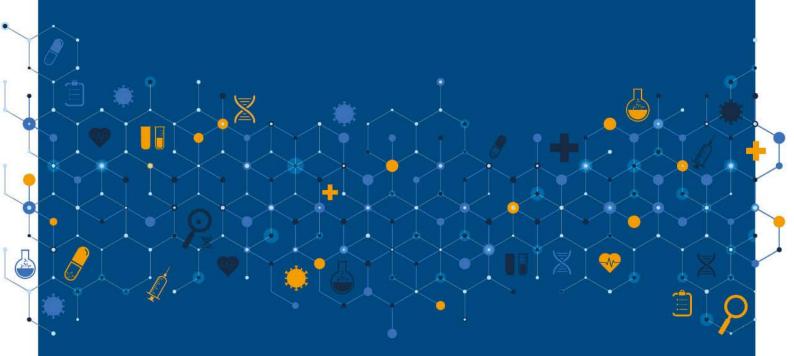


Science Evidence Advice

Weekly Surveillance Report

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

B. Acute Respiratory Infections Situation Update

B.1 COVID-19 Situation Update

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

- At a national level, the weekly number of confirmed case admissions to hospital increased slightly and the number of cases who are inpatients have increased in week 40.
- As at 29 September 2024, **285** people currently in hospital have had a positive COVID-19 test, with **9** currently in ICU. (compared to **243** and **5** in the previous week (week 38).
- The overall proportion of samples testing positive increased to 7.7%.. Consultations with sentinel GPs for ARI increased in the most recent week. Confirmed cases of COVID-19 in sentinel GP patients decreased.
- The number of deaths from any cause has decreased in the latest reported data available from ONS.
- Between weeks 34 and 39, KP.3* from the Pango lineage was the most dominant variant in Wales, accounting for **59%** of all sequenced cases.
- The number of Ambulance calls recorded referring to syndromic indicators increased from 2,010 in the previous week to 2,066 in the latest reporting week.

Figure 1: 7 day rolling sum of COVID-19 case admissions to hospital in Wales (last 90 days) (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 2: Daily COVID-19 hospital admissions, projected to September 2024

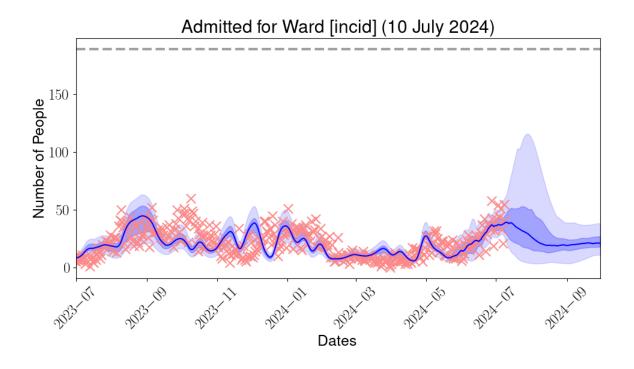


Figure 3: Daily COVID-19 ICU admissions, projected to September 2024

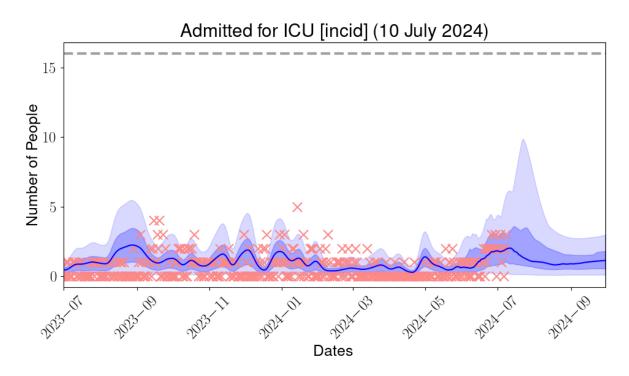
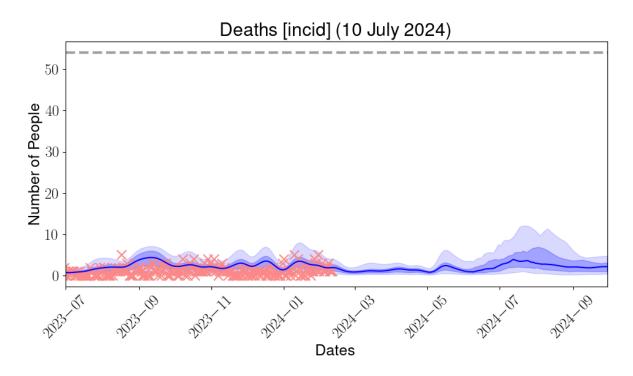


Figure 4: Daily COVID-19 deaths, projected to projected to September 2024



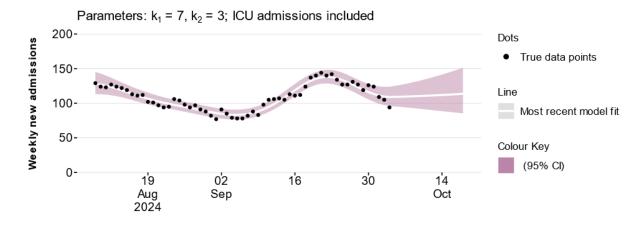
Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

COVID-19 Short Term Projections

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.

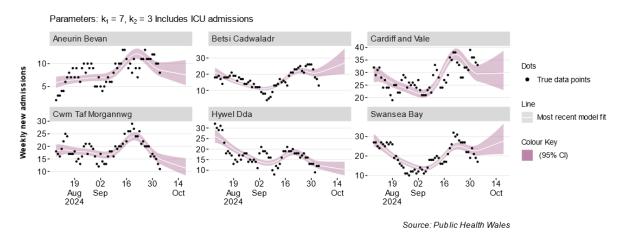
The COVID-19 STPs uses admissions data from PHW until 4 October 2024 to make short term projections for COVID-19 weeks forward (18 October 2024). The black dots show the actual data points while the white line is the best fit from the most recent projection. The colour shadings represent the 95% confidence 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 remain stable over the next two week period (Figure 5). Figure 6 shows that COVID-19 admissions are projected to increase in Swansea Bay and Betsi Cadwaladr health boards over the next two weeks.

Figure 5: Short Term Projections for COVID-19 hospital admissions in Wales (data until 4 October 2024)



Source: Public Health Wales

Figure 6: Short Term Projections for COVID-19 hospital admissions in Wales Health Boards (data until 27 September 2024)



B.2 Influenza Situation Update

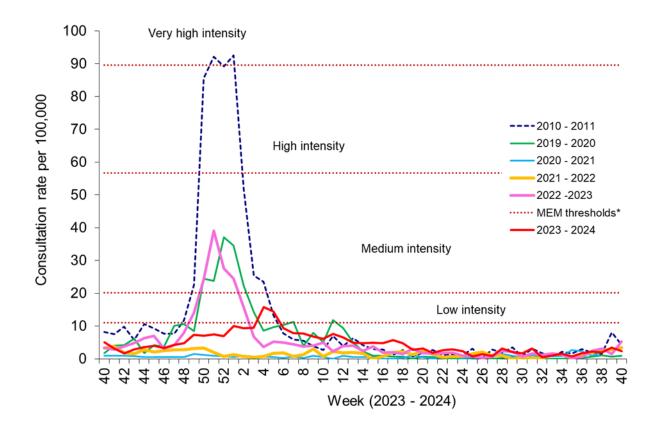
Influenza case numbers increased this week, however the overall proportion of samples testing positive remained low and stable. The number of confirmed cases of community acquired influenza admitted to hospital was **7** in the most recent week. In the most recent week, there were **13** hospital in-patient cases of confirmed influenza, **1** of whom was in critical care.

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



Consultations for influenza-like illness (ILI) with sentinel GPs are low and decreased compared to the previous week confirmed cases of influenza in sentinel GP patients increased, but remain low.

Figure 8: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)



B.3. Respiratory Syncytial Virus (RSV) update

RSV is circulating, with activity at medium intensity levels in children aged up to 5 years old. Incidence per 100,000 population in children aged up to 5y increased to 25.4 in the most recent week.

RSV incidence rate in those aged under 5 in Wales, by week

Season

- 2020/21

- 2021/22

- 2023/24

- 2024/25

Medium intensity

Medium intensity

Low intensity

Medium intensity

Low intensity

Week

Week

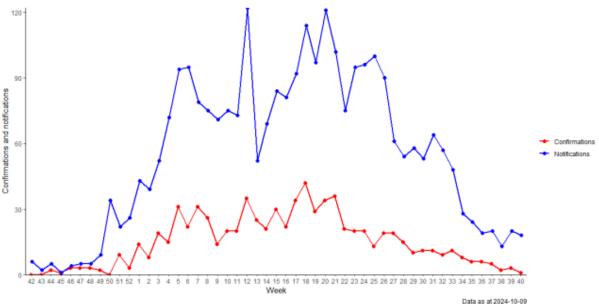
Figure 9: RSV Incidence Rate per 100,000 population under 5 years (source: PHW)

B.4 Whooping Cough (Pertussis)

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 40 decreased slightly and remain at low levels. Lab confirmations continue to be at very low levels and have also decreased in the latest week.

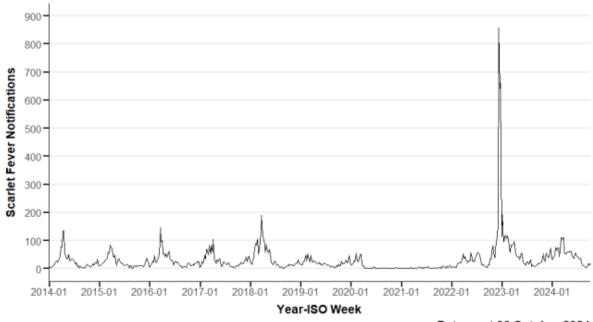
Figure 10: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales. (Source: PHW)



B.5 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 40) as shown in the figures below (up to 6 October 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)



Data as at 06 October 2024

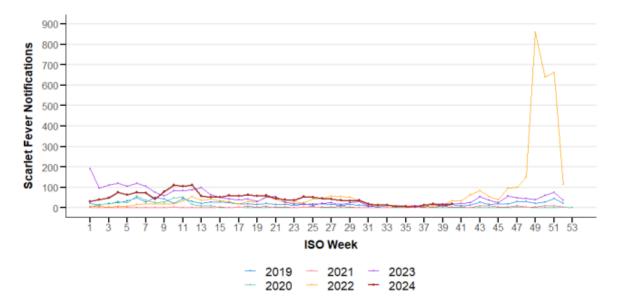


Figure 12: Rolling 3 Week Average Scarlet Fever Notifications, 2019-2024, Wales (Source: PHW)

C. Communicable Disease Situation Update (non-respiratory)

C.1 Norovirus

In the current reporting week (week 40 2024), a total of **35** Norovirus confirmed cases were reported in Welsh residents. This is an increase (118.8%) in reported cases compared to the previous reporting week (week 39 2024), where **16** Norovirus confirmed cases were reported.

In the last 12 week period (15/07/2024 to 06/10/2024) a total of **276** Norovirus confirmed cases were reported in Welsh residents. This is an increase (128.1%) in reported cases compared to the same 12 week period in the previous year (15/07/2023 to 06/10/2023) where **121** Norovirus confirmed cases were reported

In the last 12 weeks (15/07/2024 to 06/10/2024) **145** (52.5%) confirmed cases were female and **130** (47.1%) confirmed cases were male. The age groups with the most cases were the 80+ (82 cases) and 70-79 (52 cases) age groups. Sex data were not available for 1 case.

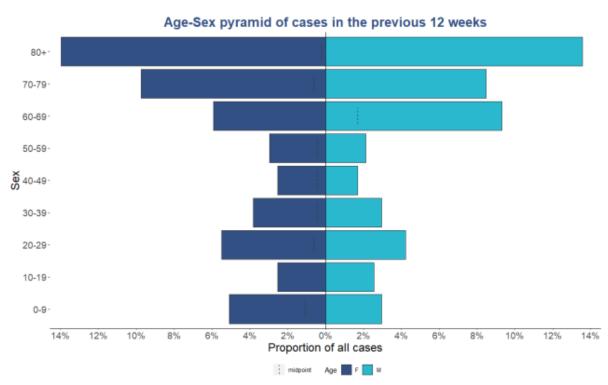


Figure 13: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (15/07/2024 to 06/10/2024)

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 (15/07/2024 to 06/10/2024). 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.

D. <u>International Surveillance Update</u>

D.1 Mpox 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. A case of mpox in Malappuram District, Kerala State, India has also been confirmed as a clade Ib mpox infection.. No cases of Clade I mpox have ever been detected in the UK.

D.2 Communicable Disease Centre (CDC) USA – Avian Flu update

3 October, 2024: Since April 2024, 20 human cases of avian influenza A(H5) virus infection have been reported in the United States; 21 in total since 2022. Ten of these cases were associated with exposure to H5N1 bird flu-infected poultry and nine were associated with exposure to sick or infected dairy cows 12. This includes six cases in California, two of which were confirmed by CDC on Thursday, October 3, two on Wednesday, October 9, and two on Thursday, October 10. All California cases occurred in dairy workers on affected farms. All of the California cases are from different farms, except for one case reported this week, which was from a farm that had a case reported previously. The two cases from the same affected farm worked on different parts of the farm and are not close contacts of each other. The epidemiology of the situation continues to suggest sporadic instances of animal-to-human spread. All six California cases are reported to have experienced mild symptoms, including eye redness or discharge (conjunctivitis), and none were hospitalized. Additional testing is ongoing in California, and presumptive positives are being routinely forwarded to CDC for confirmatory testing. Going forward, CDC will track and report confirmed cases, by state and source of exposure, in a table on its website. The source of the exposure in one case, which was reported by Missouri on September 6, could not be determined. Serological tests of the contacts of the Missouri case are pending. CDC believes the immediate risk to the general public from H5N1 bird flu remains low, but people with exposure to infected animals are at higher risk of infection.

CDC has performed genetic sequencing on samples from the two human cases of H5 bird flu in California confirmed on Thursday, October 3, and one of two human cases in California confirmed on Wednesday, October 9. Efforts to sequence additional cases are in progress. The results confirm that all three viruses sequenced to date are clade 2.3.4.4b H5N1 viruses, closely related to those detected in dairy cattle. The whole genome was sequenced from one

of the first two cases (A/California/135/2024) and was confirmed to be a B3.13 genotype virus.

D.3 <u>European Communicable Disease Centre</u> (ECDC) – Mpox Clade I update and Influenza A(H5N1) human cases – Multi-Country – 2024

Mpox Update:

There have been no major changes to the global epidemiological trends in mpox during the past week. On a global basis, MPXV clade I and clade II are circulating in different countries. Global epidemiological data are being 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 cases of mpox due to MPXV clade I have been reported by Sweden, Thailand, or India.

Overall, since monitoring began in 2022, 106,310 confirmed mpox cases (MPXV clade I and clade II), including 234 deaths, have been reported from 123 countries

D.4 Marburg Virus Disease (MVD) Rwanda

On 27 September 2024, Rwanda reported its first MVD outbreak. As of 9 October 2024, 58 cases, including 13 deaths, have been reported in the country. According to limited available information, the majority are healthcare workers. Cases have been reported from eight of Rwanda's 30 districts. In response to this outbreak, the Rwandan Ministry of Health is implementing measures such as restrictions on hospital visits and attendance at funerals, measures for educational settings, places of worship, and meetings, as well as a travel advice. Routine temperature checks are conducted at points of entry and exit screening is being implemented at Kigali airport. Vaccination of healthcare workers with an investigative vaccine is also being implemented as part of a study.

ECDC Assessment

ECDC assess the overall risk for EU/EEA citizens visiting or living in Rwanda as low. This is because the likelihood of exposure to MVD – considering the low number of cases reported and the mode of transmission – and the impact are both assessed as low.

In the event of MVD cases being imported into the EU/EEA, we consider the likelihood of further transmission to be very low, and the associated impact low. Therefore, the overall risk for the EU/EEA is assessed as low.