Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report



Wednesday 21st November 2018 (covering week 46 2018)

Influenza is not currently circulating in Wales.

Current level of influenza activity: Consistent weekly detections, below seasonal activity threshold

Trend: Increasing

Confirmed cases since 2018 week 40: 71 (65% influenza A(H1N1)pdm09, 7% influenza A(H3), 15%

influenza A(not typed), 13% influenza B)

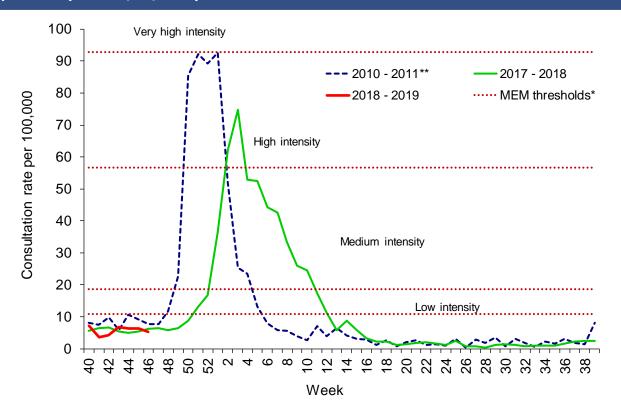
Key points - Wales

There have been consistent detections of influenza in recent weeks, however surveillance data do not currently suggest it is circulating widely in the community. During week 46 (ending 18/11/2018) 13 cases of influenza were detected in Wales but RSV was the most commonly detected acute respiratory infection.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 46 was 5.3 consultations per 100,000 practice population. The consultation rate was highest in patients aged 15-24 years (13.5 per 100,000 practice population) (Table 1).
- The ILI consultation rate has decreased compared to the previous week (6.4 consultations per 100,000), and remains below the Moving Epidemic Method (MEM) threshold for seasonal activity (10.8 consultations per 100,000) (Figure 1).
- The total number of consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 46 was 11,556. The proportion of respiratory-related consultations with OOH doctors increased to 18.3% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) decreased from 14.1% to 13.9% (Figure 6).
- As at 21/11/2018, no surveillance samples collected by sentinel GPs from patients in the community with influenza-like illness had been received (Figure 3).
- During week 46, 258 specimens were received and tested by Public Health Wales Microbiology from hospitalised and non-sentinel GP patients with acute respiratory symptoms. The following numbers of patients tested positive: nine influenza A(H1N1)pdm09, one influenza A(H3), one influenza A(not subtyped), two influenza B, 85 for RSV, 29 for rhinovirus, nine for parainfluenza, eight for enterovirus, seven adenovirus and five for human metapneumovirus (Figure 4). The proportion of samples from hospital patients positive for influenza was 5%.
- In those aged under five, the number of confirmed RSV cases per 100,000 population was 38.1 during week 46; and 65 out of 97 samples (67%) tested positive in this age group. Surveillance data suggest that the RSV season is now underway. The average duration of seasonal activity is 12 weeks (based on confirmed case data from 2011 to 2017) and week 46 was the 5th week since baseline activity thresholds were exceeded.
- During week 46, one outbreak of acute respiratory illnesses (ARI) was reported to a Public Health Wales Health Protection team, an influenza-like illness outbreak in a hospital.
- At the end of week 46, uptake of influenza vaccine was: 53.7% in those aged 65 year and older, 32.3% in patients aged six months to 64 years at clinical risk and 32.2% in children aged two and three years. In the 494 primary schools visitied so far as part of the universal childhood influenza programme, uptake was 69.4%.

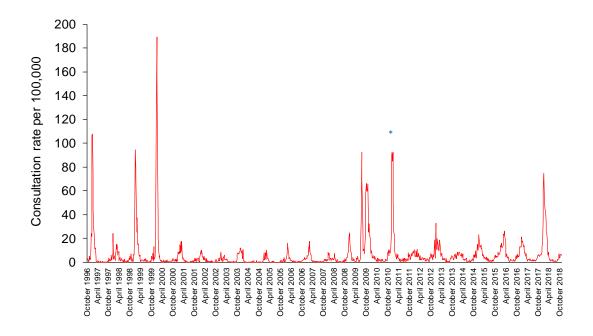
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 21/11/2018).



^{*} The Moving Epidemic Method has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for seasonally expected influenza activity in a standardised approach across Europe. The threshold calculated for Wales ILI consultation rates is 10.8 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2017-18 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 47 1996 – week 46 2018).

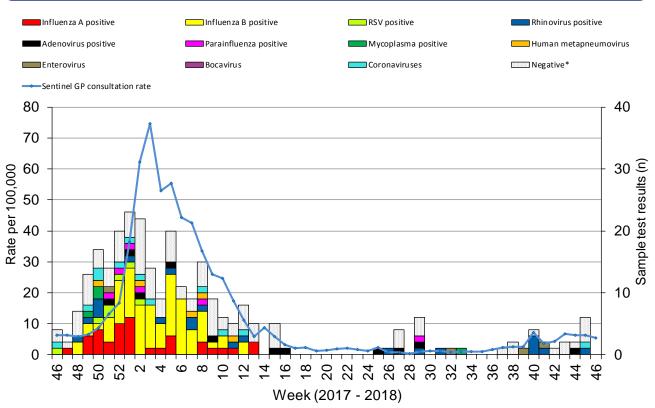


^{*} Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 41 - week 46 2018 (as of 21/11/2018).

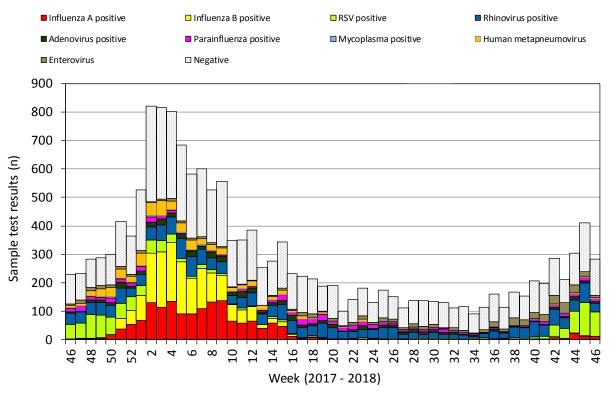
Age						
group	41	42	43	44	45	46
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	7.9	0.0	0.0	0.0	0.0
5 - 14	3.1	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	5.3	17.2	17.3	6.9	13.5
25 - 34	2.6	2.5	3.5	8.9	7.0	0.0
35 - 44	0.0	2.7	7.7	9.9	15.4	11.2
45 - 64	7.6	6.2	8.7	6.7	7.1	5.1
65 - 74	8.8	2.9	8.1	0.0	4.1	0.0
75+	0.0	6.9	0.0	0.0	4.9	9.7
Total	3.6	4.2	6.8	6.3	6.4	5.3

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 18/11/2018, by week of sample collection, week 46 2017 - week 46 2018.



^{*} Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 18/11/2018 by week of sample collection, week 46 2017 – week 46 2018.



Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre.

Out of Hours consultations and calls to NHS Direct Wales

Figure 5. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 18/11/2018).

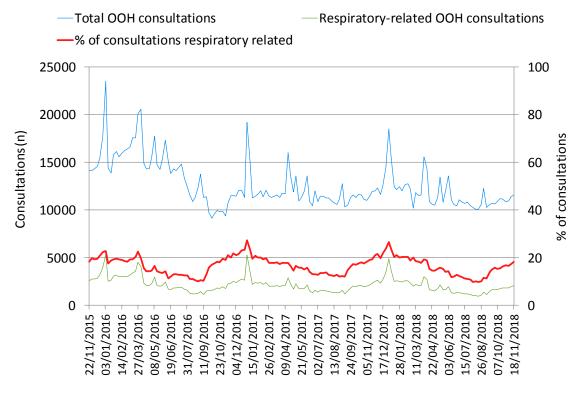
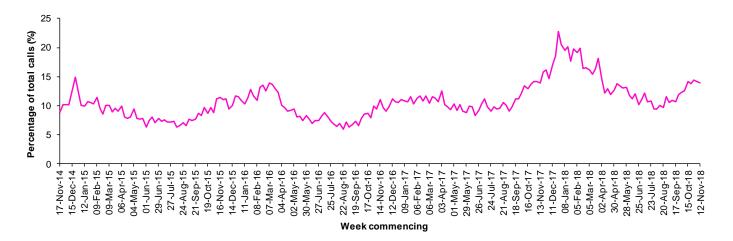


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 46 2014 - week 46 2018 (as of 18/11/2018).



¹ Data supplied by Health Statistics and Analysis Unit, Welsh Government.
Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'.
Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (ie calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.

Influenza Vaccine Uptake in Wales

Table 2. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2018/19 (as of 20/11/2018).

Influenza immunisation uptake in the 2018/19 season					
People aged 65y and older	53.7%				
People younger than 65y in a clinical risk group	32.3%				
Children aged two & three years	32.3%				
Children aged four to ten years*	69.4%				
NHS staff	35.1%				
NHS staff who have direct patient contact	34.4%				

^{*} In school sessions carried out so far.

The end of season report Influenza in Wales 2017/18 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

Link to report: http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=55714

Key points – Influenza activity in the UK and Europe

- As of week 45, influenza activity remained low with all indicators below baseline threshold levels. Influenza GP consultations increased in Scotland to 7.3 per 100,000 and in Northern Ireland to 5.0 per 100,000, but remain below MEM thresholds for baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 5.3 per 100,000 but remains below the MEM threshold for baseline activity (13.1 per 100,000).
- During week 45, one sample tested positive for influenza (one influenza A(H1N1)pdm09) through the UK GP sentinel swabbing scheme. Of the 1,693 respiratory test results reported through Public Health England's DataMart scheme, there were 44 influenza positives (13 influenza A(H1N1)pdm09, five influenza A(H3), 17 influenza A(unknown subtype) and nine influenza B). UK summary data are available from the <u>Public Health England National Influenza Report</u>.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that as
 of week 45, influenza activity was low throughout the WHO European Region. During week 45, a
 total of 681 sentinel specimens were tested for influenza, seven of which were positive (two
 influenza A(H1N1)pdm09, three influenza A(H3N2) and two influenza A not subtyped). For more
 information on European level influenza surveillance see Flu News Europe:
 http://www.flunewseurope.org/

World update

- The WHO reported on 12/11/18 that in the temperate zones of the northern hemisphere, influenza activity remained at inter-seasonal levels. Increased influenza detections were reported in some countries of Southern and South-East Asia. In the temperate zone of the southern hemisphere, influenza activity returned to nearly inter-seasonal levels. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 09/11/2018), during the time period from 15/10/18 28/10/18, National Influenza Centres and other national influenza laboratories from 104 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 84,313 specimens during that time period, 2,145 were positive for influenza viruses, of which 1,845 were typed as influenza A (905 influenza A(H1N1)pdm09, 499 influenza A(H3N2) and 441 influenza A(not subtyped)) and 300 influenza B (of the characterised influenza B viruses 54 belonged to the B-Yamagata lineage and 49 to the B-Victoria lineage).

Source: WHO influenza update:

http://www.who.int/influenza/surveillance monitoring/updates/en/

Update on influenza activity in North America

• The USA Centers for Disease Control and Prevention (CDC) report that during week 45 (ending 10/11/18) influenza activity remains low in the United States, although small increases were reported. Nationally, 2,063 (1.9%) out of 109,195 specimens have tested positive for influenza since week 40, of these positives 1,600 (77.6%) were influenza A and 463 (22.4%) were influenza B. Further characterisation has been carried out on 4,665 specimens by public health laboratories, and 491 tested positive for influenza, 413 (84.1%) were influenza A (283 influenza A(H1N1)pdm09 (78.2%), 79 influenza (H3N2) (21.8%), and subtyping was not performed on 51 specimens) and 78 influenza B (15.9%).

Source: CDC Weekly US Influenza Surveillance Report http://www.cdc.gov/flu/weekly/

• The Public Health Agency of Canada reported that during week 44, influenza activity continued to increase, with the season starting earlier than in recent years. The percentage of visits to healthcare professionals that were due to ILI was within expected levels at 2.0%. The percentage of tests positive for influenza continued to increase to 9.6% of tests positive.

Source: Public Health Agency of Canada

https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On 01/11/18 WHO reported four cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including one death. Globally, 2,266 laboratory confirmed cases of human infection with MERS-CoV, including 804 associated deaths, have officially been reported to WHO since September 2012.
 - Source: WHO Global Alert and Response website: http://www.who.int/csr/don/archive/year/2018/en/
- The majority of the MERS cases continue to be reported from the Middle East, and specifically from Saudi Arabia. Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: https://ecdc.europa.eu/en/publications-data/rapid-risk-assessment-severe-respiratory-disease-associated-middle-east-11
- Further updates and advice for healthcare workers and travellers are available from WHO: http://www.who.int/emergencies/mers-cov/en/ and from NaTHNaC: https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages

Human infection with avian influenza A(H7N9), China – latest update from WHO

- The latest WHO Influenza at Human-Animal Interface summary (22/09/2018 to 01/11/2018) reports that avian influenza A(H7N9) continues to be detected in China but at lower levels compared to previous years. Since February 2013, a total of 1,567 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 615 deaths, have been reported: http://www.fao.org/ag/againfo/programmes/en/empres/H7N9/Situation_update.html
- The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. Updates are available from the WHO Global Alert and Response website: http://www.who.int/csr/don/en/

Links:

Public Health Wales influenza surveillance webpage:

http://www.publichealthwales.org/flu-activity

GP Sentinel Surveillance of Infections Scheme:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918

NICE influenza antiviral usage guidance:

http://www.nice.org.uk/Guidance/TA158

Wales influenza information:

http://www.wales.nhs.uk/sitesplus/888/page/43745

England influenza surveillance:

https://www.gov.uk/government/collections/seasonal-influenza-guidance-data-and-analysis

Scotland influenza surveillance:

http://www.hps.scot.nhs.uk/resp/seasonalinfluenza.aspx

Northern Ireland influenza surveillance:

http://www.fluawareni.info/

European Centre for Communicable Disease:

http://ecdc.europa.eu/

European influenza information:

http://flunewseurope.org/

Advice on influenza immunisation (for NHS Wales users)

http://nww.immunisation.wales.nhs.uk/home

For further information on this report, please email Public Health Wales using: surveillance.requests@wales.nhs.uk