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



Wednesday 7th November 2018 (covering week 44 2018)

Influenza is not currently circulating in Wales.

Current level of influenza activity: No detectable activity/sporadic cases

Trend: Increasing

Confirmed cases since 2018 week 40: 43 (58% influenza A(H1N1)pdm09, 9% influenza A(H3), 21%

influenza A(not typed), 12% influenza B)

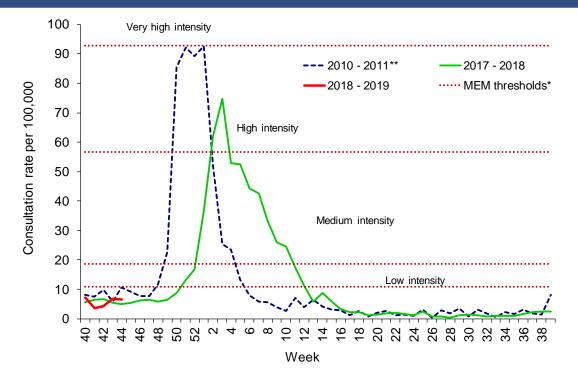
Key points – Wales

Evidence suggests that influenza is not currently circulating in Wales. During week 44 (ending 04/11/2018) 23 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 44 was 6.6 consultations per 100,000 practice population. The consultation rate was highest in patients aged 15-24 years (19.2 per 100,000 practice population) (Table 1).
- The ILI consultation rate has increased in recent weeks (although stable compared to the previous week (6.8 consultations per 100,000)), but 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 44 was 10,949. The proportion of respiratory-related consultations with OOH doctors decreased to 16.6% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) increased from 13.8% to 14.3% (Figure 6).
- During week 44, two surveillance samples from patients with influenza-like illness were submitted by sentinel GPs for testing, both samples were negative for all routinely tested respiratory pathogens (Figure 3).
- During week 44, 264 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: 16 influenza A(H1N1)pdm09, six influenza A(not subtyped), one influenza B, 79 for RSV, 37 for rhinovirus, 26 for enterovirus, 10 for parainfluenza, nine for adenovirus and four for human metapneumovirus (Figure 4).
- In those aged under five, the number of confirmed RSV cases per 100,000 population was 41.6 during week 44; and 71 out of 121 samples (59%) 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 44 was the 3rd week since baseline activity thresholds were exceeded.
- During week 44, no outbreaks of acute respiratory illnesses (ARI) were reported to a Public Health Wales Health Protection team.
- At the end of week 44, uptake of influenza vaccine was: 41.0% in those aged 65 year and older, 25.3% in patients aged six months to 64 years at clinical risk and 21.0% in children aged two and three years. In the 470 schools visitied so far as part of the universal childhood influenza programme, uptake was 69.7%.

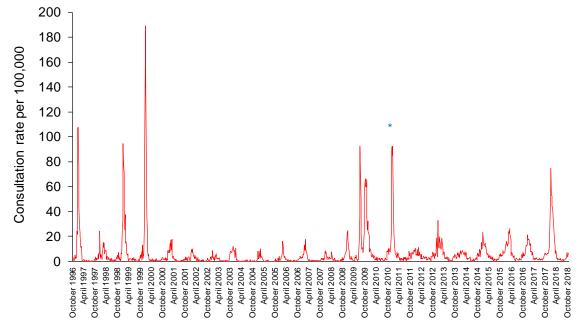
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 07/11/2018).



^{*} 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 10.4 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2016-17 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 47 1996 – week 44 2018).

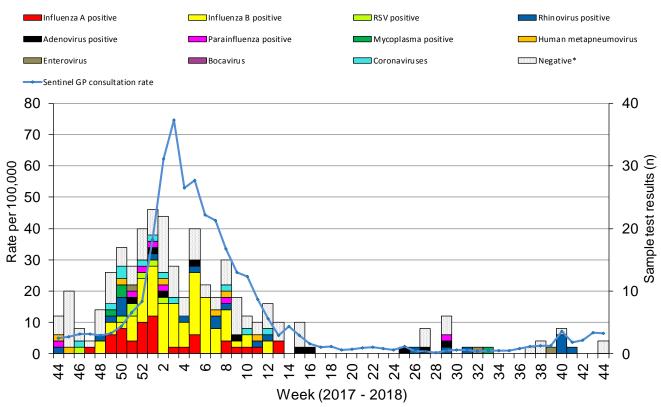


^{*} Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 39 – week 44 2018 (as of 07/11/2018).

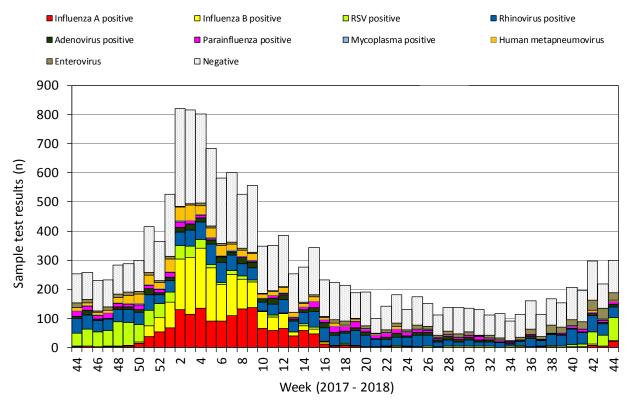
Age						
group	39	40	41	42	43	44
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	7.9	0.0	0.0
5 - 14	0.0	0.0	3.1	0.0	0.0	0.0
15 - 24	8.5	22.9	0.0	5.3	17.2	19.2
25 - 34	5.5	7.4	2.6	2.5	3.5	10.1
35 - 44	0.0	7.8	0.0	2.7	7.7	11.3
45 - 64	2.7	8.2	7.6	6.2	8.7	5.1
65 - 74	0.0	2.7	8.8	2.9	8.1	0.0
75+	0.0	0.0	0.0	6.9	0.0	0.0
Total	2.5	7.1	3.6	4.2	6.8	6.6

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 04/11/2018, by week of sample collection, week 44 2017 - week 44 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 04/11/2018 by week of sample collection, week 44 2017 – week 44 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 04/11/2018).

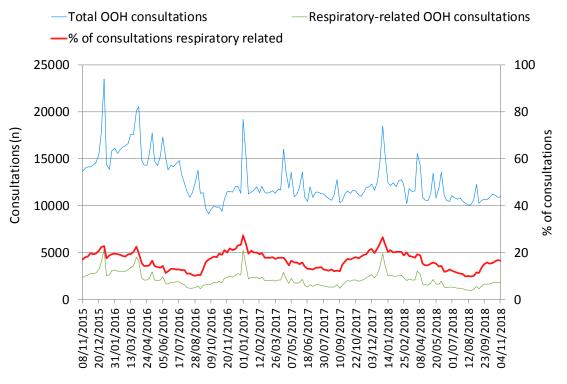
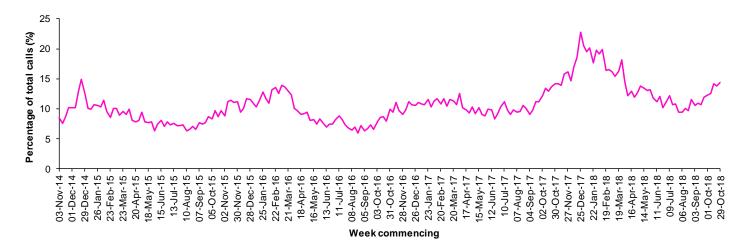


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 44 2014 - week 44 2018 (as of 04/11/2018).



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 06/11/2018).

Influenza immunisation uptake in the 2018/19 season					
People aged 65y and older	41.0%				
People younger than 65y in a clinical risk group	25.3%				
Children aged two & three years	21.0%				
Children aged four to ten years*	69.7%				
NHS staff	-				
NHS staff who have direct patient contact	-				

^{*} 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 43, there was no influenza circulation in the community and all indicators were below baseline thresholds. Influenza GP consultations increased in <u>Scotland</u> to 4.5 per 100,000 and decreased in <u>Northern Ireland</u> to 3.6 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 decreased to 3.6 per 100,000 but remains below the MEM threshold for baseline activity (13.1 per 100,000).
- During week 43, no samples tested positive for influenza through the UK GP sentinel swabbing scheme. Of the 1,545 respiratory test results reported through Public Health England's DataMart scheme, there were 12 influenza positives (three influenza A(H1N1)pdm09, one influenza A(H3), five influenza A(unknown subtype) and three influenza B). UK summary data are available from the Public Health England National Influenza Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that
 as of week 43, influenza activity was low throughout the WHO European Region. During week
 43, a total of 549 sentinel specimens were tested for influenza, eight of which were positive
 (four influenza A(H1N1)pdm09, one influenza A(H3N2) and two influenza B). For more
 information on European level influenza surveillance see Flu News Europe:
 http://www.flunewseurope.org/

World update

- The WHO reported on 29/10/18 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 appeared to decrease overall. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 26/10/2018), during the time period from 01/10/18 14/10/18, National Influenza Centres and other national influenza laboratories from 114 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 89,996 specimens during that time period, 2,890 were positive for influenza viruses, of which 2,432 were typed as influenza A (1,559 influenza A(H1N1)pdm09, 387 influenza A(H3N2) and 486 influenza A(not subtyped)) and 458 influenza B (of the characterised influenza B viruses 67 belonged to the B-Yamagata lineage and 41 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 43 (ending 27/10/18) influenza activity remains low in the United States, although small increases were reported. Nationally, 793 (1.3%) out of 62,036 specimens have tested positive for influenza since week 40, of these positives 558 (70.4%) were influenza A and 235 (29.6%) were influenza B. Further characterisation has been carried out on 2,933 specimens by public health laboratories, and 284 tested positive for influenza, 228 (80.3%) were influenza A (145 influenza A(H1N1)pdm09 (74.7%), 49 influenza (H3N2) (25.3%), and subtyping was not performed on 34 specimens) and 56 influenza B (19.7%).

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

• The Public Health Agency of Canada reported that during week 43, influenza activity crossed the seasonal threshold, indicating the beginning of the influenza season at the national level. The percentage of visits to healthcare professionals that were due to ILI was 1.4%, an increase from the previous week. The percentage of tests positive for influenza increased and crossed the seasonal threshold of 5%, with 5.2% 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 eight cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including three deaths. Globally, 2,262 laboratory confirmed cases of human infection with MERS-CoV, including 803 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 (21/07/2018 to 21/09/2018) 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