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

Wednesday 29th May 2019 (covering week 21 2019)

Current level of influenza activity: *Below baseline threshold.*
Trend: *Decreasing*
Confirmed cases since 2018 week 40: **2,877** *(99.4% influenza A and 0.6% influenza B. Of influenza A cases, 46.9% were A(H1N1)pdm09, 26.6% were A(H3) and 26.5% were untyped)*

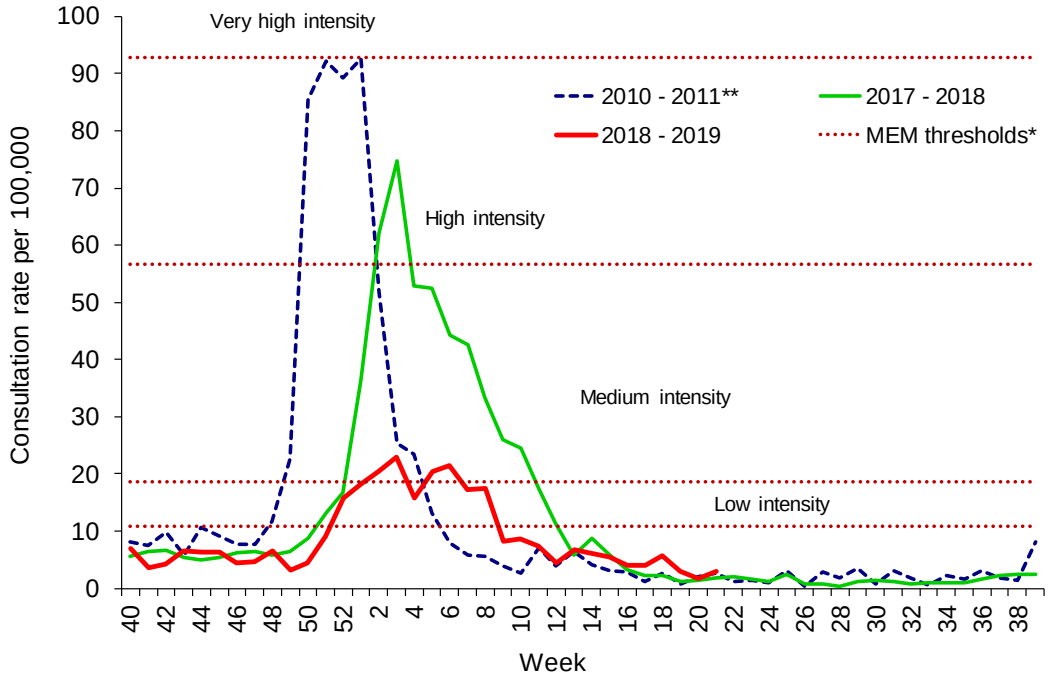
Key points – Wales

Surveillance indicators suggest that influenza is circulating in Wales.
The sentinel GP consultation rate for influenza-like illness (ILI) remained below baseline levels during week 21 (ending 26/05/2019). Weekly numbers of confirmed influenza cases in hospitals have decreased to low levels. Influenza A(H3N2) was dominant during week 21, although A(H1N1)pdm09 remains dominant for the season overall. Rhinovirus is now the most commonly detected cause of Acute Respiratory Infection (ARI) in hospital and non-sentinel GP patients, with 51 confirmed cases. Other causes of ARI, including adenovirus, parainfluenza, enterovirus and human metapneumovirus, also continue to be detected.

- On 24th May, Welsh Government announced that as 2018-19 circulation of influenza viruses in the community has now fallen to baseline levels, general Practitioners and non-medical prescribers should no longer prescribe antiviral medicines (Oseltamivir and Zanamivir) for the prophylaxis and treatment of influenza-like illness in primary care on the NHS. Hospital clinicians may continue to prescribe antivirals for patients whose illness is strongly suspected, or confirmed, to be due to influenza.
- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 21 was 3.0 consultations per 100,000 practice population. The consultation rate was highest in patients aged 1-4 years (6.2 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to week 20 (1.7 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 21 was 11,733. The proportion of respiratory-related consultations with OOH doctors decreased to 14.3% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 21 increased to 13.0% (Figure 6).
- No surveillance samples from patients with ILI, collected by sentinel GPs during week 21, had been received by Public Health Wales Microbiology as at 29/05/2019 (Figure 3).
- During week 21, 220 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: 12 influenza A(H3N2), one influenza A (not typed), 51 rhinovirus, 27 adenovirus, 20 for parainfluenza, 13 enterovirus, seven human metapneumovirus, one coronavirus, (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 5.9%.
- During week 21, 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%.

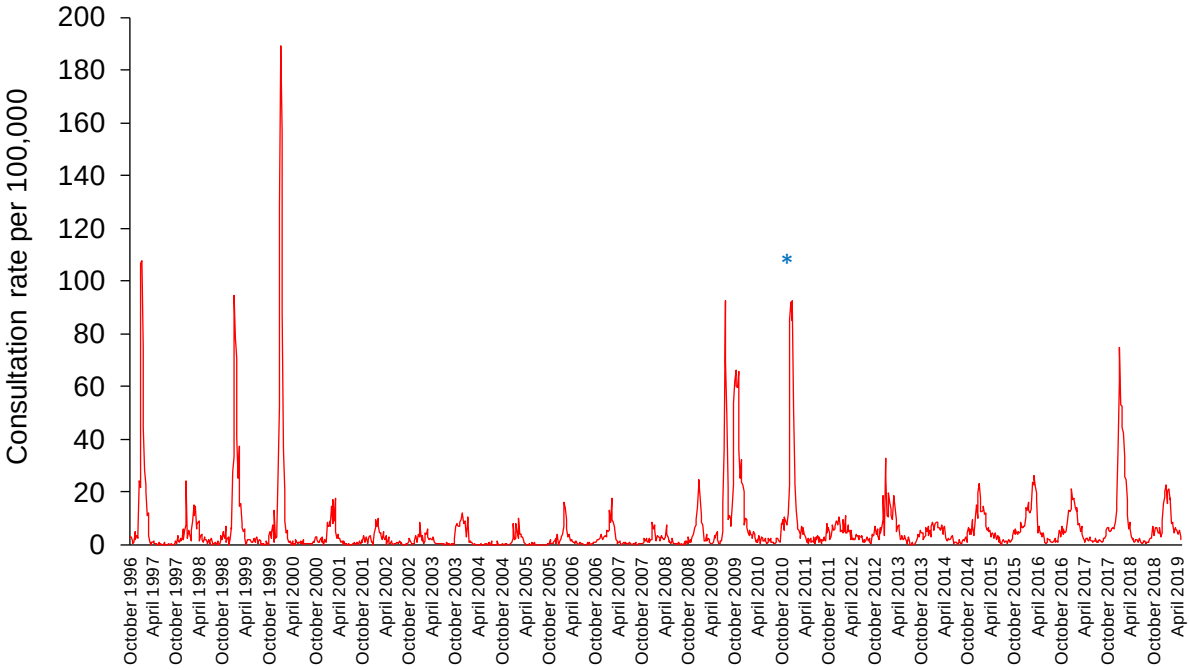
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 29/05/2019).



* 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 21 2019).

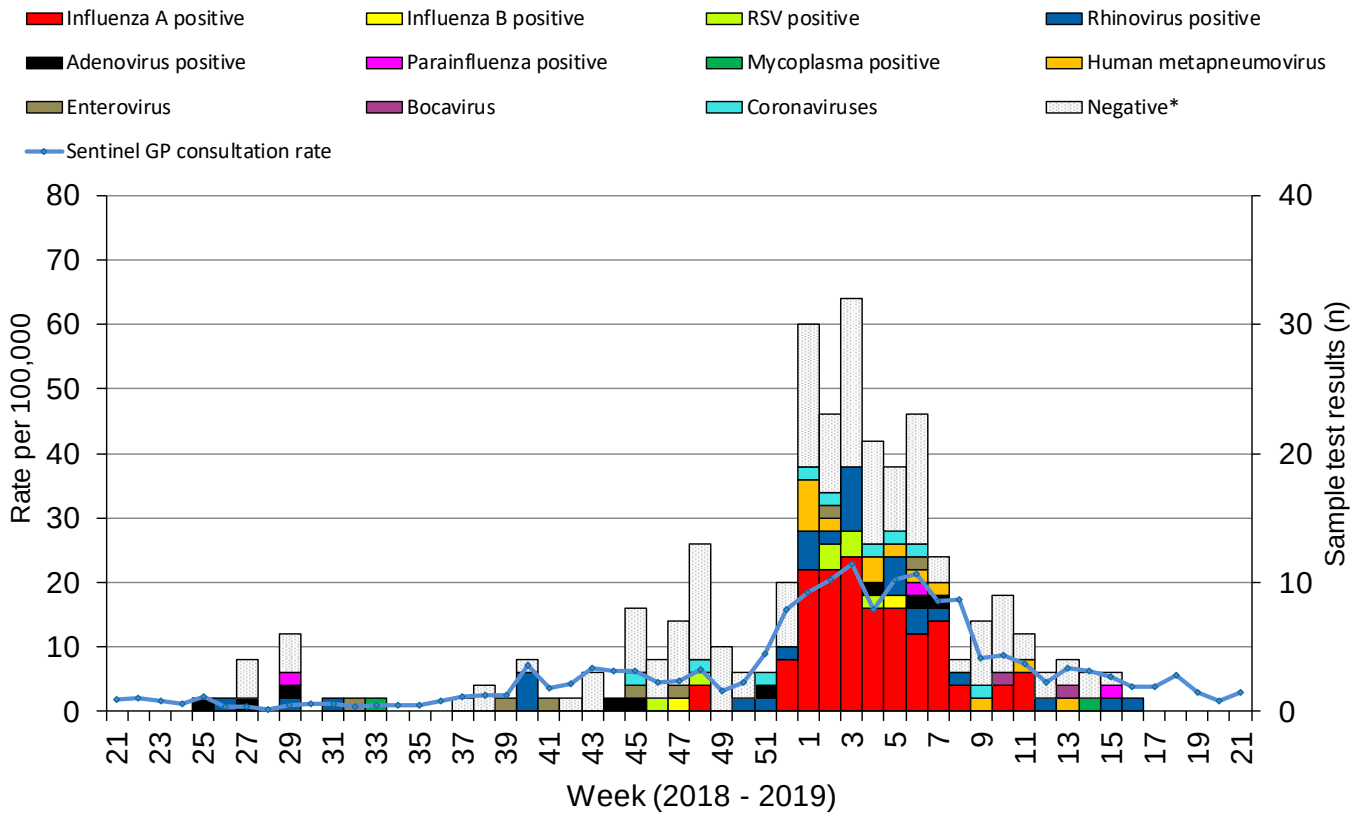


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 16 – week 21 2019 (as of 29/05/2019).

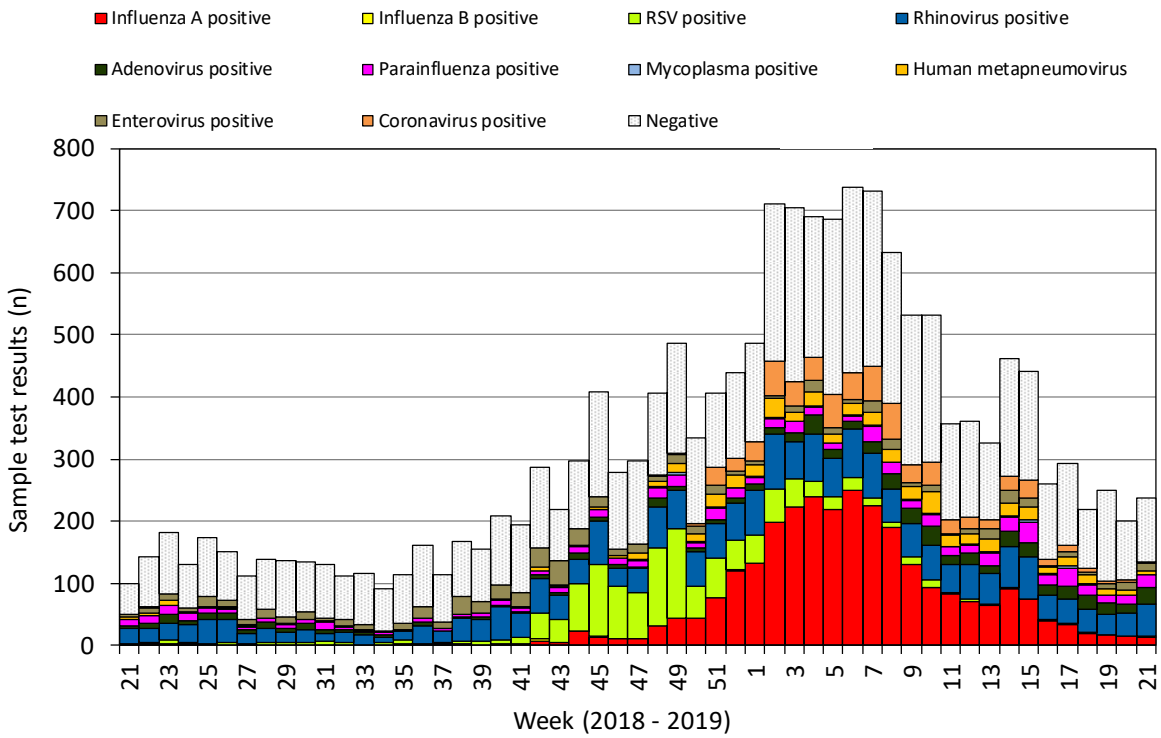
Age group	16	17	18	19	20	21
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	6.2	0.0	6.2
5 - 14	4.6	0.0	0.0	2.3	0.0	4.6
15 - 24	6.4	2.1	6.4	0.0	0.0	0.0
25 - 34	4.0	7.9	7.9	2.0	2.0	2.0
35 - 44	0.0	6.3	10.5	6.3	2.1	4.2
45 - 64	5.6	1.9	4.7	4.6	3.7	2.8
65 - 74	4.3	8.6	6.5	2.2	2.2	4.3
75+	2.5	5.0	7.5	0.0	0.0	2.5
Total	**4.0**	**4.0**	**5.7**	**3.0**	**1.7**	**3.0**

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 29/05/2019, by week of sample collection, week 21 2018 - week 21 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 29/05/2019 by week of sample collection, week 21 2018 – week 21 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 29/05/2019).

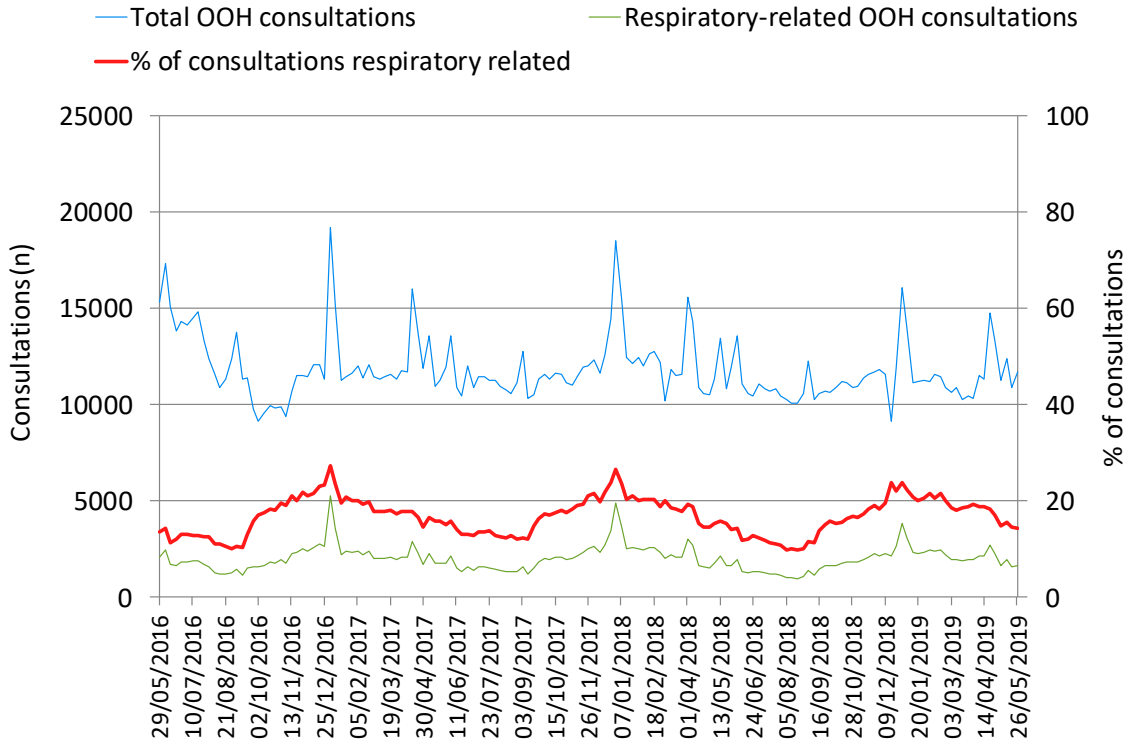
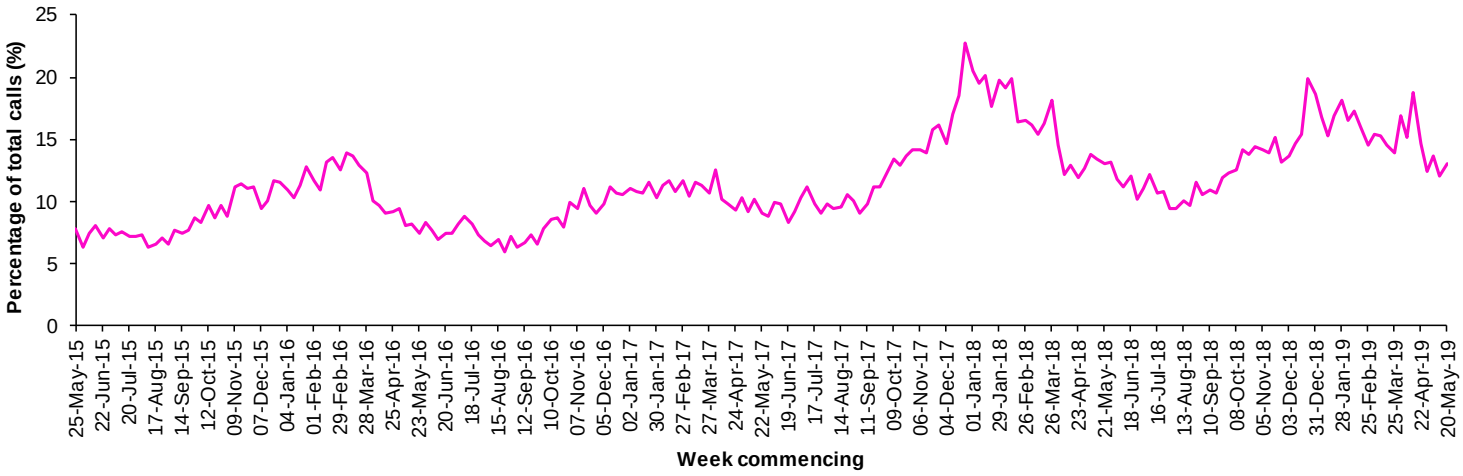


Figure 6. Influenza related calls to NHS Direct Wales[1] (as a percentage of total calls) from week 21 2015 - week 21 2019 (as of 29/05/2019).



[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 20, influenza activity indicators have decreased below baseline consistent with influenza no longer circulating widely in the community in the UK. Influenza GP consultations increased in Scotland to 2.3 per 100,000 and remained stable in Northern Ireland at 2.3 per 100,000, but remain below baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 2.2 per 100,000 and remains below the MEM threshold for baseline activity (13.1 per 100,000). The weekly ILI consultation rate through the GP In Hours Syndromic Surveillance system was at 1.8 per 100,000 during week 20.
- During week 20, no samples tested positive for influenza through UK GP sentinel swabbing schemes. Of the 1,619 respiratory test results reported through Public Health England's DataMart scheme, there were 38 (2.3%) positive for influenza (one influenza A(H1N1)pdm09, 20 influenza A(H3), 16 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 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, none of which were confirmed as influenza. For more information on European level influenza surveillance see Flu News Europe: http://www.flunewseurope.org/

World update

- The WHO reported on 27/05/19 that in the temperate zones of the southern hemisphere, influenza detections increased overall. In the temperate zones of the northern hemisphere, influenza detections decreased overall.
- Based on FluNet reporting (as of 24/05/2019), during the time period from 29/04/19 – 12/05/19, National Influenza Centres and other national influenza laboratories from 111 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 80,173 specimens during that time period, 7,693 were positive for influenza viruses, of which 4,383 were typed as influenza A (707 influenza A(H1N1)pdm09, 1,578 influenza A(H3N2) and 2,098 influenza A(not subtyped)) and 3,310 influenza B (of the characterised influenza B viruses 63 belonged to the B-Yamagata lineage and 2,075 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 19/05/2019, influenza-like illness activity (ILI) is low but steadily increasing at expected rates for this time of year. However, 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. The positivity rate for samples tested in GPs and hospitals is one of the highest for this period in recent years.
  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 (06/05/2019 to 19/05/2019), 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 (13/02/2019 to 09/04/2019) reports that one new case of avian influenza A(H7N9) was reported. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 615 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:
http://www.hps.scot.nhs.uk/resp/seasonalinfluenza.aspx
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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