

Science Evidence Advice

Weekly Surveillance Report

2 July 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>

- Cases of STEC have increased in Wales up to 25 June.
- Norovirus cases have **increased** in the last reporting period with 63 reported.
- Overall, COVID-19 infections have **increased** in the most recent week.
- COVID-19 hospital admissions increased in the most recent week.
- RSV activity in children under 5 years has remained **stable** 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 **increased** in the most recent week.

B. Communicable Disease Situation Update (non-respiratory)

B.1 Shiga toxin-producing E.coli (STEC)

The <u>UK Health Security Agency</u> (UKHSA), together with public health agencies in Scotland, Northern Ireland and Wales, are investigating an increase in the number of Shiga toxin-producing E. coli (STEC) cases in the UK in recent weeks. As of 25 June, there have been a further 19 cases associated with the recent outbreak of STEC O145 since the last update a week ago, bringing the total number of confirmed cases to 275 in the UK. All currently confirmed cases had symptom onset dates before 4 June. Although case reporting rates are declining, we expect to see more cases linked to this outbreak as further samples are referred to us from NHS laboratories and whole genome sequencing is conducted. Case numbers as of 25 June are as follows:

- 182 in England
- 31 in Wales
- 58 in Scotland
- 4 in Northern Ireland (for these cases, evidence suggests that they acquired their infection while visiting England)

Based on information from 249 cases to date, 49% were admitted to hospital.

Through surveillance, UKHSA has identified 2 individuals in England who died within 28 days of infection with the STEC outbreak strain. Based on the information available from health service clinicians one of these deaths is likely linked to their STEC infection. Both individuals had underlying medical conditions.

UKHSA has worked closely with the Food Standards Agency (FSA), Food Standards Scotland and the devolved public health agencies to investigate the incident, carrying out epidemiological investigations and whole genome sequence analysis to help identify foods commonly consumed by the cases.

As a result of evidence gathered to date, <u>product recall information notices</u> have been published by FSA as a precaution.

Public Health Wales have advised that is working with partners in the UK and across the Welsh NHS to investigate this incident. There are currently 29 cases identified in Wales and healthcare providers have been advised of the increase in cases. PHW advise anyone who has experienced bloody diarrhoea or severe stomach cramps to seek medical attention.

B.2 Norovirus

In the latest reporting week (week 24 2024), a total of 63 Norovirus confirmed cases were reported in Welsh residents. This is an increase (37%) in reported cases compared to the previous reporting week (week 23 2024), where 46 Norovirus confirmed cases were reported.

In the last 12 week period (25/03/2024 to 16/06/2024) a total of 444 Norovirus confirmed cases were reported in Welsh residents. This is an increase (39.6%) in reported cases compared to the same 12 week period in the previous year (25/03/2023 to 16/06/2023) where 318 Norovirus confirmed cases were reported.

In the last 12 weeks (25/03/2024 to 16/06/2024) 251 (56.5%) confirmed cases were female and 191 (43.0%) confirmed cases were male. The age groups with the most cases were the 70+ (239 cases) and 60-69 (66 cases) age groups.

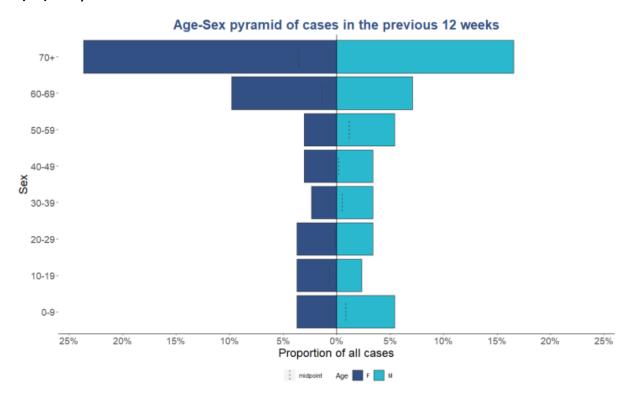


Figure 1: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (25/03/2024 to 16/06/2024)

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 23 2024 (18/03/2024 to 09/06/2024). 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.

C. Acute Respiratory Infections Situation Update

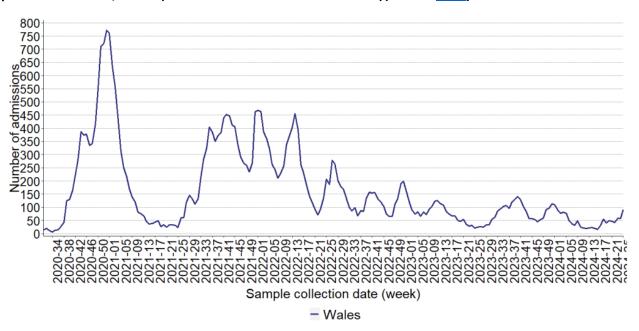
C1. COVID-19 Situation Update

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

- At a national level, the weekly number of confirmed case admissions to hospital has increased during week 25 and the number of cases who are inpatients has increased. The number of admissions to ICU has slightly increased in week 25.
- As of 23 June 2024, **355** people currently in hospital have had a positive COVID-19 test, with **7** in ICU (compared to **311** and **3** in the previous week (week 22).
- The all-Wales incidence as estimated using PCR episodes remains at low levels despite increasing in recent weeks
- The number of deaths from any cause has increased slightly in the latest reported data available from ONS and remains above the 5-year average.

- In the last four reporting weeks, V-23DEC-01 (Omicron, JN.1) is the most dominant variant in Wales, accounting for **97.7%** of all sequenced cases.
- There were 8 new respiratory incidents reported in week 25 2024 recorded in the health protection case and incident management system (Tarian). Of the 8 respiratory incidents, 7 were in residential homes and 1 in a school/nursery setting. Across recent reporting weeks, the average numbers of Acute respiratory and COVID-confirmed incidents in care homes (recorded on Tarian) have been relatively stable when looking at these by the date of onset of the first case.
- The proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms decreased in week 18 compared to previous weeks. *Please note that syndromic surveillance data from PHW is not available for the current week due to a technical issue.*
- In week 25, GP consultations for any Acute Respiratory Infection (ARI) have decreased and consultations for suspected COVID have remained stable at very low levels.
- The overall number of ambulance calls related to COVID-19 and the proportion of incidents have increased slightly in week 25.

Figure 2: Weekly number of 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 for COVID-19

The latest available Swansea University MTPs using data up to 1 May indicate a plateau at low levels in COVID-19 non-ICU hospital admissions through July and continuing on this trajectory through into August 2024. ICU occupancy is projected to remain at low levels as are deaths caused by COVID-19.

Figure 3: Daily COVID-19 hospital admissions, projected to end of July/early August 2024

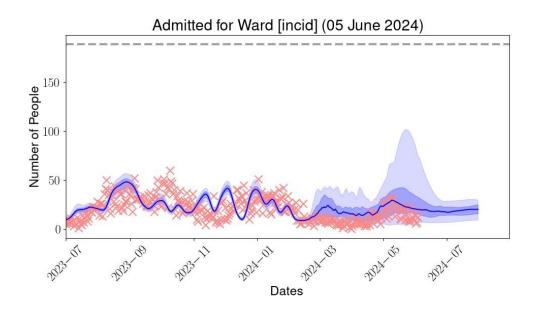
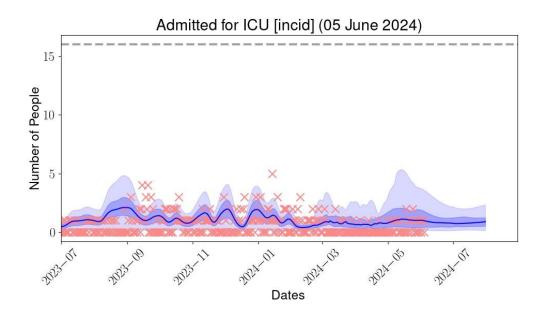


Figure 4: Daily COVID-19 ICU admissions, projected to end of July/early August 2024



Deaths [incid] (05 June 2024)

50

90

40

10

0

MRACE ARRAGE AR

Figure 5: Daily COVID-19 deaths, projected to end of July/early August 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 above are occupancy projections, based on the observed admissions and assuming a distribution of bed length of stay. Currently this is using an assumed LoS distribution of 7-24 days (non ICU) and 2-17 days (ICU)

C2. Influenza Situation Update

Current levels of influenza are low and the trend is decreasing. During week 25 (ending 23/06/2024) there were 11 confirmed cases of influenza in Wales (3 for influenza A(H1N1), 6 for influenza A (not subtyped), 2 for influenza A(H3N2)).

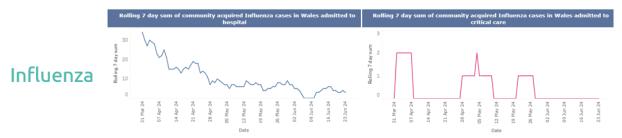
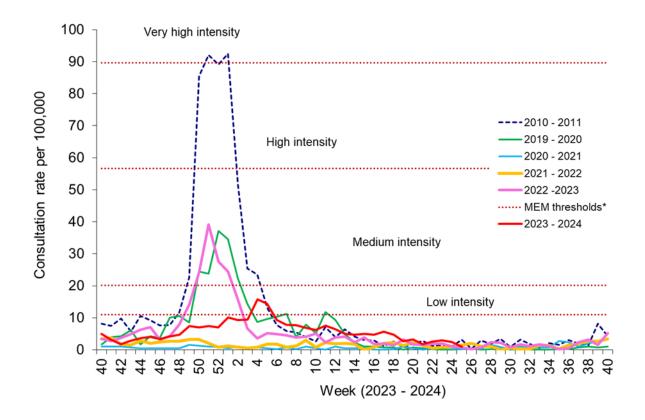


Figure 6: 7 day rolling sum of influenza case admissions to hospital in Wales (source: PHW)

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 the slight decrease to week 25 in the 2023-2024 series (the bright red line is the 2023-2024 influenza season).

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



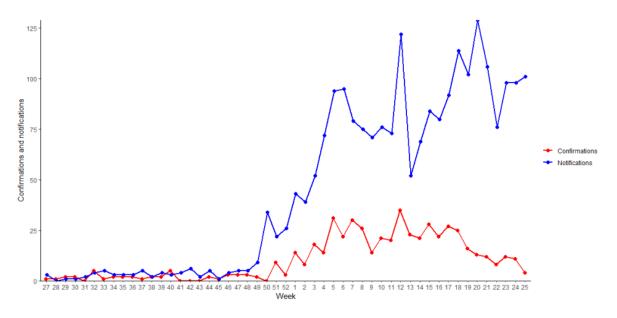
C3. Whooping Cough (Pertussis)

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 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 have continued to increase up to the end of week 25. Lab confirmations continue to be at low levels and have decreased in the latest week.

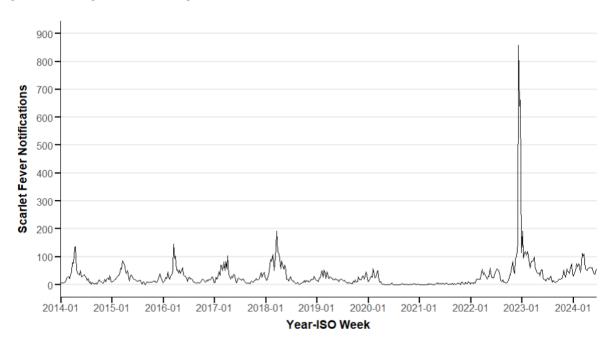
Figure 8: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales in the 2023-24 season year. (Source: PHW)



C4. iGAS and Scarlet Fever

The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have increased slightly in the most recent week (week 25) as shown in the figures below (up to 23 June 2024) with Figure 10 showing a stable picture overall for the current season (the bright red line on the chart) with the latest increase in notifications also shown. These notifications are now well below 100 a week compared to the peak of over 800 notifications in January 2023.

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



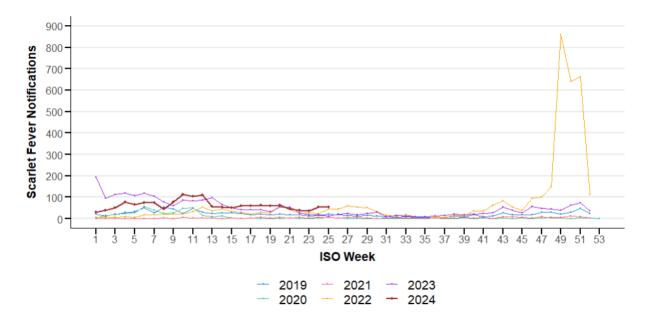


Figure 10: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (Source: PHW)

C5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has decreased in the most recent week and remains at low intensity levels and very close to baseline (compared to historic levels before 2021). The red line on the chart is the 2023-2024 season.

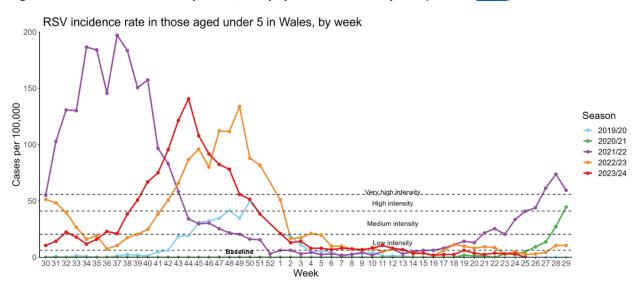


Figure 11: RSV Incidence Rate per 100,000 population under 5 years (source: PHW)

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

D1. Communicable Disease Centre (CDC) USA – Avian Flu (H5N1) in Cattle (outbreaks reporting)

A small number of sporadic human cases of highly pathogenic avian influenza (HPAI) A(H5N1) have been identified worldwide since 2022, amidst a panzootic of these viruses in wild birds and poultry. Nearly all human cases reported globally since 2022 were associated with poultry exposures, and no cases of human-to-human transmission of HPAI A(H5N1) virus have been identified. Three human cases of HPAI A(H5N1) virus infection in dairy farm workers were reported during April and May 2024 in the United States and were attributed to exposures to dairy cattle. One previous human case was detected in the United States in 2022 during poultry culling work. In a few cases, the source of exposure to HPAI A(H5N1) virus was unknown. To date, HPAI A(H5N1) viruses currently circulating most commonly in birds and poultry, with spillover to mammals and humans, do not have the ability to efficiently bind to receptors that predominate in the human upper respiratory tract. This is a major reason why the current risk to the public from HPAI A(H5N1) viruses remains low. However, because of the potential for influenza viruses to rapidly evolve and the wide global prevalence of HPAI A(H5N1) viruses in wild birds and poultry outbreaks and following the identification and spread among dairy cattle in the United States, additional sporadic human infections are anticipated. Continued comprehensive surveillance of these viruses in wild birds, poultry, mammals, and people worldwide, and frequent reassessments are critical to determine the public health risk, along with ongoing preparedness efforts.

D.2 <u>European Communicable Disease Centre</u> (ECDC) - Influenza A(H5N2), Multi-country (World). Monitoring human cases

- On 23 May 2024, the Mexico IHR National Focal Point reported to PAHO/WHO a
 confirmed case of human infection with avian influenza A(H5N2). This is the first
 laboratory-confirmed human infection with avian influenza subtype A(H5N2) reported
 globally.
- The patient, who was a resident of the State of Mexico, was hospitalised in Mexico City, and died on the day of hospitalisation.
- No human-to-human transmission associated with this event has been reported.
- Genetic analysis performed found that the virus had 99% similarity to low pathogenic avian influenza A(H5N2) strains from birds in Texcoco, State of Mexico.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered low.
- On 11 June 2024, WHO reported one human infection with avian influenza A(H9N2) virus in India. This is the second detection of A(H9N2) in humans in the country.
- The case had exposure to poultry at home and household surroundings.