

## Science Evidence Advice

**Weekly Surveillance Report** 

29 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>

- Overall, COVID-19 infections have **decreased** in the most recent week.
- COVID-19 hospital admissions decreased in the most recent week.
- RSV activity in children under 5 years has remained stable at low levels in the most recent week.
- Influenza cases have remained **stable** at low levels in the latest week.
- Whooping Cough notifications have oscillated between levels of the previous two weeks 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 decreased 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 slightly decreased in week 29, and the number of cases who are inpatients has increased. The number of admissions to ICU has decreased in week 29.
- As of 21 July 2024, **605** people currently in hospital have had a positive COVID-19 test, with **8** in ICU (compared to **585** and **13** in the previous week (week 28).
- The all-Wales incidence as estimated using PCR episodes has slightly increased in week 29.
- 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 **98.4%** of all sequenced cases.
- There were **9** new respiratory incidents reported in week 29 2024 recorded in the health protection case and incident management system (Tarian). Of these, all 9 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 in week 29 when looking at these by the date of onset of the first case following a steady increase in recent weeks.
- In week 29, GP consultations for any Acute Respiratory Infection (ARI) have decreased and consultations for suspected COVID have decreased and remain at low levels.
- The overall number of ambulance calls related to COVID-19 and the proportion of incidents slightly increased in week 29.

Sample collection date (week)

- Wales

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 (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

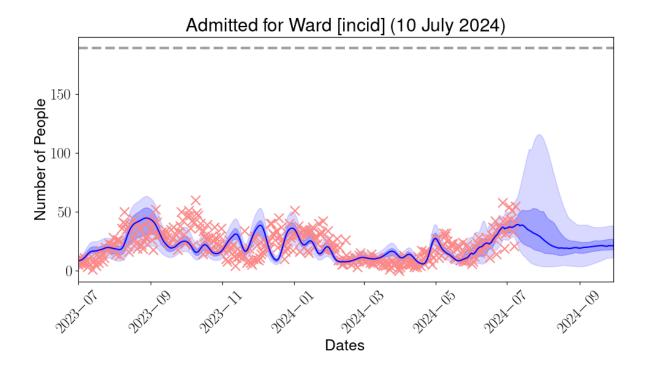


Figure 3: Daily COVID-19 ICU admissions, projected to September 2024

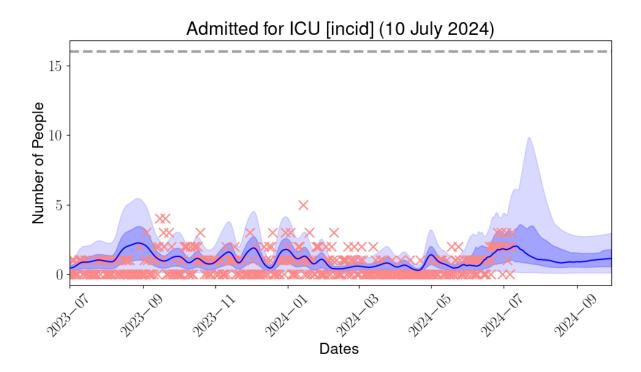
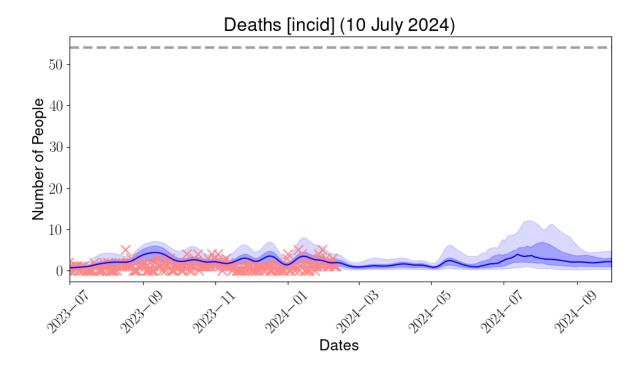


Figure 4: Daily COVID-19 deaths, projected to projected to September 2024



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.

#### **B2. Influenza Situation Update**

Current levels of influenza are low and the trend is stable. During week 29 (ending 21/07/2024) there were 11 confirmed cases of influenza in Wales (10 for influenza A (not subtyped), 1 for influenza A (H3)).

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

Daily number of inpatient Influenza cases in hospital in Wales

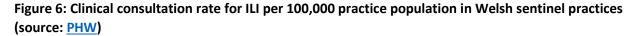
Daily number of inpatient Influenza cases in hospital in Wales

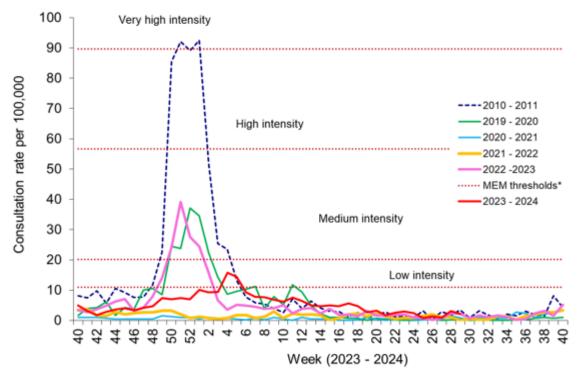
Daily number of inpatient Influenza cases in critical care in Wales

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Figure 5: 7 day rolling sum of influenza case admissions to hospital in Wales (source: PHW)

The figure below shows a slight decrease in week 29 in the 2023-2024 series (the bright red line is the 2023-2024 influenza like illness season) and well below the low intensity level threshold.





#### **B3.** Whooping Cough (Pertussis)

<u>UKHSA encourages timely vaccination as whooping cough cases rise - GOV.UK (www.gov.uk)</u> (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 up to the end of week 29 oscillated between levels of the previous two weeks. Lab confirmations continue to be at low levels and have decreased further in the latest week.

20-30 31 32 33 34 35 39 37 38 39 40 41 42 43 44 40 64 47 48 49 59 51 02 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 10 17 18 19 20 21 22 23 24 20 26 27 28 29

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 29) as shown in the figures below (up to 21 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.

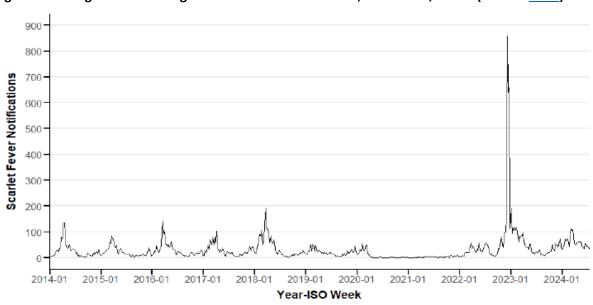


Figure 8: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (source: PHW)

Data as at 21 July 2024

Data as at 2024-07-24

Scarlet Fever Notifications 400: 33 35 ISO Week 

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

Data as at 21 July 2024

#### **B5. Respiratory Syncytial Virus (RSV) update**

RSV activity in children under 5 years has oscillated between levels of the previous two weeks in the most recent week and remains below baseline levels. The red line on the chart is the 2023-2024 season.

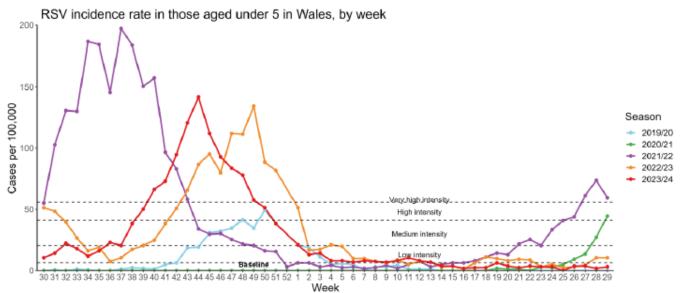


Figure 10: RSV Incidence Rate per 100,000 population under 5 years (source: PHW)

### 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.

<u>12<sup>th</sup> July 2024 Update</u>: 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 <u>European Communicable Disease Centre</u> (ECDC) - Influenza A(H5N1), Multi-country (World). Monitoring human cases

- On 14 July 2024, the Colorado Department of Public Health and Environment reported five human cases of A(H5) avian influenza virus infection.
- CDC has confirmed that four cases are A(H5), but the specimen have not been confirmed as H5N1. One additional case is presumptive positive and is pending confirmation at CDC.

- All infections occurred in workers responding to the avian flu outbreak at a commercial egg layer operation.
- Since 2003, 901 human cases of avian influenza A(H5N1), including 463 deaths (casefatality rate (CFR): 51%), have been reported in 24 countries worldwide.
- The risk of zoonotic influenza transmission to the general public in EU/EEA countries is considered low. The risk to occupationally exposed groups, such as farmers and cullers, is considered low-to-medium.