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# TIPS

## WORKING IN THE COLD

Cold stress is the body's inability to control its internal temperature. It can result in serious illness or death.

The following conditions may put you at risk:

- low temperature and wind conditions
- immersion in low temperature water
- level of physical activity/exertion
- improper or inadequate clothing

### Symptoms

- **frostbite:** prickling/burning sensation of skin, extreme pain or none if nerve tissues are affected
- **hypothermia:** sensation of cold followed by pain, numbness, muscle weakness, confusion, slurred speech, drowsiness, coma, death

### Preventing cold stress

- assess the weather conditions
- monitor yourself and co-workers
- take warm up breaks in heated shelters
- wear adequate, insulating dry clothing
- drink warm, sweet drinks or soups
- keep body moving but limit heavy work
- at or below -7°C heated shelter should be available nearby

### What to do for cold stress

- move the worker to a warm area
- encourage continuous body movement
- replace wet clothes with dry clothes/blankets
- provide warm (not hot) sweet drinks
- **call 911 (or local emergency provider) immediately if you think someone is experiencing hypothermia**

#### For more information

Visit [safemanitoba.com](http://safemanitoba.com) or  
Call 204-957-SAFE (7233) or  
toll-free 1-855-957-SAFE (7233)



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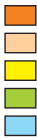
## WORKING IN THE COLD

### Wind Chill Calculation Chart

Actual Temperature (°C)

	5	0	-5	-10	-15	-20	-25	-30	-35	-40
5	4	-2	-7	-13	-19	-24	-30	-36	-41	-47
10	3	-3	-9	-15	-21	-27	-33	-39	-45	-51
15	2	-4	-11	-17	-23	-29	-35	-41	-48	-54
20	1	-5	-12	-18	-24	-30	-37	-43	-49	-56
25	1	-6	-12	-19	-25	-32	-38	-44	-51	-57
30	0	-6	-13	-20	-26	-33	-39	-46	-52	-59
35	0	-7	-14	-20	-27	-33	-40	-47	-53	-60
40	-1	-7	-14	-21	-27	-34	-41	-48	-54	-61
45	-1	-8	-15	-21	-28	-35	-42	-48	-55	-62
50	-1	-8	-15	-22	-29	-35	-42	-49	-56	-63
55	-2	-8	-15	-22	-29	-36	-43	-50	-57	-63
60	-2	-9	-16	-23	-30	-36	-43	-50	-57	-64

#### Wind Chill Range



#### Degree of Comfort

- Low risk of frostbite (10-30 mins.)
- Increasing risk (10-30 mins.)
- High risk (5 to 10 mins.)
- High risk (2 to 5 mins.)
- High risk (2 mins. or less)

\*Source: Environment Canada

### Recommended Work & Warm-up Periods for Work in Cold Environments

(Number of 10-minute warm-up periods)

Air Temp °C	8 kp/h Wind		16 kp/h Wind		24 kp/h Wind		32 kp/h Wind	
	Max. work period	No. of Breaks	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks	Max. Work Period	No. of Breaks
-26 to -28	Normal	1	75 mins.	2	55 mins.	3	40 mins.	4
-29 to -31	75 mins.	2	55 mins.	3	40 mins.	4	30 mins.	5
-32 to -34	55 mins.	3	40 mins.	4	30 mins.	5	(Non-emergency work should stop)	
-35 to -37	40 mins.	4	30 mins.	5				
-40 and below								

\*Source: WorkSafe Saskatchewan;

For more information

Refer to the *Thermal Stress Guideline*

at [safemanitoba.com](http://safemanitoba.com)