

HPS Weekly National Influenza Report

Summary of surveillance of influenza and other seasonal respiratory illnesses

Week ending 16 April 2017 – week 15

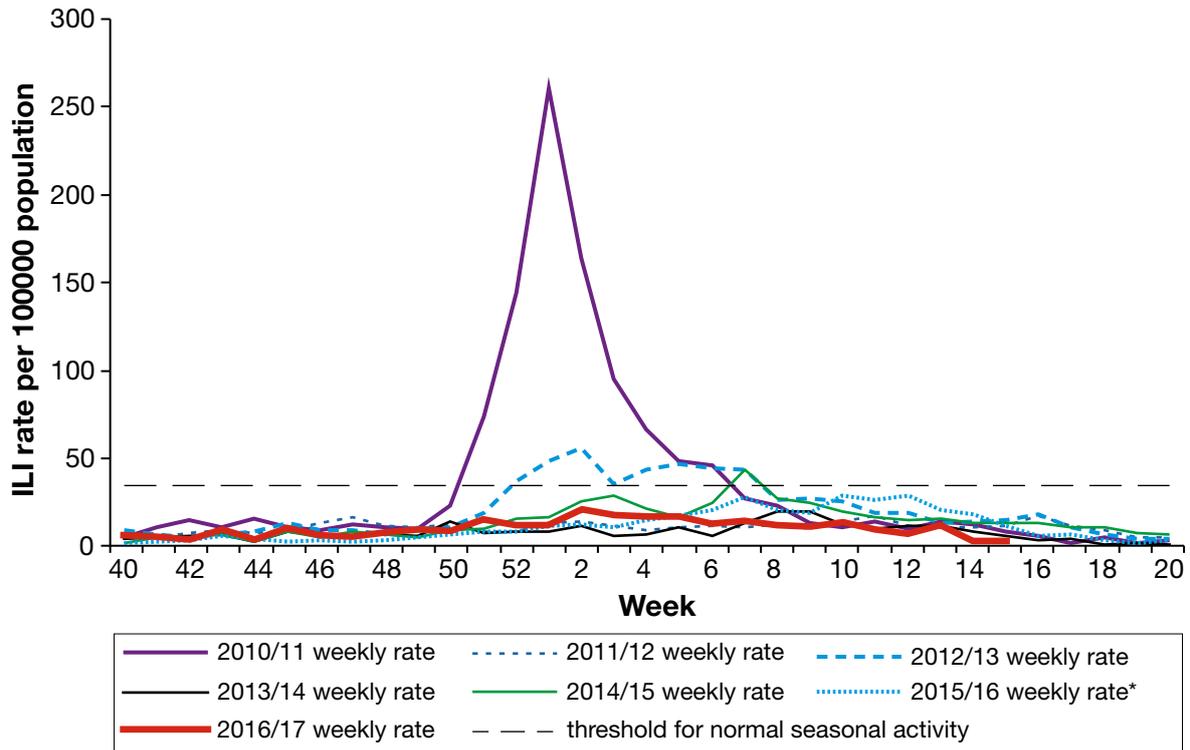
1 Summary

- This report provides an update on influenza and other seasonal respiratory pathogen activity for the 2016/17 season for the week ending 16 April 2017. For this season, we will provide a detailed influenza update report once per month with bulletin style weekly updates 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.
- In Scotland, clinical influenza activity in primary care is stable and remains low and clinical activity in secondary care continues to decrease. Virological influenza activity is decreasing suggesting that community circulation of influenza is also decreasing. Influenza B detections are increasing and accounted for 75% of all influenza detections this week in non-sentinel sources.

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 15, the GP consultation rate for ILI (4.9 per 100000 population) decreased compared to 5.1 per 100,000 in week 14 and remains 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.

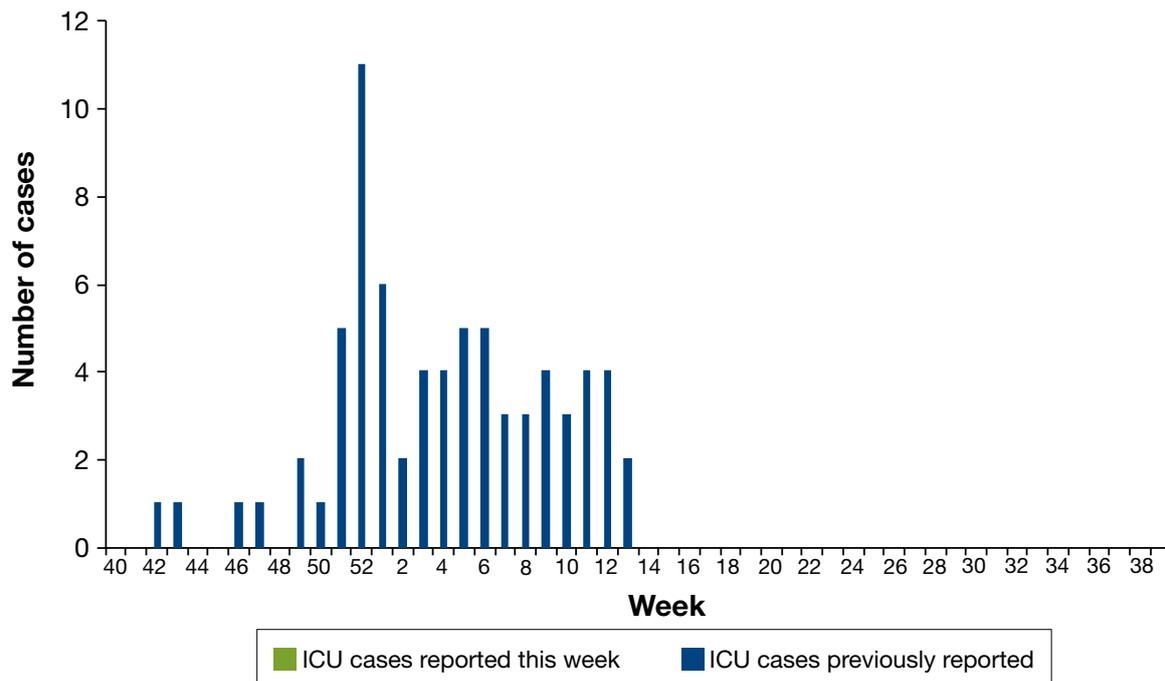


3 Severe Illness Surveillance

- No new laboratory confirmed influenza cases requiring intensive care management (ICU cases) were reported to HPS within the last week.
- Since week 40 2016, 72 ICU cases have been reported to HPS (40 influenza A (not subtyped), 18 influenza A(H3) and 14 influenza B).
- Of these 72 cases, the mean age of those presenting was 55 years (compared to 46 years in the 2015/16 season and 51 years in 2014/15, for data up to week 15 for each season). Eight were under 15 years of age (11.1%), 32 were in the age group 15-64 (44.4%) and 32 were 65 years or older (44.4%).
- Fourteen cases were reported by NHS boards in the North of Scotland, 42 in the West of Scotland and 16 in the East of Scotland¹. As seen in previous seasons, the majority of the cases had underlying medical conditions that predisposed them to severe influenza infection (88.9%). The clinical presentation and mainly older age groups affected are consistent with previous seasons in which influenza A(H3N2) has been the predominant virus detected.
- The case fatality rate (i.e. proportion of cases which have died) of 25% (18/72) is in keeping with the previous three seasons (ranging from 24.2% to 35.6%).

1 North: Western Isles, Shetland, Orkney, Highland, Grampian, Tayside. East: Fife, Lothian, Borders, Forth Valley. West: Greater Glasgow & Clyde, Lanarkshire, Ayrshire & Arran, Dumfries & Galloway.

Figure 2: Number of laboratory confirmed influenza cases with severe infection requiring intensive care management (ICU cases) by week of hospital admission, week 40 2016 to week 39 2017.



4 Virological Surveillance (sentinel and non-sentinel)

- In week 15, 72 influenza infections (6 influenza A(H3), 11 influenza A(not subtyped), 54 influenza B and one co-infection of influenza A(not subtyped) and influenza B) were reported through non-sentinel sources (ECOSS). The ECOSS swab positivity² for any type of influenza was 6.4%, compared to 6.9% in week 14. Overall, influenza detections are decreasing but the proportion of influenza B detections have increased in recent weeks and accounted for 75% of all influenza detections this week.
- In week 15, one influenza B infection was reported through the GP sentinel scheme. Sentinel swab positivity was 5.3% (1/19) compared to 30.8% in week 14 (8/26). GP sentinel results should be interpreted with caution due to the low number of samples received to date for week 15. Further samples for week 15 are still expected and any retrospective changes in swab positivity will be reported on next week.
- The levels of rhinovirus³ and coronavirus exceeded seasonal levels while all other respiratory pathogens (respiratory syncytial virus (RSV), adenovirus, parainfluenza, human metapneumovirus (hMPV) and *Mycoplasma pneumoniae* (MPN)) were within expected seasonal levels for the last week in sentinel sources. All respiratory pathogens were within expected seasonal levels in non-sentinel (ECOSS) sources for week 15.
- Antiviral prescribing guidance has been updated for the 2016-17 season and is available on the [HPS](#) website.

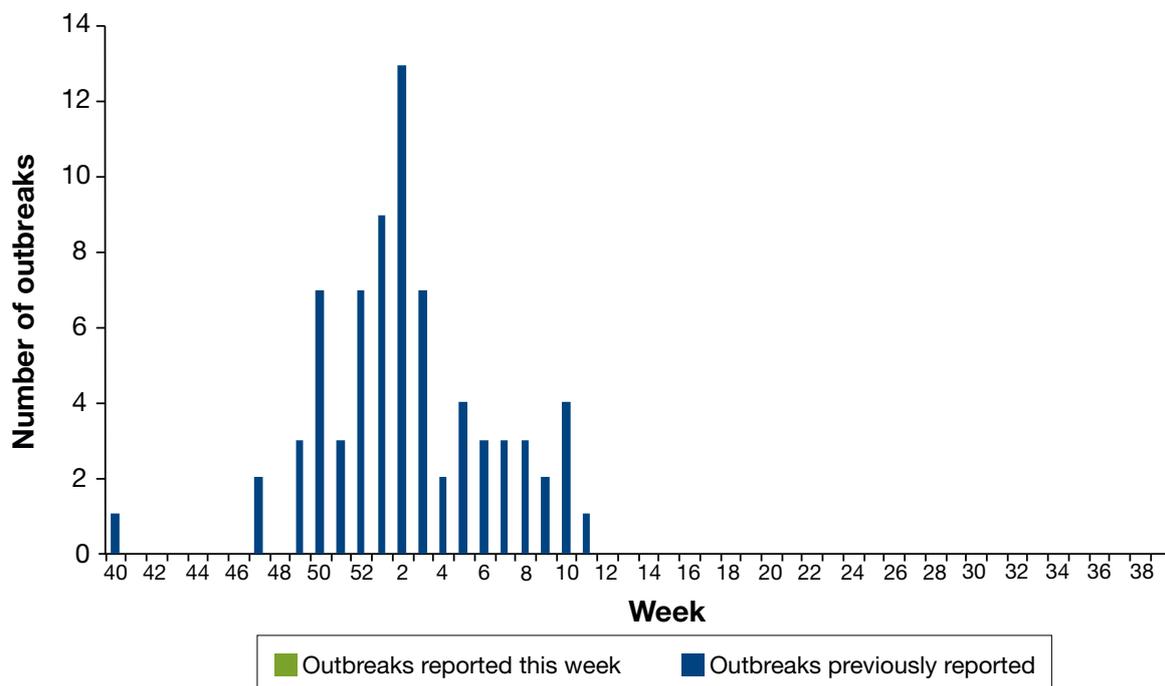
2 Percentage positive is derived from data from the Glasgow, Edinburgh, Inverness and Aberdeen laboratories, for which denominator data is available.

3 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.

5 Outbreaks

- No new closed setting outbreak of acute respiratory infection was reported to HPS within the last week.
- Since week 40, 74 closed setting outbreaks of acute respiratory infections have been reported to HPS, 50 in a care home setting and 24 within a hospital setting (Figure 3).
- Of these 74 outbreaks, 10 were influenza A(H3N2), 37 were influenza A(not subtyped), three influenza B, six were RSV, one was rhinovirus, one was human metapneumovirus, 11 were a combination of two or more pathogens and five were pathogen unknown.
- Twenty-one outbreaks were reported by NHS boards in the North of Scotland, 25 from the West of Scotland and 28 from the East of Scotland¹.

Figure 3: Number of closed setting outbreaks of acute respiratory infection by week of onset, week 40 2016 to week 39 2017.



6 Vaccine uptake

- Influenza vaccine uptake is estimated in-season with electronic extracts that come direct from general practice. These extracts are now finished for the season and data presented here is provisional end of season data. Vaccine uptake data will be verified later in the year using general practice claims for payment data.
- To week 13, provisional end of season data suggested that vaccine uptake overall for Scotland, for those aged 65 years and above was lower than the uptake at the same time last year: 72.8% (2017) vs 74.5% (2016). For those under 65 years old in an at-risk group the vaccine uptake was also lower than the uptake at the same time last year: 44.9% (2017) vs 48.0% (2016).
- Vaccine uptake in pregnant women without risk factors was similar to the uptake achieved at the same time in previous season: 49.3% in 2017, compared with 49.9% in 2016. For pregnant women with other risk factors uptake was lower than last season: uptake was 58.0% in 2017 compared with 61.5% in the same week in 2016.
- The estimated end of season uptake in preschool children (2 to under 5 year olds, not yet in school) vaccinated in general practice was higher than the previous season: 59.0% in 2017, compared with 57.1% in 2016.
- Provisional end of season data on influenza vaccination in primary schools showed an uptake of 72.9% which is higher than uptake in 2015/16 (71.2%).

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.
- The number of deaths over all and by age group was within expected levels for the past four weeks. This should be interpreted with caution as data, especially for the last two weeks, are 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](#) (13 April 2017):
 - During week 14 (ending 09 April 2017), influenza activity continues to decrease across all indicators.
- For the most recent update across Europe please see the [Joint ECDC-WHO/Europe Weekly Influenza Update](#) (week 14/ 2017):
 - Influenza activity across the region continued to be at low level with 39 countries of 41 reporting low intensity of influenza activity. However, only 10 of 42 countries reported no geographic spread indicating that influenza viruses are still circulating.
 - This was the fourth week during the season that the proportion of type B viruses exceeded the proportion of type A viruses in sentinel detections. However, the overall number of type B virus detections remained low.
- For the most recent global update please see the [WHO influenza update](#) (03 April 2017):
 - Influenza activity in the temperate zone of the northern hemisphere continued to decrease. Worldwide, influenza A(H3N2) and influenza B viruses were predominant during this reporting period. In South Asia, influenza activity with mainly influenza A(H1N1) remained elevated.

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