

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

**Trend:** *Decreasing*

**Confirmed cases since 2018 week 40: 2,588** (99.5% influenza A and 0.5% influenza B. Of influenza A cases, 51.8% were A(H1N1)pdm09, 19.9% were A(H3) and 27.9% were untyped)

## Key points – Wales

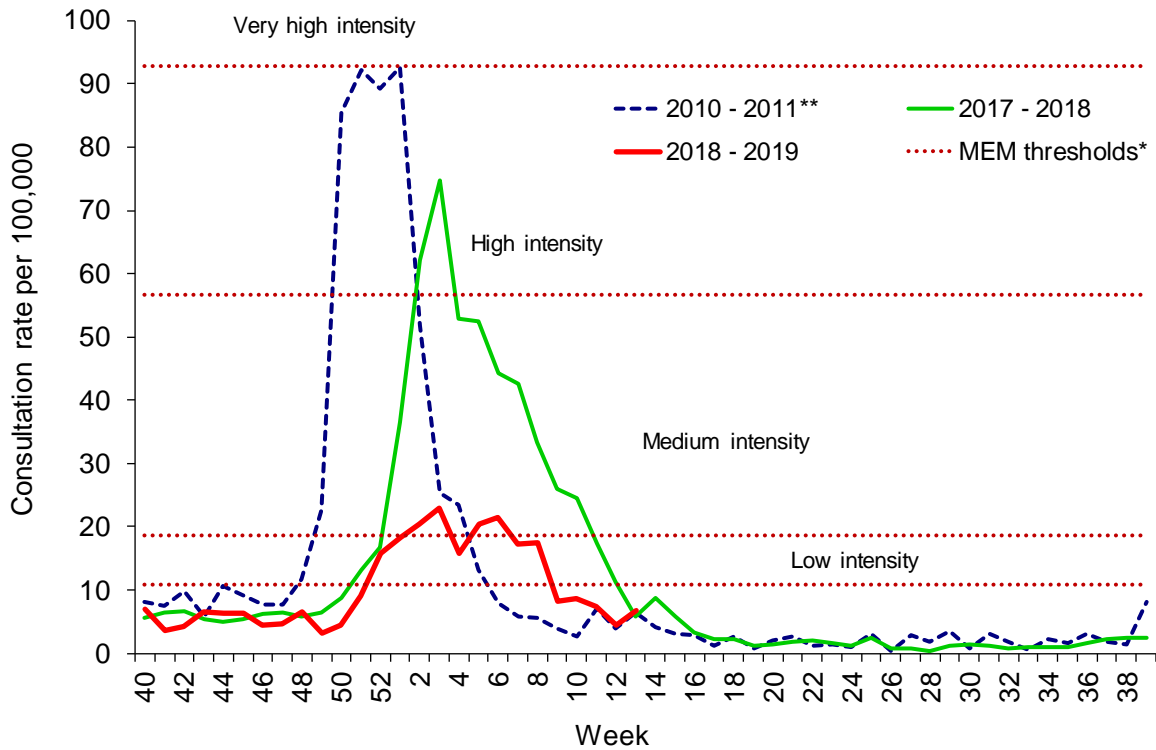
### Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) has increased but remains at baseline levels during week 13 (ending 31/03/2019). Influenza continues to be confirmed in patients with ILI, particularly those attending hospitals. Influenza was the most commonly detected cause of Acute Respiratory Infection (ARI) in hospital and non-sentinel GP patients, with 64 confirmed cases. Influenza A(H3N2) was dominant during week 13, although A(H1N1)pdm09 remains dominant for the season overall. Other causes of ARI, including rhinovirus, human metapneumovirus, parainfluenza, coronavirus, enterovirus and adenovirus also continue to be detected.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 13 was 6.7 consultations per 100,000 practice population. The consultation rate was highest in patients aged 25-34 years (17.8 per 100,000 practice population) (Table 1).
- The ILI consultation rate increased compared to week 12 (4.5 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 13 was 10,358. The proportion of respiratory-related consultations with OOH doctors increased from 18.7% to 19.2% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 13 decreased to 14.0% (Figure 6).
- Two surveillance samples from patients with ILI, collected by sentinel GPs during week 13, had been received by Public Health Wales Microbiology as at 03/04/2019, one sample tested positive for human metapneumovirus and one sample was negative for all routinely tested respiratory pathogens (Figure 3).
- During week 13, 301 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: 52 influenza A(H3N2), seven influenza A(H1N1)pdm09, five influenza A (not typed), 49 rhinovirus, 21 human metapneumovirus, 21 for parainfluenza, 17 for enterovirus, 14 coronavirus, 13 adenovirus, two for RSV and one for mycoplasma (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 20.5%.
- During week 13, there was one outbreak of acute respiratory illnesses (ARI) reported to Public Health Wales Health Protection teams, an outbreak in a school/nursery.
- At the end of week 13, uptake of influenza vaccine was: 68.3% in those aged 65 year 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%.

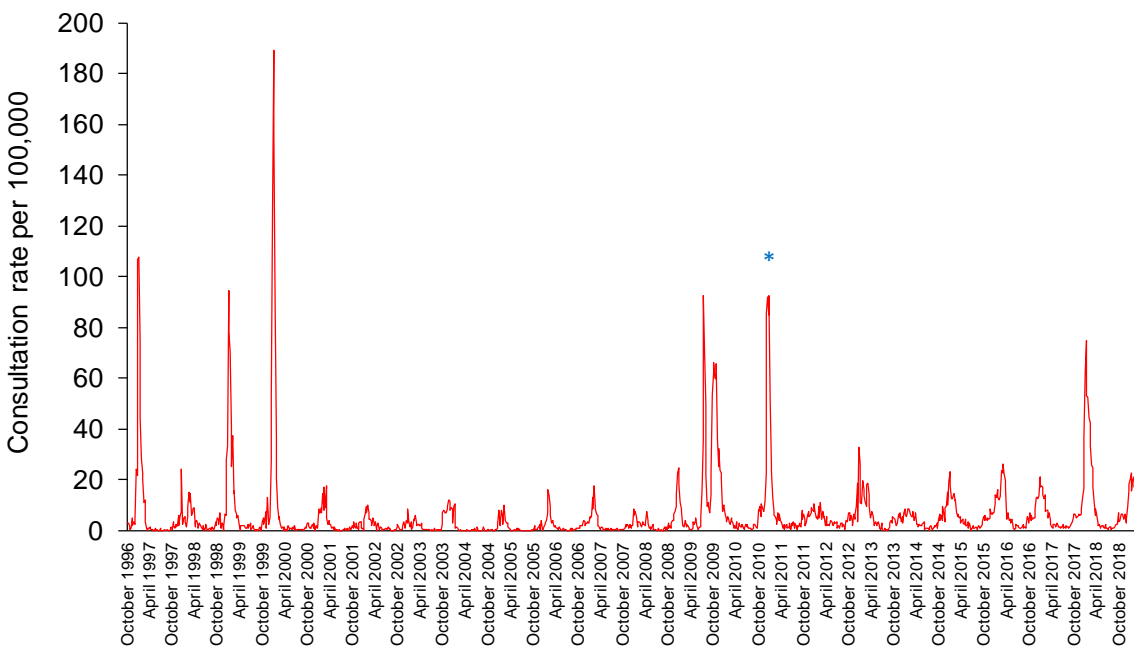
## Influenza activity in Wales

**Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 03/04/2019).**



\* 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 13 2019).**

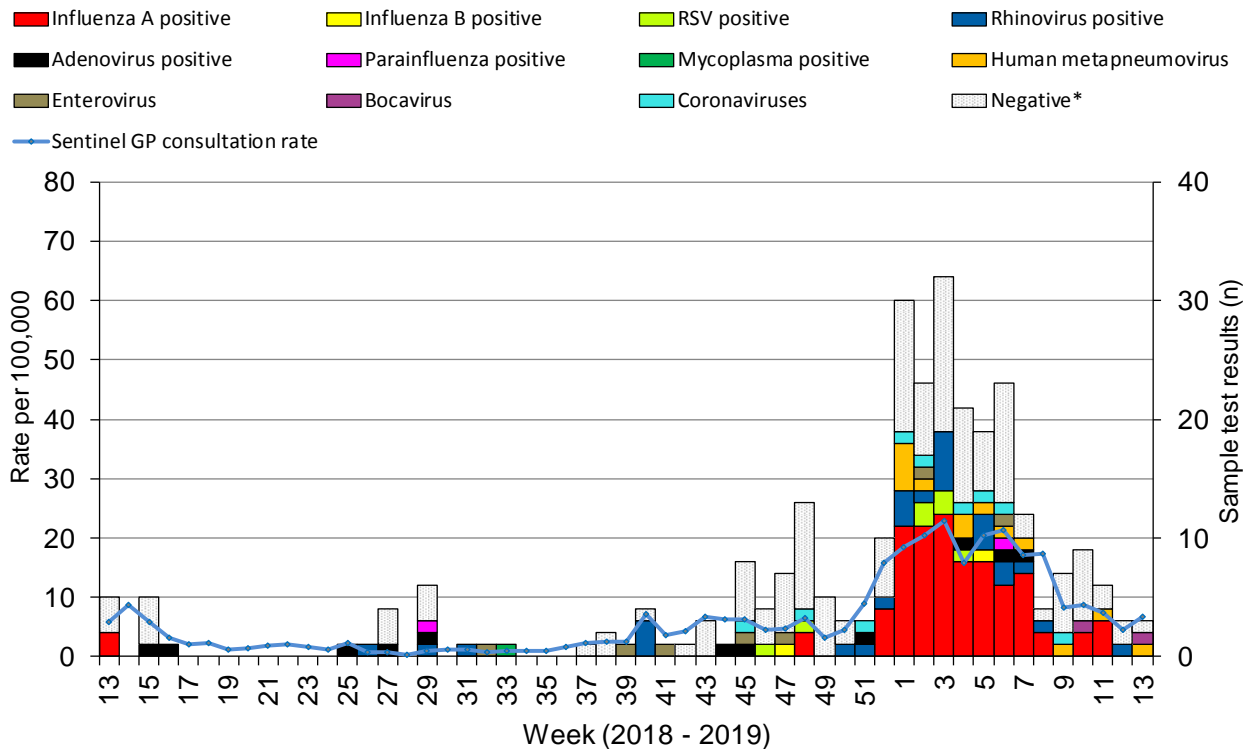


\* Reporting changed to Audit+ surveillance system

**Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 08 – week 13 2019 (as of 03/04/2019).**

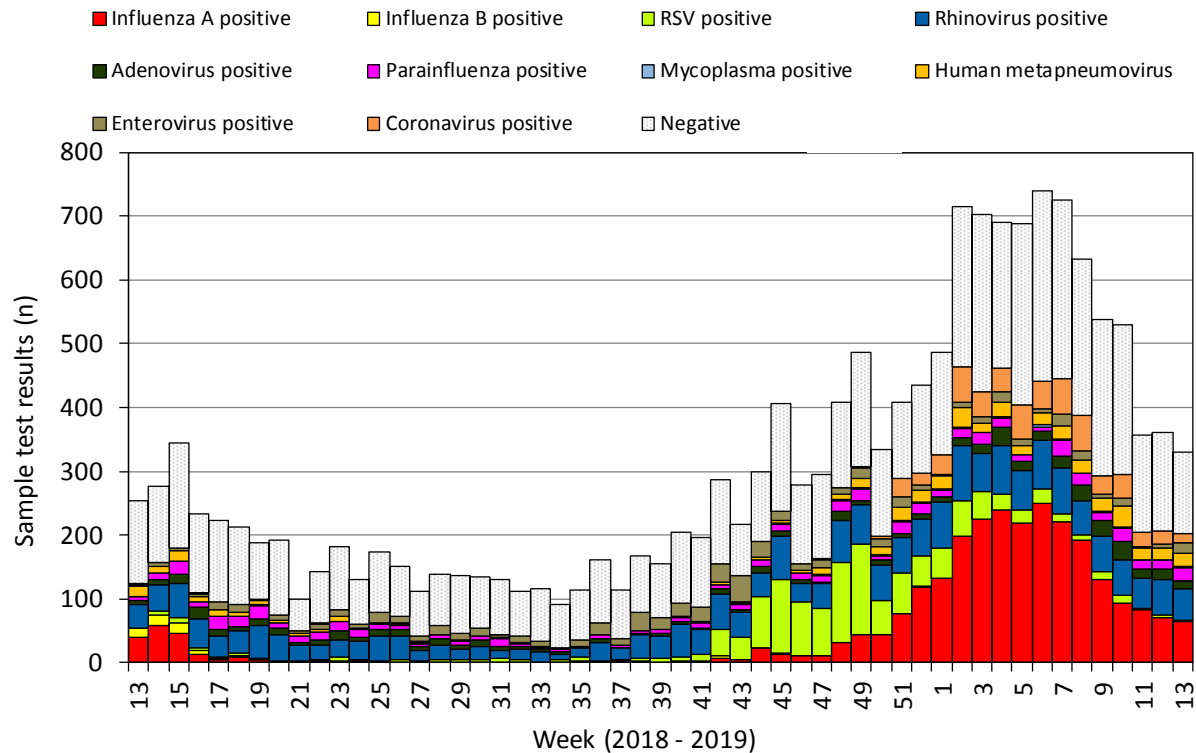
Age group	8	9	10	11	12	13
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	6.2	0.0	6.2	0.0	0.0	0.0
5 - 14	2.3	0.0	0.0	2.3	2.3	4.6
15 - 24	23.5	6.4	10.7	8.6	4.3	0.0
25 - 34	25.9	10.0	13.9	11.9	5.9	17.8
35 - 44	23.1	14.7	8.4	10.5	4.2	10.4
45 - 64	24.2	14.0	13.0	6.5	3.7	7.4
65 - 74	6.5	4.3	6.5	8.6	6.4	4.3
75+	10.1	2.5	2.5	7.6	7.5	2.5
<b>Total</b>	<b>17.5</b>	<b>8.2</b>	<b>8.7</b>	<b>7.5</b>	<b>4.5</b>	<b>6.7</b>

**Figure 3. Specimens submitted for virological testing by sentinel GPs as of 03/04/2019, by week of sample collection, week 13 2018 - week 13 2019.**



\* Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses.

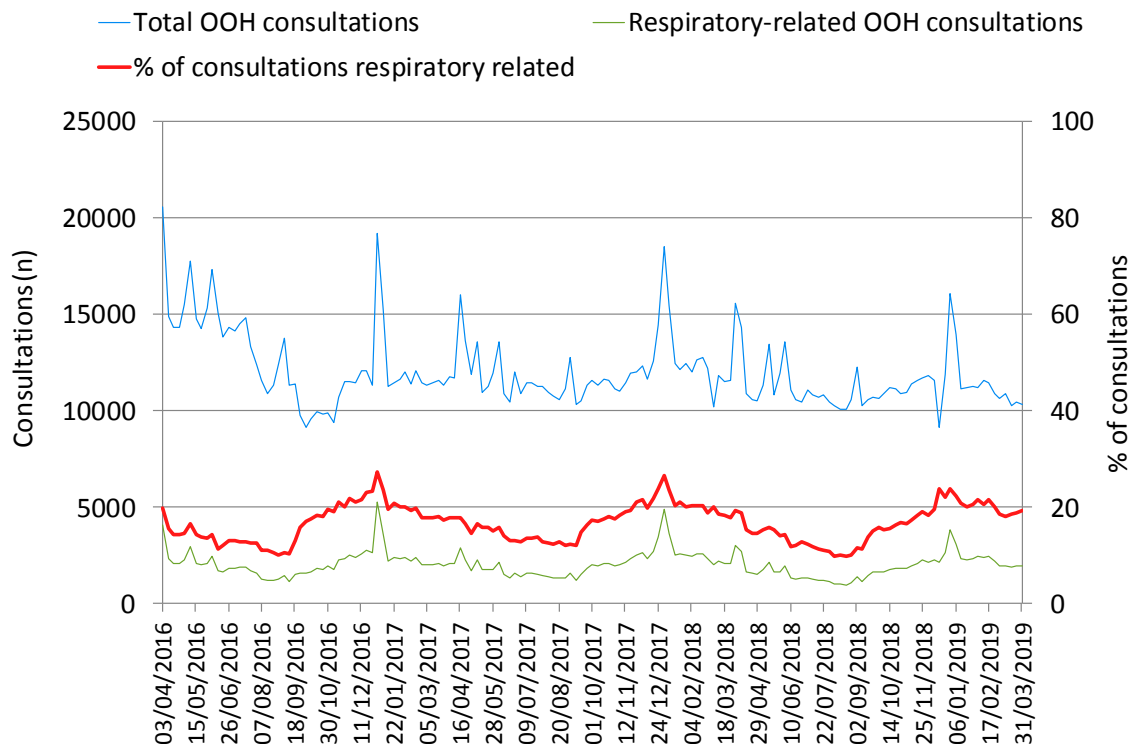
**Figure 4. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 03/04/2019 by week of sample collection, week 13 2018 – week 13 2019.**



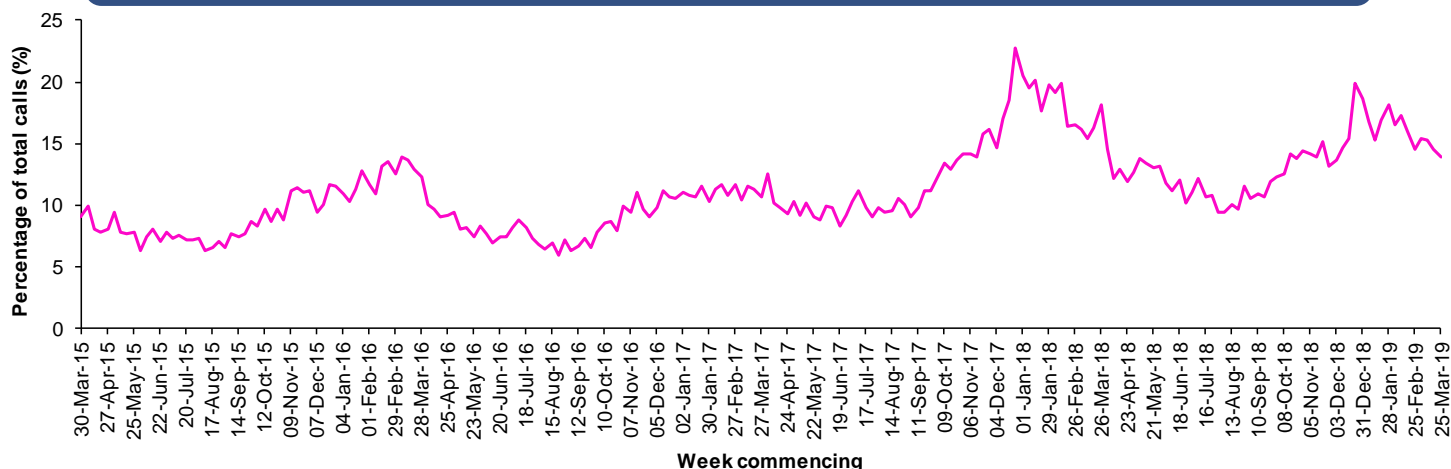
Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre.

### 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 03/04/2019).**



**Figure 6. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from week 13 2015 - week 13 2019 (as of 03/04/2019).**



<sup>1</sup> 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 02/04/2019).**

Influenza immunisation uptake in the 2018/19 season	
People aged 65y and older	68.3%
People younger than 65y in a clinical risk group	44.0%
Children aged two & three years	49.3%
Children aged four to ten years*	69.9%
NHS staff	52.3%
NHS staff who have direct patient contact	54.0%

\* 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 12, influenza continued to circulate in the community with activity indicators decreasing and below baseline in the UK. Influenza GP consultations increased in Scotland to 7.6 per 100,000 and decreased in Northern Ireland to 4.1 per 100,000, but remain below baseline activity in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 7.2 per 100,000 but 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 4.7 per 100,000 during week 12.
- During week 12, two samples tested positive for influenza (one influenza A(H3N2) and one influenza A(unknown subtype)) through UK GP sentinel swabbing schemes. Of the 2,125 respiratory test results reported through Public Health England's DataMart scheme, there were 231 (10.9%) positive for influenza (13 influenza A(H1N1)pdm09, 160 influenza A(H3), 53 influenza A(unknown subtype) and five 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 12, influenza activity is widespread in only a small number of northern, southern and western areas of the WHO European Region. During week 12, a total of 1,058 sentinel specimens were tested for influenza, 406 (38.4%) of which were positive (85 influenza A(H1N1)pdm09, 128 influenza A(H3N2), 192 influenza A not subtyped and one influenza B). For more information on European level influenza surveillance see Flu News Europe: <http://www.flunewseurope.org/>

## World update

- The WHO reported on 01/04/19 that in the temperate zones of the northern hemisphere, influenza activity decreased overall. 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 29/03/2019), during the time period from 04/03/19 – 17/03/19, National Influenza Centres and other national influenza laboratories from 115 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 176,726 specimens during that time period, 43,084 were positive for influenza viruses, of which 39,652 were typed as influenza A (8,769 influenza A(H1N1)pdm09, 8,795 influenza A(H3N2) and 22,088 influenza A(not subtyped)) and 3,432 influenza B (of the characterised influenza B viruses 119 belonged to the B-Yamagata lineage and 2,193 to the B-Victoria lineage).

**Source:** WHO influenza update:

[http://www.who.int/influenza/surveillance\\_monitoring/updates/en/](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 12 (ending 23/03/19) influenza activity decreased but remains elevated in the United States. Nationally, 144,280 (16.2%) out of 889,328 specimens have tested positive for influenza since week 40, of these positives 138,778 (96.2%) were influenza A and 5,502 (3.8%) were influenza B. Further characterisation has been carried out on 62,942 specimens by public health laboratories, and 33,229 tested positive for influenza, 32,342 (97.3%) were influenza A (19,301 influenza A(H1N1)pdm09 (62.2%), 11,737 influenza (H3N2) (37.8%), and subtyping was not performed on 1,304 specimens) and 887 influenza B (2.7%).

**Source:** CDC Weekly US Influenza Surveillance Report <http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that during week 12, influenza activity continues to be reported in all regions in Canada. During week 12 the percentage of visits to healthcare professionals that were due to ILI was 1.6%. The percentage of tests positive for influenza increased slightly to 21.8% in week 12.

**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 29/03/19 WHO reported 68 additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV) in Saudi Arabia, including 10 deaths. Globally, 2,374 laboratory confirmed cases of human infection with MERS-CoV, including 823 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 (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.who.int/influenza/human_animal_interface/HAI_Risk_Assessment/en/) [http://www.fao.org/ag/againfo/programmes/en/empres/H7N9/Situation\\_update.html](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](mailto:surveillance.requests@wales.nhs.uk)