

**TITLE OF REPORT: Excess Winter Mortality in Gateshead**

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**Purpose of the Report**

1. To brief the Health & Wellbeing Board on the issue of excess winter mortality in Gateshead.

**Background**

2. When the Director of Public Health's Health Protection Assurance Report was considered by the Board at its meeting in March 2017, the Board noted the issue of Excess Winter Deaths and it was agreed that a report should be brought back to a future Board meeting.
3. There is seasonal variation in mortality in the UK and some other countries in Europe, with higher levels of mortality in winter than in summer. Measuring excess winter mortality (EWM) is a way to quantify this variation. Excess winter deaths are defined as the number of deaths in the winter period (December to March) which occur over and above the expected number of deaths for that period.

**Causes of Excess Winter Mortality<sup>1</sup>**

4. EWM varies widely within Europe. Countries with low winter temperatures in Scandinavia and Northern Europe have very low rates of EWM, whilst countries with very mild winter temperatures in Southern Europe have very high rates of EWM. England has a higher than average EWM and exhibits high variation in seasonal mortality.
5. There are many reasons why countries with milder winter climates have such a high level of winter mortality. For example, people who live in countries with warmer winters tend to take fewer precautions against the cold. Countries with milder winters also tend to have homes with poorer thermal efficiency (for example, fewer homes have cavity wall insulation and double glazing), which makes it harder to keep homes warm during the winter. It has been shown that

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<sup>1</sup> For more detail see

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletin/excesswintermortalityinenglandandwales/2015to2016provisionaland2014to2015final> and <http://www.gateshead.gov.uk/Health-and-Social-Care/JSNA/Topics/Economy-Transport-Housing-Environment-Crime-and-Poverty/Poverty/Poverty.aspx>

low indoor temperature is associated with higher EWM from cardiovascular disease in England.

6. Households living in fuel poverty<sup>2</sup> are likely to find it difficult to afford the cost of staying warm in winter. Fuel poverty arises due to low income, poor heating systems, inadequate thermal insulation, and high fuel costs. Living in fuel poverty impacts upon physical and mental health and wellbeing and can lead to debt and financial difficulties.
7. Although EWM is associated with low temperatures, conditions directly relating to cold, such as hypothermia, are not the main cause of EWM. The majority of additional winter deaths are caused by cerebrovascular diseases, ischaemic heart disease, respiratory diseases and dementia and Alzheimer's disease. Although cancer causes more than a quarter of all deaths annually, no clear seasonal pattern has been established.
8. The cold can have various physiological effects which may lead to death in vulnerable people, including increased blood pressure in older people, increased risk of thromboses (blood clots), and lowering the immune system's resistance to respiratory infections. Additionally, the level of influenza circulating in the population increases in winter, and in vulnerable groups influenza can lead to life-threatening complications, such as bronchitis or secondary bacterial pneumonia: vaccination against influenza remains an important tool for the protection of health.
9. Furthermore, although mortality does increase as it gets colder, temperature only explains a small amount of the variance in winter mortality, and high levels of EWM can occur during relatively mild winters: both temperature and levels of influenza are important predictors of excess winter mortality but their relationship with winter mortality is complex.
10. Increasing uptake of the flu vaccine is one of the most important priorities for the NHS in reducing winter pressures and excess winter mortality. The vaccine is recommended for groups of children both for their own protection and to reduce secondary transmission – for example to grandparents. Employers are expected to ensure the vaccination of front-line health and social care staff to protect vulnerable adults as well as the staff themselves.

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<sup>2</sup> The preferred definition of fuel poverty is the Low Income High Costs (LIHC) definition, where 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.

11. The National Institute for Health and Care Excellence (NICE) has published guidance<sup>3</sup> on “Excess winter deaths and illness and the health risks associated with cold homes”. This includes recommendations on:
  - HWBs developing a strategy for people living in cold homes
  - identifying people at risk from cold homes
  - training practitioners to help people with cold homes
  - raising awareness of how to keep warm at home
  - ensuring buildings meet required standards

## **The Gateshead position**

### ***Excess winter mortality***

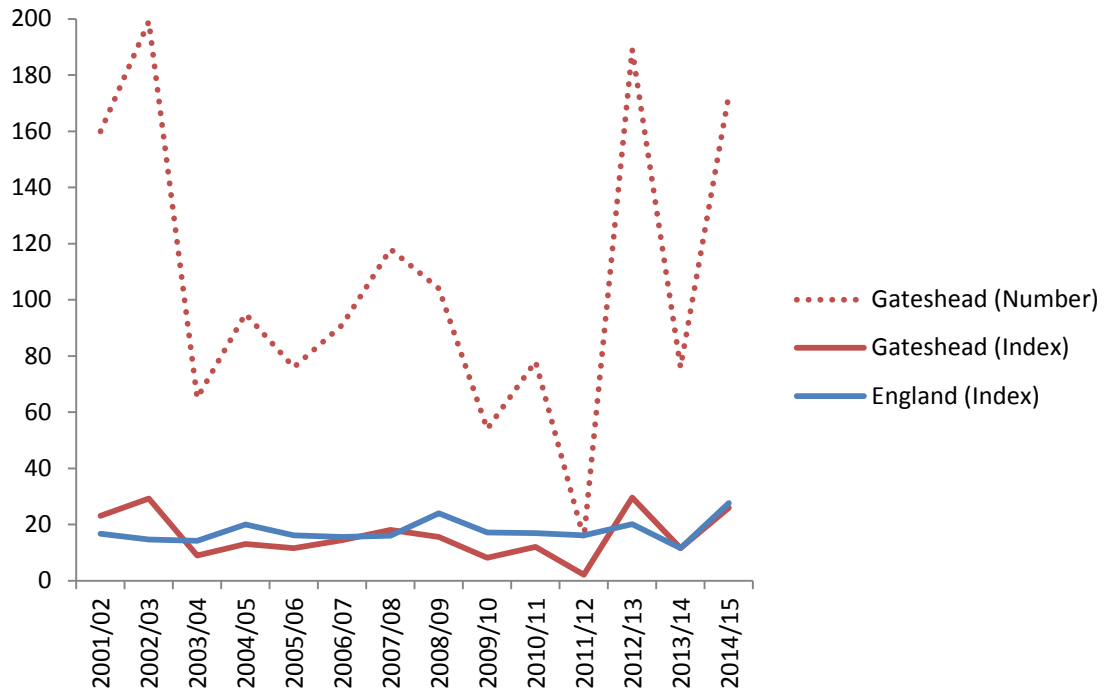
12. The most recent data available are for the 2014/15 winter, when in Gateshead there were 173 excess winter deaths, compared to 70 in 2013/14. The EWM index for 2014/15 shows that there were 26 per cent more deaths in the winter compared with the non-winter period. The position of Gateshead is typical of NE authorities, and not significantly different to England.
13. In 2014/15 in Gateshead the majority of deaths occurred amongst people aged 75 and over. There were more excess winter deaths in females than in males, as in the previous 5 years. Respiratory diseases were the underlying cause of death in more than a third of all excess winter deaths. Uptake of the flu vaccine reached 74.9% in over 65s, and 55.1% amongst at-risk groups aged below 65.
14. Last winter (2016/17), uptake of the flu vaccination locally was close to target levels amongst the over 65s (actual 73.8%, target 75%) but not amongst those aged 6 months to <65 years who were in clinical risk groups (actual 54.9%, target 75%).
15. There is significant year-on-year variation in the numbers of excess winter deaths, and in the EWM index (see figure 1). It is not always apparent why this is the case. Note that the winter of 2014/15 had the highest number of excess winter deaths in England and Wales since 1999/00 with 41,300 more people dying in the winter months compared with the non-winter months, although the number of excess deaths in Gateshead was higher in 2012/13 and 2002/03. The local index has been significantly different from England’s in only 2 years since 2001 (one year it was better, one year worse).
16. In terms of housing, the 2030 Vision is for all Gateshead homes to be energy efficient. Efficiency ratings vary by tenure and geographical locality but increases in average ratings have been secured since 2013, and more than

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<sup>3</sup> <https://www.nice.org.uk/guidance/ng6> (March 2015)

half of Gateshead properties are deemed to be energy efficient<sup>4</sup>. A small proportion of Gateshead homes, particularly in the private sector, would fail the Housing Health and Safety Rating System due to excess cold.

**Figure 1: Number and Index of Excess Winter Deaths**



17. Action to date has included targeted demolition of properties, solid wall insulation measures to high rise and low rise properties, provision of new boilers and/or loft insulation for a number of private properties, energy efficient glazing and new boilers for targeted Gateshead Housing Company homes, and the development of a low carbon District Energy Scheme for the Town Centre and quays area of Gateshead.
18. Further plans include reviewing the “Warm Up North” programme (a partnership of all LAs in the NE with British Gas), improvements to a number of blocks of flats, building new, better standard housing, and the identification of properties for potential area based insulation schemes. However, these developments will be dependent on funding availability. The remaining priorities are in improving the ‘hard-to-treat’ homes, particularly pre-war terraces and post-war high-rise blocks.
19. It is estimated<sup>4</sup> that approximately 11% of households in Gateshead are in fuel poverty. This is little changed since 2013, when 10.9% (9,855) of households in Gateshead were deemed fuel poor, but the number of households in fuel

<sup>4</sup> Home Energy Conservation Act (1995) Gateshead Council Report 2017

poverty has increased (to 10,108). This is significantly higher than the England average of 10.4%, although lower than the regional figure.

20. Residents in some areas of Gateshead are more likely to live in fuel poverty than others. In 2015, fuel poverty in different Lower Super Output Areas in Gateshead ranged from 6.7% to 20.7% of households. Households in the Bensham area and parts of Chopwell have the highest levels of fuel poverty.
21. In 2015 The Council's Communities & Place Overview and Scrutiny Committee undertook a review of Domestic Energy Management & Fuel Poverty. This made a number of recommendations, and progress is reported annually.
22. There is also relevant third sector activity, including the work of CAB, Age UK and others to raise uptake of benefits and National Energy Action which seeks to end fuel poverty.

### **Conclusion**

23. The HWB should note the importance of flu vaccination programmes for both at-risk groups and front-line staff in addressing excess winter mortality.
24. The Council and HWB have already identified the need for a wide-ranging approach to tackling poverty, and fuel poverty will need to be part of this, particularly with regard to the older population.
25. The Public Health team is currently recruiting to a vacant post focused on frailty and vulnerability. One of the areas of work they will address will be excess winter mortality, linked to the development of the poverty strategy and to take forward the recommendations in the NICE guidance on excess winter mortality.

### **Recommendations**

26. Partners in the Health and Wellbeing Board should ensure all reasonable measures are taken to encourage uptake of the flu vaccine this winter amongst eligible groups.
27. The Health and Wellbeing Board is asked to note this report.

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