NPHET COVID Update 11th November 2021

Current situation



	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 rd wave peak 14 day inc.)	20-Jun (lowest 2021 14 day inc.)	03-Nov (1 week ago)	10-Nov
14-day incidence	96.08	306.39	86.90	320.59	1494.31	89.65	676.31	952.40
5-day average cases	407.0	919.2	261.0	1476.6	4458.4	313.8	2552.2	3715.0
Total weekly cases	2,607	7,000	1,893	9,417	35,365	2,071	17912	27440

	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 rd wave peak 14 day inc.)	(lowest 2021	03-140V	10-Nov
No. Hospital (8.A.M)	122	344	224	508	1792	49	460	551
No. in ICU (11.30 A.M)	20	39	30	42	176	15	86	89

	APR21	MAY21	JUN21	JUL21	AUG21	SEP21	OCT21	NOV21	Unknown	Total since Mar2020
Reported in latest week (to										
10/11/2021)	1	0	0	0	0	4	22	44	3	74
Total	101	42	18	21	82	171	185	46	31	5,566

Cases, numbers in hospital and intensive care

The average daily case count has doubled over the past three weeks, from 1876 to 3676 cases per day. The numbers of people in hospital and ICU are high, but have not increased to the same extent, and have been stable, but with the potential to increase in the coming weeks.



	Apr 2020	Summer 2020	Oct 2020	Dec 2020	Jan 2021	Jun 2021	19 Oct	26 Oct	2 Nov	9 Nov	Daily count 10 Nov
Cases confirmed per day	859 ₁₈₋₀₄	8.7 25-06	1158 21-10	262 12-12	6516 10-01	308 19-06	1876	2115	2611	3676	2975
14-day incidence per 100,000 population	212 19-04	3.0 04-07	306 26-10	79 09-12	1528 15-01	91 20-06	493	587	695	924	952
Hospital in-patients	862 17-04	9	333 01-11	198 16-12	1949 24-01	43 29-06	436	471	493	474	551
Hospital admissions per day	85	<1	27 26-10	11	158 15-01	6 27-06	58	46	61	57	73
ICU confirmed cases	150	4 04-08	43 04-11	26 27-12	217 28-01	13 27-06	72	93	95	80	89
ICU admissions per day	14 31-03	<1 03-06	4 03-11	1	20	<1 02-07	5	6	6	6	11



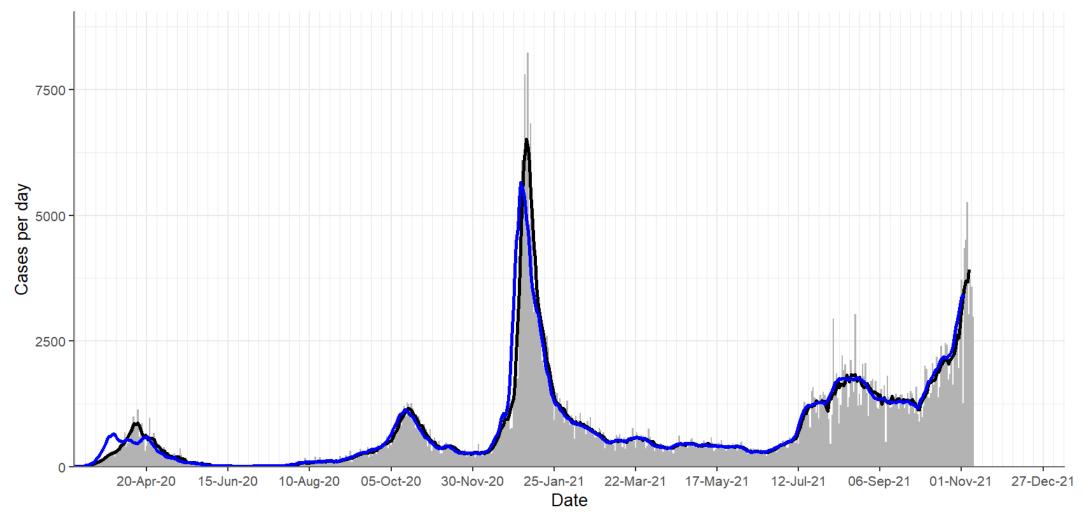


Cases & Incidence Rates

Cases per day

Daily count and 7-day rolling average. Case numbers have increased rapidly over the last 6 weeks: the 7-day average is now **3676**, up from **2611** seven days ago, **2115** two weeks ago and **1876** three weeks ago.





Daily cases by notification date (bars) and 7-day average case count by notification date (black line) and specimen collection date (blue line) CIDR data to midnight Tue 09 Nov 2021. Data by specimen collection date truncated 4 days before report.

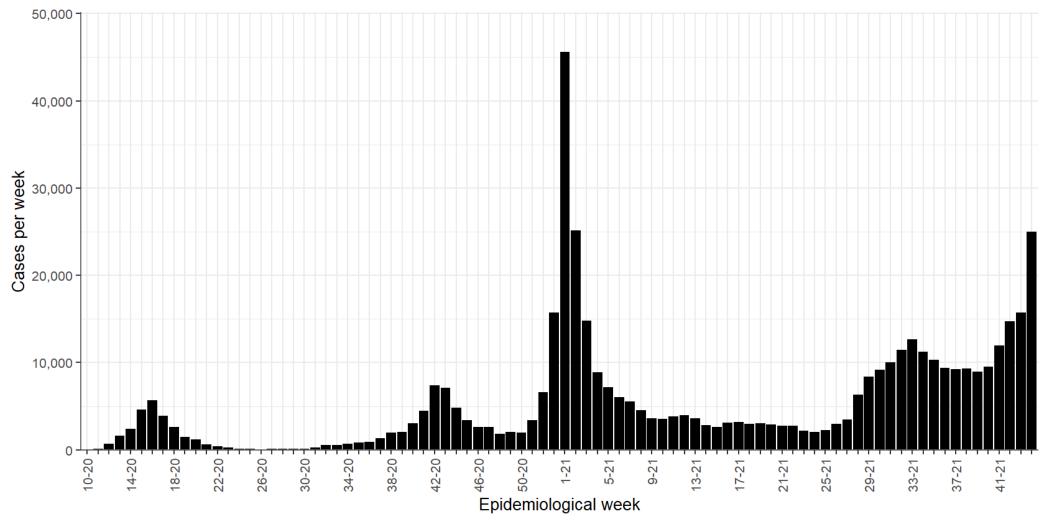




Cases per week

24,999 cases were reported in epidemiological week 44 of 2021; we have reported a higher number of cases in only two weeks of the pandemic to date.

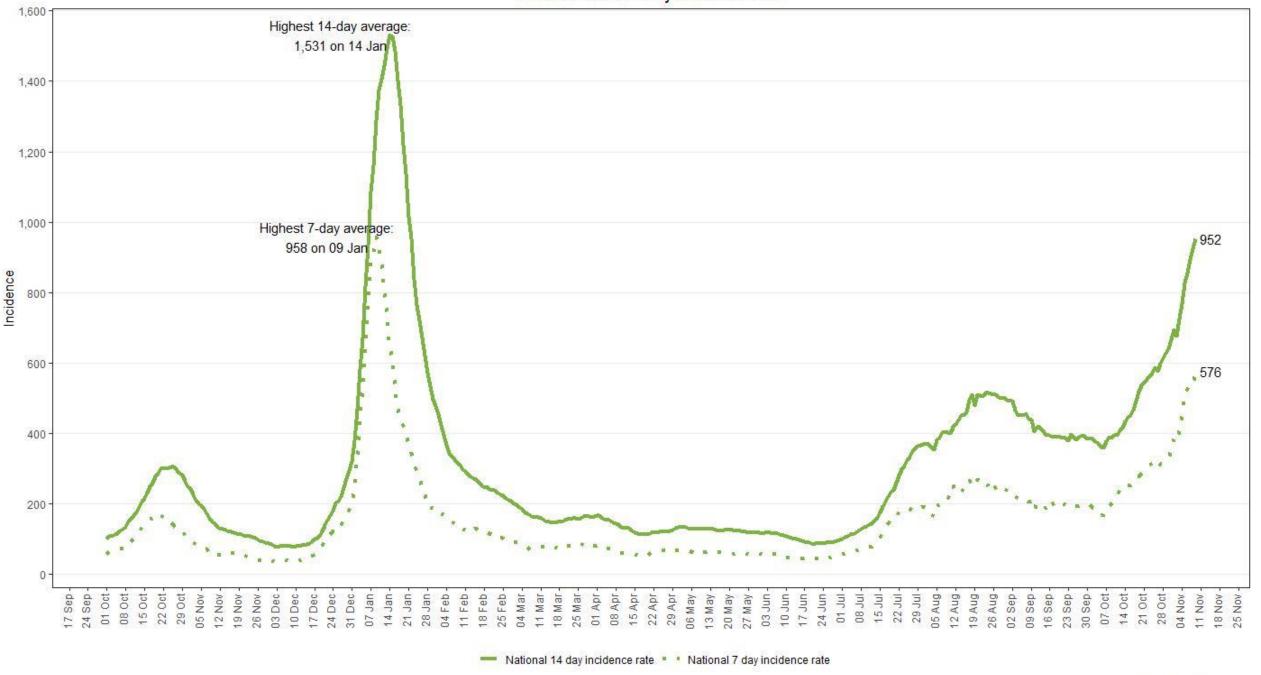








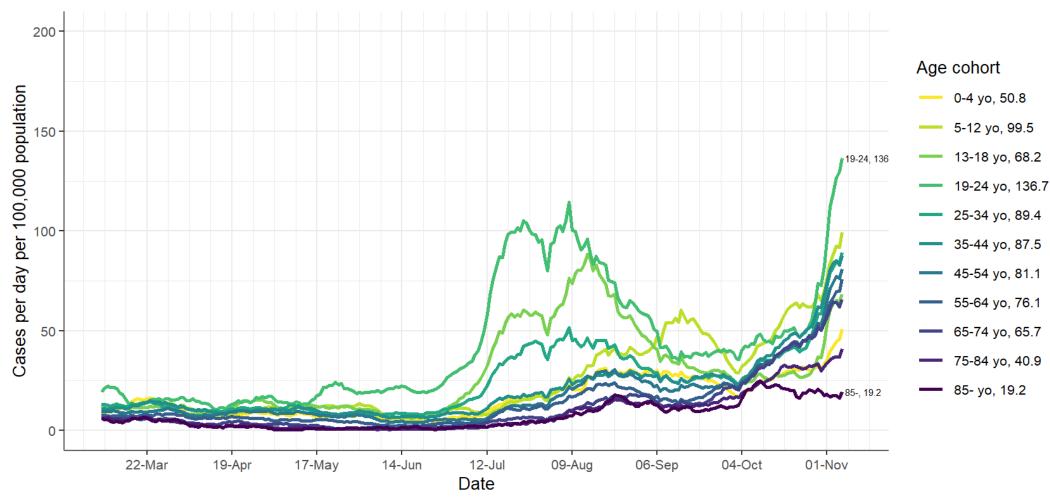
National 7 and 14 day Incidence rates



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

Incidence has risen very rapidly in those aged 19-24 years, increasing almost threefold over the last two weeks, along with an increase across all adult age groups up to 75 years of age. The increase in incidence in those aged 13-18 years during the mid-term break is noteworthy. The incidence in children aged 5-12 years is similar to adults.





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 09 Nov 2021. Cases dated by date notified to HPSC (event creation date).

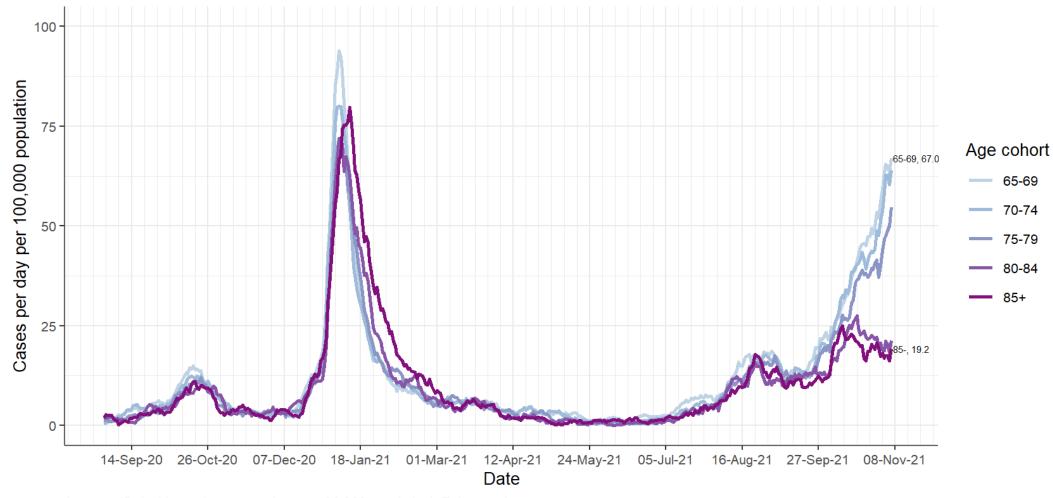




Age-specific incidence (excl. LTRF and hospital outbreaks)

The impact of recent booster vaccination of those aged 80 and over is clear: this is the only age group in which incidence is declining.





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

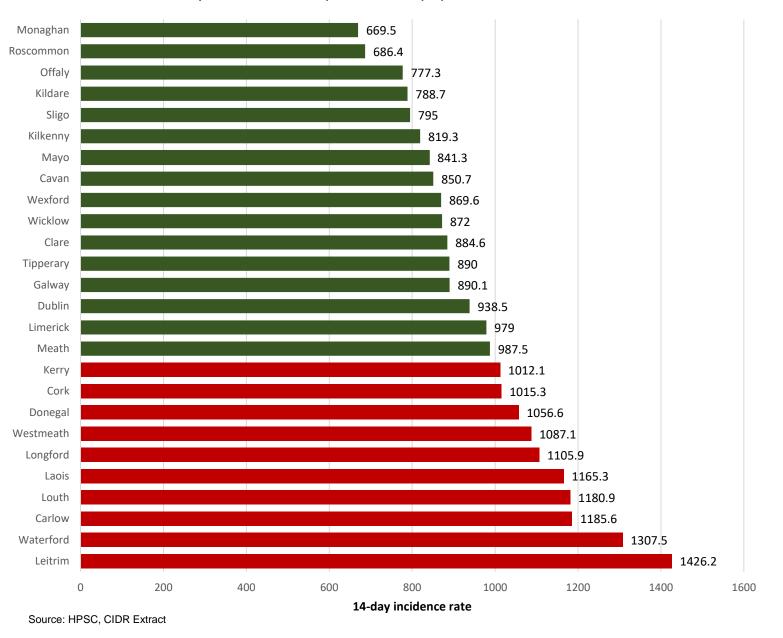
Cases associated with outbreaks in long-term residential facilities (LTRF)and outbreaks in hospitals excluded.

CIDR data to midnight Tue 09 Nov 2021. Cases dated by date notified to HPSC (event creation date).

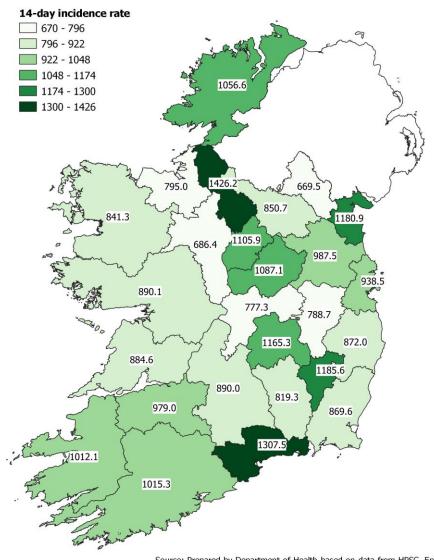




14-day Incidence Rate per 100,000 population based on CIDR

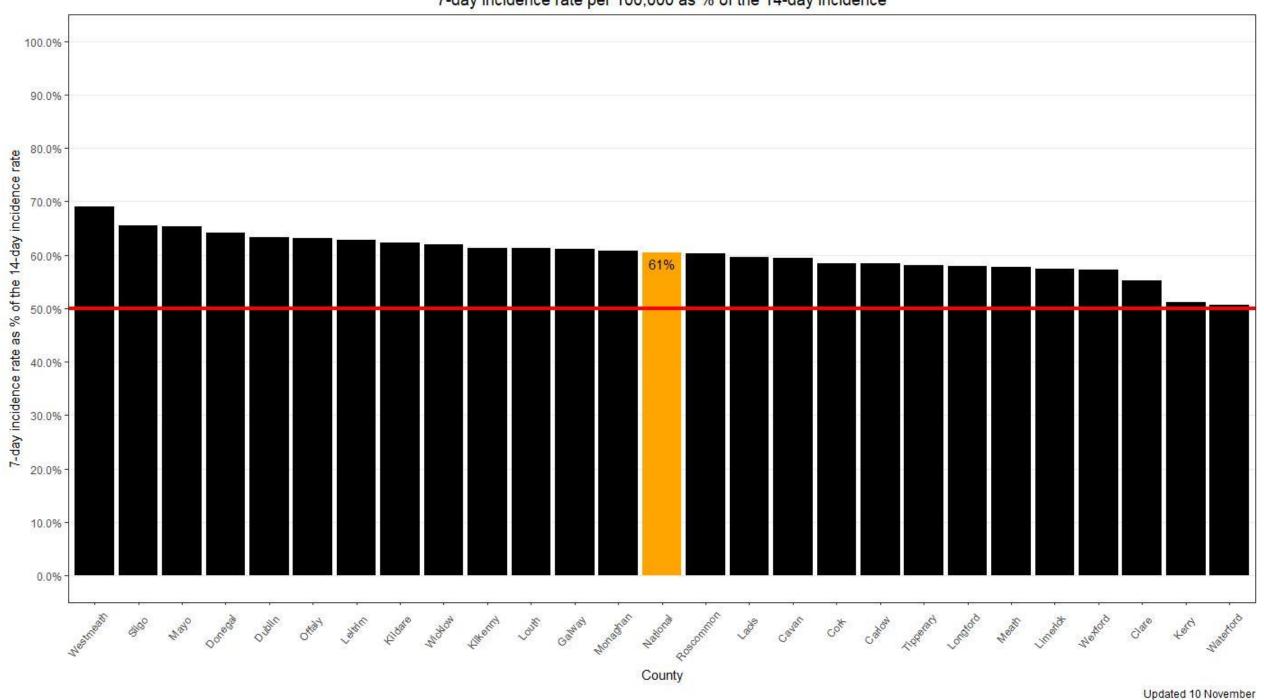


14-day incidence rate per 100,000 population (cases in 14 days to midnight 09/11/2021)

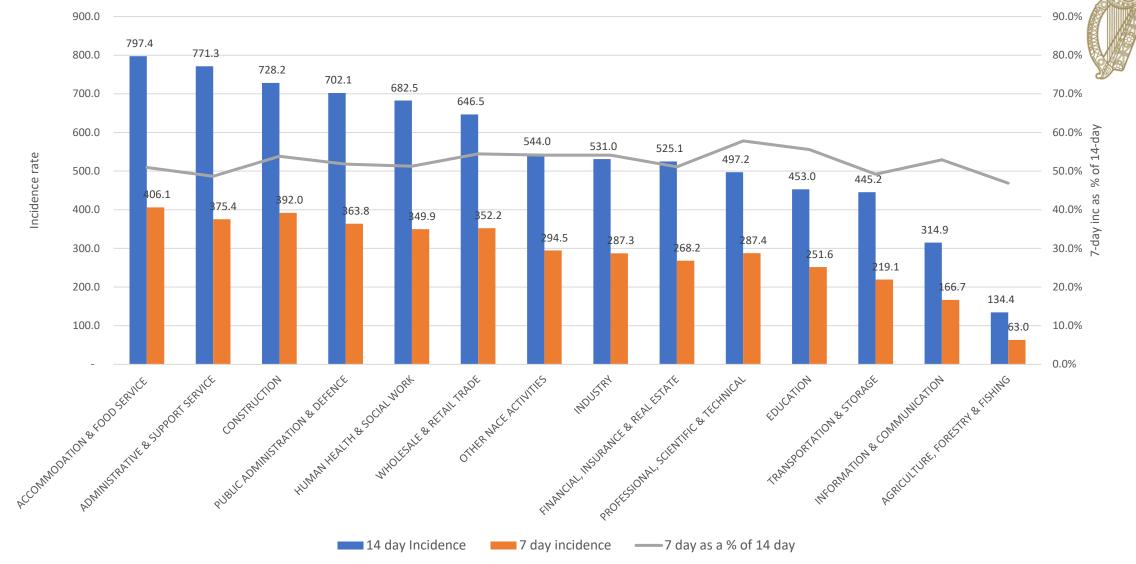


Source: Prepared by Department of Health based on data from HPSC, Epidemiology of COVID-19 in Ireland, based on cases notified on CIDR

Note: Data included in this map are based on cases notified to the national Computerised Infectious Disease Reporting (CIDR) system. These data are subject to ongoing review, validation and update. Population based on Census 2016.



14-day and 7-day incidence by NACE Sector of employment (w/e 30/10/2021) (denominator of total employment by sector based on CSO Labour Force Survey, Q2 2021)



Source: Based on analysis conducted by the CSO for cases recorded on CIDR to midnight 30th October. The CSO has used Revenue PAYE Modernisation system data to provide insight on employment status of COVID-19 cases. Using pseudonymised identifiers, more than 80% of confirmed cases in the CIDR database could be linked to administrative data sources, and of these, approximately 50% had a record of employment. The results attempt to reflect the industry of an employee when they became a positive case in the CIDR system. However, this does not indicate that the case is linked to an outbreak in the workplace. https://www.cso.ie/en/releasesandpublications/br/b-cdc/covid-19deathsandcasesseries35/

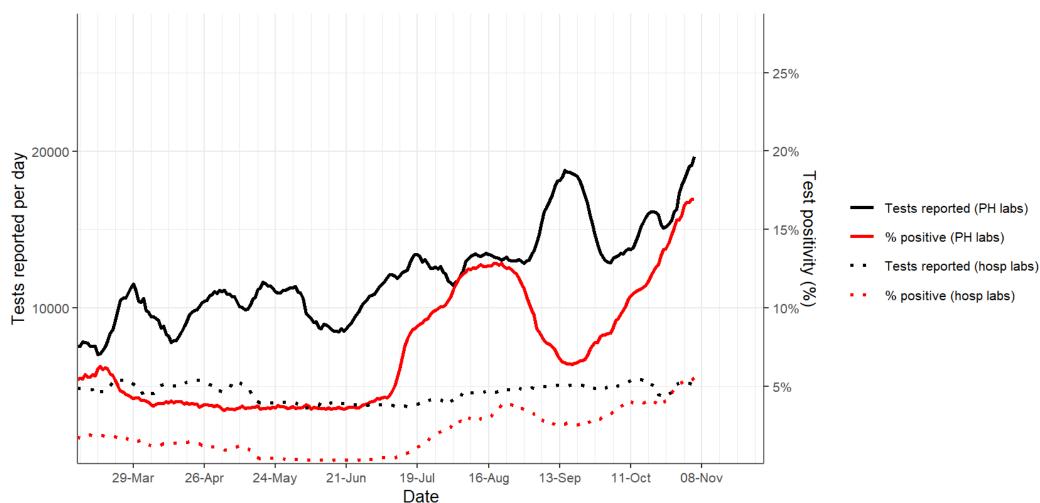


Testing

Tests and test positivity

The demand for testing is very high and continues to increase. Test positivity is very high, now over 17% for public health laboratories, and 6% for tests conducted in hospital laboratories.





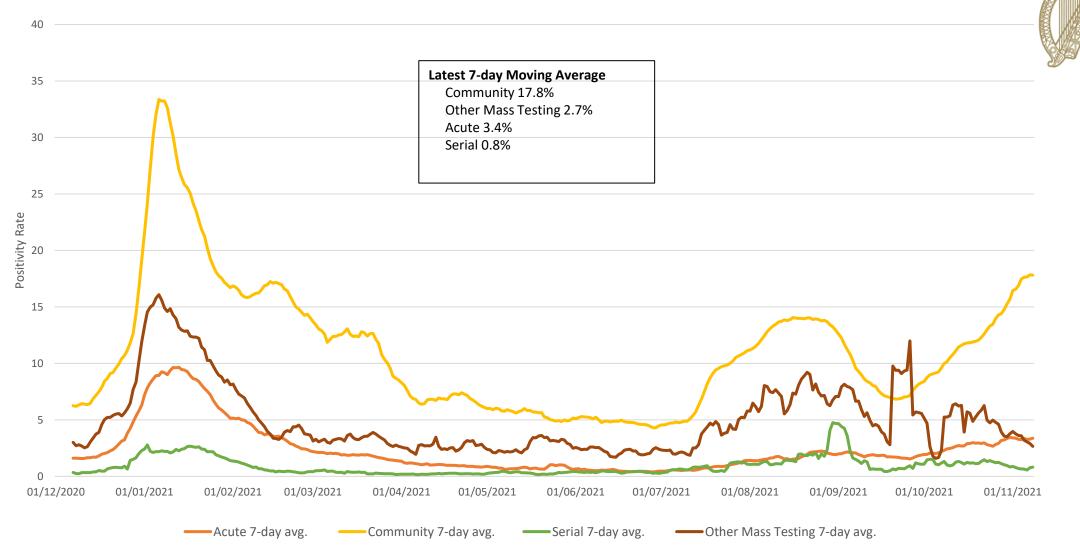
Total tests reported per day (black) and % of tests reported positive (red) for tests conducted in public health laboratories (NVRL and Cherry Orchard, solid lines) and tests conducted in hospital laboratories (dotted lines). 7-day moving averages.





7-day Moving Average Positivity Rate by Testing Pathway

*Some msising data in Acute Hospital testing since 14/05/2021



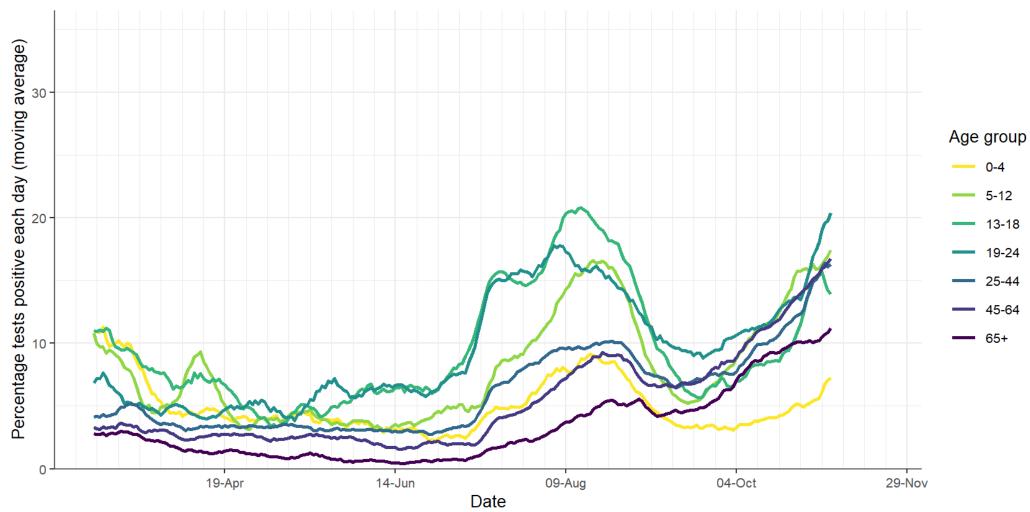
Updated 10/11/2021. Source: CRM data, HSE Contact and Tracing Team.

Acute=Swabs taken in acute hospitals; Community=Swabs taken in Community Test Centres for walk-in, online self-referral, GP and CMP referrals; Serial=Swabs taken under the Serial Testing Programme in Nursing Homes, Food Production etc; Other Mass=Swabs taken in response to an outbreak in facilities e.g. workplaces, schools, nursing homes

Test positivity by age

Test positivity has increased across all age groups, most markedly in those aged 19-24 years.



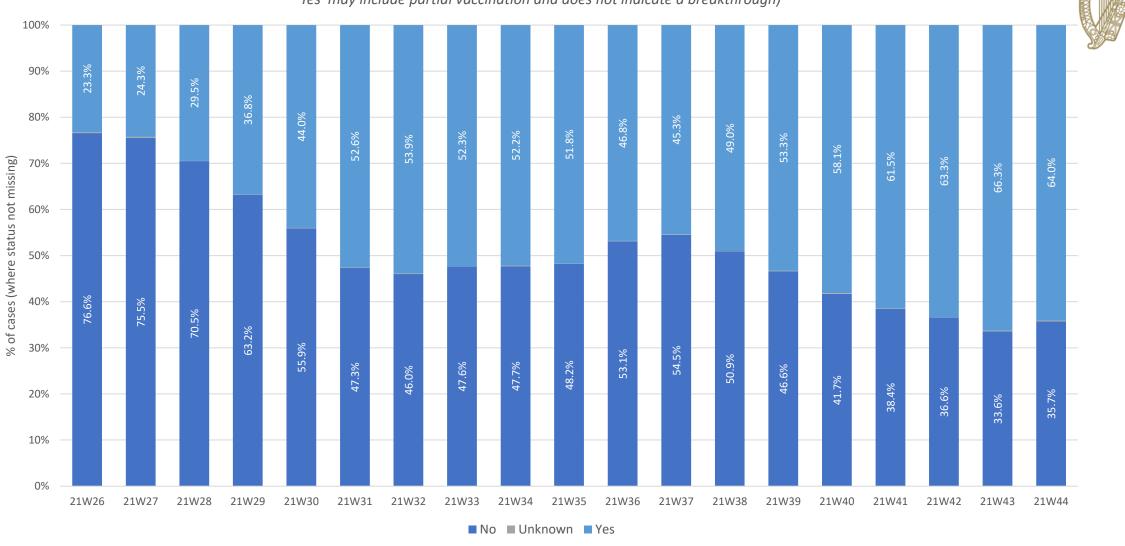


Percentage of tests each day reported as positive (7-day moving average) by age group. Laboratory testing data to Sun 07 Nov 2021.



Percentage of Cases (where vaccine status not missing) by Vaccine Status by Week (Weeks 26-44) (includes self-reported vaccine status and Covax link

'Yes' may include partial vaccination and does not indicate a breakthrough)



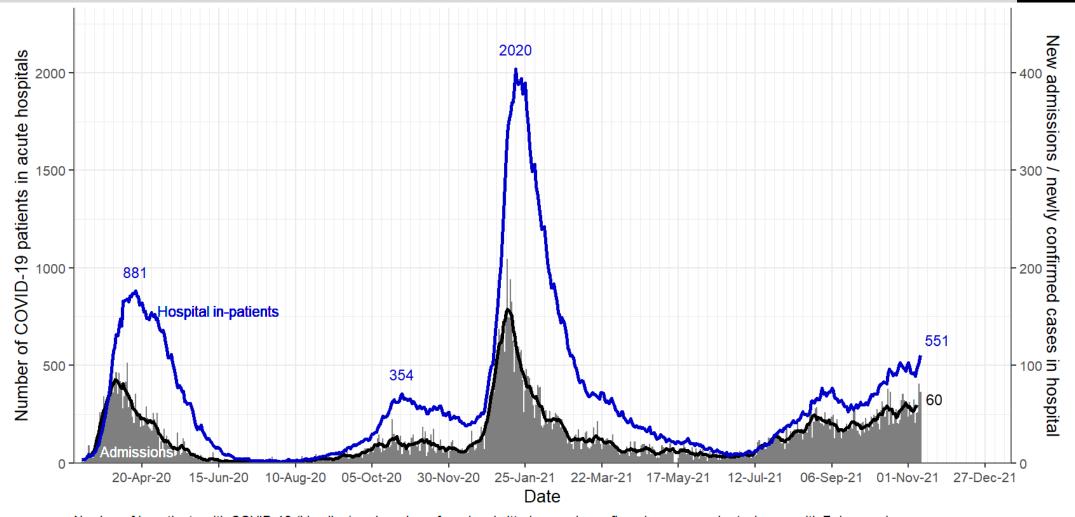


Hospitals & ICU

Confirmed cases in acute hospitals

The number of people in hospital with confirmed SARS-CoV-2 infection. The number of people in hospital is high and variable at 551 today. The number of admissions and newly confirmed cases in hospital per day is also high, on average 60 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 10 Nov 2021.

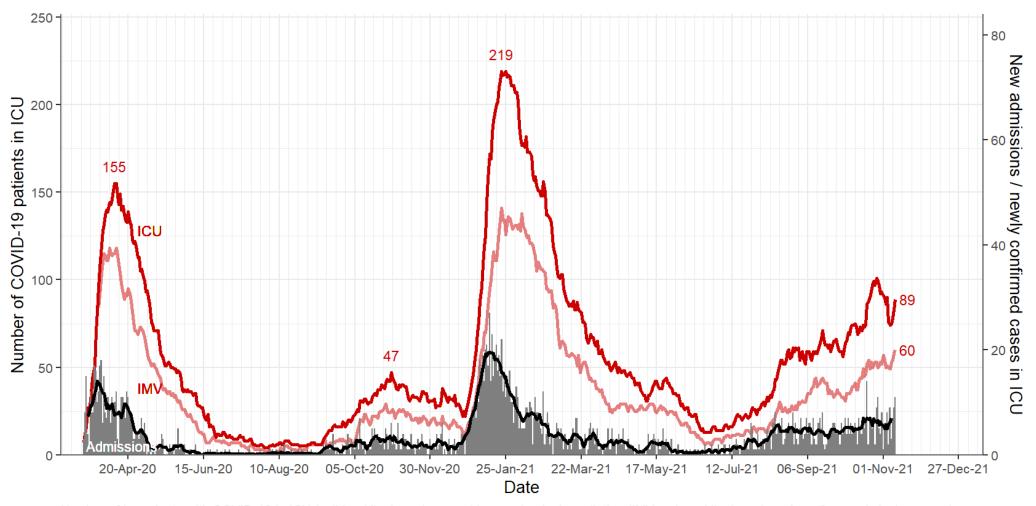




Confirmed cases in intensive care

The number of people in ICU with confirmed SARS-CoV-2 infection and the number requiring mechanical ventilation are high and variable. 89 people in ICU, 60 mechanically ventilated, average 6 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 10 Nov 2021.

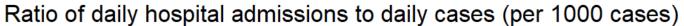


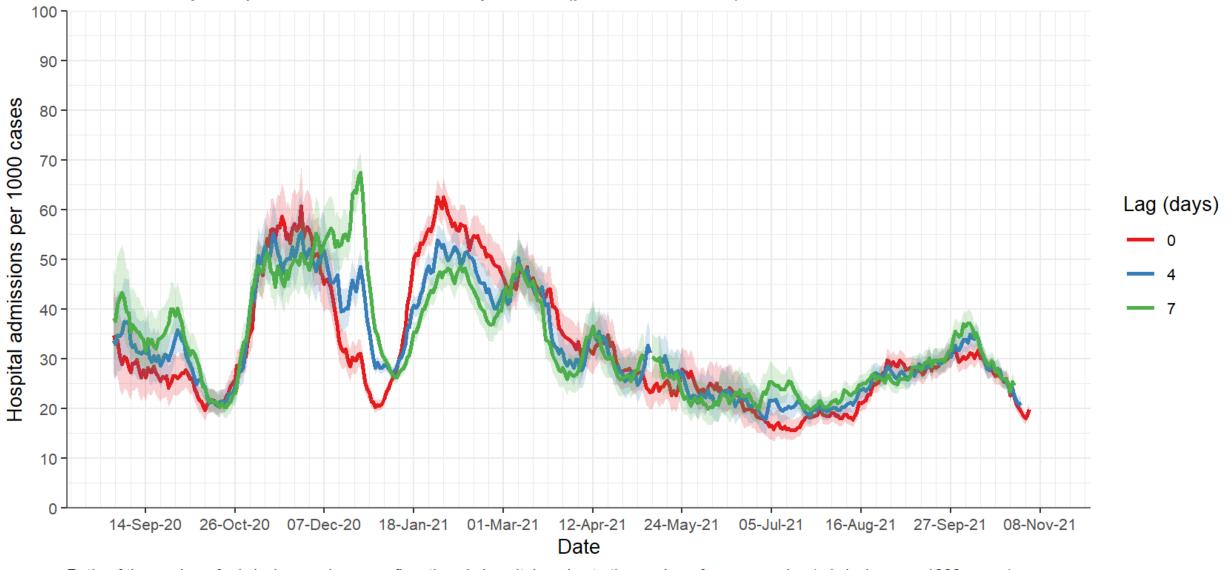
Vaccination Status of COVID-19 cases admitted to ICU in Ireland between April 1st and October 30th 2021

Between April 1st and October 30th 2021:

- 507 persons (aged 15 + years) were reported to the Health Protection Surveillance Centre (HPSC) as admitted to ICU with confirmed COVID-19 infection
- 326 cases (64%) were reported as not having received a COVID-19 vaccine or were not registered as vaccinated on Ireland's national COVID-19 immunisation system (COVAX) and 181 cases (36%) are reported as having received a COVID-19 vaccine (one or two doses)
- 136 cases (27%) were vaccine breakthrough infections (defined as laboratory confirmed SARS-CoV-2 infection in a person ≥14 days after they have completed their final recommended dose)

Source: HPSC (CIDR data extracted at 09.30am 1.11.2021)





Ratio of the number of admissions and new confirmations in hospitalper day to the number of cases per day (admissions per 1000 cases).

Calculated over a moving window of 14 days, or at least 1000 cases. Mean and 95% confidence intervals

Note that this is simply the ratio of admissions to cases on any given day, not the probability that any given case will be admitted.

Ratios are plotted for different lags, in days, between cases and hospital admissionsHSE PMIU-SDU data to Wed 10 Nov 2021. CIDR data to midnight Tue 09 Nov 2021.

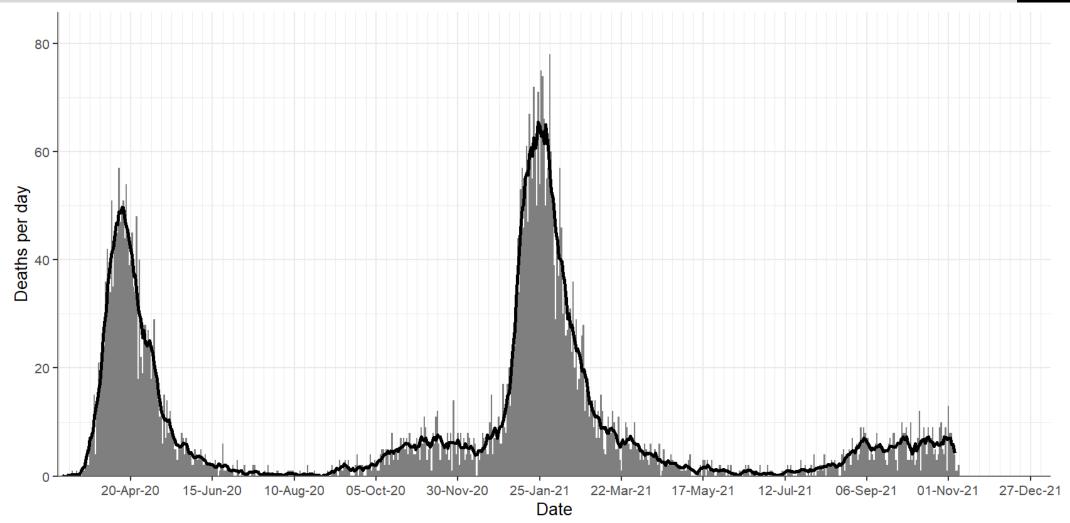


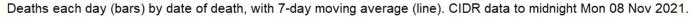
Deaths

Deaths

Deaths per day are relatively constant at approximately 5 per day, or 150 deaths per month. This may increase, given the very high case counts, though booster vaccination of those aged 80 years and older should reduce mortality.









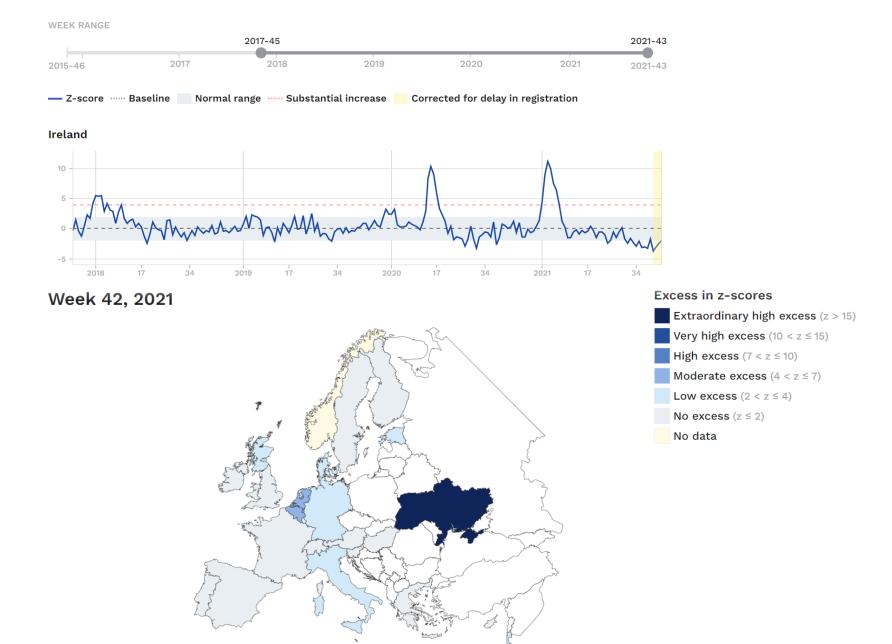
Surveillance of COVID-19 vaccine breakthrough infections amongst COVID-19 deaths (with date of death 1st April 2021 – 30th October 2021) notified to HPSC



Data were extracted from CIDR on 01/11/2021 at 10.00 am.

535 deaths in laboratory confirmed COVID-19 cases were notified to the HPSC with a date of death between 1st April 2021 and 30th October 2021.

- 222/535 (41.5%) deaths were reported in persons who were not vaccinated or not registered as vaccinated on Ireland's National COVID-19 immunisation system (COVAX).
- 313/535 (58.5%) deaths were reported in persons who had received at least one dose of COVID-19 vaccine prior to death.
- 274/535 (51.2%) deaths were reported in persons who had received both doses of a 2-dose regimen or 1 dose of a 1-dose regimen of COVID-19 vaccine prior to death.
- 253/535 (47.3%) COVID-19 deaths were reported in persons with an epidemiological date 14 days or more after receiving both doses of a 2-dose regimen or 1 dose of a 1-dose regimen and should be considered as vaccine breakthrough infections.



Source: EuroMOMO



Outbreaks & Clusters

Weekly Summary – week 44, 2021



Nursing Homes & Community Hospitals (week 44)

 Five new nursing home and community hospital outbreaks this week – 20 linked cases (range 0-13)

Acute hospitals (week 44)

 Ten new acute hospital outbreaks notified this week with 43 linked cases (range 1-16)

Residential institution outbreaks (week 44)

 Twenty new outbreaks reported this week - 56 linked cases (range 1-5)

Vulnerable groups (week 44)

Four new outbreaks associated with Irish Travellers, involving 22 cases (range: 4-8 cases), two outbreaks associated with Roma (8 cases), two with homeless (7 cases) and one outbreak associated with Addiction services (4 cases)

Workplace outbreaks

- 3 new outbreaks in food industry with 20 linked cases (range: 4-10 cases)
- 2 new construction sector outbreaks with 17 linked cases (range: 2-15 cases)
- An additional 19 workplace outbreaks in other workplace types with 103 linked cases (range: 1-41 cases)

Schools

- 34 new outbreaks in week 44 with 212 cases (range: 0-37); 32 of these (involving 192 cases), were retrospective notifications from May/June 2021
- The two remaining outbreaks (involving 20 cases) occurred in primary schools (range: 2-18 cases)

Childcare facilities

- Seven childcare facility outbreaks, involving 50 cases (range: 3-15 cases)
- Three CCF outbreaks, involving 24 cases, that occurred in May/June 2021 were retrospectively notified

Third-level students/University/college

 Two university/college/third level outbreaks, involving 19 cases (range: 7-12 cases)

Travel associated outbreaks

One new outbreak report in week 44

Hospitality

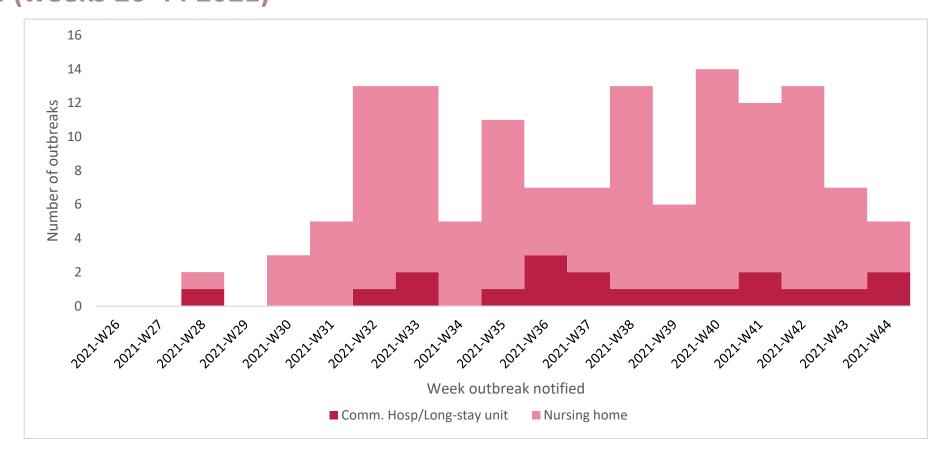
 Seven new outbreaks: 3 in pubs; 1 in restaurants/café; 3 in hotels; 26 linked cases (range 1-10)

Social and Recreational

- Ten in social gatherings; 3 in religious/other ceremonies with 40 linked cases (range 4-29) and 7 social gatherings, 11 linked cases (range 1-4)

Weekly number of COVID-19 outbreaks in Nursing Homes and Community Hospitals, wave 4 (weeks 26-44 2021)



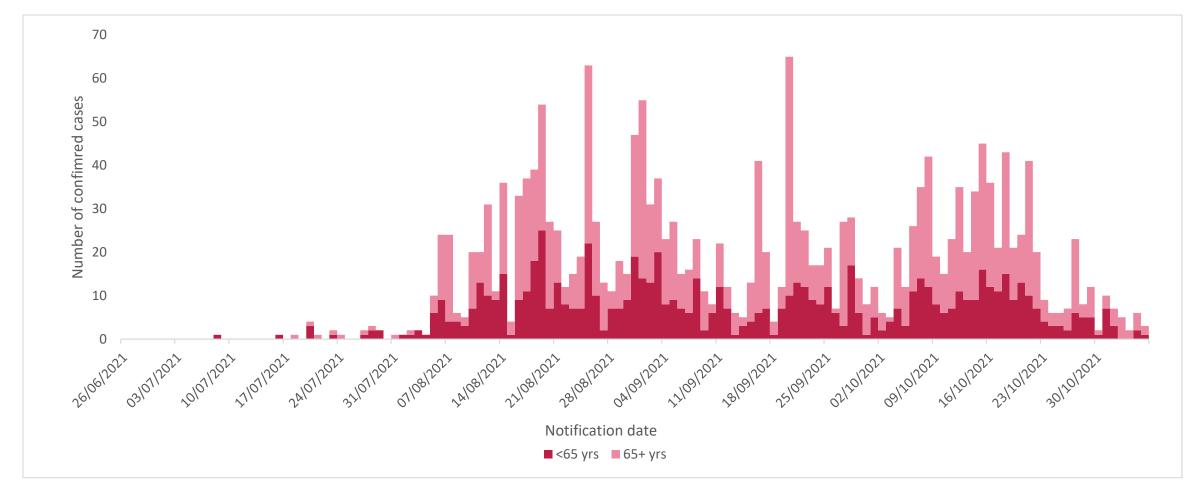


Wave 4:

- One hundred and thirty-six nursing home and community hospital/long stay unit COVID-19 outbreaks notified
- The number of outbreaks in these settings in the last 10 weeks has been relatively stable, but was highest in week 40, with 14 outbreaks in that week.

Cases linked to COVID-19 outbreaks in Nursing Homes and Community Hospitals by age group, wave 4 (weeks 26-44 2021)



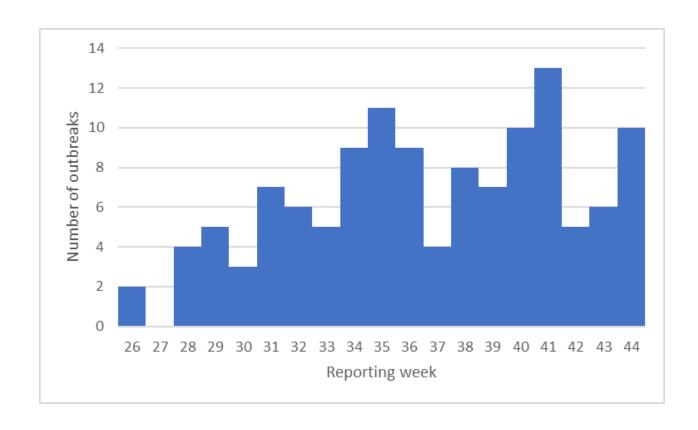


Wave 4:

• Sixty-one per cent (1205/1973) of linked cases were 65 years of age or more

COVID-19 outbreaks in Acute Hospitals, wave 4 (weeks 26-44 2021)





Update on week 44

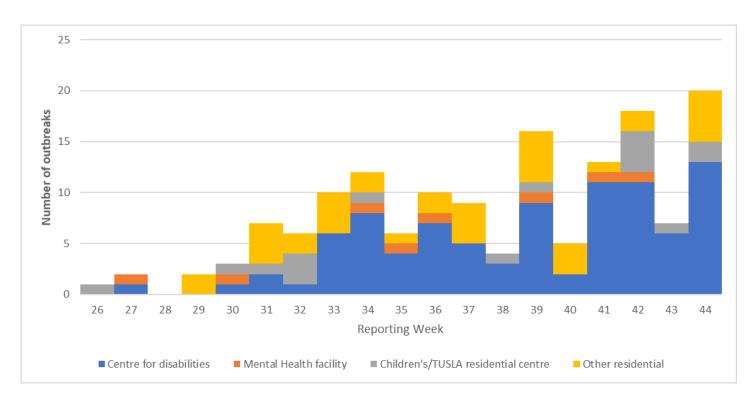
- There were ten new COVID-19 outbreaks in acute hospitals settings in week 44
- 43 cases were linked to these outbreaks (range 1-16 cases per outbreak)

Overview wave 4

 Since week 26 2021, there have been 124 COVID-19 outbreaks in acute hospitals settings, with 729 associated confirmed cases

COVID-19 outbreaks in Residential Institutions, wave 4 (weeks 26-44 2021)





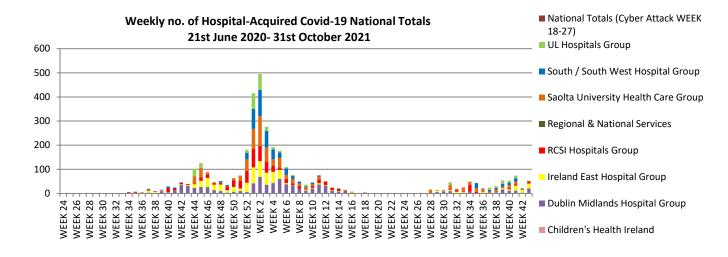
Update on week 44

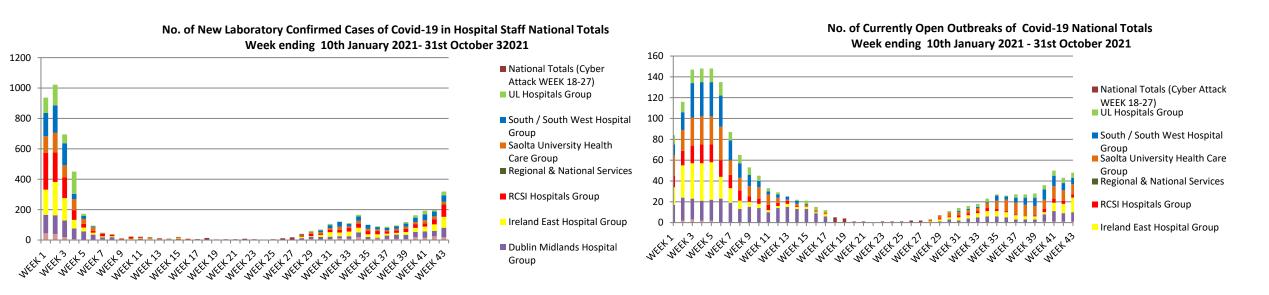
- Twenty new COVID-19 outbreaks were reported in Residential Institutions in week 44
- Thirteen were in disability settings, two in homeless facilities, two in Children's/TUSLA residential centres, one each in a centre of older persons, addiction services and a prison.
- 56 cases were associated with these outbreaks

Overview wave 4

- Since week 26 2021, there have been 150 COVID-19 outbreaks in Residential Institutions, with 634 associated cases
- 90 outbreaks were in disability settings (387 cases)
- 16 were in Children's/TUSLA residential centres with
 52 linked cases
- Eight outbreaks were in mental health facilities (23 cases)
- 36 outbreaks were in other residential settings (191 cases)

Acute operations key data

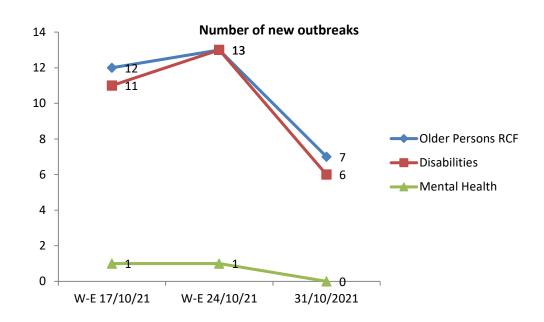


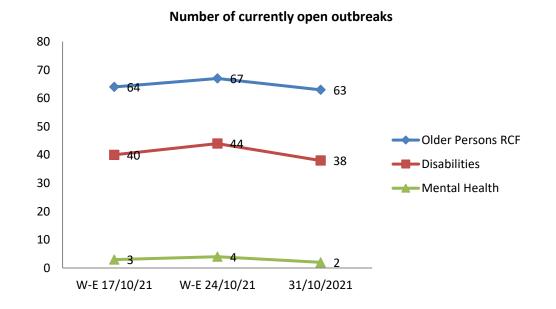


Source: AMRIC, HSE

Community operations key data









Test & Trace Update

Test and Trace update

- Test and Trace operating at surge capacity
- From the 3rd 9th November, there have been approximately 184,612 lab tests reported in community, private and acute labs.
- From the 3rd -9th November, there were c.169,858
 community referrals. Overall, total community referrals
 have increased by 11% in comparison to the same time period last week while positivity has increased to
 c.18.1%.
- In the community, the median end-to-end turnaround time from referral to:
 - > SMS for **not detected** tests was **1.1 day**
 - Communication of a detected result by call was2.1 days
 - Contact tracing completed, for detected results was 2.1 days

Total Community Referrals and Positivity Rates Week on Week



Sources: HSE – COVID-19 Contact Management Programme Weekly report and HSE Test and Trace Reports

CMP update - Week ending 7th November 2021

• The average number of cases managed by the CMP per day during the week ending 07/11/21 was 3585, an increase of 33% from 2704 cases the previous week. The average number of close contacts reported to the CMP per day for the week ending 07/11/21 was 7147, an increase of 37% from 5223 the previous week. Of the 3394 close contacts aged 12 and over with self-reported vaccination status, 61.7% (n=2093) were fully vaccinated.



- For the week ending 24/10/21, 79% (n=6704) of the close contacts referred for a Test 1 appointment attended for testing. For the week ending 24/10/2021, 69% (n=2799) of the close contacts referred for a Test 2 appointment attended for testing. For week ending 24/10/2021, Test 1 results were available for 6741 close contacts. 22.5% (n=1518) of these had a positive result. Test 2 results were available for 2225 close contacts, of these 14.2% (315) had a positive result. Overall, 27.2% (n=1833) of the close contacts tested had a positive result.
- The mean number of close contacts per case (including cases with zero close contacts) was 2.4 for the week ending 07/11/2021, unchanged from for the previous week.

Variants update

Total confirmed variants of concern cases:

- P.1 (Gamma): 33
- B.1.351 (Beta): 77



- B.1.1.318: 241
- B.1.1.318.4 (AZ.4): 6
- C.37 (Lambda): 4
- B.1.621 (Mu): 4

Delta sublineage:

AY.4.2: 104

(Based on latest NVRL results as of 8th November 2021)

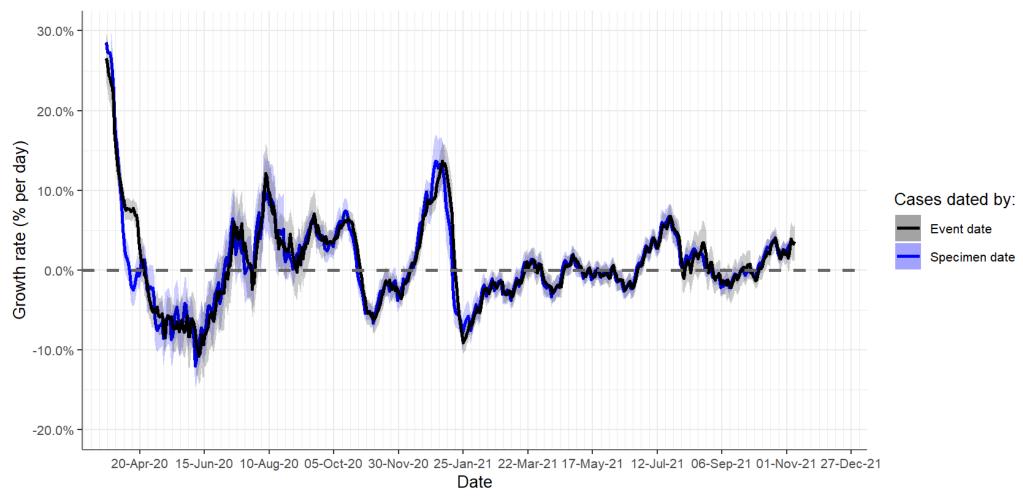


Source: HPSC (09.11.21)

Growth rate

Growth rate for cases is uncertain, and currently estimated at 5.3% per day (0.8% - 5.5%) over a 14-day window and 3.6% per day (1.5% - 5.6%) over a 21-day window. The number of people in hospital is stable (growth rate -0.1% (-0.8% to +0.5%) per day over a 14-day window. This growth rate compares with growth rates of 4-7% per day in September and October 2020 and July 2021, and in excess of 10% per day in January 2021.





Growth rate in case counts using a 21-day window. Mean and 95% confidence intervals.

CIDR data to midnight Mon 08 Nov 2021. Cases dated by date specimen collected or date notified to HPSC (event date)





Situation analysis 11 November 2021



- Incidence high and increasing
 - Cases (7-day average) 3676, up from 2611 seven days ago, 2115 two weeks ago and 1477 three weeks ago
 - 14-day incidence 952 per 100,000
 - Incidence increasing across all age groups except those 80 and above
 - Most markedly in 19-24 year olds but across all adult age groups
 - Increase in incidence in 13-18 year olds
 - Incidence in children aged 5-12 similar to adults
 - 543 in hospital, 89 in ICU, 60 ventilated
 - Test positivity high and increasing across all age groups
- Growth rate
 - Cases: 3-5% per day
 - Numbers in hospital: growth rate uncertain
- Clearly driven by increased social contact and reduced risk mitigation
- Future trajectory very uncertain
 - High levels of socialisation and force of infection very high
 - Changing relationship between cases and hospitalisation
- Individual, institutional and sectoral attention to risk mitigation













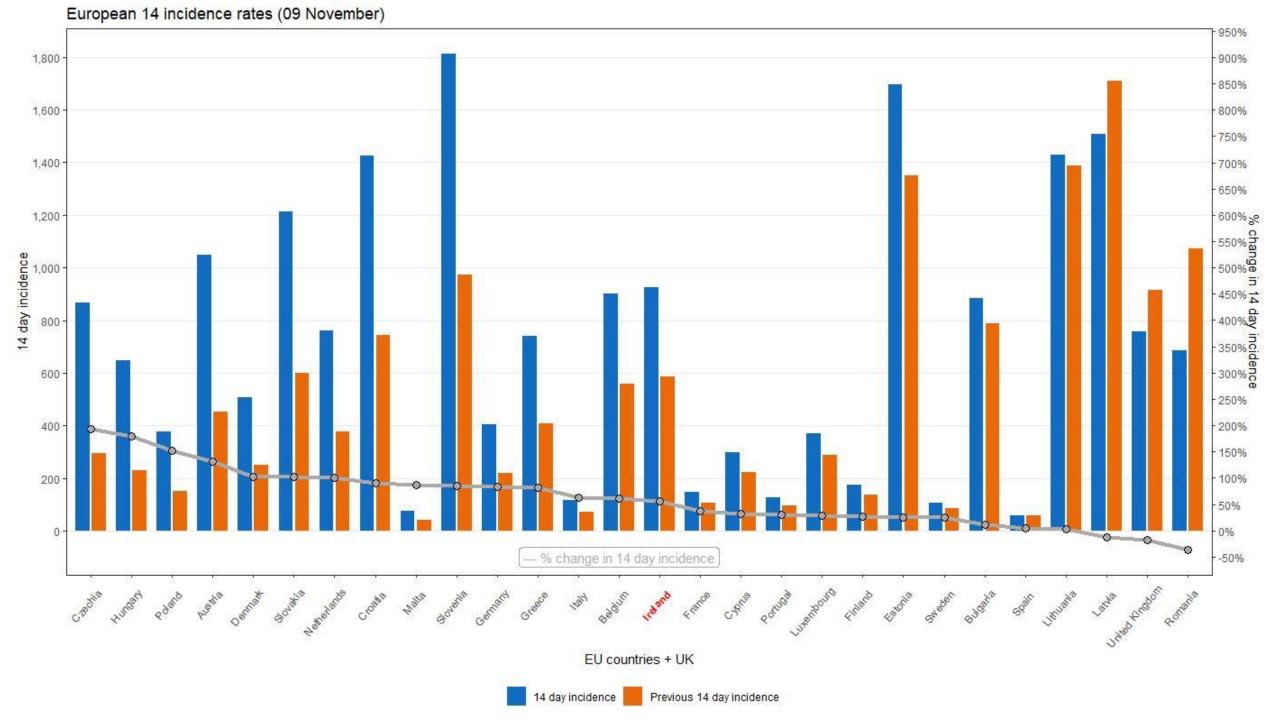
European Data

EU/UK ranked by 14 day incidence (9th Nov)

EU and the UK		Previous 14 day incidence	% change in 14 day incidence
Slovenia	1813.6	974.6	86%
Estonia	1695.1	1351.4	25%
Latvia	1506.3	1709.9	-12%
Lithuania	1428.7	1389.1	3%
Croatia	1425.2	743.1	92%
Slovakia	1214.6	600.7	102%
Austria	1050.0	452.3	132%
Ireland	924.1	586.7	57%
Belgium	901.7	558.3	61%
Bulgaria	882.8	787.6	12%
Czechia	866.1	294.2	194%
Netherlands	762.5	377.8	102%
United Kingdom	758.5	915.8	-17%
Greece	739.0	406.7	82%
Romania	684.1	1073.6	-36%
Hungary	647.4	231.5	180%
Denmark	507.6	250.7	102%
Germany	406.0	221.2	84%
Poland	378.4	150.1	152%
Luxembourg	371.0	287.3	29%
Cyprus	299.7	224.6	33%
Finland	175.8	137.5	28%
France	146.9	106.2	38%
Portugal	128.1	97.6	31%
Italy	117.5	72.0	63%
Sweden	107.5	85.7	25%
Malta	74.8	39.7	88%
Spain	59.7	57.1	5%

[•] As of 16th Dec, this daily data is now sourced from Our World In Data (OWID) instead of ECDC as they have switched to weekly reporting (Thursday evenings).

[•] OWID source their confirmed cases and deaths data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). https://github.com/owid/covid-19-data/tree/master/public/data



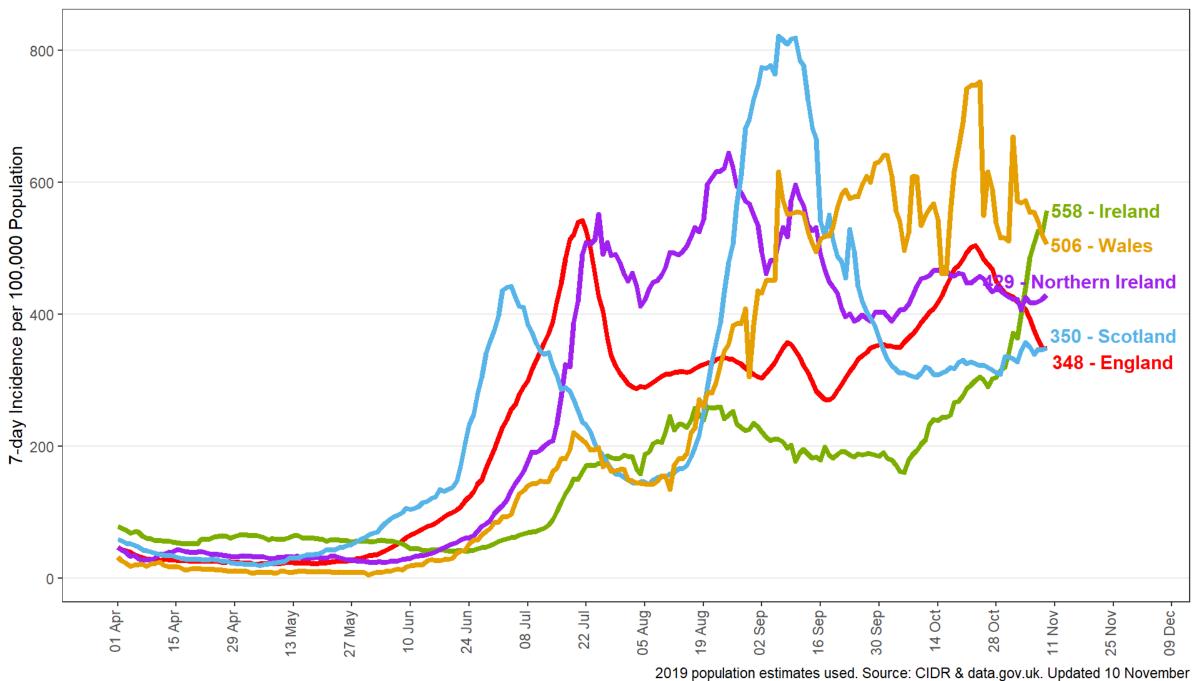
EU/UK ranked by 7 day percentage change (9th Nov)

EU and the UK	7 day incidence	Previous 7 day incidence	% change in 7 day incidence
Belgium	672.1	229.6	193%
Malta	51.2	23.6	116%
Poland	239.5	139.0	72%
France	91.5	55.4	65%
Austria	651.1	399.0	63%
Hungary	395.4	252.1	57%
Greece	450.9	288.1	56%
Germany	247.3	158.7	56%
Croatia	864.3	560.9	54%
Czechia	514.2	351.9	46%
Slovenia	1076.1	737.6	46%
Portugal	75.9	52.2	45%
Luxembourg	218.5	152.5	43%
Netherlands	447.5	315.0	42%
Ireland	540.2	383.9	41%
Slovakia	708.6	506.1	40%
Italy	68.1	49.4	38%
Denmark	287.9	219.6	31%
Finland	99.2	76.6	29%
Cyprus	168.2	131.5	28%
Spain	32.3	27.4	18%
Lithuania	672.4	756.3	-11%
Bulgaria	415.3	467.5	-11%
United Kingdom	349.0	409.5	-15%
Sweden	48.4	59.1	-18%
Estonia	756.2	938.9	-19%
Latvia	637.6	868.7	-27%
Romania	275.1	408.9	-33%

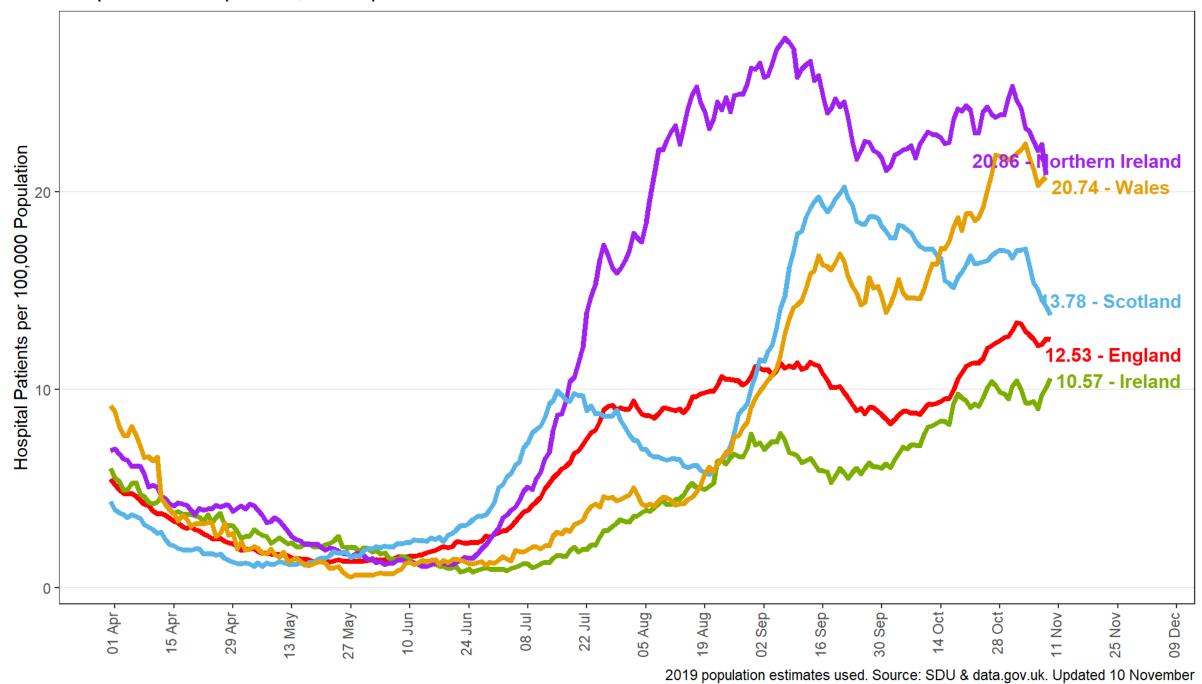
[•] As of 16th Dec, this daily data is now sourced from Our World In Data (OWID) instead of ECDC as they have switched to weekly reporting (Thursday evenings).

[•] OWID source their confirmed cases and deaths data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). https://github.com/owid/covid-19-data/tree/master/public/data

7-day Incidence per 100,000 Population

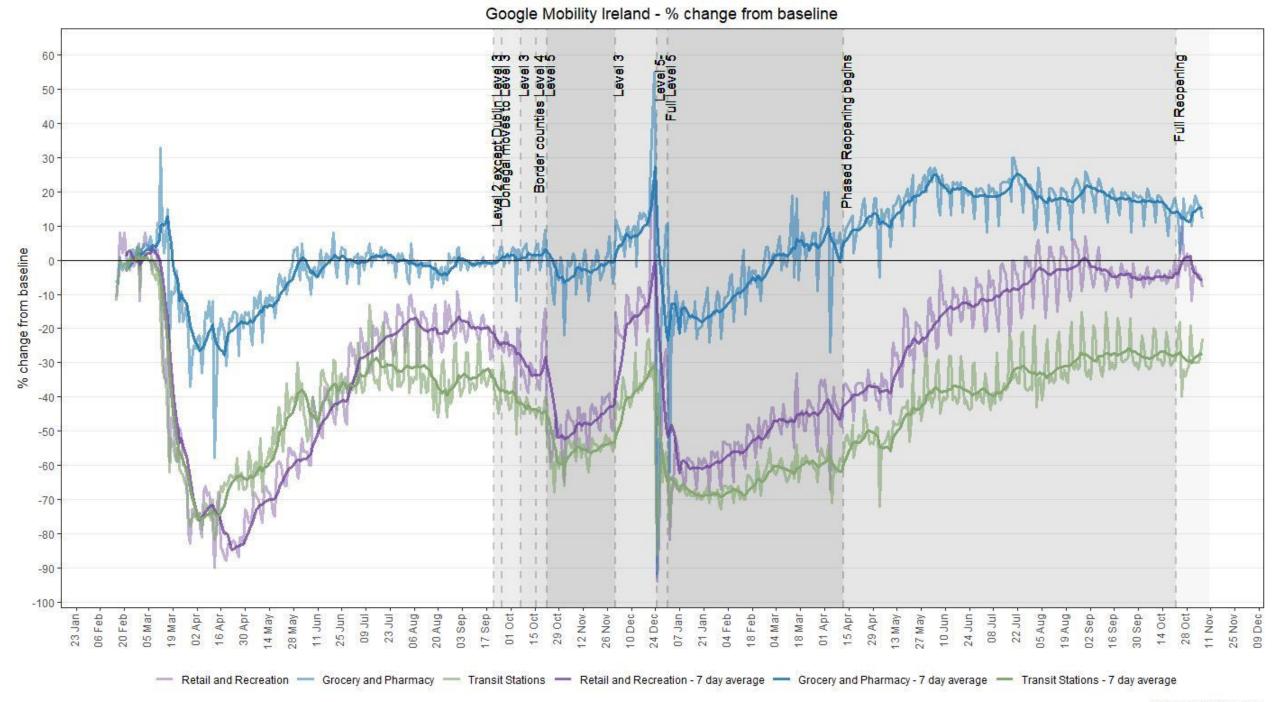


Hospital Patients per 100,000 Population





Mobility Data



Google Mobility Ireland - % change from baseline

