

ASFM HSE TRAINING

HEAT DISORDERS

Contents

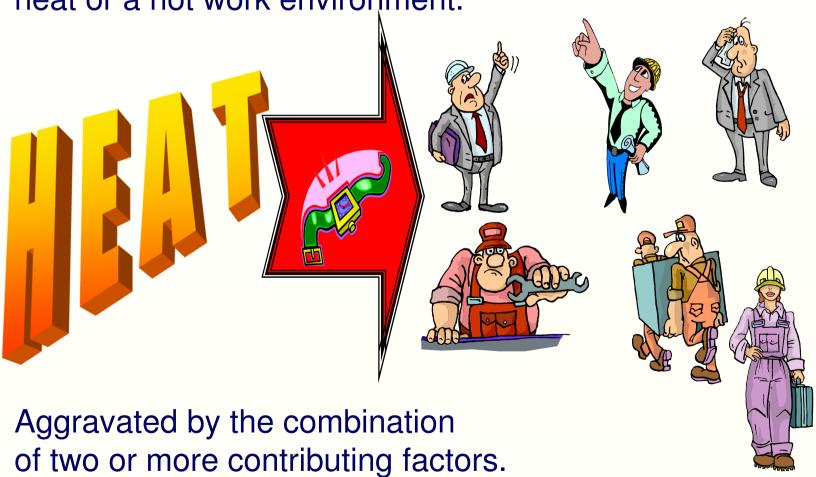


- 1. Heat Disorders
- 2. Contributing Factors
- 3. Symptoms, Prevention & Treatment
- 4. General precautions

Heat disorders



Illness mainly due to overexposure of a person to heat or a hot work environment.

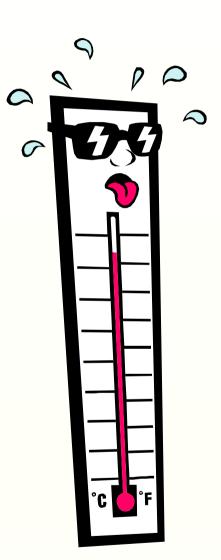


Heat disorders



Working in hot climates causes a number of disorders which are:

- Heat Rashes
- Sun burns
- Heat Exhaustion
- Sun stroke (Heat stroke)



Contributing factors



A combination of two or more of the following factors aggravate the bad effect of heat stress on a person:

- Age
- Physical condition
- Type of work
- Work environment
- Humidity

- Exposure
- Time of day
- Season of the year
- Geography
- Temperature

Age



The young and old people are more likely to suffer from heat stress.

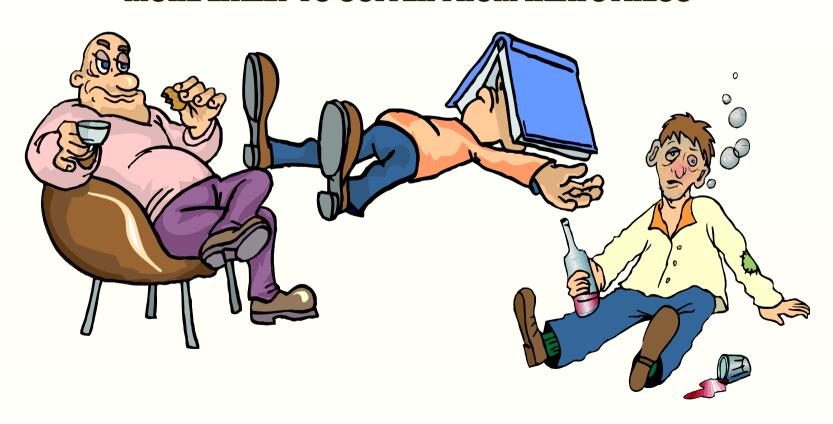




Physical condition



THE PHYSICALLY UNFIT PEOPLE ARE MORE LIKELY TO SUFFER FROM HEATSTRESS



Type of work



The people engaged in manual type of work are more likely to suffer from heat stress.



Work environment



The people working in an open area or exposed to direct sunlight, are more likely to suffer from heat stress.

Work environment



The people working near heat-generating equipment or in poorly-ventilated area, are more



Exposure



The people working continuously without rest periods, are more likely to suffer from heat stress.



Time of day



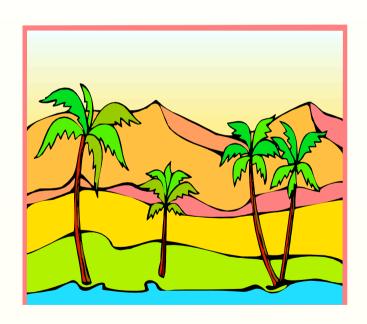
The people working in an open area between 12:30 pm and 3:00 pm, are more likely to suffer from heat stress due to the high ambient temperature.

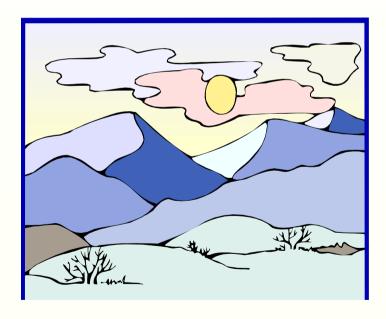


Season of the year



The people working during summer are more likely to suffer from heat stress than working during winter.

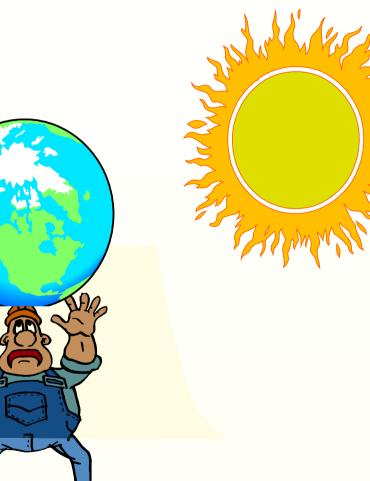




Geography



The people working in the Gulf Region are more likely to suffer from heat stress than people working elsewhere.





SYMPTOMS, PREVENTION & TREATMENT

Heat rashes



SYMPTOMS

Red bumpy rash with severe itching.

PREVENTION

- Wear loose clothing (Provides ventilation to body)
- Wash regularly to keep skin clean and dry.

TREATMENT

- Change into dry clothes and avoid hot environments.
- Rinse skin with cool water.
- Consult the doctor for medication.

Sun burn



SYMPTOMS

• Red, painful, or blistering and peeling skin.

PREVENTION

- Cover skin with clothing, Avoid direct exposure to sun
- Use suntan /sun screen lotions (In case of skin allergy refer to the doctor)

TREATMENT

- Seek medical aid.
- Work in the shade.

Heat exhaustion (dehydration)



SYMPTOMS

- Heavy sweating, cool moist skin, weak pulse.
- Nausea
- Pale skin
- Person is tired & weak
- Very thirsty, or is panting or breathing rapidly.



Heat exhaustion (dehydration)



PREVENTION

- Reduce activity levels and/or heat exposure in summer.
- Drink fluids regularly.
- Take regular rest breaks.
- Avoid hefty work in the afternoon.
- Avoid the intake of Alcohol / cigarettes



Heat exhaustion (dehydration)



TREATMENT

- Get medical aid.
- Move the person to a cool shaded area
- Loosen or remove excess clothing
- Provide cool water to drink (salted if possible)
- Fan and spray with cool water

NOTE: If heat exhaustion is not treated & work is continued it can lead to heat stroke (Which can kill).



Heat stroke (sun stroke)



Heat stroke can be lethal Immediately seek medical care

SYMPTOMS

- High body temperature (over 41°C) and any one of the following:
- Person is weak, confused, upset or acting strangely
- Hot, dry, red skin (Sweating stops)
- A fast pulse
- A headache or dizziness.
- In later stages, a person may pass out and have convulsion.

PREVENTION

- Reduce activity levels and/or heat exposure.
- Drink fluids regularly.



Heat stroke (sun stroke)



PREVENTION (Cont...)

- Take regular rest breaks
- Plan heavy work in cooler parts of the day
- Workers should check on each other to help spot the symptoms which often precede heat stroke.

TRAETMENT

- CALL AMBULANCE. This condition can kill a person quickly.
- Remove excess clothing
- Fan and spray the person with cool water
- Offer sips of cool water if the person is conscious.

Summary



To stay away from heat disorders remember to:

- Drink plenty of water
- Take regular rest breaks



- Avoid using alcohol & cigarettes
- Drink Juices/electrolytes instead of tea & coffee.
- Avoid exposure to sudden temperature changes
- Call an Ambulance immediately if a person faints

