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



Wednesday 13th September 2023 (covering Week 36 2023)

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2022 Week 40: 7875 (3068 influenza A(H3N2), 1639 influenza A(H1N1)pdm09,

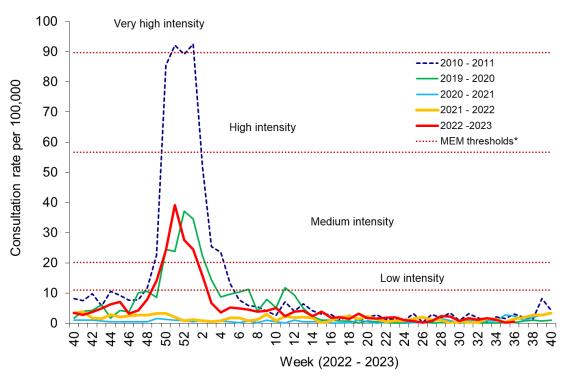
2673 influenza A(not subtyped) and 495 influenza B)

During Week 36 (ending 10/09/2023) there were seven cases of influenza. Overall influenza activity remains at baseline levels, but small numbers of cases continue to be detected. COVID-19 cases continue to be detected in patients in hospitals and case numbers have increased in recent weeks, although the most recent data suggest a peak may have been reached. RSV activity in children under 5 years has increased in the most recent week to medium intensity. SARS-CoV-2, rhinovirus, RSV, parainfluenza, adenovirus and HMPV are the most commonly detected causes of Acute Respiratory Infection (ARI).

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during Week 36, was 0.5 consultations per 100,000 practice population (Table 1) (latest data available). This is an increase compared to the previous Week (0.3 consultations per 100,000. Figure 1).
- The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 96.0 per 100,000 practice population during Week 36 (Table 2 and Figure 3). This is an increase compared to the previous week (80.7 per 100,000). Weekly consultations for Lower Respiratory Tract Infections increased (45.5 per 100,000) and Upper Respiratory Tract Infections (54.4 per 100,000) increased compared to the previous week.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache, and sore throat) during Week 36 decreased to 12.4% (Figure 13).
- During Week 36, 1,152 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. Five tested positive for influenza (three A(H1N1) and 2 influenza B). Overall influenza test-positivity remained stable at 0.4%. In addition, there were 251 SARS-CoV-2, 139 rhinovirus, 40 adenovirus, 39 RSV, 10 enterovirus, 12 parainfluenza, eight HMPV, eight mycoplasma positive samples (Figure 5). Additionally, 199 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 199 samples, 60 were positive for SARS-CoV-2, one positive for RSV and one positive for influenza B (Figure 7). Furthermore, during week 36, 43 respiratory specimens were tested from patients in intensive care units (ICU) of which none was positive for influenza (Figure 8).
- There were 57 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 36. Of the 57 samples, 13 tested positive for Sars-Cov-2, 13 for rhinovirus, two for RSV, one for influenza B, and one for adenovirus (as at 13/09/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 36 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) three were influenza A(H1N1) and three were influenza B (Figure 6).
- Confirmed RSV case incidence in children aged under 5 increased and is now at medium intensity levels. In week 36 there were 22.9 confirmed cases per 100,000 in this age group. 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 (Figure 9).
- The 7-day rolling sums of cases hospitalised within 28 days of an influenza or RSV positive test result in the community (or up to two days post-admission) were 1 and 13 respectively during Week 36 (Figures 10 & 11) and 67 for SARS-CoV-2 during week 36 (figure 12).
- During week 36, 11 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All 11 outbreaks were reported as COVID-19. 11 were in residential homes and one was in a community setting.
- According to <u>EuroMoMo</u> analysis, all-cause deaths in Wales were not in excess during week 34 (latest data available).

Respiratory infection activity in Wales

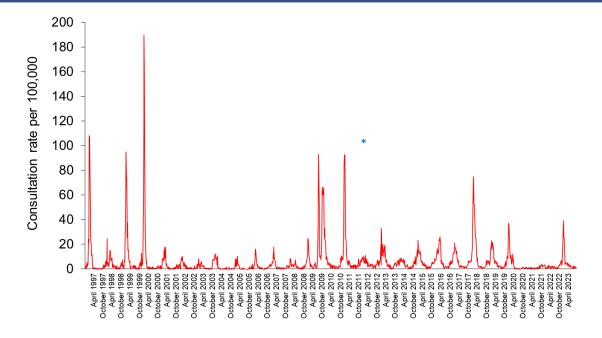
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 10/09/2023)



^{*} 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.

**Clinical consultations for ILI seasons are monitored from W40 to W40, the most recent data is presented in red.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (Week 48 1996 – Week 36 2023)



^{*} Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 31 – Week 36 2023 (as of 10/09/2023)

Age						
group	31	32	33	34	35	36
< 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	2.2	0.0	4.3	0.0	0.0	0.0
25 - 34	3.8	0.0	0.0	3.8	2.0	0.0
35 - 44	3.7	3.8	1.9	0.0	0.0	0.0
45 - 64	1.8	1.9	2.7	2.7	0.0	1.8
65 - 74	0.0	0.0	0.0	0.0	0.0	0.0
75+	0.0	2.2	2.2	0.0	0.0	0.0
Total	1.7	1.2	1.7	1.2	0.3	0.5

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 31 – Week 36 2023 (as of 10/09/2023)

Age						
group	31	32	33	34	35	36
< 1	1159.3	1073.8	399.1	465.6	650.7	533.9
1 - 4	415.9	250.6	308.7	315.4	158.8	248.1
5 - 14	110.8	60.4	59.9	79.8	55.0	51.0
15 - 24	128.2	114.1	65.0	95.3	64.8	78.1
25 - 34	124.9	87.2	84.4	88.2	78.8	65.2
35 - 44	111.4	86.2	89.0	59.3	74.3	94.5
45 - 64	105.7	74.7	92.0	70.1	67.7	70.1
65 - 74	99.1	70.1	97.0	88.4	86.5	105.7
75+	156.7	139.2	126.0	117.3	93.7	169.2
Total	135.4	100.7	98.4	93.7	80.7	96.0

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 31 – Week 36 2023 (as of 10/09/2023)

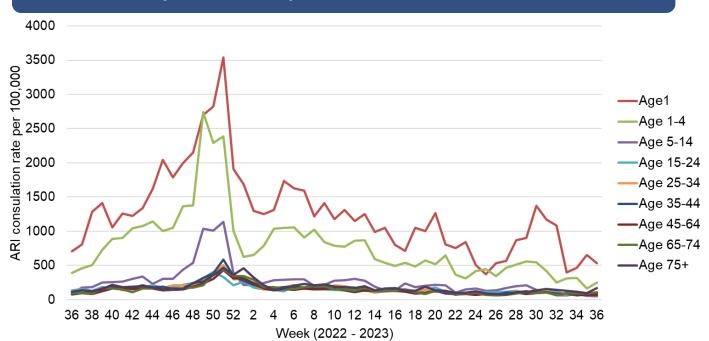
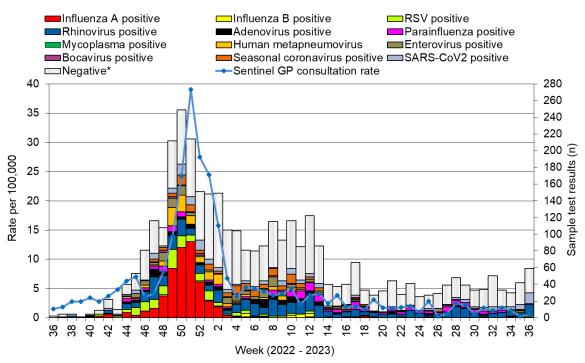
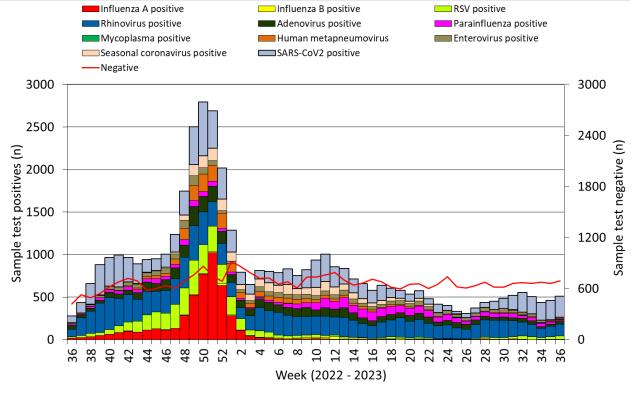


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 10/09/2023, by week of sample collection, Week 36 2022 to Week 36 2023



^{*} Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than on pathogen will appear more than once in the chart. Results for the latest week will underestimate activity as not all samples will have been received, tested and authorised at time of writing this report.

Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 10/09/2023 by week of sample collection, Week 36 2022 to Week 36 2023.



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. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 6. Flu subtypes based on specimens submitted for virological testing by sentinel GPs and community pharmacies, hospital patients, and non-sentinel GPs, as of 10/09/2023 by week of sample collection, Week 40 2022 to Week 36 2023.

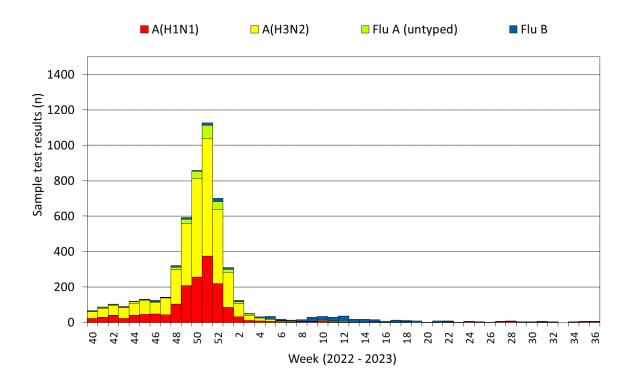


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 10/09/2023 by week of sample collection, Week 36 2022 to Week 36 2023.

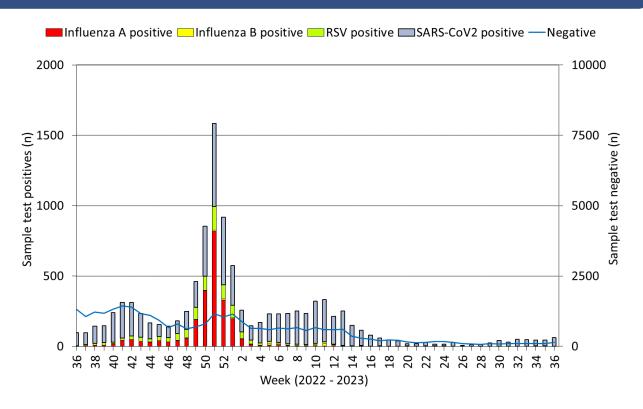
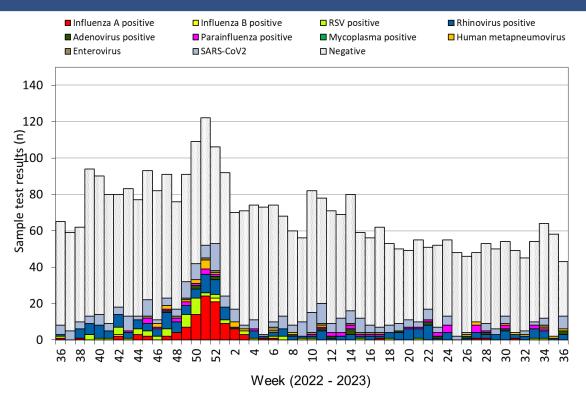
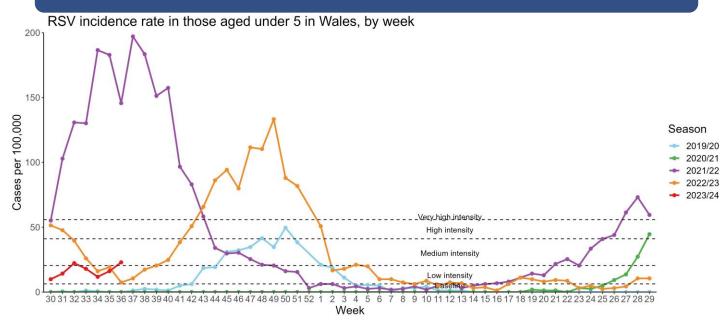


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 36 2022 to Week 36 2023.



This chart summarises respiratory panel test data and does NOT include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 9. RSV incidence rate per 100,000 population aged under five years, week 30 2019 to Week 36 2023.



^{*}RSV seasons are monitored from W30 to W29, the most recent data is presented in red

ARI - Hospital admissions

Figure 10. Seven day rolling sum of cases hospitalised in Wales within 28 days of an influenza positive test result in the community (or up to 2 days post-admission), as of 10/09/2023.

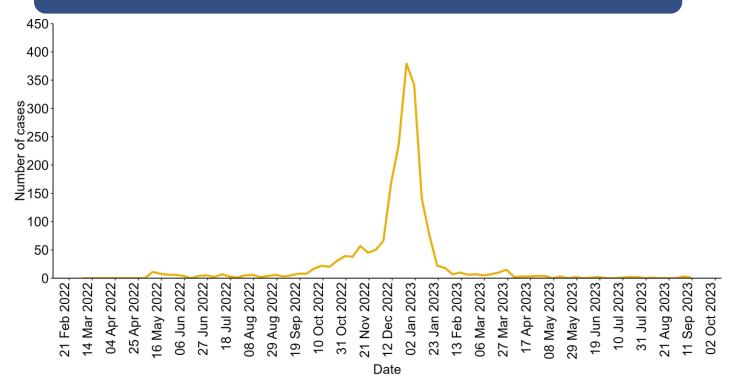


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 10/09/2023.

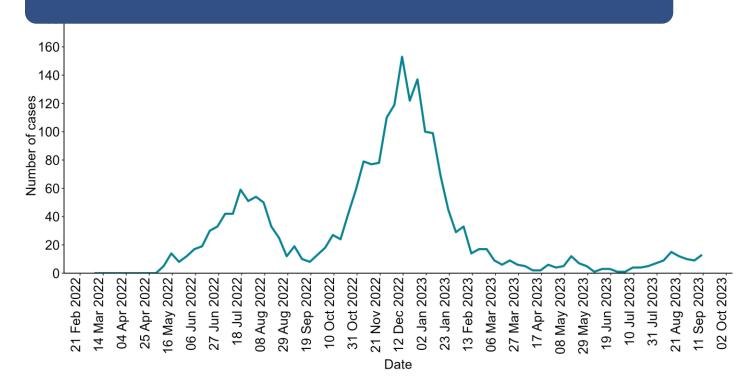
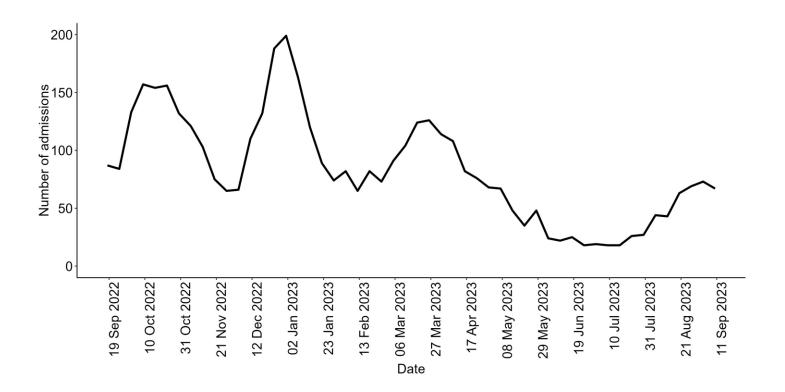
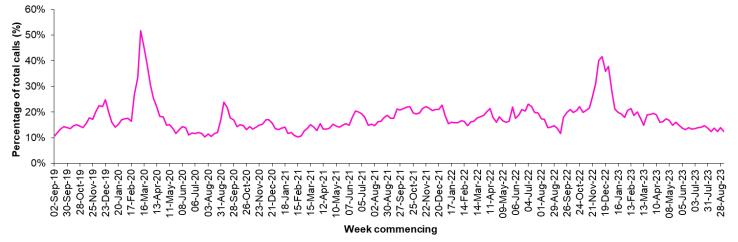


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 10/09/2023.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 36 2019 - Week 36 2023 (as of 10/09/2023).



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 (i.e. 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 in Wales 2022/23 (as of 25/04/2023).

Influenza immunisation uptake in the 2022/23 season					
People aged 65y and older	76.3%				
People younger than 65y in a clinical risk group	44.2%				
Children aged two & three years	44.0%				
Children aged between four & ten years	63.9%				
Children aged between 11 & 15 years	54.4%				
Total NHS staff	46.2%				
NHS staff with direct patient contact	46.7%				

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: https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-reports/

Influenza activity – UK and international summary

- As of Week 34, GP ILI consultations remained stable at 1.2 per 100,000, in England.
- During Week 34, 23 samples testing positive for influenza were reported in England (14 A(not subtyped), three A(H3), and six influenza B). Overall influenza positivity remained low and stable at 0.8%. UK summary data are available from the UKHSA Influenza and COVID-19 Surveillance Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 31-35, with few countries reporting regional influenza activity. Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 04/09/2023, based on data up to 20/08/2023 that globally, influenza detections remain low, with activity in many countries hemisphere now decreasing having peaked in recent weeks.
- In the countries of North America, influenza indicators were mostly at low levels typically observed between influenza seasons.
- Countries in the temperate zones of the southern hemisphere influenza activity decreased, with influenza A and B still circulating. Influenza decreased in Australia. RSV activity decreased overall but remailed high in Western Australia.
- In tropical South America, influenza detections were low overall, with influenza A(H1N1(pdm09) and influenza B viruses predominant.
- In the Caribbean countries influenza activity remained low overall, with influenza B/Victoria lineage viruses predominant.
- In Western Africa, influenza detections were few and decreasing, however, there was an increase of influenza detections in Ghana.
- In Middle Africa, Angola and Cameroon reported increased influenza B detections.
- In Southern Asia, influenza activity remained low across reporting countries with the exception of Bangladesh, Bhutan and Nepal. Bhutan reported an increase of both influenza A and B detections, ILI and SARS-CoV-2.
- Influenza activity in South-East Asia remained elevated, with influenza A (H1N1(pdm09) and influenza A(H3) predominating.
- In Northern Africa, no detections were reported among those reporting ongoing testing.
- In Central Asia, no influenza detections were reported.
 Source: WHO influenza update: https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update
- Based on FluNet reporting (as of 07/09/2023), during the period from 07/08/2023 20/08/2023 National Influenza Centres and other national influenza laboratories from 108 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 230,916 specimens during that period, of which 5,040 were positive for influenza viruses, 3,558 (70.6%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 991 (38.0%) were influenza A(H1N1)pdm09 and 1,617 (62.0%) were influenza A(H3N2). Of the 5,040 samples testing positive for influenza viruses, 1,482 tested positive for Influenza B (29.4%). Source: Flu Net: https://www.who.int/tools/flunet

Australia and New Zealand update

- In New Zealand, during the week ending 03/09/2023, community influenza-like illness activity (ILI) GP consultations decreased to 11.10 per 100,000. The SARI hospitalisation rate increased to 9.45 per 100,000 and is now at medium activity levels.
- In New Zealand, the weekly RSV testing positivity through sentinel hospital SARI sampling decreased to 4.1% in the week ending 03/09/2023.

Source: Institute of Environmental Science & Research, New Zealand

• In Australia, according to the latest available update (fortnight ending 03/09/2023), influenza-like illness (ILI) activity in the community decreased to 5.44 per 1,000 this reporting period. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (58%).

Source: Australian Influenza Surveillance Report and Activity Updates.

COVID-19 - UK and international summary

- As of 06/09/2023, there were 9.2 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were three suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were two COVID-19 death registrations in the last reporting period reported by ONS. Latest COVID-19 data from Public Health Wales is available from: https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/
- The latest UKHSA COVID-19 data summary is available from: https://coronavirus.data.gov.uk/
- WHO situation updates on COVID-19 are available from: https://covid19.who.int/

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

- On the 10/07/2023 WHO were notified by the United Arab Emirates(UAE) of a case of MERS-CoV. In total, 2,605 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 937 deaths. WHO Global Alert and Response website: https://www.who.int/emergencies/disease-outbreak-news
- 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-respiratorysyndrome-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 reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months, but overall risk assessments are unchanged. Previous reports are available from:

https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary. 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://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/

Public Health Wales interactive report on hospitalisations in influenza and RSV cases:

https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/ARI-

Hospitaladmissionsdashboard/ARIhospitaladmissionsdashboard?publish=yes

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

England influenza and COVID-19 surveillance:

https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2022-to-2023-season

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

https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/

Advice on influenza immunisation (for intranet users)

Influenza (sharepoint.com)

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