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



Wednesday 26th July 2023 (covering Week 29 2023)

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2022 Week 40: 7851 (3059 influenza A(H3N2), 1633 influenza A(H1N1)pdm09,

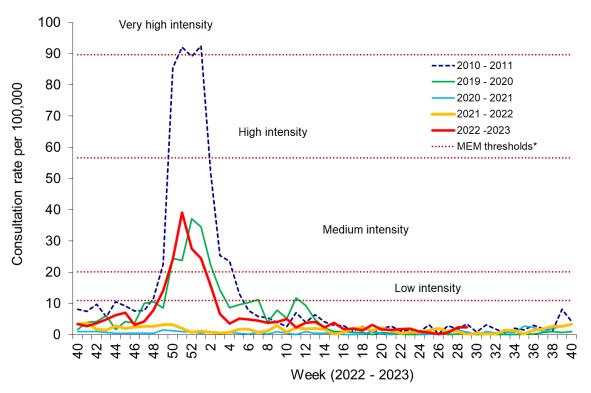
2669 influenza A(not subtyped) and 490 influenza B)

During Week 29 (ending 23/07/2023) there were four 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 incidence in children younger than 5 has increased above the baseline threshold in recent weeks. It is too early to conclude with certainty whether this represents a start to the 2023-24 RSV season in Wales. Rhinovirus, SARS-CoV-2, parainfluenza, adenovirus, and enterovirus 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 29, was 2.4 consultations per 100,000 practice population (Table 1). This remained stable compared to the previous Week (2.4 consultations per 100,000. Figure 1).
- The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 130.3 per 100,000 practice population during Week 29 (Table 2 and Figure 3). This is a decrease compared to the previous week (135.2 per 100,000). Weekly consultations for Lower Respiratory Tract Infections remained stable (41.66 per 100,000) and Upper Respiratory Tract Infections (89.72 per 100,000) decreased 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 29 increased to 14.1% (Figure 12).
- During Week 29, 1,025 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. Four samples tested positive for influenza (one influenza A(H1N1)pdm09 and three influenza B). Overall influenza test-positivity increased to 0.8% In addition, there were 212 rhinovirus, 95 SARS-CoV-2, 50 parainfluenza, 37 adenovirus, 21 enterovirus, 18 RSV, eight HMPV, four seasonal coronavirus and one mycoplasma positive samples (Figure 5). Additionally, 136 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 136 samples, 23 were positive for SARS-CoV-2 (Figure 7). Furthermore, during week 29, 50 respiratory specimens were tested from patients in intensive care units (ICU) of which none was positive for influenza (Figure 8).
- There were 25 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 29. Of the 25 samples, seven tested positive for rhinovirus, four for parainfluenza, and two for SARS-CoV2 (as at 26/07/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 29 (specimens receiving
  multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by
  sentinel GPs and community pharmacies) three were influenza B and one was influenza A(H1(pdm09) (Figure
  6).
- Confirmed RSV case incidence in children aged under 5 has increased and is now at low intensity levels. In week 29 there were 10.5 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) remained stable at two and four respectively during Week 29 (figures 10 & 11).
- During week 29, three ARI outbreaks were reported to the Public Health Wales Health Protection team. All three
  outbreaks were reported as COVID-19. One in a residential home, one in a hospital/healthcare facility and one in
  a school/nursery/daycare facility.
- According to EuroMoMo analysis, all-cause deaths in Wales were not in excess during week 28.

# Respiratory infection activity in Wales

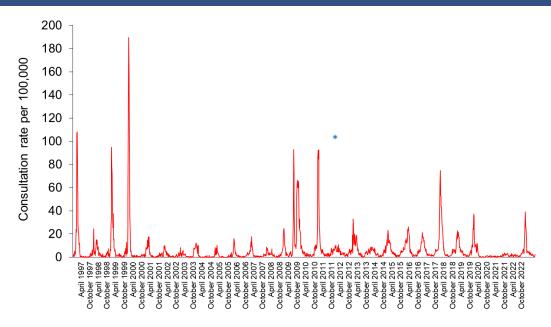
Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 23/07/2023)



<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 29 2023)



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

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 24- Week 29 2023 (as of 23/07/2023)

Age						
group	24	25	26	27	28	29
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	6.8	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	6.5	0.0
25 - 34	1.9	2.1	0.0	0.0	3.8	2.1
35 - 44	0.0	0.0	0.0	1.9	5.6	4.1
45 - 64	0.9	2.0	0.9	0.0	0.9	3.1
65 - 74	0.0	0.0	0.0	4.3	2.2	2.4
75+	2.2	0.0	0.0	0.0	0.0	4.9
Total	1.0	0.8	0.2	0.7	2.4	2.4

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 24 – Week 29 2023 (as of 23/07/2023)

Age						
group	24	25	26	27	28	29
< 1	492.5	365.4	523.4	556.1	845.0	763.1
1 - 4	418.7	446.7	342.0	462.7	510.0	487.4
5 - 14	163.1	130.2	133.0	170.7	195.0	207.8
15 - 24	111.1	106.5	110.2	116.7	125.4	102.7
25 - 34	94.6	89.3	67.1	103.5	115.0	113.0
35 - 44	78.5	72.3	66.8	98.4	102.1	118.1
45 - 64	71.0	78.6	64.7	74.7	102.1	83.7
65 - 74	100.9	68.9	58.2	69.0	86.3	98.5
75+	120.2	86.2	80.8	74.3	107.0	101.9
Total	113.6	102.7	92.0	113.1	135.2	130.3

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 29 2022 – Week 29 2023 (as of 23/07/2023).

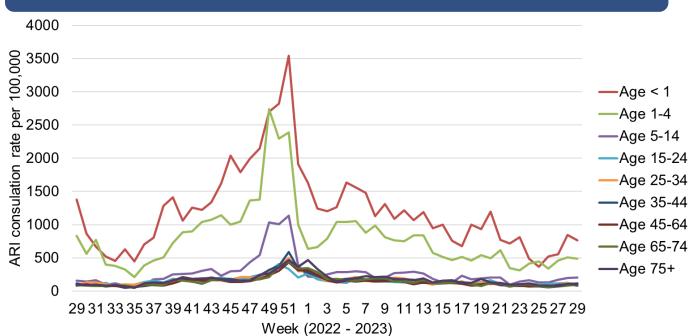
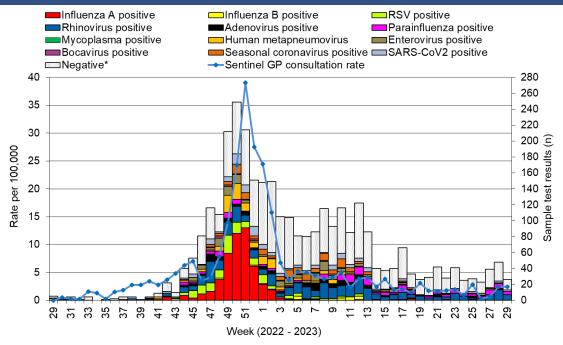
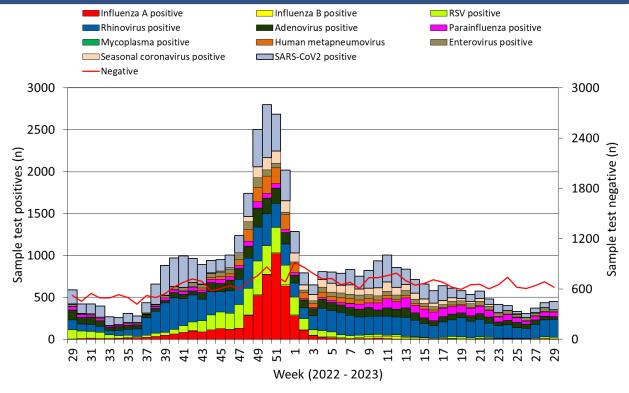


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 23/07/2023, by week of sample collection, Week 29 2022 to Week 29 2023.



<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 23/07/2023 by week of sample collection, Week 29 2022 to Week 29 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 23/07/2023 by week of sample collection, Week 40 2022 to Week 29 2023.

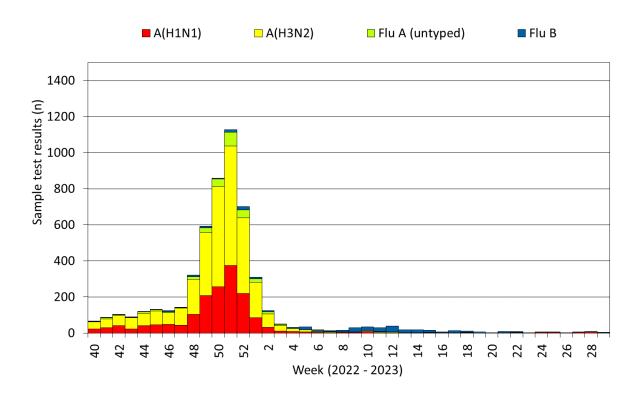


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 23/07/2023 by week of sample collection, Week 29 2022 to Week 29 2023.

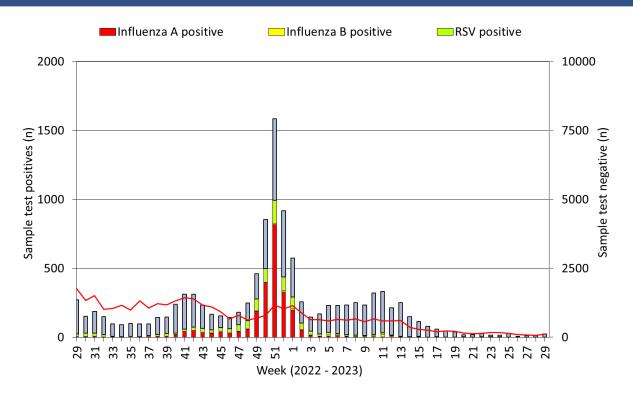
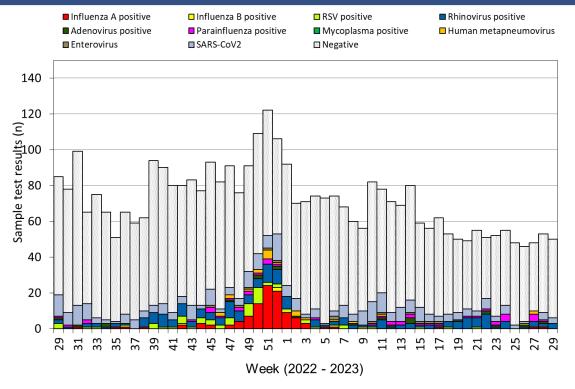
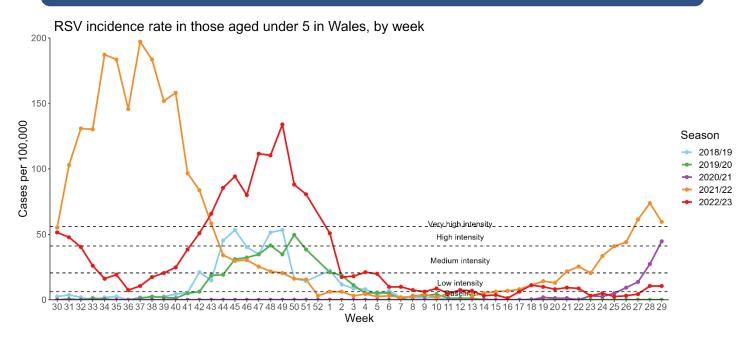


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 29 2022 to Week 29 2023.



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 2018 to Week 29 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 16/07/2023.

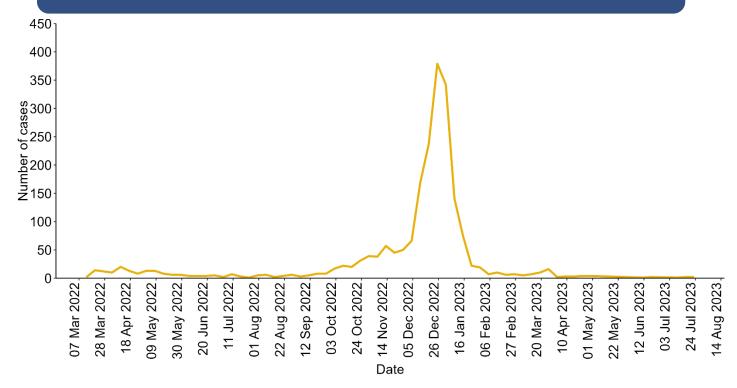
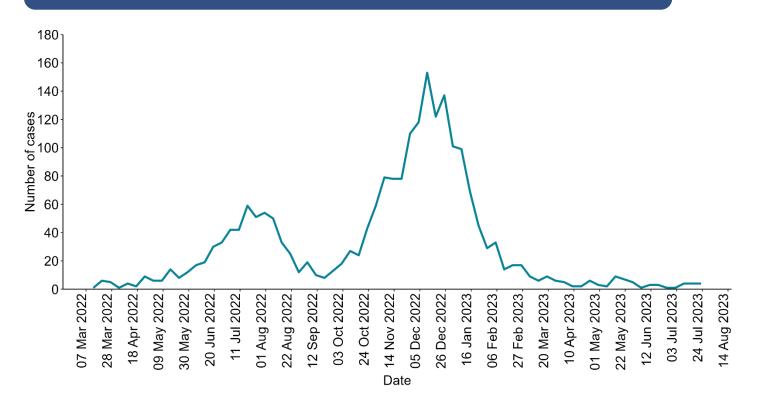
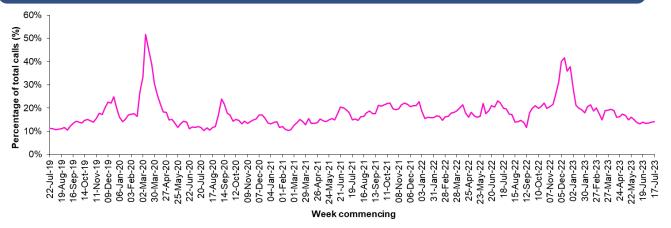


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 23/07/2023.



## **Calls to NHS Direct Wales**

Figure 12. Influenza related calls to NHS Direct Wales<sup>1</sup> (as a percentage of total calls) from Week 29 2019 - Week 29 2023 (as of 23/07/2023).



<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 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 26, GP ILI consultations remained stable at 0.9 per 100,000, in England.
- During Week 26, nine samples testing positive for influenza were reported in England (five A(not subtyped), two A(H3) and two influenza B). Overall influenza positivity remained low and stable at 0.4%. 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 21-25. Source: Flu News Europe: <a href="http://www.flunewseurope.org/">http://www.flunewseurope.org/</a>
- The WHO reported on 10/07/2023, based on data up to 25/06/2023 that globally, influenza detections remain low, but in the southern hemisphere some countries reported variable changes in influenza detections while detections in some countries have peaked.
- In the countries of North America, Influenza indicators were mostly at low levels typically observed between influenza seasons.
- In the temperate zones of the southern hemisphere, influenza activity decreased across all countries with A(H1N1)pdm09) viruses the most frequently detected followed by B viruses.
- In tropical South America, influenza detections decreased overall during this reporting period with detections of predominantly A(H1N1(pdm09) and B viruses. Detections in Bolivia and Brazil remain below the seasonal threshold.
- In the Caribbean countries influenza activity remained low in most reporting countries with influenza B predominant. In the countries of Central America, influenza was at extraordinary levels in Costa Rica, high in Honduras and moderate in Nicaragua and Panama with influenza A (H1N1)pdm09) the most frequently detected viruses. Influenza activity remained at moderate levels in Mexico and higher than usual for this time of year with influenza B detections predominant.
- In Western Africa, influenza detections of influenza A(H1N1(pdm09 were low in reporting countries.
- In Middle Africa, no influenza detections were reported during this reporting period.
- In Southern Asia, influenza activity remained low across reporting countries with all seasonal subtypes detected. Bangladesh reported a slight increase in influenza A(H3) and influenza B detections.
- Influenza activity in South-East Asia remained stable or decreased in most reporting countries with Malaysia continuing to report both influenza A subtypes. Influenza A(H1N1)pdm09) was predominant in Cambodia, Laos Peoples Democratic Republic, the Philippines, and Thailand. Malaysia and Singapore continued to report influenza A subtypes.
- In Northern Africa, no detections were reported among those reporting ongoing testing.
- In Central Asia, no influenza detections were reported despite continued testing.
   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 11/07/2023), during the period from 12/06/2023 25/06/2023 National Influenza Centres and other national influenza laboratories from 107 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 265,159 specimens during that period, of which 6,147 were positive for influenza viruses, 4,142 (67.4%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 1,768 (74.3%) were influenza A(H1N1)pdm09 and 611 (25.7%) were influenza A(H3N2). Of the 6,147 samples testing positive for influenza viruses, 2,005 tested positive for Influenza B (32.6%). Source: Flu Net: <a href="https://www.who.int/tools/flunet">https://www.who.int/tools/flunet</a>

#### Australia and New Zealand update

- In New Zealand, during the week ending 16/07/2023, community influenza-like illness activity (ILI) GP consultations increased to 18.05 per 100,000. The SARI hospitalisation rate increased to 8.36 per 100,000 and is now at medium activity levels.
- In New Zealand, the weekly RSV positivity rate through sentinel hospital SARI sampling increased to 30.0% in the week ending 16/07/2023.

Source: Institute of Environmental Science & Research, New Zealand

• In Australia, according to the latest available update (fortnight ending 09/07/2023), influenza-like illness (ILI) activity in the community decreased to 8.5 per 1,000 this reporting period. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (68%).

Source: Australian Influenza Surveillance Report and Activity Updates.

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

- As of 19/07/2023, there were 2.1 new positive PCR episodes per 100,000 population in Wales, for the most recent
  7-day reporting period. There were two suspected COVID-19 death with a date of death in the most recent 7-day
  reporting period, reported to Public Health Wales. There were four 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 936 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: <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-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