

## Excess Winter Deaths

### Introduction

Winter is associated with an increase in illness and injuries. In common with other countries, in England and Wales more people die in the winter than in the summer. However, there is evidence that risk to health from cold weather and the effects of cold weather on health are predictable and mostly preventable. Poor winter health is associated with cold weather, but other factors are important. For example, colder Scandinavian countries have relatively fewer excess winter deaths in winter compared to the UK. The cold and damp of winter can have dramatic effects on those already vulnerable because of their age, deprivation, illness or disability.

Excess Winter Deaths are calculated as the number of winter deaths (those deaths that occur in December through to March) minus the average number of deaths from the preceding August to November and the following April to July

$$\text{Excess Winter Deaths} = \text{winter deaths} - \text{average non winter deaths}$$
$$\text{Excess Winter Deaths Index} = (\text{Excess Winter Deaths} / \text{average non winter deaths}) \times 100$$

According to ONS an estimated 43,900 excess winter deaths occurred in England and Wales in 2014/15; the highest number since 1999/00, with 27% more people dying in the winter months compared with the non-winter months. The majority of deaths occurred among people aged 75 and over; there were an estimated 36,300 excess winter deaths in this age group in 2014/15, compared with 7,700 in people aged under 75. There were more excess winter deaths in females than in males in 2014/15, as in previous years. Male excess winter deaths increased from 7,210 to 18,400, and female deaths from 10,250 to 25,500 between 2013/14 and 2014/15.

Respiratory diseases were the underlying cause of death in more than a third of all excess winter deaths in 2014/15. The excess winter deaths index was highest in the South West in 2014/15 and joint lowest in Yorkshire and The Humber, and Wales.

ONS has published a report examining the links between excess winter deaths and other potential causal factors such as flu and temperature<sup>1</sup>

### Excess winter deaths in Norfolk

Excess winter deaths in Norfolk mirrors what has happened across England. Across Norfolk the highest excess winter deaths between Aug 2011 and July 2014 occurred in Broadland but this is not significantly different from England or Norfolk (Figure 1).

---

1

<http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/201415provisionaland201314final>

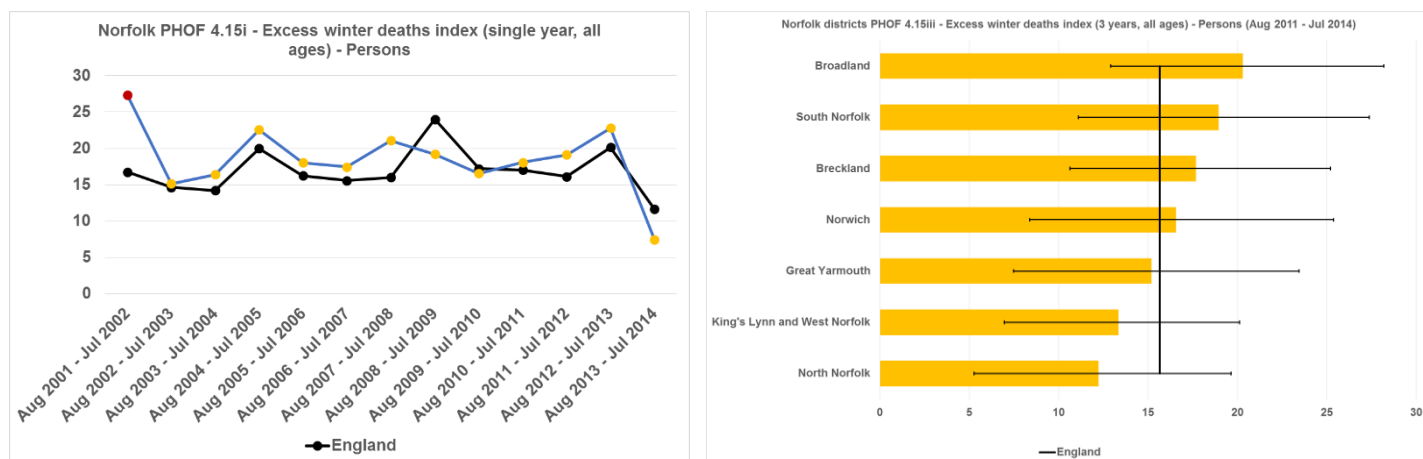


Figure 1 Excess winter deaths index for Norfolk and districts (Public Health England, PHOF<sup>2</sup>)

Table 1 shows the provisional number of excess winter deaths for districts across Norfolk in 2014/15. Great Yarmouth had the fewest excess winter deaths and lowest excess winter deaths index. Broadland had the highest number of excess winter deaths and the highest excess winter deaths index.

Area	All Ages (2014/15)				Age 85+ (2014/15)			
	Winter Deaths	Average Summer Deaths	Extra Deaths	EWD Index	Winter Deaths	Average Summer Deaths	Extra Deaths	EWD Index
Breckland	645	495	150	30.3	286	225	61	27.1
Broadland	603	440	164	37.2	314	181	134	74.0
Great Yarmouth	408	351	57	16.2	168	149	19	12.8
King's Lynn and West Norfolk	618	511	107	20.9	285	200	85	42.5
North Norfolk	544	433	112	25.8	262	182	81	44.4
Norwich	419	348	71	20.4	186	138	49	35.3
South Norfolk	520	418	102	24.4	259	175	84	48.0
<b>Norfolk</b>	<b>3,757</b>	<b>2,995</b>	<b>762</b>	<b>25.4</b>	<b>1,760</b>	<b>1,249</b>	<b>512</b>	<b>41.0</b>
<b>England</b>	<b>192,500</b>	<b>151,100</b>	<b>41,400</b>	<b>27.4</b>	<b>83,000</b>	<b>59,700</b>	<b>23,300</b>	<b>39.0</b>

Table 1 Provisional 2014/15 excess winter deaths in Norfolk districts compared to England, numbers might not match due to rounding<sup>3</sup>

<sup>2</sup> <http://www.phoutcomes.info/public-health-outcomes-framework#page/0/gid/1000044/pat/6/par/E12000006/ati/102/are/E10000020>

<sup>3</sup> Norfolk County Council Public Health

Table 2 shows the provisional number of excess winter deaths for CCGs across Norfolk and Waveney in 2014/15. NHS West Norfolk CCG had the fewest excess winter deaths and lowest excess winter deaths index. NHS North Norfolk CCG and the highest excess winter deaths index.

Area	All Ages (2014/15)				Age 85+ (2014/15)			
	Winter Deaths	Average Summer Deaths	Extra Deaths	EWD Index	Winter Deaths	Average Summer Deaths	Extra Deaths	EWD Index
NHS Great Yarmouth & Waveney CCG	999	809	191	23.6	444	339	105	31.0
NHS North Norfolk CCG	855	666	190	28.5	428	280	148	52.9
NHS Norwich CCG	711	555	157	28.2	334	220	115	52.2
NHS South Norfolk CCG	1,027	808	220	27.2	479	346	134	38.6
NHS West Norfolk CCG	756	617	140	22.6	351	255	97	37.9
<b>NHS Norfolk and Waveney</b>	<b>4,348</b>	<b>3,453</b>	<b>896</b>	<b>25.9</b>	<b>2,036</b>	<b>1,439</b>	<b>598</b>	<b>41.5</b>
<b>England</b>	<b>192,500</b>	<b>151,100</b>	<b>41,400</b>	<b>27.4</b>	<b>83,000</b>	<b>59,700</b>	<b>23,300</b>	<b>39.0</b>

Table 2 Provisional 2014/15 excess winter deaths in NHS Norfolk and Waveney CCGs compared to England, numbers might not match due to rounding<sup>4</sup>

At a more local level the Excess Winter Deaths Index becomes more variable as the numbers get smaller. In some instances the average number of deaths in the summer months is higher than the number of winter deaths resulting in a negative index. Some of the variability over time can be addressed by aggregating together more years of data. For example, at small area level across Norfolk for the five years 2010 through to 2015 the number of excess winter deaths ranges from -18 to 42. The Excess Winter Deaths Index for this time period ranges from - 50 to more than 210.

In order to understand if the deaths in winter are higher than the summer average we can see if the Excess Winter Deaths Index is significantly higher than zero (Figure 2). The areas with the highest excess winter deaths index are not necessarily associated with deprivation or rurality.

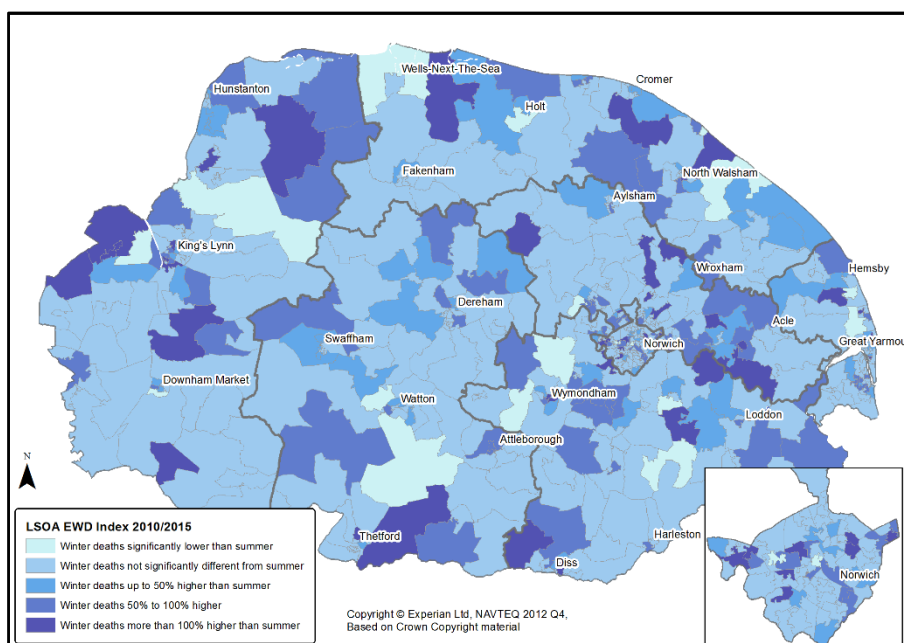


Figure 2 Map showing variation in EWD Index for LSOAs in Norfolk. A high percentage may not indicate a high number

## Social, environmental, population context

A wide range of people are vulnerable to the cold. This includes:

- people with cardiovascular conditions
- people with respiratory conditions (in particular, chronic obstructive pulmonary disease and childhood asthma)
- people with mental health conditions
- people with disabilities
- older people (65 and older)
- households with young children (from new-born to school age)
- pregnant women
- people on a low income

In terms of particular population groups children can experience significant negative effects of cold housing in terms of infants' weight gain, hospital admission rates, developmental status, and the severity and frequency of Asthmatic symptoms. Adolescents experience the negative effects of cold housing and fuel poverty on their mental health of. Adults will feel the impact of cold housing on their physical health, well-being and self-assessed general health, in particular vulnerable adults and those with existing health conditions. Older people experience the effects of cold housing in terms of higher mortality risk, poorer physical health and poorer mental health.

## Current services, local plans and strategies

Locally Norfolk County Council recognises that cold weather can lead to difficulties and that cold weather is especially hard on vulnerable people, or people aged 65 and over. Norfolk County Council runs a Warm and Well campaign in conjunction with the NHS and Public Health England Stay Well This Winter campaign (<http://www.nhs.uk/staywell/>).

There is help and advice available related to

- Tips for staying warm and well
- Making the home energy efficient and safe
- Claiming financial help

More information can be found on the Norfolk County Council website<sup>5</sup>

## Considerations for HWB and commissioner

NICE has produced guidance highlighting the population groups at risk and recommendations for action<sup>6</sup>. In the context of Norfolk the recommendations relate to:

- Environmental Health Officers
- Voluntary Sector Organisations
- Health and Wellbeing Boards
- Housing Services
- Norfolk County Council
- GPs and primary care
- Acute providers
- Social Workers
- Trading Standards

Reducing excess winter deaths can be achieved through national, regional and local campaigns to raise awareness and through primary and secondary prevention.

<sup>5</sup> <https://www.norfolk.gov.uk/what-we-do-and-how-we-work/campaigns/warm-and-well>

<sup>6</sup> <https://www.nice.org.uk/guidance/ng6>

Primary prevention will include:

- Better management of Cardiovascular Disease and COPD risk factors.
- Good coverage of flu and pneumococcal immunisation amongst defined risk groups.
- Effective falls prevention programme with community-based support services.
- Promoting home insulation and energy efficiency and access to relevant grants.
- Support/signposting patients to access the necessary benefits and support needed.
- Increasing access and take-up of relevant benefits and grants (e.g. cold weather payments, winter fuel payment, Age UK surviving winter grant).

Secondary prevention including clinical, medicines management:

- Improving the referral system for high risk residents and improving the identification of at-risk residents through staff who undertake home visits;
- Reducing recurrent falls through effective public health interventions (e.g. minor home adaptations, medication reviews).

## References and information

Public Health Outcomes Framework <http://www.phoutcomes.info/>

ONS Excess Winter Mortality pages

<http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/201415provisionaland201314final>

NHS Keep Warm, Keep Well <http://www.nhs.uk/Livewell/winterhealth/Pages/KeepWarmKeepWell.aspx>

Norfolk County Council Warm and Well <https://www.norfolk.gov.uk/what-we-do-and-how-we-work/campaigns/warm-and-well>

Excess winter deaths and illness and the health risks associated with cold homes  
<https://www.nice.org.uk/guidance/ng6>

## Author and key contacts

Tim Winters [tim.winters@norfolk.gov.uk](mailto:tim.winters@norfolk.gov.uk)

Online feedback:

Send us your query or feedback online using our online feedback form at  
<http://www.norfolkinsight.org.uk/feedback>

Email: [JSNA@norfolk.gov.uk](mailto:JSNA@norfolk.gov.uk)

## Publication date

24<sup>th</sup> October 2016