

# Science Evidence Advice

**Weekly Surveillance Report** 

3 September 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. <u>Top Line Summary</u>

- 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 decreased in the most recent week.
- Scarlet Fever notifications remain stable 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 34 2024), a total of **19** Norovirus confirmed cases were reported in Welsh residents. This is a decrease (-48.6%) in reported cases compared to the previous reporting week (week 33 2024), where **37** Norovirus confirmed cases were reported.

In the last 12 week period (03/06/2024 to 25/08/2024) a total of **440** Norovirus confirmed cases were reported in Welsh residents. This is an increase (125.6%) in reported cases compared to the same 12 week period in the previous year (03/06/2023 to 25/08/2023) where **195** Norovirus confirmed cases were reported.

In the last 12 weeks (03/06/2024 to 25/08/2024) **236** (53.6%) confirmed cases were female and **203** (46.1%) confirmed cases were male. The age groups with the most cases were the 70+ (229 cases) and 60-69 (58 cases) age groups.

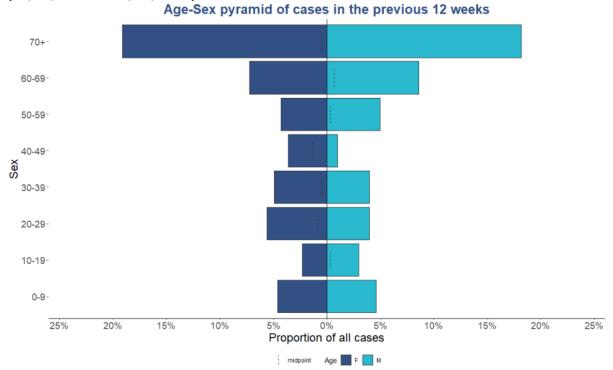


Figure 1: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (03/06/2024 to 25/08/2024)

**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 34 2024 (03/06/2024 to 25/08/2024). 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 1 (UKHSA Update)**

On 14th August the World Health Organisation (WHO) determined that the upsurge of mpox in the 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. Two cases of Clade 1b have been detected outside of Africa in recent weeks, one in Sweden and one in Thailand but no cases of Clade I mpox have ever been detected in the UK.

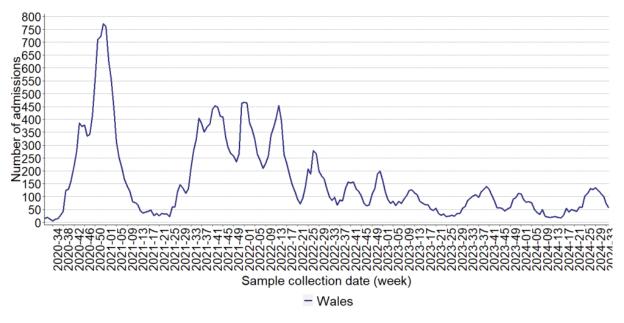
## C. Acute Respiratory Infections Situation Update

## 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 34, and the number of cases who are inpatients has decreased. The number of admissions to ICU has decreased in week 34.
- As at 25th August 2024, **263** people currently in hospital have had a positive COVID-19 test, with **9** currently in ICU. (compared to **343** and **11** in the previous week (week 29).
- The all-Wales incidence as estimated using PCR episodes has seen a small uptick in recent weeks.
- The number of deaths from any cause has increased slightly 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 4 new respiratory incidents reported in week 34 2024 recorded in the health protection case and incident management system (Tarian). Of the 4 respiratory incidents, all 4 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 increased in week 34 when looking at these by the date of onset of the first case.
- In week 34, GP consultations for any Acute Respiratory Infection (ARI) have continued to decrease and consultations for suspected COVID have decreased and remain at low levels.
- The overall number of ambulance calls related to COVID-19 have increased slightly and the proportion of incidents has also increased in week 34.

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

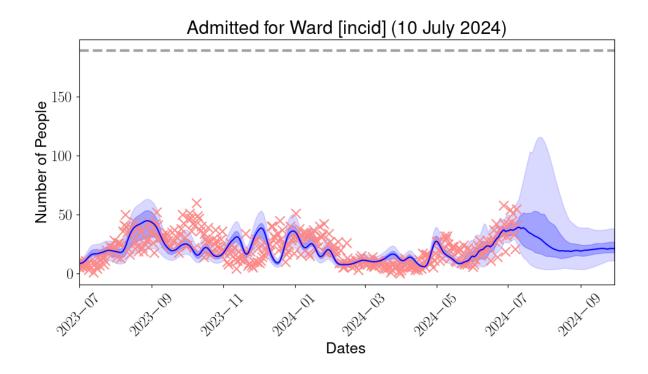


Figure 4: Daily COVID-19 ICU admissions, projected to September 2024

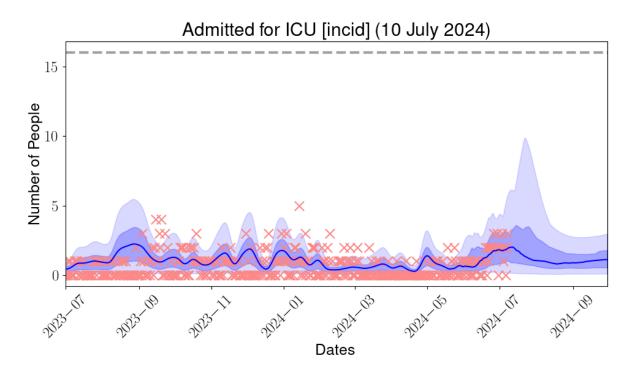
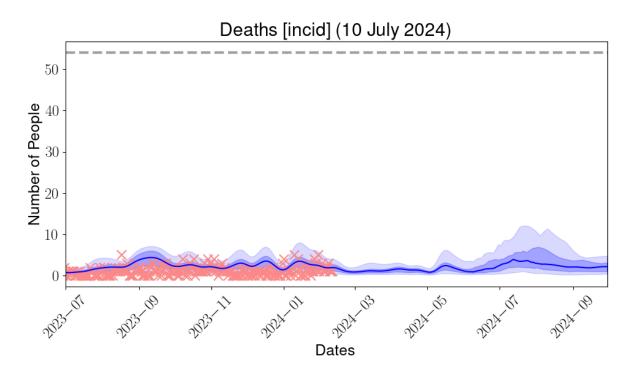


Figure 5: Daily COVID-19 deaths, projected to projected to September 2024



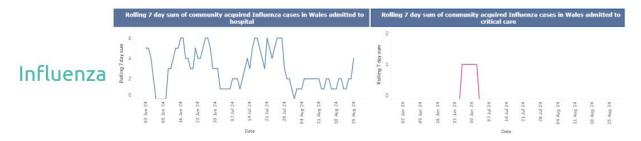
Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

## C2. Influenza Situation Update

Current levels of influenza are low, and the current trend is stable. During week 34 (ending 24/08/2024) there were 10 confirmed cases of influenza in Wales 7 influenza A (not subtyped), and 1 for influenza A(H3N2), 1 for influenza A(H1N1), and 1 for influenza B.

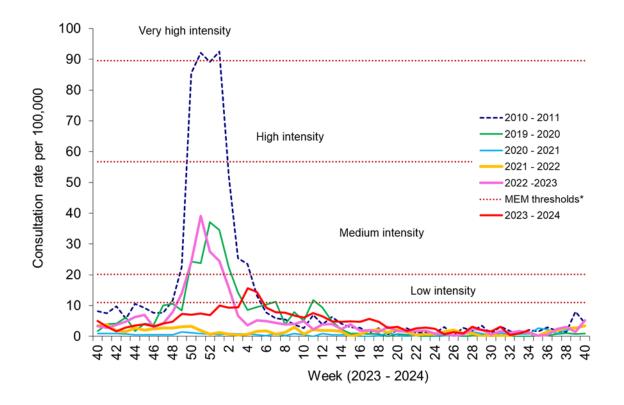
In recent weeks, detections of Rhinovirus and Adenovirus remain elevated.

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



There is evidence of a slight increase 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 increase in week 34 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)

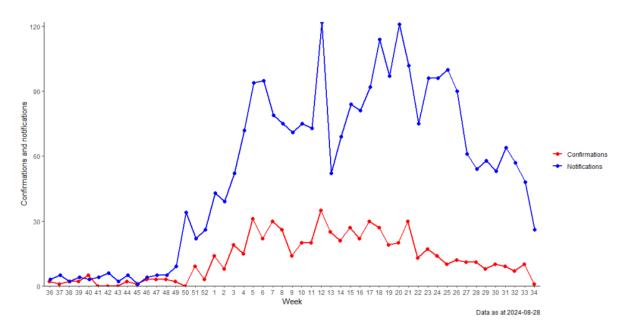
#### Whooping Cough vaccination urged as cases rise rapidly in Wales - Public Health Wales (nhs.wales)

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 34 continued to decrease. Lab confirmations continue to be at very low levels and have also 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 35) as shown in the figures below (up to 1 September 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)

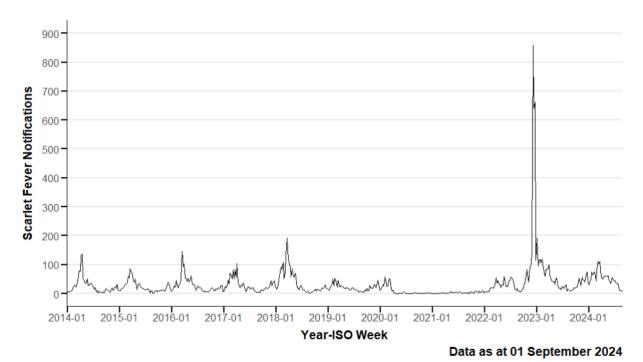
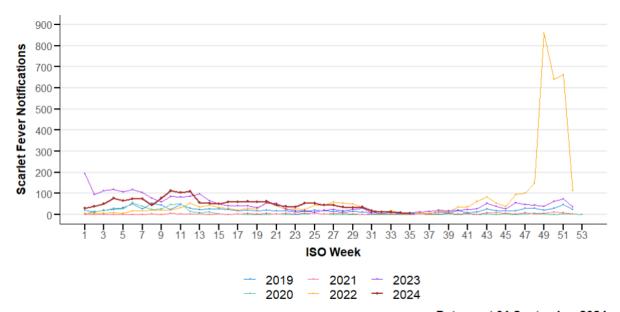


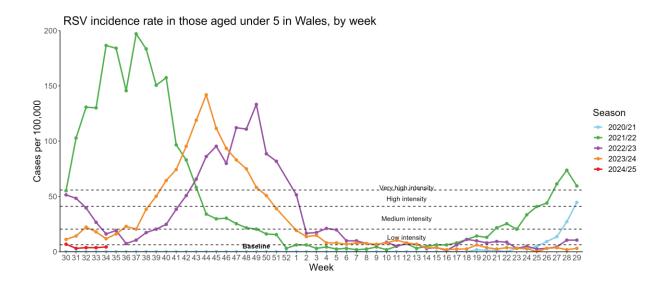
Figure 10: Rolling 3 Week Average Scarlet Fever Notifications, 2019-2024, Wales (Source: PHW)



Data as at 01 September 2024

RSV activity in children under 5 years has remained stable 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 16, 2024 – 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) virus 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) virus-infected poultry. Based on the information available at this time, CDC's current assessment is that the immediate risk to the general public from H5 bird flu remains low. On the animal health side, USDA is reporting that 191 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 21 backyard flocks, for a total of 18.68 million birds affected.

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

#### Мрох:

Following the reporting of an imported MPXV clade Ib case in Sweden on 15 August 2024, Thailand reported a confirmed imported case due to MPXV on 22 August 2024. Both cases had travel history to Africa.

- Overall, 18 837 mpox cases have been reported in Africa during 2024, including 3 101 confirmed cases and 541 deaths (case fatality (CF): 3%) from 12 Africa Union Member States, according to the Africa CDC Epidemic Intelligence Report issued on 16 August 2024. On August 22, 2024, Gabon reported a suspected case of mpox Clade Ib in a person with a travel history to Uganda.
- ECDC is closely monitoring and assessing the epidemiological situation.

#### **ECDC Risk Assessment for the EU/EEA**

The overall risk for the EU/EEA general population is currently assessed as **low**, based on a very low likelihood and a low impact. The likelihood of infection with MPXV clade I for close contacts of possible or confirmed imported cases is high, yet the severity of the disease is expected to be **low**. However, in this same group, the severity of the disease is considered **moderate** amongst those with underlying conditions, particularly individuals who are immunocompromised. Overall, the risk for these populations is **moderate** and **high**, respectively.

The likelihood of infection for people with multiple sexual partners who were not previously infected with MPXV clade IIb or were not vaccinated in the 2022 outbreak is considered **moderate**. This assessment is based on the difficulty of controlling the spread of infection during the clade II outbreak

in 2022/23 in this risk group. Although the severity of the disease would in most instances be **low**, people who are immunocompromised and those with an untreated HIV infection could experience moderate clinical severity. Overall, the risk for these populations is **moderate**.

#### Avian Flu:

On 20 August 2024, the Ministry of Health of Cambodia announced one fatal human case of A(H5N1) avian influenza virus infection.

- The case was an adolescent from Prey Veng province in Cambodia.
- This is the 10th human case of A(H5N1) avian influenza virus infection and the second fatality reported from Cambodia in 2024.
- Since 2003, 908 human cases of avian influenza A(H5N1), including 464 deaths (case-fatality rate (CFR): 51%), have been reported in 24 countries worldwide.