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



Wednesday 7th July 2021 (covering week 26 2021)

Current level of influenza activity: Baseline activity

Influenza activity trend: Stable

Confirmed influenza cases since 2020 week 40: 38 (10 influenza A(H3N2), 15 influenza A(not subtyped) and 13

influenza B).

Key points - Wales

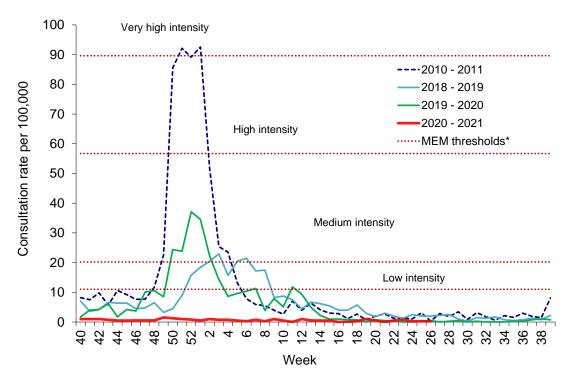
Surveillance indicators suggest that RSV is circulating in Wales and influenza is not.

During week 26 (ending 04/07/2021) there has been an increase in numbers of confirmed cases of Respiratory Synctial Virus (RSV) in children aged under 5 years, mainly in north Wales, and this week activity exceeded the threshold that would normally indicate onset of seasonal circulation of RSV. RSV did not circulate over the 2020-21 winter and it is unclear whether the current increase will progress to follow the usual epidemic pattern for RSV and there is potential for a more severe seasons this year. No influenza cases were confirmed during week 26. COVID-19 cases continue to be detected in symptomatic patients in hospital and in the community with continuing increases in recent weeks. Rhinovirus and parainfluenza are the most commonly detected cause of non-COVID-19 Acute Respiratory Infection (ARI), confirmed cases of parainfluenza (type 3) have increased significantly recently, particularly in children.

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 26 was 0.3 consultations per 100,000 practice population (Table 1). This remains stable compared to the previous week (0.3 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 57.0 per 100,000 practice population during week 26, this is a decrease compared to the previous week (105.0 per 100,000) (Table 2). Weekly consultations for Upper Respiratory Tract Infections and Lower Respiratory Tract Infections decreased compared to the previous week. The age-group specific consultation rate for ARI during week 26 was highest in under one year olds (665.8 per 100,000 practice population). In recent weeks ARI consultations have increased in children aged under 5 years.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache and sore throat) during week 26 decreased to 20.1% (Figure 8).
- During week 26, 1,290 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 11 RSV, 191 parainfluenza, 189 rhinoviruses, 32 adenoviruses, 17 enteroviruses, four human metapneumoviruses and four seasonal coronaviruses detected in week 26 (Figure 4). Additionally, 4,027 samples from patients were tested for influenza, RSV and SARS-CoV2 only, many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 4,027samples, none were positive for influenza, seven were positive for RSV and 104 were positive for SARS-CoV2 (figure 5). Fifty-six respiratory specimens were tested from patients in intensive care units (ICU) and none 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 26, had been received by Public Health Wales Microbiology as at 07/07/2021.
- Confirmed RSV case numbers in children aged under 5 have increased. This week activity exceeded the threshold that would usually indicate onset of circulation. In week 26 there were 8.8 confirmed cases per 100,000 in this age group (Figure 7). The provisional MEM threshold in Wales which predicts the start of the annual RSV season in children younger than five years is 6.3 confirmed cases per 100,000.
- During week 26, 39 **ARI outbreaks** were reported to the Public Health Wales Health Protection team, all were reported as COVID-19 outbreaks. Sixteen were in residential homes, nine were in a school/nursery setting, one was in a hospital and 13 were in a community, mixed or other setting.
- According to EuroMoMo analysis, all-cause deaths were not significantly in excess during week 24 (latest data).

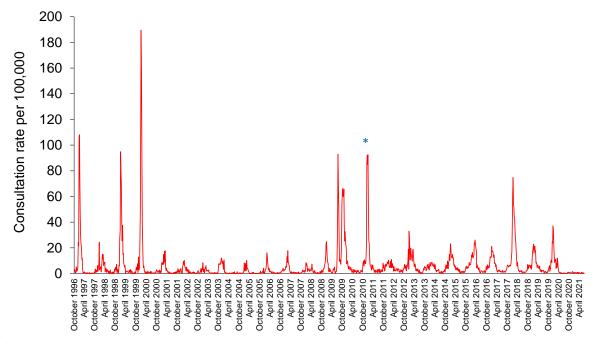
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 04/07/2021).



^{*} 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 26 2021).



^{*} Reporting changed to Audit+ surveillance system

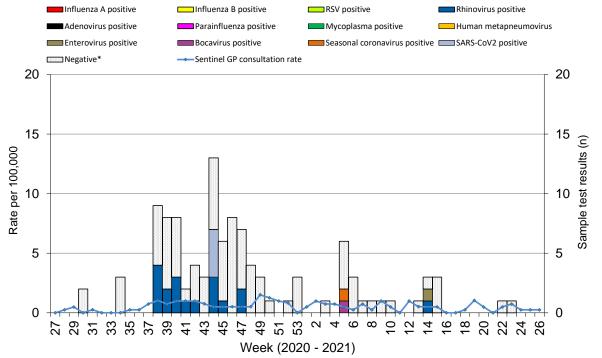
Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, week 21- week 26 2021 (as of 04/07/2021).

Age						
group	21	22	23	24	25	26
< 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	0.0	0.0	0.0
25 - 34	0.0	2.0	0.0	0.0	0.0	0.0
35 - 44	0.0	2.0	4.0	0.0	0.0	2.0
45 - 64	0.0	0.0	0.0	1.0	0.0	0.0
65 - 74	0.0	0.0	0.0	0.0	2.2	0.0
75+	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.5	0.7	0.3	0.3	0.3

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, week 21 – week 26 2021 (as of 04/07/2021).

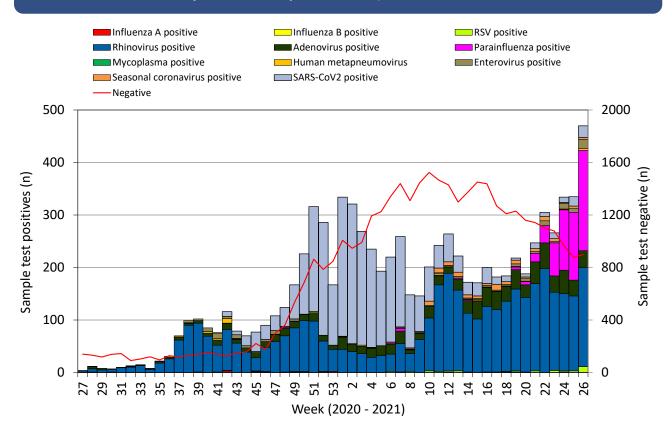
Age						
group	21	22	23	24	25	26
< 1	634.2	367.3	758.6	977.8	1342.3	665.8
1 - 4	380.2	455.4	614.2	768.1	942.3	500.5
5 - 14	57.2	36.7	65.8	76.4	94.8	55.1
15 - 24	44.3	84.7	70.8	56.4	79.3	38.2
25 - 34	55.5	53.7	70.7	56.2	62.0	45.6
35 - 44	51.1	36.9	64.7	43.4	61.7	30.6
45 - 64	35.5	39.6	56.5	41.0	53.3	24.4
65 - 74	34.6	30.7	45.1	55.9	57.5	30.4
75+	66.8	51.7	61.7	45.1	39.0	33.5
Total	63.8	64.1	87.3	85.5	105.0	57.0

Figure 3. Specimens submitted for virological testing by sentinel GPs as of 04/07/2021, by week of sample collection, week 27 2020 to week 26 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 07/04/2021 by week of sample collection, week 27 2020 to week 26 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. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 04/07/2021 by week of sample collection, week 46 2020 to week 26 2021.

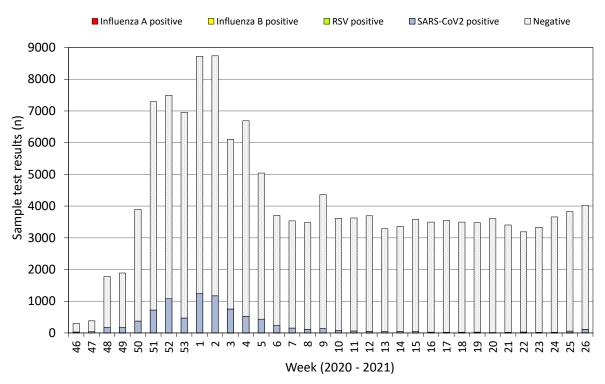
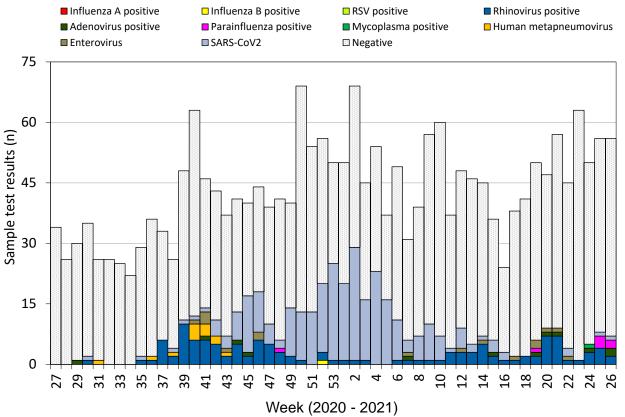
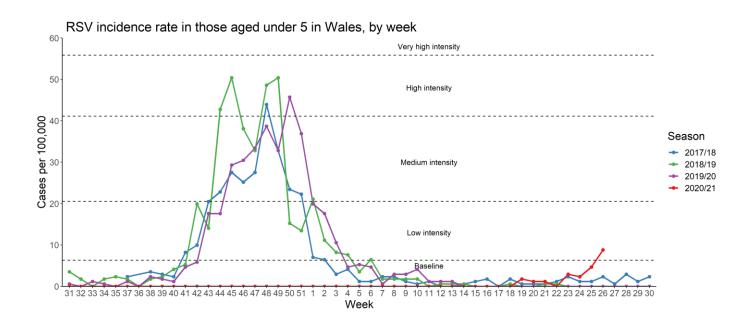


Figure 6. Specimens submitted for virological testing for ICU patients, by week of sample collection, week 27 2020 to week 26 2021.



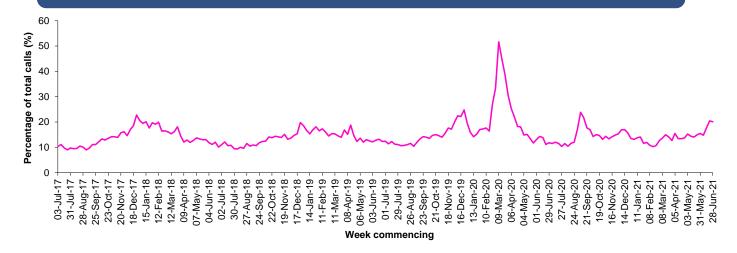
This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2.

Figure 7. RSV incidence rate per 100,000 population aged under five years, week 31 2017 to week 26 2021.



Calls to NHS Direct Wales

Figure 8. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from week 27 2017 - week 26 2021 (as of 04/07/2021).



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 25, the majority of community and syndromic indicators remained low in the UK. GP ILI consultations remained stable in Scotland at 0.5 per 100,000 and in Northern Ireland at 0.6 per 100,000, well below the baseline intensity thresholds. The weekly ILI GP consultation rate in England reported through the RCGP system increased to 1.0 per 100,000, still well below the MEM threshold for baseline activity (12.2 per 100,000).
- During week 25, none of the 2,830 respiratory test results reported through Public Health England's
 DataMart scheme tested positive for influenza. UK summary data are available from the <u>Public Health</u>
 England National Influenza and COVID-19 Surveillance Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that during weeks 21-24, influenza activity remained at inter-seasonal levels across the WHO European Region.
 Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 05/07/2021 that globally, despite continued or even increased testing in some countries, influenza activity remained at lower levels than expected for this time of year. In the temperate zone of the northern hemisphere, influenza activity remained at inter-seasonal levels, though detections of influenza B-Victoria lineage slightly increased, especially in China. In the temperate zones of the southern hemisphere, influenza activity remained at inter-seasonal levels. In the Caribbean and Central American countries, there were no influenza detections reported. In tropical South America, no influenza detections were reported in some countries in Western and Eastern Africa. In Southern Asia, a few influenza detections were reported from India. In South East Asia, no influenza detections were reported. Worldwide, influenza B accounted for the majority of the very low numbers of detections reported.
- Based on FluNet reporting (as of 02/07/2021), during the time period from 07/06/2021 20/06/2021,
 National Influenza Centres and other national influenza laboratories from 75 countries, areas or territories
 reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System
 laboratories tested more than 146,816 specimens during that time period, 766 were positive for influenza
 viruses, of which 84 were typed as influenza A (of the subtyped influenza A viruses, 48 were influenza
 A(H1N1)pdm09 and eight were influenza A(H3N2)) and 682 influenza B (of the characterised influenza B
 viruses 624 belonged to the B-Victoria lineage).

Source: WHO influenza update:

https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update

Australia and New Zealand update

• In New Zealand, during the week ending 25/06/2021, the GP influenza-like illness activity (ILI) consultation rates have increased slightly, but overall have been lower than the weekly rates seen at this time in 2020. There have been no influenza viruses detected this season to date, rhinovirus has been the most commonly detected virus, with the number of cases increasing weekly.

Source: Institute of Environmental Science & Research, New Zealand

https://www.esr.cri.nz/our-services/consultancy/flu-surveillance-and-research

• In Australia, according to the latest available update (fortnight ending 20/06/2021), influenza-like illness (ILI) activity in the community remains at low levels, but has continued to gradually increase since January 2021. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (71.8%).

Source: Australian Influenza Surveillance Report and Activity Updates.

https://www1.health.gov.au/internet/main/publishing.nsf/Content/cda-surveil-ozflu-flucurr.htm#current

Respiratory syncytial virus (RSV) in North America

 The USA CDC has reported an out of season increase in RSV activity, with an increase in sample positivity since early March 2021.

Source: CDC RSV national trends

https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html

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

- The number of confirmed cases in Wales reported as at 07/07/2021 is 222,448, with 663 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 5,578, 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 24 was 7,892. 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 06/07/2021, there have been 4,958,868 reported confirmed cases of COVID-19 in the UK, of which 28,773 were newly reported in the previous 24 hours. The total deaths within 28 days of a positive test was 128,268, with 37 reported in the previous 24 hours. Latest UK data is available from: https://coronavirus.data.gov.uk/
- As at 07/07/2021, WHO have reported 184,105,272 confirmed COVID-19 cases globally, with 158,055 reported in the previous 24 hours. There have been 3,988,565 deaths, of which 3,346 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

- The latest WHO Influenza at Human-Animal Interface summary (16/04/2021 to 21/05/2021) reports that no new cases of avian influenza A(H7N9) were reported. Since February 2013, a total of 1,568 laboratoryconfirmed cases of human infection with avian influenza A(H7N9), including at least 616 deaths, have been reported:
 - https://www.who.int/publications/m/item/influenza-at-the-human-animal-interface-summary-and-assessment-21may-2021
 - 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 and COVID-19 surveillance:

https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports

Scotland seasonal respiratory surveillance:

https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/weekly-national-seasonal-

respiratory-report/

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