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



Wednesday 17th October 2018 (covering week 41 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: 5 (60% influenza A(H1N1)pdm09, 40% influenza A(not typed)

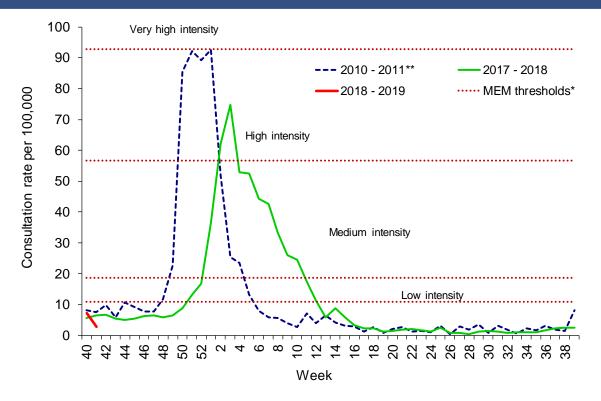
#### **Key points – Wales**

Evidence suggests that influenza is not currently circulating in Wales. During week 41 (ending 14/10/2018) three 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 41 was 2.8 consultations per 100,000 practice population. The consultation rate was highest in patients aged 65-74 years (10.6 per 100,000 practice population) (Table 1).
- The ILI consultation rate decreased compared to the previous week (7.1 consultations per 100,000) and 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 41 was 11,227. The proportion of respiratory-related consultations with OOH doctors increased to 15.6% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) increased from 12.3% to 12.5% (Figure 6).
- During week 41, one surveillance sample from a patient with influenza-like illness were submitted by sentinel GPs for testing, the sample tested positive for rhinovirus (Figure 3).
- During week 41, 186 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: two influenza A(H1N1)pdm09, one influenza A (not subtyped), 39 for rhinovirus, 24 for enterovirus, nine for RSV, eight for parainfluenza, three for adenovirus and two for mycoplasma (Figure 4).
- In those aged under five, the number of confirmed RSV cases per 100,000 population was 5.3
  during week 41, the proportion of samples that tested positive in this age group was 16%. The
  provisional MEM threshold which predicts the start of the annual RSV season is 6.4 confirmed
  cases per 100,000 in children younger than five years.
- During week 41, no outbreaks of acute respiratory illnesses (ARI) were reported to the Public Health Wales Health Protection team.
- A summary of the 2017/18 season in Wales is available from: <a href="www.publichealthwales.org/flu-activity">www.publichealthwales.org/flu-activity</a>

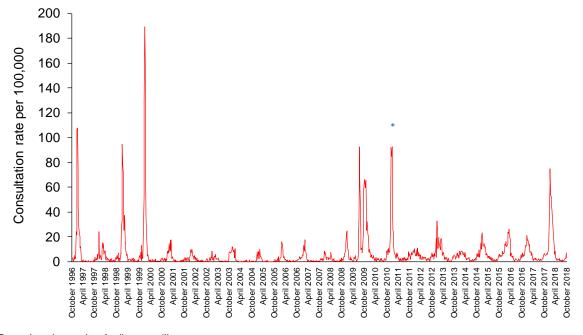
## **Influenza activity in Wales**

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 17/10/2018).



<sup>\*</sup> 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 41 2018).

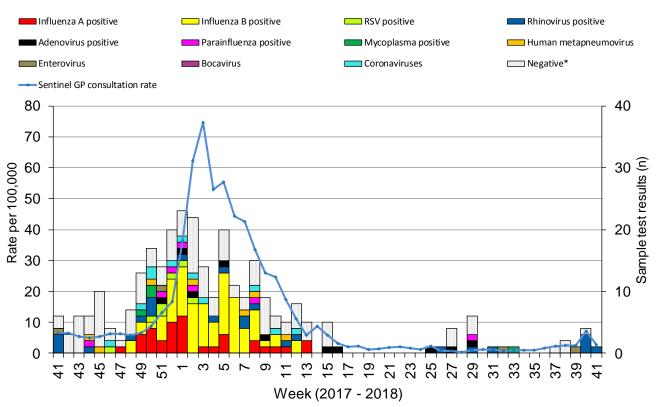


<sup>\*</sup> Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 36 – week 41 2018 (as of 17/10/2018).

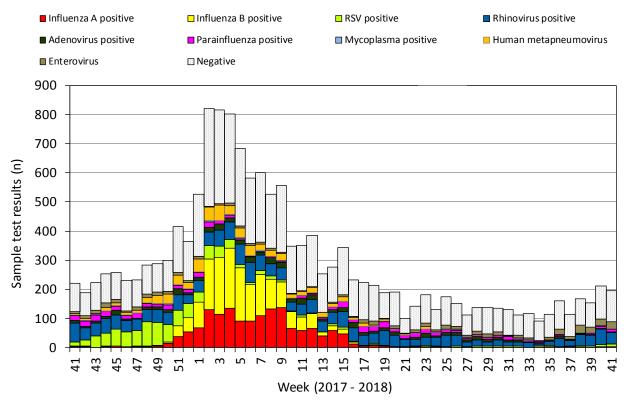
Age						
group	36	37	38	39	40	41
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	9.3	9.1	0.0	0.0	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	3.7
15 - 24	0.0	6.2	0.0	8.5	22.9	0.0
25 - 34	5.2	3.0	0.0	5.5	7.4	3.1
35 - 44	5.5	0.0	0.0	0.0	7.8	0.0
45 - 64	0.0	2.8	6.8	2.7	8.2	3.0
65 - 74	2.9	0.0	3.2	0.0	2.7	10.6
75+	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.7	2.3	2.5	2.5	7.1	2.8

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 14/10/2018, by week of sample collection, week 41 2017 - week 41 2018.



<sup>\*</sup> 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 14/10/2018 by week of sample collection, week 41 2017 – week 41 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 17/10/2018).

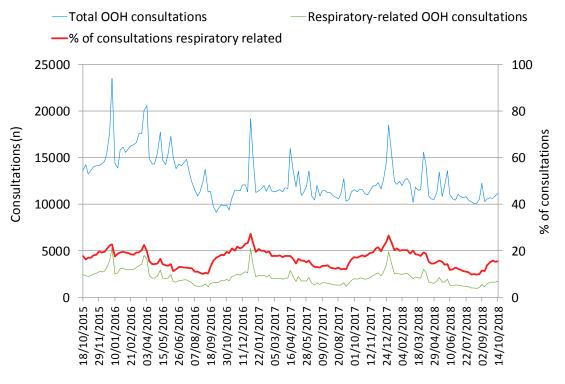
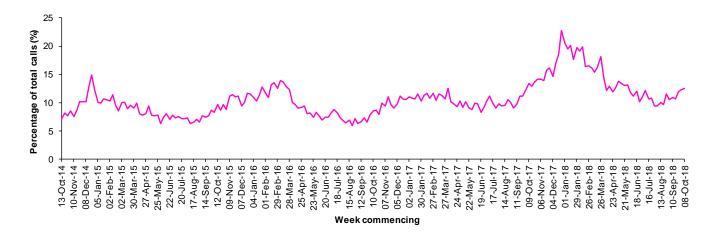


Figure 6. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from week 41 2014 - week 41 2018 (as of 14/10/2018).



<sup>&</sup>lt;sup>1</sup> 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 40, there was no widespread influenza circulation in the community and all
  indicators were below baseline thresholds. Influenza GP consultations increased in <u>Scotland</u>
  to 7.1 per 100,000 and in <u>Northern Ireland</u> to 3.8 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 4.2 per 100,000 but remains below
  the MEM threshold for baseline activity (13.1 per 100,000).
- During week 40, one sample tested positive for influenza through UK GP sentinel swabbing schemes (one influenza B). Of the 1,390 respiratory test results reported through Public Health England's DataMart scheme, there were eight influenza positives (two influenza A(H3) and four influenza A(unknown subtype) and two 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 40, influenza activity was low throughout the WHO European Region. During week 40, a total of 239 sentinel specimens were tested for influenza, two of which were positive (two influenza B). For more information on European level influenza surveillance see Flu News Europe: <a href="http://www.flunewseurope.org/">http://www.flunewseurope.org/</a>

# 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 14/10/2018, influenza and other respiratory virus activity has been very low this season, with a late peak in September. 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: <a href="https://ecdc.europa.eu/en/publications-data/rapid-risk-assessment-severe-respiratory-disease-associated-middle-east-11">https://ecdc.europa.eu/en/publications-data/rapid-risk-assessment-severe-respiratory-disease-associated-middle-east-11</a>
- Further updates and advice for healthcare workers and travellers are available from WHO: <a href="http://www.who.int/emergencies/mers-cov/en/">http://www.who.int/emergencies/mers-cov/en/</a> and from NaTHNaC: <a href="https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages">https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages</a>

## 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: <a href="http://www.who.int/influenza/human animal interface/HAI Risk Assessment/en/">http://www.who.int/influenza/human animal interface/HAI Risk Assessment/en/</a>
- 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: <a href="http://www.who.int/csr/don/en/">http://www.who.int/csr/don/en/</a>

#### 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: <a href="mailto:surveillance.requests@wales.nhs.uk">surveillance.requests@wales.nhs.uk</a>