

Science Evidence Advice

Weekly Surveillance Report

23 April 2025



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 (as at week 15 2025, up to 13 April 2025)

- Overall, COVID-19 confirmed case admissions to hospital decreased in the most recent week.
- COVID-19 cases who are inpatients have decreased in the most recent week.
- RSV activity in children under 5 years has remained stable in the most recent week.
- Influenza in-patient cases and admissions have **decreased** in the latest week.
- Whooping Cough notifications have decreased in the most recent week (week 15) but remain at low levels.
- Scarlet Fever notifications **increased** in the most recent week.
- Norovirus confirmed cases have **decreased** in the most recent reporting week (week 15).

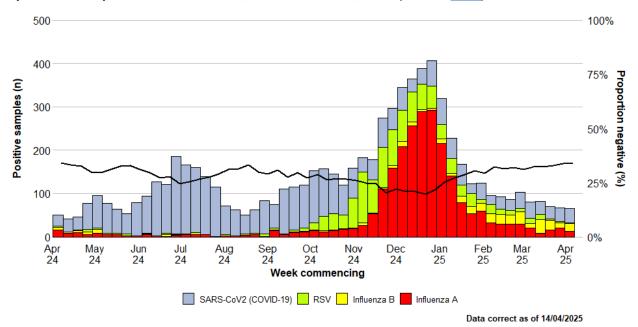
B. Acute Respiratory Infections Situation Update

B1. COVID-19 Situation Update

- At a national level, the weekly number of confirmed cases of community-acquired admissions to hospital decreased and the number of cases who were inpatients decreased in week 15 2025 (to 13 April 2025).
- As at 13 April 2025 (week 15), the number of confirmed cases of community acquired COVID-19 admitted to hospital decreased to 11 (19 in the previous week) and there were 128 in-patient cases of confirmed COVID-19, one of whom was in critical care compared to 149 and one in the previous week.
- The number of confirmed cases of positive decreased at 3.5% in hospital and nonsentinel GP practices in the most recent week (week 15) compared with 4.2% in the previous week. Consultations with sentinel GPs for COVID-19 remained stable in the most recent week.
- Thus far this season, according to European Mortality Monitoring (EuroMoMo)
 methods, 'no substantial excess' has been reported all-cause mortality so far this
 season in Wales.

- In the last four reporting weeks, **Omicron XEC** is the most dominant COVID-19 variant in Wales, accounting for **34.0%** of all sequenced cases.
- The number of Ambulance calls recorded referring to syndromic indicators **increased** from **1,627** in the previous week to **1,705** in the latest reporting week (week 15).
- During week 15, 2 ARI outbreaks were reported to the Public Health Wales Health Protection Team. One was influenza A, and one was RSV. Both incidents were in a Residential Home.

Figure 1: Samples from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, by week of sample collection, Week 15, 2024 to Week 15, 2025. (source: PHW)



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 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.

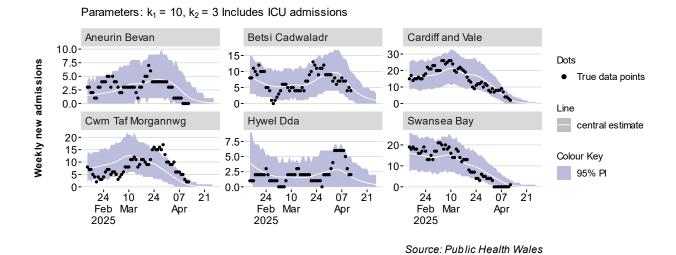
The COVID-19 STPs uses admissions data from PHW until **5 April 2025** to make short term projections for COVID-19 two weeks forward (**19 April 2025**). The black dots show the actual data points while the white line is the best fit from the most recent projection. The color shadings represent the 95% 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 plateau over the next two-week period (Figure 2). Figure 3 shows that COVID-19 admissions are projected to decrease or plateau in health boards in Wales except for Cardiff and Vale and Hywel Dda health boards where an increase in admissions for COVID-19 is projected over the next two weeks.

Parameters: $k_1 = 10$, $k_2 = 3$; ICU admissions included 100-Dots Weekly new admissions True data points 75 50 central estimate Colour Key 25-95% PI 0 10 24 07 Feb Mar Apr 2025

Figure 2: Short Term Projections for COVID-19 hospital admissions in Wales (data until 12 April 2025)

Source: Public Health Wales

Figure 3: Short Term Projections for COVID-19 hospital admissions in Wales Health Boards (data until 12 April 2025)

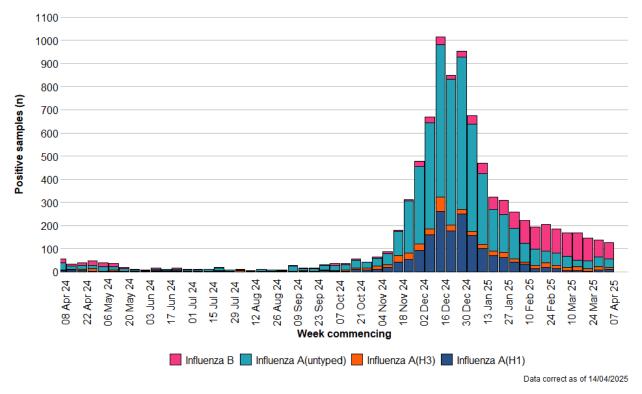


B2. Influenza Situation Update

Influenza activity has returned to low levels, but is still circulating with cases continuing to be confirmed in the community and in hospitals. GP consultations for influenza-like illness and confirmed case numbers have increased in the current week, whilst test positivity has remained stable/decreased. Influenza B was the most frequently detected type last week.

During the week ending 13 April the number of confirmed cases of community acquired influenza admitted to hospital **decreased** to **27** and there were **81** in-patient cases of confirmed influenza, **1** of whom was in critical care (compared to **79** and **4** in the previous week). In week 15 2025, there were nine confirmed cases of influenza A(H3N2), **11** cases of influenza A(H1N1)pdm09, 36 influenza A untyped and 70 influenza B. (Figure 4).

Figure 4: Influenza subtypes based on samples submitted for virological testing by Sentinel GPs and community pharmacies, hospital patients, and non-Sentinel GPs, by week of sample collection, Week 15, 2024 to Week 15, 2025 (source: PHW)



The sentinel GP consultation rate for influenza-like illness (ILI) is at low intensity and the three-week trend is variable. There were **3.1** ILI consultations per 100,000 practice population in the most recent week, a decrease compared to the previous week (**3.8** consultations per 100,000).

In the most recent week, using all available data from general practices, there were 13.8 ARI consultations per 100,000 practice population, a decrease from 16.1 in the previous week. The highest rates were found in people aged under 1 year (674.3) followed by people aged 1 to 4 (399.3 and people aged 35 to 44 (125.8).

100 Very high intensity 90 80 Consultation rate per 100,000 70 High intensity 60 50 40 30 Medium intensity 20 Low intensity 10 15 17 21 40 13 19 23 25 Week 2024-2025 2010-11 — 2021-22 — 2023-24 2017-18 — 2022-23 — 2024-25

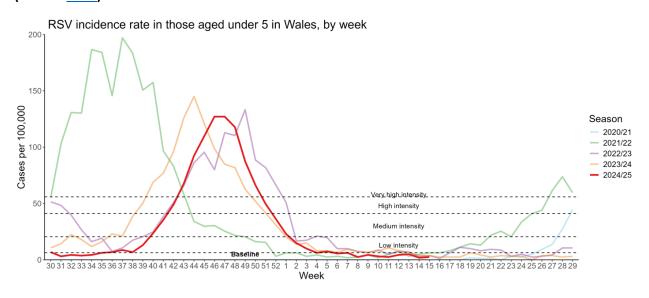
Figure 5: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)

Data correct as of 15/04/2025

B.3. Respiratory Syncytial Virus (RSV) update

RSV has been decreasing in recent weeks and activity is now at baseline levels in children aged up to 5 years old (week 15 2025). Incidence per 100,000 population in children aged up to 5 years **remained stable** at **2.5** in the most recent week (2.5 in the previous week). The number of confirmed cases of community acquired RSV admitted to hospital decreased to four in the most recent week (7 in the previous week). In the most recent week, there were 14 in-patient cases of confirmed RSV, none of whom were in critical care.

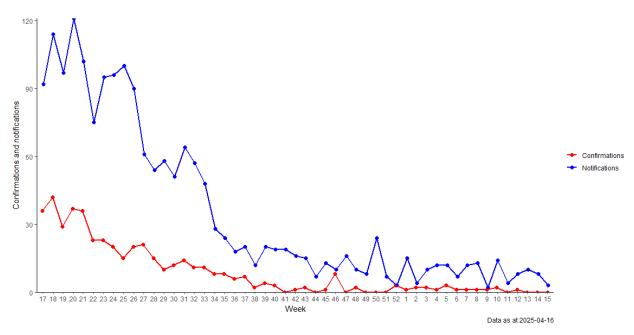
Figure 6: RSV Incidence Rate per 100,000 population under 5 years, weeks 30 2020 to Week 15 2025 (source: PHW)



B4. Whooping Cough (Pertussis)

Figure 7 below shows that whooping cough notifications up to the end of week 15 **decreased**, and remain at low levels. Lab confirmations continue to be at very low levels (Whooping cough is now reported on every two weeks).

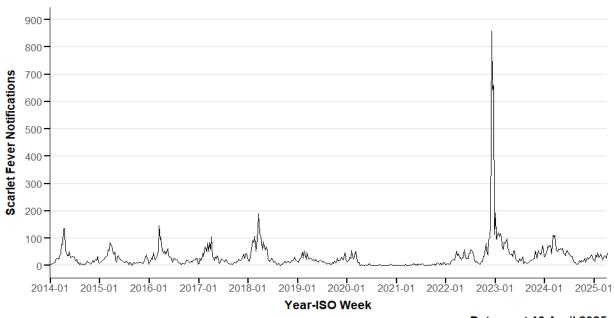
Figure 7: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales. (Source: PHW)



B.5 iGAS and Scarlet Fever

The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have **increased** in the most recent week (week 15) as shown in the figure below (up to 13 April 2025).

Figure 8: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2025, Wales (source: PHW)



Data as at 13 April 2025

C. Science Evidence Advice Winter Modelling

The Science Evidence Advice (SEA) team in Welsh Government published modelled scenarios for COVID-19, RSV and Influenza for Winter 2024-25. This used analysis of historical data and projects forward to estimate hospital demand throughout winter 2024/25, contributing to winter planning for NHS Wales. The charts that follow (Figures 9-11) show estimates of hospital admissions which occurred throughout winter 2024/25 using actual data. (See the technical notes at the end of section *C. Science Evidence Advice Winter Modelling* for details on how the 'adjusted actuals' were estimated).

Note that, the modelling is an estimate of what may happen, not a prediction of what will happen.

COVID-19

COVID-19 actuals are currently tracking alongside scenario 4 which is the Most Likely Scenario (MLS). There has been a downward trend since the new year which has continued through into April.

150scenarios Daily admissions 100 Scenario 3 Scenario 2 Scenario 1 Scenario 4(MLS) 50 Actuals 0-Oct Nov Feb Dec Jan Mar Apr Sep 2024

Figure 9 Daily COVID-19 Winter 2024-5 admissions scenarios, data until 29 March 2025

Source: Swansea University modelling (Scenarios 1, 2 3), actuals underlying the MLS to to 31 March 2024 provided by DHCW, projected MLS scenarios from 1 September 2024 to 31 March 2025 from SEA.

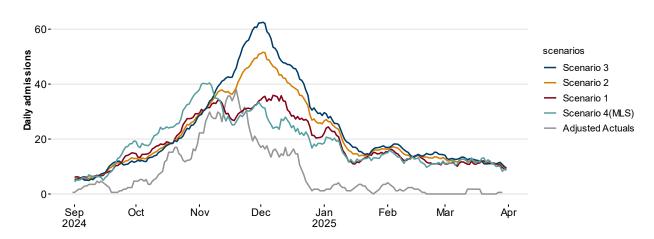
Notes

COVID-19 admissions and occupancy scenarios were created by Swansea University where a new variant emerges gradually every 3 months. The degrees of immune evasion from the variant is given by the scalar value 1, 1.2 and 1.5 and represented as scenarios 1-3. Scenario 4 is the repeat of last year's data from Digital Health and Care Wales. Includes ICD-10 codes U071, U072, U099, U109.

RSV

Adjusted RSV actuals are currently tracking below the MLS and are at baseline levels.

Figure 10: Daily RSV Winter 2024-25 paediatric (ages 0-4) admissions scenarios data until 29 March 2025

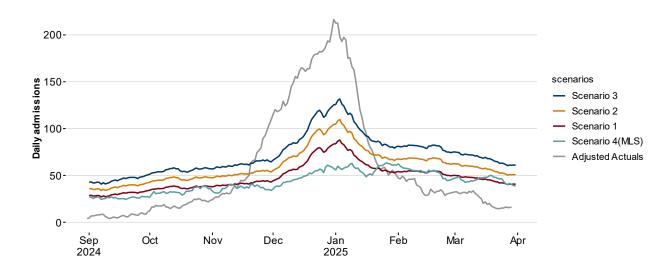


Source: Raw data to 31 March 2024 provided by DHCW, projected scenarios from 1 September 2024 to 31 March 2025 from SEA

Influenza and Pneumonia

Adjusted Influenza and pneumonia actuals have been tracking below the Most Likely Scenario, reflecting the sharp decrease in flu admissions as we have progressed through the flu season.

Figure 11: Daily flu and pneumonia Winter 2024-5 admissions scenarios, data until 29 March 2025



Source: Raw data to 31 March 2024 provided by DHCW, projected scenarios from 1 September 2024 to 31 March 2025 from SEA

Technical Notes

The winter modelling used hospital admissions data from the Patient Episode Data for Wales (PEDW) dataset provided by Digital Health and Care Wales (DHCW). However, due to a lag in clinical coding and receiving PEDW data from DHCW, the ICNET admissions data provided by Public Health Wales (PHW) were used for the actuals and adjusted to reflect the differences in the data sources. The data sources differ for a few reasons: the flu and RSV data from PHW includes lab-confirmed results only and includes inpatients only. The PEDW data from DHCW is based on International Classification of Diseases version 10 (ICD-10) codes and the definitions may go wider than those used by PHW (e.g. our flu modelling using DHCW's data includes codes for both flu and pneumonia). Therefore, we account for these differences by multiplying the PHW data by the average of the differences in daily sums between the two data sources (3.92 for flu, 4.09 for RSV) for hospital admissions between 1 September and 31 December 2023.

Modelling scenario details:

- COVID-19: The COVID-19 admissions and occupancy scenarios were created by Swansea
 University where a new variant emerges gradually every 3 months. The degrees of immune
 evasion from the variant is given by the scalar value 1, 1.2 and 1.5 and represented as
 scenarios 1-3. Scenario 4 is the repeat of last year's data from Digital Health and Care Wales.
 Includes ICD-10 codes U071, U072, U099, U109.
- RSV: Scenario 1 reflects trends in the last two years. Scenario 3 assumes pre-pandemic patterns (from 2017/18, 2018/19 and 2019/20). Scenario 2 combines elements from both Scenario 1 and 3 (2017/18, 2018/19, 2019/20, 2022/23 and 2023/24. Scenario 4 is a repeat of last year's data (2023/24). Data includes diagnosis codes J21 to J22 from the ICD-10.
- Flu and pneumonia: Based on the previous seven years of historical data,¹ the following scenarios were created for flu admissions and occupancy: Scenario 1 represents the average of non-pandemic years (2017/18, 2018/19, 2019/20, 2022/23 and 2023/24). Scenarios 2 and 3 are obtained by multiplying Scenario 1 by scalars 1.25 and 1.5. Finally, scenario 4, which repeats last year's admissions, is considered the most likely scenario (MLS). Data includes diagnosis codes J09 to J18 (flu and pneumonia) from ICD-10. The adjusted actuals for flu admissions are currently tracking below the most likely scenario.

D. Communicable Disease Situation Update (non-respiratory)

D.1 Norovirus

In the current reporting week (week 15 2025) a total of **54** Norovirus confirmed cases were reported in Welsh residents. This is a **decrease (-25.0%)** in reported cases compared to the previous reporting week (week 14 2025) when **72** Norovirus confirmed cases were reported.

In the last 12-week period 20/01/2025 to 13/04/2025 a total of **625** Norovirus confirmed cases were reported in Welsh residents. This is an increase (28.9%) in reported cases compared to the same 12-week period in the previous year 20/01/2024 to 13/04/2024 when **485** Norovirus confirmed cases were reported.

¹ Admissions during the pandemic years were not included in the scenarios due to very low numbers.

In the last 12 weeks 20/01/2025 to 13/04/2025 **369** (59.0%) confirmed Norovirus cases were female and **255** (40.8%) confirmed cases were male. The age groups with the most cases were the 80+ (216 cases) and 70-79 (166 cases) age groups. Sex data were not available for 1 case.

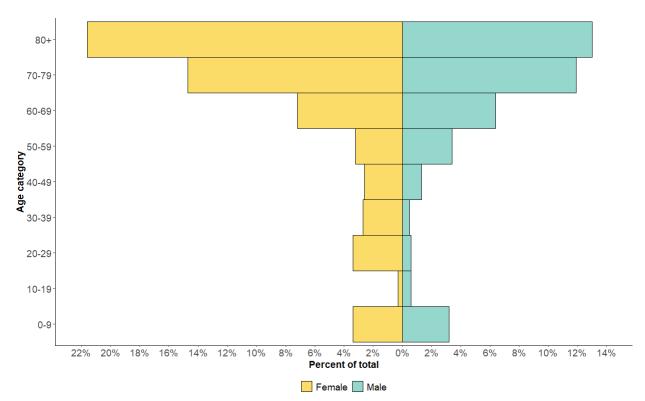


Figure 12: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (20/01/2025 to 13/04/2025)

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 15 2025** (20/01/2025 to 13/04/2025). 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.

E. UK and International Surveillance Update

E.1 Updates on Avian Influenza in the UK (up to 22 April 2025)

19 April 2025

Following successful completion of disease control activities and surveillance, the 10km surveillance zones around the following premises have been revoked:

- premises near Thirsk, Thirsk and Malton, North Yorkshire (AIV 2025/27)
- second premises near Thirsk, Thirsk and Malton, North Yorkshire (AIV 2025/28)
- third premises near Thirsk, Thirsk and Malton, North Yorkshire (AIV 2025/29)

16 April 2025

Following successful completion of disease control activities and surveillance in the zone around a premise near Wem, North Shropshire, Shropshire (AIV 2025/05), the 10km surveillance zone has been revoked.

14 April 2025

Highly pathogenic avian influenza (HPAI) H5N1 was confirmed in commercial poultry at a <u>seventh premises near Thirsk, Thirsk and Malton, Yorkshire (AIV 2025/43)</u>. A 3km protection zone and a 10km surveillance zone have been declared around the premises.

All bird flu cases and disease control zones

The first case of HPAI H5N1 of the current outbreak was confirmed in:

- England on 17 November 2024
- Scotland on 10 January 2025
- Northern Ireland on 12 February 2025

Whilst there have been no cases of HPAI confirmed in Wales during this outbreak, in line with World Organisation for Animal Health (WOAH) rules, the UK is no longer free from highly pathogenic avian influenza.

Find details of all bird flu cases and disease zones in England.

The table below lists the number of confirmed cases of HPAI during the current outbreak.

	HPAI H5N5	HPAI H5N1
England	1	56
Scotland	0	2
Wales	0	0
Northern Ireland	0	4

E2. Avian Flu in Mexico (up to 22 April 2025)

There has been no further update since 8 April 2025 when the Mexican Ministry of Health reported the country's first human death from avian influenza A(H5N1) virus infection.

E3. Ebola disease in Uganda (up to 22 April 2025)

The countdown for declaring the outbreak over was initiated on 15 March 2025, following the discharge of the last patient being treated. As of 22 April 2025, 38 days of the 42-day countdown period had been completed.