

Current level of influenza activity: *Baseline activity*

Influenza activity trend: *Stable*

Confirmed influenza cases since 2020 week 40: 13 (six influenza A(H3N2), two influenza A(not subtyped) and five influenza B.)

Key points – Wales

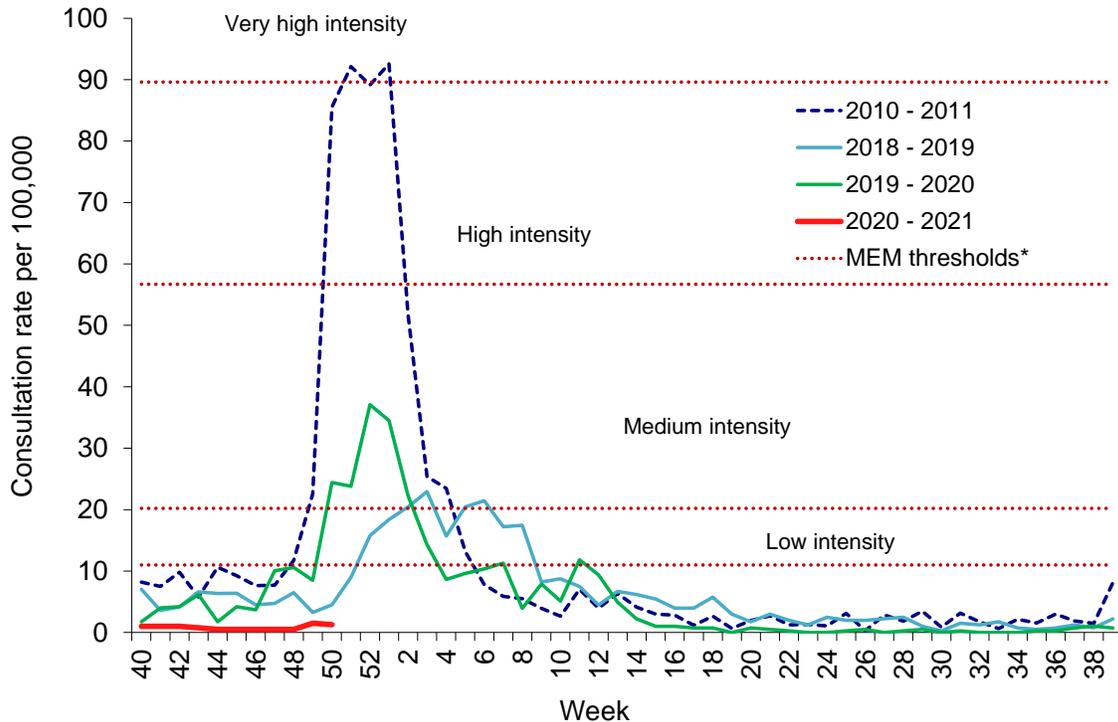
Surveillance indicators suggest that influenza is not currently circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) increased during week 50 (ending 13/12/2020). During week 50, two cases of influenza were confirmed. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community. Rhinovirus was the most commonly detected non-COVID-19 cause of Acute Respiratory Infection (ARI) but other causes of ARI continue to be detected. Surveillance data suggests the Respiratory Syncytial Virus (RSV) season is not yet underway.

- The **Sentinel GP consultation rate for influenza-like illness (ILI)** in Wales during week 50 was 1.3 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (1.5 consultations per 100,000) and remains below baseline threshold for seasonal influenza activity (11.0 per 100,000 practice population) (Figure 1). The sentinel GP ILI consultation rate was highest in patients aged 15-24 years and 65-74 years (2.2 per 100,000 practice population) (Table 1). Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.
- The **Sentinel GP consultation rate for Acute Respiratory Infections (ARI)** was 88.5 per 100,000 practice population during week 50, this is an increase compared to the previous week (85.5 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections also increased compared to the previous week. The age-group specific consultation rate for ARI during week 50 was highest in under one year olds (261.5 per 100,000 practice population).
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 50 increased to 17.0% (Figure 9).
- The total number of respiratory-related consultations with **Out of Hours (OOH)** doctors in Wales reported to Public Health Wales during week 50 was 1,119, this represents 10.2% of all 10,946 reported consultations with OOH doctors, an increase in the number and proportion reported last week (Figure 8).
- During week 50, 917 specimens received respiratory panel testing from hospital and non-sentinel GP patients with ARI. These results do not include samples tested solely for SARS-CoV2. There was one influenza A(H3N2), one influenza B, 96 rhinovirus, 11 adenovirus and one enterovirus detected in week 50 (Figure 4). Additionally, 3,869 samples from patients were submitted for rapid Cepheid tested for influenza, RSV and SARS-CoV2, these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI (Figure 5). Of these 3,869 samples, none were positive for influenza or RSV, and 373 were positive for SARS-CoV2 (figure 5). Sixty-nine respiratory specimens were tested from patients in intensive care units (ICU), none were positive for influenza (Figure 6). For the latest COVID-19/ SARS-CoV2 surveillance data please see the [PHW daily dashboard](#)
- One surveillance sample from a patient with ILI, collected by a **sentinel GP** during week 50 had been received by Public Health Wales Microbiology as at 16/12/2020. The sample was negative for all routinely tested respiratory pathogens.
- There has been no detectable RSV activity so far for 2020-21.
- During week 50, 161 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Seventy-five were in residential homes, 48 were in a school/nursery setting, 11 were in hospitals and 27 were in a community, mixed or other setting.
- According to **EuroMoMo** analysis, all-cause deaths were within the normal range for the most recent reporting week.

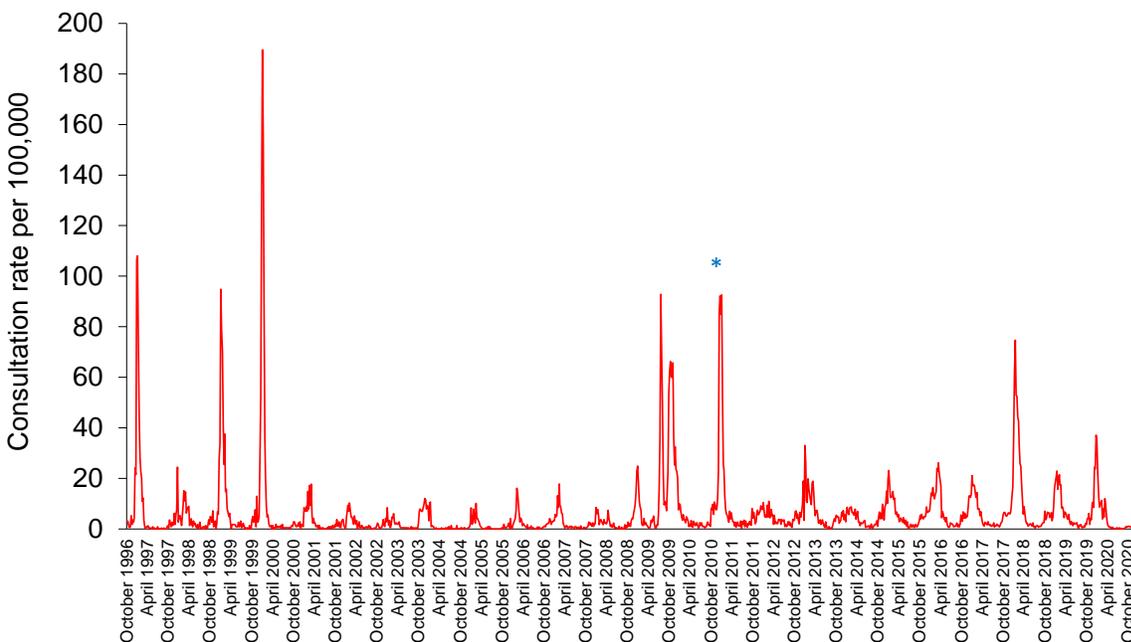
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 13/12/2020).



* 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. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (week 48 1996 – week 50 2020).



* Reporting changed to Audit+ surveillance system

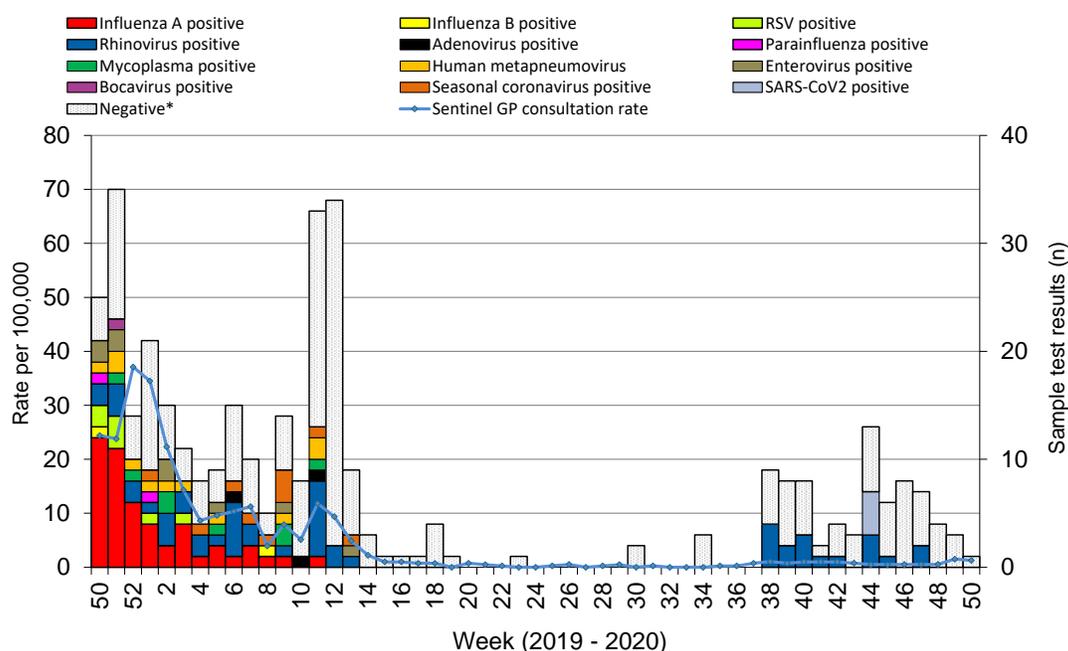
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 45 – week 50 2020 (as of 13/12/2020).

Age group	45	46	47	48	49	50
< 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	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	0.0	0.0	2.2	2.2	0.0	2.2
25 - 34	0.0	0.0	0.0	0.0	4.0	2.0
35 - 44	0.0	0.0	0.0	0.0	0.0	0.0
45 - 64	1.9	1.9	1.0	1.0	0.9	1.9
65 - 74	0.0	0.0	0.0	0.0	6.6	2.2
75+	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.5	0.5	0.5	0.5	1.5	1.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 45 – week 50 2020 (as of 13/12/2020).

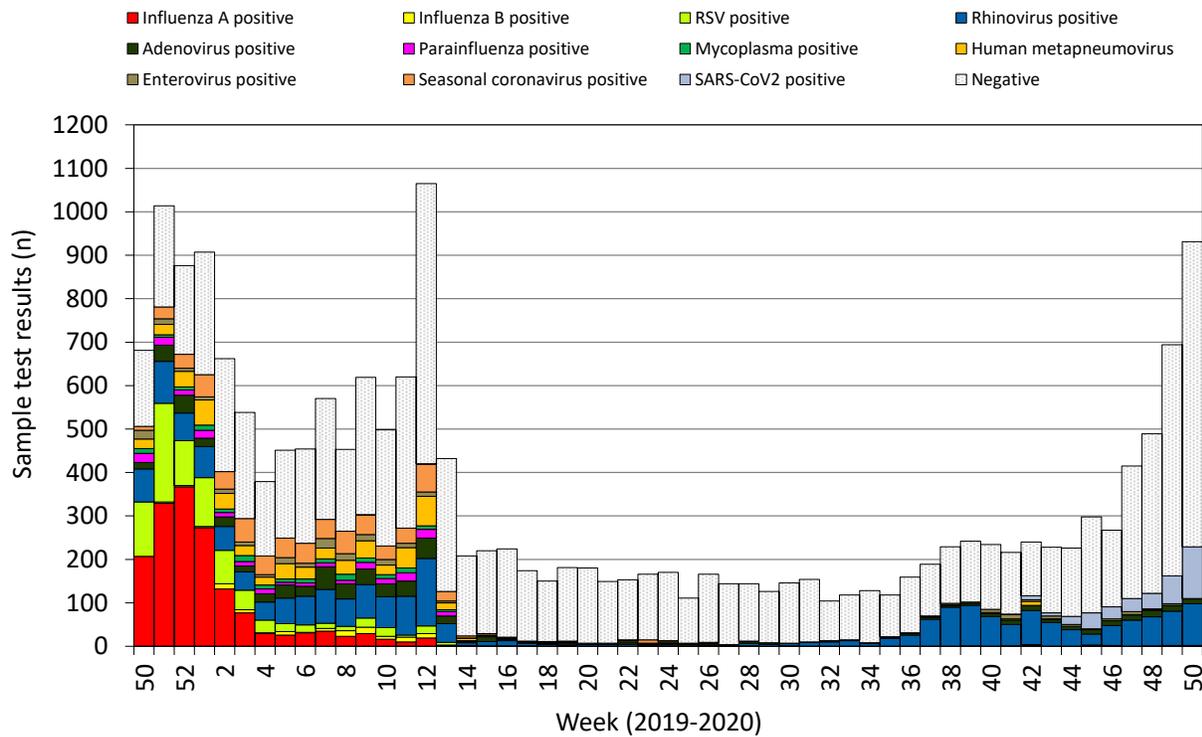
Age group	45	46	47	48	49	50
< 1	382.3	328.7	525.3	361.1	860.6	261.5
1 - 4	130.2	141.2	222.2	215.7	237.8	180.2
5 - 14	25.1	40.2	54.4	44.9	73.4	51.1
15 - 24	56.4	44.6	55.7	69.1	60.8	97.3
25 - 34	55.6	57.1	59.2	65.3	101.0	72.8
35 - 44	76.3	32.0	78.8	42.5	79.0	96.1
45 - 64	73.4	66.2	48.9	46.1	64.3	87.1
65 - 74	62.5	64.3	57.6	33.2	57.1	63.7
75+	79.5	79.3	64.4	81.7	65.1	113.5
Total	68.3	61.7	68.1	61.7	83.5	88.5

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 13/12/2020, by week of sample collection, week 50 2019 - week 50 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 13/12/2020 by week of sample collection, week 50 2019 to week 50 2020.



This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. 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. Rapid Cepheid specimens submitted for virological testing for hospital patients, as of 13/12/2020 by week of sample collection, week 46 to week 50 2020.

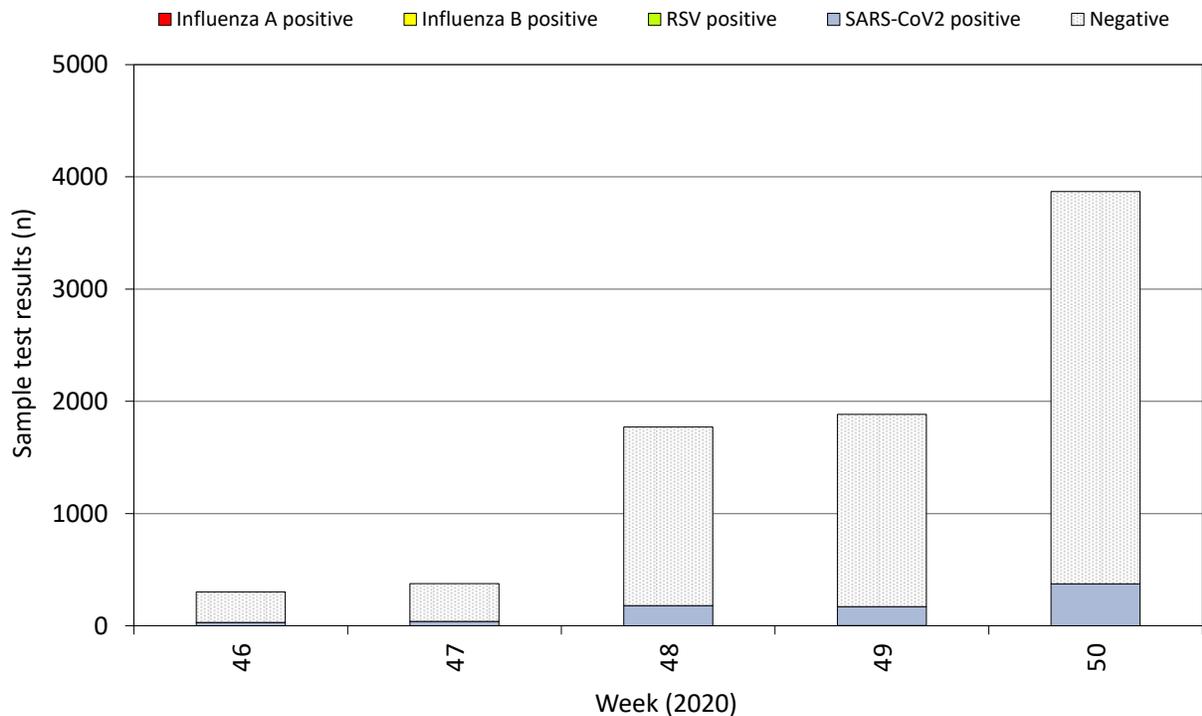
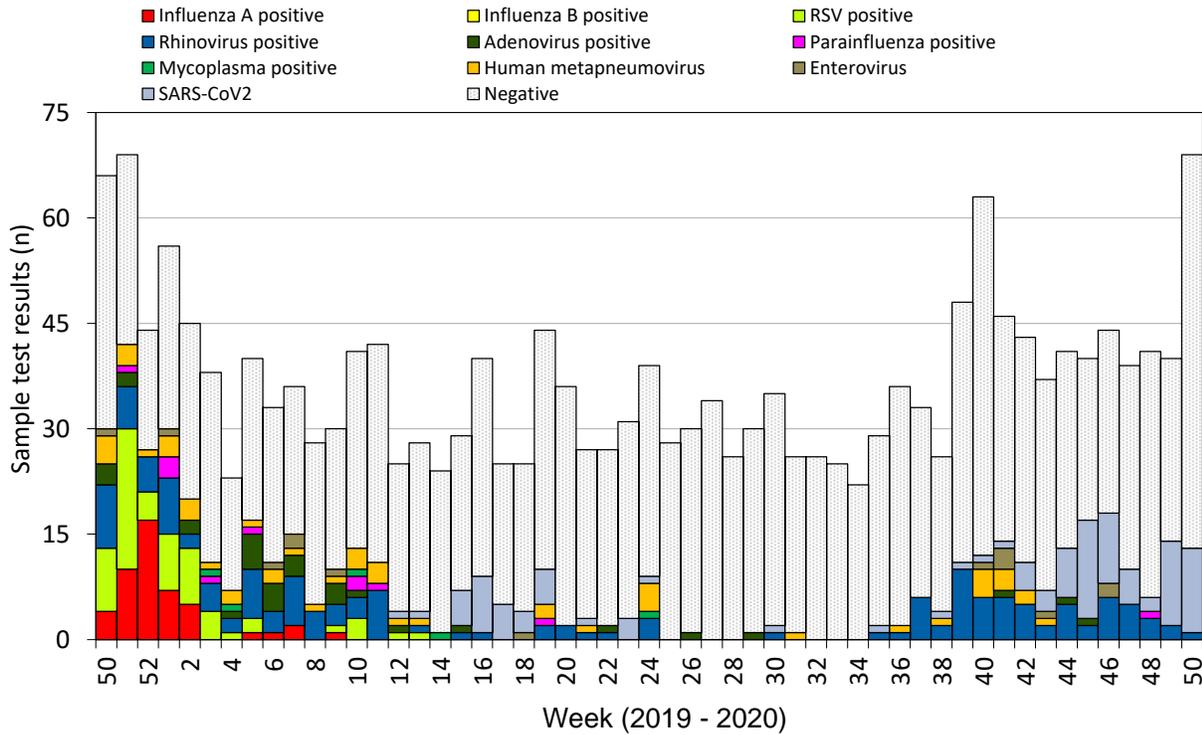
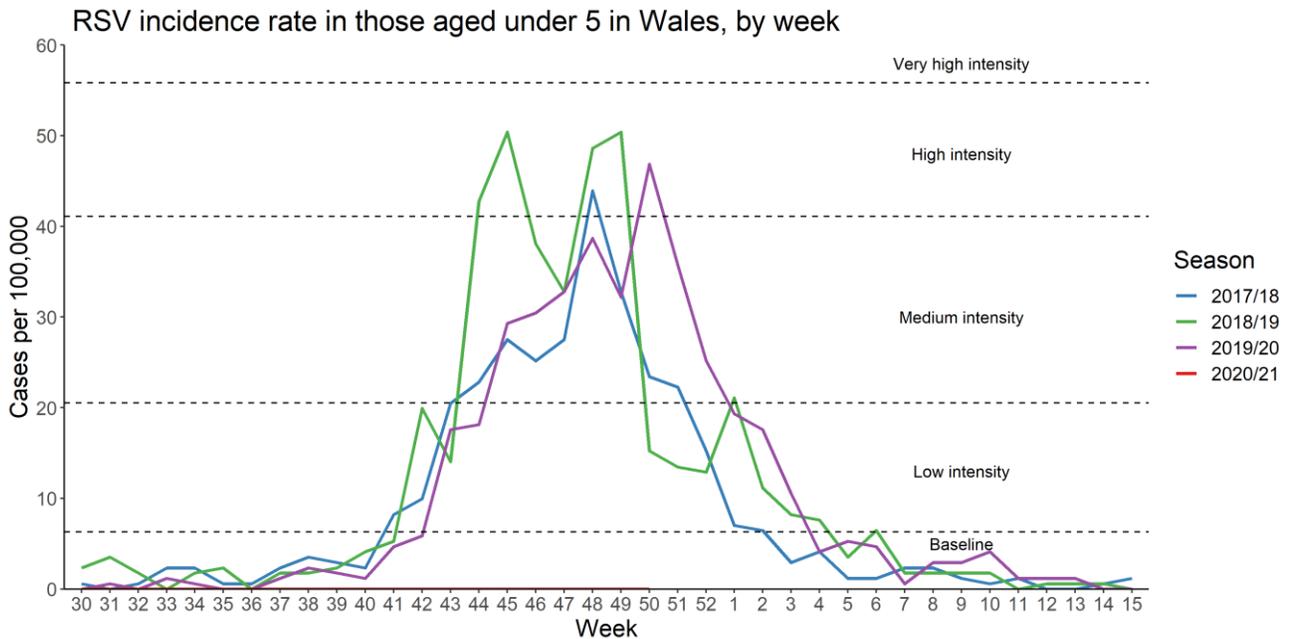


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 50 2019 to week 50 2020.



This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to week 50 2020.



No samples have tested positive for RSV in under 5 year olds since week 30 2020.

Out of Hours consultations and calls to NHS Direct Wales

Figure 8. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 13/12/2020).

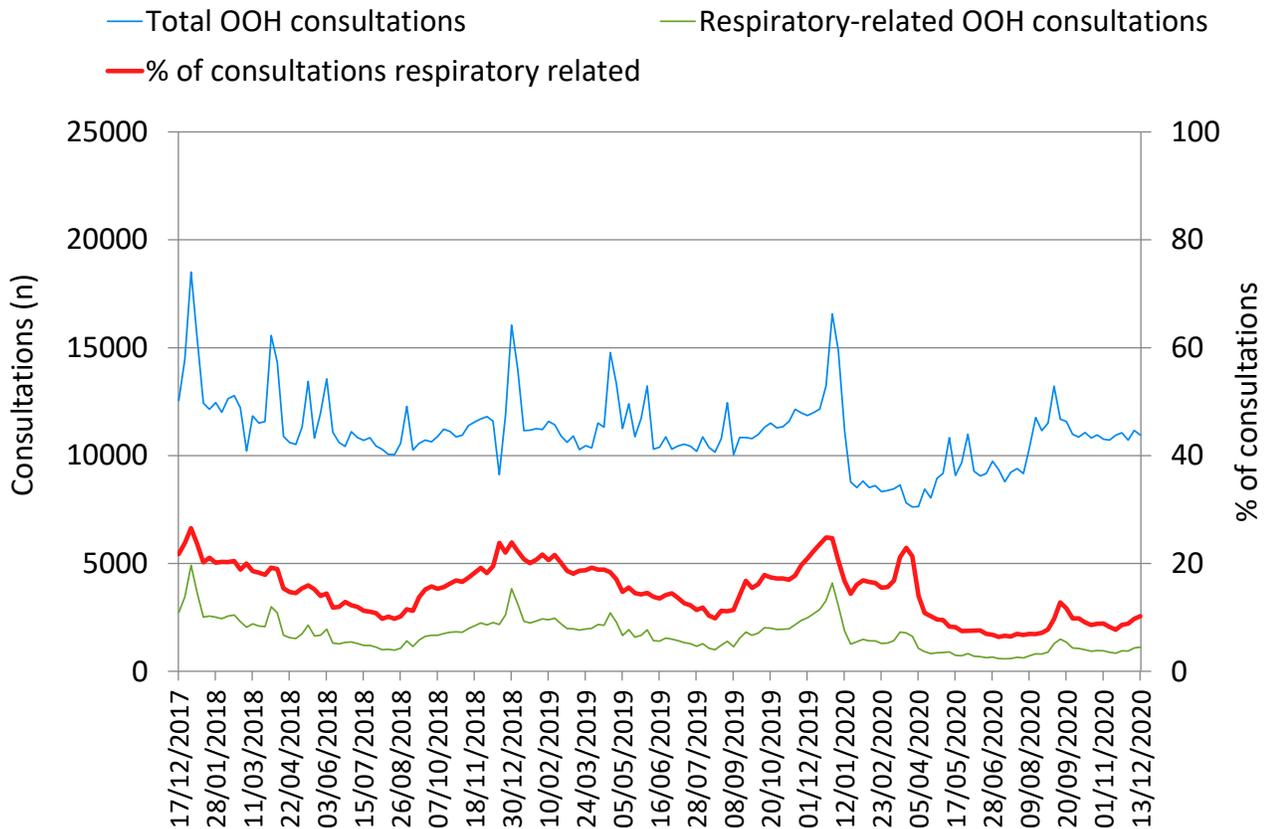
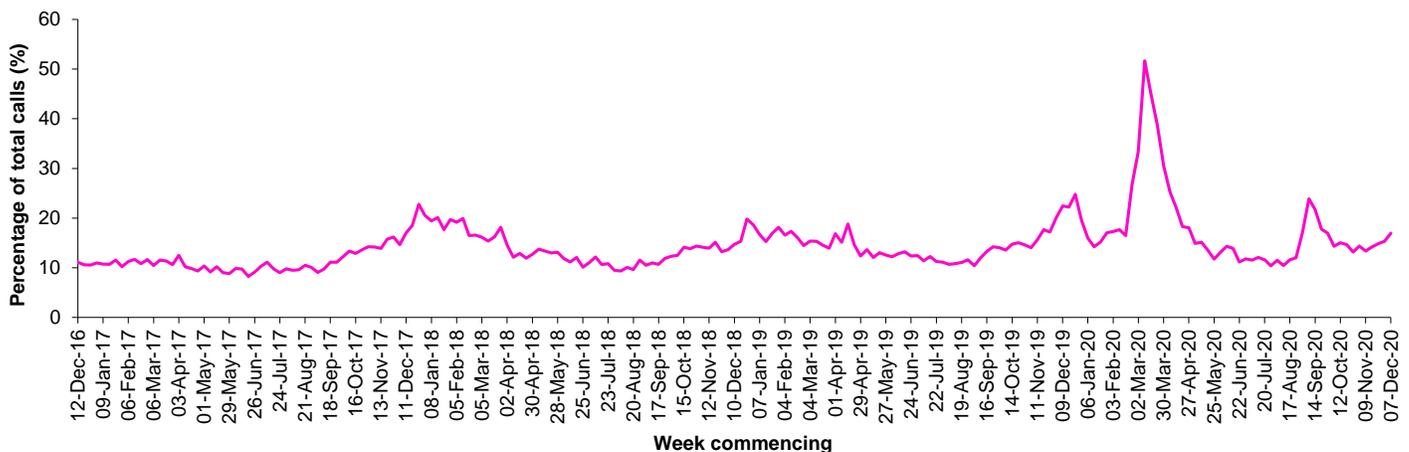


Figure 9. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 50 2016 - week 50 2020 (as of 13/12/2020).



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 3. Uptake of influenza immunisations in GP Practice patients, school children and NHS staff in Wales 2020/21 (as of 08/12/2020).

Influenza immunisation uptake in the 2020/21 season	
People aged 65y and older	74.3%
People younger than 65y in a clinical risk group	45.2%
Children aged two & three years	52.1%
Children aged four to ten years*	71.5%
NHS staff	48.2%
NHS staff who have direct patient contact	50.2%

* In school sessions carried out so far.

The end of season report Influenza in Wales 2019/20 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>

Influenza activity – UK and international summary

- As of week 49, the majority of community and syndromic indicators for influenza decreased or remained stable in the UK. GP ILI consultations remained stable in Scotland at 0.5 per 100,000, and decreased in Northern Ireland to 1.2 per 100,000, and remains well below the baseline intensity thresholds for both countries. The weekly ILI GP consultation rate in England reported through the RCGP system remained stable at 1.2 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 49, none of the 1,274 respiratory test results reported through Public Health England's DataMart scheme tested positive for influenza. UK summary data are available from the [Public Health England National Influenza and COVID-19 Surveillance Report](#).
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that as of week 49, influenza activity remained at inter-seasonal levels across the WHO European Region. During week 49, a total of 1,002 sentinel specimens were tested for influenza, none were positive.

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

- The WHO reported on 07/12/2020 that globally, influenza activity remained at lower levels than expected for this time of year. In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels, though sporadic detections of influenza A and influenza B were reported in some countries. In the temperate zones of the southern hemisphere, influenza activity was reported at inter-seasonal level. In the Caribbean and Central American countries, sporadic influenza B detections were reported in some countries. In tropical South America, there were no influenza detections in this reporting period. In tropical Africa, influenza activity was reported in some countries in Western Africa. In Southern Asia, influenza detections continued to be reported in Afghanistan and India. In South East Asia, influenza detections of predominantly influenza A(H3N2) continued to be reported in Cambodia, Lao and Thailand. Worldwide, influenza A and B viruses were detected in similar proportions.
- Based on FluNet reporting (as of 04/12/2020), during the time period from 09/11/2020 – 22/11/2020, National Influenza Centres and other national influenza laboratories from 88 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 192,375 specimens during that time period, 327 were positive for influenza viruses, of which 162 were typed as influenza A (11 influenza A(H1N1)pdm09, 44 influenza A(H3N2) and 107 influenza A(not subtyped)) and 165 influenza B (of the characterised influenza B viruses two belonged to the B-Yamagata lineage and 17 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 49 (ending 05/12/2020) influenza activity remains lower than usual for this time of year in the United States. Nationally, 40 (0.2%) out of 22,474 specimens have tested positive for influenza in week 49, of these positives 19 (47.5%) were influenza A and 21 (52.5%) were influenza B. Further characterisation has been carried out on 16,550 specimens by public health laboratories, and 16 samples tested positive for influenza, five influenza A (one influenza A(H1N1)pdm09 and four influenza A(subtyping not performed)) and 11 influenza B (of the characterised influenza B viruses four belonged to the B-Yamagata lineage and three to the B-Victoria lineage).

Source: CDC Weekly US Influenza Surveillance Report

<http://www.cdc.gov/flu/weekly/>

- The Public Health Agency of Canada reported that during week 49, influenza activity remains exceptionally low for this time of year, despite continued monitoring for influenza. The percentage of visits to healthcare professionals that were due to ILI was 0.6% in week 49, this is an increase compared to previous weeks, but remains lower than average compared to recent seasons. The percentage of tests positive for influenza was 0.04% during week 49, this is lower than previous seasons.

Source: Public Health Agency of Canada

<https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html>

Coronavirus disease 2019 (COVID-19) – UK and international summary

- The number of confirmed cases in Wales reported as at 16/12/2020 is 102,568, with 615 newly reported in the previous 24 hours. The cumulative number of suspected COVID-19 deaths in confirmed cases in hospitals and care homes reported to Public Health Wales is 2,891, with nine new deaths reported in the previous 24 hours. The cumulative number of registered deaths in Welsh residents where COVID-19 was mentioned in the death certificate as at 2020 week 48 was 3,677. Latest COVID-19 data from Public Health Wales is available from: <https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/> Public Health Wales produce a daily statement on COVID-19, available from: <https://covid19-phwstatement.nhs.wales/>
- As at 15/12/2020, there are 1,888,116 reported confirmed cases of COVID-19 in the UK, of which 18,450 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 64,908, with 506 reported in the previous 24 hours. Latest UK data is available from: <https://coronavirus.data.gov.uk/>
- As at 16/12/2020, WHO reported 71,919,725 confirmed COVID-19 cases globally, with 335,834 reported in the previous 24 hours. There have been 1,623,064 deaths, of which 4,626 were reported in the previous 24 hours. Daily WHO situation updates are available from: <https://covid19.who.int/>

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On 02/07/2020 WHO reported nine additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including five associated deaths. Globally, 2,562 laboratory confirmed cases of human infection with MERS-CoV, including 881 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>

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

- The latest WHO Influenza at Human-Animal Interface summary (11/07/2020 to 23/10/2020) 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.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480>

Public Health Wales COVID-19 data dashboard:

<https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-Public/Headlinesummary>

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:

<https://phw.nhs.wales/topics/flu/>

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:

surveillance.requests@wales.nhs.uk