



# WINTER WEATHER TIPS

Brought to you by your  
St. Joseph, Missouri Fire Department  
and the  
State Emergency Management Agency

## Around the Home...

Keep ahead of advancing winter weather by listening to NOAA Weather Radio.

An ice storm will take down power lines knocking out electricity. Check battery powered equipment before the storm arrives.

Check your food and stock an extra supply. Include food that requires no cooking in case of power failure. If there are infants or people who need special medication at home, make sure you have a supply of the proper food and medicine. Make sure pets and animals have shelter and a water supply.

If appropriate, check your supply of heating fuel. Fuel carriers may not be able to reach you due to closed roads.

Be careful when using fireplace, stoves, or space heaters. Proper ventilation is essential to avoid a deadly build-up of carbon monoxide. Don't use charcoal inside as it gives off large amounts of carbon monoxide. Keep flammable material away from space heaters and do not overload electric circuits.

Dress for the conditions when outdoors. Wear several layers of light-weight, warm clothing: layers can be removed to prevent perspiring and subsequent chill. Outer garments should be tightly woven, waterproof and hooded. For the hands, mittens, snug at the wrists, offer better protection than fingered gloves.

Don't kill yourself shoveling snow. It is extremely hard work for anyone in less than prime physical condition. It can bring on a heart attack, a major cause of death during and after winter storms.

## Automobiles...

Your automobile can be your best friend or worst enemy during winter storms. Get your car winterized before winter arrives. The following items should be checked; ignition system, cooling system, fuel system, battery, lights, tires, heater, brakes, wipers, defroster, oil, exhaust. Keep water out of your fuel tank by keeping it full.

If you travel often during winter, carry a winter storm kit in you car. It should include; flashlight, windshield scraper, paper towels, extra clothes, matches/candles, booster cables, compass, maps, sand, chains, blankets, high calorie non-perishable food.

Winter travel by car is serious business. If the storm exceeds or tests your driving ability, seek available shelter immediately.

Plan your travel. Try not to travel alone and drive in convoy when possible.

Drive carefully and defensively. Pump your breaks when trying to stop on snow or ice covered roads.

## Winter Weather Products and Criteria...

**Outlook** - The Hazardous Weather Outlook (HWOLSX, FLUS43 KLSX) will contain any and all information pertaining to potential winter storms that may occur in the latter days of the forecast.

**Watch** - A watch is used when the risk of hazardous winter weather has increased significantly, there is a strong possibility it will reach warning criteria, and falls in the 12 to 48 hour portion of the forecast.

**Warning** - These products are issued when an event is occurring, is imminent, or has a very high probability of occurrence.

Warnings are issued for events that can be life threatening:

**Snow:** Generally 6 inches in 12 hours. For Southeast Missouri, 4 inches in 12 hours.

**Ice:** Ice accumulation of 1/4 inch or more.

**Wind Chill:** Wind chill temperature of -25 degrees F or lower: A Wind Chill Advisory is issued for wind chills of -15 to -24.

**Winter Storm Warning** will be issued when a combination of precipitation types is expected. Each single type of precipitation may not reach warning criteria, but the combination will create life threatening conditions.

**Advisory** - These are issued for lesser events that, while presenting an inconvenience, do not pose an immediate threat of death, injury, or significant property damage.

**Short Term Forecasts** - These are issued at frequent intervals to provide information on current weather and expected conditions over the next 1 - 6 hours.

Here are the most common winter weather watches, warnings and advisories that are issued by the National Weather Service in St. Louis.

- Winter Storm Watch
- Blizzard Warning (not too common, but possible)
- Winter Storm Warning
- Ice Storm Warning
- Heavy Snow Warning
- Wind Chill Warning
- Winter Weather Advisory
- Snow Advisory
- Freezing Rain Advisory
- Wind Chill Advisory

## Extreme Cold...

Extreme cold temperatures are a big danger during winter months in Missouri. Prolonged exposure to the cold can cause frostbite, hypothermia, or in extreme cases, death. In fact, excessive cold is one of the leading weather-related causes of death across the country. Infants and the elderly are most susceptible to extreme cold. Freezing temperatures also cause damage to crops and property.

### Deaths from Excessive Cold in Missouri\*

\* Source: Missouri Department of Health and Senior Services (DHSS). For more information on cold weather safety, statistics, etc, visit the DHSS website.

Year	96-97	97-98	98-99	99-00	00-01
Deaths	14	7	7	12	19
Year	01-02	02-03	03-04	04-05	05-06
Deaths	11	16	24	19	20

DHSS reports that the deaths for the winter of 05-06 occurred from November 2005 - March 2006. Since the DHSS surveillance program began in 1979, there have been 416 hypothermia related deaths in Missouri.

**Frostbite** occurs when the skin becomes cold enough to actually freeze. A loss of feeling and a white or pale appearance in extremities, such as fingers, toes, ear lobes, or the nose are symptoms of frostbite.

**Hypothermia** (Low Body Temperature) can occur during long periods of exposure when the body temperature drops below 95 degrees F. A person will become disoriented, confused, and shiver uncontrollably, eventually leading to drowsiness and apparent exhaustion. In severe cases, death is possible.

- Severe winter weather can strand you in your own home. It is a good idea to keep some extra supplies around during the winter season. Items you may want to have include non-perishable food, medical supplies, batteries, and emergency heating supplies.

- Travel in winter can be extremely dangerous. The best thing to do is cancel any travel if winter weather will occur. However if you must travel, make sure you plan ahead. Make sure other people know your travel plans and know how to contact you. Travel in convoy with other vehicles if possible. Keep a survival kit in your vehicle. This kit should include items which include non-perishable food such as can goods or candy bars, extra clothes and blankets, a battery powered radio, a shovel, and sand. If stranded, the best thing to do is to stay in the vehicle. Tie a bright colored cloth to the antenna so rescuers can find you. Run the engine occasionally for heat making sure to keep the exhaust pipe clear. Open windows occasionally for fresh air.

- Severe winter storms can cut off your supply of electricity and other winter fuels. Have an alternative heat source available if possible. However, be extremely careful in using fireplaces or wood stoves. Make sure they are properly ventilated to avoid the build up of carbon monoxide, an odorless, colorless, and deadly gas. Do not use charcoal indoors as it gives off large amounts of carbon monoxide. Have your furnace checked before the weather gets cold to make sure it is in good working order.

- Portable electric generators have become very popular. They can be an excellent piece of equipment to have should you lose electric power for an extended period of time. However they must be used safely. The main thing is to make sure the generator is placed OUTSIDE! The exhaust from the engine emits deadly carbon monoxide gas. Make sure you read the owners manual carefully and follow all the recommended safety precautions.

- Working in cold weather puts a tremendous strain on the body, even for people in good shape. Take frequent breaks and don't overexert yourself. Make sure you dress properly for the conditions. Wear several layers of lightweight clothing. Air is trapped between the layers to help keep the body warm. Protect the extremities, such as the hands, feet and ears as they are the most susceptible to frostbite. Wear a hat as a large percentage of the body's heat is lost through the top of the head.

## **Your Family Disaster Plan Can Keep You Snug and Safe!**

If you knew a disaster was coming, wouldn't you make preparations to protect yourself and your family? While we may not know when the first ice storm is coming, you can take steps to keep your family safe now. The first step is updating your family's disaster plan, learn and follow some simple winter safety rules.

### **Family Disaster Plan...**

During a year, there are a lot of potential disasters that could impact your family: a Hazardous Material accident could force your family to evacuate your home; a winter storm, an earthquake or tornado could cut off basic services such as gas, water, electricity or phone service.

There are six basic types of supplies you should have packed in a special container (such as a large trash container, a backpack or a duffle bag) in case of a natural or man-made disaster. Those supplies include:

- \* Water - store one gallon per person per day.

- \* Ready to eat canned food, canned juices, high-energy foods, vitamins, comfort foods and, of course, special foods for infants or family members on a special diet.

\* First aid supplies including bandages, antiseptic, soap, latex gloves, non-prescription drugs such as aspirin, antacid, anti-diarrhea medication, etc.

\* Clothing and bedding to include sturdy shoes, rain gear, blankets, hats, gloves, thermal underwear and sunglasses.

\* Tools and emergency supplies such as: battery operated radio, flashlights, fire extinguisher, pliers, shut off wrench, matches in a water proof container, liquid soap, personal items, household chlorine bleach.

\* Special items for an infant, medication for family members, books and games for entertainment and important family documents.

\* Always keep your gas tank full!

## **Winter Storm Preparations...**

One of the key rules is to listen to the latest weather reports on local radio and television. In preparing for a severe storm or blizzard, you should have the following items readily on hand at home:

\*Several days supply of non-perishable food and drinking water.

\*Extra blankets.

\*A battery operated radio.

\*A flashlight and fresh supply of batteries.

\*An emergency or backup heating system.

Be sure to check for an adequate supply of heating fuel and be aware of the fire hazards posed by the prolonged use of stoves, fireplaces and space heaters.

The safest place to be during a winter storm or cold snap is indoors. Dress properly before venturing outdoors. Wear several layers of loose fitting, lightweight clothing. Outer garments should be tightly woven, water repellent, and hooded.

Avoid overexertion when outdoors, including when snow shoveling. Be aware that cold weather itself, without any physical exertion, puts an extra strain on the heart.

## **Safety Checks for Your Vehicle...**

Before severe storms and cold arrive, all vehicles should be winterized with particular attention to the engine, fuel, ignition and exhaust systems. Make sure that tires and brakes are in good condition and that the heater, windshield wipers and lights are working properly. Also check the antifreeze level and always keep the gas tank filled.

Each vehicle should be equipped with an emergency winter storm kit which should include: non-perishable foods, extra clothes, blankets, a flashlight, fresh batteries, a shovel, booster cables, flares, and bags of sand.

Motorists who become stranded in their vehicles should never try to walk to safety.

Conserve fuel and heat by running the heater and engine sparingly. To prevent carbon monoxide poisoning, open a car window slightly and periodically clear the snow away from the exhaust pipe.

By following the safety measures and staying prepared during cold weather and storm, you can avoid the fatal effects of winter during the next few months.

## Preparing For Winter Weather...

The two most important terms are Winter Storm Watch and Winter Storm Warning.

A **Winter Storm Watch** indicates that severe winter weather may affect your area.

A **Winter Storm Warning** indicates severe winter weather is in the area or expected immediately.

**Before** the winter storm:

- Buy a tone alert weather radio and extra batteries for your regular radio.
- Listen to your weather radio, local AM/FM radio or television station for the latest weather updates.
- Have appropriate cold weather clothing available.
- Secure an alternate fuel source such as firewood or a generator.
- Make sure your fireplace functions properly.
- If you have a generator, make sure you have fuel and your generator functions properly.
- If you have a kerosene heater, refuel your heater outside and remember to keep the heater at least 3 feet away from flammable objects.
- Insulate attics and windows.
- Avoid the rush, purchase snow shovels for your home and your car.
- Winterize the family car.
- Keep a winter car kit in the trunk of the car. The car kit includes a blanket, a spare radio with batteries, snacks or energy-type food, jumper cables, a shovel (if you get stuck in the snow), sand or shingles to give your tires traction.
- Fill your vehicle's gas tank before the snow starts falling.
- Have rock salt to melt ice, and sand or kitty litter to give you traction as you walk on ice.

**During and after** the winter storm:

- During a winter storm, read your newspaper, watch the television or listen to the radio. Your local emergency management agency provides the media with emergency sheltering or alternate travel information.
- Wear several layers of loose fitting, lightweight warm clothing rather than one layer of heavy clothing.
- Wear mittens rather than gloves.
- Wear a warm, woolen cap on your head.
- Conserve fuel by reducing your home thermostat and close unused rooms.
- Do not overexert yourself when shoveling snow.
- Do not use charcoal or gas grills to cook or heat indoors.
- Check on your elderly neighbors.
- Watch children playing outside for signs of frostbite or hypothermia. Symptoms include uncontrollable shivering, slow speech, memory loss, stumbling, drowsiness and exhaustion.

**Driving** during a winter storm

- Stay on the main roads.
- If you must stop your car, remain inside your car. Use a bright distress flag or your hazard lights to draw attention.
- 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 the night hours, keep the dome light on in your car so that rescue workers can see your car.
- If your car has 4-wheel drive, remember speed and ice are a dangerous combination.
- Make sure you can get to your car safety kit (flares, shovel, sand for traction, battery cable, blankets, and snacks).

## Looking for an unusual gift?

**Disaster Kits in a Bucket** Benefit Elderly, Families, Students

What do you give the parent, elderly neighbor, family or college student that has everything?

This year, make them a Disaster Kit in a 5-gallon Bucket. The disaster bucket is small enough to tuck inside a pantry, yet compact and light enough to carry in your car during a trip. Best of all you are giving your friends and family members emergency supplies at their fingertips.

Emergency management organizations encourage citizens to keep disaster supplies, emergency food and water on hand in case of flood, power outage, tornado or earthquake.

Unfortunately, few families and sadly fewer senior citizens will spend the money to buy numerous supplies the American Red Cross recommends keeping in a special 20 gallon container.

All of the items on the checklist may be easily found in discount retail stores in the camping and health departments. In addition to the kit, your loved ones need to have food and water on hand to ride out a power outage or other disaster. The Disaster Kits in a Bucket is the brainchild of Charlotte Craig, Director of the Cape Girardeau County Health Department.

Disaster Kit in a Bucket content list.: all of the following items will fit into a five-gallon bucket. The items are: 1 roll of toilet paper, 1 camp stove, 2 cans of Sterno, 1 mess kit, 4 boxes of water proof matches, 6 books of regular matches, 12 paper plates, 6 each plastic forks, knives and spoons, 12 disposable drinking cups, 1 flashlight, 2 AD batteries, 2 emergency solar blankets, 12 hand/foot warmers, 6 heavy duty plastic bags, 12 hand sanitizer packets, 2 light sticks, 1 roll of duct tape, 1 pocket (utility) knife, 1 hand can opener, a two punch can opener, 2 combs, 1 tube toothpaste, 2 toothbrushes and 1 first aid kit.

The first aid kit contents are as follows: 6 pairs plastic gloves, an 8 oz. bottle contact lens saline (to irrigate and clean wounds), 6 knuckle band-aids, 6 regular band-aids, 6 Telfa pads, 1 roll tape, 1 tube antibiotic ointment, 3 burn gel packets, 6 wound wipes (Providone-Iodine), 2 stretch gauze, 2 instant ice compress, 6 packets each of buffered aspirin and non-aspirin pain reliever, 1 each scissors and tweezers, a 4 oz. bottle of Hydrogen Peroxide, and 6 sanitary napkins (can be used to dress a large wound).

## **“Cover a Cough and Clean your Hands”**

Can Prevent the Spread of Flu, Colds

This fall, flu vaccine shortages are a fact of life. As flu and cold season approaches, remember to “Cover Your Cough and Clean Your Hands” to keep respiratory infections and other contagious diseases from spreading.

Influenza (flu), colds, pertussis (whooping cough) and severe acute respiratory syndrome (SARS) are respiratory infections, which can be spread from person-to-person. Last year, some central Missouri schools experienced a “whooping cough” outbreak. If you or your children are sick, please stay at home and rest. If you go to a clinic or hospital, you might be asked to wear a face mask in the waiting room to stop germs from spreading.

Tips for “Respiratory Etiquette” or “Health Good Manners”:

- Cover your nose and mouth with a tissue when you sneeze or cough; or
- Cough or sneeze into your upper sleeve not your hands if you do not have a tissue.
- Put used tissues in the wastebasket.
- Wash your hands with warm soap and water or use alcohol-based sanitizers to wash your hands.
- Stay at home if you have a cough or fever.
- See your doctor if you have a cough or fever and follow all instructions for prescribed medicine and rest.
- Wash your hands often – especially before and after eating, touching eyes, nose or mouth.
- Wash your hands after touching someone who has sneezed.
- Don't share food, utensils or beverage containers.
- Don't share cigarettes, towels, lipstick, toys or anything else that might be contaminated with respiratory germs.

## Emergency Food & Water...

### Use Foods You Have in Your Pantry

During a disaster, your family might not be able to purchase drinking water, food or have access to electricity for days or weeks. By taking advantage of weekly grocery specials, a family can easily stockpile food and drinking water without exhausting their food budget.

Having an ample supply of drinking water is a top priority in any emergency. One gallon of stored drinking water per day a day is recommended for every person in the family. Bottled drinking water can be purchased during regular shopping trips. Or store drinking water in sealed, unbreakable containers. Water should be rotated every six months.

These normal day-to-day staples are commonly stocked in most homes and lend themselves to emergency menus.

Emergency stockpiles should be rotated on a yearly basis.

- \* Liquid evaporated milk (cans), or powdered milk
- \* Canned meat, poultry and fish
- \* Canned mixtures of the above with vegetables, rice, macaroni or noodles
- \* Dry beans (variety)
- \* Canned fruit and vegetable juices
- \* Ready-to-eat cereals
- \* Macaroni, spaghetti and noodles
- \* Cheese spreads and peanut butter, honey, catsup and mustard
- \* Fats and oils that don't need refrigeration
- \* Hard candy, salted nuts and seeds
- \* Coffee, tea, bouillon
- \* Seasonings and baking powder

Stored items to use first, during power outages:

- \* First use the perishable food and foods from the refrigerator.
- \* Second, use foods from the freezer. Foods in a well-insulated freezer won't begin to spoil for several days.
- \* Open your freezer as infrequently and for the shortest time possible.
- \* Finally, begin to use non-perishable foods and staples.
- \* For cooking, use charcoal or camp stoves, BUT ONLY OUTDOORS.
- \* Candle warmers, chafing dishes and fondue pots can also be used.
- \* Canned foods can be heated in the can after removing the paper label and opening it.

## Beware! Static Electricity Can Cause Gas Pump Fires!

Static electricity is a big problem in the winter months. Can it cause a fire in your car's gas tank while you are refueling?

The Petroleum Equipment Institute recently launched a campaign to increase awareness of gas pump fires resulting from static electricity.

To date, over 150 refueling fires have been documented that appear to be caused by a discharge of static electricity. The explosions are the result of static electricity between touching the fuel pump nozzle or vehicle's fuel cap and fuel vapors, causing a spark.

Several factors with static electricity are:

- 1) Entering or exiting a vehicle and sliding across the vehicle's seat surface can generate static electricity much like walking across a carpet.
- 2) Weather conditions, such as cold and dry winds, may cause static electrical buildups while both the vehicle and person are just standing still.
- 3) The flow of any fluid, including water, across a metal surface can result in static electricity.

4) Wearing rubber soled shoes can insulate the person pumping fuel but not eliminate the static charge into the ground.

Another risk factor to consider is the likelihood of children strapped into car seats while the vehicle is at the filling station.

Always be prepared for the unexpected. Look around at the service station for fire extinguishers and emergency fuel cut-off switches, which are normally located near the door into the service station.

The Petroleum Equipment Institute and other companies have posted safety related information regarding this issue at <http://www.pei.org> Once there, click in the center of the screen on the "Stop Static" icon.

## **What to Do When the Power Is Off..**

Everyone experiences power interruptions from time to time. Unfortunately, many of these outages come at times of weather extremes or accompany various disasters. When the power is out we lose our primary source of artificial light and many lose our source of heat and water as well. When the power is out, safety becomes a major concern.

The following information will help you when the lights go out.

- Register life-sustaining equipment in your home with your utility company -- you can be put on a priority list to establish electricity. Lifesaving equipment might include ventilators, home dialysis machines, neonatal monitors, etc.
- Prepare a power outage kit. For short duration outages, consider having glow light sticks, flashlights, a battery-powered radio, extra batteries and a wind-up clock on hand.
- Have an alternate heat source and fuel supply, i.e., kerosene heater or wood for a fireplace.
- Purchase a generator. Follow the manufacturer's installation instructions very carefully, especially when hooking up lifesaving equipment to the generator.
- If your house is the only one without power, check your fuse box or circuit breaker panel. Turn off large appliances before replacing fuses or resetting circuits.
- If power is out in the neighborhood, disconnect all electrical heaters and appliances to reduce the initial demand and protect motors from possible low voltage damage.
- Unplug computers and other voltage sensitive equipment to protect them against possible surges when the power is restored.
- Conserve water, especially if you are on a well.
- Keep refrigerator and freezer doors closed. If the door remains closed, a fully loaded freezer can keep foods frozen for two days.
- Never use a charcoal barbecue inside your home. Carbon Monoxide poisoning is a real possibility.
- Use battery-operated flashlights or glow sticks for light instead of candles.
- When using kerosene heaters, gas lanterns or stoves inside the house, maintain ventilation to avoid a build-up of toxic fumes.
- Leave one light switch in the ON position to alert you when the service is restored.
- If you own an electric garage door opener, learn how to open the door without power.
- Have a corded telephone available. Remember that cordless phones do not work when the power is out.

## With Heating Costs Rising...

### Safety Tips For Wood Burning Stove Users

With the increasing natural gas and fuel oil heating costs, many homeowners are turning to wood burning stoves to keep their home warm this winter. Beware, that while you are saving money, you may increase your risk of a home fire. Most homeowners have a very limited experience with wood burning stoves. Buy your wood burning stove from a reputable business - one who can help you select the correct stove for your home needs. Plate steel and cast iron stoves last longer and retain heat for longer periods of time. If you do purchase a used stove, inspect it thoroughly for cracks, defective legs, hinges, door seals and draft louvers.

Have the stove professionally installed. A professional heating contractor will make sure there is adequate air space clearances and circulation around the stove. While a professional installation may cost you money, this service will make sure that heat radiating from the stove or chimney will not ignite adjacent combustible materials, prevent sparks from escaping into the house and prevent sparks from escaping from the chimney.

Use your stove correctly. Use short hot fires rather than long smoldering fires. Do not leave the stove unattended or when children are present. Do not store dry wood near or under the stove.

Do not use gasoline, kerosene or charcoal starter to start a fire. Do not burn trash in your stove. Empty all ashes into a metal container with a tight fitting lid. Install smoke detectors in your house!

Finally, chimneys should be inspected frequently. Because creosote buildup varies greatly depending on the type of wood, usage and stove model, have your chimney cleaned by a professional chimney sweep. Chemical cleaners are not always effective. It is important to inspect and clean your chimney frequently. If you have a chimney fire, have the chimney inspected by a professional before using the chimney again.

## Protect Your Property from a Winter Storm...

- Make sure your home is properly insulated. If necessary, insulate walls and attic. This will help you to conserve electricity and reduce your home's power demands for heat.
- Caulk and weather-strip doors and windowsills to keep cold air out, allowing the inside temperature to stay warmer longer.
- Install storm windows or cover windows with plastic from the inside. This will provide an extra layer of insulation, keeping more cold air out.
- Keep pipes from freezing: Wrap pipes in insulation or layers of old newspapers. Cover the newspapers with plastic to keep out moisture. Let faucets drip a little to avoid freezing. Know how to shut off water valves.
- If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags. Completely open all faucets and pour hot water over the pipes, starting where they were most exposed to the cold (or where the cold was most likely to penetrate). A handheld hair dryer, used with caution to prevent overheating, also works well.
- Consider storing sufficient heating fuel. Regular fuel sources may be cut off. Be cautious of fire hazards when storing any type of fuel.
- Install and check smoke alarms.
- Emergency heating equipment: Fireplace with ample supply of wood. Small, well-vented wood, coal, or camp stove with fuel. Portable space heater or kerosene heater.

Check with your local fire department on the legality of using kerosene heaters in your community. Use only the correct fuel for your unit and follow the manufacturer's instructions. Refuel outdoors only, and only when cool. Keep your kerosene heater at least three feet away from furniture and other flammable objects.

- Think Safety when using alternative heat from a fireplace, wood stove, space heater, etc., use fire safeguards and ventilate properly. Fire hazard is greatly increased in the winter because alternate heating sources are used without following proper safety precautions.
- Install snow fences in rural areas to reduce drifting in roads and paths, which could block access to homes, barns, and animals' feed and water.
- If you live in a flood-prone area, consider purchasing flood insurance to cover possible flood damage that may occur during the spring thaw. Homeowners' policies do not cover damage from floods. Ask your insurance agent about the National Flood Insurance Program if you are at risk.

