

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, 48.5% were A(H1N1)pdm09, 24.6% were A(H3) and 27.0% were untyped)

Key points – Wales

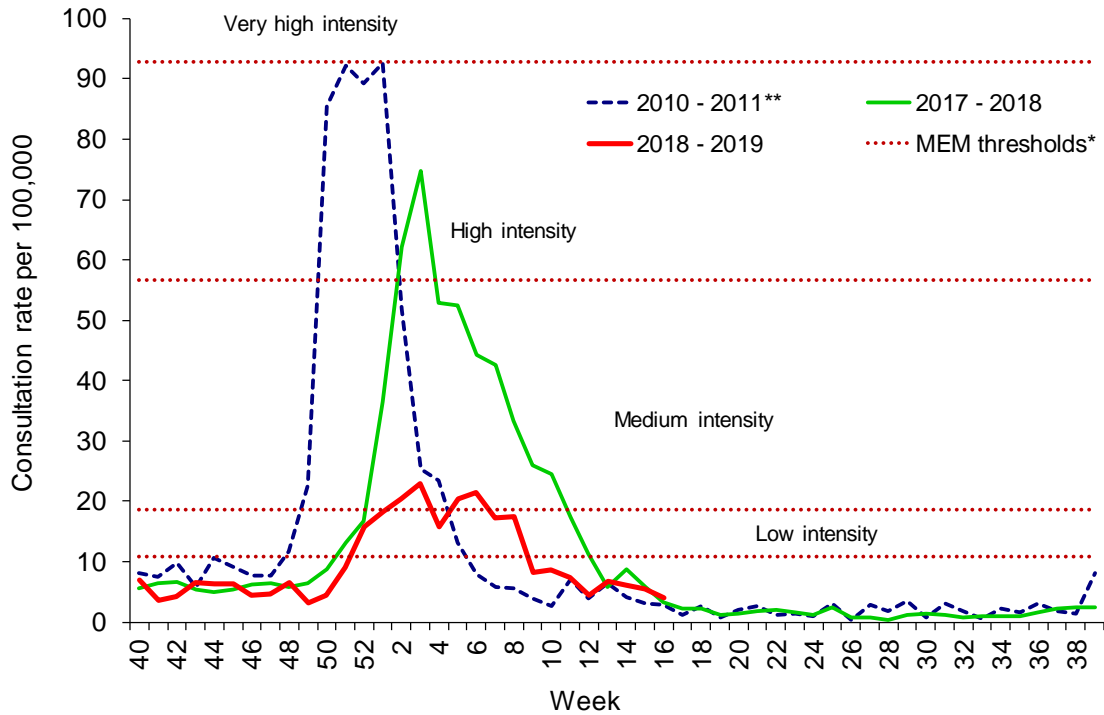
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) remained below baseline levels during week 16 (ending 21/04/2019). 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 41 confirmed cases. Influenza A(H3N2) was dominant during week 16, although A(H1N1)pdm09 remains dominant for the season overall. Other causes of ARI, including rhinovirus, parainfluenza, adenovirus and human metapneumovirus, also continue to be detected.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 16 was 4.0 consultations per 100,000 practice population. The consultation rate was highest in patients aged 15-24 years (6.4 per 100,000 practice population) (Table 1).
- The ILI consultation rate decreased compared to week 15 (5.4 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 16 was 14,774. The proportion of respiratory-related consultations with OOH doctors remained stable at 18.4% (Figure 5). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 16 increased to 18.8% (Figure 6).
- One surveillance sample from patients with ILI, collected by sentinel GPs during week 16, had been received by Public Health Wales Microbiology as at 24/04/2019 (Figure 3), the sample tested positive for rhinovirus.
- During week 16, 250 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: 33 influenza A(H3N2), two influenza A(H1N1)pdm09, five influenza A (not typed), one influenza B, 40 rhinovirus, 17 adenovirus, 15 for parainfluenza, 10 human metapneumovirus, nine coronavirus, seven enterovirus, two mycoplasma and one RSV (Figure 4). The proportion of samples from hospital patients positive for influenza decreased to 16.4%.
- During week 16, there were three outbreak of acute respiratory illnesses (ARI) reported to Public Health Wales Health Protection teams, all three were in residential homes, one was confirmed as influenza (not typed) and one was confirmed as influenza A.
- At the end of week 16, uptake of influenza vaccine was: 68.2% 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%.

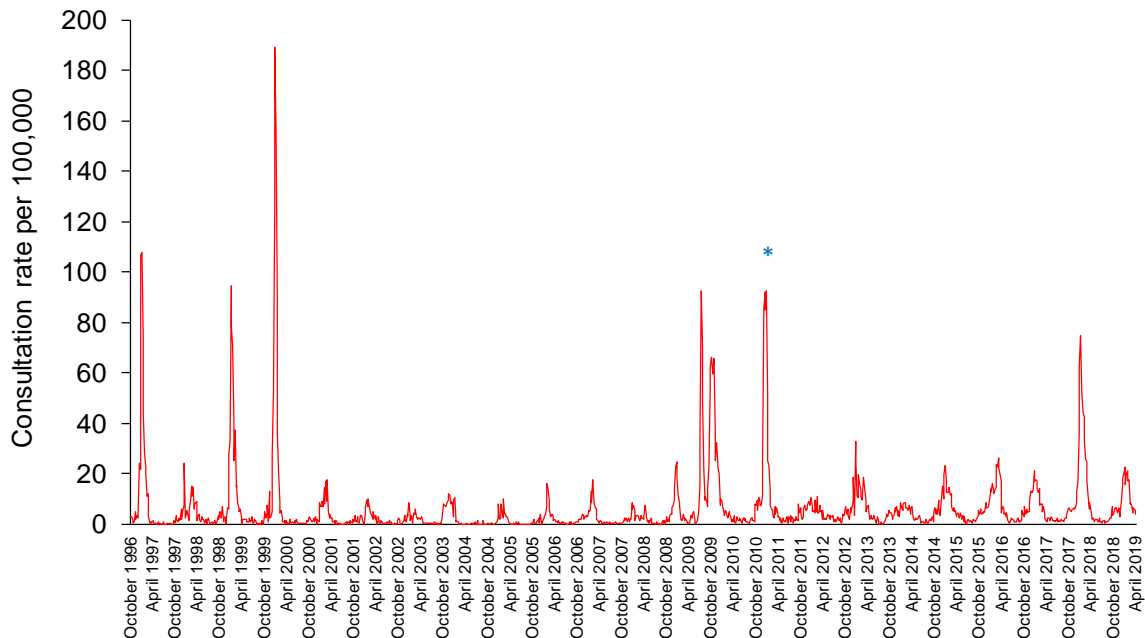
Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 24/04/2019).



* 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 16 2019).

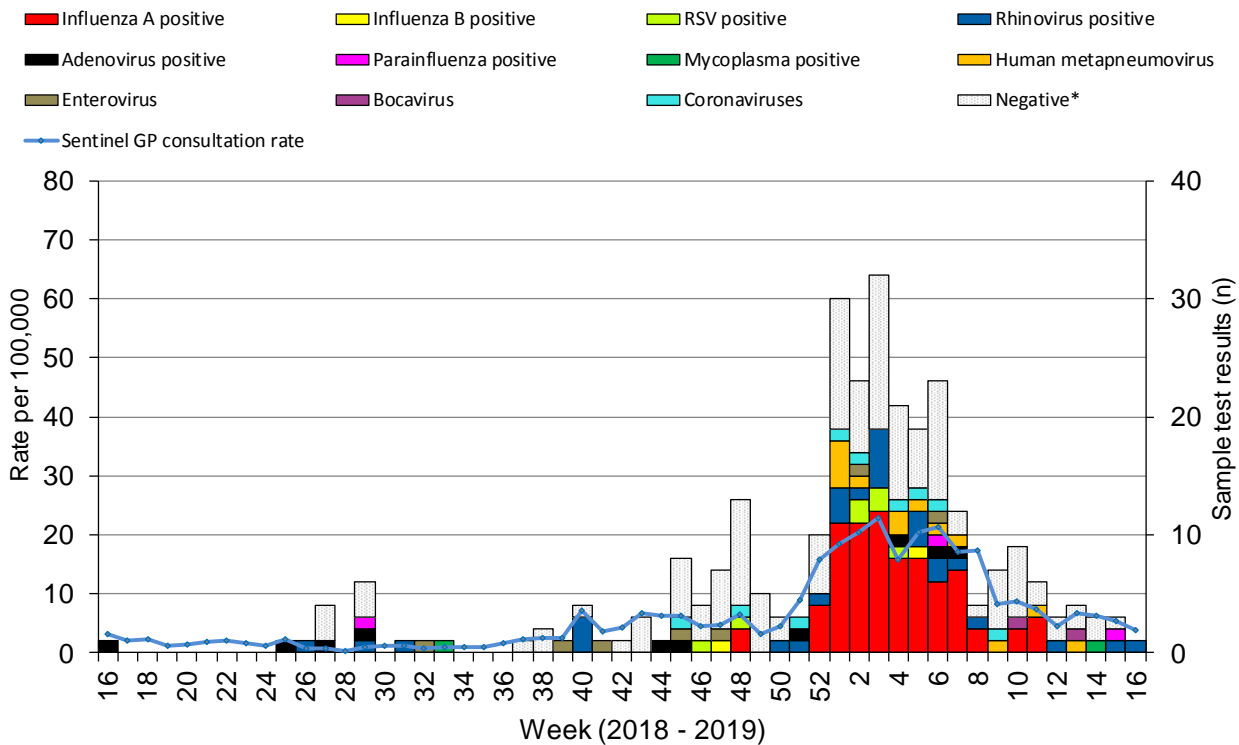


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 11 – week 16 2019 (as of 24/04/2019).

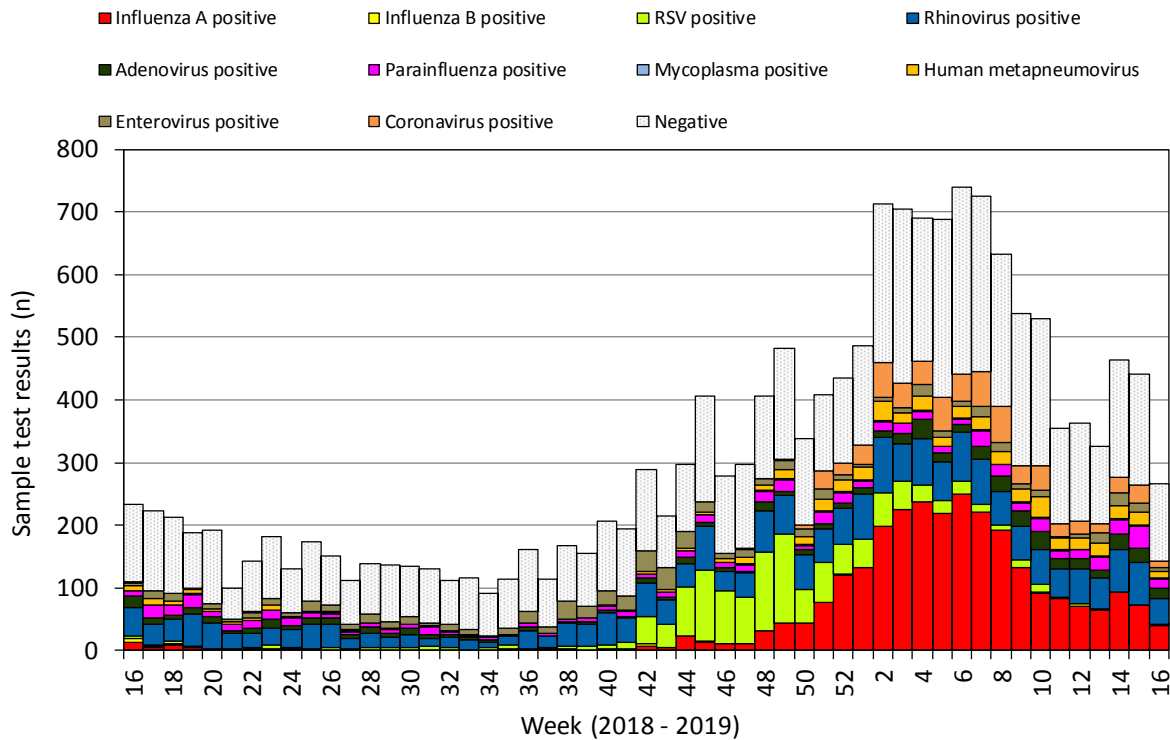
Age group	11	12	13	14	15	16
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	2.3	2.3	4.6	4.6	4.6	4.6
15 - 24	8.6	4.3	0.0	12.7	8.5	6.4
25 - 34	11.9	5.9	17.8	5.9	9.9	4.0
35 - 44	10.5	4.2	10.4	6.3	4.2	0.0
45 - 64	6.5	3.7	7.4	8.3	6.5	5.5
65 - 74	8.6	6.4	4.3	2.1	4.3	4.3
75+	7.6	7.5	2.5	2.5	0.0	2.5
Total	7.5	4.5	6.7	6.2	5.4	4.0

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 24/04/2019, by week of sample collection, week 16 2018 - week 16 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 24/04/2019 by week of sample collection, week 16 2018 – week 16 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 24/04/2019).

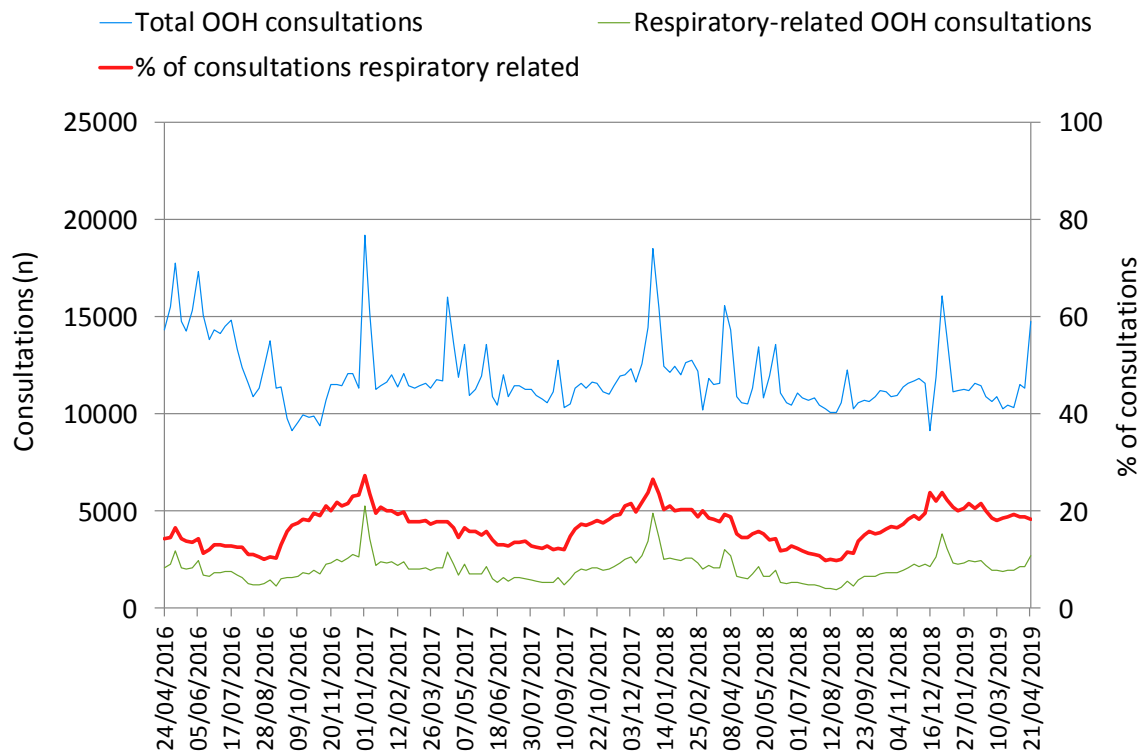
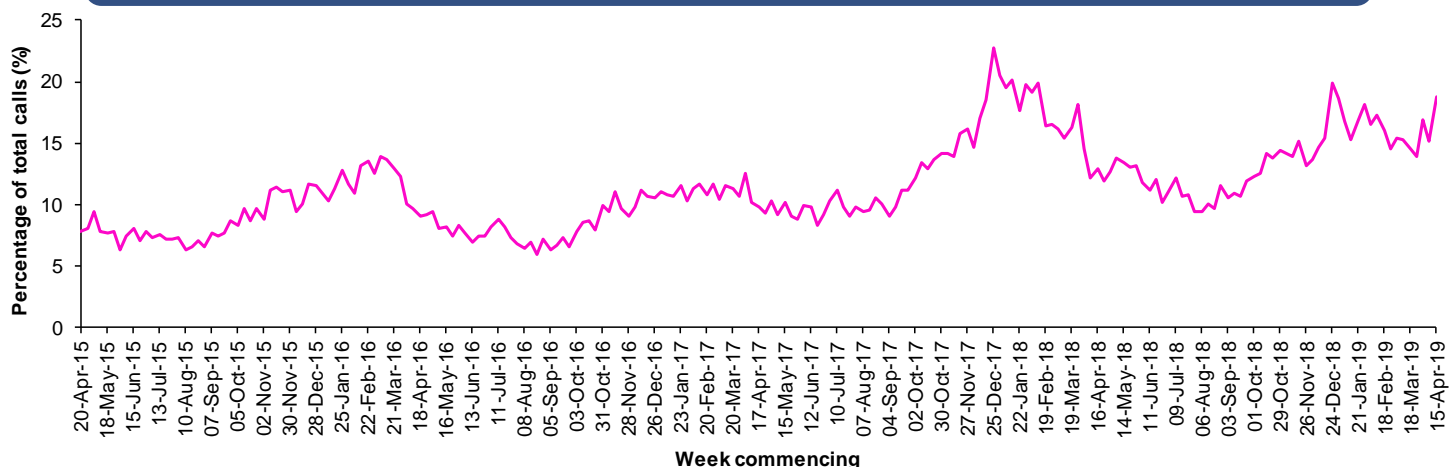


Figure 6. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 16 2015 - week 16 2019 (as of 24/04/2019).



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 15, influenza continued to circulate in the community with activity indicators decreasing and below baseline in the UK. Influenza GP consultations decreased in Scotland to 3.9 per 100,000 and increased slightly in Northern Ireland to 4.4 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 4.2 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 3.6 per 100,000 during week 15.
- During week 15, no samples tested positive for influenza through UK GP sentinel swabbing schemes. Of the 1,588 respiratory test results reported through Public Health England's DataMart scheme, there were 136 (8.6%) positive for influenza (nine influenza A(H1N1)pdm09, 83 influenza A(H3), 43 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 15, influenza activity is widespread in only a small number of countries in the WHO European Region. During week 15, a total of 667 sentinel specimens were tested for influenza, 136 (20.4%) of which were positive (23 influenza A(H1N1)pdm09, 47 influenza A(H3N2), 63 influenza A not subtyped and three influenza B). For more information on European level influenza surveillance see Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 15/04/19 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 12/04/2019), during the time period from 18/03/19 – 31/03/19, National Influenza Centres and other national influenza laboratories from 125 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 139,623 specimens during that time period, 30,960 were positive for influenza viruses, of which 25,464 were typed as influenza A (4,189 influenza A(H1N1)pdm09, 6,139 influenza A(H3N2) and 11,760 influenza A(not subtyped)) and 5,496 influenza B (of the characterised influenza B viruses 154 belonged to the B-Yamagata lineage and 3,919 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 14 (ending 06/04/19) influenza activity decreased but remains elevated in the United States. Nationally, 162,150 (16.4%) out of 986,085 specimens have tested positive for influenza since week 40, of these positives 155,300 (95.8%) were influenza A and 6,850 (4.2%) were influenza B. Further characterisation has been carried out on 69,291 specimens by public health laboratories, and 37,155 tested positive for influenza, 36,030 (97.0%) were influenza A (20,538 influenza A(H1N1)pdm09 (59.3%), 14,102 influenza (H3N2) (40.7%), and subtyping was not performed on 1,390 specimens) and 1,125 influenza B (3.0%).

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

- The Public Health Agency of Canada reported that during week 15, a second smaller wave of sustained influenza activity, dominated by influenza A(H3N2), continues to be observed in Canada. During week 14 the percentage of visits to healthcare professionals that were due to ILI was 1.0%. The percentage of tests positive for influenza remained steady at 20% in week 15.

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 (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