

Weekly All-Cause Mortality Surveillance

17 December 2015 – Week 51 report (up to week 50 data)

In week 50 2015, no statistically significant excess all-cause mortality by week of death was seen through the EuroMOMO algorithm in England overall and by age group and across the devolved administrations.

Excess overall all-cause mortality, England and Wales

-In week 49 2015, an estimated 10,365 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is an increase compared to the 9,822 estimated death registrations in week 48, and is below the 95% upper limit of expected death registrations for the time of year as calculated by PHE (Figure 1).

Excess all-cause mortality in subpopulations, UK

-In week 50 2015, no excess mortality by date of death above the upper 2 z-score threshold was seen in England after correcting ONS disaggregate data for reporting delay with the standardised EuroMoMo algorithm (Figure 2, Table 1), in any age group or subnationally. This data is provisional due to the time delay in registration; numbers may vary from week to week.

- No excess mortality above the threshold was seen across the devolved nations in week 50 (Table 2).

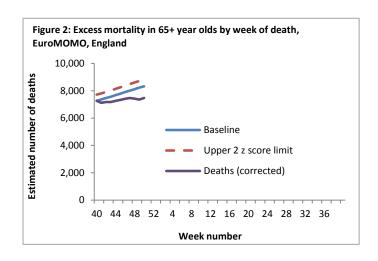


Figure 1: Observed & predicted all-cause death registrations, E&W 12,000 Estimated number of death 10,000 8,000 registrations 6,000 Prediction 4,000 Upper limit Total deaths all ages 2,000 40 44 48 52 3 7 11 15 19 23 27 31 35 Week number

Table 1: Excess mortality by age group, England*

Age group	Excess detected	Weeks with excess in
(years)	in week 50 2015?	2015/16
<5	×	NA
5-14	×	NA
15-64	×	NA
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 50 2015?	Weeks with excess in 2015/16
England	×	NA
Wales	×	NA
Scotland	×	48
Northern Ireland	×	NA

^{*} 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.