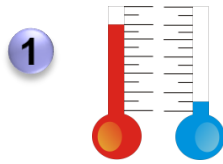
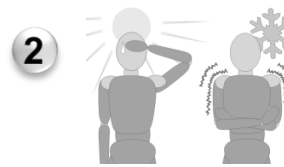


## Working outside: adverse weather conditions



1 Exposure to heat or cold



2 Health effects



3 Recommendations

Activities carried out in **adverse environmental conditions** (intense heat or cold) may alter your **thermoregulation**

In adverse environmental conditions, whether **heat or cold**, our bodies make **physiological adjustments** to keep our temperature within normal limits. The extent of the adjustments varies, depending on the interaction between:

- The **environmental conditions** in the workplace (temperature, humidity, solar radiation, etc.).
- The **physical activity** carried out (the greater the physical activity, the greater the heat gains).
- The **clothing** that is worn.

### How can our body regulate temperature changes?

The body's temperature must be kept constant.

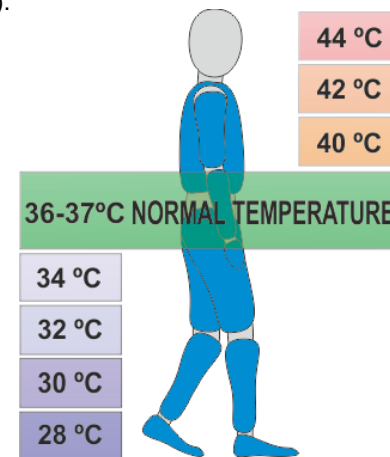
The internal body temperature is maintained by balancing heat gains and losses.

• **If body temperature increases**, mechanisms are activated to reduce it, including sweating (evaporation of heat) and vasodilation (helps heat to leave the body).

• **If body temperature drops**, mechanisms are activated to increase it: vasoconstriction (to avoid heat loss) and an involuntary increase in metabolism (shivering and shaking).

#### Thermal imbalance due to cold

When we lose more heat than we gain



#### Thermal imbalance due to heat

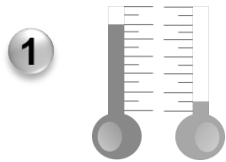
When we gain more heat than we lose

#### Thermal balance

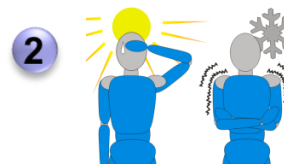
When losses and gains are equal



## Working outside: adverse weather conditions



1 Exposure to heat or cold



2 Health effects



3 Recommendations

When preventive measures and thermoregulation mechanisms fail, a series of **warning signs** could appear that we should be aware of:

### Intense exposure to heat

#### Physical signs:

- Exhaustion due to dehydration and loss of salt.
- Cramps that could appear after sweating intensely.
- General symptoms: a general feeling of being unwell, headache, etc.
- Digestive symptoms: nausea and vomiting.
- Cardiovascular symptoms: fainting, pale skin, palpitations.
- Neurological symptoms: disorientation, confusion, vertigo.

#### Behavioural symptoms:

- Reduced concentration and attention span.
- Irritability.
- Reduced mental and physical performance.

### Intense exposure to cold

#### Physical signs:

- Reddening of the skin.
- Sensation of numbness in part of the body that may hinder movement.
- No touch sensitivity.
- Swollen/tingling the hands.
- Eczema.
- Dry skin.

#### Chronic effects:

Prolonged exposure to low temperatures could cause pulmonary (chronic bronchitis, pneumonia, etc.), hearing (otitis) or eye (conjunctivitis) problems.

If you notice any of these warning signs, **stop work**.

Call the relevant **Health Surveillance and Promotion Centre (ViPS)** so that they can advise you on what to do.

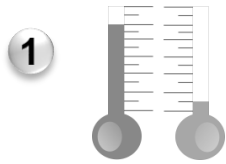
#### ViPS centres



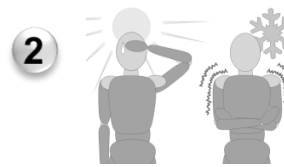
Some people are more likely than others to suffer adverse effects of heat or cold. People who are not in good physical condition, suffer from a chronic illness, have bad eating habits, take certain drugs or are not used to working in adverse environmental situations are at greater risk from stress caused by heat and cold.



## Working outside: adverse weather conditions



1 Exposure to heat or cold



2 Health effects



3 Recommendations

Follow these **general recommendations** for working outside

### INTENSE COLD

Try to carry out tasks **in the middle of the day.**

Do not **work alone** so that you can ask for help if you encounter problems.

Use **suitable clothing** depending on the weather conditions outside.

Whenever possible, avoid working outside when the **weather conditions** are unsuitable (strong wind, rain, etc.).

### INTENSE HEAT

**Solar radiation**

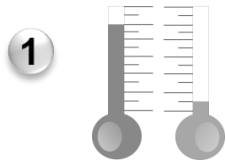
Whenever possible, **work in the shade.** If this is not possible, use **accessories to shield yourself from the sun** and put **sun cream** on any exposed areas.

Try to work **first thing in the morning** and **last thing in the afternoon.** If this is not possible, take frequent breaks in cooler environments and avoid continuous exposure.

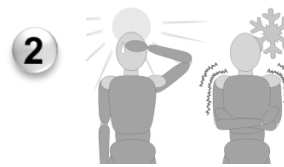
When possible, keep away from surfaces that could **accumulate or transmit heat.**



## Working outside: adverse weather conditions



1 Exposure to heat or cold

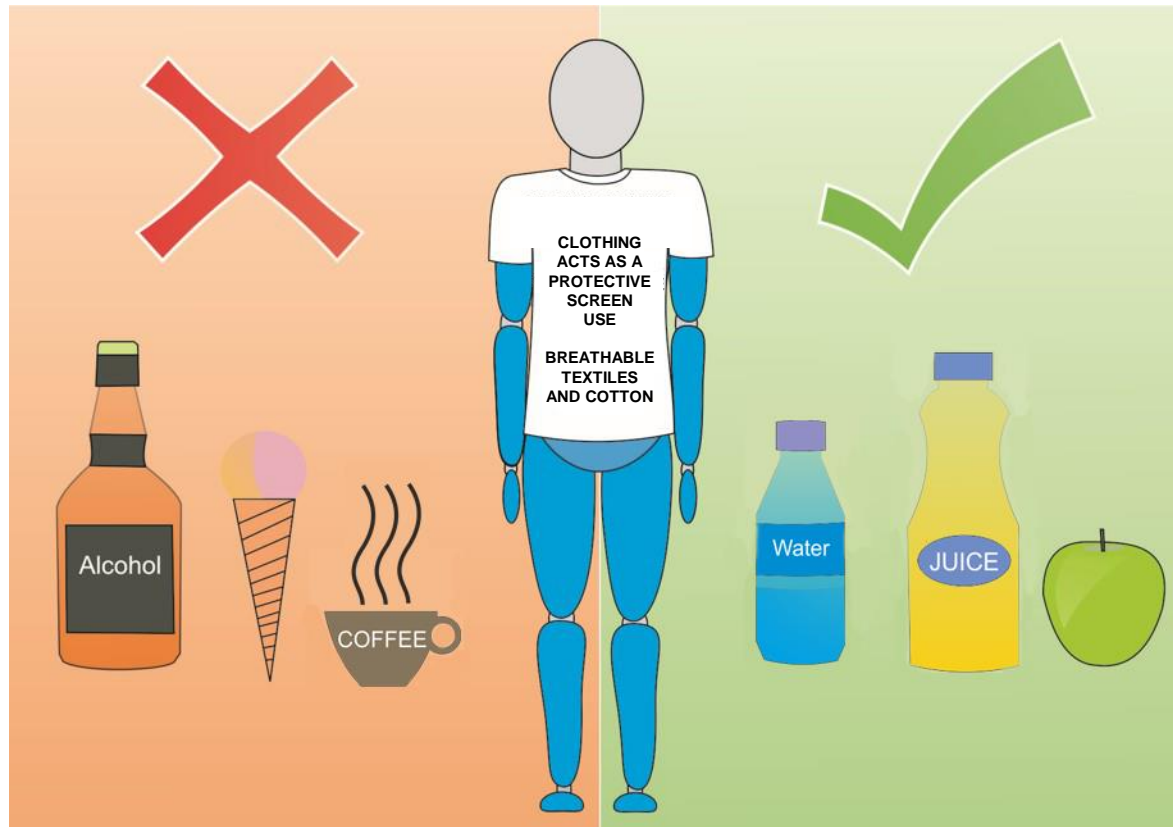


2 Health effects



3 Recommendations

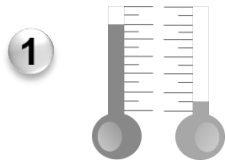
Follow these **indications** for working in **hot environments**



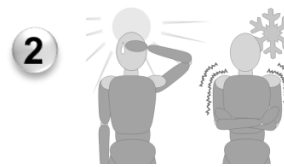
### Recommendations:

- **Drink cool water regularly** (not cold water). Do not wait until you feel thirsty.
- **Avoid drinking alcohol** or drinks that contain stimulants such as **caffeine**, as these increase dehydration.
- Do not take off **clothing** as this can act as a **protective screen**.
- **Avoid high fat foods** and try to eat a light diet.

## Working outside: adverse weather conditions



1 Exposure to heat or cold

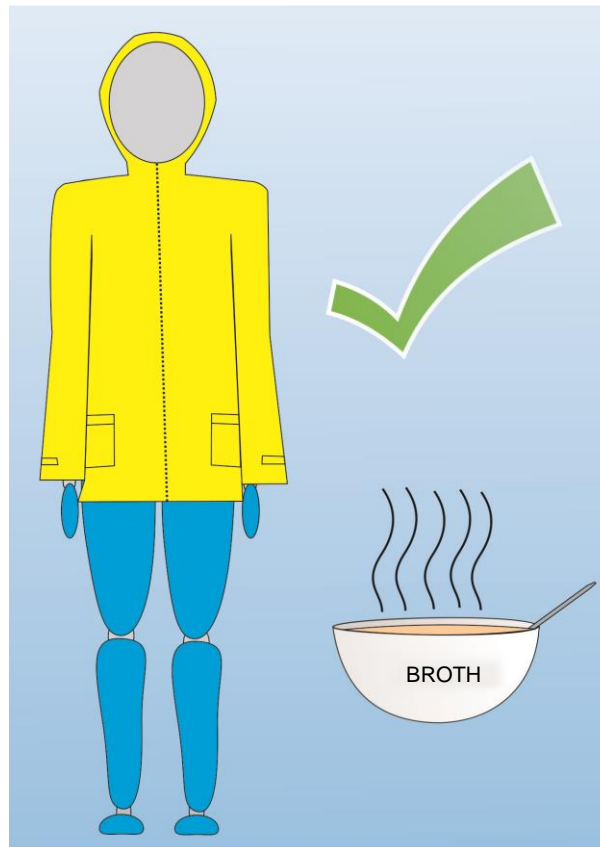


2 Heat effects



3 Recommendations

Follow these **indications** for working in **cold environments**



### Recommendations:

- **Consume hot food and drinks.** They should provide the calories that the body needs

It is important to **drink plenty of liquids**. Drink more warm, sweet, caffeine-free and non-alcoholic drinks to compensate for loss of water through the lungs and skin, and thus prevent potential dehydration.

- Use **suitable clothing**, combining different layers rather than just one item to create an insulating effect.

- When your tasks are static or sedentary, try to incorporate movements that help to **increase your body temperature**.

