

Cold Weather Health Guidelines for Community Service Providers of Vulnerable People

Community service providers are a great help in preventing cold weather injuries and death for vulnerable people. Each year across Canada more than 80 people die and many more suffer cold weather related injuries from over exposure to the cold. An understanding of cold weather injuries and who are the most vulnerable people can be critical during cold weather.

Cold weather injuries include frostbite and hypothermia.

- Frostbite is the freezing of body tissue – usually the skin. Deep frostbite includes both the skin and deep tissue. The skin starts as pink and becomes painful, then white, and waxy and prickly-feeling.
- Hypothermia is a decrease in the normal body temperature to a level at which normal muscle and brain functions are reduced. The person stumbles, fumbles, grumbles and/or mumbles. They may have low energy and feel tired. They may fall unconscious.

Some people may be unable or have difficulty generating and retaining body heat. These people are considered to be very vulnerable to cold weather injuries. Vulnerable people include;

- The homeless. With little or no shelter from cold temperatures, wet conditions (rain, snow, sweat), and the wind, homeless people are vulnerable to severe cold injury and death. Poor nutrition may result in a lack of insulating fat stores. The body requires energy, provided by food, to shiver and generate body heat. Not enough liquids (dehydration) can lead to less body fluid which makes the body vulnerable to hypothermia. Drinking liquids is important, with the exceptions of caffeine which is a diuretic and causes water loss increasing dehydration, and alcohol (see below). Improper clothing can lead to body heat loss. The homeless may also have physical mobility issues that impair their ability to stay warm.
- Those who drink alcohol. Alcohol may prevent a person from realizing that their body is becoming too cold. In addition, the blood vessels dilate (open up) increasing the blood flow towards the skin, which leads to body heat loss and hypothermia.
- Those who smoke. Smoking constricts blood vessels (makes them smaller) which decreases blood flow to the arms and legs and increases the chance of frostbite.

... over

Kingston
221 Portsmouth Avenue
Kingston, ON K7M 1V5
Tel: 613-549-1232
1-800-267-7875
Fax: 613-549-7896

Cloyne
P.O. Box 59
14209 Highway 41
Cloyne, ON K0H 1K0
Tel: 613-336-8989
Fax: 613-336-0522

Napanee
41 Dundas Street
Napanee, ON
K7R 1Z5
Tel: 613-354-3357
Fax: 354-6267

Sharbot Lake
P.O. Box 149
1130 Elizabeth Street
Sharbot Lake, ON K0H 2P0
Tel: 613-279-2151
Fax: 613-279-3997

- The elderly. They may have less body fat and therefore are unable to retain heat. They may have medical conditions or be on medications that effect their circulation, increasing their risk of cold injuries. Symptoms of hypothermia may be more subtle in the elderly.
- People who are already moderately to severely hypothermic may be acting in irrational ways. For instance they may be taking clothes off, unaware that they are cold, or they may have an “I don’t care” attitude.
- People with certain medical conditions like diabetes (who have poor circulation) and those who have heart conditions and take beta-blockers (a medication which decreases the flow of blood to the skin) have an increased risk of frostbite.

For information on preventive measures and general guidelines see “Cold Weather Health Guidelines for the General Public” – FS094. To obtain a copy of this information sheet, visit our website www.kflapublichealth.ca; click on “health information sheets” and “C” for Cold Weather.

For further information:

Personal Medical Advice

Contact your family physician or Telehealth 1-866-797-000

General cold weather health related information

KFL&A Public Health

www.kflapublichealth.ca

Where to obtain services

Contact your local municipality or township office

County of Frontenac 613 548-9400 www.frontenaccounty.ca

City of Kingston 613 546-000 www.cityofkingston.ca

County of Lennox & Addington 613-354-4883 www.lennox-addington.on.ca

Reference: Outdoor Action Guide to Hypothermia and Cold Weather injuries.

www.princeton.edu/~oa/safety/hypocold.shtml

FS103

04/03/09