



All-Cause Mortality Surveillance

22 December 2016 – Week 51 report (up to week 50 data)

In week 50 2016 in England, 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 all-cause mortality was seen in Scotland (for all ages and 65+ year olds).

Excess all-cause mortality, England and Wales

- In week 49 2016, an estimated 11,223 all-cause deaths were registered in England and Wales (source: [Office for National Statistics](#)). This is an increase compared to the 10,439 estimated death registrations in week 48 2016.

Excess all-cause (EuroMOMO) mortality in subpopulations, UK

- In week 50 2016 in England, 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 (Table 1). No significant excess was seen in any age groups or subnationally. This data is provisional due to the time delay in registration; numbers may vary from week to week.

- In the devolved administrations, significant excess mortality above the threshold was seen in Scotland (for all ages and in 65+ year olds) in week 50 2016 (Table 2). No excess was seen in Wales. Data was not available for Northern Ireland.

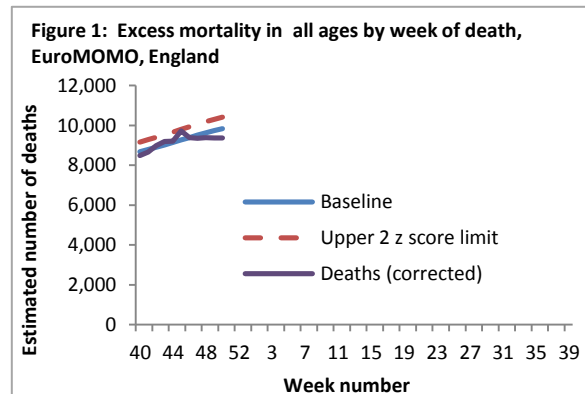
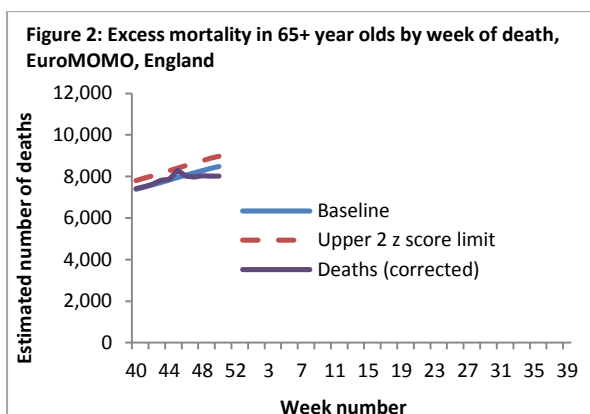


Table 1: Excess mortality by age group, England*

Age group (years)	Excess detected in week 50 2016?	Weeks with excess in 2016/17
<5	x	NA
5-14	x	NA
15-64	x	45
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, for all ages*

Country	Excess detected in week 50 2016?	Weeks with excess in 2016/17
England	x	NA
Wales	x	NA
Scotland	✓	46,49
Northern Ireland	-	-

* 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.