Science Evidence Advice (SEA)

Summary of Advice

13 January 2023
Top Line Summary

PHW report decreases in cases admitted to hospital with COVID19, Influenza and RSV. However, both Influenza and RSV in children remain in high circulation.

Wastewater surveillance and lateral flow testing data suggest that COVID-19 levels in Wales are decreasing. ONS COVID-19 infection survey positivity has decreased.

Numbers of invasive Group A streptococcal (Strep A) infections have decreased but remain high in comparison to the previous years.

Despite the improvements visible in the reported surveillance data, there is COVID-19 activity in hospitals.

The reported decreases should be interpreted with caution due to disruptions over the Christmas holiday period. It may take some more time before the impact of increased exposure of vulnerable groups to respiratory viruses, due to increased inter-generational mixing during the holiday season, becomes visible.
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1. Wales COVID-19 Situation Update

- PHW report that COVID-19 infections have decreased slightly compared to the previous weeks in Wales.

- Admissions of confirmed cases to critical care have remained stable compared to the previous week. Wastewater surveillance and ONS COVID-19 infection survey positivity suggest that COVID-19 levels in Wales are decreasing. Confirmed PCR cases continue to remain stable, and the adjusted case episode rates (PCR +LFD episodes) have stabilised.

- Deaths related to COVID-19 are decreasing compared to previous weeks.

- CH.1.1 and XBB.1.5 are currently the variants most likely to predominate in the UK following BQ.1, unless further novel variants arise. It is plausible that XBB.1.5 will cause an increase in incidence after the current wave, however it is currently too early to confirm this trajectory.

- Despite the improvements visible in the reported surveillance data, there is COVID-19 activity in hospitals.

- The reported decreases should be interpreted with caution due to disruptions over the Christmas holiday period. It may take some more time before the impact of increased exposure of vulnerable groups to respiratory viruses, due to increased inter-generational mixing during the holiday season, becomes visible.

1.1. Infections

- According to the ONS Coronavirus Infection survey, for the week 28 December 2022 to 3 January 2023, it is estimated that 5.16% of the community population had COVID-19 (95% credible interval: 4.49% to 5.93%).

- This equates to approximately 1 person in every 19 (95% credible interval: 1 in 20 to 1 in 17), or 157,000 people during this time (95% credible interval: 136,500 to 180,100).

- The trend in the percentage of people testing positive in Wales decreased over the most recent week.

- Caution should be taken in over-interpreting any small movements in the latest trend.

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1 Coronavirus (COVID-19) Infection Survey, UK Statistical bulletins - Office for National Statistics
Figure 1 - Official estimates of the percentage of the population in Wales testing positive for COVID-19 on nose and throat swabs since 23 November 2022

Source: Coronavirus (COVID-19) Infection Survey, ONS, 11/01/23
1.2. Wastewater surveillance

Wastewater surveillance\(^2\) suggests the overall SARS-CoV-2 viral load has decreased across the country. However, the signal remained level in South East Valleys.

*Figure 2 - National (blue lines) and Regions (grey lines) wastewater signal for COVID-19 in Wales.*

1.3. PHW Cases (PCR & LFD Testing)

- As of 11 January 2023, PHW reports\(^3\) PHW report that COVID-19 infections have decreased slightly compared to the previous weeks in Wales in most indicators.
- The all-Wales incidence as estimated using testing data available to PHW suggests that confirmed PCR cases continue to remain stable.
- The adjusted case episode rates (PCR +LFD episodes) have stabilised.
- Data from the Office for National Statistics Coronavirus (COVID-19) Infection Study and data from hospital testing in Wales are likely to provide a more robust measure of trend, following changes in PCR and LFD testing policy and behaviours.
- LFT positivity has decreased to 25% in week 1
- The incidence rate is highest in the over 80 age groups
- PHW reports that these data sources show differing trends with those tested in hospital showing a reduction in the most recent week, whereas the data from the Office of National Statistics Coronavirus (COVID-19) Infection Study shows an increase in the most recent week.

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\(^2\) Wastewater monitoring reports: coronavirus | GOV.WALES
\(^3\) https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/PHWVirologyDashboard-Reportsandnotes_16535581718100/Notesondataintepretationandreports
1.4. Deaths

- ONS published statistics on 10 January on provisional weekly deaths, including deaths involving COVID-19, for the week ending 30 December 2022.

- 25 deaths involving COVID-19 were registered in the latest week. This was 4.0% of all deaths, and seven less than the previous week.

  PHW reports that deaths in confirmed COVID-19 cases in hospital, reported by clinicians through PHW mortality rapid surveillance, remain at lower levels compared to previous waves.

- 630 deaths from all causes were registered in the latest week. This was 331 fewer than the previous week and is 107 more than the five-year average for 2016-19 and 2021. Caution is advised in interpreting these numbers as they were affected by the Christmas and Boxing Day bank holidays falling in the latest week.

1.5. NHS

- As of 10 January 2023, hospital admissions of suspected and confirmed COVID-19 positive patients are at approximately 14 admissions per day.

- Numbers increased through the Christmas period, reaching a peak similar to the October peak, of about 20 admissions per day on Christmas Day and Boxing Day. Admissions then started to decrease to 1 January where there was a small increase to 4 January, after which admissions have been decreasing again.

Figure 4 - Hospital admissions of suspected and confirmed COVID-19 positive patients

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4 Deaths registered weekly in England and Wales, provisional - Office for National Statistics (ons.gov.uk)
As of 10 January 2023, the 7-day average of hospital bed occupancy of confirmed COVID-19 patients was 509 beds. Numbers have been reducing since 26 December 2022, when there was a 7-day average of 644 beds occupied.

Figure 5 - Average of hospital bed occupancy of confirmed COVID-19 patients

The proportion of patients in hospital with COVID-19 who are being actively treated for COVID-19, as opposed to testing positive for COVID-19 but being primarily treated for other reasons, has been increasing since the beginning of December. During the Christmas period, between the 23 December and 10 January, the proportion has been stable at between 8% and 11%.

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5 statswales.gov.wales
Figure 6 - Percentage of COVID-19 patients in acute hospitals actively treated for COVID-19 in Wales, StatsWales (%), 7 day rolling average

As of 3 January 2023, NHS staff absence due to self-isolation has decreased since the period ending 12 December 2022, from 0.2% to 0.1%. Absence due to COVID-19 sickness has increased to 0.9% from 0.8.

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6 [statswales.gov.wales](https://statswales.gov.wales)
1.6. Vaccines

- The Autumn COVID-19 vaccine booster campaign is under way, as outlined in these tables:

**Cumulative number of COVID-19 Autumn 22/23 vaccine doses given, by week.**

Uptake, based on Wales residents, uses indicative denominator 1,610,874

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Number of doses</th>
<th>Uptake</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022-09-04</td>
<td>23,383</td>
<td>1.5%</td>
</tr>
<tr>
<td>2022-09-11</td>
<td>91,500</td>
<td>5.7%</td>
</tr>
<tr>
<td>2022-09-18</td>
<td>155,964</td>
<td>9.7%</td>
</tr>
<tr>
<td>2022-09-25</td>
<td>232,607</td>
<td>14.4%</td>
</tr>
<tr>
<td>2022-10-02</td>
<td>328,196</td>
<td>20.4%</td>
</tr>
<tr>
<td>2022-10-09</td>
<td>428,209</td>
<td>26.6%</td>
</tr>
<tr>
<td>2022-10-16</td>
<td>544,011</td>
<td>33.8%</td>
</tr>
<tr>
<td>2022-10-23</td>
<td>645,021</td>
<td>40.0%</td>
</tr>
<tr>
<td>2022-10-30</td>
<td>735,412</td>
<td>45.7%</td>
</tr>
<tr>
<td>2022-11-06</td>
<td>807,953</td>
<td>50.2%</td>
</tr>
<tr>
<td>2022-11-13</td>
<td>881,778</td>
<td>54.7%</td>
</tr>
<tr>
<td>2022-11-20</td>
<td>942,167</td>
<td>58.5%</td>
</tr>
<tr>
<td>2022-11-27</td>
<td>992,162</td>
<td>61.6%</td>
</tr>
<tr>
<td>2022-12-04</td>
<td>1,032,004</td>
<td>64.1%</td>
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<tr>
<td>2022-12-11</td>
<td>1,061,411</td>
<td>65.9%</td>
</tr>
<tr>
<td>2022-12-18</td>
<td>1,081,611</td>
<td>67.1%</td>
</tr>
<tr>
<td>2022-12-25</td>
<td>1,089,857</td>
<td>67.7%</td>
</tr>
</tbody>
</table>

Source: Public Health Wales
Number of COVID-19 Autumn 22/23 booster vaccines given by age and risk group

<table>
<thead>
<tr>
<th>Risk group</th>
<th>Denominator *(n)</th>
<th>Immunised (n) - 22/23 Booster</th>
<th>Uptake(%) - 22/23 Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severely Immunosuppressed</td>
<td>50,454</td>
<td>37,329</td>
<td>74</td>
</tr>
<tr>
<td>Residents in a care home for older adults*</td>
<td>14,134</td>
<td>12,432</td>
<td>88</td>
</tr>
<tr>
<td>Staff working in care homes for older adults**</td>
<td>37,620</td>
<td>15,173</td>
<td>40.3</td>
</tr>
<tr>
<td>Health care staff**</td>
<td>141,558</td>
<td>78,531</td>
<td>55.5</td>
</tr>
<tr>
<td>Social care staff**</td>
<td></td>
<td>22,960</td>
<td></td>
</tr>
<tr>
<td>All adults aged 65 years and older</td>
<td>707,944</td>
<td>567,612</td>
<td>80.2</td>
</tr>
<tr>
<td>All adults aged 50_to_64 years</td>
<td>683,749</td>
<td>388,133</td>
<td>56.8</td>
</tr>
<tr>
<td>Aged 5 to 49 years in a clinical risk group</td>
<td>219,181</td>
<td>69,719</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Source: Public Health Wales

An individual will be counted more than once if they are in more than one risk group. Denominator data is taken from WIS and based on Wales residents, with the exception of care home workers, healthcare workers and social care workers where denominators are based on those working in Wales. From 2 February 2022, all age groups are based on age as at 31 March 2023. Quality of recording of staff priority groups is variable and incomplete, these figures are provided provisionally and should be interpreted with caution. Care home residents have been identified by matching address as recorded in the Welsh Demographic Service (WDS) to a Care Inspectorate Wales list of registered Care Homes.
1.7. Care homes

- As of 4 January 2023, the number of adult care homes in Wales that have notified CIW of one or more confirmed cases of COVID-19 in staff or residents in the last 7 days has decreased slightly since the previous week, to 51 cases, from 54 cases. This figure for the last 20 days has increased to 161, from 143 in the period ending 28 December 2022. In Wales there are 1,018 adult care homes in total.

_Figure 7 - Number of adult care homes which have notified CIW of one or more confirmed cases of COVID-19 in staff or residents_

- As of 4 January 2023, the number of notifications to CIW of deaths of adult care home residents involving COVID-19 (both confirmed and suspected) in the last 7 days has increased to 7, compared to 2 in the previous week.

- In total, CIW has been notified of 2,271 care home resident deaths with suspected or confirmed COVID-19 between 1 March 2020 and 4 January 2023. This makes up 12% of all adult care home resident reported deaths (19,357) during this period.

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7 statswales.gov.wales
8 statswales.gov.wales
1.8. Schools

- As of 11 January 2023, the average attendance for this academic year to date is 88.9%.

- The latest week is 19 to 23 December 2022, the week before is the 12 to 16 December 2022.

- An average of 77.0% of half-day school sessions were recorded as present for pupils aged 5 to 15 over the latest week, down from 83.0% the week before. Data for the latest week is provisional.

- An average of 15.1% of half-day school sessions were recorded as authorised absence for pupils aged 5 to 15 over the latest week, up from 12.8% the week before.

- An average of 7.9% of half-day school sessions were recorded as unauthorised absence for pupils aged 5 to 15 over the latest week, up from 4.3% the week before.

- There has been no difference in the attendance rate by gender for the academic year to date, 88.9% for both boys and girls.

- The attendance rate by year group for the academic year to date has been highest for pupils in Years 3 and 4 (91.1%) and lowest for pupils in Year 11 (84.5%).

- The attendance rate for the academic year to date has been higher for pupils not eligible for free school meals (90.8%) than pupils who are eligible for free school meals (83.6%).

- The most common reason for absence for the academic year to date has been illness, with 55.3% of sessions missed being for this reason. The full report is available here.\(^9\)

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\(^9\) Attendance of pupils in maintained schools | GOV.WALES
1.9. UK Infection positivity – ONS Coronavirus Infection Survey, 28 December 2022 to 3 January 2023

- The ONS Coronavirus Infection Survey\(^\text{10}\) reports that at the midpoint of the most recent week (28 December 2022 to 3 January 2023), the positivity rate decreased in England and Wales in the most recent week. The trend in the percentage of people testing positive in Northern Ireland was uncertain in the most recent week, but rates increased over two weeks. The percentage of people testing positive in Scotland continued to increase in the most recent week.

- The estimated percentages of the community population with COVID-19 ranged from 4.02% in England to 7.04% in Northern Ireland.

**Figure 8 - Positivity rates (%) across UK countries since 23 November 2022**

![Figure 8 - Positivity rates across UK countries](source: Coronavirus (COVID-19) Infection Survey, ONS, 11/01/23)

- In Wales, the estimated number of people testing positive for COVID-19 was 157,000 people (95% credible interval: 136,500 to 180,100), equating to 5.16% of the population, or around 1 in 19 people.

- In England, the estimated number of people testing positive for COVID-19 was 2,189,300 people (95% credible interval: 2,094,800 to 2,283,200), equating to 4.02% of the population, or around 1 in 25 people.

- In Scotland, the estimated number of people testing positive for COVID-19 was 219,600 people (95% credible interval: 189,300 to 251,600), equating to 4.17% of the population, or around 1 in 25 people.

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\(^\text{10}\) [https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/previousReleases](https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronaviruscovid19infectionsurveypilot/previousReleases)
In Northern Ireland, the estimated number of people testing positive for COVID-19 was 129,100 people (95% credible interval: 109,800 to 151,200), equating to 7.04% of the population, or around 1 in 14 people.

1.10. Long Covid

An estimated 2.1 million people living in private households in the UK (3.3% of the population) were experiencing self-reported long COVID (symptoms continuing for more than four weeks after the first confirmed or suspected coronavirus (COVID-19) infection that were not explained by something else) as of 4 December 2022.

In the same period in Wales, 111,000 people self-reported long COVID (3.6% of the Welsh population). This is a decrease of 3,000 people since the four week period ending 6 November 2022. The full report is available here and the next release is scheduled for 2 February 2023.
1.11. International overview – World Health Organisation update

- The WHO reports\(^\text{12}\) that globally, nearly 2.9 million new cases and over 11 000 deaths were reported in the week of 2 to 8 January 2023. This represents a reduction in weekly cases and deaths of 9% and 12%, respectively. However, these trends need to be interpreted considering the reduction in testing and delays in reporting in many countries during the year-end holiday season.

- Data presented in the most recent WHO report, especially for the most recent weeks, are incomplete and the decreasing trends should be interpreted in that context as they may change with updated information provided following the holiday period.

- In the last 28 days (12 December 2022 to 8 January 2023), over 13.9 million cases and over 49 000 new deaths were reported globally – an increase of 10% and 22% respectively, compared to the previous 28 days.

- As of 8 January 2023, over 659 million confirmed cases and over 6.6 million deaths have been reported globally.

*Figure 9 - COVID-19 cases reported weekly by WHO Region, and global deaths, as of 11 January 2023*

- The highest numbers of new weekly cases were reported from Japan (1 070 496 new cases; +13%), the United States of America (462 944 new cases; +17%), the Republic of Korea (403 800 new cases; -12%), China (204 609 new cases; -6%), and Brazil (145 933 new cases; -29%). The highest numbers of new weekly deaths were reported from the United States of America (2695 new deaths; +8%), Japan (2149 new deaths; +11%), Brazil (926 new deaths; -17%), China (722 new deaths; +11%), and France (621 new deaths; -22%).

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1.12. European Centre for Disease Prevention and Control (ECDC)

- As of the week ending 8 January 2023, ECDC reports that the overall epidemiological situation was improving compared to the substantial increases in transmission and severity indicators reported by numerous countries during the year-end holiday period.

- Surveillance data suggests an overall decline in transmission together with stable or decreasing trends in hospital/ICU indicators and deaths pooled at the EU/EEA level.

- Data may still be affected by a combination of reduced testing, delayed reporting and changes in healthcare-seeking behaviour during the end of year holidays, which make interpretation more challenging.

*Figure 10 - EU/EEA weekly test positivity, 12 January 2023*


- Seven out of 21 countries with data reported an increase in at least one hospital or ICU indicator. One country reported an increase in COVID-19 deaths, with a total of 1,904 deaths reported in the last week.

- Forecasts of cases, hospital admissions and deaths from the European COVID-19 Forecast Hub provide predictions for weeks 2 and 3.

- Compared with the previous week, decreasing trends in cases, hospital admissions and deaths are forecast for the EU/EEA overall by the end of week 3.

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13 COVID-19 situation updates (europa.eu)
1.13. Variant of Concern update

**PHW report** the weekly summary of the total number of COVID-19 variants of concern (VOC) in Wales. (Data correct as at: 10 Jan 2023).

<table>
<thead>
<tr>
<th>Variant</th>
<th>Lineage</th>
<th>Alternate names</th>
<th>UVSeq cases</th>
<th>Total cases</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omicron</td>
<td></td>
<td></td>
<td>2,342</td>
<td>140,215</td>
<td>+545</td>
</tr>
<tr>
<td>VOC-22JAN-01</td>
<td>BA.2</td>
<td>BA.2</td>
<td>7</td>
<td>29,259</td>
<td>+8</td>
</tr>
<tr>
<td>VOC-22APR-03</td>
<td>BA.4</td>
<td></td>
<td>1</td>
<td>1,191</td>
<td>-</td>
</tr>
<tr>
<td>VOC-22APR-04</td>
<td>BA.5</td>
<td></td>
<td>288</td>
<td>7,297</td>
<td>+110</td>
</tr>
<tr>
<td>V-22JUL-01</td>
<td>BA 2.75</td>
<td></td>
<td>172</td>
<td>467</td>
<td>+74</td>
</tr>
<tr>
<td>V-22SEP-01</td>
<td>BA 4.6</td>
<td></td>
<td>9</td>
<td>191</td>
<td>+4</td>
</tr>
<tr>
<td>V-22OCT-01</td>
<td>BQ.1</td>
<td></td>
<td>634</td>
<td>1,365</td>
<td>+259</td>
</tr>
<tr>
<td>V-22OCT-02</td>
<td>XBB</td>
<td></td>
<td>55</td>
<td>86</td>
<td>+18</td>
</tr>
<tr>
<td>V-22DEC-01</td>
<td>CH.1.1</td>
<td></td>
<td>278</td>
<td>310</td>
<td>+132</td>
</tr>
<tr>
<td>Not elsewhere classified</td>
<td>B.1.1.529</td>
<td>B1.1.529, B3, genotyped cases</td>
<td>898</td>
<td>42,885</td>
<td>-60</td>
</tr>
</tbody>
</table>

Source: Public Health Wales COVID-19 genomic surveillance

- In the last four reporting weeks, V-22OCT-01 (Omicron, BQ.1) has been the most dominant variant in Wales, accounting for 42.8% of all sequenced cases.
- **UKHSA reports** that the UK incidence is composed primarily of BQ.1 and sub-lineages. This is consistent with the prediction in the variant risk assessment published on 28 October 2022.
- Two variants show marked positive growth compared to BQ.1: CH.1.1, which is at moderate prevalence, and XBB.1.5, which is at low prevalence.
- Whilst the rapid growth of XBB.1.5 in the USA is noted, UK growth estimates are very early and have high uncertainty due to the small number of sequenced XBB.1.5 cases.
- CH.1.1 and XBB.1.5 are currently the variants most likely to predominate in the UK following BQ.1, unless further novel variants arise. It is plausible that XBB.1.5

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14 COVID-19 genomic surveillance | Tableau Public
will cause an increase in incidence after the current wave, however it is currently too early to confirm this trajectory.

- The WHO reports\(^\text{16}\) that, BA.5 and its descendent lineages are still dominant globally.

- The prevalence of BA.2 and its descendent lineages is rising, a trend based on 2201 sequences (13.6%) submitted globally in week 51. BA.4 and its descendent lineages are declining with a prevalence of 0.6% as of week 51. The remaining 3439 sequences (21.1%) are classified as "unassigned" or "other" in week 51. These are assumed to be Omicron descendent lineages yet to be assigned.

- The six Omicron variants under monitoring accounted for 76.2% of all sequences submitted in week 51. Among these six variants, the prevalence is 53.4% for BQ.1*; 9.7% for BA.5 with one or several of five mutations.

- WHO, with advice from Technical Advisory Group on Virus Evolution (TAG-VE), has conducted a global rapid risk assessment for XBB.1.5

- Globally, 5288 sequences of XBB.1.5 have been reported from 38 countries. In brief, data on XBB.1.5 are limited; however, based on currently available information from one country, XBB.1.5 has a growth advantage compared to other circulating Omicron sublineages based on only one country.

- Preliminary laboratory-based antibody escape studies indicate that XBB.1.5 has higher immune escape than previous Omicron descendent lineages; however, this finding has not yet been confirmed by epidemiological evidence in humans.

- There is no available information on clinical severity for XBB.1.5 at present.

- ECDC reports\(^\text{17}\) ECDC reports that there is a risk that the XBB.1.5 variant may have an increasing effect on the number of COVID-19 cases in the EU/EEA. XBB.1.5 is a sub-lineage of the SARS-CoV-2 lineage XBB and is currently estimated to have a large growth advantage over previously circulating lineages in North America (109%) and Europe (113%), although these estimates are associated with significant uncertainty.

- There is a risk that this variant may have an increasing effect on the number of cases of COVID-19 in the EU/EEA, but not within the coming month as the variant is currently only present at very low levels in the EU/EEA. The rapid growth in the US does not necessarily mean that the variant will become dominant in the EU/EEA, since major differences in variant circulation between North America and Europe have been observed several times during the pandemic.

\(^{16}\) Coronavirus Disease (COVID-19) Situation Reports (who.int)

\(^{17}\) Update on SARS-CoV-2 variants: ECDC assessment of the XBB.1.5 sub-lineage (europa.eu)
2. COVID-19 Medium-Term Projections

- The most recent medium-term projections do not reflect the increase on hospital activity that has been seen this week. This should be reflected in the next set of medium-term projections.

- The current medium-term projections have a plateau in most indicators for the next few weeks, but the next iteration are likely to look different.

- Swansea University (SU) regularly produces medium-term projections (MTPs) for Wales. The SU projections are also combined with other models to go into a consensus MTP for admissions which is agreed every two weeks by the UKHSA Epidemiological Modelling Review Group (EMRG), which has taken over from COVID-M-O in agreeing these MTPs. EMRG projections are not shown this week as there haven't been any produced during the Christmas period.

- The SU projections are typically more up to date but may be less robust as they are based on one model only. Both MTPs are based on projecting forward from current data and do not explicitly factor in policy changes, changes in testing, changes in behaviour, or rapid changes in vaccinations.

- These MTPs for COVID-19 are not forecasts or predictions. They represent a scenario in which the trajectory of the epidemic continues to follow the trends that were seen in data available at the time.

2.1. Swansea University MTPs, data as at 30 December

- In the charts below, red crosses represent actual Omicron data, which the model is fitted to – fit is weighted to data points after the vertical orange line to represent the characteristics of emergent strains. 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 The pink dotted line represents pre-Omicron peaks.

- This set of projections suggest that pressures will decrease to a plateau following a passing of the peak.

- Note that, in the figures, fit is weighted to data points after the vertical orange line to reflect the characteristics of emergent strains. The horizontal pink line represents pre-omicron peaks.
2.2. Winter Modelling compared to actuals

In order to aid with winter planning of COVID-19 admissions and occupancy over the 2022/23 winter, a paper was published\(^\text{18}\) outlining several scenarios. It’s important to note that these scenarios were not an indication of what would happen, but rather what could happen. Since the publication of the winter modelling continuous monitoring has taken place to track actual data against the scenarios. The admissions data is provided by Public Health Wales and occupancy data is sourced from Digital Health and Care Wales\(^\text{19}\).

Data up to 8 January 2023 showed a trend in admissions continues to track closely to the optimistic scenario (upper bound). More frequent waves have been observed in the actual numbers in comparison to the projected scenarios.

Data up to 10 January 2023 showed current occupancy with a similar trend line to the most likely scenario but occurring at a different date. The actual occupancy numbers are similar to the most likely scenario numbers, however, similarly to the admissions numbers, the actual data is showing more frequent waves than the projected scenarios.

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\(^{18}\) Science Evidence Advice: Winter modelling 2022 to 2023 | GOV.WALES

\(^{19}\) statswales.gov.wales
Figure 12 COVID-19 admissions scenarios versus actuals

Figure 13 - COVID-19 occupancy scenarios versus actuals
3. **Influenza Situation Update**

- As of 11 January 2023, influenza is decreasing but still in circulation in Wales.
- UKHSA reports that influenza positivity, confirmed outbreaks, hospital and ICU admissions have decreased compared with week 52. Emergency department attendances for influenza-like illness (ILI) decreased nationally, for all age groups and regions.
- In Europe, the percentage of patients presenting with ILI symptoms that tested positive for an influenza virus remained above the epidemic threshold (10%) and slightly decreased to 34% from 37% in the previous week.
- The reported decreases should be interpreted with caution due to disruptions over the Christmas holiday period. It may take some more time before the impact of increased exposure of vulnerable groups to respiratory viruses, due to increased inter-generational mixing during the holiday season, becomes visible.

3.1. **Weekly Influenza and Acute Respiratory Infection Report – PHW**

- As of 11 January 2023, [PHW report](https://www.nhs.wales) that influenza remains in circulation in Wales. During week 1 (ending 8 January 2023), there were 503 cases of influenza (a decrease from the previous week).
- PHW suggest that decreases this week should be interpreted with caution due to disruptions over the Christmas holiday period. COVID-19 cases also continue to be detected in symptomatic patients in hospitals and in the community.
- Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during week 1 2023, was 22.8 consultations per 100,000 practice population. This is a decrease compared to the previous week (27.8 consultations per 100,000) is likely due to reduced GP opening hours during Christmas week, but remains above the threshold for medium intensity levels.
- Consultation rates were highest in those aged 25 to 64 years.
- The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 329.6 per 100,000 practice population during Week 1 2023.
- The percentage of calls to NHS Direct Wales which were ‘influenza-related’ (cold/flu, cough, fever, headache and sore throat) during Week 1 2023 decreased to 28.0%.

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**Figure 14 - Uptake of influenza immunisations in GP Practice patients in Wales**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>People aged 65y and older</td>
<td>74.6%</td>
</tr>
<tr>
<td>People younger than 65y in a clinical risk group</td>
<td>41.2%</td>
</tr>
<tr>
<td>Children aged two &amp; three years</td>
<td>40.2%</td>
</tr>
<tr>
<td>Children aged between four &amp; ten years</td>
<td>59.4%</td>
</tr>
<tr>
<td>Children aged between 11 &amp; 15 years</td>
<td>50.1%</td>
</tr>
<tr>
<td>Total NHS staff</td>
<td>41.6%</td>
</tr>
<tr>
<td>NHS staff with direct patient contact</td>
<td>41.3%</td>
</tr>
</tbody>
</table>

**Figure 15 - Specimens submitted for virological testing for hospital patients and non-sentinel GPs**

Data Source: [PHW Weekly Influenza & Acute Respiratory Infection Surveillance](#)
3.2. UKHSA Weekly national influenza surveillance report

- As of 11 January 2023, UKHSA reports that influenza positivity decreased to 12.2% compared with 25.2% in week 52; with highest positivity seen in the 5 to 14 years age group at 17.0%.

- Through primary care surveillance, the influenza-like-illness consultations indicator remained stable in week 1, in the medium activity level.

- The overall number of reported influenza-confirmed outbreaks decreased in week 1 compared with week 52. The highest number of incidents continue to be in care homes, with 49 influenza confirmed outbreaks occurring in England in week 1 compared with 88 in week 52.

- Influenza hospital admissions decreased in week 1 compared with the previous week. The week 51 and 52 admissions rates were revised up retrospectively with the receipt of new data.

- The rate decreased in week 1 to the medium activity range. Admissions data is provisional. Influenza admissions were highest in the 85 years and over and 75 to 84 years age groups.

- Influenza ICU admissions decreased in week 1, remaining within the medium intensity range. Emergency department attendances for influenza-like illness decreased nationally, for all age groups and regions.

*Figure 16 - Weekly overall hospital admission rates of new COVID-19 and influenza positive cases per 100k population, England*

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4. **Respiratory Syncytial Virus (RSV) and Invasive Group A streptococcal Situation**

- RSV incidence in children under five years of age has decreased, but remains at high levels of activity.
- UKHSA reports that the overall positivity and hospitalisation rate for RSV continued to decrease.
- Numbers of invasive Group A streptococcal (Strep A) infections have decreased but remain high in comparison to the previous years.
- The reported decreases should be interpreted with caution due to disruptions over the Christmas holiday period. It may take some more time before the impact of increased exposure of vulnerable groups to respiratory viruses, due to increased inter-generational mixing during the holiday season, becomes visible.

4.1. **Weekly Influenza and Acute Respiratory Infection Report – PHW**

- As of 11 January 2023, PHW report that confirmed RSV case incidence in children aged under five have decreased compared to previous weeks but remains at very high intensity levels.
- In week 1 there were 50.8 confirmed cases per 100,000 in children under five.
- PHW suggests that figures this week should be interpreted with caution due to disruptions and changes in behaviour over the Christmas period.

![Figure 17 - RSV Incidence rate in those aged under 5 in Wales, by week](image)

4.2. **Incidence data for Strep A and Scarlet Fever**

- PHW report that scarlet fever notifications have decreased but remain high in comparison with previous years.
As at 09 Jan 2023, there have been a total of 77 cases of iGAS confirmed in Wales since 1st September 2022. Of these individuals, 49 are aged 15 years or older and 28 are aged under 15 years.

Figure 18 - PHW Scarlet Fever Notifications per 100k, 08 January 2023

Figure 19 - PHW Lab Confirmed Invasive group A streptococcal infections, 08 January 2023