DANGER STARTS WELL BEFORE ZERO

FROST BITE

SYMPTOMS: PALE, WAXY-WHITE SKIN COLOR; SKIN BECOMES HARD AND NUMB; USUALLY AFFECTS EXTREMITIES INCLUDING EARS AND NOSE.

RESPONSE:

- Move the person to a warm and dry area and remove any wet/tight clothing that may cut off blood circulation.
- **DO NOT** rub the affected area; rubbing can cause skin/tissue damage.
- Gently place the affected area in warm (105°F) water.
 Do not pour water directly on affected area. Warming will take 25-40 mins.
- Once normal movement and color return to area, dry and wrap to keep warm.
- Seek medical attention as soon as possible.

HYPOTHERMIA

SYMPTOMS: FATIGUE/DROWSINESS; UNCONTROLLED SHIVERING; COOL BLUISH SKIN; SLURRED SPEECH; CLUMSY MOVEMENTS; IRRITABLE/IRRATIONAL/CONFUSED BEHAVIOR.

RESPONSE: CALL FOR EMERGENCY HELP IMMEDIATELY.

- Move the person to a warm and dry area and remove any wet/tight clothing and replace with dry clothing or wrap in a blanket.
- Drink warm, sweet drinks (sugar water or sports-type drinks). Avoid caffeinated drinks.
- Have the person move their arms and legs to create muscle heat. If unable to do so, place hot packs in armpits, groin, neck, and head, DO NOT rub the person or place them in warm water.

COLD STRESS SOLUTIONS

WORK//BREAK SCHEDULE FOR A FOUR HOUR SHIFT

Limiting exposure to cold is key in the prevention of cold stress. It's especially dangerous as temperatures lower and wind speed picks up. Below is a work/break schedule for workers based on the air temperature and wind speed of the environment:

	AIR TEMPERATURE		NO NOTICEABLE WIND		5 MPH/8 KPH WIND		10 MPH/16 KPH WIND		15 MPH/24 KPH WIND		20 MPH/32 KPH WIND	
	°C (approx.)	°F (approx.)	Maximum Work Period	Number of Breaks (>10 mins each)								
	-26° to -28°	-15° to -19°	(Normal Breaks) 1		(Normal Breaks) 1		75 min.	2	55 min.	3	40 min.	4
	-29° to -31°	-20° to -24°	(Normal	Breaks) 1	75 min.	2	55 min.	3	40 min.		30 min.	5
ż	-32° to -34°	-25° to -29°	75 min.	2	55 min.	3	40 min.		30 min.	5		
	-35° to -37°	-30° to -34°	55 min.	3	40 min.		30 min.	5			EMERGENCY Work only	
	-38° to -39°	-35° to -39°	40 min.		30 min.	5		EMERGENCY		GENCY		
Į,	-40° to -42°	-40° to -44°	30 min.	5	EMERGENCY		EMERGENCY Work only		WORK ONLY			
1	-43° & below	-45° & below	EMERGENCY Work only		WORK ONLY							

HOW TO USE THIS SCHEDULE:

- Across the top row, locate today's predicted wind speed.
- Down the left side, locate today's predicted air temperature.
- Follow across and down to find the recommended work time and warm-up/break-time in a four hour shift.

 Example: if the wind speed is 5mph with an air temp of -20°F/29°C, workers shouldn't be outside for longer than 75 minutes at a time and should take a minimum of two. 10 minute breaks (warm-ups) in a heated area during a four-hour shift.

*Source: Adapted from Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. Cincinnati: American Conference of Government Industrial Hygienists (ACGIH), 2013, page 202.