

Science Evidence Advice

Weekly Surveillance Report

25 March 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

Top Line Summary

= Decreasing = Increasing = Stable

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Overall, COVID-19 infections have decreased in the most recent week. While not consistent across all indicators, many of the indicators remain relatively stable.	
COVID-19 Hospital admissions decreased in the most recent week.	
During week 11 there were 233 confirmed cases of influenza in Wales which is an increase from 226 confirmed cases in the previous week but the overall trend is stable	
RSV activity in children under 5 years has increased in week 11 but remains stable at low intensity levels.	
There has been an increase in Scarlet Fever notifications in the most recent week.	
There was a increase in Norovirus cases in the most recent reporting week (week 10)	

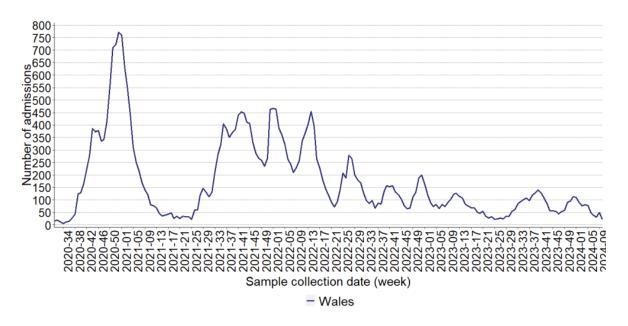
1. COVID-19 Situation Update

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 and the number of cases who are inpatients has decreased in week 11, following a gradual declining trend in recent weeks. As at 17 March 2024, 124 people currently in hospital have had a positive COVID test, including 2 currently in ICU compared to 132 and 2 in the previous week.
- The all-Wales incidence as estimated using adjusted PCR and LFD episodes remains at low levels and relatively stable. On the 1st of February 2024, the UK portal used to order LFT tests and report these results was decommissioned. PHW testing surveillance related to LFTs will be under review and subject to change. Due to low numbers of lateral flow tests, reporting on rolling seven day positivity has been discontinued as of the 21st of February 2024.

- The number of deaths from any cause has 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 **93.4%** of all sequenced cases.
- There were 7 new respiratory incidents recorded in the health protection case and incident management system (Tarian) in week 11 2024, this has remained stable since the previous week. Of the respiratory incidents, 6 were found in residential homes and 1 in a school/nursery.
- The proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms has decreased slightly in week 11 compared to previous weeks. GP consultations for any Acute Respiratory Infection (ARI) have slightly increased in the most recent week and consultations for suspected COVID have remained stable at very low levels.
- The overall number of ambulance calls related to COVID-19 has increased and the proportion of incidents remains relatively unchanged in week 11.

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)



Wastewater Signal

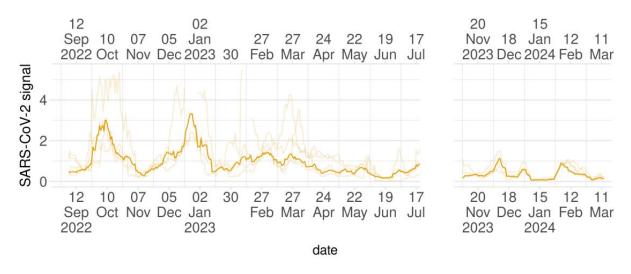
The latest Wastewater monitoring report from Welsh Government (WG) (in collaboration with Bangor and Cardiff Universities) with data up to 13 March suggests that the wastewater signal for COVID-19 remains at low levels in the most recent week (Figure 2).

Note. Level of SARS-CoV-2 given as a 10 day rolling mean at the national (bold line) and healthboard (faint lines) level. An upper limit has been placed on the y axis, which obscures a high healthboard value but, allows better visualisation of the national trend.

Figure 2: Wastewater signal

SARS-CoV-2

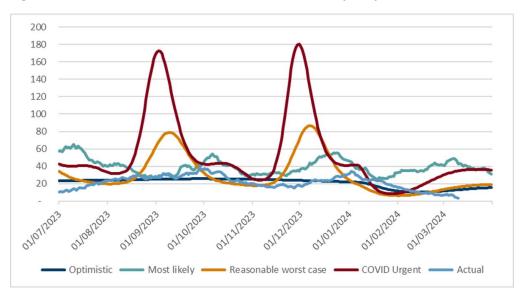
National Summary



SEA Winter Scenarios

The Science Evidence Advice (SEA) division (WG) <u>Winter COVID-19 scenarios</u> have been plotted against the actual COVID-19 hospital admissions data from PHW. Currently the actual data is tracking well below the 'most likely' scenario (which is the COVID-19 series from last Winter) and is now also below the 'reasonable worst case' and 'optimistic' scenarios developed for the Winter season.

Figure 3: SEA COVID-19 scenarios vs. PHW actuals (daily hospital admissions)



Swansea University Mid Term Projections

The latest available Swansea University MTPs using data up to 23 February project an increase in COVID-19 non-ICU hospital admissions through March before plateauing at relatively low levels. ICU admissions remain at low levels.

Figure 4: Daily COVID-19 hospital admissions, projected to May 2024

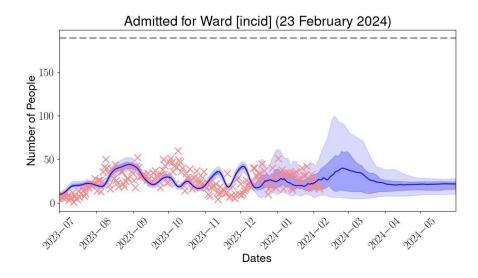
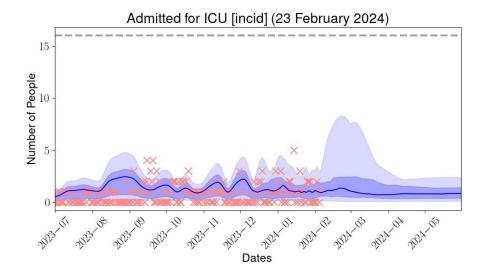


Figure 5: Daily COVID-19 ICU admissions, projected to May 2024

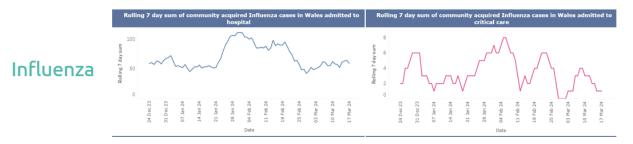


Notes: In the charts above, red crosses represent actual COVID-19 cases data. The blue line represents the central modelling estimate. The blue ribbon represents the confidence intervals, with the darker blue ribbon indicating the 25th to 75th percentiles, and the 95% confidence limits in the lighter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

2. Influenza Situation Update

Current levels of influenza are low and the overall current trend is decreasing. During week 11 (ending 17/03/2024) there were **233** confirmed cases of influenza in Wales. Of these there were **33** for influenza A(H1N1), **126** for influenza A (not subtyped), **24** for influenza A(H3) and **50** for influenza B.

Figure 6: 7 day rolling sum of influenza case admissions to hospital in Wales (source: PHW)



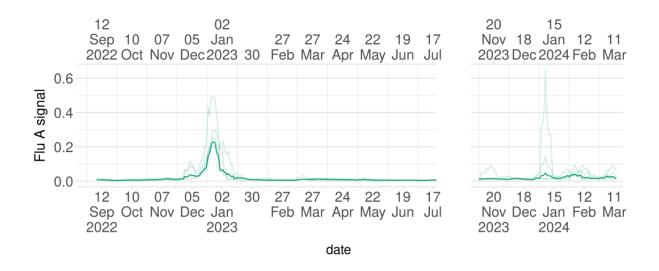
Wastewater Signal

The latest wastewater monitoring report using data up to the 13 March shows a stable picture at low levels for Influenza A signal in the most recent period.

Figure 7: Influenza A Wastewater signal

Influenza A (flu-A) virus

National Summary



SEA Winter modelling scenarios

SEA developed three alternative influenza season <u>scenarios</u> based on previous flu seasons and varying in severity. Tracking these against actual admissions data from PHW shows that this influenza season is later than the scenarios envisaged. There is a continued decrease in the most recent week possibly suggesting that the flu season has peaked at quite low levels this Winter in comparison to the scenarios produced.

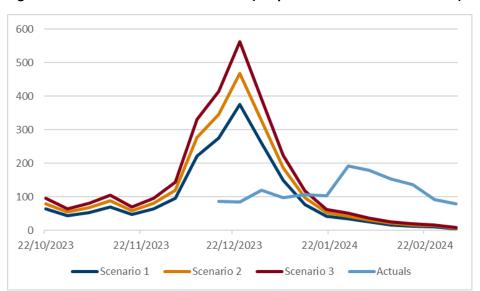
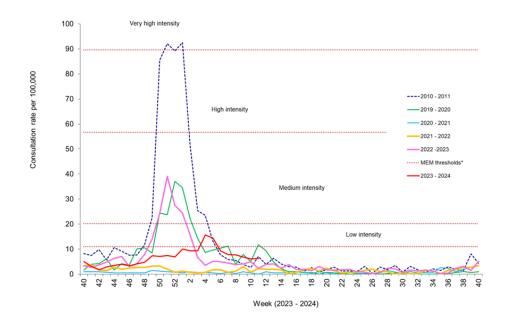


Figure 8: Influenza scenarios vs. Actuals (hospital admissions – PEDW data)

There is evidence of a continued decrease in syndromic surveillance of influenza like illness (ILI) in the most recent period and this is at the low intensity level. The figure below shows a decrease in week 10 (the bright red line is the 2023-2024 influenza season).

Figure 9: Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (source: PHW)



3. Other Infectious Diseases

3.1 iGAS and Scarlet Fever

The number of iGAS notifications are currently low, remaining at seasonally expected levels. Scarlet Fever notifications have stabilised in the most recent week as shown in the figures below (up to 17 March) with Figure 11 showing the rise for the current season (the bright red line on the chart). These notifications are over 100 a week compared to the peak of over 800 notifications in January 2023.

Figure 10: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (source: PHW)

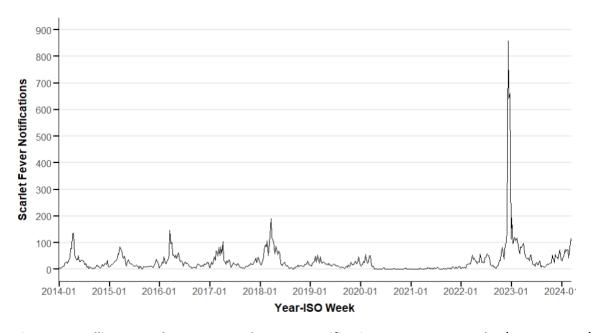
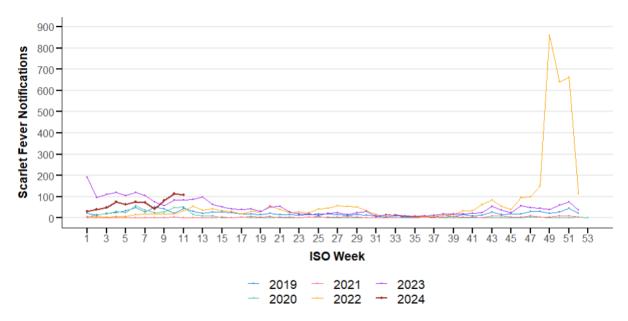


Figure 11: Rolling 3 Week Average Scarlet Fever Notifications, 2014-2024, Wales (Source: PHW)

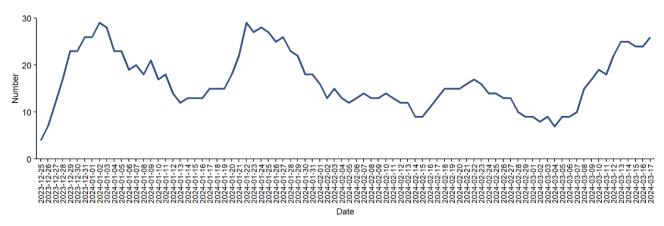


3.2 Norovirus

PHW report that:

- During week 11, 68 new cases of norovirus were confirmed in Wales. 47 (69%) were hospital acquired. This is an increase of 21 cases compared to week 10. The proportion of hospital acquired cases has increased from 51%
- At the end (23:59 on Sunday) of week 11, there were 54 patients in hospital with confirmed norovirus. This is an increase of 25 inpatient cases compared to the end of week 10.
- The number of wards with at least one case has increased from 19 to 26 wards across 10 hospitals in 6 health boards.

Figure 12: Daily number of hospital inpatient norovirus cases in Wales, 12 weeks up to end of week 10, 2024 (source: PHW)



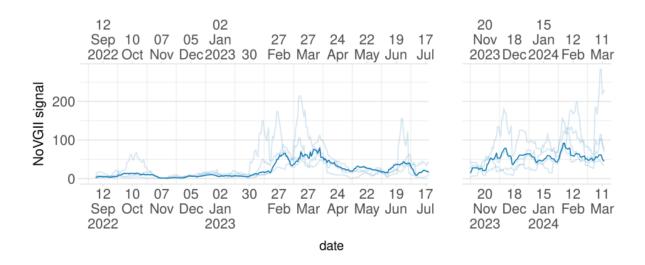
Wastewater

The latest wastewater report with data up to the 6 March indicates that Norovirus is still at relatively high levels nationally but continues to decrease in the most recent period (with a slight tick downwards in the last few days).

Figure 13: Wastewater signal for Norovirus genogroup II (NoVGII)

Norovirus genogroup II (NoVGII)

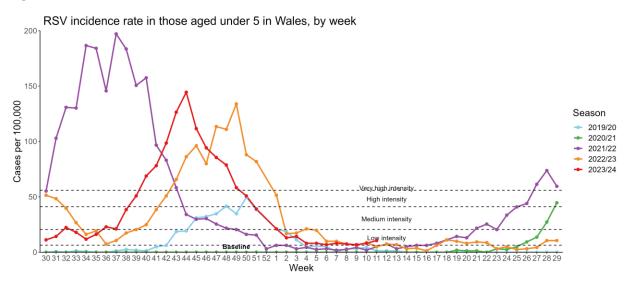
National Summary



3.3 Respiratory Syncytial Virus (RSV) update

RSV activity in children under 5 years has seen a slight uptick in the most recent week but remains at low intensity levels (compared to historic levels before 2021).

Figure 14: RSV Incidence Rate (source: PHW)



4. Health Board Analysis

4.1 Short Term Projections for Influenza and RSV

SEA have produced short term projections (STPs) for Influenza and RSV which can be produced at the Local Health Board unit.

The Influenza STPs uses admissions data from PHW until 17 March 2024 to make short term projections for Flu 2 weeks forward (31 March 2024). The brown 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 blue showing the most recent projection and the dark blue showing the oldest. The STPs for Health Boards how that Influenza is on a downward trend or plateauing in all Health Boards apart from Betsi Cadwaldr.

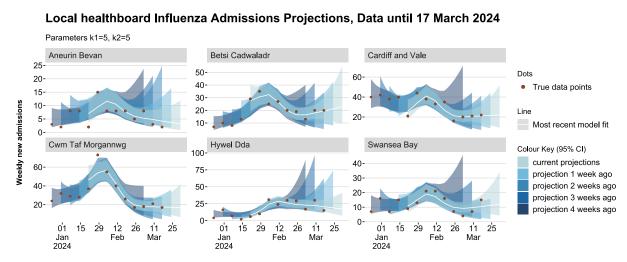


Figure 15: SEA short term projections for Influenza

The RSV STPs use admissions data from PHW until 17 March 2024 to make short term projections for RSV 2 weeks forward (31 March 2024). The brown 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 green showing the most recent projection and the dark green showing the oldest. The RSV STPs show the uptick seen in RSV that we saw at the national level in week 11 and this is the case across the Health Boards.

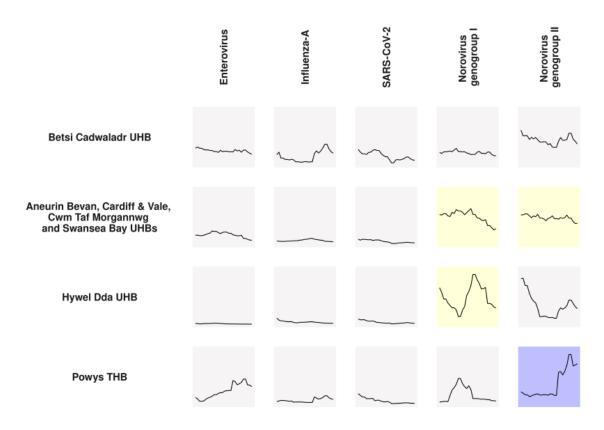
Local healthboard RSV Admissions Projections, Data until 17 March 2024 Parameters k1=5, k2=4, k3=5 Aneurin Bevan Betsi Cadwaladr Cardiff and Vale 30-30-Dots 10-True data points 20 Weekly new admissions 10-10-Line Most recent model fit 0-0-0-Hywel Dda Swansea Bay Cwm Taf Morgannwg Colour Key (95% CI) current projections 15-20 30 projection 1 week ago 15-10projection 2 weeks ago 20-10 projection 3 weeks ago 10-5 projection 4 weeks ago 0-1[']2 Feb 0-12 Feb 29 29 12 Feb 01 29 26 0'1 26 0 1 26

Figure 16: SEA short term projections for RSV

4.2 Wastewater signal HB summary

Wastewater monitoring has produced a graphic that allows a range of infections to be viewed in summary across the health boards, as follows:

Figure 17: Wastewater monitoring Health Board summary



Plot backgrounds are shaded according to the average actual signal (%) during the most recent week. Lines represent the smoothed signal during the most recent 4 week period.

SEA Surveillance Report

All values are a percentage of the highest observed value per virus per area since wastewater monitoring commenced. The background shades are divided into 3 categories, light grey: average actual signal < 20%, mid yellow: $20\% \le average actual signal < 40\%$, and dark blue: $40\% \le average actual signal$. The smoothed signal is a 10 day rolling average.

Yellow and blue shading represent higher signal levels which indicates that Norovirus is only at elevated levels in Powys THB.