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

Wednesday 19th June 2019 (covering week 24 2019)

Current level of influenza activity: *Inter-seasonal levels.*
Trend: *Decreasing*
Confirmed cases since 2018 week 40: **2,906** *(99.4% influenza A and 0.6% influenza B. Of influenza A cases, 46.6% were A(H1N1)pdm09, 26.7% were A(H3) and 26.7% were untyped).*

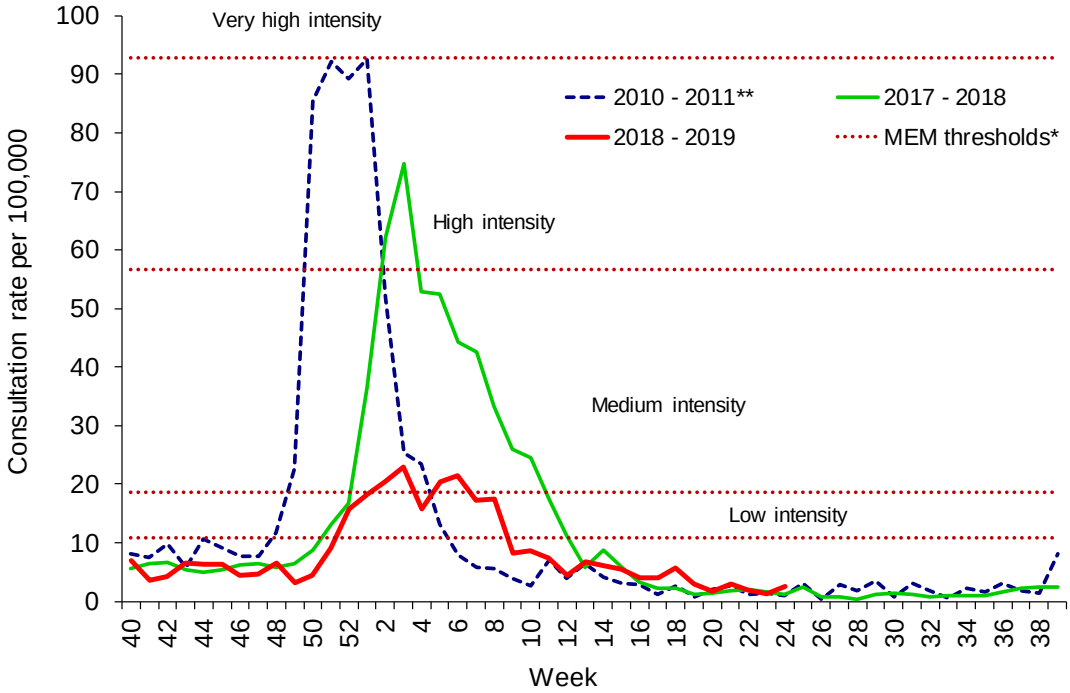
Key points – Wales

<u>Surveillance indicators suggest that influenza is circulating in Wales.</u>
The sentinel GP consultation rate for influenza-like illness (ILI) remained below baseline levels during week 24 (ending 16/06/2019). Influenza is currently being confirmed in low numbers of patients and rhinovirus is the most commonly detected cause of Acute Respiratory Infection (ARI), with 27 confirmed cases. Other causes of ARI, including parainfluenza, adenovirus, enterovirus and human metapneumovirus, also continue to be detected.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 24 was 2.5 consultations per 100,000 practice population. The consultation rate was highest in patients aged 45-64 years (4.6 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to week 23 (1.2 per 100,000), but remains below baseline levels (Figure 1).
- The total number of consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 24 was 10,386. The proportion of respiratory-related consultations with OOH doctors decreased to 13.5% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 24 increased to 12.8% (Figure 6).
- No surveillance samples from patients with ILI, collected by sentinel GPs during week 24, had been received by Public Health Wales Microbiology as at 19/06/2019 (Figure 3).
- During week 24, 117 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(H3N2), one influenza A(H1N1)pdm09, 27 rhinovirus, eight parainfluenza, seven adenovirus, five enterovirus, five human metapneumovirus and three coronavirus, (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 1.7%.
- During week 24, there were no outbreaks of acute respiratory illnesses (ARI) reported to Public Health Wales Health Protection teams.
- At the end of week 19, uptake of influenza vaccine was: 68.3% in those aged 65 years and older, 44.1% in patients aged six months to 64 years at clinical risk, and 49.4% in children aged two and three years. In the 1,373 primary schools visited so far as part of the universal childhood influenza programme, uptake was 69.9%.

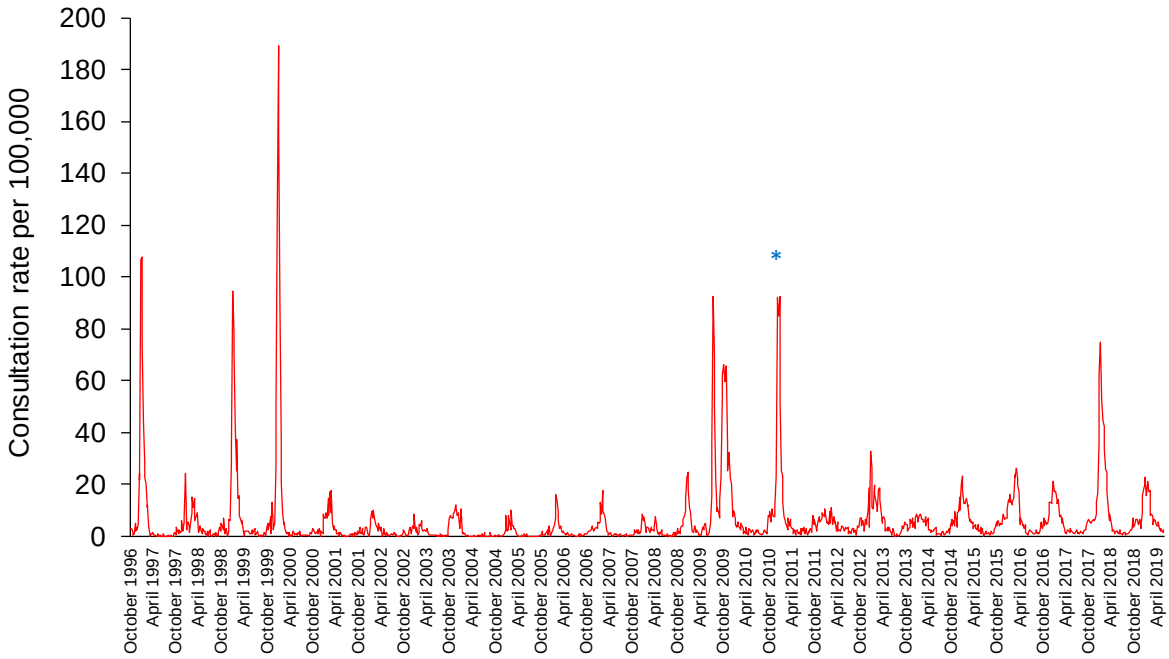
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 16/06/2019).



* 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 10.8 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2017-18 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 47 1996 – week 24 2019).

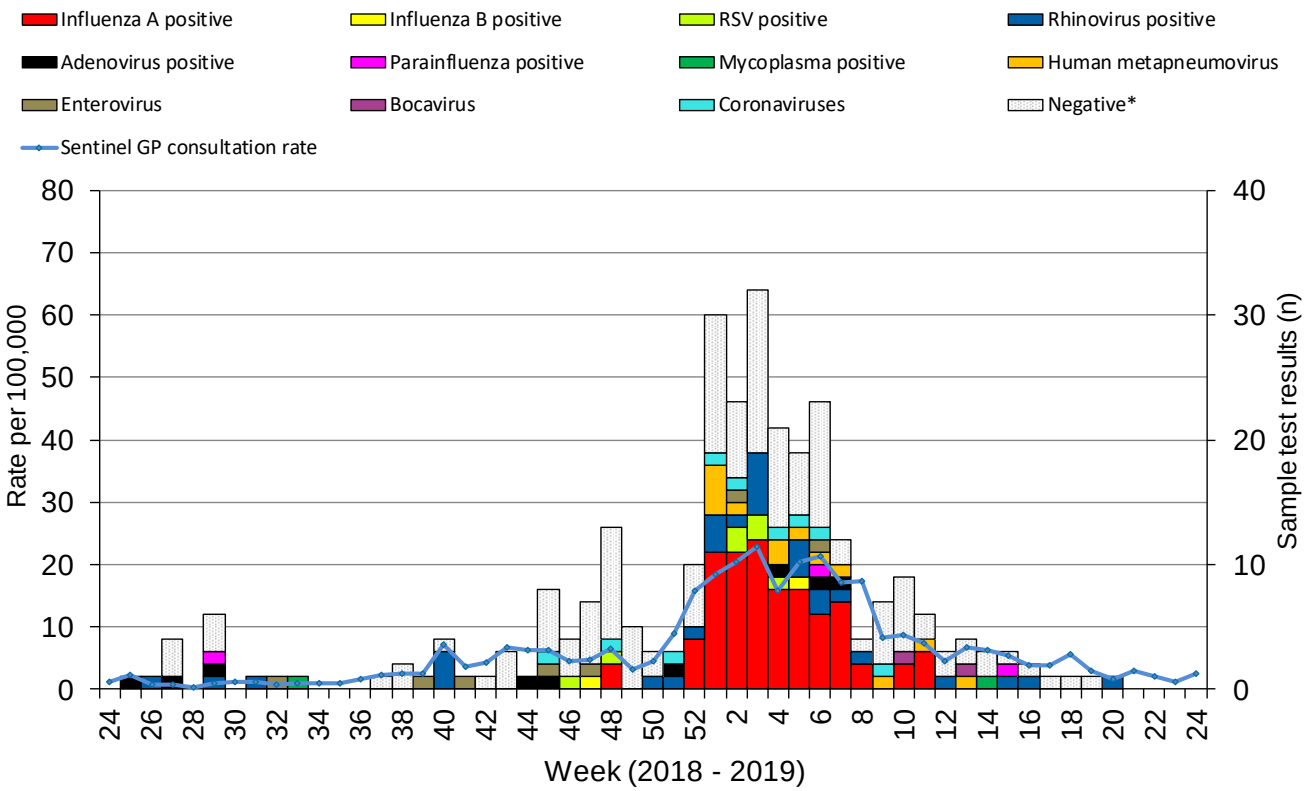


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 19 – week 24 2019 (as of 16/06/2019).

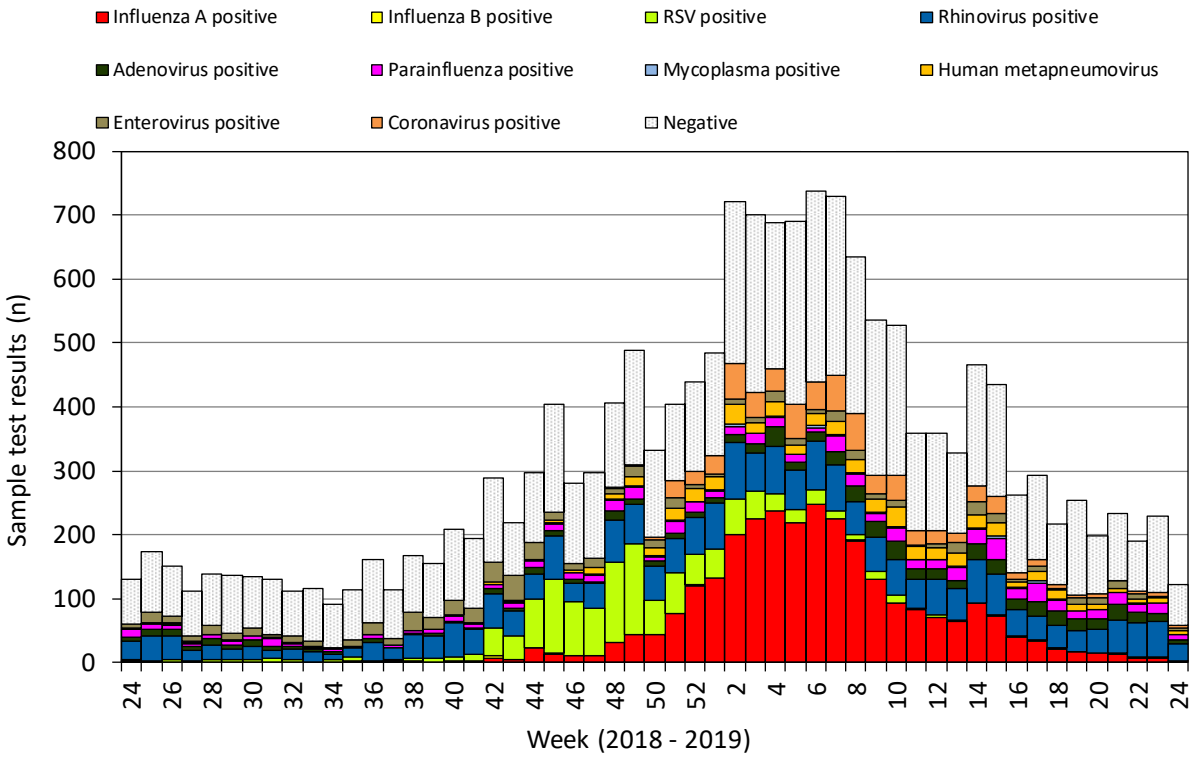
Age group	19	20	21	22	23	24
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	6.2	0.0	6.2	0.0	0.0	0.0
5 - 14	2.3	0.0	4.6	0.0	0.0	0.0
15 - 24	0.0	0.0	0.0	2.2	0.0	0.0
25 - 34	2.0	2.0	2.0	0.0	2.0	4.0
35 - 44	6.3	2.1	4.2	0.0	2.1	2.1
45 - 64	4.6	3.7	2.8	5.6	1.9	4.6
65 - 74	2.2	2.2	4.3	2.2	0.0	2.2
75+	0.0	0.0	2.5	0.0	2.5	2.5
Total	**3.0**	**1.7**	**3.0**	**2.0**	**1.2**	**2.5**

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 16/06/2019, by week of sample collection, week 24 2018 - week 24 2019.



* 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 16/06/2019 by week of sample collection, week 24 2018 – week 24 2019.



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 16/06/2019).

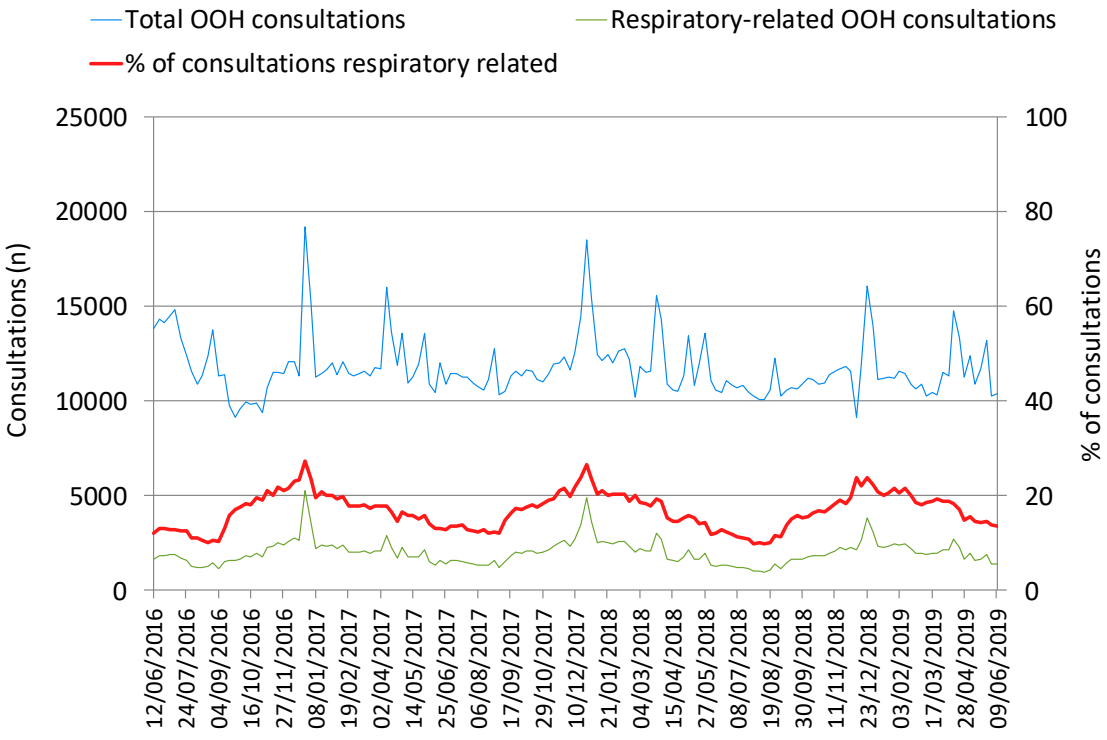
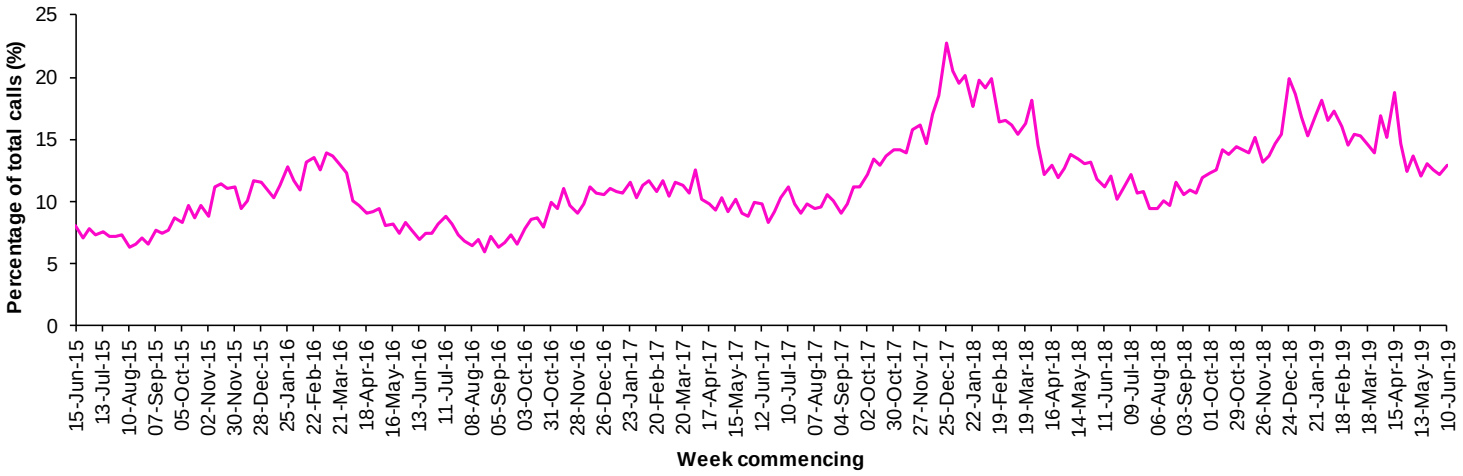


Figure 6. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from week 24 2015 - week 24 2019 (as of 16/06/2019).



[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 15/05/2019).

Influenza immunisation uptake in the 2018/19 season	
People aged 65y and older	68.3%
People younger than 65y in a clinical risk group	44.1%
Children aged two & three years	49.4%
Children aged four to ten years	69.9%
NHS staff	53.4%
NHS staff who have direct patient contact	55.5%

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 22, influenza activity indicators show low levels of activity in the UK. Influenza GP consultations decreased in Scotland to 0.8 per 100,000 and in Northern Ireland to 1.4 per 100,000, and remain below baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 1.6 per 100,000 and remains below the MEM threshold for baseline activity (13.1 per 100,000). Syndromic surveillance indicators for influenza reported through the GP In Hours Syndromic Surveillance system remained low in weeks 21 and 22.
- During week 22, 14 (1.2%) of the 1,619 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (one influenza A(H1N1)pdm09, eight influenza A(H3) and five influenza A(unknown subtype)). 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 20, influenza activity is at or below baseline levels in all reporting countries, indicating a return to interseasonal levels in the WHO European Region. During week 20, a total of 81 sentinel specimens were tested for influenza, none of which were. For more information on European level influenza surveillance see Flu News Europe: http://www.flunewseurope.org/

World update

- The WHO reported on 10/06/19 that in the temperate zones of the southern hemisphere, influenza detections increased overall. The 2019 influenza season appeared to have started earlier than previous years in Australia, Chile, South Africa and New Zealand. In the temperate zone of the northern hemisphere influenza activity returned to inter-seasonal level in most countries.Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 07/06/2019), during the time period from 13/05/19 – 26/05/19, National Influenza Centres and other national influenza laboratories from 100 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 46,002 specimens during that time period, 5,285 were positive for influenza viruses, of which 3,157 were typed as influenza A (620 influenza A(H1N1)pdm09, 1,414 influenza A(H3N2) and 1,123 influenza A(not subtyped)) and 2,128 influenza B (of the characterised influenza B viruses 34 belonged to the B-Yamagata lineage and 1,104 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 16/06/2019, influenza-like illness activity (ILI) is above the seasonal baseline threshold and there has been a significant increase since last week. A higher proportion of illness is due to influenza viruses than is usual at this time of year, influenza A(H3N2) and influenza B/Victoria are currently circulating at similar levels. The positivity rate for samples tested in GPs and hospitals was over 50% is one of the highest for this period in recent years. The 2019 seasonal influenza vaccine strains remain a good match to influenza viruses detected in New Zealand.
  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 (20/05/2019 to 02/06/2019), influenza and influenza-like illness (ILI) activity are high for this time of year compared to previous years. The majority of influenza cases reported were influenza A (87%), and where subtyping were available influenza A(H3N2) was the dominant subtype.
  Source: Australian Influenza Surveillance Report and Activity Updates.
  http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-ozflu-2019.htm

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

- On 17/05/19 WHO reported nine additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including three deaths. Globally, 2,428 laboratory confirmed cases of human infection with MERS-CoV, including 839 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/2019/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/middle-east-respiratory-syndrome-coronavirus
- 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 (10/04/2019 to 10/05/2019) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported:
  http://www.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/
  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:
https://www.hps.scot.nhs.uk/a-to-z-of-topics/influenza/#data
Northern Ireland influenza surveillance:
http://www.publichealth.hscni.net/directorate-public-health/health-protection/influenza
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:
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