

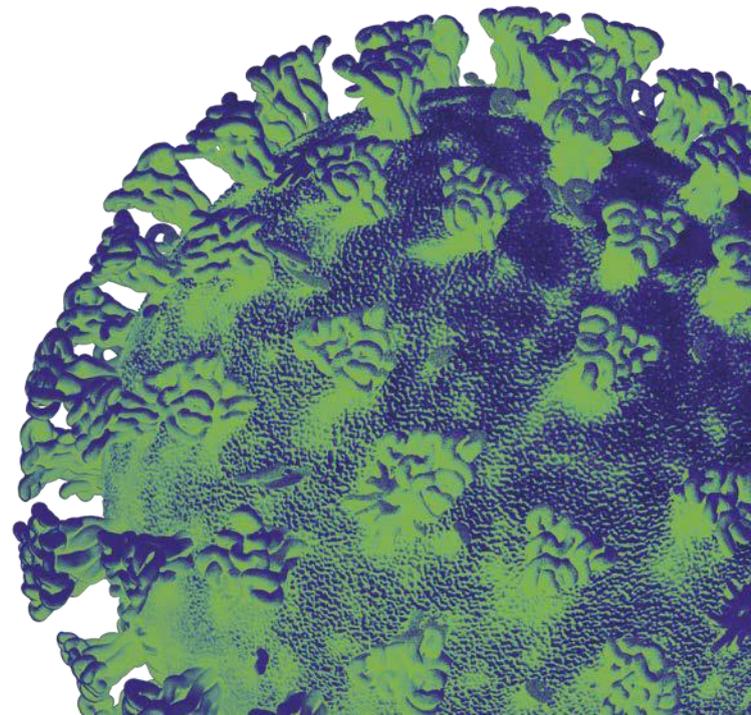
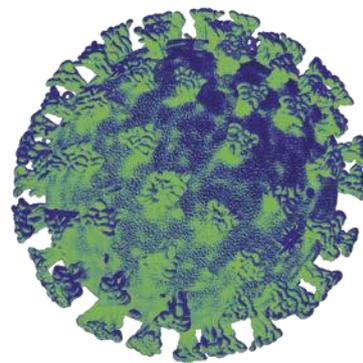
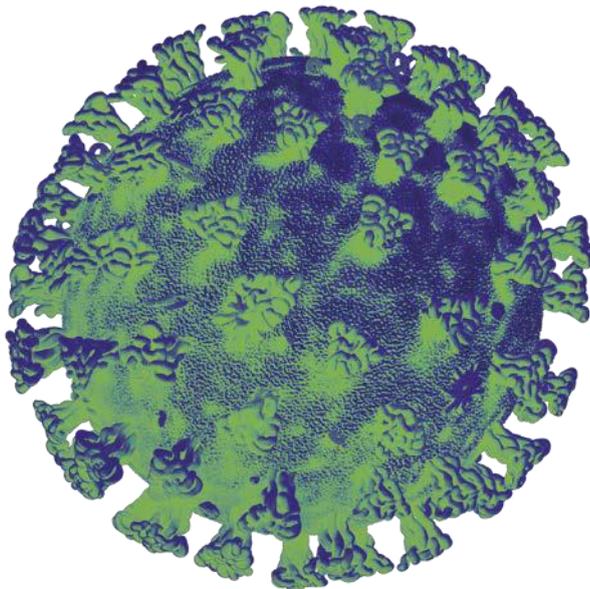


Llywodraeth Cymru  
Welsh Government

# Technical Advisory Cell

## Summary of Advice

30 April 2021



## Technical Advisory Cell: Summary of Advice

30 April 2021

### Top-line summary

- **Case numbers continue to decrease at a national level** with a 26.5% reduction to 10.8 cases per 100k population, bringing Wales into the lowest case threshold. There is considerable variation at a regional level, although generally at a low level of incidence.
- 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. At this time, it may be more useful to look at incidence and prevalence measures than  $R_t$ .
- The most recent estimate of the  $R_t$  for Wales from **SAGE** is between **0.8 and 1.0** (90% confidence interval).
- As at 28 April,  $R_t$  estimated by **Public Health Wales** (PHW) for the two week period ending 23 April, which uses case data only, is **0.81** (95% confidence interval: 0.74 to 0.87).
- As reported by PHW, as at 30 April over **1.8 million first doses** of COVID-19 vaccine and over **0.7 million second doses** have been given in Wales. This means that around 80% of the population of Wales has now received at least one dose of a COVID-19 vaccine.
- For the week of 18 to 24 April 2021, the [COVID-19 infection survey](#) estimates that community Covid-19 infection rates in Wales has decreased significantly to around **1 person in 1,570** (95% credible interval: 1 in 4,610 to 1 in 740).
- The latest [antibody estimates from ONS](#) suggest that between 5 and 11 April **61% of the 16+ population of Wales tested positive for Covid-19 antibodies** (95% credible interval: 55.9% to 66.5%)
- As at 30 April, Variant of Concern "VOC-20DEC-01" remains the dominant variant in Wales, with 11,604 (+186 since last report) cases detected to date (B.1.1.7, first identified in Kent). No additional cases of any of the other VoCs or VUIs have been detected in Wales during the 7 day period ending 30 April.
- The most recent [IPSOS MORI data](#) on adherence shows a reduction in those making essential trips only, although adherence? levels remain high and a large majority in Wales continue to maintain social distancing from others when outside. The proportion who believe coronavirus poses a high threat to them personally and their country has fallen to the lowest levels yet recorded.
- Mobility data has seen additional increases following the lifting of travel restrictions, return of schools and non-essential retail re-opening on 12 April, although workplace, retail and recreation and public transport mobility remain below baseline levels in January 2020.

- The main issues that could cause a significant resurgence of COVID-19 harms are: widespread transmission of a vaccine escape and/or immune escape variant; a breakdown in social distancing behaviour; or to a lesser extent, a change in vaccine supply or significant drop in vaccine uptake. New variants also need to be monitored for differential impacts, for instance on transmissibility in children. Continued surveillance will be crucial in understanding Wales' trajectory and reducing health and non-health harms and inequalities.

### **TAC/ SAGE papers published this week:**

- [SAGE: EMG Transmission Group: Insights on transmission of COVID-19 with a focus on the hospitality, retail and leisure sector, 8 April 2021](#)
- [SAGE: KCL and Bristol: Engagement with daily testing instead of quarantine following possible exposure to SARS-CoV-2, 11 March 2021](#)
- [SAGE: ISARIC4C and CO-CIN: Hospitalised vaccinated patients during the second wave - update April 2021, 22 April 2021](#)
- [SAGE: ISARIC4C and CO-CIN: Hospitalised patients stratified by vaccination tier in second wave, 22 April 2021](#)
- [SAGE: PHE: Investigation of novel SARS-CoV-2 variants of concern \(England\) - Technical briefing 9, 22 April 2021](#)
- [SAGE: Dynamic CO-CIN report to SAGE and NERVTAG \(recent cases\), 22 April 2021](#)
- [SAGE: NERVTAG: note on growth rate of SARS-CoV-2 B.1.1.7, 22 April 2021](#)
- [SAGE: SPI-M-O: Consensus statement on COVID-19, 14 April 2021](#)
- [SAGE: SPI-M-O: Medium-term projections, 14 April 2021](#)

### **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  $R_t$ .
- $R$  and growth rate estimates represent the transmission of COVID-19 2 to 3 weeks ago rather than today, due to the time delay between someone being infected, developing symptoms, and needing healthcare.

### SAGE estimate

- **The most recent estimate of the  $R_t$  for Wales from SAGE on 27 April is between 0.8 and 1.0 (90% confidence interval).**

- The most recent daily growth rate for Wales from SAGE estimates that the infection rate in Wales is **-4 to +1%** per day (90% confidence interval).
- 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. The estimate of  $R_t$  is shown as a range (90 or 95% confidence intervals) without a central estimate and is a lagging indicator.
- 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  $R$  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  $R$ , please see the [UK Government website](#).
- No UK estimates for  $R_t$  or growth rate are available. This is because as restrictions are lifted independently across the 4 nations SPI-M advises that  $R_t$  and growth rates for the four nations and NHS England regions are more robust and useful metrics than those for the whole UK.

#### 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.
- Halving times have also been calculated using 14 days of rolling data. The most recent 3 days of data were excluded to account for testing and reporting lag. Predictions were then extended. The R package “Incidence” was used to calculate doubling times. <https://www.repidemicsconsortium.org/incidence>
- **As at 28 April, PHW estimates  $R_t$  in Wales to be 0.81 for the 2 week period ending 23 April (95% CI: 0.74 to 0.87). The growth rate is estimated to be halving every 39.3 days (95% CI: 13.0 to -37.3).**

## Case numbers

- The figure below shows weekly COVID-19 cases per 100k population (7 day rolling sum). The most recent data up to **26 April** shows a continued reduction in cases to **10.8 cases per 100k population**, a **26.5% decrease** from the previous 7 day period.

Cases per 100k (PHW Data) (7 day rolling sum)



**Source:** Data from [PHW](#)

## Age profile

- Public Health Wales is currently updating the age banding for the data that informs this section. As a result cases by age group is not available this week.

## Wales Local Authority Update

- At low incidence changes between weeks will be more variable, as a result of the impact of outbreak clusters against a background of low cases.
- Recent surveillance data for Wales for the 7 day period ending **26 April** suggests that COVID-19 weekly changes in case incidence across Wales is **variable**, albeit at a **low level** in absolute case numbers. The majority of Wales is now in the lowest case incidence and test positivity thresholds.
- Case incidence per 100,000 population for the whole of Wales during this period was **10.8**, a **21% reduction** from the previous period. Cases for all-Wales are now in the 'Under 15' threshold for the second consecutive week.
- Test positivity for COVID-19 for the whole of Wales was **1.2%** for the most recent rolling 7 period, a **33% reduction** from the previous period.

**Source:** Data from [PHW](#)

<b>Cases and Tests - All confirmed episodes - For the 7 day period ending 26-04-2021</b>									
Local Authority	Health Board	Number	% of All Wales Total	Cases per 100,000	Incidence threshold reached	Weekly change	Test positivity (%)	Positivity threshold reached	Tests per 100,000
Newport	ABUHB	39	11.40%	25.2	25 to < 50	-7% ↓	2.4%	Under 2.5%	1068.7
Wrexham	BCUHB	29	8.50%	21.3	20 to < 25	81% ↑	2.20%	Under 2.5%	965
Swansea	SBUHB	52	15.20%	21.1	20 to < 25	4% ↑	2.20%	Under 2.5%	964.4
Gwynedd	BCUHB	19	5.60%	15.3	15 to < 20	-46% ↓	1.7%	Under 2.5%	895.2
Neath Port Talbot	SBUHB	19	5.60%	13.3	Under 15	-24% ↓	1.4%	Under 2.5%	949
Cardiff	CVUHB	43	12.60%	11.7	Under 15	-46% ↓	1.3%	Under 2.5%	898.1
Carmarthenshire	HDUHB	19	5.60%	10.1	Under 15	36% ↑	1.20%	Under 2.5%	835.4
Caerphilly	ABUHB	16	4.70%	8.8	Under 15	-20% ↓	1.0%	Under 2.5%	874.2
Flintshire	BCUHB	12	3.50%	7.7	Under 15	-37% ↓	1.1%	Under 2.5%	693.1
Pembrokeshire	HDUHB	9	2.60%	7.2	Under 15	200% ↑	1.00%	Under 2.5%	718.5
Rhondda Cynon Taf	CTMUHB	17	5.00%	7	Under 15	-6% ↓	0.8%	Under 2.5%	912.3
Powys	PTHB	9	2.60%	6.8	Under 15	-62% ↓	1.0%	Under 2.5%	667.5
Vale of Glamorgan	CVUHB	9	2.60%	6.7	Under 15	-18% ↓	0.7%	Under 2.5%	908.8
Merthyr Tydfil	CTMUHB	4	1.20%	6.6	Under 15	33% ↑	0.70%	Under 2.5%	888.5
Torfaen	ABUHB	6	1.80%	6.4	Under 15	-68% ↓	0.7%	Under 2.5%	908.9
Bridgend	CTMUHB	9	2.60%	6.1	Under 15	-44% ↓	0.6%	Under 2.5%	1030.9
Conwy	BCUHB	7	2.10%	6	Under 15	40% ↑	0.60%	Under 2.5%	973.5
Blaenau Gwent	ABUHB	4	1.20%	5.7	Under 15	33% ↑	0.50%	Under 2.5%	1138
Isle of Anglesey	BCUHB	4	1.20%	5.7	Under 15	-50% ↓	0.7%	Under 2.5%	780.9
Ceredigion	HDUHB	4	1.20%	5.5	Under 15	-20% ↓	0.8%	Under 2.5%	676.8
Denbighshire	BCUHB	4	1.20%	4.2	Under 15	100% ↑	0.40%	Under 2.5%	960.3
Monmouthshire	ABUHB	3	0.90%	3.2	Under 15	-57% ↓	0.4%	Under 2.5%	809.8
<b>Total</b>	<b>Total</b>	<b>341</b>	<b>100.00%</b>	<b>10.8</b>	<b>Under 15</b>	<b>-21% ↓</b>	<b>1.2%</b>	<b>Under 2.5%</b>	<b>902.9</b>

## Deaths

- The figure below shows the 7 day rolling sum of COVID-19 deaths reported by PHW rapid mortality surveillance up to **26 April**, with **5 deaths** for the most recent 7 day period, a **decrease of 37.5%** from the previous period.
- It is important to note that 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 be higher.

COVID-19 Deaths (7 day rolling sum)



**Source:** Data from [PHW](#)

#### ONS: Deaths registered weekly in England and Wales

- 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, the number of weekly registered deaths involving COVID-19 **decreased by 26%** from 19 to **14**, accounting for **2.2%** of all deaths compared to 3.3% the previous week.
- The **total number of deaths** registered in Wales **decreased** from 644 to **616** in the week ending 23 April. This remains below the five-year average for Wales (6.8% below the five year average).
- Note that Trends in the most recent release should be interpreted with caution due to the potential impact of the recent Easter bank holidays.

**Source:** [ONS, Deaths registered weekly in England and Wales, provisional: week ending 23 April 2021](#)

#### **Variant Update**

- **VOC 202012/01** (B.1.1.7, first identified in Kent) has been detected in all parts of Wales and continues to grow; **11,604** (+186 since last report) genomically probable or confirmed cases have been identified as at 30 April.

- There have been **37 (+0)** genomically confirmed and probable cases of **VOC-20DEC-02** (B.1.351, first identified in South Africa) in Wales as at 16 April.
- There have been **10 (+0)** genomically confirmed and probable cases of the variant **VUI-21FEB-03** (B.1.525, first identified in Nigeria) in Wales.
- There has been **1 (+0)** genomically confirmed and probable cases of the variant **VUI-21JAN-01** (P.1, first identified in Brazil via Japan) has been identified in Wales.
- There have been **8 (+0)** genomically confirmed and probable cases of the variant **VUI-21APR-01** (B.1.617, first identified in India) has been identified in Wales.

### **Test, Trace, Protect (Contact tracing for COVID-19)**

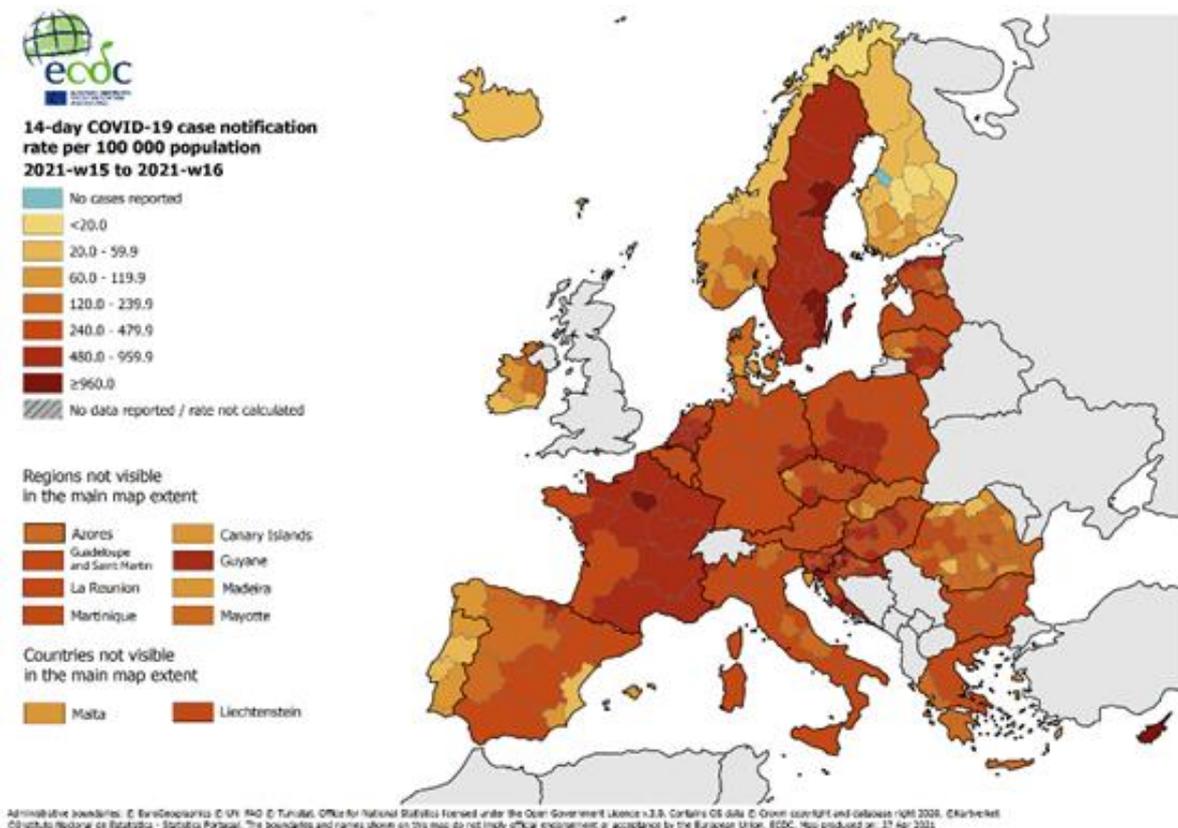
- Welsh Government publish a weekly summary of contact tracing activity in Wales during the COVID-19 pandemic. The data in this release is management information collected as part of the contact tracing process. The figures reflect the data recorded in the contact tracing system and not any contact tracing 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 week ending **24 April 2021**:
  - Of the 405 positive cases that were eligible for follow-up, **397 (98%)** were reached and asked to provide details of their recent contacts
  - Of the 1,250 close contacts that were eligible for follow-up, **1,222 (98%)** were successfully contacted and advised accordingly, or had their case otherwise resolved
- In total, since 21 June 2020:
  - of the 175,116 positive cases that were eligible for follow-up, **174,583 (99.7%)** were reached and asked to provide details of their recent contacts

- of the 402,209 close contacts that were eligible for follow-up, **382,142 (95%)** were successfully contacted and advised accordingly, or had their case otherwise resolved

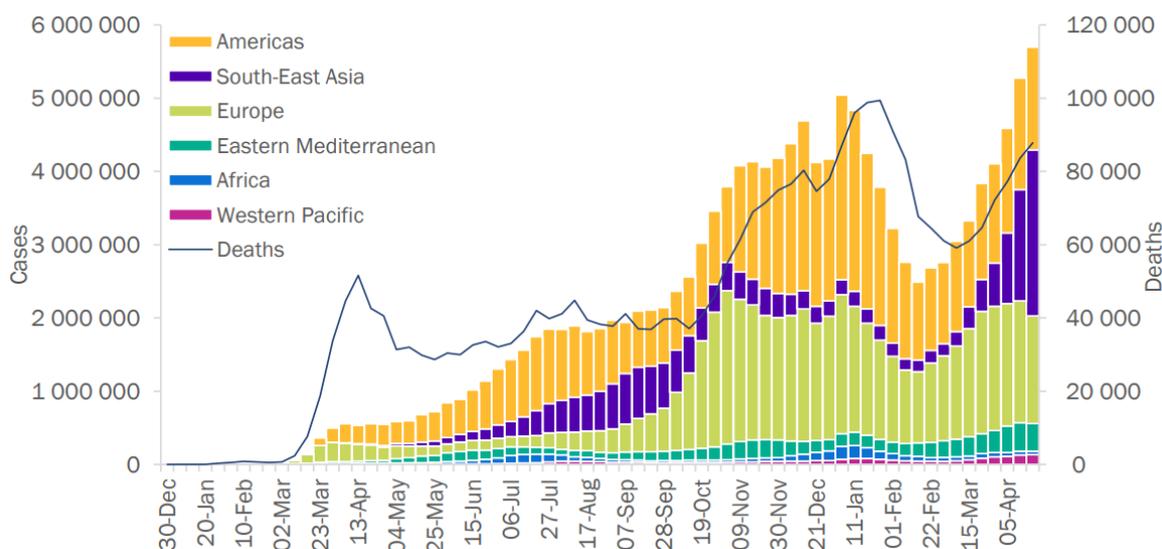
**Source:** [Test, Trace, Protect \(contact tracing for coronavirus \(COVID-19\)\): up to 24 April 2021, Welsh Government](#)

### International update

- The European picture continues to improve while some countries are showing increases, e.g. Cyprus, Croatia, Germany, Latvia, Lithuania and the Netherlands are improving. Sweden is beginning to see reductions but still has a 14-day case notification rate per 100 000 population of 750.



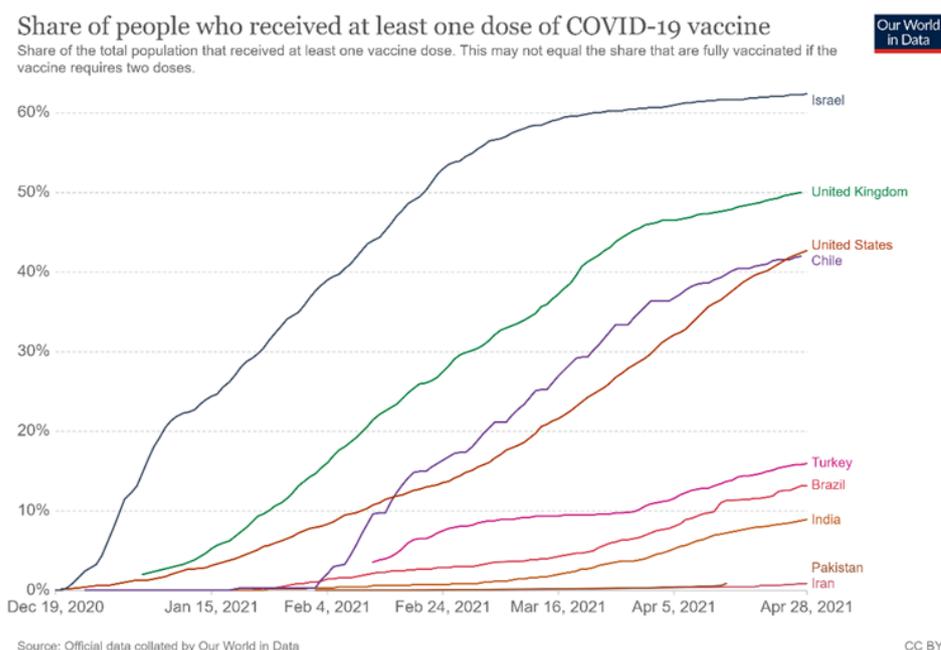
**COVID-19 cases reported weekly by WHO Region, and global deaths, as of (25 April 2021)**



**Source:** [WHO COVID-19 Weekly Epidemiological Update](#)

- In the early part of 2021 South America made up 40% of global cases. South-East Asia and in particular India now are making up the bulk of new cases. At 350,000 new cases a day it is breaking records on a daily basis.
- More concerning are the estimates of unrecorded cases and deaths. The [Institute for Health Metrics and Evaluation](#) (IHME) is an independent global health research centre at the University of Washington.
- They estimate the case rate is nearly 12.5 million a day and the death rate of 12,000 a day. The projection is for almost 1.1 Million deaths by late August. These are based on modelling several scenarios but may reflect the situation on the ground.
- Globally, new COVID-19 cases increased for the ninth consecutive week, with nearly 5.7 million new cases reported in the last week – surpassing previous peaks (see graph above). The number of new deaths increased for the sixth consecutive week, with over 87 000 new deaths reported. This week, all regions are reporting decreases in case incidence apart from the South-East Asia and Western Pacific regions.
- New variants are being discovered as sequencing is improving, with some poorer countries using failed tests as a proxy for expensive sequencing. Peru and Chile have detected a new B.1.1.1 variant designated C.37 that has all the signs of being a VOC. There are also three Indian variants identified as Variants Under Investigation (VUI) also in circulation as well as the VOCs B.1.1.7, B.1.351 and P1.

### Percentage of population that has received at least 1 dose of COVID-19 vaccine



**Source:** [Our World in data, Daily new confirmed COVID-19 cases per million people](#)

- The graph shows the progress various countries are making with vaccine roll out with Israel the UK and the US slowing somewhat as at risk groups or in the case of Israel most of the population over 16 have been vaccinated.

### **Covid-19 Infection Survey results (Office for National Statistics)**

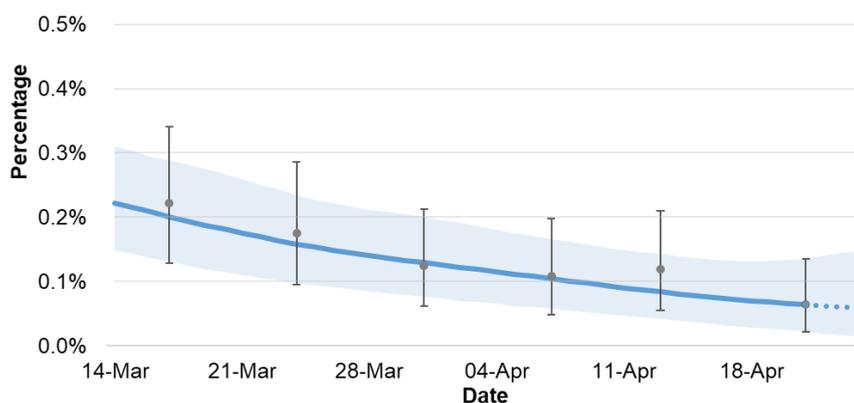
- The latest estimates for Wales from the Coronavirus (COVID-19) Infection Survey (CIS) have been published on the [Welsh Government statistics and research web pages](#) and the [Office for National Statistics website](#). The results include estimates for the number and proportion of people in Wales that had COVID-19 in the latest week, 18 to 24 April 2021.
- 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 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.

#### Latest estimates and recent trends:

- For the week 18 to 24 April 2021, an average of **0.06%** of the [community population](#) had COVID-19 (95% credible interval: 0.02% to 0.14%).

- This equates to approximately **1 person in every 1,570** (95% credible interval: 1 in 4,610 to 1 in 740), **or 1,900 people** during this time (95% credible interval: 700 to 4,100).
- The trend in the percentage of people testing positive in Wales appears to have decreased in the most recent week. Due to lower positivity rates, caution should be taken in over-interpreting small movements in the latest trends.
- In the most recent week, the trend is uncertain for people testing positive for strains **compatible with the UK variant, not compatible with the variant** and cases where the **virus is too low for the variant to be identifiable**.
- 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 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.

#### Wales, estimated % testing positive for Covid 19 since 14 March



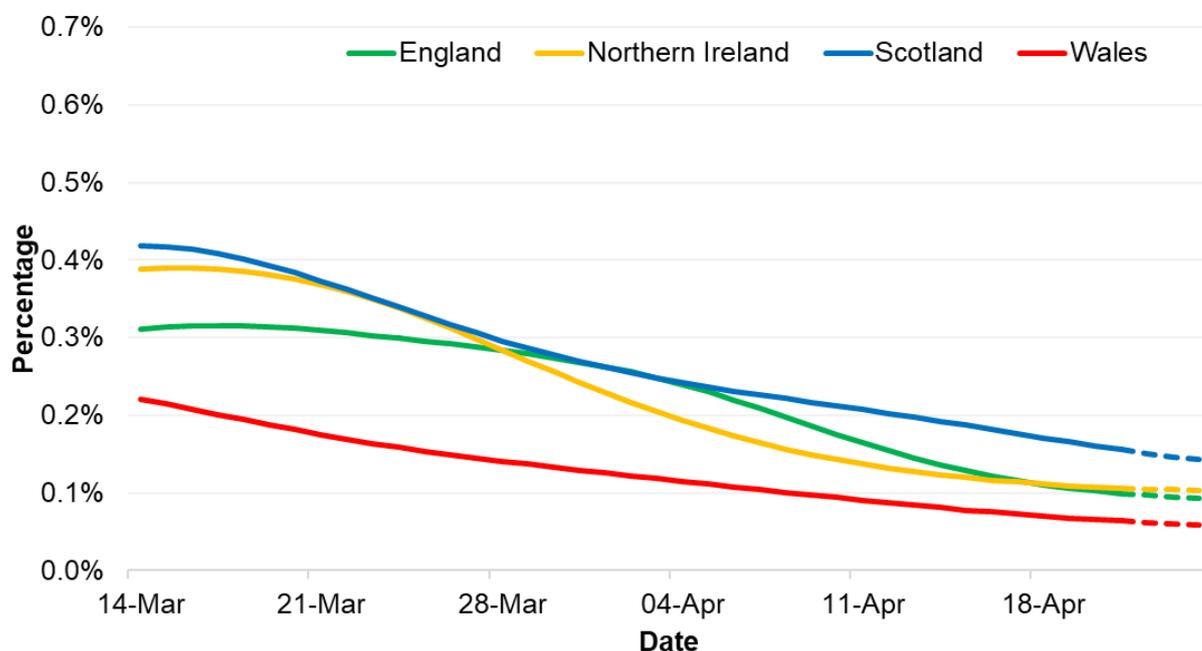
Source: Coronavirus (COVID-19) Infection Survey, ONS, 28/04/21

The blue line and shading represents the modelled trend and credible intervals based on the latest data. The point estimates and error bars are the official estimates published at the time. Reference points for the estimates are changeable. This reflects data processing schedules and events such as bank holidays.

### 1. Latest estimates for the UK countries

- At the midpoint of the most recent week (18 to 24 April 2021) rates were low across all four countries. The highest estimated percentage of the community population with COVID-19 among the nations of the UK was in Scotland (0.16%), whilst Wales appeared to have the lowest.
- In the most recent week, the positivity rate appears to have decreased in Wales, England and Scotland. In Northern Ireland, percentage of people testing positive has decreased in the most recent two weeks in, however the trend is less certain over the most recent week.

## Positivity rates (%) across UK countries since 14 March 2021



## 2. Incidence

- In Wales, during the week ending 17 April 2021, ONS estimates that there were 0.56 new PCR-positive coronavirus (COVID19) cases per 10,000 people per day (95% credible interval: 0.06 to 1.43).
- This equates to 170 new positive cases in Wales per day (95% credible interval: 20 to 430).
- Incidence of new positive cases appears to have been level in recent weeks, although credible intervals are wide due to the smaller sample size, and care should be taken in interpreting results.
- Incidence of new positive cases was highest in Scotland during the week ending 17 April 2021, and lowest in Wales.
- Across the UK, the incidence rate appears to be level in Wales, Scotland and Northern Ireland in the weeks up to 17 April and has decreased in England.
- When prevalence is very low it may not be possible to produce a reliable estimate. Credible intervals can be wide due to relatively small sample sizes, and care should be taken in interpreting results. When prevalence is very low it may not be possible to produce an estimate.

## Vaccination in Wales

- Whilst numbers will be higher due to ongoing data entry, as at 30 April 2021 1,830,964 **first doses** (+88,691 since previous week) and **748,700 second doses** (+95,163 since previous week) of Covid-19 vaccine have been given in Wales and recorded in the Covid-19 Welsh Immunisation System. **This means that approximately 82% of the Welsh population have received at least one vaccine dose** (2019 population data).
- These numbers have been de-duplicated so that people should not be 'double-counted' and are a daily cumulative snapshot of vaccinations given. As a result the number of people vaccinated will be higher than these totals.
- In the below table of total vaccine uptake by priority group and age, groups are not mutually exclusive, so individuals appear in every group that describes them, and can be counted in more than one group.

### Uptake by priority group and age, counting individuals in all groups in which they belong

Group	Group size (n)	Received 1st dose (n)	Received 2nd dose (n)	1st dose uptake (%)	2nd dose uptake (%)
Care home residents	15,329	14,978	13,594	97.7%	88.7%
Care home worker	38,092	34,469	29,722	90.5%	78.0%
80 years and older	174,074	166,323	152,650	95.5%	87.7%
Health care worker	142,448	134,420	118,037	94.4%	82.9%
Social care worker		45,215	38,182		
Aged 75-79 years	133,019	128,002	116,002	96.2%	87.2%
Aged 70-74 years	183,541	175,390	147,789	95.6%	80.5%
Clinically extremely vulnerable aged 16-69 years	81,496	75,807	54,462	93.0%	66.8%
Aged 65-69 years	180,395	169,082	65,149	93.7%	36.1%
Clinical risk groups aged 16-64 years	353,571	300,777	23,059	85.1%	6.5%
Aged 60-64 years	205,717	187,956	39,346	91.4%	19.1%
Aged 55-59 years	233,787	207,968	40,755	89.0%	17.4%
Aged 50-54 years	228,067	197,375	37,061	86.5%	16.3%
Aged 40-49 years	392,274	283,711	54,235	72.3%	13.8%
Aged 30-39 years	420,501	176,563	46,246	42.0%	11.0%
Aged 18-29 years	465,496	111,977	37,730	24.1%	8.1%

**Source:** [PHW Covid-19 Rapid Surveillance Dashboard](#)

### **Publication of results from the Coronavirus (COVID-19) infection Survey (CIS) in Wales – Antibody data: 5 to 11 April**

- The latest antibody estimates for Wales from the Coronavirus (COVID-19) Infection Survey (CIS) are available on the [Welsh Government statistics and research web pages](#) and the [Office for National Statistics website](#).
- The latest results provide estimates of the number and proportion of people in Wales that have tested positive for antibodies to SARS-CoV-2 between 5 and 11 April. The estimates can be used to identify individuals who have had the infection in the past or have developed antibodies as a result of vaccination.
- Antibody data presented is a week behind vaccination data as there is a time lag on when antibody data is received, whereas vaccine data is self-reported and more readily available. Only private households are included in the sample

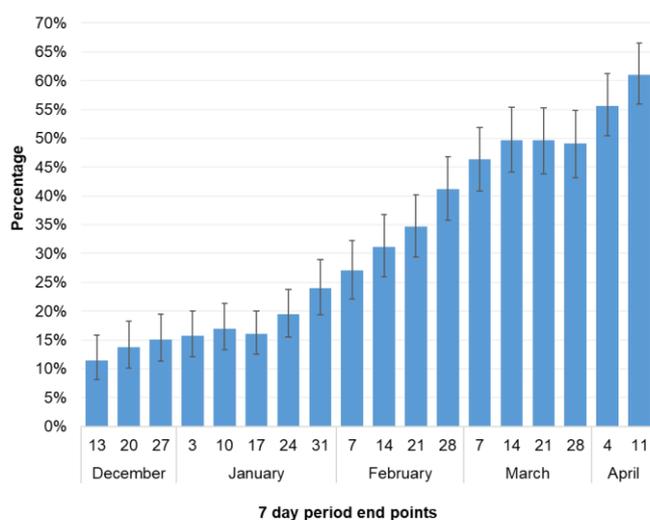
– residents in care homes, communal establishments and hospitals are not included. This is referred to as the community population.

- The vaccinations estimates are not the same as the published figures from Public Health Wales on recorded vaccinations. There will be differences between these modelled estimates and the official figures due to differences in coverage, methods and timeliness. The estimates produced from the survey are helpful to compare with other characteristics, such as testing positive for antibodies.

### Key results for Wales

- Between 5 and 11 April, 61.0% of the 16+ population tested positive for antibodies to COVID-19 from a blood sample (95% credible interval: 55.9% to 66.5%).
- Though there is uncertainty with the estimates, it appears that the antibody rates have increased in the most recent two weeks. This is likely to be due to more individuals receiving their second doses and becoming fully vaccinated.
- As more people become vaccinated the number of people with antibodies is expected to increase. However the detection of antibodies alone is not a precise measure of immunity protection acquired from vaccinations
- Antibody levels in the blood can decline over time, meaning that some people who have previously had COVID-19 may subsequently test negative for antibodies. For this reason, these figures should be regarded as estimates of monthly prevalence, not cumulative exposure.

### **Estimated percentage of the population in Wales testing positive for coronavirus (COVID-19) antibodies, December 2020 to April 2021**

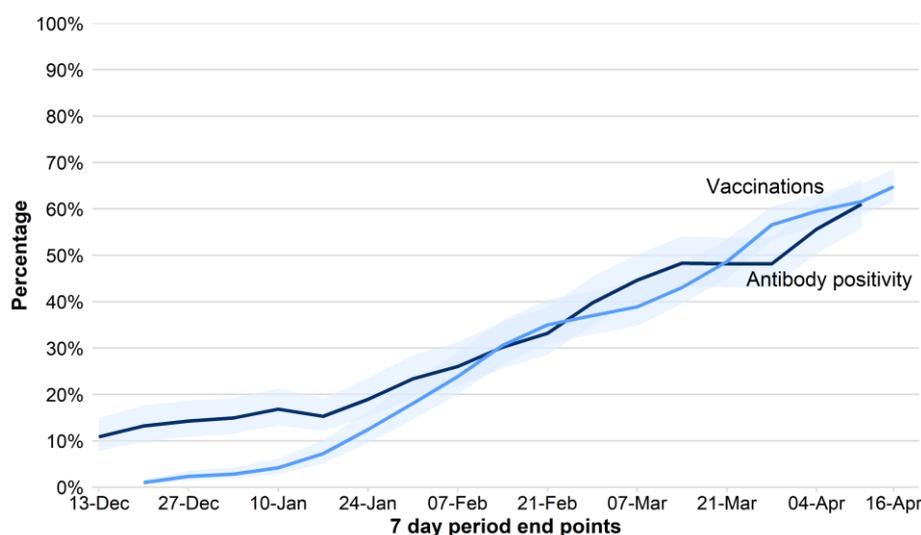


Source: Coronavirus (COVID-19) Infection Survey, ONS, 21/04/21

### Antibody positivity and vaccinations over time

- The modelled estimates suggest that both the antibody rate and the percentage of people reporting they have had at least one dose of a COVID vaccine have increased recently.
- Between 5 and 11 April, 61.6% of people aged 16 and over reported to have had one or more doses of a COVID-19 vaccine (95% credible interval: 58.7% to 65.3%). Whilst 21.8% reported they have been fully vaccinated (95% credible interval: 16.0% to 27.9%)
- Following a recent levelling off in antibody estimates, the antibody rates have begun increasing again. This may be due to the estimates showing the impact of individuals receiving their second vaccination doses and becoming fully vaccinated.
- It is important to note that antibody positivity estimates are defined by a fixed amount of antibodies in the blood. Most vaccinated individuals will have increased their antibody levels but this may not reach or stay above the threshold used in the survey.

### Estimated percentage of the population in Wales reporting receipt of vaccination and testing positive for coronavirus (COVID-19) antibodies since December 2020



Source: Coronavirus (COVID-19) Infection Survey, ONS, 21/04/21

The blue line and shading represent the modelled trend and 95% credible intervals for people testing positive for antibodies (dark blue) and people reported having had at least one dose of a COVID vaccine (light blue).

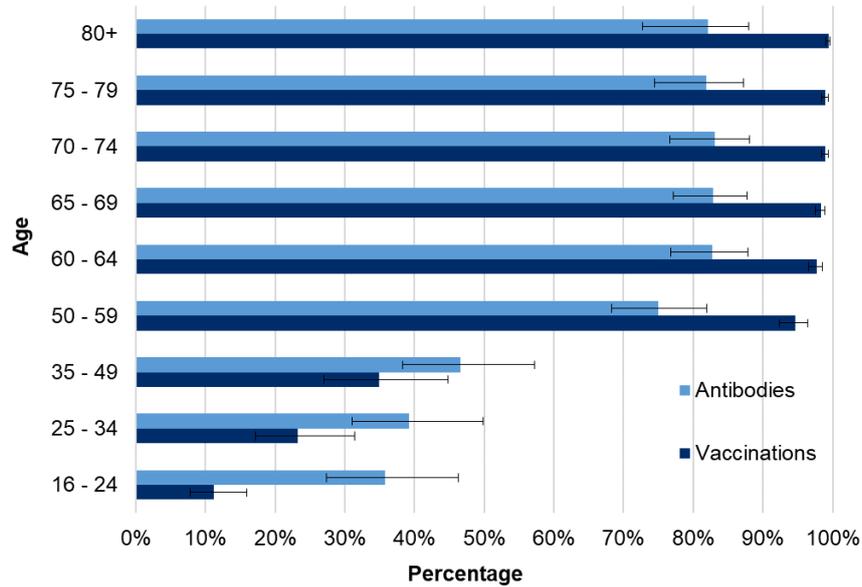
### Antibody positivity and vaccinations by age

- Between 5 and 11 April, a higher percentage of people tested positive for antibodies in the age groups over 60 than the younger age groups. It is

estimated that more than 80% of people tested positive for antibodies across these older age groups.

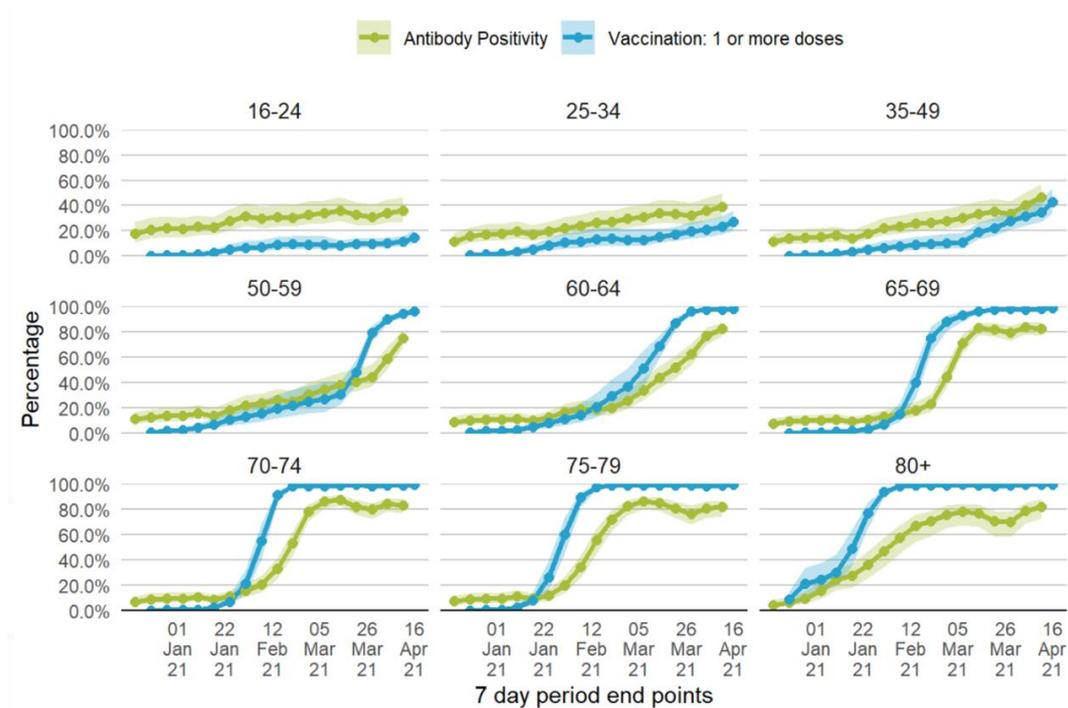
- The percentage of people testing positive for antibodies for those aged 16 to 59 years ranged from 35.7% to 75.0%. For those aged 60 years and over, antibody positivity ranged from 81.9% to 83.0%.
- In the younger age groups, the proportion of people testing positive for antibodies is generally higher than the proportion reporting to have had at least one dose of a COVID vaccine. This may imply that antibody rates in the younger ages are more likely to be driven by COVID infections than vaccinations.
- It is noticeable that the proportion of people reporting they have had at least one dose of a COVID vaccine was also highest in the older age groups. Therefore it is likely that high antibody rates in these age groups are due to higher vaccination rates.
- A similar pattern is seen amongst those reporting they have been fully vaccinated, with a higher percentage of people receiving both doses of the vaccination across the older age groups than the younger age groups.
- It is important to note that antibody positivity is defined by a fixed amount of antibodies in the blood. Most vaccinated individuals will have increased their antibody levels but this may not have reached or stayed above the threshold.
- This survey does not include those that live in care homes, one of the priority groups identified by the [Joint Committee on Vaccination and Immunisation \(JCVI\)](#). Daily and weekly counts of vaccine doses administered by nation can be seen in the [Public Health Wales \(PHW\) dashboard](#).
- Caution should be taken in over-interpreting the latest estimates. Credible intervals are wide and the sample size is relatively low, meaning there is higher uncertainty in these figures.
- An interactive tool that visualises the percentages testing positive for COVID-19 antibodies by single year of age over time is published in the antibody article on the ONS website.

**Estimated percentage of the population in Wales reporting receipt of vaccination and testing positive for coronavirus (COVID-19) antibodies by age group, 5 to 11 April**



Source: Coronavirus (COVID-19) Infection Survey, ONS, 21/04/21

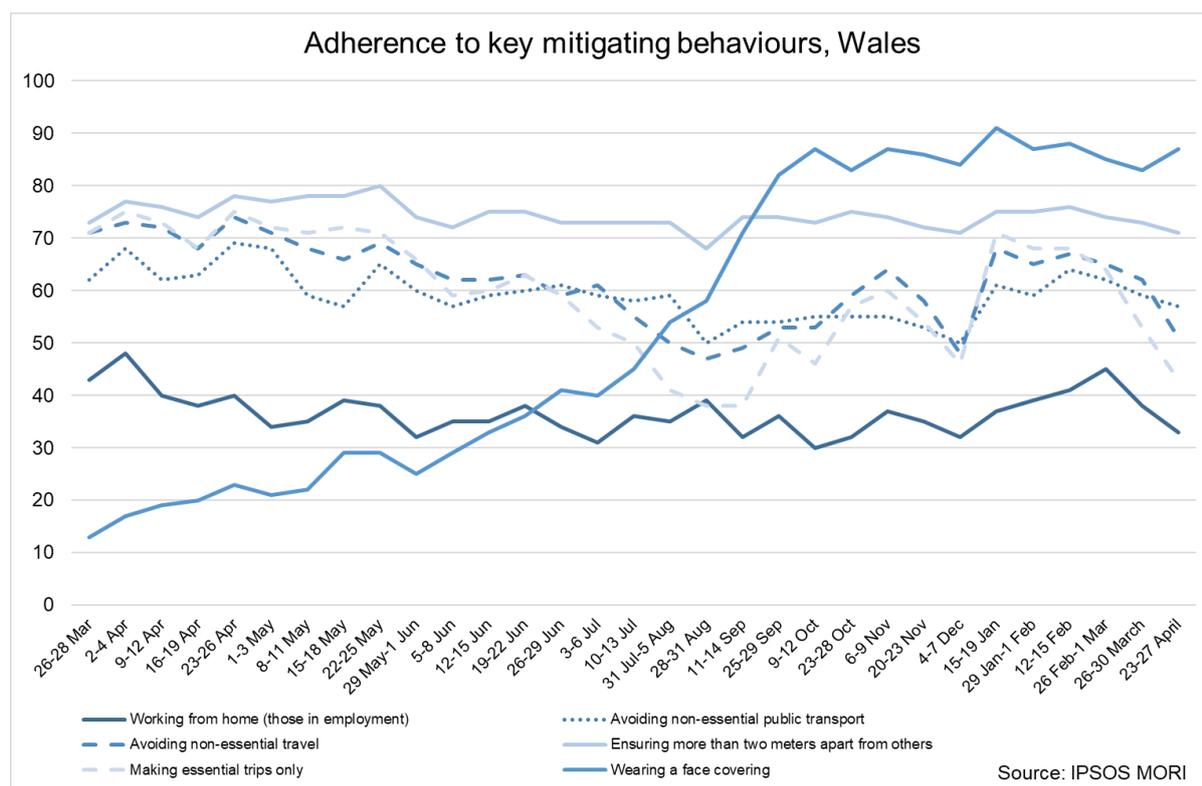
**Estimated percentage of the population in Wales reporting receipt of vaccination and testing positive for coronavirus (COVID-19) antibodies by age group, since December 2020**



Source: Coronavirus (COVID-19) Infection Survey, ONS, 21/04/21

## Adherence and understanding of current measures

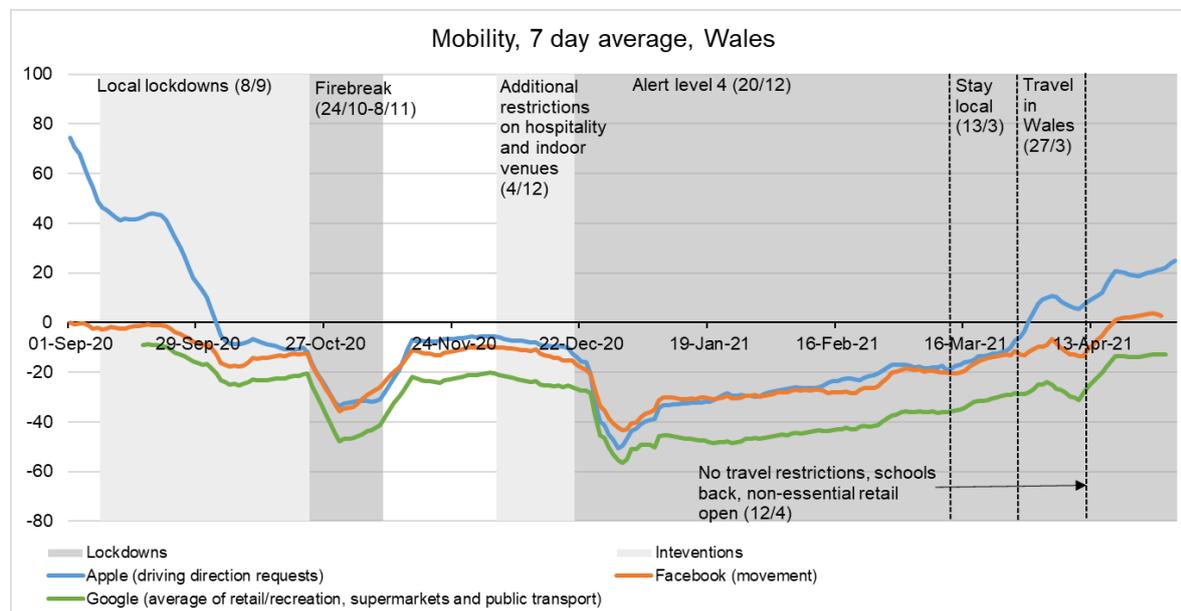
- The data from IPSIS MORI is new this week.
- The most recent IPSOS MORI data for the period 23 – 27 April for Wales shows reductions in some categories compared to the last survey wave which was 4 weeks prior (26 – 30 March). Most notably a reduction in those making essential trips only – this follows the change in guidance from staying local/within Wales in the last survey to being able to travel within the UK and further easing such as re-opening of non-essential retail. 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.



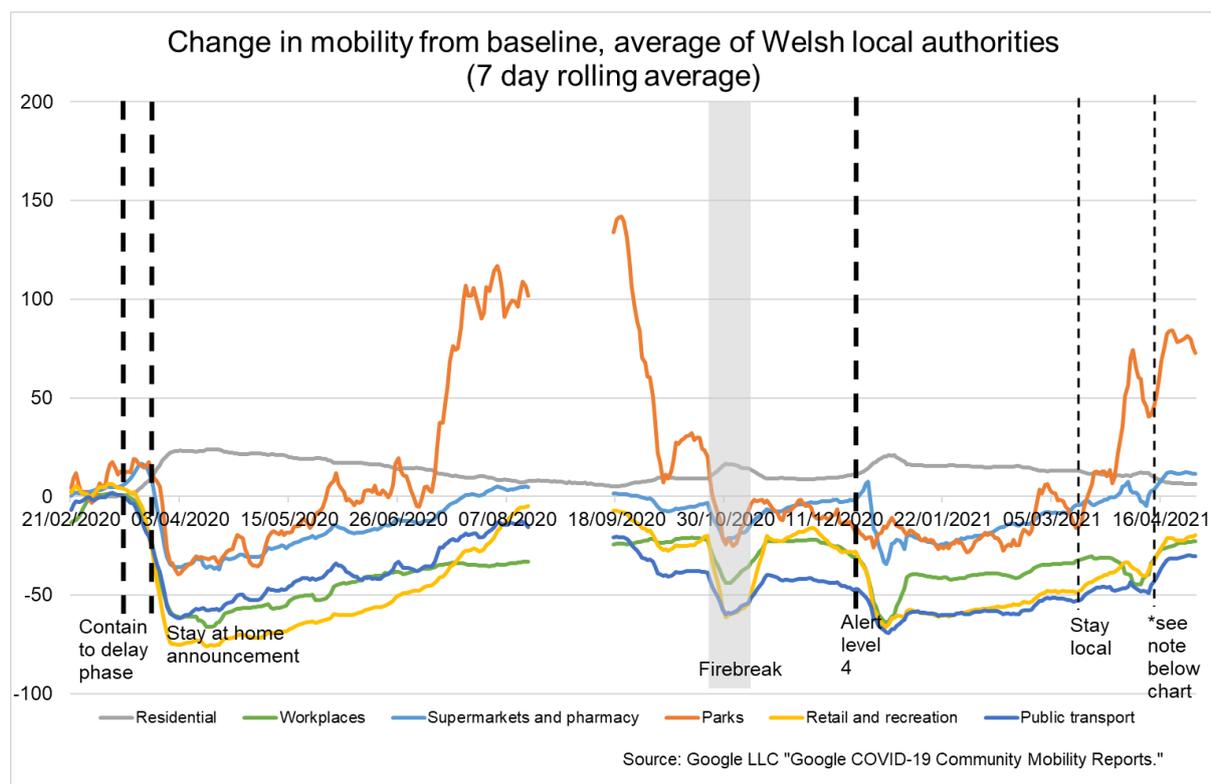
## Mobility

- The most recent mobility data shows some further small increases following the changes in guidelines from the 12 April, which include no travel restrictions, schools returning following Easter and non-essential retail re-opening. Mobility increased sharply in most categories in the week after the 12 April, but has

increased more slowly in some categories since the 19 April, with some showing no/little change.



- Mobility of [Facebook users](#) in Wales shows movement was 3% above the baseline for the week to the 28 April. This is higher than the week before (2% above the baseline). The percentage of users staying put (near to home) was 22%, down from the week before (23%). 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 1 May shows that requests for driving directions in Wales were higher than the previous week at 25% above the baseline (up from 20% above the baseline). Requests for walking directions and requests for public transport directions also increased compared to the previous week relative to the baseline. The baseline is the 13<sup>th</sup> of January 2020.
- The [Google mobility data](#) to the week of the 29 April for residential (i.e people spending time at home) were similar to the week before at 6% above the baseline. Workplaces rose relative to the baseline by 1 percentage point (at 23% below the baseline). Retail & recreation mobility was up from the previous week (20% below the baseline, up from 22% below) and supermarkets & pharmacy were unchanged (at 11% above the baseline). Public transport mobility increased over the week relative to the baseline whilst parks 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 16<sup>th</sup> – September 10<sup>th</sup> due to the data not meeting quality thresholds.



\*Changes include no travel restrictions, schools returning and non-essential retail re-opening.

- Anonymised and aggregated mobile phone data from O2 for the week to the 23 April shows an increase in trips compared to the week before. Trips starting in Wales rose by 3 percentage points to 82% of the baseline. The baseline for the O2 data is the same day of the week in the first week of March.

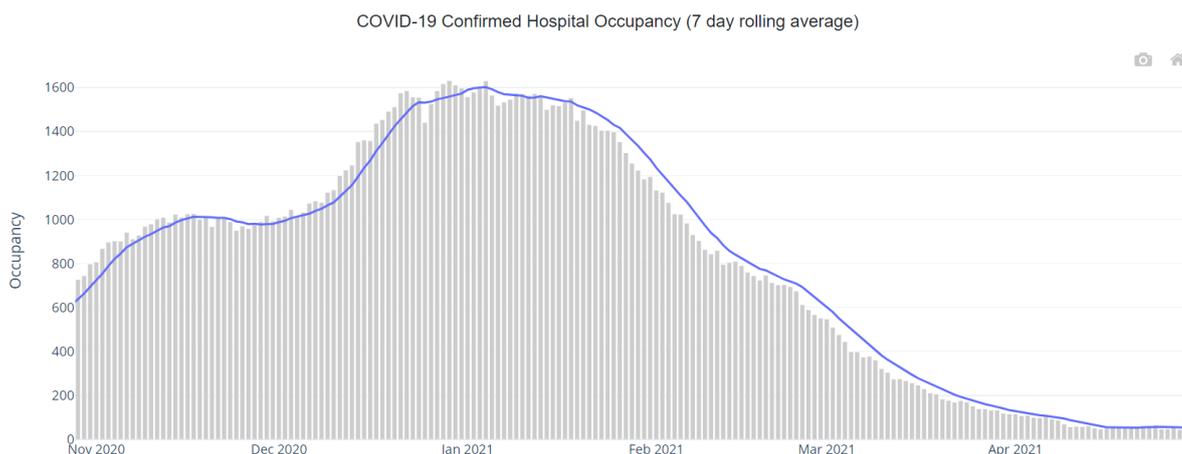
### COVID-19 weekly surveillance and epidemiological summary from Public Health Wales (as at 30 April)

- The proportion of calls to NHS 111 and NHS Direct related to possible COVID-19 symptoms have decreased compared to the previous week.
- Overall GP consultations for any Acute Respiratory Infection (ARI) have remained stable in the most recent week as have suspected COVID consultations.
- The overall number of ambulance calls increased and the number of calls possibly related to COVID-19 increased slightly in the most recent week.
- The all-Wales number of lab confirmed COVID-19 episodes has decreased slightly in the most recent week. Sample positivity for testing episodes was 1.3% in week 16.
- Confirmed case incidence has decreased or remained stable in all health board areas. Testing episode positivity continues to decrease nationally.

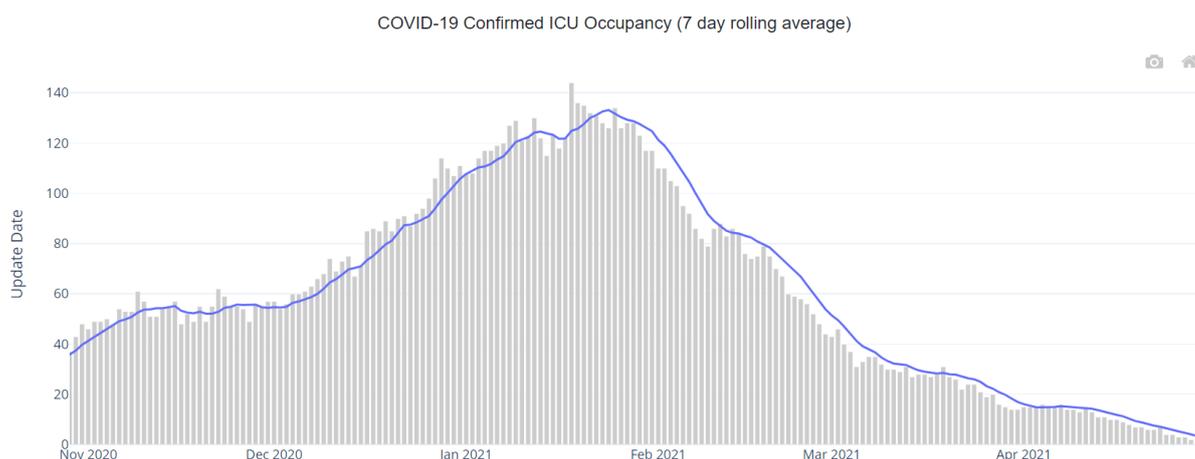
- During week 16, incidence remained stable in the majority of age groups but there was a continued small increase in those aged 85+. Incidence was highest in those aged 85+.
- At a national level, confirmed case admissions to hospitals slightly increased and confirmed cases who are inpatients in hospital remained stable compared to the previous week. In the most recent week, admissions to critical care wards decreased compared to the previous week.
- Recent surveillance data suggest that COVID-19 infections in Wales are decreasing slightly in most areas 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.
- Although the distribution of cases at MSOA level in the most recent week still suggests geographically wide-spread activity, the number of MSOAs with confirmed cases and the number of cases per MSOA decreased slightly. In the majority of MSOAs with confirmed COVID19 cases, numbers are now at low levels.
- There was a decrease in the number of incidents logged in Tarian in the most recent week.
- From 22nd February, children aged three to seven began to return to school in a phased manner. According to Welsh Government guidance, from 15th March, all remaining primary school children were able to return to learning onsite, along with learners in qualifications years, and more learners in colleges and training. There have been 10,423 cases in staff or students across 1,267 schools (81% of all schools in Wales) recorded in the TTP system since 1st September 2020, (as at 28th April 2021). In the previous 21 days (as at 28th April) there were between 1 and 17 total cases (staff and students) in most local authorities, with the exception of Cardiff with 31 cases. Confirmed case incidence remained stable in those aged <18y in the most recent week.
- Influenza is not currently circulating in Wales and RSV has not circulated over the 2020-21 winter period.

### **Hospital occupancy**

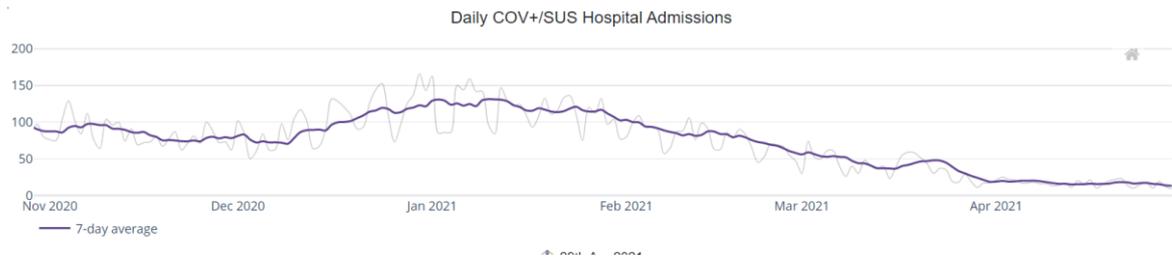
- The figure below shows the hospital occupancy of suspected and confirmed Covid-19 positive patients over the first and second wave of the pandemic (7 day rolling average, as at 29 April).
- For the most recent 7 day period ending 29 April the average weekly Covid-19 confirmed hospital occupancy was **53**, a **5% decrease** from the previous period.



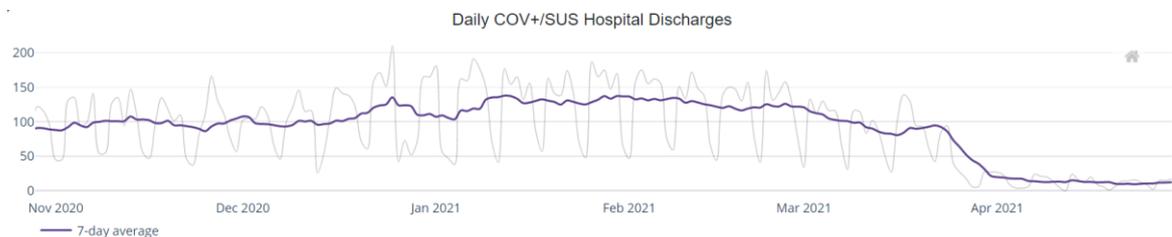
- The Figure below shows the invasive ventilated bed occupancy (ICU) of confirmed COVID-19 positive patients (7 day rolling average, as at 29 April).
- For the most recent 7 day period ending 29 April the average Covid-19 confirmed ICU occupancy was **3**, a **63% reduction** from the previous period.



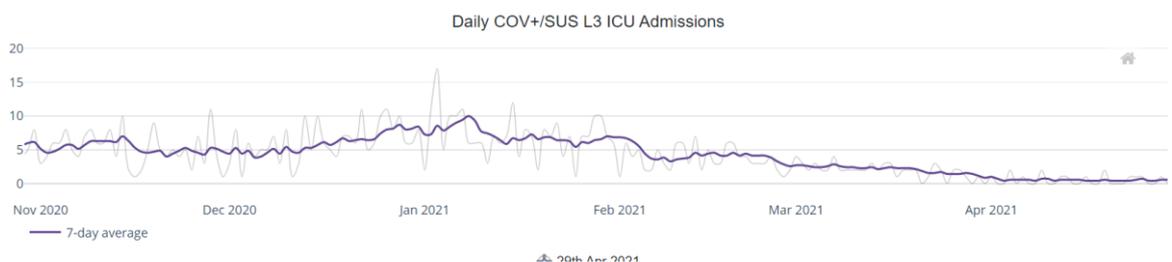
- The number of people in hospital **recovering** from COVID-19 also continues to decrease overall and is at **145** as at 28 April, a **12% reduction** from the previous 7 day period.
- The Figure below shows the number of people admitted to hospital who are either suspected or confirmed as having Covid-19 (COV+). 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 7 day average for daily Covid-19 confirmed and suspected hospital admissions as at 29 April was **13.14**, a **26% reduction** from the previous period.



- The Figure below shows the number of **hospital discharges** of people who are either suspected (SUS) or confirmed as having Covid-19 (COV+). 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 7 day daily average hospital discharges as at 29 April was **12**, a **22% increase** from the previous 7 day period.



- The Figure below shows **admissions** to Level 3 ICU and are either suspected (SUS) or confirmed as having Covid-19 (COV+). 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 7 day daily average as at 23 April was **0.6**, a **32% increase** from the previous 7 day period.



**Source:** Data from [StatsWales](#)

### 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.

