



Safety Bulletin Number: 0000001

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HEAT STRESS

Legal information

Employers have a duty under section 13(1) of the Occupational Health and Safety Act to take every reasonable precaution to ensure the health and safety of persons at the workplace. This includes developing policies and procedures for hot environments.

What is heat stress?

Heat stress is the buildup of heat in the body to the point where the body's thermostat has difficulty maintaining normal internal body temperature. It happens when high temperature combines with other factors such as:

- High humidity
- Hard physical workload
- Clothing
- Dehydration
- Physical condition

Your rights under the Occupational Health & Safety Act

Everyone has a right to a safe working environment and if the supervisor does not respond to your concern to your satisfaction, you should raise the issue with the Joint Occupational Health and Safety Committee or Health and Safety Representative. If this still does not satisfy your concern, you may contact the Safety Branch.

Heat stress symptoms

Heat rash: Itchy red skin.

Heat cramps: Painful muscle cramps.

Heat exhaustion: Faint; headache; confusion; nausea or vomiting.

Heat stroke: No sweating (hot, dry skin), high body temperature, confusion, or convulsions. Get immediate medical help.

What to do if a person is suffering from heat stress?

If you believe you or another person may be subject to heat stress at your workplace, seek a first aid attendant immediately and notify your supervisor.

How to prevent heat stress

The employer must develop a heat stress strategy. The main components are employee training and education, heat stress assessment, and heat stress controls.

Heat stress assessment

It must contain an initial environmental assessment, Wet Bulb Globe Temperature (WBGT) monitoring, clothing factors adjustment, and work demand analysis. In Nova Scotia, WBGT index, established by American Conference of Governmental Industrial Hygienists (ACGIH), is used as regulatory threshold limit value (TLV) for workplace heat monitoring. WBGT is only an index for the thermal environment. The monitored WBGT must be adjusted for contributions of clothing and work demand. If the adjusted WBGT is higher than the TLV, then personal physiological monitoring needs to be performed to determine if an employee is suffering from heat stress.

Heat stress controls

- Elimination or substitution of hot process;
- Worker acclimatization;
- Engineering controls (air conditioning, mechanical ventilation, shaded work area, control the heat at source, etc.);
- Administrative controls (reassign the work-rest regimen, cool drinking water, schedule jobs to cooler time of the day, etc.);
- Protective clothing (water or ice-cooled insulated clothing, light summer clothing, light colored clothing, head covering, etc.)

For more information

Refer to [Heat Stress Guidelines](https://novascotia.ca/lae/healthandsafety/pubs.asp) available on Labour & Advanced Education Health & Safety Publications website (<https://novascotia.ca/lae/healthandsafety/pubs.asp>).

Contact for bulletin queries

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