



## MSI RISK FACTORS

### Adverse Temperatures

Very warm and very cold work environments increase the physical demands of work.

#### Cold temperatures

- Reduce blood flow.
- Increase muscle fatigue.
- Reduce grip strength.
- Reduce joint range of motion and flexibility.
- Reduce muscle coordination and strength.
- Increase energy needs to contract muscles.

#### Hot temperatures

- Increase sweating.
- Increase grip force.
- Alter blood pressure.
- Increase core body temperature.
- Decrease the ability of the body to cool down.
- Increase energy requirements for body function
- Increase fatigue.

Adverse weather conditions may increase the risk of MSIs for outdoor workers. Slippery conditions in winter or excess wind may affect your ability to maintain balance, putting you at increased risk of MSI.

#### Examples of cold exposure:

- Deboning meat when temperatures must be maintained below certain levels.
- Using a chainsaw in the winter.
- Using a power tool that has air blowing across the hand.

#### Examples of heat exposure:

- Road paving on a hot summer day.
- Working near hot machines in a non-air conditioned indoor workplace.

# Move WELL Work WELL

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#### Control Measures for Cold Environments

- Consider rescheduling outdoor work if it is extremely cold.
- Take breaks in a warm environment.
- Increase frequency of rest periods.
- Dress in warm layers, ensuring an outer layer that is wind resistant.
- Stay dry, including taking steps to prevent excess sweating.
- Warm-up the body before beginning work.
- Cover all exposed skin.
- Wear insulated, waterproof footwear.



#### Control Measures for Warm Environments

- Use fans or other means of ventilation.
- Alter work schedules, so work is done at cooler times.
- Take breaks in a cool, ventilated area.
- Increase frequency of rest periods.
- Drink plenty of fluids.
- Wear loose-fitting (where appropriate), light-colored clothing.

#### What can you do?

- If you need to work in adverse temperatures, take frequent microbreaks.
- Take your regularly scheduled breaks.
- Follow safe work practices and procedures.
- Wear appropriate clothing.
- Recognize signs and symptoms of heat and cold-induced conditions.
- Report ergonomics-related concerns and any signs or symptoms of MSI.



**WorkplaceNL**

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