## HEAT STRESS

To ensure all Employees understand and recognize the symptoms of heat stress and the measures to prevent and treat heat related emergencies in the workplace.

SCOPE

Employers have a duty under clause 25(2)(h) of the *Occupational Health and Safety Act* to take every precaution reasonable in the circumstances for the protection of a Worker.

This procedure applies to all Employees, Contractors and Delivery Persons.

DEFINITIONS

**Heat Stress -** Stress on your body's cooling system due to physical work and loss of fluids in an extreme heat.

**Heat Rash -** Red bumpy rash with severe itching.

**Heat Cramps -** Cramps occur from salt imbalance resulting from failure to replace salt lost from heavy sweating.

**Fainting -** Decreased blood flow to the brain due to inadequate fluid intake.

**Heat Exhaustion -** Body’s cooling system starts to break down due to inadequate salt and water intake.

**Heat Stroke -** Rise in body temperature when all body reserves are exhausted, and worker stops sweating. May develop suddenly or following heat exhaustion.

STANDARDS / PROCEDURES

This policy requires the full cooperation of Management, Supervisors, Worker Health and Safety Representative(s) / Joint Health and Safety Committee, and Workers.

Employees are asked to cooperate fully with this policy. All Employees will be trained to recognize the signs and symptoms of heat stress in themselves, as well as in other Employees.

Employees experiencing symptoms of heat stress must report to first-aid personnel immediately to obtain proper medical attention. During days when heat stress procedures are in place, all Employees will follow the contingency plans. Extra water will be available, and Workers will be encouraged to drink it.

In order to monitor the effectiveness of this policy, Management in cooperation with the Worker Health and Safety Representative(s) / Joint Health and Safety Committee will perform an annual review.

**ROLES / RESPONSIBILITIES**

**Supervisor:**

* Monitor and evaluate the heat and humidex daily in order to prevent or reduce chances of illness due to heat exhaustion;
* Advise Workers to:
* Drink enough fluids to replace those lost through sweating and breathing;
* Take breaks in a cool area, as needed to avoid heat exhaustion or collapse;
* Report to their Supervisor heat stress-related symptoms in themselves or their Co-Workers;
* Adhere to the recommended rest break schedule, established to avoid heat exhaustion or collapse;
* Provide methods of reducing risk of heat exhaustion such as fluids and area for Workers to cool down if necessary; and,
* On days when Heat Stress Procedures are in effect, extra water must be available for Workers.

**Worker:**

* Must follow safe work procedures established to prevent heat-induced illness;
* Must drink enough fluids to replace those lost through sweating and breathing;
* Must report to their Supervisors’ heat-related symptoms in themselves or their Co-Workers; and,
* Must follow the recommended schedule of rest breaks, as advised by Supervisors, to avoid heat exhaustion or collapse.

**COMMUNICATION**

This procedure is communicated to all Supervisors and Employees through:

* Orientation, and,
* Postings / meetings as deemed necessary by Management.

**TRAINING**

Training on this procedure will be done annually for Employees whose work places them at risk of extreme or prolonged heat exposure.

**EVALUATION / REVIEW**

Worker compliance with this procedure is monitored regularly. The procedure will be reviewed annually for its effectiveness by Management.

**Appendix A**

|  | **Cause** | **Symptoms** | **Treatment** | **Prevention** |
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| **Heat Rash** | Hot humid environment; plugged sweat glands. | Red bumpy rash with severe itching. | Change into dry clothes and avoid hot environments. Rinse skin with cool water. | Wash regularly to keep skin clean and dry. |
| **Heat Cramps** | Heavy sweating from strenuous physical activity drains a person’s body of fluid and salt, which cannot be replaced just by drinking water. Heat cramps occur from salt imbalance resulting from failure to replace salt lost from heavy sweating. | Painful cramps occur commonly in the most worked muscles (arms, legs or stomach); this can happen suddenly at work or later at home. Heat cramps are serious because they can be a warning of other more dangerous heat-induced illnesses. | Move to a cool area; loosen clothing, gently massage and stretch affected muscles and drink cool salted water (1½ to 2½ mL salt in 1 litre of water) or balanced commercial fluid electrolyte replacement beverage. If the cramps are severe or don’t go away after salt and fluid replacement, seek medical aid. Salt tablets are not recommended. | Reduce activity levels and ⁄ or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **Fainting** | Fluid loss, inadequate water intake and standing still, resulting in decreased blood flow to brain. Usually occurs in un-acclimatized persons. | Sudden fainting after at least two hours of work; cool moist skin; weak pulse. | GET MEDICAL ATTENTION. Assess need for cardiopulmonary resuscitation (CPR). Move to a cool area; loosen clothing; have the person lie down; and if the person is conscious, offer sips of cool water. Fainting may also be due to other illnesses. | Reduce activity levels and ⁄ or heat exposure. Drink fluids regularly. Move around and avoid standing in one place for too long. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **Heat Exhaustion** | Fluid loss and inadequate salt and water intake causes a person's body's cooling system to start to break down. | Heavy sweating; cool moist skin; body temperature over 38°C; weak pulse; normal or low blood pressure; person is tired and weak, and has nausea and vomiting; is very thirsty; or is panting or breathing rapidly; vision may be blurred. | GET MEDICAL ATTENTION. This condition can lead to heat stroke, which can cause death quickly. Move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink; fan and spray with cool water. Do not leave affected person alone. | Reduce activity levels and ⁄ or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |
| **Heat Stroke** | If a person's body has used up all its water and salt reserves, it will stop sweating. This can cause body temperature to rise. Heat stroke may develop suddenly or may follow from heat exhaustion. | High body temperature (over 41°C) and any one of the following: the person is weak, confused, upset or acting strangely; has hot, dry, red skin; a fast pulse; headache or dizziness. In later stages, a person may pass out and have convulsions. | CALL AMBULANCE. This condition can kill a person quickly. Remove excess clothing; fan and spray the person with cool water; offer sips of cool water if the person is conscious.  | Reduce activity levels and / or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke. |

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