Summary

- Excess winter deaths (EWD) are calculated by comparing the average number of deaths occurring in winter (November to March) with the average number occurring in a non-winter period. It is often expressed as an Excess Winter Deaths (EWD) Index which can be interpreted as the percentage of extra deaths per winter month.
- Worcestershire has a similar pattern of excess winter deaths compared to England and the West Midlands.
- There were an estimated 400 excess winter deaths across Worcestershire in 2012/13 (November to March).
- As in previous years, there were more excess winter deaths in females than in males.
- The number of excess winter deaths increases with age, therefore as the overall index is not age standardised an area with an older population profile should expect to have a higher overall index.
- In 2012/13 in Worcestershire, the EWD index was highest for respiratory diseases, however circulatory diseases account for the highest overall percentage of excess winter deaths.
- Injury and poisoning, which includes falls, slips and trips, account for a very small number of excess winter deaths; which hasn’t exceeded 3% over the last five years in Worcestershire.
- Excess Winter Mortality is very difficult to predict as it is usually affected by how cold the winter will be and the prevalence of influenza type illnesses. Consequently, a 3 or 5 year average is used to identify trends.

Key Indicators

<table>
<thead>
<tr>
<th>Indicator – 2011/12 Winter – Source: PHOF</th>
<th>England &amp; Wales</th>
<th>West Midlands</th>
<th>Worcestershire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess winter deaths index for all ages all causes - persons</td>
<td>16.1</td>
<td>14.1</td>
<td>14.7</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator – 2012/13 Winter – Source: ONS/Locally calculated</th>
<th>England &amp; Wales</th>
<th>West Midlands</th>
<th>Worcestershire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess winter deaths index for all ages all causes - persons</td>
<td>19.7</td>
<td>21.0</td>
<td>22.1</td>
</tr>
</tbody>
</table>

When comparing local figures with national averages it is important to further explore the reason for any differences. For example, as indicators may be based on relatively low numbers, small changes could have a large impact; or they may be influenced by differences in recording practices.
Worcestershire has consistently had a similar pattern of excess winter deaths to England and the West Midlands.

- The remaining analysis is based on very small numbers so should be treated with caution.
- Although based on small numbers in Worcestershire, the EWD index increases with age with the majority of excess winter deaths occurring in people aged 75 and over.

- The EWD index for the 0-64 age group was high in 2012/13 due to a large decrease in the number of non-winter deaths rather than an increase in winter deaths in that year.

- It must be noted, however, that though the index looks very high for the 0-64 age group, the overall number of EWDs was half that of the 85+ age group. The index gives you the % difference between the winter/non winter deaths.
Briefing on Excess Winter Deaths

Figure 3: Excess Winter Deaths Index for Persons by Underlying Cause of Death in Worcestershire compared to E&W

- Respiratory disease had the largest seasonal effect of all of the causes analysed, having the highest EWM index for all winters analysed.
- Although Circulatory diseases usually account for the highest percentage of excess winter deaths, the number of circulatory disease deaths remains high throughout the year. Therefore the seasonal effects on mortality are not as high as seen with respiratory diseases.
- Injury and poisoning, which includes falls, slips and trips account for a very small percentage of excess winter deaths which hasn’t exceeded 3% over the last 5 years in Worcestershire.

Figure 4: Percentage of Excess Winter Deaths by Underlying Cause of Death

- 2009/10: Circulatory Diseases 38%, Respiratory Diseases 28%, Other 28%, Cancers 3%, Injury and Poisoning 3%
- 2010/11: Circulatory Diseases 33%, Respiratory Diseases 40%, Other 26%, Cancers 0%, Injury and Poisoning 1%
- 2011/12: Circulatory Diseases 36%, Respiratory Diseases 28%, Other 27%, Cancers 11%, Injury and Poisoning 2%
- 2012/13: Circulatory Diseases 32%, Respiratory Diseases 28%, Other 27%, Cancers 11%, Injury and Poisoning 2%
Briefing on Excess Winter Deaths

Figure 5: Excess Winter Deaths Index for Persons by Council District in Worcestershire

- Generally council district areas with higher numbers of elderly population (e.g. Bromsgrove) have historically had higher EWD indexes. This is primarily due to the index being a 'crude' rate and, as discussed, earlier, the elderly tend to be more vulnerable in the winter months.

- In 2012/13, the 0-64 population had a higher index. Consequently the council districts with younger and more deprived populations have got higher indexes in this year.

Associated documents and information

- Link to ONS Excess Winter Mortality in E&W 2012/13

- Link to Public Health Outcomes Framework – Indicators produced by Public Health England on premature mortality
  http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000044/pat/6/ati/102/page/3/par/E12000005/are/E10000034

- Link to West Midlands Public Health Observatory atlas of Excess Winter Deaths
  http://www.wmpho.org.uk/excesswinterdeathsinEnglandatlas/

- Link to Cold Weather Plan for England 2013

- Link to PHE Local Health website:
  http://www.localhealth.org.uk/#v=map9;l=en

- Evidence reviews: (Evidence review 7: fuel poverty and cold home-related health problems; Briefing 7: Fuel poverty and cold home-related health problems)