# Protecting Your Health and Safety in Cold Weather - Harford County Health

As we move further into the winter months, we can expect frigid temperatures and even more serious wind-chill conditions. **Harford County Health**Department reminds you to protect your health and safety, as well as that of your friends and loved ones, by exercising extra caution and by practicing effective methods to stay warm and avoid potentially serious cold weather illness or injury.

Individuals who are exposed to cold weather for prolonged time periods may develop hypothermia, or low body temperature, a serious and potentially fatal condition. Those at increased risk for developing hypothermia include young children and the elderly. Because of this increased risk, Harford County Health Department advises parents not to bring children under age 6 to any event requiring prolonged exposure to the cold. Likewise, individuals over age 65 are cautioned to take strict precautions against colder weather and associated health and safety risks.

Signs of hypothermia that require prompt medical assistance include sleepiness, confusion, or slurred speech; difficulty walking; uncontrollable shivering; and cold, pale skin.

Another serious cold injury is frostbite. Signs include numbness, pain, or change in color of the nose, ears, face, or extremities. Anyone experiencing these symptoms should seek shelter immediately.

# Hypothermia

#### General Guidelines:

Dress in layers so that you can adjust to changing conditions. Layers can be established using the following layering principles:

Base Layer: Should be comprised of a moisture wicking fabric to keep your skin dry.

Insulating Layer: Fleece or wool, vest or shirt that can be added or removed depending on how cold you feel.

Windproof and Water-Resistant Outer Layer: A jacket, preferably with a hood to keep out elements.

Avoid overdressing which may cause you to overheat; sweating in cold weather will prevent you from staying warm and can be dangerous.

Wear mittens; they provide more warmth than gloves.

Wear a hat since most heat is lost through your head. If you plan on being in very cold weather for an extended period of time, you may also want to wear additional warm headgear such as a ski mask, which covers your face.

Wear a scarf or turtleneck to ensure that your neck is covered.

Wear under socks. Socks should be layered as well, starting off with a sock made of a moisture wicking fabric and following with a pair of thick wool socks.

Wear waterproof, insulated boots to keep your feet warm and dry and to prevent hypothermia.

If you are going to be outside for an extended period of time, try to take breaks by going indoors or into a warm vehicle.

Stay hydrated. Drink warm beverages, preferably non-caffeinated.

If you happen to get wet or have been sweating, get out of wet clothes immediately and try to warm your body from the core with a warm drink or soup.

Recognize frostbite warning signs: grey, white or yellow skin discoloration, numbness, waxy feeling skin. If you have any of these symptoms you should seek medical attention immediately.

# Guidelines Specific to Children:

Infants and children should be dressed in several layers as well. These layers should consist of thermal long johns, turtlenecks, one or two shirts, pants, sweater, coat, warm socks, boots, mittens and a hat.

Blankets, quilts, pillows, sheepskins and other loose bedding may contribute to Sudden Infant Death Syndrome (SIDS) and should be kept out of an infant's sleeping environment. Sleep clothing like one-piece sleepers is preferred.

If a blanket must be used to keep a sleeping infant warm, it should be tucked in around the crib mattress, reaching only as far as your baby's chest, so the infant's face is less likely to become covered by bedding.

Recognize the signs and symptoms of hypothermia. As hypothermia sets in, the child may shiver and become lethargic and clumsy. His speech may become slurred and his body temperature will decline.

If you suspect your child is hypothermic, call 911 at once. Until help arrives, take the child indoors, remove any wet clothing, and wrap him in blankets or warm clothes.

According the AmericanAcademyof Pediatrics, the rule of thumb for dressing older babies and young children is to dress them in one more layer of clothing than an adult would wear in the same conditions.

#### **Guidelines for Older Persons:**

Because older adults have slower metabolisms and/or may be less active, they tend to produce less body heat than younger people. As a result, they can develop hypothermia even after exposure to relatively mild cold weather or a small drop in temperature. Older people also can be at particular risk for hypothermia because their body's response to cold can be diminished by certain illnesses such as diabetes and some medicines, including over-the-counter cold remedies. As people age, it becomes more difficult for them to tell when the temperature is too low. A deadly drop in body temperature could result. Prevent hypothermia by doing the following:

Check with your doctor to see if any medications (either prescription or "over-the-counter") you are taking may increase your risk for hypothermia. Stay indoors when it's very cold outside, especially if it's also very windy; and keep indoor temperatures at about 65 degrees. If you have to go outside, stay out in the cold only briefly.

Wear two or three thinner layers of loose-fitting clothing. Layers are warmer than a single thick layer.

Always wear a hat, gloves or mittens (mittens are warmer), a coat and boots, a scarf to cover your mouth and nose and protect your lungs from very

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cold air.

Stay dry; wet clothing chills your body quickly

Go indoors if you start shivering — it's a warning sign that you're losing body heat.

Know the warning signs of hypothermia: lots of shivering; cold skin that is pale or ashy; feeling very tired, confused and sleepy; feeling weak; problems walking; slowed breathing or heart rate.

<u>Don't rely on shivering alone as a warning sign</u>, since older people tend to shiver less, or not at all, even as their body temperature drops. Call 911 if you think you or someone else has hypothermia.

#### **Guidelines for Outdoor Workers:**

Recognize the environmental and workplace conditions that may be dangerous.

Learn the signs and symptoms of cold-induced illnesses and injuries and what to do to help co-workers who may develop these symptoms.

Again, dress in layers and wear clothing that is appropriate for cold, wet, or windy conditions and be sure that the layers are ones that can be adjusted to changing conditions.

Workers in extreme conditions must be sure to take frequent short breaks in warm dry shelters to allow their bodies to warm up.

Try to schedule work for the warmest part of the day.

Avoid exhaustion or fatigue, as energy is needed to keep muscles warm.

Drink warm beverages, but try to avoid those with caffeine.

#### Additional Cold Weather Precautions

**Frostbite:** Extreme cold can also cause frostbite: damage to the skin that can go all the way down to the bone. Frostbite usually affects the nose, ears, cheeks, chin, fingers and toes. In very bad cases, it can result in loss of limbs. People with heart disease and other circulation problems are more likely to get frostbite. To protect against frostbite:

Cover up all parts of your body when you go outside.

If your skin turns red or dark or starts hurting, go inside right away.

Know the telltale signs of frostbite: skin that's white or ashy (for people with darker skin) or grayish-yellow; skin that feels hard or waxy; numbness. If you think you or someone else has frostbite, call for medical help immediately.

# Injury while shoveling snow:

When it's cold outside, your heart works extra hard to keep you warm. Working hard by shoveling snow, for example, may put too much strain on your heart (especially if you have heart disease), your back, your legs, as well as other parts of your body. Ask your doctor whether it is safe for you to shovel snow or do other hard work in the cold.

To avoid falls when shoveling snow, keep a wide stance for better balance.

If age or a medical condition prevents you from doing the work yourself, ask someone else to do it for you.

# Reducing the Risk of Falling on Slippery Surfaces:

Avoid walking on icy or snowy sidewalks; look for sidewalks that have been cleared and/or are dry.

Wear boots with non-skid soles so you do not slip when you walk.

If you use a cane, replace the rubber tip before it is worn smooth. You might also buy an ice pick-like attachment that fits onto the end of the cane to help keep you from slipping when you walk with the cane. (Find these at medical supply stores)

## Fires and carbon monoxide poisoning:

Burning of any carbon-based fuel (such as wood, kerosene, natural gas, coal, and propane) releases carbon monoxide, a gas that cannot be seen or smelled, and can kill if fireplaces and stoves are not properly vented and maintained.

Have heating systems, water heaters and any other gas, oil or coal burning appliances serviced by a qualified technician every year.

Have fireplaces and wood stove chimneys and flues inspected yearly and cleaned when necessary. (Ask your local fire department to recommend an inspector or look in the telephone book under "chimney cleaning").

Install smoke alarms and battery-operated carbon monoxide (CO) detectors in areas where you use fireplaces, wood stoves, or propane heaters. Be sure to check or replace the batteries on alarms and detectors each spring and fall. If a CO detector sounds, leave your home immediately and call 911.

Seek prompt medical attention if you suspect carbon monoxide poisoning and are feeling dizzy, light-headed or nauseous.

Make sure space heaters are placed at least 3 feet away from anything that might catch fire, such as curtains, bedding and furniture.

Don't use a generator, charcoal grill, camp stove or other gasoline, kerosene, or charcoal burning device inside your home, basement or garage, or near a window.

Never heat your house with a gas oven.

Accidents while driving: Hazardous road conditions are among the leading causes of vehicular crashes. Since winter driving can be very dangerous, you should:

Winterize your car before the bad weather hits (have the antifreeze, tires and windshield wipers checked and changed if necessary).

Check weather reports and check for winter weather advisories before beginning long car trips.

Do not drive on icy roads, overpasses or bridges if possible; look for another route.

If you must drive in snow or ice, use "snow-rated" tires or chains when possible.

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Slow down when any amount of snow or ice is on the roads.

Take a cell phone with you when driving in bad weather and let someone know where you're going and when you expect to arrive so they can call for help if you're late.

Stock your car with basic emergency supplies, such as: a first aid kit, blankets, extra warm clothes, a windshield scraper, rock salt, a bag of sand or cat litter (to pour on ice or snow in case your wheels get stuck in the ice or snow), shovel, booster cables, container of water and canned or dried foods and can opener, flashlight.

### **Additional Resources**

For more information concerning cold weather illness and safety precautions, contact:

The American Red Cross: www.redcross.org
The U.S.Department of Labor: www.osha.gov

The AmericanAcademyof Pediatrics: www.aap.org

The AGSFoundation for Health in Aging: www.healthinaging.org/public\_education/wintersafety\_tips.php

National Institutes of Health (NIH): www.nih.gov or Telephone 1-800-222-2225

Fact sheet, "Hypothermia: A Cold Weather Hazard"

Brochures, "Stay Safe in Cold Weather" and "Hipotermia: El Peligro de las Bajas Temperaturas"