



THE COLD  
**RISK**

**PREVENTION  
STRATEGIES**



INAIL

# PREVENTION

IS THE  
BEST PROTECTION

FACING COLD WEATHER  
WITH AWARENESS

AND RESPONSIBILITY

IS ESSENTIAL TO SAFEGUARD  
HEALTH AND PREVENT  
INJURY

The "cold" risk poses a significant health hazard, especially for workers who work outdoors or are exposed to low temperatures.

Prevention and protection in this context are fundamental and are mainly based on adopting behaviors and measures that protect mental and physical health and well-being.

Against a backdrop of increasing climate uncertainty, Inail, in collaboration with other partners, has turned its research toward forms of protection for those workers who find themselves working in extreme heat or cold. The Workclimate 2.0 - Climate, Work, Prevention project analyzed the impact of environmental heat stress on workers' health and productivity, with a focus on prevention strategies.

This information booklet, in particular, aims to provide a better understanding of the risk from cold exposure, illustrating how to manage it through adopting conscious behaviors, reducing the risk of injury and safeguarding your health.

# WHAT IS COLD STRESS

Cold stress occurs when the human body dissipates heat faster than it can produce it, leading to a dangerous decrease in body temperature.

This phenomenon is caused by a combination of environmental factors such as low temperatures, intense wind (windchill effect), humidity, rain and the use of unsuitable clothing. In response, the body increases metabolism and may generate shivering to produce heat. In severe cases, the body can go into hypothermia.

The symptoms of cold stress are:

- **Intense shivering**
- **Numbness of hands and feet**
- **Mental confusion**
- **Difficulty concentrating or reduced reflexes**

# HEALTH RISKS

Cold weather puts a strain on the body, affecting muscles, heart, lungs, skin and mind. Facing it with preparation means protecting your health and preserving your well-being every day.

Exposing yourself to the cold during work or in other activities, without adequate prevention and protection measures, can lead to even serious consequences, both in the short and long term, including:

- **Reduced mental clarity, increasing the risk of accidents and injuries**
- **Musculoskeletal pain and stiffness**
- **Respiratory difficulties and aggravation of pre-existing conditions**
- **Alterations in circulation and cardiovascular stress**
- **Skin injuries, such as chilblains and, in extreme cases, frostbite**

Protecting yourself from the cold means working safely and living healthily.

# HOW TO **PROTECT** YOURSELF **FROM** THE **COLD**

Prevention is essential.

Here are some strategies to protect yourself effectively:

- Use layered clothing, choosing insulating materials such as wool, fleece and down, and avoiding cotton.
- Cover your extremities properly: hands, head, neck and feet should be protected with gloves, caps and scarves.
- Use footwear with non-slip soles to prevent falls on icy surfaces.
- Avoid direct skin contact with cold, damp surfaces.
- Take regular breaks in heated environments and change wet or damp clothes.
- Take warm (nonalcoholic) drinks and carbohydrate-rich foods to keep your metabolism active.

# PERSONAL **PROTECTIVE** **EQUIPMENT** AND **SAFE** BEHAVIOR

In addition to proper clothing, the proper use of Personal Protective Equipment (PPE) is essential. It is good practice to make sure they are intact, functional, and comply with current regulations. A cautious attitude should always be adopted, any symptoms should be reported promptly, and safe behavior should be adopted.

**NEVER** **ALONE** **WORK**  
**WORK** **SAFELY** **TOGETHER**

Observing and caring for one another is a key preventive strategy. Avoid working alone in cold, isolated environments. The presence of a colleague can make all the difference: a colleague can help to detect symptoms of discomfort early and can provide aid in an emergency.



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