



Llywodraeth Cymru  
Welsh Government

# Science Evidence Advice

Weekly Surveillance Report

1 October 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 **increased slightly** in the most recent week.
- COVID-19 hospital admissions **increased** in the most recent week.
- RSV activity in children under 5 years has **decreased slightly** in the most recent week.
- Influenza cases have **remained stable** but remain at low levels in the latest week.
- Whooping Cough notifications have **decreased** in the most recent week.
- Scarlet Fever notifications **increased** in the most recent week.
- Norovirus confirmed cases have **decreased** in the most recent week (week 38).

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

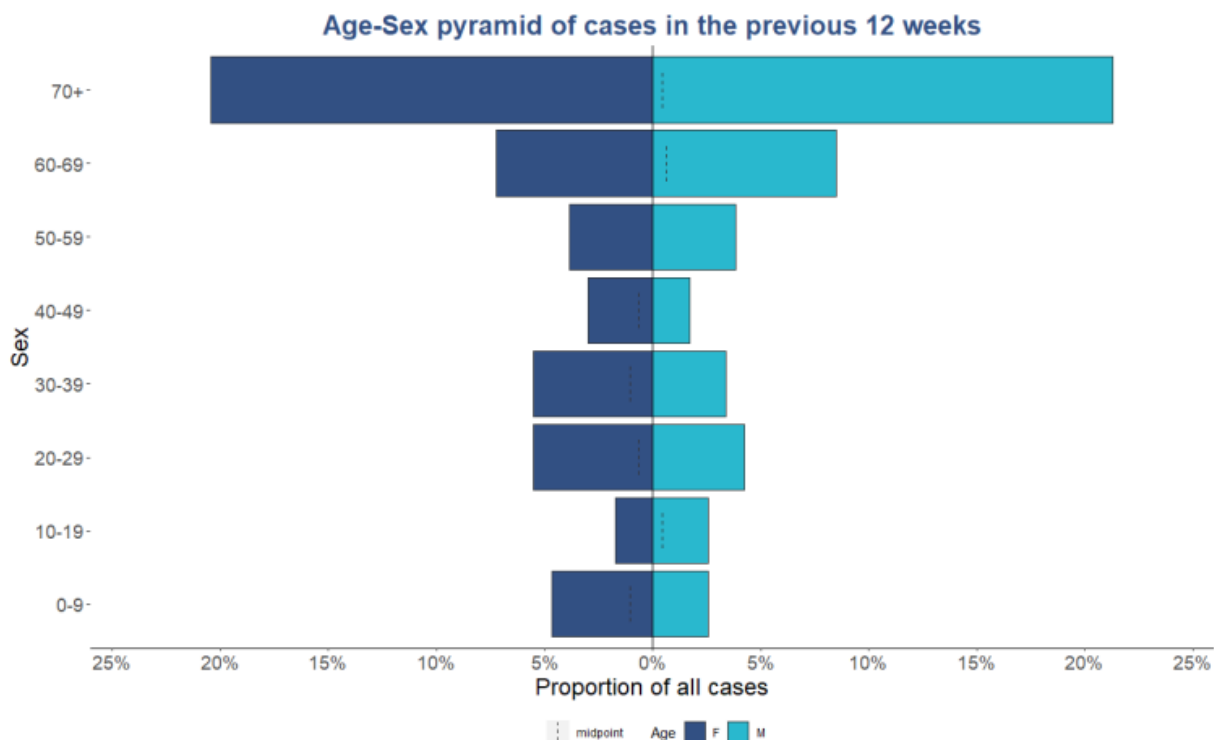
#### B.1 Norovirus

In the current reporting week (week 38 2024), a total of **16** Norovirus confirmed cases were reported in Welsh residents. This is a decrease (**-30.4%**) in reported cases compared to the previous reporting week (week 37 2024), where **23** Norovirus confirmed cases were reported.

In the last 12 week period (01/07/2024 to 22/09/2024) a total of **320** Norovirus confirmed cases were reported in Welsh residents. This is an increase (**138.8%**) in reported cases compared to the same 12 week period in the previous year (01/07/2023 to 22/09/2023) where **134** Norovirus confirmed cases were reported.

In the last 12 weeks (01/07/2024 to 22/09/2024) **165** (51.6%) confirmed cases were female and **155** (48.4%) confirmed cases were male. The age groups with the most cases were the 70+ (172 cases) and 60-69 (42 cases) age groups.

**Figure 1: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (01/07/2024 to 22/09/2024)**



**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 36 2024 (01/07/2024 to 22/09/2024). 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. On 23 September 2024, media reports citing government and health officials stated that a case of mpox in Malappuram District, Kerala State, India has been confirmed as a clade 1b mpox infection. No official statements have been made by the Indian Government on this case. No cases of Clade I mpox have ever been detected in the UK.

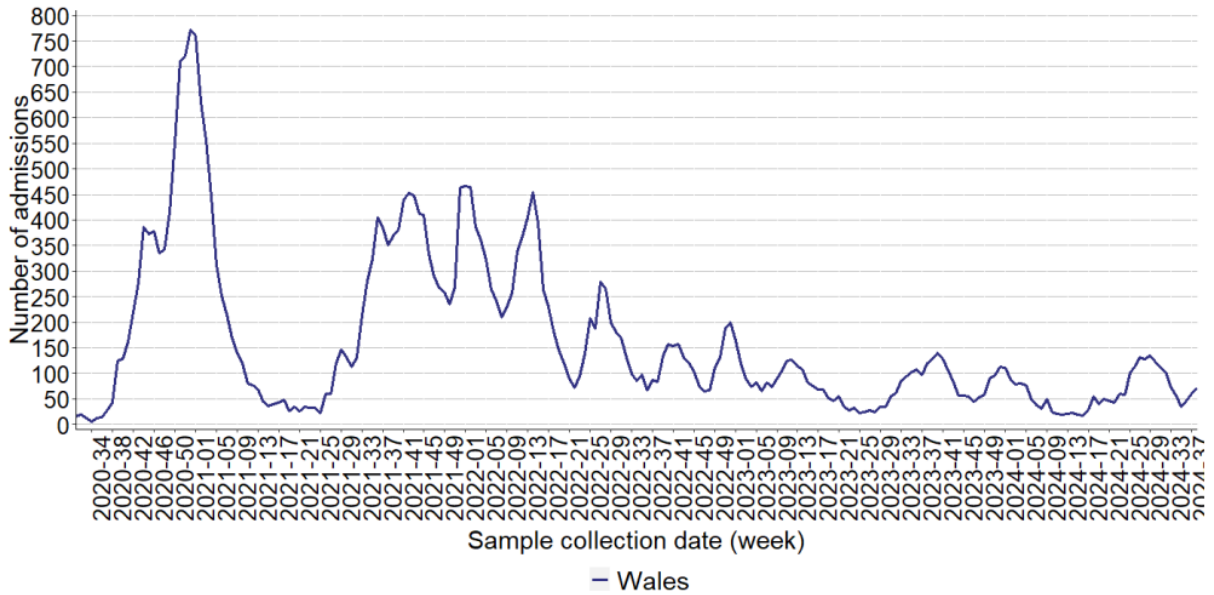
## **C. Acute Respiratory Infections Situation Update**

### **C1. COVID-19 Situation Update**

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

- At a national level, both the weekly number of confirmed case admissions to hospital and the number of cases who are inpatients have increased in week 38.
- As at 22nd September 2024, 243 people currently in hospital have had a positive COVID-19 test, with **5** currently in ICU. (compared to **202** and **4** in the previous week (week 36).
- The all-Wales incidence as estimated using PCR episodes has increased but is at low levels in week 38.
- 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 38 2024 recorded in the health protection case and incident management system (Tarian). Of the 3 respiratory incidents, 2 were in residential homes and 1 was in another setting. The average numbers of Acute respiratory and COVID-confirmed incidents in care homes (recorded on Tarian) have decreased in week 38 when looking at these by the date of onset of the first case.
- In week 38, GP consultations for any Acute Respiratory Infection (ARI) have increased and consultations for suspected COVID have remained stable at low levels.
- The overall number of ambulance calls related to COVID-19 have slightly decreased and the proportion of incidents has also slightly decreased in week 38.

**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**

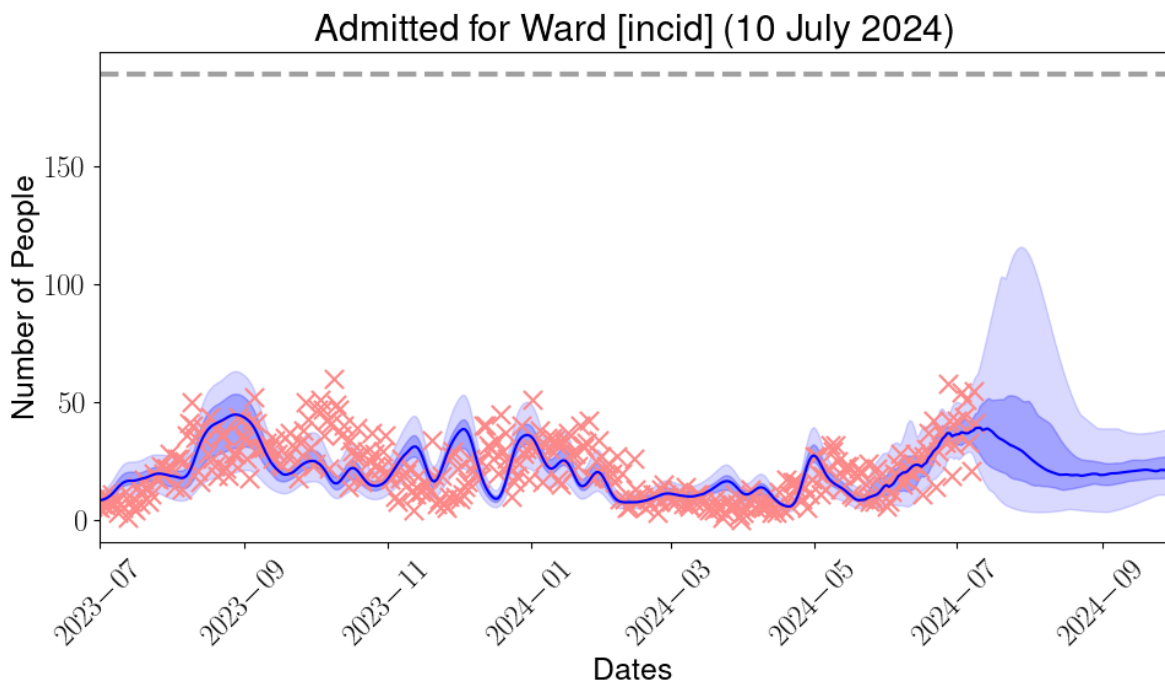


Figure 4: Daily COVID-19 ICU admissions, projected to September 2024

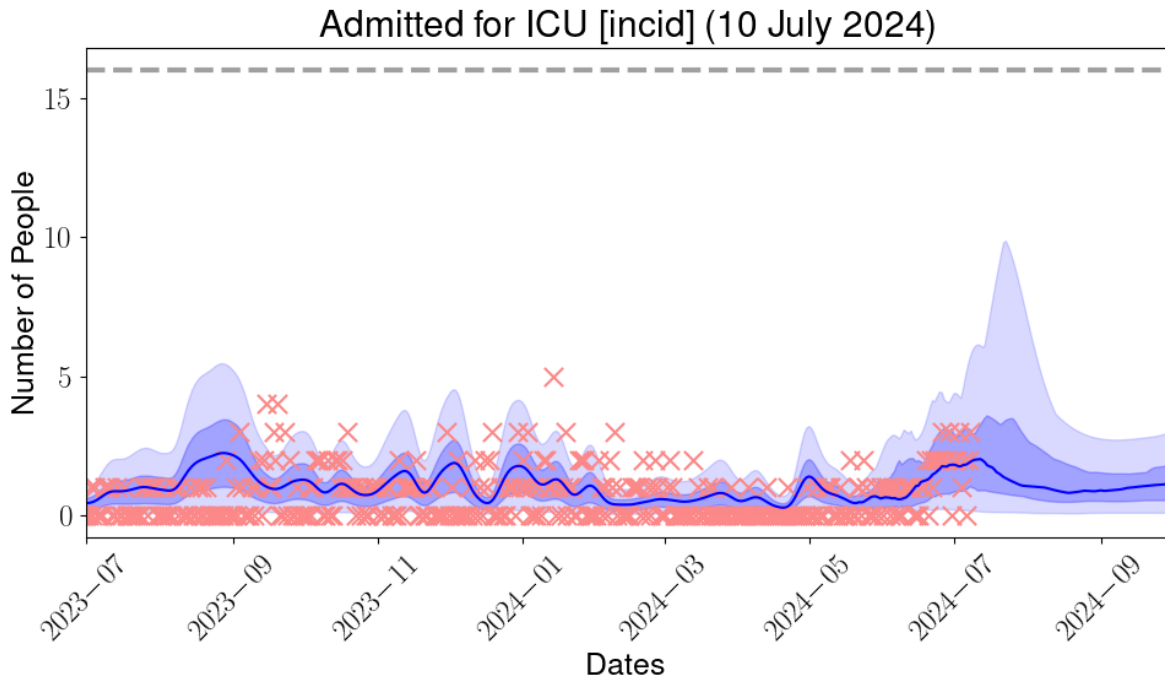
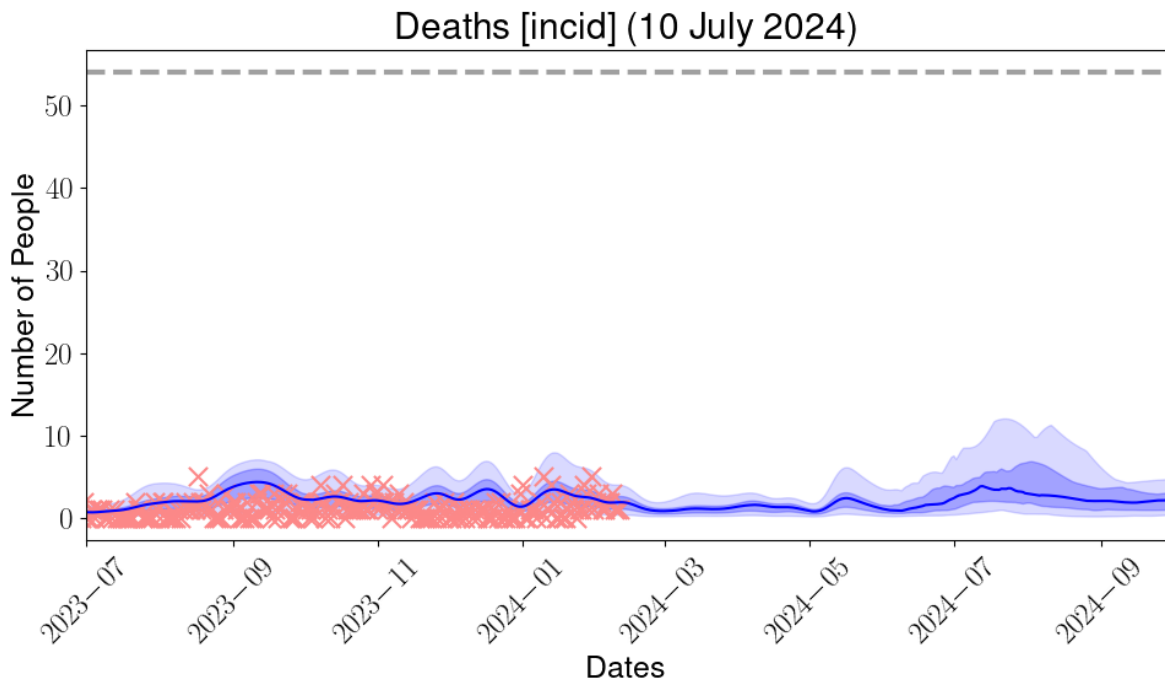


Figure 5: Daily COVID-19 deaths, projected to projected to September 2024

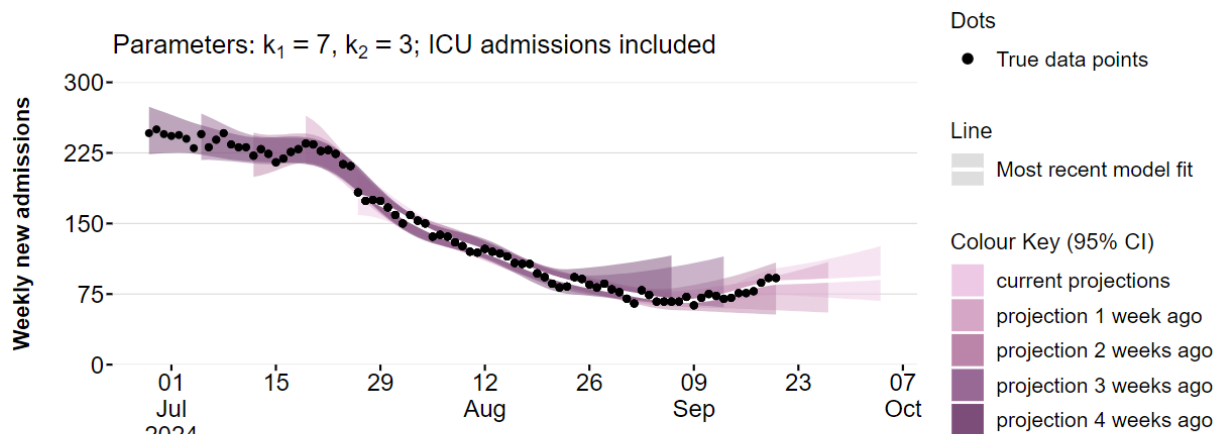


Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

The Science Evidence Advice team at Welsh Government have produced short term projections (STPs) for COVID-19 which can be produced nationally and at the Local Health Board unit. STPs are based on using generalised additive models to project 2 weeks forward from 8 weeks of current data, and do not explicitly factor in properties of the infectious disease, policy changes, changes in testing, changes in behaviour, emergence of new variants or rapid changes in vaccinations.

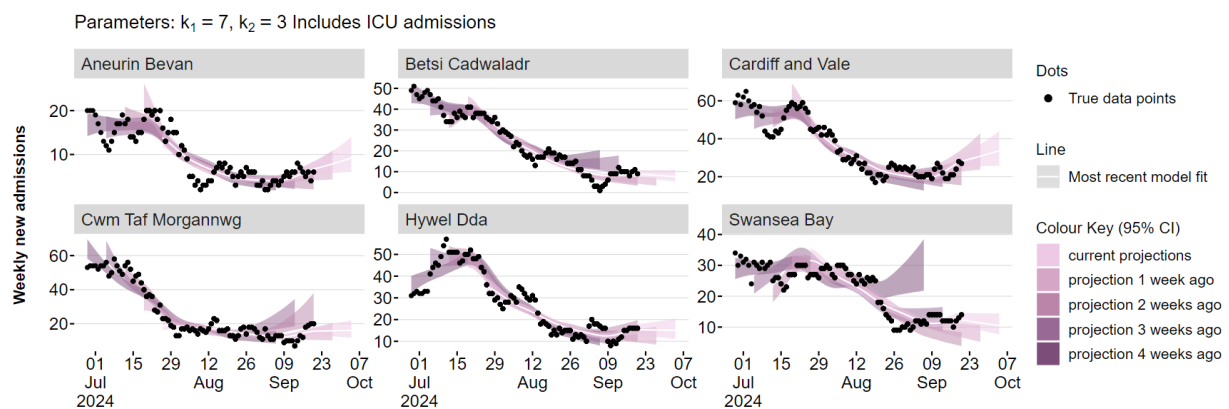
The COVID-19 STPs uses admissions data from PHW until 20 September 2024 to make short term projections for COVID-19 weeks forward (4 October 2024). The black dots show the actual data points while the white line is the best fit from the most recent projection. The colour shadings represent the 95% confidence interval of the projections with light purple showing the most recent projection and the dark purple showing the oldest. The STPs for Wales show that COVID-19 admissions are projected to increase slightly over the next two week period (Figure 6). Figure 7 shows that COVID-19 admissions are projected to increase in Aneurin Bevan and Cardiff and Vale health boards over the next two weeks.

**Figure 6: Short Term Projections for COVID-19 hospital admissions in Wales (data until 20 September 2024)**



Source: Public Health Wales

**Figure 7: Short Term Projections for COVID-19 hospital admissions in Wales Health Boards (data until 20 September 2024)**

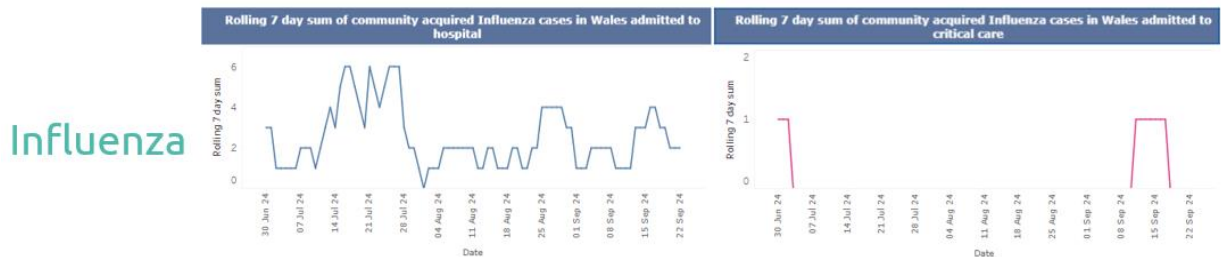


Source: Public Health Wales

## C2. Influenza Situation Update

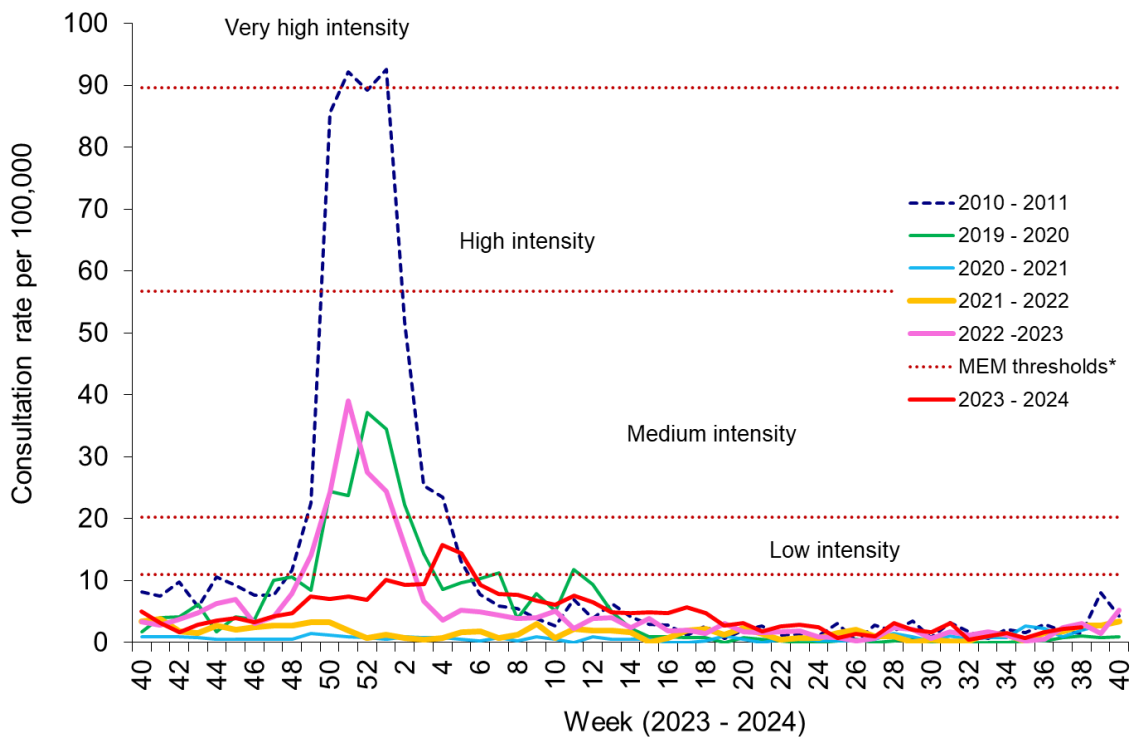
Current levels of influenza are low, and have remained stable in the latest week. During week 38 (ending 22/09/2024) there were 15 confirmed cases of influenza in Wales: 10 influenza A (not subtyped), 1 for influenza A(H3), 1 for influenza A(H3N2), 1 for influenza A(H1N1), and 2 for influenza B.

**Figure 8: 7 day rolling sum of influenza case admissions to hospital in Wales (source: PHW)**



There has been an increase in syndromic surveillance of influenza like illness (ILI) in recent weeks following a stable period. The figure below shows this increase in week 38 in the 2023-2024 series (the bright red line is the 2023-2024 influenza like illness season) but this is still below the low intensity level threshold.

**Figure 9: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)**





### C3. Whooping Cough (Pertussis)

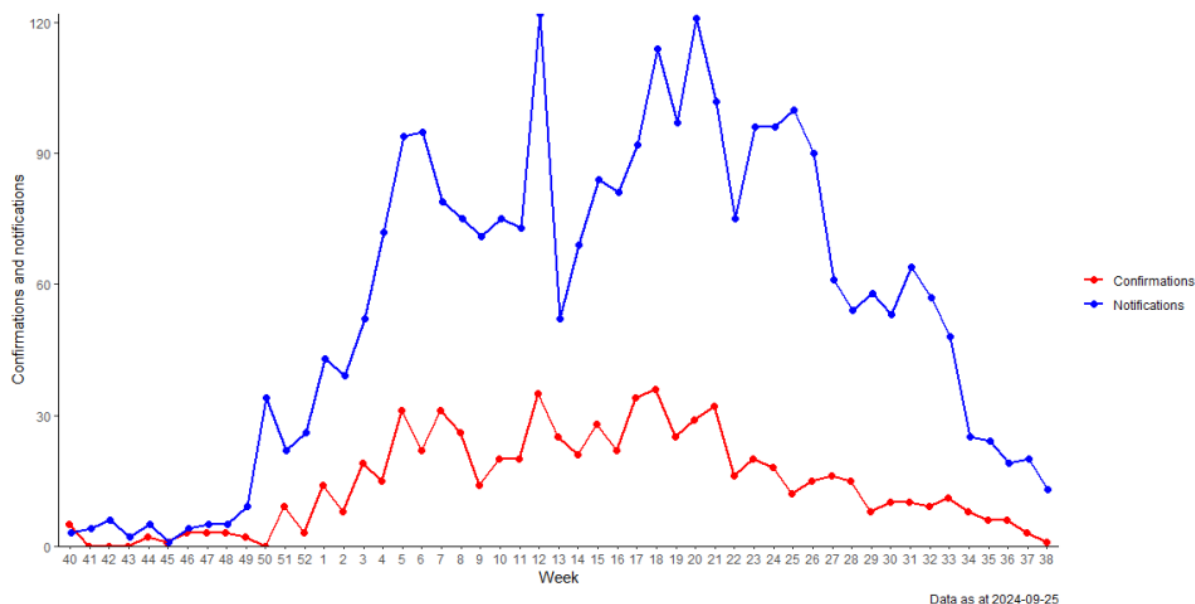
[Whooping Cough vaccination urged as cases rise rapidly in Wales - Public Health Wales \(nhs.wales\)](https://www.nhs.uk/news/2024/01/whooping-cough-vaccination-urged-as-cases-rise-rapidly-in-wales)

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 months, notifications of whooping cough have risen sharply. Following reduced circulation in 2020-2022, this whooping cough season has seen notifications at levels not seen since 2012 and 2015.

Figure 10 below shows that whooping cough notifications up to the end of week 38 remained stable at low levels. Lab confirmations continue to be at very low levels and have also decreased in the latest week.

**Figure 10: 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 slightly increased in the most recent week (week 38) as shown in the figures below (up to 22 September 2024) with Figure 12 showing a stable picture overall for the current season (the bright red line on the chart). These notifications are now well below 100 a week compared to the peak of over 800 notifications in winter 2022-23.

Figure 11: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (source: [PHW](#))

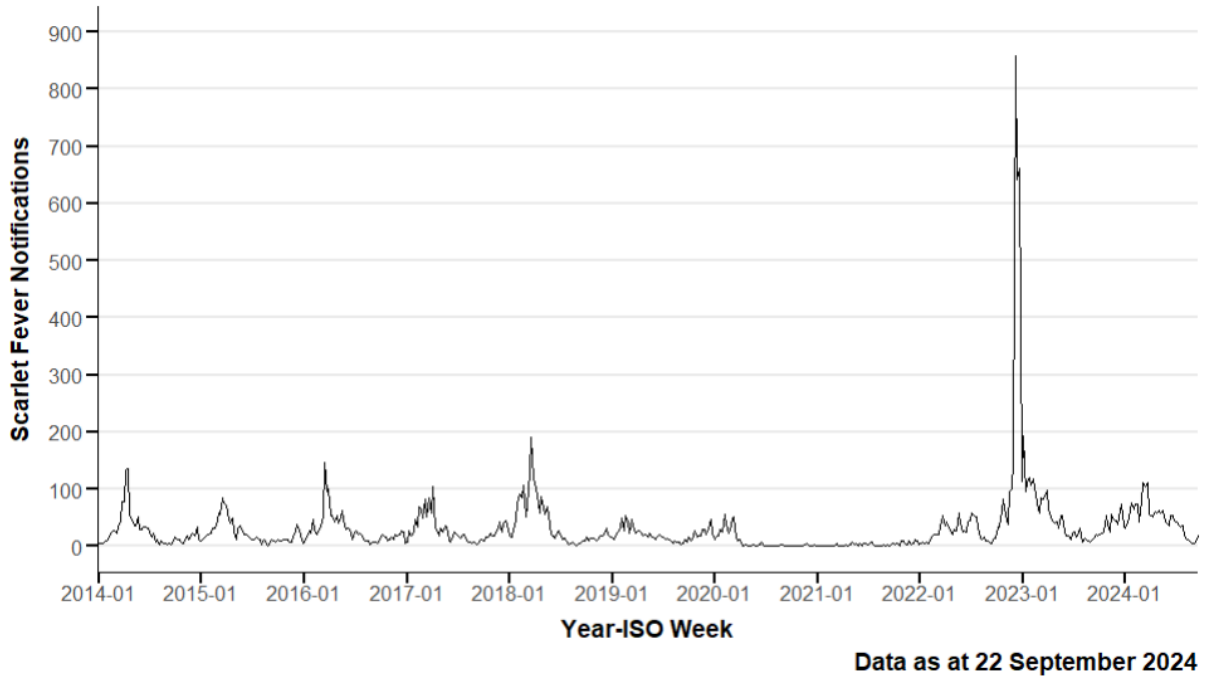
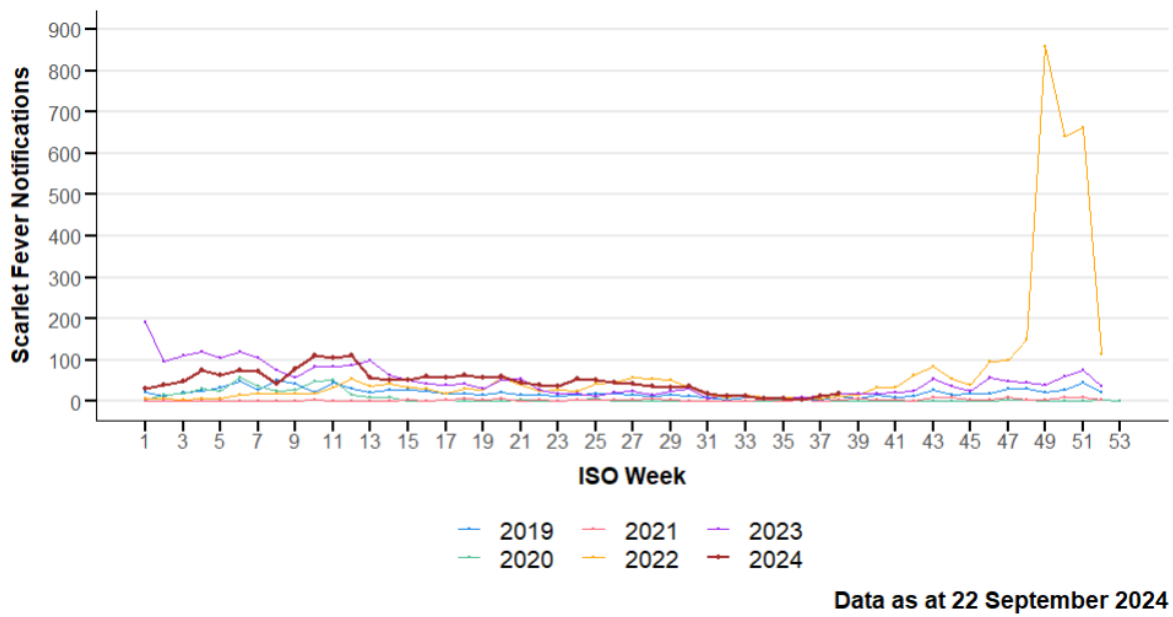


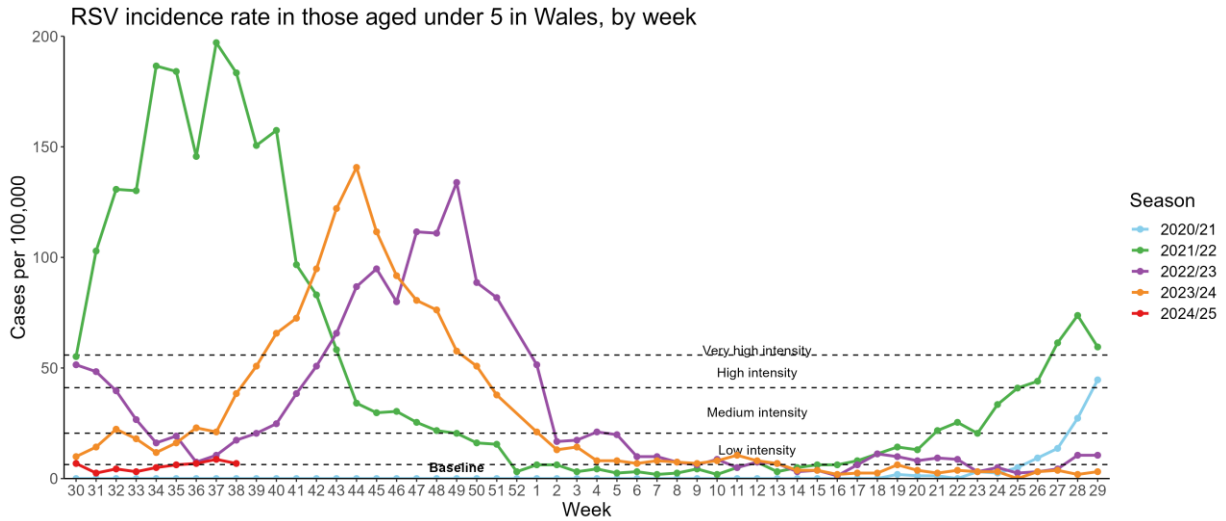
Figure 12: Rolling 3 Week Average Scarlet Fever Notifications, 2019-2024, Wales (Source: [PHW](#))



### C5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has seen a slight decrease in the most recent week and is at baseline levels. The red line on the chart denotes the 2024-2025 season which began in week 30 hence the short series.

**Figure 13: 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 13, 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, 14 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. The source of the exposure in the most recent case, which was reported by Missouri on September 6, has not been determined. The immediate risk to the general public from H5 bird flu remains low.

On the animal health side, USDA is reporting that 202 dairy cow herds in 14 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. Most recently, outbreaks in cows on eight California dairy farms were confirmed. USDA reports that since April 2024, there have been A(H5) detections in 35 commercial flocks and 22 backyard flocks, for a total of 18.68 million birds affected.

**Missouri Case Update:** Missouri continues to lead the investigation into the H5 case reported last week with technical assistance from CDC in Atlanta. The case was in a person who was hospitalized as a result of significant underlying medical conditions. They presented with chest pain, nausea, vomiting, diarrhoea, and weakness. The person was not severely ill, nor were they in the intensive care unit. They were treated with influenza antiviral medications, subsequently discharged, and have since recovered. One household contact of the patient became ill with similar symptoms on the same day as the case, was not tested, and has since recovered. The simultaneous development of symptoms does not support person-to-person spread but suggests a common exposure. Also shared by Missouri, subsequently, a second close contact of the case – a health care worker – developed mild symptoms and tested negative for flu. A 10-day follow-up period has since passed, and no additional cases have been found. There is no epidemiologic evidence to support person-to-person transmission of H5 at this time.

## **D.2 [European Communicable Disease Centre \(ECDC\)](#) – Mpox Clade I update and Influenza A(H5N1) human cases – Multi-Country – 2024**

### **Mpox Update:**

This week the epidemiological situation with regards to monkeypox virus (MPXV) clade I and clade II circulation globally has not evolved significantly. Similar to in previous weeks, there is an increasing trend in cases of mpox due to MPXV clade I reported by the Democratic Republic of the Congo and Burundi. However, the epidemiological profile of the cases remains the same.

One case of mpox due to monkeypox virus (MPXV) clade Ib has been reported in Kerala, India, in the week of 23 September 2024. The case is a male with recent travel history to the United Arab Emirates (UAE) according to reports. A second case of mpox was reported in Kerala on 27 September 2024, according to media quoting health authorities in another person with recent travel history to UAE. Previously, cases of mpox due to MPXV clade Ib outside Africa had been reported by Sweden and Thailand. Globally, MPXV clade I and clade II circulate in different countries. Global epidemiological data are updated weekly by the World Health Organization (WHO), with the most recent updates from Africa highlighting the recent expansion of clade I cases. No secondary transmission of MPXV clade Ib has been reported outside of the affected African countries. Overall, since the beginning of monitoring in 2022, 106 310 confirmed mpox cases (MPXV clade I and clade II), including 234 deaths, have been reported from 123 countries.