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



Wednesday 10th October 2018 (covering week 40 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: 2 (50% influenza A(H1N1)pdm09, 50% influenza A(not typed)

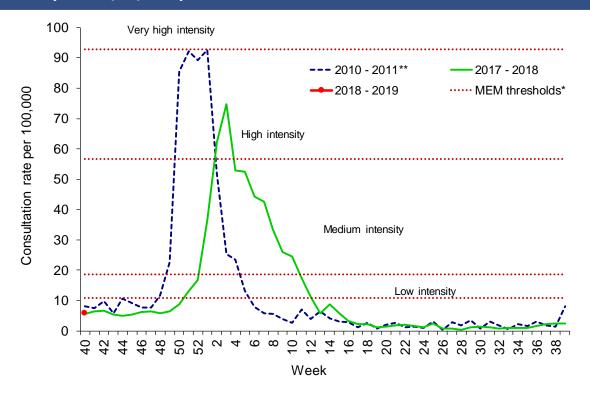
#### **Key points – Wales**

Evidence suggests that influenza is not currently circulating in Wales. During week 40 (ending 07/10/2018) two 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 40 was 5.9 consultations per 100,000 practice population. The consultation rate was highest in patients aged 15-24 years (18.8 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to the previous week (2.5 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 40 was 10,891. The proportion of respiratory-related consultations with OOH doctors decreased to 15.3% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) increased from 11.9% to 12.3% (Figure 6).
- During week 40, four surveillance samples from patients with influenza-like illness were submitted by sentinel GPs for testing, three samples tested positive for rhinovirus and the other sample was negative for all routinely tested respiratory pathogens (Figure 3).
- During week 40, 206 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: one influenza A(H1N1)pdm09, one influenza A (not subtyped), 53 for rhinovirus, 22 for enterovirus, eight for parainfluenza, seven for RSV, three for adenovirus, one for mycoplasma and one for human metapneumovirus (Figure 4).
- In those aged under five, 10% of samples tested positive for RSV in week 40. The MEM threshold for the proportion of samples testing positive, which predicts the start of the annual RSV season is 25%.
- During week 40, 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: <a href="www.publichealthwales.org/flu-activity">www.publichealthwales.org/flu-activity</a>

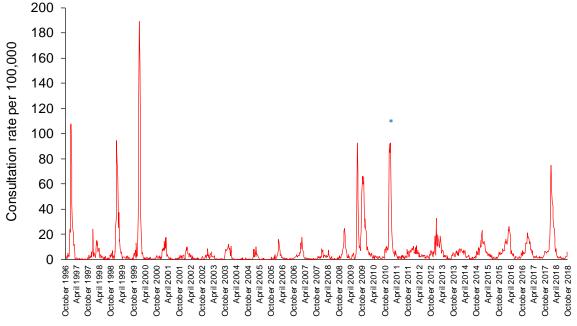
# **Influenza activity in Wales**

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



<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 40 2018).

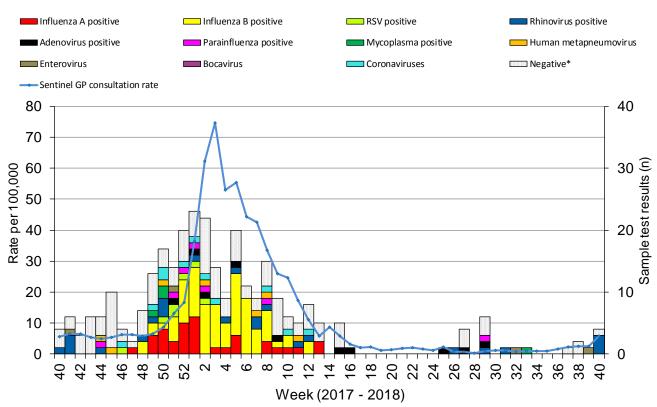


<sup>\*</sup> Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 35 – week 40 2018 (as of 10/10/2018).

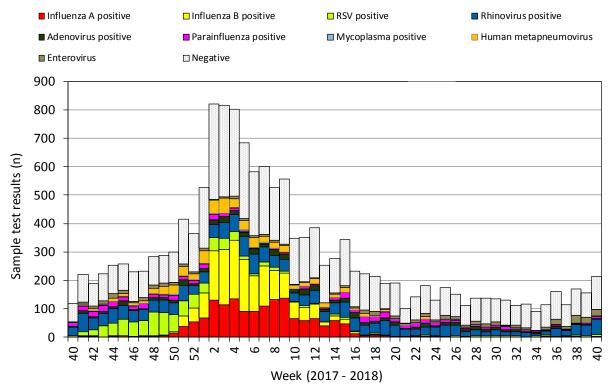
Age						
group	35	36	37	38	39	40
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	9.3	9.1	0.0	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	0.0	6.2	0.0	8.5	18.8
25 - 34	0.0	5.2	3.0	0.0	5.5	5.5
35 - 44	2.8	5.5	0.0	0.0	0.0	8.6
45 - 64	1.3	0.0	2.8	6.8	2.7	7.8
65 - 74	2.9	2.9	0.0	3.2	0.0	0.0
75+	0.0	0.0	0.0	0.0	0.0	0.0
Total	1.0	1.6	2.3	2.5	2.5	5.9

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 07/10/2018, by week of sample collection, week 40 2017 - week 40 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 07/10/2018 by week of sample collection, week 40 2017 – week 40 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 10/10/2018).

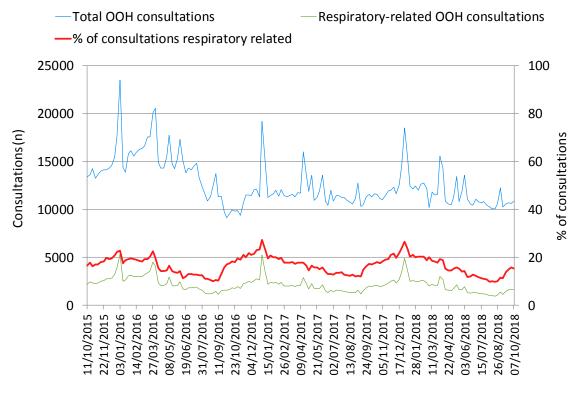
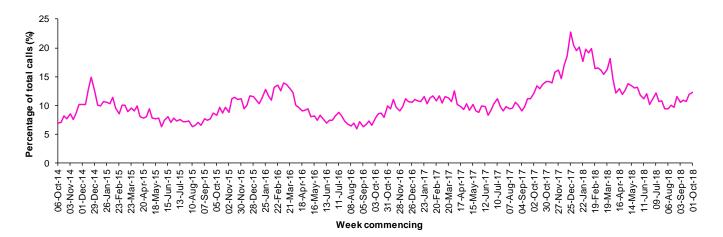


Figure 6. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from week 40 2014 - week 40 2018 (as of 07/10/2018).



<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 38, indicators for influenza show low levels of activity in the UK. Influenza GP consultations decreased in <u>Scotland</u> to 4.3 per 100,000 and increased in <u>Northern Ireland</u> to 2.8 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 2.8 per 100,000 but remains below the MEM threshold for baseline activity (13.1 per 100,000).
- During week 38, no samples tested positive for influenza through UK GP sentinel swabbing schemes. Of the 943 respiratory test results reported through Public Health England's DataMart scheme, there were six influenza positives (one influenza A(H1N1)pdm09, three influenza A(H3) and two influenza A(unknown subtype)). 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 weeks 36-39, influenza activity was at out-of-season levels in the WHO European Region. During weeks 21-39, a total of 2,319 sentinel specimens were tested for influenza, nine of which were positive (three influenza A(H1N1)pdm09, three influenza A(H3N2), two influenza A(not subtyped) and one influenza B). For type B viruses from both sentinel and non-sentinel sources, B/Yamagata lineage viruses have greatly outnumbered those of the B/Victoria lineage. 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 01/10/18 that influenza activity appeared to decrease in South America and Southern Africa. Influenza activity remained at low seasonal levels in Australia and New Zealand and at inter-seasonal levels in most of the countries in the temperate zone of the northern hemisphere. Increased influenza detections were reported in some countries of Southern and South-East Asia. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 28/09/2018), during the time period from 03/09/18 –
  16/09/18, National Influenza Centres and other national influenza laboratories from 85
  countries, areas or territories reported influenza surveillance data. The WHO Global
  Influenza Surveillance and Response System laboratories tested more than 68,731
  specimens during that time period, 2,512 were positive for influenza viruses, of which 2,120
  were typed as influenza A (1,104 influenza A(H1N1)pdm09, 586 influenza A(H3N2) and 430
  influenza A(not subtyped)) and 392 influenza B (of the characterised influenza B viruses 54
  belonged to the B-Yamagata lineage and 44 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 07/10/2018, community indicators for influenza-like illness (ILI) and influenza-positive ILI all decreased compared to the prior week. Influenza A(H1N1) is still the predominant flu virus this season.

**Source:** Institute of Environmental Science & Research, New Zealand <a href="https://surv.esr.cri.nz/virology/2018">https://surv.esr.cri.nz/virology/2018</a> Influenza Intelligence Report.php

• In Australia, according to the latest available update (10/09/2018 to 23/09/2018), influenza and influenza-like illness (ILI) activity has declined, signalling the season has peaked in recent weeks. For the first time this season influenza was 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 (29/05/2018 to 20/07/2018) reports that avian influenza A(H7N9) continues to be detected by agricultural authorities in China. Since February 2013, a total of 1,625 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 623 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>