

### Of note

Under hot conditions your body must be able to keep its temperature within the normal range by cooling. One of these cooling mechanisms is sweating.

### Factors that lower the capacity of cooling are

- inadequate exposure to high temperatures over time
- increased humidity (ability to cool through sweating is reduced!)
- excessive loss of fluid through sweating, febrile diseases or diarrhea
- drug and alcohol intake (direct effect of the drug, loss of fluid, level of alertness)
- increased physical activity (increase in body temperature!)

All these factors facilitate a decompensation with a rise in body temperature and risk of damage to vital organs including the brain. We call the resulting condition heat exhaustion, respectively heat stroke. This health condition can also appear gradually. It is a medical emergency and can lead to shock and death, if left untreated.

### Who is at risk

Basically everyone, even the young and healthy!

- especially children and the older population
- especially people with chronic or acute diseases, on various medication

### Typical signs

Thirst, dry mouth, darkened urine, muscle cramps, headache, dizziness, nausea, sleepiness, faint, confusion, body temperature >40°C.

### Prevention: Cooling and Rehydration

- Acclimatisation: consider extra time to get used to heat with enough rest.
- Plan outdoor activities early in the morning or in the late afternoon.
- Try to stay in cool indoor spaces (e.g., shopping malls or other public air-conditioned localities), take a cold shower, avoid direct sun exposure, and look out for shade and ventilation (e.g. fan).
- Appropriate clothing: wear loose fitting, light-weight, light-colored, and absorbing material (e.g. cotton), wear a brimmed hat, do not forget sunscreen.
- Physical activity: If you are not used to exercise in hot environment, start slowly and pick up the pace gradually.
- Regardless of how thirsty or active you are, drink plenty of fluids and avoid hot and heavy meals. Heavy sweating deprives the body of salt and minerals. For replacement, electrolyte containing sport drinks can be used.
- Avoid drinking alcohol.
- If you have fever, diarrhea or vomiting, correction of fluid and minerals is additionally advisable.
- If you are on a low-salt diet, have diabetes, high blood pressure, or other chronic conditions, do not forget to take pre – travel advice from your doctor regarding fluid management and adaption of medication.
- Never leave children or pets in a parked car, even if the windows are partly open!