

Current level of influenza activity: *Baseline activity*

Influenza activity trend: *Stable*

Confirmed influenza cases since 2020 week 40: 5 (three influenza A(H3N2) and two influenza B.)

Key points – Wales

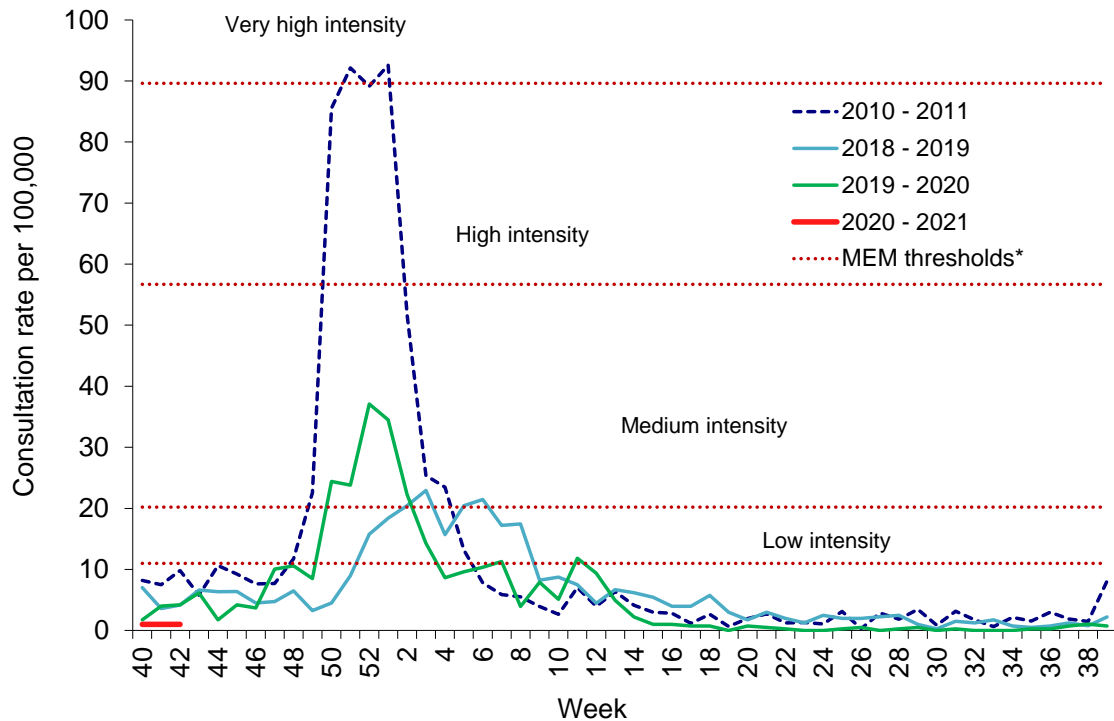
Surveillance indicators suggest that influenza is not currently circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) remained stable during week 42 (ending 18/10/2020). During week 41 (latest data available), five 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 42 was 1.0 consultations per 100,000 practice population (Table 1). This is similar to the previous week 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 65-74 years (4.3 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 68.8 per 100,000 practice population, this is a decrease compared to the previous week (70.3 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections remained stable and for Lower Respiratory Tract Infections increased slightly compared to the previous week. The age-group specific consultation rate for ARI during week 40 was highest in under one year olds (476.6 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 42 decreased to 15.1% (Figure 9).
- The total number of respiratory-related consultations with **Out of Hours (OOH)** doctors in Wales reported to Public Health Wales during week 42 was 930, this represents 8.6% of all 10,821 reported consultations with OOH doctors, a decrease in the number and the proportion reported last week (Figure 8).
- During week 42, 223 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 were three influenza A(H3N2), one influenza B, 78 rhinovirus, 11 adenovirus, nine human metapneumovirus, four enterovirus and one parainfluenza detected in week 42 (Figure 4). Forty-six respiratory specimens were tested from patients in intensive care units (ICU), none were positive for influenza (Figure 5).
- Four surveillance samples from patients with ILI, collected by **sentinel GPs** during week 42, had been received by Public Health Wales Microbiology as at 21/10/2020. One sample tested positive for rhinovirus and three samples were negative for all routinely tested respiratory pathogens.
- Surveillance data suggest that the RSV season is not yet underway with no positive samples in under 5 year olds in recent weeks.
- During week 42, 101 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, 96 were reported as COVID-19 outbreaks. Twenty-eight were in residential homes, 38 were in a school/nursery setting, six were in hospitals and 29 were in a community, mixed or other setting.
- According to **EuroMoMo** analysis, all-cause deaths are at expected levels for recent weeks.

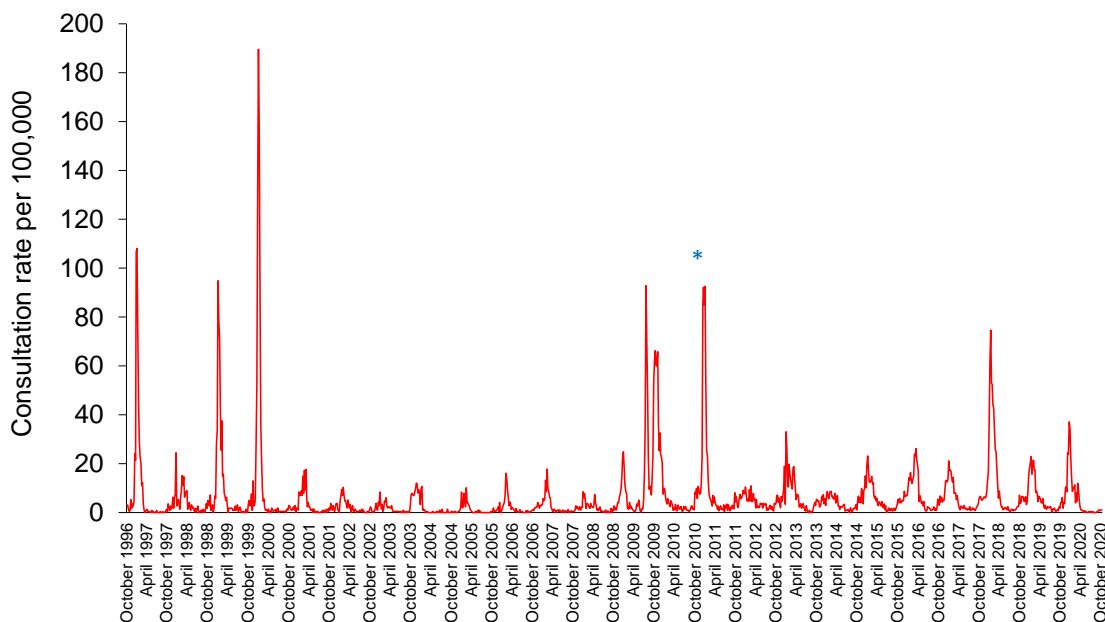
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 18/10/2020).



* 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 42 2020).



* Reporting changed to Audit+ surveillance system

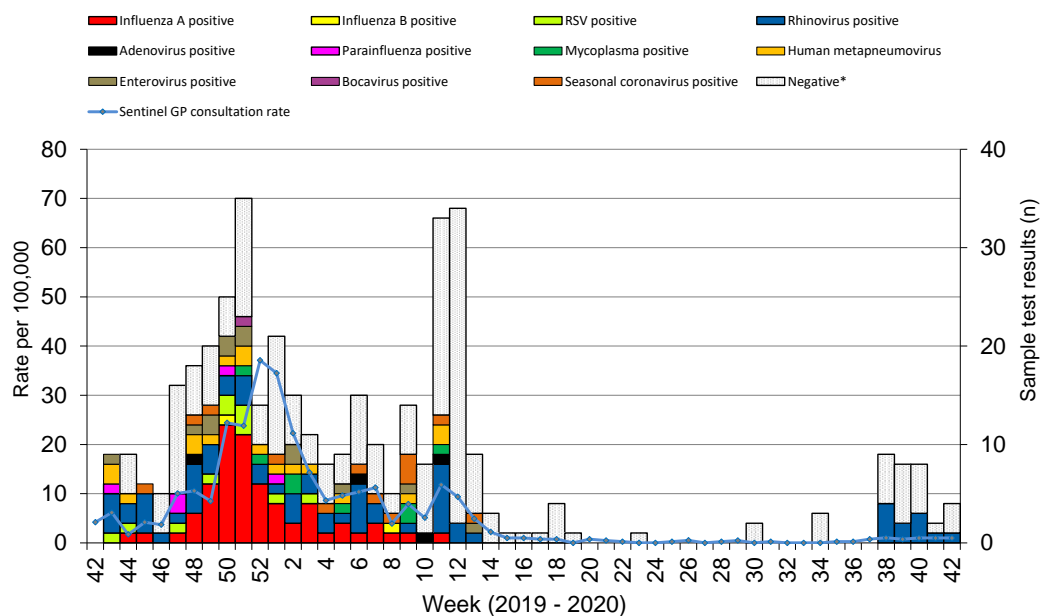
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 37 – week 42 2020 (as of 18/10/2020).

Age group	37	38	39	40	41	42
< 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	2.4	0.0	0.0	0.0	0.0
15 - 24	0.0	2.3	0.0	0.0	2.2	0.0
25 - 34	2.0	0.0	0.0	0.0	0.0	0.0
35 - 44	0.0	2.1	2.0	6.2	2.1	0.0
45 - 64	0.9	0.0	0.9	0.9	0.9	1.9
65 - 74	2.1	0.0	0.0	0.0	0.0	4.3
75+	0.0	2.5	2.4	0.0	2.4	0.0
Total	0.7	1.0	0.7	1.0	1.0	1.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 37 – week 42 2020 (as of 18/10/2020).

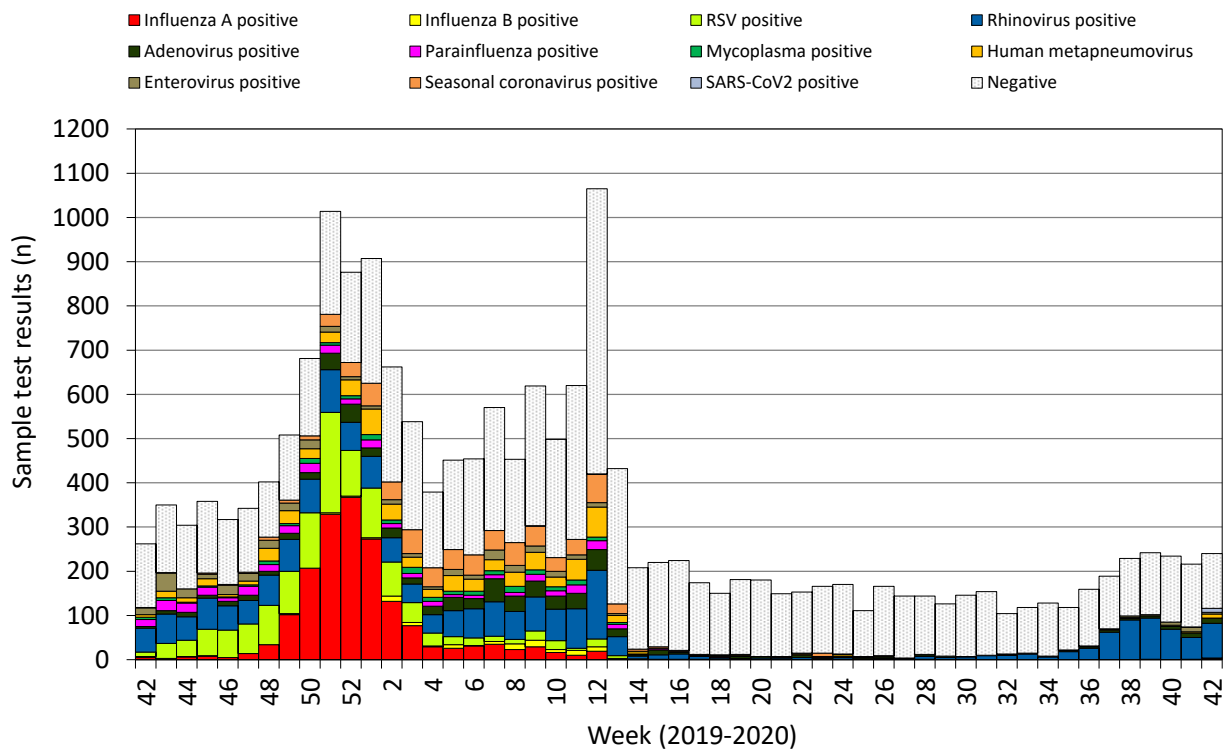
Age group	37	38	39	40	41	42
< 1	248.9	327.7	596.2	670.3	254.2	476.6
1 - 4	134.7	228.9	186.0	214.1	181.9	168.9
5 - 14	61.1	128.3	97.2	80.0	54.8	61.7
15 - 24	58.9	75.2	79.5	60.8	67.1	88.8
25 - 34	47.2	93.0	88.3	75.5	47.7	57.6
35 - 44	30.7	35.5	79.7	95.1	66.0	72.2
45 - 64	42.3	52.4	62.5	78.1	68.7	57.6
65 - 74	29.9	40.5	47.0	62.6	60.4	51.8
75+	43.1	60.4	74.1	82.2	82.1	43.4
Total	49.3	75.1	81.8	86.5	70.3	68.8

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 18/10/2020, by week of sample collection, week 42 2019 - week 42 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 18/10/2020 by week of sample collection, week 42 2019 to week 42 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 42 2019 to week 42 2020.

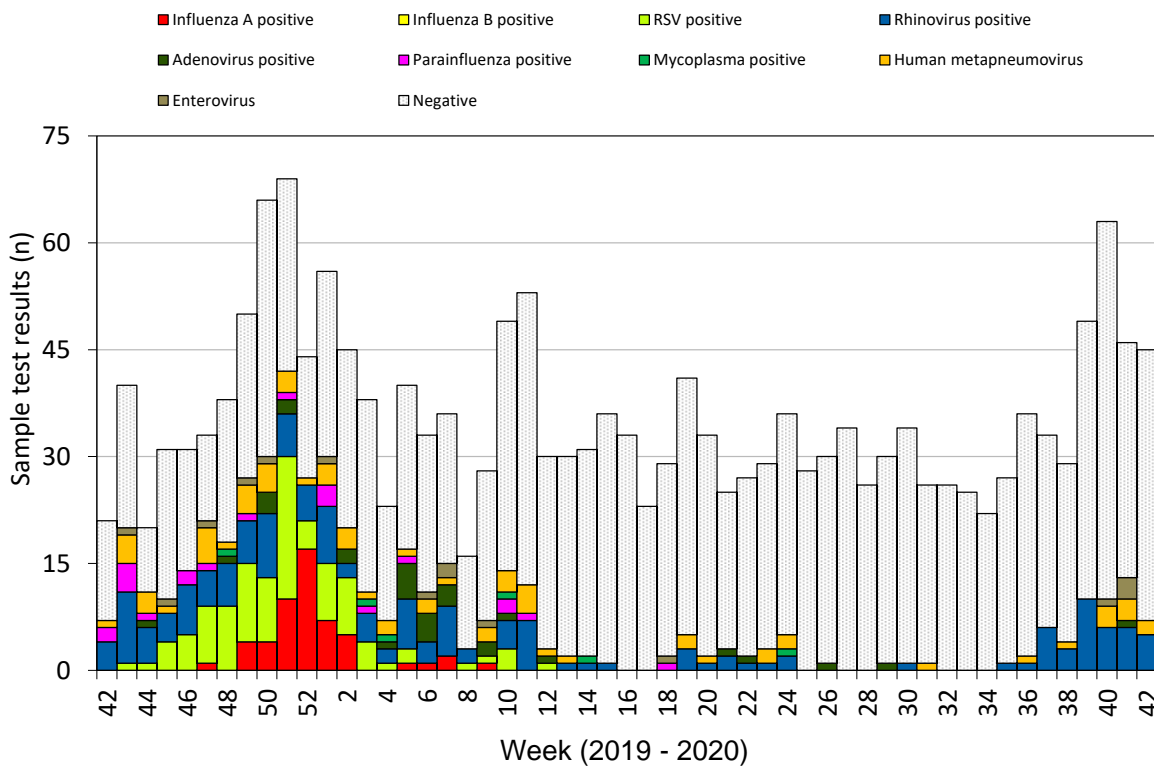
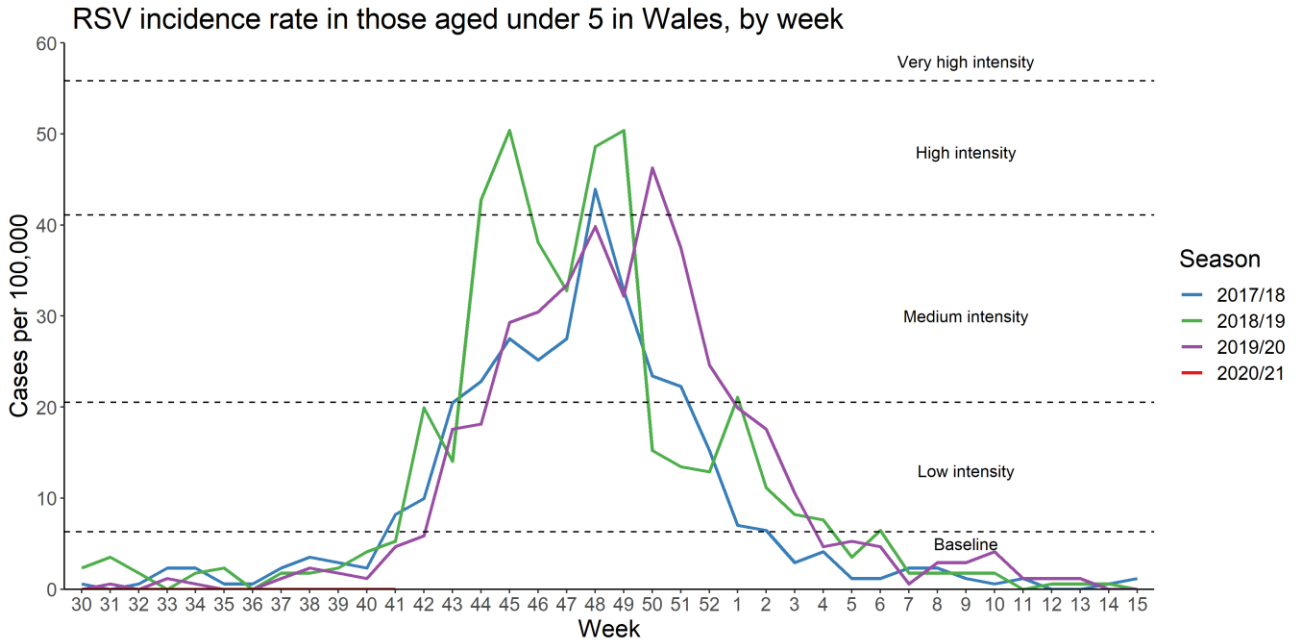


Figure 6. RSV incidence rate per 100,000 population aged under five years, week 30 2017 to week 41 2020 (latest data available).



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 7. Weekly total consultations to Out of Hours services in Wales and numbers of respiratory-related diagnoses (as of 18/10/2020).

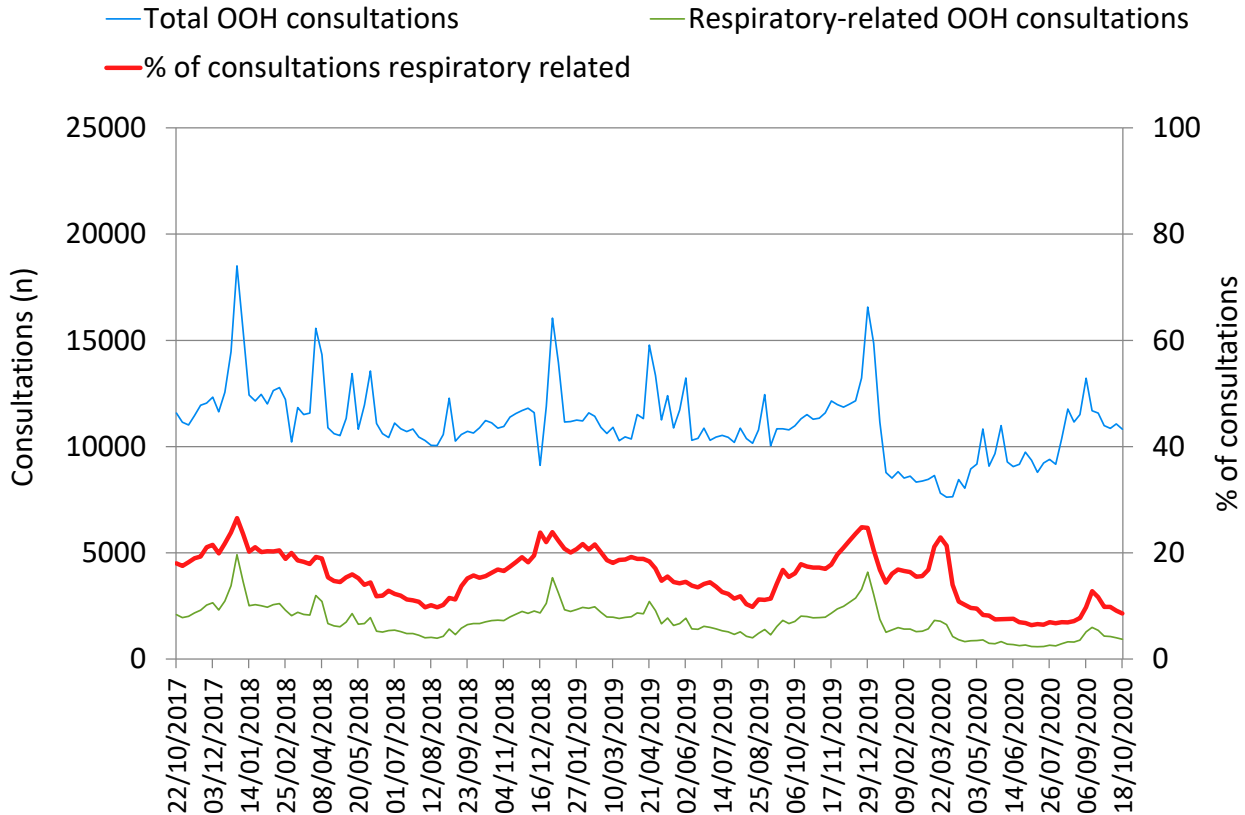
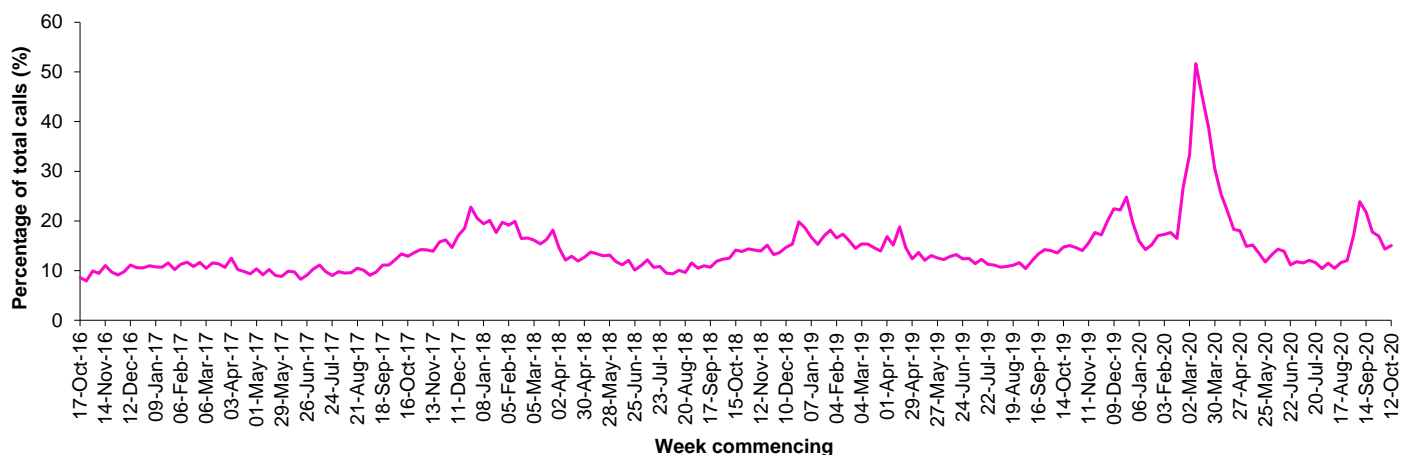


Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 42 2016 - week 42 2020 (as of 18/10/2020).



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 2019/20 (as of 06/04/2020).

Influenza immunisation uptake in the 2019/20 season	
People aged 65y and older	69.4%
People younger than 65y in a clinical risk group	44.1%
Children aged two & three years	50.7%
Children aged four to ten years*	69.6%
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>

Influenza vaccination uptake data for the 2020-21 season will be reported later in October.

Influenza activity – UK and international summary

- As of week 41, indicators for influenza show low levels of activity in the UK. GP ILI consultations remained stable in Scotland at 0.7 per 100,000, and in Northern Ireland at 1.5 per 100,000, well below the baseline intensity thresholds in both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 1.7 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000). Syndromic surveillance indicators for influenza decreased in week 41.
- During week 41, none of the 507 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 41, influenza activity remained at inter-seasonal levels across the WHO European Region. During week 41, a total of 109 sentinel specimens were tested for influenza, none of which were positive.

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

- The WHO reported on 12/10/2020 that globally, influenza activity was reported at lower levels than expected for this time of year, though increased detections were reported in some countries. In the temperate zones of the southern hemisphere, influenza activity remained low or below baseline. In the Caribbean and Central American countries, there were no influenza detections reported. In tropical South America, tropical Africa and Southern Asia there were sporadic or no detections across reporting countries. In South East Asia, increased influenza detections were reported in Cambodia and Lao. In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels. Worldwide, of the very few detections reported, seasonal influenza A(H3N2) viruses accounted for the majority of detections.
- Based on FluNet reporting (as of 09/10/2020), during the time period from 14/09/2020 – 27/09/2020, National Influenza Centres and other national influenza laboratories from 57 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 50,521 specimens during that time period, 99 were positive for influenza viruses, of which 60 were typed as influenza A (50 influenza A(H3N2) and 10 influenza A(not subtyped)) and 39 influenza B (of the characterised influenza B viruses five 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 41 (ending 10/10/2020) influenza activity remains low in the United States. Nationally, 26 (0.3%) out of 9,727 specimens have tested positive for influenza in week 41, of these positives 13 (50.0%) were influenza A and 13 (50.0%) were influenza B. Further characterisation has been carried out on 4,249 specimens by public health laboratories, and no sample tested positive for influenza.

Source: CDC Weekly US Influenza Surveillance Report

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

- The Public Health Agency of Canada reported that during week 41, influenza activity remains below average for this time of year. The percentage of visits to healthcare professionals that were due to ILI was 0.5% in week 41, similar to previous weeks. The percentage of tests positive for influenza was 0% during week 41.

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 21/10/2020 is 38,361, with 962 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 1,736, with 14 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 40 was 2,608. 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 20/10/2020, there are 762,542 reported confirmed cases of COVID-19 in the UK, of which 21,331 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 43,967, with 241 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/?_ga=2.47134183.1732144231.1599825067-744978499.1577716555
- As at 21/10/2020, WHO reported 40,455,651 confirmed COVID-19 cases globally, with 200,587 reported in the previous 24 hours. There have been 1,119,431 deaths, of which 3,228 were reported in the previous 24 hours. Daily WHO situation updates are available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/>

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 (09/05/2020 to 10/07/2020) 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