Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report



Wednesday 24th February 2021 (covering week 07 2021)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 18 (nine influenza A(H3N2), three influenza A(not subtyped) and

six influenza B.)

Key points - Wales

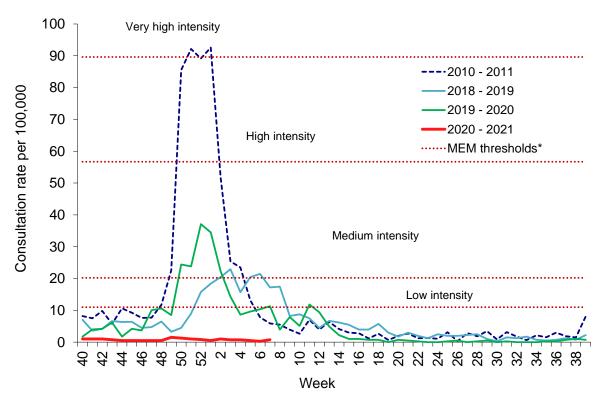
Surveillance indicators suggest that influenza is not currently circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) increased during week 07 (ending 21/02/2021). During week 07 one case of influenza was 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 07 was 0.8 consultations per 100,000 practice population (Table 1). This increased compared to the previous week (0.3 consultations per 100,000) but remains well below baseline threshold for seasonal influenza activity (11.0 per 100,000 practice population) (Figure 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 Respitatory Infections (ARI) was 46.8 per 100,000 practice population during week 06, this is a decrease compared to the previous week (54.6 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections also decreased compared to the previous week. The age-group specific consultation rate for ARI during week 07 was highest in under one year olds (232.8 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 07 decreased to 10.3% (Figure 9).
- The total number of respiratory-related consultations with **Out of Hours (OOH)** doctors in Wales reported to Public Health Wales during week 07 was 773, this represents 7.1% of all 10,889 reported consultations with OOH doctors, an increase in the number and proportion reported last week (Figure 8).
- During week 07, 1,627 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(not typed), 54 rhinovirus, 24 adenovirus, five parainfluenza, two seasonal coronavirus, and one enterovirus detected in week 07 (Figure 4). Additionally, 3,660 samples from patients were submitted for rapid Cepheid testing 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 3,660 samples, three were positive for influenza, none were positive for RSV, and 170 were positive for SARS-CoV2 (figure 5). Thirty-one respiratory specimens were tested from patients in intensive care units (ICU) and no samples 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 07, had been
 received by Public Health Wales Microbiology as at 24/02/2021. The sample was negative for all routinely
 tested respiratory pathogens.
- There has been no detectable RSV circulation so far for 2020-21.
- During week 07, 83 ARI outbreaks were reported to the Public Health Wales Health Protection team, all
 were reported as COVID-19 outbreaks. Fifty-two were in residential homes, eight were in a school/nursery
 setting, six were in hospitals and 17 were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths were not significantly in excess during week 5 (latest data).

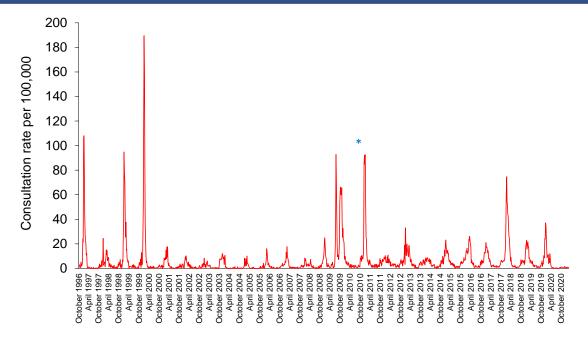
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 21/02/2021).



^{*} 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 07 2021).



^{*} Reporting changed to Audit+ surveillance system

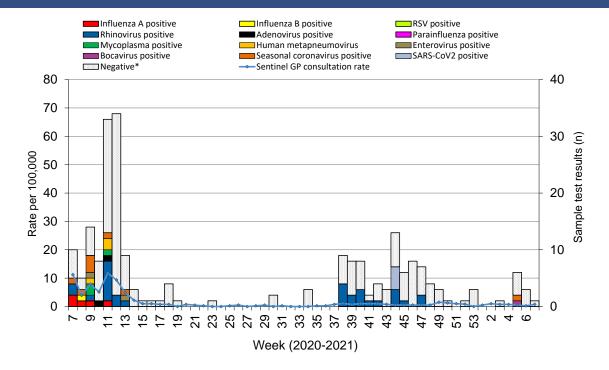
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 02- week 07 2021 (as of 21/02/2021).

Age						
group	2	3	4	5	6	7
< 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	0.0	0.0	0.0	0.0
25 - 34	0.0	4.0	2.0	2.0	0.0	4.0
35 - 44	0.0	0.0	2.1	0.0	2.1	0.0
45 - 64	0.9	0.9	0.9	0.9	0.0	0.0
65 - 74	4.3	0.0	0.0	0.0	0.0	2.2
75+	2.4	0.0	0.0	0.0	0.0	0.0
Total	1.0	0.7	0.7	0.5	0.3	0.8

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 02 – week 07 2021 (as of 21/02/2021).

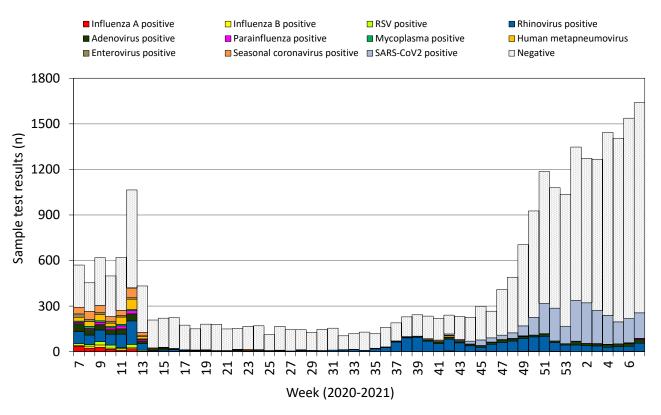
Age						
group	2	3	4	5	6	7
< 1	199.4	200.7	32.7	162.9	64.9	232.8
1 - 4	91.9	94.4	111.6	124.9	125.1	107.6
5 - 14	25.1	21.1	9.1	36.4	20.5	23.2
15 - 24	67.5	51.3	43.6	41.5	74.3	44.5
25 - 34	77.2	50.7	57.3	47.4	63.3	34.2
35 - 44	75.9	56.8	67.6	45.1	49.1	58.3
45 - 64	88.1	72.7	70.5	54.7	48.2	38.8
65 - 74	60.2	60.3	60.3	45.2	47.3	37.3
75+	105.9	52.8	187.9	79.5	62.7	71.7
Total	75.6	58.3	70.9	54.1	54.6	46.8

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 21/02/2021, by week of sample collection, week 07 2020 to week 07 2021.



^{*} 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 21/02/2021 by week of sample collection, week 07 2020 to week 07 2021.



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 21/02/2021 by week of sample collection, week 46 2020 to week 07 2021.

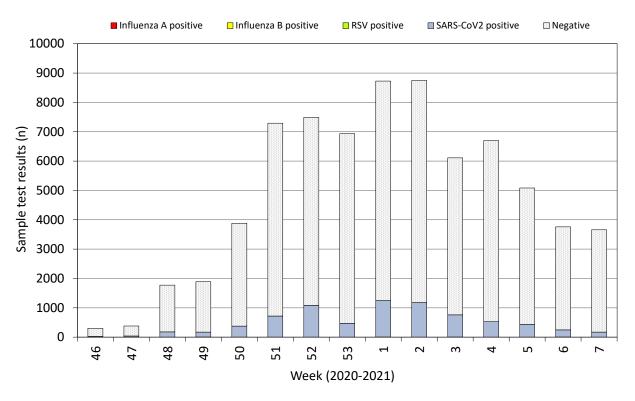
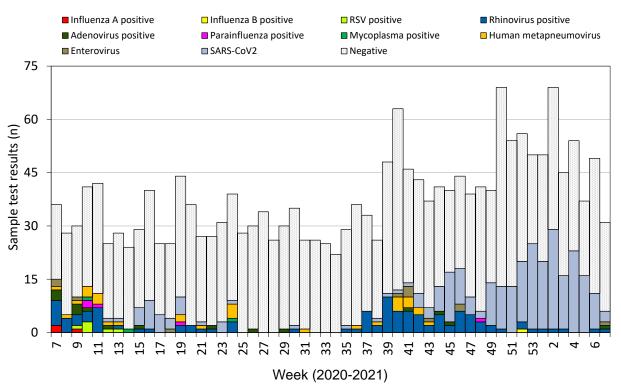
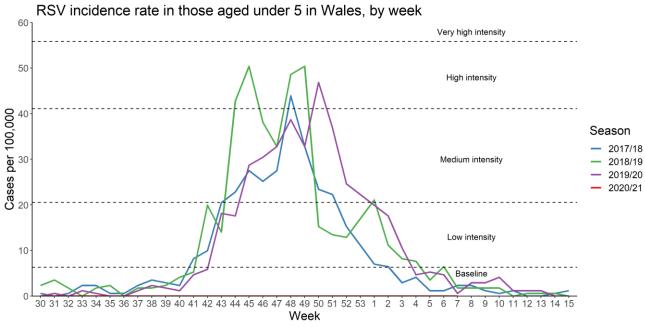


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 07 2020 to week 07 2021.



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 07 2021.



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 21/02/2021).

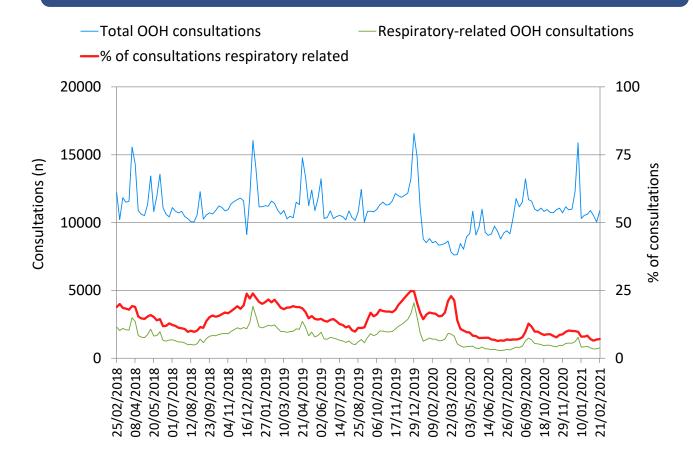
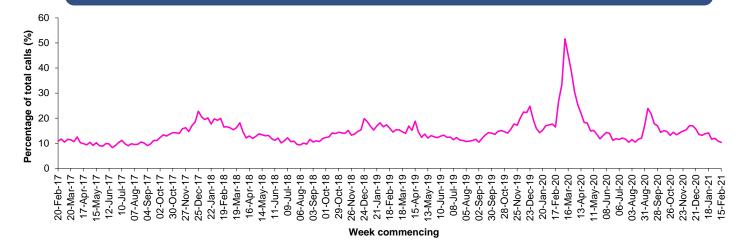


Figure 9. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 08 2017 - week 07 2021 (as of 21/02/2021).



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 16/02/2021).

Influenza immunisation uptake in the 2020/21 season				
People aged 65y and older	76.5%			
People younger than 65y in a clinical risk group	50.9%			
Children aged two & three years	56.3%			
Children aged four to ten years*	71.3%			
NHS staff	63.4%			
NHS staff who have direct patient contact	65.2%			

^{*} 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 06, the majority of community and syndromic indicators decreased in the UK. GP ILI consultations decreased in Northern Ireland to 0.8 per 100,000 and remained stable in Scotland at 0.4 per 100,000, well below the baseline intensity thresholds for both countries. The weekly ILI GP consultation rate in England reported through the RCGP system decreased to 0.6 per 100,000, well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 06, none of the 4,876 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 06, influenza activity remained at inter-seasonal levels across the WHO European Region. During week 06, none of the 1,268 sentinel specimens tested for influenza were positive.

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

- The WHO reported on 15/02/2021 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 baseline, 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, low influenza detections were reported in Haiti. In tropical South America, there were no influenza detections in this reporting period. In tropical Africa, influenza activity continued to be reported in Western Africa. In Southern Asia, sporadic influenza detections were reported across reporting countries. In South East Asia, influenza detections were reported in some countries in this reporting period. Worldwide, influenza B accounted for the majority of the very low numbers of detections reported.
- Based on FluNet reporting (as of 29/01/2021), during the time period from 04/01/2021 17/01/2021, National Influenza Centres and other national influenza laboratories from 82 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 233,931 specimens during that time period, 566 were positive for influenza viruses, of which 117 were typed as influenza A (six influenza A(H1N1)pdm09, 26 influenza A(H3N2) and 85 influenza A(not subtyped)) and 449 influenza B (of the characterised influenza B viruses one belonged to the B-Yamagata lineage and 253 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 06 (ending 13/02/2021) influenza activity remains lower than usual for this time of year in the United States. Nationally, 14 (0.1%) out of 24,947 specimens have tested positive for influenza in week 06, of these positives two (14.3%) were influenza A and 12 (85.7%) were influenza B. Further characterisation has been carried out on 15,894 specimens by public health laboratories, and three samples tested positive for influenza, one influenza A (influenza A(subtyping not performed)) and two influenza B.

Source: CDC Weekly US Influenza Surveillance Report

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

The Public Health Agency of Canada reported that during week 06, 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 0.3% during week 06, which remains lower
than average compared to recent seasons. The percentage of tests positive for influenza was 0.01%
during week 06, 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 24/02/2021 is 202,560, with 236 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 5,263, with 13 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 2021 week 05 was 6,993. 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 24/02/2021, there have been 4,144,577 reported confirmed cases of COVID-19 in the UK, of which 9,938 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 121,747, with 442 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 24/02/2021, WHO have reported 111,593,583 confirmed COVID-19 cases globally, with 173,594 reported in the previous 24 hours. There have been 2,475,020 deaths, of which 4,243 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 01/02/2021 WHO reported four additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including one associated death. Globally, 2,566 laboratory confirmed cases of human infection with MERS-CoV, including 882 associated deaths, have officially been reported to WHO since 2012.
 - Source: WHO Global Alert and Response website: https://www.who.int/csr/don/archive/year/2021/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 (24/10/2020 to 09/12/2020) 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.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://nww.immunisation.wales.nhs.uk/home

For further information on this report, please email Public Health Wales using: surveillance.requests@wales.nhs.uk