

Dangerous Cold Gripping Our State

From The National Weather Service and American Red Cross

Several rounds of arctic air plunging south into all the way to the Gulf of Mexico have turned most of the nation and North Carolina into a virtual ice box. While the temperatures themselves are not setting records, the longevity of the cold snap with overnight lows in the teens to lower 20s and daytime highs only in the 30s is unusual. In fact the average daily temperature has remained below freezing since January 2nd and will remain below freezing through the weekend and early next week. Based on current forecasts, Central North Carolina could experience as many as 12 consecutive days where the daily average temperature remains below freezing. If these bitterly cold temperatures last through Tuesday of next this will be the longest spell of cold weather since February of 1980.

Due to the prolonged period of cold weather many residents are augmenting heating of homes through the use of gas logs, space heaters, fireplaces, wood stoves and space heaters. House fires resulting from heating material within the home ranks second for the most deaths and property loss falling behind improperly discarded smoking material. Space heaters fires account for 74 percent of home fire deaths according to the National Fire Protection Association. Common causes of space heating home fires are placing space heaters too close to combustibles, and fueling errors involving liquid or gas fueled heating equipment.

The American Red Cross recommends taking the following preventive measures to minimize the chance and impact of fire.

- 1) Make sure all smoke detectors are working properly and have fresh batteries.
- 2) Never use charcoal or gas grills indoors to heat homes due to the threat of carbon monoxide poisoning.
- 3) Be extremely careful with candles. Keep candles away from combustible materials. Never leave children unattended in a room with lit candles. Keep candles...matches and lighters out of the reach of children.
- 3) Inspect fireplaces and wood stoves. Have your chimney connections and flues inspected by a professional and cleaned if necessary prior to the start of every heating season.
- 4) Use a sturdy screen or door in front of your fireplace when burning fires.
- 5) Burn only wood, never burn paper or pine boughs.
- 6) Be aware of overuse of electrical outlets - don't overload your electrical outlets and be careful of extension cords that present hazardous walkways.
- 7) Have one or more working fire extinguishers in your home. Most fire departments will provide training on how to use fire extinguishers.

Safety On Ice

Due to the recent prolonged cold weather many ponds and small lakes have developed a thin coating of ice. This ice is more dangerous than it appears if a person or animal attempts to venture out onto a frozen pond. You take a great risk by going out onto any ice as ice thicknesses are not sufficient for support people or animals. Temperatures have not been cold long enough to create the proper ice thickness. As a general rule the ice on a lake or pond must be at least 4 inches thick in order to support a person or large animal. Ponds across central North Carolina do not have sufficient ice to support people. Even if the ice is a couple of inches thick you should remain off the ice as it will break.

If someone does fall into bitterly cold water hypothermia will develop within fifteen minutes. Just a few minutes in cold water makes it very difficult to swim, even to keep yourself afloat. In addition, a sudden, unexpected entry into cold water may cause a reflexive "gasp" allowing water to enter the lungs. Drowning can be almost instantaneous.

Your body will cool down 25 times faster in cold water than in air. Survival time in near freezing water can be as short as 15 minutes. Water temperature, body size, amount of body fat, and movement in the water all play a part in cold water survival. Small people cool faster than large people and children cool faster than adults.

The general rule of thumb for ice:

- 2 inches or less - STAY OFF
- 4 inches of good ice for a walking individual
- 6 inches of good ice for a snowmobile or ATV
- 8-12 inches of good ice for a car or small pickup
- 12-15 inches of good ice for a medium pickup truck.

Treating Severe Hypothermia - Reduce Heat Loss

1) Hypothermia Wrap: The idea is to provide a shell of insulation for the patient. No matter how cold, an individual can still internally rewarm themselves much more efficiently than any external rewarming. Make sure the person is **dry** and protected from any moisture in the environment. Use multiple sleeping bags, wool blankets or wool clothing to create a minimum of 4" of insulation all the way around the patient, especially between the patient and the ground. Include an aluminum "space" blanket to help prevent radiant heat loss, and wrap the entire ensemble in plastic to protect from wind and water.

2) Add Fuel & Fluids: Warm Sugar Water is important. For people in severe hypothermia, the stomach has shut down and will not digest solid food but can absorb water and sugars. Give a dilute mixture of warm water with sugar every 15 minutes. Dilute Jello™ works best since it is part sugar and part protein. This will be absorbed directly into the blood stream providing the necessary calories to allow the person to rewarm themselves. One box of Jello = 500 Kilocalories of heat energy. **Do not** give full strength Jello even in liquid form, it is too concentrated and will not be absorbed.

For more forecast and safety information please visit:

NWS Raleigh: <http://weather.gov/raleigh>

American Red Cross: <http://www.redcross.org>

North Carolina Emergency Management: <http://readync.org>

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