

## What sun protection is effective?

- ▶ Wear appropriate body-covering clothing, made of cotton, for example. Where necessary, additional protective effects must be considered according to the risk assessment (e.g. a reflective vest).
- ▶ Wear headgear, with a wide brim or a neck guard.
- ▶ Use sunscreen on parts of the body not covered by clothing (e.g. face, hands). The sunscreen (e.g. cream, lotion) must have a sun protection factor of at least 30 and should be sweat-resistant.
- ▶ Wear sunglasses. The sunglasses should have sufficient UV absorption ("UV 400") and protect from lateral solar radiation.

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*Maritime occupations*



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**Protection against  
natural UV radiation  
aboard seagoing  
vessels**



## How does natural UV radiation affect humans?

In low doses, natural UV radiation is essential. However, depending on duration and strength, serious damage to eyes and skin may occur.

### One differentiates between:

- Acute effects, such as sunburn and corneal inflammation of the eye
- Chronic damage, such as cataracts, premature skin aging and skin cancer that will not be noticed until decades later



## What is natural UV radiation?

Natural UV radiation is emitted by the sun and is invisible to the human eye.

### Its strength depends on:

- Position of the sun
- Latitude
- Altitude above sea level
- Total ozone content
- Cloud cover
- Reflective surfaces (e.g. white or shiny surfaces)

## What should one pay attention to?

- ▶ The longer one is exposed to the sun, the higher the danger of UV radiation becomes.
- ▶ The danger is especially high about noon between 11am and 3pm.
- ▶ UV exposure is reduced by shade and clouds, but not entirely eliminated.
- ▶ Latitude and longitude have an influence on the level of radiation.

## Are seafarers at risk?

- ▶ Since 2015-01-01, certain forms of white skin cancer can be recognised as an occupational disease.
- ▶ During the project “Determination of UV radiation exposure in seafarers”, it was possible to develop a well-founded and integral database.\* It was shown that irradiation increases with decreasing geographical latitude. The highest UV radiation exposure was detected on the head and shoulders.