



TOOLBOX TALK- *Weather – 003 – Cold and damp weather – personal impact*

November 2021

This toolbox talk is one of a series of toolbox talks relating to the weather. These are intended to be used as individual toolbox talks as is relevant.

- 001 - General
- 002 – High winds
- 003 - Cold and damp weather – personal impact
- 004 – Cold and damp weather – project impact
- 005 - Hot weather
- 006 – Losing daylight – clock changes

As the weather becomes colder and wetter during winter months, construction workers who work outside face the hazard of exposure to the cold and damp. You need to be especially mindful of the weather, its effects on the body, and proper prevention techniques.

Environmental conditions - The following four environmental conditions are the causes of cold-related stress:

- Low temperatures
- High and cool winds
- Dampness
- Cold water

Risk Factors - Some risk factors for cold-related stress include the following:

- Wearing inadequate or wet clothing increases the effects of cold on the body
- Taking certain drugs or medications such as alcohol, nicotine, caffeine, and medication; they inhibit the body's response to the cold and impair judgment
- Having a cold or certain disease, such as diabetes, heart, vascular, and thyroid problems, may make a person more susceptible to the winter elements.
- Becoming exhausted or immobilized, especially due to injury or entrapment, may speed up the effects of cold weather.

When your body is unable to warm itself, serious cold-related illnesses and injuries may occur, and permanent tissue damage and death may result. Cold related illnesses can slowly overcome a person and they may not realise it themselves. Hypothermia can occur when you are exposed to cold air, water, wind, or rain. Your body temperature can drop to a low level when exposed to temperatures of **50°F (10°C)**, or higher in wet and windy weather, or if you are in **60°F (16°C) to 70°F (21°C)** water.

Apart from the effect on health, the symptoms include a lack of coordination and low energy which can impact on decisions being made and actions being taken. This can result in accidents and incidents.

Cold weather and associated illnesses can have significant implications in the workplace, especially for those with certain chronic health conditions, who are likely to be more affected by the cold. People with chronic health conditions such as asthma, arthritis, psoriasis and cardiovascular disease, need to take particular care to remain active during cold weather whilst ensuring that they are vigilant about reducing the risk of becoming ill.

Cold weather working tips

Wearing the right types of clothing can help in fighting the elements. You should wear at least three layers of clothing such as the following:

- An outer layer to reduce the impact of the wind & rain and allow some ventilation.
- A middle layer of wool or synthetic fabric to absorb sweat and retain insulation in a damp environment.
- Inner layers of cotton or synthetic weave to allow for proper ventilation.

Layering enables you to regulate your body temperature so that you do not get too cold or overheat. Layers of light-weight clothing keep you warmer than a single layer of heavy clothes. During the day temperatures may vary considerably and so does your activity level. Using multiple thin layers that can be removed allows you to adjust your temperature to avoid overheating and perspiring which can lead to chills or hypothermia later.

Check your winter wardrobe for, (and avoid) entanglement hazards such as scarves, loose sleeves, and dangling drawstrings. Basically, anything that could get caught, particularly in rotating machinery.

Keep well hydrated – dehydration will counter the benefits of layering, reducing your body's ability to keep warm.

Individuals may want to wear hats under their helmets to keep warm - ONLY specifically designed helmet comforters may be worn. As much as half your body heat can be lost from your head

The effects of operating vibration tools during cold weather conditions are increased. As required in McGee procedures exposure must be reduced to acceptable levels and strictly monitored on site to prevent harmful effects on the individual's health.

Wet clothing is 20 times less warm than dry clothing. Have access to dry clothing if your clothes become wet.

Be self-aware of how cold you are. Ensure you take your rest breaks and warm up. Have regular hot drinks / food.

Make sure you remain active in cold, wet and windy conditions.