation, early emergency and critical care management, new surgical techniques, early rehabilitation, and new prosthetic designs. New limb replantation techniques have been moderately successful, but incomplete nerve regeneration remains a major limiting factor.

Often, the patient will have a better outcome from having a well-fitting, functional prosthesis than a nonfunctional replanted limb.

Causes

Traumatic amputations usually result directly from factory, farm, or power tool accidents or from motor vehicle accidents. Natural disasters, war, and terrorist attacks can also cause traumatic amputations.

Symptoms

- A body part that has been completely or partially cut off
- Bleeding (may be minimal or severe, depending on the location and nature of the injury)
- Pain (the degree of pain is not always related to the severity of the injury or the amount of bleeding)
- Crushed body tissue (badly mangled, but still partially attached by muscle, bone, tendon, or skin)

First Aid

1. Check the person's airway (open if necessary); check breathing and circulation. If necessary, begin rescue breathing, CPR, or bleeding control.
2. Try to calm and reassure the person as much as possible. Amputation is painful and extremely frightening.
3. Control bleeding by applying direct pressure to the wound, by elevating the injured area, and, if necessary, by using pressure point bleeding control. If the bleeding continues, recheck the source of the bleeding and reapply direct pressure, with help from someone who is not fatigued. If the person is suffering from life-threatening bleeding, a constriction bandage or tourniquet will be easier to use than compression of pressure points.

4. Save any severed body parts and ensure that they stay with the patient. Remove contaminating material if possible, and gently rinse the body part if the cut end is contaminated with dirt. Wrap the severed part in a clean, damp cloth, place it in a sealed plastic bag and immerse the bag in cold water (ice water if available). Do NOT directly immerse the part in water and do NOT put the severed part directly on ice. Do NOT use dry ice as this will cause frostbite and injury to the part. If cold water is not available, keep the part away from heat as much as possible. Save it for the medical team, or take it to the hospital. Cooling the severed part will keep it viable for about 18 hours. Without cooling, it will only remain useable for about 4 to 6 hours.
5. Take steps to prevent shock. Lay the person flat, raise the feet about 12 inches, and cover the person with a coat or blanket. Do NOT place the person in this position if a head, neck, back, or leg injury is suspected or if it makes the victim uncomfortable.
6. Once the bleeding at the site of the amputation is under control, examine the person for other signs of injury that require emergency treatment. Treat fractures, additional cuts, and other injuries appropriately.
7. Stay with the person until medical help arrives.

DO NOT

- Do NOT forget that saving the victim's life is more important than saving a body part.
- Do NOT overlook other, less obvious, injuries.
- Do NOT attempt to push any part back into place.
- Do NOT decide that a body part is too small to save. (fingertip)
- Do NOT place a tourniquet, unless the bleeding is life threatening, as the entire limb below the tourniquet may be placed in jeopardy.
- Do NOT raise false hopes of reattachment.

Anaphylaxis, an allergic reaction to food, medicine or an insect bite:

A life-threatening allergic reaction (anaphylaxis) can cause shock, a sudden drop in blood pressure and trouble breathing. In people who have an allergy, anaphylaxis can occur minutes after exposure to a specific allergy-causing substance (allergen). In some cases, there may be a delayed reaction or anaphylaxis may occur without an apparent trigger.

If you're with someone having an allergic reaction with signs of anaphylaxis:

- Immediately call 911 or your local medical emergency number.
- Ask the person if he or she is carrying an epinephrine autoinjector to treat an allergic attack (for example, EpiPen, Twinject).
- If the person says he or she needs to use an autoinjector, ask whether you should help inject the medication. This is usually done by pressing the autoinjector against the person's thigh.

- Have the person lie still on his or her back.
- Loosen tight clothing and cover the person with a blanket. Don't give the person anything to drink.
- If there's vomiting or bleeding from the mouth, turn the person on his or her side to prevent choking.
- If there are no signs of breathing, coughing or movement, begin CPR. Do uninterrupted chest presses — about 100 every minute — until paramedics arrive.
- Get emergency treatment even if symptoms start to improve. After anaphylaxis, it's possible for symptoms to recur. Monitoring in a hospital setting for several hours is usually necessary.

If you're with someone having signs of anaphylaxis, don't wait to see whether symptoms get better. Seek emergency treatment right away. In severe cases, untreated anaphylaxis can lead to death within half an hour. An antihistamine pill, such as diphenhydramine (Benadryl), isn't sufficient to treat anaphylaxis. These medications can help relieve allergy symptoms, but work too slowly in a severe reaction.

Signs and symptoms of anaphylaxis include:

- Skin reactions including hives, itching, and flushed or pale skin
- Swelling of the face, eyes, lips or throat
- Constriction of the airways, leading to wheezing and trouble breathing
- A weak and rapid pulse
- Nausea, vomiting or diarrhea
- Dizziness, fainting or unconsciousness

Some common anaphylaxis triggers include:

- Medications
- Foods such as peanuts, tree nuts, fish and shellfish
- Insect stings from bees, yellow jackets, wasps, hornets and fire ants

If you've had any kind of severe allergic reaction in the past, ask your doctor if you should be prescribed an epinephrine autoinjector to carry with you.

Animal bites:

If an animal bites you or your child, follow these guidelines:

- **For minor wounds.** If the bite barely breaks the skin and there's no danger of rabies, treat it as a minor wound. Wash the wound thoroughly with soap and water. Apply an antibiotic cream to prevent infection and cover the bite with a clean bandage.
- **For deep wounds.** If the animal bite creates a deep puncture of the skin or the skin is badly torn and bleeding, apply pressure with a clean, dry cloth to stop the bleeding and see your doctor.
- **For infection.** If you notice signs of infection, such as swelling, redness, increased pain or oozing, see your doctor immediately.

- **For suspected rabies.** If you suspect the bite was caused by an animal that might carry rabies — including any wild or domestic animal of unknown immunization status, particularly bats — see your doctor immediately.

Doctors recommend getting a tetanus shot every 10 years. If your last one was more than five years ago and your wound is deep or dirty, your doctor may recommend a booster. Get the booster as soon as possible after the injury.

Domestic pets cause most animal bites. Dogs are more likely to bite than cats. Cat bites, however, are more likely to cause infection because they are usually puncture wounds and can't be thoroughly cleaned. Bites from nonimmunized domestic animals and wild animals carry the risk of rabies. Rabies is more common in bats, raccoons, skunks and foxes than in cats and dogs. Rabbits, squirrels and other rodents rarely carry rabies.

The Centers for Disease Control and Prevention recommends that children or adults exposed to bats, or who are sleeping and discover bats present, seek medical advice, even if they don't think they've been bitten. This is because bat bite marks can be hard to see.

Bleeding:

Injuries resulting in severe bleeding can be very distressing both for the patient and bystanders. It is important however to remain calm, try to calm the patient and treat the bleeding to prevent infection and the onset of shock.

If blood is present, always protect yourself and the patient against infection by wearing gloves. There are four main types of bleed:

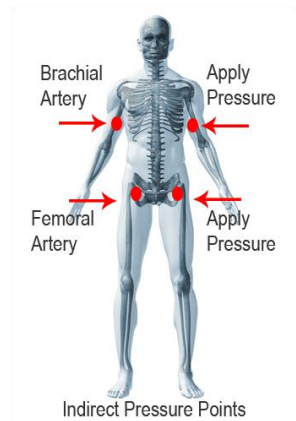
Internal bleeding

Early recognition is critical. Raise help by dialling 999/112 and treat for shock.

Capillary

This is bleeding from the surface of the skin. The blood will ooze and usually is stopped easily by natural clotting. This is the normal type of bleeding for grazed knee or a similar injury. The best treatment here is to clean the injury and cover, typically just with a plaster.

Arterial bleed



Recognised by the presence of bright red blood, pulsing or pumping. This form of injury needs urgent hospitalisation and therefore you should call 999/112 immediately. You should try to reduce the blood loss by indirect pressure to either the:

- brachial artery (press the inside of the upper arm against the bone) or
- femoral artery (press the front, upper leg, just around from the groin, against the bone)

Although this will probably not stop the bleeding, it should slow it down, which may become critical over time.

Venous bleed

Recognised by the blood being dark red in colour and a steady flow. The notes below show what action to take in the event of a venous bleed.

Initial pressure: quickly apply direct pressure to the wound either with your fingers or using a sterile dressing or pad. If there is an embedded object do not remove it, but apply pressure either side instead. If they are able to, you can ask the patient to maintain this initial pressure themselves while you prepare the main dressing.

Raise: in order to reduce blood pressure, and therefore flow, raise the wound above the level of the patient's heart. If you are able to safely, lay or sit the patient down.

Bandage: secure the initial dressing in place with a bandage which is tight enough to maintain the pressure. However, make sure that you do not tie the bandage so tight that it cuts off circulation. To check for circulation, pinch a finger or toe nail beyond the dressing for 5 seconds – it should go pale. Once you stop pinching it should return to a normal colour within 2 seconds.

Support: to maintain elevation, make the patient comfortable with the injured site continually raised above the heart level – this may involve the use of a sling (for an arm injury) or laying the patient down with their leg raised in the event of a leg injury.

Call 999/112: and continue to monitor the patient for signs of shock.

Notes for venous bleeding

- If blood seeps through the first dressing apply another dressing over the top. This can be repeated until there are three dressings. If it continues to seep through, remove the outer dressings and continue to apply fresh dressings – do not however remove the initial, bottom dressing.
- If there is an embedded object, do not remove it. Instead, use rolled up bandages to build a protective wall around it, in order that you can apply a bandage without putting direct pressure on the object.
- Continue to check for circulation by pinching a finger or toe nail. If circulation becomes impaired, then you should loosen the bandage and re-apply.
- Do not let the patient eat or drink anything – they may well need an anesthetic later in hospital.

Blisters:

If a blister isn't too painful, try to keep it intact. Unbroken skin over a blister provides a natural barrier to bacteria and decreases the risk of infection. Cover a small blister with an adhesive bandage, and cover a large one with a porous, plastic-coated gauze pad that absorbs moisture and allows the wound to breathe. If you're allergic to the adhesive used in some tape, use paper tape.

Don't puncture a blister unless it's painful or prevents you from walking or using one of your hands. If you have diabetes or poor circulation, call your doctor before considering the self-care measures below.

How to drain a blister

To relieve blister-related pain, drain the fluid while leaving the overlying skin intact. Here's how:

- **Wash your hands and the blister** with soap and warm water.
- **Swab the blister** with iodine or rubbing alcohol.
- **Sterilize a clean, sharp needle** by wiping it with rubbing alcohol.
- **Use the needle to puncture the blister.** Aim for several spots near the blister's edge. Let the fluid drain, but leave the overlying skin in place.
- **Apply an antibiotic ointment** to the blister and cover with a bandage or gauze pad.
- **Cut away all the dead skin** after several days, using tweezers and scissors sterilized with rubbing alcohol. Apply more ointment and a bandage.

Call your doctor if you see signs of infection around a blister — pus, redness, increasing pain or warm skin.

Blister prevention

To prevent a blister, use gloves, socks, a bandage or similar protective covering over the area being rubbed. Special athletic socks are available that have extra padding in critical areas. You might also try attaching moleskin to the inside of your shoe where it might rub, such as at the heel.

Bruise:

A bruise forms when a blow breaks blood vessels near your skin's surface, allowing a small amount of blood to leak into the tissues under your skin. The trapped blood appears as a black-and-blue mark.

If your skin isn't broken, you don't need a bandage, but you enhance bruise healing with these simple techniques:

- Elevate the injured area.
- Apply ice or a cold pack several times a day for a day or two after the injury.
- Rest the bruised area, if possible.
- Consider acetaminophen (Tylenol, others) for pain relief, or ibuprofen (Advil, Motrin, others) for pain relief and to reduce swelling.

See your doctor if

- You have unusually large or painful bruises — particularly if your bruises seem to develop for no known reasons.
- You begin to bruise easily.
- You're experiencing abnormal bleeding elsewhere, such as from your nose or gums, or you notice blood in your eyes, stool or urine.
- You have no history of bruising, but suddenly experience bruises.

These signs and symptoms may indicate a more serious problem, such as a blood-clotting problem or blood-related disease. Bruises accompanied by persistent pain or headache also may indicate a more serious underlying illness and require medical attention.

Burns:

To distinguish a minor burn from a serious burn, the first step is to determine the extent of damage to body tissues. The three burn classifications of first-degree burn, second-degree burn and third-degree burn will help you determine emergency care.

1st-degree burn

The least serious burns are those in which only the outer layer of skin is burned, but not all the way through.

- The skin is usually red
- Often there is swelling
- Pain sometimes is present

Treat a first-degree burn as a minor burn unless it involves substantial portions of the hands, feet, face, groin or buttocks, or a major joint, which requires emergency medical attention.

2nd-degree burn

When the first layer of skin has been burned through and the second layer of skin (dermis) also is burned, the injury is called a second-degree burn.

- Blisters develop
- Skin takes on an intensely reddened, splotchy appearance
- There is severe pain and swelling.

If the second-degree burn is no larger than 3 inches (7.6 centimeters) in diameter, treat it as a minor burn. If the burned area is larger or if the burn is on the hands, feet, face, groin or buttocks, or over a major joint, treat it as a major burn and get medical help immediately.

For minor burns, including first-degree burns and second-degree burns limited to an area no larger than 3 inches (7.6 centimeters) in diameter, take the following action:

- **Cool the burn.** Hold the burned area under cool (not cold) running water for 10 or 15 minutes or until the pain subsides. If this is impractical, immerse the burn in cool water or cool it with cold compresses. Cooling the burn reduces swelling by conducting heat away from the skin. Don't put ice on the burn.
- **Cover the burn with a sterile gauze bandage.** Don't use fluffy cotton, or other material that may get lint in the wound. Wrap the gauze loosely to avoid putting pressure on burned skin. Bandaging keeps air off the burn, reduces pain and protects blistered skin.
- **Take an over-the-counter pain reliever.** These include aspirin, ibuprofen (Advil, Motrin, others), naproxen (Aleve) or acetaminophen (Tylenol, others). Use caution when giving aspirin to children or teenagers. Though aspirin is approved for use in children older than age 2, children and teenagers recovering from chickenpox or flu-like symptoms should never take aspirin. Talk to your doctor if you have concerns.

Minor burns usually heal without further treatment. They may heal with pigment changes, meaning the healed area may be a different color from the surrounding skin. Watch for signs of infection, such as increased pain, redness, fever, swelling or oozing. If infection develops, seek medical help. Avoid re-injuring or tanning if the burns are less than a year old — doing so may cause more extensive pigmentation changes. Use sunscreen on the area for at least a year.

Caution

- **Don't use ice.** Putting ice directly on a burn can cause a person's body to become too cold and cause further damage to the wound.
- **Don't apply egg whites, butter or ointments to the burn.** This could cause infection.
- **Don't break blisters.** Broken blisters are more vulnerable to infection.

3rd-degree burn

The most serious burns involve all layers of the skin and cause permanent tissue damage. Fat, muscle and even bone may be affected. Areas may be charred black or appear dry and white. Difficulty inhaling and exhaling, carbon monoxide poisoning, or other toxic effects may occur if smoke inhalation accompanies the burn.

For major burns, call 911 or emergency medical help. Until an emergency unit arrives, follow these steps:

1. **Don't remove burned clothing.** However, do make sure the victim is no longer in contact with smoldering materials or exposed to smoke or heat.
2. **Don't immerse large severe burns in cold water.** Doing so could cause a drop in body temperature (hypothermia) and deterioration of blood pressure and circulation (shock).
3. **Check for signs of circulation (breathing, coughing or movement).** If there is no breathing or other sign of circulation, begin CPR.
4. **Elevate the burned body part or parts.** Raise above heart level, when possible.
5. **Cover the area of the burn.** Use a cool, moist, sterile bandage; clean, moist cloth; or moist cloth towels.

Water-Jel, Burn-Jel Dressings are a gelatinized water mix designed to perform the four critical steps for burn management in one application. Because of their gelatinous nature, they seal the burn from further contamination, they cool the burn site and relieve pain by heat transfer into themselves, and the fluids on the burn site cannot soak into the dressing nor can they evaporate through them. And finally, as the burn site cools down, the dressing warms up, leaving the site covered by a warm dressing, helping to prevent hypothermia.

Water-Jel, Burn-Jel Dressings will absorb temperatures in excess of 2000 degrees F—extremely important when you consider that human bone carbonizes at 1400 degrees F and other dressings could melt into the site. With Water-Jel, there is plenty of extra gel to use on any hyperemic or stasis sites surrounding the main burn, and the gel can be left on for more than four hours.

Get a tetanus shot. Burns are susceptible to tetanus. Doctors recommend you get a tetanus shot every 10 years. If your last shot was more than five years ago, your doctor may recommend a tetanus shot booster.

Cardiopulmonary resuscitation (CPR):

Cardiopulmonary resuscitation (CPR) is a lifesaving technique useful in many emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped. The American Heart Association recommends that everyone — untrained bystanders and medical personnel alike — begin CPR with chest compressions.

It's far better to do something than to do nothing at all if you're fearful that your knowledge or abilities aren't 100 percent complete. Remember, the difference between your doing something and doing nothing could be someone's life.

Here's advice from the American Heart Association:

- **Untrained.** If you're not trained in CPR, then provide hands-only CPR. That means uninterrupted chest compressions of about 100 a minute until paramedics arrive (described in more detail below). You don't need to try rescue breathing.
- **Trained, and ready to go.** If you're well trained and confident in your ability, begin with chest compressions instead of first checking the airway and doing rescue breathing. Start CPR with 30 chest compressions before checking the airway and giving rescue breaths.
- **Trained, but rusty.** If you've previously received CPR training but you're not confident in your abilities, then just do chest compressions at a rate of about 100 a minute. (Details described below.)

The above advice applies to adults, children and infants needing CPR, but not newborns.

CPR can keep oxygenated blood flowing to the brain and other vital organs until more definitive medical treatment can restore a normal heart rhythm.

When the heart stops, the lack of oxygenated blood can cause brain damage in only a few minutes. A person may die within eight to 10 minutes.

To learn CPR properly, take an accredited first-aid training course, including CPR and how to use an automatic external defibrillator (AED).

Before you begin

Before starting CPR, check:

- Is the person conscious or unconscious?
- If the person appears unconscious, tap or shake his or her shoulder and ask loudly, "Are you OK?"
- If the person doesn't respond and two people are available, one should call 911 or the local emergency number and one should begin CPR. If you are alone and have immediate access to a telephone, call 911 before beginning CPR — unless you think the person has become unresponsive because of suffocation (such as from drowning). In this special case, begin CPR for one minute and then call 911 or the local emergency number.
- If an AED is immediately available, deliver one shock if instructed by the device, then begin CPR.

Remember to spell C-A-B

The American Heart Association uses the acronym of CAB — circulation, airway, breathing — to help people remember the order to perform the steps of CPR.

Circulation: Restore blood circulation with chest compressions

1. Put the person on his or her back on a firm surface.
2. Kneel next to the person's neck and shoulders.
3. Place the heel of one hand over the center of the person's chest, between the nipples. Place your other hand on top of the first hand. Keep your elbows straight and position your shoulders directly above your hands.

4. Use your upper body weight (not just your arms) as you push straight down on (compress) the chest at least 2 inches (approximately 5 centimeters). Push hard at a rate of about 100 compressions a minute.
5. If you haven't been trained in CPR, continue chest compressions until there are signs of movement or until emergency medical personnel take over. If you have been trained in CPR, go on to checking the airway and rescue breathing.

Airway: Clear the airway

1. If you're trained in CPR and you've performed 30 chest compressions, open the person's airway using the head-tilt, chin-lift maneuver. Put your palm on the person's forehead and gently tilt the head back. Then with the other hand, gently lift the chin forward to open the airway.
2. Check for normal breathing, taking no more than five or 10 seconds. Look for chest motion, listen for normal breath sounds, and feel for the person's breath on your cheek and ear. Gasping is not considered to be normal breathing. If the person isn't breathing normally and you are trained in CPR, begin mouth-to-mouth breathing. If you believe the person is unconscious from a heart attack and you haven't been trained in emergency procedures, skip mouth-to-mouth rescue breathing and continue chest compressions.

Breathing: Breathe for the person

Rescue breathing can be mouth-to-mouth breathing or mouth-to-nose breathing if the mouth is seriously injured or can't be opened.

1. With the airway open (using the head-tilt, chin-lift maneuver), pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal.
2. Prepare to give two rescue breaths. Give the first rescue breath — lasting one second — and watch to see if the chest rises. If it does rise, give the second breath. If the chest doesn't rise, repeat the head-tilt, chin-lift maneuver and then give the second breath. Thirty chest compressions followed by two rescue breaths is considered one cycle.
3. Resume chest compressions to restore circulation.
4. If the person has not begun moving after five cycles (about two minutes) and an automatic external defibrillator (AED) is available, apply it and follow the prompts. Administer one shock, then resume CPR — starting with chest compressions — for two more minutes before administering a second shock. If you're not trained to use an AED, a 911 or other emergency medical operator may be able to guide you in its use. Use pediatric pads, if available, for children ages 1 through 8. Do not use an AED for babies younger than age 1. If an AED isn't available, go to step 5 below.
5. Continue CPR until there are signs of movement or emergency medical personnel take over.

To perform CPR on a child

The procedure for giving CPR to a child age 1 through 8 is essentially the same as that for an adult. The differences are as follows:

- If you're alone, perform five cycles of compressions and breaths on the child — this should take about two minutes — before calling 911 or your local emergency number or using an AED.

- Use only one hand to perform heart compressions.
- Breathe more gently.
- Use the same compression-breath rate as is used for adults: 30 compressions followed by two breaths. This is one cycle. Following the two breaths, immediately begin the next cycle of compressions and breaths.
- After five cycles (about two minutes) of CPR, if there is no response and an AED is available, apply it and follow the prompts. Use pediatric pads if available. If pediatric pads aren't available, use adult pads.

Continue until the child moves or help arrives.

To perform CPR on a baby

Most cardiac arrests in babies occur from lack of oxygen, such as from drowning or choking. If you know the baby has an airway obstruction, perform first aid for choking. If you don't know why the baby isn't breathing, perform CPR.

To begin, examine the situation. Stroke the baby and watch for a response, such as movement, but don't shake the baby.

If there's no response, follow the CAB procedures below and time the call for help as follows:

- If you're the only rescuer and CPR is needed, do CPR for two minutes — about five cycles — before calling 911 or your local emergency number.
- If another person is available, have that person call for help immediately while you attend to the baby.

Circulation: Restore blood circulation

1. Place the baby on his or her back on a firm, flat surface, such as a table. The floor or ground also will do.
2. Imagine a horizontal line drawn between the baby's nipples. Place two fingers of one hand just below this line, in the center of the chest.
3. Gently compress the chest about 1.5 inches (about 4 cm).
4. Count aloud as you pump in a fairly rapid rhythm. You should pump at a rate of 100 compressions a minute.

Airway: Clear the airway

1. After 30 compressions, gently tip the head back by lifting the chin with one hand and pushing down on the forehead with the other hand.
2. In no more than 10 seconds, put your ear near the baby's mouth and check for breathing: Look for chest motion, listen for breath sounds, and feel for breath on your cheek and ear.

Breathing: Breathe for the infant

1. Cover the baby's mouth and nose with your mouth.
2. Prepare to give two rescue breaths. Use the strength of your cheeks to deliver gentle puffs of air (instead of deep breaths from your lungs) to slowly breathe into the baby's mouth one time, taking one second for the breath. Watch to see if the baby's chest rises. If it does, give a second rescue breath. If the chest does not rise, repeat the head-tilt, chin-lift maneuver and then give the second breath.
3. If the baby's chest still doesn't rise, examine the mouth to make sure no foreign material is inside. If the object is seen, sweep it out with your finger. If the airway seems blocked, perform first aid for a choking baby.
4. Give two breaths after every 30 chest compressions.

5. Perform CPR for about two minutes before calling for help unless someone else can make the call while you attend to the baby.
6. Continue CPR until you see signs of life or until medical personnel arrive.

Chemical burns:

If a chemical burns the skin, follow these steps:

1. **Immediately flush the affected areas** with large quantities of water. Do not waste time looking for specific antidotes to the chemical that caused the burn and do not take time to remove the victim's clothing until the flushing process is well underway. For a known acid burn, irrigate the area for at least 15 minutes; for a known lye burn, irrigate for one hour.
2. **Remove clothing or jewelry** that has been contaminated by the chemical.
3. **Wrap the burned area loosely** with a dry, sterile dressing (if available) or a clean cloth.
4. **Rewash the burned area** for several more minutes if the person experiences increased burning after the initial washing.
5. **Take an over-the-counter pain reliever** if needed for pain. These include aspirin, ibuprofen (Advil, Motrin, others), naproxen (Aleve) or acetaminophen (Tylenol, others). Use caution when giving aspirin to children or teenagers. Though aspirin is approved for use in children older than age 2, children and teenagers recovering from chickenpox or flu-like symptoms should never take aspirin. Talk to your doctor if you have concerns.
6. **Apply Water-Jel/Burn-Jel First Aid Emergency Burn Dressing**, to the burn wound. This first aid burn dressing from Water-Jel Technologies promptly relieves pain, protects the wound from further contamination, cools the burn and reduces its progression, and helps promote healing.

Get a tetanus shot. All burns are susceptible to tetanus. Doctors recommend you get a tetanus shot every 10 years. If your last shot was more than five years ago, your doctor may recommend a tetanus shot booster.

Minor chemical burns usually heal without further treatment.

Seek emergency medical assistance if:

- The person shows signs of shock, such as fainting, pale complexion or breathing in a notably shallow manner
- The chemical burn penetrated through the first layer of skin, and the resulting second-degree burn covers an area more than 3 inches (7.6 centimeters) in diameter
- The chemical burn occurred on the eye, hands, feet, face, groin or buttocks, or over a major joint
- The person has pain that cannot be controlled with over-the-counter pain relievers

If you're unsure whether a substance is toxic, call the poison control center at 800-222-1222. If you seek emergency assistance, take the chemical container or a complete description of the substance with you for identification.

Chemical splash in the eye:

If a chemical splashes into your eye, take these steps immediately.

1. Flush your eye with water. Use clean, lukewarm tap water for at least 20 minutes, and use whichever of these approaches is quickest:

- Get into the shower and aim a gentle stream of lukewarm water on your forehead over your affected eye. Or direct the stream on the bridge of your nose if both eyes are affected. Hold your affected eye or eyes open.
- Put your head down and turn it to the side. Then hold your affected eye open under a gently running faucet.
- Young children may do best if they lie down in the bathtub or lean back over a sink while you pour a gentle stream of water on the forehead over the affected eye or on the bridge of the nose for both eyes.

Wash your hands with soap and water. Thoroughly rinse your hands to be sure no chemical or soap is left on them. Your first goal is to get the chemical off the surface of your eye, but then you must remove the chemical from your hands.

3. Remove contact lenses. If they don't come out during the flush, then take them out.

Caution

- Don't rub the eye — this may cause further damage.
- Don't put anything except water or contact lens saline rinse in the eye, and don't use eyedrops unless emergency personnel tell you to do so.

Seek emergency medical assistance

After following the above steps, seek emergency care or, if necessary, call 911 or your local emergency number. Take the chemical container or the name of the chemical with you to the emergency department. If readily available, wear sunglasses because your eyes will be sensitive to light.

Chest pain:

Causes of chest pain can vary from minor problems, such as indigestion or stress, to serious medical emergencies, such as a heart attack or pulmonary embolism. The specific cause of chest pain is often difficult to interpret.

Finding the cause of your chest pain can be challenging, especially if you've never had symptoms in the past. Even doctors may have a difficult time deciding if chest pain is a sign of a heart attack or something less serious, such as indigestion. If you have unexplained chest pain lasting more than a few minutes, you should seek emergency medical assistance rather than trying to diagnose the cause yourself.

As with other sudden, unexplained pains, chest pain may be a signal for you to get medical help. Use the following information to help you determine whether your chest pain is a medical emergency.

Heart attack

A heart attack occurs when an artery that supplies oxygen to your heart muscle becomes blocked. A heart attack may cause chest pain that lasts 15 minutes or longer. But a heart attack can also be silent and produce no signs or symptoms.

Many people who experience a heart attack have warning symptoms hours, days or weeks in advance. The earliest warning sign of an attack may be ongoing episodes of chest pain that start when you're physically active, but are relieved by rest.

Someone having a heart attack may experience any or all of the following:

- Uncomfortable pressure, fullness or squeezing pain in the center of the chest lasting more than a few minutes
- Pain spreading to the shoulders, neck or arms
- Lightheadedness, fainting, sweating, nausea or shortness of breath

If you or someone else may be having a heart attack:

- **Call 911 or emergency medical assistance.** Don't "tough out" the symptoms of a heart attack for more than five minutes. If you don't have access to emergency medical services, have someone, such as a neighbor or friend, drive you to the nearest hospital. Drive yourself only as a last resort, if there are absolutely no other options. Driving yourself puts you and others at risk if your condition suddenly worsens.
- **Chew a regular-strength aspirin.** Aspirin reduces blood clotting, which can help blood flow through a narrowed artery that's caused a heart attack. However, don't take aspirin if you are allergic to aspirin, have bleeding problems or take another blood-thinning medication, or if your doctor previously told you not to do so.
- **Take nitroglycerin, if prescribed.** If you think you're having a heart attack and your doctor has previously prescribed nitroglycerin for you, take it as directed. Don't take anyone else's nitroglycerin.
- **Begin CPR on the person having a heart attack, if directed.** If the person suspected of having a heart attack is unconscious, a 911 dispatcher or another emergency medical specialist may advise you to begin cardiopulmonary resuscitation (CPR). Even if you're not trained, a dispatcher can instruct you in CPR until help arrives. If help from a 911 dispatcher or emergency medical specialist is unavailable, begin CPR. If you don't know CPR, begin pushing hard and fast on the person's chest over the heart — about 100 compressions a minute.

Angina

Angina is a type of chest pain or discomfort caused by reduced blood flow to your heart muscle. Angina may be stable or unstable:

- Stable angina — persistent, recurring chest pain that usually occurs with exertion
- Unstable angina — sudden, new chest pain, or a change in the pattern of previously stable angina, that may signal an impending heart attack

Angina is relatively common, but can be hard to distinguish from other types of chest pain, such as the pain or discomfort of indigestion.

Angina signs and symptoms may include:

- Chest pain or discomfort
- Pain in your arms, neck, jaw, shoulder or back accompanying chest pain
- Nausea
- Fatigue
- Shortness of breath
- Anxiety
- Sweating
- Dizziness

The severity, duration and type of angina can vary. If you have new or changing chest pain, these new or different symptoms may signal a more dangerous form of angina (unstable angina) or a heart attack. If your angina gets worse or changes, becoming unstable, seek medical attention immediately.

Pulmonary embolism

Pulmonary embolism occurs when a clot — usually from the veins of your leg or pelvis — lodges in a pulmonary artery of your lung. The lung tissue served by the artery doesn't get enough blood flow, causing tissue death. This makes it more difficult for your lungs to provide oxygen to the rest of your body.

Signs and symptoms of pulmonary embolism may include:

- Sudden, sharp chest pain often accompanied by shortness of breath
- Sudden, unexplained shortness of breath, even without pain
- Cough that may produce blood-streaked sputum
- Rapid heartbeat associated with shortness of breath
- Fainting
- Severe anxiety
- Unexplained sweating

Pulmonary embolism can be life-threatening. As with a suspected heart attack, call 911 or emergency medical assistance immediately.

Aortic dissection

An aortic dissection is a serious condition in which a tear develops in the inner layer of the aorta, the large blood vessel branching off the heart. Blood surges through this tear into the middle layer of the aorta, causing the inner and middle layers to separate (dissect). If the blood-filled channel ruptures through the outside aortic wall, aortic dissection is usually fatal.

If you think aortic dissection is the cause of your chest pain, seek emergency medical assistance immediately. Typical signs and symptoms include:

- Sudden severe chest or upper back pain, often described as a tearing, ripping or shearing sensation, that radiates to the neck or down the back
- Loss of consciousness (fainting)
- Shortness of breath
- Sudden difficulty speaking, loss of vision, weakness, or paralysis of one side of your body, such as having a stroke
- Sweating
- Weak pulse in one arm compared with the other

Pneumonia with pleurisy

Frequent signs and symptoms of pneumonia are chest pain accompanied by chills, fever and a cough that may produce bloody or foul-smelling sputum. When pneumonia occurs with an inflammation of the membranes that surround the lung (pleura), you may have considerable chest discomfort when taking a breath or coughing. This condition is called pleurisy.

One sign of pleurisy is that the pain is usually relieved temporarily by holding your breath or putting pressure on the painful area of your chest. This isn't usually true of a heart attack. If you've recently been diagnosed with pneumonia and then start having symptoms of pleurisy, contact your doctor or seek immediate medical attention to

determine the cause of your chest pain. Pleurisy alone isn't a medical emergency, but you shouldn't try to make the diagnosis yourself.

Chest wall pain

One of the most common varieties of harmless chest pain is chest wall pain. One kind of chest wall pain is costochondritis. It causes pain and tenderness in and around the cartilage that connects your ribs to your breastbone (sternum).

In costochondritis, pressing on a few points along the edge of your sternum often results in considerable tenderness in those small areas. If the pressure of a finger causes similar chest pain, it's unlikely that a serious condition, such as a heart attack, is the cause of your chest pain.

Other causes of chest pain include:

- Strained chest muscles from overuse or excessive coughing
- Chest muscle bruising from minor injury
- Short-term, sudden anxiety with rapid breathing
- Peptic ulcer disease
- Pain from the digestive tract, such as esophageal reflux, peptic ulcer pain or gallbladder pain that may feel similar to heart attack symptoms

Child Birth:

Emergency Childbirth

When birth is imminent and medical help is unavailable, it is important to understand the normal course of labor and childbirth. The mother and anyone who is helping can make the birth easier and safer by knowing exactly what is happening and how best to help.

Labor is Divided into Three Stages

First Stage - the womb contracts by itself to open and bring the baby down to the birth canal.

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.

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 calm, relaxing as the contractions come and go and breathing slowly and deeply during the contractions as they become strong.

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 strong 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 noticeable only to the mother, 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. The mother will often make an involuntary, deep grunting, moan with each contraction. The delivery of the baby is now imminent.

What To Do During the 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.

Walking or standing tends to shorten labor, so if that feels comfortable to the mother, let her. Also, if she becomes hungry or thirsty, let her eat or drink small amounts of food, fruit juice, or suck on ice chips.

Don't Leave the Mother Alone

Make no 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), she may tremble, feel panicky or scared, cry or get very cross with her husband and birthing attendants.

She may even announce that she has changed her mind and is not going through with it. At this time she needs plenty of encouragement and assurance that things are proceeding normally and that her feelings are normal.

Birth attendants, the husband, and others present at the labor and birth should have a cheerful, calm appearance. Nervousness, panic, or distressing remarks can have an inhibiting effect on a laboring woman.

Comments on how long the labor is lasting, how pale or tired the woman looks can have a terrible effect on her morale. Even talking quietly can irritate a woman having an intense contraction because it is hard to concentrate on relaxing when there is noise in the room.

Relaxation is very important. A woman's husband or labor coach should instruct her to go limp like a rag doll and breath deeply, making her tummy rise and fall. This is called abdominal breathing. Begin each contraction with a deep breath to keep the tissues (of both mom and baby) oxygenated. Observe the kind of breathing you do when you are nearly asleep and try to simulate it. Help her to relax her hands, face, legs etc. if you see that they are tense. Tenseness in the body fights the contractions and intensifies the sensations of "pain." Relaxation helps a woman to handle the contractions easier and

have a faster labor. Sometimes a woman will breathe too fast and get tingling sensations in her hands and feet. She needs to be coached to slow down her breathing. You can have her follow your breathing until the tingling goes away.

Firm hand pressure on the lower back by those attending the mother may help to relieve the back ache. 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 will soon enter the birth canal, and there will be a vocalized catch in the mother's breathing when she has a contraction. The will signal the onset of the second stage.

Second Stage

The contractions of the second stage are often of a different kind. They may come 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 will help her recover her breath. She should then rest until the next contraction. She may even sleep between contractions.

Some 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 baby. (Possible respiratory and cardiac resuscitation for the baby and hemorrhage control and prevention of shock for the mother may be needed).
2. Discourage 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 nothing else 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 the 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 is coming down the birth canal, keep the perineum red or pink by massaging with warm olive oil (if none is available simply massage the area with your hand). Any place that gets white will tear more easily so keep massaging and keep all areas red. Use olive oil on the inside too and pay special attention to the area at the bottom, as that is the most common place to tear. Do this massage during a contraction when it will not be noticed or it may irritate some women.

You can support under the perineum with your hand on top of a sterile gauze pad or washcloth. Do not hold it together, just support it so the baby's head can ease out. The other hand can gently press with the fingers around the baby's head so it won't pop out too fast causing tearing. As the baby's head is born, support it with your hand so the face doesn't sit in a puddle of amniotic fluid. Gently wipe the face with a clean or sterile washcloth. Check quickly around the neck for the cord. If you feel it, just hook it with your finger and pull it around the baby's head. Check again. Some are wrapped more than once. If the cord is so tight it cannot be slipped over the baby's head, just wait until the baby is born to untangle it. Most cords are long enough to permit this. IF the cord is too short to permit the baby to be born, it has to be cut and clamped and the baby delivered rapidly. In this situation the baby may be in distress because the oxygen supply was cut off prematurely. With the next contraction, one of the shoulders comes and then the whole body slips quickly out. IF several contractions have passed without a shoulder coming, you may have to slip two fingers in and try to find an armpit. With one or two fingers hooked under the armpit, try to rotate the shoulder counterclockwise while pulling out. Usually this does it.

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, support the head in an upward position. As the 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. 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--20 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 minutes 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. These actions will cause it to contract and lessen the chances of bleeding.

If hemorrhaging occurs, do the following:

1. The uterus should be gently massaged to keep it hard.
2. The woman should lie flat, and the bottom of the bed should be elevated.
3. Put a cold pack (such as a small towel dipped in cold water and wrung out) on the lower tummy to irritate the uterus to contract.
4. Put pressure on the perineum with several sanitary napkins and the pressure of your hand.
5. Most importantly, have the baby nurse. Sucking stimulates the uterus to contract.

Another problem to be alert for is shock. Symptoms of shock are vacant eyes, dilated pupils, pale and cold or clammy skin, faint and rapid pulse, shallow and irregular breathing, dizziness and vomiting. If you notice any of these symptoms, keep the woman warm, slightly elevate her feet and legs, use soft lights, and talk softly and calmly to her.

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. The cord should not be cut until it quits pulsating so the baby can have a transition time before he absolutely has to breathe on his own. As long as the cord is pulsating, the baby is still receiving oxygen from his mother.

If the cord is long enough, the baby can be put on his mother's tummy so she can hold him and talk to him. If not, the father should touch him and talk to him. After the cord has stopped pulsating and has become limp it can be clamped or tied about one inch from the baby's tummy with a cord or sterile cloth and then cut.

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.

Never pull on the cord. When the placenta appears, grasp 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 around birth 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.

The mother will probably need light nourishment and will wish to rest and watch her baby. She should keep her hand 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 the mothers recover quickly. It is very important when assisting with an emergency delivery that you continually reassure the mother and attempt to keep her calm.

Choking:

Choking occurs when a foreign object becomes lodged in the throat or windpipe, blocking the flow of air. In adults, a piece of food often is the culprit. Young children often swallow small objects. Because choking cuts off oxygen to the brain, administer first aid as quickly as possible.

The universal sign for choking is hands clutched to the throat. If the person doesn't give the signal, look for these indications:

- Inability to talk
- Difficulty breathing or noisy breathing
- Inability to cough forcefully
- Skin, lips and nails turning blue or dusky
- Loss of consciousness

If choking is occurring:

Perform abdominal thrusts (Heimlich maneuver) on someone else:

- **Stand behind the person.** Wrap your arms around the waist. Tip the person forward slightly.
- **Make a fist with one hand.** Position it slightly above the person's navel.
- **Grasp the fist with the other hand.** Press hard into the abdomen with a quick, upward thrust — as if trying to lift the person up.
- **Perform a total of 5 abdominal thrusts,** if needed. If the blockage still isn't dislodged, repeat the five-and-five cycle.

If you're the only rescuer, perform abdominal thrusts before calling 911 or your local emergency number for help. If another person is available, have that person call for help while you perform first aid.

If the person becomes unconscious, perform standard CPR with chest compressions and rescue breaths.

To perform abdominal thrusts (Heimlich maneuver) on yourself:

First, if you're alone and choking and you have a landline phone, call 911 or your local emergency number immediately. Then, although you'll be unable to effectively deliver back blows to yourself, you can still perform abdominal thrusts to dislodge the item.

- **Place a fist** slightly above your navel.
- **Grasp your fist** with the other hand and bend over a hard surface — a countertop or chair will do.
- **Shove your fist** inward and upward.

Clearing the airway of a pregnant woman or obese person:

- **Position your hands a little bit higher** than with a normal Heimlich maneuver, at the base of the breastbone, just above the joining of the lowest ribs.
- **Proceed as with the Heimlich maneuver**, pressing hard into the chest, with a quick thrust.
- **Repeat** until the food or other blockage is dislodged or the person becomes unconscious.

Clearing the airway of an unconscious person:

- **Lower the person** on his or her back onto the floor.
- **Clear the airway.** If there's a visible blockage at the back of the throat or high in the throat, reach a finger into the mouth and sweep out the cause of the blockage. Be careful not to push the food or object deeper into the airway, which can happen easily in young children.
- **Begin cardiopulmonary resuscitation (CPR)** if the object remains lodged and the person doesn't respond after you take the above measures. The chest compressions used in CPR may dislodge the object. Remember to recheck the mouth periodically.

Clearing the airway of a choking infant younger than age 1:

- **Assume a seated position and hold the infant facedown** on your forearm, which is resting on your thigh.
- **Thump the infant gently but firmly** five times on the middle of the back using the heel of your hand. The combination of gravity and the back blows should release the blocking object.
- **Hold the infant faceup on your forearm** with the head lower than the trunk if the above doesn't work. Using two fingers placed at the center of the infant's breastbone, give five quick chest compressions.
- **Repeat the back blows and chest thrusts** if breathing doesn't resume. Call for emergency medical help.
- **Begin infant CPR** if one of these techniques opens the airway but the infant doesn't resume breathing.

If the child is older than age 1, give abdominal thrusts only.

To prepare yourself for these situations, learn the Heimlich maneuver and CPR in a certified first-aid training course.

Cholera:

Cholera is a severe diarrheal disease that is deadly without treatment. Thanks to modern hygienic advances, such as clean sanitation systems and drinking water, the disease is rare in the US and other developed countries. Cholera remains a huge public health problem in countries where hygienic practices and sanitation systems are not established. For example, the cholera epidemic in parts of Africa has been ongoing for more than 30 years, due to inadequate sanitation and water treatment systems. Cholera is a major problem in refugee camps and temporary shelters after disasters. For this reason it has been included in this Emergency Plan.

How it spreads: Transmission usually results from consuming water that is contaminated with feces from an infected person. Consumption of cholera can happen through drinking contaminated water or eating foods that have been washed with or made with contaminated water. This kind of water-borne transmission is common in areas with poor sewage systems and unclean drinking water. Foodborne transmission may also occur when an individual eats raw or undercooked shellfish. For example, people in the US have occasionally contracted cholera from eating undercooked shellfish from the Gulf of Mexico. Person-to-person transmission is unlikely.

Symptoms: Within 6 hours to 5 days of exposure, symptoms range from being mild or asymptomatic to severe disease, characterized by huge volumes of explosive watery diarrhea (sometimes called "rice water stools" because of the similarity of appearance to water that has been used to wash rice), vomiting, and leg cramps. Due to rapid loss of fluids (up to 20 liters daily), severe dehydration and shock can occur in these individuals. Signs of dehydration include loss of skin plasticity, sunken eyes, fast heartbeat, low blood pressure, and rapid weight loss. Shock occurs as a result of collapse of the circulatory system.

Prognosis: Most infections are not severe, with 75% of infected people not showing any symptoms. However, these individuals continue to shed the bacteria back into the environment, potentially infecting others with severe cholera disease. In these individuals, the large volume of diarrhea helps to wash out the bacteria, allowing the infection to resolve spontaneously. However, because of severe dehydration, fatality rates are high (25 to 50%) when untreated, especially among children and infants. Death can occur in otherwise healthy adults within hours. Those who recover usually have long-term immunity against reinfection.

Treatment, See Oral Rehydration Therapy: Because death from cholera is a consequence of dehydration, the disease is treated using oral rehydration therapy (ORT), which consists of large volumes of water mixed with a blend of sugar and salts. Prepackaged mixtures are commercially available, but wide distribution in developing countries is limited by cost. Therefore, homemade ORT recipes using common household ingredients and materials have been developed. Severe cases of cholera require intravenous fluid replacement. Antibiotics can shorten illness, but ORT is still necessary even when antibiotics are used. **Do not use anti-diarrheal medicines, since they prevent flushing of the bacteria out of the body.**

Prevention: The CDC recommends to "Boil it, cook it, peel it, or forget it". Individuals living or traveling to places where cholera is found should drink boiled or chlorine- or iodine-treated water or bottled beverage. Foods should be thoroughly cooked, and individuals should peel their own fruits. Also, avoid ice, raw foods, and ice cream. Be wary of foods and beverages from street vendors.

Corneal abrasion (scratch):

The most common types of eye injuries involve the cornea — the clear, protective "window" at the front of your eye. Contact with dust, dirt, sand, wood shavings, metal particles or even the edge of a piece of paper can scratch or cut the cornea. Usually the scratch is superficial, and this is called a corneal abrasion. Some corneal abrasions become infected and result in a corneal ulcer, which is a serious problem. Corneal abrasions caused by plant matter (such as a pine needle) can cause a delayed inflammation inside the eye (iritis).

Corneal abrasions can be painful. If your cornea is scratched, you might feel like you have sand in your eye. Tears, blurred vision, increased sensitivity or redness around the eye can suggest a corneal abrasion. You may get a headache.

In case of corneal abrasion, seek prompt medical attention. Other immediate steps you can take for a corneal abrasion are to:

- **Rinse your eye with clean water (use a saline solution, if available).** You can use an eyecup or small, clean drinking glass positioned with its rim resting on the bone at the base of your eye socket. If your work site has an eye-rinse station, use it. Rinsing the eye may wash out a foreign object.
- **Blink several times.** This movement may remove small particles of dust or sand.
- **Pull the upper eyelid over the lower eyelid.** The lashes of your lower eyelid can brush away a foreign object from the undersurface of your upper eyelid.

Take caution to avoid certain actions that may aggravate the injury:

- **Don't try to remove an object** that's embedded in your eyeball. Also avoid trying to remove a large object that makes closing the eye difficult.
- **Don't rub your eye after an injury.** Touching or pressing on your eye can worsen a corneal abrasion.
- **Don't touch your eyeball** with cotton swabs, tweezers or other instruments. This can aggravate a corneal abrasion.

Uncomplicated corneal abrasions usually heal spontaneously within 24 to 48 hours.

Cuts and scrapes:

Minor cuts and scrapes usually don't require a trip to the emergency room. Yet proper care is essential to avoid infection or other complications. These guidelines can help you care for simple wounds:

1. **Stop the bleeding.** Minor cuts and scrapes usually stop bleeding on their own. If they don't, apply gentle pressure with a clean cloth or bandage. Hold the pressure continuously for 20 to 30 minutes and if possible elevate the wound. Don't keep checking to see if the bleeding has stopped because this may damage or dislodge the clot that's forming and cause bleeding to resume. If blood spurts or continues flowing after continuous pressure, seek medical assistance.

2. **Clean the wound.** Rinse out the wound with clear water. Soap can irritate the wound, so try to keep it out of the actual wound. If dirt or debris remains in the wound after washing, use tweezers cleaned with alcohol to remove the particles. If debris still remains, see your doctor. Thorough cleaning reduces the risk of infection and tetanus. To clean the area around the wound, use soap and a washcloth. There's no need to use hydrogen peroxide, iodine or an iodine-containing cleanser.
3. **Apply an antibiotic.** After you clean the wound, apply a thin layer of an antibiotic cream or ointment such as Neosporin or Polysporin to help keep the surface moist. The products don't make the wound heal faster, but they can discourage infection and help your body's natural healing process. Certain ingredients in some ointments can cause a mild rash in some people. If a rash appears, stop using the ointment.
4. **Cover the wound.** Bandages can help keep the wound clean and keep harmful bacteria out. After the wound has healed enough to make infection unlikely, exposure to the air will speed wound healing.
5. **Change the dressing.** Change the dressing at least daily or whenever it becomes wet or dirty. If you're allergic to the adhesive used in most bandages, switch to adhesive-free dressings or sterile gauze held in place with paper tape, gauze roll or a loosely applied elastic bandage. These supplies generally are available at pharmacies.
6. **Get stitches for deep wounds.** A wound that is more than 1/4-inch (6 millimeters) deep or is gaping or jagged edged and has fat or muscle protruding usually requires stitches. Adhesive strips or butterfly tape may hold a minor cut together, but if you can't easily close the wound, see your doctor as soon as possible. Proper closure within a few hours reduces the risk of infection.
7. **Watch for signs of infection.** See your doctor if the wound isn't healing or you notice any redness, increasing pain, drainage, warmth or swelling.
8. **Get a tetanus shot.** Doctors recommend you get a tetanus shot every 10 years. If your wound is deep or dirty and your last shot was more than five years ago, your doctor may recommend a tetanus shot booster. Get the booster as soon as possible after the injury.

Diabetic Emergencies

Sugar is required in the body for nourishment. Insulin is a hormone that helps the body use the sugar. When the body does not produce enough Insulin, body cells do not get the needed nourishment and diabetes results.

People with this condition take Insulin to keep their diabetes under control.

Diabetics are subject to two very different types of emergencies:

Insulin Reaction (or Insulin Shock)

This condition occurs when there is TOO MUCH INSULIN in the body. This condition rapidly reduces the level of sugar in the blood and brain cells suffer. Insulin reaction can be caused by taking too much medication, by failing to eat, by heavy exercise and by emotional factors.

SIGNS & SYMPTOMS: Fast breathing, fast pulse, dizziness, weakness, change in the level of consciousness, vision difficulties, sweating, headache, numb hands or feet, and hunger.

Diabetic Coma

This condition occurs when there is TOO MUCH SUGAR and too little INSULIN in the blood and body cells do not get enough nourishment.

Diabetic coma can be caused by eating too much sugar, by not taking prescribed medications, by stress and by infection.

SIGNS AND SYMPTOMS: Diabetic coma develops more slowly than Insulin shock, sometimes over a period of days. Signs and symptoms include drowsiness, confusion, deep and fast breathing, thirst, dehydration, fever, a change in the level of consciousness and a peculiar sweet or fruity-smelling breath.

First Aid for Insulin Reaction and Diabetic Coma

Looking for the signs and symptoms listed above will help to distinguish the two diabetic emergencies. In addition, if the patient is conscious, you can ask two very important questions which will help determine the nature of the problem:

- ASK "HAVE YOU EATEN TODAY?"

Someone who has eaten, but has not taken prescribed medication may be in a diabetic coma.

- ASK "HAVE YOU TAKEN YOUR MEDICATION TODAY?"

Someone who has not eaten, but did take their medication, may be having an Insulin reaction.

DISTINGUISHING BETWEEN THE TWO TYPES OF DIABETIC EMERGENCIES CAN BE DIFFICULT.

(Always look for an identifying bracelet which may reveal a person's condition)

OF THE TWO CONDITIONS, INSULIN SHOCK IS A TRUE EMERGENCY WHICH REQUIRES PROMPT ACTION!

A PERSON IN INSULIN SHOCK NEEDS SUGAR, QUICKLY! IF THE PERSON IS CONSCIOUS, GIVE SUGAR IN ANY FORM: CANDY, FRUIT JUICE OR A SOFT DRINK!

SUGAR GIVEN TO A PERSON IN INSULIN SHOCK CAN BE LIFE-SAVING! IF THE PERSON IS SUFFERING FROM DIABETIC COMA, THE SUGAR IS NOT REQUIRED BUT WILL NOT CAUSE THEM FURTHER HARM.

Dislocation:

A dislocation is an injury in which the ends of your bones are forced from their normal positions. The cause is usually trauma resulting from a fall, an auto accident or a collision during contact or high-speed sports.

In adults, the most common site of dislocation is the shoulder. In children, it's the elbow. Dislocation usually involves the body's larger joints. Because of its position on the hand, however, your thumb is also vulnerable if forcibly bent the wrong way.

The injury will temporarily deform and immobilize your joint and may result in sudden and severe pain and swelling. A dislocation requires prompt medical attention to return your bones to their proper positions.

If you believe you have dislocated a joint:

1. **Don't delay medical care.** Get medical help immediately.
2. **Don't move the joint.** Until you receive help, splint the affected joint into its fixed position. Don't try to move a dislocated joint or force it back into place. This can damage the joint and its surrounding muscles, ligaments, nerves or blood vessels.
3. **Put ice on the injured joint.** This can help reduce swelling by controlling internal bleeding and the buildup of fluids in and around the injured joint.

Electrical burns:

An electrical burn may appear minor or not show on the skin at all, but the damage can extend deep into the tissues beneath your skin. If a strong electrical current passes through your body, internal damage, such as a heart rhythm disturbance or cardiac arrest, can occur. Sometimes the jolt associated with the electrical burn can cause you to be thrown or to fall, resulting in fractures or other associated injuries.

Call 911 or your local emergency number for assistance if the person who has been burned is in pain, is confused, or is experiencing changes in his or her breathing, heartbeat or consciousness.

While helping someone with an electrical burn and waiting for medical help, follow these steps:

1. **Look first. Don't touch.** The person may still be in contact with the electrical source. Touching the person may pass the current through you.
2. **Turn off the source of electricity if possible.** If not, move the source away from both you and the injured person using a dry, nonconducting object made of cardboard, plastic or wood.
3. **Check for signs of circulation (breathing, coughing or movement).** If absent, begin cardiopulmonary resuscitation (CPR) immediately.
4. **Prevent shock.** Lay the person down with the head slightly lower than the trunk, if possible, and the legs elevated.
5. **Cover the affected areas.** If the person is breathing, cover any burned areas with a sterile gauze bandage, if available, or a clean cloth. Don't use a blanket or towel, because loose fibers can stick to the burns.
6. **Treat as a typical burn.** See Burns.

Electrical shock:

The danger from an electrical shock depends on the type of current, how high the voltage is, how the current traveled through the body, the person's overall health and how quickly the person is treated.

Call 911 or your local emergency number immediately if any of these signs or symptoms occur:

- Cardiac arrest
- Heart rhythm problems (arrhythmias)
- Respiratory failure
- Muscle pain and contractions
- Burns
- Seizures
- Numbness and tingling
- Unconsciousness

While waiting for medical help, follow these steps:

- **Look first. Don't touch.** The person may still be in contact with the electrical source. Touching the person may pass the current through you.
- **Turn off the source of electricity, if possible.** If not, move the source away from you and the person, using a dry, nonconducting object made of cardboard, plastic or wood.
- **Check for signs of circulation (breathing, coughing or movement).** If absent, begin cardiopulmonary resuscitation (CPR) immediately.
- **Prevent shock.** Lay the person down and, if possible, position the head slightly lower than the trunk with the legs elevated.

After coming into contact with electricity, the person should see a doctor to check for internal injuries, even if he or she has no obvious signs or symptoms.

Caution

- **Don't touch the person with your bare hands** if he or she is still in contact with the electrical current.
- **Don't get near high-voltage wires** until the power is turned off. Stay at least 20 feet away — farther if wires are jumping and sparking.
- **Don't move a person** with an electrical injury unless the person is in immediate danger.

Fainting:

Fainting occurs when the blood supply to your brain is momentarily inadequate, causing you to lose consciousness. This loss of consciousness is usually brief. Fainting can have no medical significance, or the cause can be a serious disorder. Therefore, treat loss of consciousness as a medical emergency until the signs and symptoms are relieved and the cause is known. Discuss recurrent fainting spells with your doctor.

If you feel faint

- **Lie down or sit down.** To reduce the chance of fainting again, don't get up too quickly.
- **Place your head between your knees** if you sit down.

If someone else faints

- **Position the person on his or her back.** If the person is breathing, restore blood flow to the brain by raising the person's legs above heart level — about 12 inches (30 centimeters) — if possible. Loosen belts, collars or other constrictive clothing. To reduce the chance of fainting again, don't get the person up too quickly. If the

person doesn't regain consciousness within one minute, call 911 or your local emergency number.

- **Check the person's airway to be sure it's clear.** Watch for vomiting.
- **Check for signs of circulation (breathing, coughing or movement).** If absent, begin CPR. Call 911 or your local emergency number. Continue CPR until help arrives or the person responds and begins to breathe.

If the person was injured in a fall associated with a faint, treat any bumps, bruises or cuts appropriately. Control bleeding with direct pressure.

Fever:

Fever is a sign of a variety of medical conditions, including infection. Your normal temperature may differ slightly from the average body temperature of 98.6 F (37 C). For young children and infants, even slightly elevated temperatures may indicate a serious infection. In newborns, either a subnormal temperature or a fever may be a sign of serious illness. For adults, a fever usually isn't dangerous until it reaches 103 F (39.4 C) or higher.

Don't treat fevers below 102 F (38.9 C) with any medications unless your doctor tells you to. If you have a fever of 102 F (38.9 C) or higher, your doctor may suggest taking an over-the-counter medication, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin, others).

Adults also may use aspirin, but don't give aspirin to children. It may trigger a rare, but potentially fatal, disorder known as Reye's syndrome. Also, don't give ibuprofen to infants younger than 6 months of age.

Fahrenheit-Celsius conversion table	
°F	°C
105	40.6
104	40.0
103	39.4
102	38.9
101	38.3
100	37.8
99	37.2
98	36.7
97	36.1
96	35.6

How to take a temperature

Today most thermometers have digital readouts. Some take the temperature quickly from the ear canal and can be especially useful for young children and older adults. Other thermometers can be used rectally, orally or under the arm.

If you use a digital thermometer, be sure to read the instructions so that you know what the beeps mean and when to read the thermometer. Under normal circumstances, temperatures tend to be highest around 4 p.m. and lowest around 4 a.m.

Because of the potential for mercury exposure or ingestion, glass mercury thermometers have been phased out and are no longer recommended.

Rectally (for infants)

To take your child's temperature rectally:

- Place a dab of petroleum jelly or other lubricant on the bulb.
- Lay your child on his or her stomach.
- Carefully insert the bulb one-half inch to one inch into the rectum.
- Hold the bulb and child still for three minutes. To avoid injury, don't let go of the thermometer while it's inside your child.
- Remove the thermometer and read the temperature as recommended by the manufacturer.

Taking a rectal temperature is also an option for older adults when taking an oral temperature is not possible.

A rectal temperature reading is generally 1 degree Fahrenheit (about 0.5 degree Celsius) higher than an oral reading.

Orally

To take your temperature orally:

- Place the bulb under your tongue
- Close your mouth for the recommended amount of time, usually three minutes

Under the arm (axillary)

Although it's not the most accurate way to take a temperature, you can also use an oral thermometer for an armpit reading:

- Place the thermometer under your arm with your arm down.
- Hold your arms across your chest.
- Wait five minutes or as recommended by your thermometer's manufacturer.
- Remove the thermometer and read the temperature.

To take your child's axillary temperature, have the child sit in your lap, facing to the side. Place the thermometer under your child's near arm, which should be against your chest.

An axillary reading is generally 1 degree Fahrenheit (about 0.5 degree Celsius) lower than an oral reading.

Get medical help for a fever if:

- A baby younger than 3 months has a rectal temperature of 100.4 F (38 C) or higher, even if your baby doesn't have other signs or symptoms
- A baby older than 3 months has a temperature of 102 F (38.9 C) or higher
- A newborn has a lower than normal temperature — less than 97 F (36.1 C) rectally
- A child younger than age 2 has a fever longer than one day, or a child age 2 or older has a fever longer than three days
- An adult has a temperature of more than 103 F (39.4 C) or has had a fever for more than three days

Call your doctor immediately if your child has a fever after being left in a hot car or if a child or adult has any of these signs or symptoms with a fever:

- A severe headache
- Severe swelling of the throat
- Unusual skin rash
- Unusual eye sensitivity to bright light
- A stiff neck and pain when the head is bent forward

- Mental confusion
- Persistent vomiting
- Difficulty breathing or chest pain
- Extreme listlessness or irritability
- Abdominal pain or pain when urinating
- Other unexplained symptoms

Food-borne illness:

All foods naturally contain small amounts of bacteria. But poor handling of food, improper cooking or inadequate storage can result in bacteria multiplying in large enough numbers to cause illness. Parasites, viruses, toxins and chemicals also can contaminate food and cause illness.

Signs and symptoms of food poisoning vary with the source of contamination, and whether you're dehydrated or have low blood pressure. Generally they include:

- Diarrhea
- Nausea
- Abdominal pain
- Vomiting (sometimes)
- Dehydration (sometimes)

With significant dehydration, you might feel:

- Lightheaded or faint, especially on standing
- A rapid heartbeat

Whether you become ill after eating contaminated food depends on the organism, the amount of exposure, your age and your health. High-risk groups include:

- **Older adults.** As you get older, your immune system may not respond as quickly and as effectively to infectious organisms as when you were younger.
- **Infants and young children.** Their immune systems haven't fully developed.
- **People with chronic diseases.** Having a chronic condition, such as diabetes or AIDS, or receiving chemotherapy or radiation therapy for cancer reduces your immune response.

If you develop food poisoning:

- Rest and drink plenty of liquids. **See Oral Rehydration Solutions.**
- Don't use anti-diarrheal medications because they may slow elimination of bacteria from your system.

Foodborne illness often improves on its own within 48 hours. Call your doctor if you feel ill for longer than two or three days or if blood appears in your stools.

Call 911 or call for emergency medical assistance if:

- You have severe symptoms, such as watery diarrhea that turns very bloody within 24 hours.
- You belong to a high-risk group.
- You suspect botulism poisoning. Botulism is a potentially fatal food poisoning that results from the ingestion of a toxin formed by certain spores in food. Botulism toxin is most often found in home-canned foods, especially green beans and tomatoes. Signs and symptoms of botulism usually begin 12 to 36 hours after

eating the contaminated food and may include headache, blurred vision, muscle weakness and eventual paralysis. Some people also have nausea and vomiting, constipation, urinary retention, difficulty breathing, and dry mouth. These signs and symptoms require immediate medical attention.

See Also Gastroenteritis (Vomiting, or Diarrhea), Cholera, and Oral Rehydration Solutions.

Fractures (broken bones):

A fracture is a broken bone. It requires medical attention. If the broken bone is the result of major trauma or injury, call 911 or your local emergency number. Also call for emergency help if:

- The person is unresponsive, isn't breathing or isn't moving. Begin cardiopulmonary resuscitation (CPR) if there's no respiration or heartbeat.
- There is heavy bleeding.
- Even gentle pressure or movement causes pain.
- The limb or joint appears deformed.
- The bone has pierced the skin.
- The extremity of the injured arm or leg, such as a toe or finger, is numb or bluish at the tip.
- You suspect a bone is broken in the neck, head or back.
- You suspect a bone is broken in the hip, pelvis or upper leg (for example, the leg and foot turn outward abnormally).

Don't move the person except if necessary to avoid further injury. Take these actions immediately while waiting for medical help:

- **Stop any bleeding.** Apply pressure to the wound with a sterile bandage, a clean cloth or a clean piece of clothing.
- **Immobilize the injured area.** Don't try to realign the bone or push a bone that's sticking out back in. If you've been trained in how to splint and professional help isn't readily available, apply a splint to the area above and below the fracture sites. Padding the splints can help reduce discomfort.
- **Apply ice packs to limit swelling and help relieve pain until emergency personnel arrive.** Don't apply ice directly to the skin — wrap the ice in a towel, piece of cloth or some other material.
- **Treat for shock.** If the person feels faint or is breathing in short, rapid breaths, lay the person down with the head slightly lower than the trunk and, if possible, elevate the legs.

Frostbite:

When exposed to very cold temperatures, skin and underlying tissues may freeze, resulting in frostbite. The areas most likely to be affected by frostbite are your hands, feet, nose and ears.

If your skin looks white or grayish-yellow, is very cold and has a hard or waxy feel, you may have frostbite. Your skin may also itch, burn or feel numb. Severe or deep frostbite can cause blistering and hardening. As the area thaws, the flesh becomes red and painful.

Gradually warming the affected skin is key to treating frostbite. To do so:

- **Protect your skin from further exposure.** If you're outside, warm frostbitten hands by tucking them into your armpits. Protect your face, nose or ears by covering the area with dry, gloved hands. Don't rub the affected area and never rub snow on frostbitten skin.
- **Get out of the cold.** Once you're indoors, remove wet clothes.
- **Gradually warm frostbitten areas.** Put frostbitten hands or feet in warm water — 104 to 107.6 F (40 to 42 C). Wrap or cover other areas in a warm blanket. Don't use direct heat, such as a stove, heat lamp, fireplace or heating pad, because these can cause burns before you feel them on your numb skin.
- **Don't walk on frostbitten feet or toes if possible.** This further damages the tissue.
- **If there's any chance the affected areas will freeze again, don't thaw them.** If they're already thawed, wrap them up so that they don't become frozen again.
- **Get emergency medical help.** If numbness or sustained pain remains during warming or if blisters develop, seek medical attention.

Frostbite occurs when the skin and body tissue just underneath it freezes. Your skin becomes very cold, then numb, hard and pale. Frostbite typically affects smaller, more exposed areas of your body, such as your fingers, toes, nose, ears, cheeks and chin.

Frostnip, the first stage of frostbite, irritates the skin but doesn't cause permanent damage. You can treat mild forms of frostbite with first-aid measures, including slowly warming your skin with warm water. Severe frostbite, however, requires medical attention, as it can damage skin, tissues, muscle and bones and lead to complications, such as infection and nerve damage.

Gastroenteritis (Vomiting, or Diarrhea):

Gastroenteritis is an inflammation of your stomach and intestines. Common causes are:

- Viruses.
- Food or water contaminated by bacteria or parasites.
- Reaction to a new food. Young children may develop signs and symptoms for this reason. Infants who are breast-fed may even react to a change in their mothers' diets.
- Side effect from medications.

Characteristic signs and symptoms include:

- Nausea or vomiting
- Diarrhea
- Abdominal cramps
- Low-grade fever (sometimes)

Depending on the cause of the inflammation, symptoms may last from one day to more than a week.

If you suspect gastroenteritis in yourself:

- **Stop eating for a few hours** to let your stomach settle.
- **Drink plenty of liquids**, such as a sports drink or water, to prevent dehydration. If you have trouble tolerating liquids, take them in frequent sips. Make sure that you're urinating normally, and that your urine is light and clear and not dark. Infrequent passage of dark urine is a sign of dehydration. Dizziness and lightheadedness also are signs of dehydration. If any of these symptoms occur and you can't drink enough fluids, seek medical attention.
- **Ease back into eating.** Gradually begin to eat bland, easy-to-digest foods, such as soda crackers, toast, gelatin, bananas, rice and chicken. Stop eating if your nausea returns. Avoid milk and dairy products, caffeine, alcohol, nicotine, and fatty or highly seasoned foods for a few days.
- **Consider acetaminophen** (Tylenol, others) for relief of discomfort, unless you have liver disease.
- **Get plenty of rest.** The illness and dehydration can make you weak and tired.

Get medical help if:

- Vomiting persists more than two days
- Diarrhea persists more than several days
- Diarrhea turns bloody
- Fever is 101 F (38.3 C) or higher
- Lightheadedness or fainting occurs with standing
- Confusion develops
- Worrisome abdominal pain develops

If you suspect gastroenteritis in your child:

- Allow your child to rest.
- When your child's vomiting stops, begin to offer small amounts of an oral rehydration solution (CeraLyte, Enfalyte, Pedialyte). Don't use only water or only apple juice. **See Oral Rehydration Therapy.**
- Gradually introduce bland, easy-to-digest foods, such as toast, rice, bananas and potatoes. Avoid giving your child full-fat dairy products, such as whole milk and ice cream, and sugary foods, such as sodas and candy. These can make diarrhea worse.
- Consider acetaminophen (Tylenol, others) for relief of discomfort, unless your child has liver disease. Don't give your child aspirin.
- If you're breast-feeding, let your baby nurse. If your baby is bottle-fed, offer a small amount of an oral rehydration solution (CeraLyte, Enfalyte, Pedialyte) or regular formula. **See Oral Rehydration Therapy**

Get medical help if your child:

- Becomes unusually drowsy.
- Vomits blood.
- Has bloody diarrhea.
- Shows signs of dehydration, such as dry mouth and skin, marked thirst, sunken eyes, or crying without tears. In an infant, be alert to the soft spot on the top of the head becoming sunken and to diapers that remain dry for more than three hours.
- Is younger than age 2 and has a fever that lasts more than one day or is age 2 or older and has a fever that lasts more than three days.

Head pain:

Most headaches are minor, and you can treat them with a pain reliever. Some head pain, however, signals a dangerous or serious medical problem. Don't ignore unexplained head pain or head pain that steadily worsens.

Get immediate medical attention if your head pain:

- Develops suddenly and severely
- Accompanies a fever; stiff neck; rash; mental confusion; loss of consciousness; seizures; changes in vision, such as blurring or seeing halos around lights; dizziness; weakness or paralysis, such as in the arms or legs; loss of balance; a reddened eye; numbness; or difficulty speaking
- Is severe and follows a recent sore throat or respiratory infection
- Begins or worsens after a head injury, fall or bump
- Is a different type of headache from your usual and you're older than 50
- Progressively worsens over the course of a single day or persists for several days

Head trauma:

Most head trauma involves injuries that are minor and don't require hospitalization. However, call 911 or your local emergency number if any of the following signs or symptoms are apparent.

Adults

- Severe head or facial bleeding
- Bleeding or fluid leakage from the nose or ears
- Severe headache
- Change in level of consciousness for more than a few seconds
- Black-and-blue discoloration below the eyes or behind the ears
- Cessation of breathing
- Confusion
- Loss of balance
- Weakness or an inability to use an arm or leg
- Unequal pupil size
- Slurred speech
- Seizures

Children

- Any of the signs or symptoms for adults
- Persistent crying
- Refusal to eat
- Bulging in the soft spot on the front of the head (infants)
- Repeated vomiting

If severe head trauma occurs

- **Keep the person still.** Until medical help arrives, keep the injured person lying down and quiet, with the head and shoulders slightly elevated. Don't move the person unless necessary, and avoid moving the person's neck. If the person is wearing a helmet, don't remove it.
- **Stop any bleeding.** Apply firm pressure to the wound with sterile gauze or a clean cloth. But don't apply direct pressure to the wound if you suspect a skull fracture.
- **Watch for changes in breathing and alertness.** If the person shows no signs of circulation (breathing, coughing or movement), begin CPR.

Bump on the head: When is it a serious head injury?

Head trauma resulting from play or sporting events is a common concern for parents, but few bumps on the head of this nature result in serious injury.

The forehead and scalp have an abundant blood supply and injury to these areas often results in bleeding under the skin. When the bleeding is restricted to one area, it causes bruising and swelling. Doctors refer to this as a hematoma.

Keep in mind that even a minor head bump can cause a large swelling. And the mechanism of injury — speed, momentum and size of the people (full-grown adolescents versus children), and the forces involved (such as a concrete floor or other hard surface) — may increase the possibility of serious injury.

When to see a doctor

Occasionally, a blow to the head may be severe enough to cause bleeding in or around the brain. This type of bleeding can cause an intracranial hematoma, a serious condition that puts pressure on the brain.

See a doctor within one to two days of a head injury, even if emergency care isn't required.

Seek emergency medical attention if your child experiences:

- Unconsciousness, confusion or disorientation immediately after a head injury or after some time has passed

Also seek emergency attention if your child exhibits the following signs or symptoms following a head injury:

- Persistent or worsening headache
- Imbalance
- Vomiting
- Memory loss
- Mood changes

Heart attack:

Someone having a heart attack may experience any or all of the following:

- Uncomfortable pressure, fullness or squeezing pain in the center of the chest
- Prolonged pain in the upper abdomen
- Discomfort or pain spreading beyond the chest to the shoulders, neck, jaw, teeth, or one or both arms
- Shortness of breath
- Lightheadedness, dizziness, fainting

- Sweating
- Nausea

A heart attack generally causes chest pain for more than 15 minutes, but it can also have no symptoms at all. Many people who experience a heart attack have warning signs hours, days or weeks in advance.

If you or someone else may be having a heart attack

- **Call 911 or your local emergency medical assistance number.** Don't tough out the symptoms of a heart attack for more than five minutes. If you don't have access to emergency medical services, have a neighbor or a friend drive you to the nearest hospital. Drive yourself only as a last resort, if there are absolutely no other options, and realize that it places you and others at risk when you drive under these circumstances.
- **Chew and swallow an aspirin,** unless you're allergic to aspirin or have been told by your doctor never to take aspirin. But seek emergency help first, such as calling 911.
- **Take nitroglycerin,** if prescribed. If you think you're having a heart attack and your doctor has previously prescribed nitroglycerin for you, take it as directed. Do not take anyone else's nitroglycerin, because that could put you in more danger.
- **Begin CPR if the person is unconscious.** If you're with a person who might be having a heart attack and he or she is unconscious, tell the 911 dispatcher or another emergency medical specialist. You may be advised to begin cardiopulmonary resuscitation (CPR). If you haven't received CPR training, doctors recommend skipping mouth-to-mouth rescue breathing and performing only chest compressions (about 100 per minute). The dispatcher can instruct you in the proper procedures until help arrives.

Heat cramps:

Heat cramps are painful, involuntary muscle spasms that usually occur during heavy exercise in hot environments. The spasms may be more intense and more prolonged than are typical nighttime leg cramps. Inadequate fluid intake often contributes to heat cramps. Muscles most often affected include those of your calves, arms, abdominal wall and back, although heat cramps may involve any muscle group involved in exercise.

If you suspect heat cramps:

- Rest briefly and cool down
- Drink clear juice or an electrolyte-containing sports drink
- Practice gentle, range-of-motion stretching and gentle massage of the affected muscle group
- Don't resume strenuous activity for several hours or longer after heat cramps go away
- Call your doctor if your cramps don't go away within one hour or so

Heat exhaustion:

Heat exhaustion is one of the heat-related syndromes, which range in severity from mild heat cramps to heat exhaustion to potentially life-threatening heatstroke. Signs and symptoms of heat exhaustion often begin suddenly, sometimes after excessive exercise, heavy perspiration, and inadequate fluid or salt intake. Signs and symptoms resemble those of shock and may include:

- Feeling faint or dizzy
- Nausea
- Heavy sweating
- Rapid, weak heartbeat
- Low blood pressure
- Cool, moist, pale skin
- Low-grade fever
- Heat cramps
- Headache
- Fatigue
- Dark-colored urine

If you suspect heat exhaustion:

- Get the person out of the sun and into a shady or air-conditioned location.
- Lay the person down and elevate the legs and feet slightly.
- Loosen or remove the person's clothing.
- Have the person drink cool water or other nonalcoholic beverage without caffeine.
- Cool the person by spraying or sponging him or her with cool water and fanning.
- Monitor the person carefully. Heat exhaustion can quickly become heatstroke.

If fever greater than 102 F (38.9 C), fainting, confusion or seizures occur, call 911 or emergency medical help.

Heatstroke:

Heatstroke is the most severe of the heat-related problems, often resulting from exercise or heavy work in hot environments combined with inadequate fluid intake.

Young children, older adults, people who are obese and people born with an impaired ability to sweat are at high risk of heatstroke. Other risk factors include dehydration, alcohol use, cardiovascular disease and certain medications.

What makes heatstroke severe and potentially life-threatening is that the body's normal mechanisms for dealing with heat stress, such as sweating and temperature control, are inadequate. The main sign of heatstroke is a markedly elevated body temperature — generally greater than 104 F (40 C) — with changes in mental status ranging from personality changes to confusion and coma. Skin may be hot and dry — although if heatstroke is caused by exertion, the skin may be moist.

Other signs and symptoms may include:

- Rapid heartbeat
- Rapid and shallow breathing

- Elevated or lowered blood pressure
- Cessation of sweating
- Irritability, confusion or unconsciousness
- Feeling dizzy or lightheaded
- Headache
- Nausea
- Fainting, which may be the first sign in older adults

If you suspect heatstroke:

- Move the person out of the sun and into a shady or air-conditioned space.
- Call 911 or emergency medical help.
- Cool the person by covering him or her with damp sheets or by spraying with cool water. Direct air onto the person with a fan or newspaper.
- Have the person drink cool water or other nonalcoholic beverage without caffeine, if he or she is able.

Hypothermia:

Under most conditions your body maintains a healthy temperature. However, when exposed to cold temperatures, especially with a high wind chill factor and high humidity, or to a cool, damp environment for prolonged periods, your body's control mechanisms may fail to keep your body temperature normal. When more heat is lost than your body can generate, hypothermia, defined as an internal body temperature less than 95 F (35 C), can result.

Wet or inadequate clothing, falling into cold water and even not covering your head during cold weather can increase your chances of hypothermia.

Signs and symptoms include:

- Shivering
- Slurred speech
- Abnormally slow breathing
- Cold, pale skin
- Loss of coordination
- Fatigue, lethargy or apathy
- Confusion or memory loss
- Bright red, cold skin (infants)

Signs and symptoms usually develop slowly. People with hypothermia typically experience gradual loss of mental acuity and physical ability, so they may be unaware that they need emergency medical treatment.

Older adults, infants, young children and people who are very lean are at particular risk. Other people at higher risk of hypothermia include those whose judgment may be impaired by mental illness or Alzheimer's disease and people who are intoxicated, homeless or caught in cold weather because their vehicles have broken down. Other conditions that may predispose people to hypothermia are malnutrition, cardiovascular disease and an underactive thyroid (hypothyroidism).

To care for someone with hypothermia:

- **Call 911 or emergency medical assistance.** While waiting for help to arrive, monitor the person's breathing. If breathing stops or seems dangerously slow or shallow, begin cardiopulmonary resuscitation (CPR) immediately.
- **Move the person out of the cold.** If going indoors isn't possible, protect the person from the wind, cover his or her head, and insulate his or her body from the cold ground.
- **Remove wet clothing.** Replace wet things with a warm, dry covering.
- **Don't apply direct heat.** Don't use hot water, a heating pad or a heating lamp to warm the victim. Instead, apply warm compresses to the center of the body — head, neck, chest wall and groin. Don't attempt to warm the arms and legs. Heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop. This can be fatal.
- **Don't give the person alcohol.** Offer warm nonalcoholic drinks, unless the person is vomiting.
- **Don't massage or rub the person.** Handle people with hypothermia gently; their skin may be frostbitten, and rubbing frostbitten tissue can cause severe damage.

Insect bites and stings:

Signs and symptoms of an insect bite result from the injection of venom or other substances into your skin. The venom causes pain and sometimes triggers an allergic reaction. The severity of the reaction depends on your sensitivity to the insect venom or substance and whether you've been stung or bitten more than once.

Most reactions to insect bites are mild, causing little more than an annoying itching or stinging sensation and mild swelling that disappear within a day or so. A delayed reaction may cause fever, hives, painful joints and swollen glands. You might experience both the immediate and the delayed reactions from the same insect bite or sting. Only a small percentage of people develop severe reactions (anaphylaxis) to insect venom. Signs and symptoms of a severe reaction include:

- Nausea
- Facial swelling
- Difficulty breathing
- Abdominal pain
- Deterioration of blood pressure and circulation (shock)

Bites from bees, wasps, hornets, yellow jackets and fire ants are typically the most troublesome. Bites from mosquitoes, ticks, biting flies, ants, scorpions and some spiders also can cause reactions. Scorpion and ant bites can be very severe. Although rare, some insects also carry disease such as West Nile virus or Lyme disease.

For mild reactions

- **Move to a safe area** to avoid more stings.
- **Remove the stinger**, especially if it's stuck in your skin. This will prevent the release of more venom. Wash the area with soap and water.
- **Apply a cold pack** or cloth filled with ice to reduce pain and swelling.
- **Try a pain reliever**, such as ibuprofen (Advil, Motrin, others) or acetaminophen (Tylenol, others), to ease pain from bites or stings.

- **Apply a topical cream** to ease pain and provide itch relief. Creams containing ingredients such as hydrocortisone, lidocaine or pramoxine may help control pain. Other creams, such as calamine lotion or those containing colloidal oatmeal or baking soda, can help soothe itchy skin.
- **Take an antihistamine** containing diphenhydramine (Benadryl, others) or chlorpheniramine maleate (Chlor-Trimeton, others).

Allergic reactions may include mild nausea and intestinal cramps, diarrhea, or swelling larger than 4 inches (about 10 centimeters) in diameter at the site, bigger than the size of a baseball. See your doctor promptly if you experience any of these signs and symptoms.

For severe reactions

Severe reactions affect more than just the site of the insect bite and may progress rapidly. Call 911 or emergency medical assistance if the following signs or symptoms occur:

- Difficulty breathing
- Swelling of the lips or throat
- Faintness
- Dizziness
- Confusion
- Rapid heartbeat
- Hives
- Nausea, cramps and vomiting

Take these actions immediately while waiting with an affected person for medical help:

1. **Check for medications** that the person might be carrying to treat an allergic attack, such as an autoinjector of epinephrine (EpiPen, Twinject). Administer the drug as directed — usually by pressing the autoinjector against the person's thigh and holding it in place for several seconds. Massage the injection site for 10 seconds to enhance absorption.
2. **Loosen tight clothing** and cover the person with a blanket. Don't give anything to drink.
3. **Turn the person on his or her side** to prevent choking if there's vomiting or bleeding from the mouth.
4. **Begin CPR** if there are no signs of circulation, such as breathing, coughing or movement.

If your doctor has prescribed an autoinjector of epinephrine, read the instructions before a problem develops and also have your household members read them.

Oral Rehydration Solutions:

ORS (oral rehydration salts) is a special combination of dry salts that is mixed with safe water. It can help replace the fluids lost due to diarrhea. A person with diarrhea should receive oral rehydration salts (ORS) solution and a daily zinc supplement for 10–14 days. Diarrhea medicines are generally ineffective and can be harmful.

ORS is a drink made with 6 level teaspoons of sugar and 1/2 level teaspoon of salt dissolved in 1 litre, 4 ¼ cups, of clean water. Be very careful to mix the correct amounts. Too much sugar can make the diarrhea worse. Too much salt can be extremely harmful to the child. Making the mixture a little too diluted (with more than 1 litre of clean water) is not harmful. Wash your hands with soap and water before preparing solution.

Diarrhea usually cures itself in three to four days with rehydration (drinking a lot of liquids). The real danger is the loss of liquid and nutrients from the person's body, which can cause dehydration and malnutrition. A child with diarrhea should never be given any tablets, antibiotics or other medicines unless prescribed by a trained health worker.

The best treatment for diarrhea is to (1) drink lots of liquids and oral rehydration salts (ORS), properly mixed with clean water from a safe source, and (2) take zinc tablets or syrup for 10–14 days.

When should ORS be used? When a child or adult has three or more loose stools in a day, begin to give ORS. In addition, for 10–14 days, give children over 6 months of age 20 milligrams of zinc per day (tablet or syrup); give children under 6 months of age 10 milligrams per day (tablet or syrup).

How much ORS drink to give? Encourage the child to drink as much as possible. A child under the age of 2 years needs at least 1/4 to 1/2 of a large cup of the ORS drink after each watery stool. A child aged 2 years or older needs at least 1/2 to 1 whole large cup of the ORS drink after each watery stool. Continue giving the mixture with the goal of replacing the fluid lost: one cup lost, give a cup. Even if the child is vomiting, the mixture can be offered in small amounts (2-1 tsp.) every few minutes or so. Adults and large children should drink at least 3 quarts or liters of ORS a day until they are well.

Diarrhea usually stops in three or four days. If it does not stop, consult a trained health worker.

One of these drinks should be given to the child every time a watery stool is passed.

Ideally these drinks (preferably those that have been boiled) should contain: starches and/or sugars as a source of glucose and energy, some sodium and preferably some potassium.

The following traditional remedies make highly effective oral rehydration solutions and are suitable drinks to prevent a child from losing too much liquid during diarrhea:

- Breastmilk
- Gruels (diluted mixtures of cooked cereals and water)
- Carrot Soup
- Rice water

If possible, add 1/2 cup orange juice or some mashed banana to improve the taste and provide some potassium. Molasses and other forms of raw sugar can be used instead of white sugar, and these contain more potassium than white sugar.

If none of these drinks is available, other alternatives are:

- Fresh fruit juice

- Weak tea

If nothing else is available, give water from the cleanest possible source (if possible brought to the boil and then cooled).

Appropriate drinks to administer during the home-prepared stage include official ORSs, salted rice water, salted yogurt-based drinks, and vegetable or chicken soup with salt. Clean water should always be used when preparing a solution.

Drinks to be avoided include soft drinks, sweetened fruit drinks, sweetened tea, coffee, and medical tea infusions with diuretic effects due to high sugar content and/or caffeine. In addition, drinks with a high concentration (osmolarity) of sugar can worsen diarrhea as they draw water out of the body and into the intestine

Banana or other non-sweetened mashed fruit can help provide potassium.

For Severe Dehydration: Drink sips of the ORS (or give the ORS solution to the conscious dehydrated person) every 5 minutes until urination becomes normal. (It's normal to urinate four or five times a day.)

Give it slowly, preferably with a teaspoon. If the child vomits it, give it again. The drink should be given from a cup (feeding bottles are difficult to clean properly). Remember to feed sips of the liquid slowly. The body will retain some of the fluids and salts needed even though there is vomiting.

Extra liquids should be given until the diarrhoea has stopped. This will usually take between three and five days.

Poisoning:

Many conditions mimic the signs and symptoms of poisoning, including seizures, alcohol intoxication, stroke and insulin reaction. So look for the signs and symptoms listed below and if you suspect poisoning, call your regional poison control center or, in the United States, the National Poison Control Center at 800-222-1222 before giving anything to the affected person.

Signs and symptoms of poisoning:

- Burns or redness around the mouth and lips, from drinking certain poisons
- Breath that smells like chemicals, such as gasoline or paint thinner
- Burns, stains and odors on the person, on his or her clothing, or on the furniture, floor, rugs or other objects in the surrounding area
- Empty medication bottles or scattered pills
- Vomiting, difficulty breathing, sleepiness, confusion or other unexpected signs

When to call for help:

Call 911 or your local emergency number immediately if the person is:

- Drowsy or unconscious
- Having difficulty breathing or has stopped breathing
- Uncontrollably restless or agitated

- Having seizures

If the person seems stable and has no symptoms, but you suspect poisoning, call your regional poison control center or, in the United States, the National Poison Control Center at 800-222-1222. Provide information about the person's symptoms, the person's age and weight, and any information you have about the poison, such as amount and how long since the person was exposed to it. It helps to have the pill bottle or poison container on hand when you call.

What to do while waiting for help:

- If the person has been exposed to poisonous fumes, such as carbon monoxide, get him or her into fresh air immediately.
- If the person swallowed the poison, remove anything remaining in the mouth.
- If the suspected poison is a household cleaner or other chemical, read the label and follow instructions for accidental poisoning. If the product is toxic, the label will likely advise you to call the poison control center at 800-222-1222. Also call this 800 number if you can't identify the poison, if it's medication or if there are no instructions.
- Follow treatment directions that are given by the poison control center.
- If the poison spilled on the person's clothing, skin or eyes, remove the clothing. Flush the skin or eyes with cool or lukewarm water, such as by using a shower for 20 minutes or until help arrives.
- Make sure the person is breathing. If not, start rescue breathing and CPR.
- Take the poison container (or any pill bottles) with you to the hospital.

What NOT to do

Don't give ipecac syrup or do anything to induce vomiting. The American Academy of Pediatrics advises discarding ipecac in the home, saying there's no good evidence of effectiveness and that it can do more harm than good.

Puncture wounds:

A puncture wound doesn't usually cause excessive bleeding. Often the wound seems to close almost instantly. But this doesn't mean treatment isn't necessary.

A puncture wound — such as from stepping on a nail — can be dangerous because of the risk of infection. Wounds resulting from human or animal bites may be especially prone to infection. If the bite was deep enough to draw blood and bleeding persists, seek medical attention.

Otherwise, follow these steps:

1. **Stop the bleeding.** Apply gentle pressure with a clean cloth or bandage. If bleeding persists after several minutes of pressure, seek emergency assistance.
2. **Clean the wound.** Rinse the wound with clear water. Use tweezers cleaned with alcohol to remove small, superficial particles. If debris remains embedded, see your doctor. Clean the area around the wound with soap and a clean cloth.
3. **Apply an antibiotic.** After you clean the wound, apply a thin layer of an antibiotic cream or ointment.
4. **Cover the wound.** Bandages can help keep the wound clean and keep harmful bacteria out.

5. **Change the bandage regularly.** Do so at least daily or whenever it becomes wet or dirty.
6. **Watch for signs of infection.** See your doctor if the wound doesn't heal or if you notice any redness, drainage, warmth or swelling.

See your doctor if the puncture wound

- Is deep
- Is in your foot
- Has been contaminated with soil or saliva
- Is the result of an animal or human bite

If you haven't had a tetanus shot within five years, your doctor may recommend a booster within 48 hours of the injury.

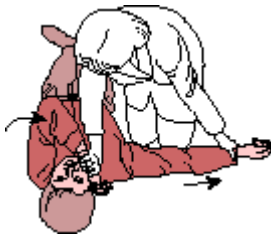
If an animal — especially a stray dog or a wild animal — inflicted the wound, you may have been exposed to rabies. Your doctor may give you antibiotics and suggest starting a rabies vaccination series.

Recovery Position:

Adult Recovery Position

This position helps a semiconscious or unconscious person breathe and permits fluids to drain from the nose and throat so they are not breathed in. If the person is unconscious or semiconscious after you have done everything on the Emergency Checklist (see p. 1189), move the person into the recovery position while waiting for help to arrive.

Do not use the recovery position if the person has a major injury, such as a back or neck injury (see p. 1191)



1. Kneel next to the person. Place the arm closest to you straight out from the body. Position the far arm with the back of the hand against the near cheek.



2. Grab and bend the person's far knee.



3. Protecting the head with one hand, gently roll the person toward you by pulling the far knee over and to the ground.



4. Tilt the head up slightly so that the airway is open. Make sure that the hand is under the cheek. Place a blanket or coat over the person (unless he or she has a heat illness or fever) and stay close until help arrives.

Infant Recovery Position

Place the infant face down over your arm with the head slightly lower than the body. Support the head and neck with your hand, keeping the mouth and nose clear. Wait for help to arrive.



Shock:

Shock may result from trauma, heatstroke, blood loss, an allergic reaction, severe infection, poisoning, severe burns or other causes. When a person is in shock, his or her organs aren't getting enough blood or oxygen, which if untreated, can lead to permanent organ damage or death.

Various signs and symptoms appear in a person experiencing shock:

- **The skin is cool and clammy.** It may appear pale or gray.
- **The pulse is weak and rapid.** Breathing may be slow and shallow, or hyperventilation (rapid or deep breathing) may occur. Blood pressure is below normal.
- **The person may be nauseated.** He or she may vomit.
- **The eyes lack luster and may seem to stare.** Sometimes the pupils are dilated.
- **The person may be conscious or unconscious.** If conscious, the person may feel faint or be very weak or confused. Shock sometimes causes a person to become overly excited and anxious.

If you suspect shock, even if the person seems normal after an injury:

- **Call 911 or your local emergency number.**

- **Have the person lie down** on his or her back with feet about a foot higher than the head. If raising the legs will cause pain or further injury, keep him or her flat. Keep the person still.
- **Check for signs of circulation** (breathing, coughing or movement). If absent, begin CPR.
- **Keep the person warm and comfortable.** Loosen belt and tight clothing and cover the person with a blanket. Even if the person complains of thirst, give nothing by mouth.
- **Turn the person on his or her side** to prevent choking if the person vomits or bleeds from the mouth.
- **Seek treatment for injuries**, such as bleeding or broken bones.

Snakebites:

Most North American snakes aren't poisonous. Some exceptions include the rattlesnake, coral snake, water moccasin and copperhead. Their bite can be life-threatening.

Of the poisonous snakes found in North America, all but the coral snake have slit-like eyes. Their heads are triangular, with a depression, or pit, midway between the eyes and nostrils.

Other characteristics are unique to certain poisonous snakes:

- **Rattlesnakes** rattle by shaking the rings at the end of their tails.
- **Water moccasins'** mouths have a white, cottony lining.
- **Coral snakes** have red, yellow and black rings along the length of their bodies.

To reduce your risk of snakebite, avoid touching any snake. Instead, back away slowly. Most snakes avoid people if possible and bite only when threatened or surprised.

If a snake bites you:

- Remain calm
- Immobilize the bitten arm or leg and stay as quiet as possible to keep the poison from spreading through your body
- Remove jewelry before you start to swell
- Position yourself, if possible, so that the bite is at the level of your heart. Not above or below. This slows the venom from reaching the heart and at the same time slows down the swelling in the bitten limb.
- Cleanse the wound, but don't flush it with water, and cover it with a clean, dry dressing
- Apply a splint to reduce movement of the affected area, but keep it loose enough so as not to restrict blood flow
- Use a compression bandage (Ace bandage) to compress the area above the bite, between the bite and heart, to slow the spread of the poison to vital organs.
- Use of a? Sawyer extractor cup or extractor syringe is highly recommended for initial first-aid and in fact the use of two extractors are advised if there are multiple fang wounds. Extractors can be left in place 30 minutes or more if necessary. It also aids in keeping the venom from spreading by applying a negative pressure against the tissue where the venom was initially deposited and

creates a gradient which favors the movement of venom toward the Sawyer's external collection cup.

- In the absence of an extractor apply hard direct pressure over bite using a 4 x 4 gauze pad folded in half twice. Tape in place with adhesive tape. Soak gauze pad in BetadineT (iodine) solution if available and not allergic to iodines. Strap gauze pad tightly in place with adhesive tape.
- **Don't use the compression bandage as a tourniquet**, which shuts off blood flow and destroys more tissue than the venom
- **Don't apply ice**
- **Don't cut the wound or attempt to remove the venom by mouth**, doesn't work.
- **Don't drink caffeine or alcohol**
- **Don't try to capture the snake**, but try to remember its color and shape so you can describe it, which will help in your treatment

Call 911 or seek immediate medical attention, especially if the area changes color, begins to swell or is painful.

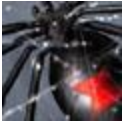
See: <http://www.hitthetrail.com/snakes>

Spider bites:

Only a few spiders are dangerous to humans. Two that are present in the contiguous United States, and more common in the Southern states, are the black widow spider and the brown recluse spider. Both prefer warm climates and dark, dry places where flies are plentiful. They often live in dry, littered, undisturbed areas, such as closets, woodpiles and under sinks.

Most presumed spider bites are actually bites from other bugs. If you suspect you have been bitten by one of these spiders, check to see if the spider lives in your area.

Black widow spider



Although serious, a black widow bite is rarely lethal. You can identify this spider by the red hourglass marking on its belly. The bite feels like a pinprick. You may not even know you've been bitten. At first you may notice slight swelling and faint red marks. Within a few hours, though, intense pain and stiffness begin. Other signs and symptoms include:

- Chills
- Fever
- Nausea and vomiting
- Severe abdominal pain

Brown recluse spider



You can identify this spider by the violin-shaped marking on its back. The bite produces a mild stinging, followed by local redness and intense pain within eight hours. A fluid-filled blister forms at the site and then sloughs off to leave a deep, enlarging ulcer. Reactions from a brown recluse spider bite vary from a mild fever and rash to nausea and listlessness. On rare occasions death results, more often in children.

If bitten by a spider

Try and identify the type of spider that bit you. Clean the site of the spider bite well with soap and water. Apply a cool compress over the spider bite location. If the bite is on an extremity, elevate it. Aspirin or acetaminophen (Tylenol, others) and antihistamines may be used to relieve minor signs and symptoms in adults. Use caution when giving aspirin to children or teenagers. Though aspirin is approved for use in children older than age 2, children and teenagers recovering from chickenpox or flu-like symptoms should never take aspirin. Talk to your doctor if you have concerns.

If bitten by a brown recluse or black widow spider

1. **Cleanse the wound.** Use soap and water to clean the wound and skin around the spider bite.
2. **Slow the venom's spread.** If the spider bite is on an arm or a leg, tie a compression bandage above the bite and elevate the limb to help slow or halt the venom's spread. Ensure that the bandage is not so tight that it cuts off circulation in your arm or leg.
3. **Use a cold cloth at the spider bite location.** Apply a cloth dampened with cold water or filled with ice.
4. **Seek immediate medical attention.** Treatment for the bite of a black widow may require an anti-venom medication. Doctors may treat a brown recluse spider bite with various medications.

Spinal injury:

If you suspect a back or neck (spinal) injury, do not move the affected person. Permanent paralysis and other serious complications can result. Assume a person has a spinal injury if:

- There's evidence of a head injury with an ongoing change in the person's level of consciousness
- The person complains of severe pain in his or her neck or back
- The person won't move his or her neck
- An injury has exerted substantial force on the back or head
- The person complains of weakness, numbness or paralysis or lacks control of his or her limbs, bladder or bowels
- The neck or back is twisted or positioned oddly

If you suspect someone has a spinal injury:

- Call 911 or emergency medical help.
- Keep the person still. Place heavy towels on both sides of the neck or hold the head and neck to prevent movement.
- Provide as much first aid as possible without moving the person's head or neck. If the person shows no signs of circulation (breathing, coughing or movement), begin CPR, but do not tilt the head back to open the airway. Use your fingers to

gently grasp the jaw and lift it forward. If the person has no pulse, begin chest compressions.

- If the person is wearing a helmet, don't remove it.
- If you absolutely must roll the person because he or she is vomiting, choking on blood or in danger of further injury, you need at least one other person. With one of you at the head and another along the side of the injured person, work together to keep the person's head, neck and back aligned while rolling the person onto one side.

Stroke:

A stroke occurs when there's bleeding into your brain or when normal blood flow to your brain is blocked. Within minutes of being deprived of essential nutrients, brain cells start dying — a process that may continue over the next several hours.

Seek immediate medical assistance. A stroke is a true emergency. The sooner treatment is given, the more likely it is that damage can be minimized. Every moment counts.

In the event of a possible stroke, use FAST to help remember warning signs.

- **Face.** Does the face droop on one side trying to smile?
- **Arms.** Is one arm lower when trying to raise both arms?
- **Speech.** Can a simple sentence be repeated? Is speech slurred or strange?
- **Time.** During a stroke every minute counts. If you observe any of these signs, call 911 or your local emergency number immediately

Other signs and symptoms of a stroke include:

- Weakness or numbness on one side of your body including either leg
- Dimness, blurring or loss of vision, particularly in one eye
- Severe headache — a bolt out of the blue — with no apparent cause
- Unexplained dizziness, unsteadiness or a sudden fall, especially if accompanied by any of the other signs or symptoms

Risk factors for stroke include having high blood pressure, having had a previous stroke, smoking, having diabetes and having heart disease. Your risk of stroke increases as you age.

Sucking Chest Wound:

With an open chest wound, the lung is unable to remain expanded.

Place an occlusive patch over the wound, covering it completely and extending 2 inches beyond the wound.

Tape it on three sides.

With each exhale, air in the chest is pushed out from underneath the occlusive patch. With each inhale, the patch sticks to the skin, keeping air from coming back into the chest.

Place a dressing over the patch. Don't make it so tight the person can't breathe.

Roll the person onto the side of the wound while awaiting transport.

If the tape won't stick (because of blood, perspiration or water), hold the occlusive patch in place with a dressing. It won't work as well, but it will work well enough to be helpful.

A sucking chest wound is identified by the sucking or hissing sound made during breathing by the casualty.

With this type of wound, the chest cavity is no longer sealed, allowing air to rush through the wound and into the chest during inhalation. This causes the lung to collapse. This is a life-threatening condition and requires immediate treatment.

Start by uncovering the wound. If the clothing is stuck to the wound or in a chemical environment, then clothing should not be removed. Don't attempt to clean the wound. That will be done later.

Use the person's hand to cover the wound while you quickly prepare an occlusive patch. The plastic bag works very well, although any air-tight material can be substituted, such as:

- Cellophane
- Aluminum foil
- Duct Tape
- Vaseline Gauze

The patch should be large enough to extend 2 inches beyond the edge of the wound. Smaller patches tend to get pulled back into the wound.

Secure the patch to the wound with adhesive tape. Three sides should be taped, while the 4th side is left untapped. Whenever the casualty breaths out (exhales), air is expelled from the chest cavity and escapes from underneath the open edge of the patch. Whenever the casualty breaths in (inhales), the patch sticks to the skin and keeps air from returning into the chest cavity. This helps to re-inflate the collapsed lung.

Place a small battle dressing over the patch, but don't make it so tight that the casualty can't breathe.

Sometimes, you won't have any adhesive tape, or the tape won't stick (blood, water, mud, or perspiration may keep it from sticking). In that case, it is still very helpful to use the patch, held in place by a battle dressing or triangular bandage.

Finally, roll the patient onto the injured side in the recovery position while awaiting transportation.

Tick bites:

Some ticks transmit bacteria that cause illnesses such as Lyme disease or Rocky Mountain spotted fever. Your risk of contracting one of these diseases depends on where you live or travel to, how much time you spend in wooded areas, and how well you protect yourself.

What to do if a tick bites you

- **Remove the tick promptly and carefully.** Use tweezers to grasp the tick near its head or mouth and pull gently to remove the whole tick without crushing it.

- **If possible, seal the tick in a container.** Put the container in your freezer. Your doctor may want to see the tick if you develop signs or symptoms of illness after a tick bite.
- **Use soap and water to wash your hands** and the area around the tick bite after handling the tick.
- **Call your doctor if** you aren't able to completely remove the tick.

See your doctor if you develop:

- A rash
- A fever
- A stiff neck
- Muscle aches
- Joint pain and inflammation
- Swollen lymph nodes
- Flu-like symptoms
- Light sensitivity to the eyes or skin (photosensitivity)

If possible, bring the tick with you to your doctor's appointment.

Call 911 or your local emergency number if you develop:

- A severe headache
- Difficulty breathing
- Paralysis
- Chest pain or heart palpitations

Tooth loss:

If a permanent tooth is knocked out, get emergency dental care. It's sometimes possible to successfully implant permanent teeth that have been knocked out, but only if you follow the steps below immediately — before you see a dentist.

If your tooth is knocked out:

- Handle your tooth by the top or crown only, not the roots.
- Don't rub the tooth or scrape it to remove debris. This damages the root surface, making the tooth less likely to survive.
- Gently rinse your tooth in a bowl of tap water. Don't hold it under running water.
- Try to replace your tooth in the socket. If it doesn't go all the way into place, bite down slowly and gently on gauze or a moistened tea bag to help keep it in place. Hold the tooth in place until you see your dentist.
- If you can't replace your tooth in the socket, immediately place it in some milk, your own saliva or a warm, mild saltwater solution — 1/4 teaspoon salt to 1 quart water (about 1 milliliter of salt to about 1 liter water).
- Get medical attention from a dentist or emergency room immediately.

B. Fire

According to the Red Cross, the third leading cause of accidental death in recent years has been fire. Most of these fires have occurred in the home, which is a particularly dangerous environment. Fire is always a possible danger, and a probable secondary disaster in the event of a major earthquake or flood. It is always important that you follow safety measures for fire prevention, detection, and escape. It is doubly important after an earthquake because regular fire fighters may not be able to get to you in time. Floods and other natural disasters will also spawn a large number of fires because of electrical shorts and severed gas lines.

Prevention

Most accidental fires can be avoided with a little care. Firemen have a saying that "a clean building seldom burns." Good housekeeping is the first line of defense against home fires. Do you practice fireproof housekeeping?

There are several steps a family can take to minimize the possibility of a fire starting in their home and to minimize the effects of a fire should one occur.

- ✓ Install fire extinguishers in danger spots. The hand pump, inexpensive, 5-gallon, water type is preferred. Carbon Tetrachloride and other vaporizing liquid type extinguishers are NOT recommended for use in small enclosed spaces, because of the dangers of poisonous fumes.
- ✓ Make sure fire extinguishers are accessible and maintained.
- ✓ Keep a garden hose near the water faucet at all times, especially in the winter months when fire danger is greatest.
- ✓ Install adequate insulation at all heating locations. This is particularly important around wood and coal-burning stoves.
- ✓ Repair or replace defective or inadequate electrical wiring.
- ✓ Use only the proper size fuses.
- ✓ Replace frayed electrical cords or broken plugs.
- ✓ Do not run cords under rugs or hook cords over nails.
- ✓ Keep electric outlets safely loaded (no overloads). Keep appliances clean and in good repair.
- ✓ Perform required maintenance on heating systems.
- ✓ Dispose of trash immediately.
- ✓ Use only non-flammable cleaning fluids.
- ✓ Keep gasoline and other flammable liquids in tightly- closed metal containers.
- ✓ Do NOT use a combustible liquid to freshen a fire.
- ✓ Keep garage, basement, attic, closets, etc. free of rubbish.
- ✓ Keep the yard and garden well-trimmed (no tall weeds, etc.).
- ✓ Use a fireplace screen.
- ✓ Install a spark arrestor on your chimney.
- ✓ Place curtains and drapes so that they won't blow into flames or touch hot surfaces from stoves, fireplaces, candles, etc.
- ✓ Supervise children playing near an open fire.
- ✓ Store matches in metal containers out of sight and reach of small children.
- ✓ Turn pot handles away from the edge of the stove.

- ✓ Keep important papers and documents in a fire-proof box or safe.
- ✓ Install and maintain home smoke detectors. More lives are saved each year by smoke detectors than all other firefighting tools and equipment combined. A home without one is only inviting trouble or tragedy.
- ✓ Instruct babysitters in fire and other emergency procedures.
- ✓ Post emergency numbers for the fire department on ALL telephones.
- ✓ Each family should have a pre-arranged escape plan for getting out of their home in case of fire. There should be at least two exits from every room (doors or windows).
- ✓ Determine a pre-arranged meeting area that all family members should go to IMMEDIATELY when they leave the home if it is on fire. This could be a tree in the front yard, the neighbor's porch, etc. This will facilitate taking a "head count" and could save the life of a would-be rescuer who returns to a burning building to search for someone who has already gotten out.
- ✓ If a major fire develops near your home, refer to safety rules in Fire: Forest and Wild Land section.

Detection

Statistics show that most FATAL fires occur while the family is sleeping. Smoke and toxic gases are the killers in most home fires rather than flames. Smoke detectors (either ionization types or photo-electric detectors powered by electricity or battery) can alert your family while the fire is still small, which may mean the difference between life and death.

For minimum protection there should be a smoke detector between the bedrooms or sleeping areas and the rest of the house, and/or a smoke detector at the head of each stairway.

The amount of detection equipment needed in your home or apartment will be determined by the size and floor plan of your living space, your life style, and how much money your family is willing to spend. (Your local fire department can give you assistance in planning your fire detection system).

Escape

If you are in a burning building, above all, remain calm. More people are killed each year through foolish actions caused by panic than by actual flames. If a fire does occur, your home might be saved if you know how to fight fires, act promptly, and have on hand some basic firefighting tools. Give detailed firefighting duties to each able family member so that you all learn to work as an efficient team. Be sure everyone in your home understands what starts fires, how they spread, and what can be done to control them. In a major earth quake, neighbors will have to work together to keep fires from spreading. When a fire breaks out evacuate yourself and your family members first, then call the fire department. If there is time and if you have the proper equipment to fight a fire and can do so without endangering yourself you may then begin to fight the fire the best way you can. Keep the following in mind to minimize dangers.

- Before opening an interior door feel the door, or the handle, to see if it is hot. IF hot or warm, do not open it if there is any other means of escape.
- Before opening a door take a deep breath and hold it. Hot air on the other side of the door could sear your lungs causing instant death.
- IF you must open a door, brace your shoulder against it so that you can slam it immediately if the air on the other side is hot.

- Close doors behind you to prevent drafts and to slow the fire spread.
- Crawl along the floor on your stomach because the air will be cooler and fresher there; hot air and poisonous gases will rise.
- If trapped in a burning building do not panic. Stuff drapes or clothing into cracks around the door to prevent smoke from entering your room.
- Open or break the windows at the top to let out smoke and poisonous gases.
- Open or break the window at the bottom and breathe from this point.
- If there is a telephone in the room, call the fire department and report your exact location.
- If at all possible, get out of the building fast. Do not stop to dress, gather pets, valuables, or toys.
- Once out--stay out!! Smoke and toxic gases can kill you in minutes.
- Meet at the established meeting place outside as soon as possible. When two people reach the meeting place, one should leave to notify the fire department. The second should stay to report to the rest of the family that the caller escaped and has gone for help.

Fire Drills

Include fire escape procedures in your family earthquake drill, and hold separate fire drills on other occasions. Give special consideration for the very young, handicapped, and the elderly. Remember that smoke, some toxic gases, and heat rise. You can simulate fire conditions by crawling on hands and knees to the nearest wall and following it around to the door. Keep head about 18 inches from the floor and take short, small breaths while escaping.

Never stand up! Cover mouth with a damp cloth if possible. Teach your family not to open doors if they are hot. Keep doors and windows closed to limit rapid spreading of the fire.

When staying in a hotel or motel, the key to survival is you! Before making reservations ask about fire prevention measures (sprinkler system and smoke detectors). Always know two ways to exit your room and the hotel (do not use the elevator). At first sign of fire, leave as fast as possible, taking room key. If you encounter smoke, take the second exit route or return to your room, close the door and call for help. Be sure to follow the steps outlined above.

For children, a fire drill should be a wise mixture of seriousness and a game--never a scary experience. Children who have had fire drill practice at home will almost automatically do the right thing in a real emergency. Without such practice, they all too often hide under a bed or in a closet, which can mean disaster.

Instruct babysitters on what to do in case of fire.

Fire Extinguishers

There are many types of fire extinguishers. It is best to read the labels and instructions. Not all types of extinguishers can be used on every kind of fire.

Pressurized water extinguishers (Class A) are good for trash, paper, cloth, and wood fires, but are normally not used for flammable liquid (Class B) or electrical (Class C) fires. To extinguish a flammable liquid fire, first smother it. Then use an extinguisher marked for Class B fires. The extinguishing agent should cover the extra flaming liquid surface.

Extra caution must be used when extinguishing electrical fires. Use a Class C extinguisher. This contains a non-conducting extinguishing agent that will prevent the user from getting shocked. A Class ABC extinguisher can be used on all three types of fires.

Care of home firefighting equipment. Keep tools that can be used to fight fire where they can be easily reached. Don't put the garden hose, rake, and shovel out of reach just because the gardening season is over. Check the hose for leaks and damaged connections. Make sure that faucet adapters are where they can be found quickly. Hang a ladder in a convenient location even when it isn't needed for painting or putting up window screens. Inspect the rungs to make sure they are solid and clean.

Store buckets where they can be found when needed and keep them free of trash.

Extinguishing Fires

Under normal conditions, it is best to call the fire department immediately after evacuating the premises. While help is on the way, try to control the spread of the fire yourself if it is safe to do so. Always keep an open escape route between you and the fire. Understanding fire can help a great deal in reducing fears about it. Three things must exist in order for a fire to occur. These are heat, fuel, and air, sometimes represented in a triangle. If any leg of the triangle is removed, there can be no fire. Most fires can be prevented by keeping one side of the triangle away from the other two.

Examples:

- Store flammable liquids away from water heaters, furnaces, and other heat and spark sources. Fuel + Air - No Heat
- Store oily rags in a sealed metal container. Fuel + Heat (spontaneous combustion) No Air.
- Keep old rags, newspapers, and trash away from furnace. Air + Heat - No Fuel
- Most fires can be extinguished by the quickest means possible, using whatever tools are available.

Remember the three basic ways to put out a fire:

- Take away its fuel.
- Take away its air (smother it).
- Take away its heat by cooling it with water.

Know how to fight a fire.

When a fire is noticed, get the building's occupants out first, notify the fire department, then fight the fire. Assume that help will not be available immediately and go to work with whatever equipment is at hand. Don't stop fighting the fire until it is out or until it becomes too big for you.

All fires destroy by heating and burning, but all fires are not put out by using the same method. The method for extinguishing a fire depends on what is burning and what caused it to burn. It is important to know the difference because the wrong method of fighting a fire can increase the danger.

Using water to fight a fire.

The type of water stream that is used on a fire is important, especially when the amount of water available is limited. Water should be applied to the fire as closely as possible. If the fire is small, the best method is for a person to get close enough to use a spray on it. A spray cools the fuel more quickly. A fire that is too hot for close approach

may have to be fought with a solid stream of water. IF this is the case, be sure to keep the stream moving over the base of the fire.

Ordinary combustible fires.

Ordinary combustibles are the materials that are usually found in and around the home such as paper, wood, and cloth. Fires that are burning ordinary combustibles can be put out by cooling or smothering. A stream of water from a garden hose or a fire extinguisher or splashes from a pail of water will cool the burning object so that it will stop.

When using a hose or fire extinguisher, aim the stream at the base of the fire, not at the smoke or flame. Make sure it is completely out and that there are no smoldering embers left to rekindle the fire.

If a person's clothing catches on fire, don't let the victim run but force him onto the ground. Smother the flames with a coat or blanket, or roll the person up in a rug. Simply rolling the victim without a covering will help. Try to prevent the person from inhaling the flames. Immediately treat them for shock and bathe them in cool water. Get medical attention immediately.

To protect a house from catching fire due to flying sparks or heat radiation from another fire, remove all rubbish that is near the house, close the windows, and wet down the house and yard with a hose.

Flammable liquids and gas fires.

Flammable liquids are those liquids which give off flammable vapors, including gasoline, oil, kerosene, and paint. Be very careful when fighting this kind of fire because it is not like an ordinary combustible fire. A flammable liquid fire must be smothered. Use a foam, dry chemical, or carbon dioxide (CO₂) extinguisher.

These fire extinguishers are marked for Class B fires. When using the extinguisher, avoid splattering as this could spread the fire. If the burning liquid is spread out and is not deep, the fire can be put out by throwing sand or dirt on it.

Never use a solid stream of water on this type of fire. The flammable liquid will splatter and will also float on top of the water. The fire will not be smothered and the fire can spread as the water and flammable liquid flow away. A water spray can later be used to cool the fuel and completely extinguish the fire.

If the fire is in a confined area, such as an oil drum, paint bucket, or kitchen skillet, it can be put out by covering the container with a lid. Small cooking fires can be smothered by turning off the gas, covering a pot, closing the oven door, or dousing it with salt or baking soda.

Note: If burning gas is the cause of the fire, turn off the gas supply valve. Don't try to extinguish burning gas without turning off the supply valve, otherwise the result may be an explosion. IF the flow of gas cannot be stopped, allow the gas to continue burning and protect the surroundings. This type of fire is very likely after an earthquake.

Electrical fires are caused by the shorting of electric wires or the overheating of electrical equipment. There is always the danger of electrical shock while fighting this type of fire. First, try to unplug the appliance or shut off the main electric switch at the fuse box. Then fight the fire with dry chemical, carbon dioxide, or any other Class C fire extinguisher. The fire extinguishing agent in these extinguishers will not conduct electricity, and the user will not get an electrical shock. Never use water on an electrical fire unless you are absolutely sure that the power has been shut off; otherwise you can get

a shock that could kill you. Don't turn the power back on or reconnect the appliance until the cause of the fire has been found and corrected.

C. Power Outages

Sudden power outages can be frustrating and troublesome, especially when they last a long time. If a power outage is 2 hours or less, you need not be concerned about losing your perishable foods. For prolonged power outages, though, there are steps you can take to minimize food loss and to keep all members of your household as comfortable as possible.

How do I prepare for a power outage?

- To help preserve your food, keep the following supplies in your home:
- One or more coolers—Inexpensive Styrofoam coolers work well.
- Ice—Surrounding your food with ice in a cooler or in the refrigerator will keep food colder for a longer period of time during a prolonged power outage.
- A digital quick-response thermometer— With these thermometers you can quickly check the internal temperatures of food to ensure they are cold enough to use safely.
- Put together an emergency preparedness kit with these supplies in case of a prolonged or widespread power outage:
- Water—one gallon per person, per day (3- day supply for evacuation, 2-week supply for home)
- Food—non-perishable, easy-to prepare items (3-day supply for evacuation, 2-week supply for home)
- Flashlight (NOTE: Do not use candles during a power outage due to the extreme risk of fire.)
- Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- Extra batteries
- First aid kit
- Medications (7-day supply) and medical items
- Multi-purpose tool
- Sanitation and personal hygiene items
- Copies of personal documents (medication list and pertinent medical information, deed/lease to home, birth certificates, insurance policies)
- Cell phone with chargers
- Family and emergency contact information
- Extra cash
- If someone in your home is dependent on electric-powered, life-sustaining equipment, remember to include backup power in your evacuation plan.
- Keep a non-cordless telephone in your home. It is likely to work even when the power is out.
- Keep your car's gas tank full.

What should I do during a power outage?

- Keep food as safe as possible.
- Keep refrigerator and freezer doors closed as much as possible. First use perishable food from the refrigerator. An unopened refrigerator will keep foods cold for about 4 hours.
- Then use food from the freezer. A full freezer will keep the temperature for about 48 hours (24 hours if it is half full) if the door remains closed.
- Use your non-perishable foods and staples after using food from the refrigerator and freezer.
- If it looks like the power outage will continue beyond a day, prepare a cooler with ice for your freezer items.
- Keep food in a dry, cool spot and keep it covered at all times.

Electrical equipment

- Turn off and unplug all unnecessary electrical equipment, including sensitive electronics.
- Turn off or disconnect any appliances (like stoves), equipment or electronics you were using when the power went out. When power comes back on, surges or spikes can damage equipment.
- Leave one light turned on so you'll know when the power comes back on.
- Eliminate unnecessary travel, especially by car. Traffic lights will be out and roads will be congested.

Using generators safely

- When using a portable generator, connect the equipment you want to power directly to the outlets on the generator. Do not connect a portable generator to a home's electrical system.
- If you are considering getting a generator, get advice from a professional, such as an electrician. Make sure that the generator you purchase is rated for the power that you think you will need.

What should I do when the power comes back on?

- Do not touch any electrical power lines and keep your family away from them. Report downed power lines to the appropriate officials in your area.

Throw out unsafe food.

- Throw away any food that has been exposed to temperatures 40° F (4° C) for 2 hours or more or that has an unusual odor, color or texture. When in doubt, throw it out!
- Never taste food or rely on appearance or odor to determine its safety. Some foods may look and smell fine, but if they have been at room temperature too long, bacteria causing food-borne illnesses can start growing quickly. Some types of bacteria produce toxins that cannot be destroyed by cooking.
- If food in the freezer is colder than 40° F and has ice crystals on it, you can refreeze it.
- If you are not sure food is cold enough, take its temperature with the food thermometer. Throw out any foods (meat, poultry, fish, eggs and leftovers) that have been exposed to temperatures higher than 40° F (4° C) for 2 hours or more, and any food that has an unusual odor, color or texture, or feels warm to touch.

Caution: Carbon Monoxide Kills

- Never use a generator, grill, camp stove or other gasoline, propane, natural gas or charcoal-burning devices inside a home, garage, basement, crawlspace or any partially enclosed area. Locate unit away from doors, windows and vents that could allow carbon monoxide to come indoors.
- The primary hazards to avoid when using alternate sources for electricity, heating or cooking are carbon monoxide poisoning, electric shock and fire.
- Install carbon monoxide alarms in central locations on every level of your home and outside sleeping areas to provide early warning of accumulating carbon monoxide.
- If the carbon monoxide alarm sounds, move quickly to a fresh air location outdoors or by an open window or door.
- Call for help from the fresh air location and remain there until emergency personnel arrive to assist you.

D. Storms, Floods and High Winds

Prepare for High Winds

- Make trees more wind resistant by removing diseased and damaged limbs.
- Move or secure lawn furniture, outdoor decorations or ornaments, trash cans, hanging plants and anything else that can be picked up by wind and become a projectile.
- During the storm, draw blinds and shades over windows. If windows break due to objects blown by the wind, the shades will prevent glass from shattering into your home.

Prepare for Floods

The National Oceanic and Atmospheric Administration (NOAA), through its Weather Service's River Forecast Centers and River District Offices, issues flood forecasts and warnings when rainfall is enough to cause rivers to overflow their banks and when melting snow may combine with rainfall to produce similar effects.

Flood warnings are forecasts of impending floods and are distributed to the public by radio and television and through local government emergency personnel. The warning message indicates the expected severity of flooding (minor, moderate, or major), the affected river or lake, and when and where flooding will begin. Careful preparations and prompt response will reduce property loss and ensure personal safety.

Flash flood warnings are the most urgent type of flood warning issued and are transmitted to the public over radio, television, and by other means established by local needs.

Area radio and television stations usually broadcast the latest flood information and warnings. However, more specific advice and instructions will be given through local media by local government.

Before the Flood

1. Find out if your residence is located in a probable flood plain so you can determine if you may be flooded. This information may be obtained from the local City or County

Engineering Department. Make advance plans (what to do and where to go) for a flood emergency.

2. Keep a stock of food which requires little cooking and no refrigeration; electric power may be interrupted.
3. Keep portable radio, emergency cooking equipment, lights, and flashlights in working order.
4. Keep first aid and critical medical supplies (prescriptions, insulin, etc.) at hand.
5. Keep your automobile fueled; if electrical power is cut off, filling stations may not be able to operate pumps for several days.
6. Keep materials like sandbags, plywood, plastic sheeting, and lumber handy for emergency waterproofing.
7. Keep your insurance policies and a list of personal property in a safe place, such as a safe deposit box. Know the name and location of the agent(s) who issued these policies.
8. Buy flood insurance. Protection against loss due to floods is not covered under a homeowner's policy. You should contact your property/casualty agent or broker about eligibility for flood insurance, which is offered through the National Flood Insurance Program (NfiP). Generally, there is a five-day waiting period for this policy to become effective, so don't wait until the last minute to apply. Generally, any contents contained in a walled and roofed structure can be covered. However, the contents must be insured separately. Flood insurance will not cover such things as gas and liquid storage tanks, landscaping, sidewalks, crops, pollutants, septic tanks, roads, motor vehicles, valuable papers (such as deeds, accounts, currency, etc.), livestock or pets.
9. Protect your valuables by transferring them to floors above projected flood levels and enclose them in polyethylene sacks.
10. Have 72-hour emergency supplies ready, in portable container. Store in location for easy access near main exit of home.
11. Stay tuned to your emergency radio station for instructions. (KNPR-FM 88.9 or KDWN-AM 720 AM).

When You Receive a Flood Warning

1. Store drinking water in closed, clean containers. Water service may be interrupted.
2. If flood is likely, and time permits, move essential items and furniture to upper floors of your house.
3. If time permits, before leaving home, cut off all electric circuits at the fuse panel or disconnect switch. If this is not possible, turn off or disconnect all electrical appliances. Shut off the water service and gas valves in your home. (Before making announcements on shutting off gas valves, company.)
4. Turn off the main water valve to trap the maximum amount of uncontaminated water in your home.
5. If forced or advised to leave your home, move to a safe area before access is cut off by flood water.
6. Take 72-hour emergency kits with you plus extra blankets if possible.

During the Flood

1. Avoid areas subject to sudden flooding.
2. Do not attempt to cross a flowing stream where water is above your knees.
3. Do not attempt to drive over a flooded road. You can be stranded and trapped.

4. If your vehicle stalls, abandon it immediately and seek higher ground. Many people drown while trying to rescue their car.
5. Listen for information on the location of emergency housing and public feeding stations.

After the Flood

1. Do not use fresh food that has come in contact with flood waters.
2. Assume that the water is contaminated and purify it by boiling or use of chemicals until notified by local authorities. Wells should be pumped out and the water tested before drinking.
3. Do not visit disaster areas; your presence will probably hamper rescue and other emergency operations.
4. Do not handle live electrical equipment in wet areas; electrical equipment should be checked and dried before it is returned to service.
5. Use flashlights, not lanterns or torches, to examine buildings; flammable substances may be inside.
6. Report broken utility lines to police, fire, or other appropriate authorities. Telephone numbers of local agencies, as well as emergency numbers for our area, should be published and broadcast by the local media.
7. Keep tuned to radio and television stations for instructions on:
 - where to go to obtain necessary medical care in your area.
 - where to go for emergency assistance such as housing, clothing, food, etc.
 - ways to help yourself and your community recover from the emergency.

E. Pandemic

Pandemic Planning - Home & Family Preparedness

A severe pandemic (defined as a world-wide epidemic) in a vulnerable population, such as the 1918 flu pandemic represents a worst-case scenario for pandemic planning and preparedness.

Communities, individuals, employers, schools, and other organizations are being asked to plan for the use of interventions that will help limit the spread of disease. At this time, there is concern because of continued spread of a highly pathogenic avian influenza (H5N1) virus among animals in Asia, Africa, the Middle East, and Europe which has the potential to significantly threaten human health. If a virus such as H5N1 mutates and spreads easily from one person to another, avian influenza may break out globally. While there are no reports of *sustained* human-to-human transmission of avian influenza, governments and international health agencies are preparing for a possible pandemic. A pandemic can originate from any “unknown” source, such as the H5N1 virus.

General Precautions

Observe general precautions including hand washing, avoiding contact with possibly infected poultry, or consuming undercooked poultry or poultry products.

If one of your family or household members becomes ill, they should be isolated in a separate room. If several members are sick, they can be isolated in the same room. When

caring for those who are ill, you will need some appropriate personal protective equipment (PPE) including the following:

- Disposable vinyl, nitrile, or latex gloves or other reusable gloves that can be disinfected
- Protective clothing (long sleeved coveralls with a waterproof apron) or a disposable surgical gown
- Disposable shoe covers or those that can be disinfected
- Safety goggles or face shield
- Wear at least the minimum level of respiratory protection which is a surgical mask or preferably an N95 respirator
- These items must be removed in the proper sequence to avoid contaminating yourself

Disinfection

Cups, glasses, dishes, all eating utensils, thermometers, etc., must be disinfected after use by the ill person. The eating utensils can be disinfected either by use of a dishwasher or dishwater with 1.5 tsp. of household bleach to one gallon (3.8 liters) of water. Remember that handling these items while they are still contaminated will lead to possible infection. Therefore, wear gloves while handling potentially contaminated items.

Surfaces in the room of the infected persons should be cleaned with a solution of bleach water as noted above or with Lysol® or Clorox® spray, wipes or liquid. Pay particular attention to faucets, doorknobs, telephones, refrigerator, oven, and toilet flush handles. This should be done whenever there is contact by an infected person or otherwise 2-3 times a day. Linens and clothing need to be washed in warm water with detergent and preferably dried in a dryer.

Remember if you are not careful in your personal protective wear and hygiene measures, you may carry infected material on your skin or clothing which may contaminate others or yourself.

Designate a specific garbage bag for infected, disposable materials.

Isolation

If you develop flu-like symptoms, ***stay home and isolated*** from your household except to seek medical care. Remain at home for 7-10 days or until you are well and can no longer spread the infection. Seek medical care if you have signs of pneumonia or severe lung infection (difficulty breathing, wheezing, or a persistent fever over 102° F or 38.9° C)

If there are other cases of avian flu in your neighborhood, it would be safest to keep your children in your yard or home away from others who may be infected. Plan in advance what will need to be done or who you can call upon if you are either alone, ill and incapacitated, or if the adults in the household become ill and incapacitated. Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.

Schools and day care facilities will likely close. Plan your child care in advance and how you might function by working at home for example, or how college-age family members can assist in younger child care during the time their colleges and universities are closed. Having multiple younger children from several households in one home for day care is less than optimal due to the high risk of spreading the disease.

Limit your exposure to public places which may include a grocery trip only once a week rather than every few days. In addition to the recommended food and water storage items, keep a supply of your prescription medications, nonprescription drugs, and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, vitamins, rubbing alcohol, thermometers, garbage bags and cleaning supplies. Keep your car filled with gas and have cash on hand in case banks are closed or services limited. Use the over-the-counter medications as directed on the container.

Maintain social distancing (see *Pandemic Planning - Social Distancing* fact sheet for more details) and stay at least 6 feet away from others at all times particularly in public. Avoid handshaking and other forms of contact. Use proper cough and sneeze etiquette even if you are not ill (see *Pandemic Planning – Personal Hygiene* fact sheet for more details). Be sure to teach your children the proper hand washing and cough/sneeze behaviors as well. If you are ill, you need to be isolated from those who are healthy even in your own household.

Personal Hygiene Basics

The best way to stop the spread of germs that cause the flu or other illnesses that can be spread from one person to another is to wash hands often and control the discharges associated with coughing and sneezing. According to the U.S. Centers for Disease Control Prevention, *"Hand washing is the single most important means of preventing the spread of infection."*

Hands should be washed with clean water and soap:

- When they are dirty
- After using the restroom
- Before and after preparing meals
- After cutting and handling uncooked meat
- Before eating
- After cleaning the house
- After caring for someone who is ill
- After changing an infant's diaper
- After cleaning up blood or body fluids
- After handling soiled bed linens and clothes
- Before and after flossing teeth
- After you cough or sneeze in them

How to Wash Hands

1. Adjust water to a comfortable level and wet hands. Dispense a small amount of soap into the palms of the hands creating lather.
2. Using as much friction as needed, thoroughly clean all surfaces of hands including between the fingers.
3. Pay attention to the nails and nail beds by rubbing the nails of one hand across the palm of the other, creating enough friction to clean underneath the nails. Hands should be washed for at least 20 seconds. Use of a memory aid, such as singing a song or reciting a familiar poem, may assist individuals in washing for an adequate period of time.
4. Rinse the hands under running water, being sure to hold the hands in a downward position.
5. Use paper towels to thoroughly dry the hands.

6. Using the same paper towel, turn off the water supply and open the door.

Other Hand Cleaning Options

Alcohol-based hand cleaners can also be used to clean hands. Put a small amount on the hands and rub all hand surfaces until the hands are dry.

If commercially prepared alcohol-based hand cleaners are not available or are too costly, an alcohol-based hand cleaner can be made by mixing 70% alcohol and glycerin (about 2% by volume of glycerin). The glycerin keeps the hands soft because the alcohol can dry them out.

Hands will periodically need to be washed with soap and water because the hands will have a glycerin buildup with time.

Cough and Sneeze Etiquette

The following measures to contain respiratory secretions are recommended for all individuals with signs and symptoms of a respiratory infection.

- Cover the nose and mouth when coughing or sneezing.
- Provide and encourage use of tissues to contain respiratory secretions. If possible, dispose of tissues immediately in the nearest no-touch waste receptacle after use.
- If tissues are unavailable, cough or sneeze into a handkerchief or your arm or shoulder, not your hands.
- If you cough or sneeze in your hands, be sure to wash or clean them with an alcohol-based hand cleaner as soon as possible to stop the spread of germs.

General

Where contact with infected persons is not expected, individuals interacting with the general population should use basic PPE during a pandemic to prevent sprays of potentially infected liquid droplets (from talking, coughing, or sneezing) from contacting their nose or mouth.

Surgical Masks and Respirators

Surgical masks provide protection from liquid droplets and are generally recommended.

Respirators, such as N95 respirators, may be considered if there is an expectation of close contact with persons who have symptomatic influenza infection. Follow the surgical mask or respirator manufacturer's fitting instructions to ensure proper fit and usage.

Eye Protection

Eye protection generally is not required to prevent influenza infection.

Hand Washing

Individuals should wash hands frequently with soap and water or a hand sanitizer to prevent hands from transferring potentially infectious material from surfaces to their mouths or noses.

Gloves

While individuals may choose to wear gloves, the exposure of concern is touching the mouth and nose with a contaminated hand and not exposure to the virus through broken skin (for example, cuts or scrapes). While the use of gloves may make individuals more aware of potential hand contamination, there is no difference between intentional or unintentional touching of the mouth, nose, or eyes with either a contaminated glove or a contaminated hand.

Proper Removal of PPE

Remove PPE in the proper sequence to avoid contamination.

1. Because gloves are considered the most contaminated piece of PPE, remove them first. Do not touch the outside of gloves with your bare hands during removal. If you contaminate your hands during the removal process, wash them before continuing.
2. Surgical masks or N95 respirators may be contaminated because droplets may have landed on them or you may have touched your face by mistake while wearing your PPE. Touch only the ties or straps at the back of your head. Slowly remove the straps, taking care that the respirator does not contaminate your bare skin or clothing.
3. Dispose of used PPE in a plastic lined trash can or a plastic bag. Seal the plastic bag for later disposal. Hold the bag by the outside and avoid any rush of air as you seal it.
4. Always wash your hands thoroughly with soap and water or a hand sanitizer immediately after PPE removal.

Pandemic Planning—Sheltering in place

Families should prepare at least two weeks of emergency supplies (food, water, medicines, and so forth) in order to shelter in place during an influenza pandemic. Consult “Preparation for Home Emergencies and Natural Disasters” under Provident Living at www.lds.org.

Living Internationally

Those living in areas with undependable infrastructure for water, electricity, and food availability should evaluate their situation and prepare emergency supplies accordingly (nonperishable food, potable water, medicines, and so forth.) for the possibility of sheltering in place for at least 2 and up to 12 weeks.

Water purification techniques for drinking water such as boiling, filtering, and adding chlorine to locally available rainwater, lakes, rivers, and wells may replace the need to store large quantities of water.

Boiling water will kill most types of disease-causing organisms and is the most reliable method of purifying water easily. Bring the water to a rolling boil for two minutes. Add one minute for each 5,000 feet of elevation.

The addition of chlorine bleach to water is also a viable alternative. For clear water, add 8 drops per gallon (3.8 liters) and let stand for at least 15 minutes. If the water is cloudy, add twice as much bleach.

Bleach used for water purification should be unscented and have a concentration of sodium hypochlorite of at least 4%.

What Can You Do on a Daily Basis?

Cover your cough. Wash your hands regularly with soap and water for at least 20 seconds to kill viruses and bacteria or apply a hand sanitizer with a minimum of 60% alcohol content when soap and water are not available (see Pandemic Planning—Personal Hygiene fact sheet for more details). Stay home if you are sick. Get a vaccination against seasonal flu.

Travel

Those living in or traveling to countries with human or animal cases of H5N1 virus should consider the potential risks. Keep informed of the latest medical guidance and practical information and plan accordingly. Consult www.travel.state.gov for the latest tips on international travel.

Sheltering of Missionaries

Missionaries serving in the local areas may require assistance if required to shelter in place for more than several days. Please contact the local mission president for instructions and assistance if requested to provide these services.

F. Chemical and Radiological

Preparing for Biological, Chemical, Radiological or Other Threats

A **biological threat** can be the deliberate or accidental release of germs or other biological substances that can make you sick. These agents can be inhaled, passed through a cut in the skin or be eaten to make you sick. Some biological agents, such as anthrax, are not contagious. Others, like the smallpox virus, are diseases you can catch from other people.

A **chemical threat** can be a deliberate or accidental release of a toxic gas, liquid or solid that can poison you and the environment. Chemical agents can be released deliberately by bombs or sprayed from aircraft, boats or vehicles. Hazardous chemical spills can also be accidental, such as the spilling of household products like bleach or a release of hazardous waste. Chemical hazards can have an immediate effect or can take hours, or even days, before they are dangerous.

A **radiological threat** can include an emergency at a nuclear power plant, the use of a small nuclear weapon or a “dirty bomb” explosion. A dirty bomb contains an explosive that would scatter radioactive material over a targeted area, which is known as “fallout.”

In the event of a radiological incident, think about shielding, distance and time. If you live within a 10- mile radius of a radiological event, you should be aware of the evacuation routes established for their area.

- ☐ **Shielding:** If you have a thick shield between yourself and the radioactive materials, more of the radiation will be absorbed by it, and you will be exposed to less.
- ☐ **Distance:** The farther away you are from the blast and the fallout, the lower your exposure.
- ☐ **Time:** Minimizing time spent exposed also will reduce your risk. You should watch TV, listen to the radio, or check the Internet for official news following the event to determine:
 - The level of danger
 - What health effects may exist
 - Where to get medications or vaccines, if necessary
 - Where to go for medical help or shelter

Watch and Listen

As with any emergency, local authorities and public health officials may not immediately be able to provide information on what you should do. It may take time to

determine exactly what the illness is, how it should be treated, and who is in danger. However, you should watch TV, listen to a NOAA weather radio or check the Internet often for official news and information as it becomes available. In Nevada, we use the Emergency Alert System (EAS) during emergencies. When the decision is made to activate the EAS, original programming will be interrupted and an emergency message will be broadcast. It is important that you listen to these instructions.

☐ If you need to get out of the surrounding area or are directed to evacuate, do so immediately and take your emergency 72hr kit. Travel on routes specified by local authorities.

☐ If you are instructed to stay inside and not to evacuate (Shelter-in-Place, Appendix D):

- Close and lock windows and doors;
- Turn off ventilation systems, water and gas; and
- Seal gaps under doorways and windows with duct tape.

☐ Stay inside until authorities say it is safe.

☐ If you suspect chemical or biological agents have entered your house, move to a safe room in the interior of the house on a higher floor if possible. Many harmful agents that could enter a house will fall and accumulate at lower levels.

☐ If harmful vapors do enter the house, covering your nose and mouth with a cloth can provide minimal breathing protection.

G. Earthquake

Do you know how to prepare for and survive a major earthquake? According to Department of Conservation scientists, it will be critical to have the right answer to that question somewhere in California sometime in the coming years.

Many people think having bottled water on hand is a good idea. That's true, as long as you have enough. Many are certain that standing in a doorway during the shaking is a good idea. That's false, unless you live in an unreinforced adobe structure; otherwise, you're more likely to be hurt by the door swinging wildly in a doorway or trampled by people trying to hurry outside if you're in a public place.

How to be Prepared

- Electricity, water, gas and telephones may not be working after an earthquake. The police and fire departments are likely to be tied up. You should be prepared to fend for yourself for at least three days, preferably for a week.
- You'll need food and water (a gallon a day per person); a first aid kit; a fire extinguisher suitable for all types of fires; flashlights; a portable radio; extra batteries, blankets, clothes, shoes and money (ATMs may not work); medication; an adjustable or pipe wrench to turn off gas or water, if necessary; baby and pet food; and an alternate cooking source (barbecue or camp stove). This list can also be applied to other disasters, such as floods or wildfires.

- It's also a good idea to decide beforehand how and where your family will reunite if separated during a quake and to conduct in-home practice drills. You might choose an out-of-the-area friend or relative that family members can call to check on you.
- Securing water heaters, major appliances and tall, heavy furniture to prevent them from toppling are prudent steps. So, too, are storing hazardous or flammable liquids, heavy objects and breakables on low shelves or in secure cabinets.
- Discuss earthquake insurance with your agent. Depending on your financial situation and the value of your home, it may be worthwhile.

During an Earthquake

- If you're indoors, stay there. Get under -- and hold onto -- a desk or table, or stand against an interior wall. Stay clear of exterior walls, glass, heavy furniture, fireplaces and appliances. The kitchen is a particularly dangerous spot. If you're in an office building, stay away from windows and outside walls and do not use the elevator.
- If you're outside, get into the open. Stay clear of buildings, power lines or anything else that could fall on you.
- If you're driving, move the car out of traffic and stop. Avoid parking under or on bridges or overpasses. Try to get clear of trees, light posts, signs and power lines. When you resume driving, watch out for road hazards.
- If you're in a mountainous area, beware of the potential for landslides. Likewise, if you're near the ocean, be aware that tsunamis are associated with large earthquakes. Get to high ground.
- If you're in a crowded public place, avoid panicking and do not rush for the exit. Stay low and cover your head and neck with your hands and arms.

After an Earthquake

- Check for fire or fire hazards. If you smell gas, shut off the main gas valve. If there's evidence of damage to electrical wiring, shut off the power at the control box.
- If the phone is working, only use it in case of emergency. Likewise, avoid driving if possible to keep the streets clear for emergency vehicles.
- Be aware that items may fall out of cupboards or closets when the door is opened, and also that chimneys can be weakened and fall with a touch. Check for cracks and damage to the roof and foundation of your home.
- Listen to the radio for important information and instructions. Remember that aftershocks, sometimes large enough to cause damage in their own right, generally follow large quakes.
- If you leave home, leave a message telling friends and family your location.

H. Tornado

Prepare a Home Tornado Plan

- Pick a place where family members could gather if a tornado is headed your way. It could be your basement or, if there is no basement, a center hallway, bathroom, or closet on the lowest floor. Keep this place uncluttered.
- If you are in a high-rise building, you may not have enough time to go to the

lowest floor. Pick a place in a hallway in the center of the building.

Assemble a Disaster Supply Kits (See, Appendix B: First Aid Kits and Appendix C: 72 Hour Kits)

- First aid kit and essential medications.
- Canned food and can opener.
- At least three gallons of water per person.
- Protective clothing, bedding, or sleeping bags.
- Battery-powered radio, flashlight, and extra batteries.
- Special items for infant, elderly, or disabled family members.
- Written instructions on how to turn off electricity, gas, and water if authorities advise you to do so. (Remember, you'll need a professional to turn natural gas service back on.)

Stay Tuned for Storm Warnings

- Listen to your local radio and TV stations for updated storm information.
- Know what a tornado WATCH and WARNING means:
 - A tornado WATCH means a tornado is possible in your area.
 - A tornado WARNING means a tornado has been sighted and may be headed for your area. Go to safety immediately.
- Tornado WATCHES and WARNINGS are issued by county or parish.

When a Tornado WATCH Is Issued...

- Listen to local radio and TV stations for further updates.
- Be alert to changing weather conditions. Blowing debris or the sound of an approaching tornado may alert you. Many people say it sounds like a freight train.

When a Tornado WARNING Is Issued...

- If you are inside, go to the safe place you picked to protect yourself from glass and other flying objects. The tornado may be approaching your area.
- If you are outside, hurry to the basement of a nearby sturdy building or lie flat in a ditch or low-lying area.
- If you are in a car or mobile home, get out immediately and head for safety (as above).

After the Tornado Passes...

- Watch out for fallen power lines and stay out of the damaged area.
- Listen to the radio for information and instructions.
- Use a flashlight to inspect your home for damage.
- Do not use candles at any time.

A. EMP

Disaster probability says that an Electromagnetic Pulse (EMP) or a solar storm has a small chance of happening. If either event happens, a massive number of people will be affected and left without electricity. Even though the probability is low, the toll on human life would be enormous and thus merits mention in this manual.

In this section we will briefly discuss what an EMP is and what causes them. We will also give some information on preparations that can be done to alleviate the disaster that an EMP attack would cause.

What is an EMP?

An electromagnetic pulse, EMP, is a byproduct of an above-the-atmosphere nuclear explosion or an extreme magnitude solar flare. It is, in its first phase, an electrically and magnetically charged pulse which will very rapidly—too rapidly to stop by ordinary means—travel through our electric grid and permanently destroy electronic components. This means it will destroy our ability to produce power by destroying the electronic equipment we currently use. We will not have the ability to replace burned out parts. That may take years. This will also effect city water production, trash removal, banking transactions, gasoline pumping, and transportation. Hospitals will not have power. Emergency services will not have power either. No water, electricity, transportation, no food production or distribution, etc. It begins to sound very grim very fast.

In 1859, a major solar storm known as the Carrington Event occurred. English astronomer Richard Christopher Carrington saw a large bright spot on the Sun and a few days later as the wave of energy hit the Earth and knocked out the most advanced technology of the era - the telegraph. Telegraph workers reported disruption of services, some even being shocked through the equipment and telegraph paper spontaneously igniting into flame. If this event would have happened today we would have instantaneously been transported to a 19th century world with none of our modern conveniences: cell phones, cars, computers, refrigerators, A/C, etc.

EMP as a weapon has been known since 1962 and has been tested as such ever since. Many nations and terrorist groups have included EMP in their war scenarios including: Egypt, Cuba, India, Pakistan, Iran, North Korea, China and Russia. In fact Iran has tested the delivery of this type of weapon twice in the last eight years in the Caspian Sea. It is extremely effective, cheaper, and more publicly acceptable (no bloodshed), than other weapons. This type of attack is a possibility for any country or individuals with a nuclear weapon or access to one.

One big problem which compounds the disastrous effect of an EMP is that our nation's leaders have known of the potential of an EMP event either as an attack on our nation by our enemies or as a natural occurrence from a solar flare. Though they know of the dangers our leaders have not taken any steps to shield our infrastructure, power lines and power plants, hospitals, keeping adequate spare parts on hand, etc., nor have they shielded even large sectors of the United States military services to the level that they were during the Cold War. Thus if we do experience an EMP event it will take anywhere from 4-10 year to recover, if at all.

Recognizing an EMP

Depending on several factors (source of EMP, height, strength, location) it may be difficult to determine if an EMP event has occurred and its severity. Here are some signs of an EMP:

1. The first indication of a possible EMP is that all electricity has gone out instantaneously. Ask yourself if there is a reason. Power outage from a Storm? Planned outage? Are others around you having the same problems?
2. Next check your cell phone or other charged, cordless device (laptop, iPod, or portable radio). If both electricity and battery operated items do not work, EMP is a reasonable conclusion.
3. If many automobiles cease to function this may also be a strong suggestion that an EMP has occurred. Some cars may malfunction, others may shut down completely.

No matter how many people have been alerted to this catastrophe, most will not immediately identify the occurrence. It is in your best interest to plan your disaster response ahead of time.

Preparation

Most preparation is not EMP specific. The basic needs for survival are the same as many other disasters such as power outages except that it will affect a wide region or the whole country (See Appendix C: Power Outages):

- Food Storage and fuel to cook with (Gas barbeque with extra bottles of gas)
- Water at least 1 gal/person/day.
- First Aid Kit
- 72 hour kit in car with food and water in case the car breaks down miles from home.
- Always carry some cash on you and have a few weeks' worth at home. (ATMs will not be working.)
- Medications. (no longer being manufactures plus transportation will be non-existent)
- Soap, female hygiene products, etc.

The entire family must have a plan for meeting without benefit of communication, and that a plan is in place for heat and security. This means, if home is chosen, that children must be able to walk home from school unaccompanied, or that someone reliable will be nearby to meet them, most likely on foot. This also, means that anyone working away from the home has planned a non-mechanical method to return home. A family disaster meeting plan is important so every member of the family knows what to do. Remember when using this plan that you will not have the luxury of communication, so everyone should know their part very well.

Faraday Cages

EMP will fry ALL electronics if not shielded whether they are plugged in or not including batteries. In order to protect any electronic gadgets that you may need you can place them in a faraday cage or its equivalent. These stop the EMP from destroying important electronic components such as radios, communication devices (such as a HAM radio), batteries and all of their respective tools, thumb drives loaded with all of your vital information, extra computer parts for your vehicles and maybe even a laptop. Be selective in what you protect. It makes no sense to protect a cell phone, for example, as the cell towers will be useless. An expedient faraday cage that you can buy at the store would be a metal trash can with a tight lid, large metal pot, or even an old inoperative microwave oven someone has placed on the curb. The microwave oven was designed to shield persons outside of it from the microwaves it produces so they are excellent choices for your faraday cage. Just make sure you cut the cord to the oven so the EMP does not enter your cage through the cord.

Conclusion

Remember the first line of this article, “Disaster probability says that an Electromagnetic Pulse (EMP) or a solar storm has a small chance of happening”. These events are not something you should plan exclusively for, but they are something that you

will become more prepared for, by becoming prepared for the smaller scale things that have a higher chance of happening, such as job loss, fires, storms, or earth quakes.

For more information on EMPs, faraday cages and what to do to prepare, go to “The Preparedness Pro” web site at:

<http://preparednesspro.wordpress.com/2009/06/15/emp-101-part-i%e2%80%94what-you-need-to-know-about-the-likelihood-of-an-emp-attack-on-the-u-s/>

Appendix A

FAMILY HOME EVENING LESSONS

Lesson 1

PREPARE FOR PEACE OF MIND

"-----If ye are prepared, ye shall not fear." (D&C 38:30)

OBJECTIVE: To motivate members of your family to prepare for an emergency.

SUGGESTED HYMNS AND SONGS: "Today while the Sun shines," Hymn #215;
"Think Not, When you gather to Zion," Hymn # 21. BE PREPARED.

Explain that tonight the family begins a series of four lessons to prepare ourselves for any emergency. Emphasize that preparing will be FUN, and that a family that is prepared will have nothing to fear. Family members will want to present the following skit about Father Noah, an expert on preparing for emergencies, and about a modern-day Noah Smith. Have two or more family members rehearse for the following skit to read aloud for the family. Props and costumes, such as a basket of food for Joshua, robes, scarves around the head, and long beards would add to the production.

NOAH IS PREPARED

FATHER NOAH: Hello, Joshua. I see you are carrying a basket of food and blankets. Are you getting ready for the flood?

JOSHUA: What flood? This is our picnic for the camel races today.

FATHER NOAH: Don't you remember? I've been telling you for years about the great destruction that will come upon this land. The Lord warned me that the water would cover everything.

JOSHUA: You mean you still think there will be a flood? I hate to hurt you feelings, Noah, but I've been here over three hundred years now, and there's never been a flood. Even if there was a flood, we could run for the hills and the town council would send relief supplies.

FATHER NOAH: The Lord told me to build a large boat that would float on top of the water, one that would also withstand rain, and stock it with provisions. Come and see it sometime. It's about 300 cubits long, 50 cubits high, and it's made from gopher wood--

very tight, like a dish--so that even large waves will not penetrate. There's plenty of room on its decks. We've named it "ARK."

JOSHUA: You're crazy to spend so much time on that foolish project. Even if you were a shipbuilder, you couldn't build a ship that large, and there's no water around here to float it. Are you sure you're not beginning to doubt the words of the Lord by now? By the time a person reaches 600 he should have better sense than to waste a hundred years that way.

FATHER NOAH: The Lord gave me plenty of warning so "I'd have time to get ready, but I feel it will be soon now. Next week I will start gathering all kinds of animals into the ark. We've been stocking the Ark with food and water for ourselves and the animals.

JOSHUA: And just how do you intend to persuade wild animals to get on that boat? I can just imagine you, Noah, tugging and pushing a hippopotamus up a gangplank. What if he steps on your beard?

FATHER NOAH: The animals will come on their own accord.

JOSHUA: This I gotta see! If it doesn't rain, he could use it for a zoo.

FATHER NOAH: Please Joshua, come with us. Ham, Shem and Japheth are coming with their wives. They have helped me build the ark, but there is room for you and you family, and you still have time to change your mind. You know how we love you. We don't want to have to leave you behind.

JOSHUA: I'll give it some thought, Father, but don't count on me. We like it here, and I've just been promoted to head sheepherder. Wow! I'd better get going or we'll be late for the races.

JOSHUA JONES: Hello, is Noah there? Noah Smith? How are you? This is Josh. I've got a great idea. My boss gave me his season tickets to the Bronco game tonight. I know its Family Home Evening, but I thought maybe we could go anyway and make it up to our families later this week.

NOAH SMITH: Rats! If it were just any other night! We've just planned a special family activity tonight that we've worked on for three weeks now. I just couldn't let my family down.

JOSH: Three weeks! We never plan more than three minutes for our Family Home Evenings.

NOAH: This is special, because we're preparing our family for a disaster. Tonight we will simulate a hurricane evacuation

JOSH: But that's ridiculous. We never get hurricanes around here, not even floods. Even if we had one, the Red Cross would be there to help. Surely you could wait a week or even a decade to prepare for a hurricane.

NOAH: You're right, of course; we'll probably never have a hurricane here, but the practice will be good for other types of emergencies too. Do you remember when that hurricane hit Brownsville last year? The people had plenty of warning, but no one was prepared to leave.

When they found the grocery stores jammed with last minute shoppers and all the canned goods stripped from the shelves, many of them panicked. They only needed supplies for about three days, but most of them left their homes without anything.

JOSH: But don't you have a year's supply of food already? The church has been teaching us to store food for over 45 years. Surely you could last three days.

NOAH: That's true, but we've assembled a compact kit in a container that will be waterproof and portable. It includes other supplies besides food. We're also planning an evacuation route and a meeting place in case we get separated.

JOSH: I never thought of that. We'd be very disorganized at our house, even though we have food. We'd probably forget something important, like the can opener. But it's too bad you have to do it tonight. You don't often get free tickets to the game.

NOAH: I'm sure a day or a week won't make any difference, but my family is counting on me to do my part. We all have our assignments, and I could never let them down. Let me know when you're ready to assemble a kit and I'll help you. If anything happened, I'd hate to leave you behind. You know how much we love you and your family. Have a good time at the game.

THE NEXT DAY:

JOSH: Hello, Noah? It's me Josh . . . yeah, it was a great game, but you'll never believe what happened. While I was away last night, we had a power failure in our neighborhood and the pipes in my basement froze and burst open. Yeah, I'm afraid it was pretty badly flooded, and some of our food storage was ruined . . . Yes, everybody's all right, but there was so much damage in the neighborhood that we won't be able to get a plumber for several days, and in the meantime we have no water . . . That's a very kind offer, I'll ask my wife. We could use a place to stay until the water pipes are repaired. I should have knocked on wood when I said there'd never be a flood around here. Maybe while we're there, you could show us how to make an emergency survival kit.

ASK: What are the most important lessons we learn from the story of Noah? (Emphasize faith in the Lord and obedience to the Lord's instructions). Brigham Young said: "I have encouraged my wife and my children to share all that we have that we may continue to have more."

ASK: Should we be prepared to share with those who have been unwilling or unable to prepare for themselves? Is sharing as important as preparing for ourselves?

The scriptures as well as modern-day prophets, tell us that calamities will come to this earth. In General Conference, October, 1973, Elder Ezra Taft Benson quoted D&C 1:12, which says: "Prepare ye, prepare ye for that which is to come . . ." And D&C 1: 17 which warns, "I the Lord knowing the calamity which should come upon the inhabitants of the earth . . ."

Elder Benson also said: "What are some of the calamities for which we are to prepare? In Section 29 the Lord warns us of "A great hailstorm sent forth to destroy the crops of the earth."

(D&C 29:16) In Section 45 we read of "an overflowing scourge" for a desolating sickness shall cover the land. (D&C 45:31) In Section 63 the Lord declares he has "decreed wars upon the face of the earth . . . "(D&C 63:33)."

In Matthew, Chapter 24, we learn of 'famines, and pestilence, and earthquakes . . . ' (Matt.

24:7)."

"When will all these calamities strike? We do not know the exact time, but it appears it may be in the not-too-distant future. Those who are prepared now have the continuing blessings of early obedience, and they are ready. Noah built his ark before the flood came, and he and his family survived. Those who waited to act until after the flood began were too late." (The Ensign, Jan. 1984, pp. 68 & 81).

Discuss with your family a three-day menu of food requiring no refrigeration or cooking which would be suitable to your needs and tastes. Assign family members to locate or supply items from the following list to assemble into three-day survival kit during the following week's Family Home Evening. After the survival kit is completed, decide on an easily accessible location to store it.

Lesson 2

Fun Family 72-Hour Kits

By C.S. Bezas

In his book *Prophetic Statements on Food Storage for Latter-day Saints*, author Neil H. Leash said,

"It has always been a source of puzzlement that any discussion of future events, given to us prophetically, seems to be received by so many Saints as information which they need not be overly concerned about; that somehow it applies to others, even to another generation" (141).

He continues,

"As a group, we seem willing to speak up in church classes and clearly discuss how Heavenly Father's people have stumbled in the past, and we often expound on what his children may experience in the future. We confess feeling perplexed that Israel could be instructed so clearly by the Lord, and yet be so unwilling to modify their behavior in order to obtain the blessings "(Ibid.).

It is true; prophets through the ages have admonished God's children to be safe — physically and spiritually. Hopefully this week's FHE lesson will help a little in this. Not only will we be better prepared for sudden emergencies after this week's Family Home Evening, we'll have fun doing it!

FHE Fun

Opening Song: #256 "As Zion's Youth in Latter Days"

Opening Prayer: By invitation.

Devotional: This is a great time for individuals to spontaneously share personal, favorite scriptures found during the week.

Activity: Items needed:

- blindfold
- a series of chairs (eventually to be mixed up in the room)
- a favorite family dessert or goody
- a clean pillowcase for every family member

Ask for a volunteer. Explain that you will blindfold him. He is to listen to your voice to avoid injury from the obstacles you will place quietly before him in the room. Explain that there is a treat waiting for the volunteer on the other end of the obstacle course.

When the child is ready, blindfold him and with your voice instruct him how to move safely through the obstacle course to where the treat is waiting. Allow him to remove the blindfold once he is safely "home."

Ask for other volunteers to process the scenario. What does the treat spiritually symbolize? What does the blindfold spiritually symbolize? What do the chairs spiritually symbolize? How are the prophets like a loving parent's voice?

Spiritual Thought: Read the following two quotes:

Thought #1. "We are blessed to live in a time when the priesthood keys are on the earth. We are blessed to know where to look and how to listen for the voice that will fulfill the promise of the Lord that He will gather us to safety" (Elder Henry B. Eyring, "Finding Safety in Counsel," Ensign, May 1997, 26).

Thought #2. "It has been asked ... how many of us would have jeered ... at ... the sight of Noah building his ark. Presumably the laughter ... continued until it began to rain — and kept raining! How wet some people must have been before Noah's ark suddenly seemed the only sane act" (Elder Neal A. Maxwell, For the Power is in Them, p 20).

Activity: Explain that prophets have always taught God's children to be prepared. There are many ways to be prepared. Ask the family for ideas. Then explain that the family is going to play a game. It's called, "I'm Prepared!"

Pass out a clean pillowcase to each family member.

Set a timer for five minutes.

Explain that there is a pretend emergency and they have five minutes to find the things that matter most to them. They must meet you at the front door when the timer goes off with what they will need to live on for the next three days. Everything else will have been destroyed because of the pretend emergency.

Start the timer and let them race off to fill their pillowcases.

When the family returns to the front door, compliment them on arriving. They've "saved" themselves by fleeing to safety in time. Then return with the group to the family room. Invite each one to display their three-days-of-living "saved" in the pillowcase.

Once all sharing is finished, ask them the following questions:

How well did you eat during those three days (in other words, did anyone remember to put food in their packs)?

How thirsty were you (in other words, did anyone put drinks in their packs)?

Did you have proof of I.D. in your packs and an out-of-state contact number, in case you lost consciousness and relatives needed to be called?

Did you have clothes to last three days?

Did you have scriptures to comfort you?

Did you have an additional comfort item (such as a book, toys, journal, or some treasured item)?

Did you have a first-aid kit to help you if hurt?

Did you have pet needs for any pet that went with you?

Ask the group if there are any other items that would have been helpful or desired for a 72-hour kit. Discuss why.

Finally, allow them five minutes to make adjustments to their "packs." They have now accomplished what many families never do — a healthy start on personalized 72-hour kits. After FHE is over, transfer each person's items into individual, old satchel bags or backpacks. Store them near an exit in the home. During the coming weeks you can

make modifications to them, but at least you now have a start. You just never know when you might need these very important 72-hour kits!

Closing Thoughts: Bear your testimony that as we hearken to the prophets, their words will help us arrive in safety at our destinations. Invite your family to make use of online resources of the prophets' words, such as LDS.org's recordings of General Conferences. Remind the kids that the obstacle course during the beginning of FHE represented unexpected emergencies. But when we're willing to prepare as the prophets teach us to, we'll be able to get to safety! And the blessings the Lord has waiting for us will be even better than the yummy treats of tonight.

Closing Song: #57 "We're Not Ashamed to Own Our Lord. (Enjoy visiting the website to learn this powerful hymn, so that your family may benefit thereby. This hymn is a great one to learn. It is short and quite memorable.)

Closing Prayer: By invitation.

Refreshments: A great refreshment idea would be a power food bar of some sort, similar to something you would store in a 72-hour kit. Why not read from additional reading resource linked below while chowing on the refreshments!

Summary

We are blessed when we are prepared. Elder James E. Faust once warned:

It is my testimony that we are facing difficult times. We must be courageously obedient. My witness is that we will be called upon to prove our spiritual stamina, for the days ahead will be filled with affliction and difficulty. But with the assuring comfort of a personal relationship with God, we will be given a calming courage. From Divine so near we will receive the quiet assurance ("That We Might Know Thee," Ensign, Jan 1999, pp 2-4).

By helping our children see how quickly we can put together a 72-hour kit, we are teaching them swift obedience to wise counsel. This so easily can translate into obedience in other areas, especially in spiritual and emergency preparedness matters. Children who have been raised in thus manner will have the strength to face the days ahead, with resiliency that will see them through to even meeting the Lord Himself!

Further reading resources:

Marianne Wilson McKnight, "Evacuate!," Friend, Jun 1998,

http://www.lds.org/ldsorg/v/index.jsp?vgnextoid=21bc9fbee98db010VgnVCM1000004d82620aRCRD&locale=0&sourceId=ff0e3d23df3bb010VgnVCM1000004d82620a____&hideNav=1

Darrin Lythgoe, "Idea List: Are You Prepared?" New Era, Mar 2000,

http://www.lds.org/ldsorg/v/index.jsp?vgnextoid=024644f8f206c010VgnVCM1000004d82620aRCRD&locale=0&sourceId=16a719b3fe4fb010VgnVCM1000004d82620a____&hideNav=1

"Disasters Test Preparedness of Members," Ensign, Dec. 2003, 67–68

http://www.lds.org/ldsorg/v/index.jsp?vgnextoid=2354fccf2b7db010VgnVCM1000004d82620aRCRD&locale=0&sourceId=973674536cf0c010VgnVCM1000004d82620a____&hideNav=1

"What's in It for You: Mutual Activity Idea," New Era, Apr 2006, 47

Appendix B

First Aid Kits for the Home, Car, and Camping

A well-stocked first-aid kit can help you respond effectively to common injuries and emergencies and save lives. Keep at least one first-aid kit in your home and one in your car. Store your kits in easy-to-retrieve locations that are out of the reach of young children. Children old enough to understand the purpose of the kits should know where they are stored.

You can purchase first-aid kits at many drugstores or assemble your own. Contents of a first-aid kit should include:

Basic supplies

- ☐ Adhesive tape
- ☐ Antibiotic ointment
- ☐ Antiseptic solution or towelettes
- ☐ Bandages, including a roll of elastic wrap (Ace, Coban, others) and bandage strips (Band-Aid, Curad, others) in assorted sizes
- ☐ Instant cold packs
- ☐ Water-Jel/Burn Jel for burns, scalds and sunburns
- ☐ Cotton balls and cotton-tipped swabs
- ☐ Disposable latex or synthetic gloves, at least two pairs
- ☐ Duct tape
- ☐ Gauze pads and roller gauze in assorted sizes
- ☐ Eye goggles
- ☐ First-aid manual
- ☐ Petroleum jelly or other lubricant
- ☐ Plastic bags for the disposal of contaminated materials
- ☐ Safety pins in assorted sizes
- ☐ Tooth preservation kit consisting of salt solution and a sealable travel case
- ☐ Sawyer Bite and Sting Extractor Kit

- ☐ Scissors, tweezers and a needle
- ☐ Soap or instant hand sanitizer
- ☐ Sterile eyewash, such as a saline solution
- ☐ Thermometer
- ☐ Triangular bandage
- ☐ Turkey baster or other bulb suction device for flushing out wounds

Medications

- ☐ Activated charcoal (use only if instructed by your poison control center)
- ☐ Aloe Vera gel
- ☐ Anti-diarrhea medication
- ☐ Over-the-counter oral antihistamine (Benadryl, others)
- ☐ Aspirin and nonaspirin pain relievers (never give aspirin to children)
- ☐ Calamine lotion
- ☐ Over-the-counter hydrocortisone cream
- ☐ Personal medications that don't need refrigeration
- ☐ If prescribed by your doctor, drugs to treat an allergic attack, such as an auto-injector of epinephrine (EpiPen)
- ☐ Syringe, medicine cup or spoon

Emergency items

- ☐ Cell phone and recharger that uses the accessory plug in your car dash
- ☐ Emergency phone numbers, including contact information for your family doctor and pediatrician, local emergency services, emergency road service providers and the regional poison control center
- ☐ Medical consent forms for each family member
- ☐ Medical history forms for each family member
- ☐ Small, waterproof flashlight and extra batteries
- ☐ Candles and matches for cold climates
- ☐ Sunscreen
- ☐ Mylar emergency blanket
- ☐ First-aid instruction manual

Give your kit a checkup

Check your first-aid kits regularly, at least every three months, to be sure the flashlight batteries work and to replace supplies that have expired.

In addition, take a first-aid course to prepare for a possible medical emergency. Be sure the course covers cardiopulmonary resuscitation (CPR) and how to use an automatic external defibrillator (AED). Renew your CPR certification at least every two years.

Prepare children for medical emergencies in age-appropriate ways. The American Red Cross offers a number of helpful resources, including classes designed to help children understand and use first-aid techniques.

Appendix C:

72 Hour kits

The purpose of 72-hr Kits is to have all of those essential items you and your family will need during an emergency period of 3 days (72 hours). When an emergency occurs you will probably not have the luxury of going around the house gathering up needed items, especially if you have to evacuate your home on short notice.

Take the time now to gather whatever your family needs to survive for 72 hours based upon the assumption that those items are the only possessions you will have with you. Store these kits in a closet near the front door, or some other easily accessible place where they can be quickly and easily grabbed on the way out of the door.

Fear may well be responsible for more deaths than exposure, hunger and injury combined. Realizing you have fears and that these are normal emotions in an unfamiliar situation, you will be aware of them and better able to cope with them as they appear. Fears can be expected in any outdoor problem situation. However, fear is usually based on lack of self-confidence and lack of adequate preparation and experience. By preparing your family for these emergency situations through 72-hr kits and holding practice sessions with your family members, this will help instill confidence and control fear in the event of an emergency.

Containers for 72-Hour Kits

The container you choose for your kit must be waterproof, or items protected inside from water, have some type of carrying handle, and must be able to be carried easily by family members. The following are good containers: rolling backpack, suitcase (rolling is best), polyethylene plastic bucket, duffel bag, trunk or footlocker (on wheels), or plastic garbage can (on wheels).

To make your container waterproof, pack all items in Zip-loc bags to keep them dry and air tight. This will prevent a liquid item from spilling and ruining other items in your kit and will keep the rain and other forms of moisture away from the items stored.

Up-to-date. Rotate food and medications at least every six months. Check the clothing annually to make sure it fits. Check expiration dates on batteries.

Complete. Check your kit regularly to make sure you have everything your family needs for three days' survival.

Usable. Make sure you know how to use everything in your kit, and that the supplies are of good quality. Don't weigh down your kit with junk.

Divisible. Provide a backpack or portable container for each family member, in case you get separated.

Personalized. No commercial kit or generic supply list will completely provide for the unique needs of your family. You will need to adjust the contents and check them frequently to make sure your current needs such as medications, baby supplies, and so forth, are met.

Versatile. Make sure your kit contains supplies for sheltering at home as well as for evacuation.

Checklist for Building a 72-Hour Emergency Kit

- ☐ Portable, hand-crank or solar-powered radio.
- ☐ Hand-cranked flashlight.
- ☐ First aid kit. See Appendix B.
- ☐ Cash and coins.
- ☐ Copies of personal identification, such as driver's licenses, passports, and work identification badges, and copies of medical prescriptions and credit cards.
- ☐ An extra set of car keys and house keys.
- ☐ Matches in a waterproof container.
- ☐ Map of the area marked with places you could go and their telephone numbers.
- ☐ Items for infants, such as formula, diapers, bottles, pacifiers, powdered milk, and medications not requiring refrigeration.
- ☐ Special items, such as denture needs, contact lenses and supplies, extra eyeglasses, and hearing aid batteries.
- ☐ Items for seniors, disabled persons, or anyone with serious allergies.
- ☐ Food—a three-day supply in the kit and at least an additional four-day supply readily accessible for use if you are confined to home. You may want to consider stocking a two-week supply of food and water in your home.
 - ☐ Protein/Granola Bars
 - ☐ Trail Mix/Dried Fruit
 - ☐ Crackers/Cereals (for munching)
 - ☐ Canned Tuna, Beans, Turkey, Beef, Vienna Sausages, etc . Not the "pop-top" cans that open without a can-opener. They can open accidentally and spoil.
 - ☐ Canned Juice

- ☐ Candy/Gum (warning: Jolly Ranchers can melt and using mint gum might make everything taste like mint.)
- ☐ Portable water filter with extra filters, Solar still, Rubber surgical tubing, Water purification tablets.
- ☐ Water—three gallons per person in the kit and an additional four gallons per person readily accessible for use if you are confined to home.
- ☐ Kitchen accessories: manual can opener; mess kits or disposable cups, plates, and utensils; utility knife; sugar and salt; aluminum foil and plastic wrap; resealable plastic bags.
- ☐ Medications—Prescription and non-prescription that are regularly used. Check with your physician or pharmacist on storage requirements.
- ☐ Household liquid bleach as a disinfectant.
- ☐ For each person, one complete change of clothing and footwear, including sturdy work shoes or boots, rain gear, and other items adjusted for the season, such as hat and gloves, thermal underwear, sunglasses, dust mask, swimsuit(to bath in public with).
- ☐ Blankets or sleeping bag for each person.
- ☐ Small tent, compass, small shovel.
- ☐ Paper, pencil; needles, thread; small A-B-C-type fire extinguisher; medicine dropper; whistle; emergency preparedness manual.
- ☐ Sanitation and hygiene items: toilet paper, towelettes, soap, hand sanitizer, liquid detergent, feminine supplies, shampoo, deodorant, toothpaste, toothbrushes, comb and brush, lip balm, sunscreen, plastic garbage bags (heavy-duty) and ties (for personal sanitation uses), disinfectant, household chlorine bleach. 5 gallon bucket with toilet seat cover, solid waste digestion tablets and dissolving toilet deodorant packets.
- ☐ Entertainment, such as games and books. Favorite comfort dolls, stuffed animals for small children.
- ☐ Roll of duct tape (10 millimeters thick) and scissors.
- ☐ Plastic sheeting pre-cut to fit shelter-in-place room openings.
- ☐ Preventative Aid: Foot powder, medicated Body powder, Moleskins, Chigger powder, Mosquito repellent, Lip balm, Sun block, Corn starch, Hand lotion.

Appendix D:

Evacuate or Shelter-In-Place

Depending on your circumstances and the type of emergency, the first important decision is whether you stay put or get away. You should understand and plan for both possibilities. Use common sense and available information to determine if there is immediate danger. In any emergency, local authorities may or may not immediately be able to provide information on what is happening and what you should do. Use available information to assess the situation. If you see large amounts of debris in the air, or if local authorities say the air is badly contaminated, you may want to "shelter-in-place." However, you should watch TV, listen to the radio, or check the Internet often for information or official instructions as it becomes available. If you are specifically told to evacuate or seek medical treatment, do so immediately.

After an emergency situation occurs, the following will help you to work through most of the situations which occur in a disaster.

First Aid

- After a disaster occurs 1st determine if there are any injuries or deaths.
- Next, determine if it is safe to perform First Aid. Safe or Not Safe – downed wires, gas leak, structural weakness or water leak, fire.
- Can and should the injured victim(s) be moved to a more secure area and can it be done safely? Yes or No.

Shelter-in-place or Evacuate

Weigh the decision to Stay and Shelter-in-Place or to Evacuate based on the emergency situation. Most incidents happen without prior warning. There is insufficient time to evacuate. The toxic chemical cloud or plume passes over the area before an orderly evacuation can occur. The public should be instructed to shelter-in-place (remain in their homes or offices, or seek shelter inside if they happen to be outdoors) rather than try to out run the toxic cloud.

Obviously there are overriding circumstances where evacuation is necessary. If there is smoke and fire at home or a neighbor's house, rising flood waters, large chemical fire or train derailment could trigger an evacuation. The evacuation of the World Trade center during 9/11 was the proper response to the terrorist attack.

Special Needs Families with special needs or issues and who might look to the Church for evacuation assistance should use normal "Responsibility-Chain" protocols. This includes *starting first* with any family in the area, and *then* home teachers or visiting teachers, priesthood leaders, and *lastly* the Bishop.

Use of Church Facilities

Families should not plan to use Church facilities as a site to evacuate to in an emergency, given the limited resources (food, water, sanitary facilities, etc.) available.

Church facilities can only be used as determined by the Stake Presidency or agent Bishop for the building. The Church facilities may also be used as a mustering point for relief efforts (collection of supplies and tools, gathering point for work parties, etc.) after the emergency situation passes.

Evacuation means leaving when there is immediate risk:

- If you smell gas or smoke, see fire, or otherwise fear for your safety, evacuate immediately. Once you are in a safe location, call 9-1-1 and report the incident.
- Evacuate if you have been told to do so. If local officials issue evacuation orders, use the evacuation routes and methods specified.
- To avoid crowds and congestion, it is better to leave early than wait till it is too late.
- Put on sturdy shoes, long-sleeve shirts and pants. In winter wear appropriate winter gear.
- Bring car keys, credit cards, road maps, mobile phone, charger and important phone numbers.
- Bring your 72 hour kit.
- Lock your home and shut off the water and electricity, but leave gas on unless instructed otherwise.
- Tell a neighbor where you are going.
- Call your out-of-area contact person.

The leave early checklist has **five “P”s**:

People: everyone out and accounted for. Know your school or daycare’s rules and procedures for child pick up by a non-parent in an emergency.

Pills: medications and prescriptions of your family, including pets.

Papers: Deed to the house, insurance policy, vehicle titles, birth certificates, etc. Scan these before a disaster and save the disk or jump drive in your bank’s safety deposit box.

Pictures: these too may be scanned and saved ahead of time. This saves car space for other survival and personal goods.

Pets: pets, collars & leashes, crates, food, toys, shot records. (See Tips for Pet Owners.)

Types of disasters and reasons requiring Evacuation/Shelter-in place:

- Church Leaders instruct their members to leave
- Law Enforcement or State Emergency Services instructs you to Evacuate
- Earthquake damage or tsunamis pending
- Eminent Flooding, Flooding damage, Dams or levee Failure
- Chemical Spill or threat
- Bio Terrorism or biological threat

- Explosions or Nuclear Attack or Accident; Radiation threats
- Gang violence/ Mob mentality, including Looting
- Pandemic Flu or other Pandemic Situations including Plagues
- Severe injury or illness
- Extreme weather conditions – Extreme heat, Extreme cold, Tornadoes
- Disruption of infrastructure – water, electricity, sewage, gas
- Downed Communications – Power Grid Blackouts
- Wildfires or Volcanic Eruptions
- Mud slides, Debris Flow or Avalanches
- EMP

Procedures and Items to take with you if you decide to evacuate

- Keep all automobiles gas tanks at least half full all the time in readiness
- Plan ahead for multiple directions and locations for possible evacuation
- Coordinate with out-of-area and out-of-state contact family members and friends
- Keep a minimum of \$100 to \$200 in cash available for emergencies
- Pre-pack a 72 hour emergency kit to take with you, including water and non-perishable foods
- Prepare and ready all important documents for emergency evacuation including proof of residence including deeds of trust or rental agreements, pictures of family members, copy of birth certificates, marriage certificates, passports, visas, credit cards, medical permission slips and identification and copies of insurance policies along with tax records and a current inventory
- Place all genealogy and other important documents and computer backups in a readiness bag for easy removal. If there is room, bring computers with you.
- Prepare a current medication list and have additional prescription medications, pet supplies, infant supplies or any other unique needs your family has for emergency on hand
- Maintain a communication ability with CB radio, Amateur Radio, hand held walkie-talkies, cell phones and battery operated AM/FM radio and extra batteries for all of the above
- Bring a good Family size First Aid Kit and Auto Fire Extinguisher
- Pack Flashlights and extra batteries
- Maps of the area, the journey and of destination area
- Comfortable extra clothing and extra pairs of shoes and/or boots; extra pairs of socks, gloves and hats, scarves and breathing masks, extra blankets and sleeping bags
- Extra tarps and tent(s) for shelter
- Extra pairs of nylon stockings for vehicle air filters

- Portable heaters and stove(s) and fuel for cooking and staying warm
- Small shovel, tire chains, crowbar, rock salt and/or sand, hack saw and bow saw
- Reading material and games for family members, Scriptures, books on edible plants and/or survival handbooks, first aid books, seasonal weather books and gardening books, etc.
- Digital Camera for documenting personal affects
- Extra house keys and car keys; before you leave, lock remaining vehicles and house upon evacuation

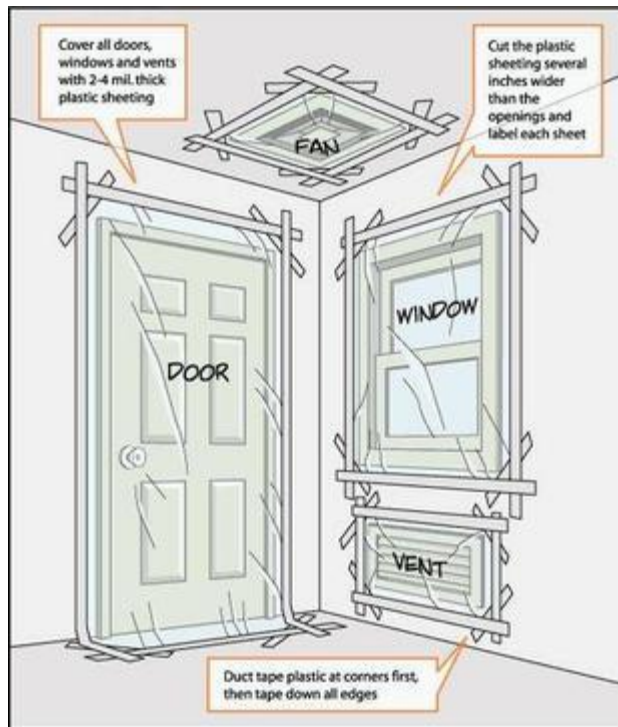
Things to do before leaving your home

- If you have not done so, as soon as possible, finish topping off your gas tanks and obtain at least 10 extra gallons of gasoline in properly designated gas cans to carry with you.
- Pack as much extra food and extra water as possible to carry with you along with water filtration
- Notify neighbors (if neighbors are still present) of your intent to Evacuate and give them a copy of your future location and out-of-area phone number(s) to be able to reach you
- Locate a small to medium trailer to haul your water, food and emergency gear/camping gear with.
- Provide a key for your neighbors to your vehicles and house in case it is a long term situation, so they will not need to break any windows or doors searching for additional food and water you left behind. Better yet, distribute extra food reserves to your neighbors and any family before you leave.
- Be sure to shut off all water, gas and electricity to your home to prevent future possible damages
- Notify your Church Leader(s) on your decision to evacuate
- Monitor NOAA Weather Alert Radio for additional instructions, along with any News and Traffic Radio Stations that might be transmitting so you are aware of the best directions and routes to travel.

Shelter-in-Place:

- Shut off all heaters and air conditioners. If it is safe, use small fans to move and circulate air within your shelter-in-place
- Take plastic sheeting and close off all vents by taping them with duct tape or clear packaging tape, basically sealing off a large inner room in your home.
- Shelter-in-place is normally for the short haul and not the long haul in the event of chemical, biological, radiation contamination, or pandemic (Flu, etc.).
- For an extended situation, follow evacuation procedures as dictated by NOAA radio or local emergency nets broadcasting on local radio channels

- Decontaminate individuals who may have been exposed by washing them completely and changing them out of contaminated clothing which should be added to a sealed plastic bag and set outside the shelter-in-place
- Most shelters-in-place still have sufficient oxygen from leaking vents and should be safe



Appendix E:

HOME EVACUATION PLAN

HOME PLAN DRAWING:

DRAW in room evacuation route with red pencil.

MARK: **C** Circuit Breaker _____

E Earthquake Safety Spot _____

G Gas Shutoff Valve _____

T Tornado Safety Spot _____

W Water Shutoff Valve _____

FAMILY MEETING PLACE _____, or
_____.

Drill Dates:

Appendix F:

Communications

D&C 84:111 And behold, the high priests should travel, and also the elders, and also the lesser priests; but the deacons and teachers should be appointed to watch over the church, to be standing ministers unto the church.

“Home teaching is the umbrella under which all members may huddle for protection in times of adversity” (Pres. Kimball)

Communication is very important during an emergency. It will be important to know where family members are, especially children, in an emergency and if they are safe. Families need to seek help if the situation is beyond their control and Church leaders need to know which families need that help and who can give it. The Lord has given us the priesthood organization to deal with these concerns. It begins with the family and extends all the way to the Stake and Church Headquarters.

Chain of Communication:

Family  Home Teacher  Quorum  Bishop  Stake

When an emergency occurs:

- The Head of Household will call his Home Teacher to notify them either if help is needed or that they are safe.
- The Home Teacher, after he has made sure his family is safe, will contact his assigned families and report to his HT Supervisor.
- The HT Supervisor, after he has made sure his family is safe, will contact his assigned home teachers and report to his Quorum President/Group Leader.
- The Quorum President/Group Leader, after he has made sure his family is safe, will report to the Bishop.
- The Bishop, after he has made sure his family is safe, will have the Ward Emergency Communications Specialist report to the Stake Emergency Communications Specialist.

Emergency Communications

In times of disaster normal means of communication may not be available. Telephone systems, the Internet, even cell phones may not be operable in the event of an emergency. Two examples of this are the tragic events of September 11, 2001 and Hurricane Katrina in 2005. In both cases cell phone networks in the area became overloaded and temporarily disrupted. But even regular landline telephone service can become overloaded and/or disrupted for an extensive period of time. Knowing, understanding and planning for just such an emergency can and does save lives.

Amateur Radio

Amateur radio (sometimes called “ham” radio) is one of the most versatile options available to private citizens. It provides tens of thousands of channels for local communications and thousands more for long distance communications. Using only handheld amateur radios (often referred to as handy-talkies or walkie-talkies) it is possible to communicate hundreds of miles using both local and linked repeater systems. (A repeater is an automated radio transceiver with an antenna normally located on a very high place such as the top of a mountain or building. The repeater receives radio transmissions locally, then instantaneously rebroadcasts them over a large area.)

In the case of Hurricane Katrina, for example, amateur radio was the only way to communicate with the outside world for a period of time after the disaster. It should be noted here that the Church has supported amateur radio as a primary means of emergency communication for many years and even has amateur radio stations set up in Area Storehouses (BCS) throughout the Church as well as at Church Headquarters in Salt Lake City. More recently the Church is encouraging each ward, stake and region to set up their own emergency communication networks as well, using licensed amateur radio operators as well as those having other FCC licenses.

Any and all who are interested in emergency communications are encouraged to obtain an amateur radio license. There are many avenues of involvement, both in the Church and in the community at large. As a “ham” one can join any number of worthy organizations to learn about emergency communications and to be of assistance in a real emergency. Among such organizations are RACES (Radio Amateur Civil Emergency Service), ARES (Amateur Radio Emergency Service), MARS (Military Auxiliary Radio System), The Red Cross and The Salvation Army. Within the Church amateur radio operators are often called upon to lend their expertise to set up emergency communication plans within each ward, stake and region.

The license to operate these radios does require that you pass a test but in recent years a license has been made available which no longer requires a knowledge and use of Morse code as in the past. The test is relatively simple and the questions are published so that a student can study the exact questions that will be asked on the test. Classes are frequently taught throughout the Las Vegas Valley to help with this test preparation. There is also online help and software available.

An amateur radio license allows much greater flexibility in terms of the number of frequencies and repeaters which can be accessed and thus distances of communication that are possible. However, for anyone not interested in studying for and obtaining an amateur radio license, there are other avenues for emergency communications, albeit with some definite limitations.

GMRS (General Mobile Radio Service)

Another option available for local communications (line-of-site for the most part) is the GMRS license. This band (frequency range) is located in the 462 Mhz range. It still requires a license from the FCC but there is no test involved. An \$85.00 fee pays for a five-year license and allows the entire family to use the assigned call letters. The main advantage of the GMRS license over the unlicensed radio services (see below) is that, at least at present, 5 watts output is allowed as well as the use of repeaters, one of which is located on top of the Las Vegas Bishops Storehouse.

In the Las Vegas Valley this is presently the designated band for emergency communications between each stake and the Storehouse. Communications between stakes and wards as well as between wards and individual members/families is up to the leadership in each stake/ward. But **any and all** individuals/families are encouraged to obtain their own equipment/licensing, whether it be amateur, GMRS or otherwise. (Contact your Ward Emergency Communications Specialist for more information and advice.)

Other Kinds of Equipment Which Do Not Require a License

Other available equipment which in certain circumstances could be useful in an emergency (and do not require any license) are FRS (Family Radio Service) radios as well as the time honored CB (Citizens Band) radios. FRS radios, usually handheld “walkie-talkies”, are available in most sporting goods stores (often sold in pairs) and are fairly handy for close communications (typically well under a mile).

CB radios, available at most truck stops, are also good for close communications (vehicle to vehicle, e.g.) but become very noisy and unreliable as the distance between radios increases. There are 40 channels available and, although Channel 9 is the Emergency Assistance Frequency, any channel can be used to ask for emergency assistance.

Communication Power

Keep in mind that no matter what form of communication equipment you use it all requires some type of electrical power. Whether it is from a wall plug or batteries you should prepare so that in times of emergency you have adequate power to operate your equipment. If your communication equipment runs off of 110 AC, how are you going to run your equipment in case of a power failure? Will your equipment run off a battery? Do you have backup batteries? Solar power is becoming a very affordable and popular option to run radio equipment and charge batteries. For example there is a 45-watt 3-panel solar array available at Harbor Freight for around \$200.00. Using this to charge a couple of auto batteries during sunlight hours it should be more than adequate to keep a low-power radio station operational 24/7 during any type of real emergency.

Once again, if you have any questions in this area don’t hesitate to contact your Ward and/or Stake Emergency Communications Specialist.

Preparation for Emergency Communications:

Family:

1. Make a list of important phone numbers, email addresses, etc. This list should include friends, family, emergency services, Ward leaders, home teachers, doctors, etc.
2. Identify who will be contacted in the event of an emergency including an out-of-town family member or friend, home teacher, and Ward leadership.
3. Determine how your family will maintain contact with others (cell phone, Walkie-Talkie, GMRS, Ham Radio).
4. Make sure your Home Teacher has your family’s contact information up to date.

Ward Priesthood Leaders:

1. Make sure the Home Teaching rolls are up to date and everyone assigned Home Teachers.
2. Keep an up to date Ward list with all contact information on all members.

3. Maintain radios and communication gear operable and charged with extra batteries.
4. Assign Ward Emergency Communications Specialist to participate in the Stake Emergency NET.

Paradise Stake Emergency NET

In the event of an emergency, frequencies will be monitored 24/7 with mandatory Ward roll calls at 9:00 AM and 5:00 PM. The Ward Emergency Communications Specialist will use radio grams to relay information using proper amateur phonetic alphabet.

Sample Stake Emergency Communications Specialist testing protocol:

This is the Paradise Stake Emergency Response Communications Net (NET). This is _____ (call sign), NET control for this evening, and my name is _____ from the _____ Ward. This NET meets each Monday at 8:45 PM on the GMRS repeater, (xxx-xxx MHz). The purpose of this NET is to test equipment, provide training, and be ready in case of an emergency. If there is an emergency or priority traffic, you may call now or interrupt NET control at any point. This is a direct NET so please call in when your Ward or call sign is called. If you have any traffic or news of specific interest to the group, please indicate such upon check-in. Visitors may check-in at the end of the roll call.

<u>WARD</u>	<u>PERSON</u>	<u>CALL SIGN</u>
#1	Xxxx Xxxx	WQMDxxx
#2	Xxxx Xxxx	WQMCxxx
#3	Xxxx Xxxx	WQLUxxx
#4	Xxxx X	Xxxxxxxx
#5	Xxxx Xxxx	WQMCxxx
#6	Xxxx Xxxx	WQMDxxx
#7	Xxxx Xxxx	WQLZxxx
#8	Xxxx Xxxx	WQLYxxx
#9	Xxxx Xxxx	Xxxxxxxx

The Paradise Stake Frequency uses the following bands, specifically:

<u>PRIORITY</u>	<u>MHz</u>	<u>CHANNEL</u>	<u>USER</u>
Primary	xxx-xxx, and the 2 meter amateur bands	GMRS	Paradise Stake
Secondary	xxx.xxx	GMRS	Bishop Storehouse Repeater
Backup	xxx.xxx	HAM Channel xxx	MARA Repeater

Families, Quorums, and Wards must use other frequencies so as to not overload the Stake's.

Each Ward is invited to participate in the Regional Radio NET (Bishop's Storehouse) exercise on GMRS Channel xx (xxx.xxx MHz), which starts immediately after the Amateur Radio Net, which starts at 9:00 AM. All with amateur licenses may participate in the Backup NET on either GMRS xxx.xxx MHz or GMRS xxx.xx MHz or HAM xxx.xx MHz.

Appendix I:

Food and Water Storage

Food:

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 or family. It's 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, as the Brethren have counseled, within the home and basements of individual families. Refer to Church publication "Essentials of Home Production and Storage" (PGWE 1125) for guidance in planning your home storage. The following basic items are recommended for storage. Indicated is the approximate amount of each needed to sustain an average adult for one year:

- Grains (wheat, rice or cereals) 300 lbs.
- Powdered milk (nonfat) 75 lbs.
- Sugar or honey 60 lbs.
- Beans & legumes 60 lbs.
- Cooking oil or shortening 20 lbs.
- Salt 5 lbs.

To these basic foods, 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)-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. It would also be a good idea to store (and use through rotation) a good multiple vitamin and mineral supplement.

People in highly mobile situations 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. However 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 several factors. Obtain the top grade food whenever possible, and store it away from other products that may affect the flavor of the food. Usually metal storage cans or heavy plastic containers with air-tight lids are best. Foods store best at from 40-60 degrees F. Shelf life diminishes in proportion to the higher temperature. Date food items as you purchase or can them, using older items first. Use storage areas that are well ventilated, clean dark, dry and cool. Do not place food storage containers on or against cement or dirt floors and walls. Allow for ventilation between and under storage containers. Do not go into debt to acquire food storage. Building a year's supply should be done in an orderly and systematic manner, consistent with a family's income.

Store sufficient clothing and/or fabric for your family's needs for a year. If possible a year's supply of fuel should be stored (refer to section on Heating, Cooking, and & Lighting).

First-aid articles, prescribed medicines, soaps and cleaning agents, matches, bedding and other such necessary items should be included. Dry pack canning is one of several excellent methods for storing foods with low moisture content. Grains, dry beans, non-fat dry milk and dried vegetables are examples.

Dry pack canning is not recommended for products that contain oil or egg or are moist enough to support the growth of mold and/or other undesirable organisms. The following should NOT be dry pack canned: brown rice, cooking oil, roasted nuts, honey, and baked goods, flour mixes containing leavening, dried meats, egg noodles, peanut butter, and coconut. Dry pack canning may be done at the Granger Cannery, as well as some wet pack items.

Wheat and Other Grains Buy dark hard winter or dark hard spring wheat.

(Investigate new breeds). Buy #2 grade or better. Protein content should be from 12-15 percent. Moisture content should be 10% or less. The wheat should be clean and free from living insects and foreign matter.

After purchase, the wheat should be placed in a sturdy, moisture proof container; a 5 gallon airtight metal container with a tight fitting double-friction lid (seal is the same as a paint can) is a good container. Sturdy poly-ethylene plastic buckets with tight fitting lids are also acceptable for wheat storage. Don't store wheat directly on concrete floors. Keep cool and dry and away from steam, water pipes, un-vented clothes dryer, wet clothes, etc.

Wheat should be treated at time of storage to guard against hatching of insect eggs. If the wheat is stored in an airtight container, it may be treated with dry ice. Drop a piece (Not pulverized) of dry ice (one-fourth pound per 5gallon container) in the container and pour the wheat on top of it. Place the lid on, but not tightly, for five to six hours; then tighten the lid to be airtight.

Other grains to consider storing are rye, triticale, corn, popcorn, barley, millet, rice, and oats. Pasta products can be counted in your grain quota.

Uncooked milled rice (white, par-boiled, and precooked) keeps indefinitely without refrigeration. Because of the oil in its bran layers, brown rice has a shelf life of only about six months. Refrigerator or freezer storage is recommended. Cooked rice may be stored in the refrigerator for up to one week or in the freezer for six months.

Flour should never be stored by apples, onions, potatoes, etc. as it will absorb moisture from them causing it to spoil more quickly and it will also take up their flavors.

Non-Fat Dry Milk/Dairy Products

Powdered milk may be purchased in both instant and regular forms. There is no nutritional difference between the two forms, and the storage life is equivalent.

Buy "extra" grade "low heat" powder. It should have been dried using a "low heat spray process". It should ideally also have been fortified with vitamins A and D.

Dry milk should be stored in a tightly covered container and stored in a cool, dry, and dark location up off the floor. Dry milk must be rotated, even if you package and store it correctly. Dry milk will store well at 40 degrees F. for 36-60 months and at 70° F. for 12-24 months. Dry milk will store longer when packed in vacuum or nitrogen.

Other dairy products which may be stored include: canned evaporated milk, canned baby formula, powdered baby formula, cream substitutes, cheese spreads, brick cheese, powdered cheese, margarine, butter, powdered butter, dried eggs.

Sugar or Honey

Sugars are high in calories and low in nutrients and are one of the most maligned of all foods. There is no scientific evidence that sugar is responsible for all the problems attributed to it. The main health hazards from eating too much sugar are a possible increase in dental caries and obesity. White sugar, brown sugar, powdered sugar, corn syrup and honey may be stored.

Honey kept for many months may darken slowly and become stronger in flavor but will still be usable. Honey and corn syrup may crystallize as they get older, but may be melted over hot water for use. The Honey Association recommends that infants under one year old should not be given honey because it is a raw product and may contain naturally occurring bacteria their systems cannot handle.

You may also wish to store jams and preserves, flavored gelatin and pudding mixes, powdered drink mixes, sweet toppings and syrups, candy, and soft drinks.

Salt

Iodized salt is best as it will help in proper functioning of the thyroid gland. Pickling salt may also be stored for bottling pickles and rock salt for making ice cream. Store salt in its original container in a dry cool, dark location and it will keep indefinitely.

Fats and Oils

Twenty pounds of fats or oils per person should be stored for one year (1 gallon equals 7 pounds). Soybeans, flax, safflower, sunflower, and castor beans are examples of crops which are grown primarily for their oil. Most cooking oils and shortenings will store for two to three years if kept in a cool dark, dry location. Olive oil and corn oil are also very good storage oils and have a better flavor than soybean and safflower oils. Fats and oils may be stored in the following forms: cooking oil (vegetable oil), shortening, butter (fresh and dried), margarine or margarine powder, mayonnaise, salad oils and dressings including dried mixes.

Dried Beans and Legumes

Beans, peas, lentils, etc. provide an economical substitute for meat or other animal protein. The packaged beans, which are on the grocery shelf, are normally the highest grades. Dry beans are an easily stored food. They should be kept in a tightly covered, metal, glass, or plastic container in a dark, dry and cool location. The quality should be good for many years when stored under these conditions. Older beans will require longer soaking and cooking periods than freshly harvested beans.

Varieties of beans that may be stored are navy, pinto, kidney, black, lima, garbanzo, black-eyed peas, split peas, lentils and soybeans.

Textured vegetable protein (TVP) is a vegetable protein made from soybeans, but its texture is similar to that of meat. When used with meat, good quality TVP absorbs the flavor and is difficult to distinguish from the meat. It can be bought as unflavored or flavored (beef, ham, bacon, or chicken). Shelf-life is two to three years. As it ages, it becomes stale.

Vitamin and Mineral Supplements

It is recommended that 365 vitamin or vitamin/mineral tablets or capsules be stored for each family member to help compensate for possible deficiencies in the diet due to a

lack of variety of foods, and because of vitamins lost during food processing, storage, and preparation. Shelf-life is about three to five years if stored in a cool, dry and dark location.

Despite careful food planning, women may still need an iron and calcium supplement, particularly if they are pregnant or nursing. Storage of iron and calcium should be carefully considered.

Suggestions on Storage of Canned Foods

(Issued by The General Church Welfare Committee) Since pioneer days, our people have been counseled by their leaders to have a reserve of essential foodstuffs. In many cases, this reserve will be produced by the householder and preserved by him.

When these foods are processed in metal cans coated with tin or enamel linings, the question frequently arises as to the length of time the foods can be safely stored for human consumption. Canned foods that have been in storage for a long period of time in cans that are not bulged or leaking are safe to eat as the first day packed. However, they may have lost some of their flavor due to a chemical reaction in the can. This reaction is not poisonous, but does alter the flavor, texture, and nutritive value. The rate at which chemical reactions occurs doubles with each 18 degrees Fahrenheit rise in temperature. Fifty degrees Fahrenheit storage will hold four times longer than an 80 degree Fahrenheit temperature.

Due to the various temperatures where canned food may be stored, it is difficult to determine the definite period of time at which all canned foods will hold. We will group some of them. The short shelf life products are highly acid and pigmented foods such as grapefruit and orange juice, black and red cherries, all colored berries, prunes and plums. These canned foods generally have an average storage life of one to two years. Other fruits such as peaches, pears, apricots, and applesauce should average from two to three years. Vegetables such as beets, carrots, green beans, spinach, greens, tomatoes and tomato juice should have an average storage life from three to four years. Vegetables and meats such as peas, corn, lima beans and roast beef should have an average from four to five years. Canned milk should be agitated every thirty days. This prevents the fats from separating, and the product should be consumed within a year.

Canned goods should be stored in a cool, dry place; the cooler and dryer the canned goods are kept, the longer they will last. Place the oldest canned goods on the shelves so that they will be used first. Fruits, vegetables, and meats properly processed in glass jars and stored in the home will keep in a cool, dark, dry place fully as long as canned goods. Some fruits, such as the highly pigmented, will keep longer in a glass container.

The utmost care should be taken to see that foodstuffs produced and preserved by the householder do not spoil for that would be waste, and the Lord looks with disfavor upon waste. He has blessed His people with abundant crops, The Lord is doing His part, He expects us to do ours.

Water Storage:

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

During times of serious emergency, the normal water supply to your home may be cut off or become so polluted that it is undrinkable. A supply of stored water could be your most precious survival item!

You and your family may then be on your own to provide a safe and adequate water supply. Remember that typhoid fever, Dysentery, and infectious hepatitis are diseases often associated with unsafe water.

Don't take a chance! Generally, under serious disaster conditions, *no water can be presumed safe--all drinking and cooking water should be purified.*

Required Amounts of Drinking Water Per Person

A minimum of two quarts and up to one gallon of water is needed per day, depending on the size of the person, the amount of exertion, weather, and perspiration loss. A minimum of seven gallons pure water per person would be needed for a two- week survival supply. With careful rationing, this amount would be sufficient for drinking, food preparation, brushing teeth, etc. Fourteen gallons per person will allow for hygiene care.

Keep an emergency supply of drinking water in plastic containers. Commercially bottled drinking water is available. It stays pure for months and has the expiration date clearly marked on it.

There are several other sources of water if your water supply is turned off--water drained from the hot water tank (usually contains 30 to 60 gallons of usable water), clear water from the toilet flush- tank, if kept constantly clean (not the bowl !), melted ice cubes, canned fruits and vegetable juices, and liquid from other canned goods.

How to Purify Water for Drinking

1. If water is cloudy, smelly, or otherwise polluted, strain it through a paper towel or several layers of clean cloth into a container in order to remove any sediment or floating matter.

2. Water that is boiled vigorously for five full minutes will usually be safe from harmful bacterial contamination.

3. If boiling is not possible, strain the water as above and treat by adding ordinary liquid chlorine household bleach or tincture of iodine. Since liquid chlorine bleach loses strength over time, fresh bleach should be used as a water disinfectant, If the bleach is a year old the amount should be doubled. Two- year-old bleach should not be used as a water disinfectant.

4. Other chemical treatments for water purification also include halzone tablets, iodine tablets or crystals.

Number of drops to be added per quart of water:

<u>Chlorine</u>	<u>Clean</u>	<u>Cloudy</u>
Common Household	2	4
Tincture of Iodine	3	6

From medicine chest or first aid kit (2% chlorine) (Rotate your iodine each year to ensure that it will work when you need it)

Mix thoroughly by stirring or shaking the water in its container. Let it stand for 30 Minutes.

A slight chlorine odor should be detectable in the water; if not, repeat the dosage and let the water stand for an additional 15 minutes before using. Use an eye dropper to add the chlorine or the iodine to the water. Use it only for this purpose.

How to Prepare and Store Bottles of Purified Water

Keep the drinking water safe from contamination by carefully storing in clean non-corrosive, tightly- covered containers. Use one-gallon containers, preferably made of heavy opaque plastic with screw-on caps. Plastic milk bottles are not recommended. Sterilize the bottles.

1. Wash bottles with soapy water, then rinse thoroughly.
2. Run about three quarts tap water into one of the containers, then add 3/4 cup bleach to the water.
3. Shake well, turning upside down a time or two so that the stopper will be sterilized also.
4. Let the mixture stand for two to three minutes, then pour it into the next container. You can use the same chlorinated water for several containers.
5. Fill the empty bottle with pure or purified water and seal it tightly close with cap or stopper.
6. Label with 'Drinking Water--Purified', and the date of preparation.
7. Water purification tablets may also be used and are available in drug stores and sporting goods stores. They are recommended for your first aid kit. Four tablets will purify one quart of water.
8. Some stored water may develop a disagreeable appearance, taste, or odor. These properties are not necessarily harmful. Inspect your water supply every few months to see whether the containers have leaked or other undesirable conditions have developed. Replace the water if it becomes contaminated.

Portable Water Purification Equipment

A high quality filter system should possess the following characteristics: light-weight; have fewer parts (less to go wrong); a fine pre-filter; a replaceable or clearable filter; tight, well-made pump; high volume output; quick filtration; should screen out organisms over 0.5 microns (0.2 microns is best). A system with all of these features may not be inexpensive, however, The cost will usually reflect reliability as well as technology of design. Always use a filter properly. Use clearest water available, allowing suspended matter to settle out. Use pre-filter if your system has one. Do not let outlet end of filter come in contact with contaminated water. Be sure vessel you're pumping into is clean.

Emergency Source of Water

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 at the highest level in your house to let air into the system and drain water from a faucet located at the lowest level.

To use 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 or 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 faucet at the bottom of the heater.

5. Never turn on the gas or electricity until the water heater has been filled again.

Precautions

1. If water is not available, do not eat because eating uses up the body's water reserve in the digestion process.

2. Store water in your stomach rather than in the canteen. Men 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. When in desert areas don't travel on foot during the heat of the day. Travel at night and even then, always walk at a slow pace.

4. Water polluted by animals or mud tastes bad but is harmless when boiled for 10 minutes or when purified by other methods outlined above.

5. Do not drink water from swimming pools. The chlorine level is too high and will kill beneficial bacteria in the digestive track causing temporary diarrhea. This water can be used for washing and for pouring down toilets.

SANITIZE ALL BOTTLES!

(Use ¼ Cup of Bleach to 1 Quart of Water)

Appendix G: Responsibilities

Self/Family Responsibility

General Instructions:

Be wise in preparing your family--there is no need to unnecessarily alarm your children. Keep things in perspective. Don't instill fear and doom in the minds of youngsters. Nor is there any need to go deeply in debt in making emergency preparations--The purpose of the program is to be able to respond safely and quickly to an unusual event that may sometime affect your family and to help correlate your needs (and strengths) with others who may also be affected.

Begin to hold regular "Family Council" meetings. Consider anything a family member wants to bring up. Encourage your youngsters to make their views known.

Have some Family Home Evenings based on Emergency preparedness--Learn about possible emergencies for your locality and how to respond to them--Fire-Flood-Earthquake-etc.

Develop a program for acquiring--or making-- the elements in a "72-Hour Kit." Holiday and Birthday gift giving could include such items.

Encourage working youngsters to buy some of their own things--(they're useful for camping, picnics, vacations too if returned or replaced.)

Have a home evacuation plan: Who calls for help? (911) Who alerts others? Where do you meet? Where will you go? Do you need to practice evacuation drills?

Do you need to acquire special skills: CPR, First Aid, or learn utility shutoffs, etc.

Families are often separated through the day. Plan what to do during a daytime emergency.

Do you have some cash, medicines, and food readily available for emergency use?
Is your fire and liability insurance adequate?

If the emergency is in a neighboring--or distant-- area, how do you feel about helping out?

What actions should we take when:

Emergency is without warning? (Accidents, Falls, Fire, Water mishaps)

Compose yourself--Remember your training. Ask those near you for help--or offer help if it is asked for--or else stay, and keep others, out of the way.

Call 911--Stay on line 'til they have all the information they want.

When the Emergency is WITH advance warning?

- 1) Learn how to respond immediately.
- 2) Learn how to evacuate area if necessary.
- 3) Learn how to help others.
- 4) Learn how to report your situation to family, Church, and Emergency leaders.
- 5) Consider your Post-Disaster needs:
 - a) Move backs, clean up, restoration replacement, etc.
 - b) Taking assignments to help others as soon as your own needs are met.

Quorum/Home Teacher Responsibilities

General Instructions:

Pre-Emergency Action:

Have home teaching fully organized to facilitate communication within the ward ("Home teaching is the umbrella under which all members may huddle for protection in times of adversity" - Pres. Kimball)

If evacuation is suggested by government or Church leaders, the home teacher will be expected to notify his families. Encourage your families to be as independent and self-reliant as possible. Distributing copies of this emergency plan to all family heads for study and use.

In PPIs, determine if families are learning these concepts. Every Melchizedek Priesthood holder should know how to properly bless the sick or injured or frightened in asking the blessings of the Spirit the families may need. **See Spiritual Preparation: The Holy Ghost and the Priesthood.**

Instruct the Quorum or Group Leaders how they should respond as a Presidency to any emergency, whether many families are affected, or only one (which could be your own!)

Actions to Take During an Emergency:

Presidency to contact each other to determine the extent that each can carry out assigned duties. (It may be necessary to assume each other's' responsibilities). Secure your own family first, but remember you have responsibilities to others also, as soon as you can respond.

Alert your families of precautionary measures or impending emergencies...if necessary to relocate, know where to, route to take, and what to take.

By referral to or from the Bishop, rescue those whose lives are threatened.

Provide First Aid.

Account for all persons in your families.

Provide emergency water, food, clothing, and housing.

Restore "normal" living conditions ASAP Limit (or prevent) property damage.

Provide spiritual, emotional, social strength.

Report to your Bishop:

- Your name, title, unit, contact number or place; locate Ham radio services if phones are out.
- Provide location, description, magnitude of damage to residences, civil, and Church buildings. Also locations of affected members.
- Provide names and details re injured, missing or dead, and the types of medical assistance still needed
- Detail actions being taken to help those in distress. Also list those from the affected
- area still able to help others, including special skills people
- Detail specialists needed for area, and resources needed from outside the area: water, medicine, food, clothes, fuel, shelter and Fast Offering needs
- Indicate your knowledge of what non-church and Government sources are doing.

Consider Post Disaster Concerns: clean-up, repairs, replacement, etc. Assign Quorum members to assist as directed by the Bishop.

Suggestions in Regard to the hazards of rescuing those in danger:

Let trained personnel respond without interference.

Assist trained personnel if asked.

When expert help is not available, use common sense and caution, acting quickly as possible:

When entering damaged buildings, be aware of possible collapse, gas leaks, electric short circuits. Stay away from downed power lines.

Do not smoke or light fires.

In rescues, generally, consider this order:

- Are they in danger in present location? If so, move them, if not--don't!!
- Restore breathing and heart beat
- Control bleeding
- Prevent shock
- Treat for burns, breaks, poisons
- Examine carefully and seek medical help
- Keep checking individual until help comes
- Be alert, calm, positive, give directions to those disoriented, dazed, disorganized

Ward Responsibilities, General Instructions:

Pre-Emergency Recommendations

Be familiar with Self/Family/Quorum responsibilities.

Call a Ward Emergency Preparedness Coordinator to give day to day direction and planning to the Ward. This person would assist the Bishop as needed in an actual emergency.

Distribute a copy of this emergency plan to Quorum leaders and family heads.

In PPIs, determine if Quorum leaders have carried out their assignments
Coordinate Ward plans with Stake Emergency Preparedness Committee
Be prepared to have your own building used as a Relocation Center by the Stake,
under their direction.

Keep current on Ward Directories and Home Teaching routes. This is important in the event of an evacuation order.

Maintain a Special Skills/Special Needs list of Ward membership, and furnish periodic updates to Stake.

Plan how to relieve Special Skills people of family duties so they can help out in emergencies.

Be familiar with Church and non-Church resources which may be available to members.

The Ward Committee will teach members to prepare for emergencies. The "Self/Family" section of this section may be sufficient.

Teach members how to report their condition during an emergency.

Make special plans to care for singles in the Ward as well as single parent families.

Actions During Emergencies:

Wards should be the first unit of responsibility in an emergency:

If a single family is affected (i.e., a fire) Home Teachers and Quorums go into action to assist.

In the event of a wider emergency which affects the Ward the Bishop will form an Emergency Response Committee made up of the Bishopric, the Priesthood Executive Committee (Elder's Quorum President, High Priest Group Leader, Young Men's President, and Relief Society President) and the Ward Emergency Communications Specialist. This committee will receive reports from the Home Teachers in the field, evaluate those reports and determine who needs help, the nature of the help and who can best provide that help with the resources available from the Ward, Stake, and Church Headquarters.

- Rescue people threatened
- Provide medical aid
- Account for affected members
- Provide food, water, housing, etc.
- Through Storehouse Services (if needed) help restore normal living conditions ASAP
- Limit or prevent further property damage to homes and businesses
- Fortify emotional, social, spiritual strengths.
- LDS Social Services might assist in some cases
- Report name, title, unit # to Stake, and who
- Church Headquarters should contact
- Provide description and location of the emergency including property damage to Church and family buildings
- Provide names of dead, missing, or injured, and number who still require skilled help
- Action taken to help those distressed
- Detail resources and assistance needed from outside sources

- Name of spokesman assigned to answer media queries
- Indicate what Government and non-Church sources are doing

Consider and address post-disaster concerns, cleanup, repair, replacement, etc.

Assign members via quorums to assist as directed by Stake President

If relocation is deemed necessary, Ward will focus energies on getting people to assigned Stake Center in or out of area

Members are to obey the law and be as helpful to others as possible