



Labour Program Health-Tip

Hot Work Environment

Do you work for long periods in a hot environment such as the outdoors in the summer? Then this Health-Tip information sheet is for you.

A hot environment will increase the stress on the body as it tries to keep cool. Not only should you be monitoring the temperature, but humidity and smog levels play a significant role on how much stress is placed on the body. When combined with the physical demands of the job, heat stress can contribute to musculoskeletal injuries (MSIs) and in rare cases, heat stroke or death. The aim of the Health-Tips given here is to help you reduce or eliminate injury and manage heat stress (consult a qualified physician if you have any pre-existing medical condition).

| Health related issue: | Consider the following: |
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| <p>Heat stress – Hot environment increases demand on body as it tries to cool your core temperature.</p> <ul style="list-style-type: none"> ▪ Will increase physical and mental fatigue as there is reduced blood flow to your muscles, brain and organs. ▪ Increase in perspiration will increase the risk of dehydration which will decrease muscle performance. | <ul style="list-style-type: none"> ▪ Take steps to become acclimatized to the heat: <ul style="list-style-type: none"> ○ Limit your time in a hot environment on the first day and progressively increase the exposure time over a few days, or ○ Start with decreasing the physical demands of the task while working the required amount of time in a hot environment. Progressively, increase the physical demands to a normal working day. ▪ Drink plenty of fluids, even if you are not thirsty: <ul style="list-style-type: none"> ○ For physically demanding tasks, drink at least two to four glasses of cool water an hour. ○ Drink a sports drink to replenish minerals and sodium lost due to heavy sweating. ○ Avoid or minimize consuming drinks with caffeine as it may cause your body to lose more fluids. |

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| | <ul style="list-style-type: none"> ▪ Wear light coloured (if outside), light weight, loose, and breathable clothing. ▪ Wear a hat with a brim for shade. ▪ If working outdoors, apply UV protection to exposed skin as directed. ▪ Stay in the shade as much as possible. Items such as an umbrella or tent can provide additional shade. ▪ Take breaks in a cooler area such as in the shade or in an air conditioned area. ▪ Increase the amount of breaks for physically demanding job tasks or perform during a cooler time of the day. ▪ Periodically wet your hands (dry hands before working with tools), head and/or back of neck to help cool the body. ▪ Arrange work schedules to avoid working outside during the hottest part of the day. Job rotation may be an option. ▪ Keep an eye on the weather forecast and work outside when it is cooler. ▪ Provide heat shields from sources of heat such as machinery. ▪ Provide ventilation to promote air circulation and/or cooler air (HVAC, fans, open windows, open doors). |
| <ul style="list-style-type: none"> ▪ Hand Grip – tools or items are difficult to grip due to perspiration <ul style="list-style-type: none"> ○ Requires an increase in grip strength which will facilitate fatigue in hands | <ul style="list-style-type: none"> ▪ Reduce slipping of hands by using items such as anti-slip gloves. ▪ Maintain the handle of tool in good condition. ▪ Frequently dry hands and tools. ▪ Improve the grip on items being lifted by adding assistive devices such as lifting straps. |
| <ul style="list-style-type: none"> ▪ Eye strain – Working in an environment with bright lights, such as a sunny day, will increase eye strain and result in increased fatigue. | <ul style="list-style-type: none"> ▪ Wear proper eye protection, if outside use glasses with 100% UV protection. |

All employees are required to be educated on potential hazards in their work place and emergency procedures in response to heat stress should be in place. Pay attention to signs and symptoms in yourself and co-workers:

- When working in a hot environment for long periods, early signs and symptoms are warning signs to potential serious health issues such as dehydration, heat exhaustion, heat stroke, and in rare instances, death. Look out for these signs and symptoms and do not ignore them!:
 - Very itchy red bumpy rash (signs of heat rash)
 - Painful red or blistering skin and peeling skin (signs of severe sunburn)
 - Onset of sudden cramps either at work or at home
 - Heavy sweating, weak pulse, feeling tired, faint, and weak, feeling nauseous, skin is pale or flush, and headaches (signs of heat exhaustion)
 - Pulse is strong and rapid, breath is shallow and rapid, headaches, hot and dry skin (not sweating), feeling dizzy, feeling nauseous, feeling confused (signs of heat stroke)

Employers under Federal Jurisdiction have an obligation to assess the hazards in the work place. Contact an HRSDC Labour Program District Office at 1-800-641-4049 if you have any questions.