

IT'S A DISASTER!

...and what are YOU
gonna do about it?

5th Edition

A Disaster Preparedness, Prevention
& Basic First Aid Manual

by Bill & Janet Liebsch



We wanted to share some creative ideas associated with our customizable book that may benefit you and your community.

Fedhealth's products are perfect **Public-Private Partnership** tools. *(Note: This PDF is only a portion of the 266-pg book, but allows you to see layout, contents, etc.)*



Many agencies, businesses and organizations across North America use custom copies of "IT'S A DISASTER!" for their employees, volunteers, customers and whole communities.

We discount our 266-page paperback up to **70% off** list (or **\$4.50** ea), and you can customize red books with stickers ... or personalize books in the print process on 1,000 units (or more) at no additional cost. The covers and first 12 pages can be customized in full color. And you can upgrade your order to add **48 to 288 extra** color glossy pages to include grant-specific data, marketing data, ads and coupons in books.

Some creative uses include...

- * Changing entire book cover (including the title) + adding your logos, safety data or plans, maps and special messages on 12 to 300 pages for local communities!
- * Collaborating with public and private partners to include coupons, QR codes and freebies on everyday products and services, and incentivize the public to keep books handy!

We also have some [revenue sharing ideas](#) to help nonprofits, schools and First Responders **raise funds** while educating local communities. For example, collaborate with Chambers, Rotary Clubs and others and use 260 (of up to 300) customizable pages charging just **15 cents** per full page color ad. (That's cheaper than a postcard!) That would **raise \$39 per book** for your project ... plus its undedicated matchable dollars.

Learn more at www.fedhealth.net or contact me direct to discuss your needs. As always ... we're completely open to ANY idea that gets this data into the publics' hands and benefits our country.

Stay safe,

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DEDICATION

*This manual is dedicated to Volunteers all around the world who give their heart, soul, energy, and time unselfishly for the betterment of our society.
Thank you.*

ABOUT THE AUTHORS

Bill and Janet Liebsch are the founders of Fedhealth, a publishing and marketing company formed in 1999 to help the public focus on preparedness and health-related issues. They are dedicated to developing and marketing collaborative programs that primarily benefit First Responders, schools, and volunteers. Fedhealth's books and ebooks are continually updated on preparedness and safety-related topics. To order additional copies and to learn about fundraising programs and free customization, visit www.fedhealth.net

DISCLAIMER

The authors of this Manual are not licensed physicians, and the enclosed suggestions should not replace the advice of trained medical staff and officials. This information is not intended as a substitute for a first aid course, but reviews basic first aid measures that could be used when professional medical assistance is delayed or temporarily unavailable due to a major disaster or crisis. All data compiled here is for informational purposes only and neither the authors nor Fedhealth can accept responsibility for any injury, loss or damage arising from the use of this information. During a time of crisis, citizens should heed the advice of local officials over the data contained in this book.

INTRODUCTION

If you have never been involved in any type of major disaster, count yourself among the lucky ones and realize that disasters can happen anywhere and anytime.

The confusion immediately following a disaster is scary - especially if you have not prepared yourself in advance and discussed these ideas with your family members.

Hopefully every time you see or hear about a disaster it makes you stop and think... "What if that was me or my family?" But what have YOU done to get yourself and your family ready? The best thing you can do to deal with any type of disaster is...

BE AWARE... BE PREPARED... and... HAVE A PLAN!

If you do these 3 things, the life you save could be your own... because what you don't know CAN hurt you!

The more the public is prepared for a disaster, the less strain we place on our local emergency services. Any major disaster will temporarily swamp First Responders, therefore, both the Red Cross and the Federal Emergency Management Agency recommend persons to try to be self-sufficient for at least 72 hours following a disaster. And if you are prepared for a longer period (like 4 days to 2 weeks or more)... that's even better!

A majority of this information was compiled from various publications provided by the U.S. Department of Homeland Security, FEMA, the Red Cross, Public Safety Canada, the CDC and the Public Health Agency of Canada to help assist you in preparing for various types of disasters and basic first aid. It also offers suggestions on personal checklists and important telephone numbers for your family members and emergency groups that can be written in the spaces provided or attached inside this manual. Most importantly, there are many web sites throughout the book to help you find more information.

We realize you may not experience every type of disaster in your part of the world, but if you ever travel you could potentially be placed in a disaster situation so please educate yourself and your family.

Please stop your hectic lives for just a few hours and sit down with your entire family (from children to seniors) to read this Manual and discuss how each of you would handle these types of situations.

It will be quality time with your loved ones and could save your lives!

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Section 1

Family Emergency Plan, Kits & Shelter

FAMILY EMERGENCY PLAN CHECKLIST

The next time disaster strikes, you may not have much time to act and local first responders may not be able to reach you right away. **PREPARE NOW** for a sudden emergency and discuss these ideas with your entire family to create a **Family Emergency Plan**.

Even though this checklist looks long and scary, it is easy to do and can help you make a plan. We suggest you and your family review this list, then read through the Manual since there are many tips mentioned in various topics and Sections that could help develop your plan.

PLEASE make some time in your busy lives to prepare for a disaster... a few minutes now could possibly save a life when a disaster hits. Remember - **be aware... be prepared... and have a plan!**

LEARN ABOUT RISKS & EXISTING PLANS:

(See Section 4 for phone numbers of State & Provincial Emergency Management offices and Red Cross - or check city/county white pages)

- [] Find out which disasters could occur in your area and ask officials how to prepare for each disaster... but read this Manual first.
- [] Ask how you will be warned of an emergency.
- [] Learn your community's evacuation routes and map them out using a free online service like Google Maps or Mapquest.
- [] Ask about special assistance for elderly or disabled persons.
- [] Ask your workplace about emergency plans and learn about plans at your children's school(s) or day care center(s).

TIPS ON MAKING YOUR FAMILY PLAN:

*(Review all and complete **Family Emergency Plan** on pages 12-13):*

- [] Meet with household members to talk about the dangers of fire, severe weather, earthquakes and other emergencies. Explain how to respond to each using the tips in this Manual.
- [] Find safe spots in your home for each type of disaster that affects your community. *(see Section 2 for explanations of each disaster)*
- [] Talk about what to do when there are power outages and injuries.

- [] Take a basic first aid and CPR class (or join a CERT - see page 224).
- [] Draw a floor plan of your home showing doors, windows and stairways. Mark locations of first aid and disaster kits, fire extinguishers, smoke detectors, ladders, and utility shut-off points. Next, use a colored pen to draw a broken line charting at least 2 escape routes from each room. And practice drills!
- [] Show family members how to turn off water, gas and electricity at the main switches when necessary.
- [] Post emergency telephone numbers near telephones and teach children how and when to call 9-1-1. (*see Section 3*)
- [] Make sure household members understand they should turn on the radio for emergency information.
- [] Pick one out-of-state and a local friend or relative for family members to call if separated during a disaster. (It is often easier to call out-of-state than within the affected area.)
- [] Pick two emergency meeting places in case you can't go home:
 - 1) A place near your home.
 - 2) A place outside the neighborhood.
- [] Teach children meeting places and emergency phone numbers in case you get separated during a crisis.
- [] Put **ICE** before a name and number in cell phone address books so First Responders would know who to call "**In Case of Emergency**".
- [] Make sure family members know how to send and receive photos and text messages (if you have those capabilities on your cells). Also consider joining a network like Twitter or a local text message alert system to receive emergency broadcast warnings, updates, etc.
- [] Get some FRS walkie-talkies and teach family how to use them.
- [] Practice emergency evacuation drills with all household members at least two times each year.
- [] Consider doing a Living Will and/or a Healthcare Power of Attorney.
- [] Keep family records in a water- and fire-proof container. Consider keeping another set of records in a safety deposit box offsite.
- [] Check if you have enough insurance coverage. (*see Section 2 for more information on flood insurance.*)

TIPS FOR ELDERLY & DISABLED FAMILY MEMBERS:

- [] Ask about special aid that may be available in an emergency for elderly and disabled family members. Find out if assistance is available for evacuation and in public shelters. FEMA suggests people with a disability register with local fire department so help can be provided quickly in an emergency (if available in your area).
- [] Ask your children's teachers and caregivers about emergency plans for schools, day care centers or nursing homes.
- [] If you currently have a personal care attendant from an agency, check to see if the agency will be providing services at another location if there is an evacuation -- and tell family members.
- [] Learn what to do and where to go for each type of emergency. For example, basements are not wheelchair-accessible so you should have alternate safe places for different types of disasters for disabled or elderly persons.
- [] Learn what to do in case of power outages and injuries. Know how to start a back-up power supply for essential medical equipment!
- [] If someone in the home uses a wheelchair, make sure 2 exits are wheelchair-accessible in case one exit is blocked.
- [] Consider getting a medical alert system that will allow you to call for help if you have trouble getting around.
- [] Both elderly and disabled persons should wear a medical alert bracelet or necklace at all times if they have special needs.
- [] Talk to your doctor to ask if you can keep a 60-90 day supply of medications and special medical parts and supplies on-hand in case of emergency.
- [] Consider setting up a "Buddy" system with a roommate, trusted friend or neighbor. Give buddy a copy of your **Family Emergency Plan** and an extra house key or tell them where one is available.
- [] Consider putting a few personal items in a lightweight draw string bag (e.g. a whistle, some medications, a small flashlight, extra hearing aid batteries, etc.) and tie it to your wheelchair or walker for emergencies. Make sure to rotate items so current and working.
- [] Visit the **National Organization on Disability** web site to learn more about Emergency Preparedness issues at www.nod.org .

TIPS FOR PETS OR LIVESTOCK / LARGE ANIMALS:

TIPS FOR PETS

- [] If you have to evacuate your home, DO NOT leave pets behind! Make sure you take a secure pet carrier, leash or harness with you.
- [] Emergency shelters may not accept pets (unless it is a service animal). Find out which motels and hotels in your area allow pets in advance of needing them. Ask your veterinarian or animal shelter if they board animals during a disaster or emergency.
- [] Make sure identification tags are current and securely fastened to pet's collar or get a microchip implanted in your pet. Keep a current photo in your wallet or cell phone for identification purposes.
- [] Make sure a roommate, trusted neighbor or friend has an extra house key to evacuate your pets in the event you are unavailable.

TIPS FOR LIVESTOCK / LARGE ANIMALS

- [] Evacuate livestock whenever possible. Make arrangements for evacuation, including routes and host sites, in advance. At least two alternate evacuation routes should be mapped out as a backup.
- [] The evacuation site should have food, water, veterinary care, handlers, equipment and proper facilities. Also consider getting a copy of SAVE YOUR HORSE! A Horse Owner's Guide to Large Animal Rescue by Michelle Staples at www.redjeansink.com
- [] Trucks, trailers, and vehicles for transporting animals should be available with experienced handlers and drivers to transport them.
- [] If evacuation is not possible, a decision must be made whether to move large animals to available shelter or turn them outside. This decision should be based on the type of disaster and the soundness and location of the shelter or structure.
- [] If you board animals, ask if facility has an evacuation plan in place.

Next, we suggest you sit with your family and write down your **Family Emergency Plan** using the next 2 pages as a guide. Then review how to put together a **Disaster Supplies Kit** since you may not have much time if you are told to evacuate quickly.

Again, we suggest you and family members read this manual together - especially your kids - since there are many tips here that could help you make a plan and learn what to do if the unexpected happens. You may just want to review the book first and then come back to this Section later.

FAMILY EMERGENCY PLAN

EMERGENCY CONTACT NUMBERS

(Post a copy of this information near each phone for easy access!)

Emergency Numbers

In a life-threatening emergency, **call 9-1-1** or local emergency number:

Police Department: _____

Fire Department: _____

Ambulance: _____

Hospital: _____

Poison Control: 1-800-222-1222 (U.S. only) _____

Out-of-State Contact

Name _____

Address _____

Telephone (Day) _____ (Evening) _____

Local Contact

Name _____

Telephone (Day) _____ (Evening) _____

Family & Friends Work / Cell Numbers

Name: _____ Phone#: _____

Name: _____ Phone#: _____

Name: _____ Phone#: _____

Neighbors

Name: _____ Phone#: _____

Name: _____ Phone#: _____

Name: _____ Phone#: _____

School Information (if you have children)

Child / School Name: _____ / _____ Ph#: _____

Child / School Name: _____ / _____ Ph#: _____

EMERGENCY PLAN, continued

Family Doctors

Name: _____ Phone#: _____

Name: _____ Phone#: _____

Other

Veterinarian: _____

Animal Shelter or Humane Society: _____

Electric company: _____

Gas company: _____

Water company: _____

EMERGENCY MEETING PLACES (OR AREAS)

In case you get separated during an emergency or disaster, decide on two Meeting Places or Areas where you can join each other. Include children in this decision so they understand why they should meet here.

1. Right outside your home _____

(Example: meet by the curb or by the mailbox in front of home or apartment building)

2. Away from the neighborhood, in case you cannot return home

(maybe choose the home of a relative or family friend)

Address _____

Telephone # _____

Directions to this place _____

Note: If these meeting places cannot be reached, text or send pictures of a new location or a landmark you are near so others can find you.

DISASTER SUPPLIES KIT

Disasters happen anytime and anywhere -- and, when disaster strikes, you may not have much time to respond. And sometimes services may be cut off or first responders can't reach people right away. Would you and your family be prepared to cope until help arrives?

Both FEMA and the Red Cross recommend keeping enough supplies in your home to meet your family's needs for at *least* three days (we suggest 4 days to 2 weeks or more in home.) Once disaster threatens or hits, you may not have time to shop or search for supplies ... but, if you've gathered supplies in advance in your **Disaster Supplies Kit**, your family could handle an evacuation or shelter living easier. And since everything is all together in one place... all you gotta do is **GRAB & GO!**

Put items you'd most likely need (water, food, first aid, emergency items, etc.) in a container that is easy-to-carry and that will fit in your vehicle. For example, a large trash can or storage container with a lid that snaps shut tightly (some even come with wheels), or a waterproof backpack or large duffel bag (waterproof, if possible) would be useful.

We're also including suggestions for a **CAR KIT** and a **CLASSROOM / LOCKER / OFFICE KIT** since these are usually the most common places you would be if and when a disaster strikes.

There are seven basic categories of supplies you should stock in your home kit: **water, food, first aid supplies, tools and emergency supplies, sanitation, clothing and bedding, and special items.**

Take advantage of sales and stock up as you can -- also put dates on food cans or labels to show when they were purchased. Supplies should ALL be checked every 6 months to make sure they are still good and working! We suggest you mark dates on your calendar and have the entire family help check all the items together. It'll be good quality time with the family and give you all a chance to update any phone numbers or information that has changed.

WATER

A normally active person needs to drink at least 2 quarts (2 litres) of water each day and possibly as much as a gallon (4 litres) a day.

[] Store one gallon of water per person per day (two quarts/litres for drinking and two quarts/litres for food preparation and sanitation).

- [] Keep at least a three-day supply of water for each person in home and store extra water for pets. Rotate new bottles every 6 months since they may leak. Consider getting drums or containers for long-term water storage from a reputable dealer ... and treat the water.
- [] Consider purchasing a certified portable water purification filter.
- [] Review TIPS ON WATER PURIFICATION at end of Section 2.

FOOD

Choose foods that require no refrigeration, preparation or cooking and little or no water. If you must heat food, pack a can of sterno or a small propane camping stove. Select foods that are compact and lightweight and rotate food out every 6 months. (Keep items like this handy in pantry too.)

- [] Ready-to-eat canned meats, fish, fruits, and vegetables (and put in a manual can opener!!) Make sure cans don't have dents in them.
- [] Canned juices, milk, soups (if powder or cubes, store extra water)
- [] Staples - sugar, salt, pepper
- [] High energy foods - peanut butter, jelly, crackers, granola bars, trail mix, nuts, jerky, dried fruits, Emergency Food bars, etc.
- [] Vitamins & herbs (e.g. a good multiple, Vitamins C & E, garlic pills [boosts immune], L-Tyrosine [an amino acid for stress], etc.)
- [] Foods for infants, elderly persons or persons on special diets
- [] Foods for your pet (if necessary)
- [] Comfort / stress foods - cookies, hard candy, suckers, sweetened cereal, instant coffee, tea bags, powdered drink mixes, etc.
- [] Some companies offer survival and long-term storage foods that are freeze dried and sold in months, 1-year, and 2-year supplies

FIRST AID KITS

You should always be prepared and keep a First Aid Kit in your home and in every car and make sure everyone knows where kits are and how to use them. And if you like the outdoors (hiking, biking, etc.) you should carry a small Kit in your fanny pack or backpack as a precaution.

There are many different sizes of First Aid Kits on the market that vary in price. You can also make your own kits using things that may already be in your home. Consider including the following items in a **waterproof** container or bag so you can be prepared for almost any type of emergency.

We realize there are a lot of items suggested here, but the more you prepare ... the better off you and your family will be during a disaster situation.

ITEMS TO INCLUDE IN FIRST AID KIT

- Ace bandage(s)
- Adhesive bandages in assorted sizes
- Adhesive tape
- Antibiotic ointment or gel
- Antiseptic towelettes
- Assorted sizes of safety pins & needles
- Box of Baking soda
- Cleansing agent (isopropyl alcohol, hydrogen peroxide and/or soap)
- Cold & Heat packs
- Contact lens solution and Eyewash solution
- Cotton and Cotton swabs
- Copy of *IT'S A DISASTER!* manual
- Dental repair kit (usually near toothpaste section)
- Disposable Face shield for Rescue Breathing
- Disposable gloves
- Face masks (with N95 rated particulate filter and/or Nanomasks)
- Flashlight & batteries - check often to make sure it works & batteries are good (Tip: remove batteries while stored or get hand crank units)
- Gauze pads
- Hand sanitizer (with at least 60% alcohol)
- Hydrogen peroxide
- Lip balm (one with SPF is best)
- Liquid bandage (to seal cuts or scrapes)
- Moleskin (for blisters on feet)
- Petroleum jelly or other lubricant
- Plastic bags
- Roller gauze
- Scissors
- Small bottle of hand lotion
- Snake bite kit with extractor
- Sunscreen (one with SPF 30 or higher and 3 or 4 star UVA protection)
- Thermometer
- Tweezers

NON-PRESCRIPTION DRUGS TO INCLUDE IN FIRST AID KIT

- Activated charcoal (use if advised by the Poison Control Center)

- Antacid (for upset stomach)
- Anti-diarrhea medication
- Antihistamine and decongestant (for allergic reactions or allergies and sinus problems)
- Aspirin, acetaminophen, ibuprofen and naproxen sodium
- Laxative
- Potassium Iodide (*see NUCLEAR POWER PLANT EMERGENCY*)
- Vitamins & herbs (e.g. a good multiple, Vitamins C & E, garlic pills or zinc [boosts immune sys], L-Tyrosine [amino acid for stress], etc.)

PRESCRIPTION DRUGS TO INCLUDE IN FIRST AID KIT

Since it may be hard to get prescriptions filled during a disaster, talk to your physician or pharmacist about storing these types of medications. Keep a 3-month supply of medications and supplies on-hand if at all possible. And make sure to check labels for special instructions and expiration dates.

TIPS ON SOME INEXPENSIVE FIRST AID ITEMS

Activated charcoal - absorbs poisons and drugs in the stomach and intestines and helps prevent toxins from being absorbed into the bloodstream by coating intestinal walls. (Check with the Poison Control Center before taking since it doesn't work on all toxic substances.) It's found at natural foods stores and pharmacies in powder, liquid, and capsule forms. Capsules can be broken open to use powder for making a paste on insect bites and stings.

Baking soda - aid for heartburn or indigestion; use as substitute for toothpaste; sprinkle in bath water for sore muscles or bites & stings; or make a paste (3 parts baking soda to 1 part water) to use on stings or insect bites, poison ivy, canker sores, sunburn, and rashes (but too strong for infants!)

Hydrogen peroxide - can help clean and disinfect wounds, treat canker sores, gingivitis, and minor earaches. Also can be used for cleaning hands or for brushing teeth. (The reason it foams up on skin or item is because of the oxygen at work - means it's killing germs!)

Meat tenderizer - (check ingredient list on bottle for "papain") make a paste to use on insect bites and stings. Papain is a natural enzyme derived from papaya that can help break down insect venom.

Vinegar - helps relieve jellyfish stings, sunburn, and swimmer's ear.

TOOLS AND EMERGENCY SUPPLIES

The following items may come in handy if you have to evacuate or if stuck at home short or long-term.

- [] Aluminum foil and resealable plastic bags
- [] Battery-operated radio and extra batteries (remember to check batteries every 6 months). Also consider radios like the NOAA Weather Radio and Environment Canada's Weatheradio with one-alert feature that automatically alerts you when a Watch or Warning has been issued. Or get a hand crank radio with flashlight.
- [] Battery-operated travel alarm clock
- [] Cash or traveler's check and some change
- [] CD (could be used as a reflector to signal planes if stranded)
- [] Compass
- [] Extra copy of *IT'S A DISASTER!* manual
- [] Flashlight and extra batteries & bulbs (check every 6 months) or get emergency solar, hand crank or shake flashlights and lanterns
- [] Fire extinguisher: small canister, ABC type
- [] Generator (learn how to use and store it in advance)
- [] Manual can opener and a utility knife
- [] Map of the area (to help locate shelters, alternate routes, etc.)
- [] Matches, lighters and candles in a waterproof container
- [] Medicine dropper (e.g. measure bleach to purify water, etc.)
- [] Needles & thread
- [] Paper, pencil (store in baggies to keep dry)
- [] Paper or plastic cups, plates, utensils, a few pots & pans (or Mess Kits)
- [] Plastic sheeting (for shelter, lean-to, or sealing room during chemical / hazardous material threat - see *HAZARDOUS MATERIALS*)
- [] Radiation detection devices (like a dosimeter, etc - see page 116)
- [] Tape (plastic & duct), rope, twine and bungee cords

- [] Signal flares
- [] Small hand tools (pliers, screwdrivers, shovel or trowel, etc.)
- [] Solar (or handcrank) charger for cell phone, PDA, etc.
- [] Sterno or small camp stove and mini propane bottle
- [] Walkie-talkies (low cost set of FRS radios and store extra batteries)
- [] Whistle (can be used to call for help in an emergency)
- [] Wrench (to turn off household gas and water)

SANITATION

Make sure all these items are in a waterproof containers or plastic bags.

- [] Disinfectant (*see TIPS ON SANITATION OF HUMAN WASTE*)
- [] Feminine supplies (tampons, pads, etc.)
- [] Household chlorine bleach (regular scent)
- [] Personal hygiene items (toothbrushes, toothpaste or baking soda, brush, comb, deodorant, shaving cream, razors, etc.)
- [] Plastic garbage bags with twist ties and small plastic grocery bags
- [] Plastic bucket with tight lid (for human waste use)
- [] Soap, liquid detergent, hand sanitizer (with at least 60% alcohol), moist towelettes or sanitizing wipes, hydrogen peroxide, etc.
- [] Toilet paper and baby wipes
- [] Wash cloths, hand and bath towels

CLOTHING AND BEDDING

- [] At least one complete change of clothing and footwear per person
- [] Sturdy shoes or work boots and extra socks
- [] Hats, work and regular gloves, and thermal underwear

- [] Blankets or sleeping bags (small emergency ones are cheap and about the size of a wallet ... or pack extra garbage bags)
- [] Rain gear or poncho (or use plastic garbage bags)
- [] Safety glasses and/or Sunglasses
- [] Small stuffed animal, toy or book for each child at bedtime

SPECIAL ITEMS

- [] Entertainment - games, books and playing cards
- [] Important Family Documents (keep in waterproof, portable safe container and update as needed. Keep copies of papers off-site in safety deposit box or with a family member [or scan all to a CD].)
 - Extra set of car keys, cash, traveler's checks and credit card
 - Will, insurance policies, contracts, deeds, stocks and bonds
 - Passports, social security #s/cards, immunization records
 - Bank account numbers
 - Credit card numbers, card companies + phone numbers
 - Inventory of valuable household goods
 - Family records (birth, marriage, death certificates, photo IDs)
 - Recent pictures of all family members and pets for i.d. needs
- [] RED and GREEN construction paper or RED and GREEN crayons or markers (can signal rescue workers to stop or move on)

Remember to pack things for family members with special needs:

For Infants

- [] Bottles, Formula, powdered milk, cereals and juices
- [] Diapers, baby wipes and diaper rash ointment
- [] Medications
- [] Small soft toys

For Elderly and Disabled (Children & Adults)

- [] Bladder control garments and pads
- [] Denture needs

- [] Extra eye glasses or contact lenses and supplies
- [] Extra hearing aid batteries
- [] Extra wheelchair batteries, oxygen, catheters or any other special equipment
- [] A list of style and serial numbers of medical devices such as pacemaker, defibrillator, etc. and copy of Medicare card
- [] List of prescription medications and dosages or allergies (if any)
- [] Special medicines for heart, high blood pressure, diabetes, etc.
- [] Store backup equipment (such as a manual wheelchair, cane or walker) at a neighbor's home or at another location

For Pets

- [] Cage or carrier, bedding, leash, muzzle, litter & box, trash bags, etc.
- [] Food, manual can opener, bowls, chew toys or treats, etc.
- [] Medications and copies of medical / immunization records

CAR KIT

Keep most or all of these items in a waterproof pack so everything is together and easy to grab. Make one for each vehicle too!

- [] Battery (or hand crank) radio, flashlight, extra batteries and bulbs
- [] Blanket (small emergency ones are cheap and the size of a wallet)
- [] Bottled water and non-perishable foods (Tip: store food in empty coffee cans to keep it from getting squashed)
- [] CD (could be used as a reflector to signal planes if stranded)
- [] Copy of *IT'S A DISASTER!* manual
- [] Extra clothes (jeans and sweater), sturdy shoes and socks
- [] First Aid Kit (with disposable gloves and N95 rated face masks)
- [] Local maps with evacuation routes pre-marked

- [] Personal hygiene items (hand sanitizer, toilet paper, tissues, tampons, etc)
- [] Plastic bags that seal
- [] Shovel (small collapsible ones are available)
- [] Short rubber hose (for siphoning)
- [] Small fire extinguisher (5 lb., ABC type)
- [] Tools - Tire repair kit, booster cables, flares, screw drivers, pliers, knife, wire or rope, etc.
- [] Work gloves

CLASSROOM / LOCKER / OFFICE KIT

Keep items in a small pack, drawstring bag or duffel so everything is together and easy to grab!

- [] Battery-operated radio and extra batteries (or a hand crank radio)
- [] Copy of *IT'S A DISASTER!* manual
- [] Emergency blanket (small, cheap, & light - the size of a wallet)
- [] A few plastic trash bags with twist ties
- [] Mini flashlight and extra bulbs and batteries (or a hand crank unit)
- [] Non-perishable foods like crackers, cookies, trail mix, granola bars, etc. (Ask children to help choosing food and make sure they understand this is for Emergencies!)
- [] Personal hygiene items (packet of tissues, moist towelettes, hand sanitizer, comb, toothbrush, tampons, etc)
- [] Small First Aid kit (with disposable gloves and N95 face masks)
- [] Small stuffed animal, book, or toy (for children)
- [] Sweatshirt or sweater (or a full change of clothes if enough room)
- [] Walkie-talkies (low cost set of FRS radios and store extra batteries)

[] Water ... as much as you can fit! Small juice boxes are good too.

[] Work gloves to protect your hands (especially from broken glass)

SUGGESTIONS & REMINDERS ABOUT KITS

Remember, both the Red Cross and FEMA recommend keeping enough supplies to meet your family's needs for at *least* three days, but consider a longer period like 96 hours or 2 weeks or more.

You may not have time to shop or search for items once a disaster threatens or hits so make your kits now so you're prepared for the unexpected.

Some things to keep in mind include ...

- Store your **Disaster Supplies Kit** in convenient place known to ALL family members. Keep a smaller version in the trunk or back of every vehicle (see CAR KIT).
- Keep items in airtight plastic bags to keep them dry in kit.
- Take advantage of end-of-season clearance sales and grocery sales (esp. can goods) and stock up as you can. Look around your home since you may be able to put a lot of these things together from what is already on shelves or in drawers or medicine cabinets.
- Replace your stored food and water supply every 6 months. It's best to test or replace batteries at this time too. Make a game of it by keeping track on a calendar or on a poster drawn by children so they can help. Also, everyone should meet every 6 months anyway to go over the **Family Emergency Plan** and update any data (phone numbers, address changes, etc.) *Suggestion: Do this every Daylight Savings time - it's twice a year on a weekend so easy to remember.*
- Ask your physician or pharmacist about storing prescription medicines.
- Visit the U.S. Department of Homeland Security web site for more tips about Kits at www.ready.gov

What are YOU gonna do about...

A FLOOD?

Floods are the most common natural disaster. Some floods develop over a period of several days, but a flash flood can cause raging waters in just a few minutes. Mudflows are another danger triggered by flooding that can bury villages without warning, especially in mountainous regions.

Everyone is at risk from floods and flash floods, even in areas that seem harmless in dry weather. Always listen to the radio or TV to hear the latest updates. Some other types of radios are the NOAA Weather Radio and Environment Canada Weatheradio with battery backup and tone-alert feature that alert you when a Watch or Warning has been issued.

BEFORE A FLOOD (OR HEAVY RAIN):

Prepare - Review FLOOD MITIGATION at beginning of this Section.

Learn the buzzwords - Learn the terms / words used with floods...

- **Flood watch** - flooding is possible
- **Flash flood watch** - flash flooding is possible so move to higher ground if in a low-lying area
- **Flood warning** - flooding is occurring or will occur soon so listen to radio or TV for updates or evacuation alerts
- **Flash flood warning** - flash flood is occurring so seek higher ground on foot immediately
- **Urban and Small Stream Advisory** - flooding of small streams, streets and low-lying areas is occurring

Learn risks - Ask local emergency management office if your property is a flood-prone or high-risk area and what you can do to reduce risks to your property and home. Find out what official flood warning signals are and what to do when you hear them. Ask if there are dams or levees nearby and if they could be hazards. (*also see Landslides & Mudflows on pages 39-41.*)

Be ready to evacuate - Listen to local authorities and leave if you are told to evacuate. (*see EVACUATION*)

Make a plan - Review Section 1 to develop a **Family Emergency Plan** and **Disaster Supplies Kit**. And download Iowa Conservation and Preservation Consortium's "Flood Recovery Booklet" to learn how to dry materials like artwork, books, photographs, CD/DVDs, etc. at www.neilsa.org

Learn to shut off - Know where and how to shut off electricity, gas and water at main switches and valves -- and ask local utilities for instructions.

Get insurance...? - Talk to your agent and find out more about the **National Flood Insurance Program**. (see *FLOOD MITIGATION*)

Did you know...

- ... you can buy federal flood insurance through most major insurance companies and licensed agents?!
- ... you do not have to own a home to have flood insurance as long as your community participates in the **NFIP**!?
- ... **NFIP** offers coverage even in flood-prone areas and offers basement and below ground level coverage?!

Put it on film/chip/drive - Either videotape or take pictures of home and personal belongings and store them in a safe place with important papers.

DURING A FLOOD (OR HEAVY RAIN):

Be aware - Listen to local news and watch for flash floods especially if near streams, drainage channels, and areas known to flood. Be prepared to fill and place sandbags in areas as instructed to help combat rising waters.

Get to higher ground - If in a low-lying area, move to higher ground.

Prepare to evacuate – (see *EVACUATION*), and IF time also...

- Secure home and move important items to upper floors.
- Turn off utilities at main switches or valves if instructed by authorities and **DO NOT** touch electrical equipment if you are wet or standing in water!
- Fill up your car with fuel.

Obey warnings - If road signs, barricades, or cones are placed in areas - **DO NOT** drive around them! Find another way or you may get fined.

Things to avoid:

- **moving water** - 6 inches (15 cm) of moving water can knock you off your feet and 2 ft (0.6 m) can float a car
- **flooding car** - if flood waters rise around your car, get out and move to higher ground if you can do it safely
- **bad weather** - leave early enough so you're not trapped
- **flooded areas** - roadways and bridges may be washed-out
- **downed power lines** - extremely dangerous in floods!!

AFTER A FLOOD (OR HEAVY RAIN):

Things to avoid:

- **flood waters** - avoid since they may be contaminated by oil, gasoline or raw sewage or may be electrically charged from underground or downed power lines - local authorities will say when it's okay to return
- **moving water** - 6 inches (15 cm) can knock you off your feet and 2 ft (0.6 m) can float a car
- **flooded areas** - roadways and bridges may be washed-out
- **downed power lines** - extremely dangerous and report them to the power company

Obey warnings - If road signs, barricades, or cones are placed in areas - OBEY THEM! Most areas fine people who ignore posted warnings. DO NOT drive around barricades... find another way to get there!

Strange critters - Watch out for snakes and other wildlife in areas that were flooded. Don't try to care for a wounded critter since it may try to attack you... call your local animal control office or animal shelter.

Flooded food - Throw away food that has come into contact with flood waters since eating it can make you sick.

Drinking water - Wait for officials to advise when water is safe to drink. If you have a well that gets contaminated, find another source or boil water.

Wash your hands - Wash hands often with clean water and soap since flood waters are dirty and full of germs!

Use bleach - The best thing to use for cleaning up flooded areas is household bleach since it helps kill germs.

Sandbags - If any sandbags come into contact with floodwaters, wear rubber gloves when removing them and follow officials' instructions on where to discard them since they're most likely contaminated.

Listen - Continue listening to radio or TV for updates on weather and tips on getting assistance for housing, clothing, food, etc.

Insurance - Call your insurance agent or representative to discuss claims.

Mold - Consider asking a restoration professional to inspect your house for mold. (see *AIR QUALITY MITIGATION*)

Recovery tips - See TIPS ON RECOVERING FROM A DISASTER.

What are YOU gonna do about...

HAZARDOUS MATERIALS?

Chemical plants are one source of hazardous materials, but there are many others that exist in large industry, small businesses, and homes. There are about 500,000 products that could pose a physical or health hazard -- things ranging from waste produced by a petroleum refinery to materials used by the dry cleaners to pesticides stored in your home.

Most hazardous materials are transported around the country by road, rail and through pipelines potentially causing spills on highways, near railroad tracks or underground. Many U.S. communities have a **Local Emergency Planning Committee (LEPC)** that keeps local planners, companies and members of the community informed of potential risks. All companies that have hazardous chemicals must report to the LEPC every year and the public is encouraged to get involved. We [the public] should all learn more about hazardous materials and how they can affect our lives so contact your emergency management office to learn more.

We're going to cover two topics here -- **HAZARDOUS MATERIALS DISASTER** (where a spill or incident affects an area or community) and **HOUSEHOLD CHEMICAL EMERGENCIES** (how to handle products and react if there's an emergency in the home). Also, please review the **TERRORISM** topic since it covers several chemical and biological agents that are also classed as "hazardous materials".

BEFORE A HAZARDOUS MATERIALS DISASTER:

Learn the buzzwords - Ask your local officials about emergency warning procedures and terms...

- **Outdoor warning sirens or horns** - ask what they mean and what to listen for
- **Emergency Alert System (EAS)** - information and alerts via TV and radio
- **"All-call" telephoning** - an automated system for sending recorded messages via telephone
- **Residential route alerting** - messages announced from vehicles equipped with public address systems (loud speakers on top of car or van)

Learn risks - Ask Local Emergency Planning Committee (LEPC), Emergency Management Office, or Fire Department about community plans for responding to a hazardous materials accident at a plant or a

transportation accident involving hazardous materials. Ask about the Emergency Planning and Community Right To Know Act (or EPCRA) and help your community become better informed.

Make a plan - Use LEPC's or agency's information to determine if your family is at risk (especially people living close to freeways, railroads, or factories which produce or transport toxic waste). And review Section 1 to develop a **Family Emergency Plan** and **Disaster Supplies Kit**.

Take a tour - LEPCs sometimes visit facilities that produce or transport toxic waste and include community groups, local officials and the media.

Pick a room - It could take authorities time to determine what the hazardous material is (if any) so pick a room in advance that your family could use as "shelter-in-place" if told to stay indoors for several hours. It's best to pick an internal room where you could block out air, if instructed to do so. To save critical time consider measuring and cutting plastic sheets in advance for each opening (vents, windows, and doors). Remember, toilets / drains are vented meaning outside air comes in constantly or when flushed / open (depends on design) - in case using bathroom as safe room.

Calculate air for room - Keep in mind people can stay in a sealed off room for only so long (or you'll run out of air.) FEMA suggests 10 square feet of floor space per person (like 5ft x 2ft / 1.5m x 0.6m) will provide enough air to prevent carbon dioxide buildup for up to 5 hours.

Be ready to evacuate - Listen to local authorities and leave if you are told to evacuate. (*see EVACUATION*)

DURING A HAZARDOUS MATERIALS DISASTER:

Call for help - If you see a hazardous materials accident, call 9-1-1, local emergency number, or the fire department.

Listen - Keep radio or TV tuned in for more information, especially if you hear a warning signal... and stay calm!

IF INDOORS – If instructed to stay inside, prepare to “shelter-in-place”...

- Close windows, vents, and fireplace dampers and turn off A/C or heat and fans to reduce air drawn in from outside.
- Keep a radio with you at all times.
- Grab **Disaster Supplies Kit** and get to a closed off room.
- Seal gaps under doorways and windows with wet towels or plastic and duct tape (see above tips on picking a room and calculating air!)

IF OUTDOORS - Stay upstream, uphill, or upwind from the disaster since hazardous materials can be carried by wind and water quickly. Try to get at least 1/2 mile or kilometer away or as far away as possible!

IF IN A VEHICLE - Close your windows and shut off vents to reduce risk.

Stay away - Get away from the accident site to avoid contamination.

Evacuate...? - If told to leave... DO it! If officials say you have time, close windows, shut vents and turn off attic fans. (*see EVACUATION*)

What to wear - Keep your body fully covered and wear gloves, socks and shoes. (Even though these may not keep you totally safe, it can help.)

Things to avoid:

- **chemicals** - spilled liquid materials or airborne mists
- **contaminated food or water** - don't eat or drink food or water that may have been exposed to hazardous materials

AFTER A HAZARDOUS MATERIALS DISASTER:

Don't go there - Do not return home until local authorities say it is safe.

Air out - Open windows, vents and turn on fans in your home.

Listen - Keep up with local reports from either the radio or TV.

Clean up - A person, critter or item that has been exposed to a hazardous chemical could spread it.

- **decontamination** - follow instructions from local authorities since it depends on the chemical. May need to rinse off or may be told to stay away from water - check first!
- **strange symptoms** - if unusual symptoms show up, get to a hospital or medical expert right away. Remove contaminated clothing and put on fresh, loose, warm clothing and listen to local reports on the radio.
- **store clothes & shoes** - put exposed clothing and shoes in tightly sealed containers/bags without touching other materials and ask local authorities how to get rid of them
- **tell people you've been exposed** - tell everyone who comes in contact with you that you may have been exposed to a toxic substance
- **land and property** - ask authorities how to clean area

Strange vapors or danger - Report any strange vapors or other dangers to the local authorities immediately.

To learn more about hazardous materials, check out the Programs under the U.S. Environmental Protection Agency's Office of Emergency Management at www.epa.gov/emergencies ... or visit the U.S. Department of Transportation's Office of Hazardous Materials Safety at <http://hazmat.dot.gov/>

Or visit Environment Canada at www.ec.gc.ca ... or the Canadian Transport Emergency Centre of the Department of Transport at www.tc.gc.ca/canutec/

BEFORE A HOUSEHOLD CHEMICAL EMERGENCY:

Learn risks - Call your local public health department or the Environmental Protection Agency for information about hazardous household materials. And check out the National Library of Medicine's Household Products Database that provides information on over 8,000 common household products and their potential health effects at <http://householdproducts.nlm.nih.gov/>

Read labels - Always read product labels for proper use, safe storage and disposal of chemicals.

Recycle it? - Call your local recycling center or collection site to ask what chemicals can be recycled or dropped off for disposal -- many centers take things like car batteries, oil, tires, paint or thinners, etc.

Store it - Keep all chemicals and household cleaners in safe, secure locations out of reach of small children.

Put it out - Don't smoke while using household chemicals.

DURING A HOUSEHOLD CHEMICAL EMERGENCY:

Call for help - Call your local Poison Control Center, 9-1-1, fire department, hospital or emergency medical services. If possible, have container handy since medical professionals may need specific data from label.

First aid tips - Follow instructions on label and see Basic First Aid tips for POISONING in Section 3.

What are YOU gonna do about...

A NUCLEAR POWER PLANT EMERGENCY?

Please note: Nukes [nuclear devices] and dirty bombs [radiological dispersion devices or RDDs] are both covered in the next topic called TERRORISM, but review next several pages before moving on.

The World Nuclear Association reports as of October 2008 there are 439 commercial nuclear power reactors in 30 countries with 367 more reactors under construction or planned. The U.S. has over 100 commercial power plants and Canada has 20 power stations meaning millions of citizens live within 10 miles (16 km) of an operating reactor. And WNA reports there are 280 research reactors (54 in the U.S.) mainly on university campuses.

Even though governments and associations monitor and regulate construction and operation of plants, accidents are possible and do happen. An accident could result in dangerous levels of radiation that could affect the health and safety of the public living near a nuclear power plant, as well as people many miles away depending on winds and weather - so millions of North Americans could potentially be affected.

Some other incidents involving possible radiation exposure may be a nuclear missile or suitcase nuke (plutonium creates massive energy and destruction) or a “dirty bomb”. (Again, these are covered in TERRORISM.)

How is radiation detected?

You cannot see, feel, taste or smell radiation, but special instruments can detect even the smallest levels of it. If radiation is released, authorities will monitor levels of radioactivity to determine the potential danger so they can alert and protect the public. *Learn about detection devices on page 116.*

What is best way to reduce radiation exposure?

Limit the amount of radiation you are exposed to by doing 3 things ...

Distance - The more distance between you and the source of radiation, the less you'll receive. During a serious accident you may be told to evacuate.

Shielding - Heavy, dense materials between you and radiation is best - this is why you want to stay indoors since the walls in your home should be good enough to protect you in some cases... but listen to radio and TV to learn if you need to evacuate.

Time - Most radioactivity loses its strength rather quickly. Limiting your time near the source of radiation reduces the amount you receive.

What is the most dangerous part of a nuclear accident?

Radioactive iodine - nuclear reactors contain many different radioactive products, but a dangerous one is radioactive iodine which, once absorbed, can damage cells of the thyroid gland. The greatest population that suffers in a nuclear accident is **children** (including unborn babies) since their thyroid is so active, but all people are at risk of absorbing radioactive iodine.

How can I be protected from radioactive iodine?

Potassium iodide (KI) - can be purchased over-the-counter now (usually from companies selling disaster-related kits) and is known to be an effective thyroid-blocking agent. In other words, it fills up the thyroid with good iodine that keeps radioactive iodine from being absorbed into our bodies.

What if I am allergic to iodine?

According to the United States Nuclear Regulatory Commission Office of Nuclear Material Safety and Safeguards, the FDA suggests that risks of allergic reaction to potassium iodide are minimal compared to subjecting yourself to cancer from radioactive iodine. Ask your doctor or pharmacist what you should keep on hand in the event of an allergic reaction.

Many European countries stockpile potassium iodide (KI), especially since the Chernobyl incident. Several states are considering or already have stockpiles of KI ready in case of an accident or incident.

As of Jan 2005, the FDA has approved 3 KI products - Iosat, ThyroSafe, and ThyroShield. Learn more at www.fda.gov (do a search on KI) or www.bt.cdc.gov/radiation/ki.asp

Community Planning for Emergencies (U.S. and Canada)

Local, state and provincial governments, Federal agencies and utilities have developed emergency response plans in the event of a nuclear power plant accident.

United States' plans define 2 "emergency planning zones" (EPZs)

- **Plume Exposure EPZ** - a 10-mile radius from nuclear plant where people may be harmed by radiation exposure
NOTE: People within a 10-mile radius are given emergency information about radiation, evacuation routes, special arrangements for handicapped, etc. via brochures, phone books, and utility bills.
- **Ingestion Exposure EPZ** - about a 50-mile radius from plant where accidentally released radioactive materials could contaminate water supplies, food crops and livestock

Canada’s Provincial Nuclear Emergency Response Plans define 3 “zones”

- **Contiguous Zone** - approximately 3 kilometres from nuclear facility where evacuation and sheltering may be ordered
 - **Primary Zone** - approximately 10 kilometres from the nuclear facility where evacuation and sheltering may be ordered
 - **Secondary Zone** - approximately 50 kilometres from the nuclear facility where radioactive contamination could cause monitoring and/or bans on some food and water sources
- NOTE: Public Education brochures are available to residents and businesses within the Primary Zone (10 km) of each nuclear facility.*

BEFORE A NUCLEAR POWER PLANT EMERGENCY:

Learn the buzzwords - Know terms used in both countries to describe a nuclear emergency at a plant: **U.S. / (Canada)**...

- **Notification of Unusual Event / (Reportable Event)** - a small problem has occurred. No radiation leak is expected. Federal, state/provincial and county/municipal officials will be told right away. No action on your part will be necessary.
- **Alert / (Abnormal Incident)** - a small problem has occurred, and small amounts of radiation could leak inside plant. This will not affect you and you shouldn’t have to do anything.
- **Site Area Emergency / (Onsite Emergency)** - a more serious problem... small amounts of radiation could leak from the plant. If necessary, officials will act to ensure public safety. Area sirens may be sounded and listen to your radio or TV for information.
- **General Emergency / (General Emergency)** - the MOST serious problem... radiation could leak outside the plant and off the plant site. In most cases sirens will sound so listen to local radio or TV for reports and updates. State/Provincial and county/municipal officials will act to assure public safety and be prepared to follow their instructions!

Learn signals - Ask about your community’s warning system and pay attention to “test” dates to learn if you can HEAR it. Nuclear power plants are required to install sirens and other warning devices to cover a 10-mile area around the plant in the U.S. (If you live outside the 10-mile area you will probably learn of the event through local TV and radio, but just be aware winds and weather can impact areas as far as 200 miles [320 km] away!!)

Learn risks - Ask the company operating the plant for brochures and data.

Make a plan - Review Section 1 to develop a **Family Emergency Plan and Disaster Supplies Kit**. Double check on emergency plans for schools, day cares or places family may be and where they'll go if evacuated. And please review the Nuclear section in TERRORISM topic to learn more about long-term sheltering, protection from fallout, radiation detection devices, etc.

Go? - Listen to authorities and leave if told to go. (*see EVACUATION*)

DURING A NUCLEAR POWER PLANT EMERGENCY:

Stay calm - Not all accidents release radiation - may be contained in plant.

Listen - Turn on radio or TV. Authorities will give specific instructions and information... pay attention to what THEY tell you rather than what is written in this Manual since they know the facts for each specific incident.

Stay or go..? - Evacuate if told to do so by local authorities ... and ...

- Grab your **Disaster Supplies Kit**.
- Close doors, windows and fireplace damper.
- Cover your mouth and nose with face mask or cloth.
- Close car windows and vents and use “re-circulating” air.
- Keep listening to radio for evacuation routes & updates.

As long as you are NOT told to evacuate, do the following...

IF INDOORS - Stay inside and prepare to “shelter-in-place”...

- Close doors and windows and your fireplace damper.
- Turn off air conditioner, ventilation fans, furnace and other intakes (they pull in air from outside).
- Go to a basement or underground area (if possible).
- Keep a battery-operated radio with you to hear updates.
- Stay inside until authorities tell you it is safe to go out!

IF OUTDOORS - Get indoors as soon as possible!

- Cover mouth and nose with a cloth or napkins and find shelter.
- Once inside, remove clothing, shower & wash hair and put on fresh clothing and different shoes. Put clothes and shoes you were wearing in plastic bags, seal and store. Local authorities can tell you what to do with bags.

IF IN A VEHICLE - Keep windows up, close vents, use “recirculating” air and keep listening to radio for updates. If possible, drive away from site.

Pets & livestock - Get them in shelters with clean food and water that has not been exposed to air-borne radiation, especially milk-producing animals.

Food - Put food in covered containers or in refrigerator -- any food that was not in a covered container should be washed first.

Take potassium iodide..? - IF radioactive iodine has been released into the air from a power plant accident, some states *may* decide to provide KI pills mentioned at beginning of this topic to people in a 10-mile radius.

(In June 2002 President George W. Bush signed a provision that gave state and local governments supplies of potassium iodide for people within 20 miles of a nuclear power plant, increasing protection beyond the Nuclear Regulatory Commission's current 10-mile radius.⁵ This is at the option of state and local government and realize it will take time for them to disperse to citizens ... unless you prepare in advance and keep KI handy.)

NOTE: Take KI pills ONLY as directed by local public health authorities and follow instructions on the package exactly! (see page 73)

AFTER A NUCLEAR POWER PLANT EMERGENCY:

Listen - Keep radio and TV tuned in -- stay in until authorities say all clear.

Clean up - If you were possibly exposed to radiation...

- **store clothes & shoes** - put clothing and shoes in tightly sealed containers or plastic bags and ask health officials what to do with them
- **shower** - wash your body and hair to remove radioactive particles
- **land and property** - ask authorities how to clean up area

Weird symptoms - Seek medical attention if you have symptoms like upset stomach or feel queasy after a reported incident since it could be related to radiation exposure. (see page 118 for more about radiation sickness)

Gardens & crops – Authorities will provide information concerning safety of farm and homegrown products -- or check with agricultural extension agent. Unharvested crops are hard to protect but crops that are already harvested should be stored inside, if possible.


Milk - Local officials should inspect cows' and goats' milk before using.

Recovery tips - Review TIPS ON RECOVERING FROM A DISASTER

More tips - See TERRORISM for more information about a nuke crisis.

Section 3

Information & Tips on Basic First Aid



What are YOU gonna do about... AN EMERGENCY?

Everyone should know what to do in an emergency. You should know who to call and what care to provide. Providing care involves giving first aid until professional medical help arrives.

The Emergency Medical Services (EMS) is a network of police, fire and medical personnel, as well as other community resources. People can help EMS by reporting emergencies and helping out victims until EMS can arrive.

During a major disaster, EMS groups will become swamped so if the public is prepared to handle some types of emergencies then we can help some of the victims until EMS arrives.

Your role in the EMS system includes the following things:

- BE AWARE...** Realize this is an emergency situation -- you could be putting yourself in danger!
- BE PREPARED...** Know how to handle the situation.
- HAVE A PLAN!** Check **ABCs...**, call 9-1-1 (or call for an ambulance) and help victim, if possible.

TIPS ON THE ABCs... AIRWAY, BREATHING & CIRCULATION

In an emergency, you need to check the victim for **ABCs...**

- Airway.** Open the airway by tilting the head back, gently lifting the jaw up, and leaving mouth open.
- Breathing.** Place your ear over victim's mouth and nose. Look at chest, listen, and feel for breathing for 3 to 5 seconds.
- Circulation.** Check for a pulse using fingertips (not your thumb) in the soft spot between throat and the muscle on the side of the neck for 5-10 seconds.

TIPS ON MAKING YOUR “EMERGENCY ACTION” PLAN

1. **BE AWARE...** Make sure it’s safe to approach area and victim.

Use your senses...

Listen for cries for help; screams; moans; explosions; breaking glass; crashing metal; gunshots; high winds; popping, humming or buzzing noises; lots of coughing, etc.

Look for broken glass; open medicine cabinet, container or bottle near victim; smoke; fire; vapors or mist; downed power lines, etc.

Watch for signs like trouble breathing; trouble talking; grabbing at throat or chest; pale or blue color in face, lips or ears; lots of people covering mouth or running away, etc.

Smell smoke or something burning; strong odors or vapors (leave if odor is too strong), etc.

Feel something burning your eyes, lungs or skin, etc.

2. **BE PREPARED...** The best thing you can do is **STAY CALM...** and **THINK** before you act!

Any time there’s an emergency or disaster, most people are scared or confused and many don’t know what to do. Take a few seconds and breathe in through your nose and out through your mouth to help slow your heartbeat and calm down. Always ask if you can help... either ask the victim or people around who may be helping.

3. **HAVE A PLAN!** Check **ABCs**, call 9-1-1 and help victim, if possible.

... Check victims’ **ABCs... Airway, Breathing, & Circulation**

... call 9-1-1, 0 for Operator or local emergency number for an ambulance (*see tips on next page*)

... help the victim, if possible -- and **STAY** until help arrives.

Before giving first aid, you must have the victim’s permission. Tell them who you are, how much training you’ve had, and how you plan to help. Do not give care to someone who refuses it - unless they are unable to respond.

TIPS ON CALLING 9-1-1 FOR AN AMBULANCE

Whenever there is an emergency, use the following tips to help decide if you should call 9-1-1 (or local emergency number) for an ambulance.

Call if victim...

- ... is trapped
- ... is not responding or is passed out
- ... is bleeding badly or bleeding cannot be stopped
- ... has a cut or wound so bad and deep that you can see bone or muscles
- ... has a body part missing or is torn away
- ... has pain below the rib cage that does not go away
- ... is peeing, pooping or puking blood (called passing blood)
- ... is breathing weird or having trouble breathing
- ... seems to have hurt their head, neck or back
- ... is jerking uncontrollably (called having a seizure)
- ... has broken bones and cannot be moved carefully
- ... acts like they had a heart attack (chest pain or pressure)

If you call 9-1-1 there may be a recording or delay while your call is being processed. DO NOT HANG UP -- wait for a 9-1-1 dispatcher.

When you talk to 9-1-1 or the emergency number...

- ... try to stay CALM and describe what happened and what is wrong with the victim
- ... give the location of the emergency, your name and the phone number you are calling from
- ... follow their instructions in case they tell you what to do for the victim
- ... do NOT hang up until the 9-1-1 operator tells you to.

TIPS ON REDUCING THE SPREAD OF GERMS OR DISEASES

Whenever you perform first aid on anyone, there is always a chance of spreading germs or diseases between yourself and the victim. These steps should be followed no matter what kind of first aid is being done -- from very minor scrapes to major emergencies -- to reduce the risk of infection.

BE AWARE...

- ... Try to avoid body fluids like blood or urine (pee).
- ... Cover any open cuts or wounds you have on your body since they are doorways for germs!

BE PREPARED...

- ... Wash your hands with soap and water before and after giving first aid.
- ... Have a first aid kit handy, if possible.
- ... Put something between yourself and victim's body fluids, if possible ...
 - blood or urine - wear disposable gloves or use a clean dry cloth
 - saliva or spittle – use a disposable Face Shield during Rescue Breathing
- ... Clean up area with household bleach to kill germs.

... and... HAVE A PLAN!

- ... *see TIPS ON MAKING YOUR "EMERGENCY ACTION" PLAN two pages back.*

TIPS ON GOOD SAMARITAN LAWS

The definition of a "Samaritan" is a charitable or helpful person. Most states have Good Samaritan laws that were designed to protect citizens who try to help injured victims with emergency care. If a citizen uses "logical" or "rational" actions while making wise or careful decisions during an emergency situation then they can be protected from being sued.

To learn more about your state's Good Samaritan laws, check with your local library, search the web or contact an attorney.

What are YOU gonna do about...

INFECTIOUS DISEASES?

The immune system is a complex network of cells, tissues, and organs that work together to defend the body against attacks by foreign invaders such as bacteria, viruses, parasites and fungi. Because the human body provides an ideal environment for many microbes, they try to break in. It is the immune system's job to keep them out or, failing that, to seek out and destroy them.⁹ But if a person's immune system is weak or damaged, germs and infection can settle in, leading to illness or possibly death.

According to the Centers for Disease Control and Prevention, infectious diseases are the leading cause of death worldwide. And with air travel and international trade, infectious microbes are carried across borders every day by humans, animals, insects and contaminated foods.

Some "old" diseases like malaria and measles are found in certain parts of the world, but "new" diseases like HIV/AIDS and West Nile are spreading around the globe. Plus every year there's some form of influenza and the common cold that spreads and affects people.

There are many infectious diseases -- too many to cover -- so we're only covering a common one (**flu**) and some emerging ones (**avian flu**, **C. diff** and **staph**). First, we describe each illness followed by "Things to watch for", then summarize "How they spread" and "What to do" for all of them at the end. Educate yourself about threats of emerging diseases and listen to officials for advice on how to protect yourself and your loved ones.

Influenza (flu) is a respiratory illness caused by the influenza virus that affects millions of people each year. Flu causes about 250,000 - 500,000 deaths worldwide every year, and a major outbreak (called a pandemic) could increase the death toll dramatically. The best way to prevent the flu is to boost your immune system and get vaccinated, esp people with weakened immune systems. There are several antivirals approved for treatment.

There are 3 types of flu viruses: A, B, and C. Influenza A viruses can infect humans and mammals (including pigs, horses and seals) but wild birds are the natural host. Typically, wild birds don't get sick but A viruses can be deadly to domestic chickens and turkeys. Influenza B viruses are normally found only in humans and generally don't cause severe widespread illness, while Influenza C viruses cause mild illness in humans.

Since strains can mutate or cross over to other species, it could lead to widespread illness and death. The worst influenza A outbreak on record was the

Spanish flu pandemic of 1918-1919 which may have killed up to 50 million people worldwide.

Things to watch for (flu)...

Possible symptoms - fever (usually high), headache, sore throat, cough, runny nose, body aches, weakness, diarrhea or puking (more common in children)

Possible complications - bacterial pneumonia (lung inflammation), shortness of breath, hospitalization

Avian flu (bird flu) is an influenza A virus subtype that occurs mainly in birds, is highly contagious among birds, and can be deadly to them. According to the CDC there are many different subtypes but one of them is the H5N1 virus. H5N1 does not usually infect people, but infections have occurred. To date, most human cases caught this flu from domestic chickens or ducks and over 50% of those patients died.

The recent H1N1 (swine flu) scare demonstrated how quickly virulent flu strains can spread globally, and that strain will continue to spread for years to come, like a regular seasonal influenza virus.

According to a recent worst-case scenario outlined by the World Bank, a flu pandemic of avian or other origin could kill more than 70 million people worldwide and lead to a “major global recession” costing more than \$3 trillion.¹⁰ Several vaccines are currently in development for avian and swine flu plus there are some antiviral drugs available for treatment.

Things to watch for (avian, H1N1 or other variants)...

Flu-like symptoms - fever, headache, sore throat, cough, runny nose, body aches, fatigue, puking or diarrhea

Possible complications - eye infections (avian flu), pneumonia, severe breathing problems or death

C. diff (Clostridium difficile or C. difficile) is a toxin-producing bacterium that causes diarrhea and more serious conditions like colitis (inflammation of the colon). There are many different strains and most make only two toxins that cause minor symptoms that are easily treated. However, a mutated strain called NAP1 (or the O27 or BI strain) makes about 20 times more toxins so symptoms are much more severe. And now NAP1 is starting to show signs of becoming drug-resistant.

Experts estimate C. diff sickens about 500,000 Americans a year and the rate of infection grows by about 10% each year. C. diff is fairly common among older adults in hospitals or in long-term care facilities and typically occurs after using antibiotics. One out of five people who get the infection will get it again, and recurrences can be more severe or even deadly.

Unfortunately *C. diff* spores can survive on most surfaces for months, and most hospital cleaners won't kill it, but a solution of bleach and water could. Also, alcohol-based hand sanitizers used in many health facilities do not work so staff, patients and visitors must wash hands with soap and water frequently to reduce spreading the infection.

Things to watch for (*C. diff*)...

Mild symptoms - watery diarrhea (at least three times a day for 2 or more days with no blood in your poop), possible cramping or minor abdominal pain or tenderness

Severe symptoms - watery diarrhea 10 to 15 times a day, abdominal cramping and pain, fever, blood or pus in poop, nausea / pukey, dehydration, loss of appetite, weight loss

Note: Not all cases of diarrhea are C. diff, but if you have it several times a day for 2 or more days, see your doctor immediately.

Staph (*staphylococcus aureus*) are bacteria about a third of the population carries on their skin or in their nose. Bacteria can enter the body through a cut, bite or wound and may cause infection. Some strains of staph have become drug resistant (called methicillin-resistant *Staphylococcus aureus* or **MRSA**). According to the CDC, staph bacteria are one of the most common causes of skin infections in the U.S. Most infections are minor (like a pimple, bump or boil) and can be treated with antibiotics. However, it can quickly turn into deep, painful abscesses that require surgical draining. Sometimes the bacteria remain confined to the skin, but they can also penetrate into the body, causing potentially life-threatening infections in bones, joints, surgical wounds, the bloodstream, heart valves and lungs.

Staph infections, including MRSA, occur most often in hospitals, nursing homes and facilities where people have weakened immune systems. MRSA also threatens police, firefighters and EMS workers, school kids and the community in general. In fact, the CDC reports MRSA is now killing more Americans each year than AIDS.

Things to watch for (staph / MRSA)...

Possible symptoms - skin infection that may look like a pimple or boil and can be red, swollen, painful, or have pus or other drainage

Severe - pneumonia, bloodstream or wound infections

How infectious diseases spread...

Most infectious diseases are spread by close person-to-person contact

primarily by touching people or things contaminated with bodily fluids (like pee, poop, sweat, droplets from sneezing, etc) -- then touching your eyes, nose, or mouth. Other diseases (like MRSA) can be spread by sharing personal items like towels or razors or by medical staff using contaminated items like stethoscopes or blood pressure cuffs. Keep in mind some bacteria or viruses can survive on objects for days, weeks or months.

What to do to reduce the spread of infectious diseases...

- Wash hands often using soap and water or use hand sanitizer (with at least 60% alcohol in it) to reduce the spread of germs. But keep in mind sanitizers don't work against some bugs so it's best to wash up.
- Tell healthcare workers and visitors to wash their hands before they touch you or your stuff -- don't be timid!
- If you have a fever, stay home! And wait 24 hours after fever breaks before you return to work or school.
- Use antibiotics only when absolutely necessary. Consider boosting your immune system to help fight infections.
- Sick people should cover mouth and nose with tissue or sleeve when coughing or sneezing, wash hands often, and wear a face mask around others (if very ill).
- Keep cuts and scrapes clean and covered until healed.
- Clean counters, doorknobs, fixtures, phones, remotes, nurse call buttons, linens, etc. often with a bleach solution.
- Don't share silverware, razors, clothing, towels, or bedding and wash objects with soap and hot water.
- Follow doctor's instructions and limit activities outside home until fever and symptoms have gone away.

For more information, visit the following web sites ...

Influenza / Flu: www.cdc.gov/flu/ www.phac-aspc.gc.ca/influenza/
(all kinds) www.flu.gov www.who.int/topics/influenza/en/

C. diff: www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html
www.phac-aspc.gc.ca/id-mi/cdiff-eng.php
www.mayoclinic.com/health/c-difficile/DS00736

Staph: www.cdc.gov/mrsa
www.mayoclinic.com/health/mrsa/DS00735

Or call CDC Hotline at 1-800-CDC-INFO. See more tips on pages 231-232

What are YOU gonna do about...

A STROKE?

According to the American Stroke Association, about 700,000 Americans suffer strokes each year and almost 1/4 of those victims die making stroke the #3 killer in the U.S. Canada reports about 40,000-50,000 new strokes annually killing about 16,000 Canadians making it the 4th leading cause of death according to the Heart and Stroke Foundation of Canada.

A stroke (or “brain attack”) occurs when oxygen and vital nutrients carried by blood are cut off causing brain cells to die. It’s cut off because...

...a blood vessel is blocked in the neck or brain (by a blood clot or narrowing of an artery) -- called an **ischemic** [is-KEM-ik] stroke (*causes about 83% of strokes*)

... **or** ...

...a blood vessel bursts or leaks -- called **hemorrhagic** [hem-o-RAJ-ik] stroke or bleeder (*causes 17% of strokes*)

NOTE: You only have 2 - 6 hours maximum to stop permanent brain damage from a stroke - so get to a hospital as quickly as possible (within 3 hours is best!)

Things to watch for...

Sudden confusion, trouble speaking or understanding

Loss of muscle control on one side of the body

Loss of balance, stumbling, dizziness or fainting

Different sized pupils (one pupil small / one enlarged)

Severe headache

Blurred or double-vision in one or both eyes

Shock (pale, cold or clammy, weak or rapid pulse, etc.)

Transient ischemic attack (TIA / mini-stroke) - a minor or warning stroke - risk of major stroke is high

What to do...

- Call 9-1-1 for an ambulance.
- Get victim to lie back with head raised (put pillows or blankets under head and shoulders so partially sitting up).
- Loosen any tight or restrictive clothing.
- See if there are any other injuries.
- If victim is drooling or having problems swallowing, place them on their side to keep the airway open.
- Stay with victim until medical help arrives.

APPENDIX A

Citizen Corps / CERT

(Volunteer Programs for Americans & Canadians)

WHAT IS CITIZEN CORPS?

Citizen Corps was created to help coordinate volunteer activities that make the nation's communities safer, stronger, and better prepared to respond to any emergency situation. Citizen Corps is managed at local levels by Citizen Corps Councils, which bring together existing crime prevention, disaster preparedness, and public health response networks with the volunteer community and other groups.

CITIZEN CORPS PROGRAMS & PARTNERS

Community Emergency Response Teams (CERTs) educate people about disaster preparedness and trains them in basic disaster response skills, such as fire safety, light search and rescue, and disaster medical operations. Using their training, CERT members can assist others in their neighborhood or workplace following an event and can take a more active role in preparing their community. The program is administered by DHS. Learn more at www.citizencorps.gov/cert

Fire Corps promotes the use of citizen advocates to enhance the capacity of resource-constrained fire and rescue departments at all levels: volunteer, combination, and career. Citizen advocates can assist local fire departments in a range of activities including fire safety outreach, youth programs, and administrative support. Fire Corps provides resources to assist fire and rescue departments in creating opportunities for citizen advocates and promotes citizen participation. Fire Corps is funded through DHS and is managed and implemented through a partnership between the National Volunteer Fire Council, the International Association of Fire Fighters, and the International Association of Fire Chiefs. Visit www.firecorps.org

Medical Reserve Corps (MRC) strengthens communities by helping medical, public health and other volunteers offer their expertise throughout the year as well as during local emergencies and other times of community need. MRC volunteers work in coordination with existing local emergency response programs and also supplement existing community public health initiatives, such as outreach and prevention, immunization programs, blood drives, case management, care planning, and other efforts. The MRC program is administered by the Department of Health & Human Services. Check out www.medicalreservecorps.gov

Neighborhood Watch incorporates terrorism awareness education into its existing crime prevention mission, while also serving as a way to bring residents together to focus on emergency preparedness and emergency response training. Funded by Department of Justice, Neighborhood Watch is administered by the National Sheriffs' Association. Learn more at www.usaonwatch.org

Volunteers in Police Service (VIPS) works to enhance the capacity of state and local law enforcement to utilize volunteers. VIPS serves as a gateway to resources and information for and about law enforcement volunteer programs. Funded by DOJ, VIPS is managed and implemented by the International Association of Chiefs of Police. To learn more visit www.policevolunteers.org

Citizen Corps **Affiliate Programs & Organizations** offer communities resources for public education, outreach, and training; represent volunteers interested in helping to make their community safer; or offer volunteer service opportunities to support first responders, disaster relief activities, and community safety efforts. Some Affiliates include:

The **American Radio Relay League (ARRL)** represents the interests of the more than 650,000 U.S. Radio Amateurs (or "HAMS"). Many amateurs have organized themselves under a formal structure to better provide public service and emergency communications like the Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES). Learn more by visiting www.arrl.org or contact your local Emergency Management office.

Civil Air Patrol is a congressionally chartered, non-profit corporation and is the civilian auxiliary of the U.S. Air Force. CAP supports Homeland Security efforts by providing coastal patrol, air/ground observation, radio communications and relay, aerial reconnaissance, air-to-ground photography, radiological monitoring, and disaster and damage assessment assets. Learn more by visiting www.gocivilairpatrol.com

National Association for Search and Rescue is a non-profit membership association comprised of thousands of paid and non-paid professionals interested in all aspects of search and rescue throughout the United States and around the world. NASAR has trained over 30,000 responders since 1989 utilizing its internationally respected SARTECH® Certification Program. NASAR is dedicated to ensuring that volunteers (non-paid professionals) in search and rescue are as prepared as the career public safety personnel (fire, law and emergency medical services) with whom they work on a daily basis. Learn more at www.nasar.org.

Some other Affiliates include The American Legion, Home Safety Council, National Safety Council, National Voluntary Organizations Active in

Disaster (NVOAD) and many others. To learn more about **Citizen Corps** or to check if there's a local council in your community, please visit www.citizencorps.gov.

MORE ABOUT CERT

In the United States and Canada, the **Community Emergency Response Team (CERT)** program helps train volunteers to assist first responders in emergency situations in their communities. CERT members give critical support to first responders in emergencies, provide immediate assistance to victims, organize spontaneous volunteers at a disaster site, and collect disaster intelligence to support first responder efforts.

The CERT course is taught in the community by a trained team of first responders who have completed a CERT Train-the-Trainer course conducted by their state training office for emergency management, or FEMA's Emergency Management Institute (EMI), located in Emmitsburg, Maryland. CERT training includes disaster preparedness, disaster fire suppression, basic disaster medical operations, and light search and rescue operations and is usually delivered in 2-1/2 hour sessions, one evening a week over a 7 week period.

FEMA's online "Introduction to Community Emergency Response Teams", IS 317, is an independent study course that serves as an introduction to CERT for those wanting to complete training or as a refresher for current team members. It has six modules with topics that include an Introduction to CERT, Fire Safety, Hazardous Material and Terrorist Incidents, Disaster Medical Operations, and Search and Rescue. It takes between six and eight hours to complete the course. The IS 317 can be taken by anyone interested in CERT. However, to become a CERT volunteer, one must complete classroom training offered by a local government agency such as the emergency management agency, fire or police department. To learn more, visit www.citizencorps.gov/cert/IS317/

For more information about CERT programs or to check if a CERT is in your community, please visit www.citizencorps.gov/cert/ ... or visit www.cert-la.com (click on "Other CERT Team Links") ... or call your local, state, provincial, or territorial Emergency Management Office to ask about volunteer opportunities.

Or visit your local or state / provincial web site to learn about other types of volunteer groups in your area and get involved!

ADDITIONAL RESOURCES & WEB SITES

WEB SITES (* = COOL STUFF FOR EDUCATORS, KIDS & PARENTS)

American Avalanche Association www.americanavalancheassociation.org

American Heart Association www.heart.org

American Stroke Association www.strokeassociation.org

* **British Columbia Injury Prevention Centre** www.injuryfreezone.com

Canadian Centre for Emergency Preparedness www.ccep.ca

Central Intelligence Agency www.cia.gov

* **CIA's Homepage for Kids** <https://www.cia.gov/kids-page/index.html>

DisasterAssistance www.disasterassistance.gov

* **Environment Canada** www.ec.gc.ca

Environmental Protection Agency (EPA) www.epa.gov

* **EPA's Environmental Kids Club** www.epa.gov/kids

Federal Bureau of Investigation www.fbi.gov

* **FBI - For the Family** www.fbi.gov/fbikids.htm

* **FEMA for Kids** www.fema.gov/kids

Health Canada www.hc-sc.gc.ca

Heart and Stroke Foundation of Canada www.heartandstroke.ca

Institute for Business and Home Safety www.disastersafety.org

Insurance Bureau of Canada www.ibc.ca

Munich Re Group's Press Releases www.munichre.com

National Fire Protection Association www.nfpa.org

National Hazards Center (Univ. of Colorado) www.colorado.edu/hazards/

National Safety Council www.nsc.org

NOAA (National Oceanic & Atmospheric Administration) www.noaa.gov

OSHA (Occupational Safety & Health Administration) www.osha.gov

Physicians for Civil Defense www.physiciansforcivildefense.org

* **U.S. Fire Administration** www.usfa.dhs.gov

* **U.S. Nuclear Regulatory Commission** www.nrc.gov

U.S. Small Business Administration www.sba.gov

* **U.S.G.S. Earthquake Hazards Program** www.earthquake.usgs.gov

* **U.S.G.S. Volcano Hazards Program** <http://volcanoes.usgs.gov>

World Nuclear Association www.world-nuclear.org

More resources available on our "Links" page at www.itsadisaster.net

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BE AWARE... BE PREPARED... and HAVE A PLAN!
This book may save your life!

**Is your family or business *really* prepared for
a disaster or emergency?**

Look inside to see how to ...

- **Protect your family and property from natural disasters**
- **Prepare for Chem / Bio, cyber, or nuclear threats**
- **Reduce the spread of infectious diseases like swine flu**
- **Make a Family Emergency Plan with tips for kids, elderly and special needs family members, and pets**
- **Assemble "Grab & Go" kits for home, car and office**
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- **Apply basic first aid if help is not readily available**
- **Develop a Business Continuity Plan**

... plus lots of resources and much more!

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This is the best single source of guidance for the public I have encountered.
-- *Gary O'Keefe, Retired Firefighter & Disaster Services Coordinator,
MVFD & Latah County, Idaho*

\$14.99 U.S.

