Technical Advisory Cell: Summary of Advice
2 July 2021

Going forward the Technical Advisory Cell Summary of Advice will be changing from a weekly situation report to a fortnightly update that considers the five COVID harms (direct, indirect (health), economic, wellbeing and inequalities) and the most up to date emerging evidence from across the 4 nations and internationally. A weekly summary of the latest situation report for Wales and surveillance data on Covid-19 will continue to be available via the Covid Situation Report, or alternatively the Public Health Wales Covid-19 dashboard.

Top-line summary

- As at 26 June, case numbers in Wales have increased to 66.5 cases per 100k population, doubling from the previous week. Almost all Local Authorities in Wales are seeing continued increases in case numbers and test positivity. Case incidence has increased in almost all age groups, particularly in those age groups which have been under represented in vaccine rollout to date.

- The most recent estimate of the reproduction number (\(R_t\)) for Wales from SAGE has increased slightly to 1.1 to 1.5 (90% confidence interval; CI), from 1.0 to 1.4 the previous week. Growth rate has also increased to +1% to +7% per day. (Note that \(R_t\) and growth rate estimates by SAGE represent the transmission of COVID-19 2 to 3 weeks ago rather than today.)

- The most recent \(R_t\) estimate from Public Health Wales (PHW) at an all-Wales level is now between 1.8 and 1.9 (95% CI), increasing slightly from 1.6 to 1.8 the previous week. The doubling time for the whole of Wales is now 6.5 days (95% Confidence interval: 6.1 to 10.3).

- At a regional level, PHW estimates by health board show the lowest \(R_t\) is in Hywel Dda and Powys, both at 1.5 and 1.4 \(R_t\) and a doubling time of 8 and 8.5 days respectively. All other areas are close to or above a reproduction number of 2.0 (Note these estimates are less lagged than SAGE, representing transmission from around 1 week ago).

- Whilst COVID-19 hospitalisations in Wales are yet to show a notable increase, trends in other parts of the UK are beginning to suggest an increase in health care demand that is likely to continue if cases continue to rise, albeit at a significantly lower level compared to previous waves.

- Whilst numbers will be higher due to ongoing data entry, as at 22:00 on 1 July 2,261,056 first doses and 1,695,819 second doses of Covid-19 vaccine have been given in Wales and recorded in the Covid-19 Welsh Immunisation System.
• For the week 20 to 26 June 2021, it is estimated that 0.22% of the community population had COVID-19 (95% credible interval: 0.02% to 0.14%), an increase from the previous period. This equates to approximately 1 person in every 450 (95% credible interval: 1 in 820 to 1 in 280), or 6,800 people during this time (3,700 to 11,000).

• As at 21 June, the Delta variant continues to increase rapidly and is the dominant variant in Wales, with 1,749 (+961 since last report) genomically confirmed and probable cases detected. In comparison, the Alpha variant has seen 135 cases identified in the same time frame.

TAG/ SAGE papers published this week:
  Technical Advisory Group: review advice on communal singing and chanting, including wind instruments and pipe organs
  SAGE: LSHTM and KCL: Reconstructing the secondary case distribution of SARS-CoV-2 from heterogeneity in viral load trajectories and social contacts, 1 June 2021
  SAGE: SPI-M-O: Consensus statement on COVID-19, 16 June 2021
  SAGE: UCL: Impacts of school closures on physical and mental health of children and young people – a systematic review, 11 February 2021

Data from Wales and the four UK nations

• The following information provides an overview across the four UK nations of the weekly number of tests carried out, the positivity rate, and the number of cases as well as these figures by 100k population for the 7 day period ending 29 June. The figure in brackets is the change from the previous 7 day period. Note these figures are for pillar 1 and 2 testing only and England testing data includes lateral flow tests.

• For the most recent 7 day period cases numbers have increased significantly in all UK nations, with the greatest relative change in Scotland, although in Wales and Northern Ireland case numbers per 100,000 population remain at a low level currently compared to England and Scotland.

• Test positivity in has also increased across all 4 UK nations, with a much higher level of test positivity in Scotland.
For the 7 day period ending 29 June 2021

<table>
<thead>
<tr>
<th>Measure</th>
<th>ENGLAND</th>
<th>NORTHERN IRELAND</th>
<th>SCOTLAND</th>
<th>WALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of cases</td>
<td>101,531 (+86%)</td>
<td>1,663 (+79%)</td>
<td>19,593 (+166%)</td>
<td>2354 (+160%)</td>
</tr>
<tr>
<td>No. of tests carried out</td>
<td>6,392,444 (+9%)</td>
<td>75,731 (+5%)</td>
<td>229,821 (+26%)</td>
<td>93,159 (+32%)</td>
</tr>
<tr>
<td>Positivity rate</td>
<td>1.6% (+78%)</td>
<td>2.2% (+69%)</td>
<td>8.5% (+113%)</td>
<td>2.5% (+92%)</td>
</tr>
<tr>
<td>Weekly cases per 100K population</td>
<td>181.4 (+86%)</td>
<td>88.4 (+79%)</td>
<td>360.3 (+166%)</td>
<td>75 (+160%)</td>
</tr>
<tr>
<td>Weekly tests per 100K population</td>
<td>11,419.7 (+9%)</td>
<td>4024.7 (+5%)</td>
<td>4226.1 (+26%)</td>
<td>2968.1 (+32%)</td>
</tr>
</tbody>
</table>

- Data from multiple sources are collated centrally by DHSC, although there are differences in methodologies between nations for processing tests and identifying individuals. More information is available here.

Source: Welsh Government dashboard, Data from Gov.UK

Reproduction number and Growth Rate

- Estimates of $R_t$ and growth rates become more uncertain as hospitalisations and deaths reach low levels and clustered outbreaks start to make up a greater proportion of cases. Both $R_t$ and growth rates are average measures and smooth over outbreaks at small spatial scales or over short periods of time. They should not be treated as robust enough to inform policy decisions alone. At this time, it may be more useful to look at incidence and prevalence measures than $R_t$. 
SAGE estimate

- The most recent estimate of the $R_t$ for Wales from SAGE on 30 June is between 1.1 and 1.5 (90% confidence interval).
- The most recent daily growth rate for Wales from SAGE estimates that the infection rate in Wales is $+1$ to $+7\%$ per day (90% confidence interval)
- These estimates will be at least two weeks out of date and so will not yet fully reflect changes related to the recent rapid increases in transmission of the delta (B.1.617.2) variant.

The Reproduction number ($R_t$) is the average number of secondary infections produced by a single infected individual. $R_t$ is an average value over time, geographies, and communities. This should be considered when interpreting the $R_t$ estimate for the UK given the differences in policies across the four nations.

Growth rate reflects how quickly the numbers of infections are changing day by day. It is an approximation of the percentage change in the number of infections each day. Growth rate is also a lagging indicator and shown as a range (90 or 95% confidence intervals) without a central estimate. Figures are shown as either doubling if $R_t$ is above 1, or halving if $R_t$ is below 1.

Care should be taken when interpreting $R_t$ and growth rate estimates for the UK, due to their inherently lagged nature, their correlation with testing incidence and that national estimates can mask regional variation in the number of infections and rates of transmission.

For more information on the models that are used to create the SAGE consensus on $R_t$, please see the UK Government website.

Public Health Wales (PHW) estimate

- PHW also estimate $R_t$ for Wales using data on the number of positive Covid-19 testing episodes for the last 7 day rolling period. Like the SAGE estimate these figures should be interpreted with caution as the number of positive cases detected can be a reflection of the amount of testing. It is assumed there is no change in testing patterns for the duration of these estimates.
- This estimate is less lagged than SAGE, representing transmission from around 1 week ago; and is also available at both a national and regional level. However it uses a different methodology and is based on positive SARS-Cov-2 testing episodes only.
- Local health board level estimates of $R_t$ and halving times will be unstable when incidence is low.
- Estimates of the reproduction number are based on the previous rolling 7 days of data and include all cases confirmed by a positive COVID-19 test result,
including hospital acquired cases. To account for reporting lag the most recent three days of data have been omitted.

- As at 30 June, the Rt at an all-Wales level estimated by Public Health Wales (PHW) is **between 1.8 and 1.9** (95% confidence interval), an increase from 1.6 to 1.8 the previous week. At a regional level all healthboard areas have an Rt above 1.0.

- *Estimates of halving/ doubling times have been calculated using 14 days of rolling data and include all cases confirmed by a positive COVID-19 test result, include hospital acquired cases. The estimate assumes that there has been no changes in mixing patterns or testing capacity.*

- The doubling time for Wales has also got shorter since last week, estimated by PHW to be **doubling every 6.5 days** (95% CI: 5.1 to 8.8) compared to 7.6 days last week. At a regional level all health board areas are currently doubling.

<table>
<thead>
<tr>
<th>Area</th>
<th>Halving time (95% CI)</th>
<th>Rt (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Wales</td>
<td>6.5 (5.1 to 8.8) DOUBLING</td>
<td>1.9 (1.8 to 1.9)</td>
</tr>
<tr>
<td>Swansea Bay UHB</td>
<td>6.1 (4.3 to 10.7) DOUBLING</td>
<td>1.8 (1.6 to 2.0)</td>
</tr>
<tr>
<td>CTM UHB</td>
<td>4.3 (3.2 to 6.7) DOUBLING</td>
<td>2.6 (2.5 to 3.0)</td>
</tr>
<tr>
<td>Aneurin Bevan UHB</td>
<td>5.6 (4.2 to 8.6) DOUBLING</td>
<td>1.9 (1.7 to 2.2)</td>
</tr>
<tr>
<td>Cardiff &amp; Vale UHB</td>
<td>6.0 (4.2 to 10.3) DOUBLING</td>
<td>2.0 (1.9 to 2.2)</td>
</tr>
<tr>
<td>Hywel Dda UHB</td>
<td>8.5 (4.7 to 46.9)* DOUBLING</td>
<td>1.5 (1.3 to 1.7)*</td>
</tr>
<tr>
<td>Powys THB</td>
<td>8.0 (4.1 to 105.9)* DOUBLING</td>
<td>1.4 (1.0 to 1.7)*</td>
</tr>
<tr>
<td>Betsi Cadwaladr UHB</td>
<td>6.9 (5.2 to 10.6) DOUBLING</td>
<td>1.8 (1.7 to 1.9)</td>
</tr>
</tbody>
</table>

* Small numbers, interpret with caution

**Case numbers**

**Cases per 100k for Wales (PHW Data) (7 day rolling sum) – 26 June**

- The figure below shows weekly COVID-19 cases per 100k population (7 day rolling sum) for the most recent 6 month period at a national and regional. The most recent data up to **26 June** shows an increase in cases to **66.5 cases per**
100k population, a 99% increase from the previous 7 day period. At a health board level, Betsi Cadwaladr continues to see the largest increase, followed by Cardiff & Vale.

Cases per 100k by Health board (PHW Data) (7 day rolling sum) – 26 June

Source: Welsh Government dashboard, Data from PHW

Age profile

- The Figure below shows the number of confirmed COVID-19 episodes per 100,000 population, by week of sample collection and age group for the most recent 3 month period.

- It should be noted that the 90+ age group is significantly affected by small increases in case numbers, as a result of the smaller denominator size in comparison to other age groups.

- According to Public Health Wales data, as at 27 June, case incidence has increased in almost all age groups, with the greatest increase in the under 50s. Cases in people aged 20-29 have increased by 140%, 10-19 by 59% and age groups 30-39 by 84%.
Wales Local Authority Update

- At low incidence regional changes between weeks will be more variable, as a result of the impact of outbreak clusters against a background of low prevalence.

- Recent PHW surveillance data for Wales for the 7 day period ending 26 June shows that case incidence per 100,000 population for the whole of Wales continues to increase and is 66.5, an 87% increase from the previous period.

- Test positivity for COVID-19 for the whole of Wales continues to rise and was 4.3% for the most recent rolling 7 period, a 59% increase from the previous period, although there is considerable variation by healthboard.

- Case incidence is increasing in all local authorities, with 12 of 22 local authorities at or just under the 50 or higher per 100,000 population threshold. Local authorities with the highest case incidences are mainly in North Wales, with Flintshire and Wrexham at 157.6 and 139.8 per 100,000 population, respectively.

Source: Welsh Government dashboard, Data from PHW
<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Number</th>
<th>% of All Wales Total</th>
<th>Cases per 100,000 pop</th>
<th>Incidence threshold</th>
<th>Change from last week</th>
<th>Proportion of tests positive (%)</th>
<th>Positivity threshold reached</th>
<th>Test Incidence per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blaenau Gwent</td>
<td>20</td>
<td>1.0%</td>
<td>28.63</td>
<td>25 to &lt; 50</td>
<td>122% ↑</td>
<td>2.0%</td>
<td>Under 2.5%</td>
<td>1437.12</td>
</tr>
<tr>
<td>Caerphilly</td>
<td>66</td>
<td>3.1%</td>
<td>36.45</td>
<td>25 to &lt; 50</td>
<td>94% ↑</td>
<td>2.9%</td>
<td>2.5 to &lt; 5%</td>
<td>1266.33</td>
</tr>
<tr>
<td>Monmouthshire</td>
<td>34</td>
<td>1.6%</td>
<td>35.94</td>
<td>25 to &lt; 50</td>
<td>70% ↑</td>
<td>2.7%</td>
<td>2.5 to &lt; 5%</td>
<td>1341.58</td>
</tr>
<tr>
<td>Newport</td>
<td>32</td>
<td>1.5%</td>
<td>20.69</td>
<td>20 to &lt; 25</td>
<td>28% ↑</td>
<td>1.4%</td>
<td>Under 2.5%</td>
<td>1501.85</td>
</tr>
<tr>
<td>Torfaen</td>
<td>47</td>
<td>2.2%</td>
<td>50.02</td>
<td>50 or higher</td>
<td>236% ↑</td>
<td>3.6%</td>
<td>2.5 to &lt; 5%</td>
<td>1405.90</td>
</tr>
<tr>
<td><strong>ABUHB</strong></td>
<td><strong>199</strong></td>
<td><strong>9.6%</strong></td>
<td><strong>33.49</strong></td>
<td>25 to &lt; 50</td>
<td><strong>95% ↑</strong></td>
<td><strong>2.4%</strong></td>
<td><strong>Under 2.5%</strong></td>
<td><strong>1381.77</strong></td>
</tr>
<tr>
<td>Conwy</td>
<td>115</td>
<td>5.5%</td>
<td>98.12</td>
<td>50 or higher</td>
<td>11% ↑</td>
<td>6.2%</td>
<td>5% or higher</td>
<td>2106.67</td>
</tr>
<tr>
<td>Denbighshire</td>
<td>126</td>
<td>6.0%</td>
<td>131.67</td>
<td>50 or higher</td>
<td>83% ↑</td>
<td>4.7%</td>
<td>2.5 to &lt; 5%</td>
<td>2094.66</td>
</tr>
<tr>
<td>Flintshire</td>
<td>246</td>
<td>11.7%</td>
<td>157.59</td>
<td>50 or higher</td>
<td>58% ↑</td>
<td>8.5%</td>
<td>5% or higher</td>
<td>1852.66</td>
</tr>
<tr>
<td>Gwynedd</td>
<td>123</td>
<td>5.9%</td>
<td>98.75</td>
<td>50 or higher</td>
<td>232% ↑</td>
<td>5.3%</td>
<td>5% or higher</td>
<td>1880.22</td>
</tr>
<tr>
<td>Isle of Anglesey</td>
<td>55</td>
<td>2.6%</td>
<td>78.52</td>
<td>50 or higher</td>
<td>267% ↑</td>
<td>5.3%</td>
<td>5% or higher</td>
<td>1480.52</td>
</tr>
<tr>
<td>Wrexham</td>
<td>190</td>
<td>9.1%</td>
<td>139.75</td>
<td>50 or higher</td>
<td>171% ↑</td>
<td>7.8%</td>
<td>5% or higher</td>
<td>1785.12</td>
</tr>
<tr>
<td><strong>BCUHB</strong></td>
<td><strong>855</strong></td>
<td><strong>41.2%</strong></td>
<td><strong>122.22</strong></td>
<td>50 or higher</td>
<td><strong>90% ↑</strong></td>
<td><strong>6.5%</strong></td>
<td><strong>5% or higher</strong></td>
<td><strong>1882.47</strong></td>
</tr>
<tr>
<td>Bridgend</td>
<td>46</td>
<td>2.2%</td>
<td>31.28</td>
<td>25 to &lt; 50</td>
<td>64% ↑</td>
<td>2.4%</td>
<td>Under 2.5%</td>
<td>1313.17</td>
</tr>
<tr>
<td>Merthyr Tydfil</td>
<td>14</td>
<td>0.7%</td>
<td>23.21</td>
<td>20 to &lt; 25</td>
<td>250% ↑</td>
<td>1.6%</td>
<td>Under 2.5%</td>
<td>1439.53</td>
</tr>
<tr>
<td>Rhondda Cynon Taf</td>
<td>139</td>
<td>6.6%</td>
<td>57.61</td>
<td>50 or higher</td>
<td>379% ↑</td>
<td>4.1%</td>
<td>2.5 to &lt; 5%</td>
<td>1398.88</td>
</tr>
<tr>
<td><strong>CTMUHB</strong></td>
<td><strong>199</strong></td>
<td><strong>9.6%</strong></td>
<td><strong>44.36</strong></td>
<td>25 to &lt; 50</td>
<td><strong>226% ↑</strong></td>
<td><strong>3.2%</strong></td>
<td><strong>2.5 to &lt; 5%</strong></td>
<td><strong>1375.72</strong></td>
</tr>
<tr>
<td>Cardiff</td>
<td>335</td>
<td>16.0%</td>
<td>91.30</td>
<td>50 or higher</td>
<td>112% ↑</td>
<td>6.2%</td>
<td>5% or higher</td>
<td>1464.15</td>
</tr>
<tr>
<td>Vale of Glamorgan</td>
<td>85</td>
<td>4.1%</td>
<td>63.63</td>
<td>50 or higher</td>
<td>33% ↑</td>
<td>4.2%</td>
<td>2.5 to &lt; 5%</td>
<td>1517.36</td>
</tr>
<tr>
<td><strong>CVUHB</strong></td>
<td><strong>420</strong></td>
<td><strong>20.2%</strong></td>
<td><strong>83.92</strong></td>
<td>50 or higher</td>
<td><strong>89% ↑</strong></td>
<td><strong>5.7%</strong></td>
<td><strong>5% or higher</strong></td>
<td><strong>1478.35</strong></td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>62</td>
<td>3.0%</td>
<td>32.84</td>
<td>25 to &lt; 50</td>
<td>68% ↑</td>
<td>2.2%</td>
<td>Under 2.5%</td>
<td>1525.13</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>26</td>
<td>1.2%</td>
<td>35.77</td>
<td>25 to &lt; 50</td>
<td>8% ↑</td>
<td>2.4%</td>
<td>Under 2.5%</td>
<td>1502.17</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>62</td>
<td>3.0%</td>
<td>49.28</td>
<td>25 to &lt; 50</td>
<td>22% ↑</td>
<td>3.0%</td>
<td>2.5 to &lt; 5%</td>
<td>1652.39</td>
</tr>
<tr>
<td><strong>HDUHB</strong></td>
<td><strong>150</strong></td>
<td><strong>7.2%</strong></td>
<td><strong>38.73</strong></td>
<td>25 to &lt; 50</td>
<td><strong>34% ↑</strong></td>
<td><strong>2.5%</strong></td>
<td><strong>Under 2.5%</strong></td>
<td><strong>1562.16</strong></td>
</tr>
<tr>
<td>Powys</td>
<td>41</td>
<td>2.0%</td>
<td>30.96</td>
<td>25 to &lt; 50</td>
<td>37% ↑</td>
<td>2.5%</td>
<td>2.5 to &lt; 5%</td>
<td>1218.71</td>
</tr>
<tr>
<td>PTHB</td>
<td>41</td>
<td>2.0%</td>
<td>30.96</td>
<td>25 to &lt; 50</td>
<td>37% ↑</td>
<td>2.5%</td>
<td>2.5 to &lt; 5%</td>
<td>1218.71</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>54</td>
<td>2.6%</td>
<td>37.68</td>
<td>25 to &lt; 50</td>
<td>64% ↑</td>
<td>2.3%</td>
<td>Under 2.5%</td>
<td>1640.44</td>
</tr>
<tr>
<td>Swansea</td>
<td>157</td>
<td>7.5%</td>
<td>63.56</td>
<td>50 or higher</td>
<td>62% ↑</td>
<td>4.3%</td>
<td>2.5 to &lt; 5%</td>
<td>1485.47</td>
</tr>
<tr>
<td><strong>SBUHB</strong></td>
<td><strong>211</strong></td>
<td><strong>10.2%</strong></td>
<td><strong>54.06</strong></td>
<td>50 or higher</td>
<td><strong>62% ↑</strong></td>
<td><strong>3.5%</strong></td>
<td><strong>2.5 to &lt; 5%</strong></td>
<td><strong>1542.37</strong></td>
</tr>
<tr>
<td>Unknown</td>
<td>21</td>
<td>1.0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2096</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>66.48</strong></td>
<td>50 or higher</td>
<td><strong>87% ↑</strong></td>
<td><strong>4.3%</strong></td>
<td><strong>2.5 to &lt; 5%</strong></td>
<td><strong>1559.18</strong></td>
</tr>
</tbody>
</table>
Deaths

- The figure below shows the 7 day rolling sum of COVID-19 deaths reported by PHW rapid mortality surveillance up to 26 June, with 2 deaths for the most recent 7 day period, an increase of 2 from the previous period.

- PHW death data is limited to reports of deaths of hospitalised patients in Welsh hospitals or care homes where COVID-19 has been confirmed with a positive laboratory test and the clinician suspects COVID-19 was a causative factor. It does not include patients who may have died from COVID-19 but who were not confirmed by laboratory testing, those who died in other settings, or Welsh residents who died outside of Wales. As a result the true number of deaths will likely be higher.

![COVID-19 Deaths (7 day rolling sum)](image)

Source: Welsh Government dashboard, Data from PHW

ONS: Deaths registered weekly in England and Wales- week ending 18 June

- The Office for National Statistics (ONS) reports on both suspected and confirmed COVID-19 deaths using data available on completion of the death registration process and is more complete, albeit subject to a greater time lag. Figures are based on the date the death was registered, not when it occurred. There is usually a delay of at least five days between occurrence and registration.

- In Wales, in the week ending 18 June the number of weekly registered deaths involving COVID-19 reduced from 1 the previous week to 0, accounting for 0.0% of all deaths.

- The total number of deaths registered was lower than the five-year average in Wales (2.6% fewer deaths).

Source: Deaths registered weekly in England and Wales, provisional: week ending 18 June 2021
**Variant Update**

As at 1 July in Wales to date:

- There have been 12,943 (+135 since last week) genomically confirmed and probable cases of the variant **Alpha** (B.1.1.7, first identified in Kent).

- There have been 43 (+2) genomically confirmed and probable cases of the variant **Beta** (B.1.351, first identified in South Africa).

- There have been 1749 (+961) genomically confirmed and probable cases of the variant **Delta** (B.1.617.2, first identified in India).

**SARS-CoV-2 variants of concern and variants under investigation in England**

**Technical briefing 17**

- The most recent Public Health England (PHE) variants of concern technical briefing for this week has been published.

- In the most recent PHE briefing case numbers have continued to rise at a reduced rate, increasing by 52% since last week to 92,056 cases. Weekly deaths have also increased from 73 to 117. Delta now comprises 95% of sequenced and 92% of genotyped cases in England.

- PHE’s analysis of attendance to emergency care, death and vaccination status as a result of the Delta variant has also been updated; note this now includes a breakdown of cases for 50+ and under.

  - 7.8% of cases were in fully vaccinated individuals, compared to 58.5% unvaccinated.

  - For hospital admissions 10.7% were fully vaccinated compared to 65.0% unvaccinated.

  - Of those hospitalised 15.7% died, of which 37.6% were unvaccinated and 42% fully vaccinated.

  - 10% of Delta variant cases were in the over 50 age group, while 24% of hospital inpatients and 92% of deaths were in this age group. Of these, 35% were unvaccinated, 16.5% were partially vaccinated and 45% had received both doses.

- Further investigation is needed around severity of disease for breakthrough infections in vaccinated individuals and health risk factors.
• It should be noted that death is a lagging indicator and many Delta cases are still at an early stage; as a result deaths are likely to continue to increase.

• Community case secondary attack rate estimates have remained broadly similar since last week, although confidence intervals have narrowed. These suggest a 43% increase in secondary attack rate for Delta compared to Alpha, with a 42% increase for household contacts and a 55% increase for non-household contacts.

• New vaccine effectiveness data suggests a slight increase in single dose effectiveness vs delta (31 to 35) and the confidence interval has also narrowed in protecting against symptomatic disease, while double vaccination estimates remain the same.

Table 8. Vaccine effectiveness against symptomatic disease for Alpha and Delta variants

<table>
<thead>
<tr>
<th>Vaccination status</th>
<th>Vaccine effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alpha</td>
</tr>
<tr>
<td>Dose 1</td>
<td>49 (46 to 52)</td>
</tr>
<tr>
<td>Dose 2</td>
<td>89 (87 to 90)</td>
</tr>
</tbody>
</table>

• Estimates for vaccine effectiveness against hospitalisation for the Delta variant has also increased slightly from 75 to 80 and the confidence interval has narrowed. Effectiveness with two doses remains above 90% for the delta variant.
Test, Trace, Protect (Contact tracing for COVID-19)

- **Welsh Government publishes a weekly summary** of contact tracing activity in Wales during the COVID-19 pandemic. The data in this release is management information collected as part of the contact tracing process. The figures reflect the data recorded in the contact tracing system and not any contact tracing activity that may have taken place outside of the typical tracing process.

- **It may not be possible to trace all individuals referred to the contact tracing service.** For various reasons contact details will not have been provided for some individuals and others may not have responded to calls, texts or emails from tracing teams. The proportion of positive cases that were eligible for follow-up and that were reached only include those cases that were successfully reached but does not include those cases where local tracers have made an attempt, but failed, to contact.

- **For cases in halls of residence, students may have been contacted by text or by their university to advise them to isolate and not by the local contact tracing team.** Also, school “bubble” contacts aren’t subject to formal contact tracing process as they are contacted directly by their school and provided the necessary public health and isolation guidance. For this reason, these types of activity are not captured in the contact tracing data.

- In the latest week (20 to 26 June 2021):
  - of the 2,196 positive cases that were eligible for follow-up, 2,103 (95.8%) were reached and asked to provide details of their recent contacts
    - 83.8% were reached within 24 hours of referral to the contact tracing system. This equates to 94.3% of those successfully reached being reached within 24 hours.
    - 90.6% were reached within 48 hours. This equates to 94.6% of those successfully reached being reached within 48 hours.
  - of the 7,618 close contacts that were eligible for follow-up, 6,934 (91.0%) were successfully contacted and advised accordingly, or had their case otherwise resolved
    - 73.6% were reached within 24 hours of being identified by a positive case. This equates to 80.8% of those successfully reached being reached within 24 hours.

<table>
<thead>
<tr>
<th>Vaccination status</th>
<th>Vaccine Effectiveness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alpha</td>
</tr>
<tr>
<td>Dose 1</td>
<td>78 (64 to 87)</td>
</tr>
<tr>
<td>Dose 2</td>
<td>93 (80 to 97)</td>
</tr>
</tbody>
</table>

Table 9. Vaccine effectiveness against hospitalisation for Alpha and Delta variants
o 84.3% were reached within 48 hours of being identified by a positive case. This equates to 92.6% of those successfully reached being reached within 48 hours.

o From the time positive cases were referred to the contact tracing system, 40.6% of all close contacts that were eligible for follow-up were reached within 24 hours. This equates to 44.5% of those successfully reached being reached within 24 hours.

o From the time positive cases were referred to the contact tracing system, 68.7% of all close contacts that were eligible for follow-up were reached within 48 hours. This equates to 75.3% of those successfully reached being reached within 48 hours.

- In total, since 21 June 2020:
  - of the 178,980 positive cases that were eligible for follow-up, 178,336 (99.6%) were reached and asked to provide details of their recent contacts
  - of the 396,296 close contacts that were eligible for follow-up, 375,975 (94.9%) were successfully contacted and advised accordingly, or had their case otherwise resolved

Source: Test, Trace, Protect (contact tracing for coronavirus (COVID-19)): up to 26 June 2021 | GOV.WALES

**International update**

![Chart of COVID-19 cases reported weekly by WHO Region, and global deaths, as of 27 June 2021](image)

- The global number of new cases over the past week (21-27 June 2021) was over 2.6 million, a similar number compared to the previous week (Figure 1). The number of weekly deaths continued to decrease, with more than 57,000 deaths reported in the past week, a 10% decrease as compared to the previous week. This is the lowest weekly mortality figure since those recorded in early
November 2020. Globally, COVID-19 incidence remains very high with an average of over 370,000 cases reported each day over the past week. The cumulative number of cases reported globally now exceeds 180 million and the number of deaths is almost 4 million.

- This week, the African region recorded another sharp increase in incidence (33%) and mortality (42%) when compared to the previous week. The Eastern Mediterranean and European Regions also reported increases in the number of weekly cases. All Regions, with the exception of the African Region, reported a decline in the number of deaths in the past week.

**Fig. 2 Covid-19 cases reported in the last 7 days per 100,000 Source: WHO**
Fig 3. Vaccination levels - percentage population with partial and full vaccination.

- Despite a 10% increase in cases in the last week Europe continues to relax restrictions. It is expected that Delta will eventually dominate the rest of Europe and the WHO expect it to be the dominant strain on the planet in 2021. Portugal has just reimposed curfews in 43 municipalities up from 3 (including Lisbon) as the delta VOC causes an uptick in cases amongst the young.

**COVID-19 vaccine doses administered by country income group**

For vaccines that require multiple doses, each individual dose is counted. As the same person may receive more than one dose, the number of doses can be higher than the number of people in the population.

Source: Official data collated by Our World in Data, World Bank

OurWorldInData.org/covid-vaccinations • CC BY

Fig 4. Vaccination doses administered by country broken down by income level.

**Covid-19 Infection Survey results (Office for National Statistics) – 20 June to 26 June**

- The latest estimates for Wales from the Coronavirus (COVID-19) Infection Survey (CIS) have been published on the Welsh Government statistics and research web pages and the Office for National Statistics website. The results include estimates for the number and proportion of people in Wales that had COVID-19 in the latest week, 20 to 26 June 2021.

- The CIS aims to estimate:
  - how many people have the infection over a given time;
  - how many new cases occur over a given period; and
  - how many people are likely to have been infected at some point.
• Estimates are provided for the ‘community population’, i.e. private households only; residents in care homes, communal establishments and hospitals are not included.

• Please note that there is a greater lag in data from the infection survey than from other sources such as Public Health Wales. It is also important to stress the uncertainty around these figures. Since the survey picks up relatively few positive tests overall, the results can be sensitive to small changes in the number of these positive tests.

• No estimates of incidence are published this week as additional checks are being carried out due to low positivity rates.

Latest estimates and recent trends:

• For the week 20 to 26 June 2021, it is estimated that 0.22% of the community population had COVID-19 (95% credible interval: 0.12% to 0.36%).
• This equates to approximately 1 person in every 450 (95% credible interval: 1 in 820 to 1 in 280), or 6,800 people during this time (95% credible interval: 3,700 to 11,000).
• The percentage of people testing positive has increased in the most recent week.
• Caution should be taken in over-interpreting any small movements in the latest trend.
• Rates for cases compatible with the Delta variant have continued to increase in the most recent week. Rates for cases compatible with the Alpha variant remain low and the trend is uncertain for cases where the virus is too low for the variant to be identifiable.

Wales, estimated % testing positive for Covid 19 since 16 May

![Graph showing the percentage of people testing positive for Covid-19 in Wales since 16 May, with a trend line indicating an increasing rate.]
Latest estimates for the UK countries

- At the midpoint of the most recent week (20 to 26 June 2021), the highest estimated percentage of the community population with COVID-19 among the nations of the UK was seen in Scotland (0.68%), whilst Northern Ireland appeared to have the lowest (0.15%).
- In England, Wales and Scotland, the percentage of people testing positive has continued to increase in the most recent week. The trend remains uncertain in Northern Ireland in this period.

Positivity rates (%) across UK countries since 16 May 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Wales</th>
<th>England</th>
<th>Scotland</th>
<th>Northern Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-May</td>
<td>0.22% (0.12 to 0.36)</td>
<td>0.39% (0.34 to 0.44)</td>
<td>0.68% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>27-May</td>
<td>0.26% (0.18 to 0.35)</td>
<td>0.39% (0.34 to 0.44)</td>
<td>0.68% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>03-Jun</td>
<td>0.27% (0.20 to 0.35)</td>
<td>0.40% (0.35 to 0.46)</td>
<td>0.68% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>10-Jun</td>
<td>0.31% (0.23 to 0.40)</td>
<td>0.41% (0.36 to 0.46)</td>
<td>0.69% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>17-Jun</td>
<td>0.33% (0.25 to 0.42)</td>
<td>0.41% (0.36 to 0.46)</td>
<td>0.70% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>24-Jun</td>
<td>0.35% (0.27 to 0.44)</td>
<td>0.42% (0.37 to 0.47)</td>
<td>0.71% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
<tr>
<td>30-Jun</td>
<td>0.37% (0.29 to 0.46)</td>
<td>0.42% (0.37 to 0.47)</td>
<td>0.72% (0.50 to 0.90)</td>
<td>0.15% (0.06 to 0.30)</td>
</tr>
</tbody>
</table>

Source: Coronavirus (COVID-19) Infection Survey, ONS, 30/06/21
Vaccination in Wales

- Whilst numbers will be higher due to ongoing data entry, as at 22:00 on 1 July 2021 2,261,056 first doses and 1,695,819 second doses of Covid-19 vaccine have been given in Wales and recorded in the Covid-19 Welsh Immunisation System. This equates to 89.6% of the eligible (age 18 and over) population receiving a first dose and 67.2% receiving a second dose (2019 population estimate 2,522,940).

- These numbers have been de-duplicated so that people should not be ‘double-counted’ and are a daily cumulative snapshot of vaccinations registered. As a result the number of people vaccinated will be higher than these totals.

- Cases numbers are currently highest in younger age groups and the table bellows shows the level of vaccine coverage in different age groups to date.

Uptake by priority group and age, counting individuals in all groups in which they belong (not de-duplicated) as at 22:00 21 June 2021

<table>
<thead>
<tr>
<th>Group</th>
<th>Group size (n)</th>
<th>Received 1st dose (n)</th>
<th>Received 2nd dose (n)</th>
<th>1st dose uptake (%)</th>
<th>2nd dose uptake (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care home residents</td>
<td>14,696</td>
<td>14,376</td>
<td>13,827</td>
<td>96.1%</td>
<td>94.2%</td>
</tr>
<tr>
<td>Care home worker</td>
<td>38,051</td>
<td>35,317</td>
<td>33,286</td>
<td>92.7%</td>
<td>97.4%</td>
</tr>
<tr>
<td>80 years and older</td>
<td>171,480</td>
<td>164,674</td>
<td>160,903</td>
<td>96.0%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Healthcare worker</td>
<td>140,636</td>
<td>137,014</td>
<td>130,381</td>
<td>98.1%</td>
<td>99.0%</td>
</tr>
<tr>
<td>Social care worker</td>
<td>45,081</td>
<td>44,321</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aged 75–79 years</td>
<td>132,388</td>
<td>128,137</td>
<td>126,078</td>
<td>94.6%</td>
<td>96.2%</td>
</tr>
<tr>
<td>Aged 70–74 years</td>
<td>163,088</td>
<td>164,014</td>
<td>170,751</td>
<td>99.1%</td>
<td>94.9%</td>
</tr>
<tr>
<td>Clinically extremely vulnerable aged 16–69 years</td>
<td>81,307</td>
<td>76,826</td>
<td>74,233</td>
<td>94.9%</td>
<td>91.3%</td>
</tr>
<tr>
<td>Aged 65–69 years</td>
<td>160,269</td>
<td>160,962</td>
<td>167,319</td>
<td>98.4%</td>
<td>92.0%</td>
</tr>
<tr>
<td>Clinical risk groups aged 16–64 years</td>
<td>164,322</td>
<td>164,044</td>
<td>168,764</td>
<td>98.3%</td>
<td>92.9%</td>
</tr>
<tr>
<td>Aged 60–64 years</td>
<td>205,374</td>
<td>200,176</td>
<td>195,201</td>
<td>95.1%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Aged 55–59 years</td>
<td>233,395</td>
<td>226,820</td>
<td>233,351</td>
<td>91.2%</td>
<td>87.2%</td>
</tr>
<tr>
<td>Aged 50–54 years</td>
<td>228,290</td>
<td>227,441</td>
<td>229,460</td>
<td>99.2%</td>
<td>63.0%</td>
</tr>
<tr>
<td>Aged 45–49 years</td>
<td>359,342</td>
<td>349,855</td>
<td>248,872</td>
<td>83.5%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Aged 40–44 years</td>
<td>416,137</td>
<td>316,370</td>
<td>139,858</td>
<td>72.4%</td>
<td>32.9%</td>
</tr>
<tr>
<td>Aged 35–39 years</td>
<td>479,106</td>
<td>343,662</td>
<td>93,242</td>
<td>71.7%</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

Source: PHW Covid-19 Rapid Surveillance Dashboard

Adherence and understanding of current measures

- The data from IPSOS MORI are new this week. The data from Public Health Wales are the same as last week.

- The most recent IPSOS MORI data for the period 18 – 22 June for Wales shows that those who reported making essential trips only was the lowest since the survey began in March 2020, whilst those ensuring they were more than 2m apart from others increased from the last survey wave 2 weeks prior. It should be noted that this is self-reported adherence and will be affected by individuals understanding of the rules and the circumstances that apply to them.

- The figure below represents data collected online by IPSOS MORI. Each of the waves has included c.500 respondents in Wales. The sample is broadly representative of the adult population aged 16-74. Data is weighted to reflect the
The latest results from the Public Engagement Survey on Health and Wellbeing during Coronavirus Measures for the period 7 – 13 June show that 45% of people say they understand the current restrictions in Wales ‘very well’. A further 43% reported understanding the restrictions ‘fairly well’. The survey also shows that 38% of people said they were following coronavirus restrictions ‘completely’ and a further 42% reported majority compliance. 42% reported having people outside their household/permitted support bubble come into their house, whilst 31% reported going into others people’s houses.

Mobility
The most recent mobility data shows small reductions from the previous week. In some cases mobility remains above the baseline - but lower than in half term week. Note that the baseline for much of the data is during January-February 2020 and changes are relative to that period. It is not possible to determine if mobility is higher/lower than would have been expected prior to the pandemic as data for 2019 or earlier years is not published.

Mobility of Facebook users in Wales shows movement was 4% above the baseline for the week to the 26 June. This is lower than the week before (7% above the baseline). The percentage of users staying put (near to home) was 21%, up from the week before (20%). The baseline is the average value, for the corresponding day of the week, during the 4-week period 2 February – 29 February 2020.

Apple data for the week to the 26 June shows that requests for driving directions in Wales were lower than the previous week at 50% above the baseline (down from 52% above the baseline). Requests for public transport directions decreased compared to the previous week relative to the baseline and requests for walking directions fell compared to the previous week. The baseline is the 13th of January 2020.

The Google mobility data to the week of the 23 June for residential (i.e. people spending time at home) were the same as the week before at 4% above the baseline. Workplaces fell relative to the baseline by 1 percentage point (at 19% below the baseline). Retail & recreation mobility was down from the previous week (2% above the baseline, down from 3% above) and supermarkets & pharmacy were lower than the previous week (at 18% above the baseline). Public transport mobility decreased over the week relative to the baseline and parks also fell.

The figure below shows the change in mobility in Wales using Google mobility data. The figures are based on the average of the local authorities that have data. The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3 – Feb 6, 2020. The data for several categories is not available for August 16th – September 10th due to the data not meeting quality thresholds.
Anonymised and aggregated mobile phone data from O2 for the week to the 18 June shows no change in trips compared to the week before. Trips starting in Wales were 90% of the baseline. The baseline for the O2 data is the same day of the week in the first week of March.

**COVID-19 weekly surveillance and epidemiological summary from Public Health Wales (as at 24 June)**

- The proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms have increased compared to the previous week.
- Overall GP consultations for any Acute Respiratory Infection (ARI) and suspected COVID consultations have increased.
- The overall number of ambulance calls and the number of calls possibly related to COVID-19 increased.
- The all-Wales number of lab confirmed COVID-19 episodes increased in the most recent week. Sample positivity for testing episodes was 3.1% in week 24.
- Confirmed case incidence has increased across the majority of health board areas and was highest in Betsi Cadwaladar UHB.
- At a national level, confirmed case admissions to hospitals decreased slightly and confirmed cases who are inpatients in hospital remained stable compared to the previous week. Admissions to critical care wards increased slightly.
- Recent surveillance data suggest that COVID-19 infections are increasing in Wales. Cases remain geographically widespread.
- The number of MSOAs with confirmed cases increased and the number of cases per affected MSOA increased in most areas.
- There have been 11,137 cases in staff or students across 1,290 schools (82% of all schools in Wales) recorded in the TTP system since 1st September 2020, (as at 23rd June 2021). In the previous 21 days (as at 23rd June) there were between 3 and 56 total cases (staff and students) in most local authorities, with the exception of Conwy with 73 cases. Confirmed case incidence increased in all age-groups younger than 65 years in the most recent week and was highest in those aged 18y to 25y.
- Delta variant has become the current predominant variant in Wales, now accounting for the majority of newly confirmed and sequenced cases.
- All-cause deaths increased, but remain below the 5 year average.
- Deaths in confirmed cases in hospital, reported through PHW mortality rapid surveillance remains at low levels, with one death reported in the most recent week.
- In deaths where information is available from PHW rapid mortality surveillance, chronic heart disease, diabetes and chronic respiratory disease are the most commonly reported risk factors (in 34%, 28% and 22% of deaths respectively).
• Influenza is not currently circulating in Wales. However, in recent weeks there has been an increase in the non-COVID-19 causes of ARI, including parainfluenza, seasonal coronavirus and rhinovirus, with small numbers of RSV cases in children.

NHS Capacity (occupancy, discharges and admissions)

• Overall, NHS Covid-19 occupancy, discharges and admissions has continued to reduce or remain stable during the 7 day period ending 1 July.

• The figure below shows the hospital occupancy of confirmed Covid-19 positive patients for the last 6 months (7 day rolling average, as at 10 June. For the most recent 7 day period the average weekly Covid-19 confirmed hospital occupancy was 26, a decrease of 1 from the previous period.

• The Figure below shows the COVID-19 Confirmed Invasive Ventilated Bed Occupancy (7 day rolling average). For the most recent 7 day period this increased slightly from 1 to 2.

• As at 30 June 2021, the number of people recovering in hospital from COVID-19, has remained stable at 53.
The Figure below shows the 7-day average number of hospital admissions of people who are suspected (SUS) or confirmed as having Covid-19 (COV+) as at 21 June. For the most recent 7 day period the average Covid-19 confirmed and suspected hospital admissions was 5, a decrease of 2 from the previous period.

The purple line represents the total number over a rolling 7 day average, whilst the fainter grey lines show the actual figures at that time.

The Figure below shows the 7-day average number of hospital discharges of people who are suspected or confirmed as having Covid-19 as at 21 June. For the most recent 7 day period the average daily hospital discharges remained at 0.
The Figure below shows critical care admissions for Level 3 ICU of people who are suspected or confirmed as having Covid-19 as at 21 June. For the most recent 7 day period daily average ICU admissions remained at less than 1.

Source: Welsh Government dashboard, Data from StatsWales