



Public Health
England

Cold Weather Plan for England 2013

Equality analysis

About Public Health England

Public Health England's mission is to protect and improve the nation's health and to address inequalities through working with national and local government, the NHS, industry and the voluntary and community sector. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England
133-155 Waterloo Road
Wellington House
London SE1 8UG
Tel: 020 7654 8000
<http://www.gov.uk/phe>
Twitter: @PHE_uk

Prepared by: Rachel Wookey and Anh Tran
For queries relating to this document, please contact: extremeevents@phe.gov.uk

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Introduction

The general equality duty that is set out in the Equality Act 2010 requires public authorities, in the exercise of their functions, to have due regard to the need to:

- eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act
- advance equality of opportunity between people who share a protected characteristic, and those who do not
- foster good relations between people who share a protected characteristic, and those who do not

The general equality duty does not specify how public authorities should analyse the effect of their existing and new policies and practices on equality, but doing so is an important part of complying with the general equality duty. It is up to each organisation to choose the most effective approach for them.

Policy context

The first national Cold Weather Plan (CWP) for England was published in November 2011. The CWP was published to help to reduce the annual number of “excess” deaths that are observed in the winter months. In the winter of 2011/ 2012 there were approximately 22,800 “excess winter deaths” in England, equating to 1200 more deaths per week during the winter than over the rest of the year. Many of these deaths are preventable and the CWP is recognition that more needs to be done to protect vulnerable people during the winter.

The development of the CWP continues to be a crucial element of a number of government policies. These policies were identified in the 2011 *Equality Analysis for the Cold Weather Plan*¹ and remain relevant.

Public Health Outcomes Framework

The Public Health Outcomes Framework (PHOF)² was published in January 2012. The inclusion of high level indicators on excess winter deaths and fuel poverty in the PHOF is a reflection of the government’s commitment to reducing the harm of cold weather and the importance of the CWP.

¹ http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_131036.pdf

² <http://www.dh.gov.uk/health/2012/01/public-health-outcomes/>

Preparation and response to severe cold weather is a core part of the public health and emergency planning system. These have continued to be emphasised in key government and Department of Health (DH) policies and are consistent with the Health and Social Care Act (2012).³

What are the intended outcomes of this work?

The CWP aims to prevent avoidable harm to health, by alerting people to the negative health effects of cold weather, and enabling them to prepare and respond appropriately. The plan sets out a series of actions to be taken by the NHS, social care and other agencies throughout the year, to prepare for and respond to winter, so as to protect the most vulnerable. It also encourages local communities to support the most vulnerable in their area, such as checking on them during severe weather and offering other support. The CWP also aims to reduce pressure on the health and social care system during winter, through improved anticipatory actions with vulnerable people.

The companion document *Making the Case* provides a range of more detailed information including: The effects of cold weather on health and health services, vulnerable populations, interventions to reduce harm to health from cold weather, Public Health Outcome Framework (PHOF) indicators related to cold weather health interventions, a summary of the Warm Homes Healthy People Fund 2012-13 evaluation report and useful resources.

Who will be affected?

The CWP 2013 sets out a series of clear actions to be taken by the NHS, social care and other public agencies, professionals working with vulnerable people as well as by individuals and local communities themselves. It is designed to minimise the effects of cold weather on health.

The CWP provides strategic, high-level guidance and a framework which Local Resilience Forums and local organisations can incorporate into their winter planning arrangements. The CWP 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.

³ <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted/data.htm>

Evidence

The impact of cold weather on health is predictable and mostly preventable. The direct effects of winter weather include an increase in incidence of:

- heart attack
- stroke
- respiratory disease
- influenza
- falls and injuries
- hypothermia

The indirect effects of cold include mental health illnesses such as depression, and carbon monoxide poisoning from poorly maintained or poorly ventilated boilers, cooking and heating appliances and heating.

For the purposes of the CWP, a number of those key groups are considered to be particularly at risk in the event of severe cold weather. These include:

- people over 75 years old
- otherwise “frail” older people⁴
- children under the age of five
- people with pre-existing chronic medical conditions such as heart disease, stroke or TIA, asthma, COPD or diabetes
- people with mental ill-health that reduces individual’s ability to self-care
- people with dementia
- people with learning difficulties
- those assessed as being at risk of or has had recurrent falls
- people who are housebound or otherwise have low mobility
- people living in deprived circumstances
- people living in houses with mould
- those who are fuel poor (ie those who have a low income but have high energy costs)⁵
- elderly people who live alone and do not have additional social services support
- homeless or people sleeping rough
- other marginalised groups

⁴ Lacas, A. et al. Frailty in primary care: a review of its conceptualization and implications for practice *BMC Medicine* 2012, 10 (4)

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211180/FuelPovFramework.pdf

In preparing the original CWP for England 2011, DH undertook an extensive search of the available literature on the effects of cold and cold weather on health. Since then, DH has undertaken further searches for newly published evidence on an annual basis. The recent review of the latest evidence has identified a number of relevant papers and reports which we have used to update the equality impact analysis for the CWP 2013, but these do not significantly alter the findings highlighted in the original equality impact analysis for the CWP 2011.

The following evidence has been considered:

1. Association of Public Health Observatories (2005) Ethnicity and Health, <http://tinyurl.com/ethnicity-health>
2. Blatteis, C. M. (2011) Age-dependent changes in temperature regulation – a mini review, *Gerontology* 2012 58 289-295
3. Carers UK (2008) Dramatic Increase in Carer Poverty, <http://tinyurl.com/carers-poverty>
4. Department for Communities and Local Government (2010) English Housing Survey 2008, <http://tinyurl.com/Housing-Condition-Survey>
5. Department for Communities and Local Government (2013) English Housing Survey: Households 2011-12, <http://tinyurl.com/EHCS-households-2011-12>
6. Department for Energy and Climate Change (2012) Getting the Measure of Fuel Poverty: Final Report of the Fuel Poverty Review (Hills Review) <http://tinyurl.com/fuel-poverty-Hills-Review>
7. Department for Energy and Climate Change (2013) Fuel Poverty Report – Updated August 2013 <http://tinyurl.com/LIHC-fuel-poverty-measure>
8. Department of Health (2010) Recognised, Valued and Supported: Next Steps for the Carers Strategy, <http://tinyurl.com/Carers-Strategy-2010>
9. Gomez-Acebo, I. et al. (2013) Cold-related mortality due to cardiovascular diseases, respiratory diseases and cancer: a case-crossover study, *Public Health* 2013 127 252-258
10. Joseph Rowntree Foundation (2011) Poverty and Ethnicity: A Review of the Evidence, <http://tinyurl.com/poverty-ethnicity-evidence>
11. Leonard Cheshire Disability (2009) Fuel Poverty and Disability, <http://tinyurl.com/fuel-poverty-disability>
12. Leonard Cheshire Disability (2005) In the Balance, <http://tinyurl.com/disability-poverty>
13. Lacas, A. et al. (2012) Frailty in primary care: a review of its conceptualization and implications for practice *BMC Medicine* 2012, 10 (4)
14. Marmot Review Team (2011) The Health Impact of Cold Homes and Fuel Poverty, <http://tinyurl.com/Marmot-cold-homes>
15. National Children's Bureau (2012) Fuel Poverty and Child Health and Wellbeing. Healthy Futures for Children and Young People Through an Energy Bill Revolution, <http://tinyurl.com/NCB-children-fuel-poverty>

16. National Children's Bureau (2013) Greater Expectations: Raising Expectations for Our Children, <http://tinyurl.com/NCB-Greater-Expectations>
17. New Policy Institute (2008) Cold and Poor: An Analysis of the Link Between Fuel Poverty and Low Income, <http://tinyurl.com/fuel-poverty-low-income>
18. Office for Disability Issues (2013) Disability Facts and Figures, <http://tinyurl.com/disability-stats>
19. Office for National Statistics (2013), The Census 2011, <http://tinyurl.com/Census-2011-ONS>
20. Office for National Statistics (2013), 2011 Census Analysis: Unpaid Care in England and Wales, 2011 compared with 2001, <http://tinyurl.com/Census-2011-carers>
21. Office for National Statistics (2011) Excess winter mortality in England and Wales, 2001/12 (provisional) and 20010/11 (final), <http://tinyurl.com/ONS-EWD-2011-12>
22. Office for National Statistics (2013) General Lifestyle Survey, <http://tinyurl.com/ONS-General-Lifestyle-Survey>
23. Office for National Statistics (2011) Population Estimates, <http://tinyurl.com/ONS-population-estimates>
24. Save the Children (2008) The Impact of Fuel Poverty on Children, <http://tinyurl.com/SCF-fuel-poverty-children>
25. The University of York (2013) Fuel Poverty and Disability: A Statistical Analysis of the English Housing Survey, <http://tinyurl.com/disability-fuel-poverty>
26. De Vries, R. et al. (2012) Fuel poverty and the health of older people: the role of local climate, *Journal of Public Health* 2012 35 (3) 361-366
27. Webb, E. et al. (2012) Housing and respiratory health in older ages, *Journal of Epidemiology and Community Health* 2013 67 280-285

Our recent review of the latest evidence on the health impact of cold weather on different equality groups has not altered the findings from the evidence that DH highlighted in previous year's CWP's and equality impact analyses. The findings from the previous reviews of the evidence remain pertinent.

The most recent ONS figures on excess winter deaths were published in November 2012.⁶ The findings showed that:

- there were an estimated 24,000 excess winter deaths in England and Wales in 2011/12 – an 8% reduction compared with the previous winter
- as in previous years, there were more excess winter deaths in females than in males in 2011/12
- between 2010/11 and 2011/12 male excess winter deaths decreased from 11,270 to 10,700, and female deaths from 14,810 to 13,300

⁶ Office for National Statistics (2011) *Excess winter mortality in England and Wales, 2001/12 (provisional) and 20010/11 (final)*, <http://tinyurl.com/ONS-EWD-2011-12>

- the majority of deaths occurred among those aged 75 and over; there were 19,500 excess winter deaths in this age group in 2011/12 compared with 4,500 in the under 75-year-olds
- the excess winter mortality index was highest in London in 2011/12, whereas in 2010/11 it was highest in Wales. Wales had one of the lowest levels of excess winter mortality last winter, second only to the North East of England

The data shows that cold weather continues to have a significant impact on the health of certain groups, such as older people.

It is too early to tell whether the CWP has had the desired impact on reducing excess winter deaths and illness. Moreover, as the annual number of excess winter deaths, varies significantly from year to year due to a range of factors, including the levels of seasonal flu and how severe or otherwise the winter was, it would be very difficult to ascribe a fall in excess winter deaths directly to the CWP.

However, in partnership with a wide range of stakeholders we have evaluated the implementation of last year's plan and made some changes based on the feedback we have received.

In addition, DH commissioned an independent evaluation of the effect of cold on health and health services, and the effect of the CWP from the Policy Innovation Research Unit (PIRU) London School of Hygiene and Tropical Medicine (LSHTM). The evaluation assesses the extent to which the CWP is implemented at the local level, whether it is reaching its target groups and is cost-effective, and how it may be improved in future years. The preliminary findings are summarised on page 18 of this document.

In March 2012 the Department for Energy & Climate Change (DECC) published the report of "The Hills Poverty Review".⁷ The review looked in detail at the causes and impacts of fuel poverty in England and confirmed that the principal causes of fuel poverty are a combination of low incomes and high costs driven by poor energy efficiency and high energy prices. The report made a number of recommendations, including a recommendation to change the way fuel poverty is measured. A new way of measuring fuel poverty using the Low Income High Cost Indicator (LIHC) was adopted by the government in 2013. In August this year DECC published revised fuel poverty statistics that reflected the new definition.

The sections that follow describe the known impacts of cold weather on identified vulnerable groups.

⁷ Department for Energy and Climate Change (2012) *Getting the Measure of Fuel Poverty: Final Report of the Fuel Poverty Review (Hills Review)* <http://tinyurl.com/fuel-poverty-Hills-Review>

Disability

There is currently a lack of evidence on the direct health impact of cold weather on people with disabilities and on the health status of disabled people, so it is difficult to assess the impact that cold weather has on this group. There is however, evidence to suggest that living in cold homes and being fuel poor can have a negative impact on the health and wellbeing of vulnerable groups including those with disabilities.⁸

The available statistics show that a greater proportion of households containing disabled people are fuel poor compared with households that do not contain someone who is disabled.⁹

One in three households with a disabled person live in non-decent accommodation¹⁰ and poor disabled households are twice as likely to live in homes with serious condensation.¹¹ Such figures highlight the vulnerability of disabled people to cold environments.

Disabled people are at increased risk of suffering from fuel poverty and the health consequences of living in cold homes because they are likely to be income poor¹² and to spend prolonged periods of time at home, requiring fuel to heat their homes all day, rather than just in the mornings and evenings. Being poor means that disabled people may face the dilemma of heating or eating, and may suffer the mental anxiety of not being able to pay their fuel bills.¹³

Disabled people are even more vulnerable to the cold if they live in rented accommodation, are an older person and/or have an existing health condition which can be exacerbated by the cold.

The lack of evidence means that it is difficult to assess the impact that cold weather, cold homes and fuel poverty has on disabled people, but it is likely that as a vulnerable group who often live in income poverty and who spend prolonged periods of time at home, disabled people are at increased risk of suffering from the negative effects of living in a cold environment.

⁸ Leonard Cheshire Disability (2009) *Fuel Poverty and Disability*, <http://tinyurl.com/fuel-poverty-disability>

⁹ The University of York (2013) *Fuel Poverty and Disability: A Statistical Analysis of the English Housing Survey*, <http://tinyurl.com/disability-fuel-poverty>

¹⁰ Office for Disability Issues (2013) *Disability Facts and Figures*, <http://tinyurl.com/disability-stats>

¹¹ Department for Communities and Local Government (2013) *English Housing Survey: Households 2011-12*, <http://tinyurl.com/EHCS-households-2011-12>

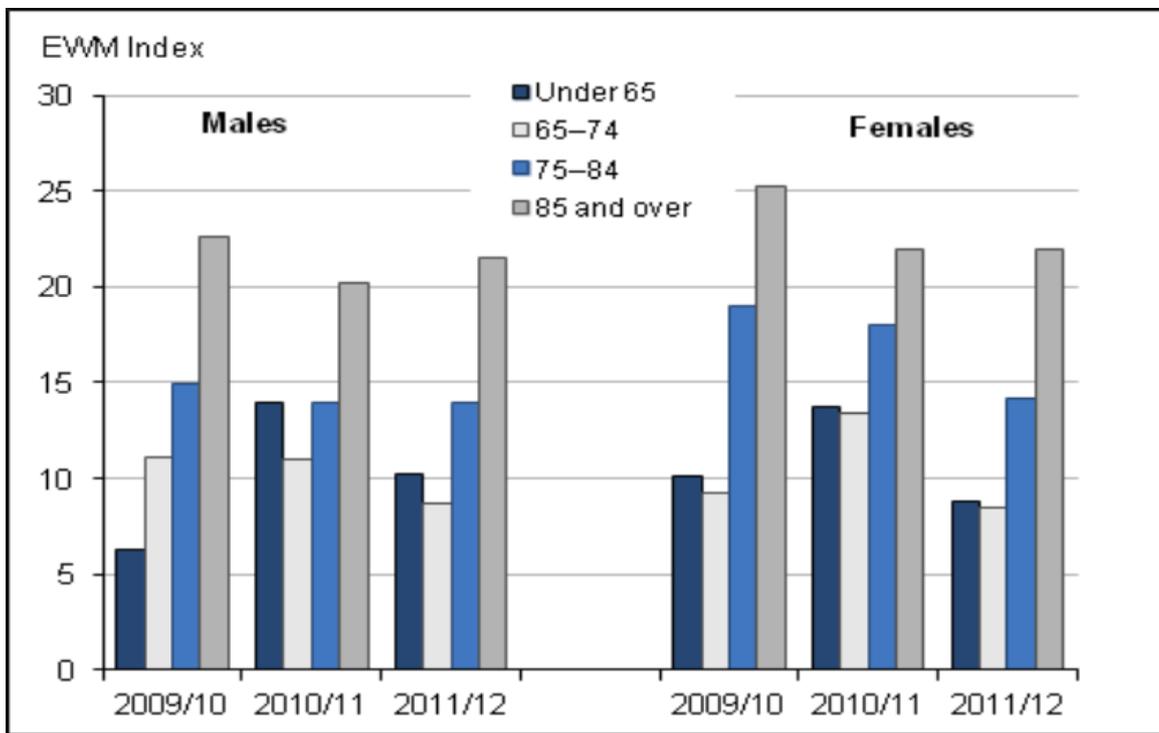
¹² Office for Disability Issues (2013) *Disability Facts and Figures*, <http://tinyurl.com/disability-stats>

¹³ Leonard Cheshire Disability (2005) *In the Balance*, <http://tinyurl.com/disability-poverty>

Sex

Excess winter deaths figures clearly show that cold weather has significantly greater impact on women than men. In 2011/12 there were 13,300 excess winter deaths in females compared with 10,700 excess winter deaths in males. The majority of these deaths occurred among those aged 75 and over, with the greatest number of excess winter deaths being among women aged over 85. The differences in excess winter mortality rates between men and women can be explained in whole or in part, by the fact that there are more women aged 75 and over in the population than men (9.2% of females compared with 6.4% of males in 2011).

Figure 5: Excess winter deaths: by sex and age group, 2009/10 to 2011/12¹⁴



The number of excess winter deaths in 2011/12 decreased substantially compared with 2010/11 for both males and females aged under 75 years. The number of excess winter deaths in males under 75 decreased by 30% from 3,860 in 2010/11 to 2,700 in 2011/12. For females under 75, excess winter deaths decreased by 36% from 2,830 in 2010/11 to 1,800 in 2011/12. The reduction in the number of excess winter deaths may in part, be explained by the warmer than average temperatures in the winter months of 2011/12 and the overall low rate of influenza-type illness.

¹⁴ Office for National Statistics (2012) *Excess Winter Mortality in England and Wales, 2011/12 (provisional) and 2010/11 (final)*, http://www.ons.gov.uk/ons/dcp171778_288362.pdf

Race

There is currently a lack of evidence on the direct health impact of cold weather per se on people from minority ethnic groups so it is difficult to assess the impact that cold weather has on them.

However, the fact that people from ethnic minority groups are twice as likely to live in low income households and are more likely to live in damp homes¹⁵ suggests that they may be at increased risk of suffering from fuel poverty and the health consequences living in cold homes.

The level of income poverty varies among different ethnic minority groups suggesting that the degree of fuel poverty risk among different groups may also vary; with the poorest ethnic minority groups being the most likely to be fuel poor:

- more than half of people from Bangladeshi and Pakistani ethnic backgrounds live in income poverty¹⁶
- the groups with the highest proportions eligible for school meals are Irish travellers, Roma gypsies, black Africans and Bangladeshi¹⁷

The health status and mortality rates from conditions associated with excess winter deaths (such as circulatory disease) among different ethnic minority groups also differs, suggesting that the ethnic groups with the poorest health and high rates of conditions associated with excess winter deaths may be more vulnerable to the negative effects of living in cold homes.

- the percentage of the population that report their health as “not good” is highest among the Pakistani and Bangladeshi populations¹⁸
- people born in Pakistan and Bangladesh, but living in England and Wales, have the highest mortality rates from circulatory disease¹⁹

¹⁵ Department for Communities and Local Government (2013) *English Housing Survey: Households 2011-12*, <http://tinyurl.com/EHCS-households-2011-12>

¹⁶ Joseph Rowntree Foundation (2011) *Poverty and Ethnicity: A Review of the Evidence* <http://tinyurl.com/poverty-ethnicity-evidence>

¹⁷ Association of Public Health Observatories (2005) *Ethnicity and Health*, <http://tinyurl.com/ethnicity-health>

¹⁸ Association of Public Health Observatories (2005) *Ethnicity and Health*, <http://tinyurl.com/ethnicity-health>

¹⁹ Ibid 18

Age

Older people

Older people are at high risk of suffering from cold weather, fuel poverty and the health consequences of living in cold homes for a number of reasons:

- half of fuel poor households contain somebody over the age of 50²⁰
- the depth of fuel poverty increases as the age of the oldest household member increases
- older people are more likely to spend prolonged periods of time at home²¹
- older people are more likely to have a limiting long term illness or disability²²
- more older people live in homes that fail to provide a reasonable degree of thermal comfort²³

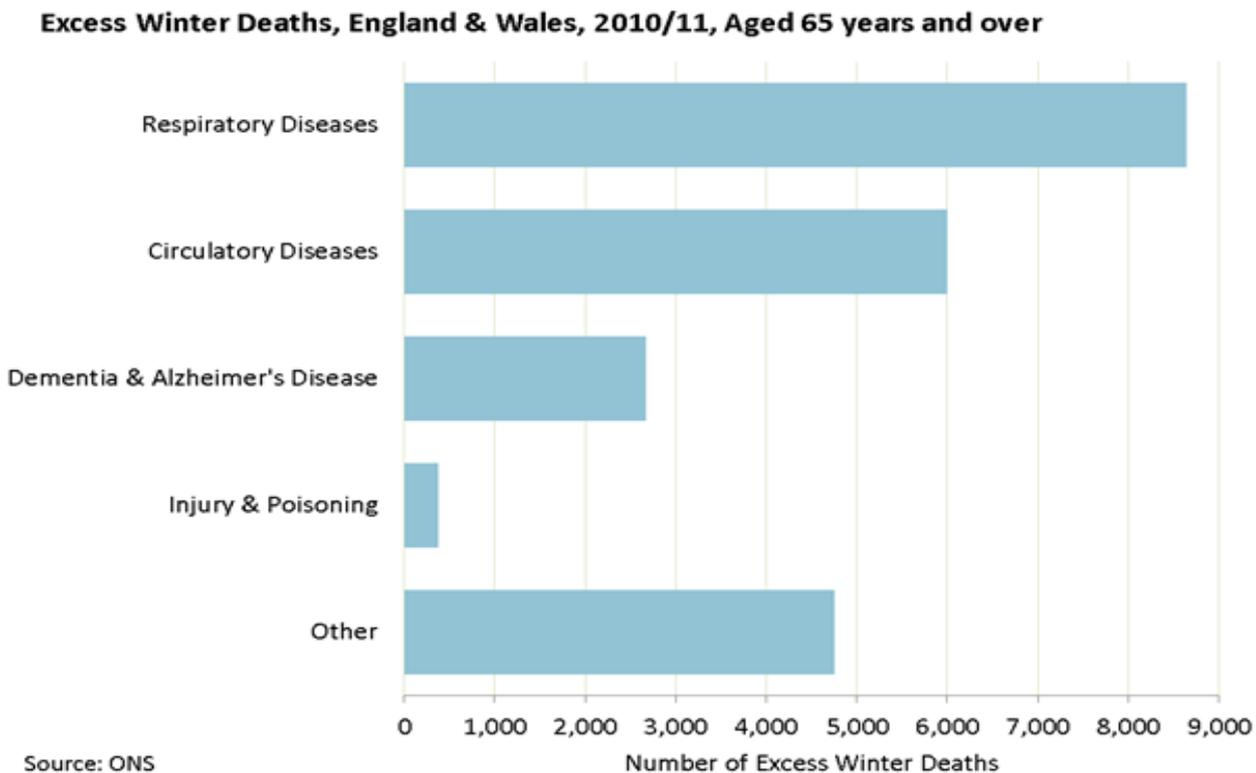
There is clear evidence that cold weather has a significant impact on older people as they account for the majority of excess deaths in winter. The main underlying causes of excess winter deaths are respiratory and circulatory disease and dementia and Alzheimer's disease suggesting that such conditions are brought on or exacerbated by the cold.

²⁰ Department for Energy and Climate Change (2013) Fuel Poverty Report – Updated August 2013 <http://tinyurl.com/Fuel-Poverty-Report-2013>

²¹ Marmot Review Team (2011) *The Health Impact of Cold Homes and Fuel Poverty*, <http://tinyurl.com/Marmot-cold-homes>

²² Office for National Statistics (2013) *General Lifestyle Survey*, <http://tinyurl.com/ONS-General-Lifestyle-Survey>

²³ Department for Communities and Local Government. *English Housing Survey 2008*



There was a substantial reduction in the number of excess winter deaths in 2011/12 compared with the previous year including in the older age groups. This may partly be explained by the warmer than average temperatures during the winter months. However, the relationship between cold weather, fuel poverty and health is complex. The variation in older people’s fuel poverty risk and its effects on health cannot be explained by the differences in temperature alone.²⁴ Cold temperatures in themselves do not cause excess winter deaths; older people are particularly vulnerable to the cold because of confounding factors such as inadequate housing, high energy prices, poverty, ill health, disability, poor thermoregulation²⁵ and social isolation.

Children and young people

Children and young people living in low income households are at high risk of suffering from fuel poverty and the health consequences of living in cold homes largely because of the relationship between fuel poverty and income poverty:

- one in four children are living in poverty in the UK – that is 3.5 million children²⁶

²⁴ De Vries, R. et al. (2012) *Fuel poverty and the health of older people: the role of local climate*, Journal of Public Health 2012 35 (3) 361-366

²⁵ Blatteis, C. M. (2011) *Age-dependent changes in temperature regulation – a mini review*, Gerontology 2012 58 289-295

²⁶ National Children’s Bureau (2013) *Greater Expectations: Raising Expectations for Our Children*,

- 43% of children living in lone parent households live in poverty²⁷
- 6.4 million households in the UK were fuel poor, of which over one million are families with children under 16²⁸
- fuel poverty is most prevalent among those aged under 25²⁹

While the majority of excess winter deaths occur in the older age groups, there is some evidence to show that living in a cold environment can have a significant impact on the health and wellbeing of children and young people:

- children living in cold homes are at increased risk of being admitted to hospital, having respiratory problems, poorer weight gain, and inadequate levels of nutritional intake³⁰
- cold housing negatively affects children's educational attainment, emotional wellbeing and resilience³¹
- adolescents living in cold housing are at risk of multiple mental health problems³²

Adults

There is some evidence to show that people with existing health conditions are more vulnerable to the cold. Those with respiratory and cardiovascular disease, cancer, diabetes, osteoarthritis knee pain, and hip fracture can have their conditions complicated and or exacerbated by the cold.^{33 34} Living in a cold environment can also have a measurable effect on the mental health of adults.³⁵

Gender reassignment (including transgender)

There is no evidence to suggest that transgender or transsexual people are adversely affected by cold weather because of their gender status. The risk of being fuel poor and of suffering from the health consequences of being fuel poor are due to other factors such as household income, household status, housing tenure and existing health conditions. Gender status is not a fuel poverty risk factor.

<http://tinyurl.com/NCB-Greater-Expectations>

²⁷ Ibid 24

²⁸ National Children's Bureau (2012) *Fuel Poverty and Child Health and Wellbeing: Healthy Futures for Children and Young People Through an Energy Bill Revolution*, <http://tinyurl.com/NCB-children-fuel-poverty>

²⁹ Department for Energy and Climate Change (2013) *Fuel Poverty Report – Updated August 2013*
<http://tinyurl.com/LIHC-fuel-poverty-measure>

³⁰ Save the Children (2008) *The Impact of Fuel Poverty on Children*, <http://tinyurl.com/SCF-fuel-poverty-children>

³¹ Marmot Review Team (2011) *The Health Impact of Cold Homes and Fuel Poverty*,
<http://tinyurl.com/Marmot-cold-homes>

³² Ibid 31

³³ Ibid 31

³⁴ Gomez-Acebo, I. et al. (2013) *Cold-related mortality due to cardiovascular diseases, respiratory diseases and cancer: a case-crossover study*, *Public Health* 2013 127 252-258

³⁵ Ibid 31

Sexual orientation

There is no evidence to suggest that gay, lesbian, or bisexual people are adversely affected by cold weather because of their sexual orientation. The risk of being fuel poor and of suffering from the health consequences of being fuel poor are due to other factors such as household income, household status, housing tenure and existing health conditions. Sexual orientation is not a fuel poverty risk factor.

Religion or belief

There is no evidence to suggest that religious groups are adversely affected by cold weather because of their religion or belief. The risk of being fuel poor and of suffering from the health consequences of being fuel poor are due to other factors such as household income, household status, housing tenure and existing health conditions. Religion or belief is not a fuel poverty risk factor.

Pregnancy and maternity

There is currently a lack of evidence on the direct health impact of cold weather and living in cold conditions on pregnant women and there is no evidence to suggest that pregnant women are a particularly vulnerable group in terms of fuel poverty. However, they may be at risk of suffering from fuel poverty and the health consequences of living in cold homes if they are income poor, if they have an existing health condition, if they live in rural areas and/or if they are a lone parent.

Carers

There is currently a lack of evidence on the direct health impact of cold weather on carers. However, there is some evidence to suggest that a significant proportion of carers struggle financially and are often fuel poor. As fuel prices increase and many are pushed into poverty, they, like other vulnerable groups, face the dilemma of “eat or heat”.³⁶

While they may not be considered as a “vulnerable group”, carers are at increased risk of suffering from the health consequences of fuel poverty because many carers suffer from poor health as a result of the stresses and strains of their caring role. More than 600,000 carers who provide more than 50 hours of unpaid care per week say that they are “not in good health” themselves.^{37 38} Income poverty, existing health conditions and

³⁶ Carers UK (2008) *Dramatic Increase in Carer Poverty*, <http://tinyurl.com/carers-poverty>

³⁷ Office for National Statistics (2013), *The Census 2011*, <http://tinyurl.com/Census-2011-ONS>

³⁸ Office for National Statistics (2013), *2011 Census Analysis: Unpaid Care in England and Wales, 2011 compared with 2001*, <http://tinyurl.com/Census-2011-carers>

the pressure of caring for someone else, particularly someone whose health has deteriorated because of the cold, means that many carers are likely to be adversely affected by cold weather.

Other identified groups

The increasing cost of fuel in recent years has resulted in more people becoming fuel poor, including groups that are not normally considered to be “vulnerable”, such as the rural poor and single-person households. These groups have now been recognised in fuel poverty reduction policies such as the recent DECC *Fuel Poverty: a Framework for Future Action*. There is evidence to show that these groups are at high risk of suffering from fuel poverty because:

- rural homes are on average bigger and less energy efficient resulting in higher fuel costs³⁹
- even though single-person households spend 25% less on fuel, their income is on average 50% less⁴⁰
- half of all the households in fuel poverty in England are single-person households⁴¹

While there is currently no evidence on the direct health impact of cold weather on the rural poor and single-person households, they may be at increased risk of suffering from the health consequences of living in cold homes because they are very likely to be fuel poor.

³⁹ New Policy Institute (2008) *Cold and Poor: An Analysis of the Link Between Fuel Poverty and Low Income*, <http://tinyurl.com/fuel-poverty-low-income>

⁴⁰ Office for National Statistics (2013), *The Census 2011*, <http://tinyurl.com/Census-2011-ONS>

⁴¹ Ibid 40

Engagement and involvement

DH commissioned an independent evaluation of the CWP from the PIRU LSHTM. The aim of the evaluation was to assess extent to which the CWP is implemented at the local level, whether it is reaching its target groups and is cost-effective, and how it may be improved in future years. The evaluation was undertaken from September 2012 to September 2013, with the final stages of completion underway at the time of writing the 2013 edition of the plan. Preliminary findings have been incorporated where possible in the CWP for England 2013.

In addition a CWP seminar was held in July 2013. The aim of the seminar, as in previous years, was to provide advice on how the CWP for England can be revised; taking into account the preliminary findings of the PIRU LSHTM CWP evaluation. A separate survey was conducted to evaluate the Warm Homes Healthy People Fund, which was established in 2011 as part of the CWP for England 2011, and was continued for a second successive year in 2012.

In summary, the preliminary results of the evaluations suggest that:

- the greatest part of the burden of cold weather occurs before the current 2°C threshold for alert level 2 or 3 is reached. This is because the negative health effects of cold weather occur at relatively moderate mean temperatures (5-8°C depending on region) and there are more days at these temperatures each year than days where the temperature is 2°C or less
- in the population who are vulnerable during cold weather, such as older people with long-term medical conditions, people who are socially isolated may be particularly vulnerable
- vulnerable groups may differ depending on exposure to low temperature or heavy snowfall events

PHE has carefully considered these preliminary findings of the evaluation and comments from delegates at the CWP seminar believes that the CWP 2013 takes account of the recommendations made as far as possible. The main changes which have been incorporated into the CWP 2013 are as follows:

1. Emphasis has been placed on actions to be taken at level 0 and level 1, and renamed level 1 “winter preparedness and action” to reflect this.
2. Action tables – we have transferred some actions previously included in levels 2 and 3 into level 0 and 1, to ensure that public health messaging and actions are taken at the appropriate time to reduce excess morbidity and mortality. (These changes are discussed further in Section 3 of the Making the Case document.

3. The plan now differentiates between the Cold Weather Alert system and the Met Office's National Severe Weather Warning Service (NSWWS) which warns relevant organisations and the public about a range of high-impact winter weather events, including rain, snow, wind, fog and ice. This service operates year round across the UK, and can be found on the met office website. A warning will be issued when snow and ice is forecast to cause an impact across a number of sectors, including health. It is issued based on a combination of the impact of the weather, and the likelihood of the weather happening. A NSWWS warning can be issued up to five days in advance of the expected event.

Local organisations are asked to consider the detailed action tables in the CWP and to recast them in ways which are most appropriate for them in developing a local cold weather plan that sits within the context of a wider winter resilience plan. Local areas are asked to satisfy themselves that the suggested actions and the cold weather alert system are understood across the system. All areas should review or audit the distribution of the cold weather alerts across the health and social care systems locally to satisfy themselves that the cold weather alerts, when they come out, are reaching those colleagues and organisations which need to take appropriate actions. Lastly, all local areas should assure themselves that organisations and key stakeholders are taking appropriate actions in light of the cold weather alert messages.

Warm Homes Healthy People Fund 2012-13

To support the aims of the CWP, DH established the Warm Homes, Healthy People fund for the winter 2011/12. This was a major new initiative with a fund of £30m allocated in two ways: a £10m capital allocation to DECC to support the Warm Front scheme and £20m revenue made available to "top tier" local authorities to support local authorities with their partners to reduce the levels of deaths and morbidity due to vulnerable people living in cold housing. A further fund of £20m was announced in 2012, with 149 projects funded in 135 top-tier local authorities.

Our evaluation of the local authority element of the WHHP fund has indicated that:

- there has been universal support for the WHHP fund with strong support for a further year's continuation of the fund (and earlier notification of the fund)
- authorities generally appreciated the wide degree of freedom they had to develop locally applicable plans and the general lack of central prescription
- the fund supported the development of, or helped strengthen existing partnerships to tackle cold weather and cold housing
- the voluntary sector was very supportive of the initiative and was actively engaged in all areas in developing and delivering plans (in a way which exceeded our expectations)

- there is now a challenge to turn last year's projects into an ongoing sustainable service
- local colleagues are keen to share good practice and learn lessons from across the country

DH has stated that the Warm Homes Healthy People fund will not be repeated this year. Ring-fenced funding of £5.45 billion for 2013-15 was made available to local authorities to address public health priorities, determined at the local level. In setting their priorities, local authorities must take into account the Public Health Outcomes Framework, which has excess winter deaths and fuel poverty as indicators. PHE aims to publish an evaluation of the Warm Homes Healthy People fund shortly that we hope will prove useful for joint strategic needs assessments and health and wellbeing strategies locally.

In addition, a Warm Homes Healthy People group has been established on the Local Government Association (LGA) website as a forum for sharing good practice. Email: knowledgehub@local.gov.uk

Stakeholder engagement in testing the policy or programme proposals

As detailed above we engaged a wide range of voluntary and statutory stakeholders in both examining the emerging evidence as well as the emerging policies and specific actions throughout the process as outlined above.

For each engagement activity, please state who was involved, how and when they were engaged, and the key outputs:

The main CWP document was downloaded 3,231 times and *Supporting the Case* was downloaded 256 times (1 November 2012 to 31 March 2013). The CWP (www.dh.gov.uk/health/2012/10/cwp-2012/en) was visited 17,114 times.

Warm Homes Healthy People online questionnaire: A mixed-methods approach was taken using three main sources of data: an online questionnaire to local authority Warm Homes, Healthy People Fund leads (asking both quantitative and qualitative questions), document analysis of local evaluation reports and semi-structured telephone interviews to local leads.

Evaluation seminar: This was the second annual CWP seminar organised by PHE and DH. The seminar reflected on the second year of CWP implementation and aimed to gather feedback that will be used to revise the plan ahead of re-launching it this winter, 2012/2013. The aim of the seminar was to review the CWP in light of the preliminary findings of the PIRU LSHTM and gain views how it might be improved on so that it maximises its potential to reach frontline personnel and have a positive impact on those vulnerable to the effects of cold weather.

Over 50 delegates were in attendance from a wide range of voluntary and statutory organisations. Invitation letters were sent to the DH strategic partners in the voluntary and community sector inviting them to the event. PIRU LSHTM presented the findings of their work on looking at the effect of cold weather on health and health services, including the impact of the CWP. The programme picked up themes which had emerged from the PIRU LSHTM study and included discussion groups, for example; it was suggested by delegates that actions taken by health and social care sector during cold weather may only relieve part of the health burden and that cross-sectoral action is required to address wider determinants such as socioeconomic inequalities, fuel poverty and housing energy efficiency.

The comments made by participants at this event and studies were considered and have been taken into consideration in the development of the CWP. Further details of discussions and key outputs of the 1 July 2013 CWP seminar can be accessed at <http://tinyurl.com/Cold-Weather-Publications>.

Summary of analysis

The CWP 2013 has been written in light of the evaluation and comments received as noted. In addition, we shared a final draft of the documents with the wider reference group.

We do not believe that the CWP will have a negative impact on any of the equality groups (protected characteristics) rather that the CWP is being published to help reduce deaths and morbidity and to protect against avoidable harm. In light of the comments we received, we have further enhanced the action tables for all organisations, including those for the “community and voluntary sector” and for “individuals”.

The evidence suggests that the key factors which place people at greater risk from winter deaths or avoidable harm to health in winter are certain underlying conditions, age, and sex. Sexual orientation, gender reassignment, religion or belief, do not appear to raise the risk factors as far as current evidence indicates.

There is a lack of evidence relating to disability, race, pregnancy and carers except where people are already on low income and living in poorer housing stock, which would place them at greater risk of suffering from fuel poverty and the ability to heat their homes adequately – and hence be at risk of suffering the effects of cold weather.

Other than age and sex there is a lack of detailed information against which to regularly monitor the situation for the equality (protected characteristics) groups on a regular basis and as noted above there is a paucity of primary research in relation to some groups.

The CWP’s key priorities include:

- ensuring that information is targeted/disseminated to protected groups where the evidence has highlighted this to be a priority
- ensuring that access to services is improved or not made worse by the plan for those in population groups with protected characteristics

Financial and practical help for certain groups, for example older people on low incomes, are available through local government schemes. These can aim to alleviate the impact of cold on health and well-being, and so improve equality of health outcomes between groups.

Eliminate discrimination, harassment and victimisation

We have no evidence to suggest that, as a result of the CWP, we will eliminate discrimination, harassment and victimisation, however we have no reason to believe that this would possibly increase under the plan. Indeed, if people from all groups with protected characteristics are better protected from the effects of cold weather, the CWP will support, for example, better performance of children at school which should indirectly contribute to less victimisation as they are better able to keep up with their classmates. People of working age from these groups will be able to continue at their jobs without taking significant periods of time off due to reduced illness and older people will continue to be able to stay fit and not risk becoming socially isolated through illness and disease exacerbated by cold weather.

Advance equality of opportunity

We generally have no evidence to suggest that as a result of the CWP that we will advance equality of opportunity per se. However, as noted above, do know that cold housing negatively affects children's educational attainment, emotional wellbeing and resilience. The actions from this CWP can help to refocus local actions towards those most vulnerable (such as children living in cold housing), which will help advance equality of opportunity more generally.

Promote good relations between groups

At each level identified as part of the Cold Watch system we have identified a set illustrative actions which local voluntary and community groups might consider to take forward. We have focused on the community's ability to marshal resources and look after vulnerable or frail neighbours both before and during winter weather, snow and ice.

An example of such actions include encouraging communities to develop a community emergency plan to ensure that pavements and public walkways are cleared of snow and ice in the local community. Such a plan might include identifying local resources (snow clearing equipment; stocks of grit and salt) and rotas of willing volunteers to keep the community safe during inclement weather and for checking in on vulnerable or frail neighbours.

We believe that this is an important element of the CWP and is consistent with wider government proposals to promote the community and neighbourhood support. Outlining a clear role for communities and voluntary sector organisations that are in touch with many of the key groups of people with protected characteristics is a way of promoting community resilience and indirectly will promote good relations between groups.

What is the overall impact?

The available evidence clearly demonstrates that cold weather has the greatest impact on those with multiple vulnerabilities. An older person is more likely to be adversely affected by cold weather if they live in an income poor household and/or if they have a disability and / or an existing health condition. Likewise, a child is at greater risk of being adversely affected by cold weather if they also live in a lone parent household and/or an income poor household, if they have a disability or an existing health condition, and/or if they are also a carer.

We believe that the CWP will impact positively on the reduction of health inequalities by reducing the number of excess winter deaths experienced each year by the way that it attempts to engage and provide good practice for a range of individuals, community, health and social care and other organisations.

The identification of those people who are susceptible to cold weather and to work systematically with them to improve resilience in a multi-agency manner means that issues such as housing or accessing benefits should be part of the local discussions at all stages of the planning and response process.

We believe that the CWP will continue to have a positive impact on reducing adverse experiences of severe cold weather for vulnerable groups, including impacting positively on some equality groups, as well as for the wider population.

Addressing the impact on equalities

This equality analysis has pointed to the need for more primary information and evidence in relation to specific equality groups, including carers, pregnancy, disability, and race.

The CWP and associated recommended documents, such as an earlier publication by the former Health Inequalities National Support Team and its “How To” resource pack – “How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level”,⁴² has encouraged community engagement to ensure an accurate picture of need and community awareness of relevant issues.

⁴² – Department of Health (2010). HINST How to guide book 10. “How to reduce the risk of seasonal excess deaths systematically in vulnerable older people to impact at population level”: Gateway reference 13669. <http://pbcc.files.wordpress.com/2012/02/ref-11-seasonal-access-deaths.pdf>

Action planning for improvement

The national CWP 2011 was launched for the first time in the autumn 2011. We have therefore been keen to assess and adjudge its impact in helping to reduce excess winter deaths'. The DH Policy Research Programme commissioned an independent evaluation of the implementation and health related impacts of the CWP by the PIRU LSHTM. The preliminary findings of this study have been presented at the CWP seminar 2013 and the comprehensive study findings are due for publication in autumn 2013.

However, the government has been keen to take this one step further, and earlier this summer ministers have made a referral to the National Institute for Clinical Excellence and Health (NICE) to produce public health guidance on the reduction of excess winter deaths.

We believe that these two pieces of work will help us to significantly address the challenges and priorities raised in this assessment in future CWPs, when they become available.

In future editions, we would propose to consider further the study findings from PIRU LSHTM and continue with the evaluation methods we developed this year engaging with our stakeholders in a variety of ways to best advise us on how to develop the plan.

Dissemination and communication plan

Our dissemination and communication strategy will ensure that the CWP is widely communicated using a variety of channels to ensure maximum publicity to health and social care professionals as well as the general public. It will also encourage professionals to print and leave hard copies of the Keep Warm Keep Well leaflets for those vulnerable clients they feel would benefit from one.

It is not proposed to publish any of the elements of the CWP in hard copy. This is in line with PHE policy which is that all publications should be online only, except in exceptional circumstances when, there might be accessibility or inclusion issues. An easy read version of the plan will be made available and further consideration given to other requests to improve accessibility,

We have emphasised in the CWP that the national plan is a guide for local areas to develop and ensure that cold weather plans form a component of local wider winter preparedness and response plans. Specifically we have recommended that local areas review or audit the distribution of the cold weather alerts across the health and social care systems locally to satisfy themselves that the cold weather alerts, when they come

out, are hitting those colleagues and organisations which need to take appropriate actions. Local areas are also recommended to assure themselves that organisations and key stakeholders are taking appropriate actions in light of the cold weather alert messages. The actions identified in the national CWP are illustrative and it is for local areas to amend and adapt this guidance and to clarify procedures for staff and organisations in a way that is appropriate for the local situation.

We recognise the need to focus particularly on ensuring that our messages on preparedness and response are reaching some of the most vulnerable groups. Our priorities in terms of raising awareness are twofold:

- working with professionals, to ensure that all Category 1 responders under the terms of the Civil Contingencies Act 2004 are aware of and receive as appropriate the Met Office cold weather alerts. Evaluations have stressed the importance of this alerting system for professionals which triggers a series of actions based on the alert level as described earlier
- raising awareness of the effects of cold weather, snow and ice on health and how the plan proposes to deal with these for both professionals and the public. We are, in turn, taking a number of specific actions in relation to this

It is proposed that like last year, the associated public facing *Keep Warm Keep Well* leaflet will continue to be provided in an online format, but all professionals from both statutory and community organisations will be made aware of, and have access to, this material. In addition we are working with the Cabinet Office on a cross-governmental campaign, “Get Ready for Winter”, to help ensure that key public health messages are communicated as widely as possible.

Raising awareness of the plan and action guide

We will actively disseminate the publication of the plan using the full variety of publication channels available to us: eg PHE, NHS Choices, the LGA; emergency planning routes; and the full range of PHE publications that it sends to various staff groups, including social care and public health colleagues. We will advise them of the CWP and provide web links to materials to ensure that they know how to download the public information leaflets if they require them for their clients. The plan will be accompanied by a foreword by the chief medical officer; and a cover letter signed jointly by senior DH, PHE, NHS England and LGA directors to emphasise the joint nature of the advice.

Communication to the general public over the entire winter

We will be working closely with the Met Office over the winter to further raise awareness in a number of ways. For example “Get Ready for Winter” is an annual web-based campaign hosted by the Met Office and is a portal for government departments and their partners. The pages offer advice and links to a range of organisations to help individuals, families and communities prepare for winter.

<http://www.metoffice.gov.uk/learning/get-ready-for-winter>

Plan launch

To organise joint press activity around the press launch to help raise awareness that the plan is in place with a focus on what people can do all of the time to protect themselves.

Cold weather public relations activity

Often the Met Office will run press releases when a period of severe cold weather, is expected. These are usually only weather based, but from time to time they could include some messaging about the risks of cold weather, or a complementary press release could be issued from PHE.

During long periods of severe cold weather

Similar public relations activity could be initiated during long periods of cold weather, when Cold Weather Alert thresholds are not likely to be met. If PHE are concerned that this weather could cause serious impacts to health and health services, such as in response to mortality surveillance, then an appropriate press release could be issued.

We will liaise with major voluntary agencies, such as Age UK and other groups working with vulnerable groups and those with protected characteristics to ensure that they are aware of the material which is available on the Web. The plan will be made available in large print and Easy-read formats and other accessible formats if requested.

Access to services

A general challenge for all groups with “protected characteristics” is to ensure that there is continued, if not improved, access to services. The CWP should not put any barriers in the way of accessing services generally. Indeed, there would be a generalised hope that if the plan is successful in raising awareness about cold weather to both individuals and organisations, there might be a general reduction of demand on both primary care and hospital based services.

More generally it is the responsibility of public sector organisations such as local authorities and local health and wellbeing boards to undertake an assessment of the needs of groups and communities as well as those who may use services. Those involved in needs assessment, as well as planning and implementation, of prevention should be aware of the different needs and concerns of those affected by cold weather as outlined in the plan and in this equality assessment. Designing and developing approaches also needs an awareness of the cultural differences which can inform and reinforce community approaches that support our response to severe cold weather.

We have identified a range of mechanisms to promote the prevention of the impact of severe cold weather and ensure equitable access and delivery:

- existing mechanisms to improve the identification of the scope and impact of severe cold weather among groups with higher risk (eg people with certain chronic diseases, older women) and those in marginalised or groups with protected characteristics. This can include joint strategic needs assessment as well as following the more specific approaches to winter planning and preparedness highlighted in the CWP
- statutory mechanisms that promote adaptation plans and equality as well as commissioning and needs assessment to ensure equity of access and delivery for all groups in all services and approaches

This equality assessment and the CWP itself will be made widely available across the NHS, local authorities and with stakeholders from the voluntary and community sector as we did in 2011 and 2012.