Llywodraeth Cymru
Welsh Government

Science Evidence Advice

Weekly Surveillance Report

22 July 2024

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Science Evidence Advice (SEA)

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 in the most recent week has some indicators decreasing and others stable or slightly increased.
- COVID-19 hospital admissions **decreased** in the most recent week.
- RSV activity in children under 5 years has **decreased** 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.

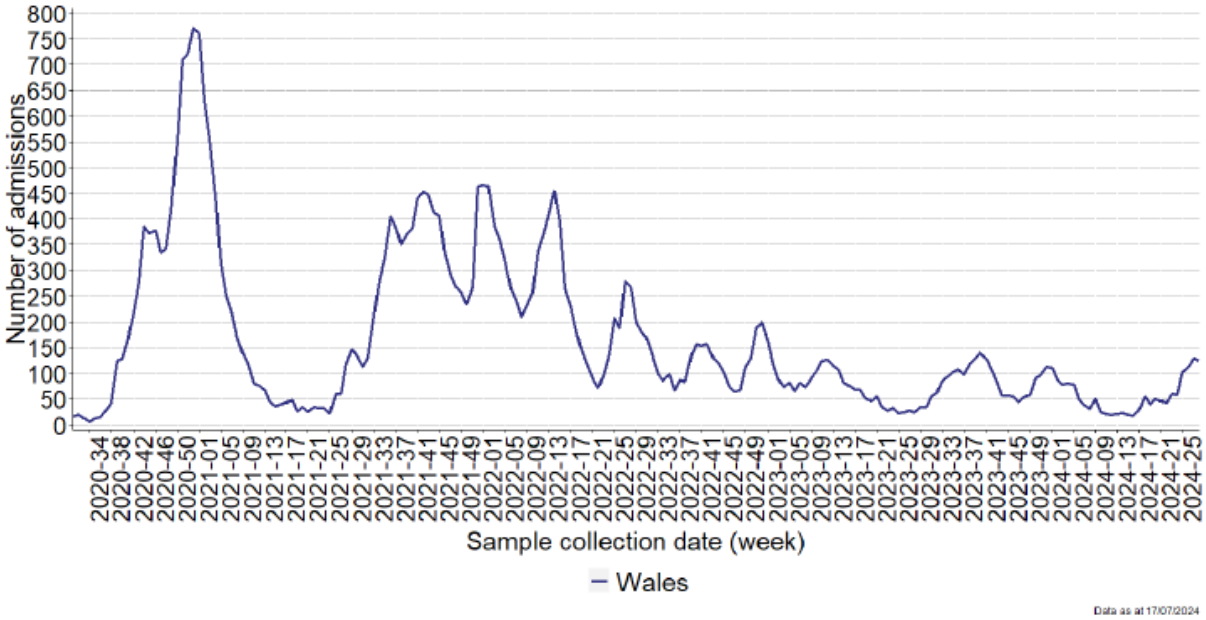
B. Acute Respiratory Infections Situation Update

B1. COVID-19 Situation Update

Overall, COVID-19 infections have increased in recent weeks, but there is a mixed picture in the latest week with some indicators decreasing and others stable or slightly increased.

- At a national level, the weekly number of confirmed case admissions to hospital has decreased during week 28 and the number of cases who are inpatients has increased. The number of admissions to ICU has decreased in week 28.
- As of 14 July 2024, **585** people currently in hospital have had a positive COVID-19 test, with **13** in ICU (compared to **523** and **16** in the previous week (week 27).
- The all-Wales incidence as estimated using PCR episodes has increased in recent weeks but decreased in the most recent week.
- The number of deaths from any cause has slightly decreased 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 **97.8%** of all sequenced cases.
- There were **17** new respiratory incidents reported in week 28 2024 recorded in the health protection case and incident management system (Tarian). Of these, 15 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 decreased, when looking at these by the date of onset of the first case.
- In week 28, GP consultations for any Acute Respiratory Infection (ARI) have decreased and consultations for suspected COVID have increased but remain at low levels.
- The overall number of ambulance calls related to COVID-19 and the proportion of incidents decreased in week 28.

Figure 1: 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 for COVID-19

The latest available Swansea University MTPs using data up to 29 June indicate a decline in COVID-19 non-ICU hospital admissions through July and a lower trajectory through August and 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

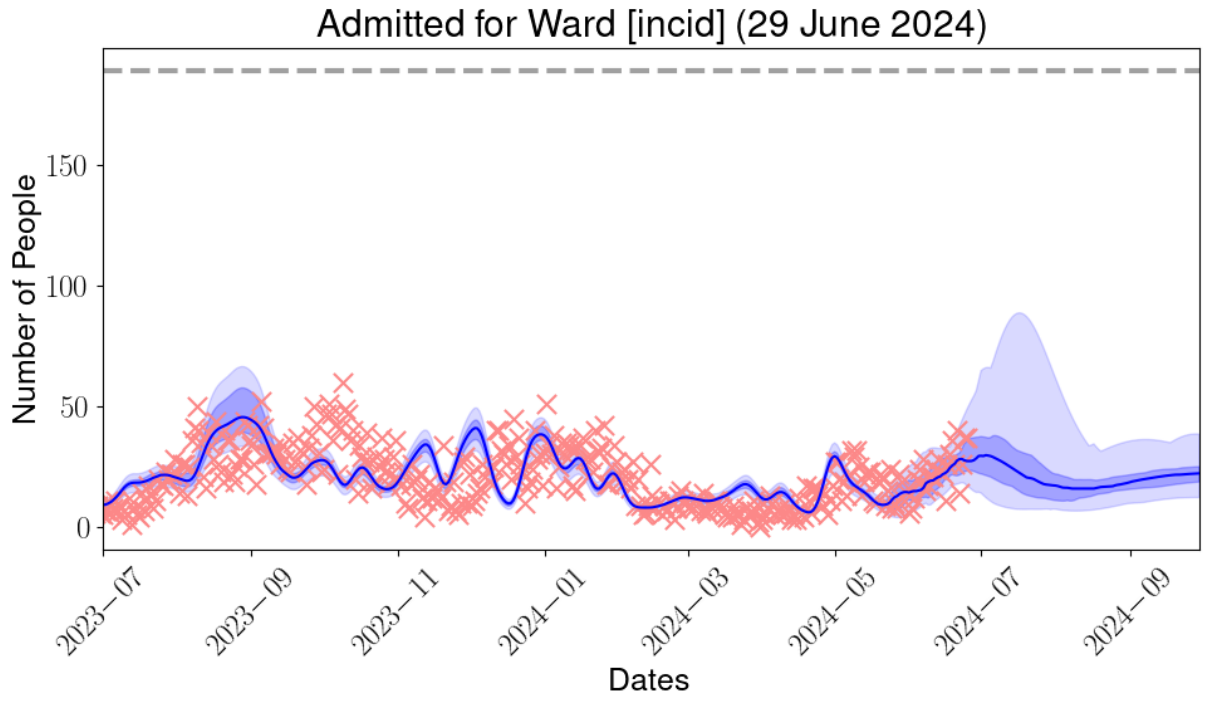


Figure 3: Daily COVID-19 ICU admissions, projected to September 2024

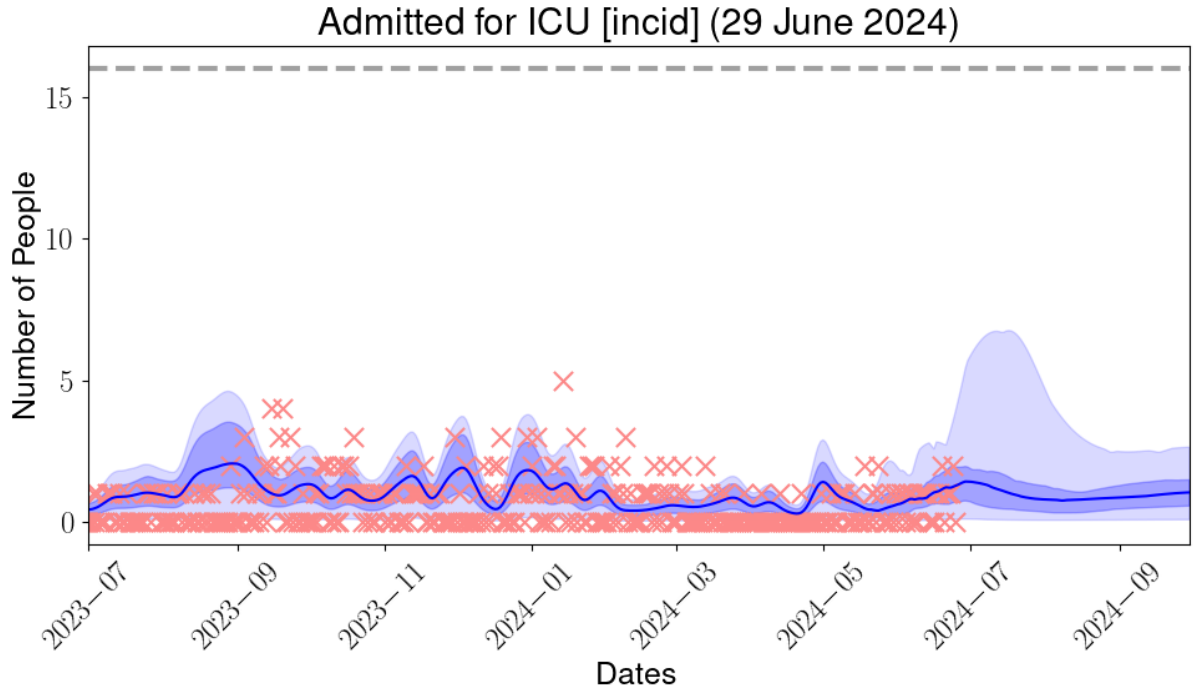
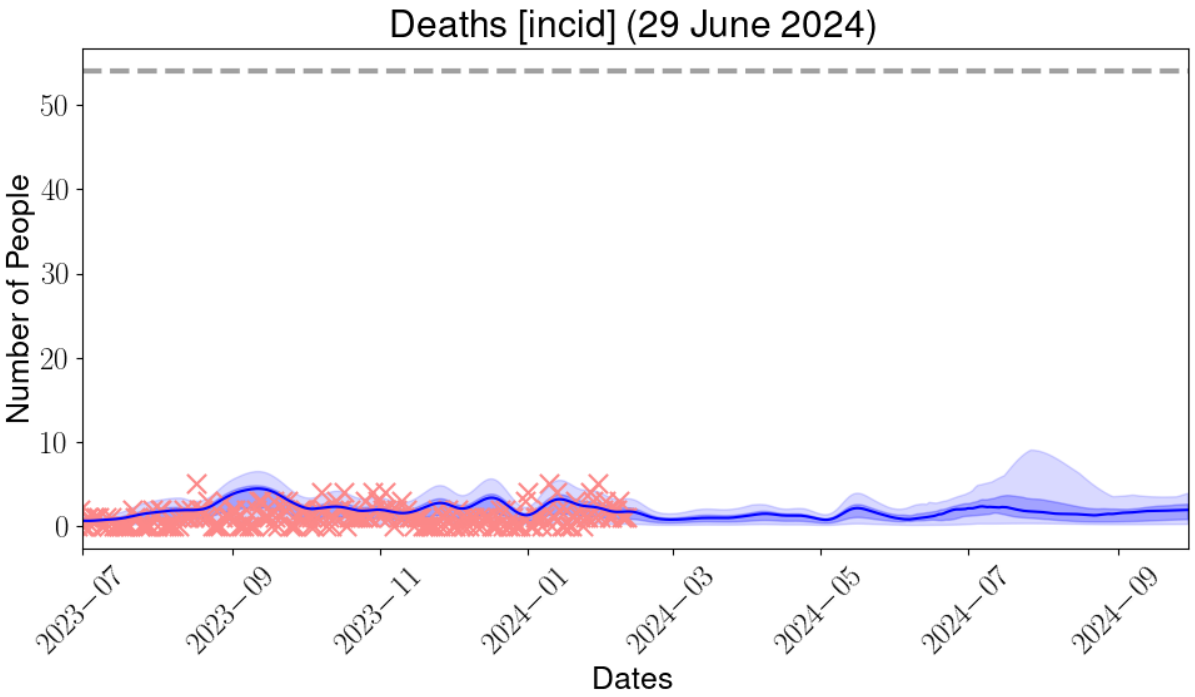


Figure 4: Daily COVID-19 deaths, projected to projected to September 2024



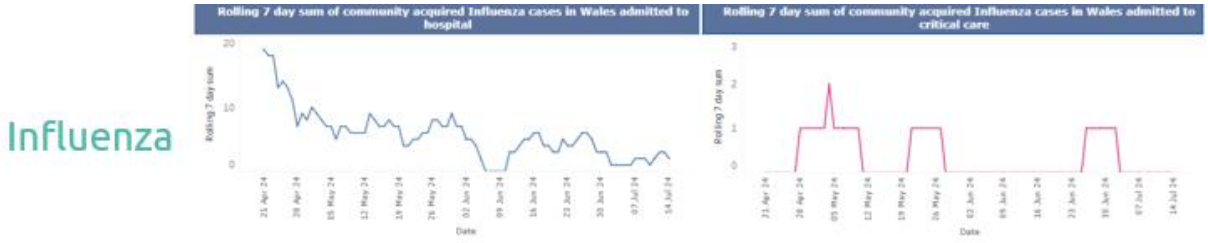
Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

B2. Influenza Situation Update

Current levels of influenza are low and the trend is stable. During week 28 (ending 14/07/2024) there were 11 confirmed cases of influenza in Wales (7 for influenza A (not subtyped), 1 for influenza A (H3), and 3 for influenza B).

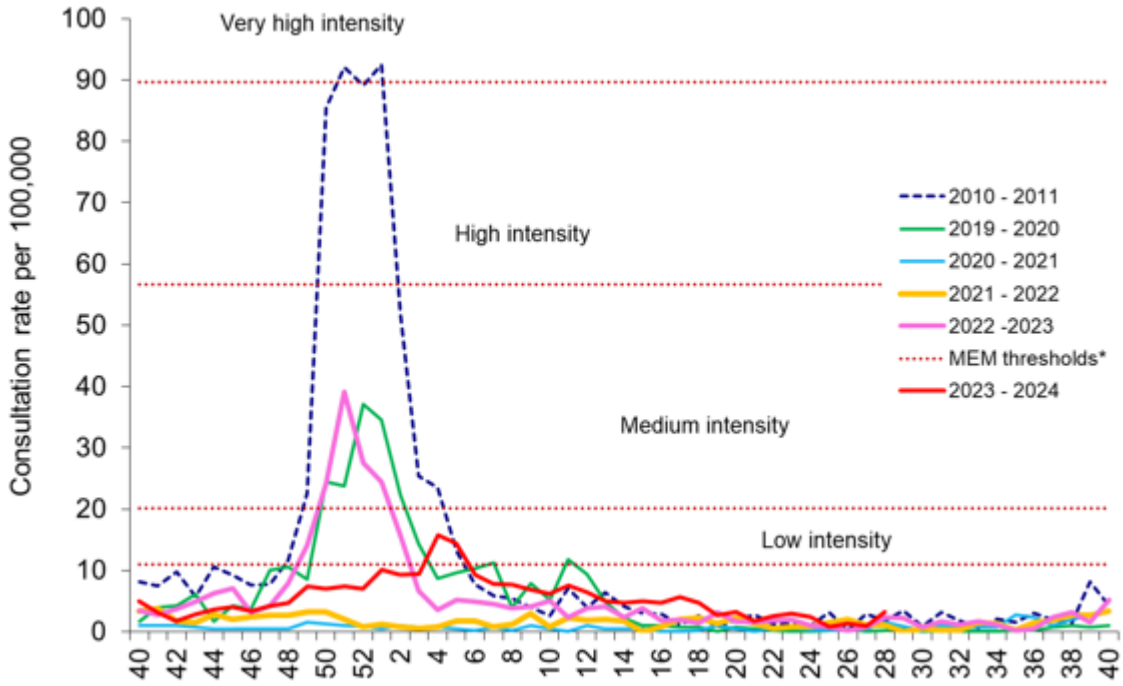
In recent weeks, detections of COVID-19, Mycoplasma pneumoniae and Rhinovirus remain elevated.

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 slight increase in week 28 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: PHW)



B3. Whooping Cough (Pertussis)

UKHSA encourages timely vaccination as whooping cough cases rise - GOV.UK (www.gov.uk) (11 July 2024 update).

January 2024	555 cases
February 2024	920 cases
March 2024	1,427 cases
April 2024	2,106 cases
May 2024	2,591 cases

Sadly, there have been 9 infant deaths (UK) since the current outbreak began in November last year (one in December 2023 and 8 between January to end May 2024). Young babies are at highest risk of severe complications and death from whooping cough. Evidence from England shows that vaccination at the right time in pregnancy is highly effective, giving 92% protection against infant death.

From January to May 2024, while most cases (53.4%, 4,057 UK) were in those aged 15 years or older who usually get a mild illness, high numbers (262 UK) continue to be reported in babies under 3 months of age who are at greatest risk from the infection.

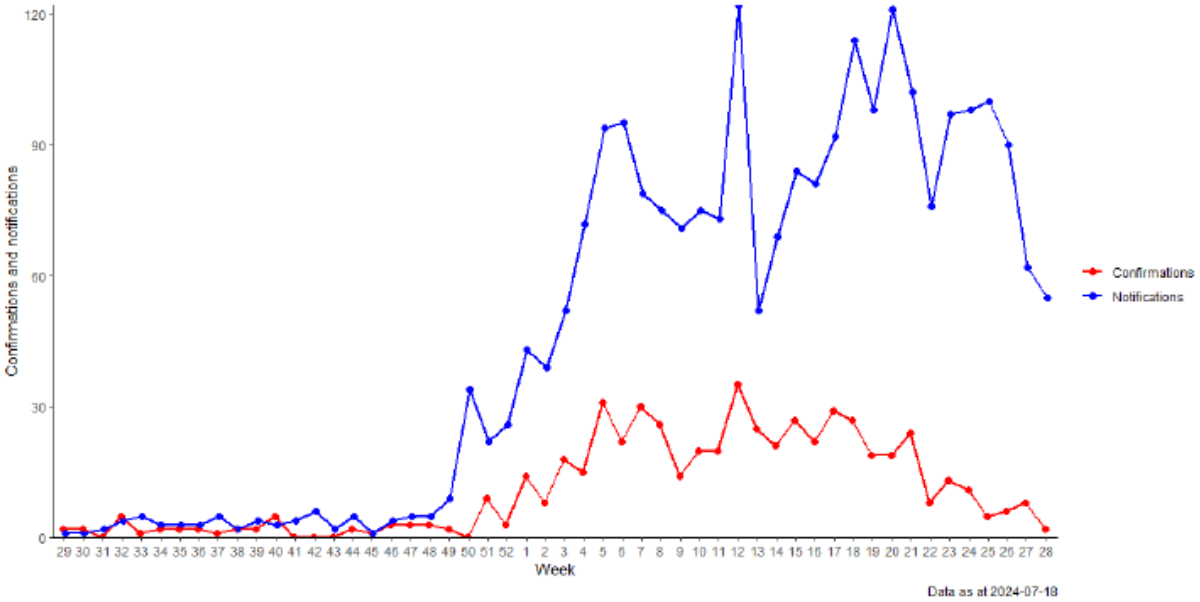
The latest uptake data for the vaccination offered to pregnant women to protect newborn infants against whooping cough continues to decline - with coverage in March 2024 at 58.9% compared to the peak coverage (72.6%) in March 2017.

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 7 below shows that whooping cough notifications have decreased up to the end of week 28. 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. (Source: PHW)



B4. 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 28) as shown in the figures below (up to 14 July 2024) with Figure 9 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 winter 2022-23.

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

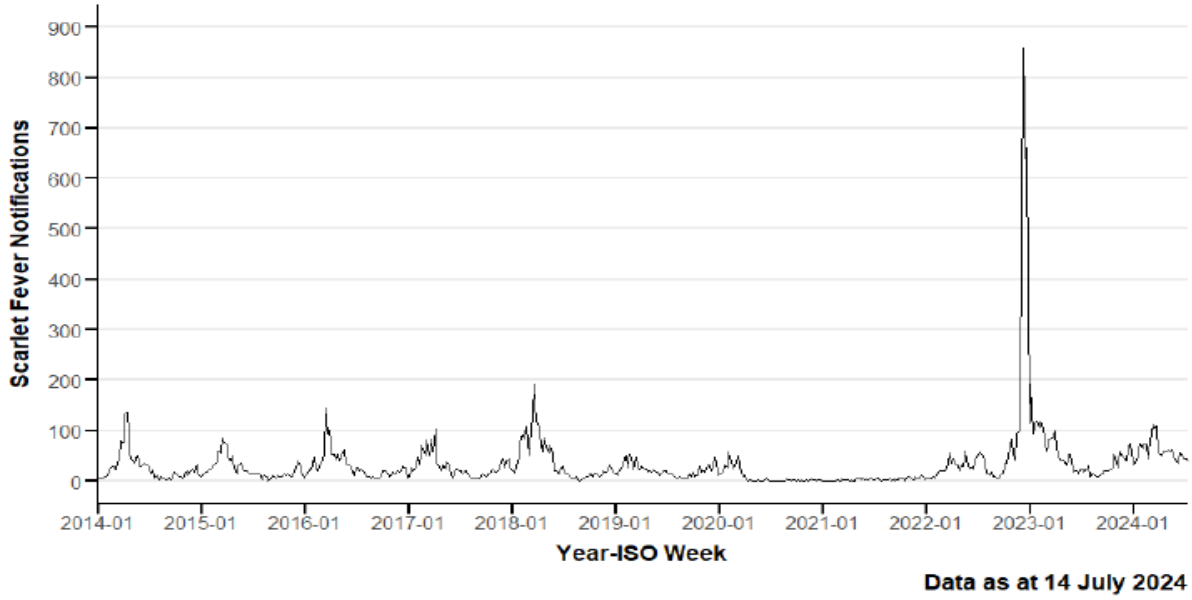
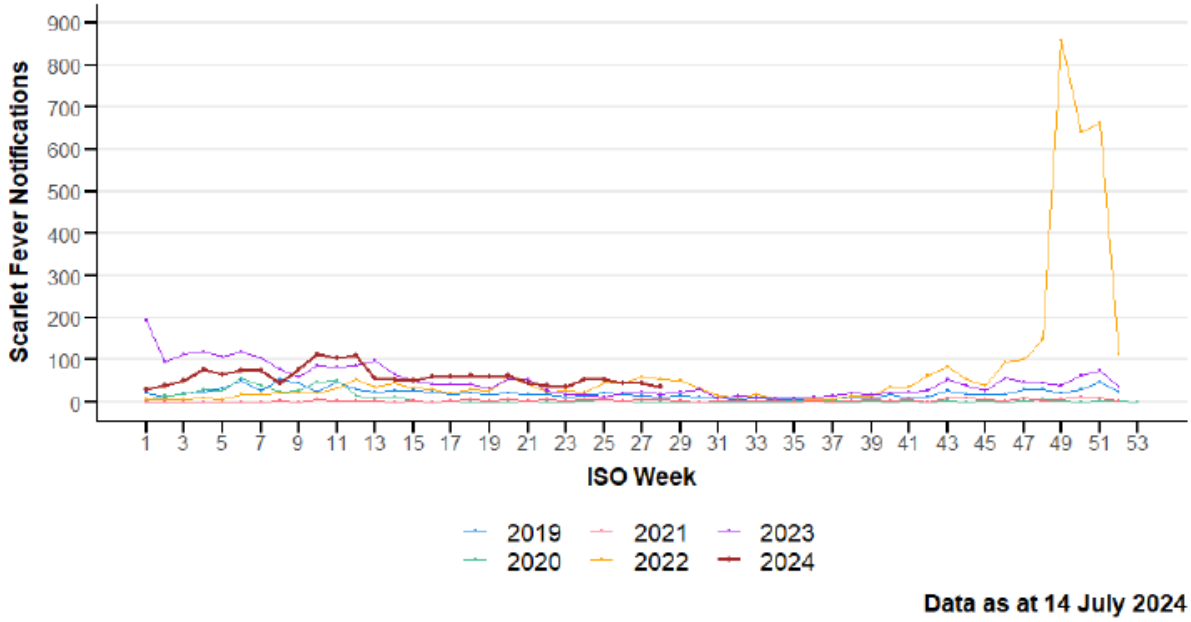


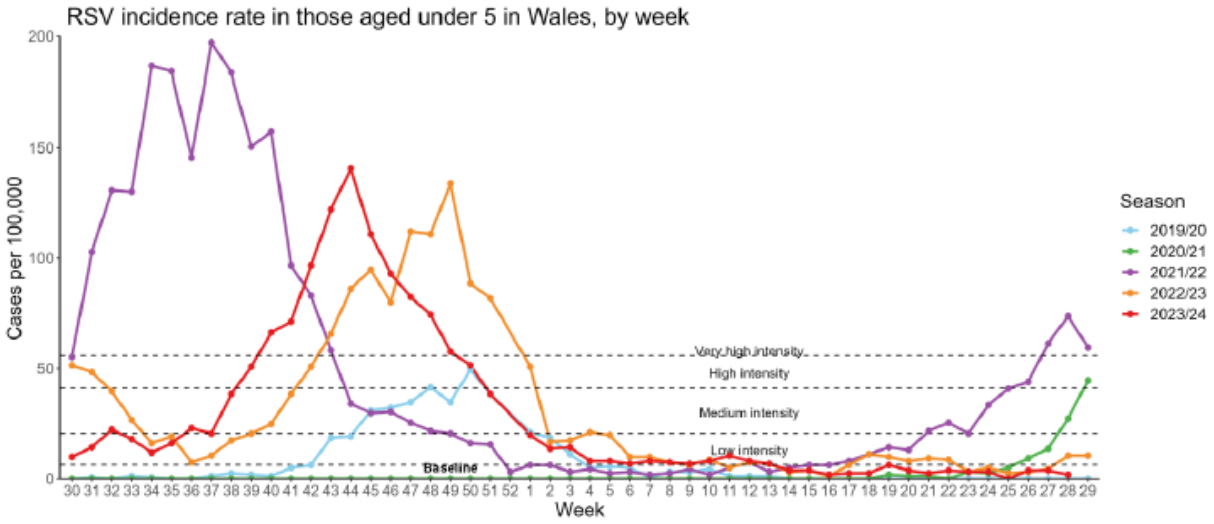
Figure 9: Rolling 3 Week Average Scarlet Fever Notifications, 2019-2024, Wales (Source: PHW)



B5. Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has decreased in the most recent week and remains below baseline levels. 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)



C. International Surveillance Update

C1. 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.

C.2 European Communicable Disease Centre (ECDC) - Influenza A(H5N1), 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

2024-WCP-0037 (europa.eu)

- On 6 July 2024, Cambodia's Ministry of Health reported one case of A(H5N1) in a child in Po village, Prasat Choan Chum commune, Kirivong district, Takeo province. The case had a fever, a cough, tiredness, and difficulty breathing. At present, the patient's condition has improved and they are receiving intensive care by doctors. According to interviews, about 10 days ago the case touched and held a dead chicken found in the village.
- On 8 July 2024, Cambodia's Ministry of Health reported a second case in a child from the same location as the case reported on 6 July. The case is a cousin of the first case and lived in the same house. According to a Ministry of Health statement, the second case also touched the same dead chicken. At present, the patient's condition is mild and they are receiving intensive care by doctors.
- Virus clade has not been yet identified for either of these cases.