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



Wednesday 13th November 2023 (covering Week 45 2023)

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2023 Week 40: 60 (8 influenza A(H3N2), 10 influenza A(H1N1)pdm09,20

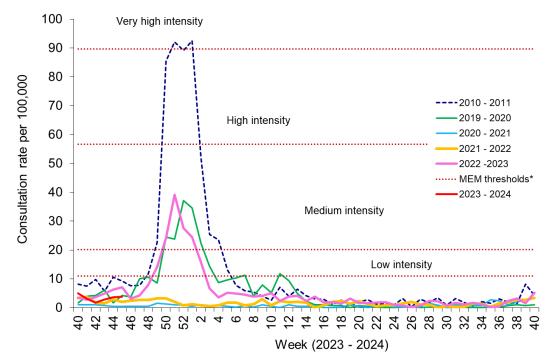
influenza A untyped and 22 influenza B)

During Week 45 (ending 12/11/2023) there were eighteen 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. RSV activity in children under 5 years decreased but remains at 'very high' intensity levels. RSV, rhinovirus, adenovirus, SARS-CoV-2, enterovirus, and adenovirus 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 45, was 3.8 consultations per 100,000 practice population (Table 1). This is an increase compared to the previous week (3.6 consultations per 100,000. Figure 1).
- The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 214.1 per 100,000 practice population during Week 45 (Table 2 and Figure 3). This is a decrease compared to the previous week (220.9 per 100,000). During week 44 Lower Respiratory Tract Infections increased to 86.2 per 100,000 and Upper Respiratory Tract Infections decreased to 130.0 per 100,000 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 45 decreased to 18.6% (Figure 13).
- During Week 45, 894 specimens received multiplex respiratory panel testing from patients attending hospitals. Seven tested positive for influenza (three for influenza A(not subtyped), three for influenza B and two for influenza A(H1N1)). Overall influenza test-positivity remained stable at 0.8%. In addition, there were: 167 RSV, 130 rhinovirus, 59 SARS-CoV2, 46 enterovirus, 34 adenovirus, 19 hMPV, 12 parainfluenza, seven mycoplasma and four seasonal coronaviruses positive samples (Figure 5). Additionally, 681 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. Of the 681 samples, 97 were positive for SARS-CoV-2, 75 RSV, six influenza A and four influenza B (Figure 7). Furthermore, during week 45, 64 respiratory specimens were tested from patients in intensive care units (ICU) of which none were positive for influenza (Figure 8).
- There were 148 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 45. Of the 148 samples, 29 tested positive for rhinovirus, 13 for RSV, 11 for enterovirus, seven for SARS-CoV2, six for mycoplasma, two for seasonal coronaviruses, two for bocavirus, one for influenza A(H1N1(pdm09), one for adenovirus and one for HMPV(as at 15/11/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 45 (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), three influenza A(not subtyped) and two
  influenza B (Figure 6).
- Confirmed RSV case incidence in children aged under 5 decreased in the most recent week but remains at very high intensity levels (compared to historic levels before 2021). In week 45 there were 112.2 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 two and 91 respectively during Week 45 (Figures 10 & 11) and 55 for SARS-CoV-2 during week 45 (Figure 12).
- During week 45, four **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All outbreaks were reported as COVID-19; all four were in residential homes.
- According to EuroMoMo analysis, all-cause deaths in Wales were not in excess during week 44.
- As at 07/11/2023, uptake of influenza vaccination was 59.9% in adults aged 65 years and older, 26.6% in those
  aged 6 months to 64 years at clinical risk, 26.7% in two- and three-year-old children, 62.9% in children aged four
  to 10 years and 45.7% in children aged 11 to 15 years (Table 3).

# Respiratory infection activity in Wales

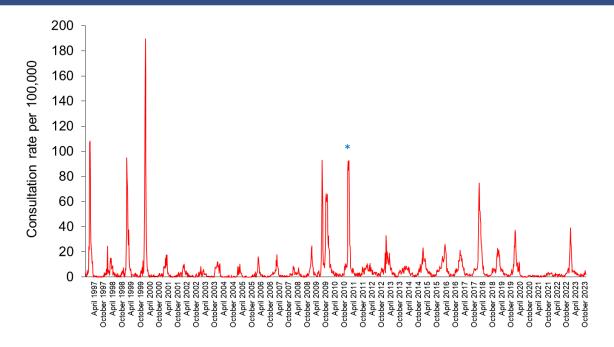
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 13/11/2023)



<sup>\*</sup> 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 45 2023)



<sup>\*</sup> Reporting changed to Audit+ surveillance system

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 40 – Week 45 2023 (as of 13/11/2023)

Age						
group	40	41	42	43	44	45
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	6.7	0.0	0.0	0.0	6.7	0.0
5 - 14	0.0	0.0	0.0	0.0	2.2	2.5
15 - 24	6.4	4.3	0.0	0.0	2.1	4.9
25 - 34	1.9	3.8	0.0	7.6	3.8	4.5
35 - 44	11.1	1.8	7.6	5.5	5.5	10.8
45 - 64	5.5	5.5	1.9	3.6	5.5	3.1
65 - 74	2.2	2.2	0.0	2.2	2.2	0.0
75+	6.5	2.2	2.2	0.0	0.0	2.4
Total	5.0	3.1	1.7	2.9	3.6	3.8

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 40 – Week 45 2023 (as of 13/11/2023)

Age						
group	40	41	42	43	44	45
< 1	1730.5	1534.4	1250.4	1333.3	1733.3	2189.8
1 - 4	913.7	881.3	800.7	1069.1	1223.8	893.5
5 - 14	223.9	212.7	205.3	269.9	247.8	240.7
15 - 24	151.5	136.3	122.9	138.5	172.6	159.5
25 - 34	135.8	158.7	124.5	150.8	166.0	168.1
35 - 44	132.6	138.0	125.9	146.9	145.1	148.6
45 - 64	123.7	115.5	112.0	129.1	149.1	161.0
65 - 74	133.7	122.9	142.3	135.7	178.8	155.1
75 <b>+</b>	185.8	183.5	180.7	204.8	187.6	210.2
Total	187.8	182.2	169.7	201.3	220.9	214.1

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 45 – Week 45 2023 (as of 13/11/2023)

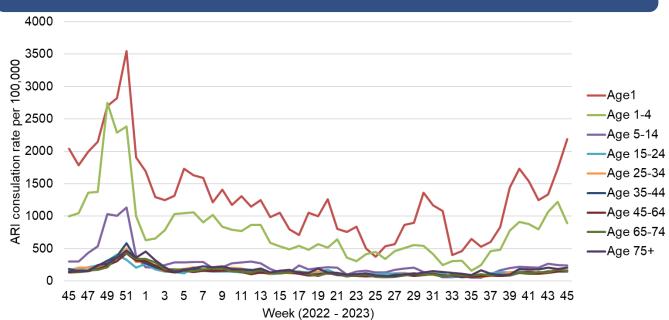
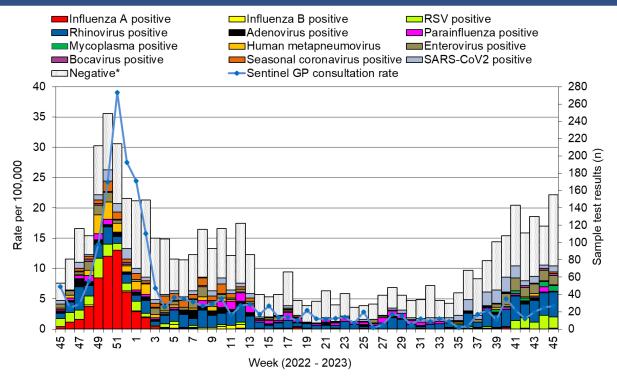
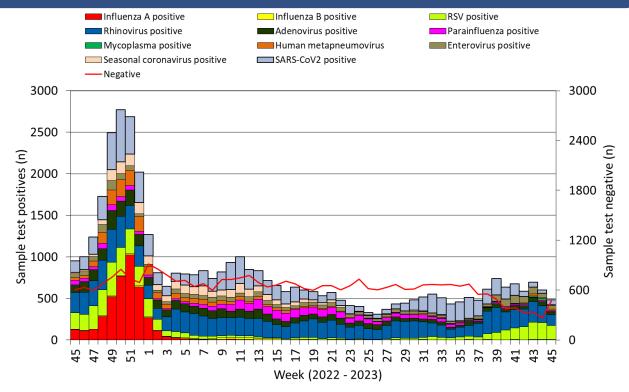


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 13/11/2023, by week of sample collection, Week 45 2022 to Week 45 2023



<sup>\*</sup> 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 13/11/2023 by week of sample collection, Week 45 2022 to Week 45 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 13/11/2023 by week of sample collection, Week 45 2022 to Week 45 2023.

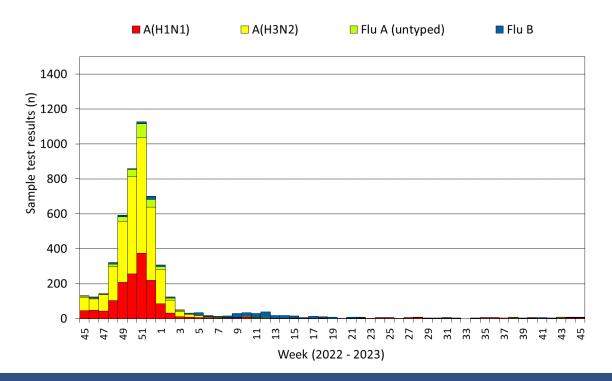


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 13/11/2023 by week of sample collection, Week 45 2022 to Week 45 2023.

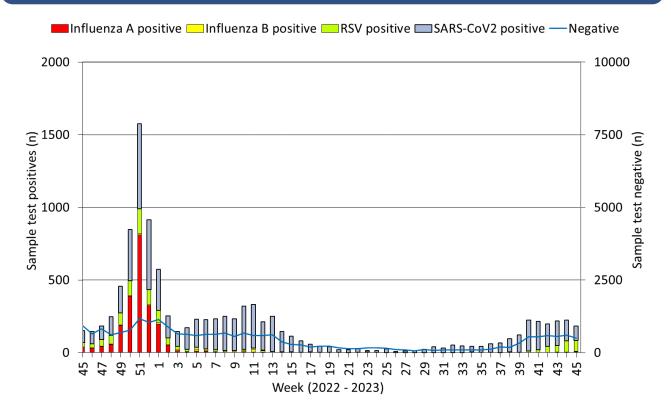
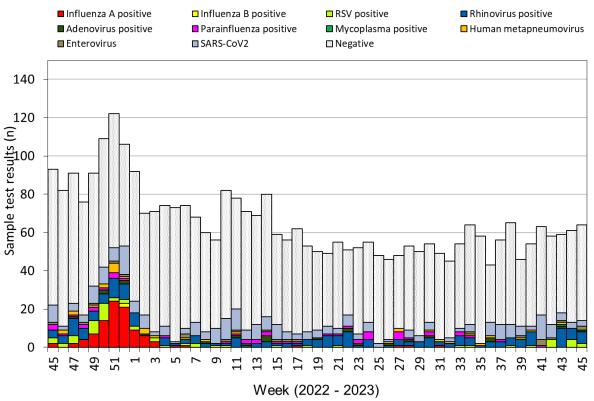
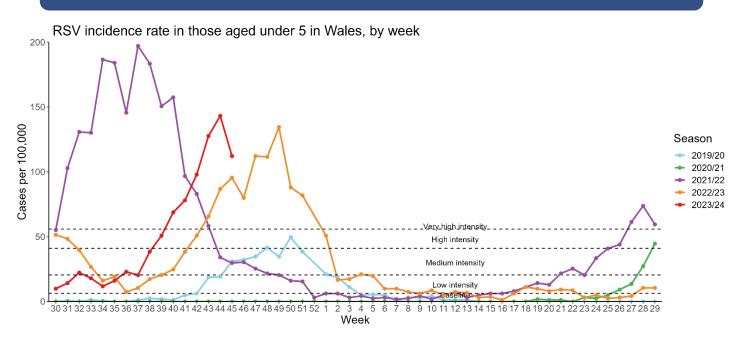


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 45 2022 to Week 45 2023.



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 45 2023.



<sup>\*</sup>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 13/11/2023.

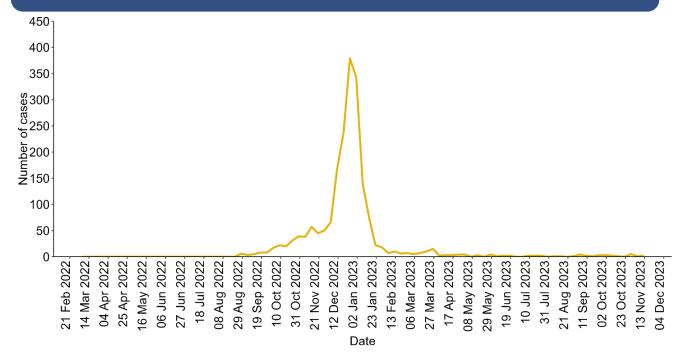


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 13/11/2023.

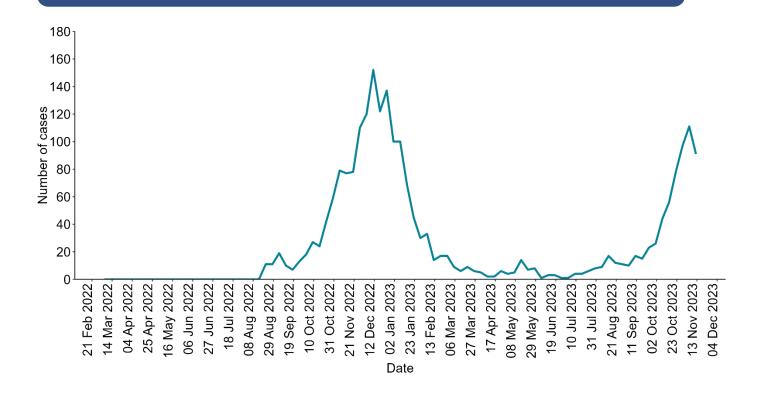
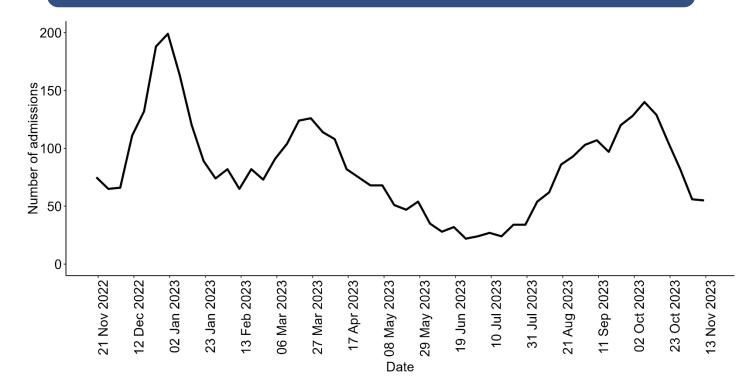
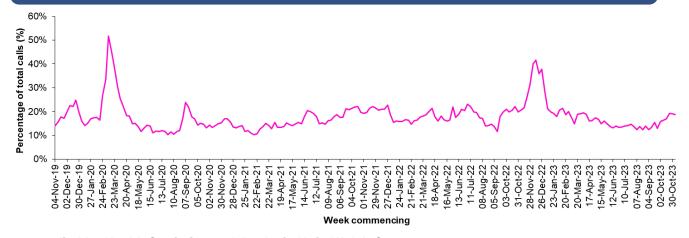


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 13/11/2023.



#### **Calls to NHS Direct Wales**

Figure 13. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from Week 45 2019 - Week 45 2023.



<sup>&</sup>lt;sup>1</sup> 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 2023/24 (as of 07/11/2023).

Influenza immunisation uptake in the 2022/23 season				
People aged 65y and older	59.9%			
People younger than 65y in a clinical risk group	26.6%			
Children aged two & three years	26.7%			
Children aged between four & ten years	62.9%			
Children aged between 11 & 15 years	45.7%			
Total NHS staff	12.6%			
NHS staff with direct patient contact	12.2%			

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: <a href="https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-">https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-</a>

reports/

#### Influenza activity – UK and international summary

- As of Week 44, GP ILI consultations remained stable at 3.3 per 100,000, in England, and decreased to 2.2 per 100,000 in Scotland.
- During Week 44, 63 samples tested positive for influenza were reported in England (42 influenza A(not subtyped), 8 influenza A(H3N2) and 13 were influenza B). Overall influenza positivity remained stable at 1.4%.
- In England, RSV hospitalisations in the under 5-year-olds increased to 33.5 per 100,000 in week 44. In Scotland, RSV hospitalisations in the under 1-year olds was 262.9 per 100,000. UK summary data are available from the <a href="UKHSA Influenza and COVID-19">UKHSA Influenza and COVID-19</a> Surveillance Report and <a href="Viral respiratory diseases">Viral respiratory diseases</a> (including influenza and COVID-19) in Scotland.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) reported that influenza positivity is still bellow seasonal epidemic activity threshold which is set at 10%. As of week 44, there were 34 confirmed influenza virus infection detections reported from sentinel primary care. 91% were type A viruses (11 influenza A(H1)pdm09 and eight influenza A(H3).

Source: European Respiratory Virus Surveillance Summary (ERVISS): <a href="https://erviss.org/">https://erviss.org/</a>

- The WHO reported on 13/11/2023, based on data up to 29/10/2023 that globally, influenza detections remained low, with most activity reported in tropical area and increased activity reported in temperate Northern hemisphere, Eastern and Western Asia.
- In Oceania influenza activity decreased with influenza A predominant. Influenza detections increased in Australia but remained low. Influenza detections in New Zealand were low and decreasing.
- In South Africa, low numbers of influenza B detections were reported but remained below the seasonal threshold.
- In the temperate South America influenza detection remained low or below baseline in reporting countries.
- In the Caribbean countries influenza activity increased slightly with detections influenza A subtypes predominant.
- In the countries of Central America, influenza activity remained low with detections of influenza B predominant.
- In tropical South America, influenza detections were low or below baseline. A slight increase in detection of influenza A(H1N1(pdm09) was reported in Ecuador however levels remain low.
- In tropical Africa, influenza detections decreased and were low overall. Influenza detections remained low in Middle Africa, stable in Eastern Africa and decreased overall in Western Africa.
- In Southern Asia, influenza activity increased due to increased detections of predominantly influenza A viruses in Iran
- In South-East Asia, influenza activity remained elevated with influenza A subtypes predominant.
- In the temperate zones of the northern hemisphere, indicators of influenza activity were reported at low levels.
   Source: WHO influenza update: <a href="https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update">https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update</a>
- Based on FluNet reporting (as of 10/11/2023), during the period from 16/10/2023 29/10/2023 National Influenza Centres and other national influenza laboratories from 109 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 262,187 specimens during that period, of which 14,448 were positive for influenza viruses, 12,366 (86.0%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 3,251 (32.6%) were influenza A(H1N1)pdm09 and 6,720 (67.4%) were influenza A(H3N2). Of the 14,448 samples testing positive for influenza viruses, 2,082 tested positive for Influenza B (14.4%). Source: Flu Net: <a href="https://www.who.int/tools/flunet">https://www.who.int/tools/flunet</a>

#### Update on influenza activity in North America

• The USA Centers for Disease Control and Prevention (CDC) report that influenza activity levels continued to increase across most parts of the country during week 44 (ending 04/11/2023). Nationally, 1,687 (3.0%) out of 56,471 specimens have tested positive for influenza in week 44 in clinical laboratories nationwide, of these positives 1,178 (69.8%) were influenza A and 509 (30.2%) were influenza B. Further characterisation has been carried out on 2,343 specimens by public health laboratories, and 192 samples tested positive for influenza; 96 influenza A(H1N1)pdm09, 10 influenza A(H3N2), 42 influenza A(not subtyped) and 44 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 44, influenza activity increased but remains low
and below threshold levels. During week 44, 523 influenza detections were reported: 523 influenza A, and 21
influenza B. The percentage of ILI visits was 1.4%. Source: Public Health Agency of Canada:
<a href="https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html">https://www.canada.ca/en/public-health/services/diseases/flu-influenza/influenza-surveillance/weekly-influenza-reports.html</a>

# Respiratory syncytial virus (RSV) in North America

• The USA CDC reported that the RSV positivity rate increased in the week beginning 04/11/2023. **Source:** CDC RSV national trends: https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html

### COVID-19 - UK and international summary

- As of 09/11/2023, there were 6.1 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 18 suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were 17 COVID-19 death registrations recorded in ONS data for the latest data period reported. Latest COVID-19 data from Public Health Wales is available from: <a href="https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/">https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/</a>
- 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:
<a href="https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary">https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary</a>
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: <a href="https://www.who.int/emergencies/disease-outbreak-news">https://www.who.int/emergencies/disease-outbreak-news</a>

#### 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-2023-to-2024-season

Scotland seasonal respiratory surveillance:

https://www.publichealthscotland.scot/publications

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