

Current level of influenza activity: *Baseline activity*

Trend: *Stable*

Confirmed cases since 2019 week 40: 1,607 (95% influenza A and 5% influenza B. Of the influenza A cases, 16% were A(H1N1)pdm09, 69% were A(H3N2) and 16% were A(not typed).

Key points – Wales

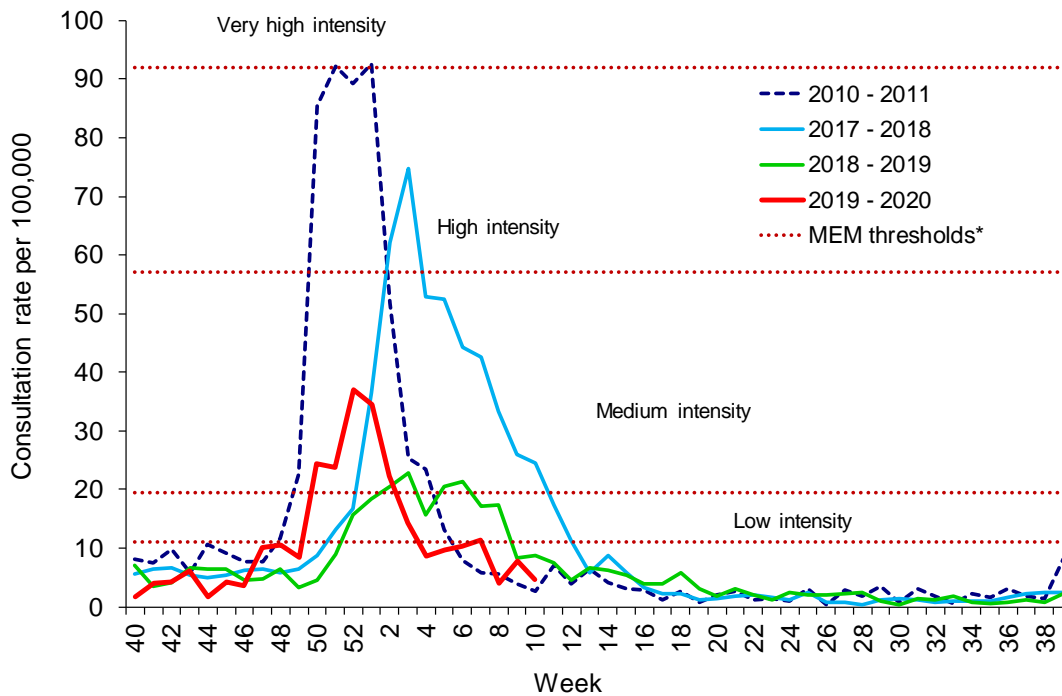
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) decreased during week 10 (ending 08/03/2020) and remains below baseline levels. During week 09 (latest data available), 43 cases of influenza were confirmed. Rhinovirus was the most commonly detected cause of Acute Respiratory Infection (ARI) but other causes of ARI continue to be detected. Respiratory Syncytial Virus (RSV) activity in children under five years of age decreased this week and remains at baseline levels.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 10 was 4.7 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate decreased compared to week 09 (7.9 per 100,000 practice population) and remains below the threshold for baseline levels (11.1 per 100,000 practice population) (Figure 1). The consultation rate was highest in patients aged 15-24 years (9.0 per 100,000 practice population) (Table 1).
- Data on respiratory-related consultations with Out Of Hours GPs are only currently available up to week 02 (Figure 7). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 10 increased to 33.4% (Figure 8).
- Two surveillance samples from patients with ILI, collected by sentinel GPs during week 09 (latest data available), had been received by Public Health Wales Microbiology as at 04/03/2020. One sample tested positive for seasonal coronavirus and one sample was negative for all routinely tested respiratory pathogens.
- During week 09 (latest data available), 602 specimens were tested by Public Health Wales Microbiology from hospitalised and non-sentinel GP patients with ARI. These figures do not include local influenza 'point of care test' results. The following numbers of patients tested positive: 17 influenza A(H1N1)pdm09, six influenza A(H3N2), six influenza A(not subtyped), 14 influenza B, 81 rhinovirus, 36 seasonal coronaviruses, 33 adenovirus, 33 human metapneumovirus, 19 RSV, 11 mycoplasma, 11 parainfluenza and 10 enterovirus, (Figure 4). The proportion of samples from hospital patients positive for influenza was 7.1%. Twenty-eight respiratory specimens were tested from patients in intensive care units (ICU), one specimen was positive for influenza (Figure 5).
- RSV seasonal activity decreased and remained at baseline levels during week 09 (latest data available). Four (4.2%) of the 96 samples from children younger than five years with ARI tested positive for RSV during week 09 and there were 2.3 confirmed cases per 100,000 in this age-group (Figure 6). The average duration of seasonal activity is 11-13 weeks and the current season lasted 12 weeks.
- During week 10, two ARI outbreaks were reported to the Public Health Wales Health Protection team, both were in a school/nursery setting.
- At the end of week 10, uptake of influenza vaccine was: 69.3% in those aged 65 years and older, 44.1% in patients aged six months to 64 years at clinical risk, and 50.4% in children aged two and three years old. In the 1,331 primary schools visited thus far as part of the universal childhood influenza programme, uptake was 68.7%.

Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 08/03/2020).

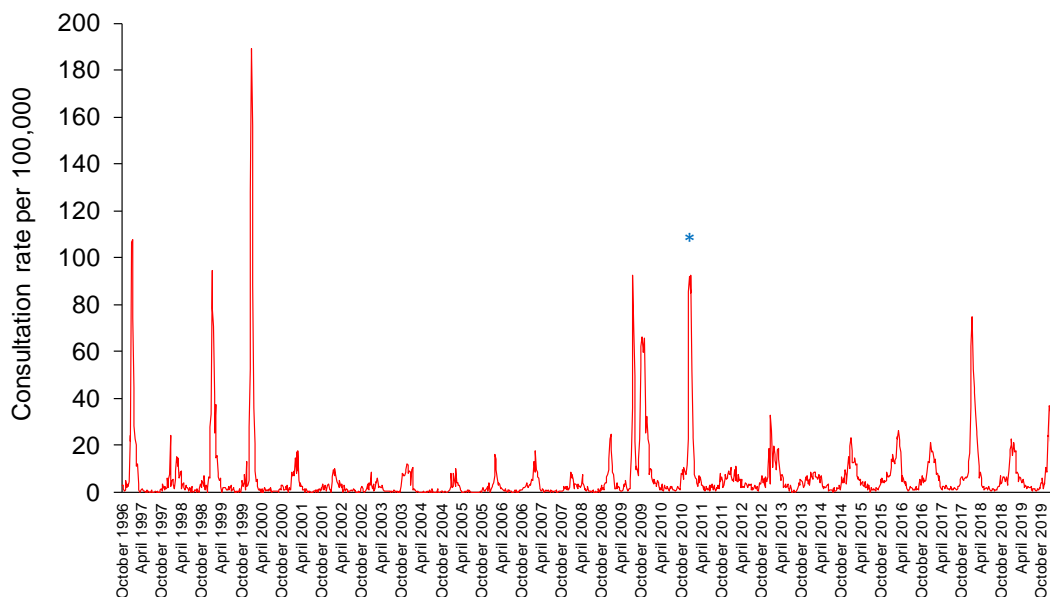


A technical issue affected data submitted from sentinel practices utilising a specific brand of GP software. As a result, between week 47 2019 and week 03 2020, data from affected practices has been excluded from calculations of the weekly ILI consultation rate. Weekly rates from week 47 2019 to week 03 2020 are based on data from approximately 20 practices.

Week 52 and week 01 consultation rates adjusted for the reduced general practice opening hours.

* The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons.

Figure 2. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 10 2020).

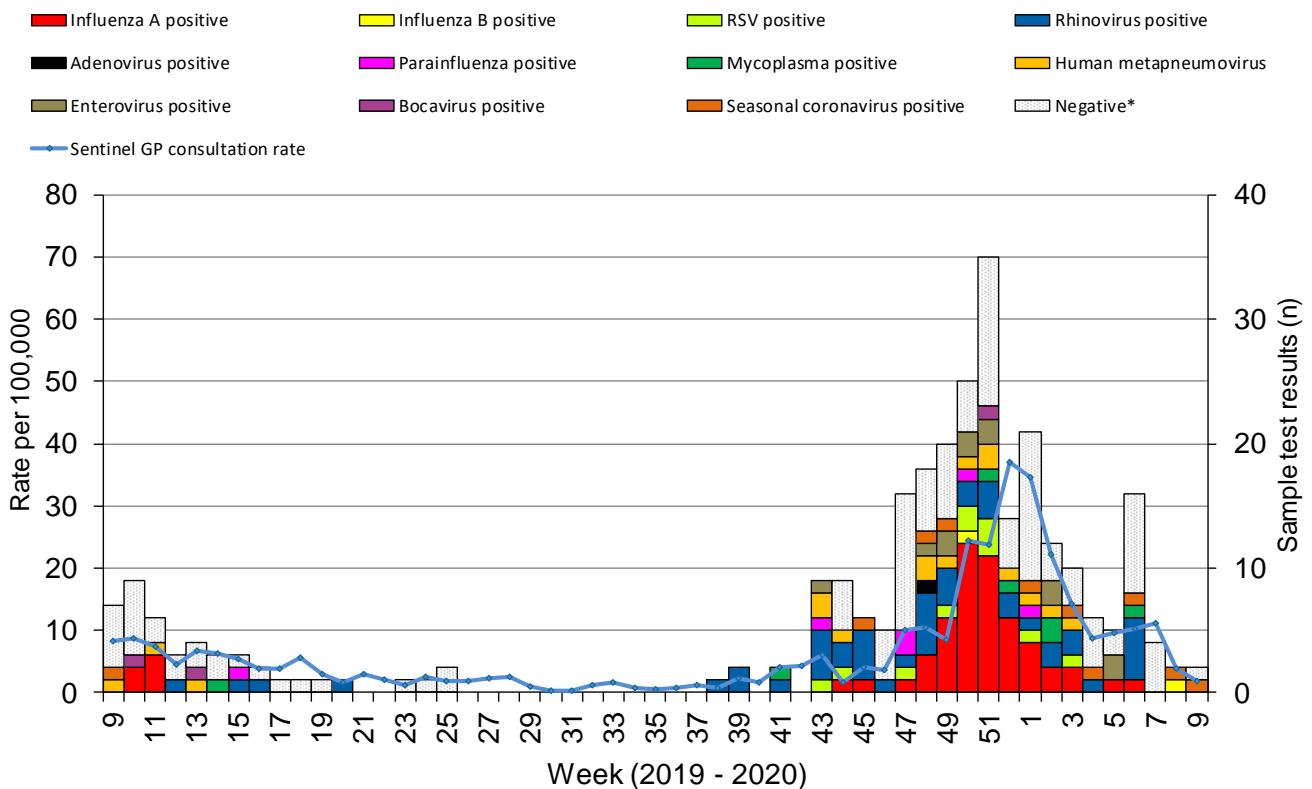


* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 05 – week 10 2020 (as of 08/03/2020).

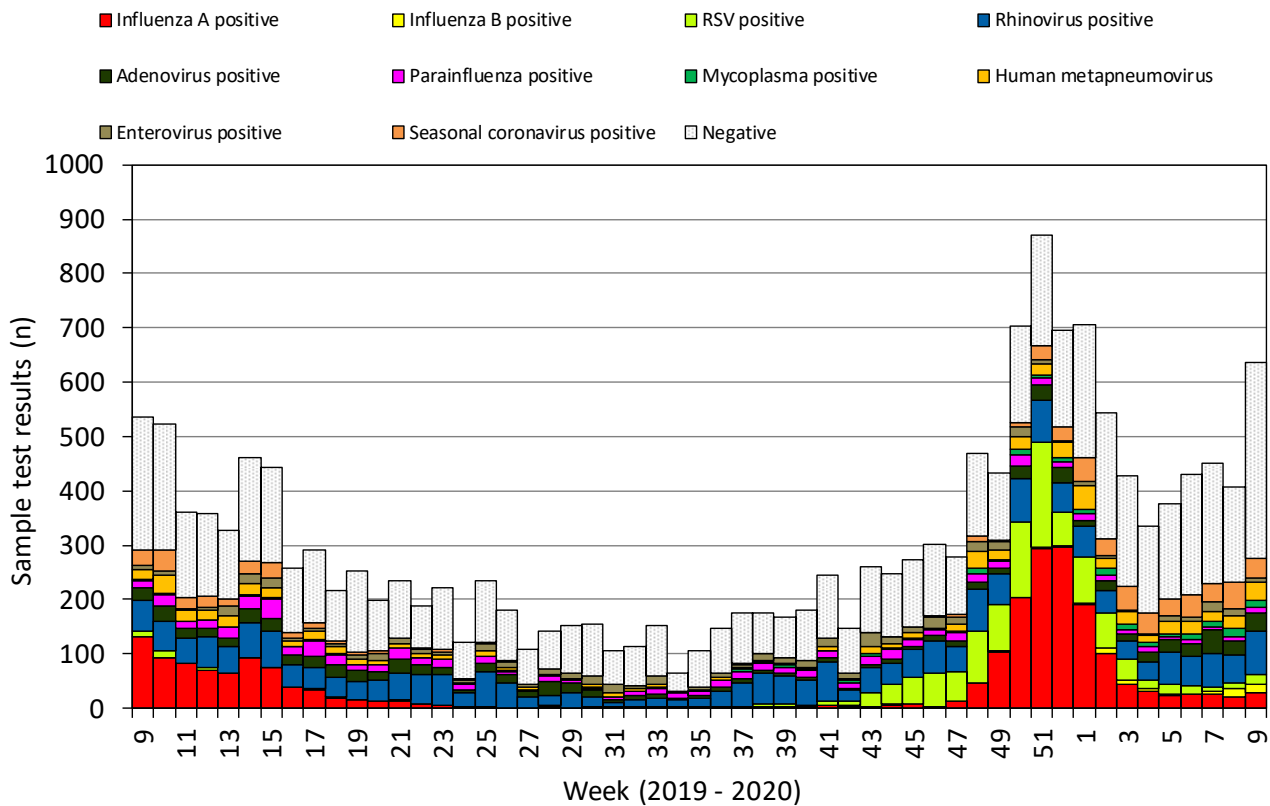
Age group	5	6	7	8	9	10
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	6.3	6.3	0.0
5 - 14	6.8	6.8	9.2	0.0	9.1	0.0
15 - 24	19.3	15.0	13.1	6.4	12.9	9.0
25 - 34	11.8	21.6	12.0	7.8	13.7	4.1
35 - 44	12.4	6.2	18.9	6.2	8.2	8.6
45 - 64	11.0	13.8	12.2	3.7	7.4	7.8
65 - 74	2.1	4.3	10.9	2.1	0.0	0.0
75+	4.9	2.4	5.0	0.0	4.9	0.0
Total	9.6	10.4	11.3	3.9	7.9	4.7

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 01/03/2020, by week of sample collection, week 09 2019 - week 09 2020 (latest data available).



* 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 01/03/2020 by week of sample collection, week 09 2019 to week 09 2020 (latest data available).



Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre. This chart summarises individual test results, patients who are positive for multiple infections within a given week will appear multiple times.

Figure 5. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 09 2019 to week 09 2020 (latest data available).

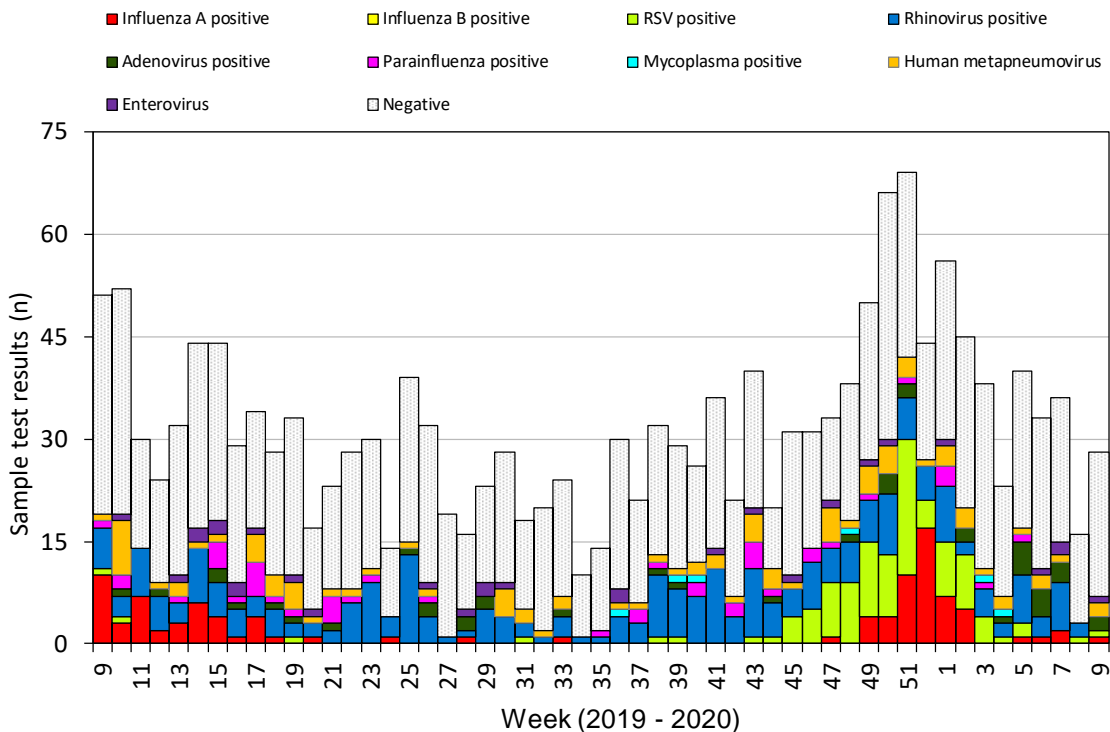
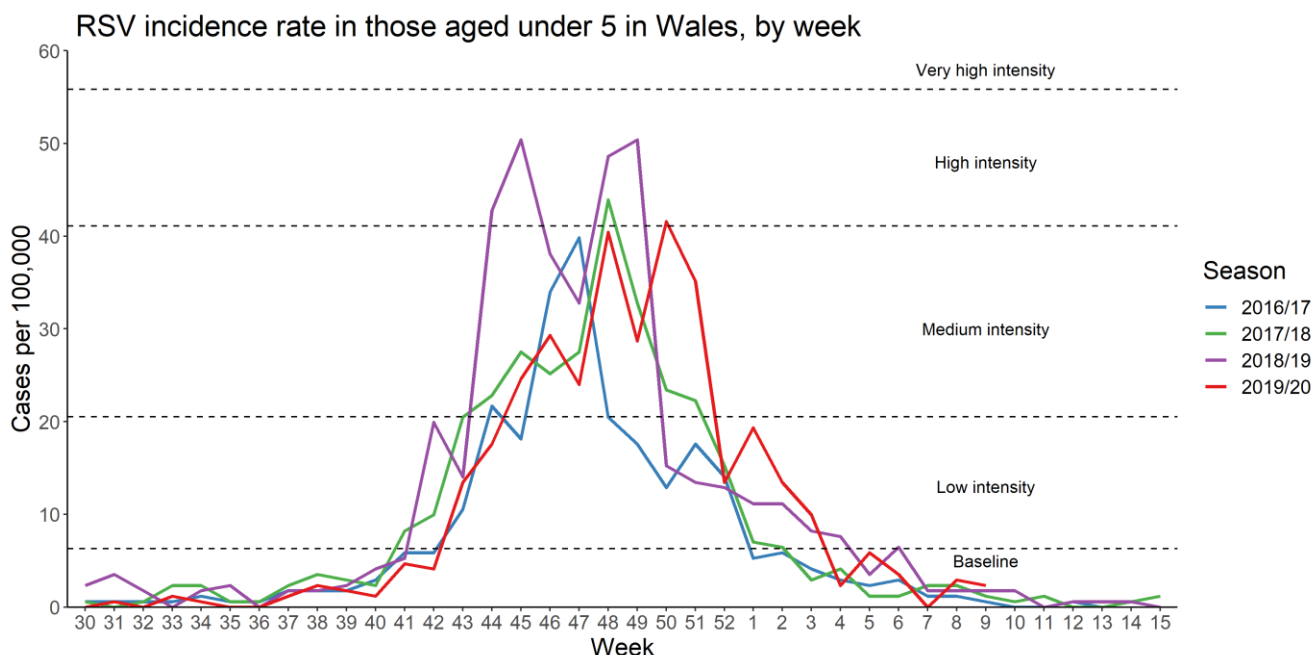


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2016 to week 09 2020 (latest data available).



Out of Hours consultations and calls to NHS Direct Wales

Figure 7. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 12/01/2020) (latest data available).

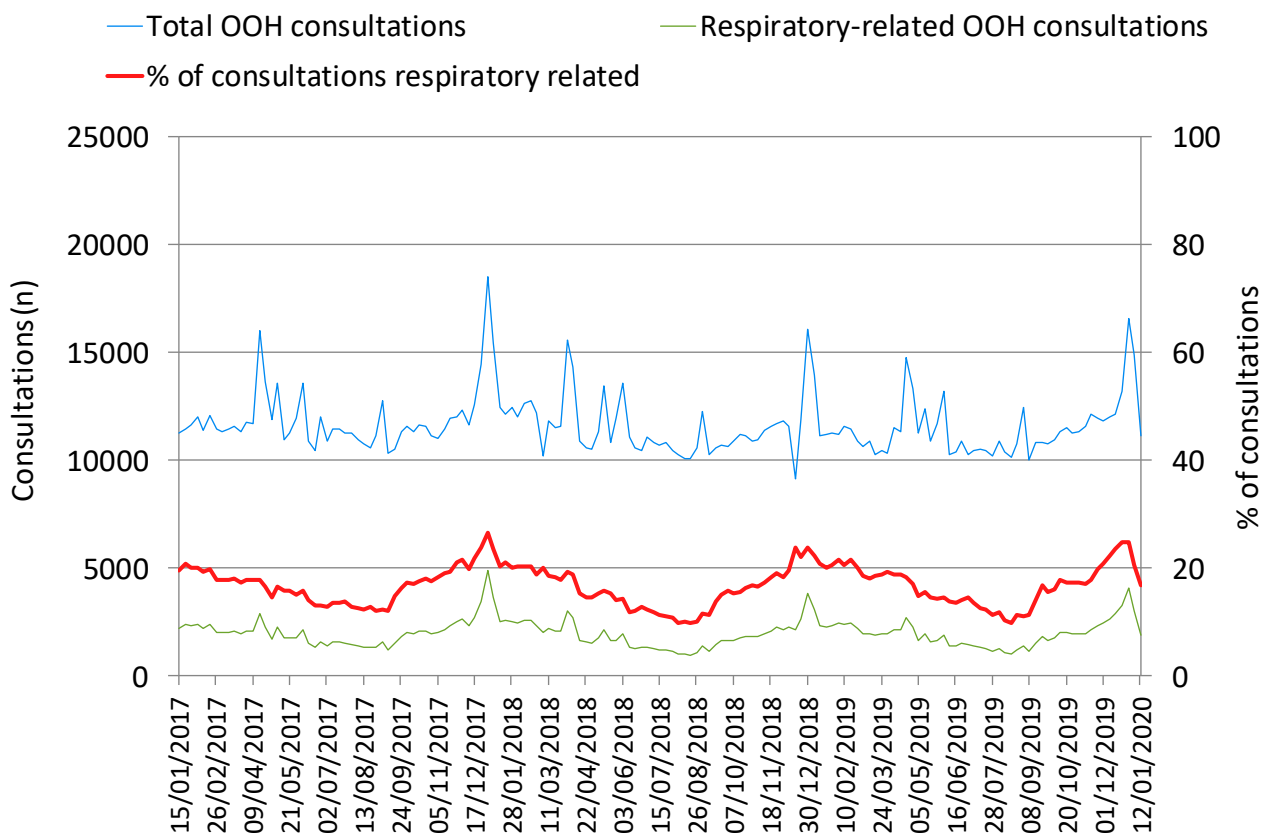
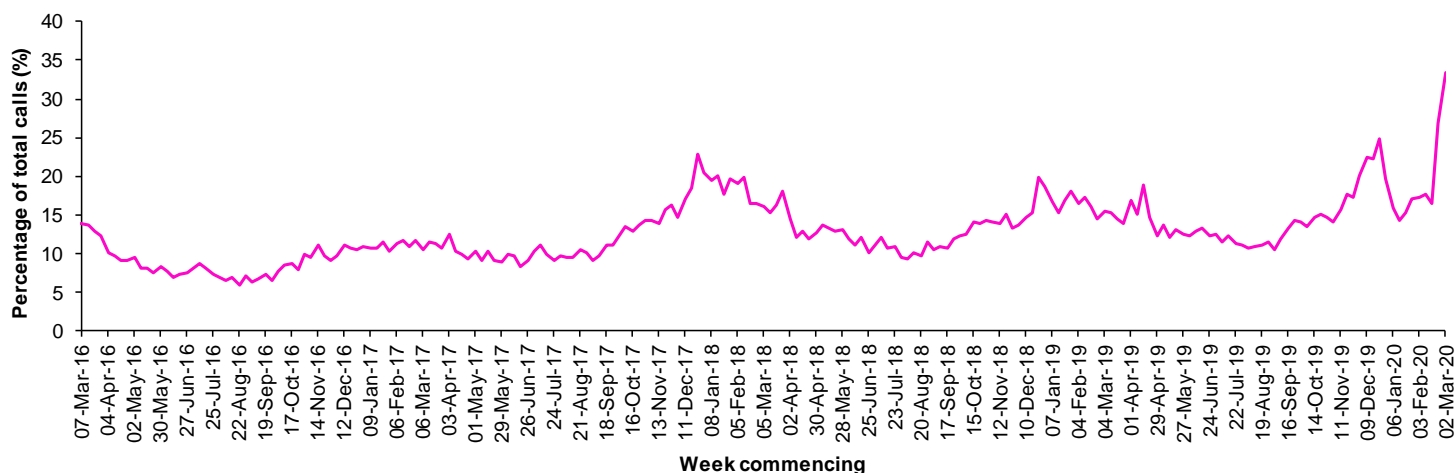


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 10 2016 - week 10 2020 (as of 08/03/2020).



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 2019/20 (as of 08/03/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	69.3%
People younger than 65y in a clinical risk group	44.1%
Children aged two & three years	50.4%
Children aged four to ten years*	68.7%
NHS staff	55.1%
NHS staff who have direct patient contact	57.8%

* In school sessions carried out so far.

The end of season report Influenza in Wales 2018/19 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 09, influenza activity decreased or remained stable across all indicators in the UK. GP ILI consultations increased in Northern Ireland to 6.0 per 100,000 and decreased in Scotland to 6.9 per 100,000, but remains below baseline thresholds in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 8.4 per 100,000 but remains below the MEM threshold for baseline activity (12.7 per 100,000). The syndromic surveillance indicator for influenza reported through the GP In Hours Syndromic Surveillance system was 6.4 per 100,000 in week 08.
- During week 09, one sample tested positive for influenza (one influenza B) through the UK GP sentinel swabbing schemes, an overall positivity of 5.3%. Two hundred and fifteen (5.2%) of the 4,107 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (63 influenza A(H1N1)pdm09, 38 influenza A(H3), 50 influenza A(not subtyped) and 64 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 09, influenza activity remained elevated across the WHO European Region. During week 09, a total of 1,755 sentinel specimens were tested for influenza, 764 of which were positive (176 influenza A(H1N1)pdm09, 162 influenza A(H3N2), 119 influenza A(not typed) and 307 influenza B).

Source: Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 02/03/2020 that in the temperate zones of the northern hemisphere, respiratory illness indicators and influenza activity remained elevated overall. In North America, influenza activity remained elevated. In Europe, influenza activity continued to increase across the region. In Central Asia, influenza activity increased with detections of all seasonal influenza subtypes. In Northern Africa, influenza activity increased in Algeria and Tunisia. In Western Asia, influenza activity remained elevated overall, although returned to low levels in some countries. In East Asia, influenza-like illness (ILI) and influenza activity decreased overall. Influenza activity was low across most reporting Caribbean and Central American countries. In tropical South American countries, influenza activity remained low. In tropical Africa, influenza activity was low across reporting countries. In Southern Asia influenza activity was low overall, though remained elevated in Afghanistan. In South East Asia, influenza continued to be reported in some countries. In the temperate zone of the southern hemisphere, influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 28/02/2020), during the time period from 03/02/2020 – 16/02/2020, National Influenza Centres and other national influenza laboratories from 122 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 201,954 specimens during that time period, 58,268 were positive for influenza viruses, of which 36,580 were typed as influenza A (7,897 influenza A(H1N1)pdm09, 3,978 influenza A(H3N2) and 24,705 influenza A(not subtyped)) and 21,688 influenza B (of the characterised influenza B viruses 21 belonged to the B-Yamagata lineage and 2,177 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 09 (ending 29/02/2020) influenza activity remains high but decreased again this week. Nationally, 10,829 (24.3%) out of 44,491 specimens have tested positive for influenza in week 09, of these positives 7,821 (72.2%) were influenza A and 3,008 (27.8%) were influenza B. Further characterisation has been carried out on 1,594 specimens by public health laboratories, and 953 tested positive for influenza, 692 (72.6%) were influenza A (596 influenza A(H1N1)pdm09 (95.2%), 30 influenza A(H3N2) (4.8%), and subtyping was not performed on 66 specimens) and 261 influenza B (27.4%).

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

- The Public Health Agency of Canada reported that during week 09, influenza activity remained high, however, several indicators decreased compared to the previous week. The percentage of visits to healthcare professionals due to ILI was 1.5%, which remains below the average for this time of year. The percentage of tests positive for influenza is 26%, a slight decrease on previous weeks.

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 24/02/2020 WHO reported an additional 19 cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including eight associated deaths. Globally, 2,519 laboratory confirmed cases of human infection with MERS-CoV, including 866 associated deaths, have officially been reported to WHO since 2012.
Source: WHO Global Alert and Response website: <http://www.who.int/csr/don/archive/year/2020/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>

Coronavirus disease 2019 (COVID-19) – latest WHO situation report

- As at 10/03/2020, WHO reported 113,702 confirmed COVID-19 cases globally, of whom 80,924 were in China (where 3,140 deaths have also been reported). Outside of China, there have been 32,778 confirmed cases in 109 different countries and 872 fatal cases reported. WHO report a risk assessment level of 'Very High' in China and 'Very High' at global and regional level. Daily WHO situation updates are available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>
- As at 10/03/2020, there are 324 reported confirmed cases of COVID-19 in the UK. The number of confirmed cases in Wales reported is 15. Public Health Wales produce a daily statement on COVID-19, available from: <https://phw.nhs.wales/news/public-health-wales-statement-on-novel-coronavirus-outbreak-in-china/>
- Links to further information and guidance are available from the Public Health Wales website: <https://phw.nhs.wales/topics/coronavirus/>

Human infection with avian influenza A(H7N9), China – latest update from WHO

- The latest WHO Influenza at Human-Animal Interface summary (21/01/2020 to 28/02/2020) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratory-confirmed cases of human infection with avian influenza A(H7N9), including at least 616 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. WHO Global Alert & Response updates: <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/statistics/weekly-national-flu-reports-2019-to-2020-season>

Scotland influenza surveillance:

<https://www.hps.scot.nhs.uk/a-to-z-of-topics/influenza/#data>

Northern Ireland influenza surveillance:

<https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-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