

# Science Evidence Advice

**Weekly Surveillance Report** 

20 August 2024



Science Evidence Advice (SEA)

gov.wales

Providing evidence and advice for Health and Social Services Group on behalf of the Chief Scientific Advisor for Health

# Science Evidence Advice: Weekly Surveillance Report

# A. Top Line Summary

- Overall, COVID-19 infections have **decreased** in the most recent week.
- COVID-19 hospital admissions decreased in the most recent week.
- RSV activity in children under 5 years has decreased to baseline level in the most recent week.
- Influenza cases have remained stable at low levels in the latest week.
- Whooping Cough notifications have increased in the most recent week.
- Scarlet Fever notifications have decreased in the most recent week.
- Norovirus confirmed cases have decreased in the most recent week.

# B. Communicable Disease Situation Update (non-respiratory)

#### **B.1 Norovirus**

In the current reporting week (week 32 2024), a total of **23** Norovirus confirmed cases were reported in Welsh residents. This is an increase (27.8%) in reported cases compared to the previous reporting week (week 31 2024), where **18** Norovirus confirmed cases were reported.

In the last 12 weeks (20/05/2024 to 11/08/2024) **250** (54.3%) confirmed cases were female and **208** (45.2%) confirmed cases were male. The age groups with the most cases were the 70+ (236 cases) and 60-69 (65 cases) age groups.

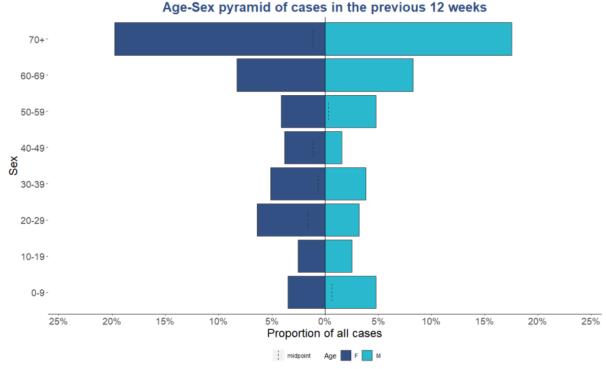


Figure 1: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (13/05/2024 to 04/08/2024)

**Notes:** This data from PHW only includes locally-confirmed PCR positive cases of Norovirus in Wales within the 12 week period up until the end of the current reporting week, week 31 2024 (13/05/2024 to 04/08/2024). Under-ascertainment is a recognised challenge in norovirus surveillance with sampling, testing and reporting known to vary by health board. In addition, only a small proportion of community cases are confirmed microbiologically.

#### **B.2 Monkeypox Clade 1b (UKHSA Update)**

On 14th August the World Health Organisation (WHO) determined that the upsurge of mpox in the Democratic Republic of the Congo (DRC) and a growing number of countries in Africa constitutes a public health emergency of international concern (PHEIC) under the International Health Regulations (2005) (IHR).

Mpox is an infectious disease that is caused by infection with monkeypox virus (MPXV). There are 2 major genetic groups (clades) of MPXV, Clade I (formerly known as Central African or Congo basin clade) and Clade II (formerly known as West African clade). Clade I is split into Clade Ia and Clade Ib.

Historically, Clade I mpox was known to circulate in 5 Central African Region countries:

- Cameroon
- Central African Republic (CAR)
- the Democratic Republic of the Congo (DRC)
- Gabon
- the Republic of the Congo

In 2024, Clade I mpox cases were reported from countries in Africa beyond these 5 Central African Region countries. This is likely to be because of multiple factors including waning population immunity from the discontinued smallpox vaccine and changing environmental and social factors, but the full aetiology remains unclear.

Clade I MPXV has previously been intermittently transmitted from animals to humans, with small mammals and primates acting as hosts. Clade I MPXV can also spread via human-to-human transmission and had previously been associated with close contact. However, in March 2023, infections linked to sexual contact and international travel were reported in the DRC for the first time. A case has been detected in Sweden in the last week but no cases of Clade I mpox have ever been detected in the UK.

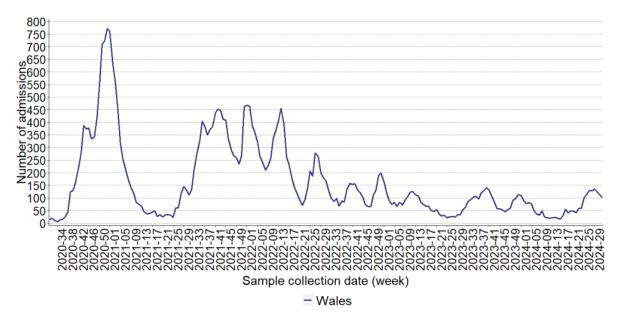
# C. Acute Respiratory Infections Situation Update

#### C1. COVID-19 Situation Update

Overall, COVID-19 infections have decreased in the most recent week. While not consistent across all indicators, many of the indicators have decreased.

- At a national level, the weekly number of confirmed case admissions to hospital decreased in week 32, and the number of cases who are inpatients has decreased. The number of admissions to ICU has increased in week 32.
- As of 11th August 2024, **411** people currently in hospital have had a positive SARS CoV-2 test, with **10** currently in ICU (compared to **513** and **9** in the previous week (week 29).
- The all-Wales incidence as estimated using PCR episodes has decreased further in week
  32.
- The number of deaths from any cause has decreased in the latest reported data available from ONS.
- Between weeks 25 and 30, KP.3\* from the Pango lineage was the most dominant variant in Wales, accounting for **67.9%** of all sequenced cases.
- There were 5 new respiratory incidents reported in week 32 2024 recorded in the health protection case and incident management system (Tarian). All 5 of these were in residential homes. Across recent reporting weeks, the average numbers of Acute respiratory and COVID-confirmed incidents in care homes (recorded on Tarian) have decreased in week 32 when looking at these by the date of onset of the first case following a steady increase in recent weeks.
- In week 32, GP consultations for any Acute Respiratory Infection (ARI) have decreased and consultations for suspected COVID have decreased and remain at low levels.
- The overall number of ambulance calls related to COVID-19 and the proportion of incidents have decreased in week 32.

Figure 2: Weekly number of COVID-19 admissions to all hospitals in Wales testing positive on or within 28d prior to admission, Wales (ICNET clinical surveillance software)(source: PHW)



## Swansea University Mid Term Projections (MTPs) for COVID-19

The latest available Swansea University MTPs using data up to 10 July indicate a decline in COVID-19 non-ICU hospital admissions into August and a lower trajectory through September 2024. ICU admissions are projected to remain at low levels as are deaths caused by COVID-19.

Figure 3: Daily COVID-19 hospital admissions, projected to September 2024

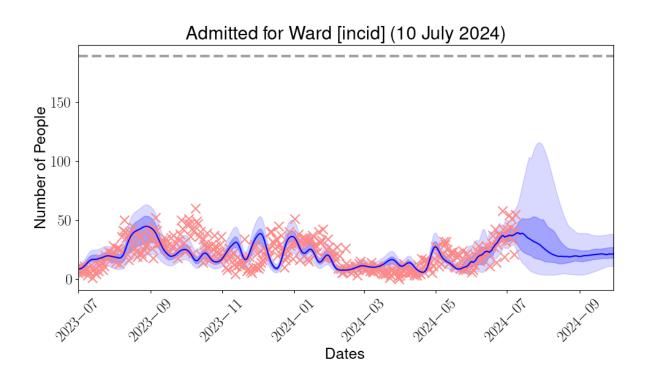


Figure 4: Daily COVID-19 ICU admissions, projected to September 2024

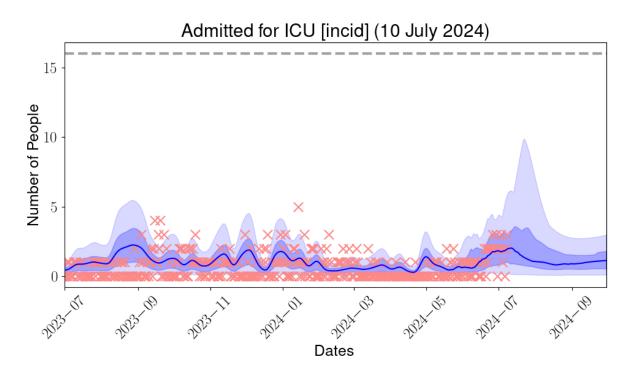
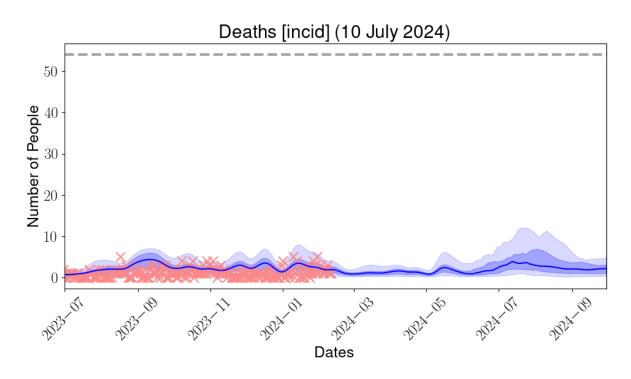


Figure 5: Daily COVID-19 deaths, projected to projected to September 2024



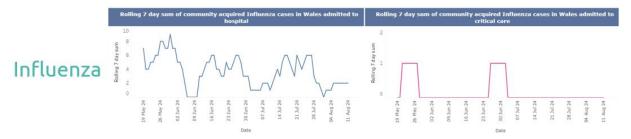
Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter ribbon.

## C2. Influenza Situation Update

Current levels of influenza are low and the trend is stable. During week 32 (ending 11/08/2024) there were 12 confirmed cases of influenza in Wales (1 for influenza A (H1N1), 5 influenza A (not subtyped), 3 for influenza A(H3N2), and 3 for influenza B).

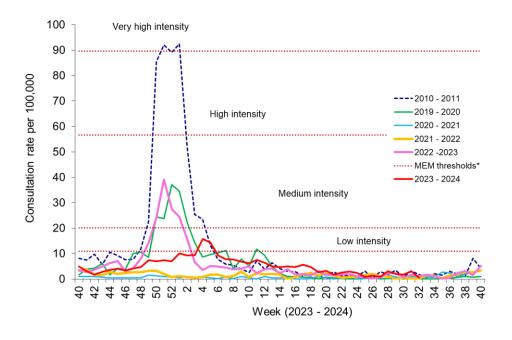
In recent weeks, detections of Parainfluenza and Enterovirus remain elevated.

Figure 6: 7 day rolling sum of influenza case admissions to hospital in Wales (source: PHW)



There is evidence of a slight decrease in syndromic surveillance of influenza like illness (ILI) in the most recent period but this remains stable overall and well below the low intensity level threshold. The figure below shows a slight decrease in week 32 in the 2023-2024 series (the bright red line is the 2023-2024 influenza like illness season) and well below the low intensity level threshold.

Figure 7: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)



#### C3. Whooping Cough (Pertussis)

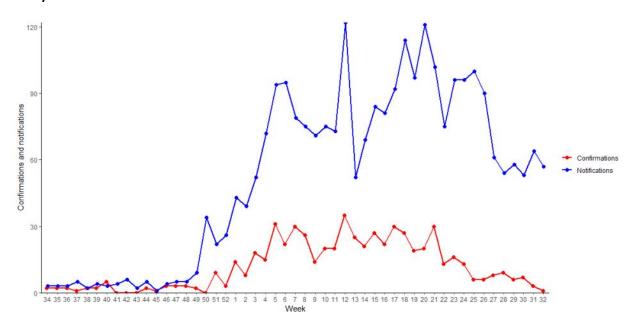
#### Whooping Cough vaccination urged as cases rise rapidly in Wales - Public Health Wales (nhs.wales)

Public health experts in Wales are encouraging all pregnant women and parents of babies and young children to ensure that they have had their Pertussis (Whooping Cough) vaccinations as cases in Wales show rapid increase in recent (Published: 24 January 2024) weeks.

Whooping cough has waves of increased infection every 3-4 years and in the last few weeks, notifications of whooping cough have risen sharply. Following reduced circulation in 2020-2022, current notifications are at levels not seen since 2012 and 2015.

Figure 8 below shows that whooping cough notifications up to the end of week 32 decreased. Lab confirmations continue to be at low levels and have decreased in the latest week.

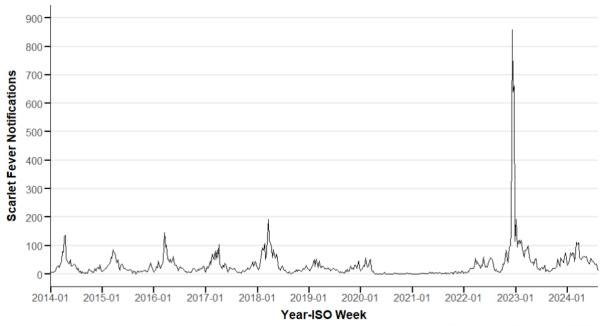
Figure 8: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales. (Source: PHW)



#### C4. iGAS and Scarlet Fever

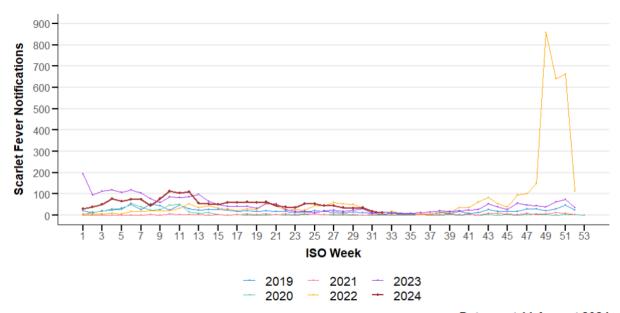
The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have decreased in the most recent week (week 32) as shown in the figures below (up to 11 August 2024) with Figure 10 showing a stable picture overall for the current season (the bright red line on the chart) with the latest plateau in notifications also visible. These notifications are now well below 100 a week compared to the peak of over 800 notifications in winter 2022-23.

Figure 9: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (source: PHW)



Data as at 11 August 2024

Figure 10: Rolling 3 Week Average Scarlet Fever Notifications, 2019-2024, Wales (Source: PHW)

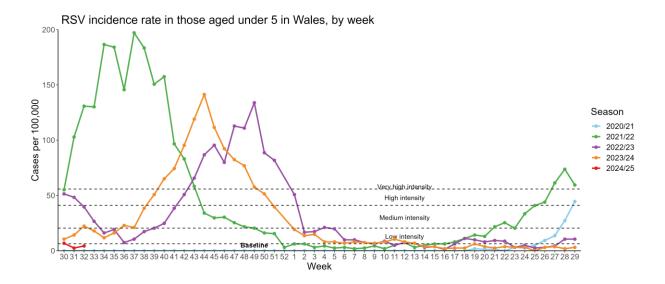


Data as at 11 August 2024

## C5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has decreased in the most recent week and is now at baseline level. The red line on the chart denotes the 2024-2025 season which began in week 30 hence the very short series.

Figure 11: RSV Incidence Rate per 100,000 population under 5 years (source: PHW)



## D. International Surveillance Update

### D1. Communicable Disease Centre (CDC) USA – Avian Flu (H5N1) in Cattle (August update)

August 2nd Update: CDC continues to respond to the public health challenge posed by a multistate outbreak of avian influenza A(H5N1) virus, or "H5N1 bird flu," in dairy cows, poultry and other animals in the United States. CDC is working in collaboration with the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), Administration for Strategic Preparedness and Response (ASPR), state public health and animal health officials, and other partners using a One Health approach. Since April 2024, 13 human cases of avian influenza A(H5) infection have been reported in the United States. Four of these cases were associated with exposure to sick dairy cows and nine were associated with exposure to avian influenza A(H5N1)-infected poultry. Based on the information available at this time, CDC's current assessment is that the risk to the general public from H5 bird flu remains low. On the animal health side, USDA is reporting that 172 dairy cow herds in 13 U.S. states have confirmed cases of avian influenza A(H5N1) virus infections in dairy cows as the number of infected herds continues to grow. USDA reports that since April 2024, there have been A(H5) detections in 35 commercial flocks and 20 backyard flocks, for a total of 18.37 million birds affected.

26th July 2024 Update: CDC continues to respond to the public health challenge posed by a multistate outbreak of avian influenza A(H5N1) virus, or "H5N1 bird flu," in dairy cows, poultry and other animals in the United States. CDC is working in collaboration with the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), Administration for Strategic Preparedness and Response (ASPR), state public health and animal health officials, and other partners using a One Health approach. Since April 2024, 13 human cases of avian influenza A(H5) infection have been reported in the United States. Four of these cases were associated with exposure to sick dairy cows and nine were associated with exposure to avian influenza A(H5N1)-infected poultry. This includes three additional cases in Colorado that were confirmed by CDC this week. The three new cases were in poultry workers who were working directly with infected poultry at a commercial egg layer operation that had reported an outbreak of H5 bird flu among poultry. Similar to previous cases, all of the people have mild illness. Based on the information available at this time, CDC's current assessment is that the risk to the general public from H5 bird flu remains low. On the animal health side, USDA is reporting that 171 dairy cow herds in 13 U.S. states have confirmed cases of avian influenza A(H5N1) virus infections in dairy cows as the number of infected herds continues to grow. USDA reports that since April 2024, there have been A(H5) detections in 35 commercial flocks and 19 backyard flocks, for a total of 18.37 million birds affected.

# D.2 <u>European Communicable Disease Centre</u> (ECDC) - Influenza A(H5N1) human cases – Multi-Country – 2024

#### **Update:**

On 3 August 2024, the Ministry of Health of Cambodia reported a human case of A(H5N1) avian influenza virus infection in an adolescent girl from Chantrea district, Svay Rieng province (Ministry of Health in Cambodia). The case presented to hospital with fever, cough, sore throat and difficulty breathing and was admitted to an intensive care unit. The patient remains in a serious condition. The case was laboratory confirmed by the National Institute of Public Health and the Pasteur Institute in Cambodia on 3 August 2024. Virus clade has not yet been announced. According to an investigation by local authorities, four days prior to the onset of disease the case had exposure, both at their own house and a neighbour's house, to nine dead chickens, which were later cooked. Since 2003, Cambodia has reported 71 human H5N1 cases with 42 fatalities, highlighting the ongoing zoonotic transmission risk in the region. National and local health authorities, together with the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Environment, are continuing to search for sources of transmission in both animals and humans, and are conducting contact tracing, administering Tamiflu prophylaxis to close contacts, and emphasising the importance of proper handling and cooking of poultry to prevent further infections.

#### Summary

Since 2003, and as of 5 August 2024, there have been 907 human cases worldwide\*, including 463 deaths (CFR: 51%), with avian influenza A(H5N1) infection reported in 24 countries (Australia (exposure occurred in India), Azerbaijan, Bangladesh, Cambodia, Canada, Chile, China, Djibouti, Ecuador, Egypt, Indonesia, India, Iraq, Laos, Myanmar, Nepal, Nigeria, Pakistan, Spain, Thailand, Türkiye, Vietnam, United Kingdom and the United States). To date, no sustained human-to-human transmission has been detected. In 2024, 24 cases, including two deaths, have been reported in four countries: Cambodia (nine cases, one death), the United States (13 cases), Vietnam (two cases, one death), and Australia (one case). \*Note: this includes six detections due to suspected environmental contamination and no evidence of infection that were reported in 2022 by Spain (two detections) and the United States (1), as well as in 2023 by the United Kingdom (3).

#### **ECDC** assessment

Sporadic human cases of different avian influenza A(H5Nx) subtypes have previously been reported globally. Current epidemiological and virological evidence suggests that A(H5N1) viruses remain avian-like. Transmission to humans remains a rare event and no sustained transmission between humans has been observed. Overall, the risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered low. The risk to occupationally exposed groups, such as farmers and cullers, is considered low-to-medium. Direct contact with infected birds or a contaminated environment is the most likely source of infection, and the use of personal protective measures for people exposed to dead birds or their droppings will minimise the remaining risk. The recent severe cases in Asia and South America in children and people exposed to infected, sick or dead backyard poultry underlines

the risk of having unprotected contact with infected birds in backyard farm settings. This supports the importance of using appropriate personal protective equipment.