Preventing Heat Stress at Work

WorkSafe BC

WORKING TO MAKE A DIFFERENCE

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About WorkSafeBC

WorkSafeBC (the Workers' Compensation Board) is an independent provincial statutory agency governed by a Board of Directors. It is funded by insurance premiums paid by registered employers and by investment returns. In administering the *Workers Compensation Act*, WorkSafeBC remains separate and distinct from government; however, it is accountable to the public through government in its role of protecting and maintaining the overall well-being of the workers' compensation system.

WorkSafeBC was born out of a compromise between B.C.'s workers and employers in 1917 where workers gave up the right to sue their employers or fellow workers for injuries on the job in return for a no-fault insurance program fully paid for by employers. WorkSafeBC is committed to a safe and healthy workplace, and to providing return-to-work rehabilitation and legislated compensation benefits to workers injured as a result of their employment.

WorkSafeBC Prevention Information Line

The WorkSafeBC Prevention Information Line can answer your questions about workplace health and safety, worker and employer responsibilities, and reporting a workplace accident or incident. The Prevention Information Line accepts anonymous calls.

Phone 604 276-3100 in the Lower Mainland, or call 1 888 621-7233 (621-SAFE) toll-free in British Columbia.

To report after-hours and weekend accidents and emergencies, call 604 273-7711 in the Lower Mainland, or call 1 866 922-4357 (WCB-HELP) toll-free in British Columbia.

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Many publications are available on the WorkSafeBC web site. The Occupational Health and Safety Regulation and associated policies and guidelines, as well as excerpts and summaries of the *Workers Compensation Act*, are also available on the web site: WorkSafeBC.com.

Some publications are also available for purchase in print:

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Introduction

Many jobs require working in hot environments, both outdoors and indoors. Working in the heat and doing heavy physical work can affect the body's cooling system. If the body is unable to cool itself, a worker can experience heat stress. If heat stress is not recognized and treated in the early stages, more serious and even fatal conditions may quickly develop.

Workers who are required to work in hot conditions must be adequately prepared to deal with heat stress. Outdoor work activity often increases during the hot summer months, particularly in construction, roofing, forestry, forest fire fighting, and road construction. Indoor work activities in hot environments expose workers to heat year-round. These include working in pulp and paper manufacturing, industrial laundries, bakeries, steel manufacturing and fabricating, boiler rooms, and working near cement kilns. Workers exposed to hot environments must be trained to prevent heat stress and to recognize the early symptoms of heat stress in themselves and co-workers.

Heat stress can result in a range of problems from skin rashes and light-headedness to convulsions and unconsciousness. Early symptoms of heat stress — such as excessive fatigue, lethargy, irritability, lack of co-ordination, and altered judgment — can result in serious accidents. Unless treated promptly, these symptoms can rapidly develop into serious conditions, including convulsions and unconsciousness.

This booklet provides a basic overview of risk factors that increase the chances of suffering from heat stress, how to recognize and treat heat stress, and how to prevent heat stress. If you work in a hot environment, this booklet contains information essential to your health and safety.

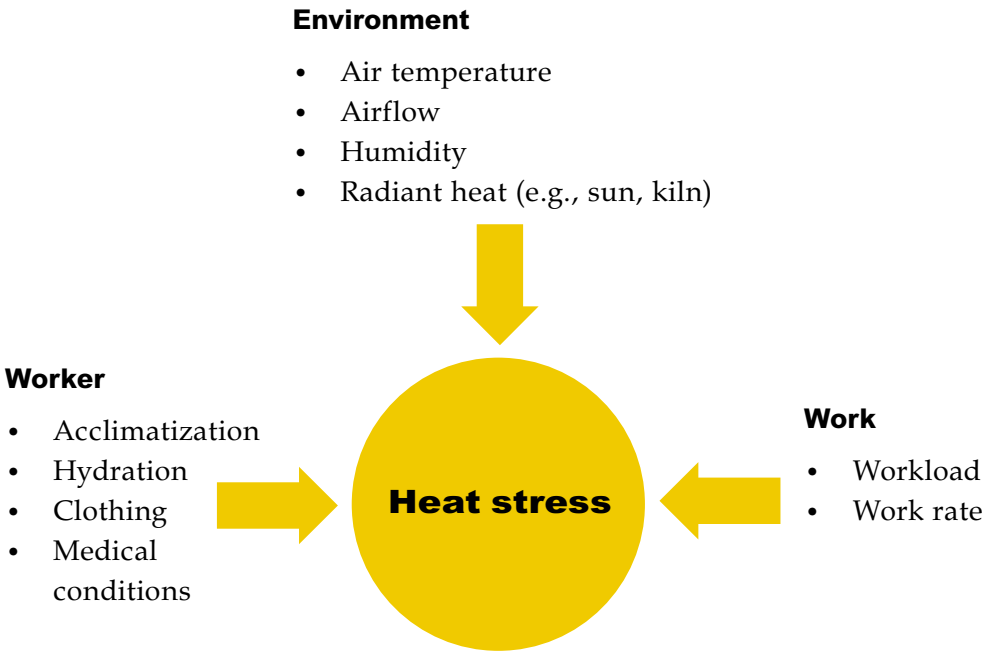
What is heat stress?

Human bodies naturally maintain temperatures between 36°C and 38°C. When the body temperature rises above this range, the body will react to get rid of the excess heat. However, if the body continues to gain heat faster than it can get rid of it, the body temperature increases and the person experiences *heat stress*. Health problems that result from heat stress are known as *heat disorders*. Heat disorders occur most often when heavy physical work is done in hot, humid environments and when the body consequently loses too much fluid and salt as sweat.

If the body is unable to cool itself, a worker can experience heat stress.

Many variables contribute to heat stress. To prevent heat stress, workers and employers must be able to identify all sources of heat and understand how the body removes excess heat.

Primary factors contributing to heat stress



Sources of heat

The body can gain heat in two ways: it can generate heat itself through work activity, and it can absorb heat from the environment. Both work activity and the environment are important sources of heat, and sometimes the work activity itself can be the main source of heat stress. Cases of heat stress have been reported when the air temperature was relatively low but the physical activity level of the work was very high.

Heat from activity

The amount of heat generated by the worker (internal heat) depends on the workload (the level of physical activity). The following table gives some examples of light, moderate, and heavy workload.

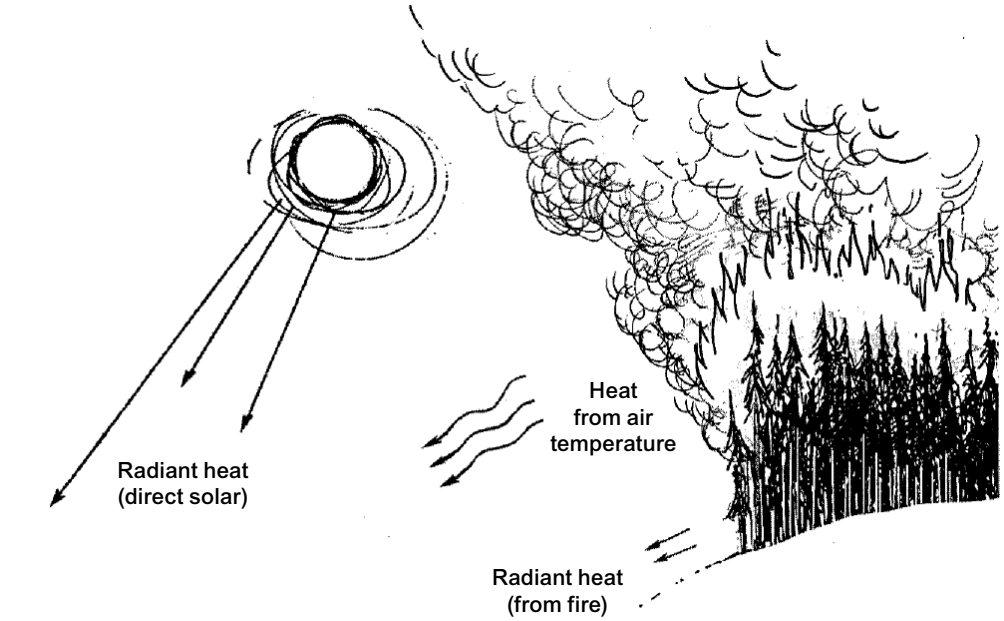
Workload	Activity	Examples
Light	Sitting, with moderate movement of arms and legs	Desk work; typing; driving in light traffic
	Standing, doing light work, with mostly arm movement	Assembly-line work
	Casual walking	Supervising a worksite
Moderate	Brisk walking	Delivering mail
	Sitting, with vigorous arm and leg movement	Driving heavy machinery; industrial cleaning
	Standing, doing light to moderate work, including some walking	Picking fruit and vegetables
	Moderate lifting or pushing	Warehouse work; loading and unloading of trucks
Heavy	Construction tasks	Sawing; planing; digging; shovelling; sledgehammer work; roofing
	Intermittent heavy lifting, pushing, or pulling	Restocking shelves; asbestos removal
	Climbing stairs with heavy gear	Firefighting

Note: These activities do not take into account heat from the environment or protective clothing.

Heat from the environment

The amount of heat gained from the environment (external heat) depends on the surrounding air temperature, the amount of air movement, and any radiant heat. Some examples of radiant heat sources are heaters, boilers, fires, and sunlight. The addition of heat from radiant sources can cause overheating even when the air temperature is not high.

This illustration shows examples of heat sources.



Removal of heat from the body

The body can usually get rid of excess heat, but how much heat is removed depends on several factors such as surrounding air temperatures, humidity, air flow, clothing, and personal risk factors (see pages 7–9). If one or more of these factors make it difficult for the body to get rid of excess heat, heat disorders may develop.

The body has two main ways to get rid of excess heat: by increasing blood flow to the skin and by sweating.

Increasing blood flow

The bloodstream takes excess body heat to the surface of the body — that is, to the skin. When the air is cooler than the skin, heat is transferred to the surrounding air. This process is known as simple heat exchange by convection. Blood flow increases as excess body heat increases. Increased blood flow to the skin often causes redness in the face or a flushed appearance.

In hot weather, shaded areas can provide much cooler air than those in direct sun. Working or resting in shaded areas allows the body to get rid of excess heat by transferring it to the surrounding air. If a person is very hot, taking a cool shower can further speed cooling by transferring body heat to the cooler water.

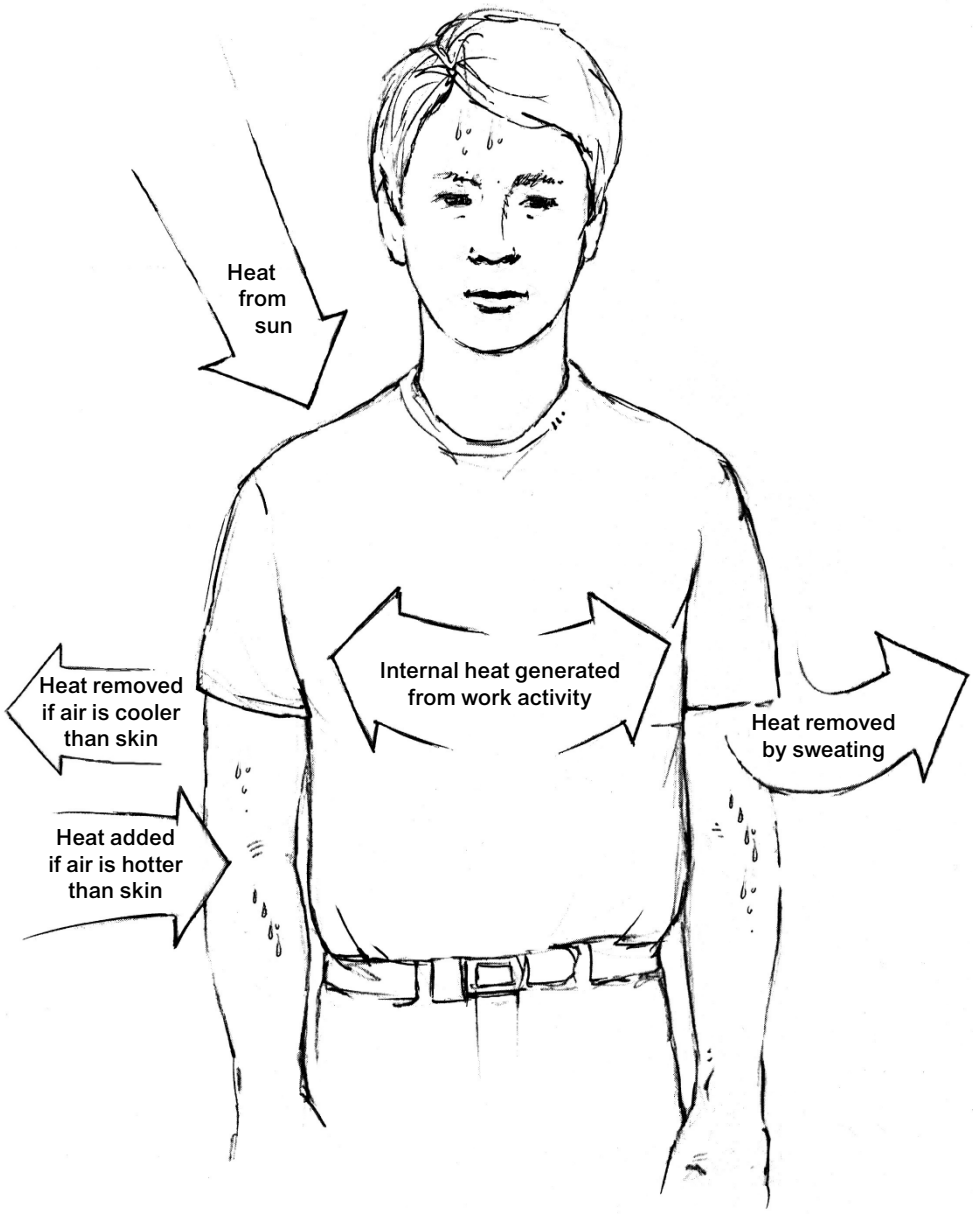
Sweating

When the body gets hot, the brain tells the body to sweat. Sweating itself does not cool the body; the cooling effect occurs when sweat evaporates from the skin. At air temperatures over 35°C, when the air is hotter than the skin, sweating becomes the most effective way for the body to cool itself.

The amount of sweat that evaporates determines the amount of cooling provided to the body. Therefore, any factor that affects sweating or the evaporation of sweat will also affect the body's ability to cool itself by sweating. Individual workers' ability to sweat can be reduced by factors such as not being properly acclimatized to a hot environment, having a skin condition that limits sweating, using a medication that limits sweating, and not drinking enough fluids. Evaporation of sweat is affected

by humidity, airflow, and the type of clothing worn. Low humidity and high airflow increase evaporation, whereas high humidity and protective clothing are likely to reduce evaporation. Although protective clothing protects workers from other hazards, it can contribute to heat stress.

This illustration shows the three main sources of heat and the two main ways heat is removed from the body.



Heat rash

Heat exposure can cause a rash or make existing skin problems worse. People working in hot, humid conditions may develop a rash that is often accompanied by intense itching spasms and prickly sensations. This is also known as prickly heat. Heat rashes are most likely to occur in areas where clothing traps hot, humid air next to the skin.

Prevention

- Avoid repeated exposure to heat.
- Change clothing often when sweating.
- Wear clean, light-coloured, loose-fitting clothing made of breathable fabric.

Treatment

- Leave the hot environment, preferably until the rash has healed.
- Keep the affected areas clean, cool, and dry as much as possible.

Personal risk factors

Since people respond differently to heat, it is important to know the common risk factors that may increase the chance of a worker developing heat stress. The two factors that are most important in helping workers to handle heat are proper acclimatization and physical fitness. With careful planning, employers can minimize the risk of heat stress by considering the following factors.

- **Lack of acclimatization**. Conditioning of the body to a hot working environment is known as acclimatization. A person who regularly works in a hot environment will be at a lower risk of developing heat disorders than a person who does not. (Acclimatization as a key preventive measure is discussed further on pages 15–16.)
- **Poor physical fitness**. Physically fit people are generally better able to cope with heat stress and less likely to develop heat disorders. Regular aerobic activity such as walking, running, cycling, and swimming can increase a person's level of physical fitness.

The two factors that are most important in helping workers to handle heat are proper acclimatization and physical fitness.

- **Obesity**. Excess fat provides increased insulation, which reduces heat loss. People with excess weight may also generate more heat during activity.
- **Increased age**. Older workers (40 to 65 years of age) are generally less able to cope with heat. In older adults, heart function becomes less efficient, and sweating starts later and occurs at a slower rate.
- **Pre-existing medical conditions or treatments**. Some common medical conditions and treatments can decrease a person's ability to cope with heat stress. For example, heart problems and treatments such as low-salt (low-sodium) diets weaken the body's ability to efficiently remove excess heat. Heart disease can also be aggravated by heat. Other conditions that may increase the risk of heat disorders include diabetes mellitus, cystic fibrosis, and hyperthyroidism. If there is any doubt whether an employee is medically able to work in a hot environment or to do heavy work, seek medical advice from an occupational health professional.
- **Short-term disorders and minor illnesses**. Feverish illnesses, diarrhea, and vomiting can all cause excess loss of fluids, which may decrease a person's ability to cope with heat. Workers who feel unwell should not work in hot conditions until they feel well again. Sleep deprivation can also increase the risk of heat stress.
- **Chronic skin disorders**. Rashes, dermatitis, healed burns, and other skin conditions that involve large skin surface areas may limit the body's ability to sweat properly. Skin problems can also worsen when exposed to heat.
- **Use of medication**. Some medications that may cause problems when working in heat stress conditions include:
  - Anticholinergic drugs
  - Antihistamines
  - Antipsychotic phenothiazines
  - Beta blockers
  - Calcium channel blockers
  - Cyclic antidepressants
  - Diuretics
  - Lithium
  - Monoamino oxidase inhibitors

This list is not complete. People who work in heat stress environments should discuss the potential side effects of their medications with their own physician.

- **Alcohol and drugs**. Alcohol intake increases water loss, and can cause even acclimatized workers to become dehydrated. Some street drugs increase internal body heat and decrease the ability to lose heat.
- **Previous heat stroke**. Workers who have previously suffered from heat stroke are at increased risk for recurrence.

Workers should be aware of early signs and symptoms such as excessive sweating, dizziness, and nausea. ***If heat stress is not recognized and treated in the early stages, it can have serious effects on the body, such as heat cramps, heat exhaustion, or heat stroke, which can be life-threatening.***

Heat cramps

Heat cramps are painful muscle cramps caused by losing too much salt through sweating; they are usually the result of heavy exercise or physical work in a hot environment. Heat cramps usually occur in the muscles that have been used the most strenuously, such as those in the legs and abdomen. The cramps typically occur late in a workday or after the muscles have cooled (for example, during a shower after work).

Heat cramps are cured only after the lost salt has been replaced.

It is important to distinguish heat cramps from the more common cramps that occur during strenuous work. Common cramps will be cured with rest and massage. Heat cramps, in contrast, are cured only after the lost salt has been replaced.

Signs and symptoms

- Muscular pain or spasms
- Excessive sweating

Treatment

- Move the worker to a cooler environment; if possible, lay the worker down, and remove or loosen tight-fitting clothing.
- Cool the worker by sponging with cool water and fanning. Take care not to cool the worker too much. If the worker begins to shiver, stop cooling.
- If the worker is fully alert and not nauseated, provide oral fluids. Juice, non-caffeinated soft drinks, commercially available oral rehydrating solutions (sport drinks), or a solution of salt water (1 teaspoon of salt in one-half litre of water) are best. Alcoholic and caffeinated beverages are not recommended.

More importantly, continued work under conditions of heat stress can lead to heat exhaustion, a more serious disorder (see following page). If a worker has cramps along with other symptoms such as fatigue, weakness, headache, gastrointestinal illness, or changes in mental state, then the worker may already be suffering from heat exhaustion or heat stroke.

Heat exhaustion

Heat exhaustion is caused by depletion of both water and salt, due to sweating during prolonged periods of exertion, when fluid replacement has not been sufficient to match losses. It is more serious than heat cramps, and the worker will have a number of other signs and symptoms.

Signs and symptoms

- Shallow respiration
- Increased respiratory rate
- Weak rapid pulse
- Cool, pale, clammy skin
- Sweating
- Weakness, fatigue, dizziness
- Headache and nausea
- Fainting
- Muscle cramps

Signs and symptoms are the same as mild shock. The presence of sweating is an important finding, because it is often the only way to differentiate heat exhaustion from the life-threatening heat stroke. If untreated, heat exhaustion may progress to heat stroke. Workers suffering from heat exhaustion should be transported to medical aid.

Treatment

- Move the worker to a cooler environment; if possible, lay the worker down, and remove or loosen tight-fitting clothing.
- Cool the worker by sponging with cool water and fanning. Take care not to cool the worker too much. If the worker begins to shiver, stop cooling.
- If the worker is fully alert and not nauseated, provide oral fluids. Juice, non-caffeinated soft drinks, commercially available oral rehydrating solutions (sport drinks), or a solution of salt water (1 teaspoon of salt in one-half litre of water) are best. Alcoholic and caffeinated beverages are not recommended.

In most cases, the patient's symptoms will improve dramatically within 30 minutes. These patients should still be transported to medical aid.

Heat stroke

Heat stroke occurs when the body's mechanisms for heat dissipation are overwhelmed and fail. Heat stroke is a life-threatening condition in which the body's core temperature rises above 41°C. At core body temperatures over 41°C sweating stops, and the body is unable to get rid of heat, causing body temperature to continue to rise. The person's mental functions may become disturbed. Without immediate first aid, heat stroke can result in loss of consciousness, permanent brain damage, and death.

Heat stroke is a medical emergency! Notify the first aid attendant, call 911, and/or arrange for immediate transportation to medical aid.

Heat stroke can come about relatively quickly or may be preceded by heat exhaustion (see page 11).

Signs and symptoms

- Hot, dry, flushed skin
- Absence of sweating
- Agitation, confusion
- Decreased level of consciousness
- Headache
- Nausea and vomiting
- Seizures
- Increased respiratory rate
- Irregular pulse rate
- Shock
- Cardiac arrest

The presence of hot, dry, flushed skin without any evidence of sweating is one of the important findings that differentiate heat stroke from other heat-related illnesses. Heat stroke can occur quickly and without warning. People should not work alone or unsupervised in conditions that have the potential to cause heat stress illnesses.

Treatment

- Maintain airway, breathing, and circulation as required.
- Move the worker to the coolest place available.
- Lay the worker down supine (on the back) unless the worker is actively vomiting or having a seizure. In this situation, place them in the ¾ prone or lateral (on the side) position.

- Remove all outer clothing, and apply cold water to the worker by either dousing or applying wet cool sheets. Spraying or sponging the entire body with cold water is also effective. Fanning will also help.
- If the worker is fully alert and not nauseated, provide oral fluids. Juice, non-caffeinated soft drinks, commercially available oral rehydrating solutions (sport drinks), or a solution of salt water (1 teaspoon of salt in one-half litre of water) are best. Alcoholic and caffeinated beverages are not recommended.
- Transport the worker to medical aid and continue to cool during transport.

Employers must conduct a heat stress assessment where a worker is, or may be, exposed to environmental conditions that could cause heat disorders. If a worker is exposed to such conditions, employers must develop and implement a heat stress exposure plan. As part of this plan, employers, supervisors, and workers must have a basic understanding of how heat affects the body if they are to prevent heat stress.

Employers must provide adequate training and education to all workers at risk for heat stress, their immediate co-workers, and their supervisors. Training should include the following information:

Employers must provide adequate training and education to all workers at risk for heat stress, their immediate co-workers, and their supervisors.

- How heat stress develops
- Personal risk factors
- How to prevent heat stress
- How to recognize symptoms
- What a worker should do if he or she, or a co-worker, develops a heat disorder

It is important for workers to recognize the signs and symptoms of the early stages of heat stress. If workers are able to remove themselves or co-workers from a hot environment in the early stages, more serious illness can be avoided. Workers should also be able to recognize the range of symptoms for different stages of heat stress in themselves and co-workers. However, since a decrease in alertness is one of the early symptoms, workers may not be able to recognize the development of heat stress in themselves.

Heat stress control plan

If a worker is exposed to environmental conditions that could cause heat disorders, the employer must implement **engineering controls** to reduce exposure. If engineering controls are not practical, the employer must provide **administrative controls** (such as an appropriate work-rest cycle) or **personal protective equipment** if the equipment provides protection equally effective as administrative controls. Combinations of various control methods often provide the most effective protection from heat stress.

Engineering controls

Engineering controls are the most effective and preferred means to reduce excessive heat exposure. The following are some examples of engineering controls.

- Reduce worker activity through automation or mechanization.
- Cover or insulate hot surfaces to reduce radiant heat.
- Shield workers from radiant heat.
- Provide air conditioning or increased ventilation to remove hot air.
- Provide fans for spot cooling. (Caution: Where the temperature of the surrounding air is above 35°C, using fans may actually increase workers' risk of heat stress. See "Working in temperatures above 35°C" on page 19 for more information.)
- Reduce the humidity using air conditioning and dehumidifiers, or reduce the sources of moisture (for example, open water baths, drains, leaky steam valves).

Administrative controls

If engineering controls are not practicable — which is often the case when work is done outdoors during the summer months — administrative controls must be considered. The following are some common administrative controls used to reduce the risk of heat stress.

Acclimatize workers

The body will adapt to working in hot environments if it is given a chance to gradually get used to the new conditions. This process, known as acclimatization, allows the body to modify its own functions to better cope with heat stress and to remove excess heat more efficiently.

Acclimatization has three main benefits:

- Enhanced cardiovascular fitness — both heart rate and core body temperature stay lower when working in a hot environment.
- Enhanced sweating — the person sweats sooner and sweats more, which has a cooling effect on the body.
- Lower salt content in sweat — this helps to prevent salt depletion. (Caution: There can still be significant salt loss, because the total volume of sweat increases.)

In general, acclimatized workers will be able to work in hotter work conditions and for longer periods than unacclimatized workers.

Acclimatization takes time — full acclimatization is usually achieved after seven continuous days of gradual exposure but can sometimes take as long as three weeks. The amount of time required for acclimatization is affected by the same personal risk factors that put individuals at risk for heat stress (see pages 7–9). For example, an older worker with cardiovascular disease may need a longer and more gradual acclimatization schedule than a young, physically fit worker with no known illnesses. Acclimatization schedules will also vary according to the level of physical work required and the conditions of the surrounding environment.

Acclimatize your body (gradually expose yourself to heat and work).

The benefits of acclimatization are lost more quickly than they are gained. In fact, some loss will take place over a weekend away from work. For this reason, the first workday after a break should require less demanding work than other days of the week. After seven consecutive days away from work in a hot environment, a worker is considered to be unacclimatized. That worker should begin the acclimatization process from the beginning.

There are some general recommendations for acclimatization schedules. An average worker who has not previously worked in a hot environment can start at 20 percent of the full workload on the first day and increase the workload by 10–20 percent each day. If workers are returning to work in hot conditions after being away more than seven consecutive days, they could start at 50 percent of the workload on the first day and increase the workload by 10–20 percent each day. During the acclimatization period, it is important to gradually increase the time spent working in the heat at each workload level.

Supervise workers

Workers should not work alone in conditions where heat stress is possible. They should be closely supervised or work in pairs or groups to ensure that heat disorders are identified and treated as soon as possible. Supervisors need to ensure that there is adequate first aid coverage and must establish emergency procedures to deal with serious conditions such as heat exhaustion and heat stroke.

Determine appropriate work-rest cycles

Appropriate work-rest cycles should be determined and scheduled to allow adequate time for workers' bodies to cool. Workers cannot rely on their bodies to indicate when a rest period is needed. By the time a worker feels ill, it may be too late.

It is important to have cool areas, such as shaded or well-ventilated areas, for breaks and rests. Showering or soaking in cool water, when possible, can cool the body very quickly.

Schedule work to minimize heat exposure

Workers should not work alone in conditions where heat stress is possible.

Common sense should be used to schedule and organize work to minimize heat exposure.

- Schedule the hardest physical tasks for the coolest part of the day.
- Rotate work activities or use additional workers to reduce heat exposure for each member of the work crew.
- Allow for slower-paced work during the hottest periods of the day.
- Move or relocate the work away from direct sunlight or radiant heat sources whenever possible.
- For outside work, schedule routine maintenance and repair work during cooler seasons of the year.
- For inside work, schedule routine maintenance and repair work for time when hot operations are shut down.

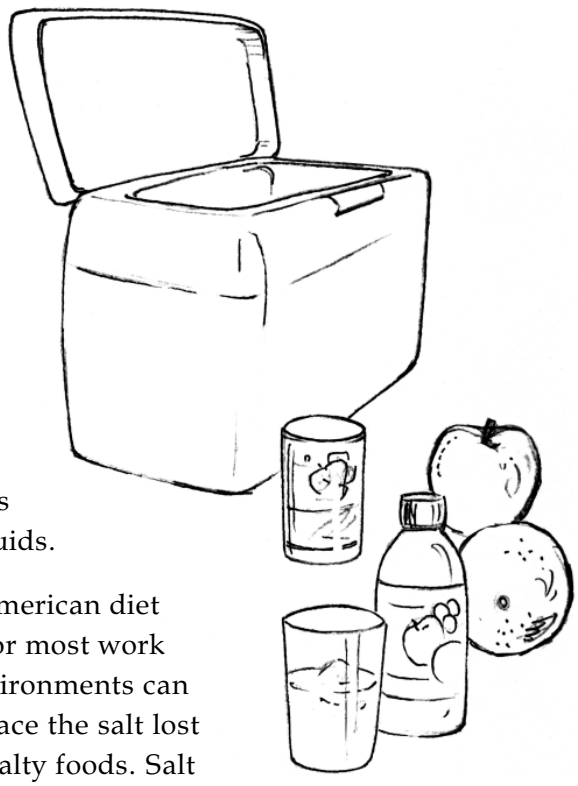
Drink water

The body naturally sweats to cool itself. Sweating can use up a significant amount of fluid, which must be replaced continuously throughout the workday. If fluid is not regularly replaced, a worker will become dehydrated, increasing his or her risk for heat stress.

It is important to drink water (without added salt) ***before*** as well as during and after work in a hot environment. As a starting point, workers should drink about two glasses (½ litre) of water before starting work in a hot environment and one glass every 20 minutes throughout the workday. In very hot environments or where sweating is profuse, even more water may be required. Workers must not wait until they are thirsty to replace fluids.

To replace the salt lost by sweating, workers can eat salty foods. Salt tablets are not recommended.

Employers are required to provide an adequate supply of cool drinking water close to the work area for workers exposed to heat. Suitable drinks include tap water, mineral water, and fruit juices. Fluids do not need to be iced; cooled drinks between 10°C–15°C are adequate. Fluids that contain caffeine or alcohol are not suitable because they increase dehydration. Eating fresh fruits will also help to replace lost fluids.



Although the average North American diet usually contains enough salt for most work conditions, working in hot environments can cause salt deficiencies. To replace the salt lost by sweating, workers can eat salty foods. Salt tablets are not recommended.

Wear cool clothing

Clothing suitable for hot conditions and heavy work helps the body to cool itself. Loose-fitting clothes made from fabrics such as cotton and silk allow air to pass through. Air passing over the skin will help cool the body by evaporating the sweat from the skin.

For work outside in the sun, light-coloured clothing reflects the heat better than dark-coloured clothing and helps to keep the body cool. Large-brimmed hats worn on hot sunny days provide shade for the head, face, and neck area. If safety headgear such as a hard hat is required, attaching a piece of light-coloured fabric to the back and side rim of the hat will provide shade for much of the neck area. Items attached to hard hats must not affect the integrity of the hard hat — for example, do not use glue or drill holes.

Wool clothing can help to minimize heat stress for work near radiant heat sources (such as boilers and kilns) and where the air temperature is higher than 35°C. Wool clothing deflects radiant heat away from the skin while allowing sweat to evaporate. In very hot climates with a lot of direct sun exposure, outdoor workers often wear wool hats to keep cool.

Wear clean, light-coloured, loose-fitting clothing made of breathable fabric.

Working in temperatures above 35°C

A thin layer of air is always trapped next to the skin. When the air temperature is greater than the skin temperature (skin temperature is generally about 35°C), this trapped layer of air protects the skin from direct contact with the hotter air in the environment. Air movement from fans or wind at these high temperatures can strip away this protective layer of air and cause the body to be heated by the warmer air. This is known as convective heating. (This is basically how convection ovens work to cook food faster.) Wearing a light layer of loose-fitting clothing helps to maintain this protective layer of air. This is why in hot desert climates people cover themselves in clothing from head to toe.

Personal heat-protective clothing

Some work environments may be so hot that even the most suitable and acclimatized workers will be able to work only for short periods of time or only with the use of personal temperature-controlled equipment.

In extremely hot environments — for example, near kilns — specialized heat-protective clothing may be required. This type of protective clothing can also be used in moderately hot environments to allow longer work periods between breaks. A proper assessment of all heat sources is required to determine which, if any, specialized clothing would be effective in reducing heat stress. Specialized heat-protective clothing should be worn only by properly trained workers following the manufacturer's instructions. Heat-protective clothing may not provide a complete solution to the problem of heat stress, so precautions such as close supervision should be maintained until the effectiveness of the clothing is known.

There are two main types of specialized heat-protective clothing: temperature-controlled clothing and anti-radiant heat or reflective clothing.

Temperature-controlled clothing

Various types of temperature-controlled clothing are available, including air-cooled suits, water-cooled suits, and ice-cooled waistcoats. There are some practical limitations on the use of such equipment, especially when access to the working area is restricted.

Anti-radiant heat or reflective clothing

Anti-radiant heat or reflective clothing may be necessary where there is excessive radiant heat from a hot surface that cannot be otherwise covered or shielded (for example, from a boiler). This clothing is available in different forms, varying from aprons and jackets to suits that will completely cover the worker from the neck to the feet. Anti-radiant heat and reflective clothing protects only against radiant heat and provides little or no protection from high air temperatures unless the clothing is also temperature-controlled.

Key points to prevent heat stress

1. Learn to recognize the signs and symptoms of heat stress in yourself and co-workers. Avoid working alone.
2. Acclimatize your body (gradually expose yourself to heat and work).
3. Drink plenty of water (one glass every 20 minutes). Avoid caffeine, alcohol, and drugs.
4. Wear clean, light-coloured, loose-fitting clothing made of breathable fabric.
5. Take rest breaks in a cool or well-ventilated area. Take more breaks during the hottest part of the day or when doing hard physical work. Allow your body to cool down before beginning again.
6. Schedule work to minimize heat exposure. Do the hardest physical work during the coolest part of the day.

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1 800 663-3871
Fax 250 615-6633

Victoria
4514 Chatterton Way V8X 5H2
Phone 250 881-3418
1 800 663-7593
Fax 250 881-3482

Head Office / Richmond
Prevention Information Line:
Phone 604 276-3100
1 888 621-7233 (621-SAFE)
Administration:
6951 Westminster Highway
Phone 604 273-2266
Mailing Address:
PO Box 5350 Stn Terminal
Vancouver BC V6B 5L5

After Hours
Health & Safety Emergency
604 273-7711
1 866 922-4357 (WCB-HELP)

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