8.5 Excess seasonal deaths and fuel poverty

Excess winter deaths relate to the difference between the number of deaths during the four winter months (December-March) and the average number of deaths during the preceding autumn and summer (April-November). These deaths are of those people who would not have been expected to die due to illness or old age in the following few weeks or months. Many of these deaths are amongst older people, especially women, and those with underlying health problems. People living with underlying heart, circulatory or lung disease are at the highest risk. Excess seasonal deaths may also occur in the summer months due to excess heat.

Cold related illnesses severely affect cardiovascular and respiratory ailments. The provision of a warm home alleviates these ailments and combats cancer, heart disease, stroke and depression.

- *Each one degree Celsius decrease in average winter temperature results in 8,000 additional winter deaths in England. Death rates increase steadily and linearly for each degree Celsius below 20ºC. The impact on health is exacerbated for vulnerable individuals and the colder the temperature the greater the risk of harm:*
  - *Temperatures that are lower than 16 degrees appear to impair respiratory functions.*
  - *Temperatures below 12 degrees place strain on the cardiovascular system.*
- *Temperatures below 6 degrees place people at risk of hypothermia.*
- *Nationally, mortality rises 18% during the winter months. In a bad winter, this could amount to an additional 50,000 deaths. During winter 2010/2011 there were 27,500 excess winter deaths*
- *However, these deaths are preventable; some countries with more extreme weather conditions than the UK experience fewer winter-related deaths. For example, Finland has 45% fewer winter deaths than the UK*
- *After cold weather, it takes 40 days for levels of illness and death to return to normal*

Contributory factors to excess seasonal mortality include:

- *circulatory diseases (including heart attack and stroke), accounting for around 40% of excess winter deaths*
- *respiratory illnesses such as bronchitis and pneumonia, which make up around a third of excess winter deaths*
- *inhaling cold air, causing airways in the lung then to narrow and produce phlegm, worsening chronic lung disease and asthma*

Deaths related to heart problems peak after 2 days, stroke deaths after 5 days, and respiratory deaths peak 12 days after the coldest weather.

The inability to heat a home sufficiently can result in fuel poverty. A household is in fuel poverty if:

- they have fuel costs that are above average (the national median level)
- were they to spend that amount they would be left with a residual income below the official poverty line

Fuel poverty frequently affects people from vulnerable groups that already experience a disproportionately higher level of general poverty and deprivation. These groups include older people, households containing children (including lone parents), households with large adult populations, vulnerable groups (including disabled people), and single person households.

In Walsall there has been a general reduction of those households living in fuel poverty and as at 2011 16.7% of households in the borough were in fuel poverty compared to 22.6% in 2008.

Households in Fuel Poverty	2008	2009	2010	2011
Walsall	22.6%	27.4%	22.6%	16.7%
West Midlands	18.2%	26.2%	21.6%	16.9%
England	15.6%	18.4%	16.4%	15%

Figure 1 Households in Fuel Poverty (Source: www.gov.uk)

The decrease in fuel poverty in England between 2010 and 2011 was the result of a rise in income, and a reduction in energy use, through improvements in the energy efficiency of housing. These two things combined to offset the price increases seen in 2011.

In 2011 the borough had 1 Lower Super Output Area (LSOA) in the highest 1% of fuel poor in England and 33 (20% of the boroughs LSOAs) within the highest 5% of fuel poor. By 2012 this had reduced to none in the highest 1% and only 1 in the highest 5%.

Walsall residents have the right to live in safe and secure homes. In order to achieve this, a number of measures targeted at tackling fuel poverty and improving the quality and energy efficiency of existing and future homes are being delivered across the borough. The 'Health Through Warmth' programme offers to help vulnerable people who have long term, cold related illnesses and need assistance to fund and install heating and insulation in their homes. Working in partnership with governing bodies, community workers, charities, the NHS and Local Authority ensures more vulnerable people can be identified to receive help.

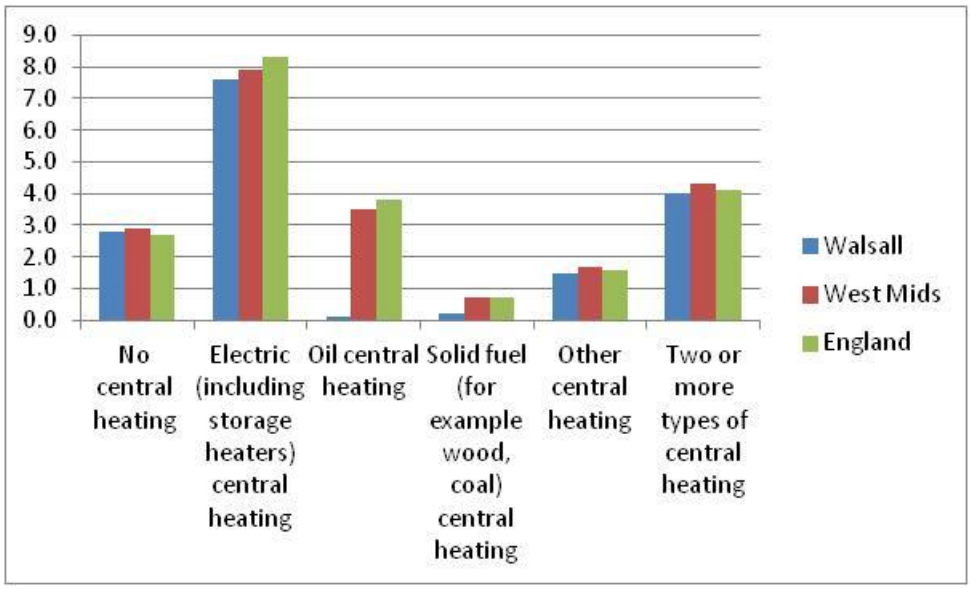

Figure 2 Households in Walsall with / without central heating (Source: 2011 Census)

The majority of households in Walsall have gas central heating fitted (83.8%) which is greater than regional and national levels of 79% and 78.8% respectively. Less than 3% of households in Walsall have no form of central heating (compared to 2001, this figure is much improved from 14%).

Key data source is The Health Impacts of Cold Homes and Fuel Poverty, Marmot Review Team.

Indicators:

The primary indicator is Excess Winter Deaths (EWD):

Excess Winter Deaths (EWD) has fluctuated over the last few years, which is to be expected as the weather is a determining factor. Current figures for 2013/14 are higher in Walsall (16.2%, equivalent to 124 deaths) compared to regional and national averages (13.5% and 11.6%A respectively).

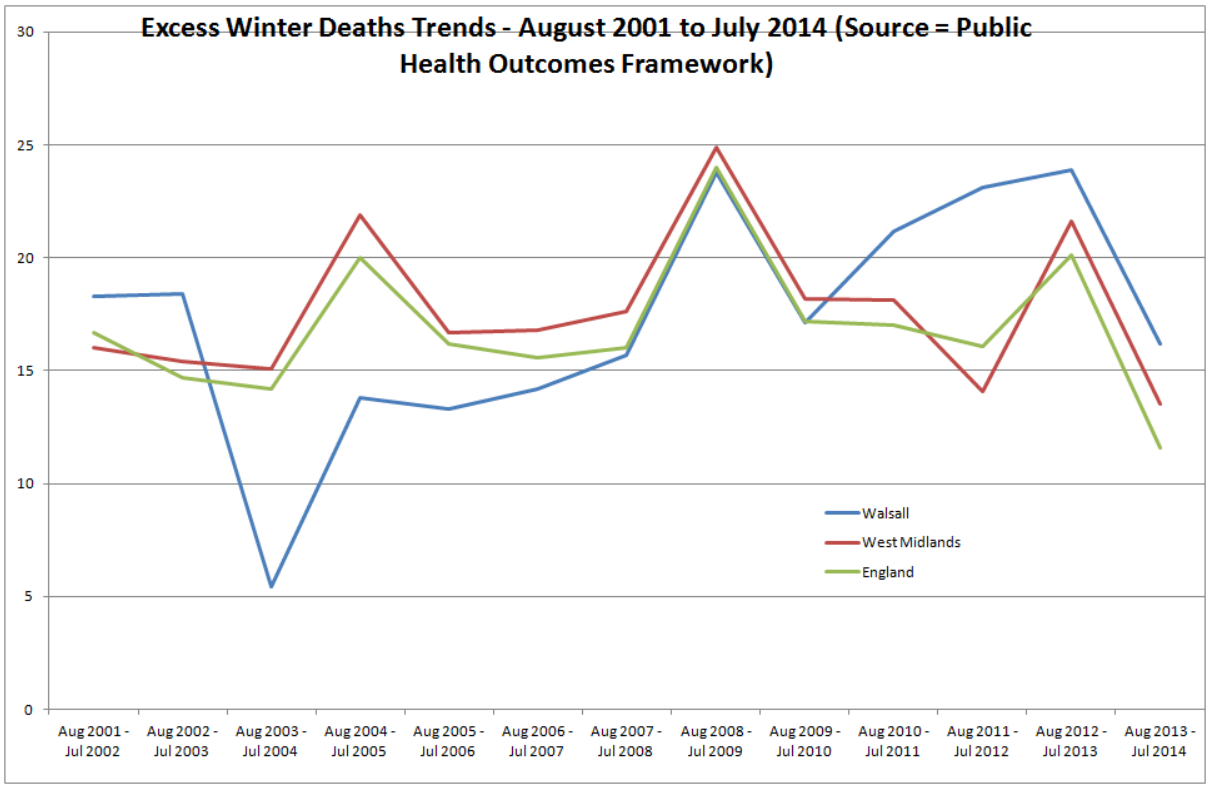

Figure 3 Excess Winter Death Trends (Source: ONS)

Priorities for action:

- ***Reducing illness especially for vulnerable groups during winter*** *- NHS Walsall undertakes a comprehensive and proactive annual flu-jab initiative supported by the council and other agencies to maximise the number of vulnerable residents immunised against influenza*
- ***Increasing energy efficiency of homes*** *- Improving the energy efficiency of homes is an essential step to reduce the number of households in fuel poverty*
- *Collectively work together to reduce unit costs of energy*
- *Build on what has been achieved to date in Walsall over the last 5 years*