

Science Evidence Advice

Weekly Surveillance Report

16 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 remained stable in Wales up to 3 July.
- 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 decreased in the most recent week.
- Scarlet Fever notifications have **decreased** slightly in the most recent week.

B. Communicable Disease Situation Update (non-respiratory)

B.1 Shiga toxin-producing E.coli (STEC) (last updated 6 July, 2024)

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 3 July, there have been a further 13 cases associated with the recent outbreak of STEC 0145. This brings the total number of confirmed cases to 288 in the UK. All currently confirmed cases had symptom onset dates before 10 June. Although case reporting rates are continuing to decline, we expect to see an additional small number of 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 3 July are as follows (the number for Wales is the same as the previous week):

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

Based on information from 263 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.

C. Acute Respiratory Infections Situation Update

C1. COVID-19 Situation Update

Overall, COVID-19 infections have slightly increased in the most recent week, particularly in hospital settings. 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 27 and the number of cases who are inpatients has increased. The number of admissions to ICU has remained stable in week 27.
- As of 7 July 2024, **523** people currently in hospital have had a positive COVID-19 test, with **16** in ICU (compared to **456** and **15** in the previous week (week 26).
- 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 **97.2%** of all sequenced cases.
- There were 9 new respiratory incidents reported in week 27 2024 recorded in the health protection case and incident management system (Tarian). All 9 respiratory incidents were within a care home 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.
- In week 27, 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 has decreased in week 27 and the proportion of incidents remains stable.

Sample collection date (week)

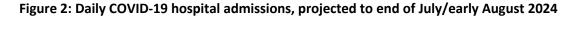
Sample collection date (week)

Figure 1: 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 5 June 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 admissions are projected to remain at low levels as are deaths caused by COVID-19.

Wales



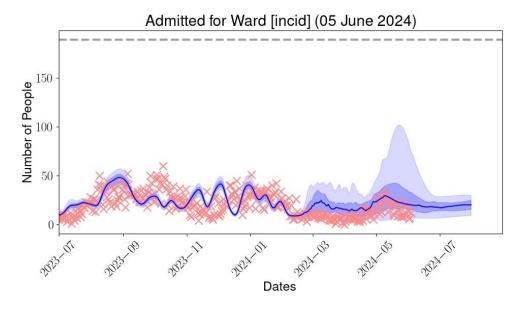


Figure 3: Daily COVID-19 ICU admissions, projected to end of July/early August 2024

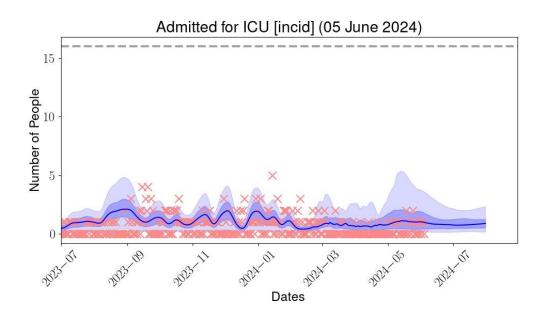
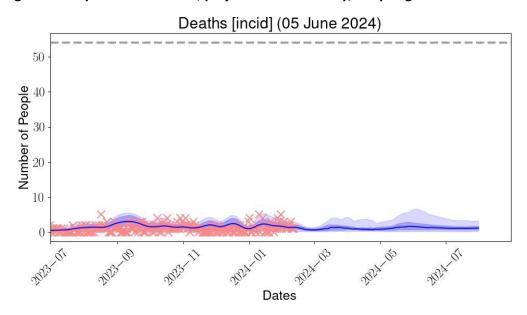


Figure 4: Daily COVID-19 deaths, projected to end of July/early August 2024



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.

C2. Influenza Situation Update

Current levels of influenza are low and the trend is decreasing. During week 27 (ending 07/07/2024) there were 11 confirmed cases of influenza in Wales (2 for influenza A(H1N1), 4 for influenza A (not subtyped), 2 for influenza A(H3), and 3 for influenza B).

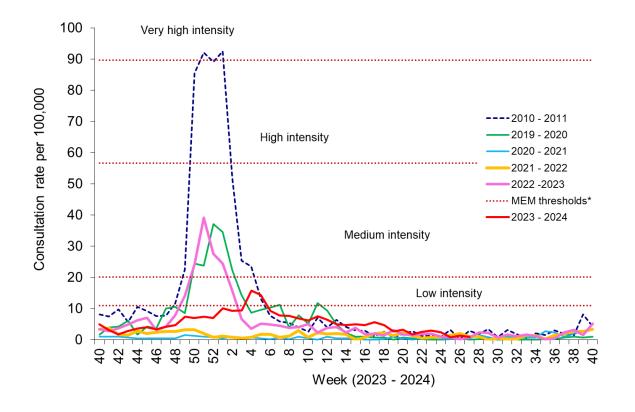
In recent weeks, detections of Mycoplasma pneumoniae and Rhinovirus remain elevated, and there have been increases in SARS-Cov2.



Figure 5: 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 further decrease to week 27 in the 2023-2024 series (the bright red line is the 2023-2024 influenza like illness season).

Figure 6: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: <u>PHW</u>)



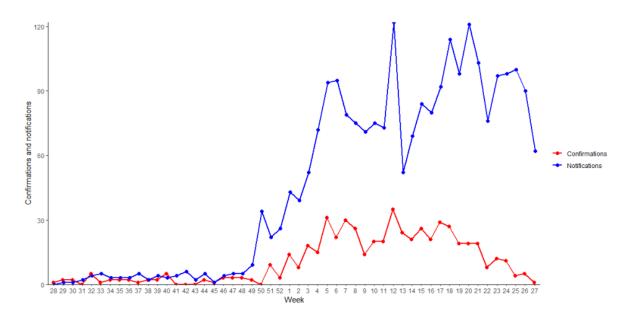
C3. Whooping Cough (Pertussis)

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 7 below shows that whooping cough notifications have decreased up to the end of week 27. Lab confirmations continue to be at low levels and have decreased further in the latest week.

Figure 7: 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 decreased slightly in the most recent week (week 27) as shown in the figures below (up to 7 July 2024) with Figure 10 showing a stable picture overall for the current season (the bright red line on the chart) with the latest decrease in notifications also visible. These notifications are now well below 100 a week compared to the peak of over 800 notifications in January 2023.

2014-01



Figure 8: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (source: PHW)

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

2019-01

Year-ISO Week

2018-01

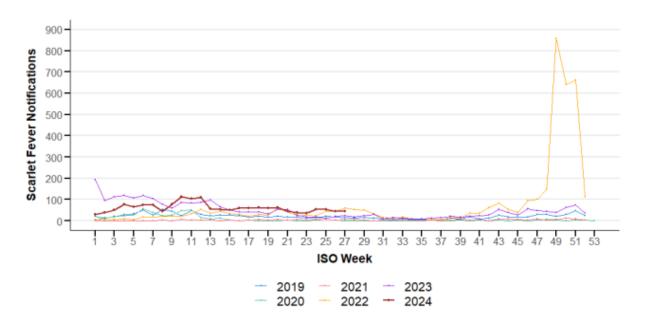
2017-01

2016-01

2021-01

2022-01

2023-01



C5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has remained stable in the most recent week but remains at low intensity levels and very close to baseline. The red line on the chart is the 2023-2024 season.

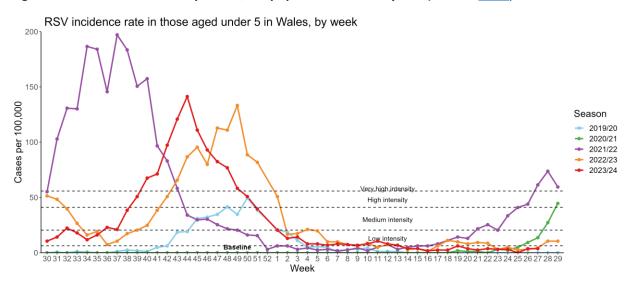


Figure 10: RSV Incidence Rate per 100,000 population under 5 years (source: PHW)

D. International Surveillance Update

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

12th July 2024 Update: 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 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), state public health and animal health officials, and other partners using a One Health approach. Four human cases of A(H5) infection associated with this outbreak in U.S. dairy cows have been reported. A Based on the information available at this time, CDC's current H5N1 bird flu human health risk assessment for the U.S. general public remains low. On the animal health side, USDA is reporting that 151 dairy cow herds in 12 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.

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

- A fourth human case of highly pathogenic avian influenza (HPAI) A(H5), associated with the ongoing multi-state outbreak of A(H5N1) in dairy cattle in the United States, was reported on 3 July 2024 in the state of Colorado.
- As of 3 July 2024, there have been four human cases of avian influenza A(H5N1) reported in workers at dairy farms with infected cows (Texas (1), Michigan (2), Colorado (1)). The viruses isolated from the previous cases belonged to HA clade 2.3.4.4b, genotype B3.13. Results of genomic analysis are pending for the fourth case.
- To date, routine population-based surveillance has not detected any increase in community rates of respiratory infections.
- The outbreak of highly pathogenic avian influenza (HPAI) A(H5N1) in cattle is still ongoing, with 138 farms affected across 12 states of the US as of 3 July 2024