Weekly All-cause Mortality Surveillance

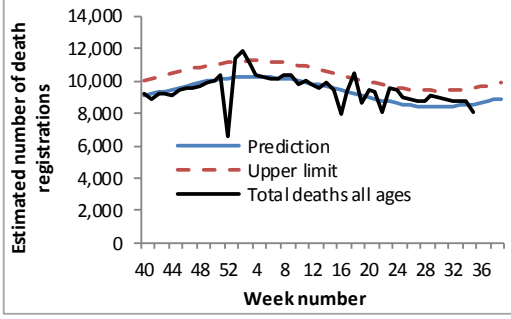
11 September 2014 – Week 37 report (up to week 36 data)

In week 36 2014, no excess all-cause mortality by week of death was seen across the UK through the EuroMOMO algorithm.

Excess overall all-cause mortality, England and Wales

-In week 35 2014, an estimated 8,027 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is less than the 8,769 estimated death registrations in week 34 and remains below the 95% upper limit of expected death registrations for this time of year as calculated by PHE (Figure 1). The sharp drops in number of deaths correspond to weeks when there were bank holidays and fewer days when deaths were registered, and so are likely to be artificial and result in subsequent increases in following weeks.

Figure 1: Observed & predicted all-cause death registrations, E&W



Excess all-cause mortality in subpopulations, UK

-In week 36 2014, no excess mortality by date of death above the upper 2 z-score threshold was seen in 65+ year olds in England after correcting ONS disaggregate data for reporting delay with the standardised EuroMOMO algorithm (Figure 2, Table 1), in other age groups or subnationally. This data is provisional due to the time delay in registration and so numbers may vary from week to week.

-No excess mortality above the threshold through the same standardised algorithm was seen across Wales, Scotland or Northern Ireland in week 36 (Table 2).

Table 1: Excess mortality by age group,England*

Age group (years)	Excess detected in week 36 2014?	Weeks with excess in summer 2014
<5	×	NA
5-14	×	NA
15-64	×	wk 26+28
65+	×	NA

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

Figure 2: Excess mortality in 65+ year olds by week of death, EuroMOMO, England

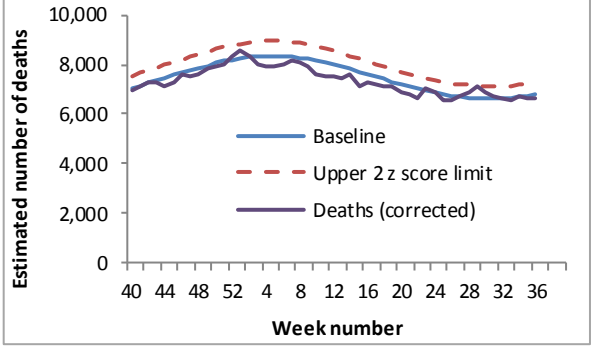


Table 2: Excess mortality by UK country*

Country	Excess detected in week 36 2014?	Weeks with excess in summer 2014
England	×	NA
Wales	×	NA
Scotland	×	NA
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.