

Current level of influenza activity: *Baseline activity*

Trend: *Stable*

Confirmed cases since 2019 week 40: 1,652 (94% influenza A and 6% influenza B. Of the influenza A cases, 16% were A(H1N1)pdm09, 68% were A(H3N2) and 16% were A(not typed).

Key points – Wales

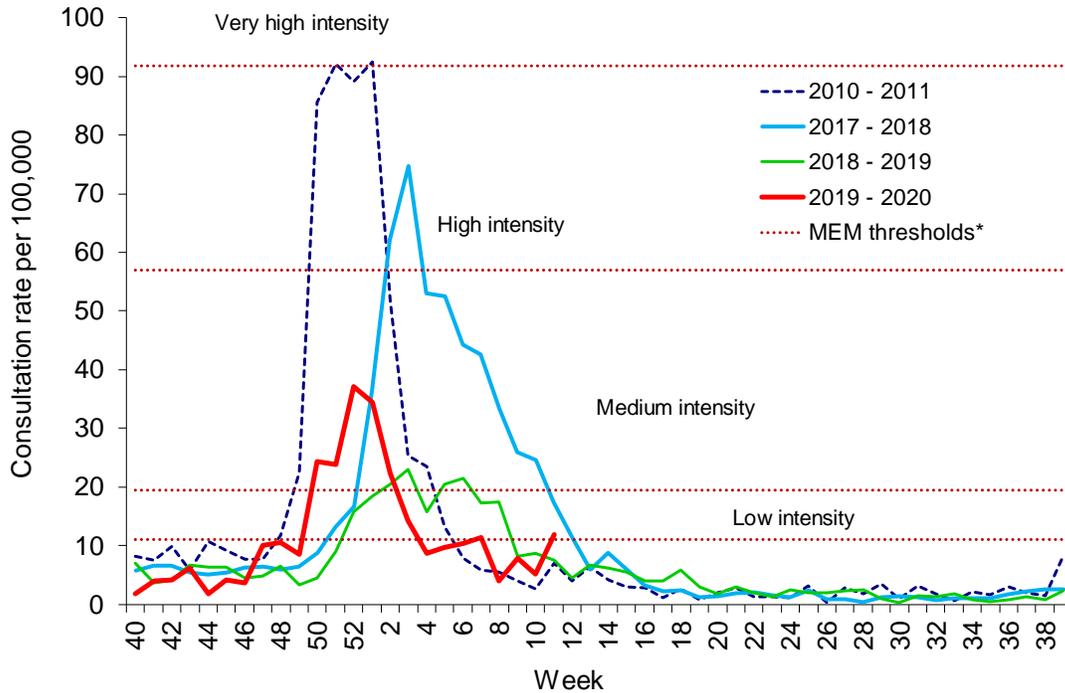
Surveillance indicators suggest that influenza is circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) increased during week 11 (ending 15/03/2020). During week 11, 24 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 increased this week but remains at baseline levels.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 11 was 11.9 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate increased compared to week 10 (5.1 per 100,000 practice population) and has returned to the baseline threshold for activity (11.1 per 100,000 practice population) (Figure 1). The consultation rate was highest in patients aged 25-34 years (22.1 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 11 increased to 51.6% (Figure 8).
- Thirty two surveillance samples from patients with ILI, collected by sentinel GPs during week 11 had been received by Public Health Wales Microbiology as at 18/03/2020. The following numbers of patients tested positive: One influenza A(H1N1)pdm09, seven rhinovirus, one mycoplasma, one human metapneumovirus, one for both adenovirus and human metapneumovirus, and 21 samples were negative for all routinely tested respiratory pathogens. The sentinel GP surveillance scheme is currently being updated to include testing for SARS-CoV-2, the virus which causes COVID-19. Results of these tests will be factored into this report when developmental work is complete.
- During week 11, 775 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: six influenza A(H1N1)pdm09, five influenza A(H3N2), one influenza A(not subtyped), 11 influenza B, 131 rhinovirus, 56 human metapneumovirus, 46 adenovirus, 45 seasonal coronaviruses, 19 parainfluenza, 13 mycoplasma, 12 enterovirus and six RSV (Figure 4). The proportion of samples from hospital patients positive for influenza was 3.0%. Twenty-eight respiratory specimens were tested from patients in intensive care units (ICU), one specimen was positive for influenza (Figure 5).
- RSV seasonal activity increased but remained at baseline levels during week 11. Four (7.3%) of the 137 samples from children younger than five years with ARI tested positive for RSV during week 11 and there were 0.6 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 11, two ARI outbreaks were reported to the Public Health Wales Health Protection team, both were in residential homes.
- At the end of week 11, uptake of influenza vaccine was: 69.4% in those aged 65 years and older, 44.2% in patients aged six months to 64 years at clinical risk, and 50.7% 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 15/03/2020).



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 11 2020).

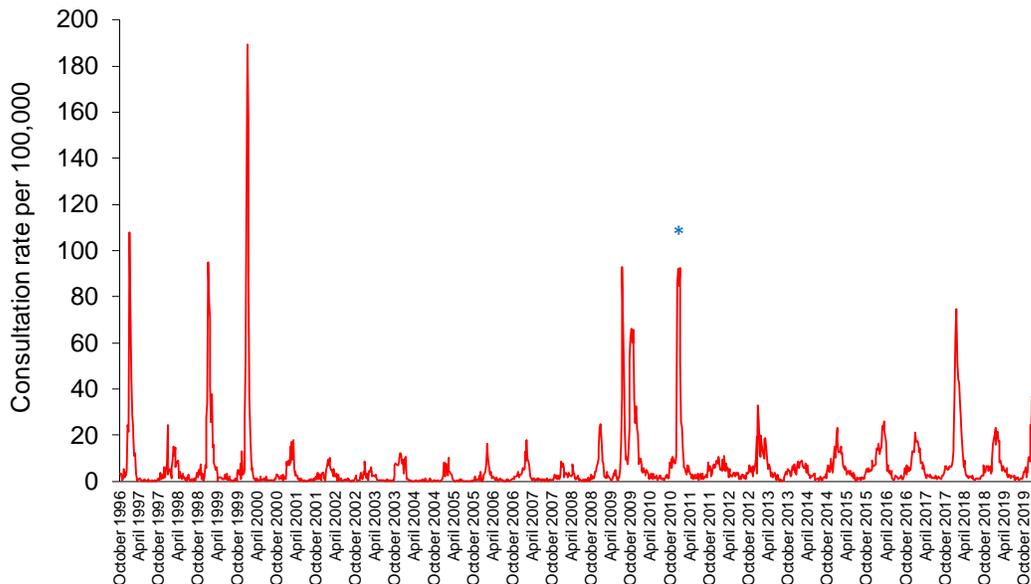
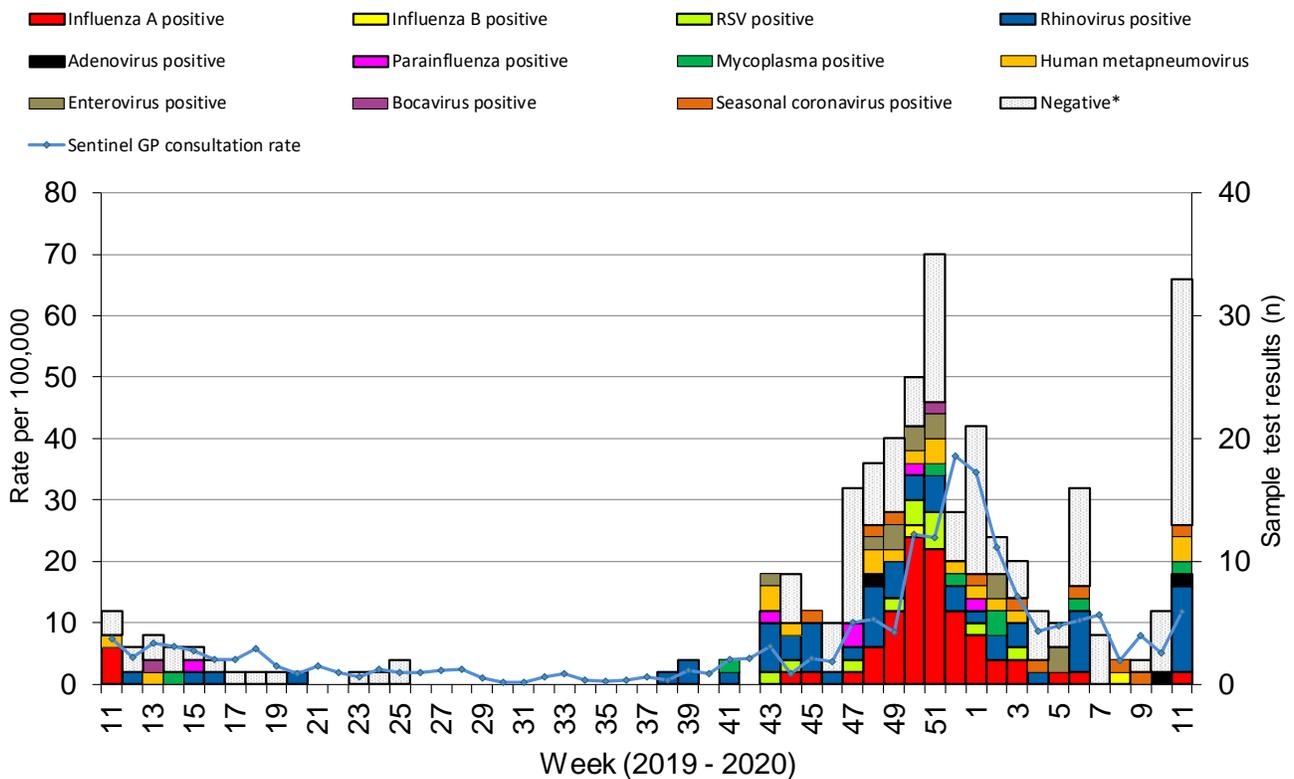


Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 06 – week 11 2020 (as of 15/03/2020).

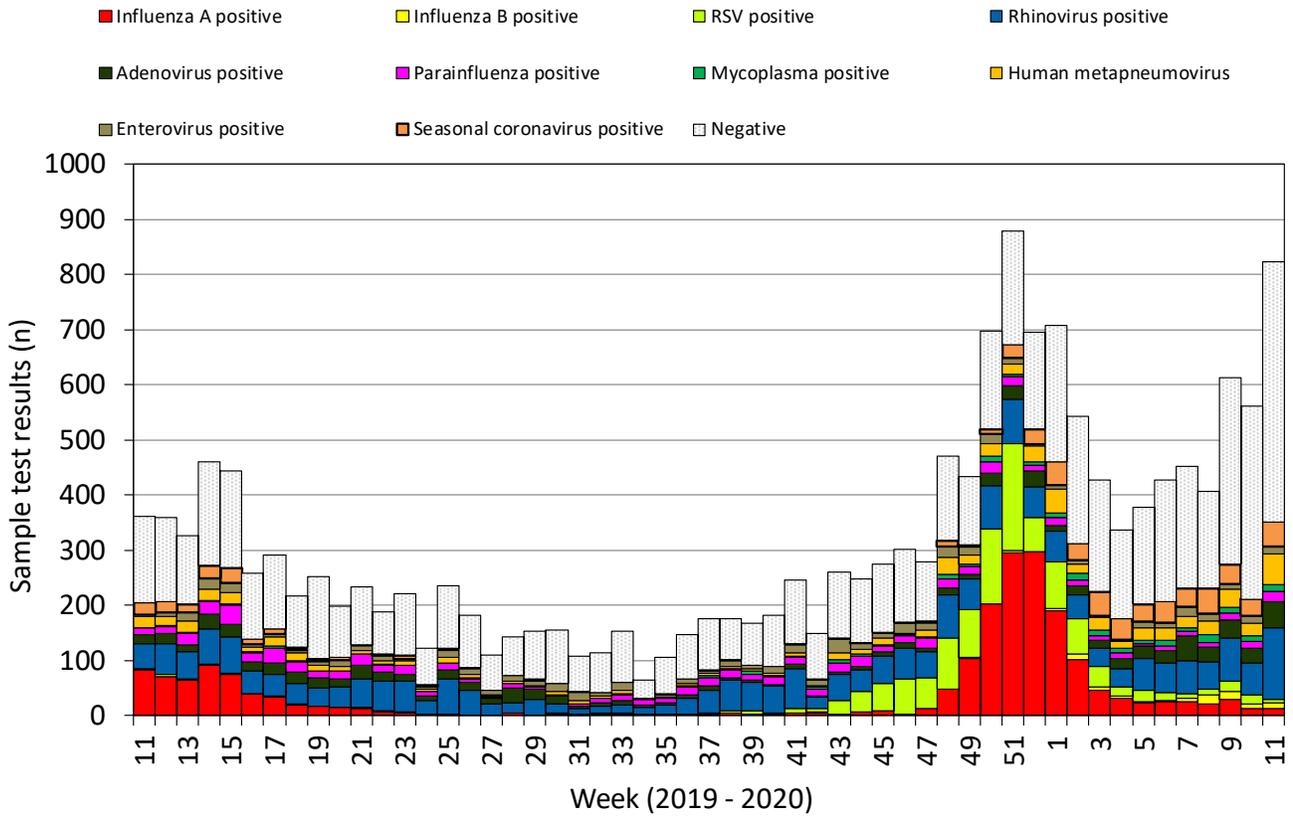
Age group	6	7	8	9	10	11
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	6.3	6.3	0.0	6.5
5 - 14	6.8	9.2	0.0	9.1	0.0	4.7
15 - 24	15.0	13.1	6.4	12.9	8.8	4.4
25 - 34	21.6	12.0	7.8	13.7	4.0	22.1
35 - 44	6.2	18.9	6.2	8.2	10.6	8.5
45 - 64	13.8	12.2	3.7	7.4	8.7	18.1
65 - 74	4.3	10.9	2.1	0.0	0.0	11.0
75+	2.4	5.0	0.0	4.9	0.0	7.5
Total	10.4	11.3	3.9	7.9	5.1	11.9

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 15/03/2020, by week of sample collection, week 11 2019 - week 11 2020.



* 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 15/03/2020 by week of sample collection, week 11 2019 to week 11 2020.



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 11 2019 to week 11 2020.

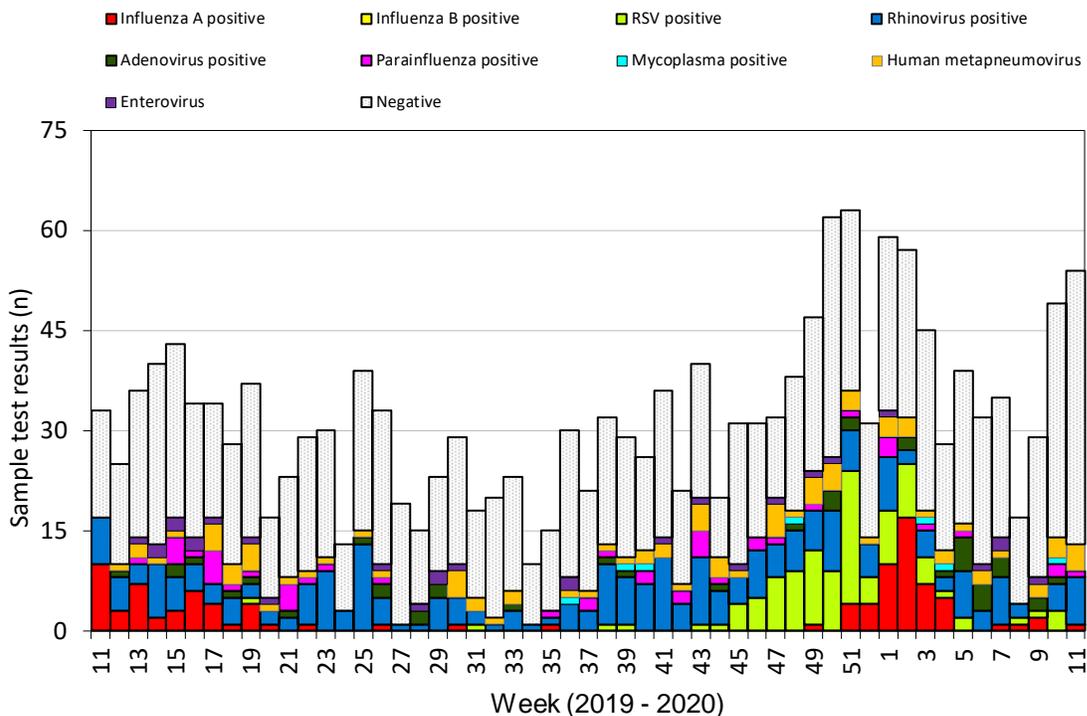
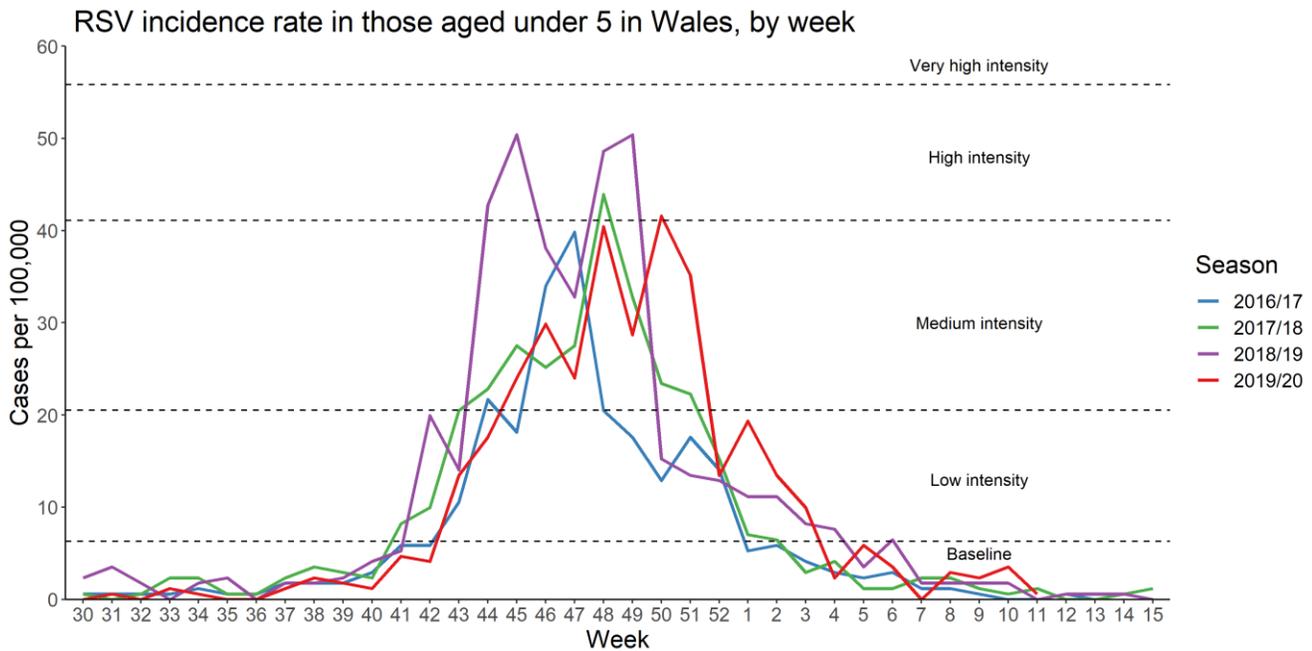


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2016 to week 11 2020.



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).

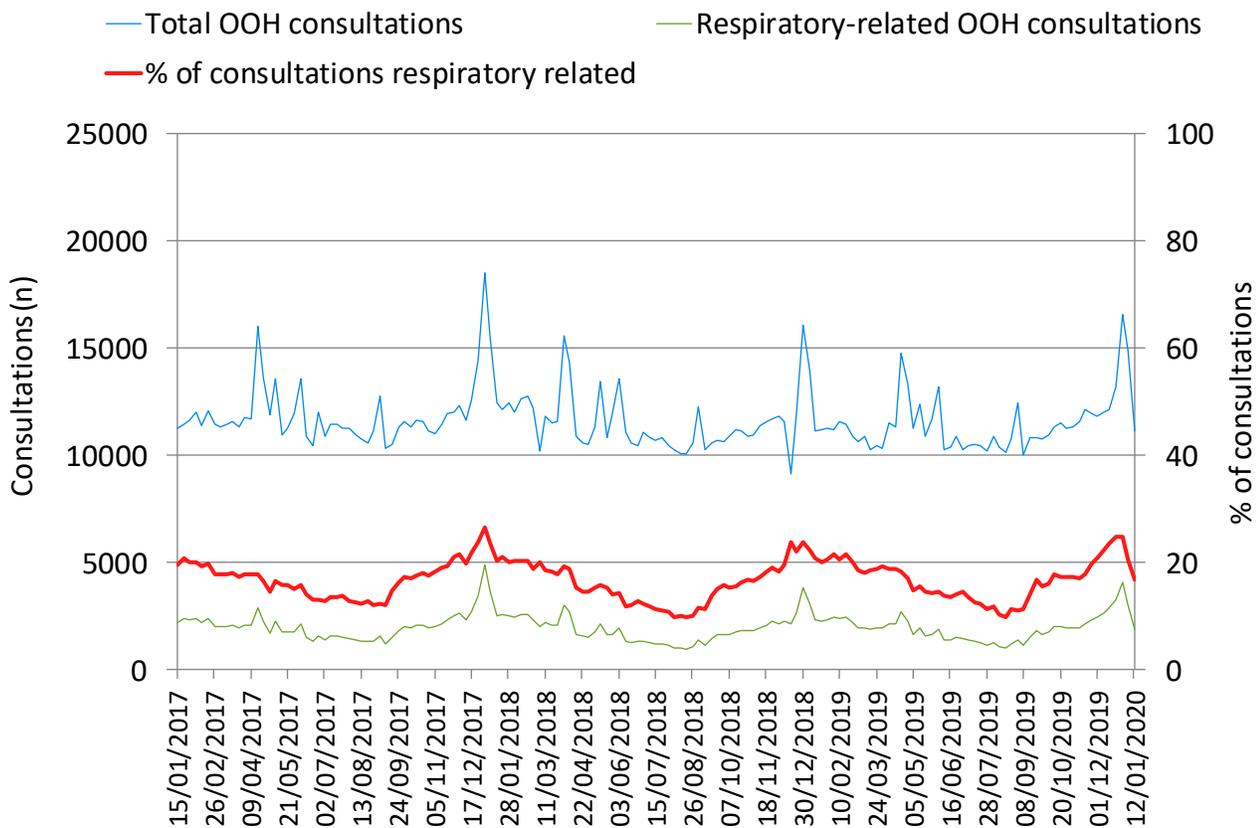
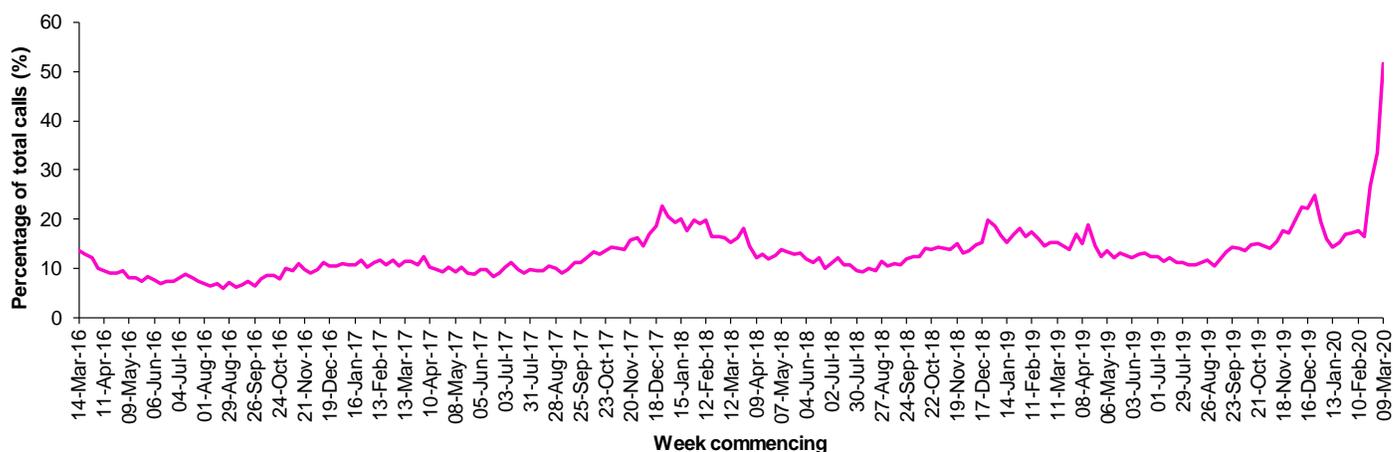


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 11 2016 - week 11 2020 (as of 15/03/2020).



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 15/03/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	69.4%
People younger than 65y in a clinical risk group	44.2%
Children aged two & three years	50.7%
Children aged four to ten years*	68.7%
NHS staff	55.8%
NHS staff who have direct patient contact	58.7%

* 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 10, influenza activity remained elevated but continued to decline across the WHO European Region. During week 10, a total of 1,753 sentinel specimens were tested for influenza, 665 of which were positive (174 influenza A(H1N1)pdm09, 139 influenza A(H3N2), 77 influenza A(not typed) and 275 influenza B).
Source: Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 16/03/2020 that in the temperate zones of the northern hemisphere, respiratory illness indicators and influenza activity appeared to decrease overall. In North America, influenza activity started to decline. In Europe, influenza activity remained elevated overall. In Central Asia, influenza activity decreased with detections of all seasonal influenza subtypes. In Northern Africa, influenza activity continued to increase 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 reported in some 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, increased influenza activity was reported in Bhutan. In South East Asia, influenza activity 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 12/03/2020), during the time period from 17/02/2020 – 01/03/2020, 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 233,445 specimens during that time period, 62,423 were positive for influenza viruses, of which 42,013 were typed as influenza A (7,348 influenza A(H1N1)pdm09, 2,516 influenza A(H3N2) and 32,149 influenza A(not subtyped)) and 20,410 influenza B (of the characterised influenza B viruses 18 belonged to the B-Yamagata lineage and 1,574 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 10 (ending 07/03/2020) influenza activity remains high but decreased again this week. Nationally, 9,413 (21.5%) out of 43,868 specimens have tested positive for influenza in week 10, of these positives 7,294 (77.5%) were influenza A and 2,119 (22.5%) were influenza B. Further characterisation has been carried out on 1,513 specimens by public health laboratories, and 744 tested positive for influenza, 575 (77.3%) were influenza A (466 influenza A(H1N1)pdm09 (93.4%), 33 influenza A(H3N2) (6.6%), and subtyping was not performed on 76 specimens) and 169 influenza B (22.7%).

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

- The Public Health Agency of Canada reported that during week 10, 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 20%, a 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 12/03/2020 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,521 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 17/03/2020, WHO reported 179,111 confirmed COVID-19 cases globally, with 7,426 fatal cases reported. WHO report a risk assessment level of 'Very High' at global level. Daily WHO situation updates are available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>
- As at 18/03/2020, there are 2,626 reported confirmed cases of COVID-19 in the UK. The number of confirmed cases in Wales reported is 149, with two deaths reported. 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/>
- Links to further information and guidance are available from the Public Health Wales website: <https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/>

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