



Extreme Heat and Worker Safety

In recent years we have seen an increase in the unpredictable nature of summer weather conditions. Recently BC broke numerous heat records due to a heat dome which led to an unprecedented number of heat related illnesses and fatalities. People who work outdoors can often be at the highest risk for heat-related illnesses and injuries during hot summer conditions. High temperatures and sunshine can be a wonderful thing when enjoying time at the lake or on the beach but can cause serious health issues. The wide variety of job roles and often rigorous physical activity in forestry can put workers at risk for heat-related illness if not managed properly.

There are three main causes of heat stress and illness:

1) **The environment**

Radiant heat from direct or indirect sunlight, air temperature hotter than skin temperature (warms a worker up) and high humidity (makes it harder for a worker to cool down).

2) **The work**

The more active you are, the more heat you will produce.

3) **The worker**

Conditioning (regular work in hot environments makes workers less prone to heat stress), poor health, and excess clothing or inappropriate personal protective equipment (trap heat and prevent cooling). As a worker's body heats up it loses fluids and salt through sweat. As workers dehydrate, they are less able to cool themselves down. The most serious types of heat-related illnesses experienced by workers are heat exhaustion and heat stroke.

Heat exhaustion generally develops when a person is working hot weather and does not drink enough liquids.

Signs

Symptoms of heat exhaustion may start suddenly, and include:

- Thirst, heavy sweating, high body temperature, pale, cool and moist skin, dizziness, feeling faint, fatigue, muscle cramps or weakness, nausea, and headache.

Heat exhaustion may also quickly develop into heat stroke. Heat stroke, which occurs when the body fails to regulate its own temperature and body temperature continues to rise, often to 40.6°C (105°F) or higher. Heat stroke is a medical emergency. Even with immediate treatment, it can be life threatening or cause serious long-term problems.

Symptoms of heat stroke include:

Skin that may be red, hot and dry, heavy sweating or sweating may have stopped, very high body temperature, fast heart rate, confusion, seizures, nausea or vomiting, difficulty breathing, and loss of consciousness.

A key indication of heat stroke is the body often stops trying to cool itself, so the person has hot, dry, skin whereas they are still sweating with heat exhaustion.

Prevention is the best option for dealing with heat-related illnesses in the workplace. Prevention includes monitoring current weather conditions and forecasts, taking adequate rest periods in a cool location, acclimatizing to the heat, adjusting the type, timing and duration of work, wearing sunscreen, wearing appropriate protective equipment, knowing the signs of heat-related illness, do not work alone in extreme heat, and drinking plenty of fluids.

If prevention did not work and a worker is dealing with heat-related illness, consider the following:

First aid for heat exhaustion includes:

- Administer or get first aid, stay with the person until help arrives, move to a cooler location, remove as many clothes as possible (including socks and shoes), apply cool, wet compresses/towels or ice to head, face or neck, encourage the person to drink liquids.
- It is also important to remember to not cool too much. If the person starts to shiver, stop cooling.

First aid for heat stroke includes:

The treatment for heat stroke is similar to heat exhaustion with the following exceptions:

- This is a **life-threatening condition**, get medical treatment immediately and do not try to force the person to drink liquids.

With summer here, now is a good time to think about how to prepare for and work safely in the heat.

Additional Information:

- Heat stress - [WorkSafeBC](#)
- HealthLinkBC – [Heat-related Illnesses](#)
- HealthLinkBC – [Heat Stroke](#)
- Fit to Log Poster – [Maintaining Hydration](#)
- Fit to Work – [The BC Forest Safety Council](#)
- Weather forecast - [British Columbia - Weather Conditions and Forecast by Locations - Environment Canada](#)