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



Thursday 28th April 2021 (covering week 16 2021)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 32 (nine influenza A(H3N2), 12 influenza A(not subtyped) and 11

influenza B).

Key points - Wales

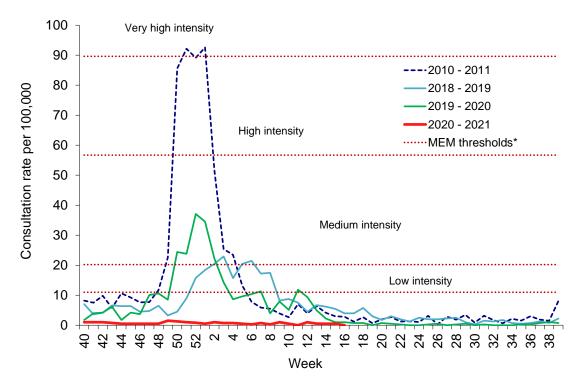
Surveillance indicators suggest that influenza is not currently circulating in Wales.

The sentinel GP consultation rate for influenza-like illness (ILI) decreased during week 16 (ending 25/04/2021). During week 16, no cases of influenza were confirmed. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community, although levels have decreased significantly. Rhinovirus remains the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI) and has increased from Week10 onwards, as have a number of other causes of ARI. Surveillance data suggest that influenza and Respiratory Syncytial Virus (RSV) have not circulated over the winter months, but there remains potential for later than usual activity.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 16 was 0.0 consultations per 100,000 practice population (Table 1). This decreased compared to the previous week (0.5 consultations per 100,000) and 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 51.4 per 100,00 practice population during week 16, this is a small increase compared to the previous week (51.0 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections increased slightly compared to the previous week. The age-group specific consultation rate for ARI during week 16 was highest in under one year olds (285.4 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 16 remained stable at 13.5% (Figure 9).
- The total number of respiratory-related consultations with **Out of Hours (OOH)** doctors in Wales reported to Public Health Wales during week 08 (latest data available) was 728, this represents 6.6% of all 11,083 reported consultations with OOH doctors that week (Figure 8).
- During week 16, 5,131 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 RSV, 126 rhinoviruses, 36 adenoviruses, four seasonal coronaviruses and three cases of enterovirus detected in week 16 (Figure 4). No samples were submitted for rapid Cepheid testing (figure 5). Twenty-four 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
- No surveillance samples from patients with ILI, collected by sentinel GPs during week 16, had been received by Public Health Wales Microbiology as at 28/04/2021.
- There has been no detectable RSV season in 2020-21, although there has been a small number of confirmed cases in recent weeks.
- During week 16, 14 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Six were in residential homes, five were in a school/nursety setting and three were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths were not significantly in excess during week 15 (latest data).

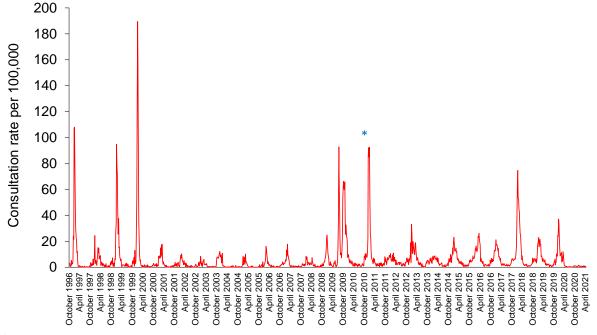
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 25/04/2021).



^{*} 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 16 2021).



^{*} Reporting changed to Audit+ surveillance system

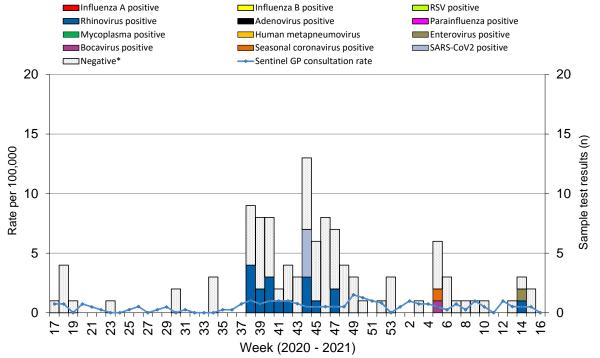
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 11- week 16 2021 (as of 25/04/2021).

Age						
group	11	12	13	14	15	16
< 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	0.0	0.0	0.0	0.0	0.0
35 - 44	0.0	2.0	2.1	2.0	0.0	0.0
45 - 64	0.0	0.9	0.0	0.9	1.9	0.0
65 - 74	0.0	2.2	0.0	0.0	0.0	0.0
75+	0.0	2.4	2.6	0.0	0.0	0.0
Total	0.0	1.0	0.5	0.5	0.5	0.0

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 11 – week 16 2021 (as of 25/04/2021).

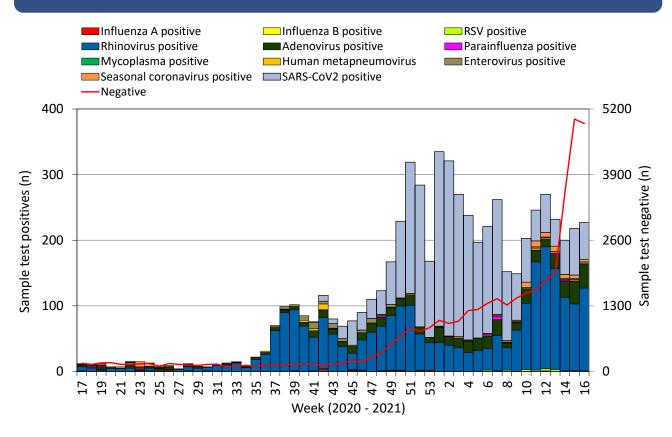
Age						
group	11	12	13	14	15	16
< 1	652.1	356.0	237.4	292.0	225.8	285.4
1 - 4	178.2	251.0	157.7	125.4	184.9	240.8
5 - 14	56.8	84.1	28.4	29.6	34.1	47.5
15 - 24	65.7	63.6	34.1	43.9	43.9	35.9
25 - 34	53.3	49.3	49.2	51.3	55.2	43.3
35 - 44	57.1	61.2	42.4	42.8	61.0	46.9
45 - 64	48.2	45.4	36.9	48.2	35.2	31.7
65 - 74	53.7	38.7	27.4	38.6	36.5	37.9
75+	91.3	52.9	46.8	28.7	55.0	68.4
Total	67.4	64.2	43.9	47.0	51.0	51.4

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 25/04/2021, by week of sample collection, week 17 2020 to week 16 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 25/04/2021 by week of sample collection, week 17 2020 to week 16 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 25/04/2021 by week of sample collection, week 46 2020 to week 16 2021.

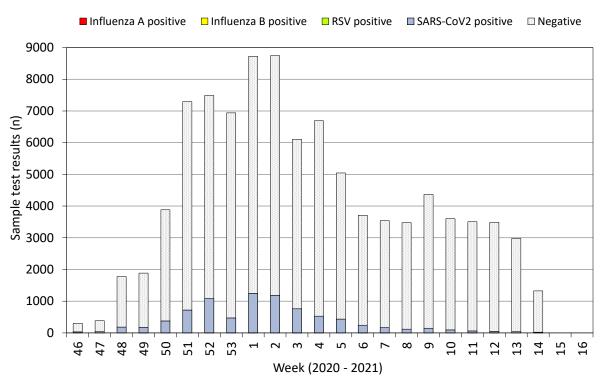
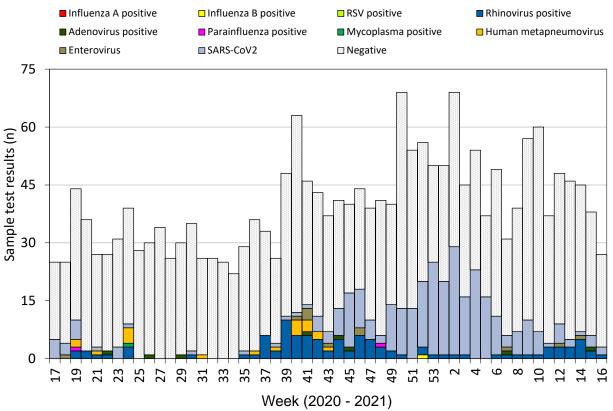
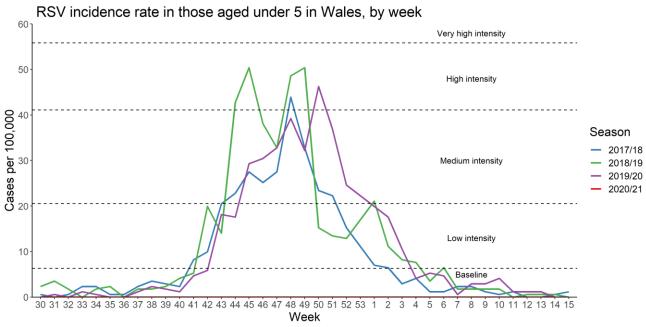


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 17 2020 to week 16 2021.



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 15 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 28/02/2021) (latest data available).

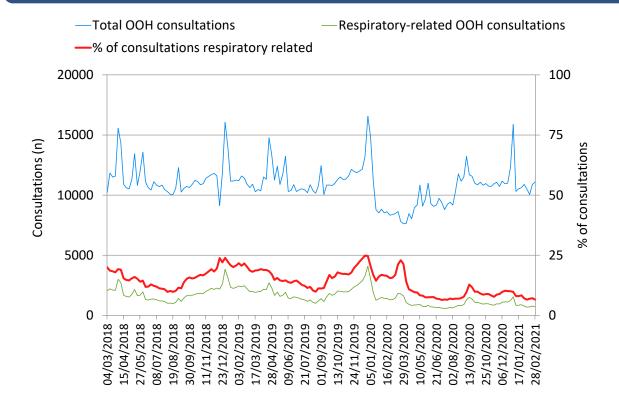
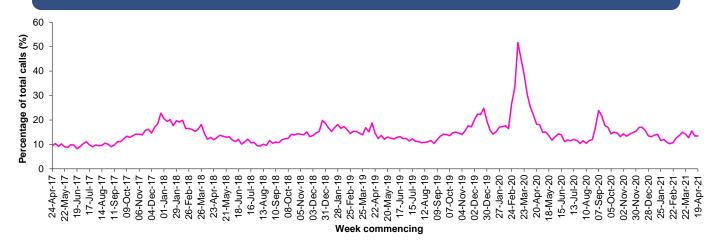


Figure 9. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 17 2017 - week 16 2021 (as of 25/04/2021).



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 23/03/2021).

Influenza immunisation uptake in the 2020/21 season				
People aged 65y and older	76.5%			
People younger than 65y in a clinical risk group	51.0%			
Children aged two & three years	56.3%			
Children aged four to ten years*	72.4%			
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 15, the majority of community and syndromic indicators remained low in the UK. GP ILI consultations increased in Northern Ireland to 0.8 per 100,000 and remained stable in Scotland at 0.3 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 increased slightly to 0.6 per 100,000, still well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 15, three of the 4,300 respiratory test results reported through Public Health England's
 DataMart scheme tested positive for influenza (one influenza A(H3N2), one influenza A(not subtyped) and
 one influenza B). 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 15, influenza activity remained at inter-seasonal levels across the WHO European Region. During week 15, four of the 1,271 sentinel specimens tested for influenza were positive.

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

- The WHO reported on 29/03/2021 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 continued to be reported in some countries. In the temperate zones of the southern hemisphere, influenza activity was reported at interseasonal level. In the Caribbean and Central American countries, no influenza detections were reported. In tropical South America, no influenza but low levels of detection of other respiratory viruses were reported in some countries. In tropical Africa, influenza activity was reported in some reporting countries in Western, Middle and Eastern Africa in recent weeks. In Southern Asia, sporadic influenza detections were reported in India and Nepal. In South East Asia, influenza A(H3N2) detections continued to be reported in Lao People's Democratic Republic. Worldwide, influenza B accounted for the majority of the very low numbers of detections reported.
- Based on FluNet reporting (as of 26/03/2021), during the time period from 01/03/2021 14/03/2021, National Influenza Centres and other national influenza laboratories from 85 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 291,427 specimens during that time period, 375 were positive for influenza viruses, of which 132 were typed as influenza A (5 influenza A(H1N1)pdm09, 77 influenza A(H3N2) and 243 influenza B (of the characterised influenza B viruses none belonged to the B-Yamagata lineage and 188 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 15 (ending 17/04/2021) influenza activity remains lower than usual for this time of year in the United States. Nationally, 12 (0.1%) out of 22,574 specimens have tested positive for influenza in week 15, of these positives five (41.7%) were influenza A and seven (58.3%) were influenza B. Further characterisation has been carried out on 13,683 specimens by public health laboratories, and six samples tested positive for influenza, four influenza A (one influenza A(H1N1)pdm09, one influenza A(H3N2) and two 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 weeks 10 to 11, 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 weeks 10 to 11, which remains lower than average compared to recent seasons. The percentage of tests positive for influenza was 0% during weeks 10 to 11, 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 28/04/2021 is 211,389, with 35 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 5,548, with no 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 14 was 7,811. 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 28/04/2021, there have been 4,411,797 reported confirmed cases of COVID-19 in the UK, of which 2,166 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 127,480, with 29 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 28/04/2021, WHO have reported 148,128,030 confirmed COVID-19 cases globally, with 584,637 reported in the previous 24 hours. There have been 3,124,905 deaths, of which 8,415 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 14/04/2021 WHO reported seven additional cases of Middle East Respiratory Syndrome coronavirus (MERS-CoV), including three associated deaths. Globally, 2,574 laboratory confirmed cases of human infection with MERS-CoV, including 886 associated deaths, have officially been reported to WHO since 2012
 - Source: WHO Global Alert and Response website: https://www.who.int/emergencies/disease-outbreak-news
- 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 (10/12/2020 to 29/01/2021) 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:
 https://www.who.int/emergencies/disease-outbreak-news

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