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



Wednesday 22<sup>nd</sup> November 2023 (covering Week 46 2023)

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2023 Week 40: 84 (10 influenza A(H3N2), 16 influenza A(H1N1)pdm09,33

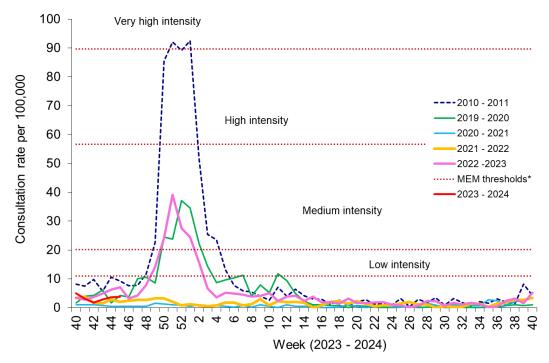
influenza A untyped and 25 influenza B)

During Week 45 (ending 19/11/2023) there were 25 cases of influenza. Overall influenza activity remains at baseline levels, but with small increases in recent weeks. 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 (latest data available), 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 (latest data available) (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 46 remained stable at 18.5% (Figure 13).
- During Week 46, 868 specimens received multiplex respiratory panel testing from patients attending hospitals. 17 tested positive for influenza (eight for influenza A(not subtyped), six for influenza A(H1N1) two for influenza B and one for influenza A(H3)). Overall influenza test-positivity increased to 2.0%. In addition, there were: 168 RSV, 129 rhinovirus, 39 SARS-CoV2, 38 enterovirus, 32 adenovirus, 24 hMPV, 11 mycoplasma, nine parainfluenza positive samples (Figure 5). Additionally, 659 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Of the 659 samples, 93 were positive for SARS-CoV-2, 90 RSV and six influenza A (Figure 7). Furthermore, during week 46, 57 respiratory specimens were tested from patients in intensive care units (ICU) of which one was positive for influenza A(not subtyped) (Figure 8).
- There were 134 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 46. Of the 134 samples, 28 tested positive for rhinovirus, 14 for RSV, eight for mycoplasma, seven for SARS-CoV2, six for enterovirus, five for hMPV, two for adenovirus, one for bocavirus, one for influenza A(H3), one for influenza B and (as at 22/11/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 46 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) eight were influenza A(not subtyped), six influenza A(H1N1), three influenza B and two influenza A(H3) (Figure 6).
- Confirmed RSV case incidence in children aged under 5 further decreased in the most recent week but remains at very high intensity levels (compared to historic levels before 2021). In week 46 there were 96.7 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 88 respectively during Week 46 (Figures 10 & 11) and 53 for SARS-CoV-2 during week 46 (Figure 12).
- During week 46, three **ARI outbreaks** were reported to the Public Health Wales Health Protection team. All outbreaks were reported as COVID-19; all three were in residential homes.
- According to <u>EuroMoMo</u> analysis, all-cause deaths in Wales were not in excess during week 45.
- As at 14/11/2023, uptake of influenza vaccination was 62.7% in adults aged 65 years and older, 28.2% in those aged 6 months to 64 years at clinical risk, 29.4% in two- and three-year-old children, 60.6% in children aged four to 10 years and 46.6% in children aged 11 to 15 years (Table 3).

### Respiratory infection activity in Wales

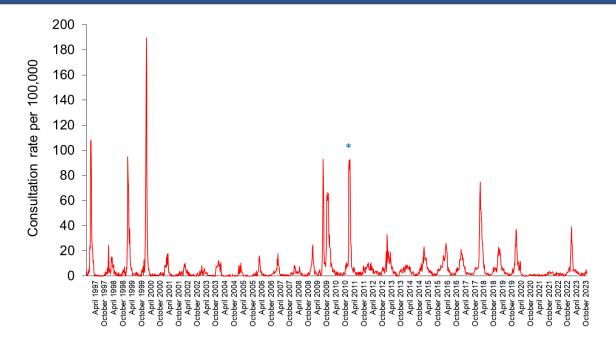
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 13/11/2023)(latest data available).



<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) (latest data available).



<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) (latest data available)

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) (latest data available)

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
<b>75</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) (latest data available)

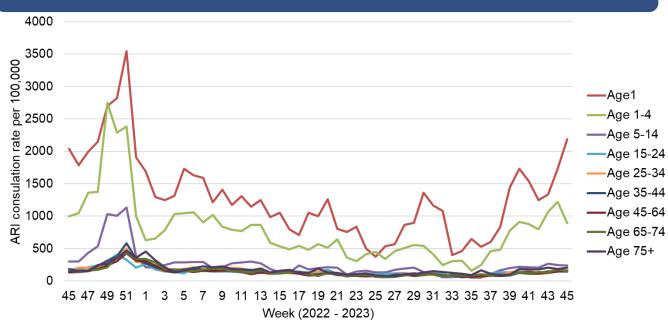
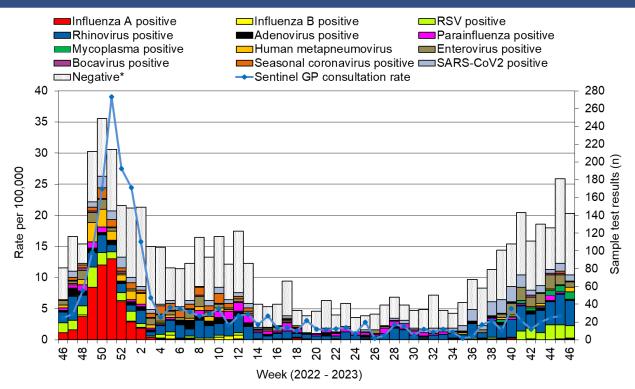
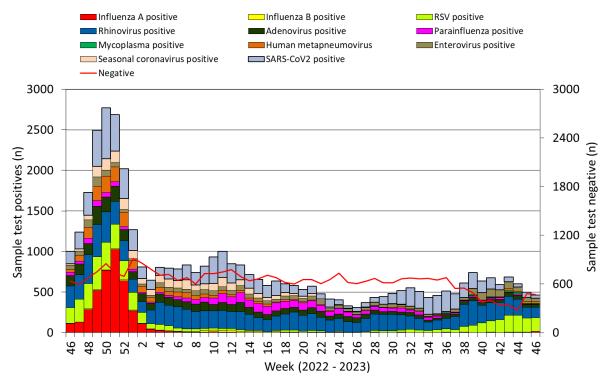


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 20/11/2023, by week of sample collection, Week 46 2022 to Week 46 2023



<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 20/11/2023 by week of sample collection, Week 46 2022 to Week 46 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 20/11/2023 by week of sample collection, Week 46 2022 to Week 46 2023.

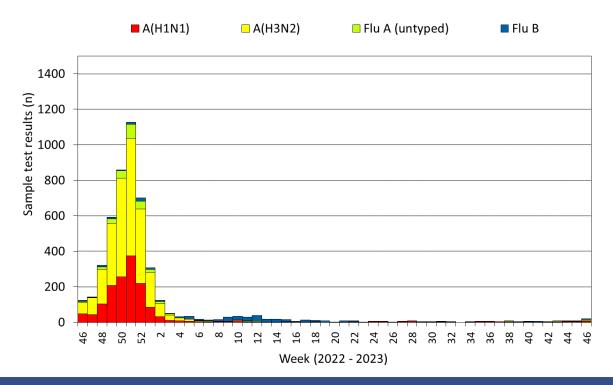


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 20/11/2023 by week of sample collection, Week 46 2022 to Week 46 2023.

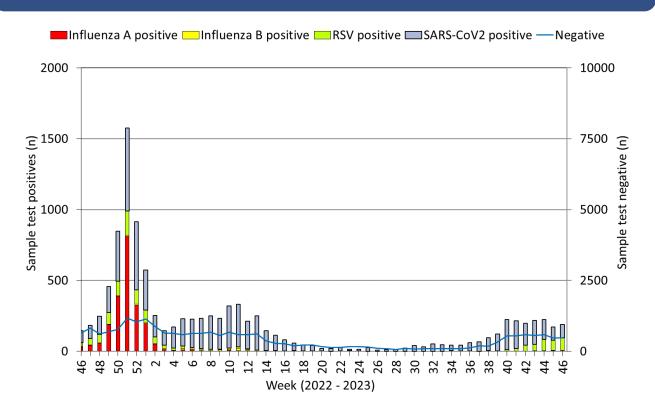
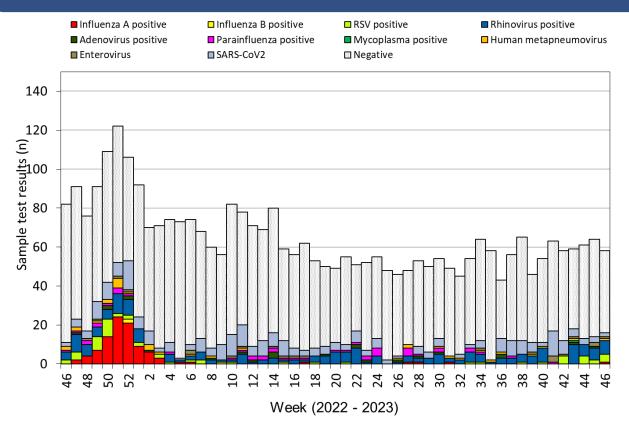
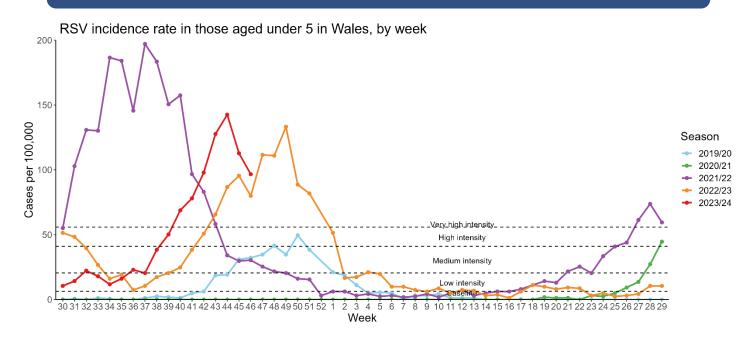


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 46 2022 to Week 46 2023.



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 46 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 20/11/2023.

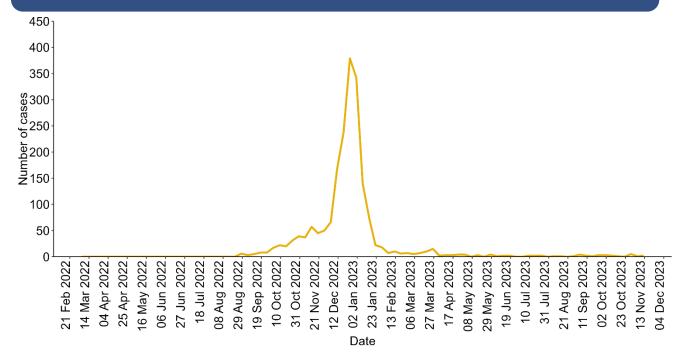


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 20/11/2023.

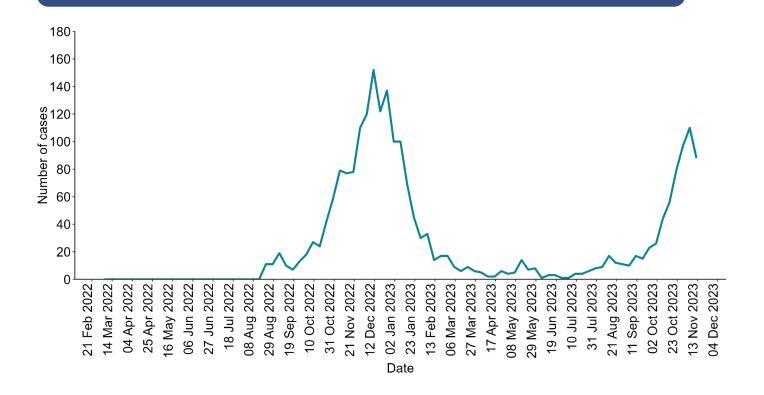
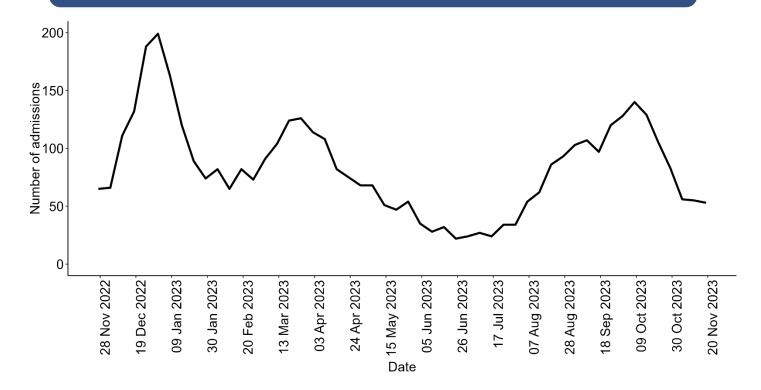
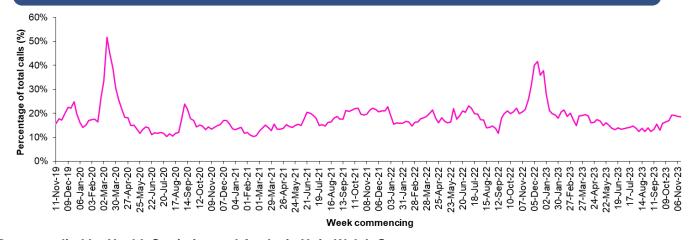


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 20/11/2023.



#### **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 46 2019 - Week 46 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 14/11/2023).

Influenza immunisation uptake in the 2022/23 season				
People aged 65y and older	52.7%			
People younger than 65y in a clinical risk group	28.8%			
Children aged two & three years	29.4%			
Children aged between four & ten years	60.6%			
Children aged between 11 & 15 years	46.6%			
Total NHS staff	25.8%			
NHS staff with direct patient contact	25.0%			

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 45, GP ILI consultations increased slightly to 3.8 per 100,000, in England, and increased to 6.3 per 100,000 in Scotland.
- During Week 45, 89 samples tested positive for influenza were reported in England (48 influenza A(not subtyped), 25 influenza A(H3N2), two influenza A(H1N1(pdm09) and 14 were influenza B). Overall influenza positivity remained stable at 1.8%.
- In England, RSV hospitalisations in the under 5-year-olds increased to 35.1 per 100,000 in week 45. In Scotland, RSV hospitalisations in the under 1-year olds was 235.1 per 100,000. UK summary data are available from the <a href="UKHSA">UKHSA</a> Influenza and COVID-19 Surveillance Report and Viral respiratory diseases (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% during week 45. Of 35 countries and areas reporting on influenza intensity, 3 reported medium intensity, 7 reported low intensity and the remainder reported baseline intensity. Of 35 countries and areas reporting on geographic spread of influenza viruses within a country or area, 3 reported widespread, 1 reported regional, 17 reported sporadic, 1 reported local and the remainder reported no activity. As of week 45, there were 71 confirmed influenza virus infection detections reported from sentinel primary care. 90% were type A viruses (22 influenza A(H1N1)pdm09 and 20 influenza A(H3).

Source: European Respiratory Virus Surveillance Summary (ERVISS): https://erviss.org/

- 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 14/11/2023), 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: https://www.who.int/tools/flunet

#### 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 45 (ending 11/11/2023). Nationally, 3,002 (4.0%) out of 74,217 specimens have tested positive for influenza in week 45 in clinical laboratories nationwide, of these positives 2,144 (71.4%) were influenza A and 858 (28.6%) were influenza B. Further characterisation has been carried out on 2,136 specimens by public health laboratories, and 235 samples tested positive for influenza; 116 influenza A(H1N1)pdm09, 17 influenza A(H3N2), 102 influenza A(not subtyped) and 75 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 45, influenza activity increased but remains low
and below threshold levels. During week 45, 1,071 influenza detections were reported: 1,038 influenza A, and 33
influenza B. The percentage of ILI visits was 1.3%. 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 11/11/2023.
 Source: CDC RSV national trends: https://www.cdc.gov/surveillance/nrevss/rsv/natl-trend.html

#### **COVID-19 – UK and international summary**

- As of 16/11/2023, there were 5.0 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were 8 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: <a href="https://www.who.int/emergencies/disease-outbreak-news">https://www.who.int/emergencies/disease-outbreak-news</a>
- 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: <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