



Weekly All-Cause Mortality Surveillance

23 June 2016 – Week 25 report (up to week 24 data)

Up to week 24 2016 in England, excess mortality by date of death was seen in 15-64 year olds in weeks 52 to 53, 03, 05 to 07, 09 to 10, 12 and 17 and in <5 year olds in weeks 40,05, 15 and 19 with the EuroMoMo algorithm. In the devolved administrations, no significant excess mortality was noted in week 24 2016.

Excess overall all-cause mortality, England and Wales

-In week 23 2016, an estimated 9,873 all-cause deaths were registered in England and Wales (source: [Office for National Statistics](#)). This is an increase compared to the 7,909 estimated death registrations in week 22 2016, and is below the 95% upper limit of expected death registrations for the time of year as calculated by PHE (Figure 1). The drops in the number of deaths in weeks 53, 13, 18 and 22 correspond to weeks where there were bank holidays and fewer days when deaths were registered. Therefore these decreases are likely to be artificial.

Excess all-cause mortality in subpopulations, UK

- Up to week 24 2016 in England, excess mortality by date of death above the upper 2 z-score threshold was seen in the 15-64 year olds from weeks 52 to 53, 03, 05 to 07, 09 to 10, 12, and 17 and in <5 years olds in weeks 40, 05,15 and 19 after correcting ONS disaggregate data for reporting delay with the standardised [EuroMoMo](#) algorithm (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, no significant excess mortality above the threshold was seen in week 24 2016 (Table 2).

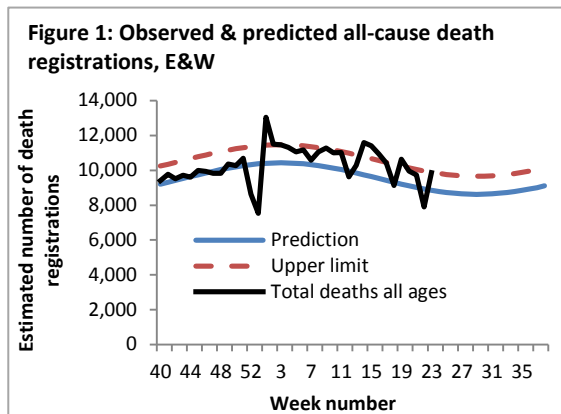


Table 1: Excess mortality by age group, England*

| Age group (years) | Excess detected in week 24 2016? | Weeks with excess in 2015/16 |
|-------------------|----------------------------------|------------------------------|
| <5 | x | 40,05,15,19 |
| 5-14 | x | NA |
| 15-64 | x | 52-53, 03,05-07, 09-10,12,17 |
| 65+ | x | NA |

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

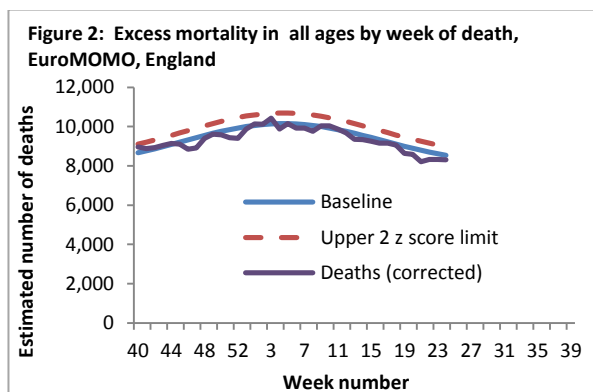


Table 2: Excess mortality by UK country*

| Country | Excess detected in week 24 2016? | Weeks with excess in 2015/16 |
|------------------|----------------------------------|--|
| England | x | 40, 52-53, 03,05-07, 09-10,12,15,17,19 |
| Wales | x | 49, 05,08,10,14,21 |
| Scotland | x | 48,02,04,05,07,09 |
| Northern Ireland | x | 42,49,52-53,01,07,09 |

* 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.