

RISK FACTORS



It doesn't have to be hot to suffer heat illness.

It can arise in cooler climates as a result of strenuous activity, carrying heavy kit or wearing protective clothing. There are many factors that can increase a person's risk of heat illness.

Lifestyle factors

Individual drive and determination
Low or reduced physical fitness
Being overweight or obese
Smoking
Alcohol within the past 24 hours
Excessive motivation (for example, in pass or fail tests)
Use of sport supplements
Use of illicit drugs

Health factors

Previous heat illness
Previous poor performance in a fitness test
Previous collapse from physical exertion
Risk of exertional collapse due to Sickle Cell Trait (ECAST)
Asthma
Recent or current illness (for example, a cold, fever or diarrhoea)
Medication (prescription or over the counter)
Recent vaccinations (for example, for COVID-19 vaccinations, personnel are recommended light duties for 72 hours if they experience any adverse symptoms)
Sunburn
Dehydration

Work factors

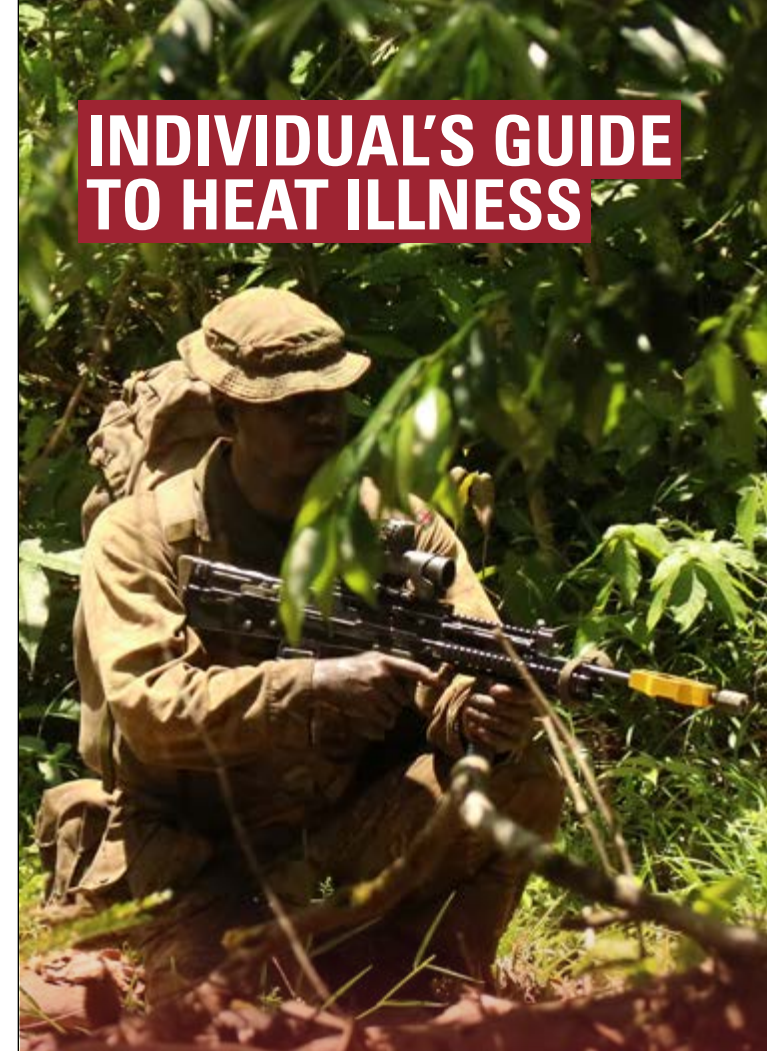
Inexperienced personnel
Not acclimatised
Long-term fatigue
Lack of sleep
Air travel within the past 24 hours
Poor nutrition or diet, or a missed meal in the previous 24 hours

HEAT ILLNESS CAN KILL

All personnel **must** raise safety concerns to the chain of command. People's responses to heat vary greatly. All personnel **must** inform the commander or manager of any physical or medical condition (for example, a known heart condition, breathing difficulties, sickle cell trait and so on).



INDIVIDUAL'S GUIDE TO HEAT ILLNESS



What is heat illness?



Heat illness is when a person becomes unwell as a result of a rise in their core body temperature.

RECOGNISE IT (signs and symptoms)



Agitation



Nausea or vomiting



Staggering or loss of co-ordination



Cramps



Disturbed vision



Confusion



Collapse or loss of consciousness (fainting)



Dizziness

PREVENT IT (don't let it happen)



Prepare correctly before an activity. This includes having the right level of fitness, sleep and nutrition.



Wear the correct kit and clothing. Take layers of clothing off before or during strenuous activity (if appropriate).



Make sure you are adequately hydrated (enough to maintain clear light-yellow urine). Hydration is essential to maximise heat loss through sweating. Make sure you drink an adequate amount of safe water before, during and after exercise in the heat. But take care to avoid overhydration and maintain salt levels.



Avoid stimulants, diuretics (caffeine), energy drinks, antihistamines, decongestants, non-steroidal anti-inflammatory drugs (NSAIDs), opioids, methylphenidate and weight-loss or other performance-enhancing supplements before and during exercise.



Avoid alcohol before exercise.



Make sure you know who the **commander** is and tell them if you or someone else feels unwell.



Cool off – pause the activity, take off a layer, find shade.

TREAT IT (basic first aid and treatment)

1 Case = more at risk.

**ACT QUICKLY...COOL NOW
THIS IS A MEDICAL EMERGENCY**

Activity

At the first sign of symptoms, do the following.



Immediately pause your activity and seek medical help. The commander will pause the activity for everybody else unless the chain of command has previously given authorisation for the activity to continue if there is a suspected case of heat illness.



While exercising, some fatigue and muscle discomfort is normal and does not need to be reported.



You **must** report any discomfort or physical distress that is not normal, or if you have a current illness, and **must** ask for medical attention.



If you have concerns about anybody else, you **must** report it.



TREAT IT (basic first aid and treatment)

Treatment

If heat illness is suspected, you should treat the casualty as follows.



Move the casualty to the shade and start to cool them down.



Strip off heavy clothing and boots, raise their feet if they are conscious.



Spray or drizzle water over the remaining light clothing.



Fan air over the casualty.



If the casualty is conscious, get them to drink cool water. If unconscious, carry out CABC (Catastrophic haemorrhage, Airway, Breathing and Circulation) checks.



Alert the commander or manager, if they are not already aware, and alert medical cover.



Consider evacuation – moderate and severe cases **must** be safely evacuated for professional medical care.



If the casualty recovers within a 30 minute period, they **should** be monitored for 4 hours and where operationally allowable, avoid activities that increase the risk of heat illness for a minimum of 48 hours.



For more information on heat illness see Annex A (Commander's guide to preventing heat illness) in JSP 375, Volume 1, Chapter 41.