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



Wednesday 31st October 2018 (covering week 43 2018)

Influenza is not currently circulating in Wales.

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

Trend: Stable

Confirmed cases since 2018 week 40: 20 (45% influenza A(H1N1)pdm09, 20% influenza A(H3), 15%

influenza A(not typed), 20% influenza B)

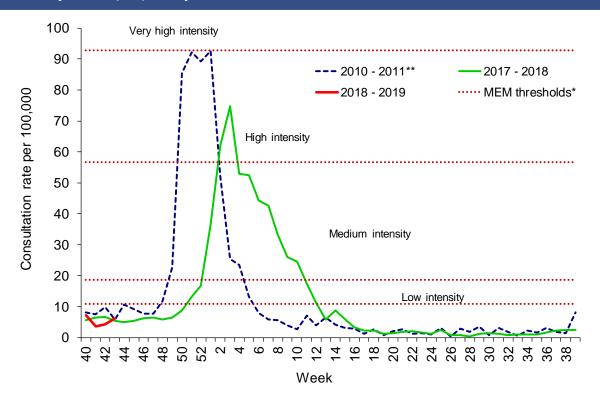
Key points – Wales

Evidence suggests that influenza is not currently circulating in Wales. During week 43 (ending 28/10/2018) four cases of influenza were detected in Wales but rhinovirus was the most commonly detected acute respiratory infection.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 43 was 6.2 consultations per 100,000 practice population. The consultation rate was highest in patients aged 45-64 years (9.6 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to the previous week (4.2 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 43 was 10,865. The proportion of respiratory-related consultations with OOH doctors increased to 16.9% (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 13.8% (Figure 6).
- During week 43, no surveillance samples from patients with influenza-like illness were submitted by sentinel GPs for testing (Figure 3).
- During week 43, 191 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: four influenza A(H1N1)pdm09, 39 for rhinovirus, 38 for RSV, 37 for enterovirus, nine for parainfluenza, four for adenovirus, three for human metapneumovirus and one for mycoplasma (Figure 4).
- In those aged under five, the number of confirmed RSV cases per 100,000 population was 15.8 during week 43; and 27 out of 75 samples (36%) 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 43 was the 2nd week since baseline activity thresholds were exceeded.
- During week 43, no outbreaks of acute respiratory illnesses (ARI) were reported to a Public Health Wales Health Protection team.
- At the end of week 43, uptake of influenza vaccine was: 35.8% in those aged 65 year and older, 21.9% in patients aged six months to 64 years at clinical risk and 14.8% in children aged two and three years. In the 328 schools visitied so far as part of the universal childhood influenza programme, uptake was 71.9%.

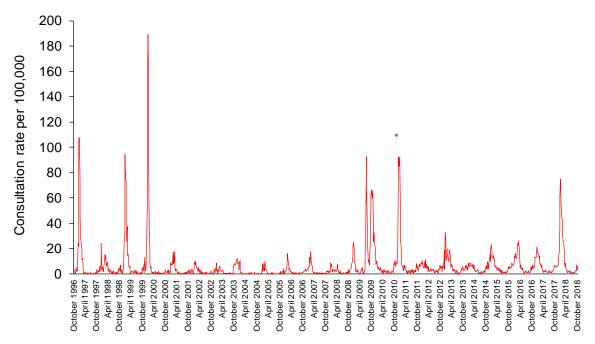
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 31/10/2018).



^{*} 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 43 2018).

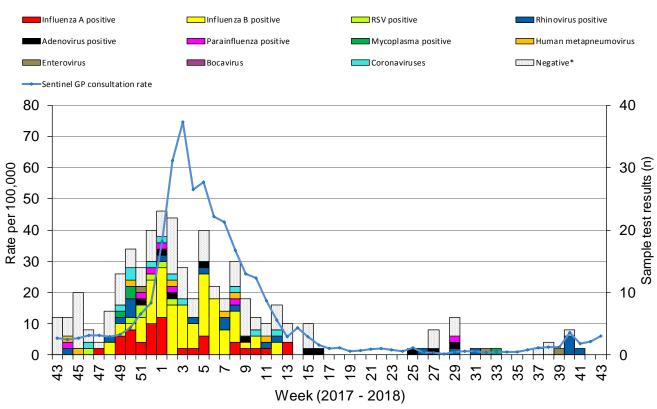


^{*} Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 38 – week $43\ 2018$ (as of 31/10/2018).

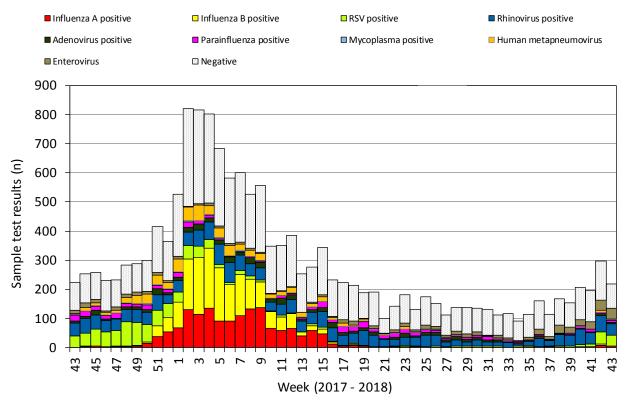
Age						
group	38	39	40	41	42	43
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	9.1	0.0	0.0	0.0	7.9	0.0
5 - 14	0.0	0.0	0.0	3.1	0.0	0.0
15 - 24	0.0	8.5	22.9	0.0	5.3	8.9
25 - 34	0.0	5.5	7.4	2.6	2.5	4.0
35 - 44	0.0	0.0	7.8	0.0	2.7	8.6
45 - 64	6.8	2.7	8.2	7.6	6.2	9.6
65 - 74	3.2	0.0	2.7	8.8	2.9	8.9
75+	0.0	0.0	0.0	0.0	6.9	0.0
Total	2.5	2.5	7.1	3.6	4.2	6.2

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 28/10/2018, by week of sample collection, week 43 2017 - week 43 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 28/10/2018 by week of sample collection, week 43 2017 – week 43 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 28/10/2018).

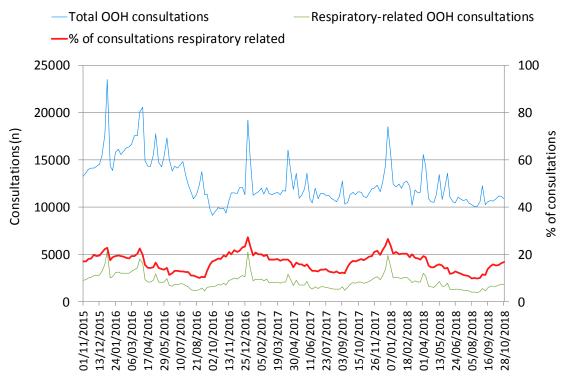
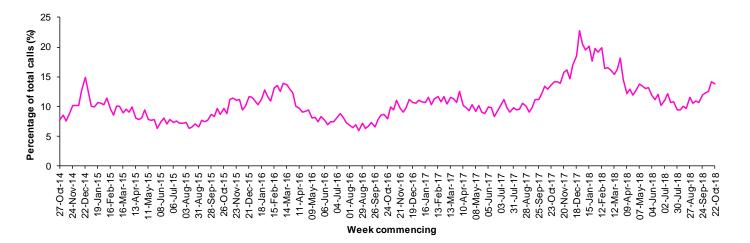


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 43 2014 - week 43 2018 (as of 28/10/2018).



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 30/10/2018).

Influenza immunisation uptake in the 2018/19 season					
People aged 65y and older	35.8%				
People younger than 65y in a clinical risk group	21.9%				
Children aged two & three years	14.8%				
Children aged four to ten years*	71.9%				
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 42, there was no influenza circulation in the community and all indicators were below baseline thresholds. Influenza GP consultations decreased in Scotland to 3.6 per 100,000 and increased in Northern Ireland to 3.8 per 100,000, and 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 4.5 per 100,000 but remains below the MEM threshold for baseline activity (13.1 per 100,000).
- During week 42, no samples tested positive for influenza through the UK GP sentinel swabbing scheme. Of the 1.470 respiratory test results reported through Public Health England's DataMart scheme, there were eight influenza positives (one influenza A(H3), six influenza A(unknown subtype) and one 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 42, influenza activity was low throughout the WHO European Region. During week 42, a total of 1,200 sentinel specimens were tested for influenza, 12 of which were positive (four influenza A(H1N1)pdm09, four influenza A(H3) and four 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 42 (ending 20/10/18) influenza activity remains low in the United States. Nationally, 633 (1.4%) out of 44.998 specimens have tested positive for influenza since week 40, of these positives 470 (74.2%) were influenza A and 163 (25.8%) were influenza B. Further characterisation has been carried out on 1,894 specimens by public health laboratories, and 150 tested positive for influenza, 115 (76.7%) were influenza A (73 influenza A(H1N1)pdm09 (78.5%), 20 influenza (H3) (21.5%), and subtyping was not performed on 22 specimens) and 35 influenza B (23.3%).

Source: CDC Weekly US Influenza Surveillance Report

http://www.cdc.gov/flu/weekly/

The Public Health Agency of Canada reported that during week 42, influenza activity increased slightly but remains at interseasonal levels. The percentage of visits to healthcare professionals that were due to ILI was 1.6%, an increase from the previous week. The percentage of tests positive for influenza increased but remained below seasonal thresholds, with 3% of tests positive.

Source: Public Health Agency of Canada

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

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

- On 03/10/18 WHO reported 32 cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including 10 deaths. Globally, 2,254 laboratory confirmed cases of human infection with MERS-CoV, including 800 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