Llywodraeth Cymru
Welsh Government

Science Evidence Advice

Weekly Surveillance Report

29 April 2025

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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 (as at week 16 2025, up to 20 April 2025)

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

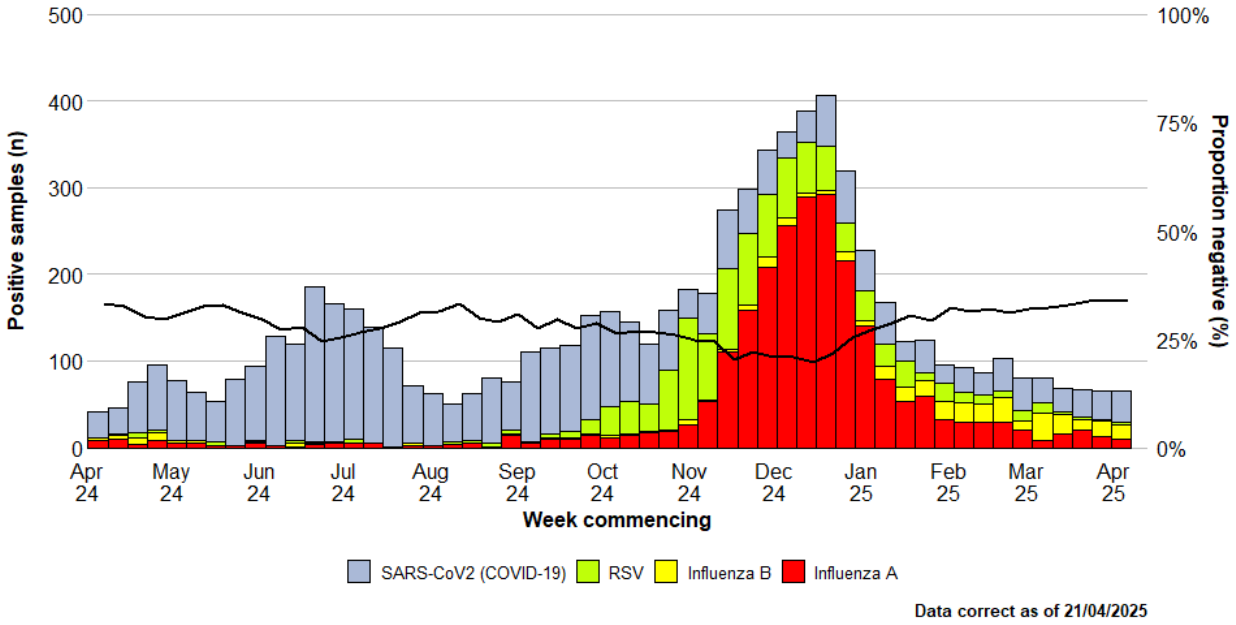
B. Acute Respiratory Infections Situation Update

B1. COVID-19 Situation Update

- At a national level, the weekly number of confirmed cases of community-acquired admissions to hospital **increased** and the number of cases who were inpatients also **increased** in week 16 2025 (to 20 April 2025).
- As at 20 April 2025 (week 16), the number of confirmed cases of community acquired COVID-19 admitted to hospital **increased** to **16** (11 in the previous week) and there were **139** in-patient cases of confirmed COVID-19, **one** of whom was in critical care compared to **128** and **one** in the previous week.
- Confirmed cases of positive increased to **6.0%** in hospital and non-sentinel GP practices in the most recent week (week 16) compared with **3.5%** in the previous week. Consultations with sentinel GPs for COVID-19 decreased in the most recent week.
- Thus far this season, according to European Mortality Monitoring (EuroMoMo) methods, ‘no excess deaths’ were reported in the weekly number of deaths from all causes in Wales.

- In the previous six weeks, **Omicron XEC** is the most frequently detected 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 **1,705** in the previous week to **1,810** in the latest reporting week (week 16).
- During Week 16, **1** ARI outbreaks were reported to the Public Health Wales Health Protection Team. The incident was Influenza Like Illness and was 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 16, 2024 to Week 16, 2025. (source: PHW)

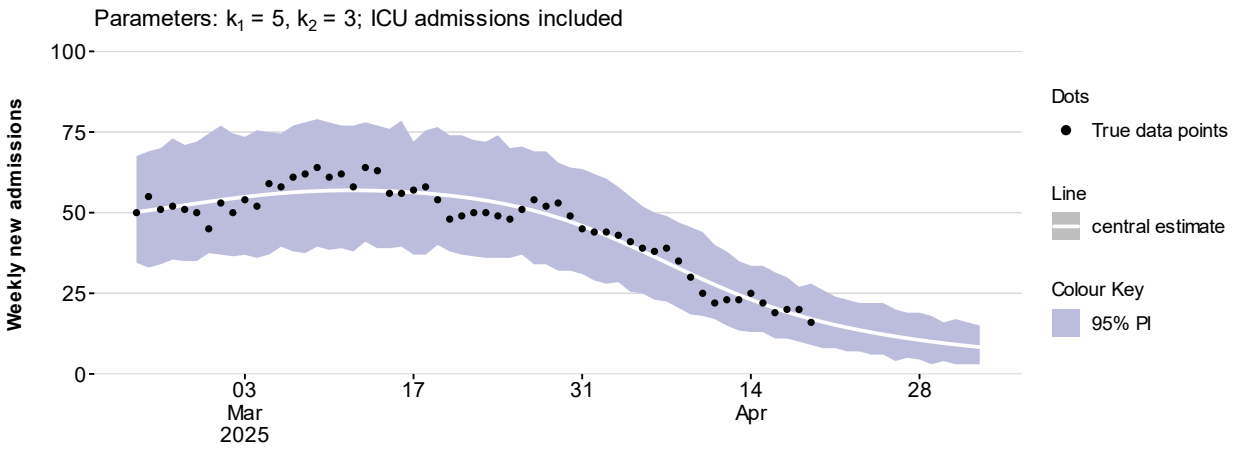


COVID-19 Short Term Projections

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.

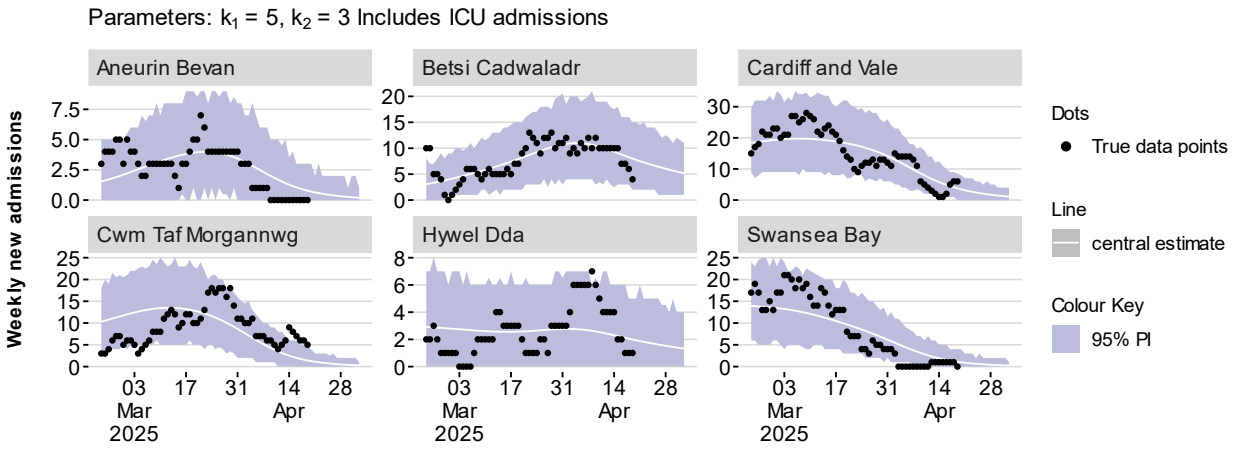
The COVID-19 STPs uses admissions data from PHW until **19 April 2025** to make short term projections for COVID-19 two weeks forward **(3 May 2025)**. The black dots show the actual data points while the white line is the best fit from the most recent projection. The colour shadings represent the 95% 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.

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



Source: Public Health Wales

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



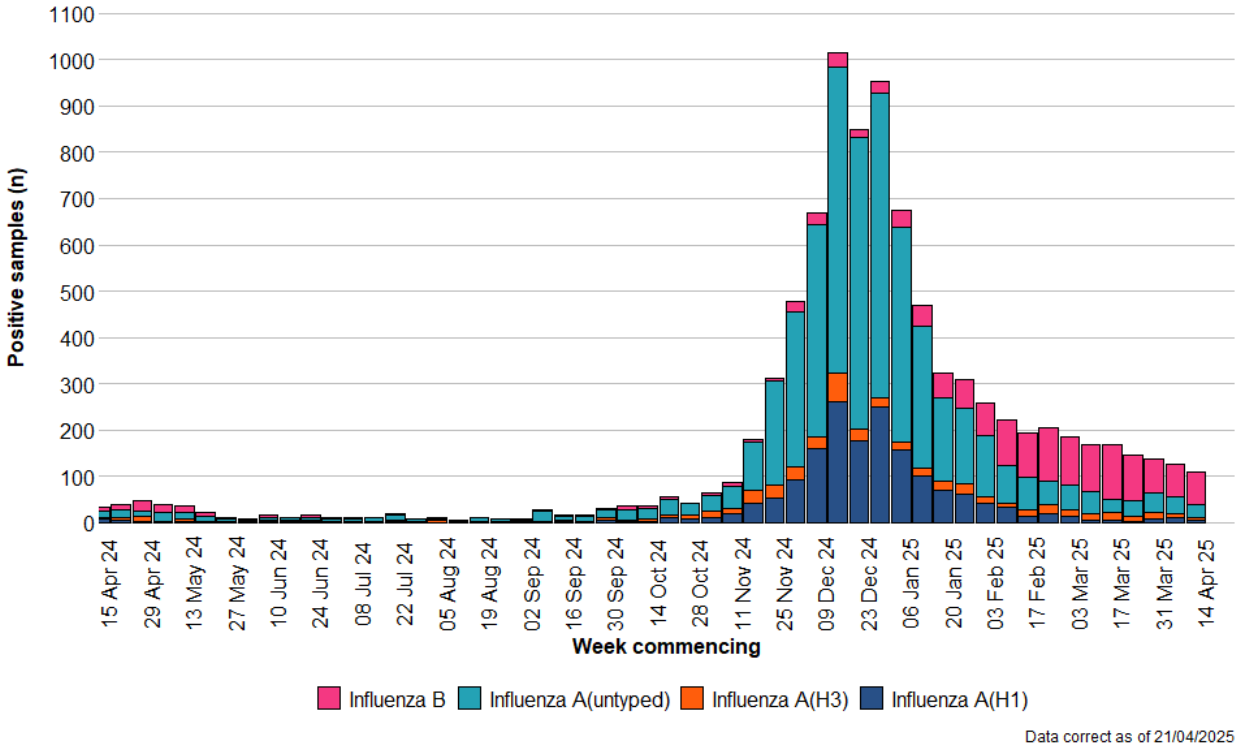
Source: Public Health Wales

B2. Influenza Situation Update

Influenza is currently circulating, and case numbers remain broadly stable. There remains potential for further increases in influenza B activity. GP consultations for influenza-like illness have decreased in the current week. The number of confirmed case numbers admitted to hospital has increased in the current week, whilst test positivity has decreased. Influenza B was the most frequently detected type last week.

During the week ending 20 April the number of confirmed cases of community acquired influenza admitted to hospital **increased** to **29** and there were **91** in-patient cases of confirmed influenza, **2** of whom were in critical care (compared to **81** and **1** in the previous week). In week 16 2025, there were eight confirmed cases of influenza A(H3N2), 4 cases of influenza A(H1N1)pdm09, 26 influenza A untyped and 71 influenza B. (Figure 4).

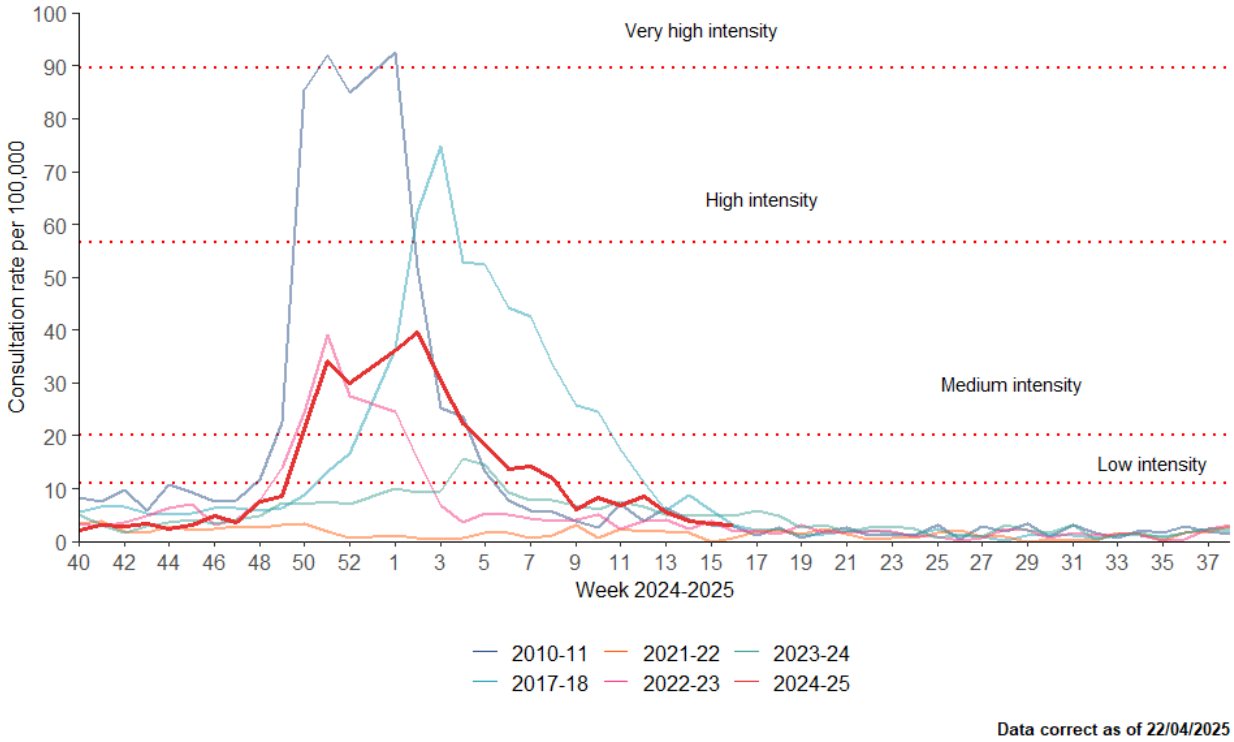
Figure 4: Influenza subtypes based on samples submitted for virological testing by Sentinel GPs and community pharmacies, hospital patients, and non-Sentinel GPs, by week of sample collection, week 16, 2024 to Week 16, 2025. (source: PHW)



The sentinel GP consultation rate for influenza-like illness (ILI) is at baseline and the three-week trend is decreasing. There were **3.2** ILI consultations per 100,000 practice population, in the most recent week, a decrease compared to the previous week (**3.3** consultations per 100,000).

In the most recent week, using all available data from general practices there were **13.1** ARI consultations per 100,000 practice population a decreased from **13.8** in the previous week. The highest rates were found in people aged under 1 year (**786.5**) followed by people aged 1 to 4 (**385.6**) and people aged 75+ (**141**).

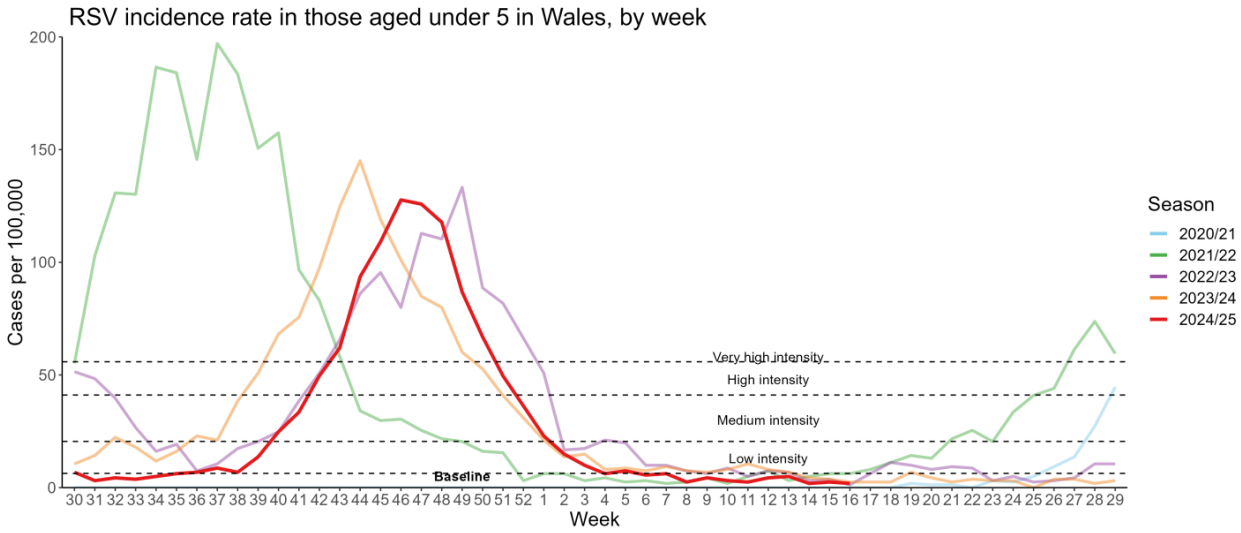
Figure 5: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)



B.3. Respiratory Syncytial Virus (RSV) update

RSV activity is now at baseline levels in children aged up to 5 years old (week 16 2025). Incidence per 100,000 population in children aged up to 5 years **decreased** to **1.9** 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 2 in the most recent week (4 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.

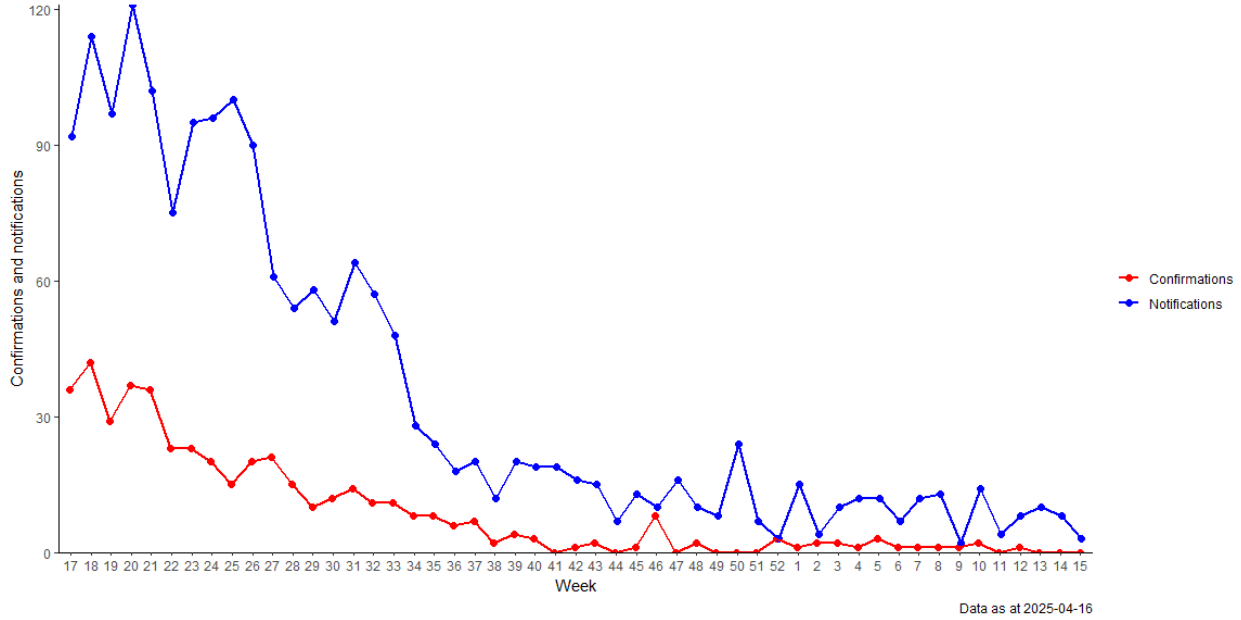
Figure 6: RSV Incidence Rate per 100,000 population under 5 years, Week 30 2020 to Week 16 2025 (source: PHW)



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).

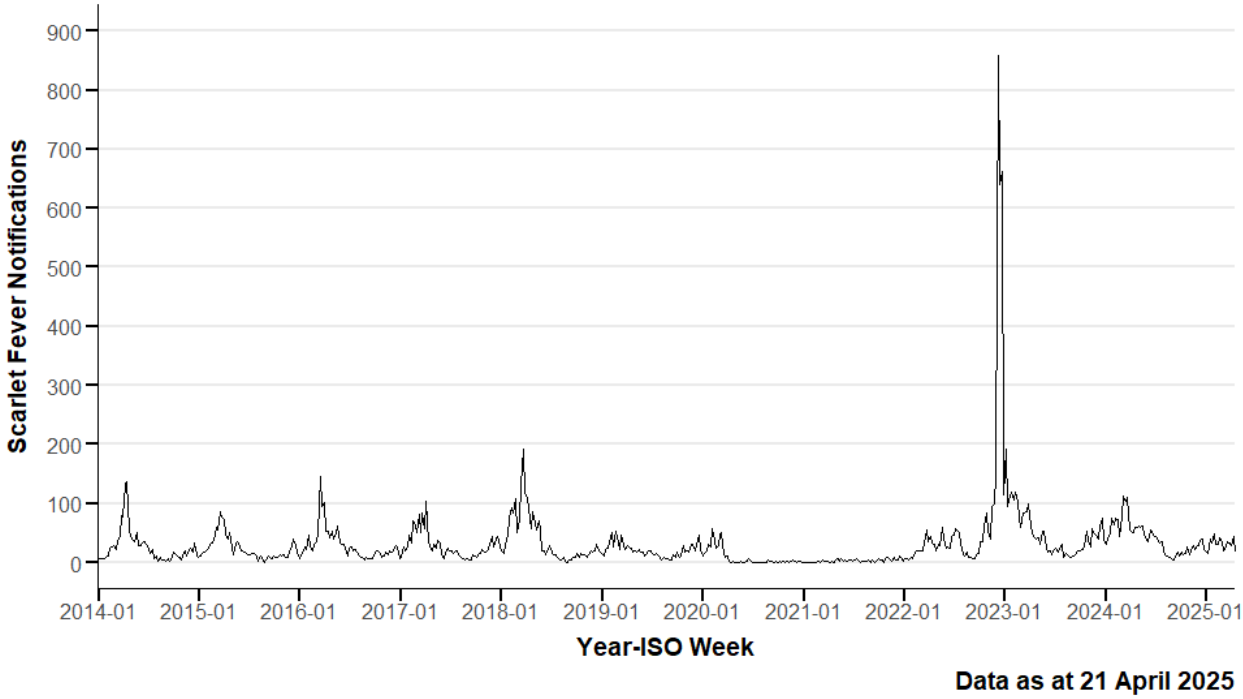
Figure 7: Weekly notifications and confirmations of Pertussis/Whooping Cough in Wales. (Source: PHW)



B.5 iGAS and Scarlet Fever

The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have further **decreased** in the most recent week (week 16) as shown in the figure below (up to 21 April 2025).

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



C. Science Evidence Advice Winter Modelling

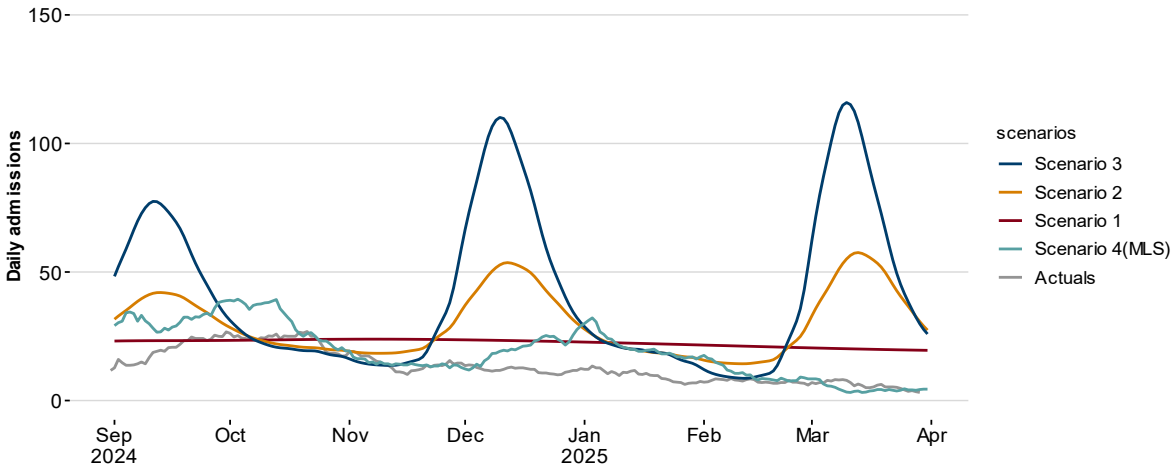
The Science Evidence Advice (SEA) team in Welsh Government published modelled scenarios for COVID-19, RSV and Influenza for Winter 2024-25. This used analysis of historical data and projects forward to estimate hospital demand throughout winter 2024/25, contributing to winter planning for NHS Wales. 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.

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 31 March 2024 provided by DHCW, projected MLS scenarios from 1 September 2024 to 31 March 2025 from SEA.

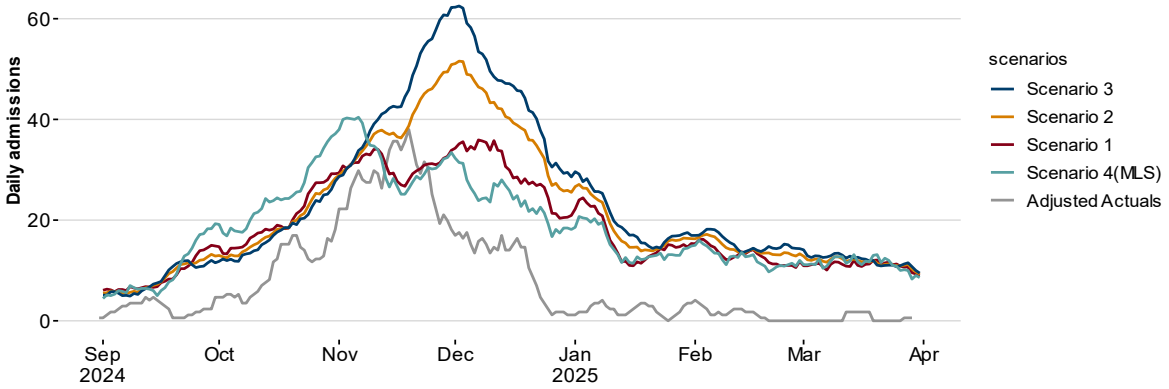
Notes

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

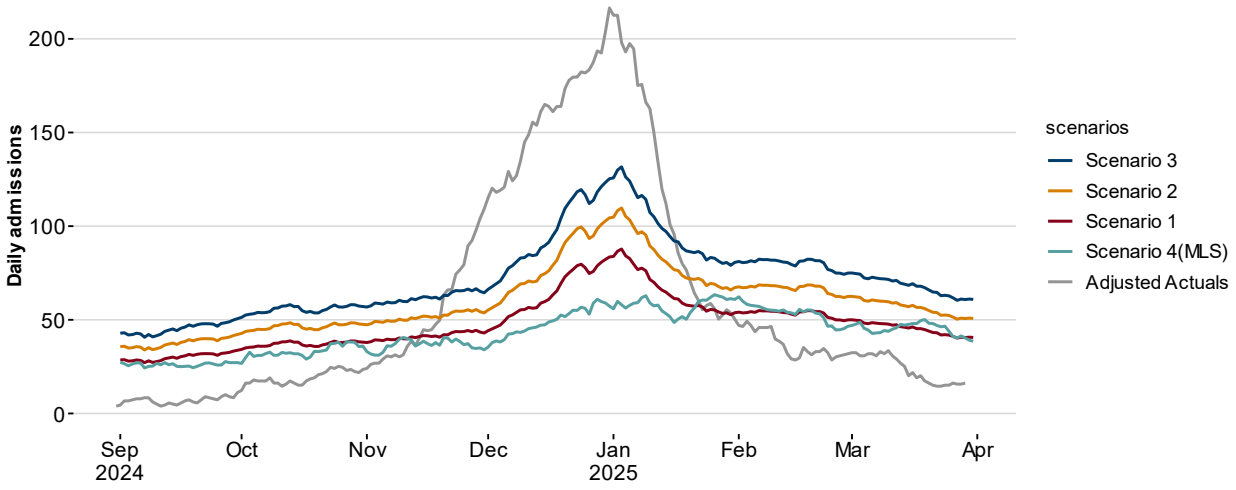


Source: Raw data to 31 March 2024 provided by DHCW, projected scenarios from 1 September 2024 to 31 March 2025 from SEA

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

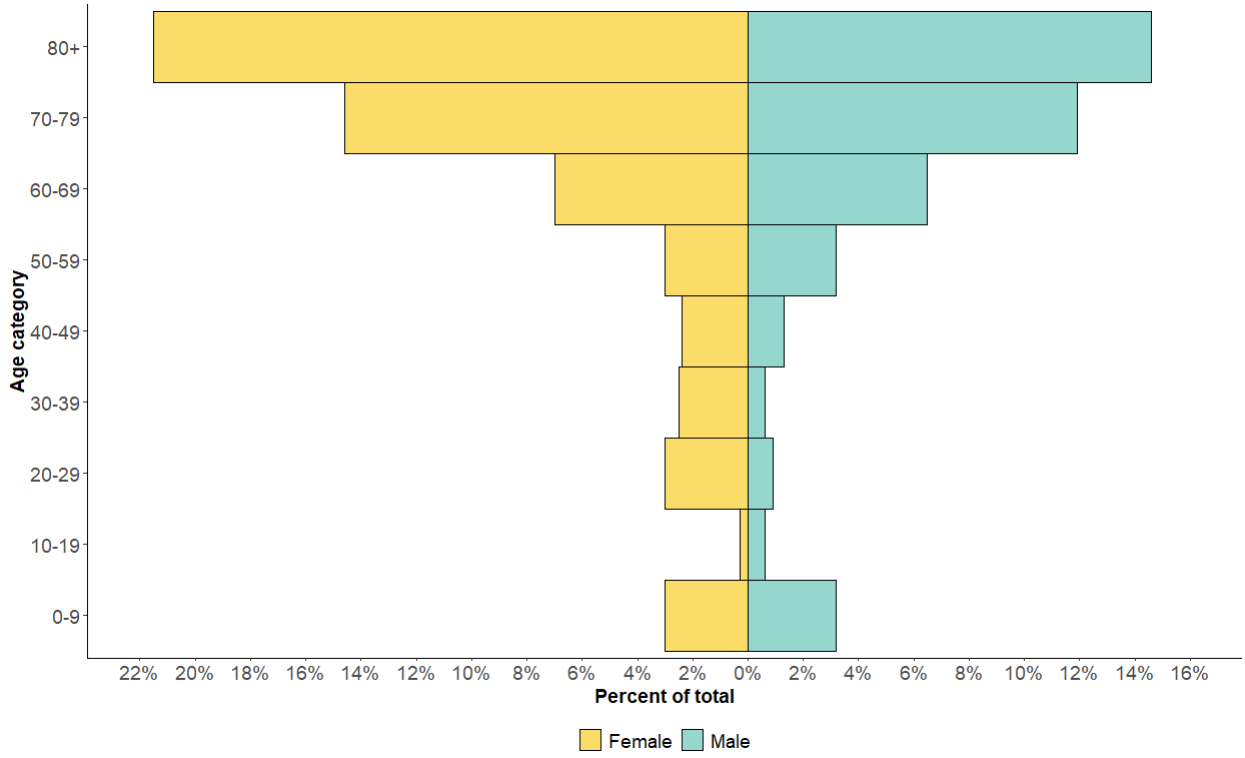
In the current reporting week (week 16 2025) a total of **36** Norovirus confirmed cases were reported in Welsh residents. This is a decrease **(-34.5%)** in reported cases compared to the previous reporting week (week 15 2025) when **55** Norovirus confirmed cases were reported.

In the last 12-week period 27/01/2025 to 20/04/2025 a total of **633** Norovirus confirmed cases were reported in Welsh residents. This is an increase (39.1%) in reported cases compared to the same 12-week period in the previous year 27/01/2024 to 20/04/2024 when **455** Norovirus confirmed cases were reported.

In the last 12 weeks 27/01/2025 to 20/04/2025 **362 (57.2%)** confirmed Norovirus cases were female and **270 (42.7%)** confirmed cases were male. The age groups with the most cases were the 80+ (228 cases) and 70-79 (167 cases) age groups. Sex data were not available for 1 case.

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

Figure 12: Age and sex distribution of confirmed Norovirus cases in the last 12 weeks (27/01/2025 to 20/04/2025)



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 16** 2025 (27/01/2025 to 20/04/2025). 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 28 April 2025)

28 April 2025

Following the successful completion of disease control activities and surveillance within the zone surrounding the following premises:

- fourth premises near Thirsk, Thirsk and Malton, North Yorkshire (AIV 2025/32)
- fifth premises near Thirsk, Thirsk & Malton, North Yorkshire (AIV 2025/38)

The 3km protection zone around each premises has ended and the area that formed it becomes part of the 10km surveillance zone.

Check the interactive map for other restrictions including the requirement to house all birds in North Yorkshire and surrounding counties.

25 April 2025

Following the successful completion of disease control activities and surveillance within the zone surrounding the following premises:

- near Wymondham, Diss, Norfolk (AIV 2025/33)

The 3km protection zone around each premises has ended and the area that formed it becomes part of the 10km surveillance zone.

Check the interactive map for other restrictions including the requirement to house all birds in Norfolk and surrounding counties.

24 April 2025

Following successful completion of disease control activity and surveillance in the zone around a premises near Blaydon, Blaydon and Consett, County Durham (AIV 2025/31) and a second premises near Blaydon, Blaydon and Consett, County Durham (AIV 2025/34 formerly AIV SOS 2025/02) the 3km protection zone has ended and the area that formed it becomes part of the 10km surveillance zone.

Check the interactive map for other restrictions including the requirement to house all birds in County Durham and surrounding counties.

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 28 April 2025)

Additional information has been provided regarding the previously reported fatal case of Avian Flu in Mexico. According to WHO DON, on 17 April 2025, the positive A(H5N1) sample from the child under 10 years old from Durango state was characterised as clade 2.3.4.4b genotype D1.1.

They presented with symptoms on 7 March 2025, with fever, malaise and vomiting. Overall, 91 close contacts have been identified (21 household contacts, 60 healthcare workers, and 10 people from a childcare centre). Nasopharyngeal and pharyngeal swabs were collected from 49 contacts and all tested negative for A(H5N1) virus.

The source of infection remains unknown and is under investigation. Several birds have been confirmed with A(H5N1) virus infection in the state of Durango, including a sick vulture at the zoo and a Canada goose at the Peña del Aguila dam in Durango.

E.2 Avian Influenza in Ho Chi Minh City, Vietnam (up to 28 April 2025)

On 18 April 2025, the Ho Chi Minh City Department of Health reported a human case of avian influenza A (H5N1). The case involved a child under 10 years old from Tay Ninh province.

The infection was confirmed by the Pasteur Institute of Ho Chi Minh City on 18 April 2025 from cerebroespinal fluid (CSF) samples. The child developed fever, headache, and gastrointestinal symptoms on 11 April 2025 and was hospitalised the same day. The clinical status of the child deteriorated, and they were diagnosed with encephalitis on 13 April 2025. In the same day, nasopharyngeal swab and CSF samples were taken and sent to the Laboratory Department of the Tropical Diseases Hospital.

On 17 April, influenza A(H5) virus was identified via PCR in the CSF sample. The PCR of the nasopharyngeal swab samples was negative for influenza virus. On 18 April 2025, the Pasteur Institute of Ho Chi Minh City confirmed the presence of influenza A(H5N1) in the CSF sample and confirmed the negative result in the respiratory specimens.

Detections of avian influenza A(H5N1) virus in CSF and not in respiratory specimens are rare; cases of encephalitis caused by influenza A(H5N1) have been reported previously from Vietnam.

E3. Ebola disease in Uganda (up to 28 April 2025)

There has been no further update regarding the outbreak of Ebola disease in Uganda.