

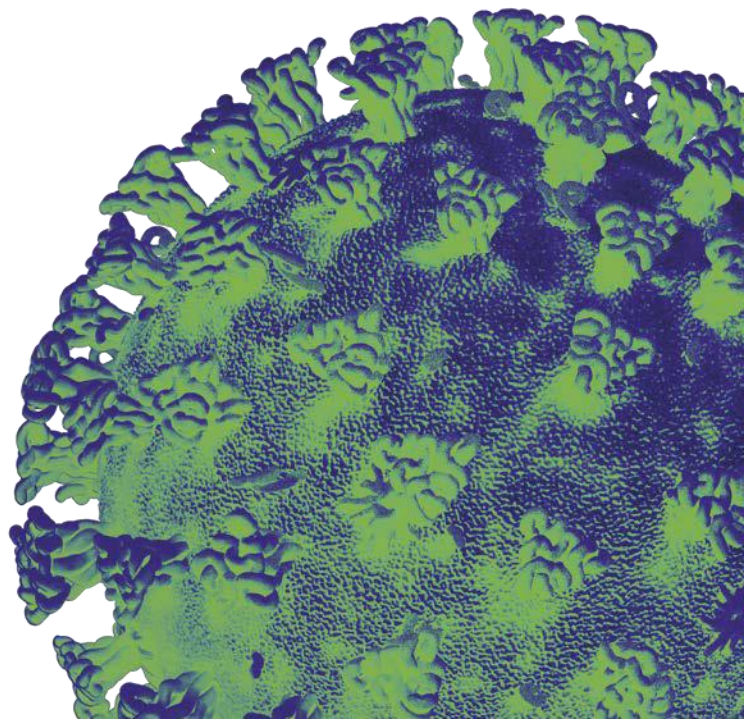
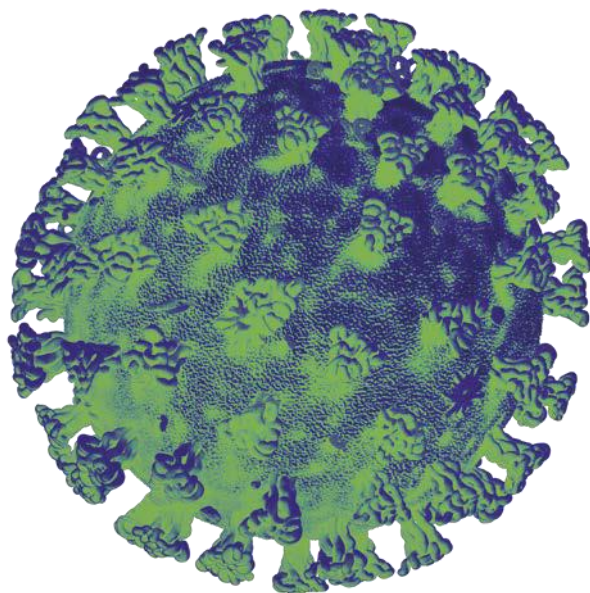
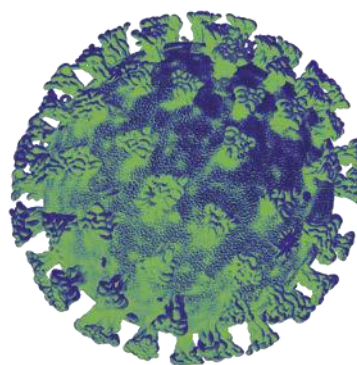


Llywodraeth Cymru  
Welsh Government

# Technical Advisory Cell

## Summary of advice

15 January 2021



## Technical Advisory Cell: Summary Brief

15 January 2021

### Top-line summary

- The most recent estimate of the Reproduction number ( $R_t$ ) for Wales from SAGE (as of 13 January) is between 0.8 and 1.1. This is the official estimate of the  $R_t$  number for Wales based on data available up until 11 January. SAGE estimates that the epidemic is shrinking/growing by between -4% and +1% per day.
- Based on case numbers only, Public Health Wales estimates  $R_t$  to be between 0.88 and 0.91 (as of 8 January) and halving time to be 28.5 days (as at 12 January).
- These estimates are encouraging as they are the same, or have reduced, since last week. However they should be treated with caution as they may be effected by changes in testing patterns over the Christmas period.
- As at 12 January, test positivity (rolling 7 days) is 17.7%, which has decreased since last week, but remains high and is above the red circuit breaker in all areas of Wales. Positivity remains highest in the North Wales areas of Wrexham (29.4%), Flintshire (20.7%), and Bridgend (21.8%) in South Wales. Positivity is lower in Gwynedd, North Wales (12.7%), but showing signs of increasing.
- The ONS infection survey data is not available for the most recent week due to delays in laboratory tests, see [here](#) for more information.
- As at 13 January, the proportion of confirmed samples tested which have the S-Gene Target Failure (suggestive of the UK variant of concern; VOC202012/01) has increased in all regions of Wales, at around 50% or higher in most Health Boards. 1 case of VOC202012/02 has been reported from Wales (the variant linked to South Africa).
- As at 13 January, the proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms remained stable compared to the previous week and the number of ambulance calls has decreased. GP consultations for any Acute Respiratory Infection (ARI) have decreased, whilst GP consultations for suspected COVID have increased compared to the previous week.
- As of 15 January, the number of people with confirmed COVID-19 in hospital has plateaued over recent weeks, but remains high and above the April peak. Overall ICU occupancy (COVID-19 and non-COVID-19 patients) is also high and close to the April peak. In Wales, there are normally approximately 152 critical care beds (Level 3 ICU equivalent), however hospitals are creating additional critical

care bed capacity due to increased demand. Therefore, critical care units in Wales are at or over 100% occupied for their normal critical care capacity and 1:1 nursing staffing ratio for all critical patients may not be possible for many patients, even with non-critical care staff helping to care for patients.

- Deaths reported by Public Health Wales (as of 15 January) are showing a decreasing trend, but are still higher than the April peak. Data on deaths from the Office for National statistics (week ending 8 January), which is more complete but subject to a time lag, continues to show an upward trend since our last report. Data should be treated with caution due to the festive holiday period.
- Further analysis of ONS data for Wales indicates that COVID-19 was the leading cause of death in December for the second consecutive month, mortality rate in deprived areas was almost twice that seen in least deprived areas, and the rate of deaths due to COVID-19 for December was higher in Wales compared to England.
- As at week ending 10 January, a total of 88,163 doses of COVID-19 vaccine (79 of which were second dose) were given in Wales. The actual number of doses will be higher due to ongoing data entry.
- Papers from SAGE considered by the Technical Advisory Cell are published [here](#), including a paper [on reducing within- and between-household transmission](#) in light of the new, more transmissible variant, which is covered in further detail later in this report.
- An additional paper of interest includes a report from the UK [CoMix social contacts survey](#) (reported below).

### **Growth rate and Reproduction number**

- It is important to note that the following estimates cannot yet fully reflect the most recent changes in transmission from the past two to three weeks. This is because there is a delay between initial infection, developing symptoms and the need for hospital care and the time of death.
- The current daily growth rate estimated by SAGE (as of 14 January) is between -0.04 and 0.01 (90% confidence interval) in Wales, indicating that infections could be shrinking/growing by between -4% and +1% per day.
- The most recent estimate of the Reproduction number ( $R_t$ ) for Wales from SAGE (as of 14 January) is predicted to be between 0.8 and 1.1 (90% confidence interval).

- Public Health Wales also estimate  $R_t$  for Wales using data on the number of positive cases. As of 12 January,  $R_t$  in Wales is estimated to be 0.80 – 0.91 (95 % confidence interval).
- Care should still be taken when interpreting  $R_t$  and growth rate estimates for the UK, due to their inherently lagged nature, testing availability and, as these figures mask variation in the number of infections, how rates of transmission are changing in some parts of the country. These estimates should be interpreted with caution as they may be effected by changes in testing patterns over the holidays.
- The estimates of  $R_t$  are shown as a range without a central estimate. A growth rate that is lower but still positive, or an  $R_t$  number above 1, indicates that the epidemic is growing exponentially.

### Halving time

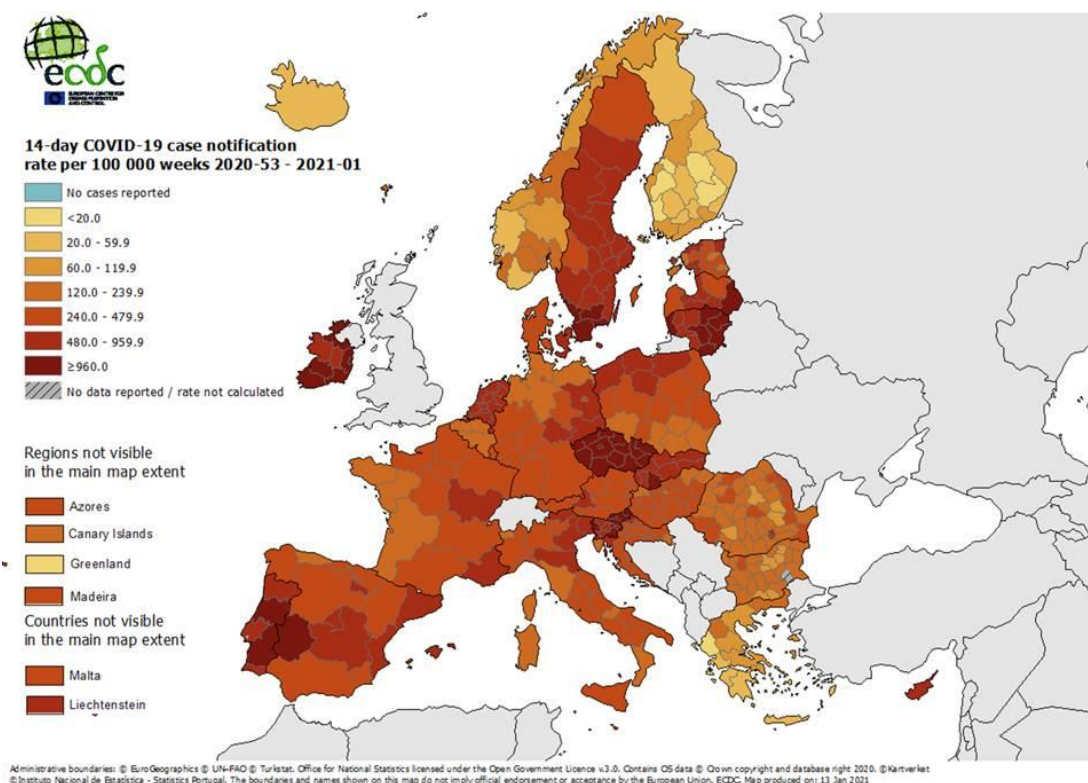
- As at 12 January, Public Health Wales estimated the halving time (the time it takes for the number of cases to half) to be 28.5 days (95% confidence interval 11.2 to -53.1) using data from 26/12/2020 to 08/01/2020.
- Halving time (and  $R_t$  and growth rates), gives an indication of the rate of change and therefore it should be treated with caution for the reasons outlined above.

### International update

- The Republic of Ireland has seen a very sharp drop in the number of COVID-19 cases in the last week. From a high point of 8227 new cases on 8 January, their daily case rate has more than halved to about 2946 reported on 17 January. This followed a very rapid rise from 1753 reported on 1st January which is very likely due to the Christmas festivities.
- This pattern has not been replicated so obviously in other countries of Europe but there are strong hints that the festive period did increase the daily number cases in several other countries but in a more gradual fashion, i.e. the rises started before Christmas and may have been due to general preparations for Christmas.
- Several new variants have appeared around the world, most notably in South Africa and two variants in Brazil. These variants have similar mutations which make them more infectious and more transmissible.
- In South Africa and surrounding countries and the countries surrounding Brazil, there are increasing numbers of new infections which is worrying considering

that currently it is summer in the southern hemisphere and these rises are contrary to what might be expected if there is a strong degree of seasonality to the pandemic; it is thought that most of the increased number of infections is due to the new variants although South American countries do not gene sequence nearly as many new cases as the UK or South Africa. Consequently, the UK has decided to remove all countries off the 'travel corridor' list from Monday 18 January 2021 at least temporarily.

- The map below shows the 14-day average notification rate per 100,000 people in the EU. The UK is not included due to Brexit.

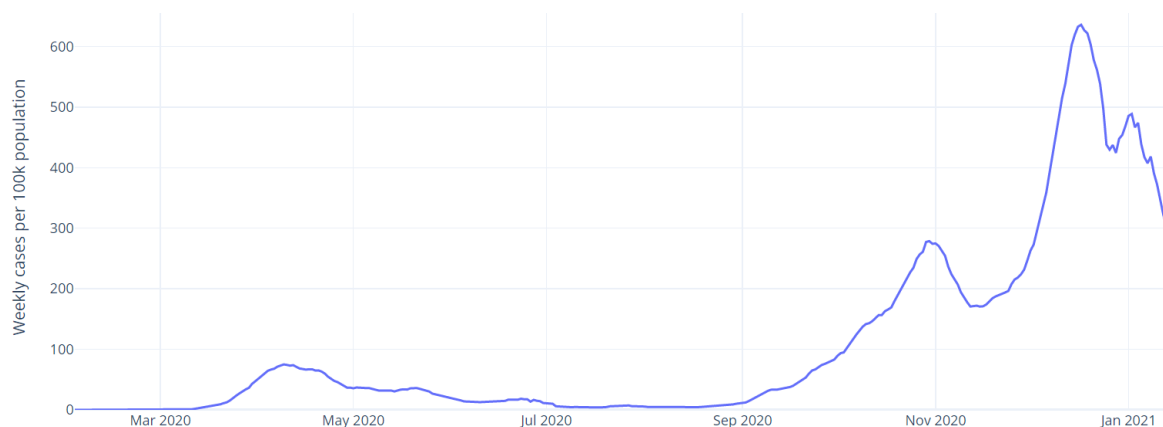


- Data on the picture across Europe, including caveats around data lags and variable testing policies is available [here](#).

## Case numbers

- The figure below shows that numbers of confirmed COVID-19 cases per day (7 day rolling sum, per 100,000 of the population). Cases are showing a reduction overall following a peak in mid-December.

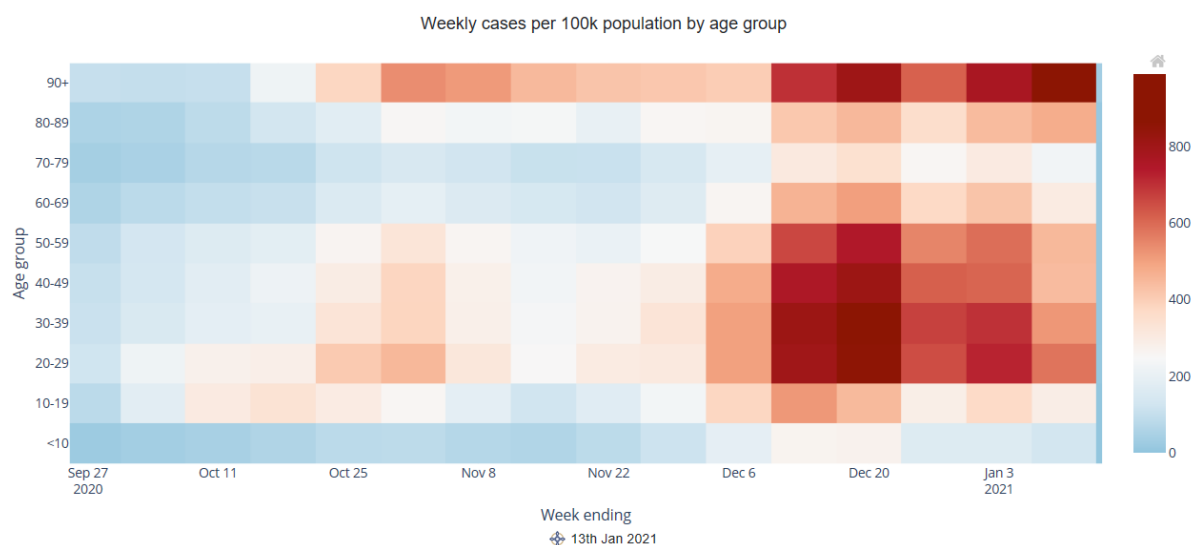




**Source:** Data from Public Health Wales as of 14 January

### 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.
- According to Public Health Wales, as at 13 January, incidence decreased in most age groups following an increase in the previous week and incidence was highest in those aged 90+ years.



**Source:** Welsh Government dashboard, data from Public Health Wales as at 13 January.

### Vaccination in Wales

- As at week ending 10 January 2021, a total of 88,163 doses of COVID-19 vaccine (79 of which were second dose) has been given in Wales.

- This number includes 1,833 people who received their vaccination in Wales, but were resident outside of Wales.
- The actual number of doses will be higher due to ongoing data entry.
- Vaccinations data is available from the [PHW tableau](#).

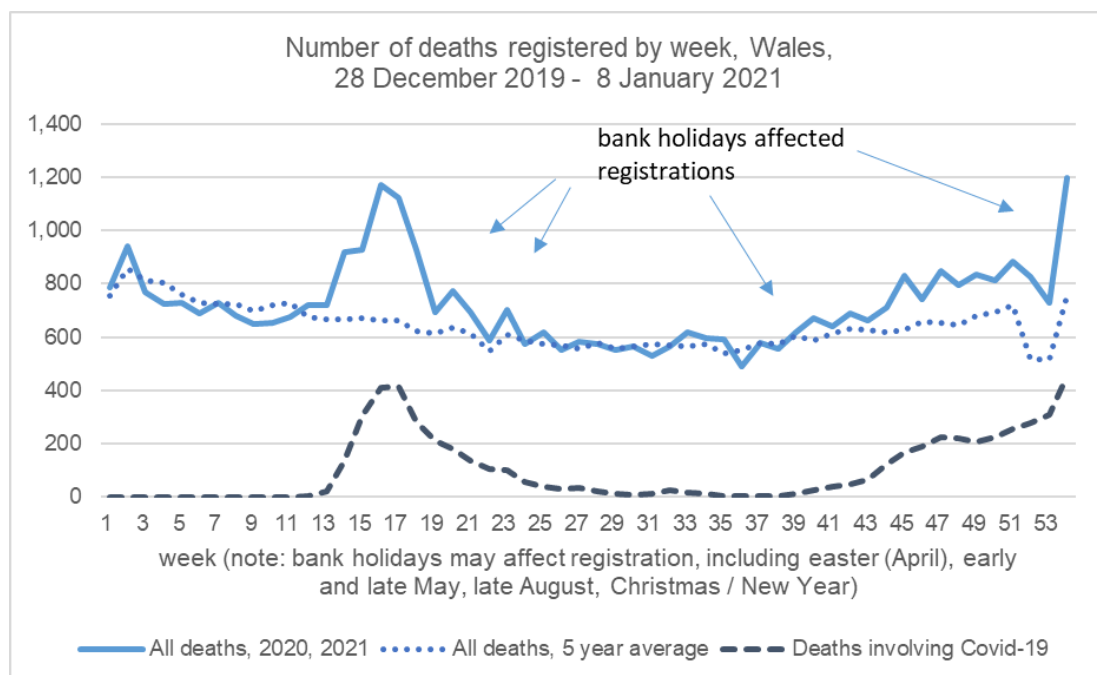
## Deaths

- The Figure below shows the 7 day rolling sum of COVID-19 deaths reported by Public Health Wales as at 15 January 2021, showing a decreasing trend recently.



**Source:** Welsh Government dashboard, data from Public Health Wales as at 15 January.

- It is important to note that this data includes reports of a death of a 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 factor that caused death. 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. The true number of deaths will be higher.
- 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 whilst subject to a time lag, is more complete.
- The Figure below shows ONS data of the number of deaths involving COVID-19 registered by week in Wales and the number of all cause deaths registered by week from 28 December 2019 to 8 January 2021.



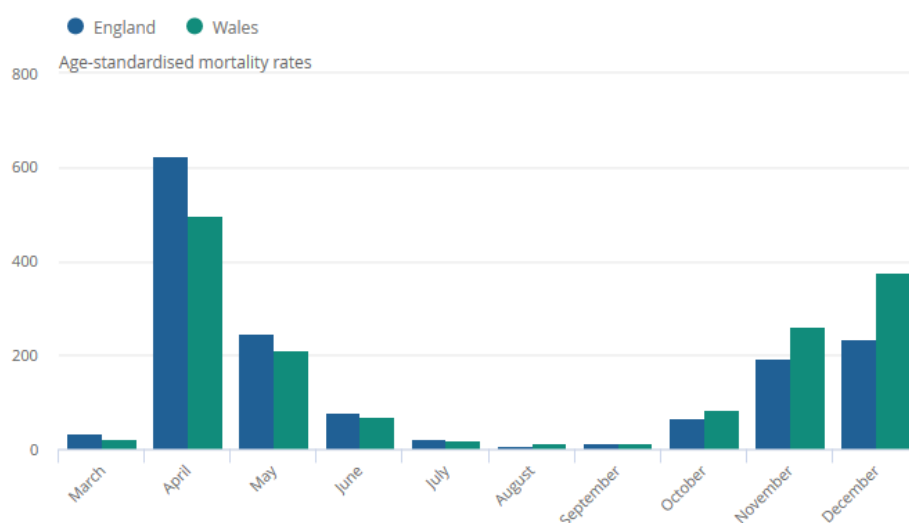
Source data: [Office for National Statistics](#)

- In Wales, the number of deaths involving COVID-19 increased from 310 (Week 53) to 454 (Week 1) while the total number of deaths in Week 1 was 442 higher than the five-year average.
- The previous two weeks contained Christmas and New Year bank holidays and registration delays would likely have an impact on the number of deaths registered. The trends for the most recent weeks should therefore be interpreted with caution.
- The ONS has also published an additional monthly mortality analysis for deaths registered in December 2020. The analysis of COVID-19 deaths in the bulletin focuses on deaths “due to” COVID-19 (deaths where the underlying cause of death was COVID-19, or suspected COVID-19). This is not the same as all deaths “involving” COVID-19 – shown in the weekly reports – as these include deaths where COVID-19 was mentioned anywhere on the death certificate, whether as underlying cause or not. However, in most cases (around 9 out of 10) where COVID-19 was mentioned on the death certificate, it was found to be the underlying cause of death.
- The key findings for Wales are below and further detail is published [here](#):
  - In Wales, there were 3,941 deaths registered in December 2020. This was 851 more deaths than in December 2019 and 1,075 deaths more than the five-year average for December.



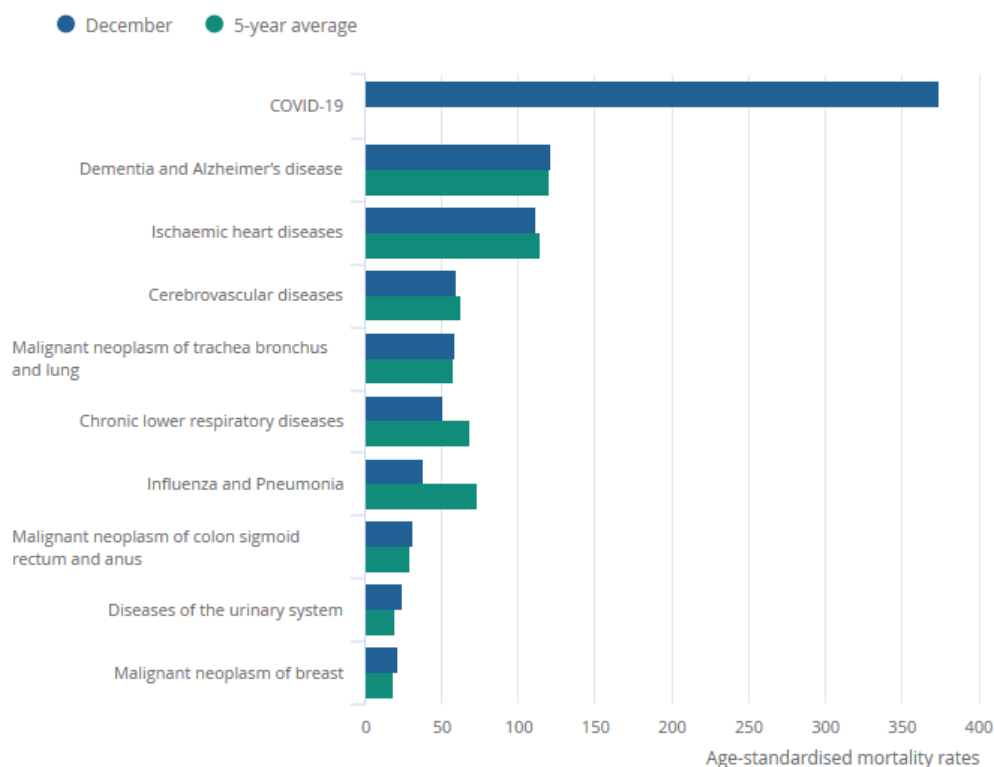
- Of the 3,941 deaths registered in December 2020 in Wales, 1,233 deaths (31.3%) involved COVID-19 (ie, it was mentioned anywhere on the death certificate, whether as underlying cause or not). This included 1,081 deaths (27.4%) “due to” COVID (ie, where it was the underlying cause of death).
- In December 2020 in Wales, the age-standardised rate of deaths due to COVID-19 increased for the third consecutive month, although it was lower than in April. The rate of deaths due to COVID-19 for December was higher in Wales than England.

**Age-standardised mortality rates for deaths due to COVID-19, per 100,000 people, England and Wales, deaths registered in March to December 2020**



- COVID-19 was the leading cause of death in December 2020 for the second consecutive month. Based on provisional data for January to December 2020, COVID-19 was the leading cause of death (followed by dementia and Alzheimer’s disease and then Ischaemic heart diseases).

**Age-standardised mortality rate for selected leading causes of death, per 100,000 people, Wales, deaths registered in December 2020**

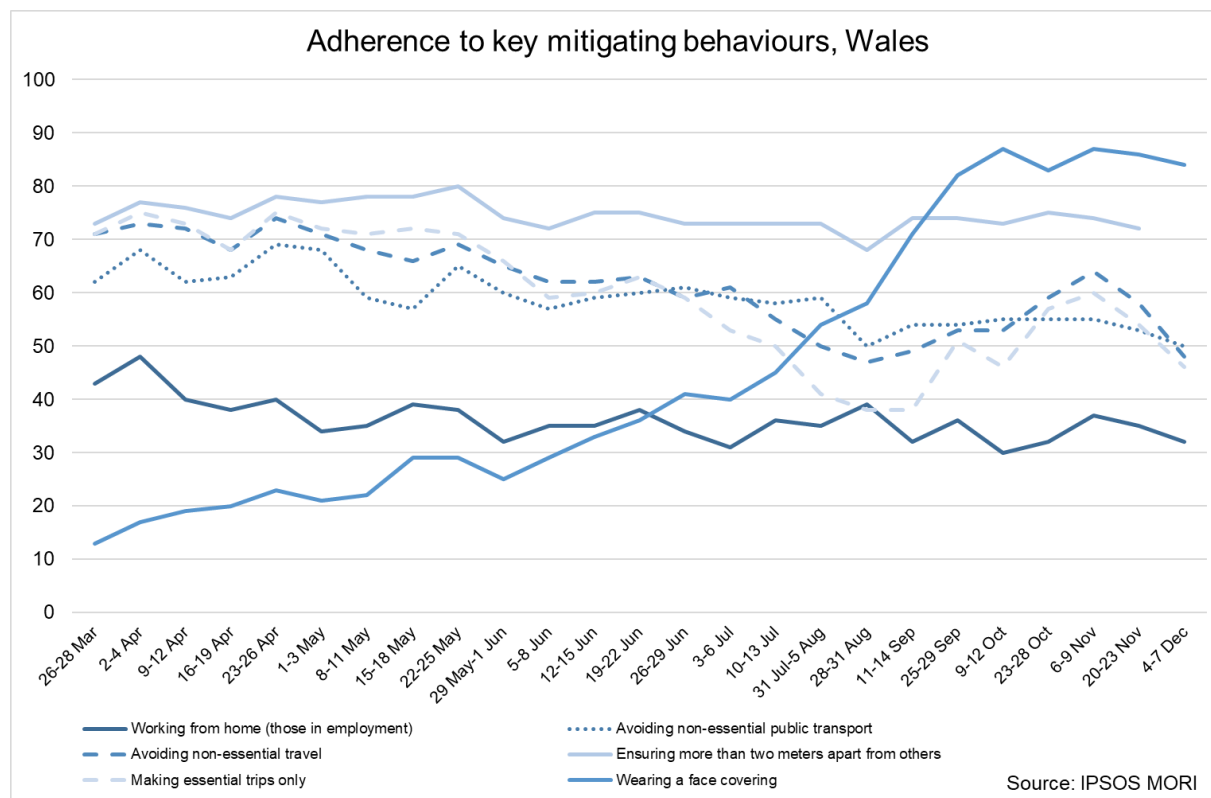


- The provisional age-standardised mortality rate for deaths registered in Wales for 2020 was significantly higher than all years between 2010 and 2019.
- In Wales, the age-standardised mortality rate due to COVID-19 for March to December 2020 in the most deprived areas was around twice the mortality rate in the least deprived areas.
- Within Wales, the age-standardised mortality rate due to COVID-19 for March to November 2020 was highest in Cwm Taf Morgannwg, and lowest in Hywel Dda. (Due to a processing issue, ONS have not yet added data for December).

### **Adherence and understanding of current measures**

- There is new data from both Public Health Wales and the Covid social study. New data from IPSOS MORI are due next week.
- The most recent [IPSOS MORI data](#) for the period 4-7 December for Wales shows further reductions in some categories from the last survey. There were reductions in people making essential trips only and avoiding non-essential travel compared to two weeks ago. 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 as part of a multi-country survey on the Global Advisor platform. 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 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](#) for the period 4 January – 10 January show that 52% of people say they understand the current restrictions in Wales ‘very well’. A further 39% reported understanding the restrictions ‘fairly well’. These results are higher than those in mid-December before alert level 4 started. The results also show that 49% of people said they were following coronavirus restrictions ‘completely’ and a further 41% reported majority compliance, again higher than in mid-December. 20% reported having people outside their household/permitted extended household come into their house, whilst 15% reported going into others people’s houses, both of these are lower than in mid-December.
- The [Covid Social Study](#), which mostly focuses on UK level analysis, shows that self-reported compliance is generally higher when the rules are better understood. New analysis this week considers covid-19 rules compliance (UK level). Some of the key results are:
  - Participants were asked if they had requested a test if they developed symptoms of Covid-19 since the pandemic started. 33% said that they had

requested a test every time they developed symptoms, but 10% said they had only requested a test on some occasions but not others, and **57% said they had never requested a test even though they had experienced symptoms. Younger adults have been most consistent in requesting tests when they experienced symptoms**, with 42% requesting a test every time, compared to 37% of adults aged 30-59 and 18% of adults aged 60+. **75% of adults aged 60+ said they had never requested a test despite experiencing symptoms on one or more occasions.** Women have also been more consistent in requesting tests (39% always requesting them vs 27% of men). People in higher income households have also most consistently requested tests (39% every time vs 28% in lower income households).

- The study asked people how long they have been isolating if they either developed symptoms of COVID-19 or were told that they had come into contact with someone else who had developed symptoms. For people who had experienced either event more than once, it was asked for people to report the shortest amount of time they had isolated for. The rules are that individuals should isolate for 10 days in either circumstance. **Only 62% of people are isolating for the recommended number of days (10 or more) when they develop symptoms of Covid-19.** 39% are isolating for much longer (21 days or more), which could be due to experiencing ongoing symptoms of the virus. However, 13% are not isolating at all when they develop symptoms, 16% are only isolating for 1-5 days, and 9% are only isolating for 6-9 days. **Adults aged 18-59 are better at self-isolating for the recommended number of days (63% vs 61% of those aged 60+), and show a much lower rate of not isolating at all (3% for those aged 18-29 vs 13% of those aged 30-59 and 26% of those aged 60+).** The percentage of people self-isolating for the recommended length of time is the same across genders (62%) but the number not isolating at all is higher in men (17%) than women (10%). People in higher income households are also showing a slightly higher level of self-isolating for the recommended length of time (63% vs 61%) and are much less likely not to isolate at all (9% vs 18%).

Figure 32a Days of self-isolation amongst younger adults (aged 18-29)

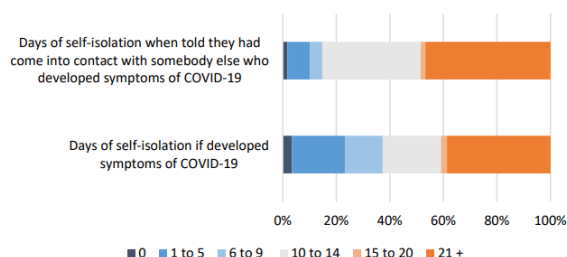
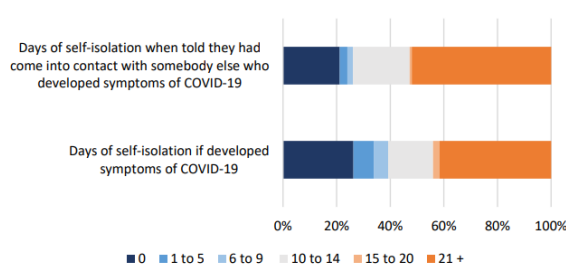
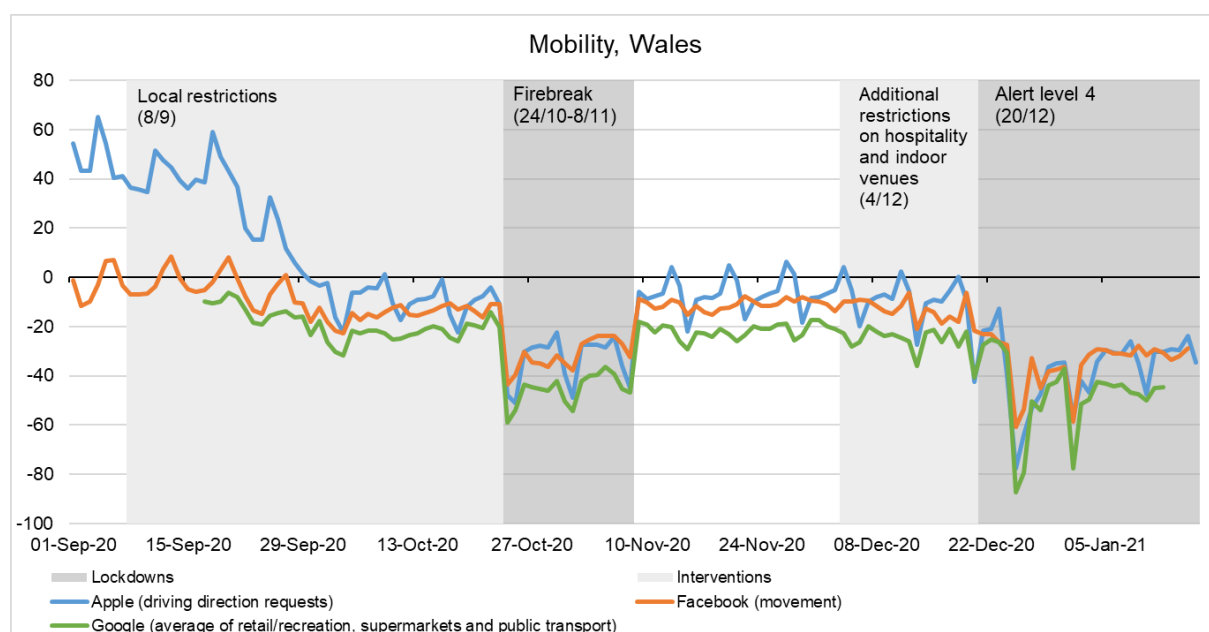


Figure 32c Days of self-isolation amongst older adults (aged 60+)



## Mobility

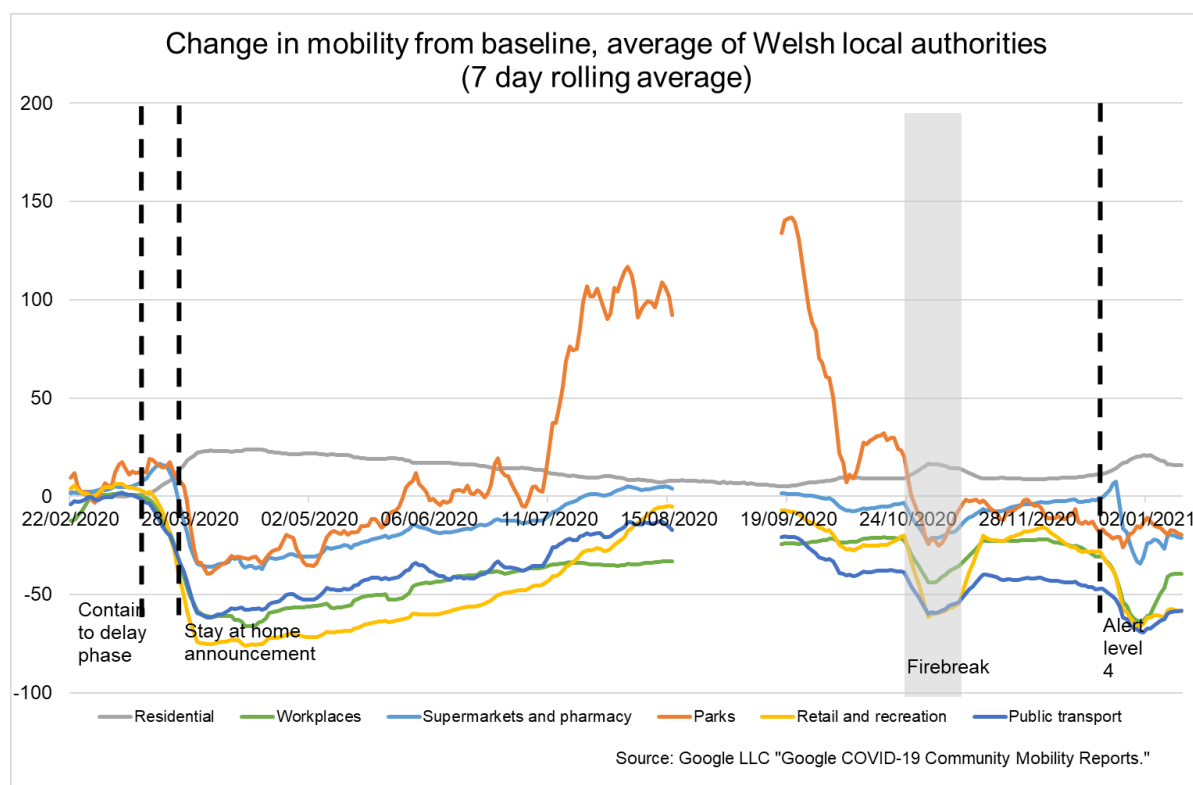
- Mobility data for the latest week (mostly the second whole week in January) shows a similar pattern to the previous week. Patterns of mobility are in line with the firebreak – with levels in some cases similar to the first week (when schools were closed during half term). For example both Facebook users staying at home and Google residential data show similar levels to that first week of the firebreak. Data from Google on workplaces show mobility to be somewhere between the first and the second week of the firebreak.



- Mobility of [Facebook users](#) in Wales shows movement was 30% below the baseline for the week to the 15 January. This is similar to from 31% the week before. The percentage of users staying put (near to home) was 36%, the same as the week before. 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 16 January shows that requests for driving directions in Wales are similar to the previous week at 68% of the baseline (from 67%). Requests for walking directions were up whilst requests for public transport directions were unchanged relative to the baseline compared to last week. The baseline is the 13<sup>th</sup> of January 2020.
- The [Google mobility data](#) to the week of the 12 January shows a reduction in residential (i.e people spending time at home) compared to the week before at 16% above the baseline (down from 19%). Note that the Google data for the previous week includes new year's day. Workplaces show an increase (at 40% below the baseline, up from 53%). Retail & recreation shows a small increase from last week (58% below the baseline, up from 60% the week before) whilst supermarkets & pharmacy shows a similar picture (21% below the baseline, up

from 22%). Public transport shows an increase whilst parks show a reduction compared to the previous week.

- 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 17<sup>th</sup> – September 10<sup>th</sup> due to the data not meeting quality thresholds.



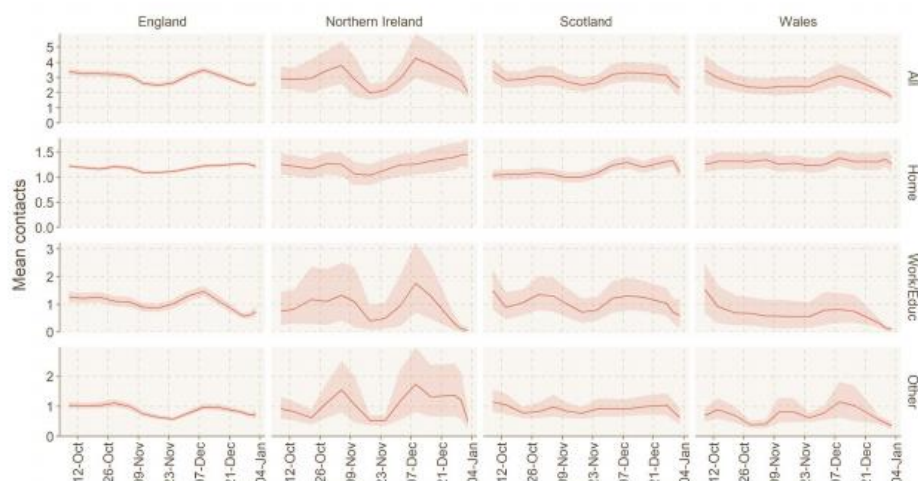
- Anonymised and aggregated mobile phone data from O2 for the week to the 8 January shows an increase in trips compared to the week before, which would have included the period between Christmas and the new year. Trips starting in Wales rose by 7 percentage point to 49% below the baseline. The baseline for the O2 data is the same day of the week in the first week of March.

### CoMix report: Mean contacts for UK adults from the UK social contact survey

- The following section include extracts from the UK-wide CoMix report for Week 41 available [here](#).
- CoMix is a behavioural survey, launched on 24th of March 2020. The sample is broadly representative of the UK adult population. Participants are invited to respond to the survey once every two weeks.



- Parents complete the survey on behalf of children (17 years old or younger). Participants record direct, face-to-face contacts made on the previous day, specifying certain characteristics for each contact including the age and sex of the contact, whether contact was physical (skin-to-skin contact), and where contact occurred (e.g. at home, work, while undertaking leisure activities, etc).
- Mean contacts for adults remain low in all four nations throughout the period of October to December 2020.
- Contacts in children were shown to reduce substantially over the Christmas holiday period due to a reduction in school related contacts, although children also reduced their contact in “other” settings (mostly social and leisure) during this period. [This is at a UK level only]
- The data were consistent with no meaningful change in higher risk contacts (>5 min with individuals aged 60+) during the Christmas period. [This is at a UK level only]
- For Wales, data indicates that face-to-face contact between adults has remained at around two to four contacts overall, when assessed by asking participants record direct, face-to-face contacts made on the previous day (see Figure below). It is important to note there are limitations associated with smaller sample size for Wales.



**Figure 1: Setting-specific mean contacts of Adults for UK nations over time.** Uncertainty calculated using Bootstrapped accounting. Contacts truncated to 50 contacts per participant. Observations are smoothed over two weeks to account for panel effects. Educ = education setting. Date on x axis refers to the midpoint of the survey period.

Source: [CoMix report, Week 41](#)

## **Reducing within- and between-household transmission in light of new variant SARS-CoV-2**

The Executive summary of this paper is copied below and the full paper is available [here](#).

- Within-household transmission is a very common setting for SARS-CoV-2 transmission. During lockdown, this becomes a more important environment for transmission as most activities beyond the household are subject to restrictions.
- The risks from transmission within households are likely to be elevated for the new variant (B1.1.7) due to its increased transmissibility (medium confidence).
- Transmission from a case to others within a household is not inevitable, and measures can be taken to reduce the risk of secondary infection (high confidence).
- Transmission between household members can be mitigated through the application of a combination of personal, procedural, and environmental controls, both as pre-emptive measures and as enhanced measures implemented immediately when any household member has symptoms or is a possible or confirmed close contact of a case. Enhanced measures are also likely to be beneficial when a household member is vulnerable (high confidence).
- A whole-population communications campaign to increase awareness of the necessity, feasibility and effectiveness of implementing household measures to reduce transmission, is likely to improve uptake of these measures and reduce transmission (medium confidence).
- A comprehensive package of information and support would likely improve household implementation of quarantine, especially in disadvantaged households and communities. Maximum effect could be achieved by considering the broad range of barriers to adherence that exist, including financial, practical, informational and emotional factors (high confidence).
- The impact of information and support could be maximised by ensuring it is appropriate and easily accessible for people in a range of household circumstances, and from different cultures and sectors of society (high confidence).
- In the absence of strong measures to reduce between-household transmission, reduction of within-household transmission may have limited influence, but when the epidemic is sufficiently controlled by reducing between household mixing,

reduction of within-household transmission can potentially make a substantial contribution to further reducing prevalence (medium confidence).

- Successful reductions in household transmission have the potential to contribute to reductions in R, hospitalisations, and mortality, and increase health service capacity (medium confidence)
- We estimate that if all the measures outlined in this paper were followed and an overall 25% reduction in within-household transmission risk were achieved, this could lead to a prevalence of 10-15% lower after three weeks, with associated impacts for hospitalisation (medium confidence).

## Research

- There are currently 9877 Welsh patients recruited to COVID-19 urgent public health studies, an increase of 120 since last report.

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

As at 13 January

- The proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms remained stable compared to the previous week.
- Overall GP consultations for any Acute Respiratory Infection (ARI) have decreased whilst GP consultations for suspected COVID have increased compared to the previous week.
- The number of ambulance calls possibly related to COVID-19 have decreased in the most recent week.
- The all-Wales number of lab confirmed COVID-19 episodes decreased in the most recent week following an increase in 2020 week 53. Sample positivity for testing episodes was 19% in week 01.
- During week 01, incidence decreased in most age groups following an increase in week 53, this figure increased in those aged 85+ and was highest in this age group.
- Confirmed case incidence and testing episode positivity has decreased in most regions of Wales in recent weeks, with the exception of Betsi Cadwaladr UHB.

- At a national level, confirmed case admissions to hospitals and confirmed cases who are inpatients in hospital was stable compared to the previous week. Admissions to critical care wards decreased compared to the previous week.
- Recent surveillance data suggest that COVID-19 infections in Wales is decreasing in most regions of Wales. Cases remain geographically widespread, however the majority of local authority (LA) areas are seeing decreasing overall trends in confirmed case incidence in the most recent week.
- High numbers of incidents continue to be reported, mainly in residential care homes.
- There have been increasing detections of VOC 202012/01 (detected using the proxy of S-Gene Target Failure viruses) throughout December and early January. The proportion of confirmed samples tested which have the S-Gene Target Failure (suggestive of VOC202012/01) has increased across Wales, in all regions, being around 50% or higher in most Health Boards. 1 case of VOC2020/12/02 has been reported from Wales (the variant linked to South Africa), and there have been 424 genomically confirmed cases of VOC 202012/01.
- Most school pupils are currently being taught online, with some face-to-face learning for vulnerable children and children of critical workers. Schools surveillance information is available on the [Public Health Wales dashboard](#).

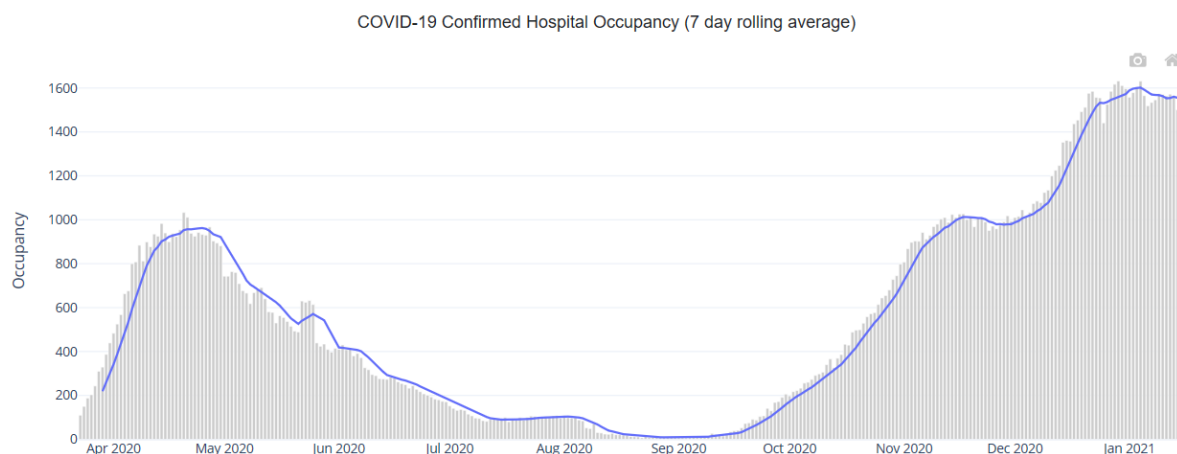
### **Local authority analysis from Public Health Wales**

(Period covering 3 to 9 January 2021)

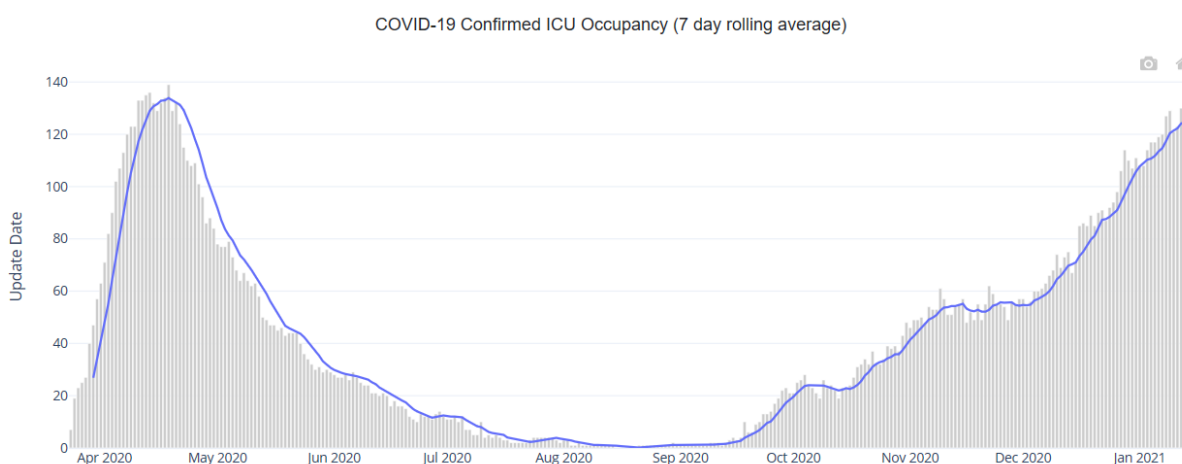
- All local authorities, are in the highest threshold for 7-day incidence (> 50 per 100,000) and test positivity (>5%).
- Please use caution in interpreting trends for the most recent period as testing data is not always complete and figures will be subject to future revision if late data feed through.

### **Hospital occupancy**

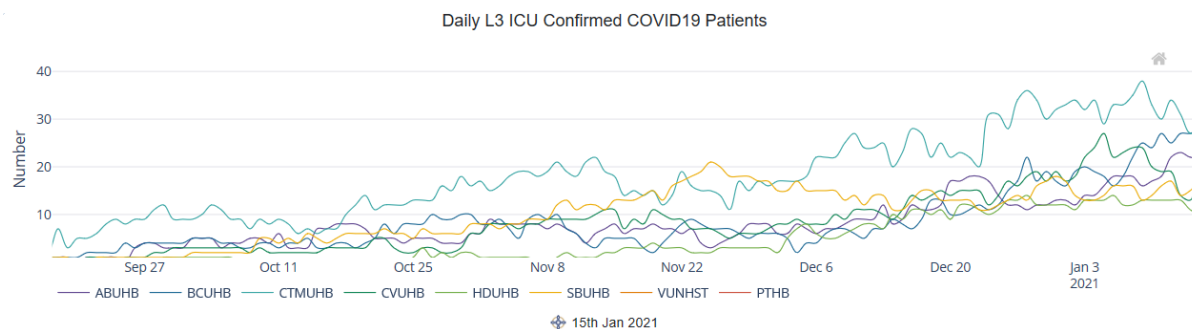
- The figure below shows the confirmed COVID-19 hospital occupancy over the first and second wave of the pandemic (7 day rolling average, as at 15 January 2021).



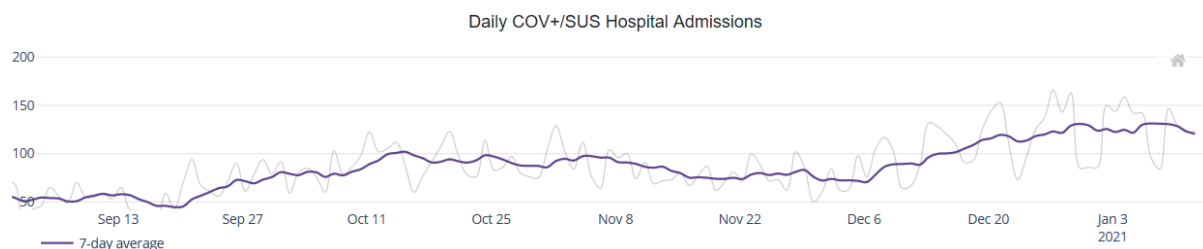
- The Figure below shows the confirmed COVID-19 intensive care unit (ICU) occupancy over the first and second wave of the pandemic (7 day rolling average, as at 15 January 2021).



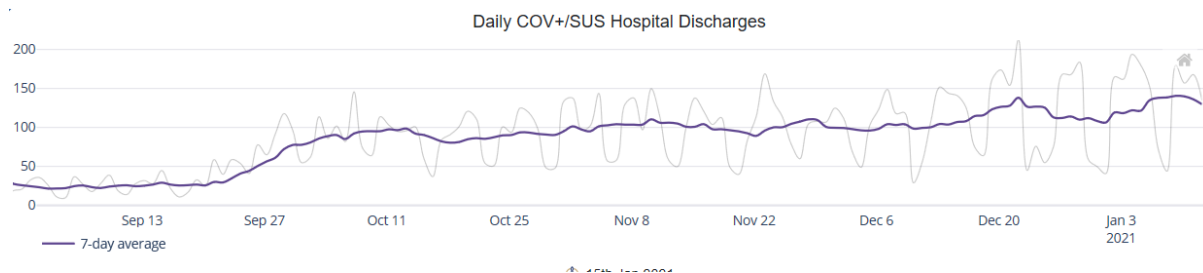
- As of 15 January, the number of people with confirmed COVID-19 in hospital has plateaued over recent weeks, but remains high and above the April peak. Overall ICU occupancy (COVID-19 and non-COVID-19 patients) is also high and close to the April peak.
- In Wales, there are normally approximately 152 critical care beds (Level 3 ICU equivalent), however hospitals are creating additional critical care bed capacity due to increased demand. Therefore, critical care units in Wales are at or over 100% occupied for their normal critical care capacity and 1:1 nursing staffing ratio for all critical patients may not be possible for many patients, even with non-critical care staff helping to care for patients.
- The Figure below shows the total number of people who have tested Covid-19 positive and are in ICU in hospitals across the different health boards in Wales. Data as of 15 January 2021.



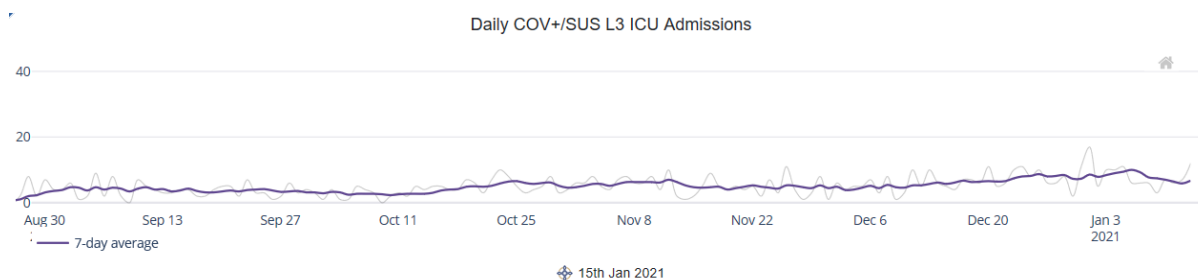
- The Figure below shows the number of people admitted to hospital and are either suspected or confirmed as having Covid-19. The purple line represents the total number over a rolling 7 day average, whilst the fainter grey lines show the actual figures at that time. Data as of 15 January 2021.



- 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. Data as of 15 January 2021.



- 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. Data as of 15 January 2021.





**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.

