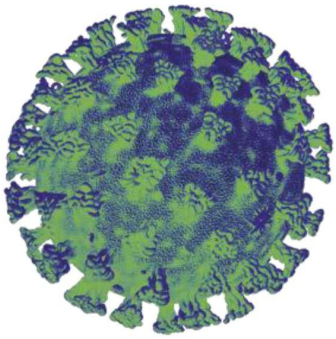
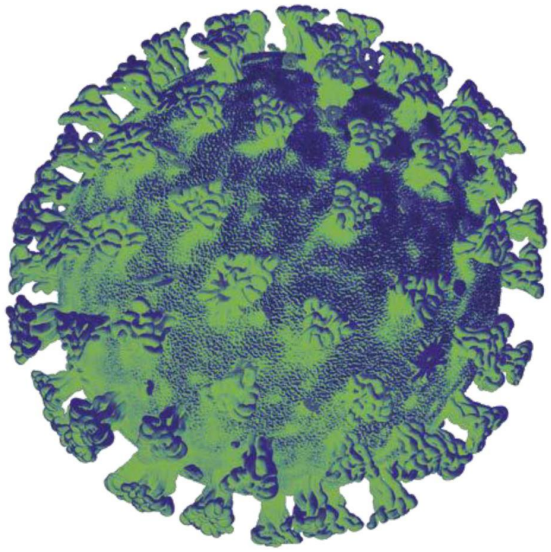
Llywodraeth Cymru
Welsh Government

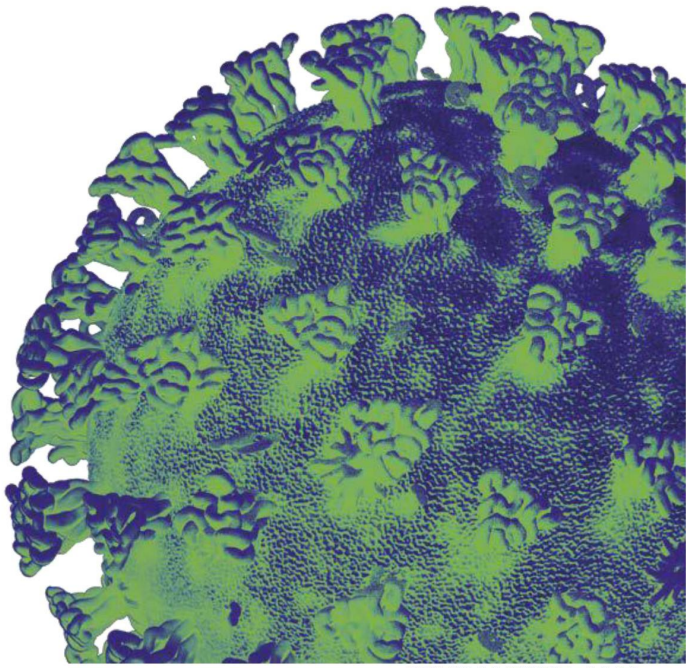
Technical Advisory Cell

Summary of advice

18th September 2020







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Technical Advisory Cell: Summary Brief

18th September 2020

Top-line summary

- The epidemic is evolving rapidly across Wales and the UK, meaning that estimates become out of date very quickly. There is consensus that the situation continues to be serious. This is highlighted by the sad news that we have begun again this week to have deaths from COVID-19 recorded in Wales.
- The number of positive cases per 100,000 of the population in Wales has increased significantly over the last two weeks but this has not produced a significant increase in admissions and deaths.
- We believe that the SAGE estimate of the R number is lower than the true R number in Wales. This is because the SAGE estimate is based on trends in admissions and deaths as well as cases and survey data, all of which have a time lag.
- A package of non-pharmaceutical interventions (NPIs) on local and national scale may be needed to bring R back below 1. Some NPIs may need to be in place for a significant length of time, though an earlier and more comprehensive response is likely to reduce the length of time for which they are required.
- When re-introducing NPIs, sufficient time is needed to establish whether these interventions have truly been successful. This is because there are also time lags associated with infectivity, symptom development, testing capacity and public behaviour.
- Interventions differ in their effectiveness in reducing transmission and have different types and levels of harm associated with them. It is increasingly important to consider the indirect harms associated with COVID-19.
- The public version of the Reasonable Worst Case (RWC) for Wales has now been published. While we do not expect the scenario to be accurate from week to week, we are monitoring epidemiological data in Wales against this.
- Results from the Office for National Statistics infection study show that for the week 30th August to 5th September, an estimated 0.05% of the community population in Wales had COVID-19. This equates to approximately 1 person in every 2,000, or a total of 1,500 people during this time. Care should be taken when interpreting these figures due to low sample sizes.

- The main foci of recent activity has been in Caerphilly, Merthyr Tydfil and Rhondda Cynon Taf with mobile community test sites recently established and restrictions currently in place in Caerphilly and Rhondda Cynon Taf.
- Papers from SAGE considered by the Technical Advisory Cell and Group are published here: https://www.gov.uk/government/collections/scientific-evidence-supporting-the-government-response-to-coronavirus-covid-19#meeting-minutes-and-supporting-papers

Growth Rate

- The current growth rate is estimated by SAGE to be between -0.04 and 0.08. There is significant uncertainty around the actual growth rate and the data used is subject to time lags so the recent increase in cases may be reflected in the growth rate next week.

Reproduction number

- The most recent estimate of the Reproduction number R_t for Wales from SAGE is predicted to be between 0.7 and 1.2. The estimate of R_t is shown as a range without a central estimate. The large confidence interval suggests a high degree of uncertainty of the exact value of R_t.
- The number of positive cases has increased in Wales over the last two weeks but this has not yet produced a significant increase in admissions and deaths.
- We believe that the SAGE estimate of the R number is lower than the true R number as it is based on trends in admissions and deaths as well as cases and survey data, all of which have a time lag.
- A consistent R_t value below 1 will lead to a reduction in cases and hospitalisations, however a consistent R_t value above 1 will lead to an increase in cases and hospitalisations.

Current Estimate of R_t in Wales

- There is evidence of small variations in R_t between the different nations of the UK. There is, however, greater uncertainty in the estimates for Scotland, Wales, and Northern Ireland partly due to the smaller numbers of cases and deaths compared to England.
- Any changes in transmission that may have occurred in the past two to three weeks may not yet be reflected in clinical data, nor therefore fully reflected in current estimates of R_t.

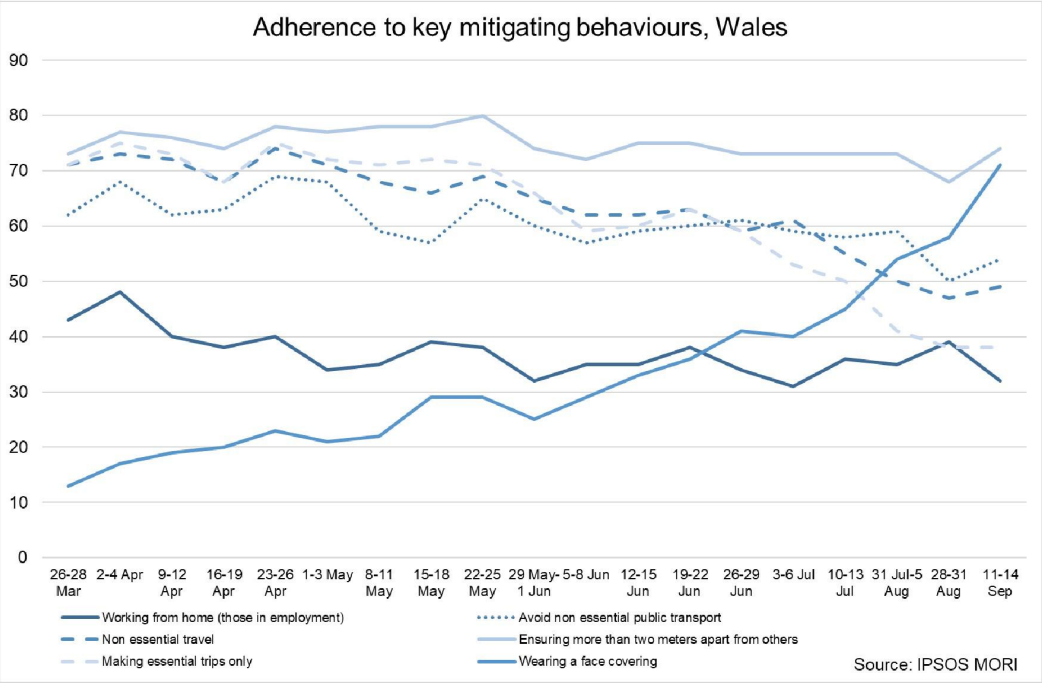
- There are three settings which are particularly relevant to the current situation: the community, care homes, and hospitals. Importation of cases from other countries may have also played a part in recent transmission.

Halving time

- Reliable estimates of hospital doubling/halving times cannot currently be estimated due to low numbers of admissions.

Adherence to current measures and mobility

- The most recent IPSOS MORI data for Wales shows stability in most of the questions relating to adherence to key mitigating behaviours. The percentage who reported using a face covering increased to 71% (the survey covered the 11th-14th – with the 14th being when face coverings were mandated in many indoor settings).
- 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.



- The latest results from the Public Engagement Survey on Health and Wellbeing during Coronavirus Measures show that 52% 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. 40% reported that others outside their household/extended household had been in their house in the last week and 28% reported going into one or more other houses in the last week (excluding their extended household). These are similar percentages to the end of July.
- Mobility data for Wales and the UK show little change from last week.
- In mid-April mobility of Facebook users in Wales was 50% lower than the baseline, this is 1% lower than the baseline and is up slightly from last week. 22% of Facebook users in Wales are staying put, similar to the previous 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 slightly in the last week. Relative to the baseline the data are higher than the other nations, but the gap has narrowed further in the last week. Requests for walking directions shows no change in the last week, whilst requests for public transport routes has fallen.
- The Google mobility data shows increases in workplaces in the last week (which may coincide with the end of the summer holidays the previous week). Retail & recreation shows a fall, whilst most other categories show little change.
- 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. The first week in September showed reductions in movement in Wales, with the most recent week showing stability.
- Anonymised and aggregated mobile phone data from O2 has shown that trips starting in Caerphilly have fallen by 8 percentage points in the last week (to Tuesday 15th), compared to 1 percentage point for Wales. Data from Google (to the 11th) shows reductions in mobility in Caerphilly for many of the categories.
- 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.

ONS infection study results

- For the week 04 September to 10 September, an average of 0.05% of the community population had COVID-19 (95% credible interval: 0.01% to 0.13%).
- This equates to approximately 1 person in every 2,000 (95% credible interval: 1 in 8,200 to 1 in 800), or 1,500 people during this time (95% credible interval: 400 to 3,900).
- Data suggest the rate has been relatively stable over the past 6 weeks.
- Although Public Health Wales (PHW) testing data indicate some local spikes in infection rates recently, they are not significant enough to influence the Wales level estimates presented here. Additionally, the CIS reference period is approximately one week behind the latest PHW data.
- There is considerable uncertainty around the estimates and credible intervals

  are provided to indicate the range within which we may be confident that the true figure lies.

Research

- There are currently 5513 Welsh patients recruited to COVID-19 urgent public health studies, an increase of 42 in last 7 days.

COVID-19 weekly surveillance and epidemiological summary from Public Health Wales

- The proportion of calls to NHS 111 and NHS direct related to possible COVID-19 symptoms have increased.
- Ambulance calls possibly related to COVID-19 peaked in April and have fallen and currently stable. Hospital and ICU admissions are low and stable.
- Age-group specific incidence is now highest in those younger than 50 years.
- Recent cases have included travellers returning from countries outside the UK and also local transmission in work places and social networks.
- The main foci of recent activity has been in Caerphilly, Merthyr Tydfil and Rhondda Cynon Taf, although increasing trends are noted in other local authorities.

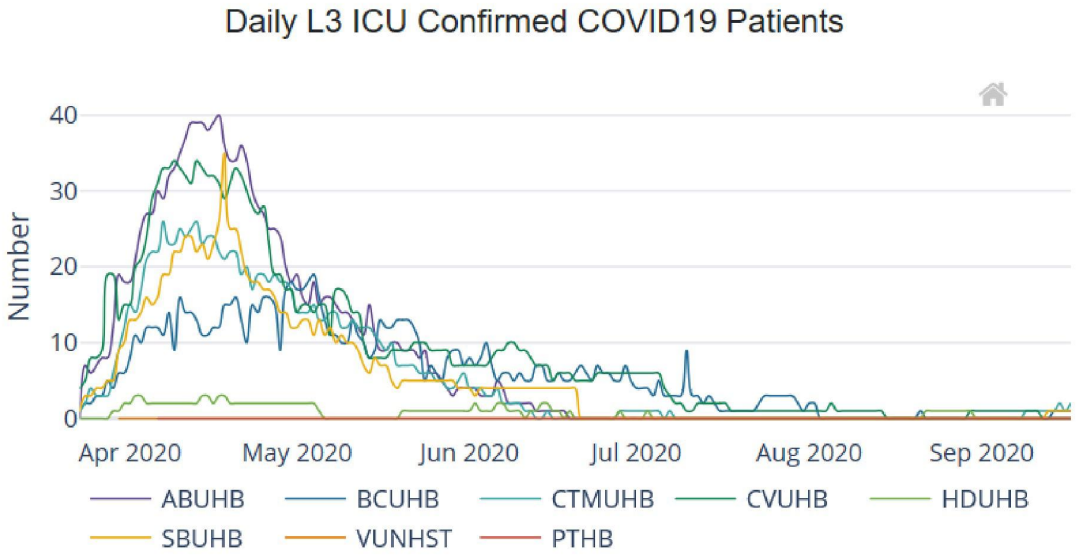
- There continues to be 1 to 10 new incidents reported per week, mainly in residential care homes, but with recent increases in other settings including schools and clusters amongst family and friends and in workplaces.
- Increased activity in Caerphilly, Merthyr Tydfil and Rhondda Cynon Taf with mobile community test sites recently established and restrictions currently in place in Caerphilly and Rhondda Cynon Taf.

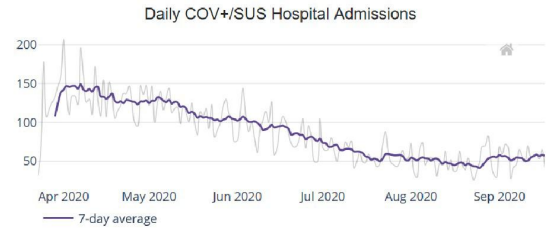
NHS Data Dashboard

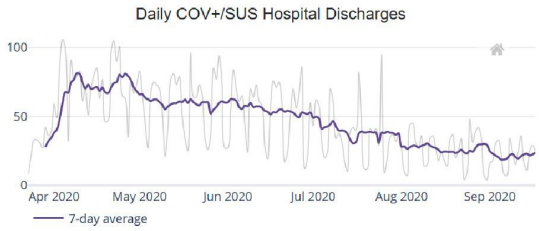
- Hospital data updated at 18/09/2020

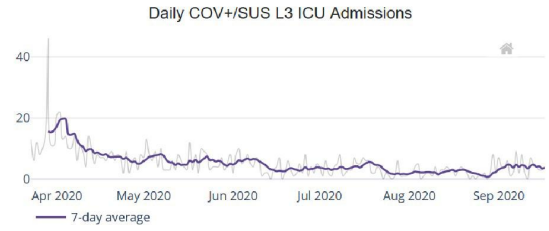
L3 ICU

- Of the total of 133 patients in L3 ICU in Wales (Down from 151 in previous report):
    - 4 are confirmed COVID patients (2 in CTMUHB, 1 in SBUHB and 1 in BCUHB)
    - 7 are suspected COVID patients (4 in ABUHB, 1 in BCUHB, and 1 in CTMUHB)
- Of the health boards with L3 ICU units:
    - CTMUHB is at 88.9% occupancy (with 2 suspect and 2 confirmed COVID patients)
    - SBUHB is at 55.2% occupancy (with 1 confirmed COVID patient)
    - CVUHB is at 53.2% occupancy (with 1 suspected and 1 confirmed COVID patients)
    - ABUHB is at 46.9% occupancy (with 4 suspected COVID patients).
    - BCUHB is at 46.9% occupancy (with 0 COVID Patients)
    - HDUHB is at 40.6% occupancy (with 0 COVID patient)









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.