

Appendix F-3

Sample Temperature (Hot/Cold) Preparedness Guide

School administrators, teachers, coaches, intramural supervisors must be familiar with and implement their school board's temperature policy for cold and hot weather conditions, to make informed decisions for student safety. When conducting outdoor physical activities reference your school board's:

- Temperatures that are safe for students to be physically active outdoors.
- Temperatures that are not safe for students to be physically active outdoors.
- Temperatures that require accommodations for student safety when physically active outdoors.

Note: Specific temperatures (hot or cold) are not provided in the Ontario Physical Education Safety Guidelines because a provincial survey of boards indicated a discrepancy in the temperatures considered to be unsafe. Therefore one should access and follow their school board's temperature policies for outside activities.

COLD TEMPERATURES

COLD INJURIES

Exposure to the cold can be hazardous or even life-threatening. The body's extremities, such as the ears, nose, fingers and toes, lose heat the fastest. Exposed skin may freeze, causing frostnip or frostbite. In extreme conditions or after prolonged exposure to the cold, the body core can also lose heat, resulting in hypothermia.

FROSTNIP

A mild form of frostbite, where only the skin freezes. The skin appears yellowish or white but feels soft to the touch. It's a painful tingling or burning sensation.

FROSTBITE

A more severe condition, where both the skin and the underlying tissue (fat, muscle, bone) are frozen. The skin appears white and waxy and is hard to the touch. There is no sensation – the area is numb.

HYPOTHERMIA

Being cold over a prolonged period of time that can cause a decrease in body temperature below the normal 37°C. Shivering, confusion and loss of muscular control (for example, difficulty walking) can occur. Hypothermia can progress to a life-threatening condition where shivering stops or the person loses consciousness. Cardiac arrest may occur.

COLD WEATHER SAFETY PRECAUTIONS:

- Check the temperature prior to outdoor activity.
- Implement your school board's Cold Weather Action Plan in advance to ensure you address safety concerns when it is cold or when the wind chill is significant.
- Communicate to students:
 - Dress warmly. For example:
 - Dress in layers with a wind resistant outer layer
 - When it is cold, wear a hat (a large portion of body heat is lost from the head), mittens or insulated gloves and something to keep your face warm, such as a scarf, neck tube or face mask
 - Wear warm and waterproof footwear
 - When it is very cold or when the wind chill is significant, cover as much exposed skin as possible.
 - Stay Dry

- Wet clothing chills the body rapidly
- Remove outer layers of clothing or open coat if sweating.
- Keep Active
 - Walking or running will generate body heat.
- Watch for signs of frostnip, frostbite, hypothermia.

HOT TEMPERATURES

HEAT RELATED INJURIES

When the heat or high humidity is combined with other stresses such as prolonged physical activity, loss of fluids, fatigue, or some medical conditions, it may lead to heat-related illness, disability, and even death. Heat stress is affected by four environmental factors: air temperature, humidity, air movement, and radiant heat.

HEAT RASH

A heat rash is a red bumpy rash with severe itching.

HEAT CRAMPS

Heavy sweating from strenuous physical activity that decreases body fluids. Weakness and painful cramps occur commonly in the most worked muscles (arms, legs or stomach).

FAINTING

Fluid loss, inadequate water intake and standing still, resulting in decreased blood flow to brain.

HEAT EXHAUSTION

The body cooling system begins to break down. It may result in excessive sweating, clammy skin, body temperature over 38°C, a weak pulse, normal or low blood pressure, a

person being tired and weak, nausea and vomiting, being very thirsty, panting or breathing rapidly, and blurred vision.

HEAT STROKE

High body temperature (over 40°C) and any one of the following occurs:

- The person is weak, confused, upset or acting strangely
- Profusely sweating
- Fast pulse
- Headache or dizziness
- Fainting or convulsions

HOT WEATHER SAFETY PRECAUTIONS

- Check the temperature prior to outdoor activity.
- Implement school board's Hot Weather Action Plan (for example, for heat or humidex).
- Encourage and provide access to hydration prior to, during, and after activity.
- When appropriate activity levels to be reduced and/or increase the frequency and length of rest breaks.
- Cancel/reschedule activity as per school board protocol.
- Communicate to students the importance of:
 - Drink fluids regularly prior to, during and after activity. (Dehydration is a key factor in heat illness.)
 - Wear light coloured, loose fitting clothes made of either natural fibres or composite fabrics with high absorption
 - Use sun blockers on all exposed body parts.

- Where possible to stay out of the sun and in the shade as often and as long as possible
 - To cool down, spatter yourself with water before the activity and during breaks
 - Do not lay down during breaks or after the activity as this may provoke a collapse.
 - Risk is increased if you suffer from asthma, inform your teacher/coach accordingly
 - Inform teacher/coach immediately (to seek medical help) with shivering, muscle cramps, headache fatigue or collapse.
 - Drinking fluids prior to, during, and after activity.
 - Wearing light coloured, loose fitting clothes.
 - The use of sun screen/blockers.
 - Avoiding sun exposure when possible.
 - Cooling down (for example, spatter water on body/clothing).
 - Sitting/standing during breaks and walking after activity to avoid collapse
 - Informing teacher/coach immediately if students have: shivers, muscle cramps, headache, and/or fatigue.
- Students (people in general) are generally unable to notice their own heat stress related symptoms. Their survival depends on the ability of teachers/coaches to recognize symptoms and seek timely first aid and medical help.

LIST OF EARLY WARNING SIGNS FOR HEAT INJURY

Note: this is not an exhaustive list

- Flushed face
- Hyperventilation or shortness of breath
- Headache
- Dizziness
- Tingling arms
- Goose bumps (hair on arms standing on end)
- Chilliness
- Poor coordination
- Confusion, agitation, uncooperativeness