



EXTREME COLD

Across the Prairies, winter often starts out cold and stays that way with a season that seems to go on for nine months. Westerners know about cold winters and are largely prepared for it but cold weather can be limiting for some plants, animals and materials.

Extreme cold temperatures may occur separately or in combination with other hazards such as high winds and blowing snow. Wind chill is another hazard associated with cold weather.

Wind Chill Index

The new wind chill index developed in the early 2000's is based on the loss of heat from the face only - the area of the body that is most exposed to severe winter weather conditions.

Wind Chill Range	Rating	Impact
0 to -9	Low	<ul style="list-style-type: none"> Minor increase in discomfort
-10 to -24	Moderate	<ul style="list-style-type: none"> Uncomfortable Bared skin feels cold Danger of hypothermia if outdoors for extended periods
-25 to -44	Cold	<ul style="list-style-type: none"> Danger of skin freezing (frostbite) Remember that the average person's skin begins to freeze at a wind chill of -25 Examine face, fingers, toes, ears and nose for numbness or whiteness Threat of hypothermia if outdoors for extended periods
-45 to -59	Extreme	<ul style="list-style-type: none"> Exposed skin may freeze in mere minutes Examine face, fingers, toes, ears and nose for numbness or whiteness Severe danger of hypothermia if outdoors for long periods Be prepared to end outdoor activities early or cancel them completely
-60 or colder	DANGER! HIGH RISK!	<ul style="list-style-type: none"> Conditions outside are hazardous Skin left uncovered may freeze in under 2 minutes If possible stay indoors

Across the country, different criteria have been established to distinguish between the various wind chill ranges. The reason for this is because the threshold for cold varies across Canada. The federal government decided to group geographic areas of Canada with similar "cold thresholds" together.

Geographic Area	Wind Chill	Rating	Impact
Central Ontario & Southern portion of Northern Ontario, Southern Quebec, Prairies , Central Interior and Northern B.C., Labrador	-25 to -44	cold wind chill, mentioned in forecast	risk of frostbite
	- 45 to -59	very cold wind chill, warning issue	frostbite in minutes
	-60 or less	extreme wind chill, warning issued	hazardous frostbite condition

WHAT TO DO DURING EXTREME COLD

- **Stay out of the cold**
- If you have to go out, check the forecast
- If you go outside, dress appropriately:
 - A hat, mittens, a scarf or knit mask to cover face/mouth
 - Sleeves that are snug at the wrist
 - Water-resistant coat and boots
 - Wear several layers of loose-fitting clothing



- Wool, silk or polypropylene inner layers of clothing will hold more heat than cotton
- Avoid exertion as your body is already working hard to stay warm
 - If you must do heavy outside chores, dress warmly and work slowly
- **Stay dry**
- Do not ignore shivering; it's an important first sign that the body is losing heat
- Keep hydrated
- Keep moving; activities help to keep you warm
- Understand wind chill
- Watch for signs of frostnip, frostbite and hypothermia
- Some people are more susceptible to the cold, particularly children, the elderly and those with circulation problems
- The use of alcohol, tobacco and certain medications will increase susceptibility to cold

PETS AND LIVESTOCK



You have a responsibility to ensure the well-being of animals under your care. With a bit of planning you can greatly increase the comfort and health of your animals during periods of cold weather. For more information on caring for your animals, please go to www.rmccormanpark.ca, under Public Information, click Emergency Preparedness and the R.M.'s Emergency Preparedness page will open. There you can access the Winter Weather Preparedness booklet.



SIGNS OF COLD EMERGENCIES

Watch for the following signs of hypothermia, frostnip and frostbite:

Hypothermia

- Being cold over a prolonged period of time can cause a drop in body temperature
- Shivering, confusion and loss of muscular control (e.g., difficulty walking) can occur.
- It can progress to a life-threatening condition where shivering stops or the person loses consciousness. Cardiac arrest may occur.

Frostnip

- Weaker form of frostbite where only the skin freezes
- Skin takes on a yellowish or white colour, but remains soft to the touch
- Accompanied by a painful tingling or burning feeling

Frostbite

- A more severe condition, where both the skin & the underlying tissue are frozen
- Skin appears white and waxy and is hard to the touch
- No sensation – the area is numb or tingling

TREATMENT OF COLD EMERGENCIES

If you find someone suffering from a cold related illness take the following actions:

Hypothermia

- Get medical attention immediately
- Lay the person down and avoid rough handling, particularly if the person is unconscious
- Get the person indoors; gently remove wet clothing
- Warm the person gradually and slowly, using available sources of heat

Frostnip

- Do NOT massage or rub the affected area
- Slowly warm up the area using body heat (a warm hand) or some warm water
- Do not use any form of direct heat which can burn the skin
- After the area has been warmed, do not re-expose it to the cold

Frostbite

- Frostbite can be serious, and can result in amputation. Get medical help!
- Do not rub or massage the area
- Do not warm the area until you can ensure it will stay warm
- Warm the area gradually; use body heat, or warm water. Avoid direct heat which can burn

