

## Examples of work loads:

**Rest** – Sitting.

**Light work** – Sitting while performing light manual work with hands or arms, and driving; standing with occasional walking.

**Moderate work** – Normal walking; sustained moderate hand and arm work; moderate arm and leg work; moderate arm and trunk work; light pushing and pulling.

**Heavy work** – Intense arm and trunk work (carrying, shoveling, manual sawing, pushing and pulling heavy loads); walking at a fast pace.

**Very heavy** – Very intense activity at a fast to maximum pace (shoveling wet sand).



## Working at Home in the Heat

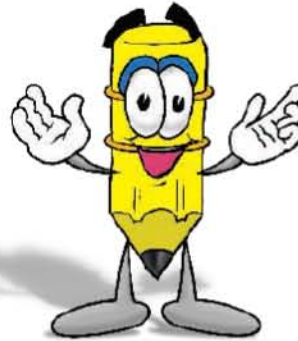
Whether you are mowing the lawn, painting the fence, or just working in the back yard, working safely in the heat can be difficult to do. Following the same safety precautions taken at the work place is the key to controlling the hazards associated with working in extreme heat situations at home.

Avoid caffeine and alcohol intake while working in the heat, as they can cause dehydration, which may inhibit your body from being able to control its internal temperature correctly.

## REMEMBER!

Weather conditions can change throughout the shift, and even hour-by-hour. Always be prepared to adjust the work plan and implement your program or policy.

For detailed information, please go to: [www.employment.alberta.ca/documents/whs/whs-pub\\_gs006.pdf](http://www.employment.alberta.ca/documents/whs/whs-pub_gs006.pdf) for the Best Practice “Working Safely in the Heat & Cold” GS006 – General Safety (August 2009).



The Alberta Construction Safety Association's mission is to provide quality advice and education for the construction industry that will reduce human suffering and financial costs associated with workplace incidents. This brochure is part of a series, *The Toolbox Brochures*, which are available on a variety of safety topics. If you have any questions or comments please contact:



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# Working Safely in Extreme Heat Conditions



## Making Safety A Way Of Life



# The Alberta Construction Safety Association

The goal of this topic is to help you consider the health risks associated with working in extreme heat situations, and to suggest reasonable solutions for work places. This toolbox talk will help you to:

- Understand how your body reacts in hot environments.
- Recognize when it is “too hot.”
- Know the health risks associated with working in extremely hot conditions.
- Better understand weather implications.
- Know what steps to take to control the hazards associated with heat exposure.

How “hot” you feel depends on six primary factors: Air temperature, other sources of heat (radiant heat), relative humidity, moving air, physical exertion, and clothing. Other factors include a person’s general health, weight, age, fitness level, and medical condition.

Thermal comfort is also very important. Ideally, air temperature should be kept within a range that most people find comfortable. Heat stress is the overall heat load on the body, including environmental heat and inner body heat production due to working hard. The possible side effects include: edema, rashes, cramps, exhaustion, syncope, heat stroke, and hyperpyrexia (abnormally high fever).

## TIP!

**Intense thirst is not a sufficient warning sign of heat stress. Staying hydrated is important. Don’t forget to drink regularly.**

## Early warning signs include:

Headache, dizziness/faintness, irritability/anger/mood change, fatigue, heavy sweating, prickly heat (heat rash), muscle cramps, changes in breathing and pulse rate.

## IMPORTANT!

**Heat stroke is a life-threatening situation and requires immediate medical attention.**

## Signs of heat stress worsening:

Breathlessness, strong pulse changing to weak rapid pulse, severe headache, severe muscle cramps, confusion, skin changing from feeling cold and clammy to feeling hot and dry, severe dehydration, sweating may stop, exhaustion, coma ensue.

When controlling exposure, the employer is required to follow the hazard control hierarchy.

First, explore ways to **eliminate** the hazard.

Second, reduce exposure by applying **engineering controls** such as designing or modifying plants, equipment, ventilation systems and processes to reduce exposure.

Third, apply **administrative controls** such as safe work practices, standards and safe job procedures including training, timing of work, policies and other rules to reduce exposure.

Fourth, use **personal protective equipment (PPE)** if necessary.

Fifth, use a **combination** of these if doing this creates a greater level of worker safety.

While there are no specific requirements relating to working in the heat in Alberta, the OH&S Act requires employers to ensure the health and safety of workers at their work sites. Part 2 of the OH&S Code requires employers to assess and control hazards workers may be exposed to at the work site. Extremely hot environments must be assessed and controlled when encountered.



A **sunburn** is a burn to living tissue, such as skin, which is produced by overexposure to ultraviolet (UV) radiation, commonly from the sun’s rays.