

Heat Related Illness: Signs, Treatment and Prevention



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During very hot and extreme heat conditions, the community is at greater risk of health problems. These can be either specific heat-related illnesses or exacerbation of pre-existing medical problems.

What are extreme heat conditions?

People are most at risk during heat waves and when the temperature hovers about 5°C or more above average for three or more days. The risk is increased when elevated temperatures are combined with increased humidity.

Who is most at risk?

Older people, particularly the frail and those living alone, and those living in non-air conditioned environments are most vulnerable to heat stress. Also at risk are infants, pregnant women and nursing mothers. People with existing medical conditions, such as heart disease, and those on some medications, in particular fluid tablets and those on fluid restricted diets, are also at greater risk. People who are on medications for mental health conditions may be at greater risk as may be people who use recreational drugs.

What is heat related illness?

Heat related illness can occur when the body is unable to cool itself adequately.

The body normally cools itself by sweating. In some situations, sweating isn't enough and body temperature rises rapidly. This rise can be associated with swelling of the hands and feet, maybe a mild heat rash or cramps; through heat exhaustion to the more severe and potentially fatal heat stroke.

People can experience heat related illness during periods of extreme heat in summer. It can also occur in athletes or others during periods of exertion.

Heat rash: signs and treatment

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It can occur at any age, but is most common in young children.

Heat rash looks like a red cluster of pimples or small blisters. It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in the elbow creases.

The best treatment for heat rash is to move to a cooler, less humid environment. Keep the affected area dry. Dusting powder may be used to increase comfort. Avoid using ointments or creams as they keep the skin warm and moist, and may make the condition worse.

Heat cramps: signs and treatment

Heat cramps usually affect people who sweat a lot during strenuous activity. The sweating depletes the body's salt and fluid. This causes muscle cramps, which may be an early symptom of the more severe condition of heat exhaustion.

These painful cramps usually affect the abdomen, arms or legs.

If medical attention is not necessary, stop all activity and rest quietly in a cool place. Drink clear juice or a low sugar sports drink. Do not return to strenuous activity for a few hours after cramps subside. If cramps continue for more than one hour seek medical attention.

Heat exhaustion: signs and treatment

Heat exhaustion can develop over several days of extreme hot weather. It is the body's response to gradual depletion of fluid and salt due to sweating. Those most prone to heat exhaustion are elderly people, people exercising or working in a hot environment, or people with high blood pressure.

Warning signs include heavy sweating, paleness, muscle cramps, tiredness and weakness, dizziness, headache, nausea or vomiting, or fainting.

If the symptoms are severe or don't improve with treatment, or if the person has high blood pressure or heart problems, seek medical attention immediately. Otherwise, attempt to cool the person with a cool shower, bath or sponge, and rest. Give them cool non-alcoholic beverages. If possible, move the person to an air-conditioned environment. Ensure they are wearing lightweight clothing.

Heat stroke: signs and treatment

If heat stroke is suspected, call medical help immediately, as this is a life threatening emergency.

Heat stroke is the most serious heat-related illness and it can be fatal. It occurs when the body temperature rises rapidly, because the body loses its ability to sweat and is unable to cool down. The body temperature rises to 41°C or higher within 10 to 15 minutes.

Warning signs include extremely high body temperature (above 39°C); red, hot, dry skin, although in some cases sweating may still be

evident; rapid strong pulse; throbbing headache; dizziness and nausea.

While waiting for emergency medical help, get the person to a cool shaded area. Immerse the person in a tub of cool water, ensuring more than just the extremities are cooled. Monitor the body temperature and continue cooling efforts until the body temperature drops below 38°C. Do not give the person fluids to drink. If medical attention is delayed, seek further instructions from ambulance or hospital emergency staff.

Prevention is best

- drink plenty of fluids during hot weather
- increase ventilation by opening windows and using fans, however don't rely just on fans to prevent heat stroke in those at high risk
- seek air-conditioned environment if possible
- monitor those at high risk
- check elderly people twice a day
- seek your doctor's advice about predisposing medical conditions and medications
- wear light coloured, loose fitting clothing
- pace yourself
- limit strenuous outdoor activity
- stay out of the sun
- take a cool shower or bath
- take time to adjust to the environment
- never leave a child alone in a car
- avoid hot foods, alcohol, coffee and other caffeinated drinks, etc.
- monitor pets for heat stress

For further information

http://www.bt.cdc.gov/disasters/extraemeheat/heat_guide.asp

For more information, contact your local public health network



Click on the map or the links below to go to contact info

Central Public Health Unit Network servicing Brisbane Northside, Longreach, Redcliffe, Rockhampton, Sunshine Coast, Wide Bay.

For contact details go to <http://www.health.qld.gov.au/phs/cphun/>

Southern Public Health Unit Network servicing Brisbane Southside, Darling Downs, Roma, Gold Coast, South West Queensland, West Moreton

For contact details go to <http://www.health.qld.gov.au/phs/sphun/>

Tropical Public Health Unit Network servicing Cairns, Mackay, Mount Isa and Gulf, Townsville

For contact details go to <http://www.health.qld.gov.au/phs/tphun/>

For medical advice, contact your doctor, hospital or health clinic.

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