

Individual's Guide to preventing Cold Injury

Version 2.1 November 2022
Based upon JSP 375
(Management of Health and Safety in Defence),
Annex B to JSP 375, Volume 1, Chapter 42



Cold injury includes whole-body cooling, i.e. hypothermia, and cooling of the extremities such as hands and feet, i.e. freezing cold injury (FCI) or non-freezing cold injury (NFCI). NFCI is the most common of these and mostly occurs in the UK during training Exercises.

How does it happen?

Hypothermia can develop slowly e.g. during a cold UK Exercise, or rapidly, e.g. during immersion or extreme cold. Hypothermia is also a risk to casualties with moderate to severe injuries in any climate.

Non-Freezing Cold Injury (NFCI) is caused by gradual, prolonged cooling of the hands or feet. It does not have to be freezing to get an NFCI; most cases occur in the UK during training.

Freezing Cold Injury (FCI) happens in sub-zero temperatures and includes frost nip and frost bite. Parts of the body most prone to freezing are the extremities and exposed areas, e.g. nose, ears, fingers and toes.



What can you do to prevent it?

Static duties/ If in a prolonged static position always try to insulate yourself from the ground.

cramped Keep moving as much as you are able to, be that your whole body or wriggling

posture toes and fingers.

Wet clothing Put on waterproofs before exposure to rain or snow.

If clothing next to the skin becomes wet change into dry clothing as soon as

possible.

Boots Ensure boots are snug but not tight.

Change out of wet boots or use dry socks & insoles.

Use waterproof socks only when static or in harbour areas.

Use gaiters.

Gloves Carry spare gloves.

Buddy Buddy Look out for your colleagues and raise the alarm straight away if you have any

concerns.

Hand & foot Check your hands and feet at regular intervals.

inspections If you start to lose feeling in hands or feet refer to the NFCI Field Assessment

Tool (NFAT) for guidance.

Medical Be aware that some medical conditions and medications increase the risk of conditions/ cold injuries. Let your Unit Medical Officer know if you start to suffer symptoms

medications in the cold.

Alcohol Avoid alcohol for 24hrs before activity.

Drive to If you experience symptoms during training STOP and report it regardless of how

succeed important you feel the activity is.

Cold injury caught early often recovers quickly and fully without requirement for prolonged medical restrictions.

Keep It Clean dirty clothing tends to be packed down

which compromises insulation

Avoid Overheating adjust layers to avoid overheating and sweating

Wear It Loose loose, layered clothing traps air and provides good insulation

Keep It Dry wet clothing leads to rapid heat loss

kit fits correctly
 exercise extremities
 eat and drink plenty
 tight boots are terrible

Typical symptoms and signs of hypothermia are as follows. Not all symptoms may be present.

Moderate or severe

Casualty says they feel cold Uncontrolled shivering Cold to touch

Mild confusion, disorientation, or irritability

Loss of manual dexterity (clumsiness)

Slurred speech

Shivering has stopped Lips may turn blue

(may deny problem and refuse help) Apathetic, confused, irrational

Slow and/or irregular pulse or undetectable pulse Unresponsive and may look dead Reduced level of consciousness

If anyone taking part in the activity shows any signs or symptoms

- of hypothermia, pause or stop the activity and then: remove the casualty from immediate danger;
 - carry out the 'airway, breathing and circulation' (ABC) assessment; and
- assess the severity of hypothermia.

Mild hypothermia

Prevent further cooling

Protect the casualty from the wind and rain

Carefully check for signs of life, for at least 60 seconds. Keep the casualty horizontal, lying as flat as possible.

Moderate or severe hypothermia

Handle the casualty very gently

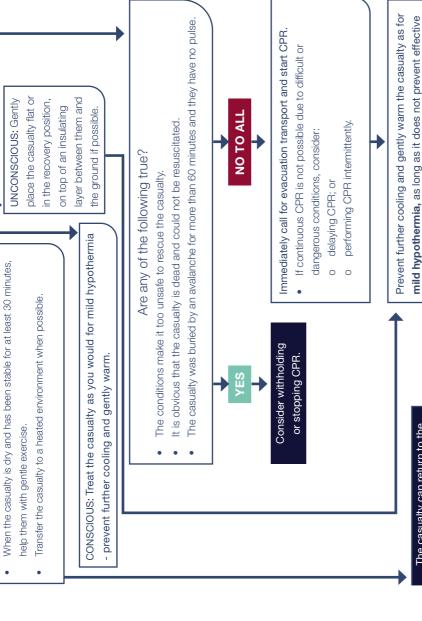
- Put a layer of insulation between the casualty and the ground. - (move to shelter or shield them)
- Put any available dry, warm and windproof clothing on the casualty. Remove wet clothing.
- Cover the casualty's head and neck.

Gently warm the casualty

Give the casualty high-energy food such as chocolate.

Huddle around the casualty.

Are there signs of life (breathing, a pulse)?



that other personnel assessment must be carried out and identified must be measures that are case is a warning any extra control Note: A single are at risk. A dynamic risk put in place.

> REPORT THE SITUATION (Civilian emergency services or Role 2/3 medical treatment facility (MTF)

Evacuate the casualty for emergency care

CPR or delay transport.

activity when a clinical assessment The casualty can return to the

finds that they have recovered.

in line with your Defence organisation's occurrence-reporting procedures.

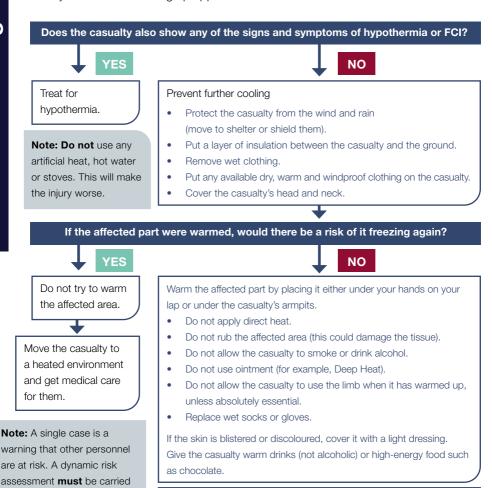
out and any extra control measures that are identified

must be put in place.

Use the NFCI Field Assessment Tool (NFAT) at Annex E as a guide for hand and foot inspections.

Suspect FCI if a hand or foot inspection identifies any of the following signs and symptoms.

- An area of skin is white and waxy looking with a clear border between white and pink skin.
- The casualty is not in pain and there is no feeling in the affected part.
- The affected part feels cold and hard to touch.
- Any skin that is warming up appears blistered and bruised



REPORT THE SITUATION in line with your Military Command's

or Defence organisation's occurrence-reporting procedures.

Carry out a hand and foot inspection using the NFCI Field Assessment Tool (NFAT) in Annex E.

You should suspect NFCI if a person is suffering numbness, tingling, pain or swelling in their hands or feet after prolonged exposure to cold or wet conditions.

Prevent further cooling

- Protect the casualty from the wind and rain (move to shelter or shield them).
- Put a layer of insulation between the casualty and the ground.
- Remove wet clothing.
- Put any available dry, warm and windproof clothing on the casualty.
- Cover the casualty's head and neck.



Gently warm the casualty

- Provide warm food and drink.
- Huddle with others around the casualty.
- Once the patient is dry, has had some food and has been stable for at least 30 minutes, encourage mild exercise.
- Re-warm hands and feet using available measures (body warmth, clothing, rubbing, hand warmers).

Do not immerse the hands and feet in water or hold them up to a flame.

When the casualty has warmed up, follow the management guidelines in NFAT.

Note: Do not use anv artificial heat, hot water or stoves. This will make the injury worse.

Note: A single case is a warning that other personnel are at risk. A dynamic risk assessment must be carried out and any extra control measures that are identified must be put in place.



