

Working in the Heat

The human body works at its best within a narrow temperature range.

- A movement of 2°C or more above or below the body's normal temperature of 37 °C and problems can start to happen.

Heat Illness

Exposure to heat can cause illness and death.

The most serious heat illness is **heat stroke**.

Other heat illnesses, such as **heat exhaustion, heat cramps** and **heat rash**, should also be avoided.

There are precautions that can be taken any time temperatures are high and the job involves physical work.

Risk Factors for Heat Illness

- High temperature and humidity, direct sun exposure, no breeze or wind
- Heavy physical labor
- No recent exposure to hot workplaces
- Low liquid intake
- Waterproof clothing

Symptoms of Heat Exhaustion

- Headache, dizziness, or fainting
- Weakness and wet skin
- Irritability or confusion
- Thirst, nausea, or vomiting



Symptoms of Heat Stroke

- May be confused, unable to think clearly, pass out, collapse, or have seizures (fits)
- May stop sweating

To Prevent Heat Illness:

- Have a lot of cool water available close to the work area. At least half a litre of water per hour is needed.
- Work modified schedules and take frequent rest periods with water breaks in shaded or air-conditioned areas.
- *Gradually* increase your workload to allow acclimatization.
- Your supervisor should monitor conditions and protect any workers who are at risk of heat stress.
- Consider protective clothing that provides cooling.

How to Protect Yourself

- Know signs/symptoms of heat illnesses; monitor yourself; use a buddy system.
- Block out direct sun and other heat sources.
- Drink plenty of fluids. Drink often and **BEFORE** you are thirsty. Drink water every 15 minutes.
- Avoid beverages containing alcohol or caffeine.
- Wear lightweight, light colored, loose-fitting clothes.

What to Do When a Worker is Ill from the Heat

- Call your supervisor for help. If the supervisor is not available, call 911.
- Have someone stay with the worker until help arrives.
- Move the worker to a cooler/shaded area.
- Remove outer clothing.
- Fan and mist the worker with water; apply ice (ice bags or ice towels).
- Provide cool drinking water, if able to drink.

IF THE WORKER IS NOT ALERT or seems confused, this may be a heat stroke. CALL 911 IMMEDIATELY and apply ice as soon as possible.

Heat stress quick guide

| Heat Stress Symptoms | Treatment | Prevention |
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| Heat rash (prickly heat) <ul style="list-style-type: none"> → Tingling and burning of the skin → Red itchy rash → Sweat glands plugged due to prolonged exposure of skin to heat, humidity and sweat | Take cool showers Dry skin thoroughly Apply calamine lotion | Keep the skin as clean and dry as possible Rest in a cool place Shower often Change clothes frequently |
| Heat cramps <ul style="list-style-type: none"> → Painful spasms of muscles that do the hardest work i.e. in the arms, legs and abdomen | Massage the muscle(s) Eat foods containing salt (unless they are to be avoided due to medical condition) | Warm up muscles before heavy work Take regular rest breaks Eat a normal, healthy diet, including plenty of fluids |
| Fainting <ul style="list-style-type: none"> → Increased flow of blood to the skin to get rid of heat means less blood to the brain | Lie down in a cool place Drink cool fluids to lower body temperature Seek medical attention if fainting recurs | Drink plenty of fluids at regular intervals Avoid standing still in one position — move around |
| Heat exhaustion <ul style="list-style-type: none"> → Tired, weak, dizzy → Cool, clammy skin → Slow, weak pulse → Pale or flushed skin → Higher than normal heart rate (160 to 180 beats/minute) | Lie down with knees raised Drink cool, not cold fluids Seek medical attention if condition does not improve quickly | Take four to seven days to adjust (acclimatize) to the heat Drink plenty of fluids at regular intervals Take rest breaks in a cool place |
| Heat stroke <ul style="list-style-type: none"> → Person usually stops sweating → Body core temperature is high (40-43 ° C.) → Skin is hot and dry. → Person may experience headache, dizziness, and confusion → May lose consciousness or have convulsion → Fatal if treatment is delayed | This is a medical emergency and the person must be taken to the hospital as quickly as possible Move worker to a cool or shaded area, remove clothing, wrap in wet sheet, pour on chilled water and fan vigorously Treat for shock once temperature is lowered | Take four to seven days to adjust (acclimatize) to heat Drink plenty of fluids at regular intervals Take rest breaks in a cool place Wear clothing appropriate for the conditions Follow a work/rest schedule |