# NPHET COVID Update 20<sup>th</sup> January 2022

## **Current situation**



	01-Oct	26-Oct (2 <sup>nd</sup> wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 <sup>rd</sup> wave peak 14 day inc.)	20-Jun (lowest 2021 14 day inc.)	12-Jan (1 week ago)	19-Jan
14-day incidence	96.08	306.37	86.88	320.57	1494.23	89.57	6,180.7**	4,989.1**
5-day average cases	407.0	919.2	260.8	1476.4	4458.0	313.8	22,323**	8,849**
Total weekly cases	2607	7000	1892	9416	35362	2070	157,357**	80,216**

	01-Oct	26-Oct (2 <sup>nd</sup> wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 <sup>rd</sup> wave peak 14 day inc.)	(lowest 2021	12-0an	19-Jan
No. Hospital (8.A.M)	122	344	224	508	1792	49	1,055	910
No. in ICU (11.30 A.M)	20	39	30	42	176	15	92	90

	JUN21	JUL21	AUG21	SEP21	OCT21	NOV21	DEC21	JAN22	Unknown	Total since Mar2020
Reported in latest week (to 19/01/2022)	0	0	1	0	3	4	12	34	0	52
Total	21	22	89	179	224	246	196	66	31	6,087

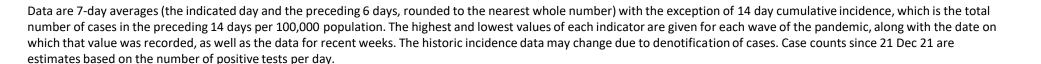
<sup>\*\*</sup>From 22<sup>nd</sup> December, reported daily case numbers have been based on positive SARS-CoV-2 results uploaded to the HSE COVID Care Tracker the preceding day. These data are provisional and do not represent notified cases. National 14-day incidence, 5-day average and weekly cases are based on reported cases from CCT since 22<sup>nd</sup> December. Data does not include positive antigen tests reported on HSE portal.

# Cases, numbers in hospital and intensive care

Comparing case numbers, numbers in hospital, and new admissions to and confirmations in hospital per day over the last three weeks to those in mid-December, incidence and healthcare demand remain high, but we are past the peak with incidence and hospitalisation declining. The number of people in ICU is currently stable.



	Apr 2020	Summer 2020	Oct 2020	Dec 2020	Jan 2021	Jun 2021	15 Dec	5 Jan	12 Jan	19 Jan	Daily count 19 Jan
Cases confirmed per day	<b>859</b> 18-04	<b>8.7</b> 25-06	<b>1158</b> 21-10	<b>262</b> 12-12	<b>6516</b> 10-01	<b>308</b> 19-06	4226	19566	22478	15122	12138
14-day incidence per 100,000 population	<b>212</b> 19-04	<b>3.0</b> 04-07	<b>306</b> 26-10	<b>79</b> 09-12	<b>1531</b> <sub>15-</sub>	<b>91</b> 20-06	1314	4450	6190	5527	
Hospital in-patients	<b>881</b> 17-04	<b>9</b> 02-08	<b>354</b> <sub>01-11</sub>	198 16-12	<b>2020</b> 24-01	<b>43</b> 29-06	501	755	994	976	911
Hospital admissions per day	<b>85</b> 04-04	<b>&lt;1</b> 10-07	<b>27</b> 26-10	<b>11</b> 13-12	<b>158</b> 15-01	<b>6</b> 27-06	56	139	149	122	106
ICU confirmed cases	<b>155</b> 14-04	<b>4</b> 04-08	<b>47</b> 04-11	<b>26</b> 27-12	<b>219</b> <i>28-01</i>	13 27-06	110	89	87	90	90
ICU admissions per day	<b>14</b> 31-03	<b>&lt;1</b> 03-06	<b>4</b> 03-11	<b>1</b> 16-12	<b>20</b> 17-01	<b>&lt;1</b> 02-07	7	6	8	7	7

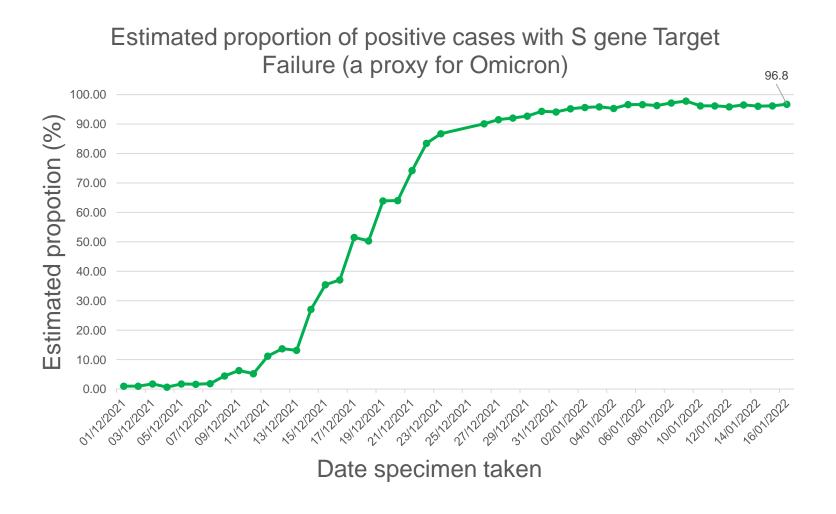




#### **Ireland – Current Situation**

Proportion of cases SGTF approximately 97%





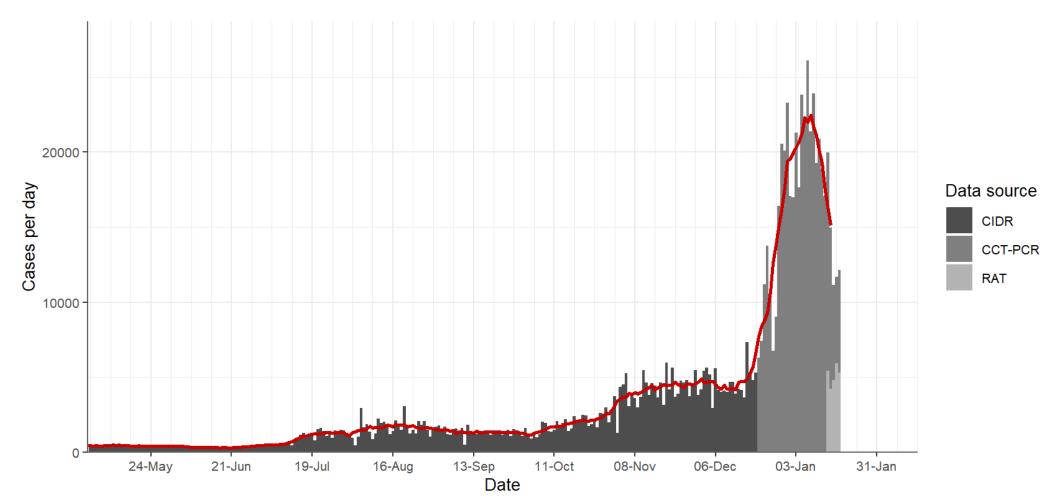


# Cases & Incidence Rates

# Daily case counts

Daily case counts by source of data, with 7-day moving average. The case count is an underestimate of incidence, though moreso at peak, where test positivity was exceptionally high, than now, where both demand for testing and test positivity is falling. The data suggest that incidence has fallen rapidly. It is possible that the rate of decline will slow as population mobility and contact increases as public concern about the consequences of infection wanes.





Daily cases by notification date (bars) and data source

CIDR: Cases confirmed on CIDR. CCT-PCR: Estimated cases from positive PCR tests reported to contact management.

RAT: Positive rapid tests reported to HSE. Red line is 7-day average case count by notification date.

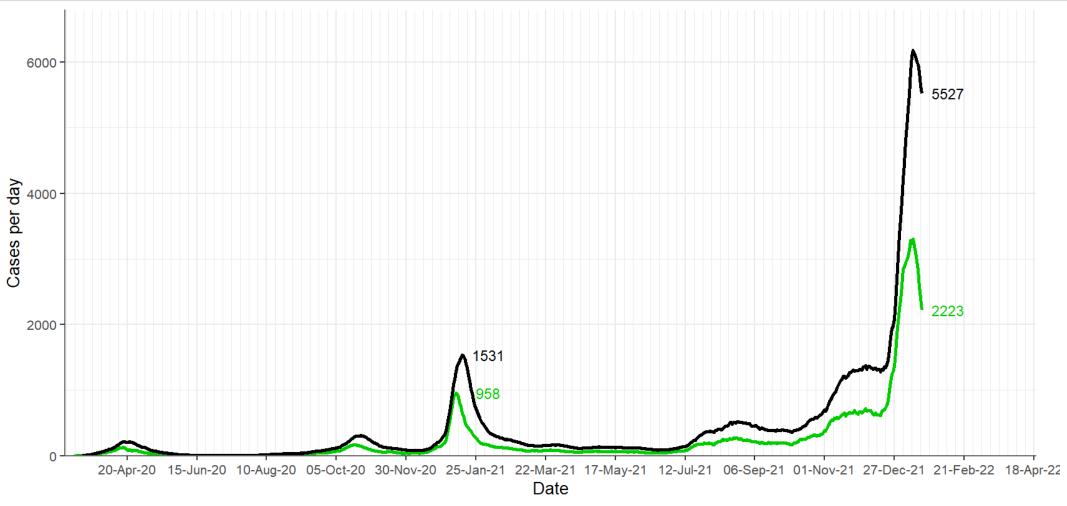




## Cumulative incidence

7-day and 14-day cumulative incidence per 100,000 population. These are likely to be underestimates, and remain very high, but are falling rapidly.



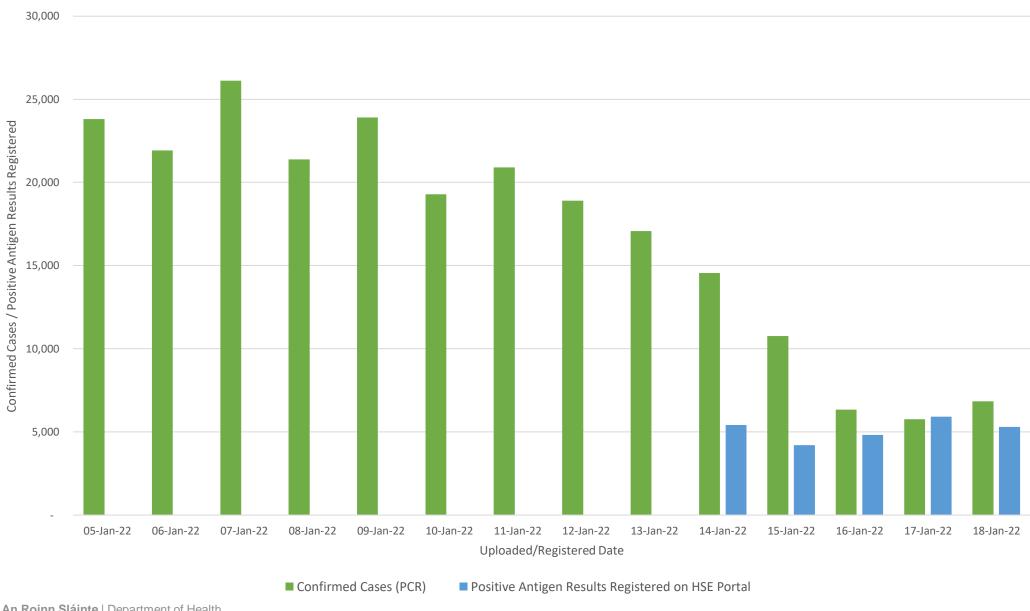


7-day (green) and 14-day (black) cumulative incidence per 100,000 population. Data from CIDR to 21 Dec 21, then estimated from positive tests reported. CSO 2016 population





#### Confirmed Cases (PCR) and Registered Positive Antigen Tests past 14 days

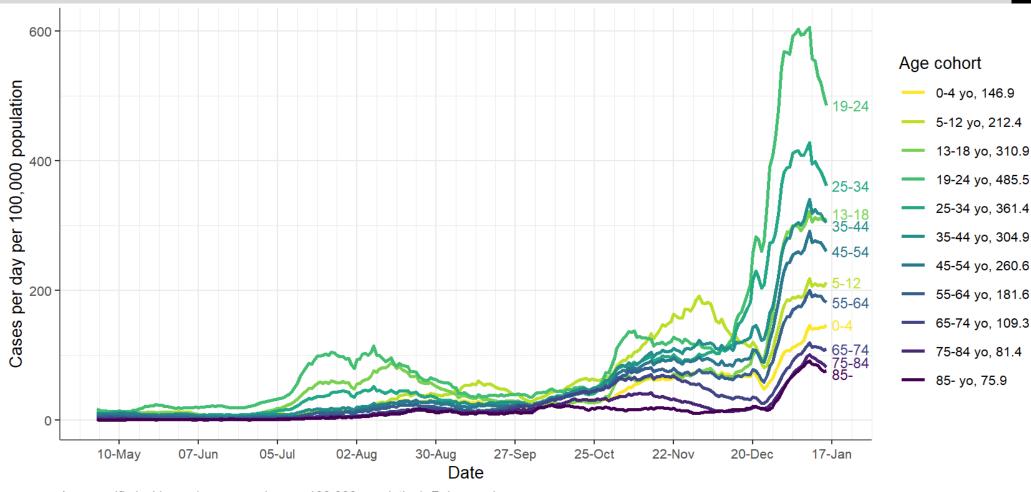




### Age-specific incidence (excl. LTRF and hospital outbreaks)

There is a considerable lag in uploading data to CIDR, so information on the age breakdown of cases is delayed, and distorted by the fact that positive antigen tests in those aged 4-39 are no longer confirmed by PCR testing. The important consideration here is that incidence in those aged 65 and older appears to have peaked and is now declining.





Age-specific incidence (cases per day per 100,000 population). 7-day moving average.

Cases associated with outbreaks in long-term residential facilities (LTRF) and outbreaks in hospitals excluded.

CIDR data to midnight Tue 18 Jan 2022. Cases dated by date notified to HPSC (event creation date). CSO 2016 population.

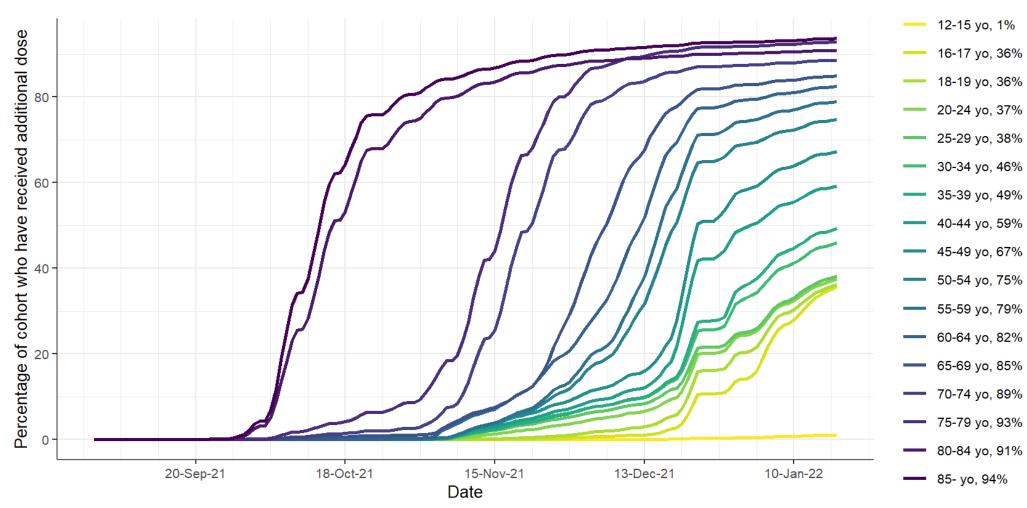




#### **Booster vaccination**

36-38% of those aged 16-29 years, and almost half those aged 30-39 years, have received an additional booster dose.





Percentage of each age cohort who have received an additional dose. Data from COVAX to Tue 18 Jan 2022



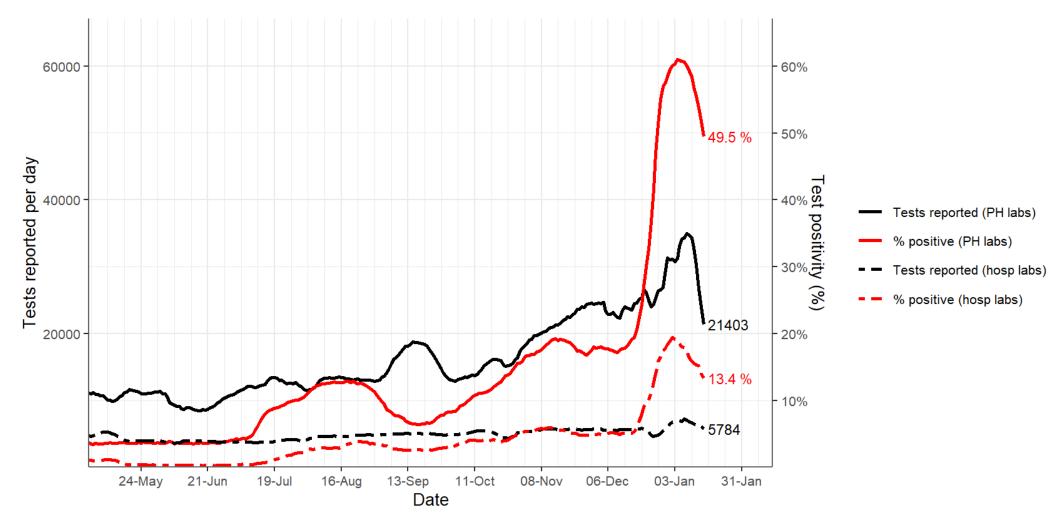


# Testing

# Tests and test positivity

While test positivity rate in public health laboratories (60%) remains very high, it is falling rapidly; importantly, test positivity in hospital laboratories which is a biased but more stable sample of the population, is also falling.

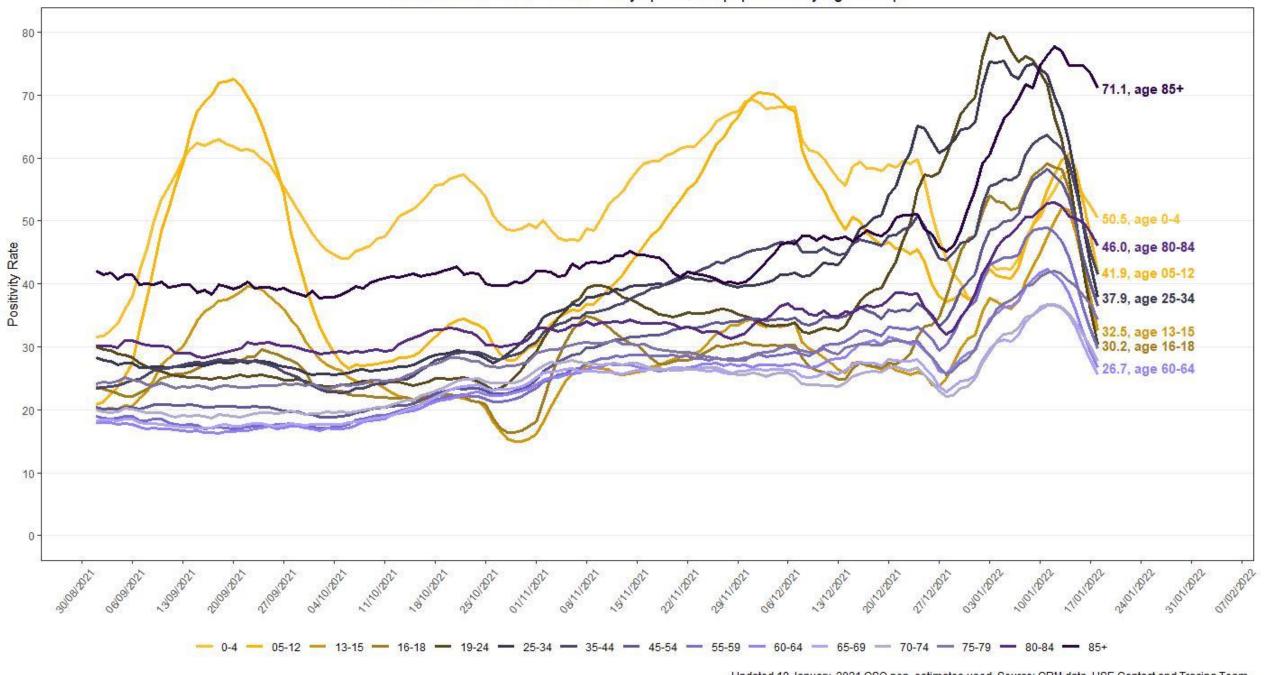




Total tests reported per day (black) and % of tests reported positive (red) for tests conducted in public health laboratories (NVRL and Cherry Orchard, solid lines) and tests conducted in hospital laboratories (dotted lines). 7-day moving averages.



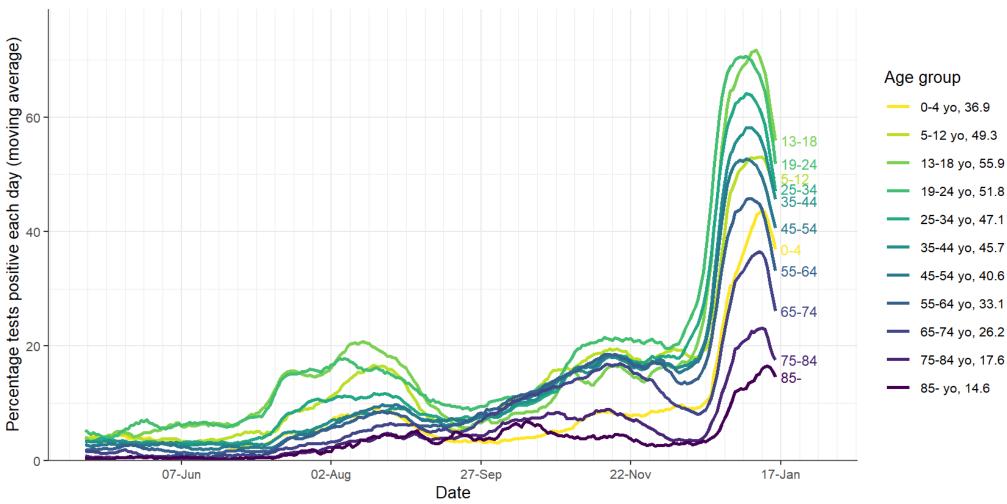
No. of Total Results in Past 7 Days per 1,000 population by Age Group



# Test positivity by age

Test positivity is falling across all age groups.





Percentage of tests each day reported as positive (7-day moving average) by age group. Laboratory testing data to Tue 18 Jan 2022.



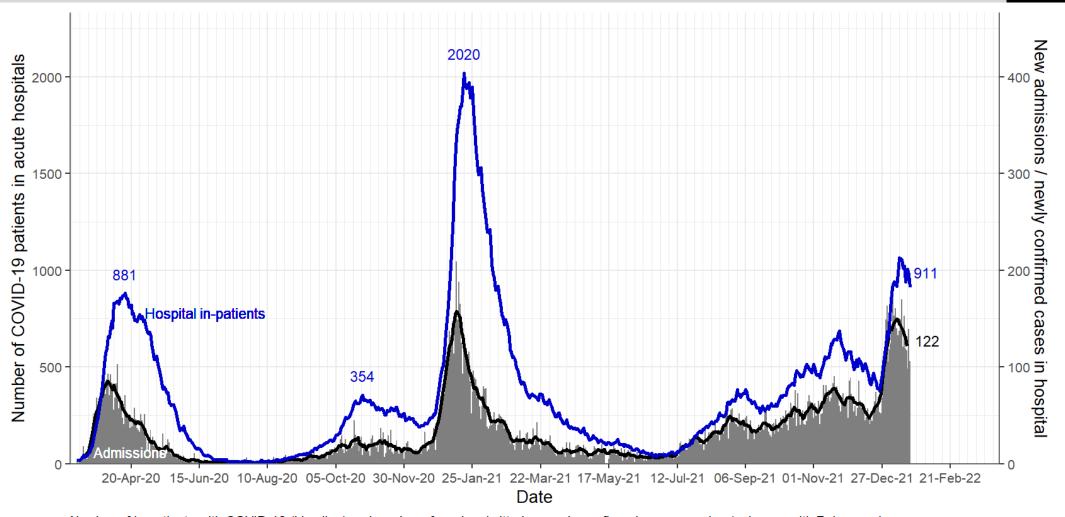


# Hospitals & ICU

# Confirmed cases in acute hospitals

The number of people in hospital with confirmed SARS-CoV-2 infection. The number of people in hospital has decreased to 911 from a peak of 1063 on 10 January 2022. The 7-day average number of admissions and newly confirmed cases in hospital per day has also decreased to 122 per day (peak 150 per day).





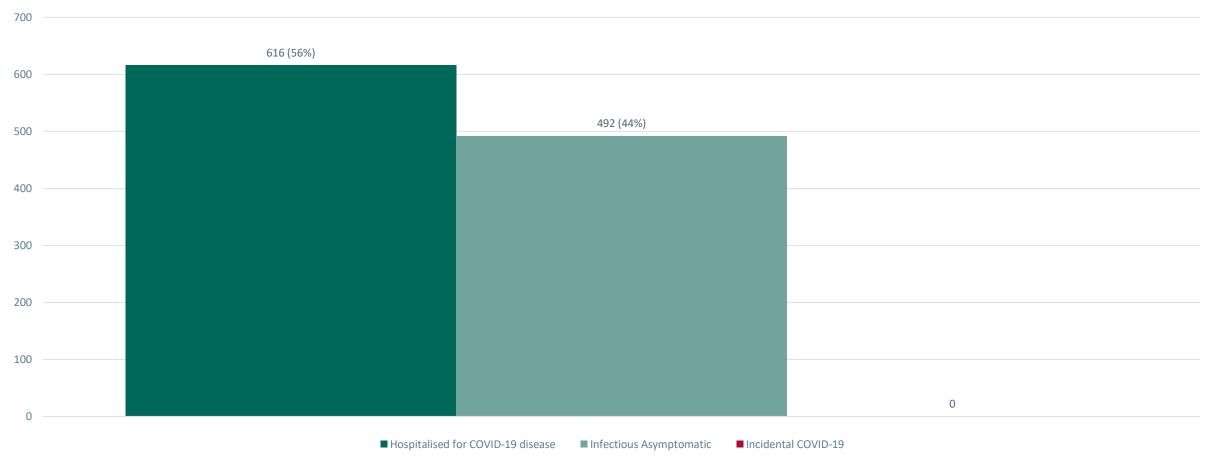
Number of in-patients with COVID-19 (blue line) and number of newly admitted or newly confirmed cases per day (columns, with 7-day moving average, black line, secondary y-axis) on HSE acute hospital sites. HSE PMIU-SDU data to Wed 19 Jan 2022.





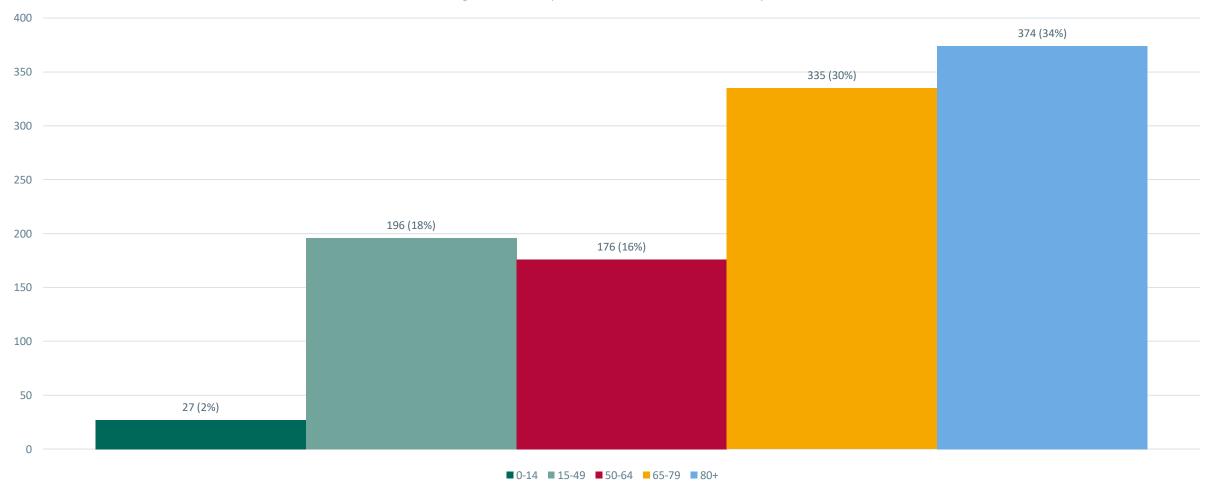
# Breakdown of Hospitalised Cases by COVID-19 Category Nationally as of 18<sup>th</sup> January 2022



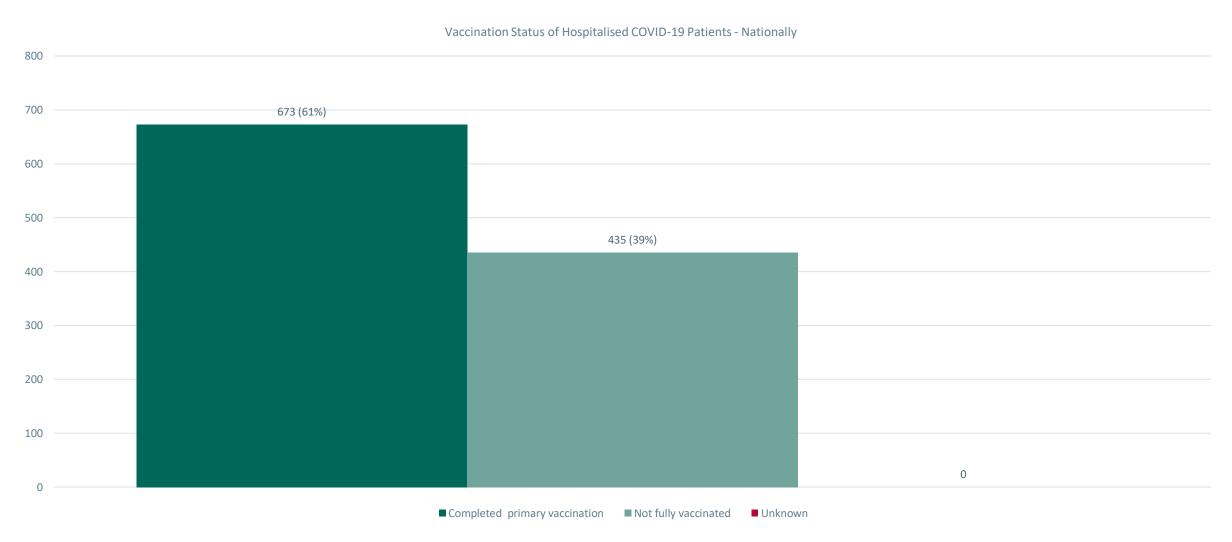


## Age Profile of Hospitalised COVID-19 Cases as of 18th January 2022





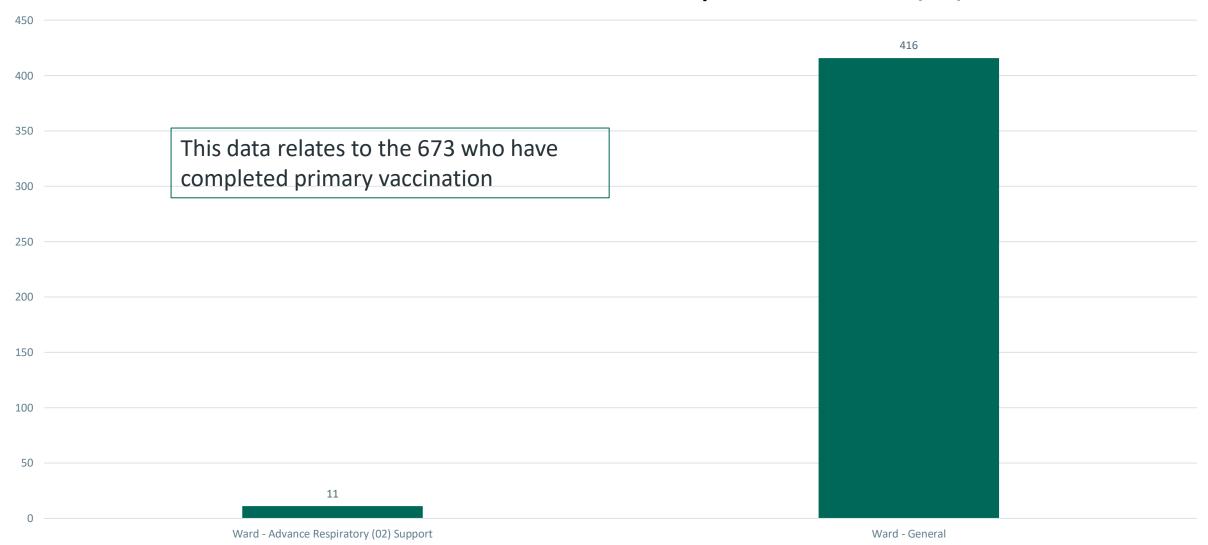
## Vaccination Status of Hospitalised COVID-19 Patients as of 18th January 2022



Note – Completed Primary Vaccination is defined as those who has received their second dose of vaccine more than 14 days ago



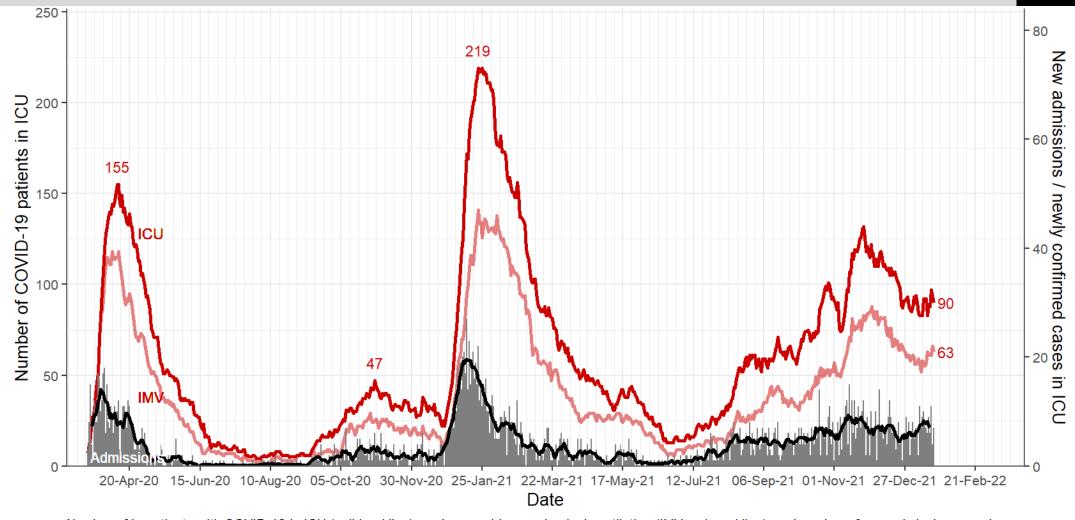
#### Total Patients with Additional Dose Record as per COVAX as on 18/01/2022



## Confirmed cases in intensive care

The number of people in ICU with confirmed SARS-CoV-2 infection and the number requiring mechanical ventilation are currently stable, though the number requiring IMV has increased over the last week. 90 people in ICU, 63 mechanically ventilated, average 7 admissions per day.



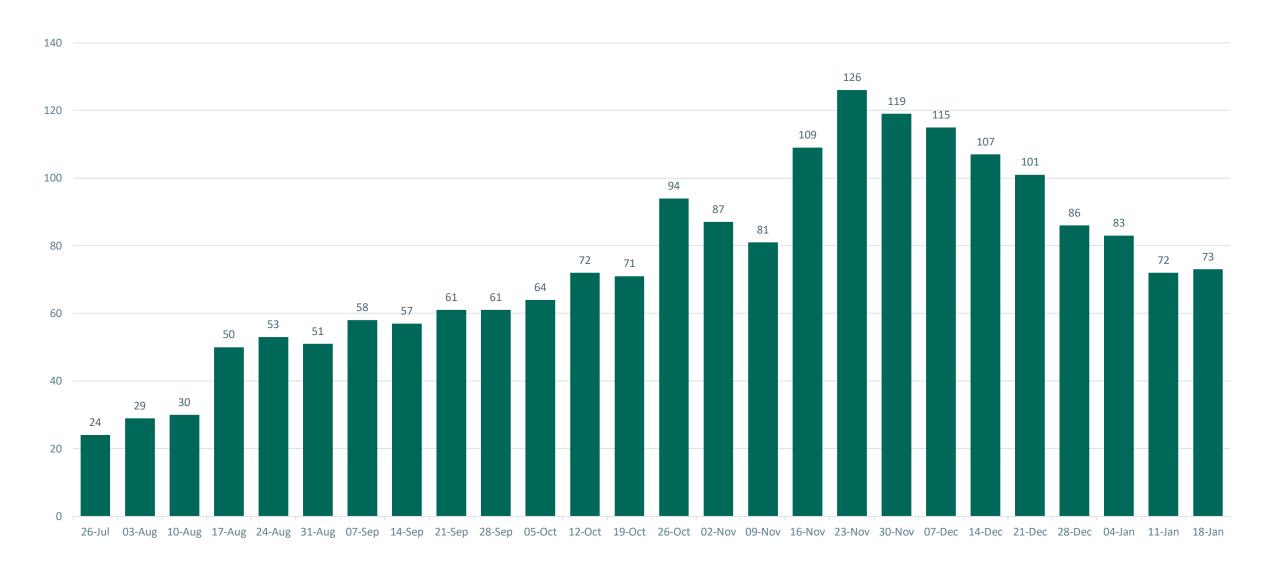


Number of in-patients with COVID-19 in ICU (solid red line) number requiring mechanical ventilation (IMV, pale red line), and number of new admissions per day (columns, with 7-day moving average, black line, secondary y-axis). NOCA ICU-BIS data to Wed 19 Jan 2022.

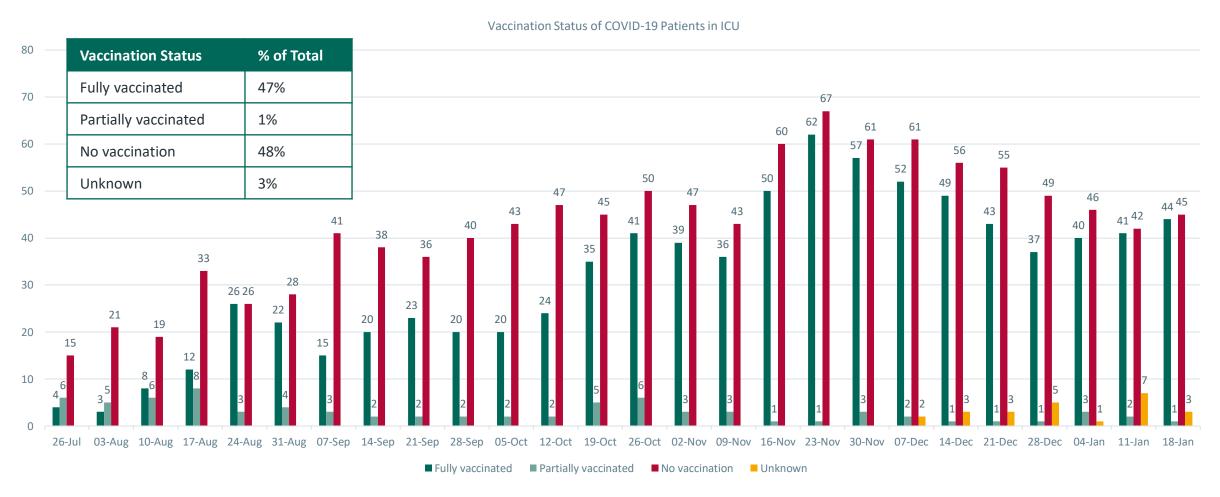




### Primary reason for admission to ICU was COVID-19



#### **Vaccination Status of COVID-19 Patients in ICU**

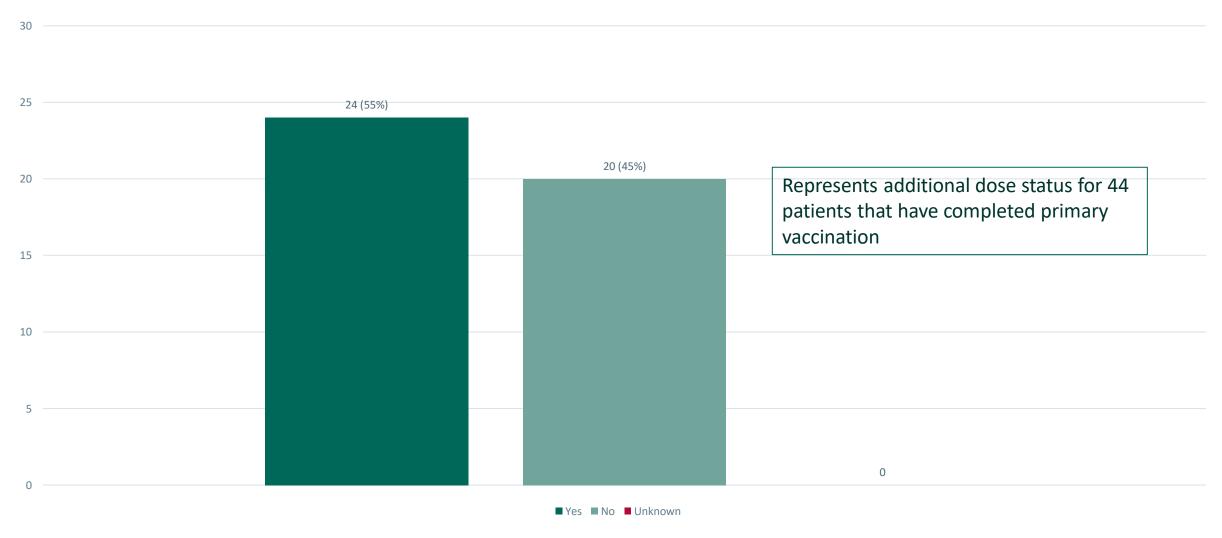


Note – Fully Vaccinated is defined as those who has received their second dose of vaccine more than 14 days ago

Source: ICU Bed Information System (National Office of Clinical Audit (NOCA))



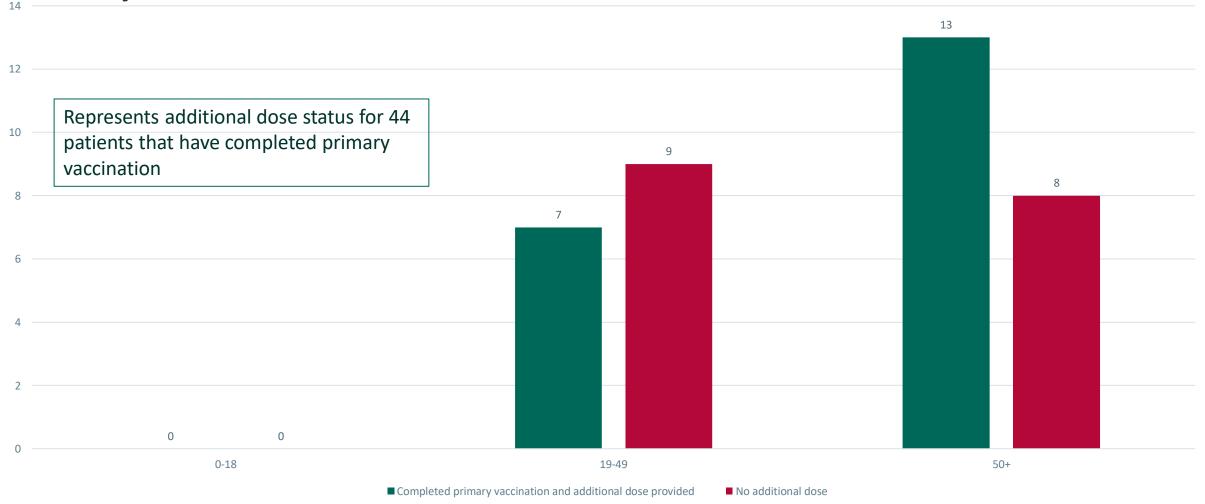
## Additional Dose Status of COVID-19 Patients in ICU as of 18th January 2022



Source: ICU Bed Information System (National Office of Clinical Audit (NOCA))



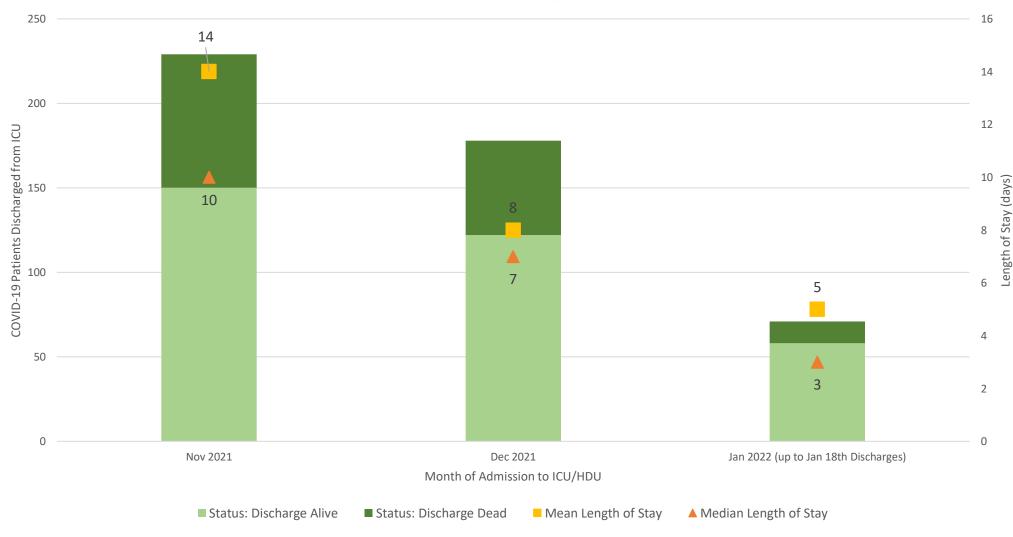
# Additional dose Status of COVID-19 Patients in ICU by Age Profile as of 18<sup>th</sup> January 2022



Source: ICU Bed Information System (National Office of Clinical Audit (NOCA))

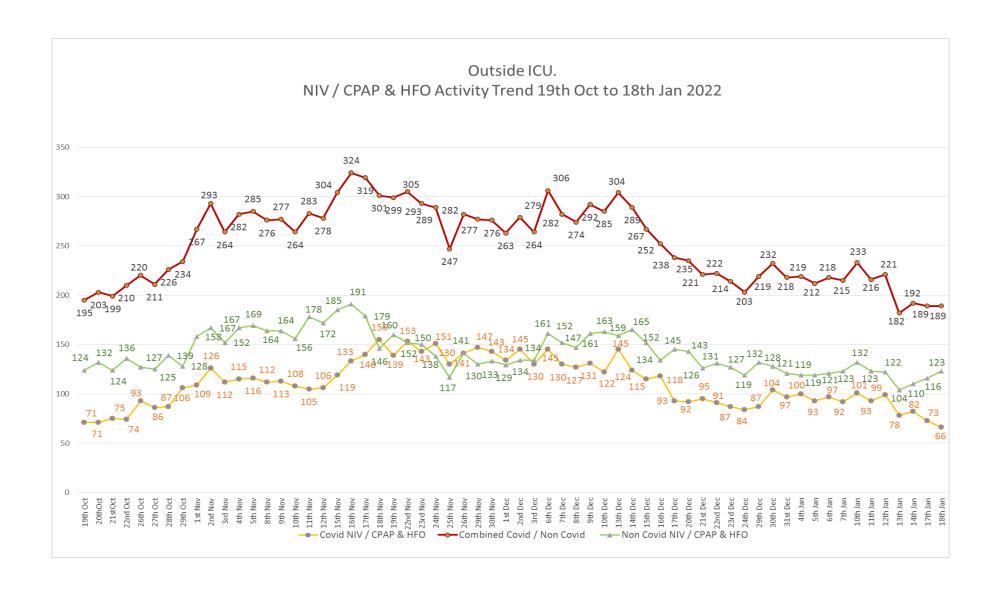


# Mean and Median Length of Stay of COVID-19 ICU/HDU Patients <u>Discharged from ICU</u> by Month of Admission to ICU/HDU



- 571 COVID-19 positive patients were admitted to ICU/HDU between 1st Nov 2021 and 18th Jan 2022.
- Of these, 478 have been discharged from ICU/HDU.
- Chart shows number of discharged patients (by status on discharge) by month of admission to ICU/HDU and Mean and Median Length of Stay.
- Mean and Medan LOS may change (esp for January) as current /future ICU/HDU patients are discharged.

Updated 18/01/2021 Source: NOCA, ICU-BIS, weekly KPI data collection. Special DOH data request



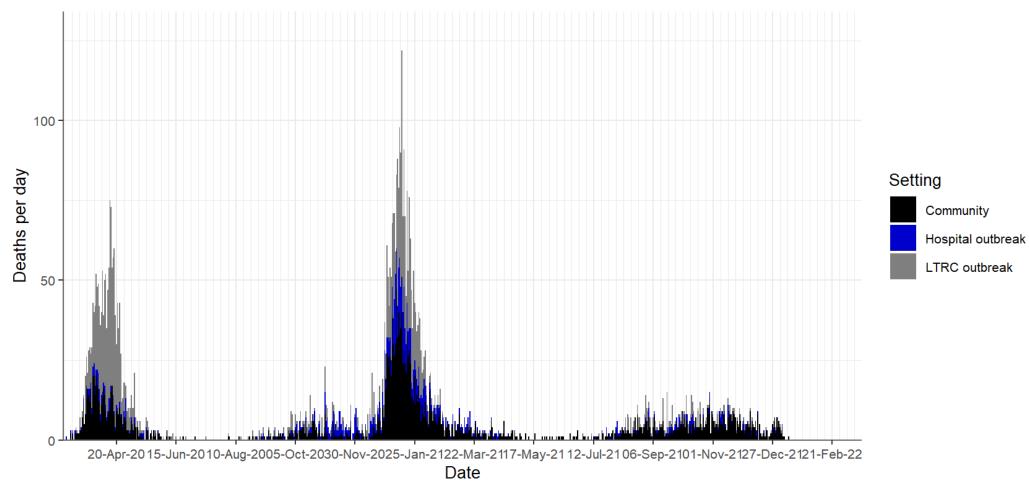


# Deaths

# **Deaths**

Deaths per day appear stable.





Cases who died: 7-day moving average count with cases dated by specimen collection date, case notification date, and date of death. Analysis confined to the 4957 deaths with laboratory confirmed SARS-CoV-2 infection where date of death is known. CIDR data to midnight Tue 18 Jan 2022.







# Outbreaks & Clusters

# Summary of COVID-19 outbreaks by key outbreak locations, week 2\* 2022 and weeks 26\*\* 2021 – week 2 2022



	Current week	Total		
Key outbreak locations	Week 2	Week 26 2021 – Week 2 2022		
Nursing Home/Community Hospital	61	345		
Acute hospitals	33	276		
Residential Institutions#	60	405		
Vulnerable groups^	27	318		
Schools^^	3	518		
Childcare facility	0	246		

<sup>\*</sup>Week 2 2022 (January 9<sup>th</sup> 2022 – January 15<sup>th</sup> 2022), \*\*Week 26 2021 – Week 2 2022 (June 27<sup>th</sup> 2021 – January 15<sup>th</sup> 2022)

#Includes: centres for disabilities, centres for older people, children's/TUSLA residential centres, mental health facilities, prisons, women/children's refuges, other/not specified ^Includes: Irish Travellers, Roma, homeless, direct provision service and addiction service population

<sup>^^</sup>These outbreaks are associated with school children +/or school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks

#### Weekly Summary – week 2, 2022



#### Nursing Homes & Community Hospitals

 Sixty-one new outbreaks notified in week 2 with 759 associated cases (range 0-47 cases per outbreak)

#### Acute hospitals

33 new acute hospital outbreaks notified in week 2 with 150 associated cases (range 0-19)

#### Residential institution outbreaks

60 new outbreaks reported this week with 199 associated cases (range 0-13)

#### Vulnerable groups

- 27 new outbreaks reported this week,
  - Fifteen outbreaks among Irish Travellers (47 cases)
  - Five outbreaks in DPCs (60 cases)
  - Two outbreaks associated with homeless services (36 cases)
  - Three outbreaks associated with addiction services (36 cases)
  - Two outbreaks among Roma (2 cases)

#### Schools

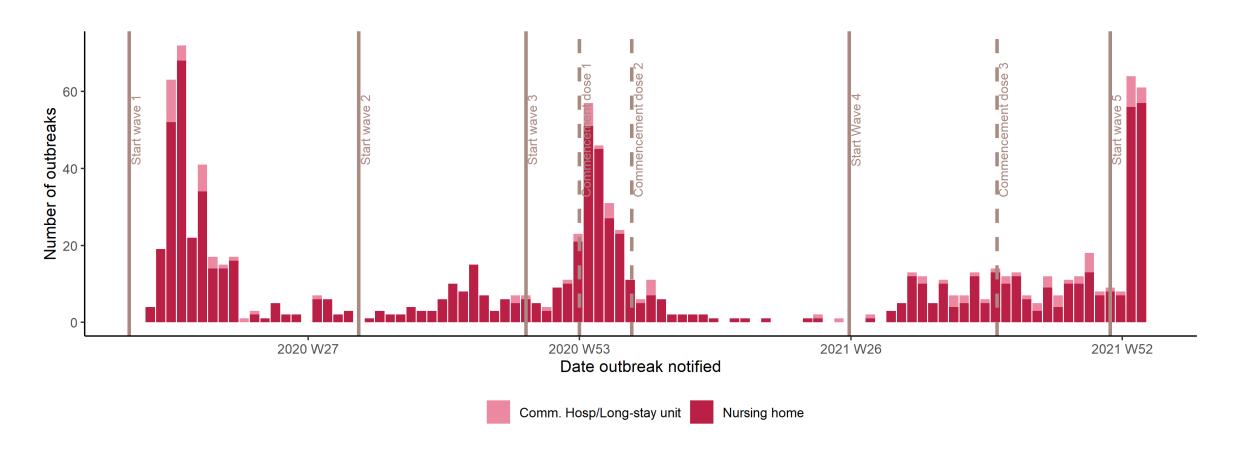
- Three new outbreaks with eleven associated cases
- One in post-primary school with six associated cases
- Two in special education schools. One with five associated cases and one with no cases associated as yet

#### Childcare facilities

No new outbreaks in week 2

# Weekly number of COVID-19 outbreaks in Nursing Homes and Community Hospitals, waves 1-5





Large peaks occurred in the number of outbreaks in wave 1 (72 outbreaks in a single week) and wave 3 (57 outbreaks in a single week). In week 2 2022 (wave 5), 61 outbreaks were reported in these settings

# Burden of disease associated with COVID-19 outbreaks in Nursing Homes and Community Hospitals, wave 5 (weeks 51 2021 to week 2 2022)



	Outk	reak	Linked confirmed cases						
Outbreaks Location	Number of outbreaks	Number of cases	Number	Number hospitalised	Number admitted to ICU	Number hospitalised and died	Number who died		
Comm. Hosp/Long-stay unit	14	143	39	1	0	0			
Nursing home	128	1572	215	17	0	0	5		
Total	142	1715	254	18	0	0	5		

#### Wave 5:

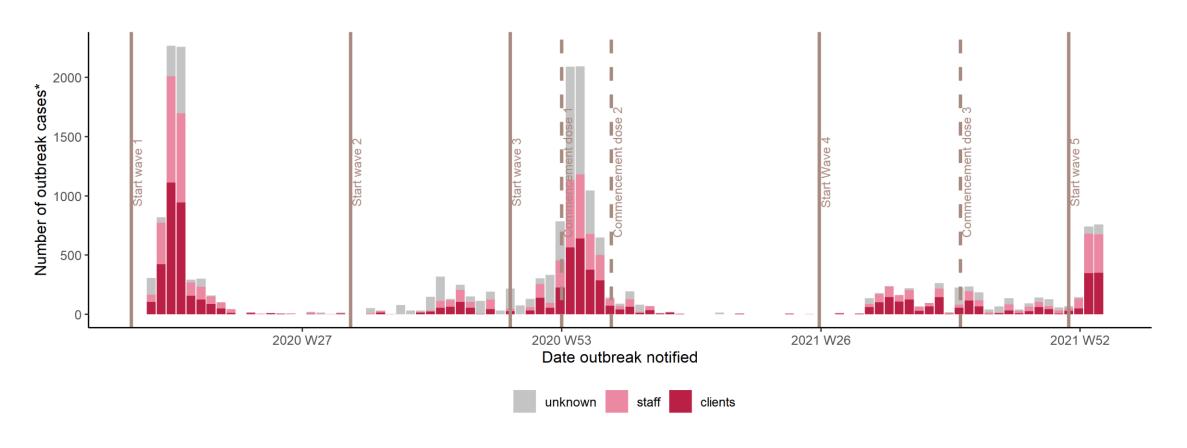
- 142 outbreaks in wave 5
- 1715 cases were reported associated with these outbreaks, of which there was disaggregate data available on 254 cases.
- 18 of the 254 outbreak-linked cases (7.1%) were hospitalised (median age 70 years)
- 5 (2.0%) cases died [Note: there is one additional death reported in a case not yet linked to their outbreak]

#### Week 2 2022

Sixty-one new outbreaks -759 associated cases (range 0-47 cases per outbreak)

# Cases associated with COVID-19 outbreaks in Nursing Homes and Community Hospitals by healthcare worker status, waves 1-5

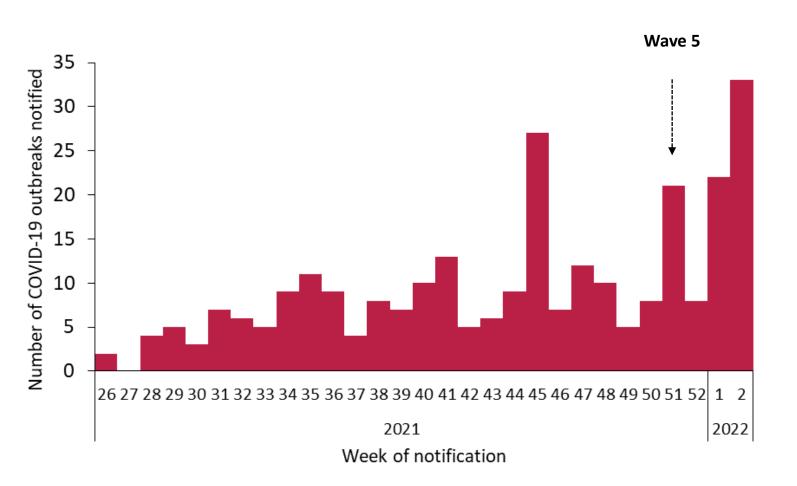




In week 2 there were 322 outbreak associated cases among staff and 352 among residents, with 85 cases of unknown status

# COVID-19 outbreaks in Acute Hospitals, wave 4 – 5 (week 26 2021 – week 2 2022)





#### **Update on week 2**

- There were 33 new COVID-19 outbreaks in acute hospitals settings in week 2
- 150 confirmed cases were associated to these outbreaks (range 0-19 cases per outbreak)

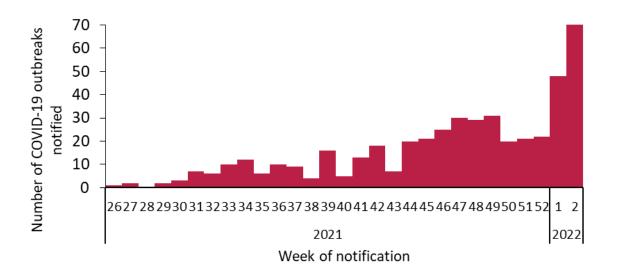
#### Overview wave 4 and 5

- Since week 26 2021, there have been 276 COVID-19 outbreaks in acute hospitals settings, with 1,614 confirmed cases
- Of these, 84 (30%) outbreaks with 396 cases in wave 5

### COVID-19 outbreaks in Residential Institutions, wave 4 – 5 (week 26 2021 – week 2 2022)



	Number of outbreaks notified					
Outbreak location	Week 2	Week 2 outbreaks: Range in no. of cases	Week 26 2021 - week 2 2022	Number open	Open outbreaks: Range in no. of cases	
Centre for disabilities	44	0-9	279	166	0-32	
Centre for older people	3	2-4	8	5	2-12	
Children's / TUSLA residential centre	5	2-4	46	29	1-16	
Mental health facility	5	2-13	37	23	1-13	
Women/ children's refuge	0	n/a	4	3	2-8	
Other	2	1-2	17	11	1-10	
Not Specified	0	n/a	2	0	n/a	
Prisons	1	1	12	9	1-75	
Total	60	0-13	405	246	0-75	

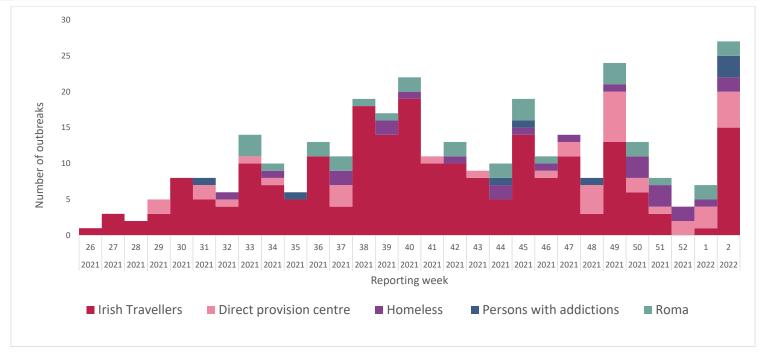


Note: This figure includes all residential institutions including those in Vulnerable groups section i.e. Direct Provision Centres and Addiction Services

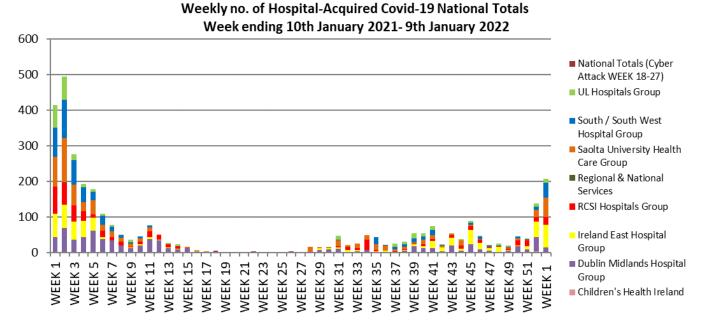
## COVID-19 outbreaks among Vulnerable Groups, wave 4 - 5 (weeks 26 2021 - 2 2022)

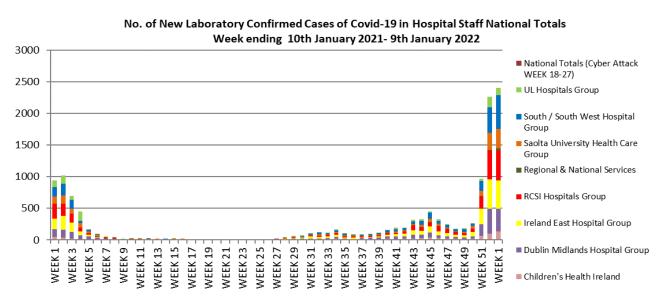


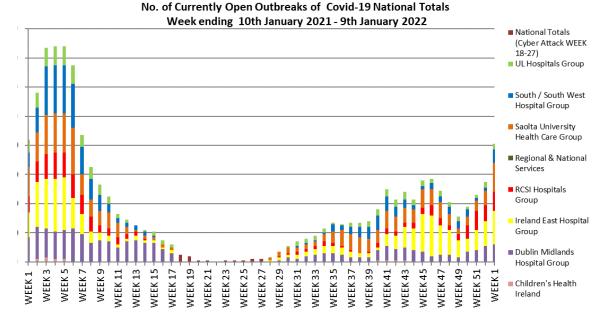
Vulnerable populations	Number of outbreaks notified						
	Week 2	Week 2 outbreaks:	Week 26 2021 –	Number open	Open outbreaks:		
		Range in no. of cases#	Week 2 2022		Range in no. of cases#		
Irish Travellers	15	0-6	221	98	0-83		
Roma community	2	0-2	30	15	0-22		
Direct provision centres	5	2-25	34	20	1-25		
Homeless¥	2	3-33	25	17	2-33		
Persons with addictions	3	0-3	8	5	0-5		
Total	27	0-33	318	155	0-83		



#### **Acute operations key data**





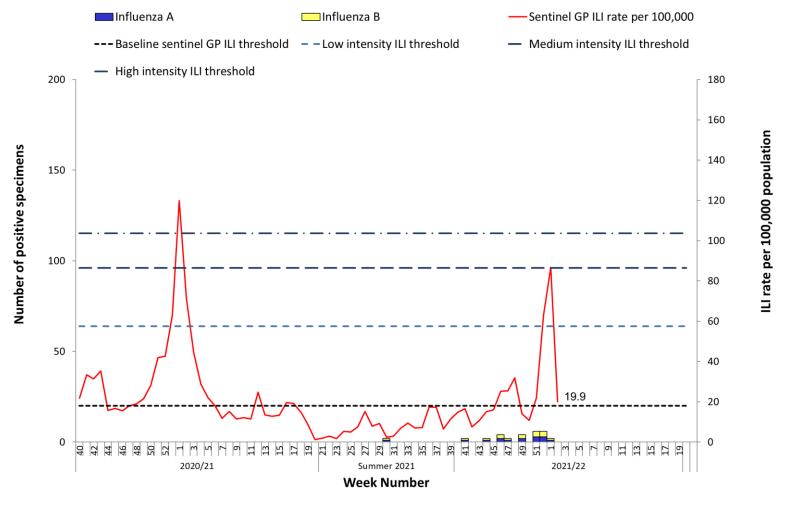


Source: AMRIC, HSE



## Sentinel GP influenza-like illness (ILI) consultation rate per 100,000 population & number NVRL influenza positive specimens by week and season







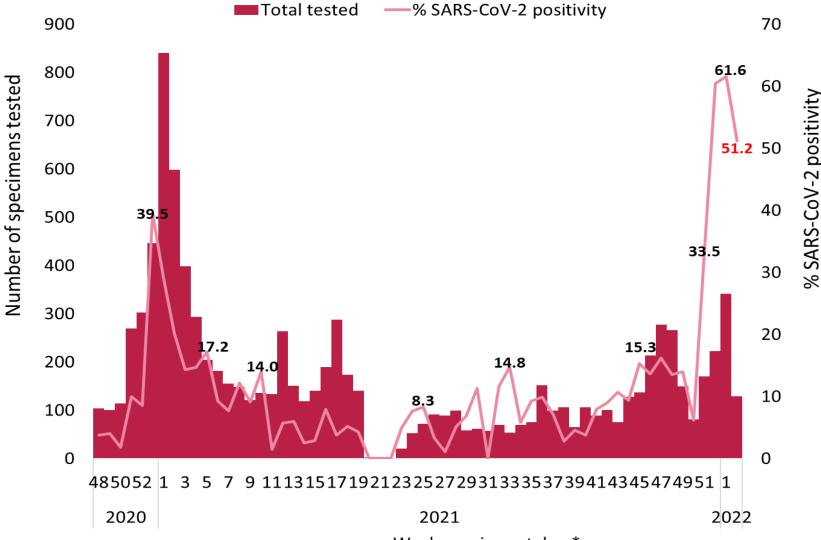
Recent trends in sentinel GP ILI consultation rates are reflecting community COVID-19 incidence and changes to health seeking behaviour in relation to GP consultations and the use of online COVID-19 test booking systems and antigen tests.





#### % SARS-CoV-2 positivity data from sentinel GP COVID-19 referral specimens tested by NVRL\*, by week specimen was taken







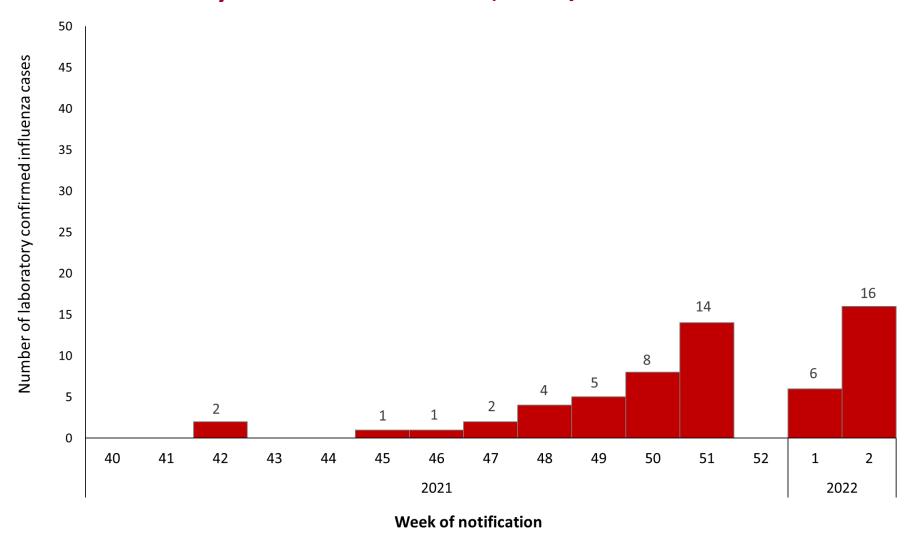


<sup>\*</sup>Including laboratories under the clinical governance of the NVRL.



# Laboratory confirmed influenza cases notified to HPSC by week of notification, 2021/2022 season





Data Source: Ireland's Computerised Infectious Disease Reporting (CIDR) system

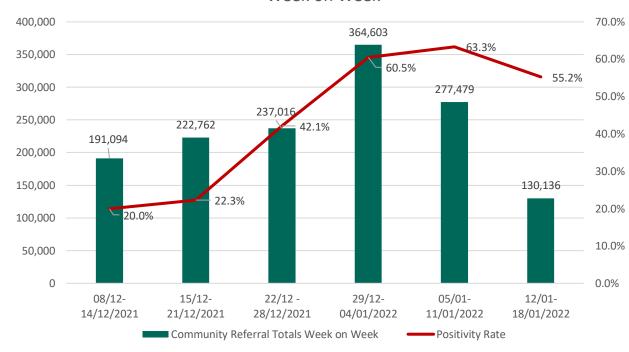


# Test & Trace Update

#### **Test and Trace update**

- The Test and Trace system has been operating at surge until the past weekend, when there was a significant drop in overall demand for testing.
- Community referrals have **decreased by 53%** in comparison to the same time-period last week while **community positivity is now at 55.2%**.
- **196,661** Laboratory PCR tests were undertaken last week, and **230,730** Antigen Test kits were made available to individuals and programmes last week.
- **15,862** GP referrals were received last week which is a decrease of **80%** compared to the previous week.
- Swabs completed in the community were **135,941**, this is a **47% decrease** in comparison to the same time-period last week.
- The median end to end TAT for a not-detected result in the Community is **1.2** days.
- The median end to end TAT for a detected result in the Community is **1.9** days.
- Over 1,006,281 Antigen Test Kits have been dispatched to date through the Home Delivery Programme.
- Over **567,069** Antigen Test Kits have been dispatched to **Other Programmes** to date, including Acute, CHO, DAFM and RCF testing.
- In total, there have been over **1,573,350** Antigen Test Kits dispatched to date.
- A solution to enable uploading of positive antigen results and enablement of close contact management has been developed and became available on Friday 14<sup>th</sup> of January. Since the launch of the Antigen Portal on Friday the 14<sup>th</sup> of January 2022, **25,701** positive antigen results have been reported. All antigen test results are self-reported and not subject to validation.
- Changes to Public Health advice were introduced on Friday 14<sup>th</sup> January, including the key change that a positive antigen result is now considered to be a case and individuals can list their close contacts on the HSE portal.

#### Total Community Referrals and Positivity Rates Week on Week

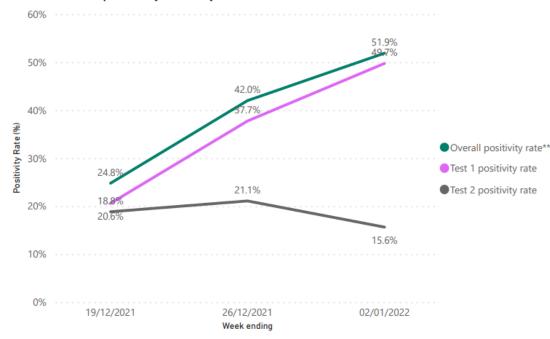


#### **CMP** update

- The average number of cases managed by the CMP per day during the week ending 16/01/22 was 16214, a decrease of 31% from 23544 cases the previous week. The average number of close contacts reported to the CMP per day for the week ending 16/01/22 was 20572, a decrease of 31% from 29721 the previous week. Household contacts accounted for 77.8% (n=100602).
- For close contacts created the week ending 02/01/2022, PCR Test 1 results were available at the time of report preparation for 44169 close contacts; 21972 (49.7%) of these had a positive result. PCR Test 2 results were available at the time of report preparation for 3721 close contacts; 581 (15.6%) of these had a positive result. Overall, 51.9% (n = 22553) of the close contacts tested had a positive result. The highest proportion of close contacts testing positive by circumstances of contact (where recorded) was amongst household contacts (51.2%).
- The mean number of close contacts per case (excluding cases with zero close contacts) for the week ending 16/01/2022 was 2, an increase from the previous week.



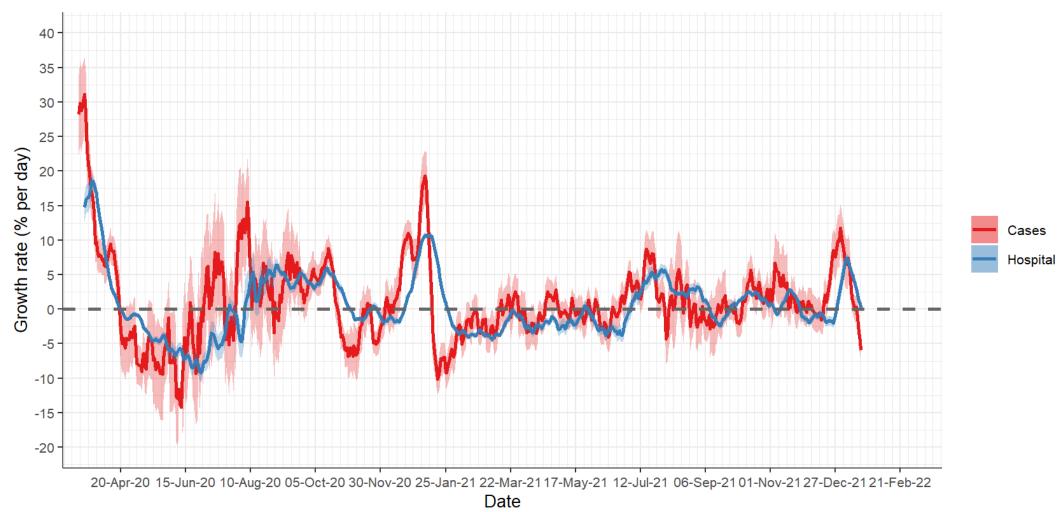
#### Close contact positivity rate\* by week



#### **Growth rate**

Case counts are now falling rapidly, with rate of decline estimated at -6.0 % per day (-4.3%, -7.7%) over a 14-day window and -2.3% per day (-0.9%, -3.7%) over a 21-day window. The number of people in hospital is also starting to decrease, with the formal estimate of growth rate passing through zero.





Growth rate in case counts and numbers of people with confirmed COVID-19 in hospital. 14-day window. Mean and 95% confidence intervals. Case data from CIDR to 21 Dec 21, then estimated from positive tests reported.



#### Situation analysis 20 January 2022



- While incidence data is incomplete, the data indicate that incidence is high but falling rapidly, and the peak of infection and hospitalisation has passed.
  - 7-day average case count 15,922
  - 7- and 14-day incidence 2223 and 5527 per 100,000 respectively
  - 911 in hospital, 90 in ICU, 63 ventilated
  - Test positivity decreasing across all age groups and decreasing in public health and hospital laboratories
- Growth rate
  - Incidence: approximately -6% per day, halving time 9-16 days
  - Numbers in hospital: zero and decreasing
- The rate of decline may slow as population mobility and contact increase, and there may be a tail of severe disease





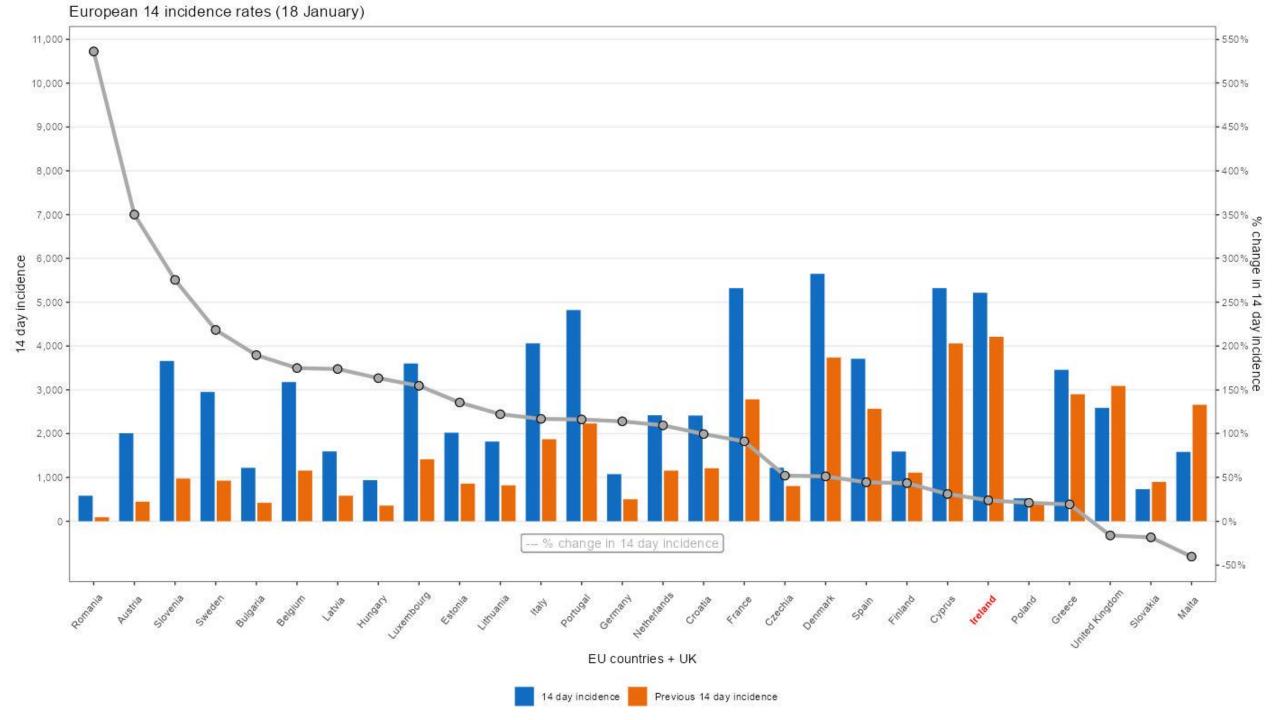


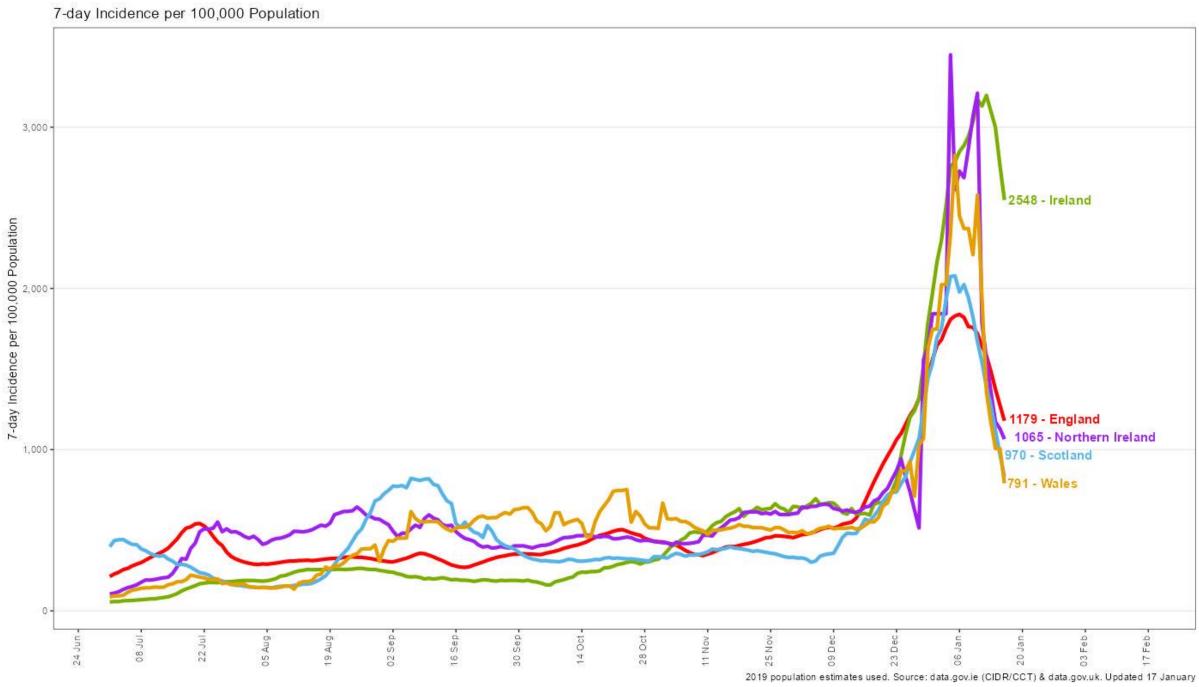


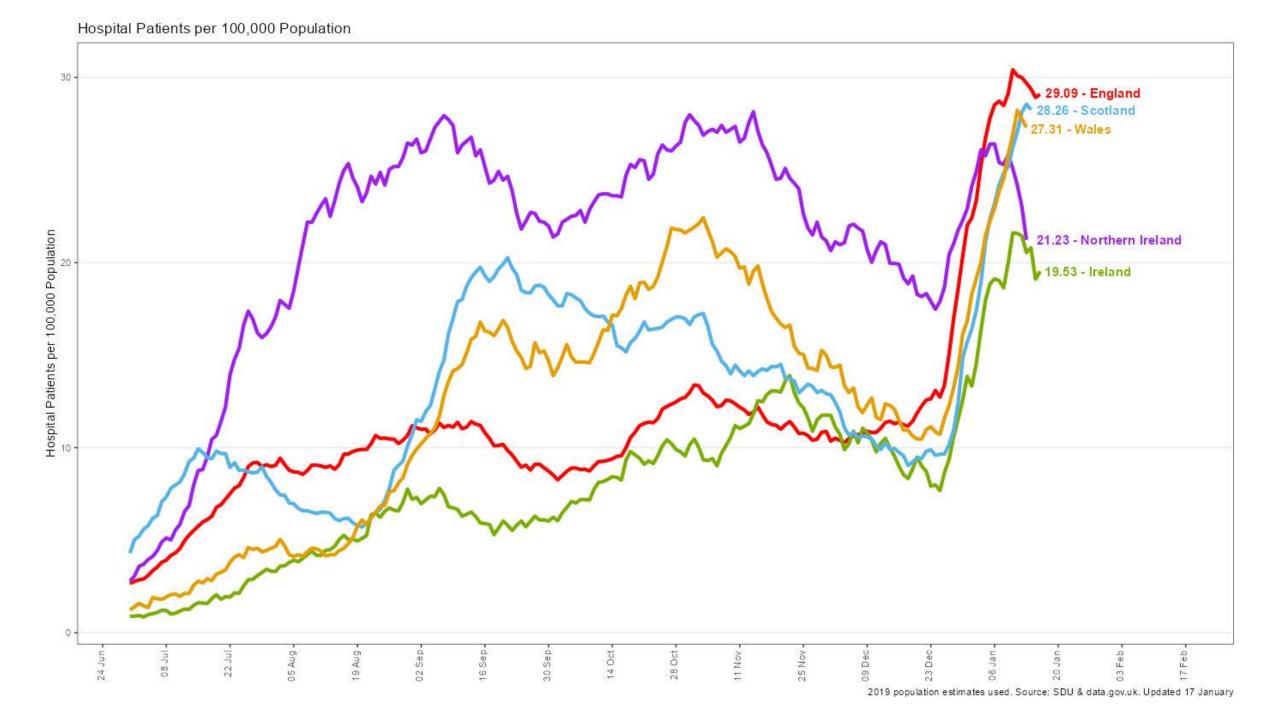




# European Data

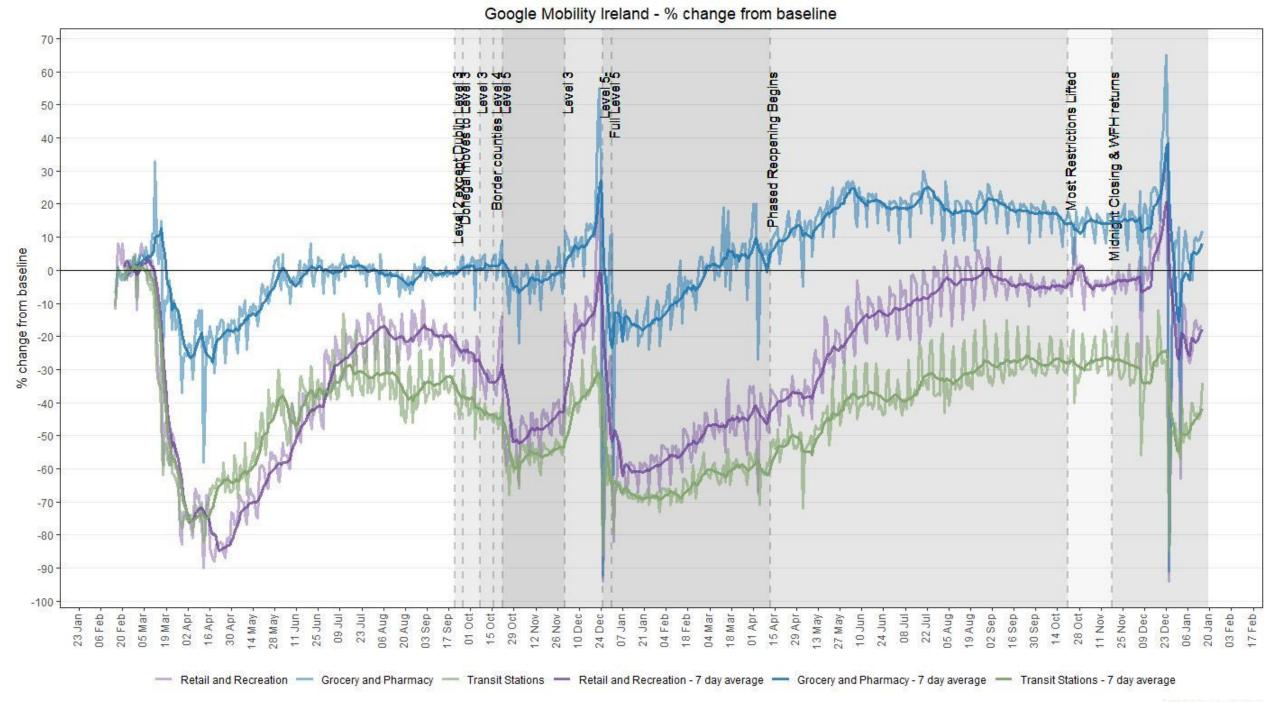


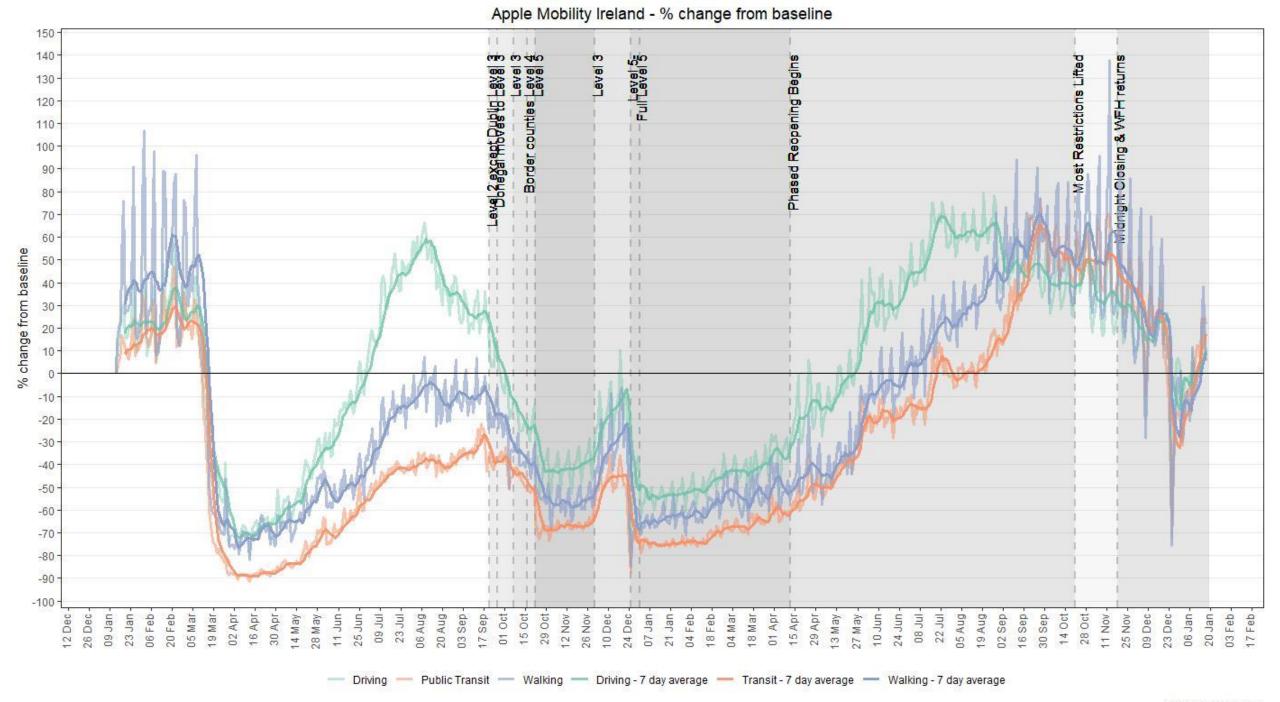






# Mobility Data





#### Google Mobility Ireland - % change from baseline

