

Current level of influenza activity: *Low seasonal activity*

Trend: *Decreasing*

Confirmed cases since 2019 week 40: 1,404 (98% influenza A and 2% influenza B. Of the influenza A cases, 13% were A(H1N1)pdm09, 72% were A(H3N2) and 15% were A(not typed).

Key points – Wales

Surveillance indicators suggest that influenza is circulating in Wales.

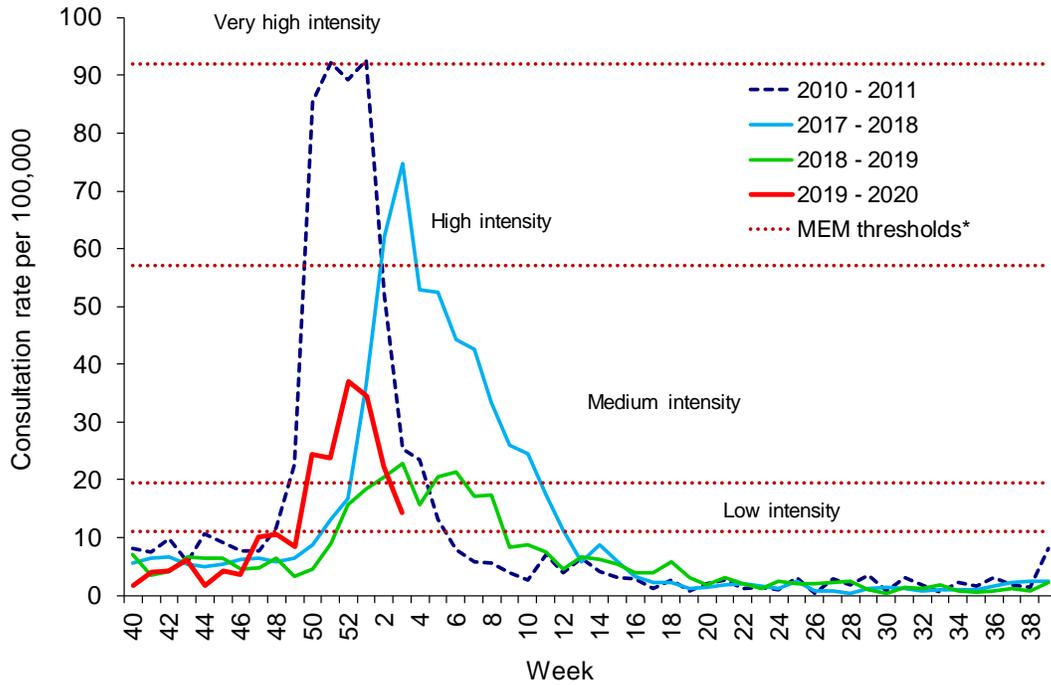
The sentinel GP consultation rate for influenza-like illness (ILI) decreased during week 03 (ending 19/01/2020) and is now at low intensity. During week 03, 52 cases of influenza were confirmed.

Influenza 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 continued to decrease this week is at low levels.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 03 was 14.3 consultations per 100,000 practice population (Table 1).
- The ILI consultation rate decreased compared to week 02 (22.3 per 100,000 practice population) and is now at low intensity.
- The total number of respiratory-related consultations with Out of Hours (OOH) doctors in Wales reported to Public Health Wales during week 02 (**latest data available**) was 1,875. This represents 16.8% of all 11,163 reported consultations with OOH doctors and is a decrease in the number and the proportion reported last week (Figure 7). The percentage of calls to NHS Direct Wales which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 03 decreased to 14.2% (Figure 8).
- Nine surveillance samples from patients with ILI, collected by sentinel GPs during week 03, had been received by Public Health Wales Microbiology as at 22/01/2020. One sample was positive for influenza A(H3N2) (a patient aged 15-24 years), two samples tested positive for rhinovirus, one sample tested positive for RSV, one sample tested positive for human metapneumovirus, one sample tested positive for coronavirus and three samples were negative for all routinely tested pathogens.
- During week 03, 401 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: 11 influenza A(H1N1)pdm09, 27 influenza A(H3N2), seven influenza A(not subtyped), six influenza B, 39 RSV, 33 rhinovirus, 22 human metapneumovirus, 13 adenovirus, 11 mycoplasma, eight parainfluenza and three enterovirus (Figure 4). The proportion of samples from hospital patients positive for influenza was 13%. Thirty-seven respiratory specimens were tested from patients in intensive care units (ICU), no specimens were positive for influenza A (Figure 5).
- RSV seasonal activity continued at low levels during week 03. Seventeen (21%) of 79 samples from children younger than five years with ARI tested positive for RSV during week 03 and there were 10.0 confirmed cases per 100,000 in this age-group (Figure 6). Week 3 was the 12th week of the RSV season and the average duration of seasonal activity is 11-13 weeks.
- During week 03, three ARI outbreaks were reported to the Public Health Wales Health Protection team, one outbreak in a residential home, one outbreak in a school/nursery, and one outbreak in the community which was confirmed as influenza A.
- At the end of 2020 week 03, uptake of influenza vaccine was: 68.1% in those aged 65 years and older, 41.6% in patients aged six months to 64 years at clinical risk, and 45.7% in children aged two and three years old. In the 1,268 primary schools visited thus far as part of the universal childhood influenza programme, uptake was 68.3%.

Influenza activity in Wales

Figure 1. Clinical consultation rate per 100,000 practice population in Welsh sentinel practices (as of 19/01/2020).

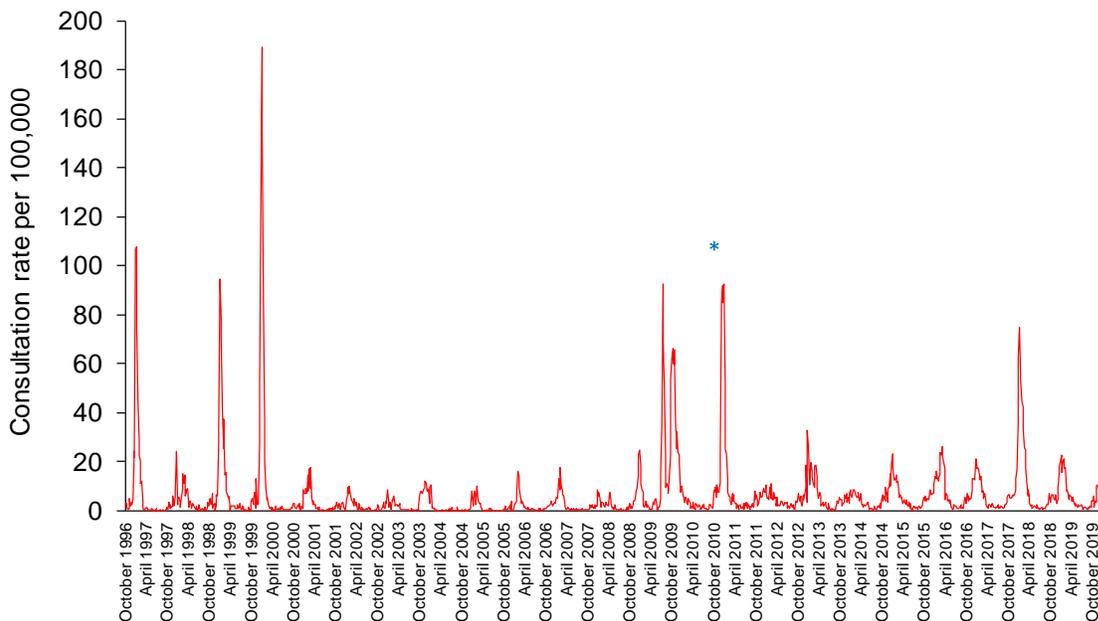


A technical issue is currently affecting data submitted from sentinel practices utilising a specific brand of GP software. As a result, since week 47, data from affected practices has been excluded from calculations of the weekly ILI consultation rate. Weekly rates from week 47 onwards are based on data from approximately 20 practices.

Week 52 consultation rate 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 03 2020).



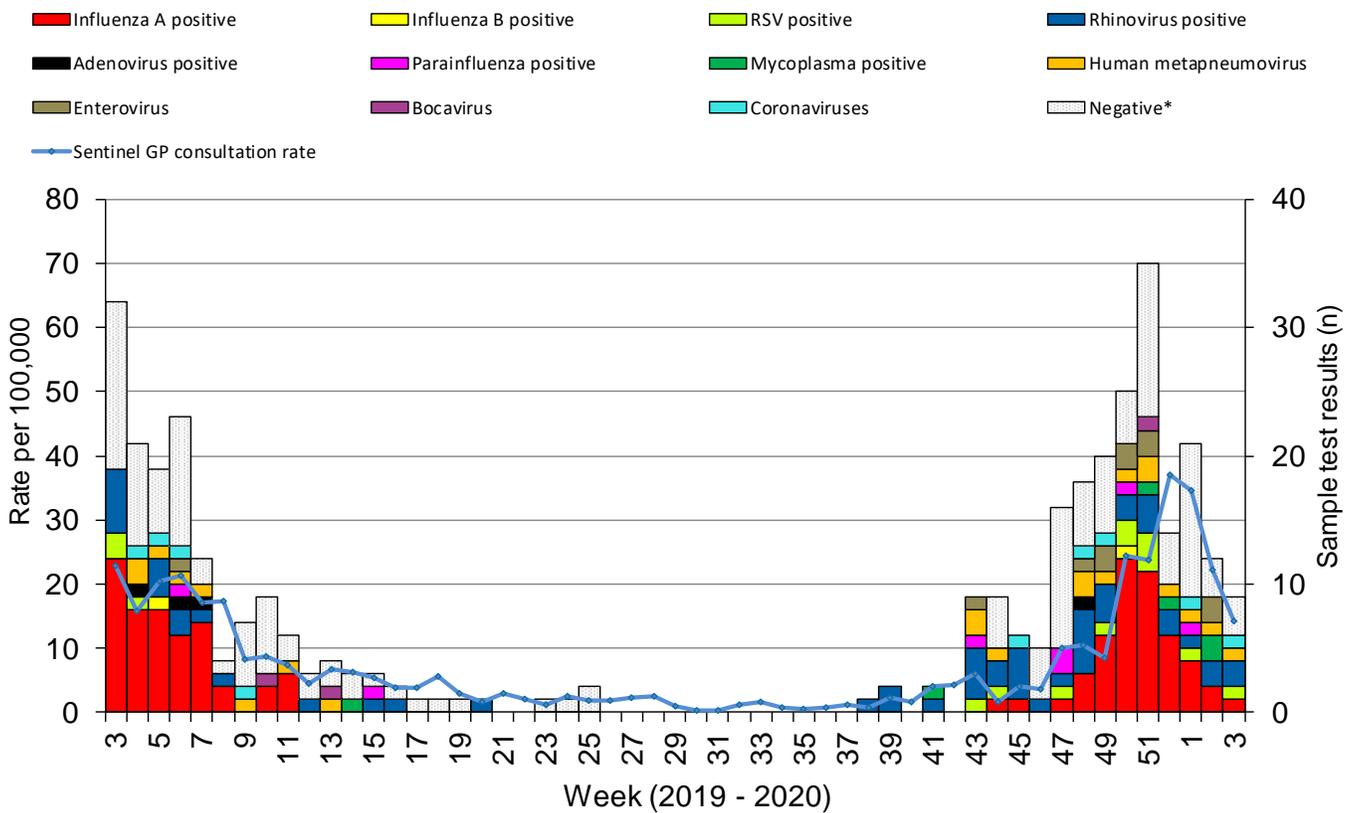
* Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for influenza in Welsh sentinel practices, week 50 2019 – week 03 2020 (as of 19/01/2020).

Age group	50	51	52	1	2	3
< 1	-	-	-	-	-	-
1 - 4	-	-	-	-	-	-
5 - 14	-	-	-	-	-	-
15 - 24	-	-	-	-	-	-
25 - 34	-	-	-	-	-	-
35 - 44	-	-	-	-	-	-
45 - 64	-	-	-	-	-	-
65 - 74	-	-	-	-	-	-
75+	-	-	-	-	-	-
Total	24.4	23.8	37.1	34.5	22.3	14.3

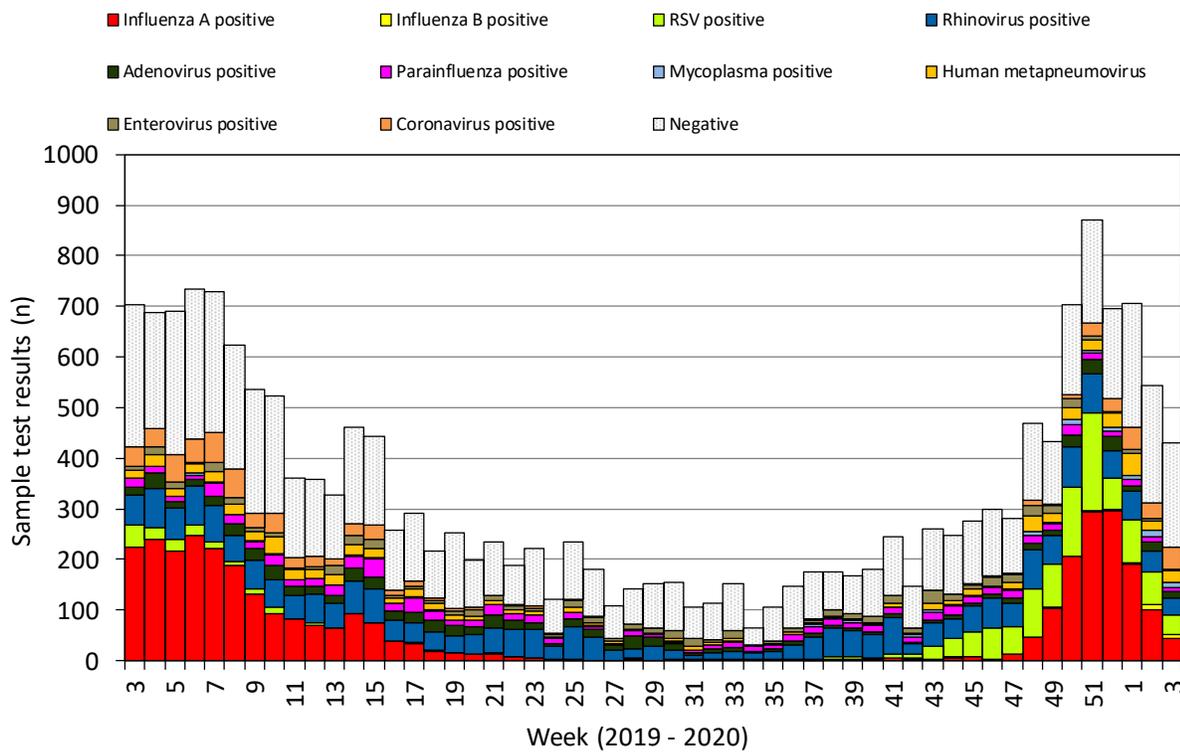
Due to the technical issue currently affecting data submitted from sentinel practices utilising a specific brand of GP software, no age breakdown is available for weeks 49 to 03.

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 19/01/2020, by week of sample collection, week 03 2019 – week 03 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 19/01/2020 by week of sample collection, week 03 2019 to week 03 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 03 2019 to week 03 2020.

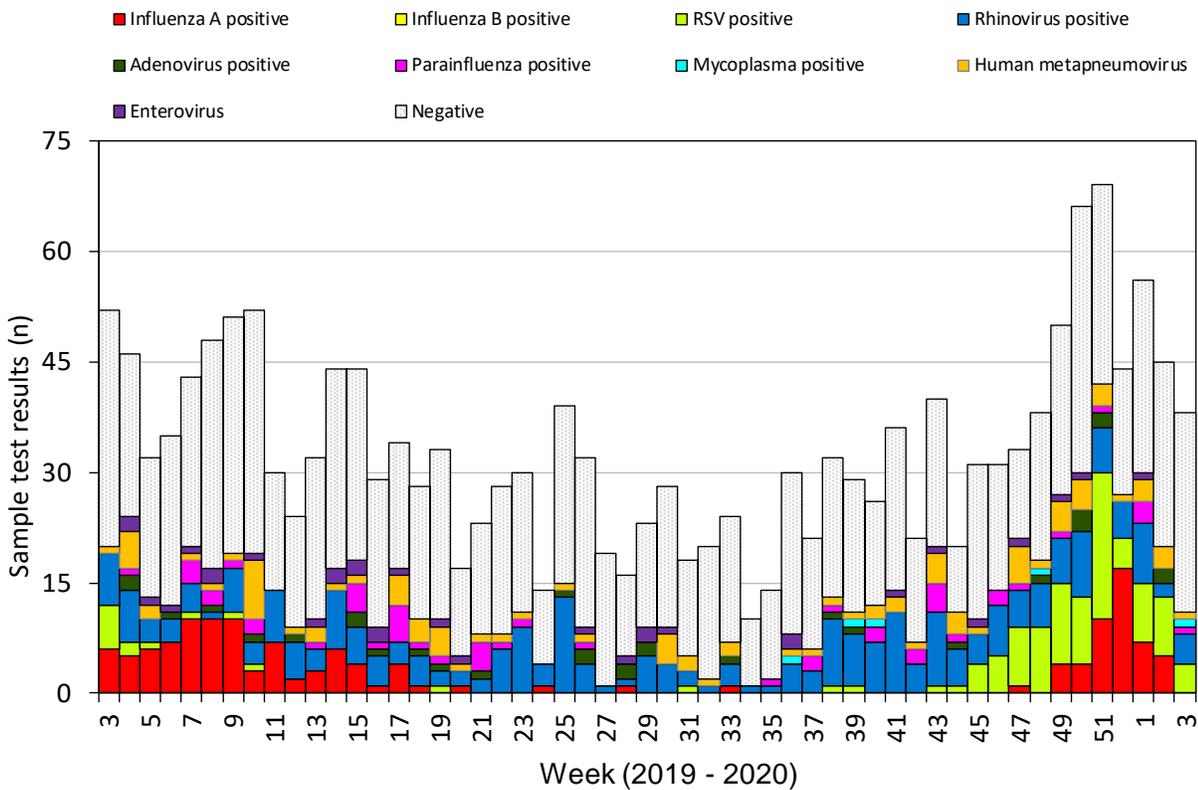
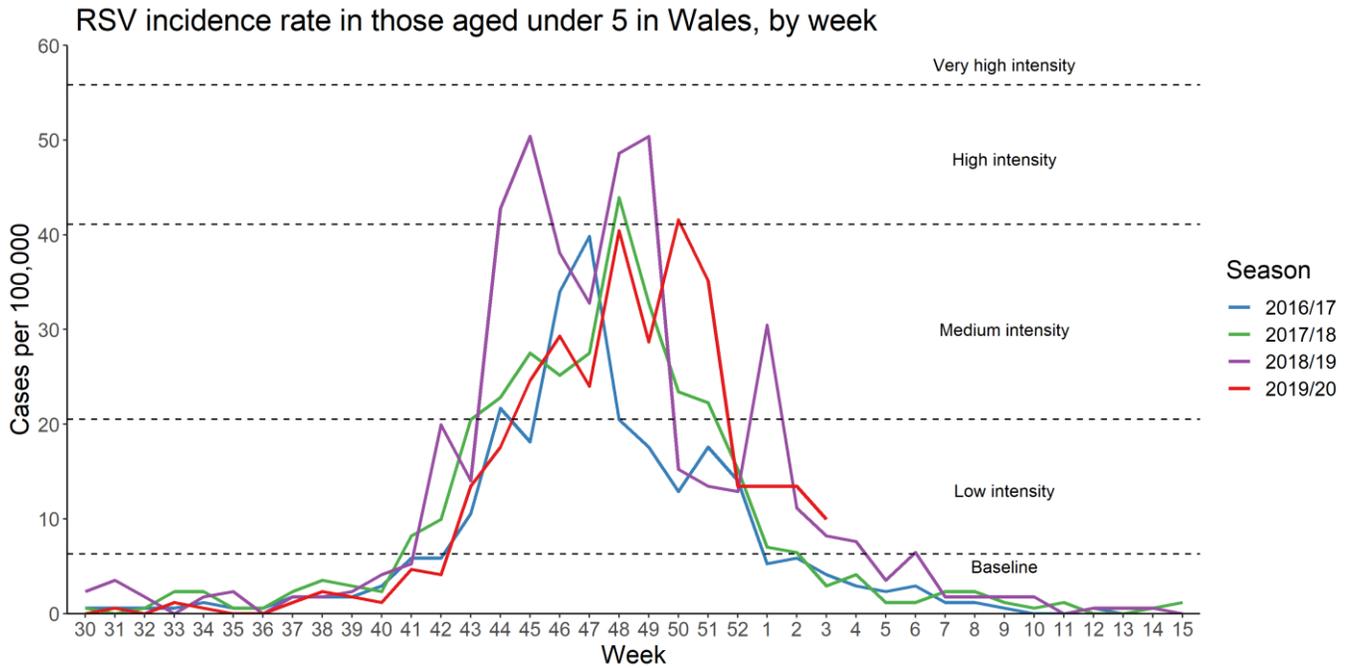


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2016 to week 03 2020.



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).

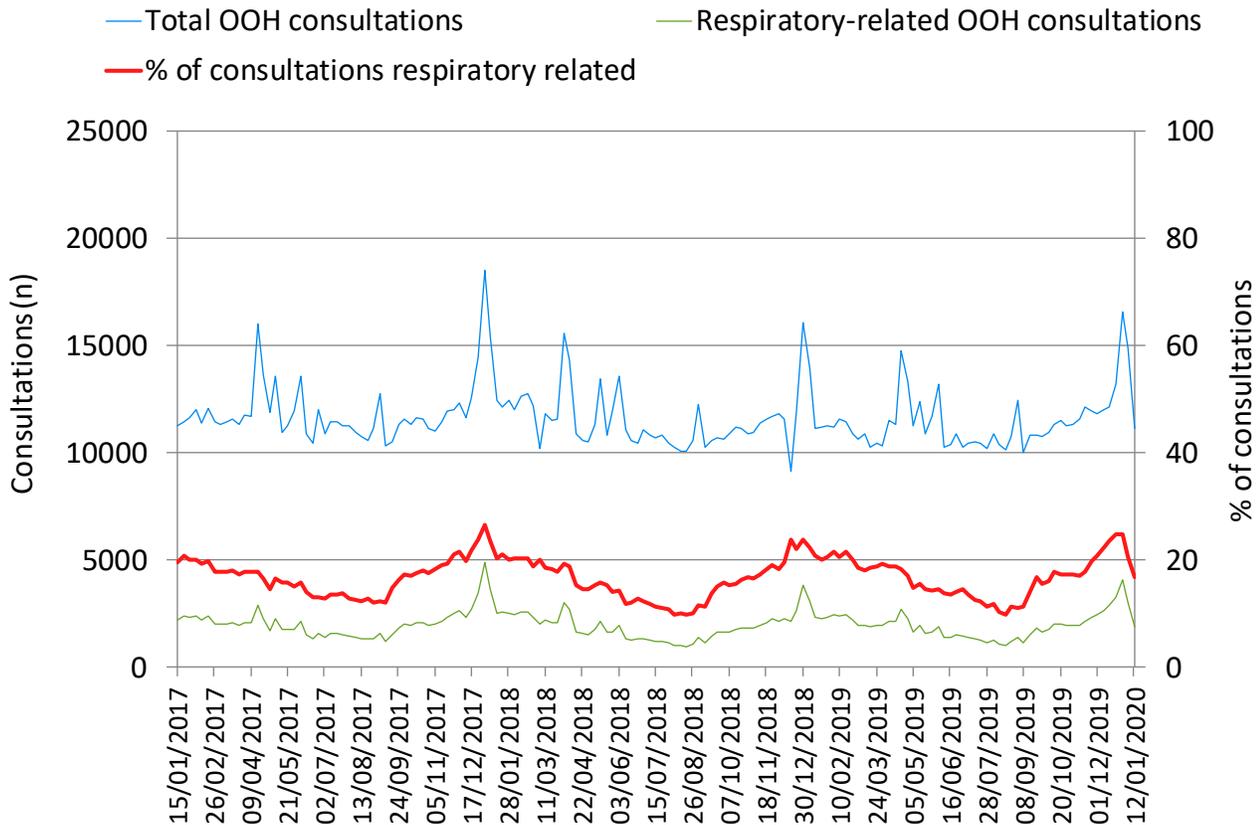
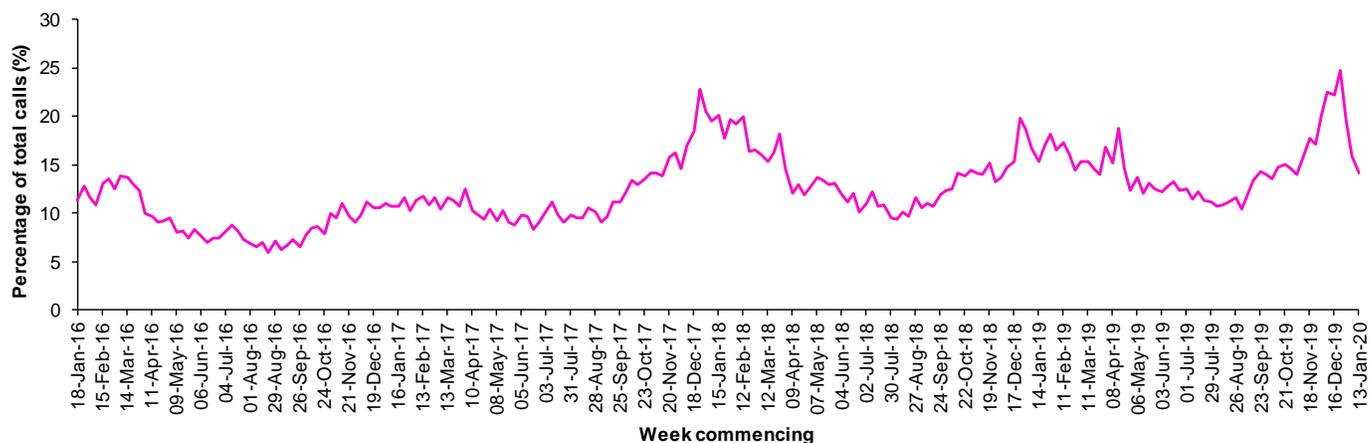


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 03 2016 - week 03 2020 (as of 19/01/2020).



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 19/01/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	68.1%
People younger than 65y in a clinical risk group	41.6%
Children aged two & three years	45.7%
Children aged four to ten years*	68.3%
NHS staff	48.1%
NHS staff who have direct patient contact	50.5%

* 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 02, influenza activity continues but shows signs of having peaked in some indicators in the UK. GP ILI consultations decreased in Northern Ireland to 13.4 per 100,000 and has returned to baseline levels. Consultations increased in Scotland to 12.1 per 100,000 but remains below baseline activity. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 14.7 per 100,000 but remains above 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 14.5 per 100,000 in week 02.
- During week 02, 41 samples tested positive for influenza (six influenza A(H1N1)pdm09, 29 influenza A(H3), three influenza A(unknown subtype), two influenza B and one co-infection of influenza A(H3) and B) through the UK GP sentinel swabbing schemes, an overall positivity of 24.4%. Three hundred and forty-seven (12.4%) of the 2,793 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza (64 influenza A(H1N1)pdm09, 121 influenza A(H3), 149 influenza A(not subtyped) and 13 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 02, activity increased, particularly in the southern part of the WHO European Region. During week 02, a total of 1,856 sentinel specimens were tested for influenza, 737 of which were positive (324 influenza A(H1N1)pdm09, 136 influenza A(H3N2), 36 influenza A(not typed) and 241 influenza B).
Source: Flu News Europe: <http://www.flunewseurope.org/>

World update

- The WHO reported on 20/01/2020 that in the temperate zones of the northern hemisphere, respiratory illness indicators and influenza activity continued to increase in most countries. In North America, influenza activity further increased with all seasonal influenza subtypes co-circulating. In Europe, influenza activity continued to increase across the region and was reported at moderate levels in some countries. In Central Asia, influenza activity increased with influenza B viruses predominant. In Northern Africa, influenza activity was low overall. In Western Asia, influenza activity remained elevated overall. In East Asia, influenza-like illness (ILI) and influenza activity continued to increase overall. Activity was low overall in most Caribbean and Central American countries. In tropical South American countries, increased influenza activity was reported from Ecuador and Colombia in recent weeks. In tropical Africa, influenza activity was low across reporting countries of Eastern and Western Africa. In Southern Asia influenza activity was low across most reporting countries. In South East Asia, influenza activity continued to be reported in Lao PDR and Malaysia, and increased in Singapore. In the temperate zone of the southern hemisphere, influenza activity returned to inter-seasonal levels. Worldwide, seasonal influenza A viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 17/01/2020), during the time period from 23/12/2019 – 05/01/2020, National Influenza Centres and other national influenza laboratories from 104 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 174,604 specimens during that time period, 44,847 were positive for influenza viruses, of which 27,946 were typed as influenza A (5,081 influenza A(H1N1)pdm09, 11,005 influenza A(H3N2) and 11,860 influenza A(not subtyped)) and 16,091 influenza B (of the characterised influenza B viruses 23 belonged to the B-Yamagata lineage and 3,753 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 02 (ending 11/01/2020) influenza activity declined slightly but remains high. Nationally, 9,277 (22.9%) out of 40,451 specimens have tested positive for influenza in week 02, of these positives 3,899 (42.0%) were influenza A and 5,378 (58.0%) were influenza B. Further characterisation has been carried out on 1,904 specimens by public health laboratories, and 1,148 tested positive for influenza, 579 (50.4%) were influenza A (504 influenza A(H1N1)pdm09 (93.3%), 36 influenza A(H3N2) (6.7%), and subtyping was not performed on 39 specimens) and 569 influenza B (49.6%).
Source: CDC Weekly US Influenza Surveillance Report: <http://www.cdc.gov/flu/weekly/>
- The Public Health Agency of Canada reported that during week 02, influenza activity decreased across multiple indicators, suggesting peak influenza activity may have been reached. The percentage of visits to healthcare professionals due to ILI was 1.8%, which is below average for this time of year. The percentage of tests positive for influenza is 26%, which is higher than the average for this time of year.
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 08/01/20 WHO reported an additional case of Middle East Respiratory Syndrome coronavirus (MERS-CoV). Globally, 2,494 laboratory confirmed cases of human infection with MERS-CoV, including 858 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/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>

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

- The latest WHO Influenza at Human-Animal Interface summary (28/09/2019 to 25/11/2019) 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. 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/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://www.immunisation.wales.nhs.uk/home>

For further information on this report, please email Public Health Wales using:

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