

Keep Warm Keep Well

SUPPORTING VULNERABLE PEOPLE
DURING COLD WEATHER

Advice for health and social care professionals



Keep Warm Keep Well

About this leaflet

This leaflet is part of the national Keep Warm Keep Well programme – which aims to reduce chronic and acute health risks associated with cold weather. It contains advice for people working in primary care or social services, and for home care providers.

In this leaflet, you will find out about the dangers of cold to vulnerable people. It will help you plan before and during winter, or for any particularly cold period.

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Understanding the effects of cold weather

Cold, especially extreme cold, can be dangerous for everyone. Even in a normal winter, there are tens of thousands of deaths caused by the cold.

During an average winter, 25,000 people die as a result of cold weather in England and Wales. If it is a colder winter than normal, there are a further 8,000 deaths per degree Celsius below the average temperature.

Extremely cold weather can cause mild hypothermia, which increases the risks of some illnesses – including heart attacks, strokes and respiratory disease – and the likelihood of falls.

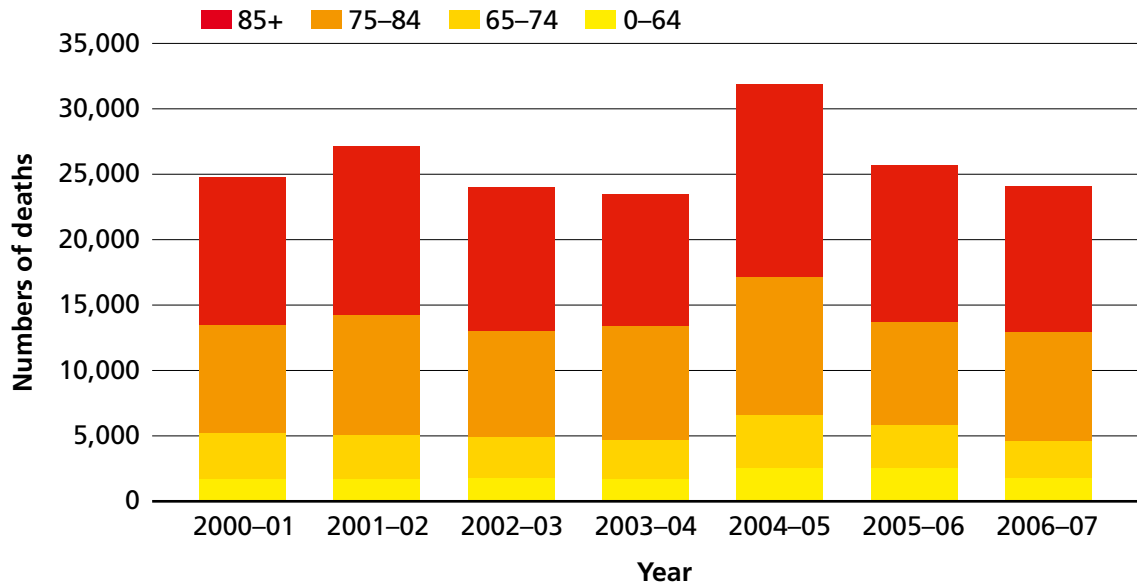
Who is at risk?

Some people are more at risk of becoming ill during cold weather. A number of factors can determine who is more vulnerable during winter:

- **Older age** – especially people who are over 75 years old.
- **Young age** – particularly children with respiratory problems, such as asthma.
- **Chronic and severe illness** – including heart conditions, respiratory insufficiency, asthma and COPD (chronic obstructive pulmonary disease).
- **Fuel poverty** – over 75% of those who cannot afford to adequately heat their homes are adults living alone.
- **Inability to adapt behaviour to keep warm** – this affects people with disabilities, babies and the very young.
- **Environment and overexposure** – such as homelessness, or living in a cold, damp home with poor or inadequate heating and insulation.

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Excess winter mortality by age in England and Wales



How do cold temperatures affect health?

A lowering of temperature by 1°C can result in a rise in blood pressure of 1.3 mm Hg. Higher blood pressure coupled with increased blood viscosity (which is caused by mild skin surface cooling) increases the risk of strokes and heart attacks.

Cold air also affects the normal protective function of the respiratory tract – leading to increased broncho-constriction and mucus production, and reduced mucus clearance.

This table illustrates the effects of living in temperatures below the recommended 16–21°C (or recommended 18°C and over in living areas):

INDOOR TEMPERATURE	EFFECT ON HEALTH
21°C	Recommended living room temperature
18°C	Minimum temperature with no health risk, though may feel cold
Under 16°C	Resistance to respiratory diseases may be diminished
9–12°C	Increases blood pressure and risk of cardiovascular disease
5°C	High risk of hypothermia

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How does living in a cold, damp home affect health?

Living in poorly heated or insulated accommodation can worsen underlying health conditions and affect well-being:

Mild hypothermia

- A study of A&E patients showed greater incidence of hypothermia in those who were over 65 and living in relatively deprived areas, during periods of cold weather. Five per cent of these patients showed a core temperature below 35°C; 34% of this group subsequently died.

Cardiovascular disease

- Around 40% of excess winter deaths are caused by circulatory diseases (there were approximately 13,000 such deaths in 2005–06).
- The cold increases blood pressure – one study showed that a 1°C lowering of living room temperature led to a rise in blood pressure of 1.3mm Hg.
- Higher blood pressure increases the risk of heart attacks and strokes.

Respiratory illness

- Respiratory illness causes about a third of excess winter deaths (there were approximately 10,500 such deaths in 2005–06).
- The cold lowers resistance to respiratory infections: it impairs lung function and can trigger broncho-constriction in asthma and COPD.
- Dampness increases mould growths, which can cause asthma and respiratory infections.

Falls and injuries

- Symptoms of arthritis become worse in cold or damp homes.
- Strength and dexterity decrease as temperatures drop, increasing the risk of falls or injuries.
- Living in a cold home increases the risk of falls among the elderly.

Mental and social health

- Damp, cold housing is associated with an increase in mental health problems.
- Some people become socially isolated, as they are reluctant to invite friends over to a cold home.
- In cold homes where only one room is heated, it is difficult for children to do homework – affecting educational and long-term work and health opportunities.

Home energy improvements have led to an 80% reduction in time off school due to sickness for children with asthma or recurrent respiratory infections.

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Taking action to prevent illness and excess deaths

Not all countries that have cold winters experience the same volume of excess deaths. This suggests that we could be doing more to prevent them.

In a typical winter, temperatures are low enough to affect the health of vulnerable people living in cold, damp homes. These health risks worsen during a cold snap. Cold snaps can happen suddenly, and rapid drops in temperature quickly affect vulnerable people.

Planning ahead

By planning ahead, health and social care providers can offer care and support for people at risk in the event of a cold snap.

All high-risk individuals who live alone are likely to need daily contact with care workers, volunteers or informal carers. Older people, especially older women, people with chronic or serious illness or mobility problems, or those living in hard-to-heat accommodation, may need extra care and support.

Cold snaps can take place with little warning, with illness and death occurring within the first couple of days. In fact, it is possible to predict when excess deaths occur after a cold snap: deaths caused by heart attack happen two days later; deaths caused by stroke happen five days later; and deaths caused by respiratory disease happen 12 days later. So it is best to be prepared before cold temperatures are forecast – ideally by the beginning of November. Use care plans to help you to assess which individuals are at risk, and identify what extra help they might need.

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Before a cold snap...

If you are treating, visiting, supporting or caring for someone in their own home, take these steps before the weather turns cold. Where possible, involve their family and any informal carers.

Top tips – heating in the home

Poor heating is a key factor in many excess winter deaths. People living in cold homes (those in the lowest quarter of indoor temperatures) are at 20% greater risk of excess winter death than those living in warm homes (those in the top quarter of indoor temperatures).

- Ask whether the home is properly insulated: lofts should have at least 10 inches of insulation, and wall cavities should be insulated too. There are grants available to help make homes more energy efficient – direct them to the Keep Warm Keep Well leaflets to find out more (see page 10).
- Make sure the thermostat is set so that the main rooms are at 21°C during the day and bedrooms are at 18°C at night.
- See whether they have fitted draught-proofing to seal any gaps around windows and doors.

Top tips – health and benefits

- Check whether the person needs a benefit entitlement check. If they are eligible for additional benefits and credits, they could see an increase in their annual income of over £1,000.
- Make sure they have had a flu jab.
- Advise giving up smoking – this would improve circulation and reduce the chance of a heart attack.

Top tips – care and support

- Tell the person to contact the primary care team if one of their informal carers is unavailable.
- Review their care plan to ensure it contains contact details for their GP, other care workers and informal carers.
- Check that there are adequate arrangements for food shopping so they don't have to go out too much in cold weather.
- Monitor the weather by checking local news and forecasts.

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During a cold snap...

There are a number of actions that people can take to keep themselves warm during winter.

Top tips – keeping warm

- Advise them to close curtains and shut doors to keep heat in the rooms used the most.
- Recommend using hot water bottles or electric blankets (but never both together) if the bedroom is cold at night.
- Encourage them to eat well – food is a vital source of warmth, so they should eat regular hot meals and drinks throughout the day.
- Encourage them to keep moving if possible – it is good for health and improves circulation.

Top tips – for health and social care providers

- Stay in regular contact throughout the cold snap.
- Try to arrange for someone to visit at least once a day.
- Give ongoing advice on keeping warm – the Keep Warm Keep Well booklets contain useful tips on heating and preparing for winter, financial support and staying healthy during winter. See page 10 to find out where to get them from.

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About hypothermia

Hypothermia is a condition where the body becomes dangerously cold. It can be caused by brief exposure to extreme cold or by prolonged exposure to mild cold.

Hypothermia is a serious concern for older people who might be prone to falls or collapses. If it's not treated quickly, it can be fatal.

People with chronic or severe illness are likely to be at particular risk of current illnesses becoming worse from mild hypothermia. People with respiratory disease, cardiovascular and cerebrovascular conditions, COPD, asthma, severe mental illness, Parkinson's disease and difficulties with mobility are all especially susceptible to the effects of the cold.

Danger signs

If someone has these symptoms, they may be suffering from hypothermia:

- Very cold skin even under clothes, for example, across the stomach or under the arms.
- Drowsiness and slurred speech.
- Loss of sensation – not being able to tell when it is cold.

Taking action

If you think someone may have hypothermia, take immediate action:

- Dial 999 for an ambulance.
- Try to warm the person gradually by warming the room, wrapping them in a blanket or duvet, and giving them a warm drink.
- Don't give them alcohol or try to warm them up quickly.

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Find out more

Keep Warm Keep Well booklets

The Keep Warm Keep Well booklets contain useful tips on heating and preparing for winter, financial support and staying healthy during winter.

They are available from GP practices, pharmacies, NHS walk-in centres, hospitals, care homes, benefit offices and voluntary organisations.

NHS Direct

Visit the NHS Direct website (www.nhsdirect.nhs.uk) for additional advice on keeping warm in cold conditions

Winter Warmth

Further information and a link to the factsheet on Winter Warmth is available at www.dh.gov.uk/en/socialcare/deliveringadultsocialcare/olderpeople/dh_4076849



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