Technical Advisory Cell

Summary of advice

2\textsuperscript{nd} October 2020
Top-line summary

- Some data streams indicate potential slowing in the growth rate of the epidemic, but it remains likely that infection incidence is growing overall in Wales.

- The latest estimate of $R_t$ from the Scientific Advisory Group for Emergencies (SAGE) for Wales is between 1.3 and 1.6. While there may still be high degrees of variability (for example, in a localised outbreak), there is now more confidence in the reliability of the $R$ and growth rate estimates compared to two to three months ago.

- For the week 18 September to 24 September, an average of 0.21% of the community population in Wales had COVID-19, equating to approximately 1 person in every 500, or 6,400 people across Wales in total during this time. There is uncertainty in these results because the survey is still only picking up relatively few positive tests overall, the results are very sensitive to small changes.

- Mobility data for Wales and the UK mostly shows reductions in mobility compared to last week, with larger falls in Wales. Wales also shows increases in adherence to key mitigating behaviours including the use of face coverings and those making essential trips only.

- Unless measures bring $R$ back below 1, it is possible that infection incidence and hospital admissions may exceed scenario planning levels.

- Ventilation is an important mitigation measure and should be considered alongside other control measures.

- Behavioural insights relevant to contact tracing and young people are important to consider and advice from the Technical Advisory Group is available here: https://gov.wales/technical-advisory-group-behavioural-insights-contact-tracing-systems-and-young-people


Growth rate and reproduction number

- The current daily growth rate is estimated by SAGE to be between 0.05 and 0.09 in Wales, indicating that infections could be increasing by up to 1% and 5% per day.
• The most recent estimate of the Reproduction number (R\textsubscript{t}) for Wales from SAGE is predicted to be between 1.3 and 1.6. The estimate of R\textsubscript{t} is shown as a range without a central estimate.

• Growth rate and R\textsubscript{t} figures are similar to those for the UK overall, but are higher than last week’s estimates.

• A consistent R\textsubscript{t} value below 1 will lead to a reduction in cases and hospitalisations, while a consistent R\textsubscript{t} value above 1 will lead to an increase in cases and hospitalisations.

• While there may still be high degrees of variability, there is now more confidence in the reliability of the R number and growth rate estimates compared to two to three months ago.

• Care should still be taken when interpreting R\textsubscript{t} and growth rate estimates for the UK, due to their inherently lagged nature, and as these figures mask variation in the number of infections and how rates of transmission is changing in some parts of the country. Availability of testing may also be a constraint.

**International update**

• As with last week, the UK is lagging behind France and Spain but following a similar trajectory.

• The Figure below shows how 14-day COVID-19 cases per 100,000 have changed across Europe from week 36 – 38. Data on the picture across Europe, including caveats around data lags and variable testing policies is available here: [https://www.ecdc.europa.eu/en/covid-19-pandemic](https://www.ecdc.europa.eu/en/covid-19-pandemic)
Adherence to current measures and mobility

- The most recent IPSOS MORI data for Wales shows increases in several of the questions relating to adherence to key mitigating behaviours. The percentage who reported using a face covering increased further to 82%, whilst those who said they made essential trips only increased from 38% to 51% - the highest it has been since early July.

- The figure below represents data collected online by IPSOS MORI as part of a multi-country survey on the Global Advisor platform. Each of the waves has included c.600 respondents in Wales. The sample is broadly representative of the adult population aged 16-74. Data is weighted to reflect the age and gender profile of the Welsh population aged 16-74. All samples have a margin of error around them. For a sample of around 500, this is +/- 4.8 percentage points.

![Graph showing adherence to key mitigating behaviours, Wales](image)

- The latest results from the Public Engagement Survey on Health and Wellbeing during Coronavirus Measures show that 50% of people came into close contact (within 1 metre) with at least 3 people from outside their household/extended household in the last 7 days. This is similar to the results from two weeks ago. 29% reported that others outside their household/extended household had been in their house in the last week, this is down from 40% two weeks prior. 23% reported going into one or more other houses in the last week (excluding their extended household) – this is down slightly from 28% two weeks ago.

- Mobility data for Wales and the UK mostly shows reductions in mobility compared to last week, with larger falls in Wales.
In mid-April mobility of Facebook users in Wales was 50% lower than the baseline, this is 9% lower than the baseline (3% lower last week). 24% of Facebook users in Wales are staying put, up from last week. In early April around 45% were staying put – this was around 18% in early March.

Apple data showing requests for driving directions in Wales have fallen again in the last week and are now similar to mid July. After two months of being above the other nations relative to the baseline, Wales is now similar to the UK average. Requests for walking directions and requests for public transport directions have both fallen in the last week.

The Google mobility data shows small increases in workplaces and a slightly larger increase in residential in the last week (i.e people spending more time at home than last week). Other categories are currently unavailable due to concerns over the quality of the data, but will be re-instated soon.

After lockdown patterns of mobility between England and Wales were broadly similar. Between mid-May and early-June England saw larger increases in mobility than Wales, with Scotland showing a similar pattern to Wales. During July mobility increased more in Wales than in England and that continued throughout August. After small reductions in early to mid September, the last week has seen large reductions in some of the mobility data.

Anonymised and aggregated mobile phone data from O2 to the 29th of September has shown that following the introduction of the local lockdowns there were notable falls in trips in all areas the day after the lockdown started (which has been at 6pm). Rhondda Cynon Taf is still showing fewer trips than before lockdown started whilst trips starting in Caerphilly have returned to around pre-lockdown levels. Blaenau Gwent had an initial reduction on the 23rd, but looks to be back to pre-lockdown levels. Other lockdown local authorities covered by the data show trips are below pre-lockdown levels.

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 are currently unavailable.

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1 Data are to the 29th of September, so cover the local lockdowns in Caerphilly (8th September 6pm), Rhondda Cynon Taf (17th September 6pm), Blaenau Gwent, Bridgend, Newport and Torfaen (22nd September 6pm), Swansea and Cardiff (27th September 6pm). As the data cover whole local authorities, the local lockdown in Llanelli (26th September 6pm) has not been included in this analysis.
COVID-19 Infection Survey results (Office for National Statistics)

- For the week 18 September to 24 September, an average of 0.21% of the community population in Wales had COVID-19 (95% credible interval: 0.09% to 0.39%).

- This equates to approximately 1 person in every 500 (95% credible interval: 1 in 1,100 to 1 in 300), or 6,400 people during this time (95% credible interval: 2,700 to 12,100).

- Data suggest the positivity rate increased in recent weeks, but may be levelling off.

- Recent models give higher estimates than previous models. However it is important to stress the uncertainty around these figures. Since the survey is still only picking up relatively few positive tests overall, the results are very sensitive to small changes in the number of these positive tests.

Research

- There are currently 5637 Welsh patients recruited to COVID-19 urgent public health studies, an increase of 57 in last 7 days.
COVID-19 weekly surveillance and epidemiological summary from Public Health Wales

As at 30th September

- The proportion of calls to NHS 111 and NHS direct related to possible COVID-19 symptoms have increased during recent weeks.
- GP consultations for Acute Respiratory Infection (ARI) and suspected COVID-19 decreased in week 39 compared to the previous week.
- Ambulance calls possibly related to COVID-19 are currently stable.
- The number of lab confirmed COVID-19 episodes increased nationally compared to the previous week and positivity is now above 5%.
- During week 39, incidence increased across all age groups, with highest incidence being seen in those aged 30-49.
- Recent cases have included returning travellers and local transmission including work places and social networks.
- Confirmed cases in Hospital and ICU have continued to increase in week 39.
- The LA areas of highest activity have mainly been in South Wales, however there are increasing trends in many other parts of Wales.
- There are an increasing number of incidents reported, mainly in residential care homes, and recent increases in school settings.
- Highest activity seen in Blaenau Gwent, Merthyr Tydfil and Rhondda Cynon Taf, mobile community test sites recently established and as at 1st October, local restrictions currently in place in 15 local authority areas and one town (Llanelli).
- Activity in schools continues to be recently noted.
NHS Data Dashboard

- The table below details the occupancy of Intensive Care Units (ICU) across health boards in Wales. Hospital data updated as at 02/10/2020.

<table>
<thead>
<tr>
<th>Health Board</th>
<th>L3 ICU Occupancy %</th>
<th>Patients with suspected Covid-19</th>
<th>Patients with confirmed Covid-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABUHB</td>
<td>59.4%</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>BCUHB</td>
<td>57.1%</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>CTMUHB</td>
<td>77.5%</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>CVUHB</td>
<td>54.4%</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>HDUHB</td>
<td>62.5%</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>SBUHB</td>
<td>62.1%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Wales</td>
<td>60.9%</td>
<td>11</td>
<td>21</td>
</tr>
</tbody>
</table>

- The Figure below shows the total number of people who have tested Covid-19 positive and are in Intensive Care Units in hospitals across the different health boards in Wales.

![Daily L3 ICU Confirmed COVID19 Patients](image)

- The Figure below shows the number of people admitted to hospital and are either suspected or confirmed as having Covid-19. 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 number of hospital discharges of people who are either suspected or confirmed as having Covid-19. 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 patients admitted to the intensive care units and are either suspected or confirmed as having Covid-19. 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.
Professional Head of Intelligence Assessment (PHIA) probability yardstick

- Where appropriate, TAC advice will express Likelihood or confidence in the advice provided using the PHIA probability yardstick to ensure consistency across the different elements of advice.