

# Emergency Resource Guide

Information to help you plan and prepare

*Personal Preparedness*

*Prevention*

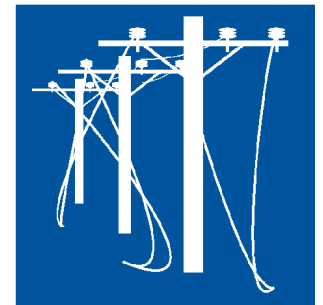
*Terrorism*

*Biological Agents*

*In the Community*

*In the Home*

*Nature and Weather*



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# About this Guide

Emergencies happen daily in the city. They may be as minor as people locked out of their car, or as major as a house fire. You hear the sirens, but you forget it and go on about your work. This is understandable, but if you are suddenly the one involved in the emergency what you do until the police, fire or rescue units arrive is critical — it may save a life!

Also, major disasters can, and have happened here. Tornadoes, heavy snow, train wrecks and many others are possible and could affect many residents.

The City of Littleton is well prepared to handle both major and minor emergencies, but what about you? Do you know what to do?

That is the purpose of this handbook: to tell you about Littleton's plan and provide you with specific information on what you can do to avoid emergencies; handle them if they do occur, and what to do if there is a major disaster.

Please read it carefully. Take action on the suggestions in it. Remember, the life you save may be yours or that of a member of your family!

Littleton citizens are fortunate to be protected by an extensive disaster plan that covers all four types of disasters and identifies special responses to 53 different kinds of emergencies from accidents to winter storms. It has been used effectively over the years to manage disasters of all types, including the major disaster of the 1965 flood, plane crashes, train wrecks and chemical spills. Training and testing of the plan is continuous and it is constantly being updated (the most recent update was in February 2005).

It didn't happen by accident. Littleton has been "lucky" over the years to have a number of minor and area disasters. Lucky? Yes, for this made city officials aware of the problems they might encounter. Combine this awareness with a willingness of the city council to support disaster planning, training and testing, and the plan took shape. The strong support and involvement of the city manager, police department and fire rescue department has enabled the city to prepare for any emergency.

The emergency operations center has been used many times during power outages, severe storms, and chemical spills. It was on stand-by for possible Y2K problems at the start of the new Millennium. The city also has a fully active back-up facility. For further support of emergency operations, a mobile command post was purchased in 2002 and has been used on many occasions.

The city also works closely with Littleton Public Schools. The district has an outstanding disaster plan that correlates closely with the city plan. The city also works closely with the emergency planners in Arapahoe, Jefferson and Douglas Counties as well as with Englewood, Sheridan, Cherry Hills Village, Bow Mar, Columbine Valley, Greenwood Village, Centennial and Highlands Ranch. We also work with the Amateur Radio Emergency Service, The Red Cross, The Salvation Army, the Colorado Search and Rescue Board and the Arapahoe Rescue Patrol.

All city departments have their disaster assignments. In support of the emergency departments other city departments assist in such areas as registering volunteers, clearing roads, getting supplies, keeping accurate records of incidents, determining the extent of damage and getting help from other areas or the state and federal governments.

The city is also fortunate to have its own riot control and hostage team (SWAT), hazardous materials (HAZMAT) team, water rescue team, wildland fire team and search and rescue team. The city also has mutual aid agreements with surrounding law enforcement and fire services.

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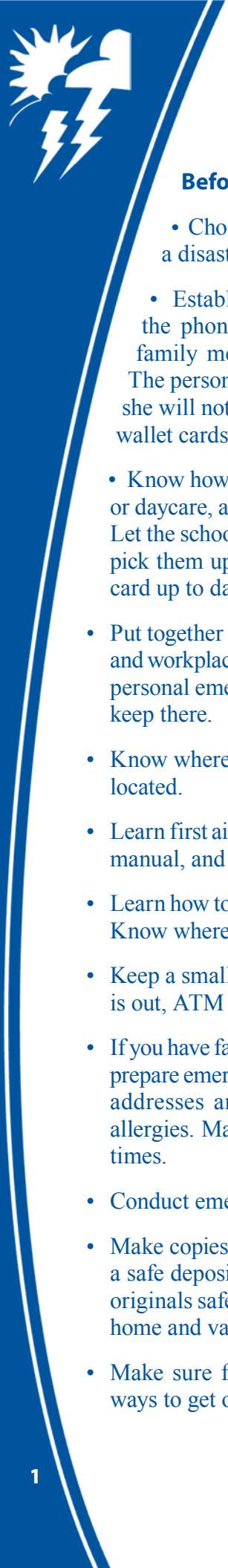
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# Prepare for Emergencies

## Before disaster strikes

- Choose a place for your family to meet after a disaster.
- Establish an “out-of-area” contact and keep the phone numbers handy. This is the person family members will call if you are separated. The person should live far enough away that he or she will not be affected by the emergency. Prepare wallet cards with the person’s contact information.
- Know how to contact your children at their school or daycare, and how to pick them up after a disaster. Let the school know if someone else is authorized to pick them up. Keep your child’s emergency release card up to date.
- Put together an emergency supply kit for your home and workplace. If your child’s school or daycare stores personal emergency kits, make one for your child to keep there.
- Know where the nearest fire and police stations are located.
- Learn first aid and CPR. Have a first aid kit, a first aid manual, and extra medicine for family members.
- Learn how to shut off your water, gas, and electricity. Know where to find shut-off valves and switches.
- Keep a small amount of cash available. If the power is out, ATM machines won’t work.
- If you have family members who don’t speak English, prepare emergency cards in English with their names, addresses and information about medications or allergies. Make sure they can find their cards at all times.
- Conduct emergency drills every six months.
- Make copies of your vital records and store them in a safe deposit box in another city or state. Store the originals safely. Keep photos and videotapes of your home and valuables in your safe deposit box.
- Make sure family members know all the possible ways to get out of your home. Keep all exits clear.

- Make sure all family members agree on an emergency plan. Give emergency information to babysitters or other caregivers.

## During an emergency or disaster

- Keep calm and take time to think. Give assistance where needed.
- Listen to your radio or television for official information and instructions.
- Use the telephone for emergency calls only.
- If you are ordered to evacuate, take your emergency kit and follow official directions to a safe place or temporary shelter.

## After the emergency or disaster is over

- Use caution in entering damaged buildings and homes.
- Stay away from damaged electrical wires and wet appliances.
- Check food and water supplies for contamination.
- Notify your relatives that you are safe, but don’t tie up phone lines; they may be needed for emergency calls.
- If government disaster assistance is available, the news media will announce where to go to apply.

## Pets

- Family pets are very important, too. You need to preplan for their welfare as well as your own. Be prepared to evacuate them. Do you have a carrier for each pet? In a major emergency, a collar and leash are not the best way to evacuate an animal. Do your pets all have identification so they can be returned to you in the event they get separated from your family during an evacuation or emergency? Animal control can more quickly return your pets if they are tagged. Be sure to assemble a pet kit. It includes (as appropriate): food, water, bowls, litter, medications, a leash, and a muzzle.

# Emergency Supplies



**Government agencies will respond to community disasters, but citizens may be on their own for hours, even days, after disaster strikes. You should be prepared to take care of yourself and your family for at least three days. In some emergencies, such as an influenza pandemic, you may need to prepare for a week or more.**

## Emergency survival kit

Store a kit with the following items at home and at work.

- ☐ Dry or canned food and drinking water for each person
- ☐ Can opener
- ☐ First aid supplies and first aid book
- ☐ Copies of important documents, such as birth certificates, licenses and insurance policies
- ☐ “Special needs” items for family members, such as infant formula, eyeglasses, and medications
- ☐ A change of clothing
- ☐ Sleeping bag or blanket
- ☐ Battery powered radio or television
- ☐ Flashlight and extra batteries
- ☐ Whistle
- ☐ Waterproof matches
- ☐ Toys, books, puzzles, games
- ☐ Extra house keys and car keys
- ☐ List of contact names and phone numbers
- ☐ Food, water, and supplies for pets

**Additional items you can store at home for use during an emergency:**

## Cooking supplies

- ☐ Barbecue, camp stove
- ☐ Fuel for cooking, such as charcoal or camp stove fuel

- ☐ Plastic knives, forks, spoons
- ☐ Paper plates and cups
- ☐ Paper towels
- ☐ Heavy-duty aluminum foil

## Sanitation supplies

- ☐ Large plastic trash bags for trash, water protection
- ☐ Large trash cans
- ☐ Bar soap and liquid detergent
- ☐ Shampoo
- ☐ Toothpaste and toothbrushes
- ☐ Feminine and infant supplies
- ☐ Toilet paper
- ☐ Household bleach with no additives, and eyedropper (for purifying drinking water)
- ☐ Newspaper—to wrap garbage and waste

## Comfort

- ☐ Sturdy shoes
- ☐ Gloves for clearing debris
- ☐ Tent

## Tools

- ☐ Ax, shovel, broom
- ☐ Crescent wrench for turning off gas
- ☐ Screwdriver, pliers, hammer
- ☐ Coil of one-half inch rope
- ☐ Plastic tape and sheeting
- ☐ Knife or razor blades
- ☐ Garden hose for siphoning and fire fighting



# Disaster Tips for People with Special Medical Needs

**In a disaster, people with special medical needs have extra concerns. This information will help you and your family prepare for an emergency.**

## Medications

- Always have at least a three-day supply of all your medications. In some emergencies, such as an influenza pandemic, you may need to prepare for a week or more.
- Store your medications in one location in their original containers.
- Have a list of all of your medications: name of medication, dose, frequency, and the name of the prescribing doctor.

## Medical supplies

- Have an extra three-day supply of any medical supplies you use, such as bandages, ostomy bags, or syringes.

## Electrically powered medical equipment

- For all medical equipment requiring electrical power—beds, breathing equipment, or infusion pumps—check with your medical supply company and get information regarding a back-up power source such as a battery or generator.

## Oxygen and breathing equipment

- If you use oxygen, have an emergency supply (enough for at least a three-day period).
- Oxygen tanks should be securely braced so they do not fall over. Call your medical supply company regarding bracing instructions.
- If you use breathing equipment, have a three-day supply or more of tubing, solutions and medications.

## Pollution considerations

- This information is sent out on radio and TV. If members of your family are sensitive to high levels of pollution, be sure the proper medications are on hand. During an area pollution alert stay indoors as much as possible and keep your windows closed. Cut down on physical activity. Do not drive unless it is urgent. If you must go somewhere, walk, ride a bicycle, or use public transportation.

## Intravenous (IV) and feeding tube equipment

- Know if your infusion pump has battery back-up, and how long it would last in an emergency.
- Ask your home care provider about manual infusion techniques in case of a power outage.
- Have written operating instructions attached to all equipment.

## Emergency bag

- In the event that you have to leave your home, have a bag packed at all times that contains:
  - ✓ A medication list.
  - ✓ Medical supplies for at least three days.
  - ✓ Copies of vital medical papers such as insurance cards and power of attorney.

## People who can help

- An important part of being prepared for a disaster is planning with family, friends and neighbors. Know who could walk to your home to assist you if no other means of transportation is available.
- Discuss your disaster plans with your home health care provider.
- Ask your local fire department if they keep a list of people with special medical needs; ask to be included if they do maintain a list.
- Keep a phone contact list handy of people who can help.



# Helping Children After a Disaster



**It's important to remember some children may never show distress, while others may not give evidence of being upset for several weeks or even months after an emergency. Other children may not show a change in behavior, but may still need your help.**

## **Children may exhibit the following behaviors after a disaster:**

- Be upset over the loss of a favorite toy or possession that is important to them.
- Change from being quiet, obedient and caring to loud, noisy and aggressive, or change from being outgoing to shy and afraid.
- Develop night-time fears such as nightmares, fear of the dark or fear of sleeping alone.
- Be afraid the event will reoccur.
- Become easily upset.
- Lose trust in adults. (After all, their adults were not able to control the disaster.)
- Revert to younger behavior such as bed-wetting or thumb-sucking.
- Want to stay close to parents. Refuse to go to school or day care.
- Feel they caused the disaster because of something they said or did.
- Become afraid of wind, rain or sudden loud noises.
- Have symptoms of illness, such as headaches, vomiting or fever.
- Worry about where they and their family will live.
- Don't give children more information than they can handle about the disaster.
- Assure fearful children that you will be there to care for them; consistently reassure them.
- Go back to former routines as soon as possible. Maintain a regular schedule for the children.
- Reassure children that the disaster was not their fault.
- Let children have some control, such as choosing clothing or what meal to have for dinner.
- Re-establish contact with extended family.
- Help your children learn to trust adults again by keeping promises you make.
- Help your children regain faith in the future by making plans.
- Get needed health care as soon as possible.
- Spend extra time with your children at bedtime.
- Make sure children eat healthy meals and get enough rest.
- Allow special privileges for a short period of time, such as leaving the light on when they go to bed.
- Find ways to emphasize to your children that you love them.
- Allow children time to grieve losses.
- Develop positive anniversary activities to commemorate the event. These may bring tears, but they are also a time to celebrate survival and the ability to get back to a normal life.

## **Things parents can do to help their children**

- Talk with children about how they are feeling. Assure them that it's okay to have those feelings.
- Help children learn to use words that express their feelings, such as "happy," "sad," or "angry."
- Children should not be expected to be brave or tough. Tell them it's okay to cry.



# Accidental Poisoning

**Poisons can be found in everyday items located in all areas of your home: kitchen, closets, bathrooms, attic, garage, dining room, laundry room, storage areas and basements. To help prevent accidental poisoning, follow these poison prevention tips.**

- Use child-resistant containers (but remember, child-resistant containers are not completely childproof).
- Keep potentially poisonous products in their original containers (see below for product list).
- Place potentially poisonous products out of reach immediately after use.
- Keep emergency numbers (including the Rocky Mountain Poison and Drug Center) next to your phone.

## **Make sure these products are stored safely**

- Prescription and over-the-counter medications (including aspirin and vitamins).
- Disinfectants, deodorants, and air fresheners.
- All kinds of sprays.
- Polishes and cleansing powder.
- Fertilizers and weed killers.
- Insect and rodent poison, slug bait.
- Paint remover and turpentine.
- Cosmetics.
- Soaps, detergents, and shampoo.
- Toilet bowl and drain cleaners.
- Lye and bleach.
- Kerosene and lighter fluids.
- Insect repellent.
- Mothballs and pesticides.

- Note: special care should also be taken with house plants as many may be poisonous if eaten by humans or pets.

## **What to do when someone is poisoned**

- If it is a life-threatening emergency, call 9-1-1. If you suspect a possible poisoning, or for more information on potential poisons, call the Rocky Mountain Poison & Drug Center at 1-800-222-1222, TTY: 303-739-1127.

## **Be prepared to answer the following questions**

- What was taken (give exact name of the product)? Bring product container to the phone if possible.
- When was it taken?
- How much was taken?
- Who took it? Body size makes a big difference in determining a poisonous dose.
- The name, condition, age and weight of the patient.
- Address and telephone number from where you are calling.

## **About the Rocky Mountain Poison Center**

- The Rocky Mountain Poison & Drug Center is a 24-hour telephone service providing information and emergency response for poisonings. Staffed by nurses, pharmacists and poison information specialists—and supported by a board-certified clinical toxicologist—the center handles over 70,000 calls a year.
- To learn more, visit the center's Web site at [www.rmpdc.org](http://www.rmpdc.org).



# Protect Your Pets



**Consider your pets when planning for emergencies. Know where to take your pets in an emergency and remember their needs when creating your family preparedness kit.**

## **Before the disaster**

- Find a safe place for your pets to stay. Emergency pet shelters, animal control shelters, veterinary clinics and friends and relatives out of harm's way are all possible choices. Some hotels and motels may allow you to bring pets; others may suspend their "no pet" rules during an emergency. Check ahead to make sure you can bring your pet.
- Make sure your pets wear current ID tags all the time, and that carriers for each pet are labeled with contact information.
- Make sure your pets are current on their vaccinations. Pet shelters may require proof of vaccines.

## **During a disaster**

- Keep pets in the house as emergency situations develop so you can locate them.
- Don't wait until the last minute to get ready. Warnings may be issued hours or days in advance.
- Pet shelters will be filled on a first-come, first-served basis. Call ahead to check availability. Bring the items in your pet's emergency supply kit.

## **If you evacuate, take your pets**

- If it's not safe for you to stay in the disaster area, it's not safe for your pets. Don't leave animals inside your home, chained outside or roaming loose. They can easily be injured, lost or killed.
- If you leave, take your pet even if you think you'll be able to come home in just a few hours.
- Leave early—if you wait for an evacuation order, you may be told to leave your pets behind.

## **If you don't evacuate**

- Keep your pets with you in a safe area of your home.
- Keep dogs on leashes and cats in carriers, and make sure they are wearing identification.

- In case you're not home during a disaster, arrange well in advance for a trusted neighbor to take your pets. Be sure the person is comfortable with your pets, knows where to find them and your pet emergency supplies, and has a key to your home.

## **After the disaster**

- Don't allow your pets to roam loose. Pets can get lost if familiar landmarks and smells are gone.
- For a few days, keep dogs on leashes and cats in carriers inside the house. If your house is damaged, they could escape and become lost.
- Be patient with your pets. Re-establish their routines as soon as possible. Be ready for behavioral problems. If problems continue, or if your pet is having health problems, talk to your veterinarian.

## **Emergency supply list for pets**

Have everything ready to go. Store supplies in sturdy, easy-to-carry containers. Include:

- ☐ Can opener
- ☐ Medications and medical records stored in a waterproof container, and a first-aid kit.
- ☐ Sturdy leashes and harnesses. A secure carrier large enough for your pet to stand comfortably, turn around and lie down. Add blankets or towels for bedding.
- ☐ Photos to help identify lost pets and prove ownership.
- ☐ Food and water for at least seven days for each pet.
- ☐ Bowls, cat litter and litter box, and a manual can opener.
- ☐ Information on feeding schedules, medical conditions, behavior problems, and the name and number of your veterinarian.
- ☐ Pet beds and toys, if you can easily take them.
- ☐ Newspapers, paper towels, plastic trash bags, grooming items and household bleach.



# Pandemic Flu

## **An influenza pandemic is a worldwide outbreak of a new flu virus**

- An influenza, or flu pandemic is an outbreak of a new type of flu virus that spreads rapidly from one country to another. Because the virus is new, people have no natural immunity to it and vaccine will not be available for many months. Without vaccine or immunity, the virus passes rapidly from person to person. Hundreds of thousands of people in our country could get sick, and many could die.
- There have been three large flu pandemics in the 20th century—1918, 1957, and 1968. No one knows where or when the next one will begin, but health officials agree that it is only a matter of time.

## **What to expect if an outbreak occurs**

- A flu pandemic could be devastating, so everyone should be prepared for the worst. With up to one-third of the workforce sick or staying home, supplies and services could be limited or disrupted.
- Extraordinary measures could be required. You may be asked to stay away from other people, large public events like concerts or sports could be canceled, and schools could be closed. Health officials may issue orders to keep people with the virus at home or in special facilities. You may be asked to wear a mask in medical facilities or other public places.

## **What to do now**

- Know your neighbors. Encourage others to prepare.
- Be ready to help family and neighbors who are elderly or have special needs if services they depend on are not available.
- Know school policies about illness and absence. Make a plan for taking care of your children if schools are closed for long periods.
- Be prepared to stay home from work when you are sick. Know work policies about sick leave, absences, time off and telecommuting.
- Encourage planning. Every workplace should have

a plan for doing essential tasks if large numbers of employees are absent over many months.

- Explore ways to get your work done with less personal contact, such as increased use of e-mail and phone conferences.
- Be prepared to get by for a week or more on what you have at home. Stores may not be open or may have limited supplies.
- Plan to limit the number of trips you take to shop or to run errands.

## **Prevent the spread of germs**

The flu virus is spread from person to person when an infected person coughs, sneezes or touches things that others use. To protect yourself and others:

- Cover your mouth and nose when you cough or sneeze. Cough into your sleeve or cover your mouth and nose with a tissue.
- Wash your hands. Soap and warm water are best, but alcohol-based hand gel or disposable wipes also work.
- Don't touch your eyes, nose or mouth. The flu virus is often spread when a person touches something that has the flu virus on it and then touches his or her eyes, nose or mouth.
- Stay home when you're sick or have flu symptoms. Drink extra water, get plenty of rest and check with a health care provider as needed.

## **Learn home-care basics**

- Know how to care for someone with fever, body aches and lung congestion. During a pandemic, follow health official's instructions.
- Learn about dehydration. The flu virus causes the body to lose water through fever and sweating. Watch for weakness, fainting, dry mouth, dark concentrated urine, low blood pressure, or a fast pulse when lying or sitting down. These are signs of dehydration. To prevent dehydration, it is very important for a person with the flu to drink a lot of water—up to 12 glasses a day.

# How to Use 9-1-1

**Call 9-1-1 only to report a life-threatening situation requiring police, medical or fire emergency assistance. Do not call 9-1-1 unnecessarily. 9-1-1 lines must be kept open for people with true emergencies. If you call 9-1-1 accidentally, DO NOT HANG UP. Stay on the line until a dispatcher answers and explain what happened.**

## When to call 9-1-1

- To get help for someone who is hurt. For example:
  - ✓ If someone is seriously injured.
  - ✓ If you see someone hurt in an accident.
- If you see someone acting suspiciously, stealing, or breaking into a home or building.
- If you smell smoke or see a fire.
- If you see people fighting and hurting each other.
- If you see someone being robbed or beaten.
- If you believe emergency assistance may be needed but are not sure, call 9-1-1 and describe the situation.
- If you call 9-1-1 by accident, don't hang up. Explain what happened to the 9-1-1 operator.

## When not to call 9-1-1

In the event of a natural disaster or emergency, minimize your calls to 9-1-1 unless it is a life-threatening police, medical or fire emergency. The following guide should help you determine when it is appropriate to call 9-1-1 in a disaster.

- Never call 9-1-1 as a joke.
- Never call 9-1-1 to ask for information.
- Never call just to see if 9-1-1 is working.
- Stay off the telephone unless you have a critical need to make a telephone call.
- Only call 9-1-1 if you need emergency response from police, fire or emergency medical personnel.
- If you experience other types of problems not related to these emergency services, call the appropriate telephone number for those services.

## Other emergency phone tips

- If you pick up your telephone to make a call and do not hear a dial tone, do not hang up. Simply wait a few seconds, and you may get a dial tone and be able to make your call.
- Do you have an out-of-area contact? In an emergency, local phone lines could be jammed. If you have a friend or relative to call long distance, you should be able to get through. Your family can leave messages for each other and you can let people know you're okay.

## What to say when you call 9-1-1

- Tell the person what is wrong.
- Tell the person your name, address and telephone number.
- Do not hang up until they tell you that you should; they may have to ask you more questions.

## Teach your children the correct use of 9-1-1

- Parents should use the information in this book to talk to children about how and when to use 9-1-1. Knowing the right thing to do can save lives.

## Keep phone lines clear during emergencies

- During emergencies, telephone services become overloaded. You can help keep service available for those who need it most by making only calls that are critical. Limit fax machine and computer use as well; their use also ties up phone lines.

## 9-1-1 Education

- Taught by members of Littleton Fire Communication Center, this class targets kindergarten through second grade, as well as senior citizens. It teaches the proper use of 9-1-1, including when it is appropriate to call 9-1-1. For more information contact Littleton Fire Rescue at 303-795-3800.

## Non-emergency numbers

- Littleton Police..... 303-794-1551
- Littleton Fire Rescue..... 303-794-1555



# Prevent the Spread of Germs

**Here are some simple tips to help keep respiratory infections and many other contagious diseases from spreading, especially during the cough, cold, and “flu” season.**

- Respiratory infections affect the nose, throat and lungs. They include influenza (the “flu”), colds, and pertussis (whooping cough). The germs (viruses and bacteria) that cause these infections are spread from person to person in droplets from the nose, throat, and lungs of someone who is sick.
- You can help stop the spread of these germs by practicing “respiratory etiquette,” or good health manners.
- Here are some tips to help prevent spreading your germs to others, and to avoid catching someone else’s germs.

## Keep your germs to yourself

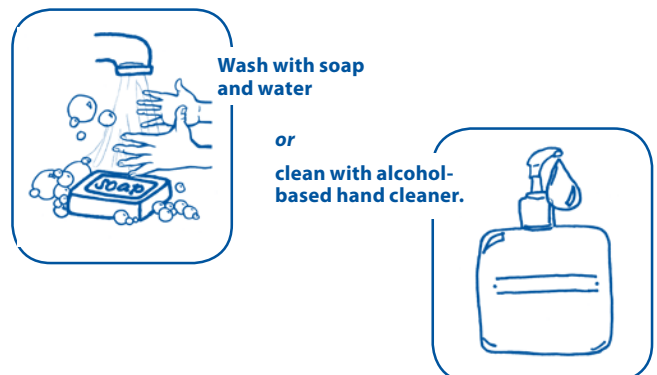
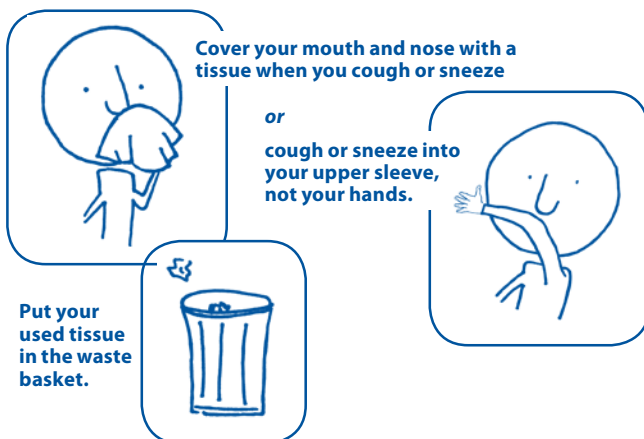
- Cover your nose and mouth with a tissue when sneezing, coughing or blowing your nose.
- Discard used tissues in the trash as soon as possible.
- Always wash your hands after sneezing, blowing your nose, or coughing, or after touching used tissues or handkerchiefs. Wash hands often if you are sick.

- Use warm water and soap or alcohol-based hand sanitizer to wash your hands.
- Try to stay home if you have a cough and fever.
- See your doctor as soon as possible if you have a cough and fever, and follow their instructions. Take medicine as prescribed and get lots of rest.
- If asked, use face masks provided in your doctor’s office or clinic’s waiting room. Follow office and clinic staff’s instructions to help stop the spread of germs.

## Keep the germs away

- Wash your hands before eating, or touching your eyes, nose or mouth.
- Wash your hands after touching anyone who is sneezing, coughing or blowing their nose.
- Don’t share things like towels, lipstick, toys, or anything else that might be contaminated with respiratory germs.
- Don’t share food, utensils or beverage containers with others.

## Cover Your Cough and Clean Your Hands





# About Terrorism



**Terrorists look for visible targets where they can avoid detection before or after an attack such as international airports, large cities, major public events, resorts, and high-profile landmarks. Preparing for terrorism is critical, just as for other types of disasters.**

- Be aware of your surroundings.
- If you see what appears to be a dangerous situation, call 9-1-1 and explain your concerns to a 9-1-1 operator. The operator will help determine what actions should be taken.
- Take precautions when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers. Do not leave your luggage unattended.
- Learn where emergency exits are located, and how to quickly evacuate a building, transportation corridor, or congested public area.
- Stay clear of heavy or breakable objects that could move, fall or break in an explosion.

## **Prepare for building explosion**

The use of explosives by terrorists can result in collapsed buildings and fires. People who live or work in a multi-level building should follow these guidelines:

- Learn the emergency evacuation procedures that are in place.
- Learn where the fire exits are located and be able to find them in the dark.
- Keep fire extinguishers in working order. Know where they are located and how to use them.
- Learn first aid and CPR.
- Businesses and organizations should keep and maintain a disaster supply kit on each floor of their buildings.

## **If an explosion occurs**

- Immediately get under a sturdy table or desk if things are falling around you.

- Heavy smoke and poisonous gases collect first along the ceiling. Stay below the smoke at all times.

## **If trapped in debris**

- If you have a flashlight, use it to help rescuers locate you.
- Stay in your area so you don't kick up dust.
- Cover your mouth with a handkerchief or clothing.
- Tap on a pipe or wall so that rescuers can locate you. Use a whistle if one is available. Shout only as a last resort—shouting can cause a person to inhale dangerous amounts of dust.

## **If there is a fire**

- Stay low to the floor and exit the building as quickly and calmly as possible.
- Cover your nose and mouth with a wet cloth, if possible.
- Test closed doors for heat with the palm of your hand and forearm on the lower and upper portions of the door. If it is not hot, brace yourself against the door and open it slowly. If it is hot or warm to the touch, do not open the door. Seek an alternate escape route.

## **Biological agents**

- Biological agents are organisms or toxins that may harm people, livestock, or crops. Because biological agents cannot necessarily be detected and may take time to grow and cause disease, it may be difficult to determine that a biological attack has occurred.
- If the government were to become aware of a biological attack through an informant or warning by terrorists, they would most likely instruct people to either seek shelter where they are and seal the premises (shelter-in-place) or evacuate immediately.
- A person affected by a biological agent requires the immediate attention of professional medical personnel. Some agents are contagious and victims may need to be quarantined. Some medical facilities may not be receiving victims for fear of contaminating the hospital population.



# Bomb Threats

**Bomb threats are usually received by telephone, but they may also be received by note, letter or email. All bomb threats should be taken very seriously and handled as though an explosive were in the building.**

- Your place of employment should have a plan in place instructing what to do when a bomb threat is received.
- If you receive a bomb threat, get as much information from the caller as possible.
- Take good notes when talking to the person on the telephone. Keep the caller on the line, and write down everything that is said. Be aware of background noise, special voice characteristics, music, machinery or other sounds.
- If you are at work, have a coworker call 9-1-1 and building security immediately. Plan how you are going to alert your coworker.
- If you receive a bomb threat, do not touch any suspicious packages.
- Clear the area around a suspicious package, and notify police immediately.
- While evacuating a building, avoid standing in front of windows or other potentially hazardous areas.
- Do not block sidewalks or other areas used by emergency officials.
- If you find a bomb, don't touch it or attempt to move it. Call for help and evacuate the area immediately.

## Bomb Threat Checklist

Exact time of call: \_\_\_\_\_

Exact words of caller: \_\_\_\_\_

### QUESTIONS TO ASK:

1. When is the bomb going to explode? \_\_\_\_\_
2. Where is the bomb? \_\_\_\_\_
3. What does it look like? \_\_\_\_\_
4. What kind of bomb is it? \_\_\_\_\_
5. What will cause it to explode? \_\_\_\_\_
6. Did you place the bomb? \_\_\_\_\_
7. Why? \_\_\_\_\_
8. Where are you calling from? \_\_\_\_\_
9. What is your address? \_\_\_\_\_
10. What is your name? \_\_\_\_\_

### CALLER'S VOICE (circle all that apply)

Calm	Disguised	Nasal	Angry	Broken
Stutter	Slow	Sincere	Lisp	Rapid
Giggling	Deep	Crying	Squeaky	Excited
Stressed	Accent	Loud	Slurred	Normal

If voice is familiar, whom did it sound like? \_\_\_\_\_

Were there any background noises? \_\_\_\_\_

Remarks: \_\_\_\_\_

Person receiving call: \_\_\_\_\_

Telephone number call received on: \_\_\_\_\_

Date: \_\_\_\_\_



# Radiation Exposure



**One possible source of radiation exposure is a “dirty bomb.” A dirty bomb is a small explosive device packaged with radioactive materials. During any event that releases radiation, your best protection is to follow the recommendations of authorities.**

## **Stay inside**

- Stay inside your home or office unless instructed by civil authorities to leave. Close the windows, turn off the heating or air-conditioning, and stay near the center of the building. Once the initial blast is over, radioactive materials may be spread in the smoke and debris in the air. By staying inside you will reduce any potential exposure to airborne radioactive material. If there is a basement, go there.

## **Listen to the radio**

- If you learn that radioactive materials have been released in an area near you—either accidentally or intentionally—tune your radio to the emergency broadcasting network for instructions. Government agencies will let you know how to protect yourself. Keep a battery-powered radio handy in case electrical power goes out in your area.

## **Follow instructions**

- The best way to avoid exposure to radiation is to do what experts advise. If told to evacuate, do so promptly. Take items you will need for an extended absence, such as prescription medicines and clothing. Listen for news about the location of the radioactive cloud. Even if it has already passed, radioactive contamination may have fallen on the ground and experts will recommend the best ways to safely leave the area.

## **If you suspect you are contaminated**

- If you believe you have been exposed to radioactive materials, you should carefully remove your outer layer of clothing and put it in a plastic bag; then take a warm shower to rinse off any radioactive materials. Place the sealed plastic bag in a room away from people.

## **Seek help if needed**

- Special assistance centers will be set up as soon as possible. Center locations will be made available through the media and on health department and other emergency service Web sites. If this information is not yet available, go to a police or fire station located outside of the affected area. If you were near the explosion or believe you were in the path of the cloud, tell the staff at the station or assistance center.

## **Watch what you eat**

- Avoid drinking fresh milk or eating fruits and vegetables grown in the affected area. Wait until the Department of Health announces that produce and dairy products are safe to eat and drink. Milk, fruit and vegetables are okay to eat if they were bought or picked before the radiation was released and were stored indoors. Food stored in cans or bags is also safe to eat. Be sure to thoroughly rinse off containers before opening.

## **What are the health effects of exposure to radiation?**

- Radiation’s health effects can be mild, such as reddening of the skin, or very serious, such as cancer or early death. Radioactive materials dispersed in an urban area pose a serious health hazard. Strong sources of gamma rays can cause acute radiation poisoning or even fatalities at high doses. Long-term exposure to low levels of gamma radiation can cause cancer. Alpha particles (such as americium) small enough to be inhaled can damage people’s lungs and lead to an increased risk of cancer.
- The degree of damage to the body depends on:
  - ✓ The amount of radiation absorbed by the body
  - ✓ The type of radiation
  - ✓ The route of exposure
  - ✓ The length of time a person is exposed



# Chemical Agents

**Chemical warfare agents are gases, liquids or solids that can poison people, animals and plants. Chemical warfare agents can cause injuries and death. How serious the injuries are depends on the type of chemical, the amount, and the length of exposure.**

## What are the types of chemical agents?

- The main chemical warfare agents are sulfur mustard (mustard gas) and nerve agents such as Sarin and VX. These agents are typically released as a vapor or liquid. During a chemical attack, the greatest danger would come from breathing the vapors. If a large amount of chemical was released as an aerosol, the agent may appear as droplets on people's skin.

## Sulfur mustard: symptoms and treatment

- Sulfur mustard can cause skin to become red and irritated. Larger amounts will make the skin blister.
- Sulfur mustard can damage your eyes causing irritation, redness, and swelling of the lids.
- Breathing in sulfur mustard can cause throat irritation, sinus pain and coughing. Breathing in large amounts will damage the lungs.
- If you are exposed to sulfur mustard, it may take four to eight hours before you feel symptoms. After a relatively small exposure, symptoms may take up to 24 hours to develop.
- Medical staff can treat symptoms with soothing lotions, eye drops and pain medication. If infections develop, you may be given antibiotics.

## Nerve agents: symptoms and treatment

- A small amount of vapor can make pupils smaller, dim or blur vision, and cause eye pain, a runny nose, or shortness of breath.
- Moderate amounts of vapor can cause muscle weakness, nausea, vomiting, and diarrhea.

- Exposure to large amounts of vapor can cause interruption of breathing, muscle weakness, loss of consciousness, convulsions, and death.
- Effects usually appear seconds to minutes after breathing the vapor of a nerve agent.
- Exposure to small amounts of vapor may cause only smaller than normal pupils and may take an hour to appear.
- If you are exposed to a large amount of a nerve agent and have a runny nose, difficulty breathing, or nausea and vomiting, you may be treated with the medicines atropine or pralidoxime.

## What you should do if there is a chemical attack?

- If there is a chemical attack, authorities will tell you either to evacuate the area immediately or to seek shelter.
- If you have symptoms of exposure, call 9-1-1 immediately.
- If you were outside before taking shelter and think you may have been exposed to a chemical agent:
  - ✓ Take off your outer clothes, put them in a plastic bag and seal the bag. Tell emergency staff about the sealed bag so they can remove it safely.
  - ✓ Wash or take a cool shower (do not use hot water). Use lots of soap. Do not put soap in your eyes.
  - ✓ If you leave the area, tell emergency or medical staff at your new location that you may have been exposed.

# Shelter-in-Place



- Go inside.



- Close all windows and doors.



- Turn off ventilation systems (heating and air-conditioning, and fireplace dampers).



- Go into a room with the fewest doors and windows and seal the room.



- Stay in the room until told by the authorities that it is safe to come out.

*Illustrations courtesy of ExxonMobil*

**If a chemical agent attack happens, authorities will instruct people to either seek shelter where they are and seal the premises (shelter-in-place), or evacuate immediately. If ordered to remain in your home, office or school, follow these directions to “shelter-in-place.”**

## How to shelter-in-place

- Dampen towels and place over the cracks under doors.
- Cut plastic sheeting to fit over the windows and vents. Secure the plastic with duct tape.
- Tape around the door.
- Turn on the radio.
- Don't air out or leave your sealed shelter until you are told to do so.

## Remember

- If ordered to evacuate, do so immediately, carefully following directions. Do not wander about; know where you are going and how to get there.
- Avoiding chemical exposure should be your primary goal. Leaving your sheltered area to rescue or assist victims can be a deadly decision.

- In a chemical emergency, there is very little an untrained volunteer can do to help victims. Stay in your sheltered area until authorities determine it is safe to come out.
- If you were outside before taking shelter and think you may have been exposed to a chemical agent, there are several things you can do. If you are in a sealed shelter, take off at least your outer clothes, put them in a plastic bag and seal the bag. If water is available, wash or take a cool to warm (not hot) shower, using lots of soap and water. Do not put the soap in your eyes, just lots of water. If you leave the area, tell emergency responders or medical staff at your destination you may have been exposed. Tell the emergency responders about the sealed bag so they can arrange for its safe removal after the emergency.
- If you have symptoms of exposure, call 9-1-1 immediately and follow their instructions.



# Anthrax

## What is anthrax?

- Anthrax is a bacterial disease that most commonly affects animals such as cattle, pigs, sheep and goats. Anthrax bacteria form spores that can survive in the environment for long periods of time. Humans seldom get anthrax, but when they do, it is through handling infected animals or other materials containing anthrax spores, eating infected meat or breathing in spores. Anthrax cannot be spread from person to person.

## Types of anthrax and the symptoms

- There are three types of anthrax, and symptoms vary according to how the infection occurred. Symptoms usually occur within one to seven days of exposure, but can take as long as 60 days to develop.

## Types of anthrax and their symptoms are:

- *Inhalation anthrax* (the most serious type of anthrax)—caused by inhaling anthrax bacteria into the lungs. Early symptoms may resemble those of flu or a common cold: fever, cough, headache, chills, weakness, difficulty breathing and chest discomfort. After several days, the symptoms may progress to severe breathing problems and shock. This type of anthrax infection is often fatal if not treated promptly. In an intentional exposure such as a bioterrorism event, breathing in the spores is the most likely route of exposure.
- *Cutaneous anthrax*—caused when anthrax bacteria make contact with cut or damaged skin. About two weeks after infection, an itchy sore develops. Later symptoms include a small blister, which becomes a painless sore with a black center. Lymph glands in the infected area may also swell.
- *Gastrointestinal anthrax*—caused by swallowing anthrax bacteria resulting in damage to the intestinal tract. Early symptoms include nausea, vomiting, loss of appetite, and fever, followed by abdominal pain, vomiting of blood, and severe diarrhea.

## Recognizing possible anthrax contamination

- If you have anthrax symptoms, consult a health care provider. If you believe you have been intentionally exposed to anthrax, contact law enforcement officials immediately.

- If you receive a letter or package that may contain anthrax:

- ✓ Set the package down gently and leave it undisturbed to avoid release of spores into the air.
- ✓ Immediately wash your hands thoroughly with soap and warm water.
- ✓ Call 9-1-1 to report the incident. Follow the instructions of the 9-1-1 operators until help arrives.
- ✓ Remember: do not handle the package further unless necessary.

- If you open the package and the suspected anthrax powder is released:

- ✓ Do not try to clean up the powder. Cover the spilled contents immediately with anything (e.g., clothing, paper, trash can, etc.), and do not remove this cover!
- ✓ Leave the room and close the door, or section off the area to prevent others from entering (i.e., keep others away).
- ✓ Turn off the heating or air-conditioning system.
- ✓ Remove heavily contaminated clothing as soon as possible and place in a plastic bag or other container that can be sealed. This clothing bag should be given to the emergency responders for proper handling.
- ✓ If possible, list all people who were in the room or area, especially those who had actual contact with the powder. Give this list to the local public health authorities so that proper instructions can be given for medical follow-up, and to law enforcement officials for further investigation.

## Treatment for anthrax

- Antibiotics should be used to prevent or treat anthrax only under the direction of your health care provider or local health department. All forms of the disease need to be treated promptly. Since anthrax is not spread from person to person, there is no need to immunize or treat contacts of persons ill with anthrax, such as household members, friends, or coworkers, unless they were exposed to the same source of infection.





# Botulism

## What is botulism?

- Botulism is a rare, muscle-paralyzing disease caused by a toxin made by *Clostridium botulinum* (*C. botulinum*), a bacteria found naturally in the soil. There are three main types of botulism: food borne, infant, and wound. Botulism toxin could be used as a biological weapon because it can be breathed in or swallowed.

## How is botulism spread? What are the symptoms?

- You can get botulism from eating contaminated food or when a wound is contaminated by the bacteria. The disease is not spread from person to person. The amount of exposure to the toxin determines how quickly symptoms appear—from a few hours to several days.
- Regardless of how the toxin enters the body, the results are the same. As the disease progresses, symptoms may include double or blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness (starts with shoulders and descends through the body). Finally, breathing muscles may be paralyzed causing death unless mechanical breathing assistance is available.
- *Food borne botulism* occurs when a person eats food contaminated with the toxin-producing bacteria. This usually results from poor home-canning techniques. The first symptoms may include nausea and vomiting. Food borne botulism can occur in all age groups. The source of the contaminated food must be identified as quickly as possible to prevent others from becoming ill.
- *Infant botulism* occurs in a small number of infants each year who have *C. botulinum* bacteria in their intestinal tracts. Honey can be a source of botulism and should not be fed to infants.
- *Wound botulism* occurs when wounds are infected with *C. botulinum*. For example, a wound may be contaminated during an outdoor injury by contact with contaminated soil. The bacteria can only infect damaged skin.

## Preventive measures

- If you have symptoms, consult a health care provider as soon as possible. If you believe you have been intentionally exposed to botulism, contact law enforcement officials immediately.
- There is no vaccine to prevent botulism. You can reduce risk of exposure by following safe food handling and cooking practices, and by keeping wounds or cuts clean and properly bandaged.

## Treatment for botulism

- Immediate treatment is essential. The Centers for Disease Control and Prevention maintains a supply of antitoxin to treat botulism. This antitoxin can only be obtained by health care providers from health departments when botulism is suspected or confirmed. The antitoxin reduces the severity of symptoms if it is given early. Most patients eventually recover.
- Mechanical breathing assistance and other supportive care is the mainstay of treatment.
- In wound botulism, the wound should be surgically cleaned and antibiotics administered.
- Certain antibiotics used to treat bacteria infections can increase the severity of muscle paralysis in botulism cases. Antibiotics should be used to treat botulism only under the direction of your health care provider or local health department.
- No therapy is available to reverse paralysis caused by botulism.
- Recovery from symptoms of botulism is slow. Victims of botulism should anticipate physical and psychological problems resulting from a lengthy and difficult convalescent period.

## Botulism and Bioterrorism

- An airborne attack or sabotage of the food supply are thought to be the most likely modes of dissemination of botulinum toxin in a biological attack.
- Inhaling aerosolized spores would produce *inhalational botulism*—a form that does not occur naturally; the incubation period is likely to be less than that for food-borne illness.



# Pneumonic Plague

## What is plague?

- Plague is an uncommon infectious disease of animals and humans caused by *Yersinia pestis* (*Y. pestis*) bacteria. *Y. pestis* is present in wild rodents and their fleas in many areas around the world, including most of the western United States. *Y. pestis* is easily destroyed by sunlight and drying. Even so, when released into air, the bacterium will survive for up to one hour, although this could vary depending on conditions.

## Types of plague

Pneumonic plague is one of several forms of plague. Depending on circumstances, these forms may occur separately or in combination:

- *Pneumonic plague*, the most virulent and least common form of plague, occurs when *Y. pestis* infects the lungs. This type of plague can spread from person to person through the air. Transmission can take place if someone breathes in aerosolized bacteria, which could happen in a bioterrorist attack. Pneumonic plague is also spread by breathing in *Y. pestis* suspended in respiratory droplets from a person (or animal) with pneumonic plague. Becoming infected in this way usually requires direct and close contact with the ill person or animal. Pneumonic plague may also occur if a person with bubonic or septicemic plague is untreated and the bacteria spreads to the lungs.
- *Bubonic plague* is the most common form of plague. This occurs when an infected flea bites a person or when materials contaminated with *Y. pestis* enter through a break in a person's skin. Patients develop swollen, tender lymph glands (called buboes) and fever, headache, chills, and weakness. Bubonic plague does not spread from person to person.
- *Septicemic plague* occurs when plague bacteria enters the bloodstream. It can be a complication of pneumonic or bubonic plague or it can occur by itself. When it occurs alone, it is caused in the same ways as bubonic plague; however, buboes do not develop. Patients have fever, chills, prostration, abdominal pain, shock, and bleeding into skin and other organs. Septicemic plague does not spread from person to person.

## How is pneumonic plague spread? What are the symptoms?

- Pneumonic plague occurs when the *Y. pestis* bacterium is inhaled. The disease may be spread through face-to-face contact when an infected person coughs or sneezes. Because it enters the body by being inhaled, pneumonic plague could be spread intentionally if the bacteria were put into aerosol form.
- The symptoms of pneumonic plague begin one to four days after exposure to the bacteria. The symptoms include fever, headache, weakness and a bloody or watery cough due to pneumonia. The pneumonia rapidly becomes worse and without early treatment, it can be fatal.

## Preventive measures

- If you have symptoms, consult a health care provider as soon as possible. If you believe you have been intentionally exposed to pneumonic plague, contact law enforcement officials immediately.
- There is no vaccine against pneumonic plague. Antibiotics are used to prevent illness in those who have been exposed to pneumonic plague.

## Treatment for pneumonic plague

- Early treatment of pneumonic plague is essential. To reduce the chance of death, antibiotics must be given within 24 hours of first symptoms. Streptomycin, gentamicin, the tetracyclines, and chloramphenicol are all effective against pneumonic plague. You should use antibiotics to prevent or treat plague only under the direction of your health care provider or local health department.
- Antibiotic treatment for seven days will protect people who have had direct, close contact with infected patients. Wearing a close-fitting surgical mask also protects against infection.
- A plague vaccine is not currently available for use in the United States.



# Smallpox



**Smallpox is of high concern for use as a biological weapon because of its potential high morbidity, lack of a treatment (other than supportive), and low immunity status of the current population.**

## **What is smallpox?**

- Smallpox is a severe viral infection caused by the variola virus. Smallpox infection was eliminated from the world in the late 1970s. However, because the security of the virus is uncertain, there is a remote risk that smallpox could be used as a weapon.
- Routine vaccination against smallpox in the United States ended in 1972 because the risk associated with the vaccine was greater than the risk of getting the disease. However, in 2003 some members of the military, public health and health care workforce were vaccinated against smallpox as part of bioterrorism preparedness.

## **How is smallpox spread? What are the symptoms?**

- Smallpox is extremely infectious and is spread from one person to another by infected saliva droplets. Exposure may come from face-to-face contact, airborne spread (coughing or sneezing) or through direct contact with contaminated materials. People with smallpox are most infectious during the first week of illness because that is when the largest amount of virus is present in saliva. However, some risk of transmission lasts until all scabs have fallen off.
- The incubation period for the disease ranges from about seven to 17 days following exposure. Initial symptoms include high fever, fatigue, headache, and backache. A rash—most prominent on the face, arms and legs—follows in two to three days. The rash starts with flat red lesions that evolve at the same rate. Lesions become pus-filled and begin to crust early in the second week. Scabs develop, and then separate and fall off after about three to four weeks. The majority of patients with smallpox recover, but death occurs in up to 30 percent of cases.

## **Preventive measures**

- If you have symptoms, consult a health care provider as soon as possible. There is no evidence of increased risk of smallpox outbreak or bioterrorism attack using smallpox, but the United States does maintain an emergency supply of smallpox vaccine. The vaccine is not currently available to the public because it can have severe side effects.

## **Treatment for smallpox**

- There is no proven treatment for smallpox, but research to evaluate new antiviral agents is ongoing. Patients with smallpox can benefit from supportive therapy, such as intravenous fluids and medicine to control fever or pain, and antibiotics for any secondary bacterial infections.
- If the vaccine is given to a person within four days of exposure to smallpox, it may lessen the severity of—or possibly prevent—illness. Vaccine against smallpox contains a live virus called vaccinia; it does not contain the smallpox virus.
- The vaccine is stored and distributed by the Centers for Disease Control and Prevention through the Strategic National Stockpile of pharmaceutical supplies. In the event smallpox is used as a weapon, the distribution of vaccine would be coordinated by the Centers for Disease Control and Prevention with state and local health departments.

## **Infection control**

- Airborne and contact precautions should be followed by all health care providers, staff, and visitors (i.e., gown, gloves, N95 mask).
- Only vaccinated individuals (within the past three years, or those without contraindications to vaccination) should provide care to suspected smallpox patients.
- Respiratory and contact isolation is required for all hospitalized patients.
- Private, negative pressure room with HEPA-filtered exhaust is recommended.



# Tularemia

## What is tularemia?

- Tularemia, also known as “rabbit fever,” is an infection caused by the bacteria *Francisella tularensis* that can affect animals and humans. About 200 cases of human tularemia are reported each year in the United States. Bites from infected ticks and the handling of infected rabbits are responsible for most tularemia cases in the United States. If tularemia were to be released intentionally, as in a bioterror event, the bacteria would most likely be released into the air to be breathed in.

## Why are we concerned about tularemia being used as a bioweapon?

- *Francisella tularensis* is highly infectious. A small number of bacteria (10-50 organisms) can cause disease. If *Francisella tularensis* were used as a bioweapon, the bacteria would likely be made airborne so they could be inhaled. People who inhale the bacteria can experience severe respiratory illness, including life-threatening pneumonia and systemic infection, if they are not treated.

## How is tularemia spread? What are the symptoms?

- You can get tularemia by handling infected animals, by eating or drinking contaminated food or water or by inhaling contaminated dusts or sprays. Tularemia is not spread from person to person.
- Depending on the type of exposure tularemia can occur in several forms:
  - ✓ Infection of the lungs (pneumonic)—the most common form and is caused by inhaling the bacteria through contaminated dusts or aerosols.
  - ✓ Enlargement of lymph glands in the neck and inflammation of the throat—occurs most commonly after ingesting contaminated food or water.
  - ✓ Swollen lymph glands with or without a skin ulcer—can occur after handling contaminated materials or being bitten by infected ticks or other biting insects such as deer flies.

- All forms of the disease are accompanied by flu-like symptoms such as fever, chills, headaches, body aches, and weakness that usually occur three to five days after exposure to the bacteria. A person with pneumonia can develop chest pain, difficulty breathing and respiratory failure.

## Preventive measures

- If you have symptoms, consult a health care provider as soon as possible. If you believe you have been intentionally exposed to tularemia, contact law enforcement officials immediately.
- Currently there is no vaccine available for general use. In the event of exposure to tularemia, early antibiotic treatment is recommended if it is likely the person was exposed to tularemia, or if the person has been diagnosed with tularemia. Several types of antibiotics have been effective in treating tularemia infections. The tetracycline class (such as doxycycline) or fluoroquinolone class (such as ciprofloxacin) of antibiotics are taken orally. Streptomycin or gentamicin are also effective against tularemia, and are given by injection into a muscle or vein. Health officials will test the bacteria in the early stages of the response to determine which antibiotics will be most effective.

## Treatment for tularemia

- Early treatment of tularemia with appropriate antibiotics is essential. Antibiotics should be used to prevent or treat tularemia only under the direction of your health care provider or local health department.

## What is CDC doing about tularemia?

- The CDC operates a national program for bioterrorism preparedness and response that incorporates a broad range of public health partnerships. Other things CDC is doing include:
  - ✓ Stockpiling antibiotics to treat infected people
  - ✓ Coordinating a nation-wide program where states share information about tularemia
  - ✓ Creating new education tools and programs for health professionals, the public, and the media.

*Additional source: Centers for Disease Control and Prevention.*

# Viral Hemorrhagic Fevers



## What are viral hemorrhagic fevers?

- Viral hemorrhagic fevers (VHFs) are diseases caused by groups of viruses such as the Ebola virus and Marburg virus. In general, infection with these viruses may cause serious illness with fever, and damage to blood vessels affecting many organ systems. Damage to the blood vessels can disrupt blood flow and cause severe bleeding. Although some VHFs are mild illnesses, many can be fatal. Other VHFs include Lassa fever, yellow fever, Crimean-Congo and New World hemorrhagic fever viruses.

## What are the symptoms of viral hemorrhagic fever illnesses?

- Although symptoms vary for each specific virus, initial signs of VHF often include fever, rashes, body aches, headache and fatigue. Severely ill patients may also show signs of shock, bleeding, and damage to the blood vessels in major organs including the liver, lungs, nervous system, and occasionally, the kidneys. Typically, symptoms develop within days, but may not appear until several weeks after exposure.

## How are hemorrhagic fever viruses spread?

- Humans can be infected in several ways:
  - ✓ Contact with urine, fecal matter, saliva or other body excretions from infected rodents.
  - ✓ Contact with the bodies of dead infected animals.
  - ✓ Being bitten by infected mosquitoes or ticks.
  - ✓ Contact with animals that have been bitten by infected mosquitoes or ticks.
  - ✓ Close contact with infected people or their body fluids. Ebola, Marburg, Lassa fever, New World hemorrhagic fever, and Crimean-Congo hemorrhagic fever viruses can be spread from person to person. People can also be infected by touching objects such as syringes and needles that have been contaminated with infected body fluids.

## Where do cases of viral hemorrhagic fever occur naturally?

- Hemorrhagic fever viruses are found around the world, but none of the VHF viruses are native to the United States. Because VHF viruses need an animal or insect host to survive, VHFs are rare outside of the areas where the host for the specific virus lives.
- Rats and mice often carry VHF viruses, but the viruses may also be carried by ticks and mosquitoes. Occasionally, an infected traveler may carry a hemorrhagic fever virus from an area where the virus occurs naturally. If the virus is a type that can be transmitted by person-to-person contact, the traveler can infect other people.

## How can cases of viral hemorrhagic fever be prevented and treated?

- The most effective way to prevent VHFs from being transmitted from person to person is medical isolation of infected patients and use of caution to prevent exposure of health care workers and others to the virus. Special care must be taken to properly dispose of medical wastes and tissues from infected patients.
- There is no specific drug for treatment of VHF; patients receive supportive care. Patients infected with Lassa fever virus may respond to the antiviral drug ribavirin if treated early in the course of infection.
- The only licensed, approved vaccine for VHFs is for yellow fever; however, the vaccine must be taken prior to yellow fever exposure. Experimental vaccines for several other VHFs are being studied, but are not yet licensed or approved for general use.

## VHFs and bioterrorism

- The Centers for Disease Control and Prevention identifies hemorrhagic fever viruses as agents that could be used as biological weapons because some are highly infectious, can be easily spread through the air, and have the potential to cause great numbers of illnesses and deaths. They are also known to have been the subject of biological weapons research.



# Methamphetamine Labs

**Methamphetamine (also referred to as meth) is a powerful, addictive drug that is illegally manufactured or “cooked” in makeshift labs. Meth labs are toxic sites containing chemicals that can cause serious health problems for anyone who comes in contact with them. Meth is also called crank, speed, crystal, or ice.**

## Health risks

- People who enter a drug lab before it has been properly cleaned and ventilated may feel headaches, nausea, dizziness, or fatigue. These symptoms usually go away after several hours. Greater exposure can result in shortness of breath, cough, chest pain, lack of coordination, burns, or death.

## How to recognize a meth lab

- Meth labs may be set up at campgrounds, rest areas, rental homes, motel rooms, abandoned cars, garages, storage sheds, barns, and vacant buildings.
- A typical meth lab is a collection of chemical bottles, hoses, and pressurized cylinders. The cylinders can be modified propane tanks, fire extinguishers, scuba tanks, or soda dispensers among other things. The tanks contain anhydrous ammonia or hydrochloric acid—both highly poisonous and corrosive.
- Labs are frequently abandoned, potentially explosive, and very toxic chemicals are left behind. Chemicals may also be burned or dumped in wooded areas or along roads.
- Warning signs of living near a meth lab:
  - ✓ Strong odor of solvents
  - ✓ Residences with windows blacked out
  - ✓ Iodine- or chemical-stained bathroom or kitchen fixtures
  - ✓ Increased activity, especially at night
  - ✓ Excessive trash

## Do not enter a site that you think may be used for cooking meth

- Labs present extreme dangers from explosions and exposure to hazardous chemicals.
- Breathing the fumes and handling substances can cause injury or death.
- Drug labs are considered hazardous waste sites and should only be entered by trained and equipped professionals.
- Never handle materials you suspect were used for making meth, such as contaminated glassware and needles.
- Skin contact may result in burns or poisoning.
- Some of the chemicals can explode on contact with water or air.
- Consider that when professionals respond to a drug lab, they do not enter the building until they have put on chemically resistant suits and boots, special gloves, and respirators.

## To report a suspected lab:

- Rocky Mountain High Intensity Drug Trafficking Area (RM HIDTA), 1-800-965-6393 or 303-671-2186.
- South Metro Drug Task Force Tip Line, 720-748-2977

## General questions and concerns about health effects of meth labs:

- Colorado Department of Public Health and Environment, 1-800-886-7689.
- More information and educational resources concerning methamphetamine and meth labs can be found on the “Rocky Mountain High-Intensity Drug Trafficking Area” web site at [www.rmhidta.org](http://www.rmhidta.org).



# Getting Medicine During a Public Health Emergency



**The Strategic National Stockpile is a federal government program that provides medication and medical supplies to states during an emergency.**

## **When help is needed fast**

- If a disease outbreak, bioterrorism attack or natural disaster happens in Colorado, thousands, possibly millions, of people will need medical attention to treat or prevent the spread of disease. Local medical supplies and medications will be used up quickly during such a public health emergency.
- The Strategic National Stockpile (SNS) helps meet the need for additional supplies by quickly delivering large quantities of critical emergency medicines and supplies to states that request them.

## **Assistance for Colorado and your community**

- In the event of a disaster, outbreak or attack, the governor will ask the federal government to send SNS shipments to Colorado. Once help is approved, the SNS will fill the request from storage facilities strategically located around the country. Supplies can be delivered to any state within 12 hours of the request.
- Depending on the type of emergency, the SNS will deliver antibiotics, chemical antidotes, antitoxins, or other medical or surgical items. Additional drugs and/or medical supplies can be supplied within the following 24 to 36 hours.
- When SNS shipments are received, Colorado emergency response workers will immediately deliver the supplies and medications directly to the communities that need them.

## **Finding medication during an emergency**

- Cities and towns in Colorado will set up emergency medication centers (also known as points of dispensing sites or PODS) where people can pick up the emergency medications or receive vaccinations.

Medication centers will be located in large public buildings such as schools, arenas, or churches in several geographic areas to minimize the amount of time and distance people need to travel to reach them.

- Local public health agencies will announce when medication centers will open, where to find them, how to get there, what to bring and what to expect. You will be able to get this important information from sources that include:
  - ✓ Television and radio news and newspapers.
  - ✓ State and local public health and emergency management Web sites.
  - ✓ Community, civic, and religious organizations.
- Local governments are responsible for determining the location of medication centers in their areas. In many cases these sites will not be made public until an emergency occurs. Not all medication center sites will be used for every emergency, so it will be important to check the resources listed above for current information in the event of an emergency.

## **At the medication center**

- If medication centers are opened to distribute medicine from the Strategic National Stockpile in an emergency, there will be no charge to the public.
- Trained staff will be available to assist you at the medication center.
- The process will be simple.
- Depending on the type of emergency, one person may be able to pick up medications for a household or group.
- Check the resources listed above for current information in the event of an emergency.



# Household Fires

**Fires in homes are most often caused by cooking accidents, smoking, or unsafe use of wood stoves or space heaters. Here are some things you can do to avoid a home fire or protect yourself during a fire.**

## Protecting against fires

- Install smoke detectors in or near all sleeping areas and on every level of your home, including the basement. Check smoke detectors on a regular basis and replace the batteries twice yearly.
- Have A-B-C type fire extinguishers. Teach family members how to use them.
- Know the location of all exits including windows. If you live in an apartment, count the number of doorways between your apartment and the two nearest exits.
- Know two ways out of every room in case smoke or flames block your primary exit.
- Choose a meeting place outside the home.
- Have an escape plan and practice it with your family. This will help ensure you can get out quickly when there is no time for mistakes.
- Keep folding or chain style ladders stored in each upstairs bedroom.
- Use alternative heat sources, such as wood stoves or space heaters, safely:
  - ✓ Never use gas ovens, gas ranges, barbecues, or most portable or propane heaters for indoor heating.
  - ✓ Before using an alternative heat source, read the manufacturer's instructions.
- Do not smoke in the bedroom, on the couch or anywhere you might fall asleep while smoking.
- Sleep with your bedroom door closed.
- Make sure your house number is clearly visible from the street and that fire trucks can reach your home.

- Have fire-fighting materials available: dry powder, fire extinguisher, heavy tarp or blanket, and water.

## If fire strikes

- If there is a fire, evacuate. Do not go back inside. Call 9-1-1 from a neighbor's house.
- Never use water on an electrical fire.
- Smother oil and grease fires in the kitchen with baking soda or salt, or put a lid over the flame if it is burning in a pan.
- If caught in smoke, drop to your hands and knees and crawl; breathe shallowly through your nose and use your blouse, shirt or jacket as a filter.
- If you must move through flames, hold your breath, move quickly, cover your head and hair, keep your head down and close your eyes as much as possible.
- If your clothes catch fire, "stop, drop and roll" until the fire is out.
- If you are in a room and cannot escape, leave the door closed, stay low to the floor and hang a white or light-colored sheet outside the window.
- Be sure all family members are accounted for. If someone is missing, let the fire department know.

## Littleton Fire Rescue Programs

- *Hazard House*—a tabletop display of a multi-level home demonstrates the hazards associated with each room in a home. It can be reserved for elementary classrooms of up to 50 children or for community groups.
- *Life Safety House*—a mobile safety trailer which provides an in-depth tour of typical rooms found in a home, and the fire hazards associated with each room. Simulated smoke gives participants an opportunity to practice a safe escape. The Life Safety House may be requested for third-grade school presentations. A minimum of two classrooms must sign up.

For more information about these and other Littleton Fire Rescue programs, call 303-795-3800.



# Using a Generator During Power Outages



## Don't overload your generator

- Determine the amount of power you will need to operate only the equipment you plan to connect to the generator.
  - ✓ Light bulb wattage indicates the power needed for lighting. Appliance and equipment labels indicate their power requirements.
- If you can't determine the amount of power you will need, ask an electrician.
- If your generator does not produce enough power to run several things at once, including the initial surge, stagger the use of your equipment.
- If your equipment draws more power than the generator can produce, you may blow a fuse on the generator or damage the connected equipment.

## Use your generator safely

- Incorrect generator use can lead to carbon monoxide (CO) poisoning from the toxic engine exhaust, electric shock, electrocution, or fire. Follow the directions supplied with the generator.

## Never use a portable generator indoors

- Never use a portable generator in a garage, carport, basement, crawlspace or other enclosed or partially-enclosed area, even with ventilation. Opening doors and windows or using fans will not prevent CO buildup in the home.
- If you start to feel sick, dizzy, or weak while using a generator, get to fresh air right away—do not delay!
- Install battery-operated home CO alarms. Test batteries frequently and replace when needed. If existing alarms are hard-wired, be sure they have back-up batteries.

## Using your generator outdoors

- Place the generator away from windows, doors, and vents that could allow CO to come indoors.

- To avoid electrocution, keep the generator dry. Do not use in rain or wet conditions. Operate it on a dry surface under an open canopy-like structure. Make sure your hands are dry before touching the generator.

## Use and store generator fuel safely

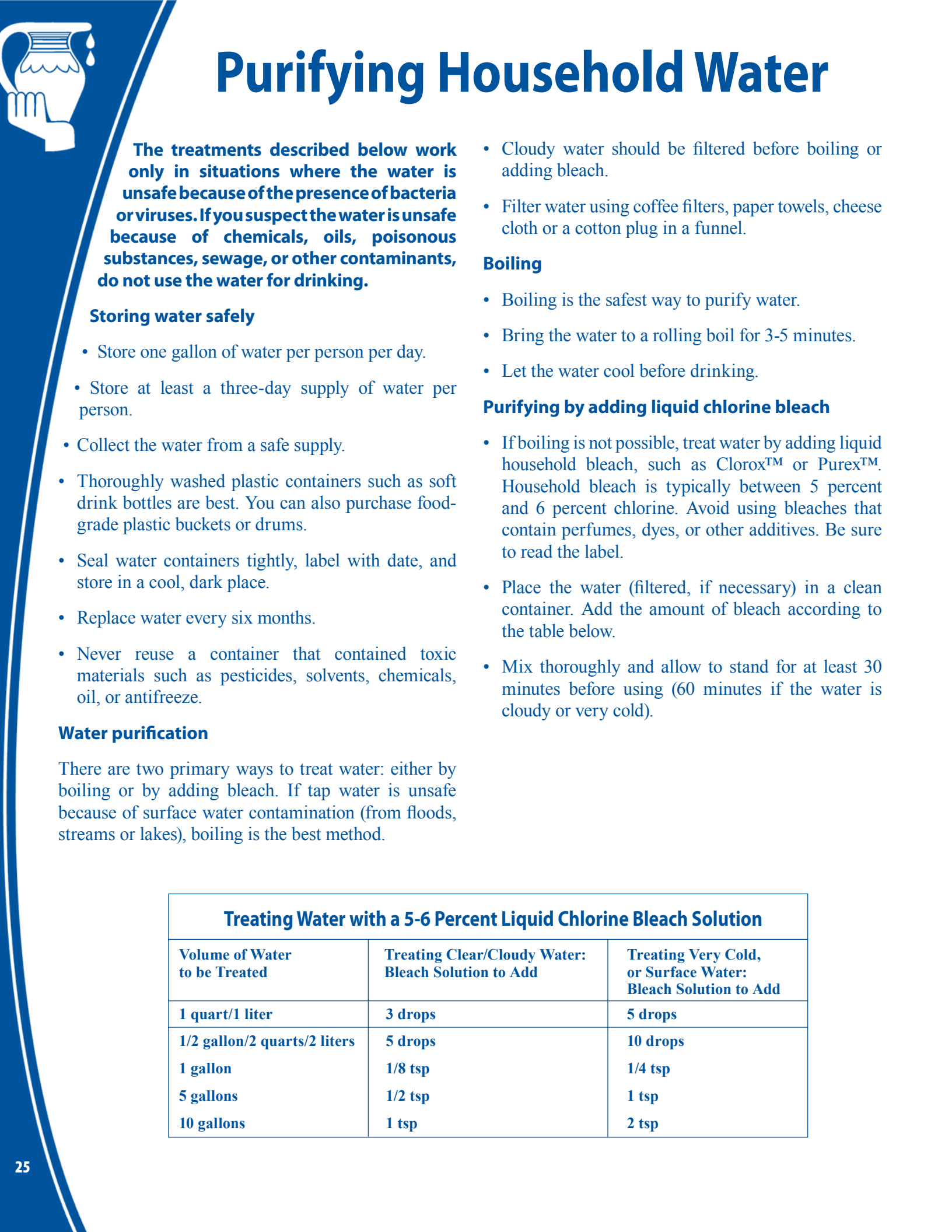
- Turn the generator off and let it cool before refueling. Gasoline spilled on hot engine parts could ignite.
- Store generator fuel in a UL-approved container outside of living areas in a locked shed or other protected area. Local laws may restrict use or storage of fuel. Call Littleton Fire Rescue at 303-795-3800 for information.
- If you spill fuel or do not seal its container properly, invisible vapors can travel along the ground and be ignited by an appliance's pilot light or arcs from electric switches in the appliance.
- Use the type of fuel recommended in the generator instructions or on its label.

## Connect your generator correctly

- **Never try to power house wiring by plugging the generator into a wall outlet, a practice known as "back feeding." It can lead to the electrocution of utility workers or neighbors served by the same utility transformer.**
- The only safe way to connect a generator to house wiring is to have a qualified electrician install a power transfer switch.
- Plug appliances directly into the generator, or use a heavy duty, outdoor-rated extension cord that is rated (in watts or amps) at least equal to the sum of the connected equipment loads.

## The safest way to get emergency power

- Permanently installed stationary generators are the best way to provide home backup power during a power outage.



# Purifying Household Water

**The treatments described below work only in situations where the water is unsafe because of the presence of bacteria or viruses. If you suspect the water is unsafe because of chemicals, oils, poisonous substances, sewage, or other contaminants, do not use the water for drinking.**

## Storing water safely

- Store one gallon of water per person per day.
- Store at least a three-day supply of water per person.
- Collect the water from a safe supply.
- Thoroughly washed plastic containers such as soft drink bottles are best. You can also purchase food-grade plastic buckets or drums.
- Seal water containers tightly, label with date, and store in a cool, dark place.
- Replace water every six months.
- Never reuse a container that contained toxic materials such as pesticides, solvents, chemicals, oil, or antifreeze.

## Water purification

There are two primary ways to treat water: either by boiling or by adding bleach. If tap water is unsafe because of surface water contamination (from floods, streams or lakes), boiling is the best method.

- Cloudy water should be filtered before boiling or adding bleach.
- Filter water using coffee filters, paper towels, cheese cloth or a cotton plug in a funnel.

## Boiling

- Boiling is the safest way to purify water.
- Bring the water to a rolling boil for 3-5 minutes.
- Let the water cool before drinking.

## Purifying by adding liquid chlorine bleach

- If boiling is not possible, treat water by adding liquid household bleach, such as Clorox™ or Purex™. Household bleach is typically between 5 percent and 6 percent chlorine. Avoid using bleaches that contain perfumes, dyes, or other additives. Be sure to read the label.
- Place the water (filtered, if necessary) in a clean container. Add the amount of bleach according to the table below.
- Mix thoroughly and allow to stand for at least 30 minutes before using (60 minutes if the water is cloudy or very cold).

Treating Water with a 5-6 Percent Liquid Chlorine Bleach Solution		
Volume of Water to be Treated	Treating Clear/Cloudy Water: Bleach Solution to Add	Treating Very Cold, or Surface Water: Bleach Solution to Add
1 quart/1 liter	3 drops	5 drops
1/2 gallon/2 quarts/2 liters	5 drops	10 drops
1 gallon	1/8 tsp	1/4 tsp
5 gallons	1/2 tsp	1 tsp
10 gallons	1 tsp	2 tsp

# Securing Your Water Heater



**Fresh water after a disaster may be as close as your water heater—provided, of course, it remains standing upright. You can protect this valuable resource by securing your water heater to the wall studs.**

## First—check for plumbers' tape

Experts modified the procedure for strapping water heaters following the 1989 Loma Prieta and 1994 Northridge earthquake. Prior to this, a single strap of plumbers' tape was commonly used. Because so many tanks burst through this strapping, experts now recommend:

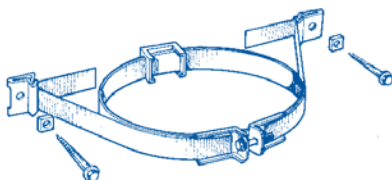
1. Secure both the top and the bottom of the tank, rather than just the top or middle of the tank.
2. Use heavy-gauge metal strapping rather than plumbers' tape.



3. Replace all copper and metal piping with flexible natural gas and water line connectors. The illustration above is *plumbers tape*; it is not strong enough to prevent a water heater from tipping over.

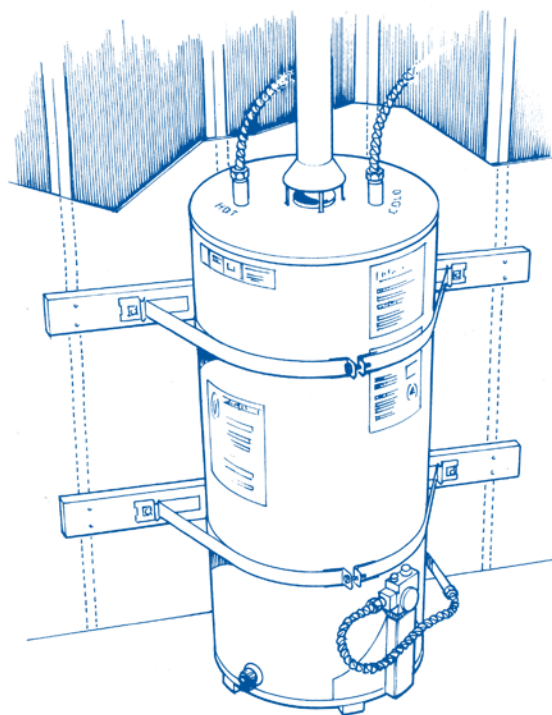
## Second—secure tank with heavy-gauge metal straps at the top and bottom

- Commercially available strapping kits make this a relatively easy process. These can be found in many hardware stores on the aisle displaying the water heaters.
- These kits come complete with the strapping, lag screws, washers, spacers and tension bolts.
- You can also choose to assemble the strapping materials yourself using heavy-gauge metal straps and 3-inch lag screws.
- To prevent the tank from tipping backwards, there



should be very little space between it and the wall. If there is more than 1 or 2 inches, attach a wooden block to the wall with long lag screws.

- Wrap the heavy-gauge metal strapping 1-1/2 times around the tank. Start by placing the strapping at the back of the tank. Bring it to the front and then take it back to the wall.
- Secure this strapping to the wall studs or the wood block using several 1/4-inch x 3-inch or longer lag screws with oversized washers.
- If you are securing it directly into concrete, use 1/4-inch expansion bolts in place of the screws.



## An emergency source of water

- Water can easily be accessed by connecting a garden hose to the drain spout, and by opening a faucet somewhere in the house.
- Make sure the electricity or natural gas is off before opening the drain.

# Turning Off Utilities

When disaster strikes, it often affects one or more of the utilities in your home. It is important to know where the main controls are located, and when and how to turn them off.

## Electricity

- Locate your main electrical switch or fuse panel, and learn how to turn off the electrical power system.
- If a generator is used as a backup power supply, always follow the manufacturer's instructions. Connect lights and appliances directly to the generator and not to the electrical system.

## Water

- Turn off water flow at the meter or at the water main leading into the house to prevent contaminated water from entering your water heater and plumbing. Turning off the water flow at the meter requires a special valve wrench, available from a hardware store. Make sure you have the tool readily available.

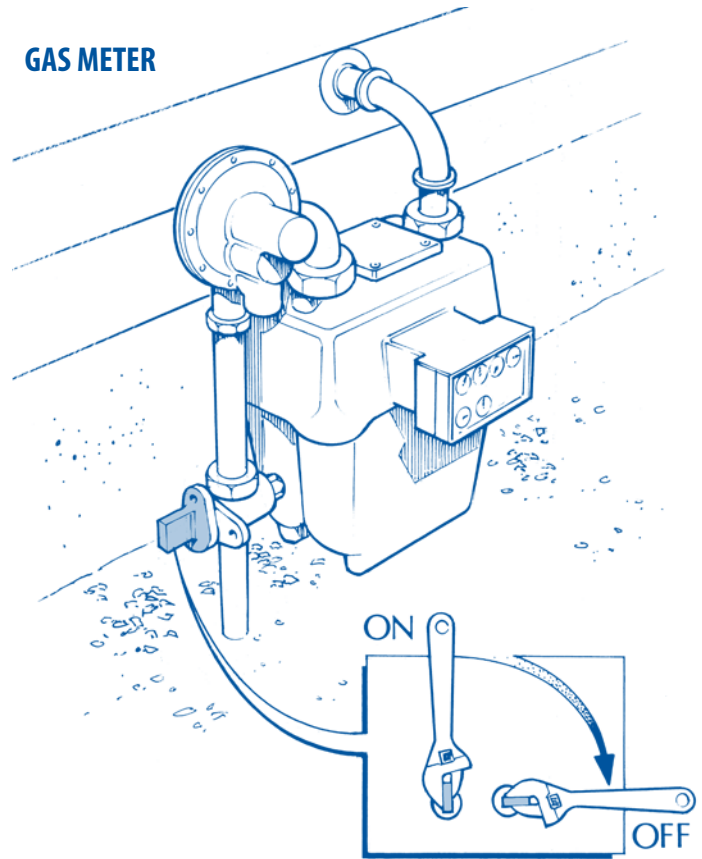
## Sewer system

- Make sure your sewer system is functioning properly before using it. This will prevent the contamination of your home, and possibly, the drinking water supply.

## Gas meter (illustration at right)

- Locate your gas meter and valve.
- Have a wrench immediately available for turning off the gas supply.
- If you smell natural or propane gas, evacuate immediately and leave the area. Go to where you no longer smell gas. Do not use matches, lighters, open-flame appliances, or operate electrical switches. Sparks could ignite gas causing an explosion.
- Shut off the gas only if you smell gas or hear a hissing noise. Contact Xcel Energy to turn the gas back on.

GAS METER



**It is best to learn how to turn off household utilities before disaster strikes.**

If you are an Xcel Energy customer, you should call 1-800-895-1999 if you are experiencing an electrical outage. If the power goes out, turn off all electrical appliances to the best of your ability. This will help with the transition to the restoration of service by lessening the electrical demand when lines are put back into service.

If you smell gas or hear a hissing sound, open the windows and get out of the house. Call Xcel Energy's gas emergency number at 1-800-895-2999 from a safe location.

# Earthquakes



## Drop, Cover, and Hold

- When you feel an earthquake, DROP and COVER under a desk or sturdy table. Stay away from windows and objects like bookcases that could fall. HOLD on to the desk or table. If it moves, move with it. Do not run—stay where you are. “Drop, Cover, and Hold.”

## Be prepared for an earthquake

- Anchor appliances and tall heavy furniture that might fall. Put latches on cabinet doors to keep contents from spilling out.
- Find out how you can improve your home to protect it against earthquake damage.
- Establish an “out-of-area” contact and keep the phone numbers handy. This is the person family members will call if you are separated. The person should live far enough away that he or she will not be affected by the emergency.
- Have a place at home where emergency supplies are kept, and tell family members where it is.

## During an earthquake

If you are indoors:

- Stay inside. Get under a desk or sturdy table and hold on to it. If it moves, move with it. Stay away from windows, bookcases, refrigerators, heavy mirrors, hanging plants, and other objects that could fall. Do not go outside until the shaking stops.
- If you are in a crowded store or public place, do not rush for an exit. Move away from display shelves holding objects that could fall on you, and “drop, cover, and hold.”
- If you are in a theater or stadium, stay in your seat, protect your head with your arms or get under the seat. Do not leave until the shaking stops.

If you are outdoors:

- If you are outdoors, move to a clear area away from trees, signs, buildings or downed electrical wires and poles.

If you are in a downtown area:

- If you are on a sidewalk near a tall building, get into a building’s doorway or lobby to protect yourself from falling bricks, glass and other debris.

If you are driving:

- If you are driving, slowly pull over to the side of the road and stop. Avoid overpasses, power lines and other hazards. Stay inside the vehicle until the shaking stops.

If you are in a wheelchair:

- If you are in a wheelchair, stay in it. Move to safe cover if possible, lock your wheels and protect your head with your arms.

## After the earthquake

- If you were evacuated, wait until you are told it is safe before returning home.
- Be careful entering buildings. Stay away from downed power lines.
- Check yourself and those around you for injuries.
- Be prepared for aftershocks.
- Use the phone only to report a life-threatening emergency.
- Do not drive unnecessarily.
- If you smell gas or hear a hissing sound, open a window and leave the building. Shut off the main gas valve outside.
- Check on neighbors, particularly elderly or disabled persons.
- Try to contact your out-of-area phone contact.
- Listen to your radio.





# Floods

**Floods are the most common and widespread of all natural disasters. If you live in an area where floods occur, you should know the following:**

## **What to do before a flood**

- Plan for evacuation including where you are going to go and the route you will follow.
- Prepare your home for a flood. Call your local building department or office of emergency management for information.
- Purchase flood insurance.
- Keep all insurance policies and a list of valuable items in a safe place.
- Take photos or a videotape of the valuables you keep in your home.
- Listen to your radio or television for reports of flood danger.
- Keep your car filled with gas.

## **What to do during a flood**

- Do not try to walk or drive through flooded areas. Water can be deeper than it appears and water levels rise quickly. Follow official emergency evacuation routes. If your car stalls in floodwater, get out quickly and move to higher ground.
- Stay away from moving water; moving water six inches deep can sweep you off your feet. Cars are easily swept away in just two feet of water.
- Stay away from disaster areas unless authorities ask for volunteers.
- Stay away from downed power lines.
- If your home is flooded, turn off the utilities until emergency officials say it is safe to turn them back on. Do not pump the basement out until floodwater recedes. Avoid weakened floors, walls and roof-tops.
- Wash your hands frequently with soap and clean water if you come in contact with floodwaters.

## **What to do after a flood**

- Wear gloves and boots when cleaning up.
- Open all doors and windows. Use fans if possible to air out the building.
- Wash all clothes and linens in hot water.
- Discard mattresses and stuffed furniture; they cannot be adequately cleaned.
- Wash dirt and mud from walls, counters and hard surfaced floors with soap and water. Disinfect by wiping surfaces with a solution of one cup bleach per gallon of water.
- Discard all food that has come into contact with floodwater. Canned food is alright, but thoroughly wash the can before opening.
- If your well is flooded, your tap water is probably unsafe. If you have public water, the health department will let you know—through radio and television—if your water is not safe to drink. Until your water is safe, use clean bottled water.
- Learn how to purify water. If you have a well, learn how to decontaminate it.
- Do not use your septic system when water is standing on the ground around it. The ground below will not absorb water from sinks or toilets. When the soil has dried, it is probably safe to again use your septic system. To be sure, contact your local health department.
- When floodwaters have receded, watch out for weakened road surfaces.

## **Flash Flooding**

- In canyons, flash floods can occur without warning. It may not even be raining where you are. The rain may have been far up the canyon and is roaring down on you. If the water starts to rise, don't wait! Go immediately. Leave everything. Your life is more important. Never try to outrun a flood in your car or on foot.

# Hot Weather Precautions



**Severe heat may cause illness or even death. When temperatures rise to extreme highs, reduce risks by taking the following precautions to reduce the risk of heat exhaustion and heat stroke:**

- Stay indoors and in an air-conditioned environment as much as possible unless you're sure your body has a high tolerance for heat.
- Drink plenty of fluids but avoid beverages that contain alcohol, caffeine or a lot of sugar.
- Eat more frequently but make sure meals are balanced and light.
- Never leave any person or pet in a parked vehicle.
- Avoid dressing babies in heavy clothing or wrapping them in warm blankets.
- Check frequently on people who are elderly, ill or who may need help. If you might need help, arrange to have family, friends or neighbors check in with you at least twice a day throughout warm weather periods.
- Make sure pets have plenty of water.
- Salt tablets should only be taken if specified by your doctor. If you are on a salt-restrictive diet, check with a doctor before increasing salt intake.
- If you take prescription diuretics, antihistamines, mood-altering or antispasmodic drugs, check with a doctor about the effects of sun and heat exposure.
- Cover windows that receive morning or afternoon sun. Awnings or louvers (window blinds) can reduce the heat entering a house by as much as 80 percent.

## **If you go outside**

- Plan strenuous outdoor activities for early or late in the day when temperatures are cooler, then gradually build up tolerance for warmer conditions.
- Take frequent breaks when working outdoors.
- Wear a wide-brimmed hat, sun block and light-colored, loose-fitting clothes when outdoors.
- At first signs of heat illness (dizziness, nausea, headaches, muscle cramps), move to a cooler location,

rest for a few minutes and slowly drink a cool beverage. Seek medical attention immediately if you do not feel better.

- Avoid sunburn: it slows the skin's ability to cool itself. Use a sunscreen lotion with a high SPF (sun protection factor) rating.
- Avoid extreme temperature changes. A cool shower immediately after coming in from hot temperatures can result in hypothermia, particularly for elderly or very young people.

## **If the power goes out or air conditioning is not available**

- If air conditioning is not available, stay on the lowest floor out of the sunshine.
- Ask your doctor about any prescription medicine you keep refrigerated. If the power goes out, most medicine will be fine to leave in a closed refrigerator for at least three hours.
- Keep a few bottles of water in your freezer; if the power goes out, move them to your refrigerator and keep the doors shut.

## **Tips for pets**

- Never leave your pet in a parked car. Even cracked windows won't protect your pet from overheating or suffering from heat stroke during hot summer days.
- Exercise your dog in the early morning or evening hours, instead of during the middle of the day when it's hottest.
- If your dog or cat is out during the day, remember that asphalt and concrete can get very hot and burn the pads of their feet. Your pet must always have shelter available to protect it from extreme temperatures and inclement weather.
- Provide your pet with fresh, cool water every day in a tip-proof bowl.



# Thunderstorms and Lightning

**All thunderstorms produce lightning. In the United States, an average of 300 people are injured and 80 people are killed each year by lightning. Although most lightning victims survive, people struck by lightning often report a variety of long term, debilitating symptoms.**

## Thunderstorm facts

- They may occur singly, in clusters, or in lines.
- Some of the most severe storms occur when a single thunderstorm is slow-moving and affects one location for an extended time.
- Thunderstorms typically produce heavy rain for a brief period, anywhere from 30 minutes to an hour.
- Warm, humid conditions are highly favorable for thunderstorm development.
- About 10 percent of thunderstorms are classified as severe.

## Lightning facts

- Because lightning is unpredictable it increases the risk to individuals and property.
- Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- “Heat lightning” is lighting from a thunderstorm too far away for thunder to be heard. However, the storm may be moving in your direction!
- Most lightning deaths and injuries occur when people are caught outdoors in the summer months during the afternoon and evening.
- An individual’s chances of being struck by lightning are estimated to be 1 in 600,000.
- Lightning strike victims carry no electrical charge and should be attended to immediately.

## Know the terms

- *Severe thunderstorm watch* tells you when and where severe thunderstorms are likely to occur. Stay tuned to NOAA Weather Radio, commercial radio, or television for information.

- *Severe thunderstorm warning* is issued when severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property to those in the path of the storm.

## Preventative measures

- Remember the 30/30 lightning safety rule: go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.
- During a thunderstorm, get inside a home, building, or hard top automobile (not a convertible). Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside. Remember, rubber-soled shoes and rubber tires provide NO protection from lightning. Avoid showering or bathing. Use a corded telephone only for emergencies. Cordless and cellular telephones are safe to use. Unplug appliances and other electrical items such as computers and turn off air conditioners. Use your battery-operated NOAA Weather Radio for updates from local officials.

## Things to avoid

- Natural lightning rods such as tall, isolated trees in an open area.
- Hilltops, open fields, beaches, or a boat on the water.
- Isolated sheds or other small structures in open areas.
- Anything metal, such as tractors, farm equipment, motorcycles, golf carts, golf clubs, and bicycles.

## Aid for lightning victims

- If breathing has stopped, begin mouth-to-mouth resuscitation.
- If the heart has stopped, administer CPR.
- If the victim has a pulse and is breathing, look for other injuries. Also be alert for nervous system damage, broken bones, and loss of hearing and eyesight.

# Tornadoes



**Littleton is not in a tornado belt, but tornadoes do touch down here at times. Officials are in direct contact with the weather service and send out watch teams if there is any possibility of a tornado. If there is, schools are contacted immediately. However, if tornado conditions exist, the evacuation of homes or schools is the worst thing to do, because shelter is the best protection. If you are warned of tornadoes in the area, or if you see one, move immediately to a basement, interior wall or lower floor. Stay away from windows. Be sure you have your battery powered radio, first aid supplies and other emergency items. If you see a tornado, call 9-1-1 and advise them of where it is in relation to where you are.**

## What is a tornado?

- Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damaged paths can be in excess of one mile wide and 50 miles long. Some tornadoes are clearly visible, while rain or nearby low-hanging clouds may obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible. Before a tornado hits, the wind may die down and the air may become very still. A cloud of debris can mark the location of a tornado even if a funnel is not visible. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado. The average forward speed of a tornado is 30 MPH, but may vary from stationary to 70 MPH. Tornadoes are most frequently reported east of the Rocky Mountains during spring and summer months. Tornadoes are most likely to occur between 3 and 9 p.m., but can occur at any time.

## Know the terms

- *Tornado watch* means that tornadoes are possible. Remain alert for approaching storms. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio, or television for information.

- *Tornado warning* means that a tornado has been sighted or indicated by weather radar. Take shelter immediately. If you are under a tornado WARNING, seek shelter immediately!
- The media does a good job of warning of severe weather events. If the sky is ominous, tune to one of the local TV stations. If major problems are developing, they will advise you. Watch the sky. You will see rain shafts and roiling clouds. They are not tornadoes. A tornado must have three characteristics. First, the cloud must have a definite shape with clearly defined lines along its edges. Second, it must be rotating. And third, it must be touching the ground. You can tell this by seeing debris rising from the base of the cloud.

## Preventive measures

- If you are in a structure such as a residence, small building, school, nursing home, hospital, factory, shopping center, high-rise building, go to a pre-designated shelter area such as a safe room, basement, storm cellar, or the lowest building level. If there is no basement, go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls. Put as many walls as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. Do not open windows.
- If you are in a vehicle, trailer, or mobile home, get out immediately and go to the lowest floor of a sturdy, nearby building or a storm shelter. Mobile homes, even if tied down, offer little protection from tornadoes.
- If you are outside with no shelter, lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding. Do not get under an overpass or bridge. You are safer in a low, flat location. Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter. Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.





# Wildfires

**Forest fires and wildfires threaten lives and destroy homes and natural resources. You can take action now that can help save lives and help prevent or reduce damage caused by wildfires.**

## What to do before a wildfire

- Have an evacuation plan. You may need to leave your home to go to a safe place. Know where you are going and the possible routes to get there.
- Designate a “safety zone” in case all evacuation routes are burning.
- If you have special physical or medical needs, be sure to have an ample supply of medication and supplies to take with you if you evacuate. People with heart and lung diseases must be especially careful around wood smoke. Discuss your emergency plans with your medical provider.
- Make emergency plans for your pets and livestock.
- Establish an “out-of-area” contact and keep the phone numbers handy. This is the person family members will call if you are separated. The person should live far enough away that he or she will not be affected by the emergency. Prepare wallet cards with the person’s contact information.
- Put together a 72-hour emergency supply kit. Include water, food, and protective clothing (sturdy shoes, cotton or wool clothing, long pants, long-sleeved shirt, gloves and a handkerchief). Store in easy-to-carry packs.
- Store copies of your vital records and lists and/or photos and/or videotapes of valuable items in a safety deposit box. Include updated insurance policies.
- Familiarize yourself with local radio and television stations. They will have the latest information about fires in your area.
- Prepare your home for a wildfire. Clearly mark all driveways with names/addresses. Remove firewood, shrubs and other combustibles away from the home. Call your local fire, forestry, natural resources office, or go to [www.firewise.org](http://www.firewise.org) for more ideas on home design and landscaping.

- Talk to your neighbors about wildfire safety and about working together during a wildfire.
- Always call your local fire department before burning trash or vegetation. Be careful when cooking outdoors or using gas-powered equipment on dry, windy days.

## When wildfire threatens

- Remain calm. Listen to the radio and television for fire reports and evacuation information. Follow the advice given by authorities. (However, if you feel threatened, do not wait to leave.)
- Phone/tell your family and friends you may need to evacuate and let them know where you are going. Use your out-of-area contact card.
- Pre-load your car with emergency supplies, vital records and other valuables. Face your vehicle in the direction of escape. Keep pets confined nearby.
- Put on protective clothing to protect your body, face and lungs.
- Prepare a note to post at your home that tells authorities when you left, and where you are going.
- Set up a ladder, garden hoses and sprinklers on the roof. To conserve water, wait until the embers start falling.

## If advised to evacuate, do so immediately

- If there is time, close all windows, vents, and doors. Remove light-weight curtains. Shut off gas utilities.
- Turn on home’s lights.
- Post your prepared note on main entrance.
- Lock your doors.
- Choose a route away from fire hazards. Watch for other traffic and emergency vehicles. Drive with your lights on and leave room for emergency vehicles.
- If your evacuation route(s) are burning, go to your designated “safety zone.”
- Do not attempt to re-enter the area until firefighters have declared it safe.



# Windstorms



**“Down-slope wind storms” are most common from late autumn into spring and accompany travelling upper level disturbances in the strong wintertime jet stream. The Front Range is prone to these windstorm events.**

## **What to do before a windstorm**

- Contact your local emergency management office or the National Weather Service to find out what types of storms are most likely to occur in your community.
- Assemble a disaster supply kit.
- Contact vendors to learn the proper use of home generators.
- Find out who in your area might need special assistance, specifically the elderly, disabled, and non-English speaking neighbors.
- Check with your veterinarian for animal care instructions in an emergency situation.
- Know what emergency plans are in place at your workplace, school, and daycare center.
- Conduct a home safety evaluation to find out which nearby trees could fall in a windstorm.
- If you have an electric garage door opener, locate the manual override.
- If winds begin blowing hard, check all outside items and secure them. If your home is damaged, turn off the utilities and call the fire department. Stay inside and away from windows or skylights.

## **What to do during a windstorm**

- Don't panic. Take quick action to protect yourself and help others.
- If the power goes out while you are cooking, turn off the stove. Turn off natural gas appliances.
- If you are indoors, move away from windows or objects that could fall. Go to lower floors in multi-story homes.

- If you are outdoors, move into a building. Avoid downed electric power lines, utility poles and trees.
- If you are driving, pull off the road and stop away from trees. If possible, walk into a safe building. Avoid overpasses, power lines and other hazards.
- Listen to your radio for emergency instructions.

## **What to do after a windstorm**

- Check yourself and those around you for injuries.
- Evacuate damaged buildings. Do not re-enter until declared safe by authorities.
- Call 9-1-1 only to report a life threatening emergency.
- If you smell gas or hear a hissing sound indoors, open windows and leave the building. Turn off the gas source and call Xcel Energy's gas leak report line at 1-800-895-2999. Do not use matches, candles, open flames or electric switches indoors.
- If the power goes out, keep refrigerator and freezer doors closed to keep food frozen for up to two days.
- Provide assistance to your neighbors, especially the elderly or disabled.
- Try to make contact with your out-of-area phone contact, but avoid making local telephone calls.
- Monitor your portable or weather radio for instructions or an official “all clear” notice. Radio stations will broadcast what to do, the location of emergency shelters and medical aid stations, and the extent of damage.



# Winter Storms

**Winter storms can range from moderate snow over a few hours to blizzard conditions with blinding, wind-driven snow or freezing rain that lasts several days. The time to prepare is before the snow falls or ice forms.**

## Preparing for winter storms

- Listen to your radio or television for winter storm forecasts and other information.
- Prepare your home for cold weather. Install storm windows. Insulate outside walls, attics and crawl spaces. Wrap pipes, especially those near cold outer walls or in attics or crawl spaces. Repair leaks in the roof, around the doors and in the windows.
- Have appropriate cold weather clothing available.
- If you have a kerosene heater, refuel your heater outside and remember to keep it at least three feet from flammable objects when in use.
- Make sure your fireplace functions properly.
- Have rock salt and sand on hand for traction on ice.
- Fill your gas tank before the snow starts falling.

## During a winter storm

- Wear several layers of loose fitting, light weight, warm clothing rather than one layer of heavy clothing. Wear mittens rather than gloves and a warm, woolen cap.
- Do not drive unnecessarily.
- Use alternative heat methods safely. Never use a gas or charcoal grill, hibachi or portable propane heater to cook indoors or heat your home.
- Be careful when shoveling snow. Do not overexert yourself.
- Be sure to eat regularly. Food provides calories that maintain body heat.
- Watch for signs of frostbite and hypothermia: slurred speech, disorientation, uncontrollable shivering, stumbling, drowsiness and body temperature of 95 degrees Fahrenheit or less.

- If you become trapped outside, get out of the wind and stay dry. Build a lean-to or snow cave if nothing else is available. Do not eat snow; it will make you too cold.

## If in your vehicle

- Make sure someone knows where you are going. Stay on the main roads.
- If you must stop, remain inside the vehicle. Use a bright distress flag or your hazard lights to draw attention to your vehicle.
- If trapped in a blizzard, clear your tail pipe and run your engine and heater for 10 minutes every hour. Open your window slightly.
- During night hours, keep the dome light on in the car so rescue crews can see your vehicle.
- Keep an emergency kit in your vehicle. Include a three-day supply of water and non-perishable food that can be eaten without being cooked. Include a blanket or sleeping bag for each passenger, a flashlight, cell phone, shovel, sack of sand or kitty litter, booster cables, flare, coffee can with lid and toilet paper.

## Know the Terms

Familiarize yourself with these terms to help identify a winter storm hazard:

- *Winter storm watch*—A winter storm is possible in your area. Tune in to NOAA Weather Radio, commercial radio, or television for more information.
- *Winter storm warning*—A winter storm is occurring or will soon occur.
- *Blizzard warning*—Sustained winds or frequent gusts to 35 miles per hour or greater and considerable amounts of falling or blowing snow (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.
- *Frost/freeze warning*—Below freezing temperatures are expected.

# West Nile Virus



**For more information on preventing West Nile virus, including what employers and workers can do to reduce their risk, go to [www.fightthebitecolorado.com](http://www.fightthebitecolorado.com).**

## **What is West Nile virus?**

- West Nile virus can be a serious, even fatal, illness. It can affect people, horses, certain types of birds and other animals. West Nile virus first appeared in the United States in 1999, and was confirmed in Colorado in 2002.

## **How is it spread?**

- West Nile virus is almost always spread to people by the bite of an infected mosquito. Mosquitoes become infected after feeding on birds that carry the virus. There is no evidence that West Nile virus can be spread by direct contact with infected people or animals.

## **Who is at risk?**

- The risk of getting West Nile virus is very low, but anyone can become infected. People over 50 years of age have the highest risk of serious illness.

## **What are the symptoms?**

- Most people who are infected with West Nile virus will not get sick. About 1 in 5 people infected will have mild symptoms such as fever, headache and body aches. Even fewer, about 1 in 150 people infected, will have more severe symptoms. Severe symptoms may include headache, high fever, neck stiffness, stupor, disorientation, tremors, convulsions, muscle weakness, paralysis, and coma. If you have any of these symptoms, contact your health care provider.

## **How can I protect myself?**

- There is no human vaccine for West Nile virus. The best way to protect yourself and your family is to avoid mosquito bites and reduce the places mosquitoes live and breed around your home.

## **Avoid mosquito bites**

- Make sure windows and doors are “bug tight.” Repair or replace screens.
- Stay indoors at dawn and dusk when mosquitoes are the most active.
- Wear a long sleeve shirt, long pants and a hat when going into mosquito-infested areas such as wetlands or woods.
- Use mosquito repellent when necessary. Read the label and carefully follow instructions. Take special care when using repellent on children. Mosquito repellents that contain the active ingredients DEET, Picaridin, or oil of lemon eucalyptus are the most effective for offering long-lasting protection against mosquito bites.

## **Don't give mosquitoes a home**

- Empty or throw away anything that holds standing water: bottles, cans, old tires, buckets, plastic covers, and toys.
- Change water in your birdbaths, fountains, wading pools, and animal troughs at least twice each week.
- Make sure roof gutters drain properly, and clean clogged gutters in the spring and fall.
- Fix leaky outdoor faucets and sprinklers.
- Stock ponds and fountains with fish that eat mosquito larvae.
- Install or repair screens to keep mosquitoes out of the house.
- BTI is an effective larvicide that can be used against the mosquito. It is a natural bacteria that kills mosquito larvae yet is non-toxic to animals when used properly. The BTI product comes in both granular and dunk form and can be purchased at garden centers and hardware stores. For more information on West Nile virus, contact the Littleton Code Enforcement Division at 303-795-3831.

# Phone Numbers

Emergency: Ambulance, Fire, Police .....	9-1-1
Arapahoe County Government—General Info.....	303-795-4400
Colorado Department of Public Health and Environment .....	303-692-2000
Comcast (24 hours) .....	1-800-COMCAST
Denver Water Customer Care .....	303-893-2444
Douglas County Emergency Management .....	303-660-7589
Jefferson County Government—General Info.....	303-279-6511
Littleton City Government—General Info.....	303-795-3700
Littleton Hospital .....	303-730-8900
Littleton Public Schools.....	303-347-3300
Littleton Public Schools Security and Emergency Preparedness (24 hours) .....	303-347-3420
National Weather Service .....	303-261-9130
NOAA Weather Information.....	303-494-4221
Non-emergency: Douglas County Sheriff .....	303-660-7505
Non-emergency: Jefferson County Sheriff .....	303-277-0211
Non-emergency: Arapahoe County Sheriff .....	303-795-4711
Non-emergency: Littleton Fire Rescue .....	303-794-1555
Non-emergency: Littleton Police .....	303-794-1551
Poison Center—Rocky Mountain.....	1-800-222-1222
Qwest Residential Phone Repair (24 hours).....	1-877-348-9007
Red Cross .....	303-722-7474
Road Conditions Statewide .....	303-639-1111
Ski Hot-line .....	303-825-SNOW
State Patrol .....	303-629-3115
Statewide Weather Report .....	303-494-4221
Tri-County Health Department .....	303-452-9547
U.S. Department of Health and Human Services.....	1-800-772-1213
Xcel Energy—Report a Gas Leak .....	1-800-895-2999
Xcel Energy—Report a Power Outage .....	1-800-895-1999

*Publication prepared by:*

**City of Littleton**

City Manager's Office  
2255 West Berry Avenue  
Littleton, Colorado 80165