

## 6.4.2 Excess winter deaths and fuel poverty

### Why is this issue important?

People living in cold homes during the winter months are at increased risk of negative health outcomes, including winter deaths.<sup>1</sup> Excess winter deaths (EWDs) are defined as the difference between the number of deaths from December to March and the average number during non-winter months. In winter 2010-11, there were about 23,700 EWDs, or 1,300 more deaths per week in the winter months in England.<sup>2</sup> Most of the difference is due to respiratory and circulatory deaths, such as stroke and coronary heart disease. Other health conditions associated with, or exacerbated by, cold housing are mental ill-health, arthritis and rheumatism.<sup>1</sup>

Under the '10 per cent' ratio indicator, if a household needs to spend more than 10% of its income to maintain an adequate level of warmth, it is said to be fuel poor. The main contributing factors of fuel poverty are energy efficiency of the home; fuel costs; and household income.<sup>3</sup>

In 2011, the number of fuel poor households in the UK was estimated at around 4.5 million, representing approximately 17% of all UK households. This is a fall of around 0.25 million compared with 2010, due to rising incomes and a reduction in energy use through improvements in the energy efficiency of housing. These two elements combined to offset energy price increases in 2011.<sup>4</sup>

Fuel poor households must choose either to spend more than 10% of their income on heating, which has a detrimental impact on other aspects of health and well-being, or to under-consume energy and live in a cold home to save money.<sup>1</sup>

EWDs are almost three times higher in the coldest quarter of housing than in the warmest quarter, with an estimated 21.5% of all EWDs being attributable to cold housing. There is a relationship between EWDs, low thermal efficiency of housing

and low indoor temperature. Countries that have more energy efficient housing have lower EWDs.<sup>1</sup> Poorly insulated housing also contributes to carbon emissions and improving the energy efficiency of local homes and buildings is a priority in the Brighton & Hove Sustainability Action Plan.<sup>5</sup>

Indirect health impacts of cold housing and fuel poverty include a negative affect on: children's educational attainment, emotional wellbeing and resilience; adult and children's dietary choices; and the risk of accidents and injuries in the home.<sup>1</sup>

### Key outcomes

- **Fuel poverty (Public Health Outcomes Framework)**
- **Excess winter deaths (Public Health Outcomes Framework)**

### Impact in Brighton & Hove

The EWD Index is excess winter deaths as a percentage increase of the expected deaths based on non-winter deaths. For 2008-11 the EWD Index in Brighton & Hove was 20% (equivalent to an average of 135 EWDs per year). This is the same as the South East (20%) and similar to England (19%).<sup>6</sup> In the recent past, the rate of EWDs in England was twice the rate observed in some colder northern European countries, such as Finland.<sup>2</sup> Countries with the poorest housing in terms of thermal efficiency demonstrate the highest level of excess winter mortality.<sup>7</sup>

Brighton & Hove has an old housing stock with 66% of houses built before 1945 (compared with 43% in England)<sup>8</sup> and many private sector properties labelled 'hard to treat' (e.g. those with solid walls) in relation to standard energy efficiency measures.<sup>9</sup> According to 2011 estimates, 12% of households (14,500 households) in the city were fuel poor; a

<sup>1</sup> Marmot Review Team. The Health Impacts of Cold Homes and Fuel Poverty; 2011

<sup>2</sup> Department of Health. Cold Weather Plan for England: 'Protecting health and reducing harm from severe cold'; 2012.

<sup>3</sup> Department of Energy and Climate Change. The UK Fuel Poverty Strategy; 2001.

<sup>4</sup> Department of Energy and Climate Change. Annual Report on Fuel Poverty Statistics 2013

<sup>5</sup> Brighton & Hove City Council. Sustainability Action Plan. Available at: <http://www.brighton-hove.gov.uk/content/environment/sustainability-city/city-sustainability-partnership> [Accessed 11/08/2013]

<sup>6</sup> West Midlands Public Health Observatory. Excess Winter Deaths Trend, 1990-2009 [www.wmpho.org.uk/excesswinterdeathsineEnglandatlas](http://www.wmpho.org.uk/excesswinterdeathsineEnglandatlas) [Accessed on 25/08/2012].

<sup>7</sup> World Health Organisation. Environment and health risks: a review of the influence and effects of social inequalities; 2010

<sup>8</sup> Brighton & Hove City Council. Private Sector House Condition Survey; 2008.

<sup>9</sup> Internal Brighton & Hove City Council reporting (2009). Cited in Brighton & Hove State of the City Report; 2011.

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drop of 1.3% from 2010. This is lower than England (15%) but higher than the South East (10%).<sup>10</sup>

### Local inequalities

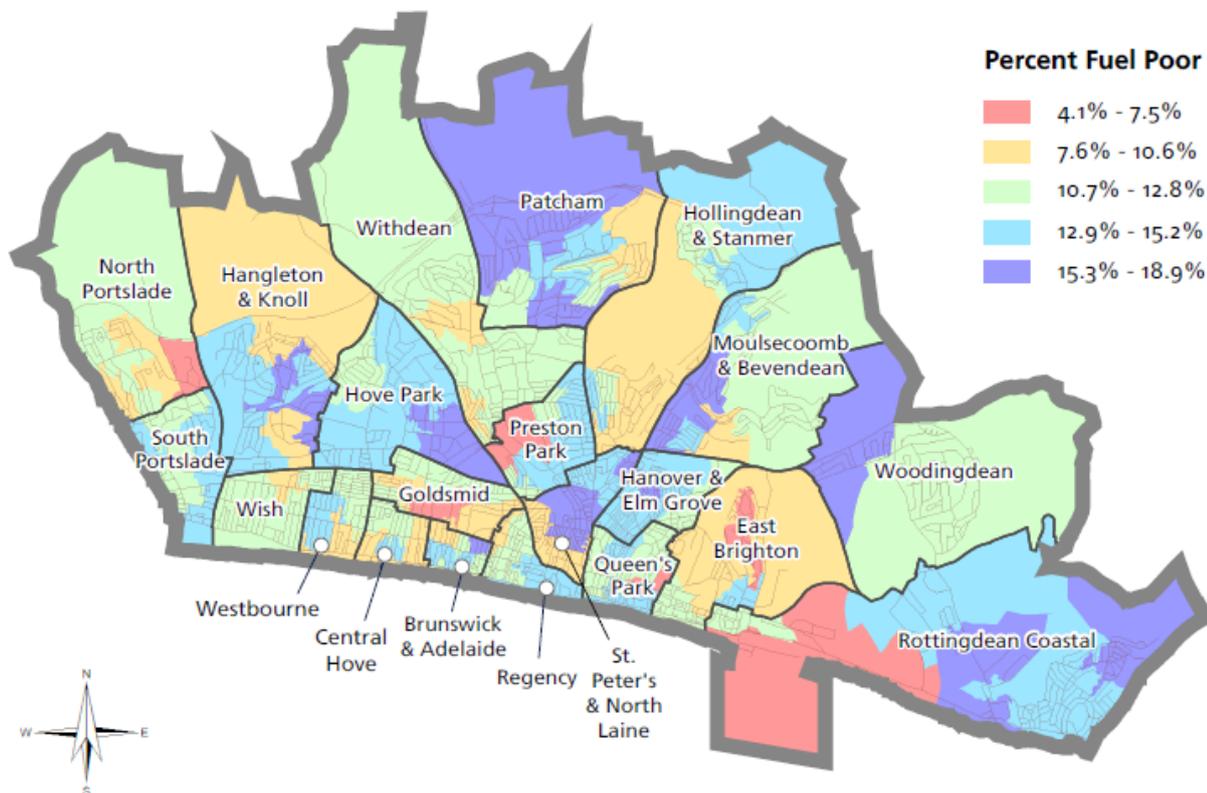
Older people, very young children and people with pre-existing medical conditions, are most at risk of ill-health from cold weather.<sup>2</sup> With the exception of households where the oldest member is under 25, fuel poverty also increases linearly with age of the oldest member. In 2011, around a fifth of households where the oldest person was aged 60-84 were fuel poor.<sup>4</sup> Gypsies and Travellers may face higher heating costs and be unable to claim winter

of respondents said they could not keep their home warm enough in the winter 'quite often' or 'most of the time'. The survey also showed that inability to keep homes warm enough 'most of the time' increased with deprivation.<sup>13</sup>

The wards with the estimated highest fuel poverty are Patcham; Hanover and Elm Grove; South Portslade; Hove Park and Rottingdean Coastal (all 14%). Sub ward analysis identifies areas most affected (Figure 1).

**Figure 1: Estimated fuel poverty distribution, 2011**

Source: Department of Energy and Climate Change, 2013



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fuel allowance without a permanent address.<sup>11</sup>

The vast majority of EWDs (87% for England and Wales, 2009-2010) were in those aged 75 or over, and 59% of EWDs were in those aged 85+.<sup>12</sup> In the Brighton & Hove Health Counts Survey 2012, 16%

### Where we are doing well

Following successful bids to the Department of Health for Warm Homes Healthy People funding, multi-stranded programmes were run in the city during 2011/2012 and 2012/2013 winters to prevent winter death and illness. Together, the programmes delivered: 269 fuel poverty awareness training sessions to front line workers; 150 winter home checks to make homes safer and warmer; 23 emergency home visits to check welfare and

<sup>10</sup> Department of Energy and Climate Change. Sub-regional fuel poverty levels, England, 2011; 2013.

<sup>11</sup> Office for Public Management. Health and social care needs of Gypsies and Travellers in West Sussex: Report to NHS West Sussex and West Sussex County Council; 2010.

<sup>12</sup> ONS, Excess Winter Mortality in England and Wales, 2010/11 (Provisional). <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-235062> [Accessed on 25/08/2012].

<sup>13</sup> NHS Brighton & Hove. Health Counts 2012.

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deliver 55 warm packs; 75 warm packs to rough sleepers; 198 home energy advice and assessment visits; 17,500 information leaflets and 3,500 room thermometers to residents; 11 community outreach workshops and two information events on keeping warm and saving energy in the home; 92 winter warmth grants totalling £18,100 and 382 financial inclusion checks, resulting in £604,193 in confirmed and likely annual income increases for residents.

In April 2013, a Brighton & Hove Winter Debrief was held to gather views from local statutory, community and voluntary organisations on how the city coped with winter 2012/13 and what improvements could be made in protecting vulnerable people in future cold weather. Relevant recommendations are included below.

### Predicted future need

Over the next 40 years, global temperatures are set to rise. Despite the warming climate, it is predicted that we may still experience very cold winters, although they are likely to become less frequent.<sup>5</sup>

Increasing fuel costs relative to income have contributed to greater fuel poverty and this is predicted to continue. In July 2013, the government accepted an alternative measurement of fuel poverty, known as the 'Low Income High Cost' (LIHC) measure.<sup>14</sup> Under this definition, a household is considered to be fuel poor if they have required fuel costs that are above average (the national median level) and, were they to spend that amount, they would be left with a residual income below the official poverty line. Under the LIHC definition, an estimated 2.6 million households were fuel poor in England in 2011. Even under this measure, numbers are set to rise by 2016; Parliament's previously agreed date for the eradication of fuel poverty as far as reasonably practicable.<sup>4</sup>

The 2010 Spending Review and the end of previous energy company obligations has reduced grant funding for energy efficiency measures. Energy efficiency improvements, and any available subsidy

for vulnerable residents, will now be delivered through the Green Deal and the Energy Company Obligation (ECO). Green Deal is a market-led framework that will allow individuals/businesses to make energy efficiency improvements to buildings at no upfront cost. Central to the Green Deal is a finance mechanism that will allow access to the finance needed with repayment attached to future electricity bills. Underpinning delivery is the ECO where energy suppliers are obligated to provide funding for measures that, through the installation of energy efficiency measures, generate an amount of heat or carbon credit in qualifying homes.

Concerns have been raised from a number of quarters that this national programme will not necessarily benefit the most vulnerable and financially disadvantaged households. Brighton & Hove City Council are working with other local authorities, public bodies, local businesses and organisations in Sussex to design a model that is able to address some of these issues.

### What we don't know

There is no local data on levels of fuel poverty by equality groups. With the exception of age, there is also no local data for EWDs.

### Key evidence and policy

- Department of Energy and Climate Change. Annual Report on Fuel Poverty Statistics 2013.
- Department of Health. Cold Weather Plan for England 2012: Protecting health and reducing harm from severe cold.
- Hills J. Getting the Measure of Fuel Poverty: Final Report of the Fuel Poverty Review. 2012.
- Marmot Review Team. The Health Impacts of Cold Homes and Fuel Poverty. 2011.
- Brighton & Hove City Council. Private Sector House Condition Survey. 2008.

### Recommended future local priorities

1. An over-arching strategic group with an identified lead to set the scope for and to drive year round seasonal planning, reporting to the Health and Wellbeing Board.

<sup>14</sup> Hills J. Getting the Measure of Fuel Poverty: Final Report of the Fuel Poverty Review; 2012.

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2. An agreed plan to protect and support vulnerable people during winter months, bringing together the national cold weather plan, potential future Warm Homes Healthy People Programmes and other Brighton & Hove linked arrangements.
3. Coordination of local assets and resources available to support vulnerable people in the city during the winter, including local statutory and Community and Voluntary Sector organisations and volunteer networks.
4. Focus action on those most at risk of fuel poverty and ill health caused by cold living conditions.
5. More health professionals and other front-line staff and volunteers trained on the risks of cold housing, what practical and financial support can be offered and how to refer clients locally.
6. Develop 'winter warmth champions' in a range of organisations and settings to raise awareness of the WHHP Programme and encourage referral of patients / clients.
7. Further work on increasing appropriate referrals from GPs, health and other relevant professionals to the Council Private Sector Housing Team for advice and assistance with fuel poverty and cold homes, including work to increase use of the online referral system 'Refer-all'.
8. Explore and maximise opportunities to reduce energy bills of most vulnerable residents, for example, collective buying of energy; progressing solar photovoltaic cells and solar thermal, district heat networks and supporting the roll out of the Green Deal and ECO.
9. Revive the work involved in planning the Brighton & Hove Transport Hub, including involving transport providers more fully and considering broader issues such as delivery of food and essential supplies to areas cut off during adverse weather conditions.
10. Further promotion to the general public, particularly older people, on the health risks of living in a cold home and work to tackle perceptions that people should simply endure

cold living conditions and not 'bother' the support services.

11. Further outreach work to ensure marginalised and minority populations are supported (e.g. BME; people who speak little or no English; rough sleepers).
12. Local community networks and individuals to be fully informed of the risks of cold weather and engaged in efforts to protect themselves and their neighbours.
13. Wider dissemination of Met Office Cold Weather Alerts.

### Key links to other sections

- Ageing well
- Climate change
- Housing
- Childhood poverty
- Long term conditions

### Further information

- Department for Energy and Climate Change Fuel poverty statistics.  
[http://www.decc.gov.uk/en/content/cms/statistics/fuelpov\\_stats/fuelpov\\_stats.aspx](http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/fuelpov_stats.aspx)
- West Midlands Public Health Observatory.  
[www.wmpho.org.uk/excesswinterdeathsinenglandatlas](http://www.wmpho.org.uk/excesswinterdeathsinenglandatlas)

### Last updated

July 2013