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

Wednesday 9th October 2019 (covering week 40 2019)

Current level of influenza activity: *Inter-seasonal levels.*
Trend: *Stable*
Confirmed cases since 2019 week 40: **2** *(50% influenza A(H1N1)pdm09, 50% influenza (not typed).*

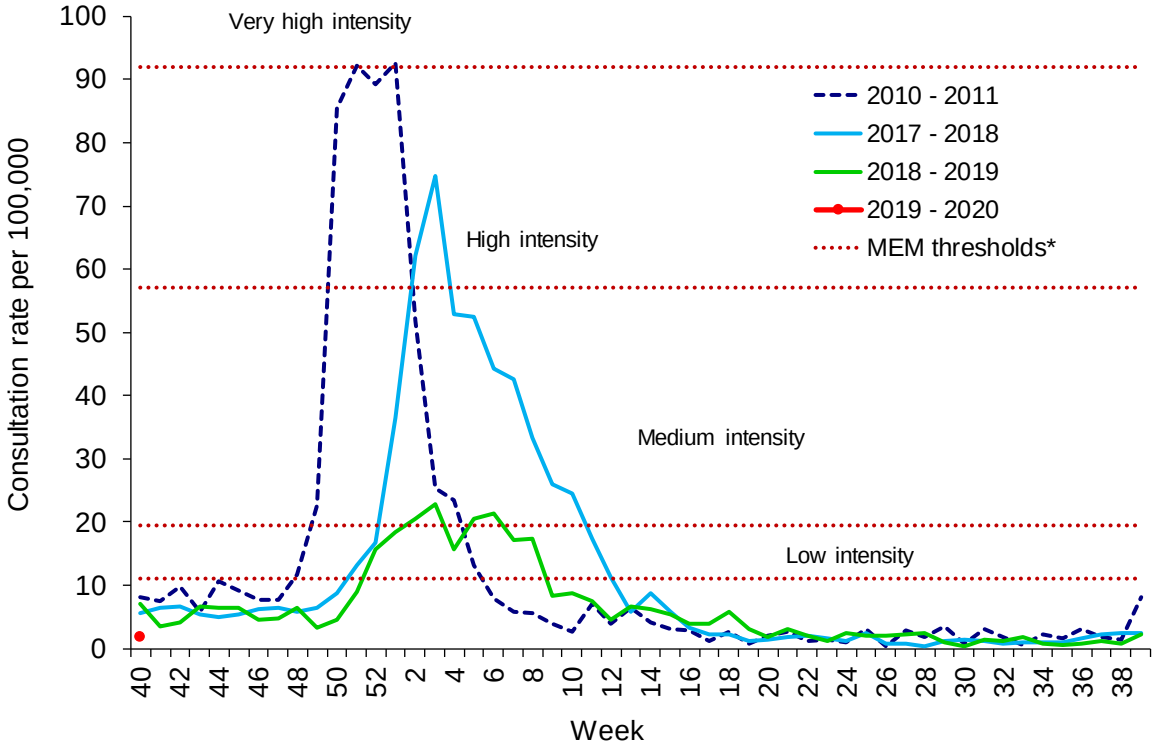
Key points – Wales

<u>Surveillance indicators suggest that influenza is not circulating in Wales.</u>
The sentinel GP consultation rate for influenza-like illness (ILI) remained below baseline levels during week 40 (ending 06/10/2019). During week 40, two cases of influenza were confirmed but rhinovirus remains the most commonly detected cause of Acute Respiratory Infection (ARI). Other causes of ARI continue to be detected.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 40 was 1.7 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate decreased compared to week 39 (2.2 per 100,000), and remains below baseline levels (Figure 1). The consultation rate was highest in patients aged 45-64 years (4.6 per 100,000 practice population) (Table 1).
- The total number of consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 40 was 10,981. The proportion of respiratory-related consultations with OOH doctors increased to 16.1% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 40 decreased to 14.0% (Figure 6).
- No surveillance samples from patients with ILI, collected by sentinel GPs during week 40, had been received by Public Health Wales Microbiology as at 09/10/2019 (Figure 3).
- During week 40, 183 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), 48 rhinovirus, 13 parainfluenza, 13 enterovirus, four adenovirus, three mycoplasma, three RSV and three human metapneumovirus (Figure 4). The proportion of samples from hospital patients positive for influenza was 1.1%.
- During week 40, there were no outbreaks of acute respiratory illnesses (ARI) reported to Public Health Wales Health Protection teams.
- For the 2018/19 influenza season, 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 as part of the universal childhood influenza programme, uptake was 69.9%.

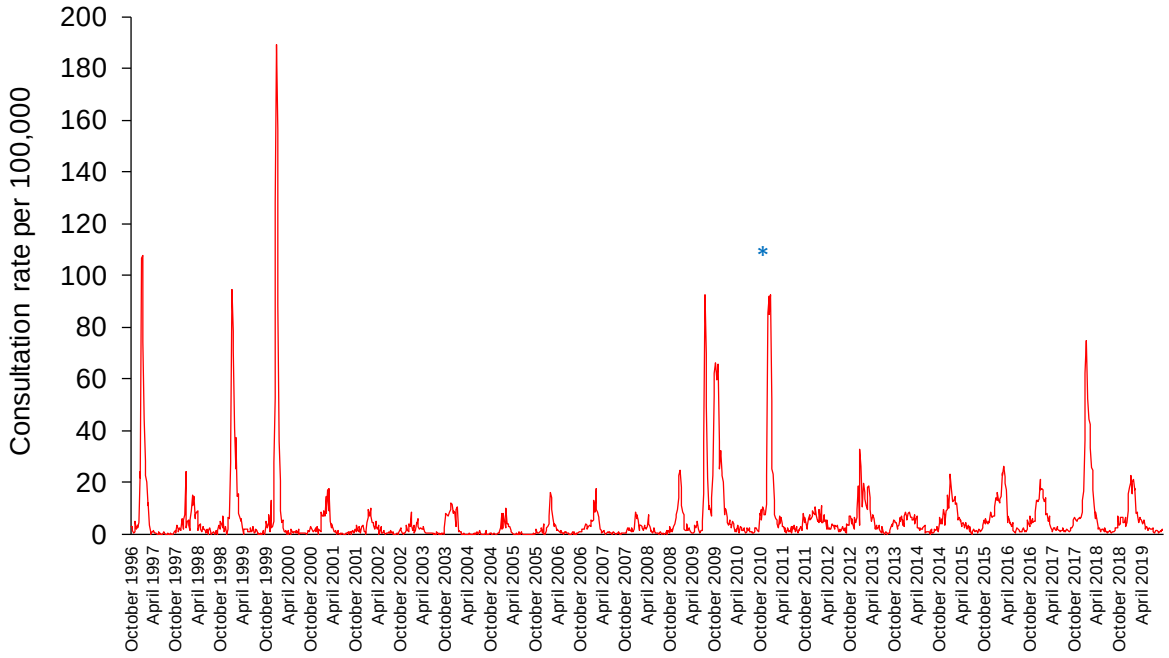
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 06/10/2019).



* 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 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 47 1996 – week 40 2019).

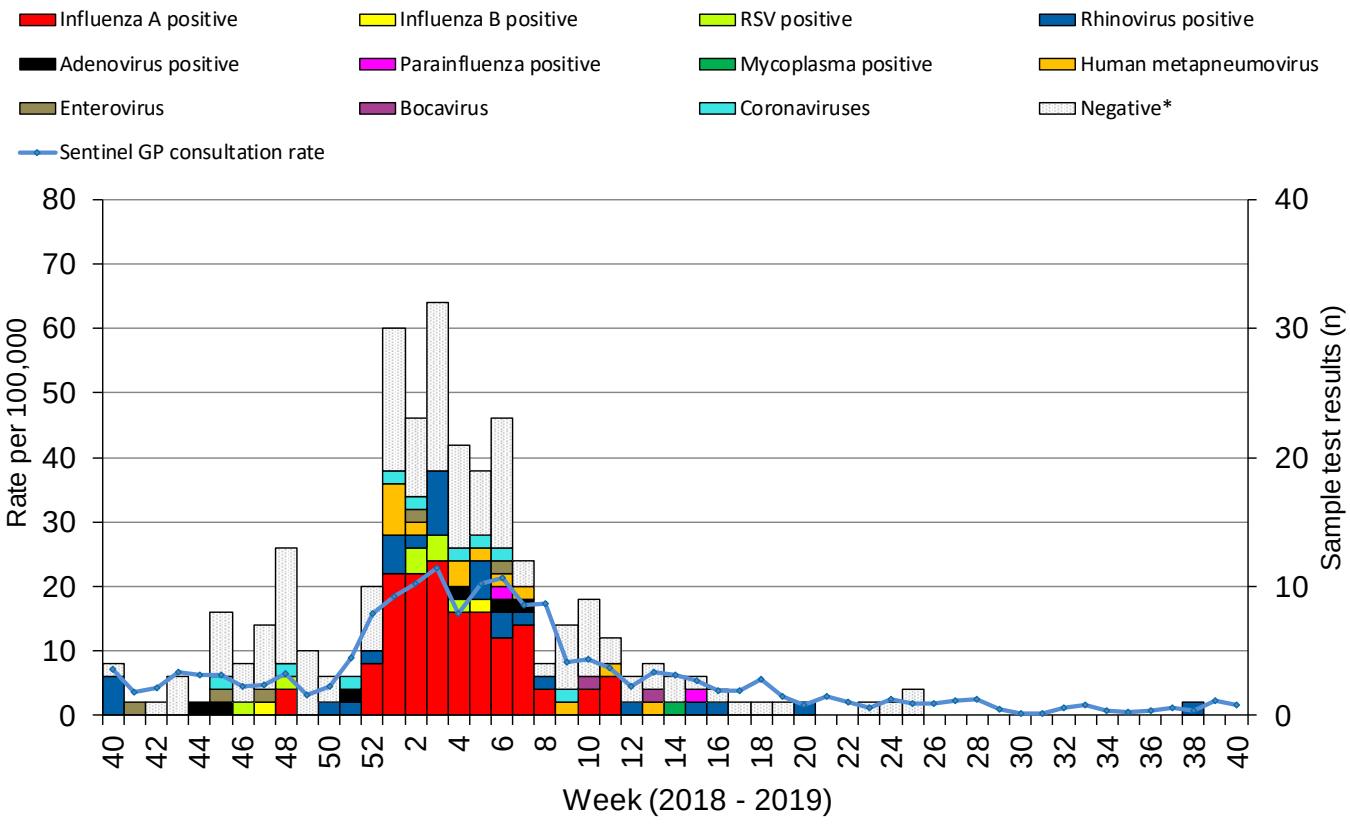


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 35 – week 40 2019 (as of 06/10/2019).

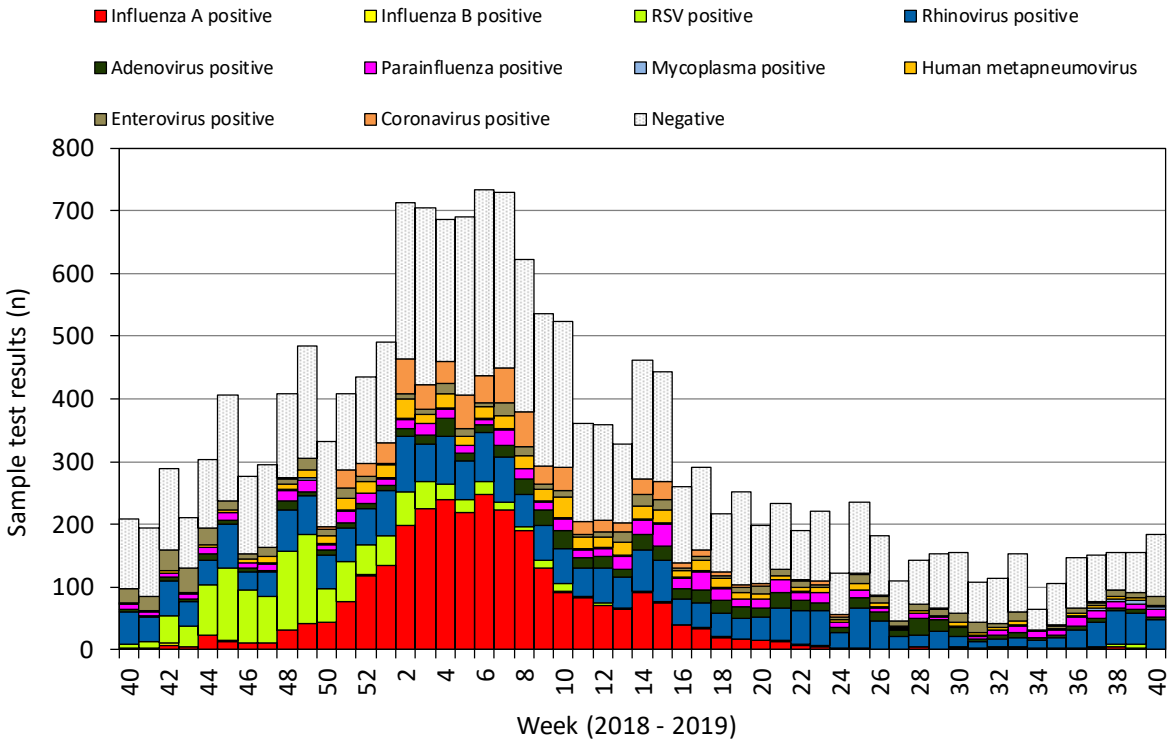
Age group	35	36	37	38	39	40
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	2.2	0.0	0.0	0.0	2.2	0.0
25 - 34	0.0	0.0	2.0	2.0	2.1	0.0
35 - 44	0.0	0.0	0.0	2.1	6.5	0.0
45 - 64	0.0	0.9	2.8	0.0	3.9	4.6
65 - 74	2.1	2.1	2.1	0.0	0.0	4.3
75+	0.0	2.5	0.0	0.0	0.0	0.0
Total	**0.5**	**0.7**	**1.2**	**0.8**	**2.3**	**1.7**

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 06/10/2019, by week of sample collection, week 40 2018 - week 40 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 06/10/2019 by week of sample collection, week 40 2018 – week 40 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 06/10/2019).

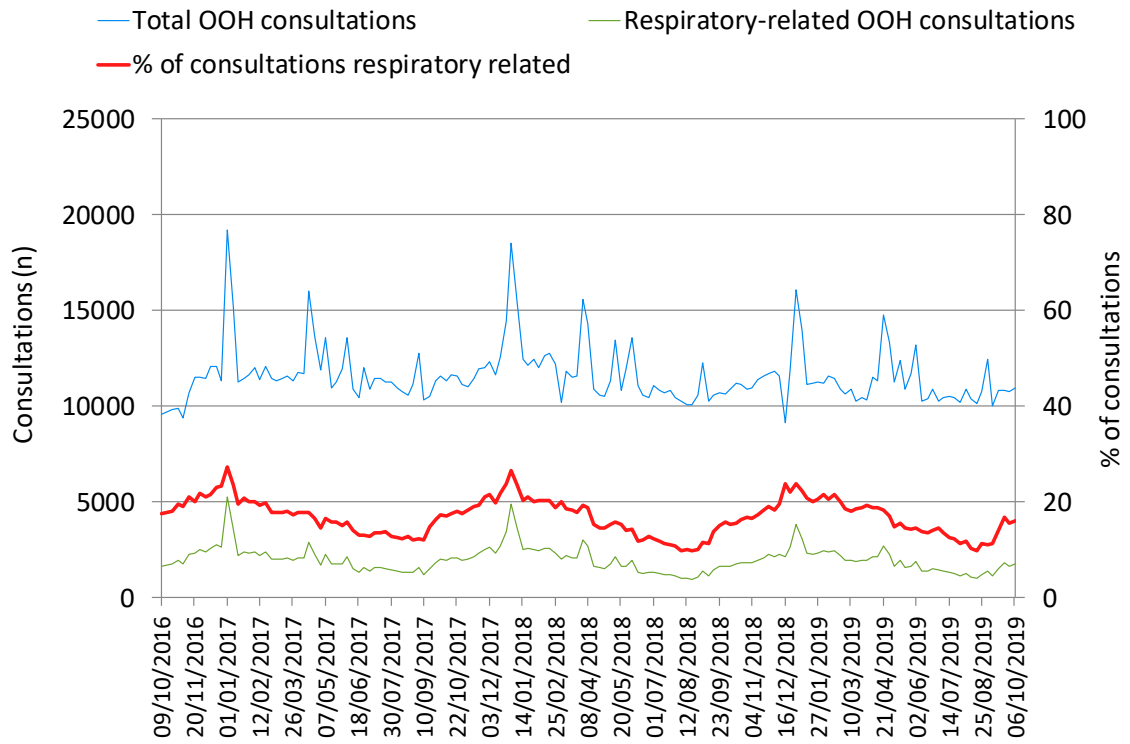
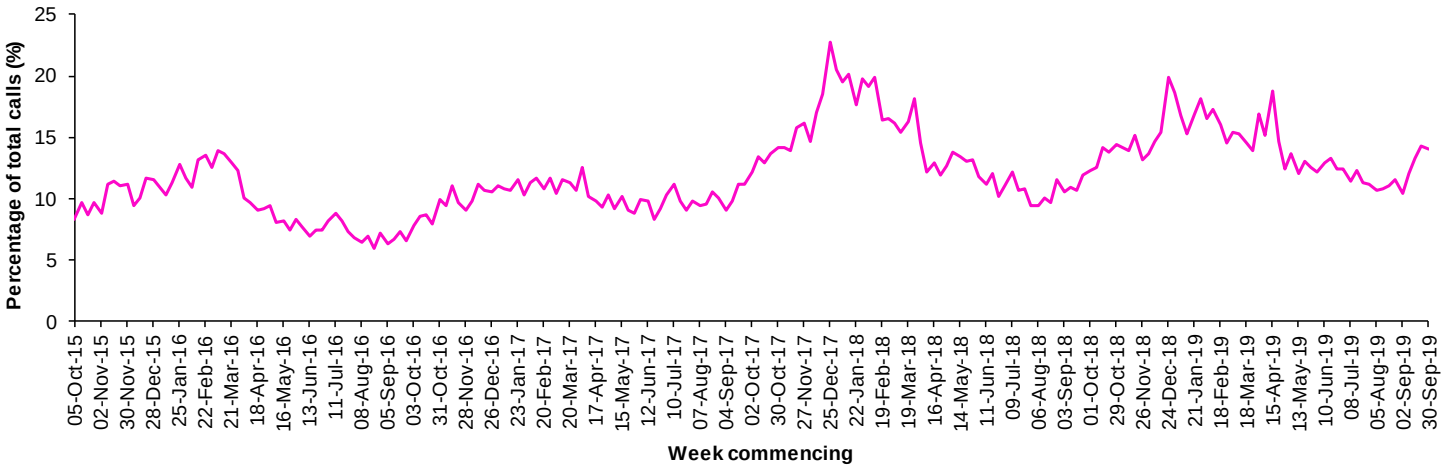


Figure 6. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from week 40 2015 - week 40 2019 (as of 06/10/2019).



[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.

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 2018/19 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 38, influenza activity indicators show low levels of activity in the UK. Influenza GP consultations decreased in Scotland to 1.9 per 100,000 and increased in Northern Ireland to 2.8 per 100,000, but remain below baseline activity. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 2.2 per 100,000 but 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 37 and 38.
- During week 38, eight (1.0%) of the 814 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (four influenza A(H3), two influenza A(not subtyped) 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 39, influenza activity was low, at inter-seasonal levels in the WHO European Region. During week 39, a total of 54 sentinel specimens were tested for influenza, none of which were positive. For more information on European level influenza surveillance see Flu News Europe: http://www.flunewseurope.org/

World update

- The WHO reported on 30/09/2019 that in the temperate zones of the southern hemisphere, influenza activity was low in most countries. Activity was low in the Caribbean and tropical South American countries. In Central American countries, influenza activity continued to increase in El Salvador. In tropical Africa influenza activity was low across reporting countries. In Southern Asia influenza activity was low across most reporting countries. In South East Asia influenza activity was low in most reporting countries, and continued to be reported at moderate level in Malaysia and Myanmar. In the temperate zone of the northern hemisphere influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 27/09/2019), during the time period from 02/09/2019 – 15/09/2019, National Influenza Centres and other national influenza laboratories from 80 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 36,387 specimens during that time period, 2,704 were positive for influenza viruses, of which 1,650 were typed as influenza A (405 influenza A(H1N1)pdm09, 874 influenza A(H3N2) and 371 influenza A(not subtyped)) and 1,054 influenza B (of the characterised influenza B viruses 63 belonged to the B-Yamagata lineage and 292 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 29/09/2019, influenza-like illness activity (ILI) remains below the seasonal baseline threshold. The overall GP ILI rate per 100,000 patients peaked at low levels. Currently, influenza A(H3N2) and influenza B/Victoria are co-circulating. Recent virology reports suggest a mutation in the circulating influenza B/Victoria strain, which may reduce the vaccine effectiveness for this specific influenza virus strain in New Zealand during 2019.
  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 (09/09/2019 to 22/09/2019), influenza and influenza-like illness (ILI) activity is lower than average for this time of year compared to previous years, and is consistent with past activity following a peak in notifications. The 2019 flu season began earlier than usual although overall activity levels have not been unusually high compared to previous seasons. The majority of influenza cases reported were influenza A (77%) although there has also been co-circulation of influenza B. The majority of typed influenza viruses were influenza A(H3N2).
  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 26/09/19 WHO reported six additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including one associated death. Globally, 2,464 laboratory confirmed cases of human infection with MERS-CoV, including 850 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 (25/06/2019 to 27/09/2019) 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:
https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-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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