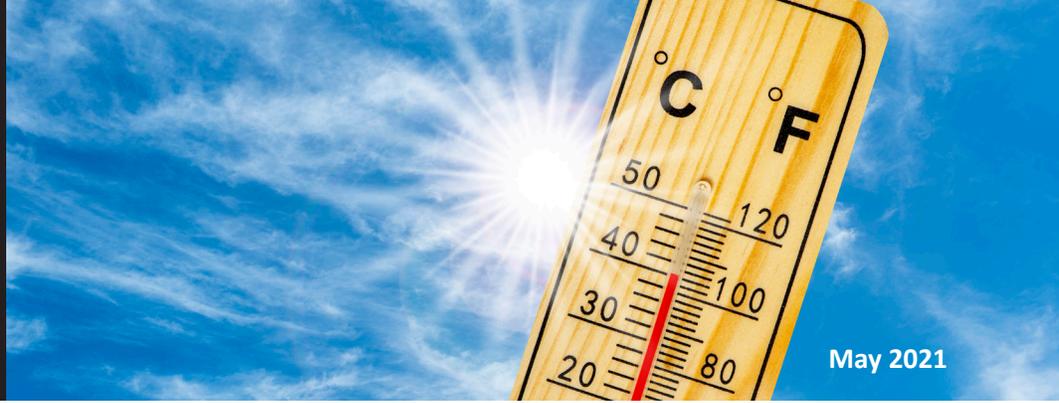


# Warm Weather Safety



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Summer heat is often welcome in Canada after cold, snowy weather that occurs in winter. However too much heat can cause harm and we need to be aware of procedures to follow during a heat wave. Outdoor activities can lead to heat related illnesses such as heat cramps, heat rash, heat exhaustion and heat stroke.

It is important that adults know how to prevent heat illnesses and be able to provide aid when needed. When educators take students outdoors in warm weather, they should be aware of the signs and symptoms of heat related illnesses.

## Types of Heat Illnesses

- Heat rash is a mild skin irritation caused by heavy sweating.
- Heat cramps are painful, involuntary muscle spasms that usually occur during heavy exercise in hot environments. Fluid and electrolyte loss often contribute to heat cramps.
- Heat exhaustion is a condition that may include heavy sweating and a rapid pulse which is a result of your body overheating. The body loses salt and fluid through heavy sweating.
- Heat stroke usually occurs in high heat and humidity conditions but may also occur in mild temperatures if the humidity is high. Sweat cannot evaporate as quickly as usual so the body cannot release heat to cool. Body temperatures can rise to dangerous levels (41°C) in approximately 10 minutes.



## Symptoms of the Different Types of Heat Illnesses

### Heat Stroke

- Temperature of 41°C or greater
- Severe headache
- Nausea
- Seizures
- Hot, dry skin
- Confusion
- Dizziness or fainting
- Rapid pulse
- Lack of sweating
- Loss of consciousness

### Heat Exhaustion

- Heavy sweating
- Muscle cramps
- Moist skin
- Headache
- Nausea
- Dizziness
- Fainting
- Weakness
- Weak pulse
- Thirst

### Heat Cramps

- Muscle pain or spasm occurring in the legs, arms, or abdomen

### Heat Rash

- Small blisters on the skin on the upper chest, neck or inside the elbow

Heat stroke is the most serious form of heat illness and can cause blood disorders and damage to the heart, liver, kidney, muscles, and nervous system. Heat stroke can lead to death if the person does not receive emergency medical treatment. Call 911 immediately if any heat stroke symptoms are present.

## Treatment for Heat Illness

Heat Exhaustion	Heat Stroke
<ul style="list-style-type: none"> <li>Remove from heat.</li> <li>Loosen tight clothing.</li> <li>Do not dry skin.</li> </ul>	<ul style="list-style-type: none"> <li>Remove from heat.</li> <li>Call 911 immediately.</li> <li>Loosen tight clothing.</li> <li>Do not dry skin.</li> </ul>
Active Cooling	Aggressive Cooling
<ul style="list-style-type: none"> <li>Pour water on torso.</li> <li>Fan skin.</li> <li>If person is alert, provide cool drink.</li> </ul>	<ul style="list-style-type: none"> <li>Immerse body in cool water.</li> <li>Immerse forearms in cool water.</li> <li>Pour water on torso.</li> <li>Fan skin.</li> <li>If person is alert, provide cool drink.</li> </ul>

## Preventing Heat Related Emergencies

- Drink plenty of cool fluids. Drink water every 15 minutes when working or exercising in a hot environment.
- Avoid being outside during the hottest part of the day.
- Know the humidex rating – it combines the temperature and humidity and is an indication of how the hot, humid weather feels to the average person.
- Wear light clothing and keep the head covered.
- Apply sunscreen (SPF 15 or greater).
- Slow down activities as the day gets hotter and take frequent breaks in a cool or shady area.
- Never leave children or pets in a vehicle as the inside temperature in summer can quickly rise to 49° or higher.

## Heat and Humidity

Humidity is the amount of water vapour in the air. High humidity makes people feel hotter than they would on a drier day as the perspiration that cools down a body cannot evaporate as quickly in moist, saturated air. Relative humidity tells how much water vapour is in the air, compared to how much it could hold at that temperature. It is shown as a percent so that a relative humidity of 50%

means that the air is holding one half of the water vapour it can contain at that temperature.

## Humidex

The Humidex (humidity index) is an index number used by Canadian meteorologists to describe how hot the weather feels to the average person. The Humidex combines the temperature and humidity into one number to reflect the perceived temperature. It is a better measure of how stifling the air feels than either temperature or humidity alone.

### Humidex Range

20-29	Little Discomfort
30-39	Some Discomfort
40-45	Great discomfort; avoid exertion
Above 45	Dangerous; heat stroke possible

An extremely high Humidex reading is any reading over 40. In such conditions, it is necessary to reduce all unnecessary physical activity.

### Humidex Temperature and Relative Humidity

Relative humidity % Temp °C	100%	95%	90%	85%	80%	75%	70%	65%
21°C	29	29	28	27	27	26	26	24
22°C	31	29	29	28	28	27	26	26
23°C	33	32	32	31	30	29	28	27
24°C	35	34	33	33	32	31	30	29
25°C	37	36	35	34	33	33	32	31
26°C	39	38	37	36	35	34	33	32
27°C	41	40	39	38	37	36	35	34
28°C	43	42	41	41	39	38	37	36
29°C	46	45	44	43	42	41	39	38
30°C	48	47	46	44	43	42	41	40
31°C	50	49	48	46	45	44	43	41
32°C	52	51	50	49	47	46	45	43

Additional information on Humidex and how to use the Humidex Calculators can be found at Environment Canada. ([weather.gc.ca](http://weather.gc.ca))

## Tick Borne Illness



Warm weather often means more time spent outdoors which means an increased risk of encountering a tick and getting a tick-borne disease.

In Manitoba, the first ticks will appear when daytime temperatures go above 6°C and will peak during the first days of 20°C. Ticks can be found as late as November in Manitoba.

The black-legged tick, also known as the deer tick, carries the bacteria that causes Lyme infection. The bacteria can be transmitted to humans through a bite from an infected black-legged tick. The best way to protect against Lyme disease is to prevent tick bites.

## Reducing Exposure to Ticks

- Wear long pants, long-sleeved shirts, and socks outdoors especially in grassy and wooded areas.
- Pull your socks over your pant legs.
- Use insect repellent containing DEET or Icaridin (Picaridin) on your skin and clothing.
- Avoid contact with ticks by walking on cleared paths or walkways.
- After being outdoors, check yourself for ticks immediately. Key parts of the body to check include under the arms, inside the belly button, back of the knees and in and around the hair.
- If you find an attached tick, remove it with tweezers immediately.
- Do a tick check on outdoor gear and pets.
- Shower or bathe within two hours of being outdoors.
- Put dry outdoor clothes in a dryer for ten minutes on high heat to kill any remaining ticks and longer if clothes are damp.

## How to Remove a Tick

1. Use fine-tipped tweezers to grasp the tick as close as possible to the skin's surface. The goal is to remove the entire tick.
2. Pull upwards with steady, even pressure and do not twist or jerk the tick.
3. Clean the bite area and your hands with rubbing alcohol or soap and water.

## Symptoms of Lyme Disease

- A flat, circular rash that looks like a red oval or bull's-eye anywhere on your body.
- Fatigue.
- Joint pain and swelling.
- Muscle aches.
- Headache.
- Fever.
- Swollen lymph nodes.
- Difficulty concentrating.



Contact your healthcare provider immediately if you have any of these symptoms.

Manitoba's new eTick program helps monitor and assess the continued expansion of the blacklegged tick populations.



Manitobans can use eTick when they find ticks on animals, humans or in various habitats. They can submit a picture to have the tick identified by experts, which will let them confirm if the tick they found belongs to a species capable of transmitting tick-borne disease. To submit a picture of a tick visit [www.etick.ca](http://www.etick.ca).

Limiting exposure to potentially infected blacklegged ticks, particularly the smaller nymphs who are active during the late spring and summer months, is the key to tick-borne disease prevention.

Manitobans are encouraged to take precautions to minimize their risk of tick exposure by:

- applying an appropriate tick repellent, following label directions, on exposed skin and clothing;
- inspecting themselves, children and pets after spending time outdoors;
- removing ticks as soon as possible from people and pets;
- staying to the centre of walking trails;
- wearing long pants and long-sleeved shirts; and
- keeping grass and shrubs around homes cut short to create drier environments that are less suitable for blacklegged tick survival.

Symptoms of anaplasmosis, babesiosis and Lyme disease can be found at:

[www.gov.mb.ca/health/publichealth/cdc/tickborne/index.html](http://www.gov.mb.ca/health/publichealth/cdc/tickborne/index.html).