

Current level of influenza activity: *Influenza is circulating at low levels*

Trend: *Stable*

Confirmed cases since 2018 week 40: 2141 (99.5% influenza A and 0.5% influenza B. Of influenza A cases, 58.1% were A(H1N1)pdm09, 11.7% were A(H3) and 30.2% were untyped)

Key points – Wales

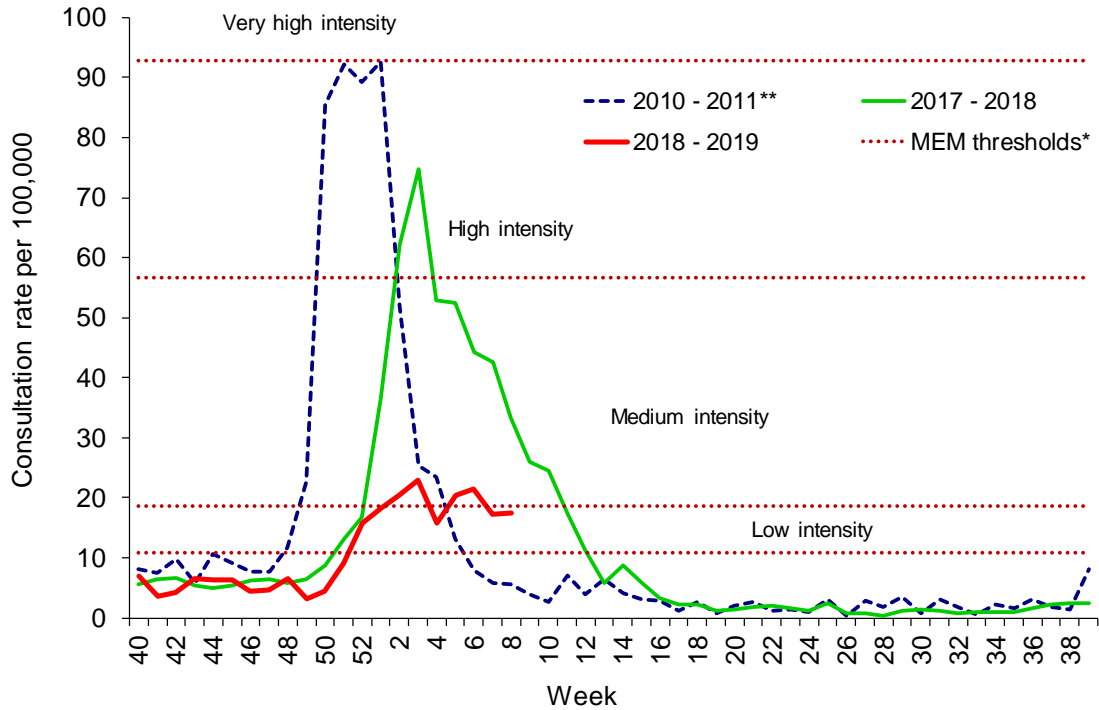
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) increased during week 08 (ending 24/02/2019) but remains at low intensity levels. Influenza was the most commonly detected cause of Acute Respiratory Infection (ARI) in hospital and non-sentinel GP patients, with 192 confirmed cases. Influenza A(H1N1)pdm09 is currently dominant. An increasing number of influenza A(H3N2) cases have also been confirmed in recent weeks. Other causes of ARI, including coronavirus, rhinovirus, adenovirus, human metapneumovirus and parainfluenza continue to be detected in addition to influenza.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 08 was 17.5 consultations per 100,000 practice population. The consultation rate was highest in patients aged 25-34 years (25.9 per 100,000 practice population) (Table 1).
- The ILI consultation rate was stable compared to week 07 (17.2 per 100,000), below the medium level intensity threshold, but above the low level intensity threshold (10.8 per 100,000) (Figure 1). Based on sentinel ILI consultation data from 2010 to 2018, an average influenza season in Wales lasts 14 weeks and 2019 week 08 was the 9th week of the season.
- The total number of consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 08 was 10,911. The proportion of respiratory-related consultations with OOH doctors decreased to 20.2% from 21.6% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 08 decreased to 16.1% (Figure 6).
- Three surveillance samples from patients with ILI, collected by sentinel GPs during week 08, had been received by Public Health Wales Microbiology as at 27/02/2019, two samples tested positive for influenza A(H1N1)pdm09 (one patient aged 5-14 from Mid and West Wales, and one patient aged 35-44 from Mid and West Wales), and one sample tested positive for rhinovirus. A further 10 samples collected during week 07 had been received by Public Health Wales Microbiology, five tested positive for influenza A(H1N1)pdm09, two tested positive for influenza A(H3), one tested positive for rhinovirus, one tested positive for adenovirus and human metapneumovirus.
- During week 08, 593 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: 68 influenza A(H1N1)pdm09, 62 influenza A(H3N2), 62 influenza A (not typed), 57 for coronavirus, 52 for rhinovirus, 25 for adenovirus, 21 for human metapneumovirus, 18 for parainfluenza, 17 for enterovirus, 9 for RSV and one for mycoplasma (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 32.4%.
- During week 08, seven outbreaks of acute respiratory illnesses (ARI) were reported to Public Health Wales Health Protection teams, six outbreaks were in a hospital, three of which were confirmed as influenza (not typed), and one outbreak was in a residential home, confirmed as influenza A(H3N2).
- At the end of week 08, uptake of influenza vaccine was: 68.2% in those aged 65 year and older, 43.5% in patients aged six months to 64 years at clinical risk, and 49.0% in children aged two and three years. In the 1,296 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 27/02/2019).



* 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 08 2019).

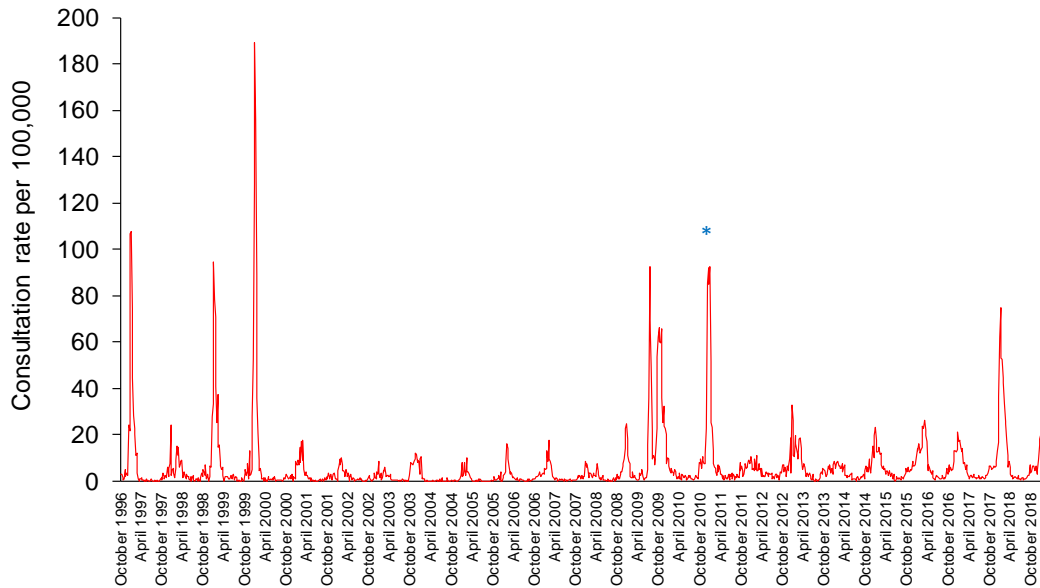
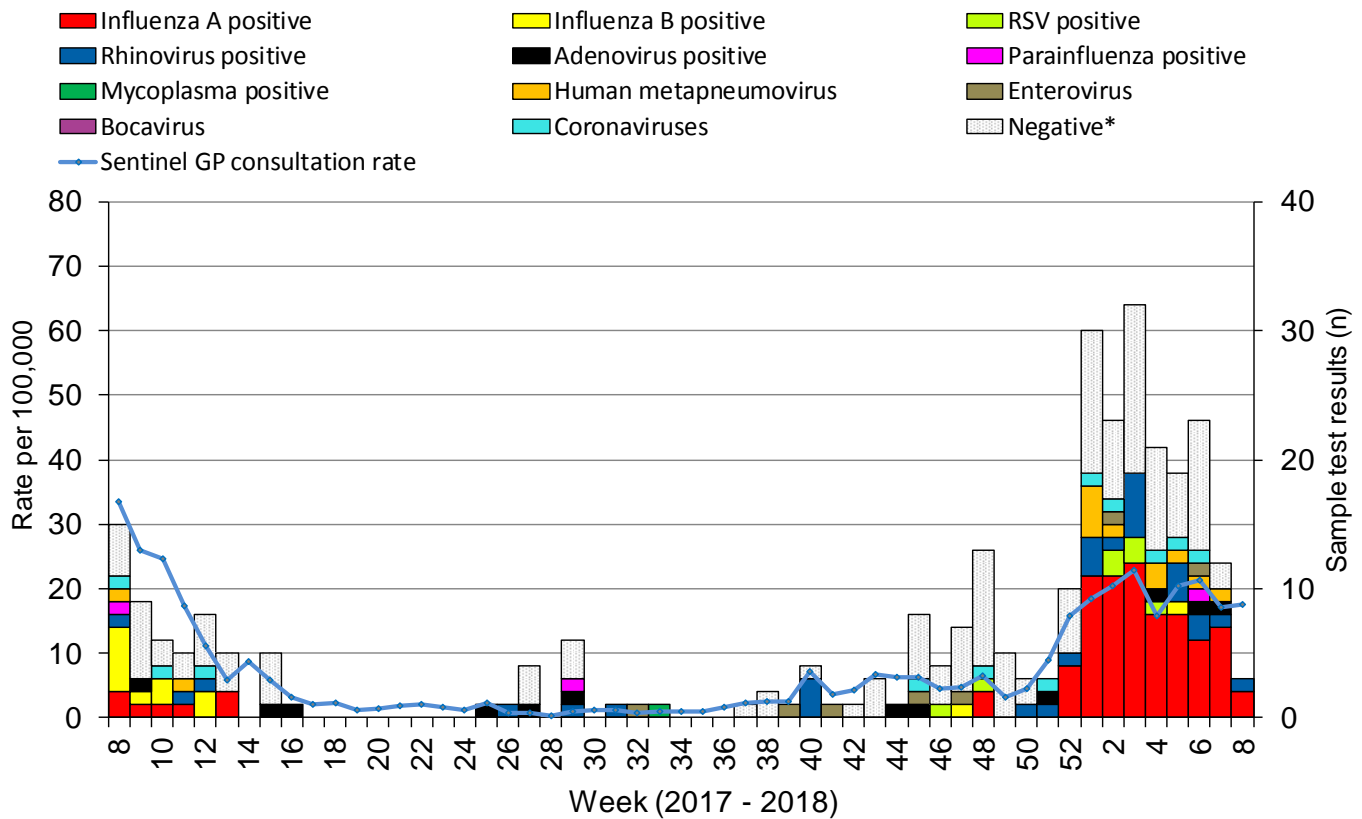


Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 03 – week 08 2019 (as of 27/02/2019).

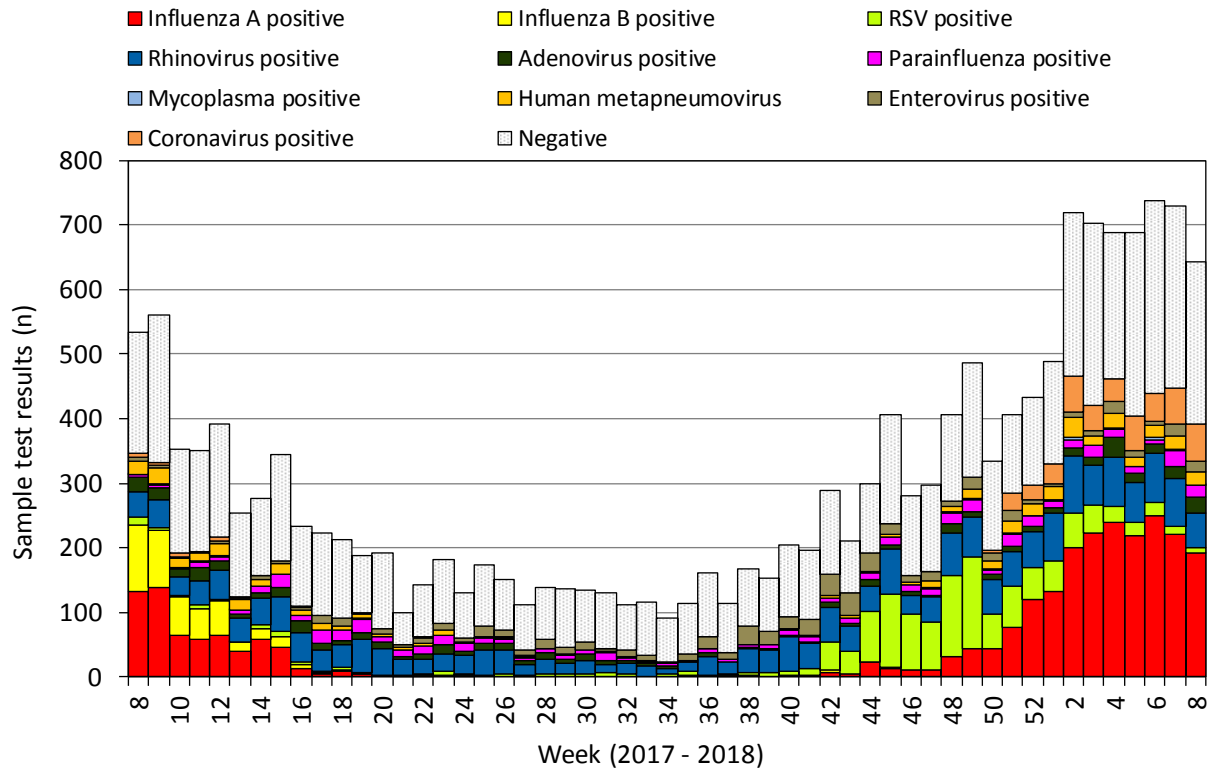
Age group	3	4	5	6	7	8
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	12.3	43.1	37.0	6.2	12.4	6.2
5 - 14	13.8	4.6	20.7	9.2	4.6	2.3
15 - 24	19.1	8.5	17.1	27.7	8.5	23.5
25 - 34	35.8	21.9	29.9	15.9	17.9	25.9
35 - 44	29.4	27.3	25.2	46.2	27.3	23.1
45 - 64	29.8	18.6	22.3	27.9	29.8	24.2
65 - 74	15.1	4.3	8.6	15.1	6.5	6.5
75+	10.1	10.1	10.1	2.5	10.1	10.1
Total	22.9	15.7	20.4	21.4	17.2	17.5

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 27/02/2019, by week of sample collection, week 08 2018 - week 08 2019 .
Reporting changed to Audit+ surveillance system



* 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 27/02/2019 by week of sample collection, week 08 2018 – week 08 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 26/02/2019).

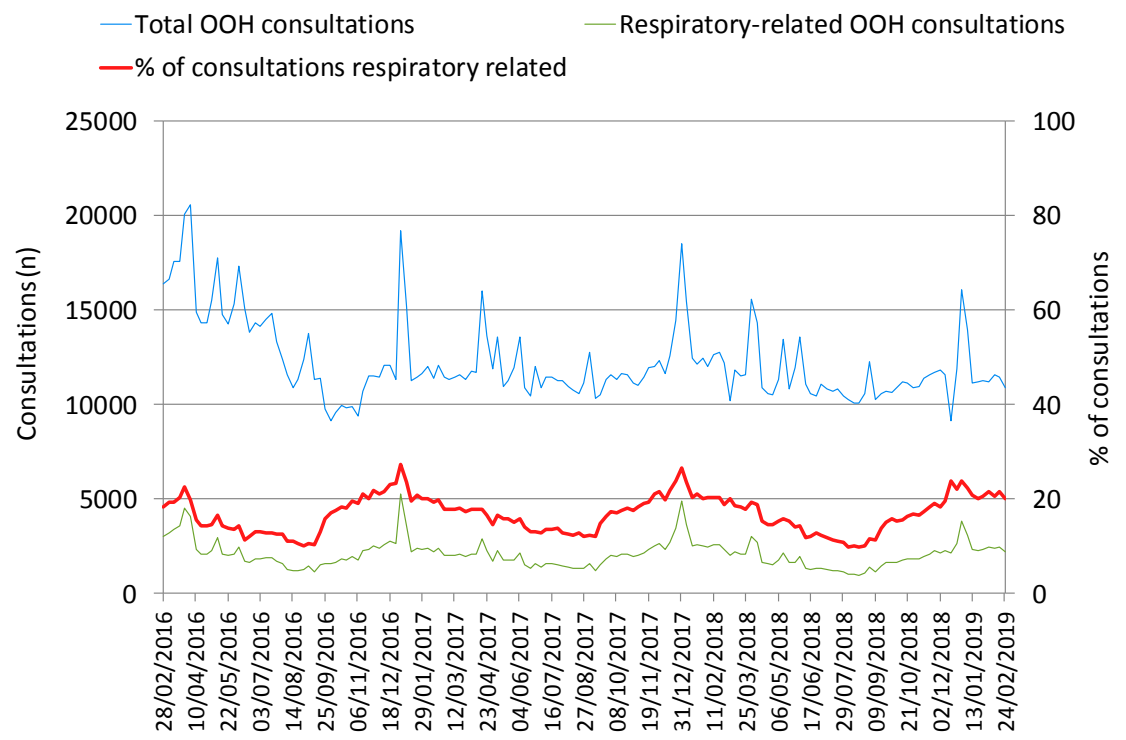
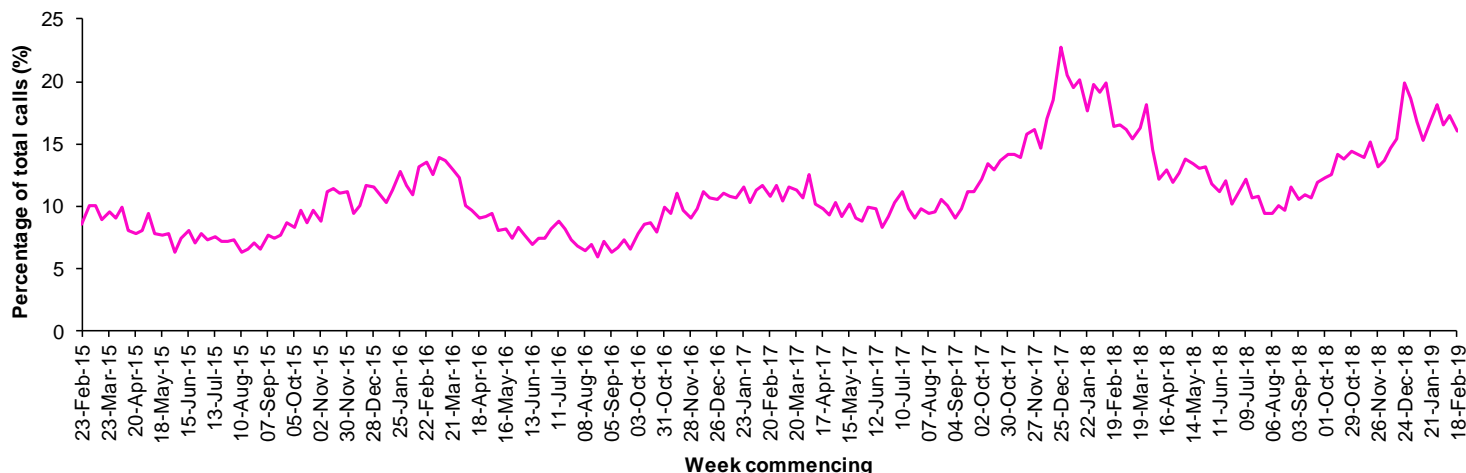


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 08 2015 - week 08 2019 (as of 24/02/2019).



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 26/02/2019).

Influenza immunisation uptake in the 2018/19 season	
People aged 65y and older	68.2%
People younger than 65y in a clinical risk group	43.5%
Children aged two & three years	49.0%
Children aged four to ten years*	69.9%
NHS staff	51.9%
NHS staff who have direct patient contact	53.5%

* 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 07, influenza continued to circulate in the community with activity at low intensity. Influenza GP consultations decreased in [Scotland](#) to 26.7 per 100,000 and decreased in [Northern Ireland](#) to 16.2 per 100,000, and remains below baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 21.1 per 100,000 but remains above 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 14.7 per 100,000 during week 07.
- During week 07, 65 samples tested positive for influenza (43 influenza A(H1N1)pdm09), 19 influenza A(H3) and three influenza A(not subtyped)) through the UK GP sentinel swabbing scheme. Of the 3,571 respiratory test results reported through Public Health England's DataMart scheme, there were 998 (27.9%) positive for influenza (335 influenza A(H1N1)pdm09, 284 influenza A(H3), 377 influenza A(unknown subtype) 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 07, influenza activity is widespread throughout the WHO European Region. During week 07, a total of 3,356 sentinel specimens were tested for influenza, 1,775 (52.9%) of which were positive (628 influenza A(H1N1)pdm09, 492 influenza A(H3N2), 648 influenza A not subtyped and seven influenza B). For more information on European level influenza surveillance see Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 18/02/19 that in the temperate zones of the northern hemisphere, influenza activity continued to increase. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza subtype A accounted for the majority of influenza detections.
- Based on FluNet reporting (as of 15/02/2019), during the time period from 21/01/19 – 03/02/19, 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 213,440 specimens during that time period, 69,007 were positive for influenza viruses, of which 67,733 were typed as influenza A (25,052 influenza A(H1N1)pdm09, 9,734 influenza A(H3N2) and 32,947 influenza A(not subtyped)) and 1,274 influenza B (of the characterised influenza B viruses 83 belonged to the B-Yamagata lineage and 216 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 07 (ending 16/02/19) influenza activity continues to increase in the United States. Nationally, 80,755 (12.6%) out of 639,225 specimens have tested positive for influenza since week 40, of these positives 77,625 (96.1%) were influenza A and 3,130 (3.9%) were influenza B. Further characterisation has been carried out on 40,074 specimens by public health laboratories, and 18,076 tested positive for influenza, 17,636 (97.6%) were influenza A (12,720 influenza A(H1N1)pdm09 (75.4%), 4,142 influenza (H3N2) (24.6%), and subtyping was not performed on 774 specimens) and 440 influenza B (2.4%).

Source: CDC Weekly US Influenza Surveillance Report

<http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that during week 07, influenza activity continues to decline slowly. During week 07 the percentage of visits to healthcare professionals that were due to ILI was 1.1%, this is low compared to previous seasons. The percentage of tests positive for influenza remained similar to the previous week at 17.9% in week 07.

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 26/02/19 WHO reported 39 additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including four deaths. Globally, 2,345 laboratory confirmed cases of human infection with MERS-CoV, including 817 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 (22/01/2019 to 12/02/2019) reports that no new cases of avian influenza A(H7N9) were reported and the risk assessment has not changed. Since February 2013, a total of 1,567 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