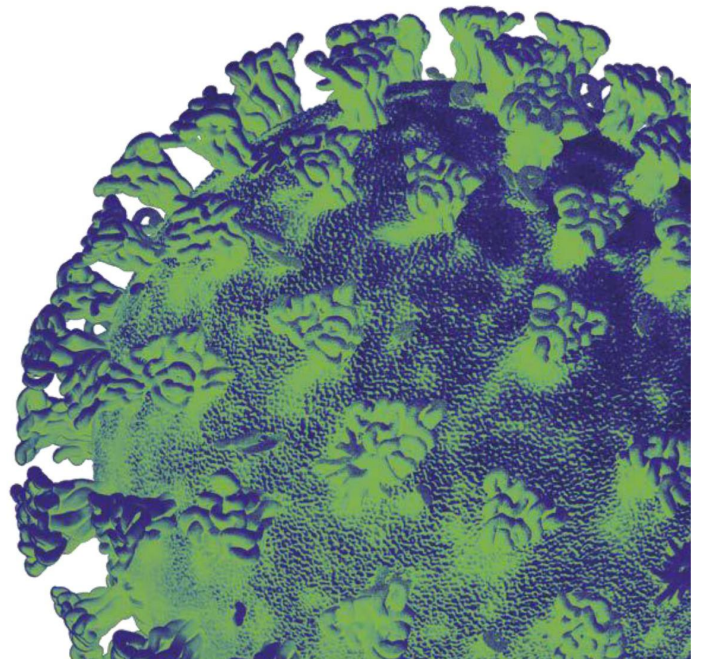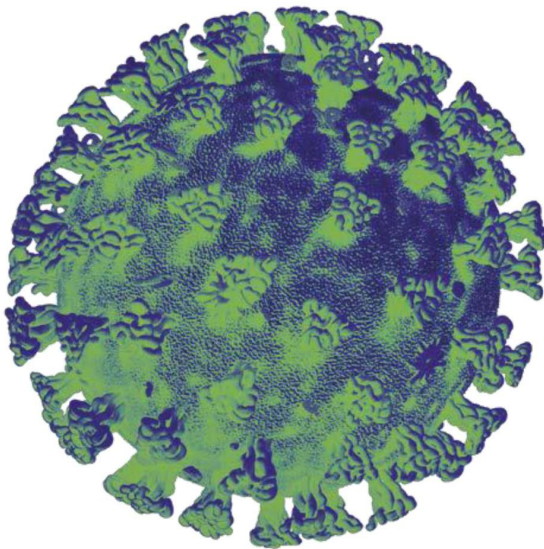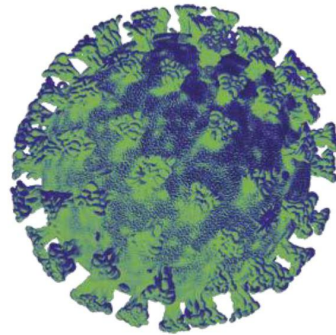Llywodraeth Cymru
Welsh Government

Technical Advisory Cell

Summary of advice

25th September 2020

Technical Advisory Cell: Summary Brief

25th September 2020

Top-line summary

- The incidence of Covid-19 in Wales continues to increase and there are now increases in related hospital and ICU admissions. The latest estimate of R from the Scientific Advisory Group for Emergencies (SAGE) for Wales is 1.0 and 1.4, however the true figure is expected to be higher.

- There are encouraging signs in Caerphilly that compliance with local measures are enough to bring down the incidence of COVID-19.

- If the current measures do not bring R below 1 then further restrictions will be needed to control the epidemic in Wales. The earlier additional measures are introduced, the more effective they will be.

- Public Sector bodies should use communication with the public to increase the understanding of risk. It is extremely important for everyone to follow the guidance, as anyone can contribute to transmission, even if they have previously been infected.

- Papers from SAGE considered by the Technical Advisory Cell and Group are published here: https://www.gov.uk/government/collections/scientificevidence-supporting-the-government-response-to-coronavirus-covid19#meeting-minutes-and-supporting-papers

Growth Rate

- The current daily growth rate is estimated by SAGE to be between 0.01 and 0.05 in Wales, indicating that infections could be increasing by up to 1% and 5% per day. This is below the rate for the UK but is higher than last week's estimate.

- There is significant uncertainty around the actual growth rate and the data used is subject to time lags so any recent increase in cases may not be reflected in the growth rate.

Reproduction number

- The most recent estimate of the Reproduction number R_t for Wales from SAGE is predicted to be between 1.0 and 1.4. 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 three weeks but this measure is greatly affected by the number of tests and offers an uncertain measure. Since we do not wish to have to reach a point where the more effective measurer of hospital admissions or deaths, a degree of uncertainty is acceptable.

- A consistent R_t value below 1 will lead to a reduction in cases and hospitalisations, while 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.

International update

- The UK is lagging behind other countries like France and Spain but following a similar trajectory. The rise in cases and the speed of the rise is causing issues as it spreads across Europe with Spain, France and the Balkans now seeing marked increases.

- The Figure below shows how 14-day COVID-19 cases per 100,000 have changed across Europe from week 30 – 37. 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
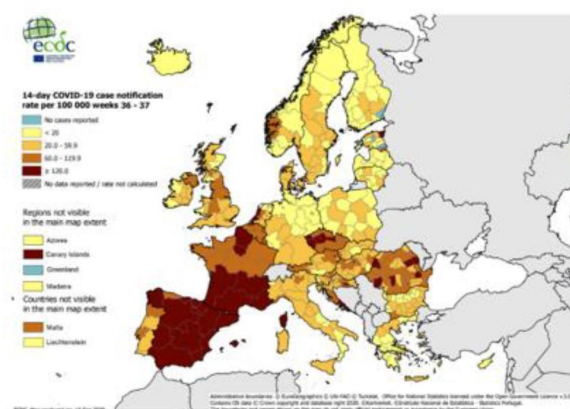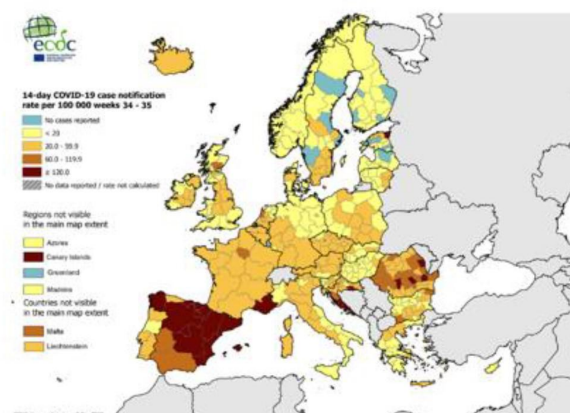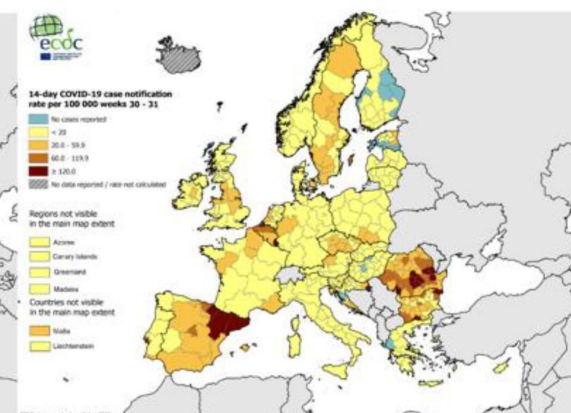
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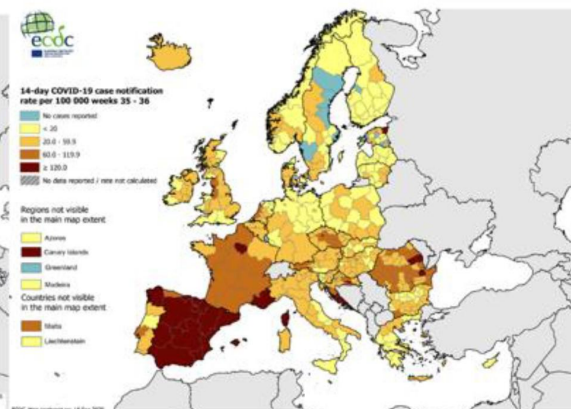
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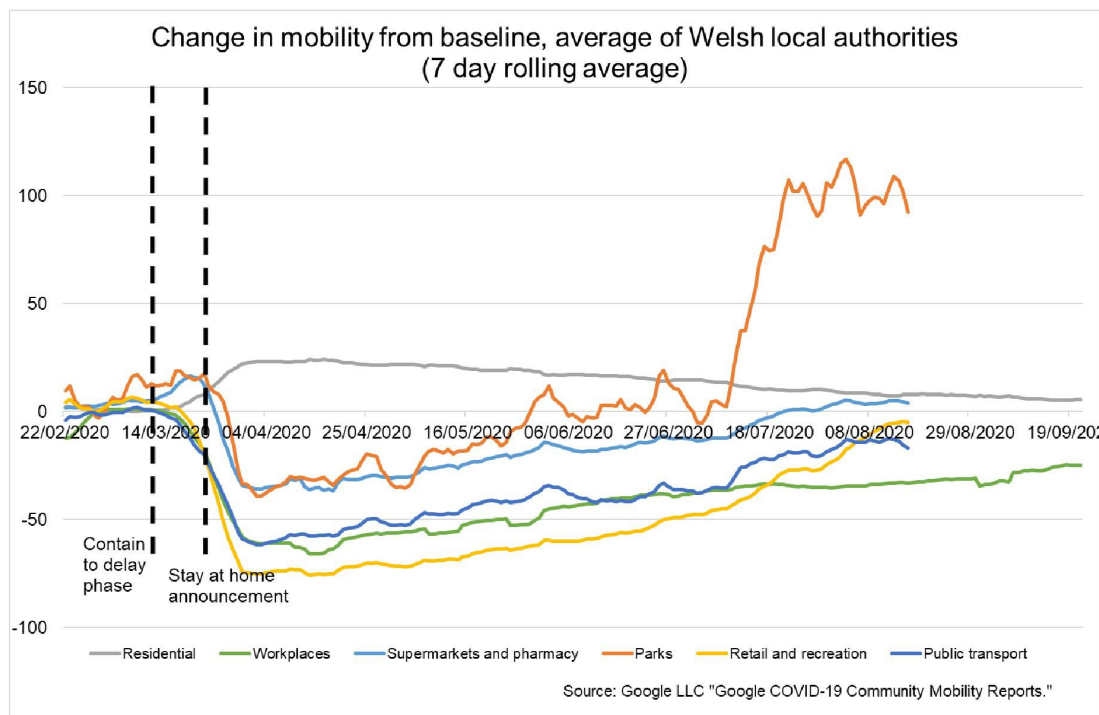

Week 30-31

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.

Adherence to key mitigating behaviours, Wales

Source: IPSOS MORI
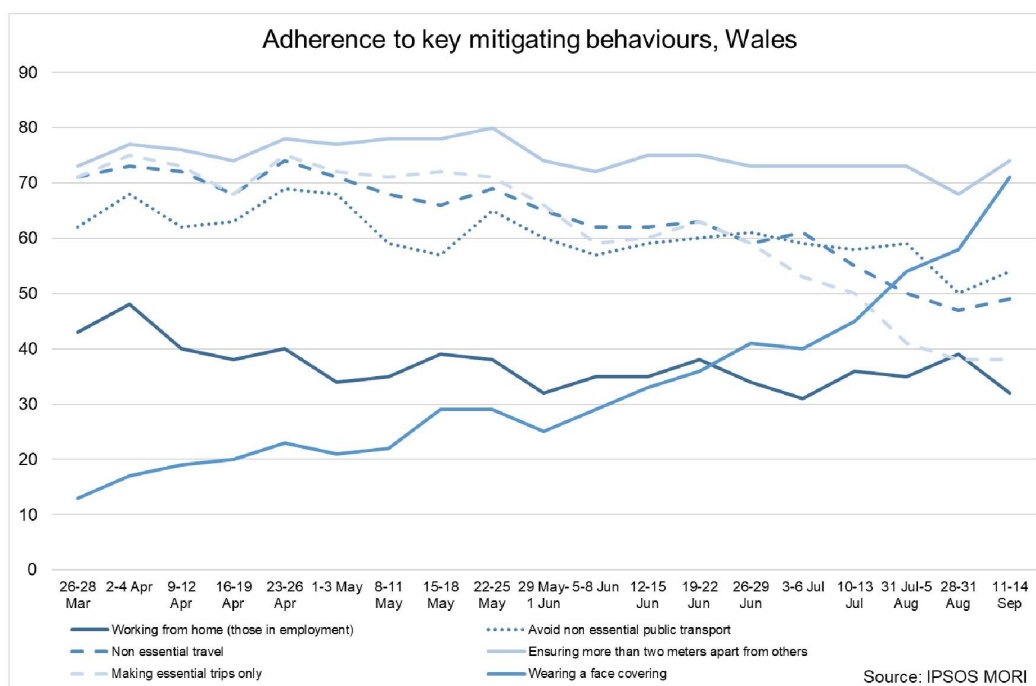
- Mobility data for Wales and the UK mostly shows a similar picture to last week.

- In mid-April mobility of Facebook users in Wales was 50% lower than the baseline, this is 1% lower than the baseline and similar to 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 a little further in the last week. Requests for walking directions and requests for public transport directions have both increased in the last week.

- The Google mobility data shows small increases in workplaces in the last week and in residential. 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. The first week in September showed reductions in movement in Wales, with the last two weeks having little change mostly.

- Anonymised and aggregated mobile phone data from O2 has shown that trips starting in Rhondda Cynon Taf have fallen by 5 percentage points in the last week (to Tuesday 22nd). Following the reduction in Caerphilly between the 8th and the 15th, trips have increased in the last week - but remain lower than they

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were before the local lockdown started. Data from Google (to the 21st) shows increases in residential mobility (i.e. people staying at home more) for Rhondda Cynon Taf and Caerphilly following the local lockdowns.

- 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.

Change in mobility from baseline, average of Welsh local authorities (7 day rolling average)

Source: Google LLC "Google COVID-19 Community Mobility Reports."

ONS COVID-19 Infection Survey (CIS) results

- For the week 13 September to 19 September, an average of 0.35% of the community population had COVID-19 (95% credible interval: 0.14% to 0.66%).

- This equates to approximately 1 person in every 300 (95% credible interval: 1 in 700 to 1 in 200), or 10,800 people during this time (95% credible interval: 4,400 to 20,200).

- Data suggest the positivity rate has increased in recent weeks, from a previous measure of 0.05% of the community.

- The latest model gives a much higher estimate than the previous modelled estimate. 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.

- Taking into account the CIS and other sources of information, such as Public Health Wales testing data, we can be confident that the rate has increased recently, though the 'true' increase may not be as sharp as implied by the latest model.

Research

- The Welsh Government has been continuing to collaborate with UK government and the other Devolved Administrations to take a UK approach to COVID-19 research and development.

- There are now currently 225 projects funded by UK Research and Innovation (UKRI). Much of this research has been researcher-led via open calls.

- There is now a move to focus on a more commissioned-led approach, to more directly address policy needs.
- Wales plays a key role in recruiting patients to Urgent Public Health studies and there are currently 5580 Welsh patients recruited to COVID-19 urgent public health studies, an increase of 67 in last 7 days.

- A vaccine research delivery programme has been established in partnership with Public Health Wales.

- A number of data-led research projects are underway, using anonymised linked data via the Secure Anonymised Data Linkage (SAIL) databank.

- Research and evidence teams in organisations across Wales, including Welsh Government, Public Health Wales and Health Technology Wales have been providing rapid review and synthesis of evidence in response to urgent questions.

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

As at 24th September 2020

- The proportion of calls to NHS 111 and NHS direct related to possible COVID-19 symptoms have increased

- GP consultations for Acute Respiratory Infection (ARI) and suspected COVID-19 also continued to increase.

- Ambulance calls possibly related to COVID-19 are currently stable.

- During week 38 the number of lab confirmed COVID-19 episodes increased nationally compared to the previous week and positivity is now above 3%. Age-group specific incidence is highest in those younger than 50 years.

- Recent cases have included returning travellers and local transmission including work places and social networks.

- Confirmed cases in hospital and ICU have increased.

- The main foci of recent activity has been in LA areas in South Wales, with Blaenau Gwent, Bridgend, Caerphilly, Merthyr Tydfil, Rhondda Cynon Taf and Newport currently with local restrictions in please. There are increasing trends noted in other LAs also.

- Activity in schools has recently been noted.

NHS Data Dashboard

- Hospital data updated at 25/09/2020

L3 ICU
- Of the total of 145 (up by 12 since last report) patients in L3 ICU in Wales:
  - 13 are confirmed COVID patients (9 in CTMUHB, 2 in BCUHB, 1 in SBUHB and 1 in ABUHB)
  - 5 are suspected COVID patients (2 in ABUHB, 2 in BCUHB, and 1 in CTMUHB)
- Of the health boards with L3 ICU units:
  - SBUHB is at 65.5% occupancy (with 1 confirmed COVID patient)
  - ABUHB is at 59.4% occupancy (with 2 suspected and 1 confirmed COVID patients).
  - CTMUHB is at 59.0% occupancy (with 1 suspect and 9 confirmed COVID patients)
  - BCUHB is at 57.1% occupancy (with 2 suspected and 2 confirmed COVID Patients)
  - HDUHB is at 56.3% occupancy (with no COVID patients)
  - CVUHB is at 48.1% occupancy (with no COVID patients)

- 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.
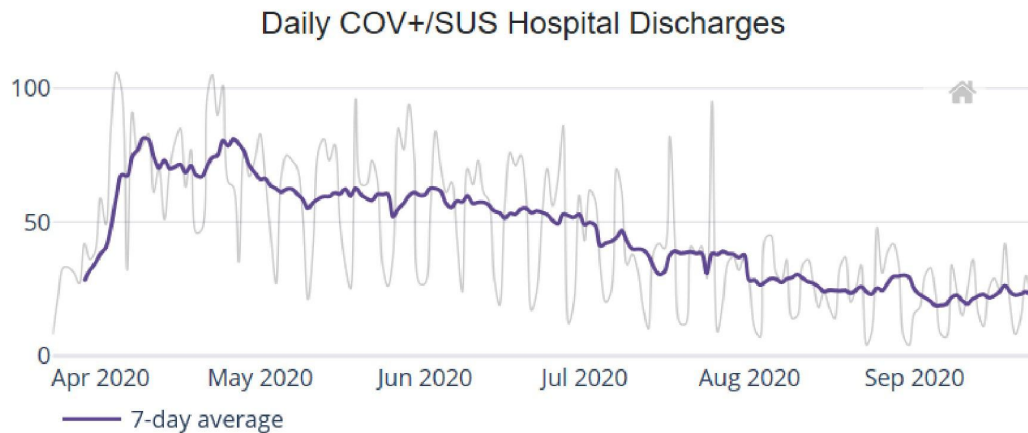
Daily L3 ICU Confirmed COVID19 Patients
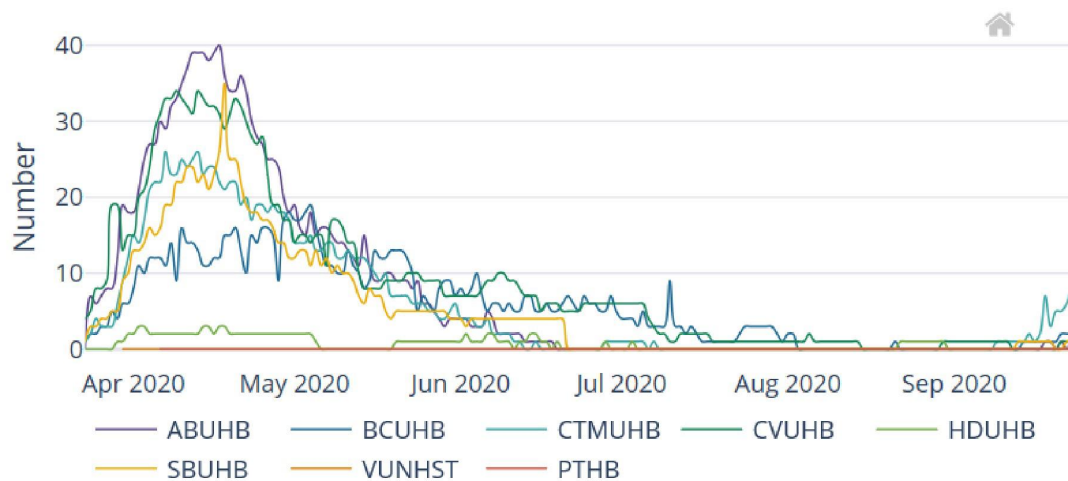
- The Figure below shows the number of people admitted to hospital and are either suspected or confirmed as having Covid-19. The purple line represents the total number over a rolling 7 day average, whilst the fainter grey lines show the actual figures at that time.

Daily COV+/SUS Hospital Admissions
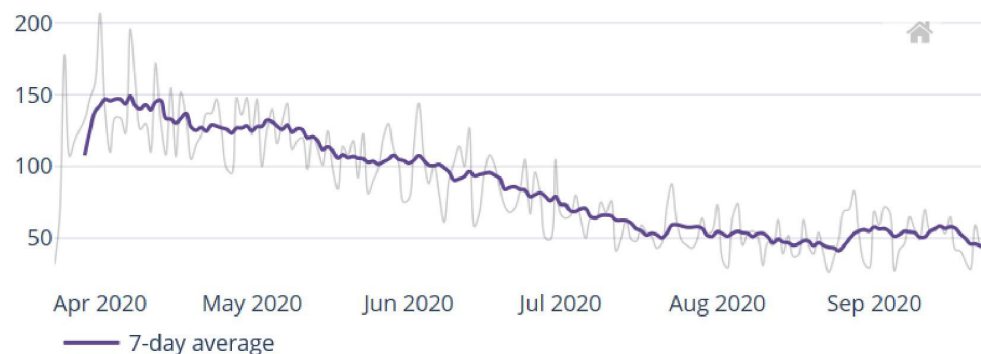
- The Figure below shows the number of hospital discharges of people who are either suspected or confirmed as having Covid-19. The purple line represents the total number over a rolling 7 day average, whilst the fainter grey lines show the actual figures at that time.

Daily COV+/SUS Hospital Discharges

- 7-day average

- 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.

Daily COV+/SUS L3 ICU Admissions

- 7-day average
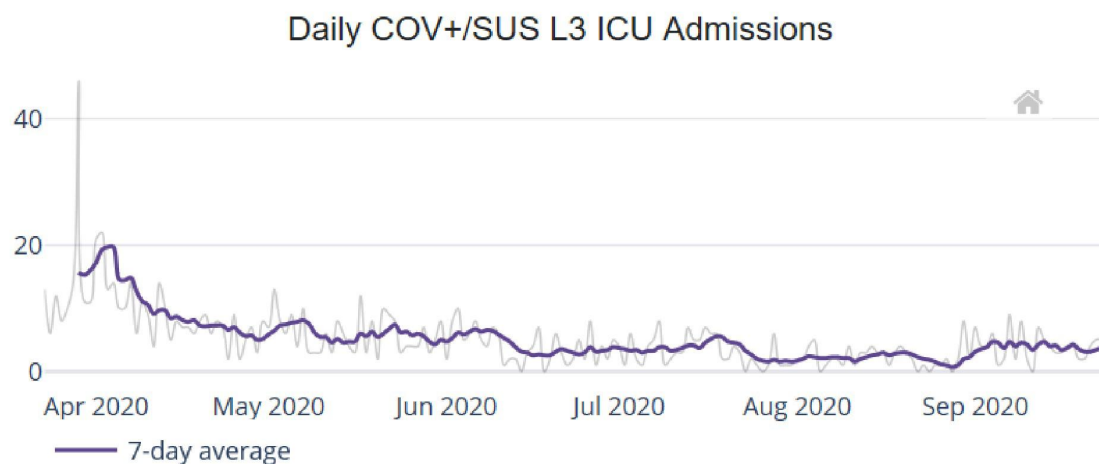
Professional Head of Intelligence Assessment (PHIA) probability yardstick

- 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.