



HPS Weekly National Influenza Report

Summary of surveillance of influenza and other seasonal respiratory illnesses

Week ending 1 January 2017 – week 52
(revised on 10 January 2018)



1 Summary

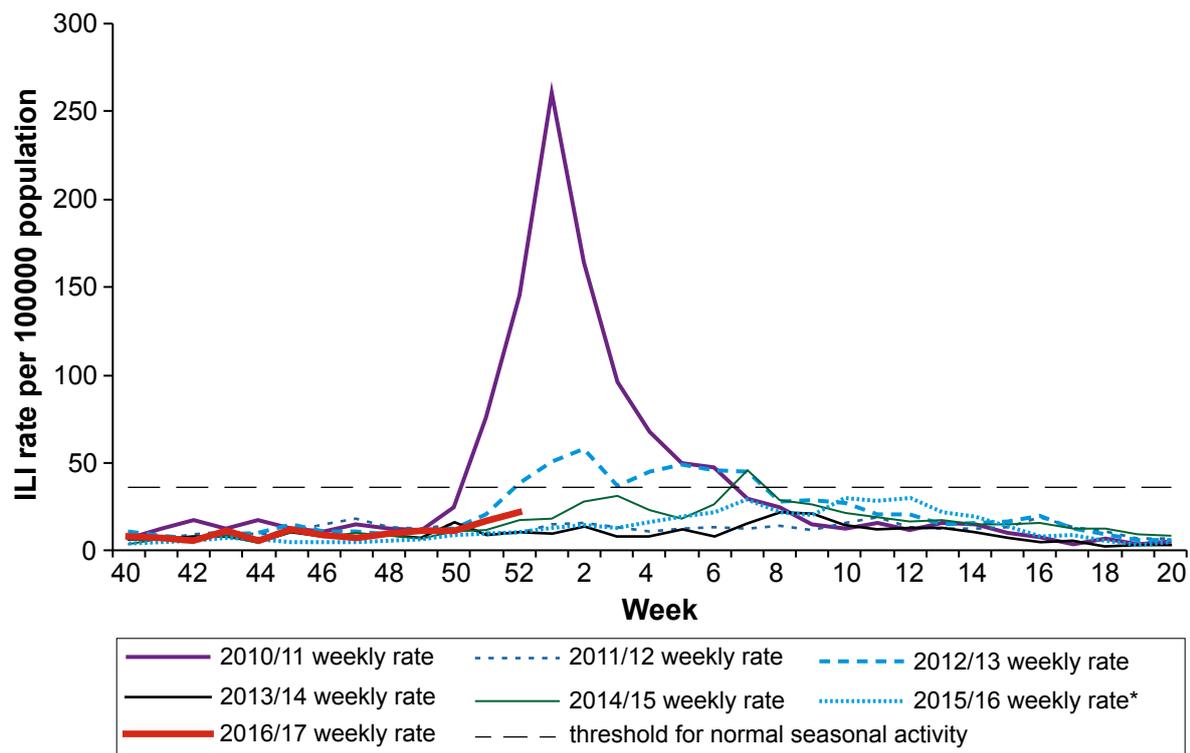
- **ERRATUM: Please note that the GP consultation rate for influenza-like illness (ILI) figure in this report has been updated. The published figure should have undergone an adjustment to account for the reduced number of working days. The correct figure for week 52 2016 is 22.1 per 100,000 population. ILI rates may change slightly from week to week due to data reporting delays.** This report provides an update on influenza and other seasonal respiratory pathogen activity for the 2016/17 season for the week ending 1 January 2017. For this season, we will provide a detailed influenza update report once per month with bulletin style weekly update in the weeks in between.
- This report contains summary epidemiological information on influenza-like illness (ILI) and acute respiratory illness (ARI) activity, its severity and impact in the community and secondary care settings, and vaccine uptake estimates.
- Please note that due to the reduced number of working days in week 52, data in this report must be interpreted with caution.
- In Scotland, clinical influenza activity is stable and remains low. Virological influenza activity suggests that there is evidence of increasing community circulation of influenza.
- The levels of all winter respiratory pathogens reported through non-sentinel sources (ECOSS) and sentinel sources were within expected seasonal levels for the last week with the exception of human metapneumovirus which exceeded seasonal levels in sentinel sources.
- Current respiratory syncytial virus (RSV) detection levels in non-sentinel and sentinel sources suggest that the annual RSV wave has peaked and is decreasing.
- A CMO letter, recommending that antiviral drugs can now be prescribed for the prevention or treatment of influenza in the community where clinically indicated was issued on 23 December 2016 and is available [here](#).

2 Community Surveillance – GP consultation rates and NHS 24 calls

- The GP consultation rate for influenza-like illness (ILI) and the threshold for normal seasonal activity have been calculated using a method this season which the European Centre for Disease Prevention and Control (ECDC) is recommending should be used across the EU. Please refer to the [technical document](#) for further information.
- In week 52, the GP consultation rate for ILI (22.1 per 100000 population) increased compared to the previous week (16.2 per 100000 population) but remained well below the threshold for normal seasonal activity (36.1 per 100000 population) (Figure 1).
- GP consultation rates for ILI are estimated based on weekly data submissions by 99% of all Scottish General Practices.

- The proportion of cold/flu calls to NHS 24 remained at levels expected for this time of the year.

Figure 1: GP consultation rates for ILI in Scotland; weekly rates per 100000 population, week 40 2016 to week 20 2017, compared to last 6 seasons.



* As year 2015 had 53 weeks, weeks 52 and 53 were averaged to produce week 52 figures for 2015/16.

3 Severe Illness Surveillance

- One new laboratory confirmed influenza case requiring intensive care management (ICU cases) was reported to HPS within the last week.
- Since week 40 2016, six ICU cases have been reported to HPS (three influenza A (not subtyped), two influenza A(H3) and one influenza B).

4 Virological Surveillance (sentinel and non-sentinel)

- In week 52, 209 influenza infections (66 influenza A(H3), 132 influenza A(untyped) and eleven influenza B) were reported through non-sentinel sources (ECOSS). The ECOSS swab positivity¹ for any type of influenza was 15.4% (compared to 11.9% in week 51).
- In week 52, three influenza infections were reported through the GP sentinel scheme (one influenza A(not subtyped) and two influenza B). In week 52, sentinel swab positivity was 21.4% (3/14) compared to 17.1% in week 51 (14/82). GP sentinel results should be interpreted with caution due to the low number of samples received to date for week 52. Further samples for week 52 are still expected and any retrospective changes in swab positivity will be reported on next week.

1 Percentage positive is derived from data from the Glasgow, Edinburgh, Inverness and Aberdeen laboratories, for which denominator data is available.

- The levels of respiratory pathogens respiratory syncytial virus (RSV), rhinovirus², coronavirus, parainfluenza, adenovirus, human metapneumovirus (hMPV) and *Mycoplasma pneumoniae* (MPN) reported through non-sentinel sources were within expected seasonal levels for the last week. The levels of all respiratory pathogens were within expected seasonal levels in sentinel sources with the exception of hMPV which exceeded seasonal levels. RSV levels are decreasing suggesting the annual RSV wave has peaked.
- Antiviral prescribing guidance has been updated for the 2016-17 season and is available on the [HPS](#) website.

5 Outbreaks

- In week 52, two new closed setting outbreaks of acute respiratory infection were reported to HPS. Both outbreaks were caused by RSV. One of these was a retrospective report.
- Since week 40, twelve closed setting outbreaks of acute respiratory infection have been reported to HPS, six within a hospital setting and six in nursing homes.
- Of these twelve outbreaks, seven were caused by influenza A (untyped), one by human metapneumovirus, one by influenza A (H3N2) and RSV and three by RSV.

6 Vaccine uptake

- To week 52, provisional data suggested that vaccine uptake for Scotland, for those aged 65 years and over was slightly lower compared to the uptake at the same time last year; 71.1% (2016) vs 72.2% (2015). For those under 65 years old in an at-risk group the vaccine uptake was lower than the uptake at the same time last year; 42.8% (2016) vs 44.8% (2015).
- Vaccine uptake in pregnant women was variable compared to the same time in previous seasons. For pregnant women without risk factors, uptake was similar at the same time last year; 43.9% (2016) compared to 44.1% (2015); for pregnant women with other risk factors, uptake was lower at 54.5% in 2016 compared with 57.2% in the same week in 2015.
- The estimated uptake in preschool children (2 to under 5 year olds, not yet in school) vaccinated in the GP setting was 55% to week 52 in 2016, compared with 53.3% in 2015.
- Please note that these vaccine uptake estimates are based on automated extracts from 99.5% of Scottish GP practices, estimates may change retrospectively as data from more practices is received. As such, vaccine uptake reported here should be regarded as provisional.

7 Mortality

- Information on mortality from all causes is available from the General Registrar's Office for Scotland (now part of National Records of Scotland). Excess deaths relating to all causes of death during the winter months are often attributed in part to influenza. 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.

2 The rhinovirus PCR used by the majority Scottish labs also detects enterovirus. However, only a very small proportion of respiratory samples detected to be positive by this PCR are likely to be attributable to enterovirus.

- The number of deaths in all other age groups was within expected levels for the past week. This should be interpreted with caution as data, especially for the last week, is still provisional.
- Please note, that information on laboratory confirmed influenza cases with severe infection requiring intensive care management (including deaths), are reported in section 3.

8 International Situation

- For the most up to date information on respiratory viral activity across the UK please see the most recent [PHE report](#) (29 December 2016):
 - The influenza season has now started with increases seen in several indicators including influenza-associated GP consultation rates and outbreaks in the community, the proportion of laboratory samples positive for influenza in primary and secondary care and influenza-related admissions to hospital and intensive care.
- For the most recent update across Europe please see the [Joint ECDC-WHO/Europe Weekly Influenza Update](#) (week 51 / 2016):
 - Influenza activity continues to increase across the region. Very high intensity was reported in one country (Finland).
 - The proportion of virus detection among sentinel surveillance specimens increased to 47% from 38% last week.
 - A [risk assessment](#) on seasonal influenza in EU/EEA countries was published by ECDC on 24 December 2016 stating that influenza viruses, mainly A(H3N2), started circulating early. If A(H3N2) continues to predominate it is likely that people over 65 years will be the most severely affected age-group this season. More than half of the detected characterised A(H3N2) viruses belong to a new genetic clade, but all are antigenically similar to the vaccine strain.
- For the most recent global update please see the [WHO influenza update](#) (26 December 2016):
 - Influenza activity in the temperate zone of the northern hemisphere increased slightly, with some countries passing their seasonal threshold, which is early for the season. Worldwide, influenza A(H3N2) virus was predominant.
 - On 25 February 2016, WHO published the recommended composition of influenza virus vaccines for use in the 2016/17 northern hemisphere influenza season. It is recommended that trivalent vaccines contain the following strains: an A/California/7/2009 (H1N1)pdm09-like virus, an A/Hong Kong/4801/2014 (H3N2)-like virus and a B/Brisbane/60/2008-like virus. For further information please see the full report.

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