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



Wednesday 24th October 2018 (covering week 42 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: 16 (31% influenza A(H1N1)pdm09, 25% influenza A(H3), 19%

influenza A(not typed), 25% influenza B)

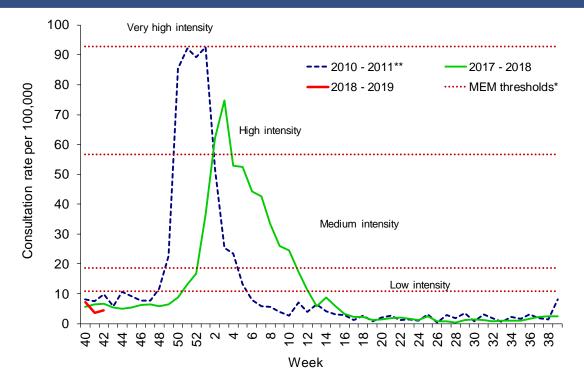
Key points – Wales

Evidence suggests that influenza is not currently circulating in Wales. During week 42 (ending 21/10/2018) 11 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 42 was 4.4 consultations per 100,000 practice population. The consultation rate was highest in patients aged 1-4 years (9.0 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to the previous week (3.6 consultations per 100,000) but remains well 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 42 was 11,122. The proportion of respiratory-related consultations with OOH doctors increased to 16.3% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) increased from 12.5% to 14.0% (Figure 6).
- During week 42, no surveillance samples from patients with influenza-like illness were submitted by sentinel GPs for testing (Figure 3).
- During week 42, 266 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(H3), two influenza A(H1N1)pdm09, one influenza A (not subtyped), four influenza B, 56 for rhinovirus, 42 for RSV, 35 for enterovirus, seven for adenovirus, six for parainfluenza and five for human metapneumovirus (Figure 4).
- In those aged under five, the number of confirmed RSV cases per 100,000 population was 19.9 during week 42; and 34 out of 97 samples (35%) tested positive in this age group. The provisional MEM threshold for seasonal activity in this age group is 6.4 confirmed cases per 100,000. 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).
- During week 42, no outbreaks of acute respiratory illnesses (ARI) were reported to a Public Health Wales Health Protection team.
- A summary of the 2017/18 season in Wales is available from: www.publichealthwales.org/flu-activity

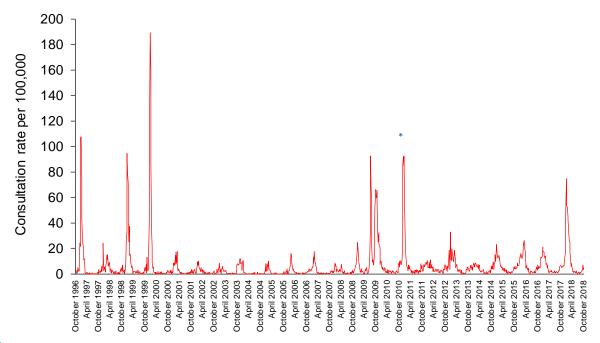
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 24/10/2018).



^{*} 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 42 2018).

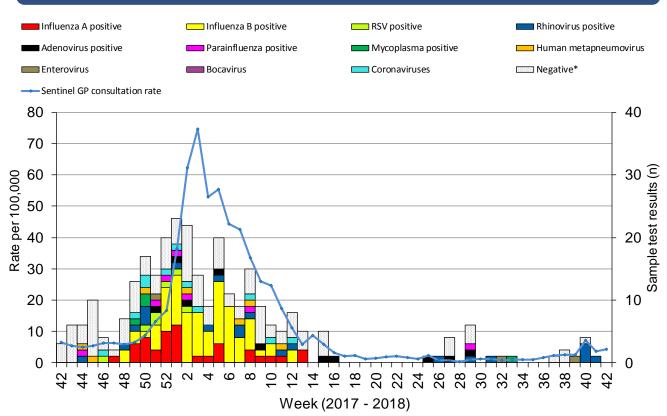


^{*} Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 37 – week $42\ 2018$ (as of 24/10/2018).

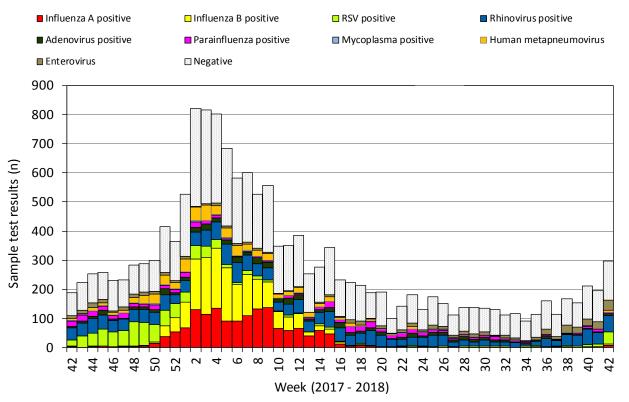
| Age | | | | | | |
|---------|-----|-----|-----|------|-----|-----|
| group | 37 | 38 | 39 | 40 | 41 | 42 |
| < 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 - 4 | 9.3 | 9.1 | 0.0 | 0.0 | 0.0 | 9.0 |
| 5 - 14 | 0.0 | 0.0 | 0.0 | 0.0 | 3.1 | 0.0 |
| 15 - 24 | 6.2 | 0.0 | 8.5 | 22.9 | 0.0 | 5.8 |
| 25 - 34 | 3.0 | 0.0 | 5.5 | 7.4 | 2.6 | 2.8 |
| 35 - 44 | 0.0 | 0.0 | 0.0 | 7.8 | 0.0 | 3.1 |
| 45 - 64 | 2.8 | 6.8 | 2.7 | 8.2 | 7.6 | 6.9 |
| 65 - 74 | 0.0 | 3.2 | 0.0 | 2.7 | 8.8 | 3.2 |
| 75+ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 |
| Total | 2.3 | 2.5 | 2.5 | 7.1 | 3.6 | 4.4 |

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 21/10/2018, by week of sample collection, week 42 2017 - week 42 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 21/10/2018 by week of sample collection, week 42 2017 – week 42 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 21/10/2018).

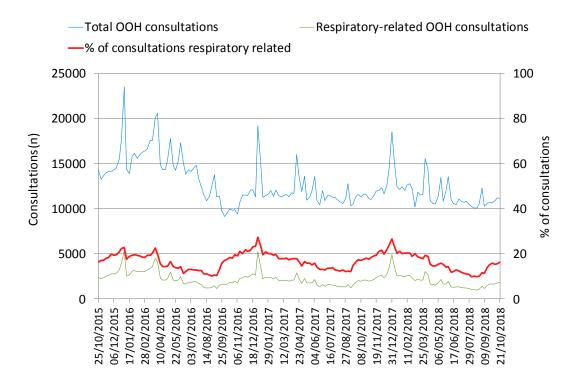
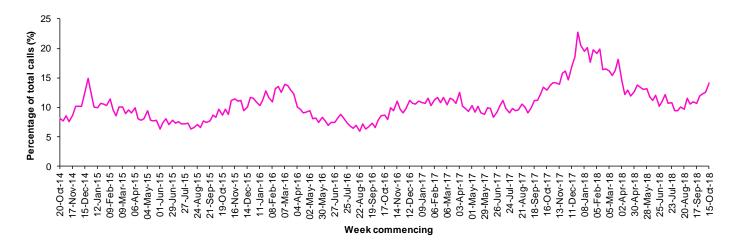


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 42 2014 - week 42 2018 (as of 21/10/2018).



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 2017/18

| Influenza immunisation uptake in the 2017/18 season | | | | |
|---|-------|--|--|--|
| People aged 65y and older | 68.8% | | | |
| People younger than 65y in a clinical risk group | 48.5% | | | |
| Children aged two & three years | 50.2% | | | |
| Children aged four to eight years | 68.3% | | | |
| NHS staff | 55.4% | | | |
| NHS staff who have direct patient contact | 57.9% | | | |

The end of season report Influenza in Wales 2017/18 is now 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 41, there was no influenza circulation in the community and all indicators were below baseline thresholds. Influenza GP consultations decreased in <u>Scotland</u> to 5.1 per 100,000 and in <u>Northern Ireland</u> to 3.5 per 100,000, and remains below MEM thresholds for baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 3.9 per 100,000 but remains below the MEM threshold for baseline activity (13.1 per 100,000).
- During week 41, no samples tested positive for influenza through the UK GP sentinel swabbing scheme. Of the 1,252 respiratory test results reported through Public Health England's DataMart scheme, there were 12 influenza positives (one influenza A(H1N1)pdm09, three influenza A(H3), seven 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 41, influenza activity was low throughout the WHO European Region. During week 41, a total of 660 sentinel specimens were tested for influenza, three of which were positive (one influenza A(H3) 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 15/10/18 that in the temperate zones of the southern hemisphere, influenza activity appeared to decrease in Southern Africa and remained at low levels in Australia and New Zealand. Increased influenza detections were reported in some countries of Southern and South-East Asia. and In the temperate zone of the northern hemisphere influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 12/10/2018), during the time period from 17/09/18 30/09/18, National Influenza Centres and other national influenza laboratories from 95 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 58,772 specimens during that time period, 2,124 were positive for influenza viruses, of which 1,789 were typed as influenza A (1,051 influenza A(H1N1)pdm09, 369 influenza A(H3N2) and 369 influenza A(not subtyped)) and 335 influenza B (of the characterised influenza B viruses 51 belonged to the B-Yamagata lineage and 53 to the B-Victoria lineage).

Source: WHO influenza update:

http://www.who.int/influenza/surveillance_monitoring/updates/en/

Australia and New Zealand update

- In New Zealand, during the week ending 21/10/2018, despite continued decreases in influenza-like illness (ILI) and severe acute respiratory illness (SARI) visits recently, influenza positivity increased slightly last week. Influenza A(H1N1) is still the predominant flu virus this season.
 Source: Institute of Environmental Science & Research, New Zealand https://surv.esr.cri.nz/virology/2018 Influenza Intelligence Report.php
- In Australia, according to the latest available update (24/09/2018 to 07/10/2018), influenza and
 influenza-like illness (ILI) activity has declined, signalling the season has peaked in early
 September. Influenza continued to be the most common respiratory virus detected in patients
 with ILI syptoms.

Source: Australian Influenza Surveillance Report and Activity Updates. http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-ozflu-2018.htm

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