



All-Cause Mortality Surveillance

18 January 2018 – Week 03 report (up to week 02 data)

In week 02 2018, statistically significant excess all-cause mortality by week of death was observed through the EuroMOMO algorithm in the 65+ year olds in England. In the devolved administrations, statistically significant excess all-cause mortality was observed in Scotland and in Northern Ireland in week 02 2018 but not in Wales.

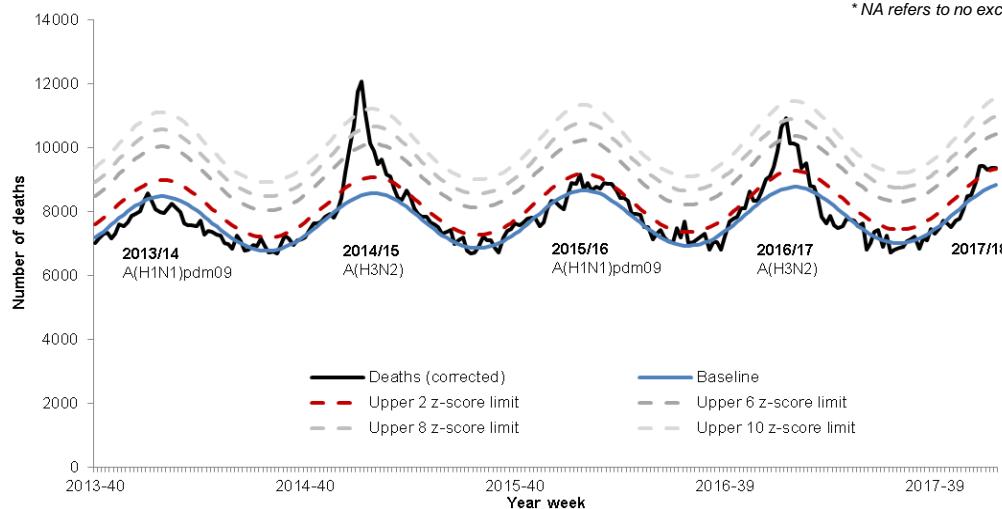
All-cause death registrations (ONS), England and Wales

- In week 01 2018, an estimated 12,723 all-cause deaths were registered in England and Wales (source: [Office for National Statistics](#)). This is an increase compared to the 8,487 estimated death registrations in week 52 2017.

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

- In week 02 2018 in England, no statistically significant excess mortality by week of death above the upper 2 z-score threshold was seen overall or subnationally, however by age group statistically significant excess mortality was seen in the 65+ year olds (this excess has been seen from week 50 to week 02 (Table 1)), after correcting ONS disaggregate data for reporting delay with the standardised [EuroMOMO](#) algorithm (Figure 1). This data is provisional due to the time delay in registration; numbers may vary from week to week.
- In the devolved administrations, statistically significant excess all-cause mortality was observed in Scotland and in Northern Ireland in week 02 2018 but not in Wales (Table 2).

Figure 1: Weekly observed and expected number of all-cause deaths in 65+ year olds, with the dominant circulating influenza A subtype, England, 2013 to 2018



Produced by the Respiratory Diseases Department (RDD), 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.

Table 1: Excess mortality by age group, England*

Age group (years)	Excess detected in week 02 2018?	Weeks with excess in 2017/18
<5	✗	NA
5-14	✗	NA
15-64	✗	46
65+	✓	50-02

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

* NA refers to no excess seen

Table 2: Excess mortality by UK country, for all ages*

Country	Excess detected in week 02 2018?	Weeks with excess in 2017/18
England	✗	50
Wales	✗	NA
Scotland	✓	41,49-02
Northern Ireland	✓	47,49-02

* 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

* NA refers to no excess seen