

Science Evidence Advice

Weekly Surveillance Report

10 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 increased slightly 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 decreased in the most recent week.
- Norovirus confirmed cases have decreased in the most recent week (week 34).

B. Communicable Disease Situation Update (non-respiratory)

B.1 Norovirus (no update this week)

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.

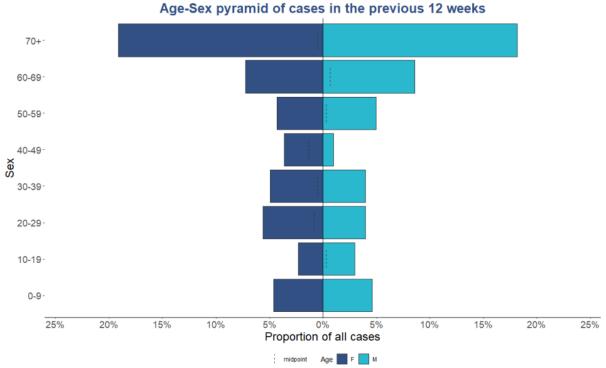


Figure 1: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (03/06/2024 to 25/08/2024)

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 35, and the number of cases who are inpatients has decreased. The number of admissions to ICU has remained stable in week 35.
- As at 1st September 2024, **194** people currently in hospital have had a positive COVID-19 test, with **4** currently in ICU. (compared to **263** and **9** in the previous week (week 29).
- The all-Wales incidence as estimated using PCR episodes remained relatively stable in week 35.
- The number of deaths from any cause has decreased slightly in the latest reported data available from ONS.
- Between weeks 30 and 35, KP.3* from the Pango lineage was the most dominant variant in Wales, accounting for **77.2%** of all sequenced cases.
- There were **3** new respiratory incidents reported in week 35 2024 recorded in the health protection case and incident management system (Tarian). Of the 3 respiratory incidents, all 3 were in residential homes. The average numbers of Acute respiratory and COVID-confirmed incidents in care homes (recorded on Tarian) have decreased in week 35 when looking at these by the date of onset of the first case.
- In week 35, GP consultations for any Acute Respiratory Infection (ARI) have decreased slightly and consultations for suspected COVID have decreased and remain at low levels.
- The overall number of ambulance calls related to COVID-19 have decreased slightly and the proportion of incidents has also decreased in week 35.

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.

Sample collection date (week)

- Wales

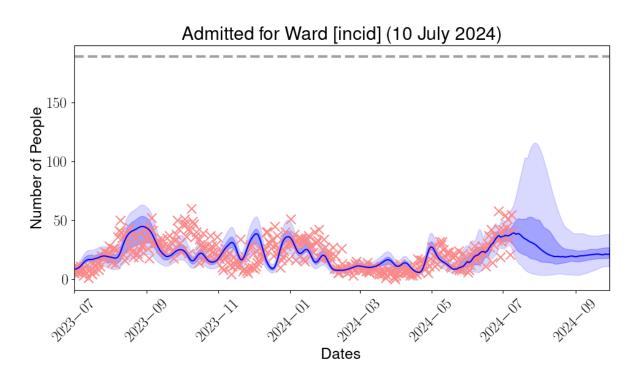


Figure 3: Daily COVID-19 hospital admissions, projected to September 2024

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

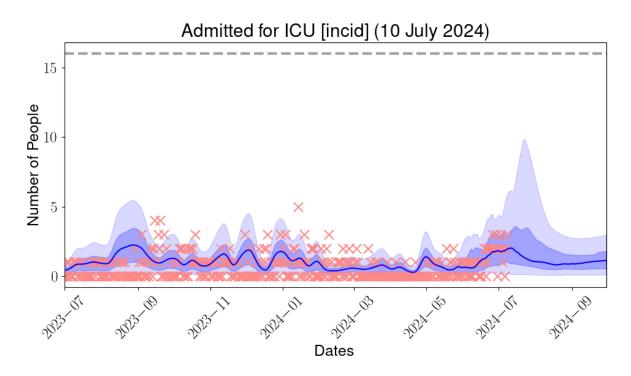
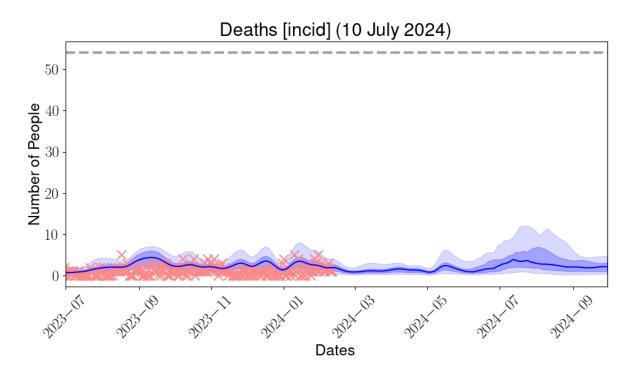


Figure 5: Daily COVID-19 deaths, projected to projected to September 2024



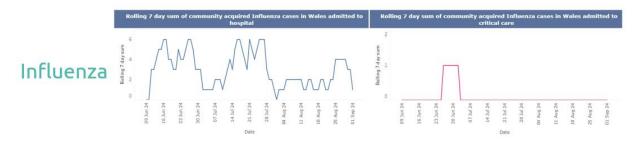
Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

C2. Influenza Situation Update

Current levels of influenza are low, and the current trend is stable. week 35 (ending 31/08/2024) there were 8 confirmed cases of influenza in Wales 5 influenza A (not subtyped), 1 for influenza A(H3N2), and 2 for influenza B.

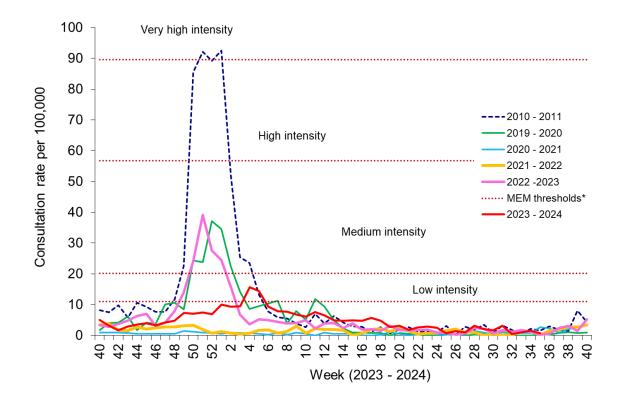
In recent weeks, detections of Rhinovirus and Adenovirus remain elevated.

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



There has been a slight decrease in syndromic surveillance of influenza like illness (ILI) in the most recent period and this remains stable overall and well below the low intensity level threshold. The figure below shows a slight decrease in week 35 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)

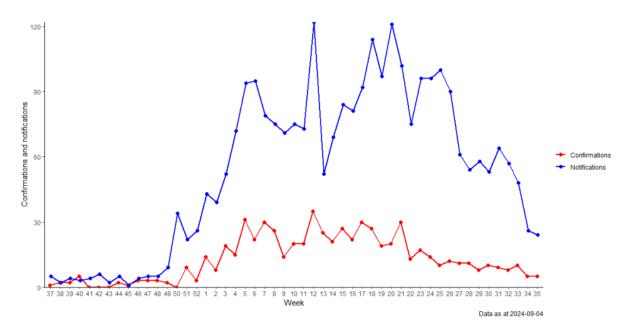
Whooping Cough vaccination urged as cases rise rapidly in Wales - Public Health Wales (nhs.wales)

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 35 continued to decrease. Lab confirmations continue to be at very low levels and have plateaued in the latest week.

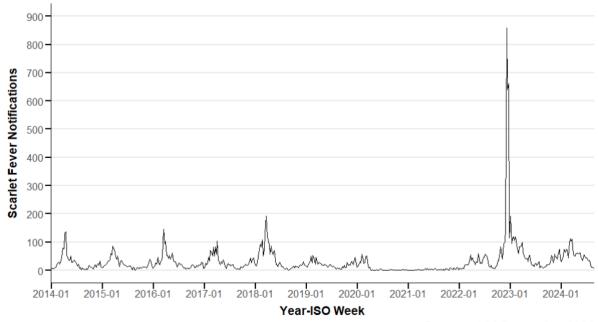
Figure 8: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales. (Source: PHW)



C4. iGAS and Scarlet Fever

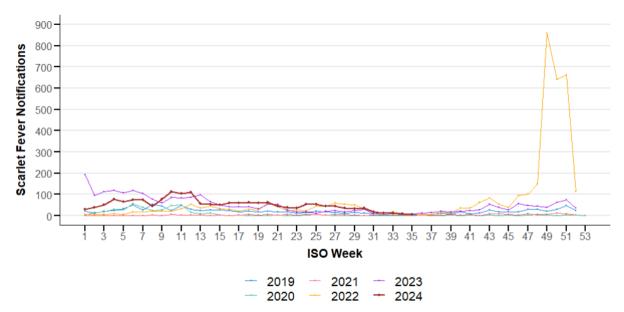
The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have decreased in the most recent week (week 35) as shown in the figures below (up to 1 September 2024) with Figure 10 showing a stable picture overall for the current season (the 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)



Data as at 01 September 2024

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

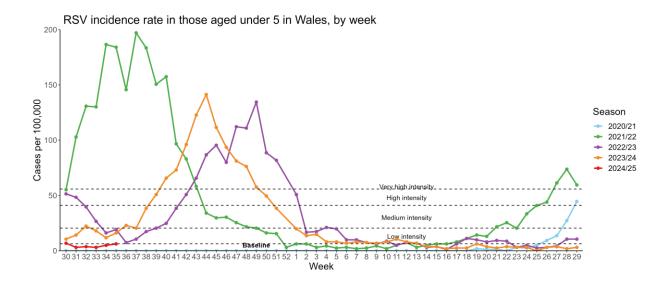


Data as at 01 September 2024

C5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has seen a slight increase in the most recent week but is still at baseline levels. 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 case in Missouri

September 6, 2024: CDC has confirmed a human case of avian influenza A(H5) ("H5 bird flu") reported by the state of Missouri. The case was identified through that state's seasonal flu surveillance system. The specimen was forwarded to CDC for confirmatory testing per usual protocols and confirmed on 5 September.

Case Information

There are reports that the patient, who was hospitalized, had underlying medical conditions, was treated with influenza antiviral medications, subsequently discharged, and has recovered. There is no immediate known animal exposure. No ongoing transmission among close contacts or otherwise has been identified.

This is the 14th human case of H5 reported in the United States during 2024 and the first case of H5 without a known occupational exposure to sick or infected animals. H5 outbreaks in cattle have not been reported in Missouri, but outbreaks of H5 have been reported in commercial and backyard poultry flocks in 2024. H5N1 bird flu has been detected in wild birds in that state in the past.

While other novel flu cases have been detected through the country's national flu surveillance system, this is the first time that system has detected a case of H5. Targeted H5-outbreak specific surveillance has been conducted as part of ongoing animal outbreaks and has identified all the other cases. In this case, the specimen from the patient originally tested positive for flu A, but negative for seasonal flu A virus subtypes. That finding triggers additional testing.

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

Mpox:

Since the beginning of mpox monitoring in 2022 and until 31 July 2024, over 100 000 confirmed cases of mpox due to monkeypox virus (MPXV) clade I and clade II, including over 200 confirmed deaths, have been reported globally, according to the World Health Organization (WHO).

- Overall, more than 20 000 mpox cases including over 600 deaths (confirmed and suspected) due to MPXV clade I and clade II have been reported from 13 African Union Member States in 2024, including over 5 000 confirmed cases, according to the Africa CDC Epidemic Intelligence Report, issued on 31 August 2024. Although the epidemiological profile of cases remains similar to the previous week, one new country, Guinea, has reported one mpox case, while cases without an epidemiological link to DRC have been reported in Uganda and one case with travel history to Rwanda has been reported in Kenya.
- Imported Clade I cases outside of the African continent have been reported by Sweden (15 August; one person) and Thailand (22 August; one person). No secondary transmission has been reported.

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- Additional information can be found in the ECDC Rapid Risk Assessment published on 16 August (Risk assessment for the EU/EEA of the mpox epidemic caused by monkeypox virus clade I in affected African countries) and the Epidemiological Update published on 26 August, including the latest ECDC recommendations. (https://www.ecdc.europa.eu/en)
- ECDC is closely monitoring and assessing the epidemiological situation