



An Roinn Sláinte  
Department of Health

# COVID NPHET Update 30<sup>th</sup> December 2020

# Current situation



	01-Oct	26-Oct (peak 14 day inc.)	12-Dec	15-Dec	18-Dec	21-Dec	24-Dec	27-Dec	30-Dec
14-day incidence	96.12	306.27	81.17	84.34	100.63	122.22	166.03	209.56	272.73
5-day average cases	407.2	920.0	260.0	315.0	416.2	614.8	863.0	983.4	1213.0
Total weekly cases	2608	7003	1839	2105	2751	3831	5421	6611	8006

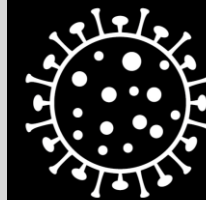
	01-Oct	26-Oct (peak 14 day inc.)	12-Dec	15-Dec	18-Dec	21-Dec	24-Dec	27-Dec	30-Dec
No. Hospital (8.A.M)	122	344	190	198	206	235	255	320	454
No. in ICU (6.30 P.M)	22	40	35	33	29	29	23	23	34

	01-Oct	26-Oct (peak 14 day inc.)	12-Dec	15-Dec	18-Dec	21-Dec	24-Dec	27-Dec	30-Dec
Positivity rate (7 day average)	3.0%	6.1%	2.5%	2.6%	3.2%	4.1%	5.1%	6.5%	9.3%

	August	September	October	November	December
<b>Total Deaths</b>	<b>5</b>	<b>37</b>	<b>126</b>	<b>158</b>	<b>123</b>
<b>Deaths associated with Nursing Home outbreaks</b>	<b>3</b>	<b>12</b>	<b>51</b>	<b>51</b>	<b>38</b>
<b>Deaths associated with Hospital outbreaks</b>	<b>0</b>	<b>7</b>	<b>25</b>	<b>57</b>	<b>40</b>

# Cases, numbers in hospital and intensive care

Case numbers are rising rapidly. The number of people in hospital and the number of admissions per day is increasing sharply. The number in ICU has increased in recent days, but this is not yet reflected in the 7-day average. The number of deaths per day is not decreasing.



Coronavirus  
**COVID-19**  
Public Health  
Advice

	16 Apr	24 Jun	29 Jul	26 Aug	30 Sept	21 Oct	2 Dec	9 Dec	16 Dec	23 Dec	30 Dec
Cases confirmed per day	547	10	18	117	356	1160	272	268	330	713	1144
14-day incidence <i>per 100,000 population</i>	157	4.0	5.6	32	92	288	85	79	88	153	273
Hospital in-patients	858	42	11	22	108	279	244	228	198	222	331
<i>Hospital admissions per day</i>	56	2	2	3	10	23	14	14	14	22	40
ICU confirmed cases	147	15	5	6	18	32	32	31	33	29	26
<i>ICU admissions per day</i>	8	< 1	< 1	< 1	2	3	2	3	1	2	4
Deaths confirmed per day	32	< 1	< 1	< 1	1	5	7	4	5	6	6

Data are 7-day averages (the indicated day and the preceding 6 days, rounded to the nearest whole number) with the exception of 14 day cumulative incidence, which is the total number of cases in the preceding 14 days per 100,000 population. NPHE monitors 5-day moving average and 14-day cumulative incidence on a day-by-day basis, as indicators of rate of change of incidence and overall burden of infection. 7-day averages are used here to limit day-of-week effects. The historic incidence data may change due to denotification of cases.



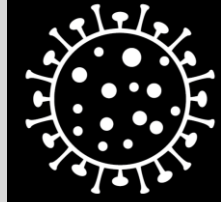
Rialtas na hÉireann  
Government of Ireland



# Cases, Incidence Rates & Testing

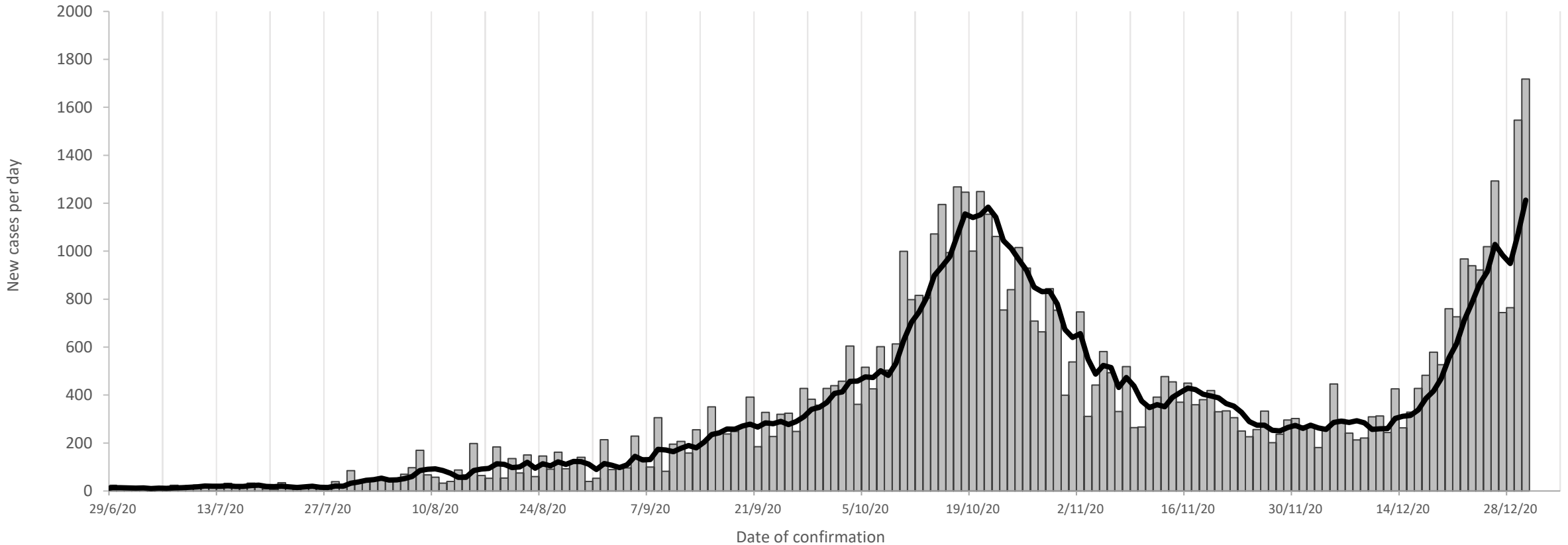
# Confirmed cases each day

Daily and weekly count and 5-day rolling average. Case counts are much lower than in late October. The 5-day average peaked at 1186 on 21 October, reached a low of 251 on 28 November, and is now **1213**



Coronavirus  
**COVID-19**  
Public Health  
Advice

Cases per week	93	125	139	119	284	540	546	711	796	912	1303	1947	2060	3031	4458	7397	7073	4838	3424	2583	2580	1799	2028	1967	3368	6611
----------------	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------



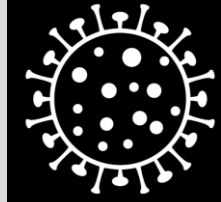
Daily count (bars) 5-day average (line) and weekly counts of the number of laboratory confirmed new cases by date on which they were confirmed by HPSC. Case counts may change due to denotification of cases. Weekly case counts are by event date from midnight Saturday to midnight Saturday.



Rialtas na hÉireann  
Government of Ireland

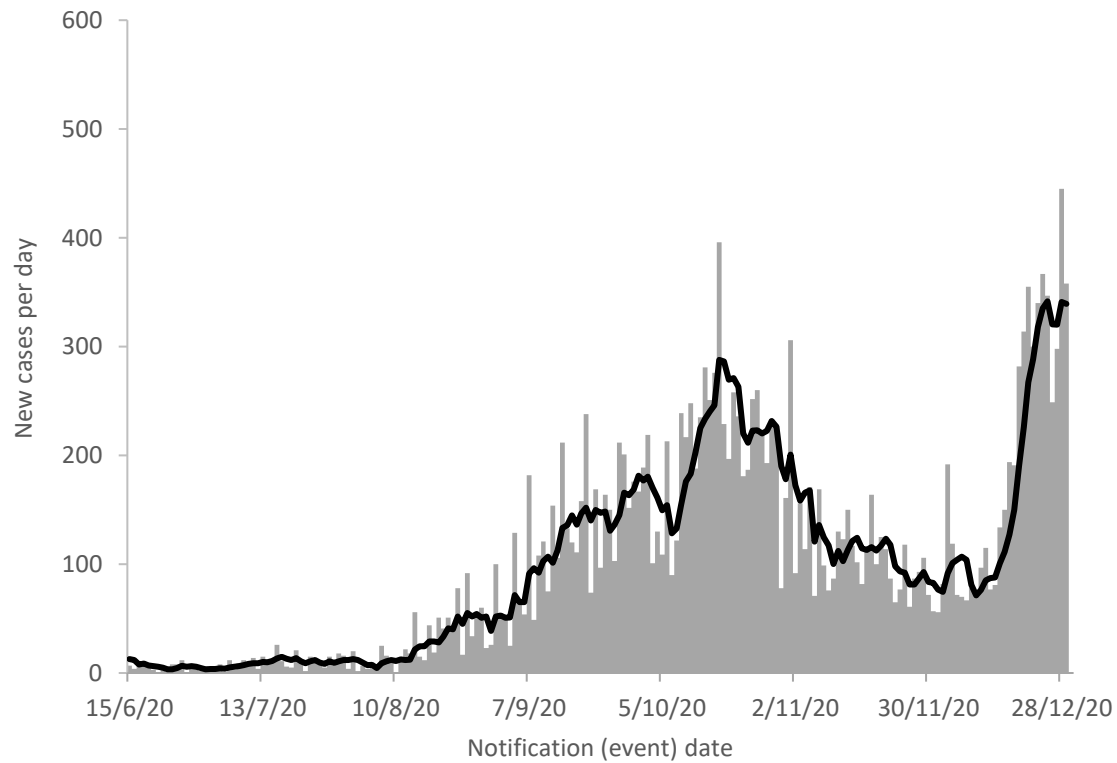
# Confirmed cases each day

Daily case count and 5-day rolling average for Dublin alone and for the other 25 counties. Case counts are rising rapidly in Dublin and across the entire country. Case counts in Dublin now exceed the peak of the second wave.

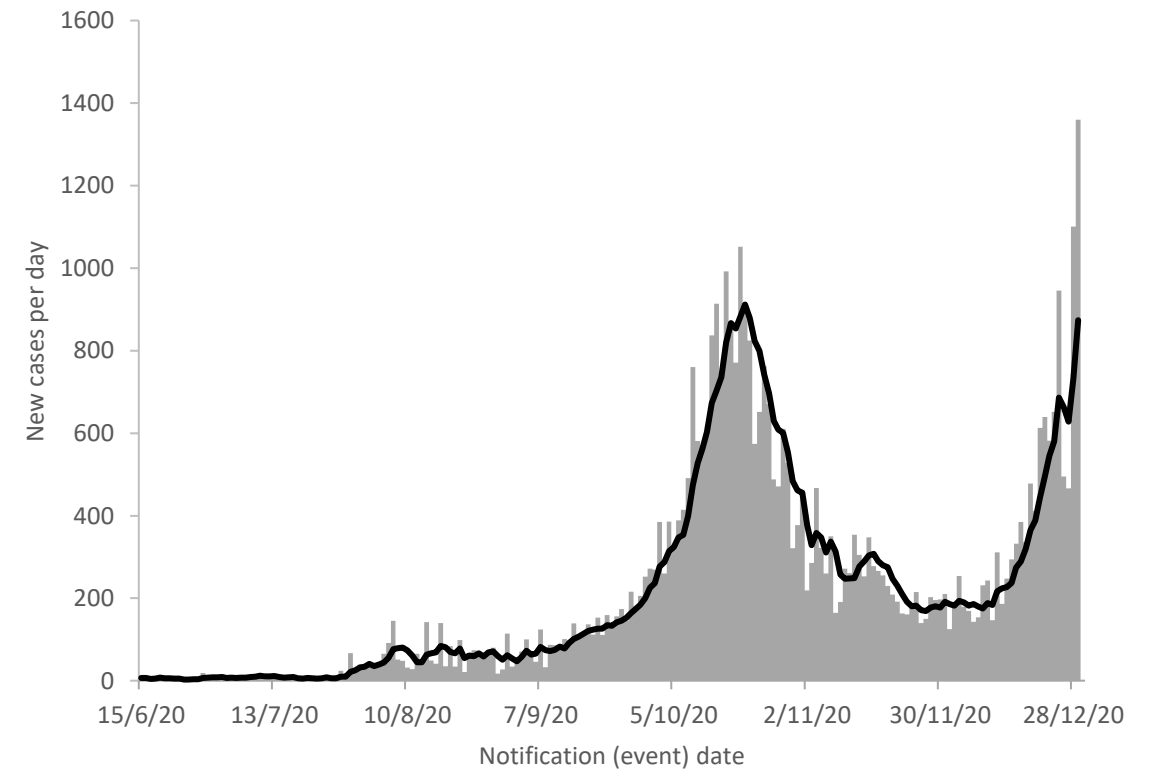


Coronavirus  
**COVID-19**  
Public Health  
Advice

## Dublin

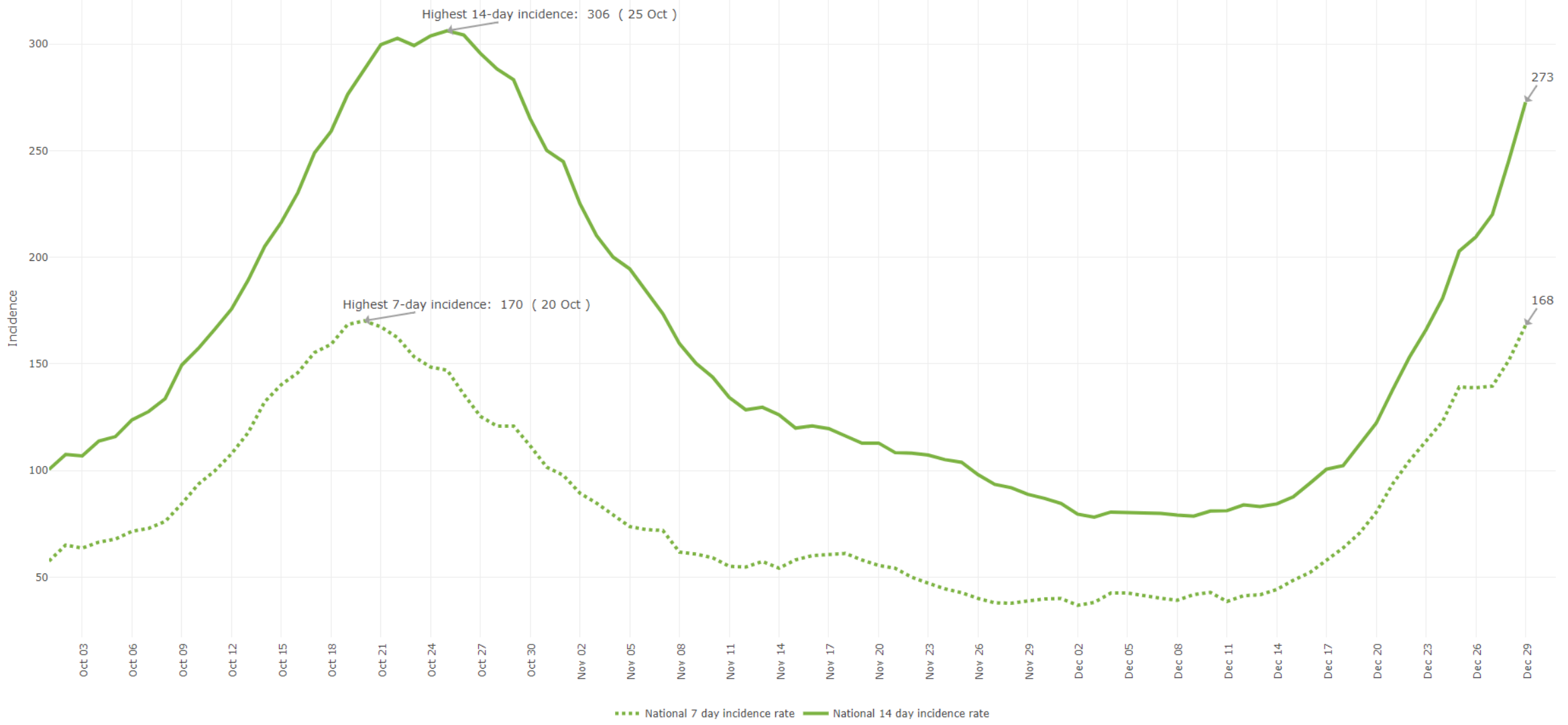


## 25 counties

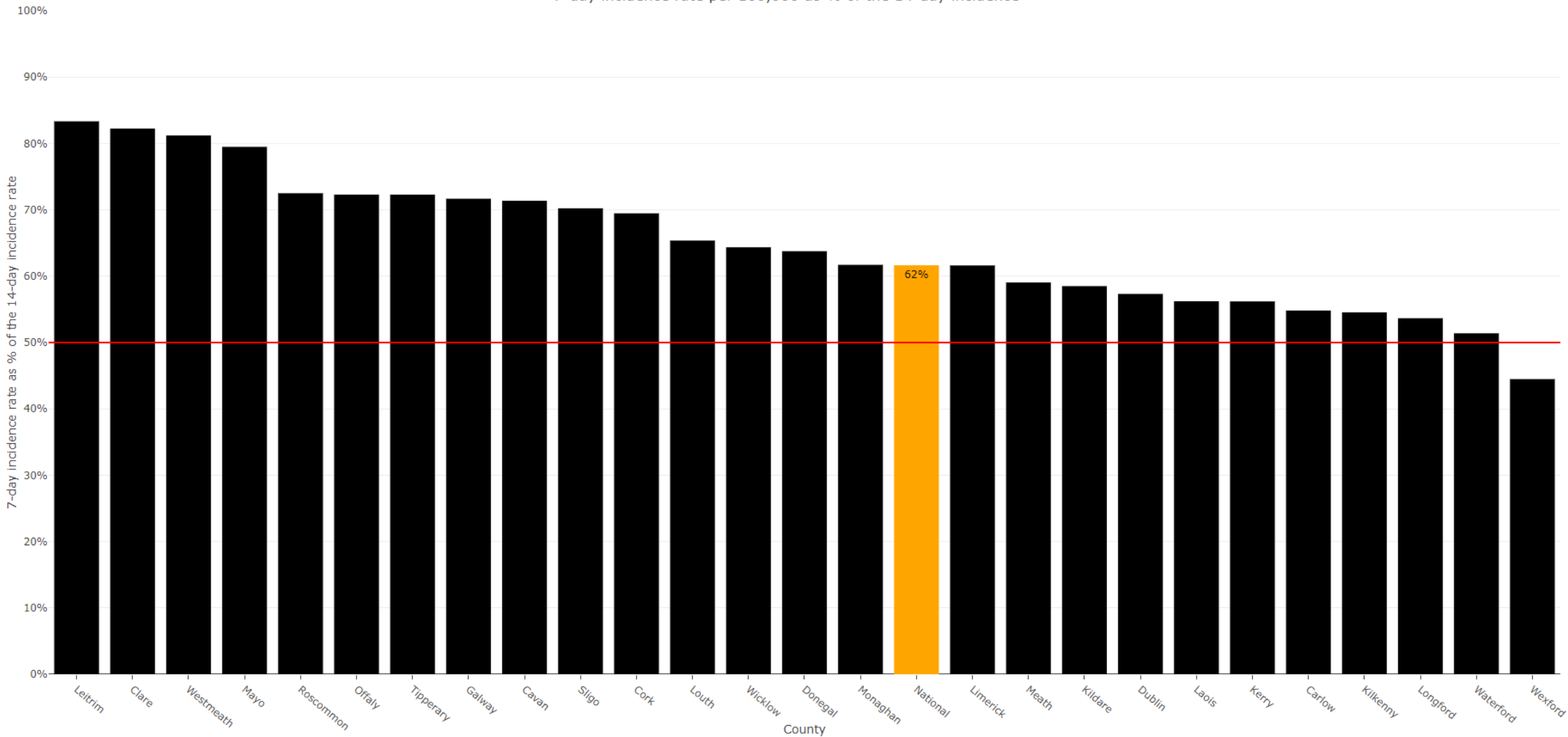


Daily count (bars) 5-day average (line) new cases by date on which they were notified to HPSC and created as an event on the CIDR database

National 7 and 14 day Incidence rates



7-day incidence rate per 100,000 as % of the 14-day incidence





Total Tests  
 **2,330,969**

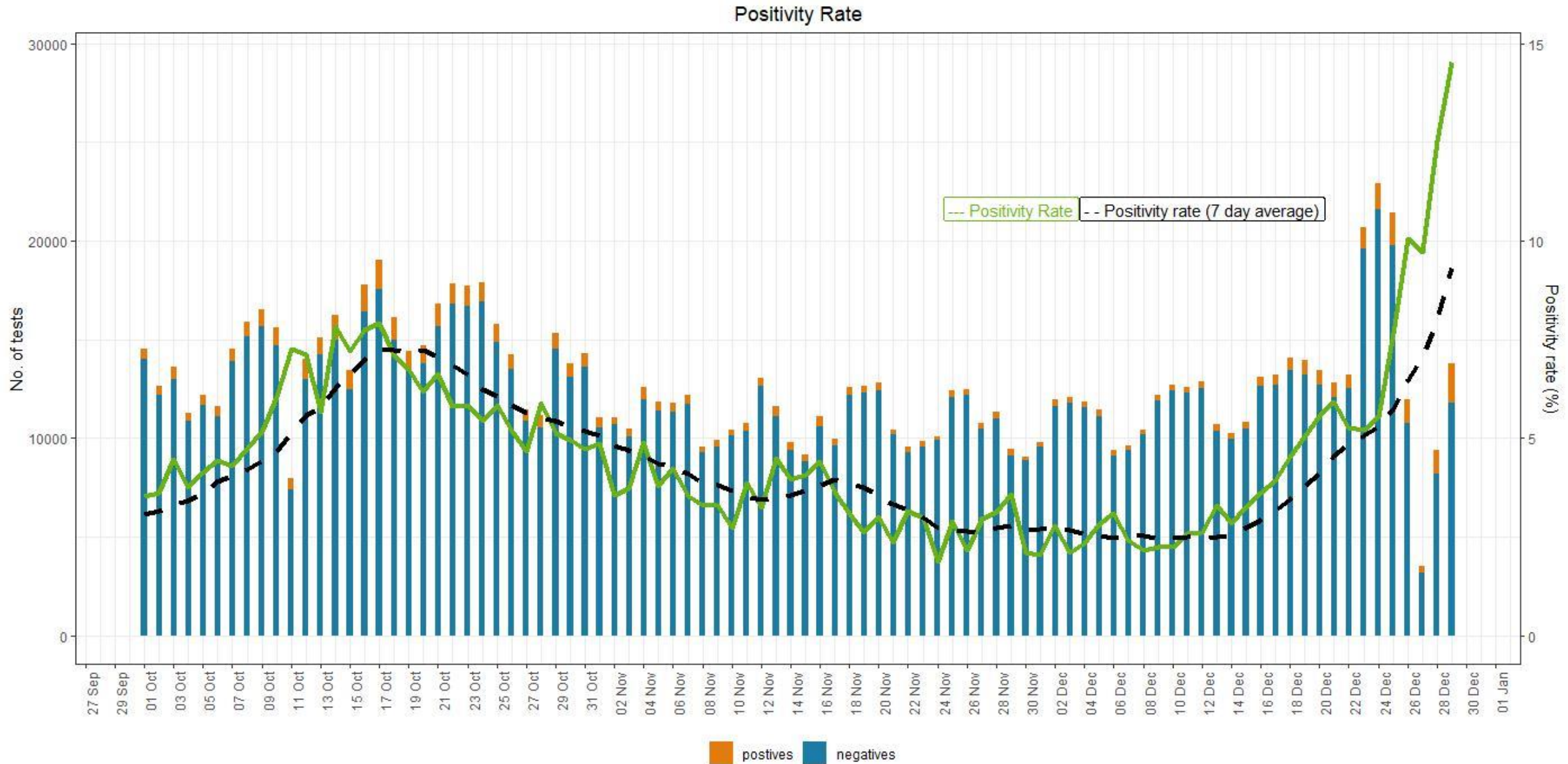
Total Positive  
**94,487**  
4.1%

Tests (24hrs)  
 **13,802**

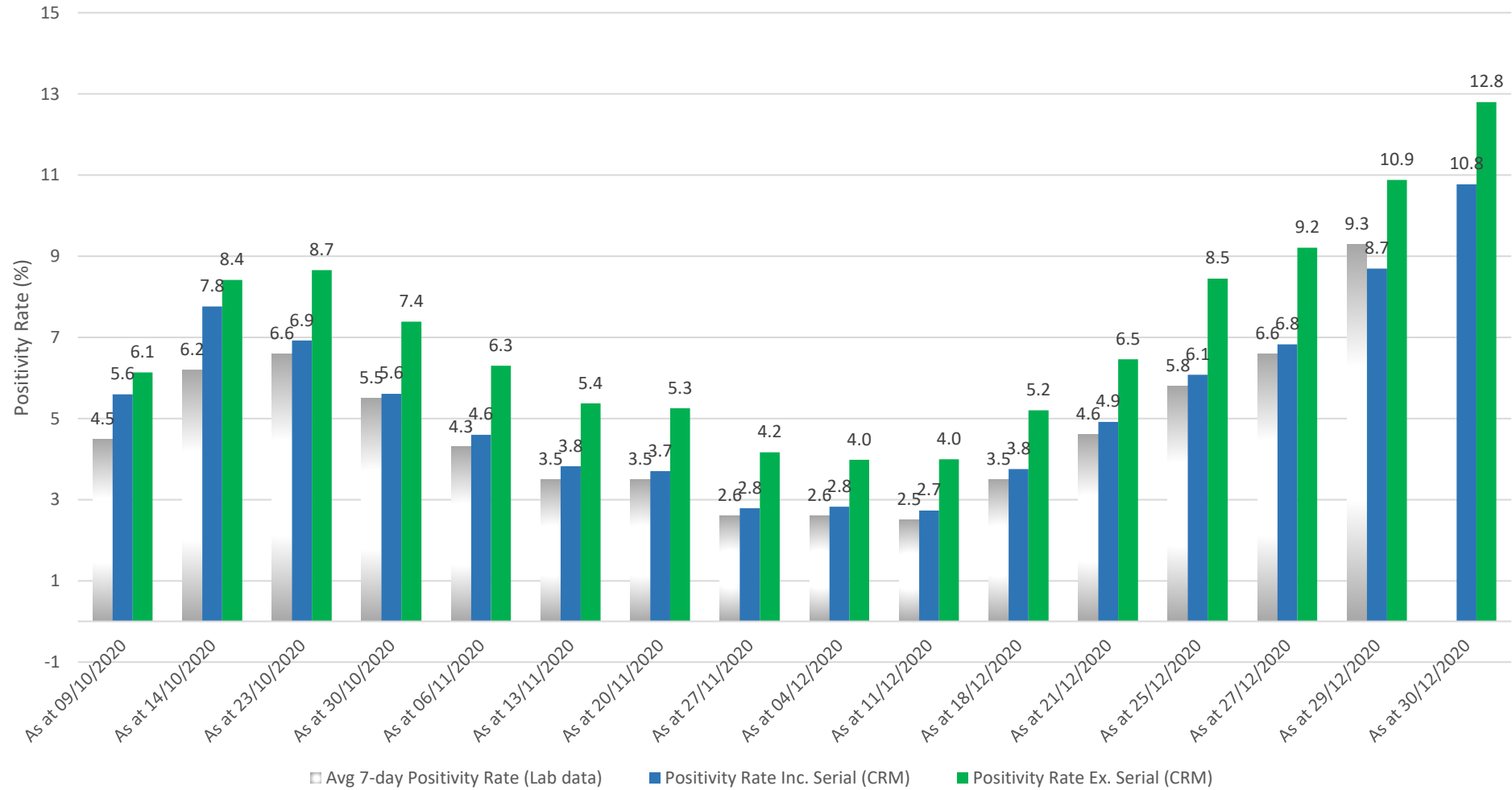
Tests (Last 7 days)  
 **103,702**

Positive (Last 7 days)  
**8,724**  
8.4%

# Recent trend in positivity rate



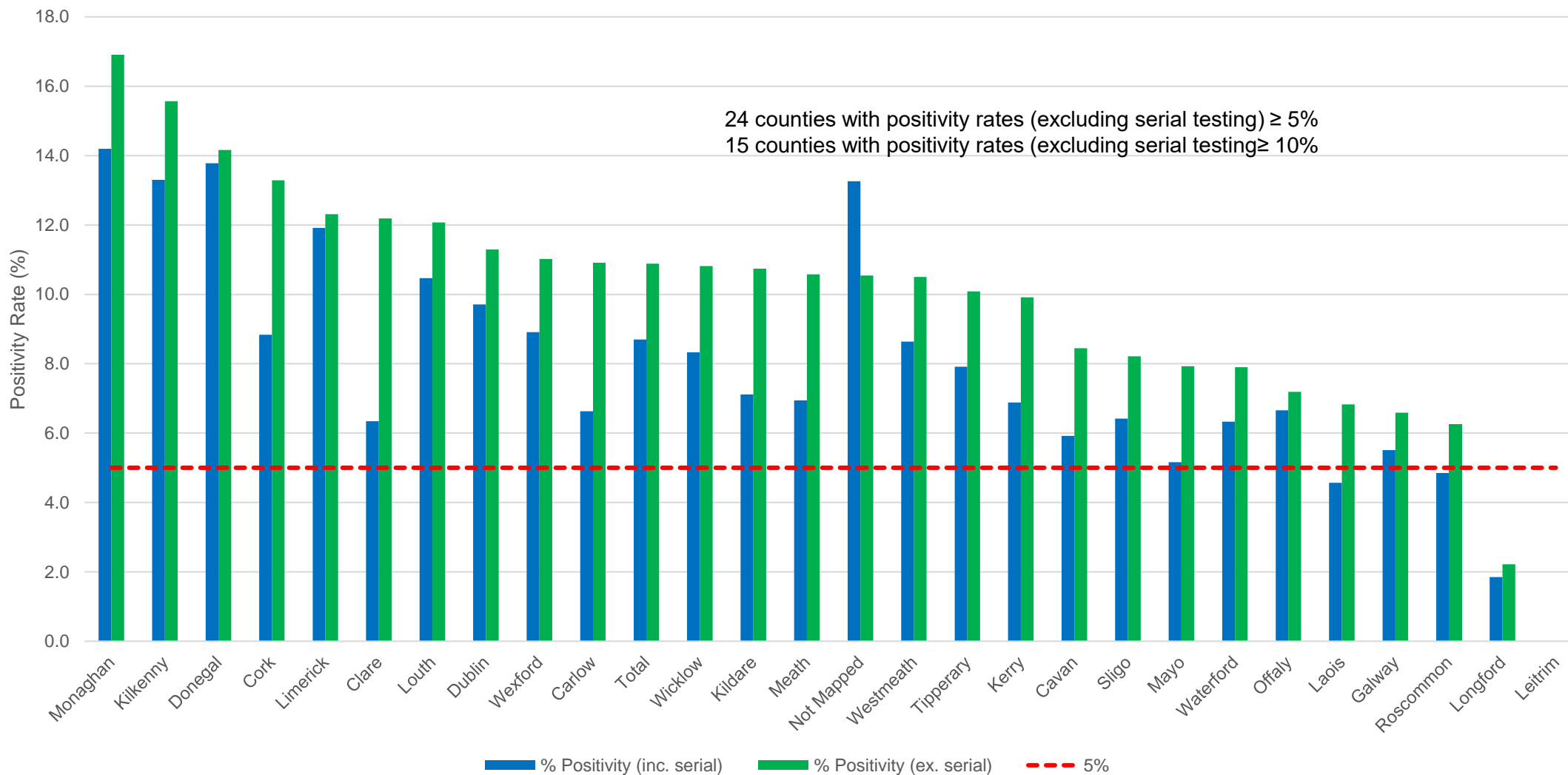
### 7-day Avg Positivity Rate (Lab data) and % Positivity Rate in Past 7 Days inc. and ex. Serial Testing (CRM)



Updated 30/12/2020  
 Source: Lab data, HPSC Daily Cumulative Report;  
 CRM data, HSE Contact and Tracing Team.

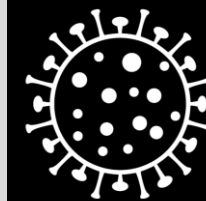
Up to 23/10/2020 tests which could not be linked to a County (Not Mapped) are not included in the data for total tests.

% Positivity Rate Past 7 Days (inc./ex. serial testing) by County as at 29/12/20  
 (data from County Positivity Rate data provided by HSE Contact and Tracing Team)



# Incidence across different age groups (excluding HCW and LTRC)

When incidence started to rise again in July, cases increased first in younger age groups, especially in the 19-24 age group, with a delayed increase in incidence in older (65+) adults. The current increase in levels of infection is different, with rising incidence across all age groups, and a concerning increase in those aged 65 and older. There has been a very marked increase in incidence in the last week in those aged 19-24. A number of cases in those aged 65 and older will be linked in the coming days to outbreaks in LTRC.



Coronavirus  
**COVID-19**  
Public Health  
Advice

Week	Age band								
	0-4	5-12	13-18	19-24	25-39	40-64	65-74	75-84	85+
26	0.6	0.2	0.3	1.8	1.5	0.7	0.8	1.5	3.0
27	1.5	0.4	0.3	1.8	1.9	0.9	0.0	1.0	0.0
28	0.9	1.1	1.1	10.9	2.0	1.1	1.9	1.0	3.0
29	1.2	0.4	0.8	3.0	3.3	1.9	2.4	1.5	3.0
30	1.8	0.5	1.6	3.6	4.3	0.9	1.9	0.0	1.5
31	4.8	2.6	7.3	11.2	8.6	4.6	2.1	2.5	1.5
32	4.5	3.8	6.7	19.9	16.7	10.9	4.8	2.5	3.0
33	6.6	10.4	12.9	28.7	20.5	12.5	8.6	2.5	5.9
34	6.6	6.9	16.7	34.4	15.3	10.5	5.6	5.1	1.5
35	6.0	9.5	13.2	36.2	17.9	10.7	4.8	8.7	5.9
36	13.3	13.7	17.8	48.6	22.6	13.9	11.0	12.2	14.8
37	17.5	17.5	29.9	64.3	28.3	24.5	22.5	8.7	7.4
38	21.4	26.2	44.1	90.3	44.3	34.8	32.9	19.8	14.8
39	12.4	22.8	42.8	148.2	50.1	42.0	33.2	31.0	17.8
40	29.9	28.6	63.2	167.3	67.8	57.7	34.3	26.0	19.2
41	44.0	47.4	134.8	322.2	116.6	91.6	62.1	51.9	53.3
42	78.1	90.9	196.7	430.8	155.1	142.8	91.8	67.7	57.7
43	82.7	93.5	175.5	304.9	122.7	121.6	84.6	82.9	69.6
44	54.0	67.1	93.9	152.8	74.3	76.2	54.3	54.5	45.9
45	34.4	39.7	58.1	83.9	58.0	46.1	42.8	44.3	41.4
46	41.9	37.2	65.9	89.7	45.5	45.2	32.7	43.3	57.7
47	22.0	34.1	59.5	79.7	34.8	33.2	28.6	39.2	54.8
48	23.2	31.5	45.5	66.7	33.9	29.9	22.2	36.1	31.1
49	28.4	36.6	37.7	40.5	33.2	30.1	25.4	30.0	34.0
50	21.4	39.7	44.4	57.4	40.1	35.3	22.5	31.6	19.2
51	51.6	58.5	74.3	128.9	88.9	82.2	54.9	56.0	48.8
52	72.4	73.4	114.1	313.4	175.2	136.4	90.8	99.7	124.3

Heat map shows age-specific incidence (cases per week per 100,000 population) Healthcare workers and cases associated with outbreaks in long-term residential care are excluded, so that the analysis reflects the pattern of cases in the community. Cases dated by date of specimen collection.



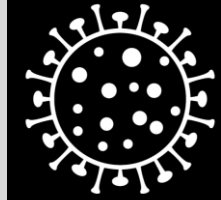
Rialtas na hÉireann  
Government of Ireland



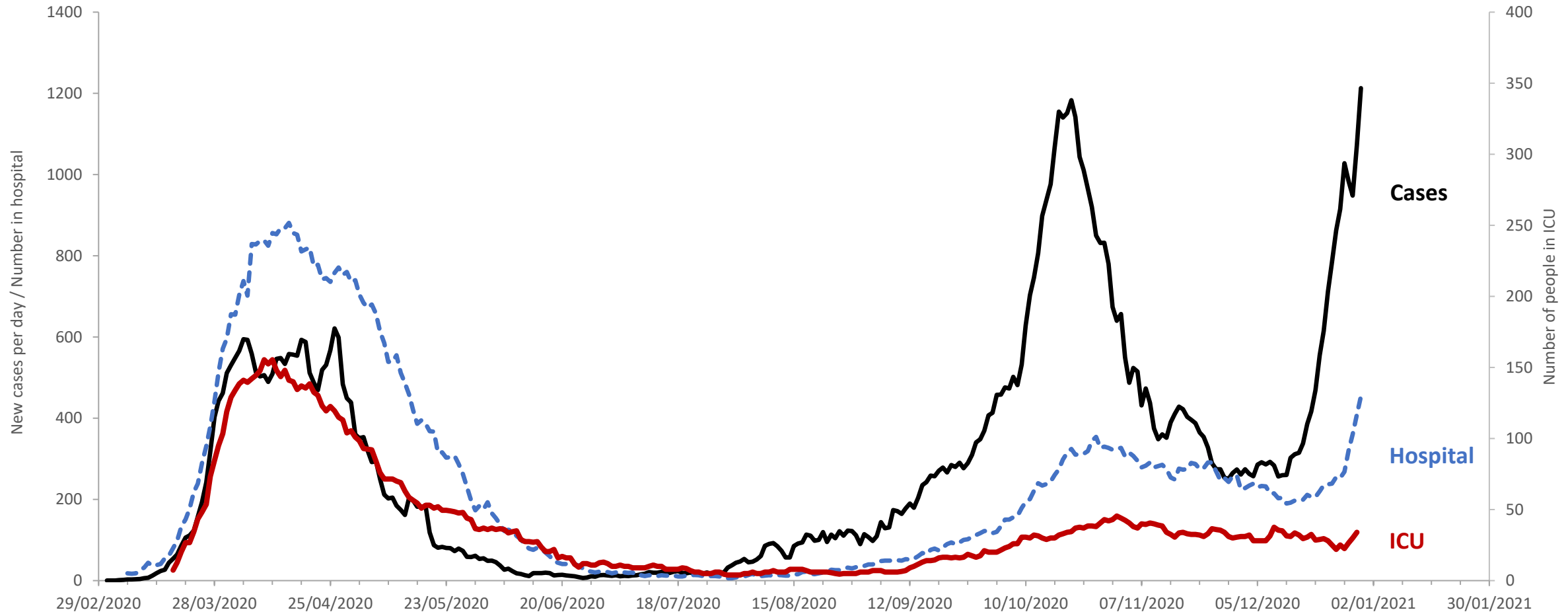
# Hospital & ICU Data

# Cases, numbers in hospital and intensive care

There was a long delay in the second wave between the increase in cases and the increase in the numbers of people in hospital because there was a long period in September and October where the disease was largely confined to younger adults. However, numbers in hospital are now rising sharply, as the recent rapid increase in incidence was more evenly distributed across age cohorts

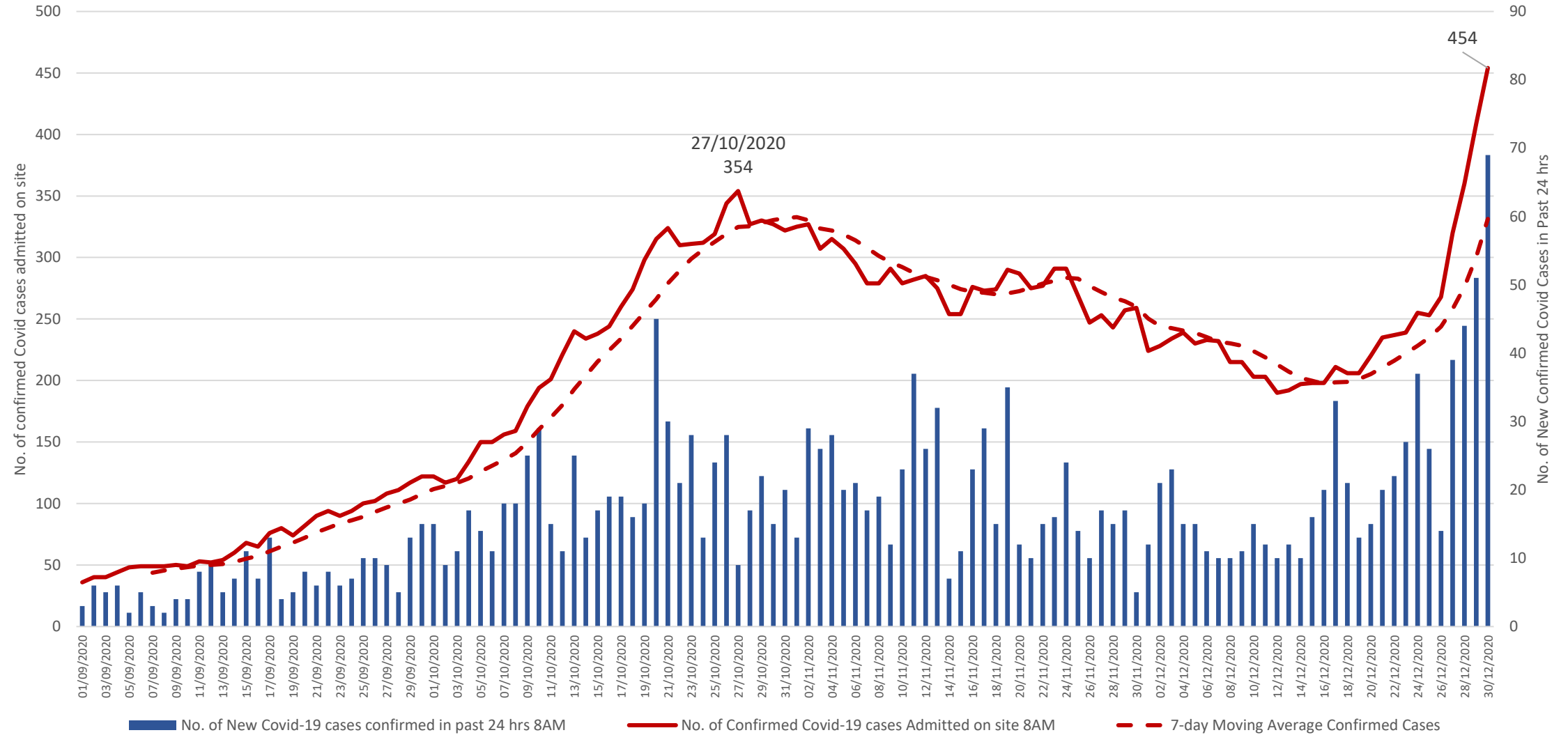


Coronavirus  
**COVID-19**  
Public Health  
Advice



Cases: Number of new cases confirmed per day, cases assigned to date confirmed by HPSC. Tests outsourced to German laboratory in April backdated, using the specimen collection date, to the date they would have been confirmed if tested in a timely manner. Hospital: number of COVID-19 confirmed patients in acute hospitals. ICU: number of COVID-19 confirmed patients in ICU. 5-day averages.

## Total No. of Confirmed Covid Cases in Hospital at 8AM & No. of New Confirmed Covid Cases in Past 24 hrs since 01/09/2020

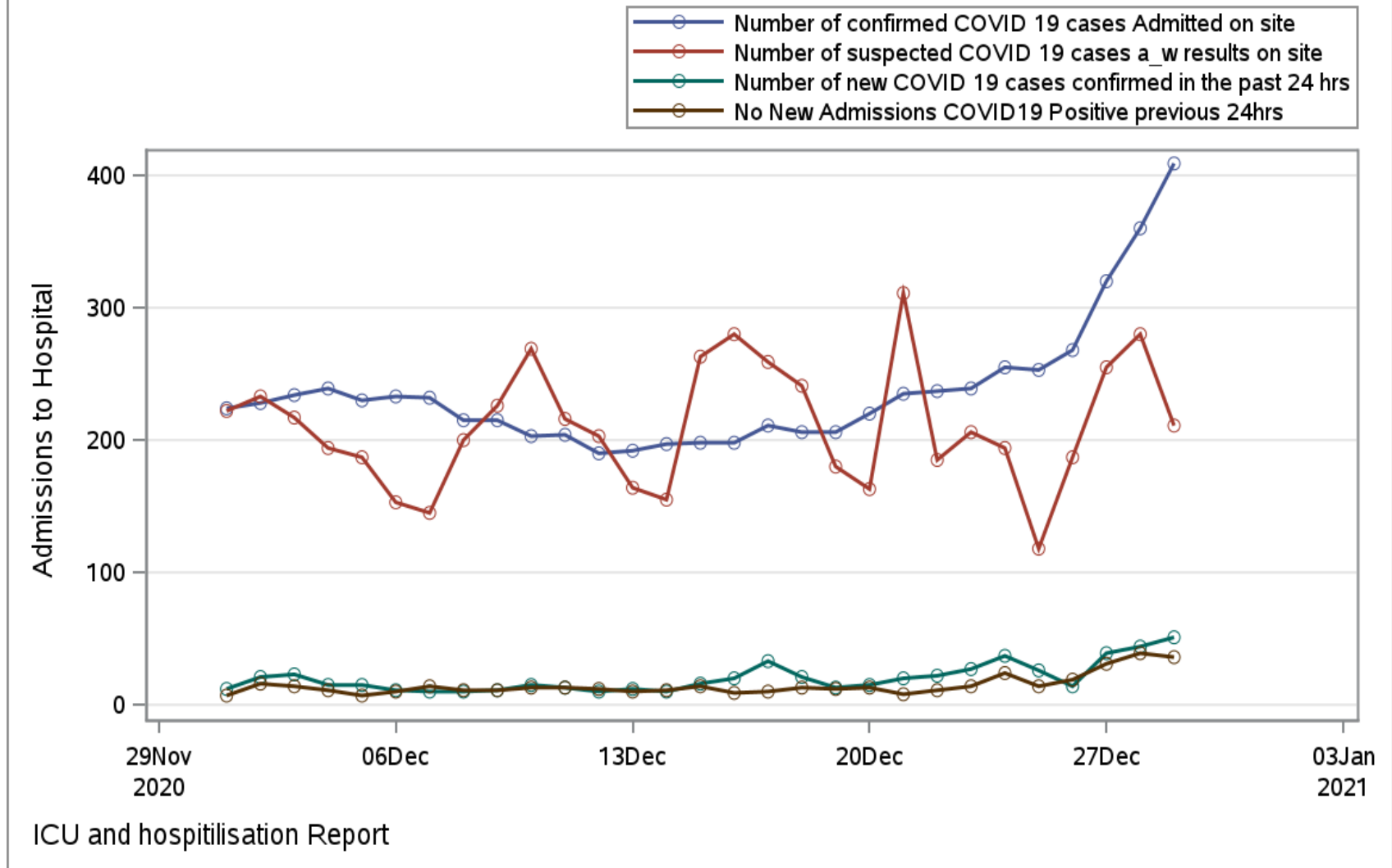


Updated to 8AM 30/12/2020

Confirmed Covid cases: Daily count of number of COVID-19 confirmed cases in acute hospitals.  
New confirmed cases: New COVID-19 confirmed admissions and new laboratory confirmations of suspected cases in preceding 24 hours.  
Data from HSE PMIU-SDU, 8am census.



### Hospitalisation: 2 pm Report SDU from Database (all)

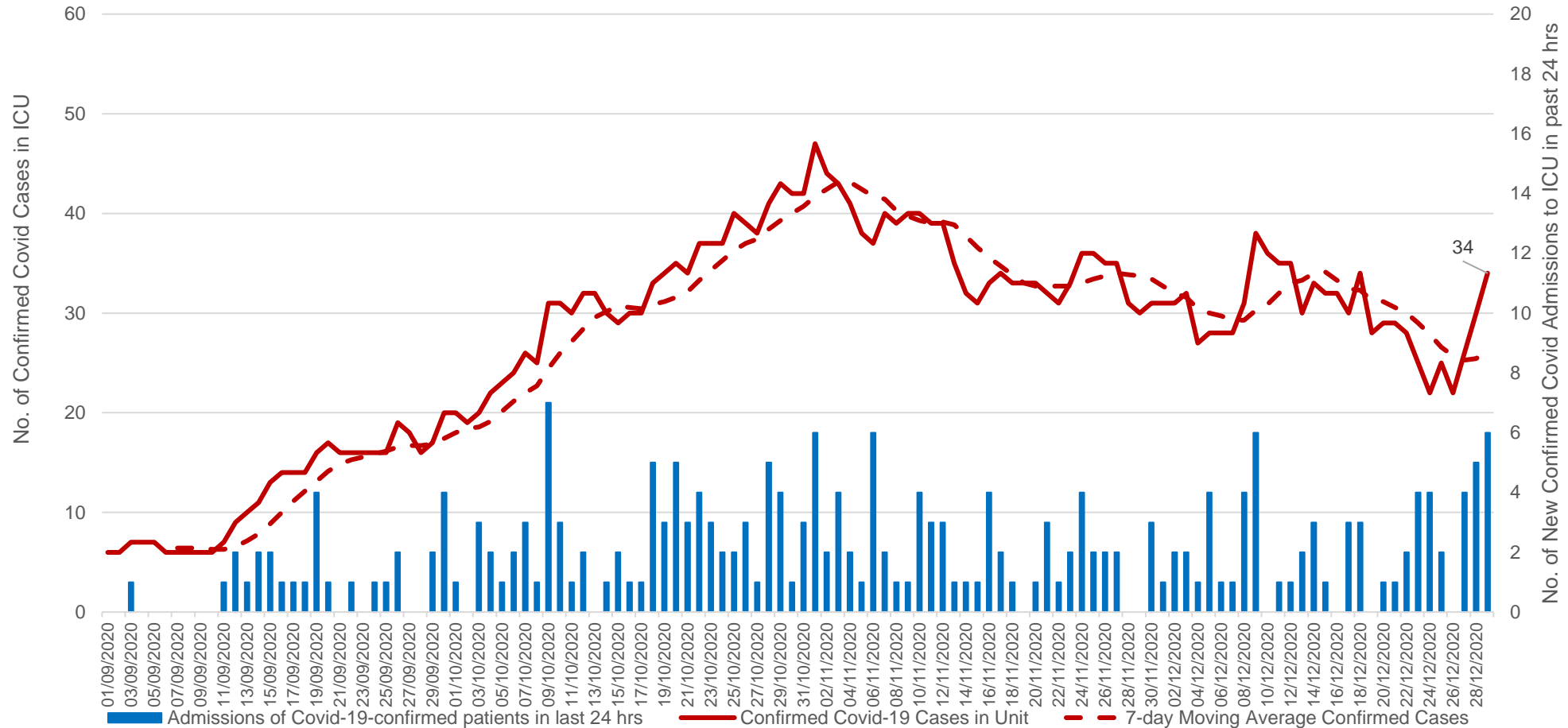


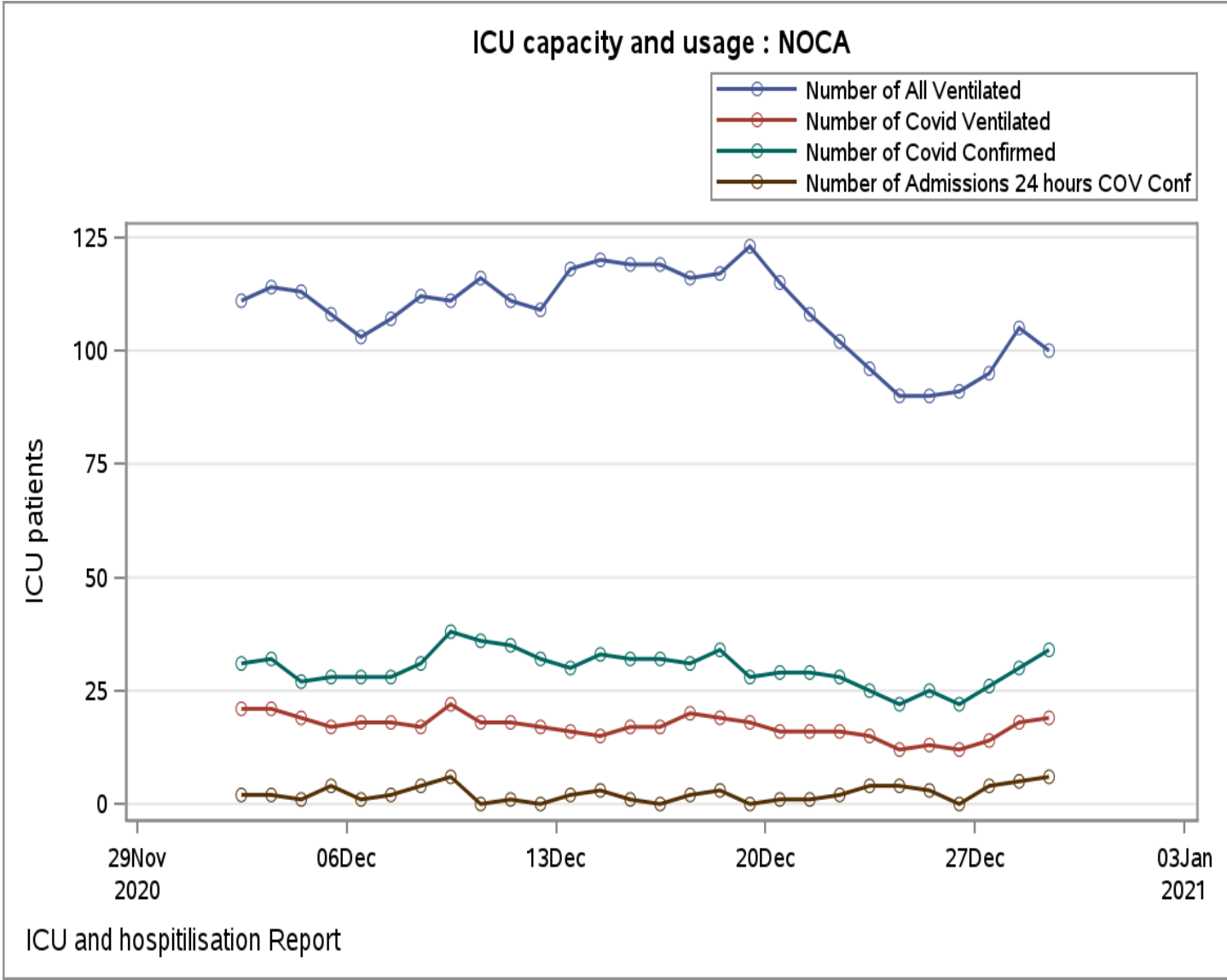
ICU and hospitalisation Report

Data up to  
29/12/20



Total No. of Confirmed Covid Cases in ICU at 11.30AM &  
 No. of New Confirmed Covid Admissions to ICU in past 24 hrs since 01/09/20  
 (includes all reporting public and private hospitals and may differ from no. reported by HSE in public hospital ICUs)

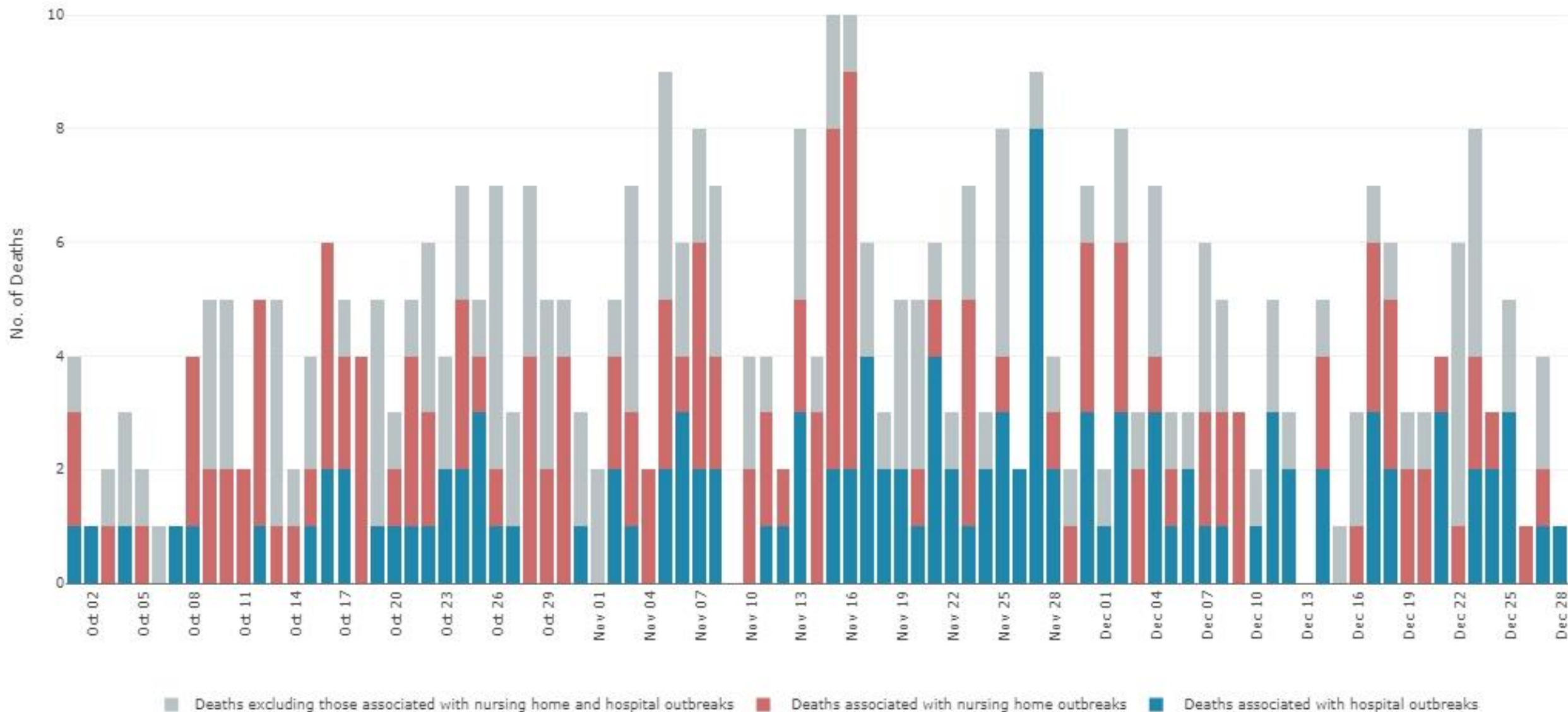






# Deaths

### Deaths by Date of Death





# Outbreaks & Clusters

# COVID-19 outbreaks by key outbreak locations, week 52 and overall, 2020 Ireland



- Since March 1<sup>st</sup> 2020, 10,610 outbreaks have been notified to CIDR
- In week 52, 215 outbreaks were notified; 110 in private houses, 105 in other locations

Key outbreak locations	Week 52	Weeks 10-31	Weeks 32-52
Workplace	9	51	293
Direct Provision Centre	1	21	19
Vulnerable groups*	2	19	97
Prisons	0	6	3
Nursing Home/Community Hospital	14	301	123
Acute hospitals	10	103	119
School <sup>^</sup>	21	0	284
Childcare facility	6	0	102

\*Includes Irish Travellers, Roma, homeless 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

Data source: CIDR December 29th 2020 – data to midnight 26/12/2020

# Weekly Summary



- **Total** number of outbreaks week 52 n=215 compared with week 51 n=254
- **Vulnerable groups**
  - Three new outbreaks in week 52
  - Two new Irish Traveller outbreaks - 15 linked cases
  - One new outbreak in a DPC with 29 linked cases
- **Workplace outbreaks**
  - Nine new outbreaks in week 52 – 37 linked cases
  - Largest open outbreak – meat factory with 72 linked cases
- **Residential institution outbreaks**
  - 91 outbreaks in residential institutions with 449 linked cases since week 32
  - 16 outbreaks are ‘open’ with 64 linked cases
  - Four new outbreaks - 21 linked cases
- **Nursing Homes & Community Hospitals**
  - 47/424 outbreaks remain open with 1047 linked cases
  - Fourteen new outbreaks with 53 linked cases in week 52
  - One new outbreak has 20 linked cases already
- **Acute hospitals**
  - 55 open outbreaks involving 22 hospitals, 990 linked cases (range 1-138)
  - Ten new outbreaks in week 52 with 39 linked cases
  - Four outbreaks have more than 100 linked cases each
- **Schools**
  - 21 new outbreaks in week 52 with 72 linked cases
  - Largest school outbreak - 16 linked cases
- **Childcare facilities**
  - Six new outbreaks in week 52 with 28 linked cases
  - One outbreak – 11 linked cases



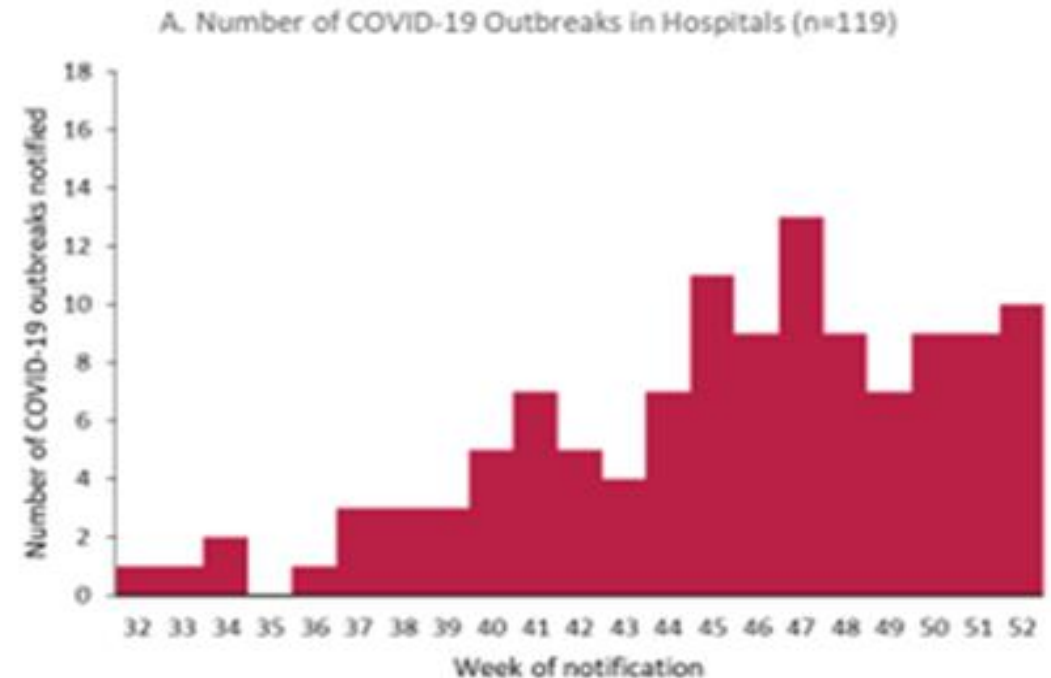
# Acute Hospital Outbreaks – Summary August 2<sup>nd</sup> -December 26<sup>th</sup> 2020



**Table :** Number of COVID-19 outbreaks and cases in acute hospital settings in Ireland, from 02/08/2020 to midnight on 26/12/2020. *Data source: CIDR*

Outbreak location: Acute Hospitals	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-52)			
	Week 52	Week 52 outbreaks: Range in no. of cases	Week 32-52	Number open	Open outbreaks: Range in no. of cases	Cases notified in week 52	Total cases	Total ICU cases	Total number of deaths
	10	1-10	119	55	0-138	57	1593	34	126

- Between weeks 32-52, a total of 1593 confirmed cases linked to 119 notified outbreaks in acute hospitals
- 10 new outbreaks were notified in week 52 with 39 linked cases
- 55 outbreaks remain ‘open’
- Open outbreaks range in size from 0-138, four outbreaks have more than 100 linked cases each



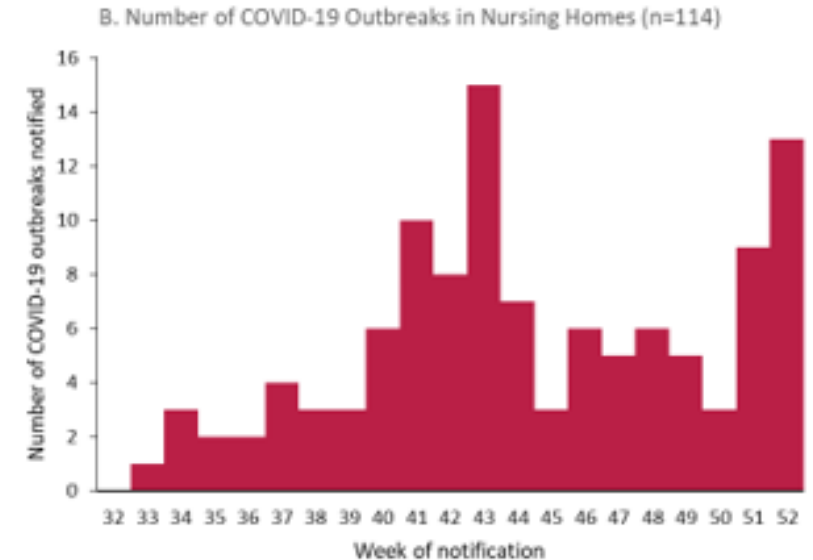
Data source: CIDR December 29<sup>st</sup> 2020  
 \*Data to midnight 26/12/2020

# Nursing Homes and Community Hospital/Long Stay Units: Summary August 2nd -December 26th 2020



Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-52)				
	Week 52	Week 52 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-52	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 52	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Nursing home	13	0-20	114	47	0-86	146	2011	112	2	143
Community Hospital/Long-stay unit	1	2	9	6	1-54	2	90	2	0	1
<b>Total</b>	<b>14</b>	<b>0-20</b>	<b>123</b>	<b>53</b>	<b>0-86</b>	<b>148</b>	<b>2101</b>	<b>114</b>	<b>2</b>	<b>144</b>

- Between weeks 32-52, a total of 2,101 confirmed cases linked to 123 notified outbreaks in nursing homes and community hospitals/long-stay units
- 14 new outbreaks were notified in week 52 with 53 linked cases
- 53 outbreaks remain 'open' with 1047 linked cases
- Open outbreaks range in size from 0-86, five largest outbreaks have 71, 72, 79, 82 and 86 respectively



Data source: CIDR December 29<sup>st</sup>

# Outbreaks associated with school children and staff, childcare facilities and third level students - Summary August 2nd -December 26th 2020



Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-52)				
	Week 52	Week 52 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-52	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 52	Total cases	Total hospitalised cases	Total ICU cases <sup>***</sup>	Total number of deaths
School*	21	1-16	284	103	0-48	43	1205	8	0	0
University/college/third level students**	0	n/a	90	34	2-190	0	1006	12	0	0
Childcare facility	6	0-11	102	25	0-22	35	517	3	1	0
<b>Total</b>	<b>27</b>	<b>0-16</b>	<b>476</b>	<b>162</b>	<b>0-190</b>	<b>78</b>	<b>2728</b>	<b>23</b>	<b>1</b>	<b>0</b>

\*These outbreaks are outbreaks associated with school children +/- school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks

\*\*These outbreaks also include outbreaks among third level students that may have occurred in other locations, such as private houses or social gatherings, and may not be directly linked to a University/college location

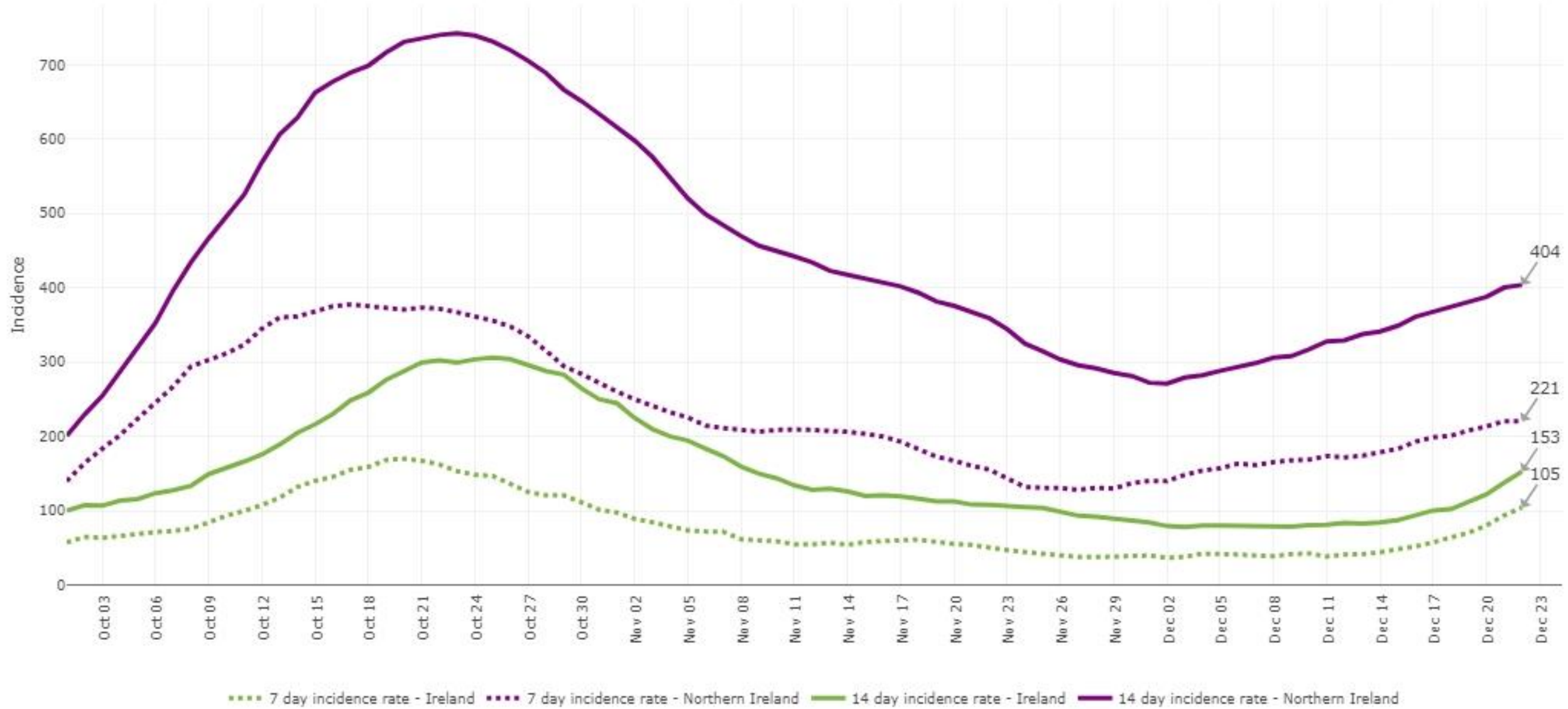
\*\*\*Case admitted to ICU is an adult

<sup>#</sup>n/a is used where there were no outbreaks in a category or where there are no confirmed cases currently linked to any outbreak in that category (see technical note 6)

- Between weeks 32-52, a total of 2728 confirmed cases linked to 476 notified outbreaks in schools, childcare facilities (CCFs) and third level students
- Twenty-seven new outbreaks in week 52 – 21 in schools with 72 linked cases and six in CCFs with 28 linked cases
- 128 school and CCF outbreaks remain 'open' with 632 linked cases

Data source: CIDR December 29<sup>st</sup> 2020  
\*Data to midnight 26/12/2020

7 and 14 day Incidence rates for Ireland and Northern Ireland



Note – calculated using the 2016 population estimates for both ROI and NI.

Source: HPSC CIDR Extract 24122020 and health-ni.gov.uk daily data 23/12/20.

### Laboratory Completed Tests during Last 7 Days (22 - 28 Dec 2020) by LGD

Local Government District	+ve Cases Last 7 Days	Last 7 Day Rate per 100K	Individuals Tested Last 7 Days
Antrim and Newtownabbey	418	293.0	2,855
Ards and North Down	233	144.8	2,836
Armagh City, Banbridge and Crai...	703	329.0	3,993
Belfast	852	249.7	7,192
Causeway Coast and Glens	373	258.6	2,323
Derry City and Strabane	619	410.8	3,582
Fermanagh and Omagh	429	367.2	2,605
Lisburn and Castlereagh	392	270.0	2,981
Mid and East Antrim	449	324.0	2,577
Mid Ulster	546	370.1	2,851
Newry, Mourne and Down	519	288.0	3,353
Not Known	153		1,454
<b>Total</b>	<b>5,686</b>	<b>302.2</b>	<b>38,602</b>

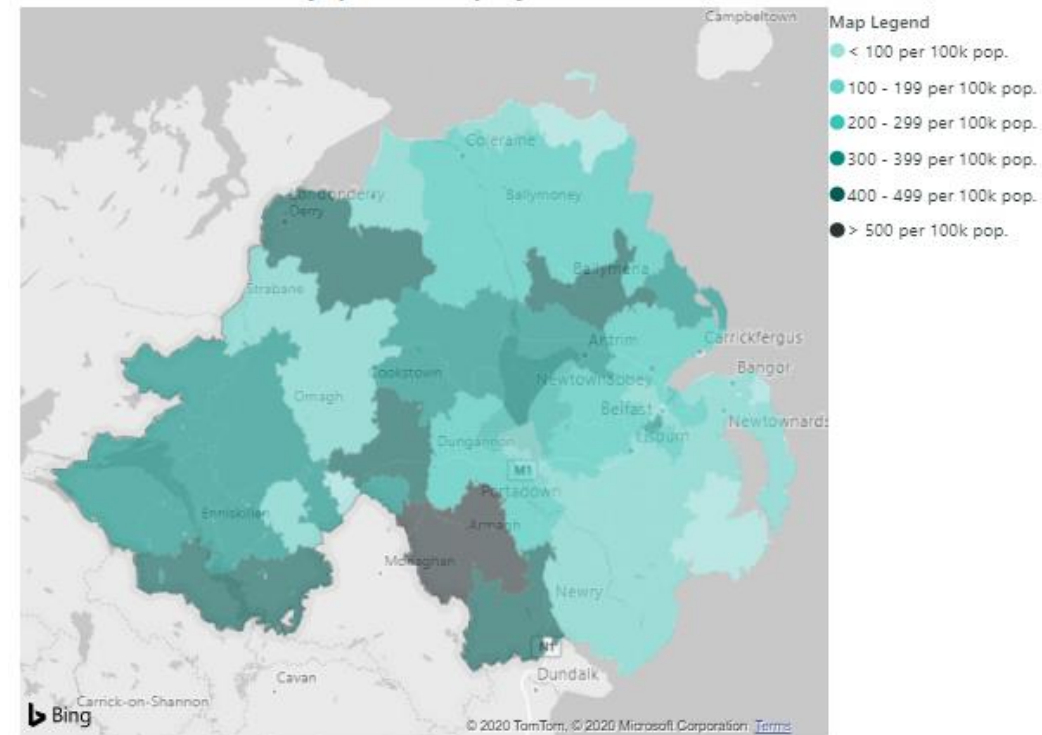
Monaghan 298 - 455

Donegal 280 - 457

Cavan 143 - 247

Louth 234 - 395

Positive Cases in last 7 Days per 100K Pop. by Postal District (21 Dec-27 Dec 2020)





# Test & Trace Update

## Testing and contact tracing NPHET update

### *Testing*

Over the past seven days, 21<sup>st</sup> – 27<sup>th</sup> December, there has been approximately 97,698 swabs taken for COVID-19 testing.

Of these:

- 68,417 (70%) of these were taken in the community
- 18,974 (19%) swabs were taken in acute settings.
- 10,307 (11%) swabs taken were taken as part of the Serial Testing programmes of staff in residential care facilities and staff in food production facilities.

### *Contact Tracing*

From 21<sup>st</sup> – 27<sup>th</sup> December, a total of 44,718 calls were made in the Contact Tracing Centres. Over the past seven days, the average number of close contacts per case was 5, compared to 4.2 in the previous week. This continues to rise and on 28<sup>th</sup> December it was 5.9

Additional activities ongoing in contact tracing include active surveillance calls daily or every second day in addition to daily active surveillance texts.

## Turnaround Times (21<sup>st</sup>- 27<sup>th</sup> December)

### *End-to-end turnaround time*

- The median end-to-end turnaround time, from referral to SMS, for **not detected** tests in the community setting was **1.8 days**.
- The median turnaround time for time, from referral to communication of a **detected result** by SMS, in community settings was **1.8 days**.
- The median end-to-end turnaround time, from referral to the end of contact tracing, for **detected cases** in the community setting was **2.8 days**.

**Overall Swab to laboratory result communicated – Medians:** 24 hours in Acute , 24 hours in Serial Testing, 25 hours in Community

### *Referral to appointment*

In the community, the median time from referral to appointment was 0.8 days.

74.5% of GP referrals are provided with a COVID-19 test appointment within 24 hours.

### *Contact Tracing:*

The median time to complete all calls, from the 14<sup>th</sup> – 20<sup>th</sup> of December was 0.9 days, the average is 1.

Source: HSE



## CMP close contact update (week ending 27<sup>th</sup> Dec)

The number of close contacts during week ending 27<sup>th</sup> December was 33,390, a 119% increase (more than double) compared to the previous week. 91% (30,303) of these contacts had been informed of their close contact status by 9am on the 28<sup>th</sup> of December.

Of those referred for testing with an appointment on or before the 27<sup>th</sup> of December 81% have attended Test 1.

The current positivity rate for Test 1 is 12.9% for results returned at the time of report preparation.

The number of complex contact settings increased by 79%, from 2,315 to 4,141 for the week ending December 27<sup>th</sup>.

### SARS-CoV2 Test 1\* Results by Circumstances – Contacts Created Last Week – (21/12 to 27/12)

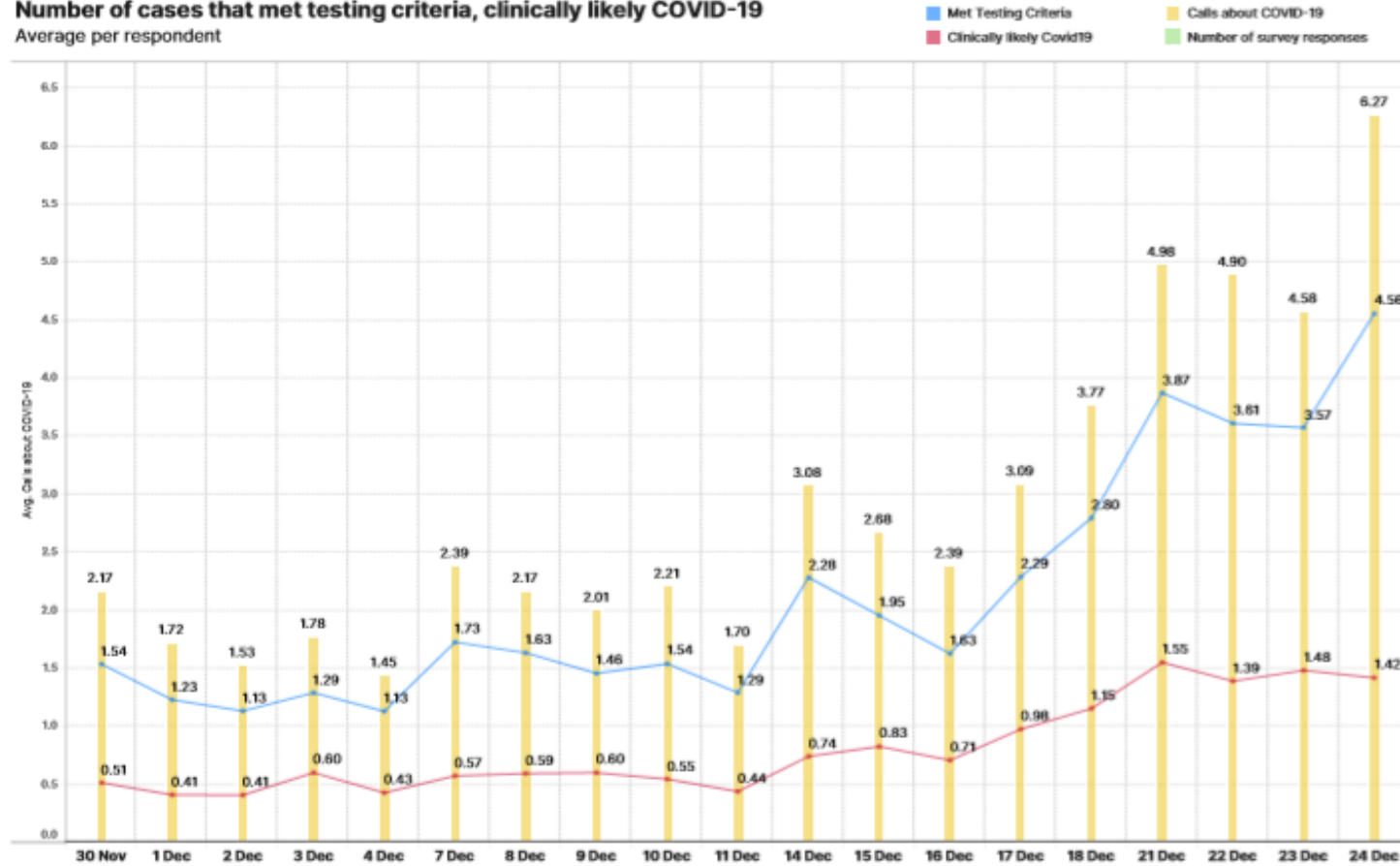
<b>Circumstances of Contact</b>	<b>Positive Results</b>	<b>Number of Results Reported</b>	<b>Positivity Rate</b>
<b>Household</b>	497	2463	20.2%
<b>Social</b>	270	2135	12.6%
<b>Workplace</b>	40	378	10.6%
<b>Pre-School/Crèche</b>	31	495	6.3%
<b>Primary School</b>	46	881	5.2%
<b>Secondary School</b>	16	319	5.0%
<b>Special School</b>	0	12	**
<b>Third Level Education</b>	1	5	**
<b>Healthcare Setting: Patient</b>	4	20	**
<b>Healthcare Setting: Staff</b>	1	26	**
<b>Sport</b>	0	30	**
<b>Transport: Flight</b>	6	184	3.3%
<b>Transport: Other</b>	5	33	**
<b>Other</b>	13	110	11.8%
<b>Not Recorded</b>	167	1418	11.8%
<b>Total</b>	1097	8509	12.9%

Table 3 – Test 1\* Results by Circumstances of Contact – 21/12 to 27/12

\*Note: Test 1 refers to the Day 0 test for close contacts informed before 5pm on the 23<sup>rd</sup> December and the Day 5 test for close contacts informed after 5pm on the 23<sup>rd</sup> December. Test 2, the Day 7 test, was temporarily suspended from the 23<sup>rd</sup> December due to the surge in testing activity.

\*\* Unstable positivity rate due to small numbers.

**Number of cases that met testing criteria, clinically likely COVID-19**  
Average per respondent



Source: **COVID-19**  
GP Community Tracker



21st December 2020



## Age specific sentinel GP ILI consultation rates per 100,000 population by week and age specific thresholds

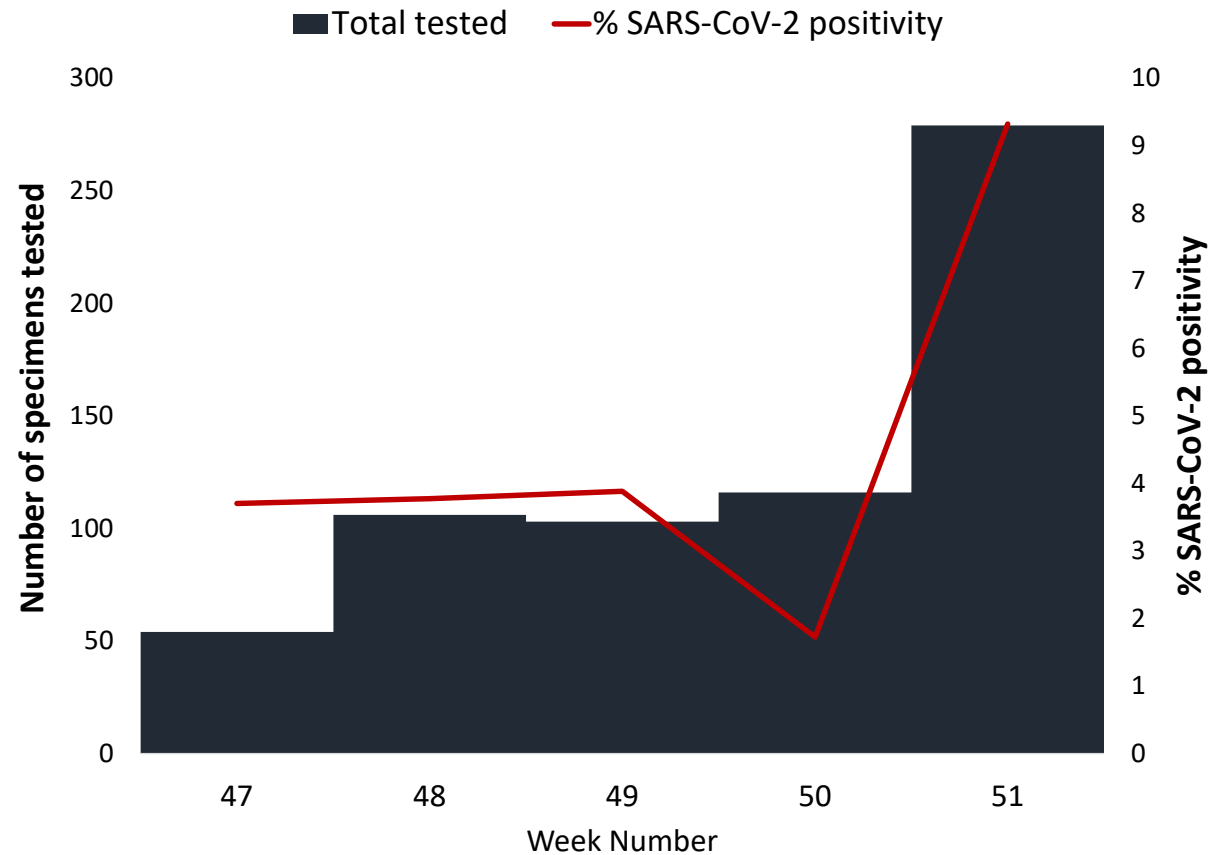
MEM Threshold Levels	Below Baseline	Low	Moderate	High	Extraordinary
----------------------	----------------	-----	----------	------	---------------

Sentinel GP ILI consultation/100,000 pop.	Week of Consultation											
	40	41	42	43	44	45	46	47	48	49	50	51
All Ages	23.2	35.2	33.1	37.1	16.5	17.7	16.4	18.7	20.2	22.7	30.1	45.0
<15 yrs	18.6	25.8	27.8	31.8	10.0	16.1	24.7	18.7	28.0	24.8	33.5	40.5
15-64 yrs	25.2	42.2	37.1	40.5	18.8	19.0	13.3	19.7	19.1	22.4	29.2	48.0
≥65 yrs	20.5	16.3	22.0	29.1	15.7	14.1	18.2	13.4	13.0	20.9	29.1	37.3
Number of reporting practices (N=60)	51	55	55	56	57	54	58	57	58	58	57	56

*Note: Moving Epidemic Method (MEM) threshold levels are colour coded – the MEM method is recommended internationally and by ECDC to establish thresholds for influenza-like illness (ILI)/influenza*



## % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER



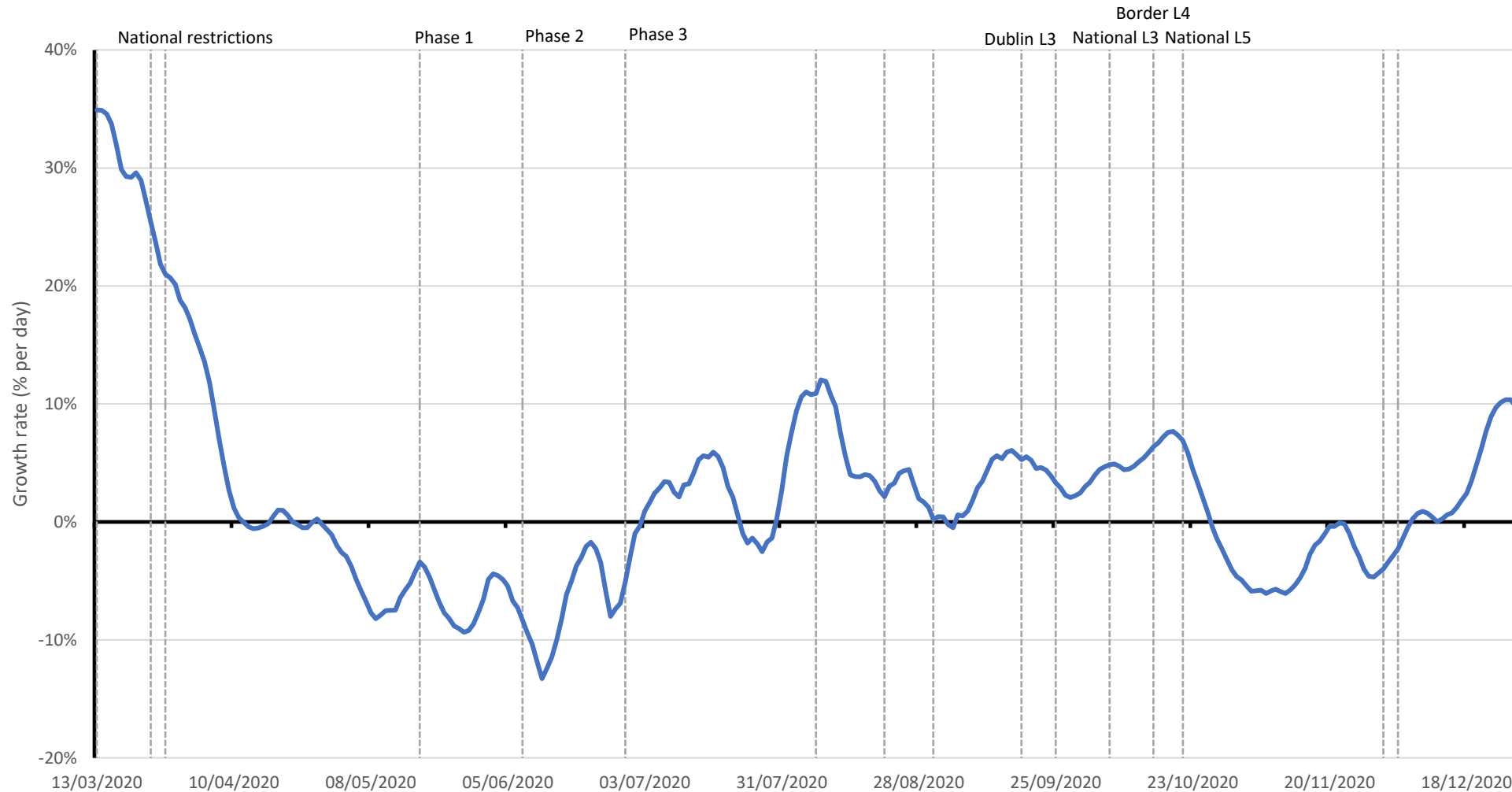
Week Number	Total tested	Number SARS-CoV-2 positive	% SARS-CoV-2 positivity
47	54	2	3.7
48	106	4	3.8
49	103	4	3.9
50	116	2	1.7
51	279	26	9.3
<b>Total</b>	<b>658</b>	<b>38</b>	<b>5.8</b>



# Growth in Cases & R number

# Growth rate for case numbers

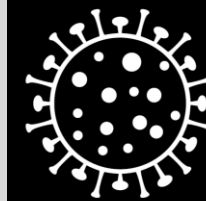
When the pandemic in Ireland grew very rapidly in early March, at over 30% per day. The national restrictions introduced in late March suppressed transmission, with daily incidence decreasing at -5% to -10% per day. This was sustained until the end of June, after which case numbers started to grow, on average at 4% to 5% per day. A period of very rapid growth can be seen in early August associated with the outbreaks in Kildare-Laois-Offaly. Level 3 measures in Dublin reduced growth rate to zero for a period (data not shown). Incidence decreased at -5% to -7% per day for the first three weeks of Level 5 measures, at a slower rate thereafter, and is now increasing by close to 10% per day



Growth rate calculated as the average growth rate over a 14-day trailing window; cases dated by notification (event) date.

# Estimates of effective reproduction number (R)

Reproduction number is high, currently estimated at 1.6 to 1.8.



Coronavirus  
**COVID-19**  
Public Health  
Advice

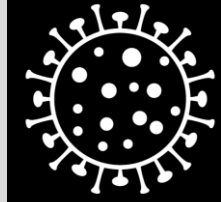
Method	Estimate	95% confidence interval
SEIR model-inferred	1.98	1.65 – 2.43
Bayesian model	1.65	1.02 – 2.65
Time-dependent R	1.77	1.59 – 1.95
GAM estimate 21 Dec 2020	1.43	1.18 – 1.68
GAM estimate 28 Dec 2020	1.62	1.23 – 2.01

Estimates generated 29 December 2020, refer to IEMAG technical notes for methodology. Estimates are unreliable when case numbers are low or variable. SEIR-inferred estimate is slow to respond to changes in R. These R estimates relate to viral transmissions and infections that occurred approximately 7-14 days ago. The estimate of R is influenced by different patterns of transmission in large outbreaks, smaller clusters, and individual transmission.



Rialtas na hÉireann  
Government of Ireland

# Situation analysis 30 December 2020



Coronavirus  
**COVID-19**  
Public Health  
Advice

- The level of infection continues to **increase rapidly**
  - Cases (5-day average) **1213 cases per day**; 14-day incidence **273 per 100,000**
  - Incidence rising across **all age groups, especially those aged 19-24**
    - Incidence in those aged 18 and younger remains below population average
  - **Growth rate** estimated to be **7- 10% per day**, and **doubling time 7-10 days**
  - **Reproduction number** very high – **1.6 – 1.8**
  - Growth rates greater than those seen approaching the peak of the second wave
  - Number of **close contacts** of confirmed cases **increasing**
- **Numbers in hospital increasing rapidly**, numbers in intensive care may be starting to increase, and deaths per day static
- We are now **in a third wave** with older and vulnerable adults a key concern
- A significant number of cases and hospitalisations over coming weeks
- **Stay home if possible**
  - self-isolate and seek referral for test immediately if symptomatic
  - carefully observe public health guidance and restrictions





# European Data

## EU/UK ranked by 14 day percentage change (28<sup>th</sup> December)

EU/EEA and the UK	14 day incidence	Previous 14 day incidence	% change in 14 day incidence
<b>Ireland</b>	<b>211.53</b>	<b>79.08</b>	<b>167%</b>
United Kingdom	680.29	355.2	92%
Czechia	870.87	539.56	61%
Netherlands	871.8	584.51	49%
Denmark	738.79	563.52	31%
Slovakia	633.8	504.79	26%
Latvia	580.69	467.08	24%
Spain	272.76	221.79	23%
Estonia	559.58	458.11	22%
France	281.68	243.4	16%
Lithuania	1371.93	1237.78	11%
Germany	376.42	342.96	10%
Cyprus	566.05	557.71	1%
Sweden	752.03	762.12	-1%
Belgium	263.37	274.95	-4%
Slovenia	893.82	1006.82	-11%
Portugal	448.46	518.57	-14%
Malta	265.44	312.77	-15%
Poland	318.23	395.71	-20%
Italy	331.68	420.4	-21%
Romania	305.87	437.81	-30%
Austria	315.7	472.94	-33%
Finland	72.68	111.86	-35%
Croatia	679.32	1191.54	-43%
Luxembourg	630.85	1153.72	-45%
Greece	103.21	190.94	-46%
Hungary	339.52	690.95	-51%
Bulgaria	237.59	521.61	-54%



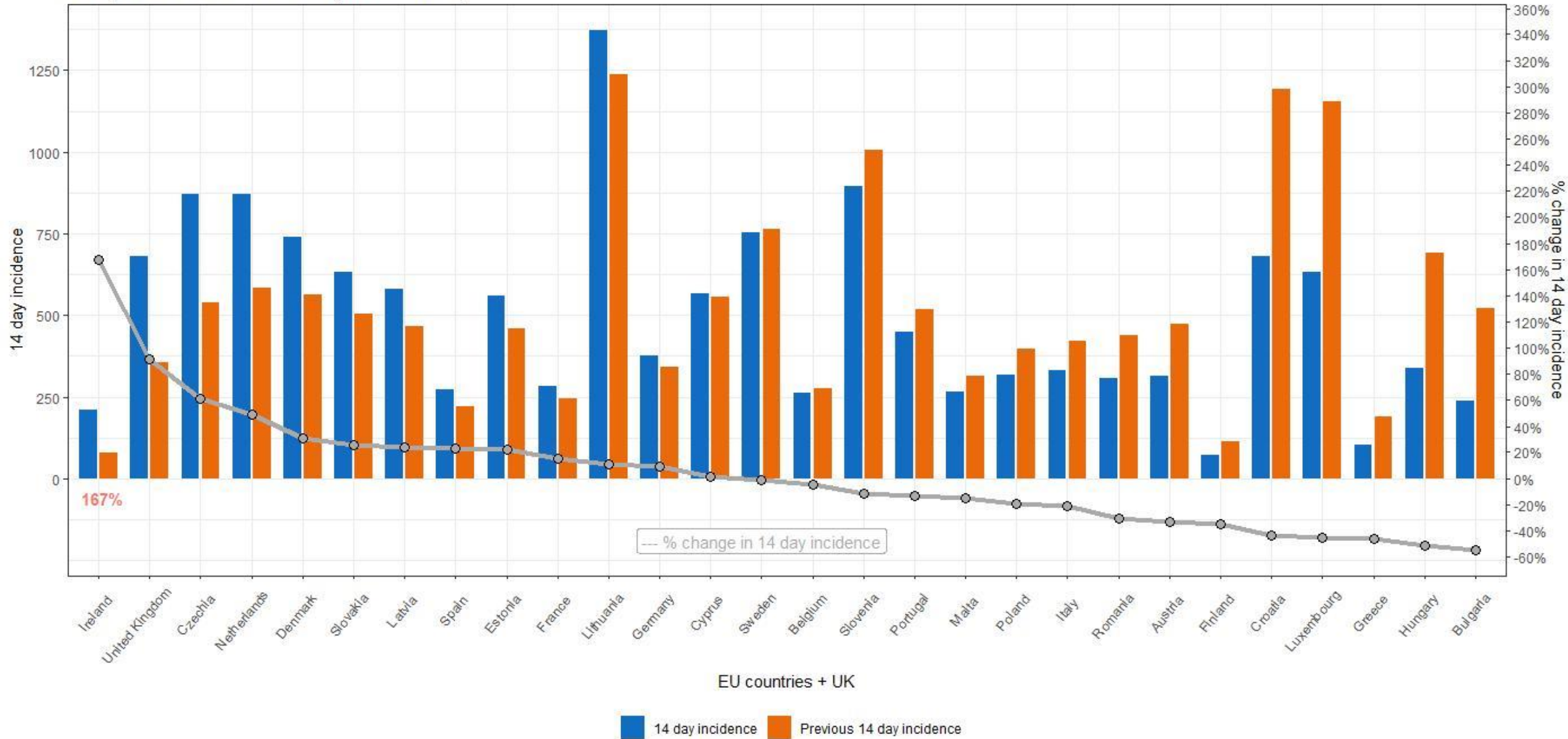
## EU/UK ranked by 14 day incidence (28<sup>th</sup> December)

EU/EEA and the UK	14 day incidence	Previous 14 day incidence	% change in 14 day incidence
Lithuania	1371.93	1237.78	11%
Slovenia	893.82	1006.82	-11%
Netherlands	871.8	584.51	49%
Czechia	870.87	539.56	61%
Sweden	752.03	762.12	-1%
Denmark	738.79	563.52	31%
United Kingdom	680.29	355.2	92%
Croatia	679.32	1191.54	-43%
Slovakia	633.8	504.79	26%
Luxembourg	630.85	1153.72	-45%
Latvia	580.69	467.08	24%
Cyprus	566.05	557.71	1%
Estonia	559.58	458.11	22%
Portugal	448.46	518.57	-14%
Germany	376.42	342.96	10%
Hungary	339.52	690.95	-51%
Italy	331.68	420.4	-21%
Poland	318.23	395.71	-20%
Austria	315.7	472.94	-33%
Romania	305.87	437.81	-30%
France	281.68	243.4	16%
Spain	272.76	221.79	23%
Malta	265.44	312.77	-15%
Belgium	263.37	274.95	-4%
Bulgaria	237.59	521.61	-54%
<b>Ireland</b>	<b>211.53</b>	<b>79.08</b>	<b>167%</b>
Greece	103.21	190.94	-46%
Finland	72.68	111.86	-35%



- As of 16<sup>th</sup> 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>

## European 14 incidence rates (28 December)



- As of 16<sup>th</sup> 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>

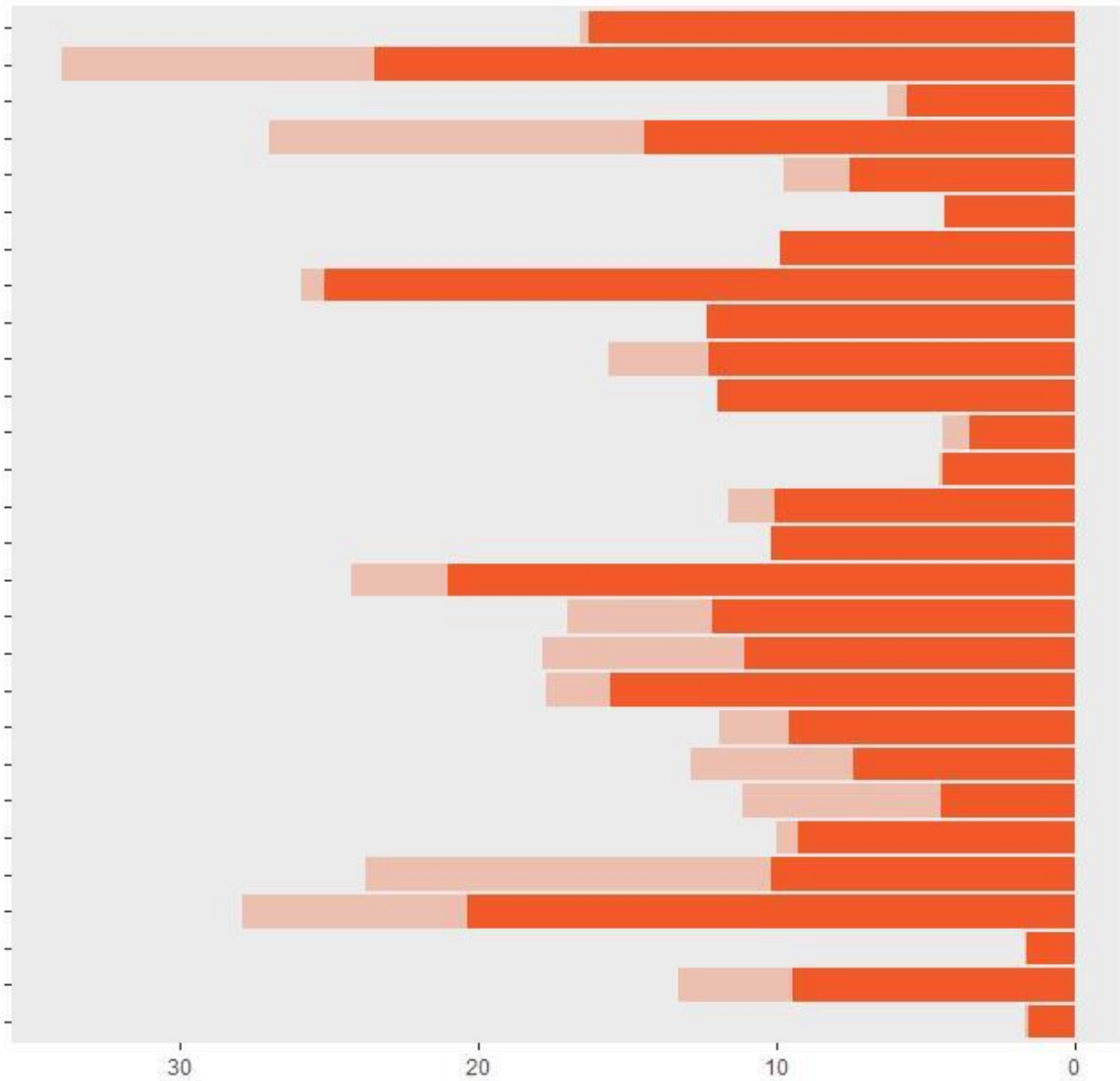
## EU/UK ranked by 7 day percentage change (28<sup>th</sup> December)

EU/EEA and the UK	7 day incidence	Previous 7 day incidence	% change in 7 day incidence
<b>Ireland</b>	<b>134.21</b>	<b>77.32</b>	<b>74%</b>
United Kingdom	378.59	301.7	25%
Malta	141.32	124.11	14%
Latvia	291.75	288.94	1%
Czechia	437.18	433.69	1%
Estonia	280.81	278.77	1%
Slovenia	434.5	459.32	-5%
Cyprus	274.46	291.59	-6%
Lithuania	656.87	715.06	-8%
Spain	128.68	144.08	-11%
Netherlands	408.1	463.7	-12%
Austria	145.57	170.12	-14%
Italy	152.53	179.15	-15%
France	128.54	153.15	-16%
Slovakia	284.58	349.22	-19%
Portugal	200.52	247.94	-19%
Poland	141.83	176.4	-20%
Germany	165.22	211.21	-22%
Finland	31.1	41.58	-25%
Denmark	314.73	424.05	-26%
Belgium	110.64	152.72	-28%
Romania	128.11	177.76	-28%
Greece	41.58	61.63	-33%
Sweden	286.44	465.6	-38%
Hungary	119.45	220.07	-46%
Croatia	231.85	447.47	-48%
Bulgaria	80.32	157.27	-49%
Luxembourg	202.4	428.45	-53%



- As of 16<sup>th</sup> 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>

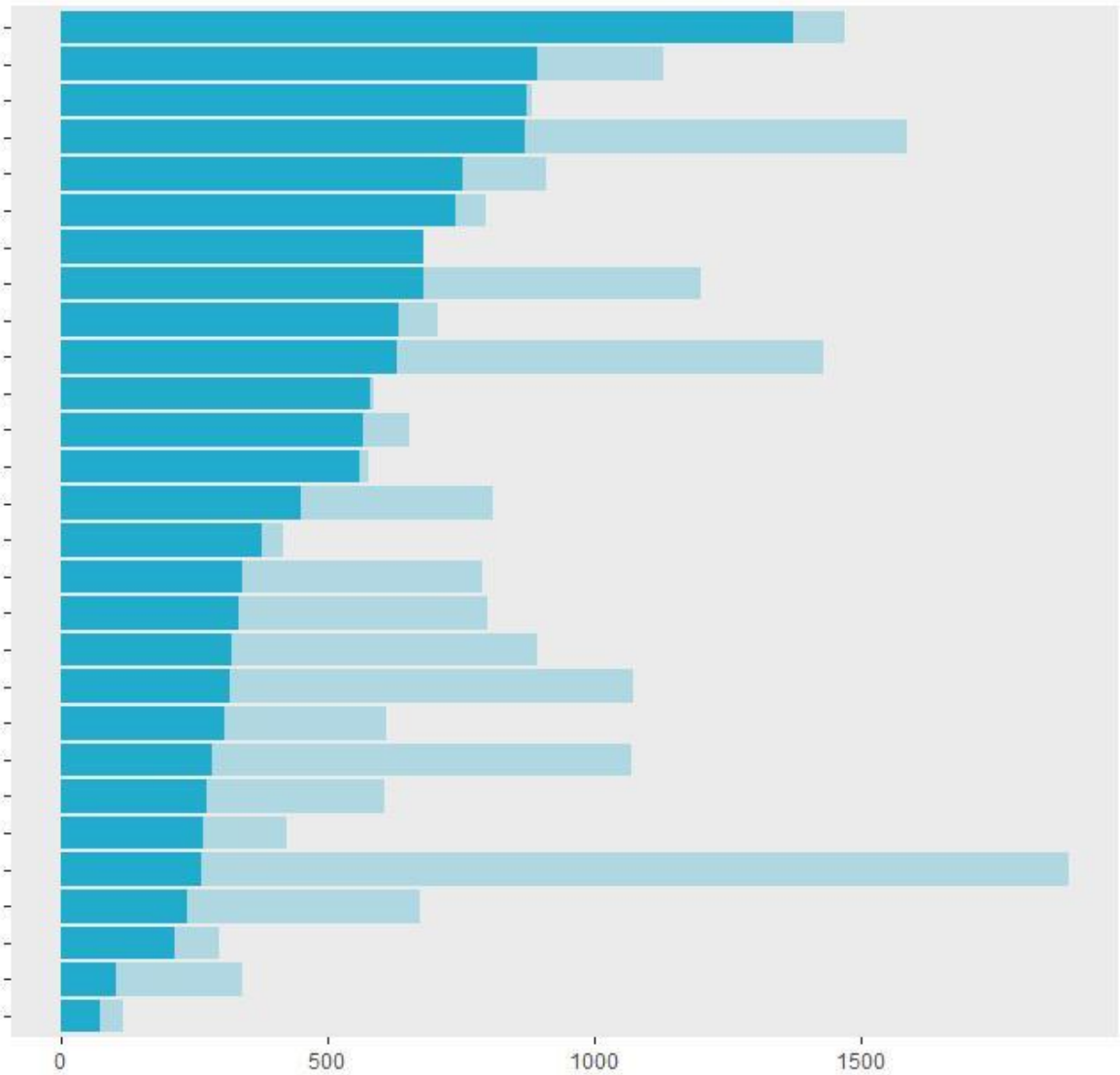
14 day mortality rate



EU Country

- Lithuania
- Slovenia
- Netherlands
- Czechia
- Sweden
- Denmark
- United Kingdom
- Croatia
- Slovakia
- Luxembourg
- Latvia
- Cyprus
- Estonia
- Portugal
- Germany
- Hungary
- Italy
- Poland
- Austria
- Romania
- France
- Spain
- Malta
- Belgium
- Bulgaria
- Ireland
- Greece
- Finland

14 day case incidence



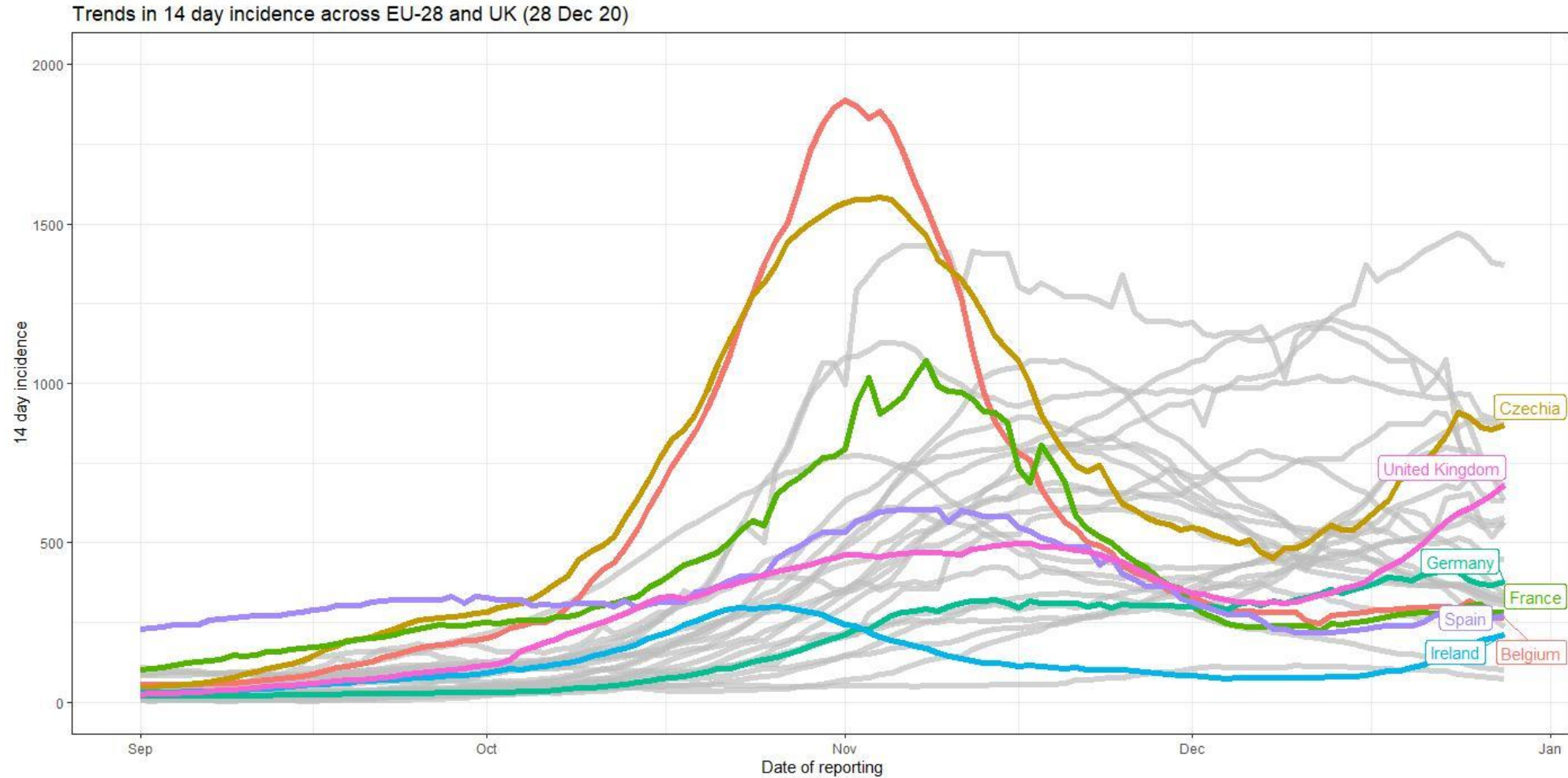
Current 14 day mortality rate Highest mortality rate during 2nd wave (Sep-Dec)

Current 14 day case incidence Highest case incidence during 2nd wave (Sep-Dec)

Updated 28 December

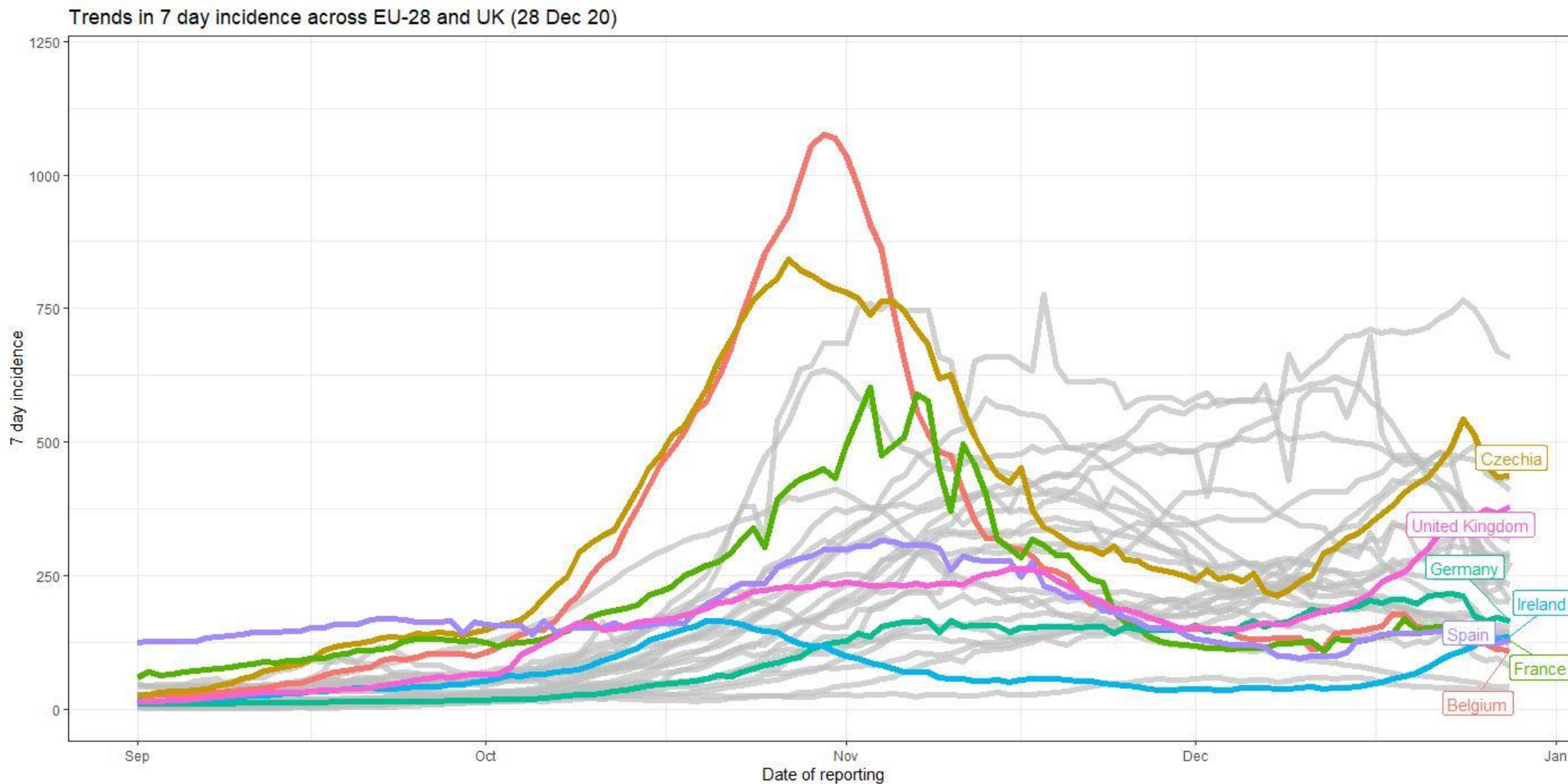
- As of 16<sup>th</sup> Dec, this daily data is now sourced from Our World In Data (OWID) instead of ECDC as they have switched to weekly reporting (Thursday evenings).
- OWID source their confirmed cases and deaths data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). <https://github.com/owid/covid-19-data/tree/master/public/data>

# European trends since start September (14 day incidence)



- As of 16<sup>th</sup> 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>

# European trends since start September (7 day incidence)



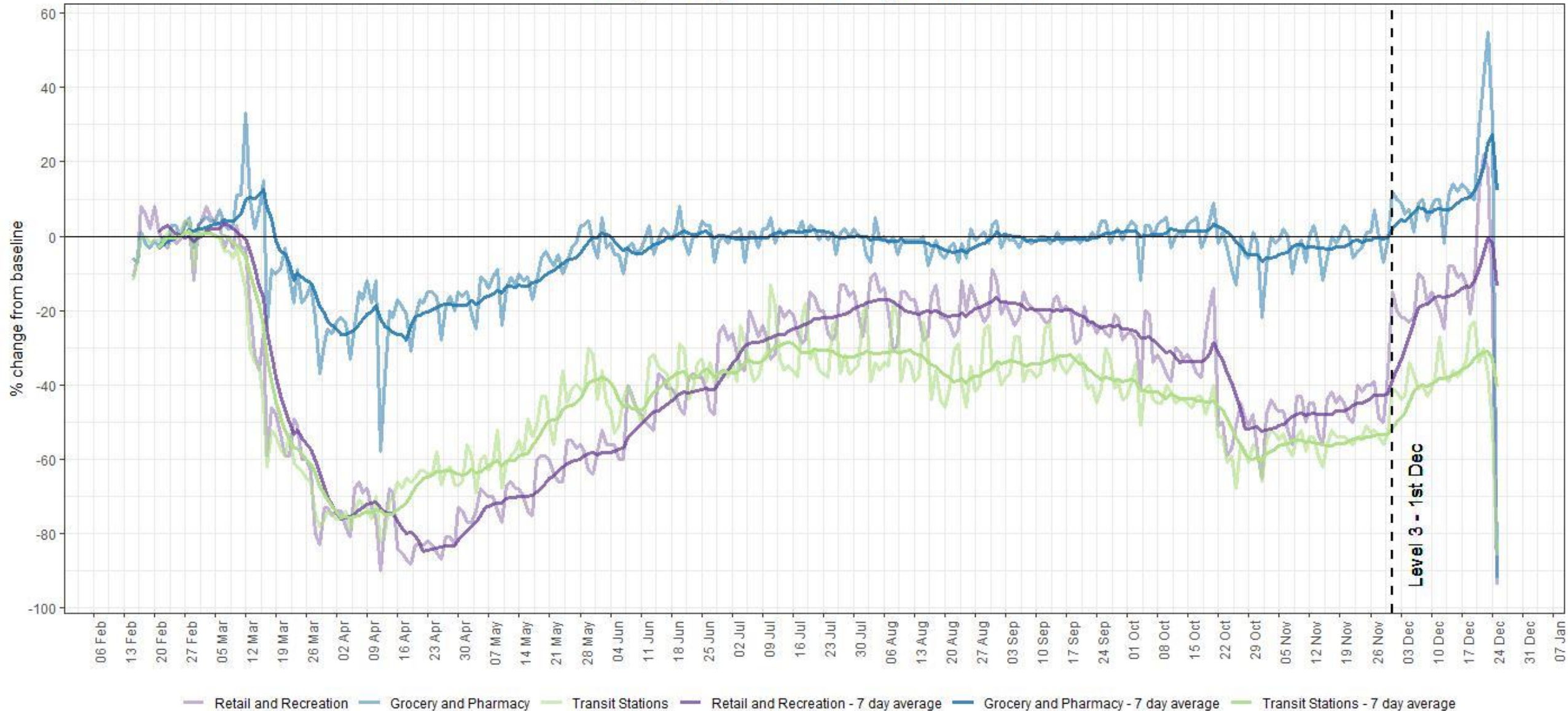
- As of 16<sup>th</sup> Dec, this daily data is now sourced from Our World In Data (OWID) instead of ECDC as they have switched to weekly reporting (Thursday evenings).
- OWID source their confirmed cases and deaths data from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). <https://github.com/owid/covid-19-data/tree/master/public/data>



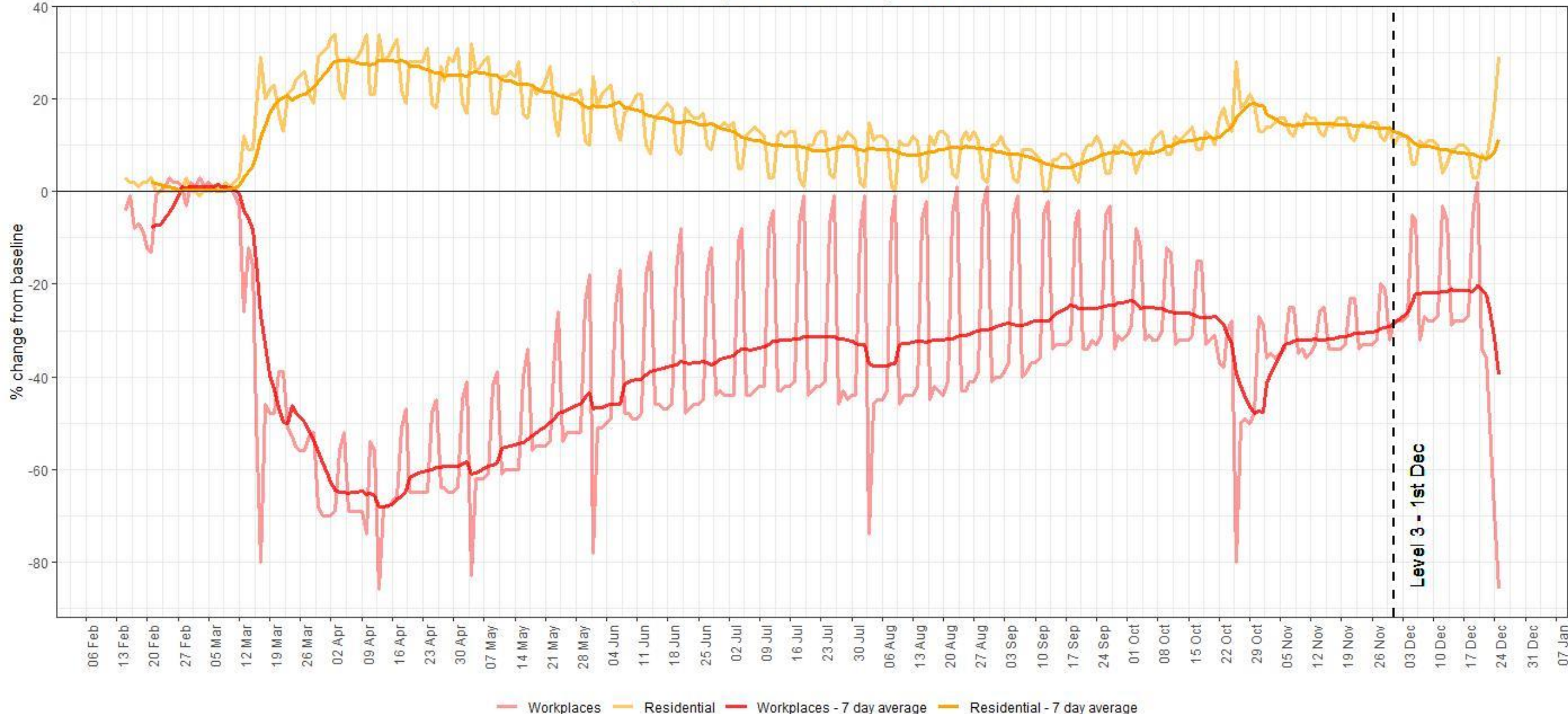


# Compliance Data

Google Mobility Ireland - % change from baseline



Google Mobility Ireland - % change from baseline



Workplaces Residential Workplaces - 7 day average Residential - 7 day average

Level 3 - 1st Dec

Apple Mobility Ireland - % change from baseline

