All-Cause Mortality Surveillance

17 September 2020 – Week 38 report (up to week 37 data)

In week 37 2020, no statistically significant excess all-cause mortality by week of death was observed overall through the EuroMOMO algorithm. In the devolved administrations, no statistically significant excess all-cause mortality for all ages was observed for Northern Ireland or Wales in week 37 or for Scotland in week 35.

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

In week 36 2020, an estimated 7,739 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is lower than the 9,032 estimated death registrations in week 35 2020.

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

In week 37 2020 in England, no statistically significant excess mortality by week of death above the upper 2 z-score threshold was seen overall, by age group in the 15-64 or sub nationally (all ages) after correcting GRO 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, no statistically significant excess all-cause mortality for all ages was observed for Northern Ireland or Wales in week 37 or for Scotland in week 35.

Figure 1: Weekly observed and expected number of all-cause deaths in all ages, with the dominant circulating influenza A subtype, England, 2015 to week 37 2020
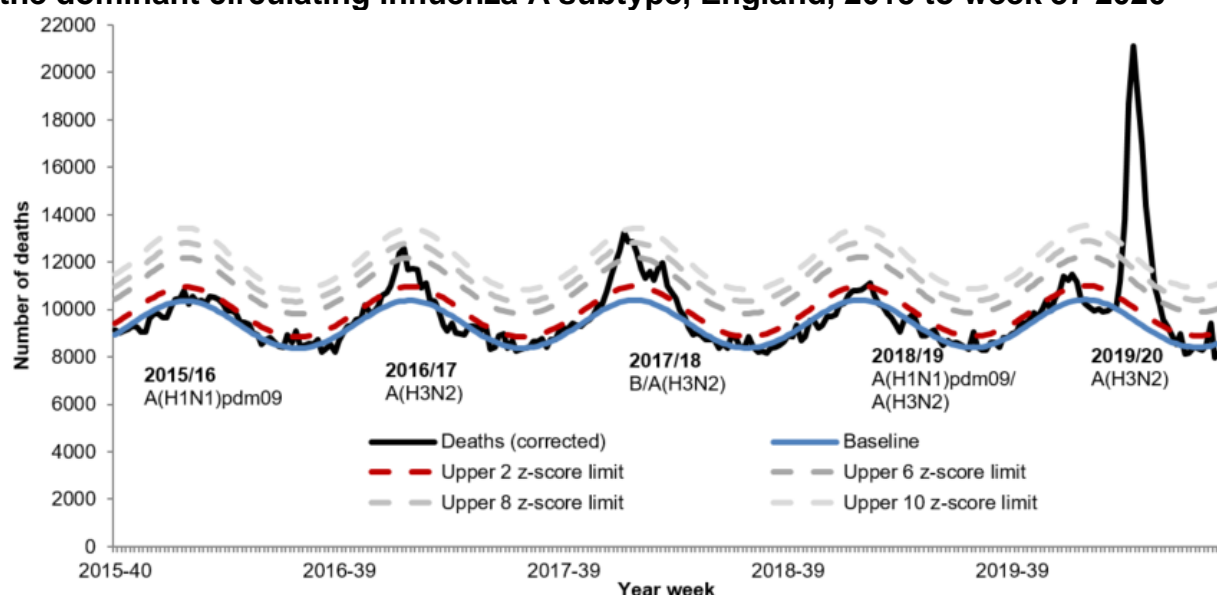
Note: The recent weeks' data are estimates with large registration delay corrections and therefore should be interpreted with caution. These estimates may differ substantially to future reports as the actual number of deaths become known.

Table 1: Excess mortality by age group, England*

Age group (years)	Excess detected in week 37 2020?	Weeks with excess in 2019/20
<5	×	48, 52, 10
5-14	×	46
15-64	×	11-24, 26, 30, 32-33, 36
65+	×	47, 50-02;12-22, 33

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

Country	Excess detected in week 37 2020?	Weeks with excess in 2019/20
England	×	47; 50-02; 12-23; 33
Wales	×	01;13-20
Northern Ireland	×	49-51; 02-03; 13-20, 22
Country	**Excess detected in week 35 2020?**	**Weeks with excess in 2019/20**
Scotland	×	41; 46; 49-51; 01-02; 13-22

* 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

- 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 and in summer occasionally as a result of heat-waves.
- Immunisation & Countermeasures Division'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.

Produced by the Immunisation & Countermeasures Division, National Infection Service, Public Health England.