



# WORKING IN A COLD STORE ENVIRONMENT ADVICE FOR EMPLOYEES

This guidance aims to provide workers within a cold store environment advice on some of the health issues associated with working within this cold environment. For the purposes of this guidance a cold store is defined as a warehouse storing goods at temperatures below zero degrees C.



This guidance has been produced by the British Frozen Food Federation and is a revision of earlier guidance drawn up in consultation with the Health and Safety Executive.

This guidance has also been reviewed by our Primary Authority partner who has approved the content / information provided.

**Your employer is required to look after your health, safety and welfare. For a cold store environment, your employer must provide:**

- suitable personal protective equipment (PPE) – selection of PPE should take account of the temperature, length of exposure, type of operation and personal preference. (see guide to the recommended PPE at the end of this document)
- a heated rest room. Suitable and sufficient breaks must be taken in a warm area. The length of time you are required to work in the cold is dependent on several factors including the type of work you are doing, air temperature, the risk of wind chill and the type of clothing you are wearing. Breaks should be arranged based on a comprehensive risk assessment.
- task rotation to higher temperature tasks for workers where practicable within the job remit
- adequate supervision
- training for employees on cold hazards and how to recognise the early symptoms of cold stress and provide the appropriate level of first aid
- suitable First Aid facilities
- local heating in vehicle cabs where practicable
- easily accessible warming areas and drying rooms for PPE
- a means of escape following entrapment (accidental lock in) within the cold store

**It is also recommended that employers:**

- undertake pre-employment self-assessment health questionnaires where the questions asked are intrinsic to the job. For example, questions relating to working in a cold store environment where a specific health condition may be adversely affected by the cold. This may require referral to an occupational health professional.
- provide regular health monitoring specifically designed for the cold storage environment.
- provide free health assessments to new and existing night workers. A night worker is a person working between 11pm and 6am for a period of no less than seven hours and includes workers on shift rotation.

**Employees also have responsibilities to look after their own health, safety and welfare. For the cold environment there are 3 main risks to be aware of:**

**Freezing injuries** including frost nip, frostbite or skin damage when in contact with cold surfaces. Follow the 'Keep Warm' guidance shown below. Avoiding contact with metal and plastic surfaces with bare skin can prevent these injuries. When there is prolonged exposure to temperatures of -20°C or below, exposure to bare skin should be avoided.

**Non-Freezing and chronic injuries** may be less obvious, but are usually marked by prolonged numbness, pain, swelling, and sensitivity to the cold, in the hands or feet. They occur when tissues remain cold for many hours but do not freeze, and are best prevented by ensuring that you warm up thoroughly during breaks, and by keeping your body warm (but not too hot). Report these problems early so they can be addressed.

**Hypothermia** which is a drop in body temperature. This is unlikely in occupational circumstances however you should follow the 'Keep Warm' guidance within this document and be aware that cold hands and feet indicate a drop in body temperature.

**Pre-existing medical conditions**

- Cold exposure can be a trigger for certain diseases and aggravate the symptoms of prevailing chronic diseases. People working in cold stores should be physically fit for work. Medical conditions that are likely to be adversely affected by the low temperature include:
- asthma or other respiratory conditions (freezer air is very dry). It may not be necessary to exclude people who suffer from allergic asthma, which is not cold induced.
- cardiovascular and circulatory conditions such as angina, Raynaud's disease etc
- hand-arm vibration syndrome
- arthritis
- musculoskeletal diseases
- skin diseases
- metabolic disorders e.g. thyroid and also diabetes (whether controlled by tablets or injections)

### ***Pre-existing medical conditions (continued)***

If you suffer from any of the above medical conditions, employees should bring this information to the attention of your employer via their occupational health provider with 'informed consent' **before work starts**. In these situations your employer should arrange for you to be assessed by an occupational health professional to assess whether the disease or its severity is a significant risk to your health in this environment. You should also notify your employer via their occupational health provider if there has been a change in your health, either through accident, illness or if you are taking medication for a chronic or acute condition that affects your body's ability to control its temperature even if this is only temporary. Note that if you are on medication for management of high blood pressure you should consider discussing this with the occupational health professional if this poses a risk when working in a cold environment. If you become an expectant mother you should inform your employer so they can carry out with you a specific assessment of the work you are able to do in order to minimise risks to your unborn child.

### **'Keep Warm' advice**

A cold environment can be a health hazard. When properly managed it should cease being a hazard. As such keeping warm is fundamental for all employees. This is a short and simple guide to keeping warm and safe in a cold store environment:

- Use the special low-temperature clothing provided by your employer. Choose clothes according to the job, not only the temperature. Report to your employer any loss or obvious defect with the personal protective equipment supplied to you. Ensure your clothing is kept clean and in good repair so that it will work properly.
- Avoid excessive sweating. Reduce the numbers of layers you are wearing when highly active and add layers when you are less active. Also, when you are on your break, dry your clothes both inside and out. Open or adjust cuffs and closures on your clothing to allow moist air to vent out; wearing a size larger rather than snug / tight clothing can help this venting.
- Don't wear clothing that is too small or too tight as this restricts blood flow, preventing warm blood entering your extremities.
- Drink enough water and cut down on tea and coffee as they contain caffeine which acts as a diuretic and can dehydrate you. Instead, drink water, soup or hot chocolate.
- Smoking and drinking alcohol can affect the blood flow to your hands and feet. You should avoid consuming alcohol as it affects the body's ability to retain heat and places you at greater risk of developing hypothermia (and accidents); smoking reduces blood flow to the skin and increases the risk of freezing and non-freezing cold injuries.
- Employees should also be aware that prescriptive, non-prescriptive and recreational drugs might affect your ability to regulate your body temperature in cold environments.
- Consider your diet, weight and fitness. Good general health is important when working in the cold. If you are either under or overweight, working in the cold can place extra demands on your body which may make it harder to work and may place your body at greater risk of developing serious medical problems.
- Protect bare skin. Cover all areas that may become exposed to cold temperature or wind.
- Do not touch cold metal or plastic objects and surfaces with bare hands or skin.
- Pay attention! Cold hands and feet indicate a drop in body temperature. Get out of the cold if you experience extreme drowsiness, loss of balance, extreme shivering or slower than normal breathing, as these are early signs of hypothermia.
- Always consider safety first – the safety of you and your colleagues is paramount.
- Help others. Keep an eye on your colleagues and tell them if you are concerned for their health and safety. Freezing cold injury of the face can be hard to notice in yourself, and hypothermia is only ever spotted by others. If you are worried about any health or safety issue, including the safety of others, let your supervisor know of your concerns.



A guide to the recommended Personal Protective Equipment to be worn in a cold store environment.

Chill environment down to -5C, 150 gm chill protective clothing including:

- thermal undergarments to personal preference;
- jacket and trousers or quilted all-in-one coverall;
- lightweight gloves;
- safety boots or shoes; and
- head protection – baseball cap or thinsulate hat or safety helmet.

Frozen environment -5C and below, 235 gm frozen protective clothing including:

- thermal undergarments to personal preference;
- jacket and salopettes or all-in-one coverall, both with knee protection
- cold-store gloves with thermal liners;
- insulated safety boots with thermal socks;
- safety helmet with thermal liner, thermal balaclava and thermal hood.

It should be noted that the clothing weights given are a recommendation. The exact requirements should be determined by risk assessment.

**It is important to note that this guidance offers employees within a cold store environment with advice on only the health issues associated with working in this environment. There are other hazards that can cause adverse affects when working in this environment that will be highlighted to you by your employer.**

**If you have trouble complying with any of the above advice or suffer from any of the effects mentioned, speak to your employer.**



British Frozen Food Federation  
Warwick House, Unit 7  
Long Benington Business Park  
Main Road, Long Nennington  
NEWARK, Nottinghamshire NG23 5JR  
Tel: 01400 283090 Fax: 01400 283098  
[www.bfff.co.uk](http://www.bfff.co.uk)