

# Factors to consider before allowing a person to work in a **HOT ENVIRONMENT**

Prevention of dehydration – ensure that drinking water is readily available and that employees indeed drinks 600 ml of water per hour.

Restrictive clothing can be a hazard when working in hot environments.

Recent use of alcohol < 24 hours prior to shift.

Recent use of energy drinks that can lead to: Altered electrolyte levels, interference with calcium absorption, increased sweat excretion, arrhythmias, hypertension, dehydration, sleeplessness, nervousness, and in rare instances, rhabdomyolysis if consumed excessively

Is the employee declared medically fit to work in a hot environment according to the requirements of the Environmental Regulations for Workplaces of the OHS Act, i.e. a medical condition under treatment that may increase the risk of heat exposure related disease, medical history that can lead to a critical work-place reduction in heat tolerance.

Since a person with diarrhoea and / or vomiting will not necessarily report to the medical station, workers need to be trained to report these conditions to the supervisor who must then first send them for Fitness Assessment by a medical practitioner before allowing them to work in a hot environment.

What is the expected work load of the employee working in a hot environment, as heat stress can be induced by work load:

Rest – environment where the person sits whilst performing work with moderate arm movement

Light work – the person may be sitting or standing; performing light hand or arm work with occasional walking and even driving

Moderate work – the person does moderate lifting / pushing / pulling; walking at a moderate pace

Heavy work – Shovel work, digging, lifting / pushing / pulling heavy objects; walking at a fast pace

Very heavy work – very intense activity at a maximum pace

Is proper work procedures and the prevention of heat stress related diseases in place?

Is the employee fully acclimatized to heat?

Insulin dependent diabetic.

A person between the age of 50 – 65 is more susceptible to heat stroke.

Did the employee disclose all medication during the medical examination as certain medication increases the risk of heat stroke.

Body-mass index (BMI):  
A BMI of > than 30 is a risk.  
A BMI of < 16 is a risk.

Any heart disorders or history of a heart disorder.

History of heat disorders should be re-considered to be declared Fit to Work in a hot environment.

Pregnancy: An environmental temperature of > 27 °C can cause dizziness and dehydration in the pregnant women and can also have an adverse effect in the lactating mother.

Persons above 50 years of age are more susceptible to dehydration.

