

The weather is of influence on the safety on board. The heat and sun are of influence on the crew.

Because of the heat, the blood vessels dilate in order to release heat so that the body can cool down, the skin can become red. In addition, the body starts to sweat, the sweat evaporates and cools down the body.

Next to heat radiation the sun also gives harmful UV-radiation that after long term exposure can cause skin diseases like skin cancer. In addition, working unprotected in the sun can lead to heatstroke. Below you will find a number of dangers and measures that can be taken when working in the heat.



## POSSIBLE DANGERS

- Overheating/ heat exhaustion.
- Sunstroke/ heat stroke.
- Heat spasm. Due to the sweating, a lot of salt is lost, and muscles can have a shortage.
- Fatigue or loss of concentration (with prolonged exposure to heat). This can lead to a higher risk of accidents.
- Surfaces can heat up by the sun and even cause for burns, especially dark and bare metals like aluminum.
- Burns through UV radiation.
- Eye damage through UV radiation.
- Dehydration because of moisture loss (sweating).
- Extreme high temperatures in the engine room.
- Heat stroke because of a sudden change in temperature for example when leaving a acclimated room.
- Skindiseases like skin cancer
- Incidents because PPE's are not worn.

## MEASURES

- Pay attention to the weather forecasts.
- Cover head, neck and skin as much as possible.
- Make sure there is enough ventilation in the engine rooms.
- Alternate the crewmembers as much as possible when they work in the sun or in rooms with high temperatures.
- Make sure there is enough rest, the so-called 'cool-down breaks'.
- Wear sunglasses against bright sunlight.
- Try to plan physical heavy work outside of the hottest time of day (between 1 and 3pm). Use sunscreen with a high factor frequently.
- Do not let flammable products like turpentine or thinner stand in the sunshine. Also rags with these liquids can ignite when temperatures are high.
- When possible, try to create shade above the workplace by means of a parasol or by stretching a sail.
- Drink enough water even when you are not thirsty (the body will only indicate 'thirst' later). Avoid drinking caffeine, caffeine has a dehydrating effect.
- Make sure you get enough salt.
- Make sure that the temperature difference between the air-conditioned rooms and outside does not exceed 5 to 7 degrees celcius. This prevents the blow of heat as you leave the room.
- Do not ignore body signs of a sunstroke such as itching, rashes, dry skin, cramps, headaches, nausea.
- Keep an eye on each other.
- Make use of sun protection in the accommodation and wheelhouses as much as possible and ensure adequate ventilation.
- Rotate your tasks as much as possible.
- In extreme circumstances, use a cooling jacket to keep the body temperature under control.
- **Always wear your PPE**

## References/Sources:

[http://www.ccohs.ca/oshanswers/phys\\_agents/max\\_temp.html](http://www.ccohs.ca/oshanswers/phys_agents/max_temp.html)