



Weekly All-Cause Mortality Surveillance

21 January 2016 – Week 03 report (up to week 02 data)

In week 02 2016, no statistically significant excess all-cause mortality by week of death was seen through the EuroMOMO algorithm in England overall and by age group. In the devolved administrations, significant excess was seen in Northern Ireland for week 02.

Excess overall all-cause mortality, England and Wales

-In week 01 2016, an estimated 13,045 all-cause deaths were registered in England and Wales (source: [Office for National Statistics](#)). This is an increase compared to the 7,524 estimated death registrations in week 53 2015, and is above the 95% upper limit of expected death registrations for the time of year as calculated by PHE (Figure 1). The sharp drop in the number of deaths in week 53 corresponds to a week where there were bank holidays and fewer days when deaths were registered. Therefore this drop is likely to be artificial.

Excess all-cause mortality in subpopulations, UK

- Up to week 02 2016 in England, excess mortality by date of death above the upper 2 z-score threshold was seen in <5 years olds and 5-14 year olds in week 51 and in 15-64 year olds in week 52 after correcting ONS disaggregate data for reporting delay with the standardised [EuroMoMo](#) algorithm (Figure 2, Table 1). No significant excess was seen in other age groups. This data is provisional due to the time delay in registration; numbers may vary from week to week.

- In the devolved administrations, up to week 02 2016, excess mortality above the threshold was seen in Northern Ireland in weeks 52 2015 to week 02 2016. No significant excess mortality was seen in Wales up to week 02 2016 (Table 2).

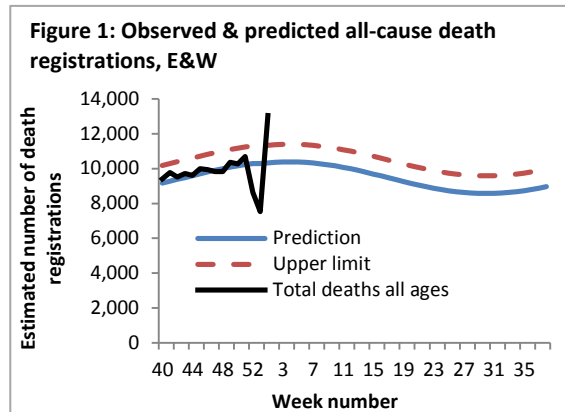


Table 1: Excess mortality by age group, England*

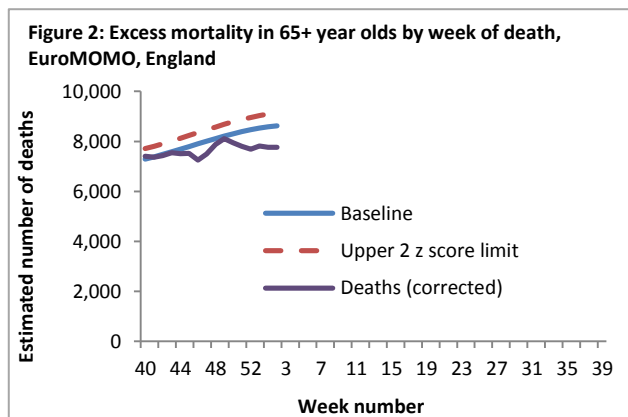
| Age group (years) | Excess detected in week 02 2016? | Weeks with excess in 2015/16 |
|-------------------|----------------------------------|------------------------------|
| <5 | × | 51 |
| 5-14 | × | 51 |
| 15-64 | × | 52 |
| 65+ | × | NA |

* Excess mortality is calculated as the observed minus the expected number of deaths in weeks above threshold

Table 2: Excess mortality by UK country*

| Country | Excess detected in week 02 2016? | Weeks with excess in 2015/16 |
|------------------|----------------------------------|------------------------------|
| England | × | NA |
| Wales | × | NA |
| Scotland | × | 48 |
| Northern Ireland | × | 52-02 |

* Excess mortality is calculated as the observed minus the expected number of deaths in weeks above threshold
NB. Separate total and age-specific models are run for England which may lead to discrepancies between Tables 1 + 2



Produced by the Respiratory Diseases Department, Public Health England.

- Seasonal mortality is seen each year in England and Wales, with a higher number of deaths in winter months compared to the summer. Additionally, peaks of mortality above this expected higher level typically occur in winter, most commonly the result of factors such as cold snaps and increased circulation of respiratory viruses, in particular influenza.
- RDD's weekly mortality surveillance aims to detect and report acute significant weekly excess mortality above normal seasonal levels in a timely fashion. Excess mortality is defined as a significant number of deaths reported over that expected for a given point in the year, allowing for weekly variation in the number of deaths. This triggers further investigation of spikes and informs any public health responses.
- The aim is not to assess general mortality trends or precisely estimate the excess attributable to different factors, although some end-of-winter estimates and more in-depth analyses (by age, geography etc.) are undertaken.
- Separate to the calculations presented in this report, excess winter deaths (EWD), comparing the number of deaths in the winter period compared to the non-winter period, are calculated by [ONS](#) and presented in an [atlas](#) down to local authority level.