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Cold Exposure Emergencies and How To Avoid It

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Many of us have first-hand accounts of what being without heat for a period of time feels like. Although I live in Texas where the cold weather is nothing compared to what some of you go through, there have been a handful of times where I have woken up to the after effects of a winter storm knocking out my electricity and immediately felt worry and panic about keeping my babies warm enough.

If you live in an area that experiences extremely cold temperatures, aside from a fireplace and an ample supply of firewood, the number one thing to invest in for your survival retreat is a gas oven/stove as opposed to an electric one. When the power goes out, the gas usually stays on, and there is no better way to heat a powerless house (or kitchen at the very least) than with 4 gas burners on high. Wood or pot-belly stoves work well too, and when you have one in the basement as backup to your normal electrical furnace, it sure does come in handy.

We Are All At-Risk for Hypothermia

People can develop hypothermia with temperatures above freezing. The fastest way to become hypothermic is being in the cold with wind and rain. In this case, you body loses heat 25 times faster than it would by just being out in the cold.

When the cold hits the body and the core temp drops, your body will kick into survival mode by cutting off circulation to the outer extremities first, like when a lizard detaches its tail. The fingers, toes, nose, ears, and lips are the first places your body ceases to keep alive when faced with death by freezing. These are also the first parts of the body to show signs of frostbite.

Older individuals and small children are at the greatest risk of hypothermia. Diabetics and those who suffer from low thyroid levels are also more at risk. However, anyone who is subjected to the elements long enough will surely be affected.

According to [The Doom and Bloom Survival Medicine Handbook](#) ^[1] by Joseph Alton, M.D. and Amy Alton, A.R.N.P., the body loses heat in several ways:

- Although alcohol may give you that “warm” feeling, it actually causes your blood vessels to expand, resulting in more rapid heat loss. This also goes for recreational drugs. Sorry guys.
- Unprotected body surfaces such as the head, ears, fingers, etc.
- Direct contact with anything cold, especially over a large area of your body, will cause rapid cooling of your body core temperature.
- Wind chill is an important factor that causes heat loss. Wind removes body heat by carrying away the thin layer of warm air that exists at the surface of your skin.

Look for “Umbles”

The best way to identify someone with hypothermia is to look for the “umbles” – stumbles, mumbles, fumbles, and grumbles. Changes in a person’s behavior may indicate that the cold is affecting how well their muscles and nerves work. If you suspect that someone is suffering from exposure to the cold, take his or her temperature. If their body temperature is 96 degrees or lower, then emergency measures must be put in place. Dr. Doom and Nurse Amy

also state that if left untreated, hypothermia leads to a complete failure of various organ systems and to death.

People who develop hypothermia due to exposure to cold are also vulnerable to other cold related injuries, such as frostbite and immersion foot.

Frostbite, or freezing of the body tissues, usually occurs in the extremities and sometimes the ears and nose. Symptoms include:

- “Pins and needles” sensation and numbness.
- Skin color changes from red to white to blue. If the color then changes to blacks, a condition known as “gangrene” has set in. Gangrene is the death of tissue resulting from loss of circulation. This usually results in the loss of the body part affected.

Immersion foot causes damage to nerves and small blood vessels due to prolonged immersion in water.

- When seen in areas other than the feet, this condition is referred to as chilblains.
- Immersion foot appears similar to frost bite, but might have a more general swollen appearance.

How to Treat Symptoms of Hypothermia

Dr. Doom and Nurse Amy also suggest the following steps be taken to treat someone who has been exposed to frigid temperatures and may have symptoms of hypothermia:

1. Get the person out of the cold and into a warm, dry location.
2. Wrap the person in blankets, towels, coats – whatever is handy. You can also use your own body heat to keep the person warm. Lie close to the victim but be gentle if you rub their arms and legs because an older person’s skin may be easily damaged.
3. Monitor breathing. Begin CPR if necessary. While you are monitoring them, take a moment to look for any signs of frostbite and immersion foot.
4. Share body heat.
5. Give warm oral fluids that are nonalcoholic.
6. Use warm compresses. Apply a compress to only to the neck, chest wall or groin. These areas will spread the heat much better than putting warm compresses on the extremities, which sometimes worsens the condition.
7. Don’t apply direct heat. Don’t use hot water, a heating pad or a heating lamp to warm the person. The heat can damage the skin or cause strain on the heart and even lead to cardiac arrest!

Keep the C.O.L.D. Away

The best way not to be subjected to hypothermia is to prevent it through [layering the clothing](#) ^[2] and preventing the loss of body heat. Moreover, if you find yourself spending long hours outside in cold weather, prepare accordingly and wear plenty of warm layers, have a ready supply of hand and feet warmers on stand-by. Remember that when all power, gas, and wood run out, your only option is to layer up liberally. Therefore, keep the C.O.L.D acronym in mind when you are out in the cold weather:

Cover. Protect your head by wearing a hat. This will prevent body heat from escaping from your head. Instead of using gloves to cover your hands, use mittens. Mittens are more helpful than gloves because they keep your fingers in contact with one another.

Over-extension. Avoid activities that cause you to sweat a lot. Cold weather causes you to lose body heat quickly, and wet, sweaty clothing accelerates the process.

Layering. Loose-fitting, light weight clothing in layers insulates you well. Use clothing made of tightly woven, water repellent material for protection against the wind.

Dry. Keep as dry as you can. Get out of wet clothing as soon as possible. It’s very easy for snow to get into gloves and boots, so pay particular attention to your hands and feet.

In the event of a prolonged or long-term power disruption, without heat to warm yourself and your home, winter will be a nightmare to endure if you are not properly prepared for it. Finding a way to maintain warmth will inevitably be left up to you to provide.

To conclude, another VERY important part of winter and heat preparedness is in the head. Just remember CLAP:

Calm

Level-headed

Alert

Positive

People tend to panic when confronted with an obstacle such as no heat in the winter. Survival is in the mind, and only the smart will survive. So stay positive and you will come through.

In order to provide the readers of this website with accurate and to-date medical advice, this article has excerpts that were taken out of [The Doom and Bloom Survival Medicine Handbook](#) ^[1] by Joseph Alton, M.D. and Amy Alton, A.R.N.P pages 161-167.

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[1] The Doom and Bloom Survival Medicine Handbook: <http://www.amazon.com/Doom-Bloom-Survival-Medicine-Handbook/dp/0615563236>

[2] layering the clothing: http://readynutrition.com/resources/are-you-ready-series-emergency-clothing-part-3_27112009/

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