

Current level of influenza activity: *Circulation at low levels.*

Trend: *Decreasing*

Confirmed cases since 2018 week 40: 2,795 (99.5% influenza A and 0.5% influenza B. Of influenza A cases, 47.9% were A(H1N1)pdm09, 25.2% were A(H3) and 26.9% were untyped)

Key points – Wales

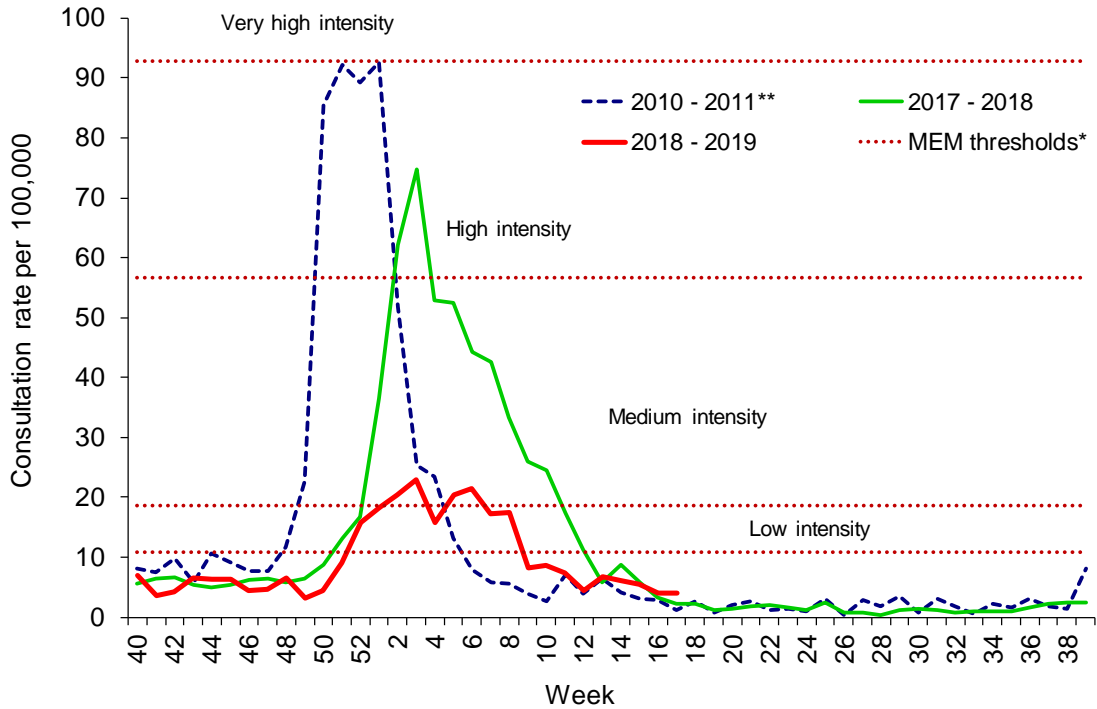
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) remained below baseline levels during week 17 (ending 28/04/2019). Influenza continues to be confirmed in patients with ILI, particularly those attending hospitals. Influenza A(H3N2) was dominant during week 17, 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 39 confirmed cases. Other causes of ARI, including parainfluenza, adenovirus and human metapneumovirus, also continue to be detected.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 17 was 4.0 consultations per 100,000 practice population. The consultation rate was highest in patients aged 65-74 years (8.6 per 100,000 practice population) (Table 1).
- The ILI consultation rate remained stable compared to week 16 (4.0 per 100,000), and 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 17 was 13,352. The proportion of respiratory-related consultations with OOH doctors decreased to 17.1% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 17 decreased to 14.6% (Figure 6).
- No surveillance samples from patients with ILI, collected by sentinel GPs during week 17, had been received by Public Health Wales Microbiology as at 01/05/2019 (Figure 3).
- During week 17, 288 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: 26 influenza A(H3N2), eight influenza A (not typed), two influenza B, 39 rhinovirus, 28 for parainfluenza, 22 adenovirus, 15 human metapneumovirus, 10 coronavirus, eight enterovirus and four mycoplasma (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 12.5%.
- During week 17, there was one outbreak of acute respiratory illnesses (ARI) reported to Public Health Wales Health Protection teams, the outbreak was in the community.
- At the end of week 16, uptake of influenza vaccine was: 68.2% in those aged 65 years and older, 44.0% in patients aged six months to 64 years at clinical risk, and 49.3% 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%.

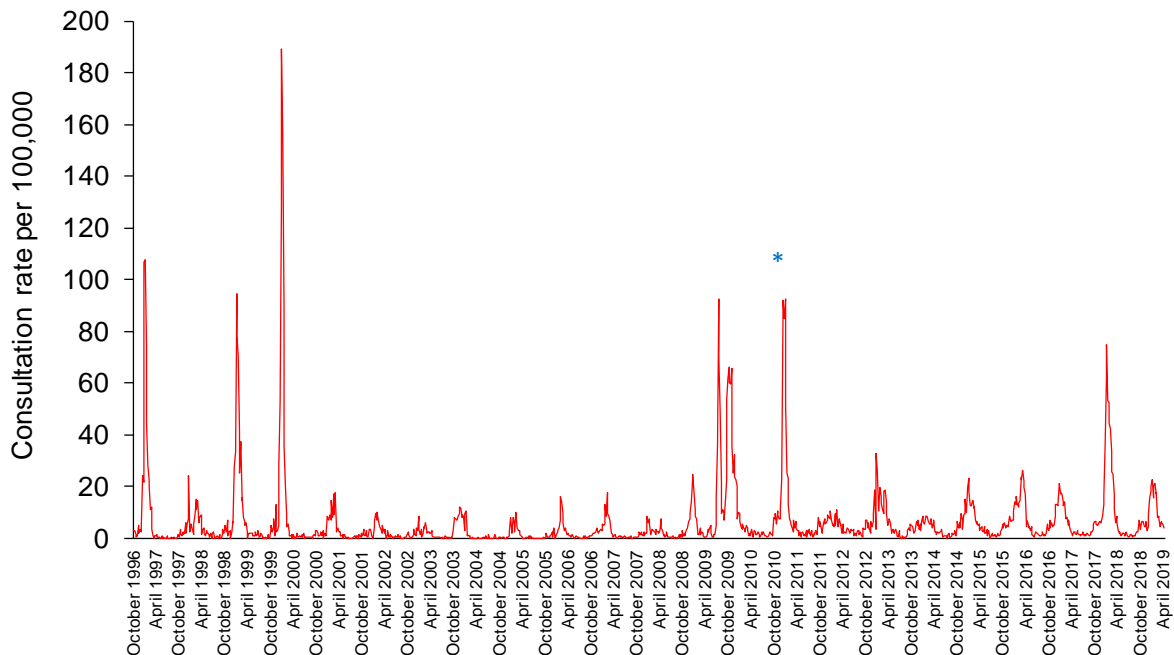
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 01/05/2019).



* 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 17 2019).

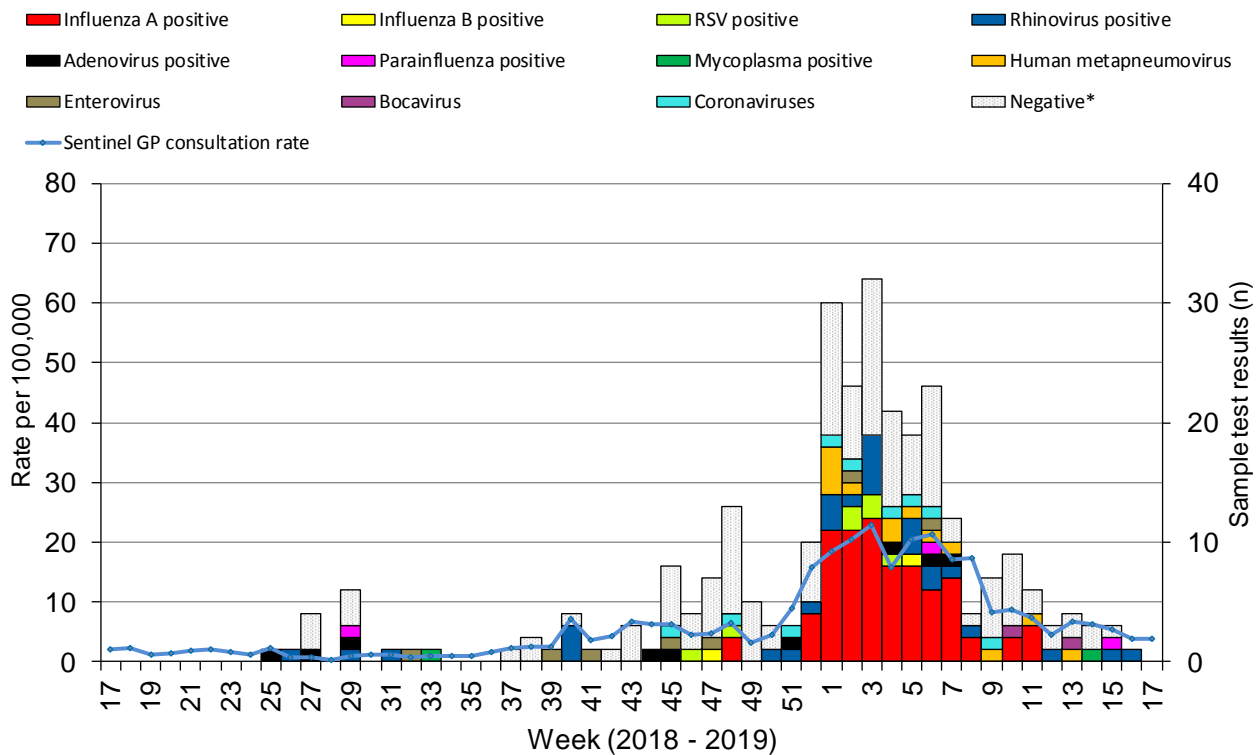


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 12 – week 17 2019 (as of 01/05/2019).

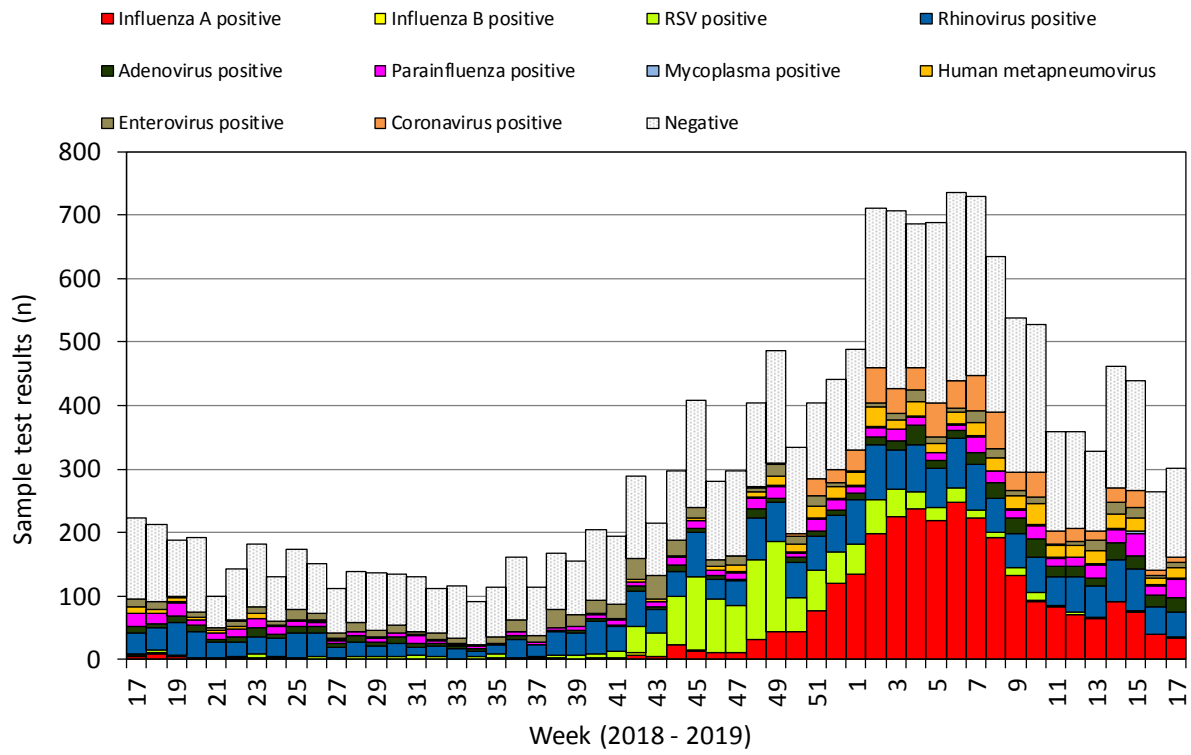
| Age group | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|------------|------------|------------|------------|------------|------------|
| < 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 - 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 - 14 | 2.3 | 4.6 | 4.6 | 4.6 | 4.6 | 0.0 |
| 15 - 24 | 4.3 | 0.0 | 12.7 | 8.5 | 6.4 | 2.1 |
| 25 - 34 | 5.9 | 17.8 | 5.9 | 9.9 | 4.0 | 7.9 |
| 35 - 44 | 4.2 | 10.4 | 6.3 | 4.2 | 0.0 | 6.3 |
| 45 - 64 | 3.7 | 7.4 | 8.3 | 6.5 | 5.5 | 1.9 |
| 65 - 74 | 6.4 | 4.3 | 2.1 | 4.3 | 4.3 | 8.6 |
| 75+ | 7.5 | 2.5 | 2.5 | 0.0 | 2.5 | 5.0 |
| Total | 4.5 | 6.7 | 6.2 | 5.4 | 4.0 | 4.0 |

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 01/05/2019, by week of sample collection, week 17 2018 - week 17 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 01/05/2019 by week of sample collection, week 17 2018 – week 17 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 01/05/2019).

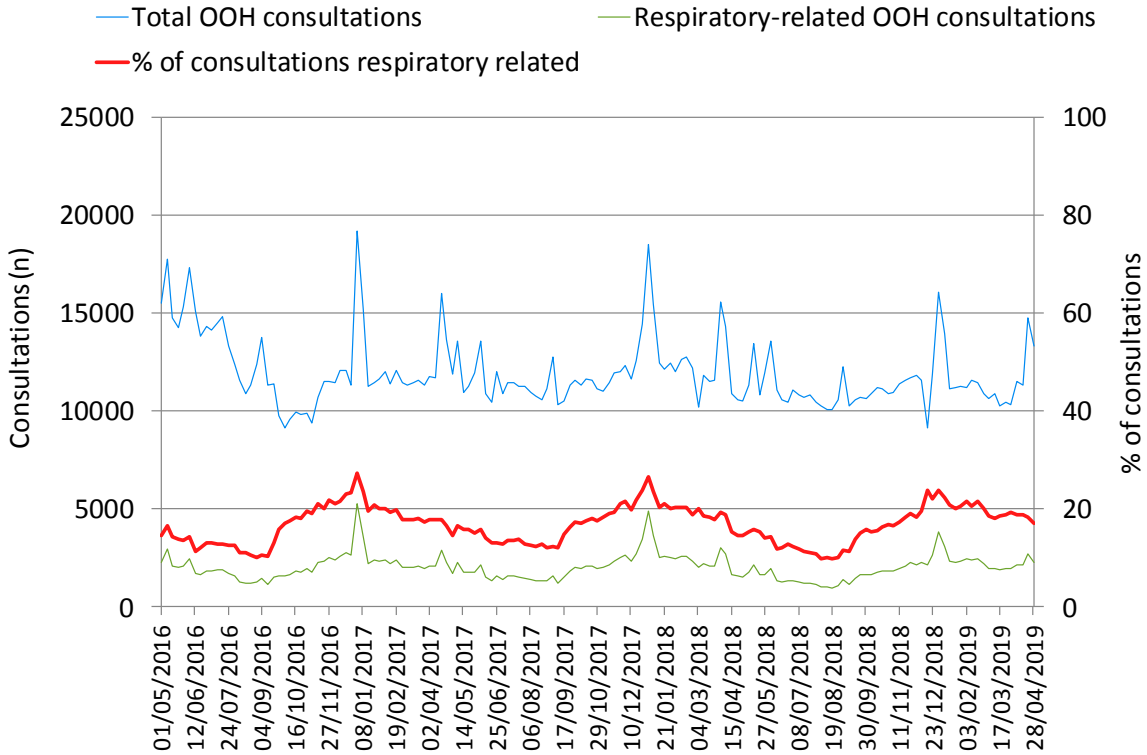
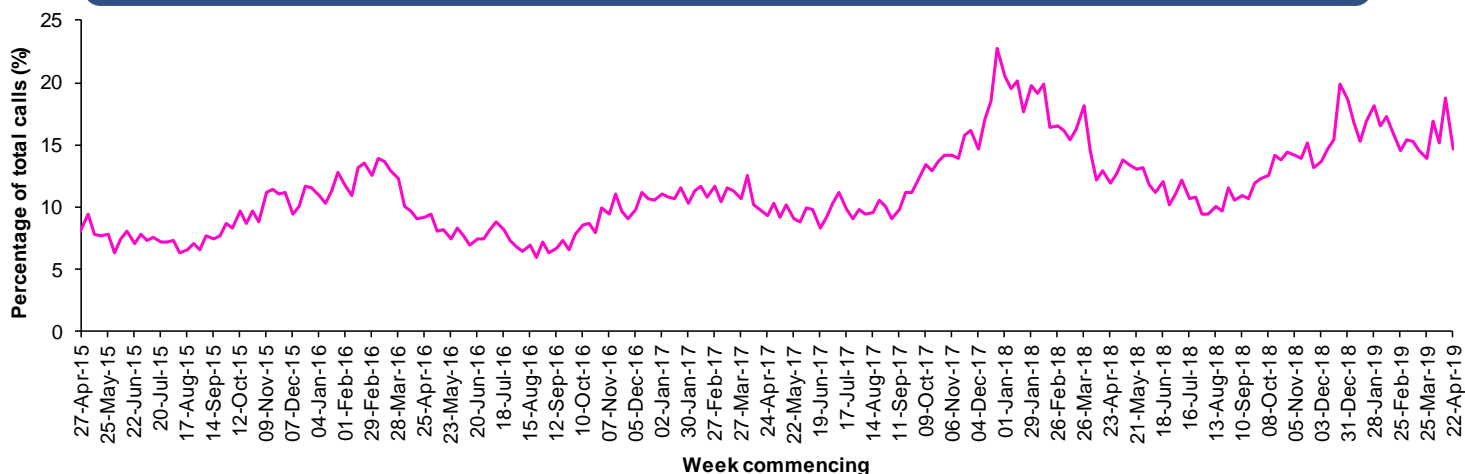


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 17 2015 - week 17 2019 (as of 01/05/2019).



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 23/04/2019).

| Influenza immunisation uptake in the 2018/19 season | |
|---|-------|
| People aged 65y and older | 68.2% |
| People younger than 65y in a clinical risk group | 44.0% |
| Children aged two & three years | 49.3% |
| Children aged four to ten years* | 69.9% |
| NHS staff | 53.4% |
| NHS staff who have direct patient contact | 55.5% |

* In school sessions carried out so far.

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 16, influenza continued to circulate in the community with activity indicators decreasing and below baseline in the UK. Influenza GP consultations decreased in Scotland to 2.9 per 100,000 and decreased in Northern Ireland to 3.6 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 3.4 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 3.2 per 100,000 during week 16.
- During week 16, four samples tested positive for influenza through UK GP sentinel swabbing schemes. Of the 2,086 respiratory test results reported through Public Health England's DataMart scheme, there were 137 (6.6%) positive for influenza (three influenza A(H1N1)pdm09, 84 influenza A(H3N2), 49 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 16, influenza activity is widespread in only a small number of countries in the WHO European Region. During week 16, a total of 429 sentinel specimens were tested for influenza, 72 (16.8%) of which were positive (six influenza A(H1N1)pdm09, 25 influenza A(H3N2) and 41 influenza A not subtyped). For more information on European level influenza surveillance see Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 29/04/19 that in the temperate zones of the northern hemisphere, influenza activity decreased overall. In the temperate zones of the southern hemisphere, influenza detections increased in southern Australia and South Africa. Influenza activity remained at inter-seasonal levels in South America. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 26/04/2019), during the time period from 01/04/19 – 14/04/19, National Influenza Centres and other national influenza laboratories from 124 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 137,187 specimens during that time period, 20,772 were positive for influenza viruses, of which 17,422 were typed as influenza A (1,917 influenza A(H1N1)pdm09, 3,922 influenza A(H3N2) and 11,583 influenza A(not subtyped)) and 3,350 influenza B (of the characterised influenza B viruses 108 belonged to the B-Yamagata lineage and 1,196 to the B-Victoria lineage).

Source: WHO influenza update:

http://www.who.int/influenza/surveillance_monitoring/updates/en/

Update on influenza activity in North America

- The USA Centers for Disease Control and Prevention (CDC) report that during week 16 (ending 20/04/19) influenza activity continues to decrease in the United States. Nationally, 171,607 (16.3%) out of 1,051,664 specimens have tested positive for influenza since week 40, of these positives 163,602 (95.3%) were influenza A and 8,005 (4.7%) were influenza B. Further characterisation has been carried out on 73,182 specimens by public health laboratories, and 39,096 tested positive for influenza, 37,802 (96.7%) were influenza A (21,130 influenza A(H1N1)pdm09 (58.0%), 15,270 influenza (H3N2) (42.0%), and subtyping was not performed on 1,402 specimens) and 1,294 influenza B (3.3%).
- The Public Health Agency of Canada reported that during week 16, the second smaller wave of influenza activity, dominated by influenza A(H3N2), decreased this week in Canada. During week 16 the percentage of visits to healthcare professionals that were due to ILI was 0.8%. The percentage of tests positive for influenza decreased to 17% in week 16.

Source: Public Health Agency of Canada

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html>

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

- On 24/04/19 WHO reported 22 additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including four deaths. Globally, 2,399 laboratory confirmed cases of human infection with MERS-CoV, including 827 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: <http://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:

surveillance.requests@wales.nhs.uk