

Cold Weather Plan for England

Protecting health and reducing harm from severe cold



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Foreword

Cold weather kills

This plan provides important guidance on how to reduce the impact that severe cold weather has upon health and, in doing so, will save lives. It builds on the *Annual Report of the Chief Medical Officer 2009* by my predecessor Sir Liam Donaldson, in which he called for a national Cold Weather Plan to address the issues of excess winter mortality.

The past two winters have had significant periods of severe and sustained cold weather. This has highlighted again the need to have effective plans in place to mitigate the effects of cold weather on health.

Every year mortality rises by 19% in the winter months in England. This amounts to an average of 27,000 'excess' winter deaths or about 1,560 more people per week dying between December and March compared with the rest of the year. In many northern European countries with much colder weather than ours a rise of such magnitude is not observed. Furthermore, many more people present to GPs and hospitals in winter with a range of cold weather-related conditions.

The majority of these deaths occur among older people, especially women, and those with underlying health problems; however, they are not people who would have died anyhow at that time. Most deaths are due to cardiac disease, strokes and respiratory problems, not hypothermia. It has been estimated that the annual cost to the NHS of treating winter-related disease due to cold private housing is over £850 million.

The purpose of this Cold Weather Plan is to reduce winter deaths by raising public awareness and triggering actions in the NHS, social care and other community organisations to support vulnerable people who have health, housing or economic circumstances that increase their risk. The plan is also intended to mobilise communities and civil society to help their neighbours, friends and relatives to protect against avoidable harm to health in winter.



Timely preventive measures can reduce this excess winter mortality. This plan draws on previous experience over the past few years in delivering the annual Heatwave Plan. The Heatwave Plan has successfully helped individuals, communities and authorities to prepare and plan for summer heatwaves and to reduce the impact of such events on those people who are most at risk.

We hope that this Cold Weather Plan will do the same to reduce excess winter deaths. As this is the first year of the Cold Weather Plan, we would value your comments on how you would like us to improve future editions of the plan.

A handwritten signature in black ink, appearing to read 'Sally C. Davies'. The signature is written in a cursive, flowing style.

Professor Dame Sally C. Davies
Chief Medical Officer
Chief Scientific Adviser
Department of Health

Executive summary

The Cold Weather Plan is a public health plan. It aims to prepare for, alert people to and prevent the major avoidable effects of winter on people's health, which claim around 27,000 lives each year.

The plan aims to do this by building on established national and local campaigns for winter health with a more co-ordinated approach. It recommends a series of steps to minimise the health impact of severe winter weather, to be taken by:

- the NHS, social care and other public agencies;
- professionals working with people at risk; and
- individuals and local communities.

Cold Weather Alert service

The plan will work through a system of cold weather alerts – linked to the existing winter weather warning system developed by the Met Office – which will trigger appropriate actions up to a major incident. This system is based on the established Heatwave Plan which has been in existence for seven years.

The Cold Weather Plan sets out actions at four Cold Weather Alert levels:

Cold Weather Plan levels	
Level 1	Long-term planning <i>All year</i>
	Winter preparedness programme <i>1 November–31 March</i>
Level 2	Severe winter weather is forecast – Alert and readiness <i>60% risk of severe cold in the following days</i>
Level 3	Response to severe winter weather – Severe weather action
Level 4	Major incident – Emergency response <i>Exceptionally severe weather or threshold temperatures breached for more than six days</i>

Level 1: Winter preparedness – long-term planning

Level 1 includes long-term strategic planning activities that can take place throughout the year. For example:

- **Health and social care services and professionals** should work with partner agencies to identify those most at risk from seasonal illness and to improve their resilience to severe winter weather.
- **Individuals and communities** should consider what they can do in advance to prepare for cold winter weather, such as insulating their homes and making sure that those at risk are receiving the benefits they are entitled to.

Level 1: Winter preparedness – general preparation

Level 1 also includes general winter preparations, running alongside seasonal activities such as the annual flu vaccination programme.

- **Health and social care services and professionals** should work with partner agencies to co-ordinate cold weather plans and support communities to help those at risk. They should also make plans to deal with a surge in demand for services, identify those at risk on their caseloads and encourage all staff to get their flu jabs.
- **Individuals and communities** should take steps to prepare for winter, such as: getting a flu jab if they are in a risk group; insulating their homes and protecting water pipes from freezing; looking out for vulnerable neighbours; and checking their entitlements and benefits.

Level 2: Severe winter weather is forecast

A Level 2 alert is triggered when there is a 60% risk of severe cold weather lasting at least 48 hours forecast to arrive within the next two or three days.

- **Health and social care services and professionals** should make sure that all those at risk have been identified and can be contacted. If visiting clients, they should check that their rooms are adequately heated. More general actions include implementing business continuity, communicating public media messages and making sure that all staff are aware of winter plans.
- **Individuals and communities** should stay tuned to the weather forecast and keep themselves stocked with food and medications, check room temperatures, keep an eye on people at risk and make sure that they are getting their benefits and entitlements.

Level 3: Response to severe winter weather

A Level 3 alert indicates that the severe winter weather forecast at Level 2 is now occurring, and is expected to impact on people's health and on health services.

- **Health and social care services and professionals** should activate plans to deal with a surge in demand for services and mobilise community and voluntary support. They should contact those at risk in person or by phone every day while the severe weather lasts and ensure that they are receiving their entitlements. Other actions include communicating public media messages to staff and ensuring that staff are in a position to help and advise clients.
- **Individuals and communities** should take immediate action to minimise the harmful effects of the weather, including: setting daytime room temperature to 21°C and bedroom night temperature to at least 18°C; dressing warmly and eating well; and checking on those you know are at risk.

Level 4: Major incident

A Level 4 alert indicates a major incident. It means that exceptional winter weather affects one or several parts of the country and is so severe that it creates widespread transport disruption and/or threatens the operation of health and social care services.

Level 4 alerts require a cross-government response at a national level. However, there are some actions that can be taken by the health sector, such as:

- continuing to take Level 3 actions during the emergency period;
- making sure that all local healthcare providers can continue to operate, for example by adequate clearing of snow and gritting to ensure safe emergency access; and
- risk appraisals on how the wider population, outside at-risk groups, is likely to be affected by the extreme conditions.

The plan and wider winter planning

The plan is part of a wider suite of measures that the Department of Health is taking to protect individuals and communities from the effects of severe winter weather and ensure continuity of services. It is also linked to the annual seasonal influenza vaccination programme and the 'Keep Warm Keep Well' campaign, as well as wider work on winter pressures and resilience which takes place in the NHS over the winter months.

The Cold Weather Plan provides strategic guidance and a framework which Local Resilience Forums, NHS, social care and other local organisations can incorporate into their winter planning arrangements. Most of the recommendations set out in the plan require co-ordinated action at a local level, although some incidents will require escalation. The plan is consistent with other emergency plans and duties under the Civil Contingencies Act 2004 to warn and inform the public before, during and after an emergency.

The Cold Weather Plan is being published today with a companion document *Making the Case: Why cold weather planning is essential to health and well-being*, which provides the most up-to-date research and evidence to act as an authoritative source of information for local organisations, communities and individuals.

Warm Homes, Healthy People fund: keeping people warm in winter

To support the aims of the Cold Weather Plan the Department of Health is establishing the **Warm Homes, Healthy People** fund for winter 2011/12.

This is a major new initiative to support local authorities and their local partners in reducing death and morbidity in England due to cold housing in the coming winter. Further details will be announced in November 2011.

Why the plan is needed

The extent of the problem

Although winter weather and snow can be fun, they are also associated with an increase in illnesses and injuries. Cold weather increases the risk of heart attacks, strokes, lung illnesses, influenza and other diseases. People slip and fall in the snow or ice causing serious injuries. Some groups are particularly susceptible to the effects of very cold weather, such as older people, the very young and people with pre-existing medical conditions. In most cases, simple preventive action could avoid illness and injury.

On average over the past three years, around 27,000 more people die in England over the winter months because of cold weather when compared with other times of the year. This is often referred to as 'excess winter deaths' or 'excess winter mortality'. Very severe weather can substantially add to this death toll. There were 34,000 'excess' deaths during the winter of 2008/09, compared with 23,800 in 2009/10.¹ In cold weather, many more people visit GPs and hospitals with a range of cold weather-related health problems.

Although there has been some improvement in the past decades with improving living conditions, mortality in England still does not compare well with the rest of Europe.² Other northern European countries perform better than England. For example, Finland – a much colder country – has around half the winter excess death rate of the UK. Likewise, those countries with the greatest excess mortality, such as Spain and Portugal, are also the ones with the mildest winters. This is largely because people in colder countries are better prepared for cold weather, with well-insulated, well-heated, energy-efficient homes and warm outdoor clothing. As the recent Marmot Review Team report *The Health Impacts of Cold Homes and Fuel Poverty* stated: 'Countries which have more energy efficient housing have lower excess winter deaths.'³

What is the purpose of the plan?

The purpose of the Cold Weather Plan is to avoid the adverse health effects of winter by raising public awareness and triggering actions by those in contact with people who are most at risk. This, in turn, could help to reduce pressures on the health and social care system in the busiest months of the year.

Who is the plan for?

The plan is primarily for health and social care services and other public agencies and professionals who interact with those most at risk from cold weather in winter. At-risk groups include older people, the very young and people with pre-existing medical conditions as well as those whose health, housing or economic circumstances put them at greater risk of harm from cold weather.

The plan is also intended to mobilise individuals and communities to help to protect their neighbours, friends, relatives and themselves against avoidable health problems in winter. As such, the broadcast media and alerting agencies may find this plan useful.

Health benefits

Many of the deaths and injuries due to cold weather are preventable. A number of local initiatives have already demonstrated that simple measures can improve people's health and lessen the impact on the NHS. Their success suggests that a national plan of preventive actions, education and co-ordinated responses could reduce both the health burden of winter weather and health inequalities across England.

Cost benefits

The annual cost to the NHS of treating winter-related disease due to cold private housing is over £850 million. This does not include additional spending by social services, or economic losses through missed work. A recent study showed that investing £1 in keeping homes warm saved the NHS up to 42 pence in health costs.⁴

Making the case

The Cold Weather Plan is supported by a separate volume of supporting information: *Making the Case: Why cold weather planning is essential to health and well-being* (www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130564).

This sets out the supporting evidence on why cold weather can be harmful to health. It is also supported by a series of Information Guides published online which aim to provide an authoritative source of information about the effects of cold weather on health for:

- individuals, families and carers;
- community and voluntary sector organisations;
- health, social care and other community care professionals; and
- NHS, social care, and local authorities and other public sector organisations.

The plan and the Cold Weather Alert service were piloted over the last winter in certain parts of England and the plan has been extensively amended in light of this experience and comments received from a range of professional and community and social stakeholders.



Section 1

The Cold Weather Plan – a public health plan

The Cold Weather Plan sets out what should happen before and during severe winter weather in England. It spells out what preparations both individuals and organisations could make to reduce health risks and includes specific measures to protect at-risk groups.

The plan also provides good practice and advice on how to respond and what to do once severe winter weather has been forecast.

The plan focuses on the effects of cold weather on health. However, severe cold weather in winter is often accompanied by ice and snow, which can cause severe disruption to services and access to these services for patients, staff and the wider public. At a local level, the key will be how well cold weather health planning is co-ordinated with other winter pressures planning – for example, to maintain transport and other infrastructure.

For this reason, multi-agency Local Resilience Forums will have a critical role in supporting the delivery of this plan at a local level, working closely with the newly created Health and Wellbeing Boards.

The effectiveness of the plan will be reviewed in 2012 with a view to making improvements for future years. The evaluation process will include data monitoring, expert reviews, research, cross-departmental discussions and stakeholder engagement.

1.1 Essential elements of effective cold weather planning

The Cold Weather Plan depends on having well co-ordinated plans in place for how to deal with severe cold weather before it strikes, including the following essential elements.

1.1.1 Strategic planning

- Co-ordinated long-term planning between agencies to protect people and infrastructure from the effects of severe winter weather and thus reduce excess winter illness and death. It is anticipated that this could be led in the future by local Health and Wellbeing Boards.
- Strategic planning at national and local level to prepare for pressures on the health system such as pressure on staffing levels, high demand and disruption to services.
- Planning for the future impact of climate change on winter weather and the need to increase energy efficiency and reduce carbon emissions. The Government's Green Deal programme to provide energy efficiency measures (such as insulating homes) at no up-front cost starts in late 2012 and will be the most ambitious home improvement policy since World War II.

1.1.2 Advance warning and advice during the winter months

- A Cold Weather Alert service from 1 November to 31 March based on Met Office forecasts, which will trigger levels of response from the Department of Health and other organisations and groups.
- Advice and information from the Department of Health for the public and health and social care professionals, particularly those working with at-risk groups. This includes both general preparation for winter and more specific advice when severe weather is forecast.

1.1.3 Communicating with the public

- There are general duties under the Civil Contingencies Act 2004 to warn and inform the public before, during and after an emergency.
- Working with the media to get advice to people quickly, both before and during severe winter weather.
- Raising awareness of how cold weather affects health and what preventive action people can take, both throughout the year and during cold weather emergencies.
- Keep Warm Keep Well campaign materials are available online to help local organisations to communicate with the public every winter.

1.1.4 Communicating with service providers

- Helping GPs and district nurses to identify vulnerable patients on their practice lists by providing them with cold weather information and good practice.
- Ensuring that health and social care organisations and voluntary groups implement measures to protect people in their care and reduce cold-related illness and death in those most at risk.

- Ensuring that staff are fit and well and that service providers supply flu vaccination to front-line health and social care workers. This will reduce the risk of them passing the virus to vulnerable patients, staff and family members; and help to reduce the level of absenteeism in NHS and care services.

1.1.5 Engaging the community

- Providing extra help, where possible, to care for those most at risk, including isolated older people and those with a serious illness or disability. This could come from local authorities, health and social care services, the voluntary sector, communities and faith groups, families and others. This is determined locally as part of the person's individual care plan.
- Additional help to ensure that people are claiming entitlements to benefits should be signposted.

1.2 The Cold Weather Plan and existing winter planning

This Cold Weather Plan builds on existing measures taken by the Department of Health and the NHS to protect individuals and communities from the effects of severe winter weather.

These include:

- **Annual seasonal influenza (flu) vaccination programme** (www.dh.gov.uk/health/2011/10/winter-flu/) which aims to protect people from the harmful effects of flu and is offered, free of charge, to certain at-risk groups.
- **Pneumococcal vaccination programme** which aims to protect those people most at risk from pneumococcal disease which can cause meningitis, septicaemia and pneumonia.
- **Keep Warm Keep Well** – this provides advice on staying warm over the winter and checking on neighbours and relatives who may be vulnerable during cold weather, in order to reduce illness and deaths. www.nhs.uk/Livewell/winterhealth/Pages/KeepWarmKeepWell.aspx
- **NHS Choices** (www.nhs.uk) – the main NHS website provides reliable advice and guidance throughout the year on how to keep fit and well. It includes information on topics such as: keeping warm; the dangers of carbon monoxide poisoning; the importance of eating well; and the symptoms of flu.
- **NHS winter pressures reporting and winter resilience programmes** – these are plans made locally and nationally over the winter to help the NHS and local agencies to manage the demands placed on essential services so that they can continue to operate smoothly through severe winter weather.



- **Winterwatch** – this service, launched in 2010, provides information for service professionals and users about the current volume of activity in response to the winter pressures together with practical advice from the Chief Medical Officer to help to keep the public well. Winterwatch also includes regular data on A&E and ambulance activity and the weekly National Influenza Report from the Health Protection Agency (HPA). <http://winterwatch.dh.gov.uk/>
- **Excess Seasonal Deaths Toolkit** – this was produced by the Department of Health to help local communities to take a systematic approach to reduce the risk of seasonal excess deaths in older people. www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_115098.pdf
- **Excess Winter Deaths Atlas for England** – information about excess winter deaths produced in association with the Public Health Observatories. www.wmpho.org.uk/excesswinterdeathsinEnglandatlas/
- **Warm Homes, Healthy People fund: keeping people warm in winter** – this is a major new initiative to support local authorities in reducing death and morbidity in England due to cold housing in the coming winter. Further details will be announced in November 2011 (see Section 7).

The Cold Weather Plan will build on these measures by creating a co-ordinated, strategic approach supported by a new system of cold weather alerts to trigger action by those in contact with people who are at risk. We hope that the plan will be useful for communities and professionals, such as emergency responders in health and social care.

Section 2

The Cold Weather Alert service

The Met Office's National Severe Weather Warning Service already warns relevant organisations about a range of high-impact winter weather events, including heavy rain, heavy snow, strong winds, fog and widespread ice. This service operates year round across the UK.

Under the Cold Weather Plan, the new Cold Weather Alert service will add to this by recognising the potential impact of cold weather on health and triggering a co-ordinated response. Depending on the severity, duration and geographical spread of severely cold weather conditions, a series of escalating alerts will be issued up to a major incident (Level 4).

This service will run in England from 1 November to 31 March.

The Met Office will issue alerts up to Cold Weather Alert Level 3, while a Level 4 alert would be issued following cross-government consultation, in response to a particularly severe winter weather event.

The thresholds for what constitutes severe winter weather have been developed in consultation between the Met Office, Department of Health, Cabinet Office and other experts.

2.1 The Cold Weather Alert levels

The Cold Weather Alert service includes four alert levels as outlined in Figure 2.1 and described in further detail below. Cold weather alerts are issued by the Met Office on the basis of either of two measures: low temperatures or widespread ice/heavy snow. Often low temperature criteria are met at the same time as the ice and snow. However, sometimes one may occur without the other.

- **Level 1: Winter preparedness** – Level 1 is in force throughout the winter from 1 November to 31 March, with the seasonal flu vaccination programme starting on 1 October.
- **Level 2: Alert and readiness** – Level 2 is declared when the Met Office forecasts a 60% risk of severe winter weather in one or more defined geographical area in the days that follow. This usually occurs two to three days ahead of the event. A Level 2 alert would be issued when a mean temperature of 2°C is predicted for at least 48 hours, with 60% confidence, and/or widespread ice and heavy snow is forecast, with the same confidence.
- **Level 3: Severe weather action** – a Level 3 alert is issued when the weather described in Level 2 above actually happens. It indicates that severe winter weather is now occurring, and is expected to impact on people's health and on health services.
- **Level 4: Major incident** – a Level 4 alert indicates that many parts of the country are experiencing exceptionally severe winter weather and the conditions are affecting critical services. Such weather conditions are likely to have significant impacts not only on health, but also on other sectors and critical infrastructure. A cross-governmental response may be required.

The cold weather definitions from the Met Office are included at Annex 1.

The issue of a cold weather alert should trigger a series of actions, as Figure 2.1 shows. It is a summary of the good practice guidance contained in the sections which follow.

Figure 2.1: Summary of Cold Weather Plan levels and actions

Alert trigger	Health, social care and local authorities	Community and voluntary sector	Individuals
Level 1 Long-term planning <i>All year</i>	Organisations and professional staff: Work with partner agencies to: <ul style="list-style-type: none"> • develop a shared understanding of excess winter deaths and what partners can do to reduce them • identify those most at risk from seasonal variations • improve winter resilience of those at risk • ensure that a local, joined-up programme is in place to support improved housing, heating and insulation • assess responses to climate change issues – a reduction in carbon emissions and preparing for the expected health impacts 	<ul style="list-style-type: none"> • Develop a community action plan 	<ul style="list-style-type: none"> • Insulate your home and protect water pipes from freezing • Check your entitlements to benefits and local grants
Level 1 Winter preparedness programme <i>1 November – 31 March</i>	Organisations: <ul style="list-style-type: none"> • Work with partner agencies to co-ordinate cold weather plans • Work with partners and staff on risk reduction awareness (e.g. flu jabs for staff), information and education • Support communities to help those at risk • Plan for a winter surge in demand for services Professional staff: <ul style="list-style-type: none"> • Identify those at risk on your caseload 	<ul style="list-style-type: none"> • Develop community action plan 	<ul style="list-style-type: none"> • Find good information about health risks • Check your entitlements and benefits • Get a flu jab if you are in a risk group • Insulate your home and protect water pipes from freezing • Look out for vulnerable neighbours
Level 2 Alert and readiness <i>60% risk of severe cold in the following days</i>	Organisations: <ul style="list-style-type: none"> • Communicate public media messages • Communicate alerts to staff and make sure that they are aware of winter plans • Implement business continuity Professional staff: <ul style="list-style-type: none"> • Identify those most at risk Check client's room temperature if visiting	<ul style="list-style-type: none"> • Keep an eye on people you know to be at risk 	<ul style="list-style-type: none"> • Stay tuned into the weather forecast and keep yourself stocked with food and medications • Check ambient room temperatures • Make sure that you get any benefits to which you are entitled
Level 3 Severe weather action	Organisations: <ul style="list-style-type: none"> • Activate plans to deal with a surge in demand for services • Mobilise community and voluntary support As appropriate, contact those at risk (visit, phone call) daily <ul style="list-style-type: none"> • Communicate public media messages • Ensure that staff can help and advise clients Professional staff: <ul style="list-style-type: none"> • Signpost clients to appropriate benefits • Maintain business continuity 	<ul style="list-style-type: none"> • Activate community action plan 	<ul style="list-style-type: none"> • Clear pavements • Set daytime room temperature to 21°C • Set bedroom night-time temperature to at least 18°C • Dress warmly, eat well • Check those you know are at risk
Level 4 Emergency response Exceptionally severe weather or threshold temperatures breached >6 days	Level 4 alert declared by central Government Response likely to involve: <ul style="list-style-type: none"> • National government departments • Executive agencies • Public sector, including health sector • Voluntary sector At all levels	NATIONAL EMERGENCY ACTION Multi-agency response required and coordinated by central government	
At-risk groups Over 75 years old, frail, pre-existing cardiovascular or respiratory illnesses and other chronic medical conditions, severe mental illness, dementia, learning difficulties, arthritis, limited mobility		or otherwise at risk of falls, young children, living in deprived circumstances, living in houses with mould, fuel poor (needing to spend 10% or more of household income on heating home), elderly people living on their own, homeless or people sleeping rough, other marginalised groups	

Figure 2.2 below illustrates how cold weather alert messages should be cascaded throughout the local community and nationally as appropriate. Local Resilience Forums and health and social care organisations will want to develop this into a specific cascade system that is appropriate for their local area.

Figure 2.2: Typical cascade of cold weather alerts



Adapted from: Anthea Sanyasi, HPA Health Emergency Planning Adviser, London

Section 3

Responsibilities at Level 1 – Winter preparedness

Cold Weather Plan levels	
Level 1	Long-term planning <i>All year</i>
	Winter preparedness programme <i>1 November–31 March</i>
Level 2	Severe winter weather is forecast – Alert and readiness <i>60% risk of severe cold in the following days</i>
Level 3	Response to severe winter weather – Severe weather action
Level 4	Major incident – Emergency response <i>Exceptionally severe weather or threshold temperatures breached for more than six days</i>

Level 1 alerts run throughout the winter and indicate that people should be preparing for the possibility of severe weather and its effects on health. Everyone has a role to play in this, including individuals, health and social care professionals and a range of community and voluntary sector organisations.

Health and social care services have a particular responsibility to plan for cold weather in co-operation with government and other agencies, and to put measures in place to protect those most at risk. Therefore, Level 1 also includes long-term planning and prevention activities which can take place throughout the year.

3.1 Long-term planning

Preparing for cold weather should be a year-round activity. Long-term planning needs to encompass health improvement plans which can only be addressed jointly by partners in a multi-agency context.

Many of the factors that will help to protect and enhance the health of the population require action well before the winter. That is why long-term planning is needed, including year-round joint working between agencies to protect the population and infrastructure from severe winter weather and reduce excess winter illness and death.

To achieve this, long-term planning for cold weather should be included in health improvement plans agreed by local partner agencies including health, social care, local authorities and others – and be owned collectively by those partners. In the emerging new organisational structures for public health, consequent on proposed legislation, co-ordination should be provided by the local Health and Wellbeing Board with leadership coming from the local Director of Public Health.

3.1.1 A three-stage process for cold weather planning

The Department of Health publication *How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level*⁵ sets out a variety of ways to reduce the risk of ill-health in cold weather. It also suggests a three-stage process which can be adopted for cold weather planning:

Prepare – develop a shared understanding of seasonal excess deaths and how partners can co-ordinate a systematic approach between agencies, for example through joint working arrangements, data sharing and agreed personal care plans.

Identify those people likely to be highly susceptible to seasonal variations, forming a shared register of those most at risk.

Systematically work to improve the resilience of vulnerable people to severe cold, for example by encouraging uptake of vaccination programmes, home insulation schemes and benefit entitlements.

These three stages should be co-ordinated with the cold weather alerts, and be responsive to the changes in cold weather conditions before and throughout the winter period.

3.1.2 Analysing different needs

A key part of this process is identifying and addressing the needs of different groups and communities, including marginalised and vulnerable groups. The local Joint Strategic Needs Assessment is an essential tool for this. Plans should take into account the different needs and concerns of those affected by cold weather, including cultural differences which can influence community-based responses to cold weather. An effective approach is one that seeks to:

- involve people from marginalised groups, service users and a range of community sources to plan and evaluate interventions and approaches; and
- collect and analyse local data that includes not only gender and age, but also other important demographic information to address social inequalities. Encouraging community engagement can help to draw a more accurate picture of need and community awareness of relevant issues.

3.1.3 Taking action

Some long-term responses to winter weather are directly within the control of the health sector, for instance planning for and delivery of seasonal flu immunisation programmes in the autumn.

Others, such as improved insulation and heating, or adaptations to reduce the risk of falls, are traditionally provided by local authority schemes or grants from other government departments or local sources. The health sector should be working in partnership with other agencies, especially local authorities, to help to promote schemes that provide assistance to householders.

For example, support and advice from a trusted source, such as a health or social care professional, could help vulnerable people to access the grant or assistance to which they are entitled. A more systematic, year-round focus on such activity could help to reduce health inequalities.

Behaviour change support, information and advice may also be effective, but needs long-term planning with consistent, sustained delivery of interventions over long periods of time. Even where support measures have been provided, many households, including the most vulnerable, often do not heat their homes to an adequate level for a variety of reasons. Information to promote appropriate behaviour and understanding of health risks needs to be provided not just in the coldest weather, but throughout the winter.

Long-term planning will also need to take into account the projected impacts of climate change (e.g. warmer, wetter winters, extreme weather events and cold snaps) and the need to increase energy efficiency and reduce carbon emissions in an attempt to mitigate those impacts.

At an individual level, we would urge people to consider improving the heating efficiency of their homes by installing better insulation and to find out whether they are entitled to grants and subsidies for home heating and insulation, and to 'shop around' to achieve the best prices for energy supply.

3.2 Level 1 alerts – actions and activities

The following measures can be taken in advance by individuals, communities, professionals and organisations to protect themselves against the effects of severe winter cold.

3.2.1 Individuals, families and carers

Consider how you can protect yourself and your family and friends from the effects of cold weather:

- Ensure that you can easily access information about cold weather and health (further information is given below and in the companion document to this plan, *Making the Case*).
- Make sure that you and your family members have received all appropriate vaccinations (influenza, pneumococcal, meningitis), particularly if you or they are in an at-risk group.
- Ensure that you have a room thermometer.
- Consider improving the heating efficiency of your home, including better insulation.
- Find out whether you are entitled to grants and subsidies for home heating and insulation.
- Check that home heating, radiators, boilers and electric heaters are serviced ahead of winter to reduce the risk of breakdowns during the cold weather.
- Have all gas, solid fuel and oil burning appliances (i.e. boilers, heaters and cookers) serviced by an appropriately registered engineer. Malfunctioning appliances can release carbon monoxide – a gas which at high levels will kill and at lower levels can cause health problems.
- Make sure that flues and chimneys are swept and checked for blockages and that there is adequate ventilation in rooms to allow appliances to work properly. Fit an audible carbon monoxide alarm which is EN50291 compliant, although fitting this type of alarm should not replace regular maintenance of appliances.
- Where the home is not connected to the mains gas network and heating oil or LPG is the main heating source, households should ensure that heating oil and gas are purchased early to avoid running out during periods of severely cold weather.
- Consider who might be at particular risk from cold weather among your family, neighbours and friends, and how you can help them to protect themselves against the ill-effects of cold weather (see examples of at-risk groups in Figure 3.1).
- Layer your clothing and wear shoes with a good grip if you need to go outside.

- Follow expert advice on protecting and insulating your water pipes against freezing (advice on pipe protection and what to do in the event of bursts is given by most water companies on their websites).

If you or your relative find your home uncomfortably cold or damp and are concerned that it may pose a health problem, you can seek advice from your local authority's environmental health department, who can undertake a Housing Health and Safety Rating System assessment (see box on page 27).

Figure 3.1: At-risk groups – examples of sub-categories, as well as living conditions and health conditions which may place people at risk

Over 75 years old
Frail
Pre-existing cardiovascular or respiratory illnesses and other chronic medical conditions
Severe mental illness
Dementia
Learning difficulties
Arthritis, limited mobility or otherwise at risk of falls
Young children
Living in deprived circumstances
Living in homes with mould
Fuel poor (needing to spend 10% or more of household income on heating home)
Elderly people living on their own
Homeless or people sleeping rough
Other marginalised groups

Advice for the public about winter warmth benefits

You may be able to get financial and practical help to heat your home. Help available includes Warm Front, and Warm Home Discount

The **Warm Front** scheme offers grants for heating and insulation improvements up to £3,500 or up to £6,000, if your home needs oil central heating, for private sector households in receipt of certain benefits. To find out if you qualify, call a Warm Front advisor free on 0800 316 2805 (lines are open Monday to Friday from 8am-6pm and Saturdays from 9am-5pm) or visit the Warm Front website (http://www.direct.gov.uk/en/Environmentandgreenerliving/Energyandwatersaving/Energygrants/DG_10018661).

The Warm Home Discount scheme is a four-year scheme that commenced in April 2011 to help low-income and vulnerable households with energy costs. There are two key elements to the scheme. The first is that a rebate of £120 may be paid, to those in receipt of Pension Credit guarantee credit only (not the savings element) on 11 September 2011, and who pay their own electricity bill to a participating supplier.

Those eligible need not apply. Limited data sharing between the Department for Work and Pensions and energy suppliers should enable rebates to be paid automatically in the majority of cases. If a consumer qualifies, but an automatic rebate can't be made, they'll receive a letter from the Government asking them to provide further information to a dedicated call centre. This information will be available on their electricity bill.

If a consumer is receiving the guarantee credit element of Pension Credit but not the savings credit element, please visit www.direct.gov.uk/warmhome for up to date information on the scheme.

The second element of the schemes requires participating electricity suppliers to provide additional rebates to a small number of groups who they class as vulnerable. For example people who are on a low income with a disability, long term illness or those with children. However, as suppliers have some discretion over who is included within this group, the actual criteria used will vary from supplier to supplier. Further information and contact email/telephone addresses for participating electricity suppliers is available at: www.decc.gov.uk/warmhome

Winter Fuel Payments from £100 to £300 for winter 2011/12 may be available if you were born on or before January 5 1951. If you receive State Pension or certain other benefits you should be paid automatically and don't need to claim. The payment is paid each winter and you don't need to reapply if your circumstances don't change.

If you don't currently receive a Winter Fuel Payment and think you may be eligible, you can find out more at www.direct.gov.uk/winterfuel or call 08459 151515 (8.30am-4.30pm Monday-Friday, textphone 0845 601 5613).

Cold Weather Payments are available to you if you receive Pension Credit and may be available to you if you receive certain benefits and are disabled or have a child who is disabled or under the age of five. To find out more about Cold Weather Payments visit www.direct.gov.uk/coldweatherpayment.

For more information and advice on your health and well-being in winter, visit NHS Choices on: www.nhs.uk/livewell/winterhealth/pages/keepwarmkeepwell.aspx

Additional information on help with heating costs is provided by charity organisations such as National Energy Action (www.nea.org.uk/useful-phone-numbers/), Citizens Advice (www.citizensadvice.org.uk or call 08444 111 444 or check your local bureau's contact details) and Age UK (www.ageuk.org.uk/money-matters/claiming-benefits/heating-benefits/ or call 0800 169 6565).

Housing Health and Safety Rating System (HHSRS)

This is the way in which local authorities assess homes under the Housing Act 2004. It is the basis for regulation of housing conditions. Anyone, including health professionals, can request that an assessment be made if they have concerns about how housing conditions could potentially affect someone's health.

The assessment is usually made by an environmental health practitioner who judges the risk based on the most vulnerable age group for any hazard identified, regardless of who is actually living there.

There are 29 potential hazards in the system: these include excess cold, excess heat, damp and mould, lead, carbon monoxide, noise, entry by intruders, falls associated with baths, falling on stairs, falling on the level, fire, electrical hazards, and crowding and space. Excess cold, damp and carbon monoxide are especially relevant to winter weather preparedness.

Depending on the severity of the hazards found, the housing authority can require that the landlord takes action to reduce the hazard. Alternatively, the assessment can be used as a basis for housing renewal assistance whereby the local authority can offer loans and grants from local resources depending on local prioritisation. For the most serious of hazards (Category 1) there is a duty on the authority to take action. For further information on the HHSRS please visit www.communities.gov.uk/documents/housing/pdf/150940.pdf

3.2.2 Community groups and voluntary sector organisations

- Develop a Community Action Plan to ensure that pavements and public walkways are cleared of snow and ice in the local community. This might include identifying local resources (snow clearing equipment and stocks of grit and salt) and rotas of willing volunteers to keep the community safe during inclement weather and to check on vulnerable or frail neighbours.
- Get in touch with other groups who will be holding workshops or directing members/clients to benefits advice.

3.2.3 NHS, social care and other community staff

- Find out what resources are available to you for raising awareness of the health risks associated with winter weather (for example, see the companion document to this plan, *Making the Case*).
- Identify individuals who are at particular risk from severe cold weather. These people are likely to be already receiving care from health and social services in the at-risk groups identified in this plan. Where many agencies are involved a key worker should oversee prevention/management arrangements, especially for frail elderly people living alone.
- Identify any changes to individual care plans for those in high-risk groups (see Figure 3.1 on page 25).
- Work with at-risk individuals, their families and carers to ensure that they are aware of the dangers of cold weather and how to keep warm. Help them to put simple protective measures in place, such as ensuring that they have

adequate warm clothing and receive warm meals every day, and that they are claiming the relevant benefits.

- Pharmacists have an important role in reminding people to have sufficient medication and help with preventive medicines management.
- Make sure that you get a flu vaccination.

3.2.4 Health, social care and local authority organisations

- Ensure that cold weather planning is brought into all aspects of winter weather planning within the NHS and social care organisations as well as with multi-agency Local Resilience Forums.
- Ensure that the actions in this plan are brought to the attention of relevant staff, and particularly that both organisations and staff are aware of all the guidance on minimising and coping with cold weather-related health risks.
- Ensure that your internal alert and cascade system is updated to receive the Cold Weather Alert service. People who will receive the alerts need to be aware of their own role and responsibilities for action when an alert is received.
- Ensure that you have a business continuity plan and an emergency plan for severe winter weather, including how to respond to a possible surge in activity and staffing pressures. Make sure that the plan is up to date with key emergency contacts identified.
- Consider who your partners may be in protecting the health of the local population against cold – these may include police and fire authorities and voluntary and community sector organisations.
- Consider how to best mobilise and engage community organisations and support the development of community action plans.
- Identify which local health, social care and voluntary sector organisations are themselves most vulnerable to the effects of severe winter weather.
- Ensure that all community staff who identify clients living in homes that are too cold know how to get assistance for their clients.
- Have a plan in place to provide influenza vaccination to all front-line staff and to encourage vaccination uptake.
- Explore and encourage the uptake of energy efficient, low-carbon solutions for insulating and heating of homes and social care and health institutions.
- Consider how your winter plans can help to reduce health inequalities and how they might target high-risk groups (as summarised in the box on page 29).
- Work out how your winter plans can target marginalised groups, including frail and isolated people, homeless people and travellers alongside careful consideration of the needs of black and ethnic minority groups.

- Implement the strategies recommended in the Department of Health publication *How to Reduce the Risk of Seasonal Excess Deaths Systematically in Vulnerable Older People to Impact at Population Level* (see box below).
- Work across all local authority teams to identify accident hotspots on the pavements or roads, advise on gritting priorities to prevent accidents in icy weather, and ensure access by utilities and other essential services.

How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level: A workbook for health and social care

The workbook, produced by the National Support Team for Health Inequalities, recommends a three-stage process for cold weather planning. Having prepared for winter (Stage 1) and identified those at risk (Stage 2), Stage 3 suggests systematically offering or implementing practical and effective interventions, including:

- assessment for affordable warmth interventions, including energy efficiency, household income and fuel cost;
- regular review of benefits entitlement and uptake;
- seasonal flu and pneumococcal vaccination;
- an annual medication review (every six months if taking four or more medicines);
- an annual medicines utilisation review and follow-up support to ensure that the patient is taking their medicine;
- implementation of a personal brief health interventions plan that includes advice and support on stopping smoking, sensible drinking, healthy eating, adequate hydration and daily active living;
- assessment and support programme to prevent falls;
- assessment for appropriate assistance technologies, e.g. alarm pendants to call for help; and
- help to develop a personal crisis contingency plan (e.g. including a buddy scheme, where there are no close friends or family, to watch for danger signs and provide someone to call).

Department of Health (2010) *How to Reduce the Risk of Seasonal Excess Deaths Systematically in Vulnerable Older People to Impact at Population Level*. Health Inequalities National Support Team 'How to' guide book 10. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_115098.pdf

3.2.5 At national level

The Department of Health will make advice available to the public and health and social care professionals in affected areas as appropriate.

Preparations at this level will be the overall responsibility of the Department of Health and, in future, Public Health England in collaboration with the Met Office, the Health Protection Agency and NHS bodies, including NHS Direct/ NHS Choices.

A Level 1 alert will be sent by the Met Office to the agreed list of organisations supplied by the Department of Health, which will include the Cabinet Office as well as other central government departments.

The Met Office will continue to monitor and forecast temperatures in each area, including the likely duration of the period of severe winter weather.

The Department of Health, and in due course Public Health England, will look to develop new ways to monitor and analyse winter-related illnesses and deaths as close to real time as possible. It will also issue general advice to the public and healthcare professionals and will work closely with other national organisations that produce winter warmth advice to ensure maximum reach of the message.



Section 4

Responsibilities at Level 2 – Alert and readiness

Cold Weather Plan levels	
Level 1	Long-term planning <i>All year</i>
	Winter preparedness programme <i>1 November–31 March</i>
Level 2	Severe winter weather is forecast – Alert and readiness 60% risk of severe cold in the following days
Level 3	Response to severe winter weather – Severe weather action
Level 4	Major incident – Emergency response <i>Exceptionally severe weather or threshold temperatures breached for more than six days</i>

A Level 2 alert is triggered when there is a 60% risk of severe cold weather lasting at least 48 hours forecast to arrive within the next two or three days. The following actions should be taken by hospitals, care homes and communities to prepare for the potential impact on health.

4.1 Individuals, families and carers

- Consider how you can protect yourself and your family and friends, especially those most at risk. These include older people, the very young, and people with underlying medical conditions, including respiratory conditions such as asthma and chronic obstructive pulmonary disease (COPD) – see Figure 3.1 on page 25 for the full list.
- Actions to prepare for impending severe winter weather include:
 - Stay informed by tuning in to weather forecasts.
 - Take the weather into account when planning your activity over the following days. For example, avoid exposing yourself to cold or icy outdoor conditions if you are at higher risk of cold-related illness or falls.
 - Consider how you can access essential medication and groceries without putting yourself at risk, for example by getting supplies in early, having them delivered, or asking a friend or neighbour for help.
 - Check that the heating in your home is working properly, that your home is warm enough and that at least one room meets recommended room temperatures (see Table 5.1).

- Consider whether any friends and family could benefit from some additional support during the cold snap.
- Discuss with neighbours, community, friends and relatives about clearing snow and ice from in front of your house and public walkways nearby if you are unable to do this yourself.

4.2 Community groups and voluntary sector organisations

- Implement the Community Action Plan (see Level 1 actions).
- Keep an eye on vulnerable people you know.
- Encourage local residents to keep the pavements free of ice and snow.

4.3 NHS, social care and other community staff

- Make sure that all those at high risk from cold weather have been identified and that arrangements are in place to visit them and take appropriate action to protect them against severe winter weather.
- When visiting clients check room temperatures to ensure that clients are warm. Ensure that they have at least one room which meets recommended room temperatures (see Table 5.1).
- Also check that clients have supplies of food and medication and that they are claiming the benefits to which they are entitled.
- Remind clients of the action they can take to protect themselves from the effects of severe cold.
- Make sure that you are prepared for a potential influx of weather-related injuries and illnesses.
- Consider how the forecast weather conditions may impact on your work – for example, snow and icy roads delaying home visits.
- Get an influenza vaccination.

4.4 Health, social care and local authority organisations

- Make sure that NHS, social care and other community staff have implemented the agreed Cold Weather Plan and that they have identified vulnerable clients and are supporting them.
- Implement business continuity and emergency plans as required.
- Ensure that local resilience teams are aware of the new cold weather alerts.
- Communicate cold weather alerts to your staff, particularly those in community care.
- Make sure key partners, including all managers of care, residential and nursing homes, are aware of the alerts.
- Ensure that all key staff are aware of winter plans and arrangements and have access to relevant advice.

- Communicate public media messages on the weather.
- Provide a flu vaccination programme to all front-line staff and encourage staff to be vaccinated.
- Consider how to make best use of available capacity, for example by using community beds for at-risk patients who do not need an acute bed and enabling access to step down care and reablement.
- Provide guidance to community organisations to help them to mobilise their community action plans.
- Discuss road gritting arrangements with the local authority when snow or icy conditions are forecast. Consider plans to ensure access to critical health services, for essential deliveries and to prevent ice-related car and pedestrian accidents.

Hospitals, emergency departments, GP surgeries and other community health service providers

Cold-related illnesses and severe cold weather conditions may put particular pressure on hospitals, A&E departments and GP surgeries. If severe weather is forecast, they should consider the following actions to ensure that they can cope with demand and minimise disruption to services.

Staffing

- Consider deploying more clinical resources (medical, nursing and allied health) to deal with expected surges in demand.
- Consider accommodating key staff on site overnight if there is a risk that transport networks may be disrupted.
- Encourage relevant front-line staff to be vaccinated against flu.

Capacity

- Consider discharging inpatients, taking account of transport networks, to free up acute beds, and work with local authorities and other partners to make step down and reablement services available.
- Consider cancelling routine elective surgery and day case outpatient surgery to accommodate increased cold-related demand.
- Consider whether you will need more orthopaedic surgical capacity to deal with an expected increase in fall-related fractures.
- Consider scheduling extra 'fracture clinics' to cope with a possible surge in demand.
- Emergency departments should prepare for increased numbers of falls of elderly people. Extra occupational therapy and physiotherapy resources are likely to be required and there may be a higher workload for nurses.
- Consider postponing elective surgery that is likely to require critical care resources (Intensive Treatment Unit stay) to provide capacity for severe cold-related illness.

- Ease pressure on healthcare services by carefully selecting patients for hospital assessment and admission, and taking a co-ordinated approach to patient pathways to higher levels of care.
- Consider the impact on radiology departments, which may face an increased burden of medical and musculoskeletal imaging and need to work flexibly to cope with demand.
- Consider developing a triage mechanism for severe winter weather episodes.

Resources

- Ensure readily accessible supplies of warmed fluids, forced-air warming blankets and other warming equipment.
- Prepare for increased respiratory problems with stocks of nebulised medications and consider gathering non-invasive positive pressure ventilation (NIPPV) equipment for use.
- Ensure that departments are well stocked with plaster, splints, crutches and equipment required to manage any expected increase in fracture pathology.
- Consider whether you need to increase the frequency of routine pharmacy restocking to match increased hospital attendances and prescribing.

GP surgeries, walk-in health centres, community health service providers and other primary care facilities

- Consider how you can adapt your team's capacity to a possible surge in activity.
- Consider how you would deal with the potential consequences of disrupted transport links, including disrupted access to patients' homes and care homes and possible delays in pharmaceutical supplies.
- Encourage relevant front-line staff to be vaccinated against flu.
- Set up patient alert schemes which identify those at risk of cold homes.

Information gathering and support

- Work with ambulance crews to collect information about where accidents and falls are taking place to share with road, police and other organisations so that remedial action can be undertaken.
- Monitoring information from hospital A&E departments should be analysed and shared to identify specific reasons for A&E pressures (such as an increase in fractures or flu admissions) so that remedial and preventive action can be undertaken locally.



4.5 At national level

The Department of Health – and Public Health England in future – will make advice available to the public and health and social care professionals in affected regions via NHS Choices/NHS Direct, as well as on the Met Office, Health Protection Agency and Department of Health websites.

A Level 2 alert will be sent by the Met Office to the Cabinet Office as well as other central government departments which should then cascade the information through their own stakeholder networks and front-line communications systems.

Section 5

Responsibilities at Level 3 – Severe weather action

Cold Weather Plan levels	
Level 1	Long-term planning <i>All year</i>
	Winter preparedness programme <i>1 November–31 March</i>
Level 2	Severe winter weather is forecast – Alert and readiness <i>60% risk of severe cold in the following days</i>
Level 3	Response to severe winter weather – Severe weather action
Level 4	Major incident – Emergency response <i>Exceptionally severe weather or threshold temperatures breached for more than six days</i>

A Level 3 alert indicates that the severe winter weather forecast at Level 2 is now occurring, and is expected to impact on people’s health and on health services. It should trigger the following actions by hospitals, care homes, local authorities, community organisations and individuals.

5.1 Individuals, families and carers

Families, friends and carers of people in high-risk groups, such as older people and those with respiratory conditions (see the full list in Figure 3.1 on page 25), should check on them regularly during the severe weather period.

There are a number of simple actions that those at risk can take to protect against the ill-effects of cold weather. These include the following.

5.1.1 During the day

- Avoid going outdoors unless necessary – but keep active and moving around indoors as much as you can.
- Keep your home at recommended indoor temperatures – see Table 5.1.
- If you cannot heat all your rooms, keep your living room warm throughout the day and heat your bedroom before going to bed.
- Set the timer on your heating to come on before you get up and switch off when you go to bed.
- In very cold weather, rather than turn the thermostat up, set the heating to come on earlier so that you will not be cold while you wait for your home to heat up.

5.1.2 During the night

- If you use a fire or heater in your bedroom during winter, open the window or door a little at night for ventilation.
- Keep your bedroom at recommended indoor night-time temperatures (see Table 5.1).
- Never use an electric blanket and hot water bottle together as you could electrocute yourself.
- If you have an electric blanket, check what type it is – some are designed only to warm the bed before you get in and should not be used throughout the night.
- Make sure that your electric blanket is safe by getting it tested every three years by an expert. The Fire Brigade and Trading Standards can test your electric blanket for safety. If buying a new electric blanket look for CE, BEAB or IMQ safety markings.

Table 5.1: Recommended indoor temperatures

Indoor temperature	Effect
21°C (70°F)	Minimum recommended daytime temperature for rooms occupied during the day
18°C (65°F)	Minimum recommended night-time temperature for bedrooms. No health risk, though may feel cold

Source: World Health Organization (1987) *Health Impact of Low Indoor Temperatures: Report on a WHO meeting*. Copenhagen: World Health Organization. Available at: <http://tinyurl.com/3ghblbm>

5.1.3 Dress warmly

- Wearing plenty of thin layers is warmer than one thick one.
- Put on a coat, hat, scarf, gloves and warm, non-slip shoes or boots when you go outside.
- Wear clothes made of wool, cotton or fleecy synthetic fibres.
- Stay warm in bed with bed socks, thermal underwear and a nightcap or headscarf.

5.1.4 Manage your energy use

- Shut and draughtproof outside doors.
- Draw your curtains at dusk to help to keep the heat generated inside your rooms.
- Make sure that your radiators are not obstructed by curtains or furniture.
- Boil only the water you need rather than filling the kettle completely.

- Do not use a gas cooker or oven to heat your home as this is inefficient and there is a risk of carbon monoxide poisoning.

More information is available from the Keep Warm Keep Well web page: www.nhs.uk/Livewell/winterhealth/Pages/KeepWarmKeepWell.aspx

5.2 Community groups and voluntary sector organisations

- Implement your winter emergency and business continuity plans.
- Make sure that you check the health status of vulnerable individuals regularly. If you visit, check that indoor temperatures remain at recommended levels (see Table 5.1), that individuals take warm meals and drinks regularly and that they wear adequate warm clothing. Also provide advice about the health effects of cold and preventive action.
- Take account of weather-related road conditions when planning home visits.
- Ensure that you are able to contact your colleagues and clients if visits need to be rearranged.

5.3 Health, social care and local authority organisations

5.3.1 Local health and social services

- Ensure strategic co-ordination of the likely surge in demand for primary and secondary care, and enquiries to social services.
- Ensure that staff are aware of cold weather health risks and are able to advise clients how to protect against them.
- Consider daily visits/phone calls for high-risk individuals living on their own who have no regular daily contacts.
- Provide guidance to community organisations to help them to implement local community action plans.
- Advise carers to contact the patient's GP if there are concerns about an individual's health.
- Ensure that all care home managers and domiciliary care providers have access to Department of Health advice.

5.3.2 Hospitals and care, residential and nursing homes

- Ensure that rooms, particularly living rooms and bedrooms, are kept warm (see Table 5.1).
- Ensure that patients and residents wear warm clothing that is appropriate to the temperature and weather conditions, indoors and outdoors.
- Identify particularly high-risk individuals (see Figure 3.1 on page 25 for the full list).
- Ensure that patients and residents take warm drinks and food regularly.

- Ensure that staffing levels will be sufficient to cover the anticipated period of severe weather.
- Repeat messages on risk and protective measures to staff.
- Mental health trusts and community teams should also ensure that visits or phone calls are made to check on high-risk individuals with severe mental illness who are living on their own or have no regular contact with a carer.

5.4 At national level

As per Level 2 arrangements, a Level 3 alert will be sent by the Met Office to the agreed list of organisations supplied by the Department of Health, which will include the Cabinet Office as well as other central government departments.

The Met Office will continue to monitor and forecast temperatures in each area, including the likely duration of the period of severe winter weather, the likely temperatures to be expected and the probability of other regions exceeding the Level 3 threshold.

The Department of Health will make advice available to the public and health and social care professionals in affected areas as appropriate.



Section 6

Responsibilities at Level 4 – Emergency action

Cold Weather Plan levels	
Level 1	Long-term planning <i>All year</i>
	Winter preparedness programme <i>1 November–31 March</i>
Level 2	Severe winter weather is forecast – Alert and readiness <i>60% risk of severe cold in the following days</i>
Level 3	Response to severe winter weather – Severe weather action
Level 4	Major incident – Emergency response <i>Exceptionally severe weather or threshold temperatures breached for more than six days</i>

A Level 4 alert indicates a major incident. It means that exceptional winter weather affects one or several parts of the country.

Level 4 is reached when winter weather is so severe, prolonged or widespread that its effects are likely to extend outside health and social care, such as when it creates widespread transport disruption and/or where the operation of health and social care services is threatened.

A Level 4 alert would be declared nationally in a similar manner to that for a Level 4 heatwave. In the event of a major incident being declared, all existing emergency policies and procedures will apply. All Level 3 responsibilities must be maintained during a Level 4 incident.

Please note: This section sets out existing responsibilities during a major incident. However, this content is subject to change as a result of cross-government discussion this winter. The emerging role of the new national Public Health Service – Public Health England – could also have some impact on how a major incident is handled.

6.1 Cross-government response

- The decision to issue a Level 4 alert at national level will be taken in light of a cross-government assessment of the weather conditions, co-ordinated by the Civil Contingencies Secretariat (Cabinet Office).
- In undertaking this assessment, the Civil Contingencies Secretariat would consult with a range of interested departments/agencies, including the

Department of Health emergency planning functions, the Met Office, the Department for Transport, and the Department for Communities and Local Government.

- In line with its approach to all major national incidents, the Cabinet Office would likely nominate a lead government department to co-ordinate the central government response in the event of a Level 4 alert being declared.
- Response arrangements will need to be necessarily flexible, in order to adapt to the nature of the challenge and other circumstances at the time, while applying good practice, including lessons learned from previous emergencies.

6.2 The health sector

- Health and social care services and local authorities should ensure that Level 3 actions continue during the emergency period.
- Measures should be taken to ensure that local healthcare providers that are most vulnerable to extreme winter conditions can continue to operate, for example adequate clearing of snow and gritting to ensure safe emergency access.
- During extreme conditions, it is not only high-risk groups that may be at risk. Therefore, further risk appraisals should be made as to how the wider population is likely to be affected.
- The Department for Communities and Local Government's Resilience and Emergencies Division will support the co-ordination of a cross-sector response to the period of extreme winter weather.

6.3 Potential wider impacts (including those that may have an impact on the health sector)

6.3.1 Transport infrastructure

- Motorways, trunk roads and smaller roads that lead to national or critical national infrastructure, including hospitals, will need clearing of ice and/or snow. The majority of this clearing will be by the spreading of salt. Given that the number of suppliers is limited, it is likely that arrangements for 'salting' the roads will be carefully co-ordinated through a national strategic salts plan.
- The Highways Agency will take responsibility for keeping traffic moving on motorways and trunk roads, whereas all other roads will remain the responsibility of the relevant local authorities. Traffic congestion has potentially serious consequences for those stranded in vehicles, particularly vulnerable people such as older people or young children.
- The rail network will be susceptible to ice on the rails and high levels of snow.
- Public transport networks are particularly at risk, with potential subsequent knock-on effects.
- Airlines require large supplies of de-icer to get planes ready to move. Runways need clearing of snow, but approach roads to all airports need to be clear to allow passengers and staff access to airports.

6.3.2 Power supplies

- In preparation for winter, National Grid carries out a 'what if' scenario-based analysis to determine the likely risks and consequences of infrastructure failure. The most recent exercise shows that unless there is an unlikely combination of unusually high gas demand combined with multiple infrastructure failure, all emergency requirements could be met through fuel switching, for example from gas to coal. Supplier companies are strongly incentivised to supply the fuel that their customers need.

6.3.3 Children's sector

- Some schools may have to close classrooms where conditions are too cold. Snow and ice may also disrupt staff and pupils' travel to school and make access to classrooms and playgrounds difficult or dangerous.
- Schools often close or send pupils home early in bad weather, sometimes putting a strain on childcare arrangements for working parents.
- It is for the headteacher of each school to decide whether or not to close their school in severe weather conditions, as they are best placed to make the decision taking account of the local conditions both inside and outside the school premises. Schools are kept open whenever it is safe to do so, once a risk assessment has taken place.
- Further information can be found at: www.education.gov.uk/schools/adminandfinance/emergencyplanning/a0069425/advice-on-severe-weather

6.3.4 Environment and agriculture

- Falling temperatures might require animals to be temporarily housed at farms, or they may be unable to get to markets and slaughterhouses.
- Milk-collecting tankers might be unable to reach farms.
- Freezing temperatures, snow and ice can disrupt the growth of plants and can delay planting.

6.3.5 Culture and sports

- Large numbers of outside entertainment events will be cancelled.
- Loss of revenue from sporting fixtures.

6.3.6 Water shortages

- Individual householders have a responsibility to protect their pipes against freezing and bursting as a result of cold weather. Advice on pipe protection and what to do in the event of bursts is given by most water companies on their websites.
- Water companies have plans in place to deal with failure in the supply of mains water or sewerage services. These plans are regularly reviewed and tested by the water companies and are independently certified every year.
- In the event of a loss of mains supply, water companies will supply water by alternative means such as in static tanks in the street, or bottled water. There is a requirement to provide not less than 10 litres per person per day, with special attention given to the needs of vulnerable people, hospitals and schools. Where an interruption to the piped water supply exceeds five days, the requirement rises to 20 litres per person per day.



Section 7

Warm Homes, Healthy People fund: keeping people warm in winter

To support the aims of the Cold Weather Plan the Department of Health is establishing the **Warm Homes, Healthy People** fund for winter 2011/12.

This is a major new initiative to support local authorities and their local partners in reducing death and morbidity in England due to cold housing in the coming winter. Further details will be announced in November 2011.

The Department of Health and other government departments already provide a range of advice and support to help individuals, families and carers to prepare for cold weather. However, the evidence that the annual cost to the NHS due to cold private housing is over £850 million is compelling. There is more that we can do to ensure the health of the most vulnerable. The Department of Health is therefore taking two immediate new steps:

- We will be providing additional financial support to the Department of Energy and Climate Change (DECC) of up to £10 million. This will be used to support Warm Front or other schemes to ensure that they help even more households vulnerable to fuel poverty in 2011/12.
- We will be inviting bids from local government and the charitable sector to access a new Warm Homes, Healthy People fund. Up to £20 million will be available in the first instance. We will be looking for innovative local proposals that address the public health consequences of cold housing for the most vulnerable in our communities, and where current available support is not getting through. We will be working closely with Age UK and other expert advisers on the design of this scheme.

Annex 1

Severe cold weather and cold weather service alerts – definitions

Cold weather alerts are issued by the Met Office on basis of the following weather events:

- low temperatures;
- widespread ice; and
- heavy snow.

Often low temperatures criteria are coincident with ice and/or snow. However, sometimes one event may occur without the other.

Definitions

Heavy snow – defined as snow falling at a rate of at least 2 cm per hour or more, expected for at least two hours. Geographic extent is not considered, and sometimes the event can be quite localised, but the Met Office will always try to indicate in the bulletin the areas that are affected.

Widespread ice – defined as when rain falls on to surfaces with temperatures at or below zero; or condensation occurs on surfaces at or below zero; or already wet surfaces fall to or below zero. The ice is usually clear and difficult to distinguish from a wet surface. It usually forms in sheets. Warnings are issued when any depth of ice is expected over a widespread area. Warnings will also be issued after snowfall when compacted snow is expected to cause an ice risk.

Widespread – indicates that icy surfaces will be found extensively over the area defined in the Met Office bulletin.

The Met Office issues all these alerts down to a county level, so either of the warnings above could be issued even if only one county was likely to be affected.

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Department for Business, Innovation and Skills
Department for Communities and Local Government
Department for Culture, Media and Sport
Department for Education
Department for Environment, Food and Rural Affairs
Department for Transport
Department for Work and Pensions
Department of Energy and Climate Change
Department of Health
 Emergency Planning, Resilience and Response
 Health Improvement and Protection
 NHS Operations
 Office of the Chief Medical Officer



Health Protection Agency

Met Office

Ministry of Justice

Public Health England (launches in shadow form in 2012)

The delivery of this plan is closely linked in with a network of representatives from the Strategic Health Authority areas across England.

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Further reading

For a review of the evidence supporting this plan, see *Making the Case: Why cold weather planning is essential to health and well-being*, at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130564

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Produced in association
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Each winter there is an average of 27,000 extra winter deaths that could be avoided. The past two winters have seen significant periods of severe and sustained cold weather. This plan is intended to mobilise action to reduce winter deaths by a range of NHS, social care, community and voluntary organisations, as well as by individuals. For a review of the evidence supporting this plan, see *Making the Case: Why cold weather planning is essential to health and well-being*, at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130564