



# HPS Monthly National Influenza Report

## Summary of surveillance of influenza and other seasonal respiratory illnesses

Week ending 24 December 2017 – week 51

(Revised on 15 January 2018)



### 1 Overall assessment

In week 51, overall assessment remains green - seasonal influenza is having a low/moderate impact on the population. There is some evidence of increasing secondary care pressure based on virological detections of influenza. Community circulation of influenza prompted the issue of a [CMO letter](#) last week advising that GPs may prescribe antivirals.

**ERRATUM:** Please note that the text in the summary box for Excess all-cause mortality has been revised. The previous text said “No excess deaths were reported in the last four weeks.” when this should have said “No excess in all-cause mortality was reported in week 51, but a small statistically significant excess in all-cause mortality was observed in weeks 49 and 50. This should be interpreted with caution as data, especially for the last two weeks, are still provisional.”

## 2 Summary

Indicator	Data	Comment	Change from previous week
Community Influenza Transmission	GP consultations	ILI rates have increased above baseline this week into normal seasonal activity (increased to 41/100,000 - threshold being 34.5/100,000). See details in section three.	↑
	NHS24 calls	Change over from legacy to new IT system limits comparability with historic data. NHS24 call proportions with colds/flu (1.8%), coughs (11.3%), difficulty breathing (9.7%) and fever (10.4%) increased compared to previous weeks.	
	Primary care virology	Swab positivity was 73.7% (28/38). A total of 25 swabs were positive for influenza A (one A(H1N1); twentyone A(H3N2); and three A(not subtyped)), and three swabs were positive for influenza B.	
Influenza in Closed Settings	Outbreaks	Number of acute respiratory illness outbreaks reported this week: 10. 7 of these were retrospective reports. See details in section 3.	↑
	Secondary care virology (ECOSS)	Swab positivity was 32.4% (756/2173) .The majority of detections were influenza A (not subtyped). See details in section 3.	
	SARI (Severe Acute Respiratory Illness)	An earlier increase in the number of laboratory confirmed influenza cases requiring ICU management was reported. Cumulative number: nineteen. Cases reported in week 51: four.	
Influenza Associated Mortality	SARI mortality	Number of SARI deaths: three. Case fatality rate is low: 15.8% (3/19)	↔
	Excess all-cause mortality	No excess in all-cause mortality was reported in week 51, but a small statistically significant excess in all-cause mortality was observed in weeks 49 and 50. This should be interpreted with caution as data, especially for the last two weeks, are still provisional.	
Non-flu respiratory pathogens	Non-flu respiratory pathogens	RSV and Adenovirus detections continue to increase and are above previous seasons levels.	↑

### 3 Supporting data

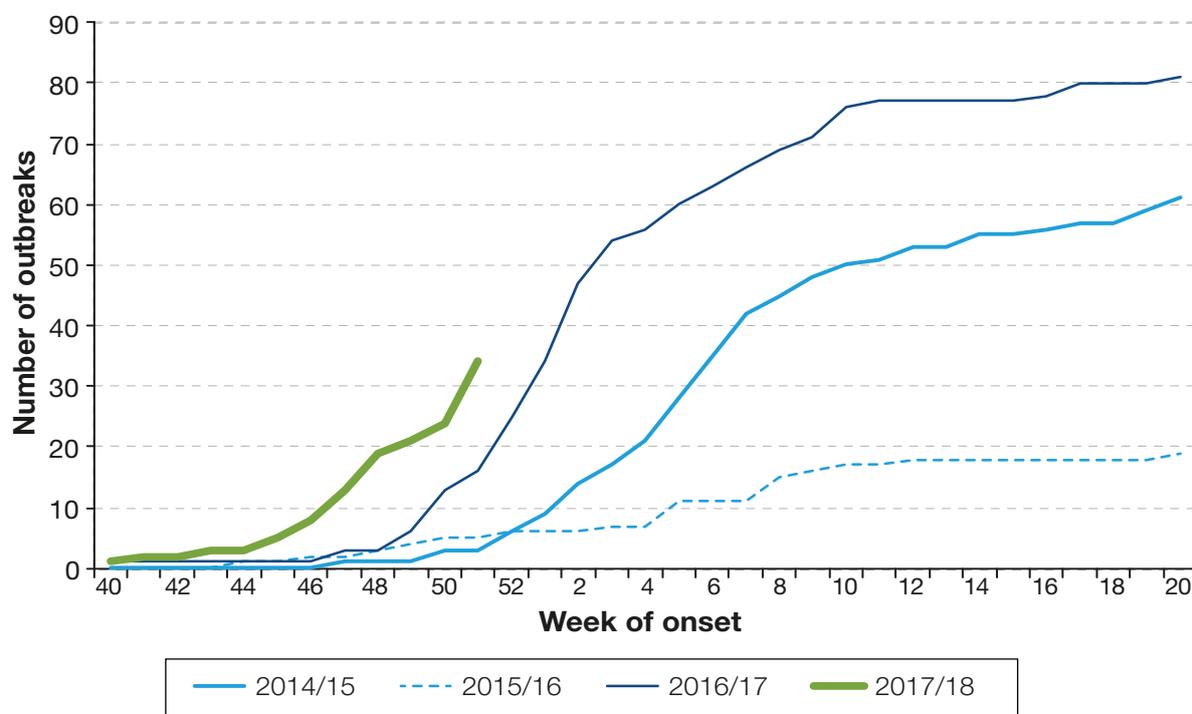
Supporting data and further information will be published in this section if any of the respiratory surveillance systems show a significant increase.

Community circulation of influenza has prompted the issue of a [CMO letter](#) advising that GPs may prescribe antivirals.

#### Acute Respiratory Illness Reporting

Compared with the same period in previous seasons, in 2017/18 we are observing an earlier increase and higher number of ARI outbreaks reported to HPS (Figure 1). Thirtyfour closed setting outbreaks have been reported since week 40. These were geographically spread throughout Scotland and most have occurred in care homes (58.8%, 20/34). The majority of outbreaks have been caused by influenza (73.5%, 25/34) with thirteen caused by influenza A(not subtyped), twelve by influenza A(H3N2), two by influenza B, two non-flu respiratory pathogens and 5 unknown pathogens.

**Figure 1:** Cumulative number of respiratory outbreaks in 2017/18 season compared to seasons 2014/15 to 2016/17.

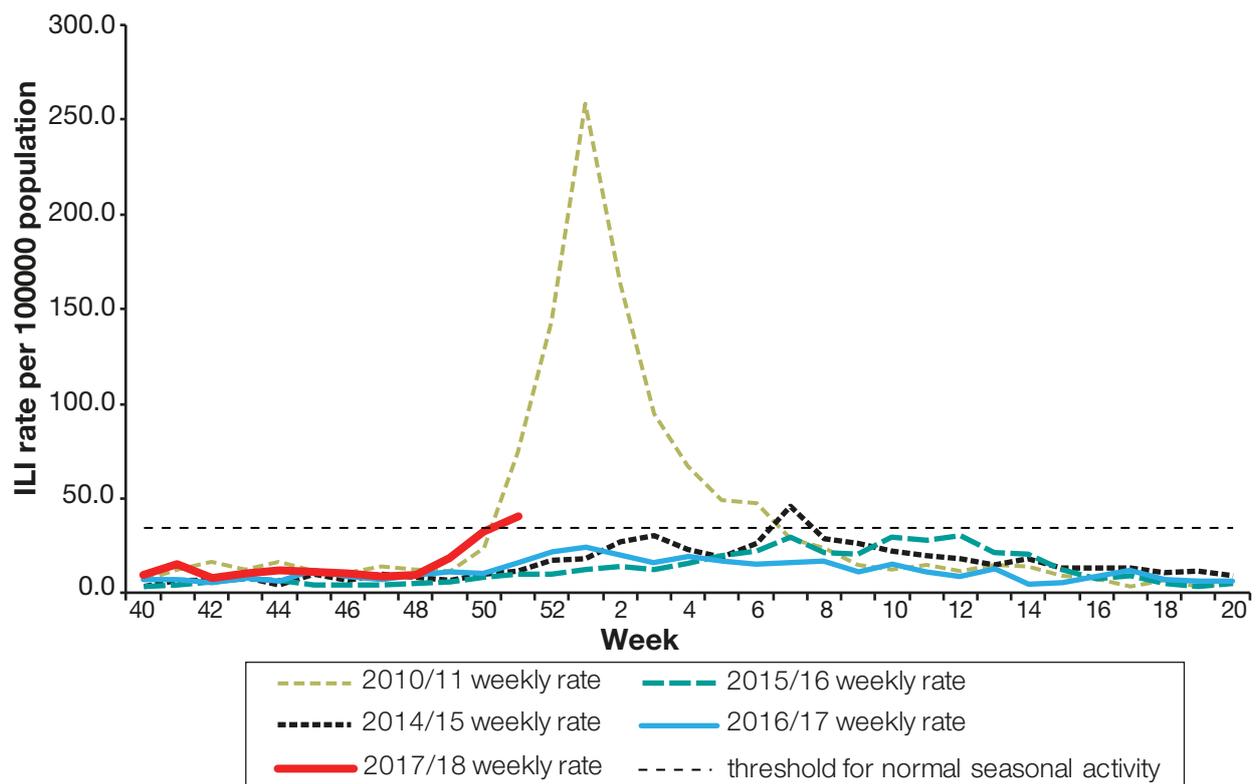


Note: Where week of onset is not available, week of report has been used instead. This may change retrospectively for the current season as updates are received.

#### GP consultation activity:

GP consultations for influenza-like illness (ILI) have increased above baseline this week into normal seasonal activity (increased to 41/100,000 - threshold being 34.5/100,000). (Figure 2). The age-specific rates have also increased and are above baseline levels for all age groups except under 1 year olds.

**Figure 2:** GP consultation rates for ILI in Scotland; weekly rates per 100000 population, week 40 2017 to week 20 2018, compared to last 3 seasons and 2010/11 season



### Virological activity:

Virological influenza activity is increasing and swab positivity is higher than the last four previous seasons for the same period in both GP sentinel and non-sentinel sources (ECOSS). So far this season, of the influenza viruses that have been subtyped, H3N2 is predominating and influenza B swab positivity is increasing earlier than previous seasons. In week 51, 675 samples were positive for influenza A (409 (not subtyped), 264 (H3N2) and two (H1N1)) and 83 were positive for influenza B in non-sentinel sources (Figure 3).

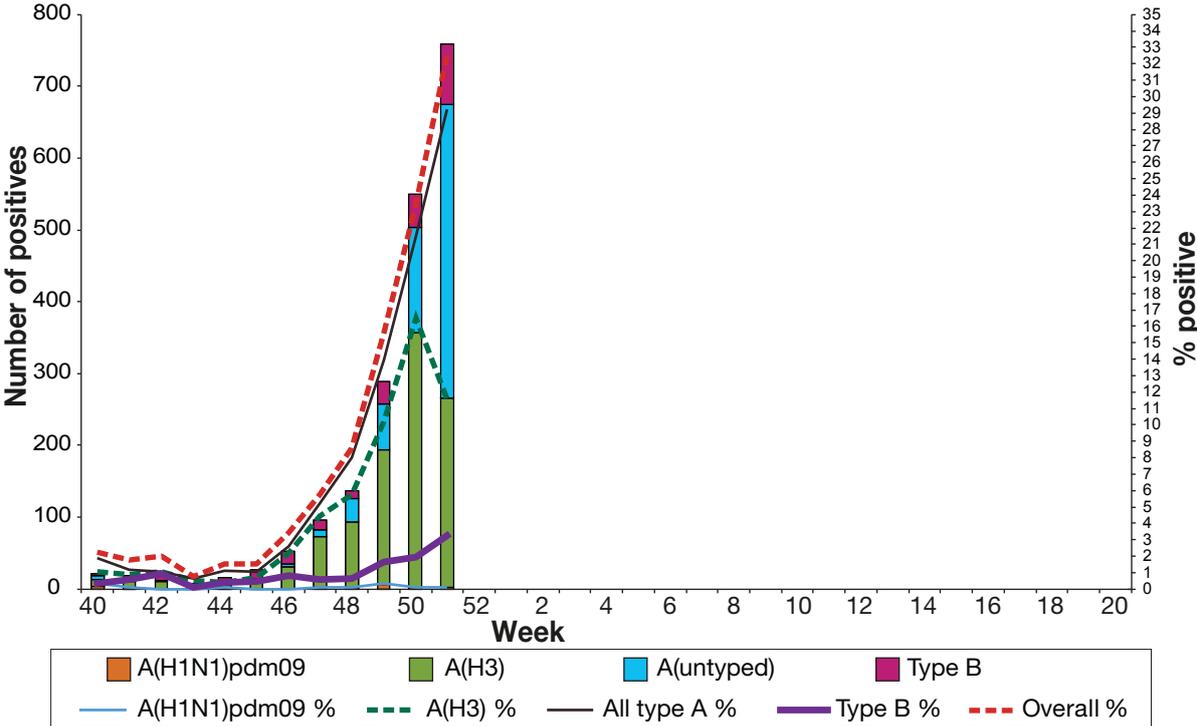
The West Of Scotland Specialist Virology Centre (WoSSVC) has detected 78 influenza viruses for season 2017/18 by sequencing.

Of the 3 A(H1N1)pdm09 influenza viruses that have been characterised, all belong in the genetic subgroup 6B.1(A/Michigan/45/2015) which match the 2017/18 vaccine strain.

Of the 60 A(H3N2) influenza viruses sequenced, 34 belong to the genetic subclade 3C.2a (A/Hong Kong/4801/2014) which matches the 2017/18 vaccine strain; 22 belong to the genetic subclade 3C.2a.1(A/Singapore/IFIMH-16-0019/2016) which is the A/H3N2 virus recommended for inclusion in vaccines for the Southern Hemisphere 2018 season; and 4 belong to the genetic subclade 3C.3a (A/Switzerland/9715293/2013) which matches the vaccine strain from 2015-2016.

Of the 15 influenza B viruses sequenced, all belong to B/Yamagata lineage (B/Phuket/3073/2013) which is not present in the trivalent vaccine, but matches the quadravalent vaccine. An extra 25 influenza B viruses have been detected by real-time PCR, of which 22 belong to B/Yamagata lineage and 3 to B/Victoria lineage. The B/Victoria lineage is present in both trivalent and quadrivalent vaccine types.

**Figure 3:** Weekly summary of ECOSS swab positivity (number and percentage positive) by influenza subtype



### 4 Vaccine uptake

Provisional data to week 51 suggests uptake rates of:

- 71.0% in people aged 65 years and over, (compared with 71.0% in 2016-17)
- 41.3% in under 65’s at-risk, (compared with 42.2% in 2016-17)
- 57.5% in pregnant women (with other risk factors), compared with 54.4% in 2016-17
- 44.0% in pregnant women (without other risk factors), compared with 43.8% in 2016-17
- 52.6% in preschool children (2 to under 5 year olds), compared with 54.8% in 2016-17
- 71.0% in primary school children, compared with 71.0% in 2016-17

The next update of influenza vaccine uptake will be published in week 03.

## 5 Links for more information

### Further information for the Scottish 2017/18 season

- [HPS seasonal influenza web page](#)
- [Scottish Vaccine Update](#)
- [Historical end of season influenza vaccine uptake](#)

### UK and international influenza reports

- [PHE Weekly national flu report](#)
- [Flu News Europe website](#)
- [WHO influenza update](#)

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