



An Roinn Sláinte
Department of Health

COVID NPHET Update 23rd December 2020

Current situation



	01-Oct	26-Oct (peak 14 day inc.)	04-Dec	07-Dec	10-Dec	13-Dec	16-Dec	19-Dec	22-Dec
14-day incidence	96.12	306.46	78.18	80.18	78.67	83.90	87.72	102.38	138.24
5-day average cases	407.2	921.2	256.8	286.2	256.4	302.6	338.0	469.4	713.6
Total weekly cases	2608	7012	1817	1967	1993	1967	2312	3036	4478

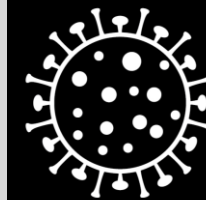
	01-Oct	26-Oct (peak 14 day inc.)	04-Dec	07-Dec	10-Dec	13-Dec	16-Dec	19-Dec	22-Dec
No. Hospital (8.A.M)	122	344	239	232	203	192	198	206	237
No. in ICU (6.30 P.M)	22	40	32	28	37	32	32	31	28

	01-Oct	26-Oct (peak 14 day inc.)	04-Dec	07-Dec	10-Dec	13-Dec	16-Dec	19-Dec	22-Dec
Positivity rate (7 day average)	3.0%	6.1%	2.6%	2.5%	2.5%	2.5%	2.9%	3.8%	4.8%

	August	September	October	November	December
Total Deaths	5	37	123	153	76
Deaths associated with Nursing Home outbreaks	3	12	50	50	26
Deaths associated with Hospital outbreaks	0	7	24	54	25

Cases, numbers in hospital and intensive care

Case numbers are rising rapidly. The number of people in hospital is increasing; the number in ICU and deaths per day are not decreasing.



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	16 Apr	24 Jun	29 Jul	26 Aug	30 Sept	21 Oct	25 Nov	2 Dec	9 Dec	16 Dec	22 Dec
Cases confirmed per day	547	10	18	117	356	1160	303	272	268	330	548
14-day incidence <i>per 100,000 population</i>	157	4.0	5.6	32	92	288	105	85	79	88	122
Hospital in-patients	858	42	11	22	108	279	284	244	228	198	216
<i>Hospital admissions per day</i>	56	2	2	3	10	23	18	14	14	14	20
ICU confirmed cases	147	15	5	6	18	32	33	32	31	33	30
<i>ICU admissions per day</i>	8	< 1	< 1	< 1	2	3	2	2	3	1	1
Deaths confirmed per day	32	< 1	< 1	< 1	1	5	6	7	4	5	5

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.



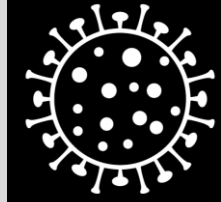
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Cases, Incidence Rates & Testing

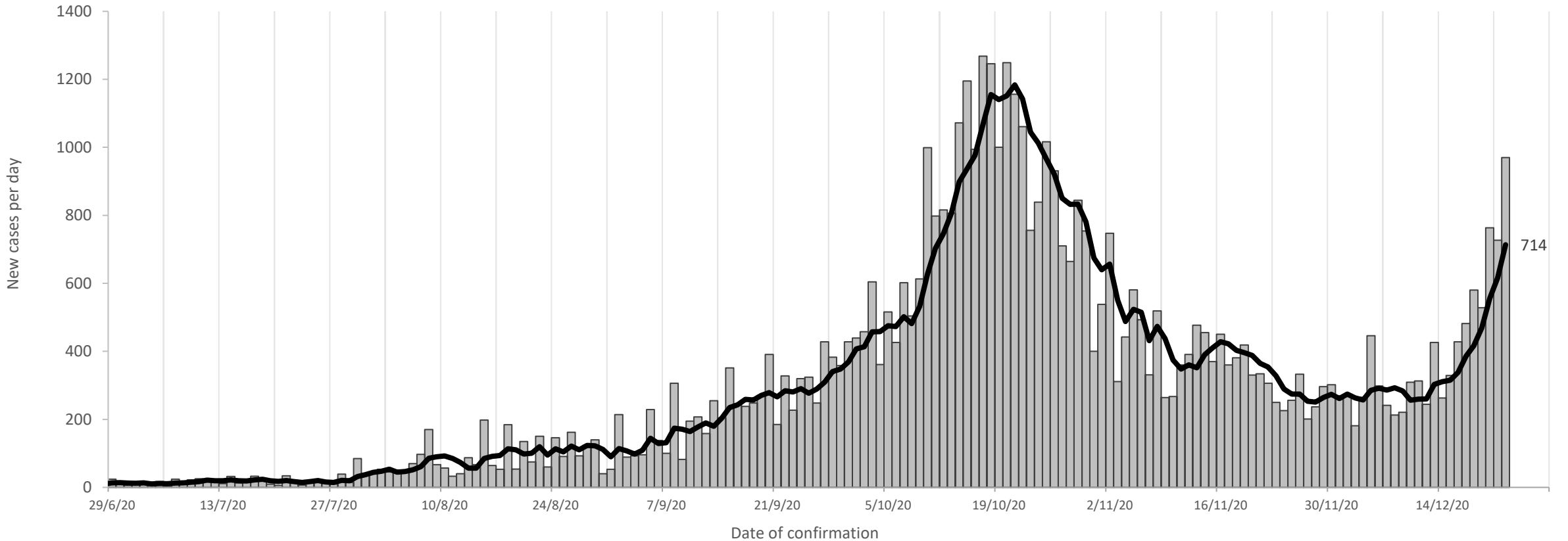
Confirmed cases each day

Daily and weekly count and 5-day rolling average. The 5-day average peaked at 1186 on 21 October, reached a low of 251 on 28 November, and is now **714**



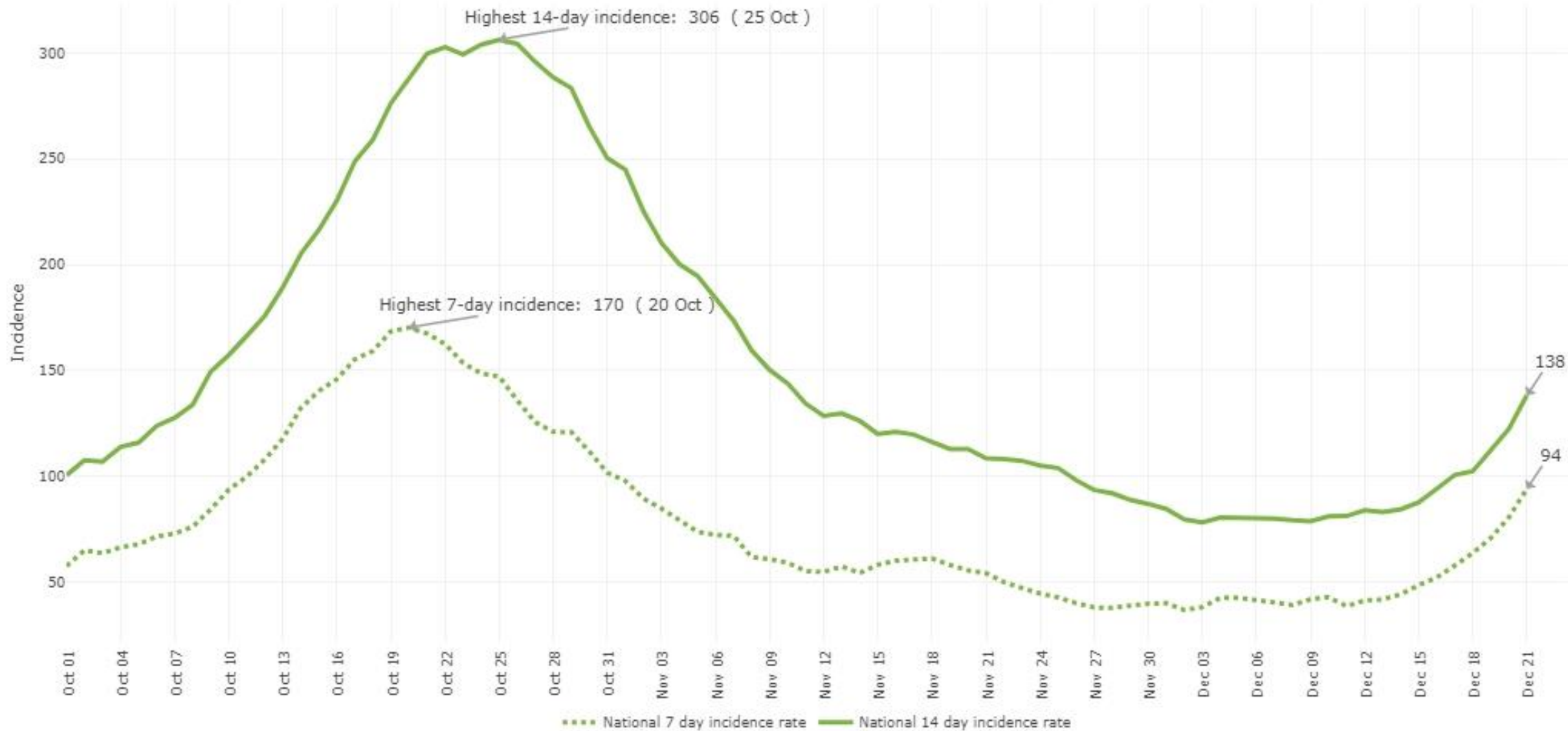
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Cases per week	93	125	139	119	284	540	546	711	796	912	1303	1947	2060	3031	4458	7397	7077	4841	3424	2584	2580	1799	2028	1967	3373
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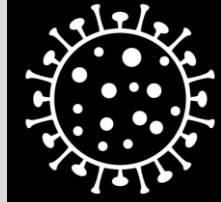
Daily count (bars) 5-day average (line) and weekly counts of the number of laboratory confirmed new cases by date on which they were confirmed by HPSC. Case counts may change due to denotification of cases. Weekly case counts are by event date from midnight Saturday to midnight Saturday.

National 7 and 14 day Incidence rates



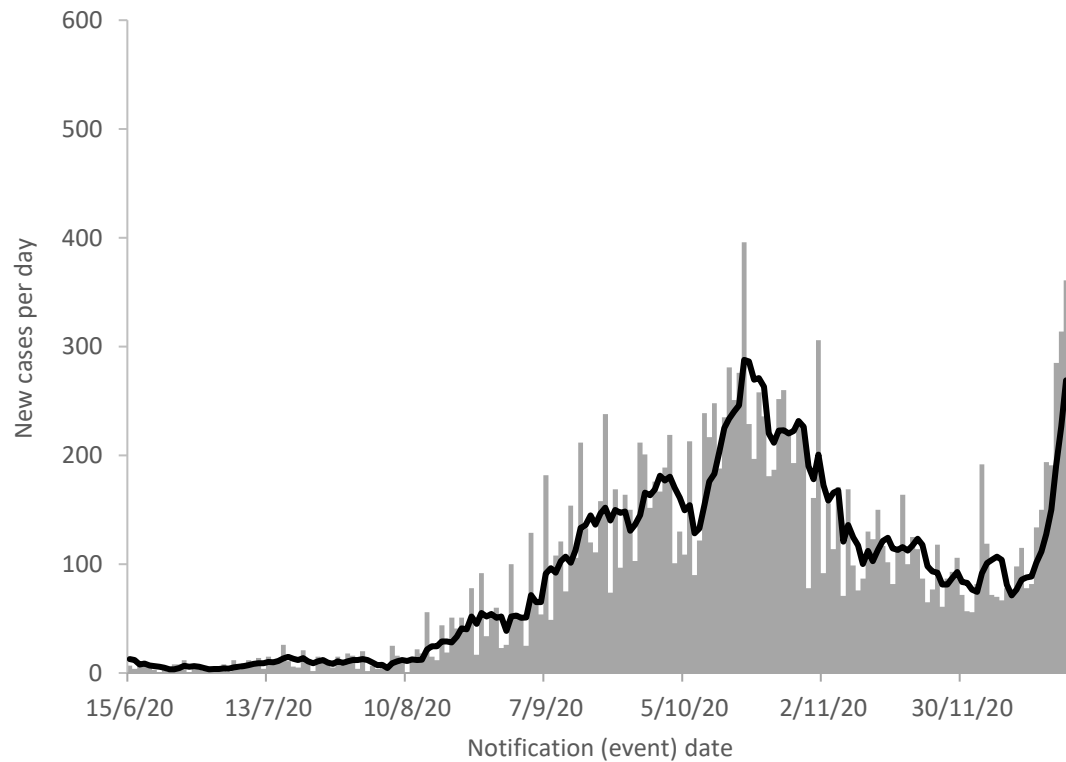
Confirmed cases each day

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.

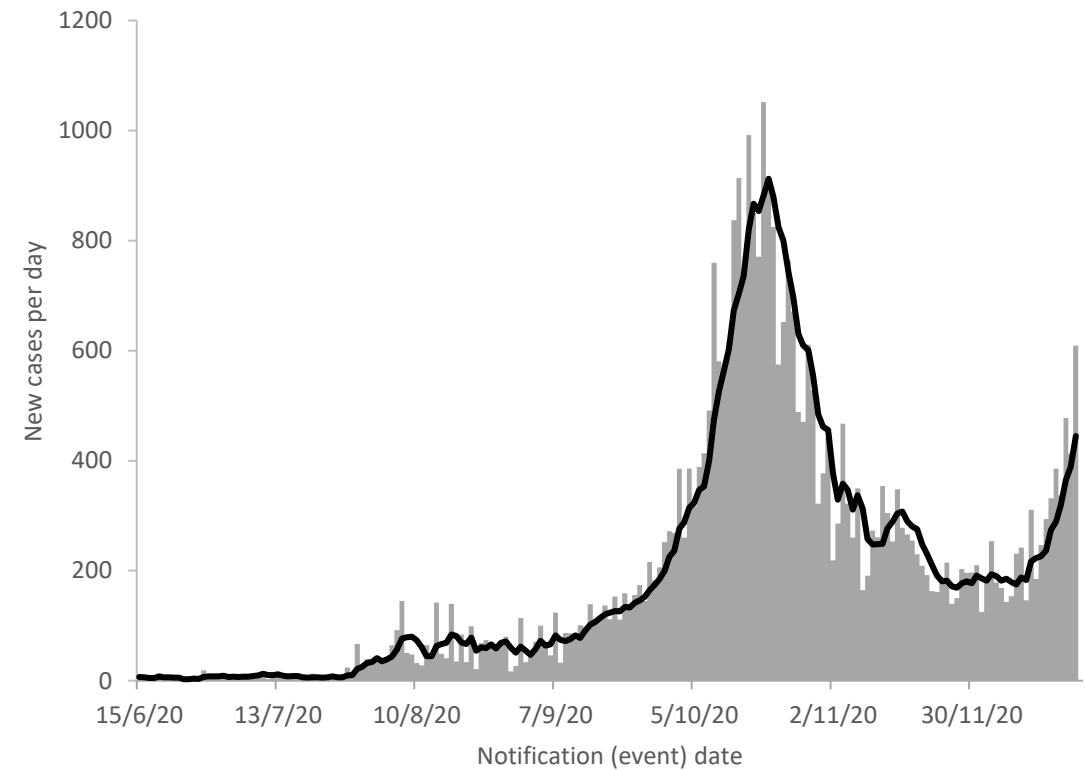


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Dublin

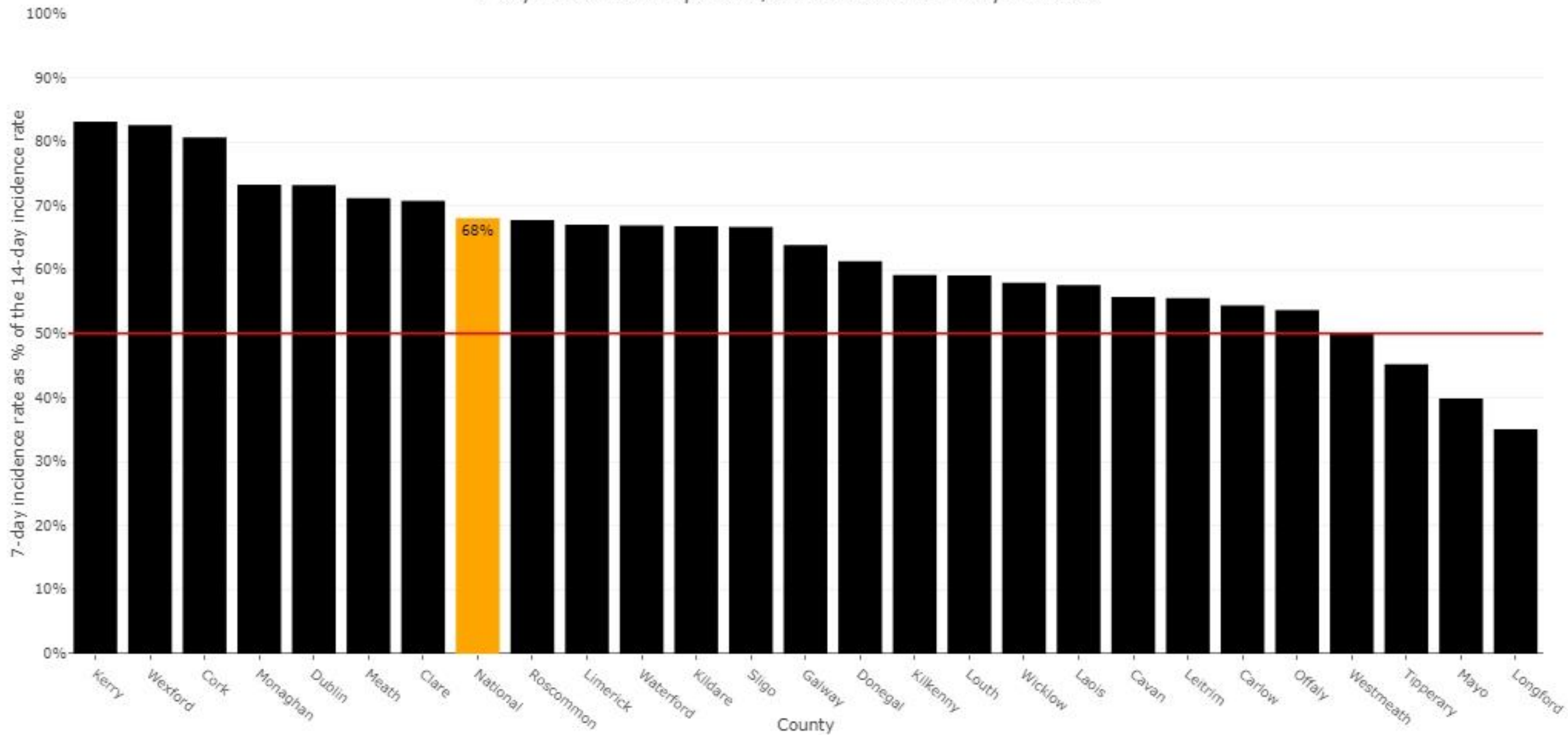


25 counties



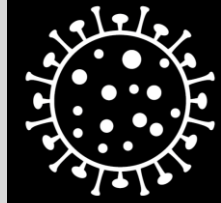
Daily count (bars) 5-day average (line) new cases by date on which they were notified to HPSC and created as an event on the CIDR database

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



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



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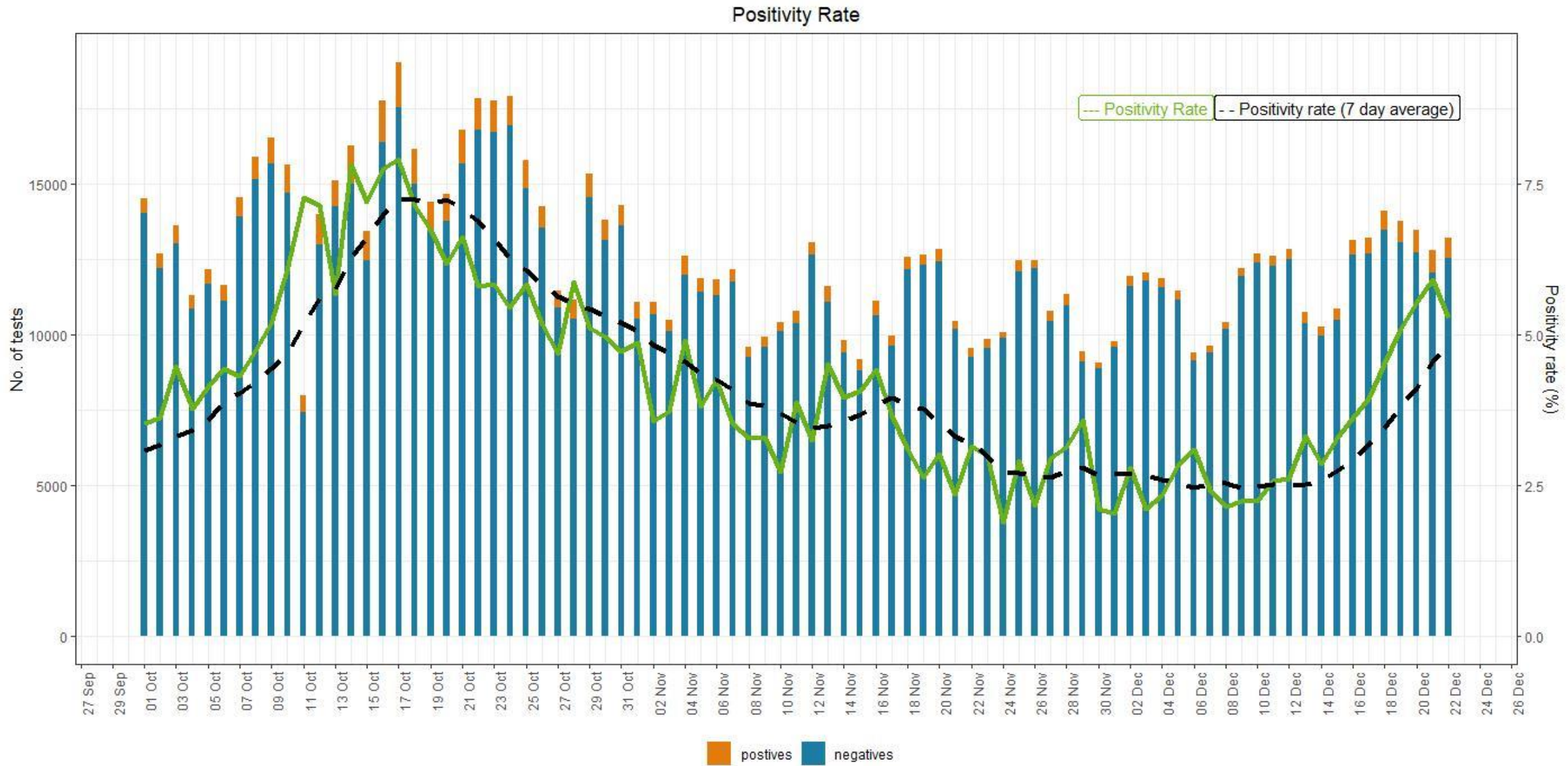
Week	Age band								
	0-4	5-12	13-18	19-24	25-39	40-64	65-74	75-84	85+
26	0.6	0.2	0.3	1.8	1.5	0.7	0.8	1.5	3.0
27	1.5	0.4	0.3	1.8	1.9	0.9	0.0	1.0	0.0
28	0.9	1.1	1.1	10.9	2.0	1.1	1.9	1.0	3.0
29	1.2	0.4	0.8	3.0	3.3	1.9	2.4	1.5	3.0
30	1.8	0.5	1.6	3.6	4.3	0.9	1.9	0.0	1.5
31	4.8	2.6	7.3	11.2	8.6	4.6	2.1	2.5	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	155.2	142.9	91.8	67.7	57.7
43	82.7	93.5	176.0	305.5	122.7	121.7	84.6	82.9	69.6
44	54.0	67.1	93.9	153.1	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	90.0	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	21.1	39.7	44.1	57.4	40.1	35.3	22.5	31.6	19.2
51	51.0	57.6	71.6	127.1	87.0	81.7	54.6	55.5	56.3

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.



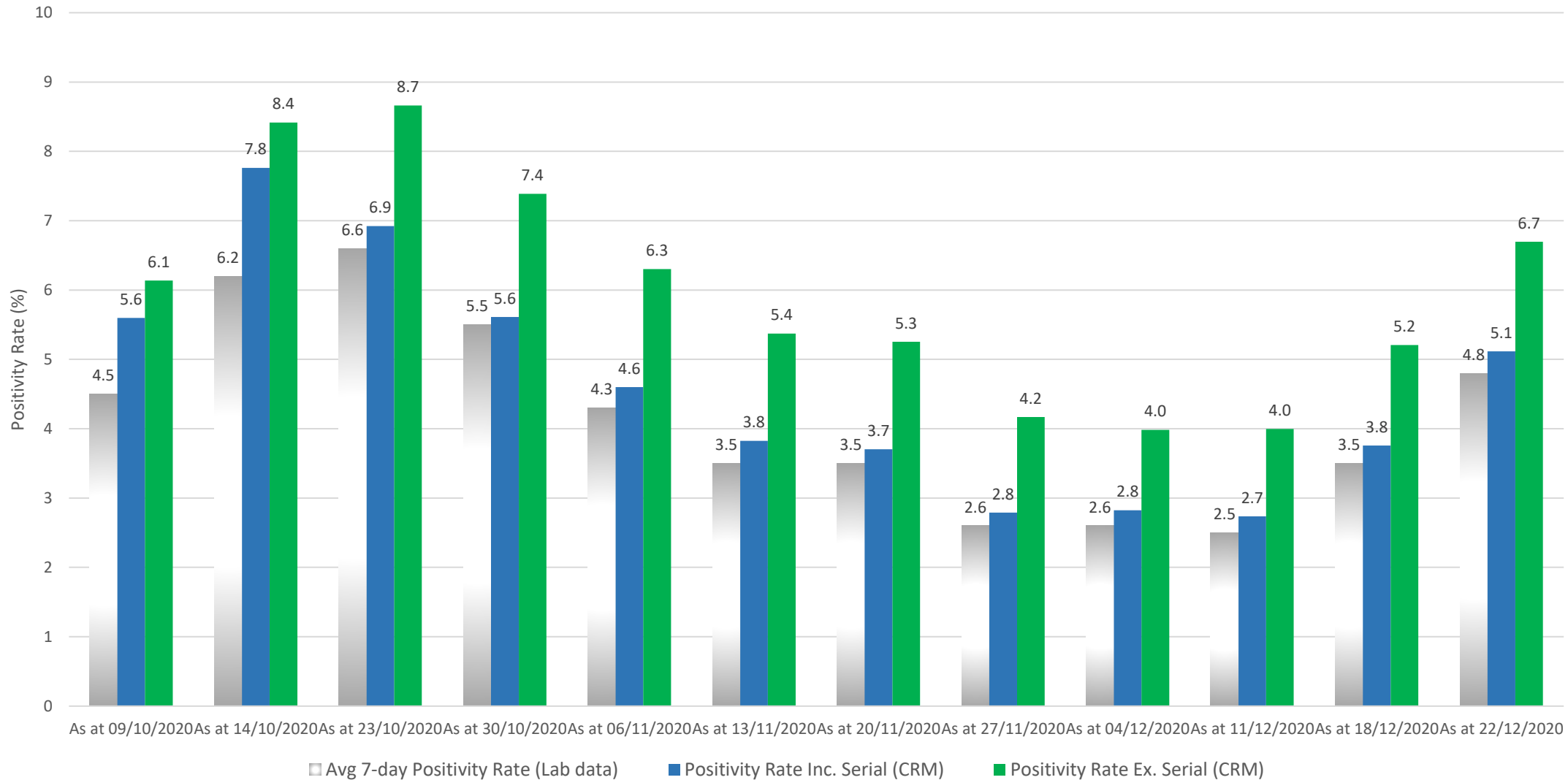
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Recent trend in positivity rate



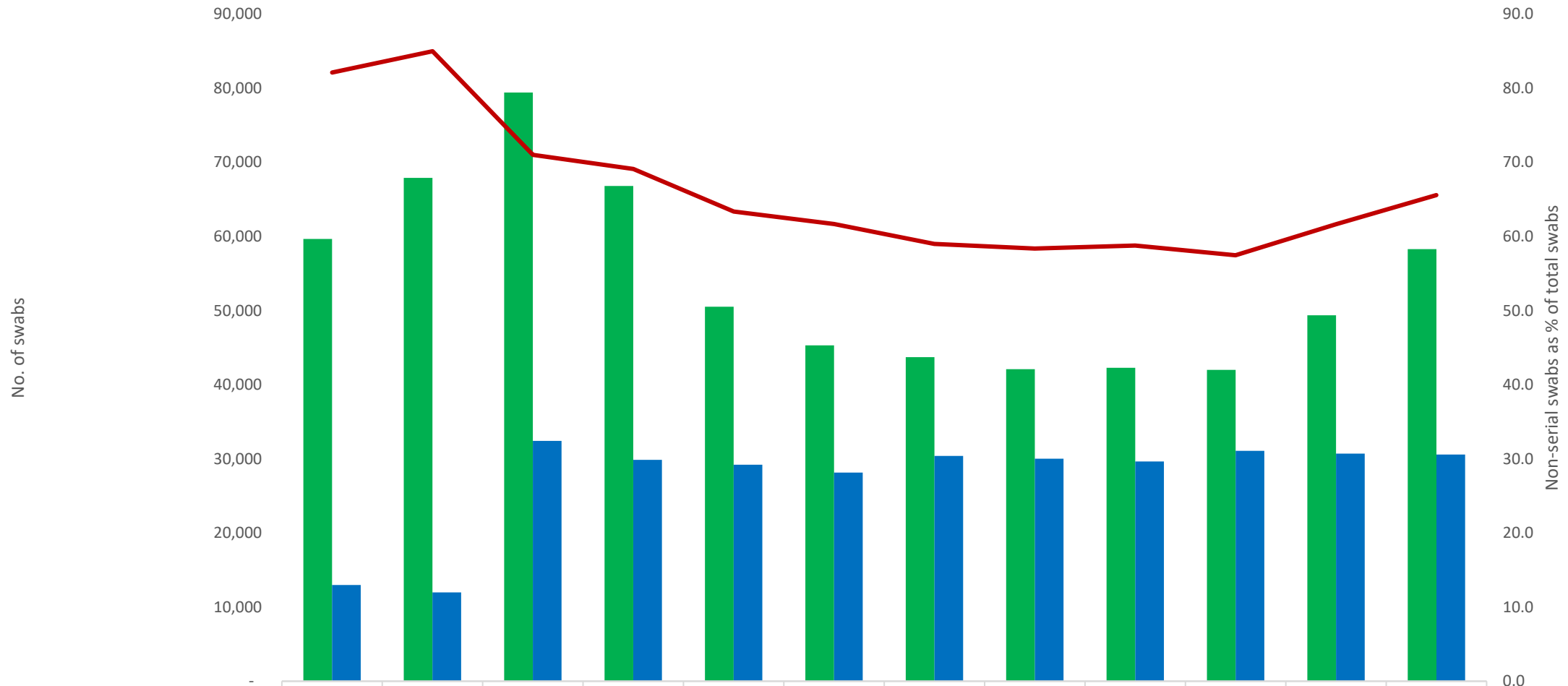


7-day Avg Positivity Rate (Lab data) and % Positivity Rate in Past 7 Days inc. and ex. Serial Testing (CRM)



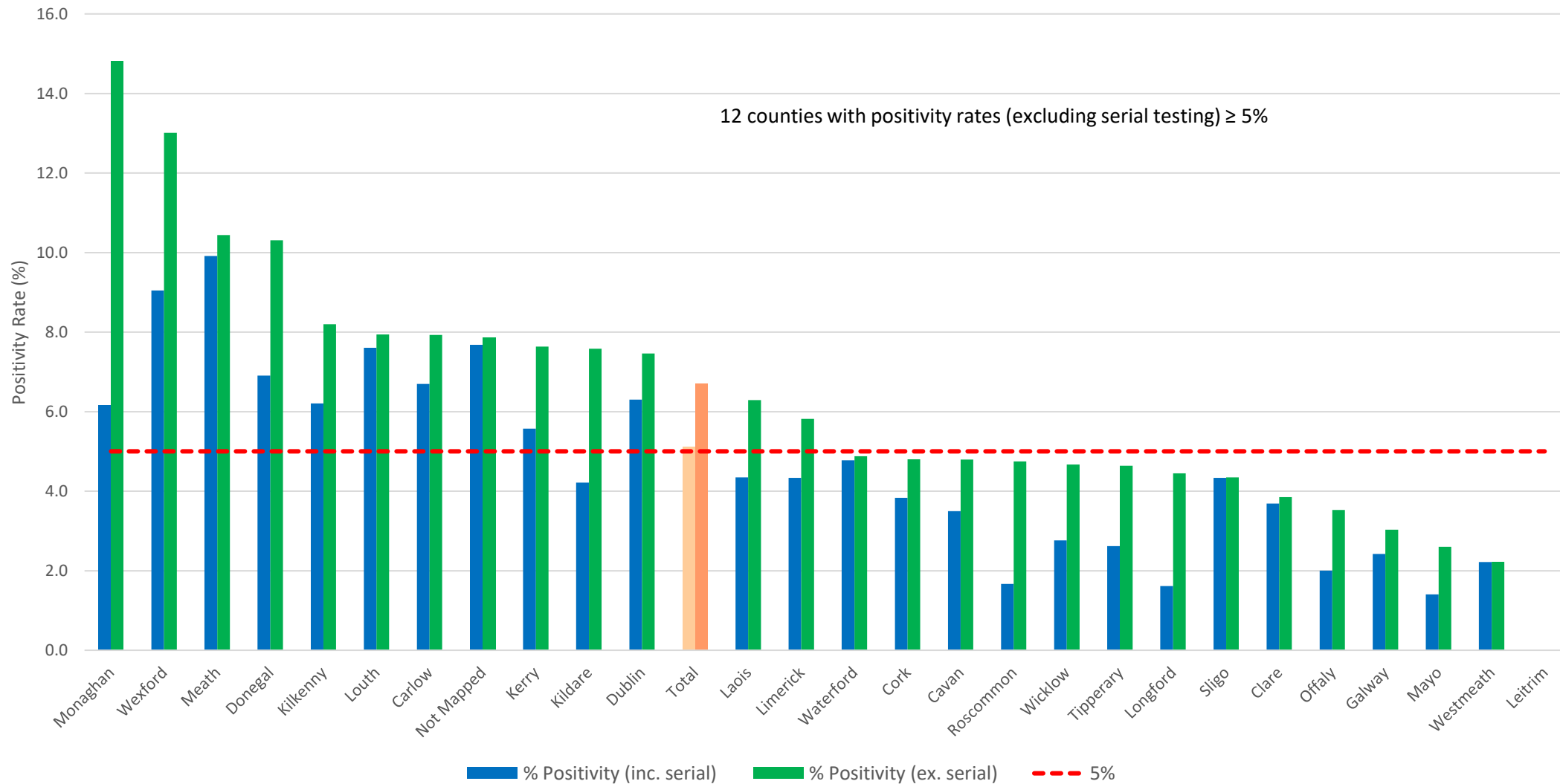


No. of Non-Serial and Serial Swabs in Past 7 Days and Non-Serial as a % of Total Swabs



	As at 09/10/2020	As at 14/10/2020	As at 23/10/2020	As at 30/10/2020	As at 06/11/2020	As at 13/11/2020	As at 20/11/2020	As at 27/11/2020	As at 04/12/2020	As at 11/12/2020	As at 18/12/2020	As at 22/12/2020
Non-Serial Swabs	59,684	67,895	79,412	66,804	50,512	45,314	43,724	42,098	42,267	42,010	49,369	58,288
Serial Swabs	12,982	11,977	32,407	29,861	29,219	28,133	30,386	30,017	29,636	31,074	30,704	30,575
Non-Serial as % of Total Swabs	82.1	85.0	71.0	69.1	63.4	61.7	59.0	58.4	58.8	57.5	61.7	65.6

% Positivity Rate Past 7 Days (inc./ex. serial testing) by County as at 22/12/20
 (data from County Positivity Rate data provided by HSE Contact and Tracing Team)

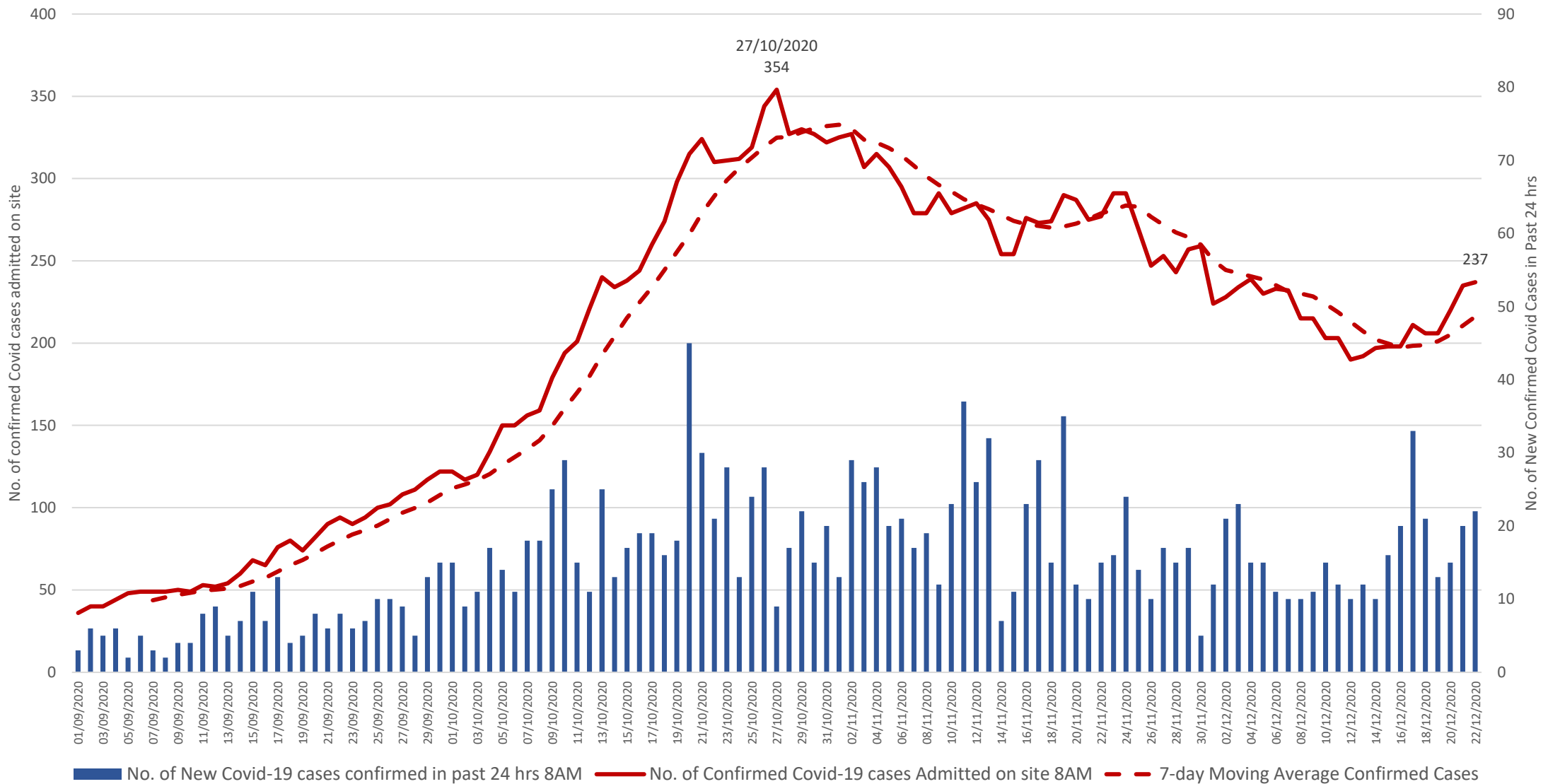


Location is based on location of Community Test Centre or Acute Hospital and not on patient's address



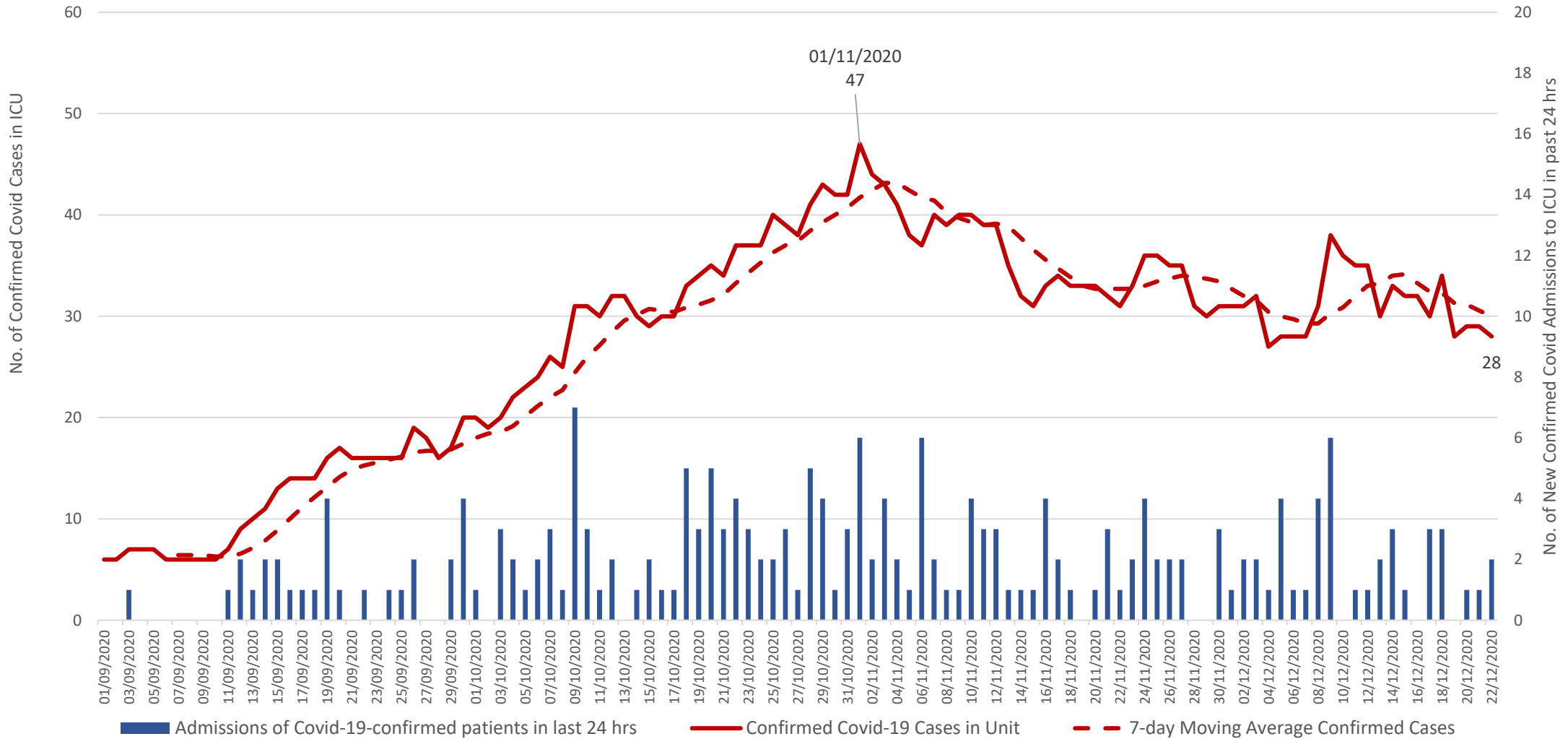
Hospital & ICU Data

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





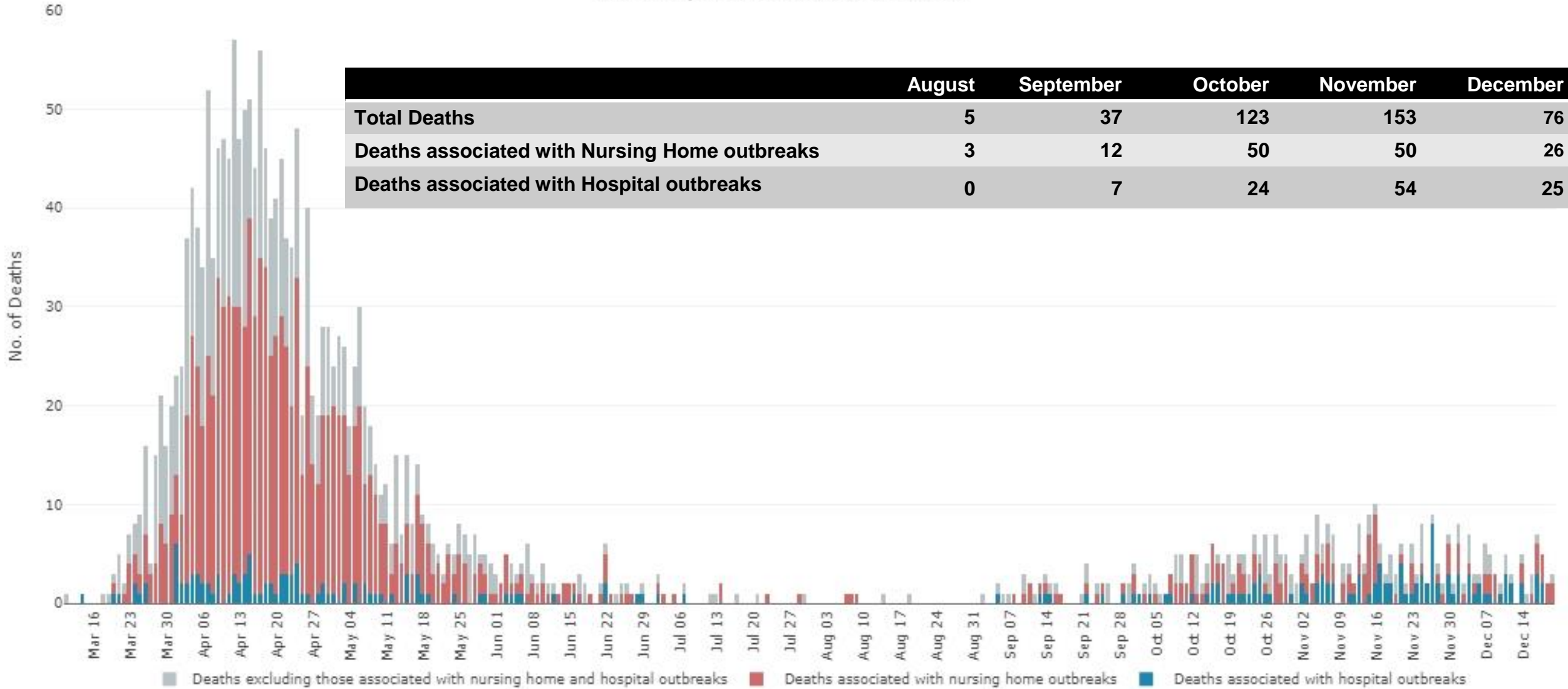
Total No. of Confirmed Covid Cases in ICU at 11.30AM &
No. of New Confirmed Covid Admissions to ICU in past 24 hrs since 01/09/20
(includes all reporting public and private hospitals and may differ from no. reported by HSE in public hospital ICUs)



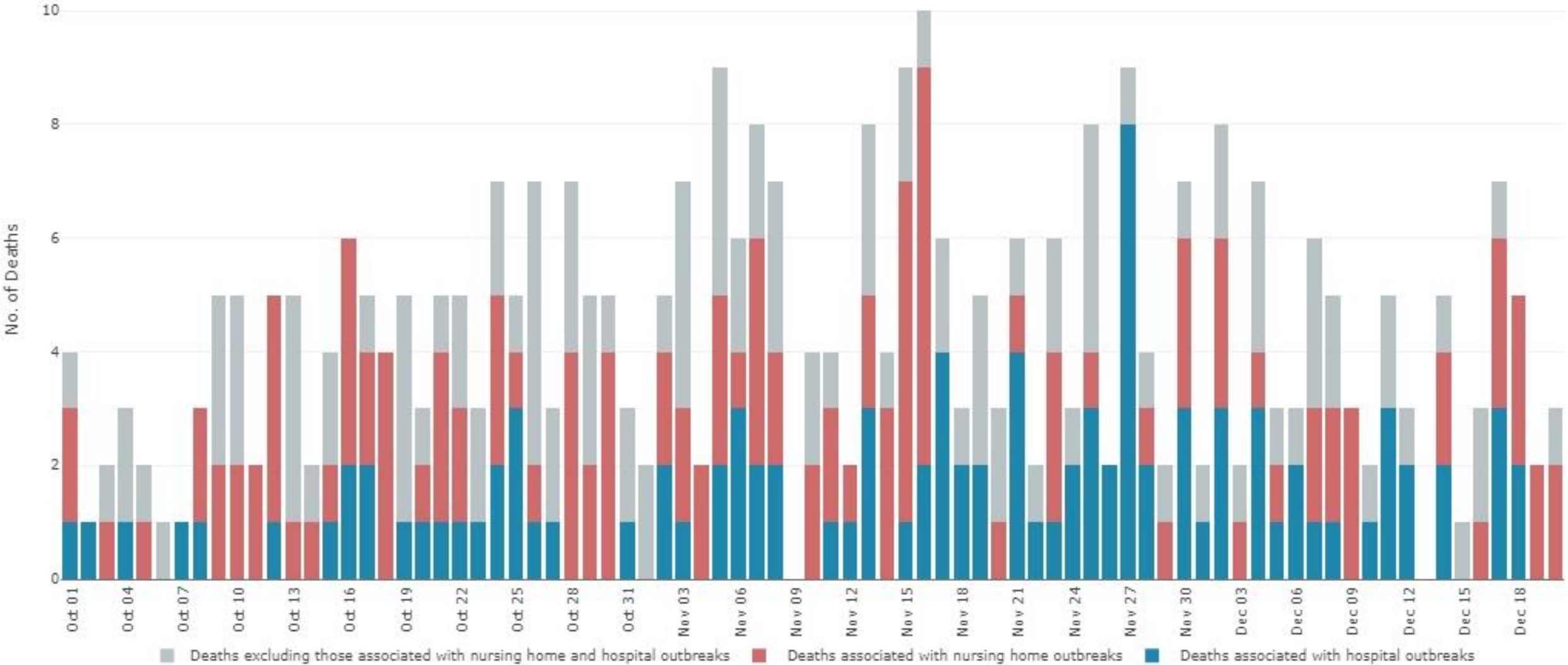


Deaths

Deaths by Date of Death since March



Deaths by Date of Death



Source: HPSC CIDR Extract 22122020



Outbreaks & Clusters

COVID-19 outbreaks by key outbreak locations, week 51 and overall, 2020 Ireland



- Since March 1st 2020, 10,397 outbreaks have been notified to CIDR
- In week 51, 254 outbreaks were notified; 171 in private houses, 83 in other locations

Key outbreak locations	Week 51	Weeks 10-31	Weeks 32-51
Workplace	5	51	284
Direct Provision Centre	1	21	17
Vulnerable groups*	4	19	95
Prisons	0	6	3
Nursing Home/Community Hospital	11	301	109
Acute hospitals	9	103	109
School [^]	17	0	263
Childcare facility	5	0	96

*Includes Irish Travellers, Roma, homeless and addiction service population

[^]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 21st 2020 – data to midnight 20/12/2020

Weekly Summary

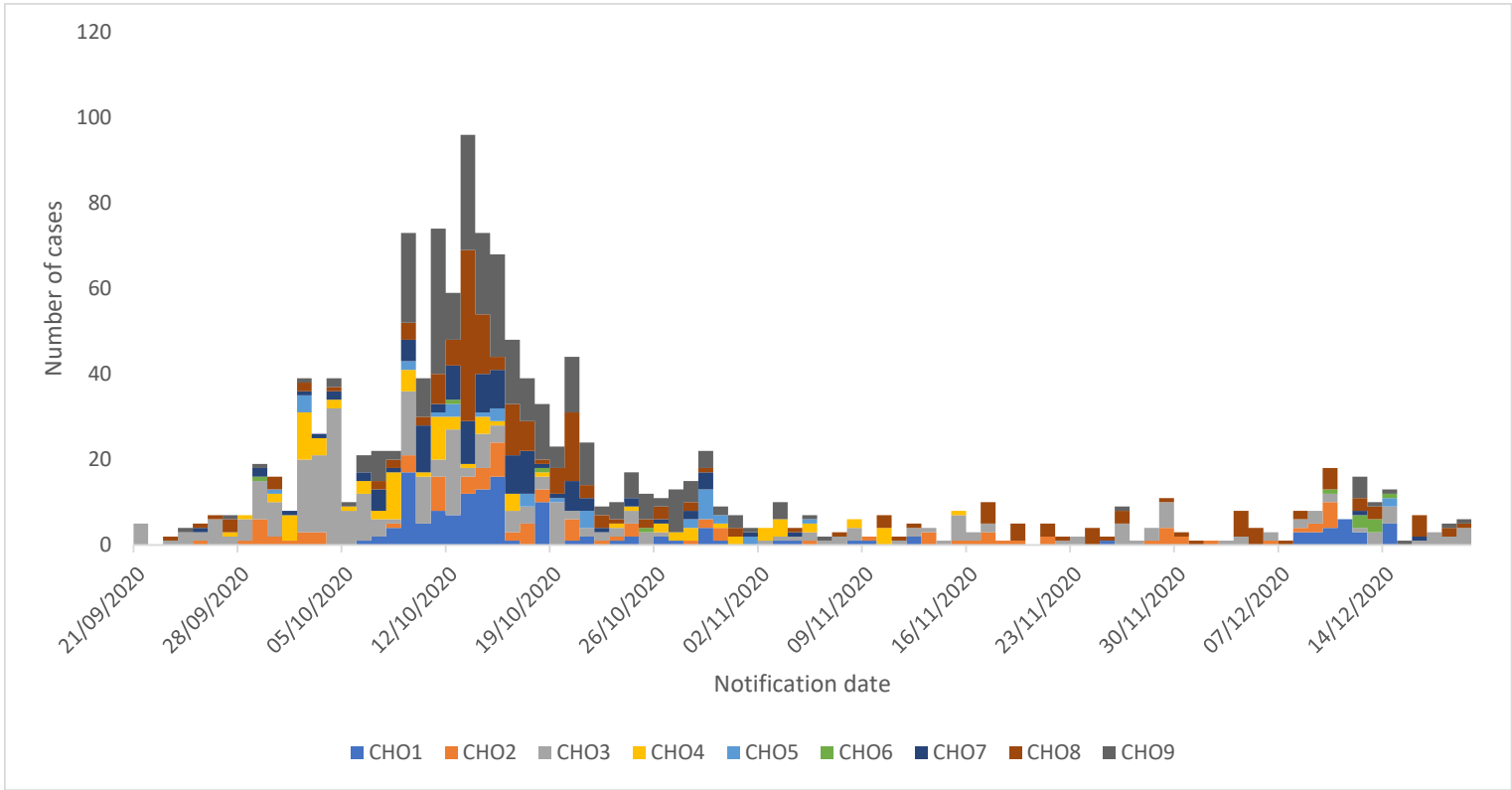


- **Total** number of outbreaks week 51 n=254 compared with week 50 n=410
- **Vulnerable groups**
 - Irish Traveller outbreaks (since 20/09/2020)
 - 73 outbreaks, 1328 total cases
 - 3 new outbreaks- 31 linked cases
 - 60 cases in week 51 compared with average of 28/week in weeks 46-49
 - One new Roma outbreak - 13 linked cases
 - One new outbreak in a DPC
- **Workplace outbreaks**
 - Four new outbreak since last week's report – with 7 linked cases
 - 44 additional cases linked to 4 active outbreaks (3 in meat/poultry factories)
- **Residential institution outbreaks**
 - 237 outbreaks in residential institutions with 1,339 linked cases
 - 20 outbreaks are 'open' with 121 linked cases
 - Four new outbreaks - seven linked cases
- **Nursing Homes & Community Hospitals**
 - 44/410 outbreaks remain open with 1019 linked cases
 - Eleven new outbreaks with 85 linked cases since last week's report
 - One new outbreak has 36 linked cases already
 - Since August 1st, 122 deaths have occurred in cases linked to NH/CH outbreaks
- **Acute hospitals**
 - 54 open outbreaks involving 23 hospitals, 1026 linked cases (range 1-138)
 - Eight new outbreaks since last week's report with 34 linked cases
 - Since August 1st, 107 deaths have occurred in cases linked to acute hospitals outbreaks
- **Schools**
 - 12 new outbreaks since last week's report with 53 linked cases
 - Largest school outbreak - 32 linked cases
- **Childcare facilities**
 - Five new outbreaks since last week's report with 35 linked cases
 - One outbreak– 22 linked cases
- **Third level institutions**
 - 90 outbreaks since 01/09/2020 – 1011 linked cases
 - Two new outbreaks in week 51 with 5 linked cases

Key points

- Significant nursing home outbreaks of concern
 - Both new and several ongoing outbreaks
- Acute hospitals
 - One hospital – 6 new ward outbreaks this week
- Increase in number of school outbreaks
 - Some large outbreaks in schools
- Increase in number of cases in Irish Travellers in past 2 weeks
 - 60 cases in week 51, 48 cases in week 50 compared with an average of 28 per week in previous 4 weeks

COVID-19 infections among Irish Travellers - September 20th-December 19th 2020



Data source: CIDR December 21st 8:30 am

- 1328 confirmed cases
- 47% (624/1327) male
- Median age 24 years
- 27% (357/1328) <15yrs
- Among 73 associated outbreaks, 12 had >20 linked cases
- **Three new outbreaks in week 51, 60 cases in week 50 and 45 in week 51, compared to average of 28 in previous 4 weeks**

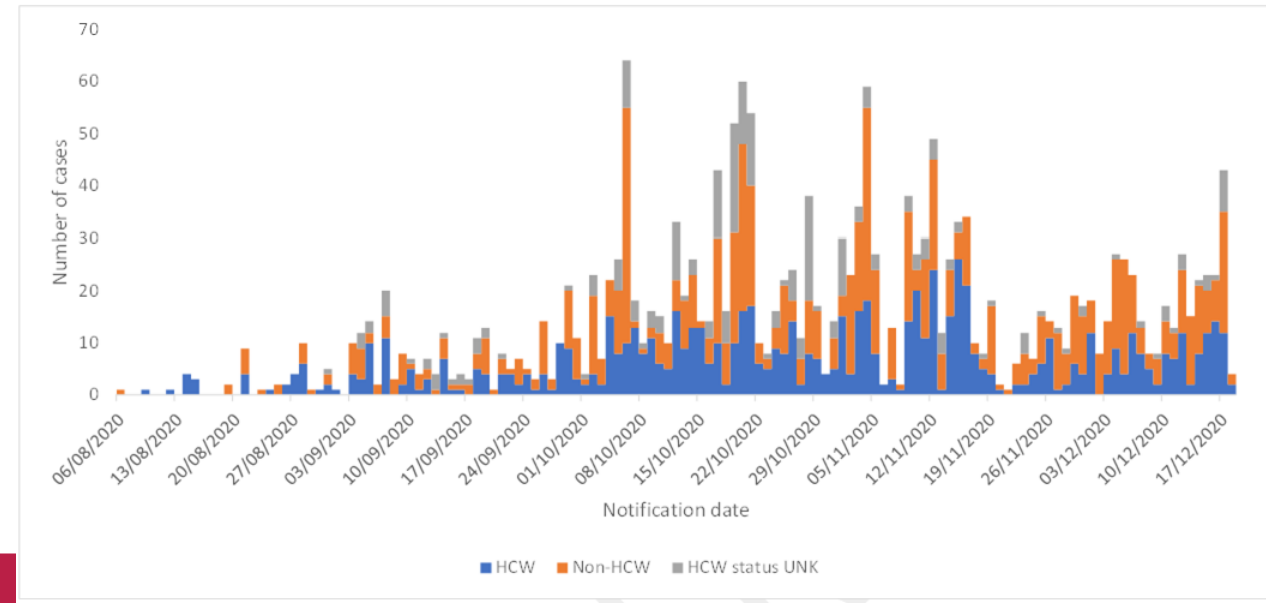
Inclusion criteria

Cases linked to outbreaks reported as affecting Irish Travellers OR whose ethnicity is reported as Irish Traveller, September 20th 2020 to midnight December 14th 2020

Focus on 44 'OPEN' Nursing Homes and Community Hospital/Long Stay Units: August 1st to midnight December 19th 2020



- 1019 associated cases (412 HCW/staff cases, 490 client cases, 117 cases HCW status unknown)
- 8 outbreaks include only HCW/staff cases, 32 include both HCW/staff cases and client cases, two outbreaks include client cases only, for one outbreak the mix of cases is unclear, and for one outbreak, there were no linked cases
- 11 new outbreaks since last week's report – 85 linked cases
- 14 previously notified 'open' outbreaks – 118 additional cases since last week's report
- 19 previously notified 'open' outbreaks – no additional cases since last week's report
- 1-86 linked cases per 'open' outbreak – the five largest 'open' outbreaks have 69, 72, 72, 82 and 86 cases respectively

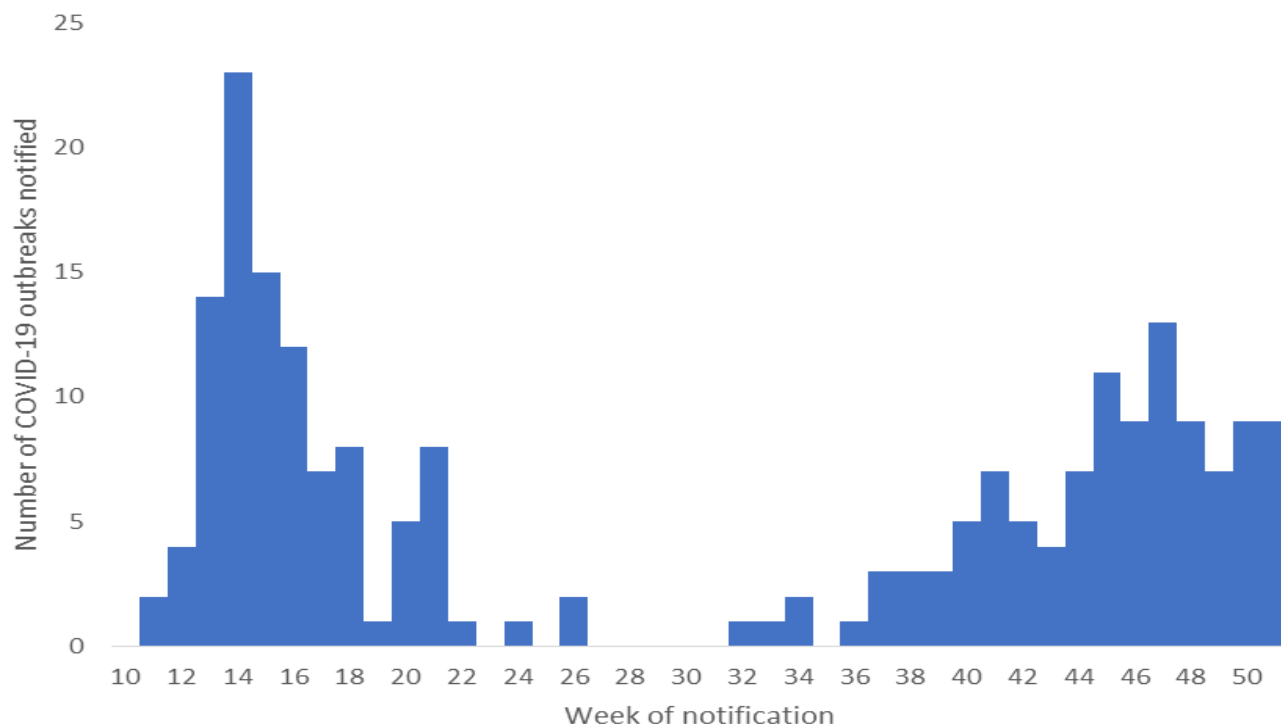


Data source: CIDR December 21st 8:30 am

Acute Hospital outbreaks to midnight 19th December 2020 (n=212)



Number of COVID-19 Outbreaks in Hospitals (n=212)



Overview

- **212** outbreaks in acute hospitals
- **54** ‘open’ acute hospital outbreaks (all occurring since 1st September 2020)
- 1,026 confirmed cases linked to 51 of the open outbreaks (range 1-138)
- The 54 open outbreaks correspond to outbreaks in **23** Acute Hospitals

Update

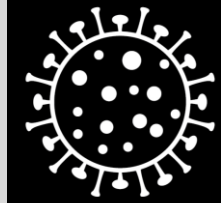
- 8 new outbreaks since reporting on 15/12/2020
- 34 confirmed cases linked to 6 of these outbreaks (range 2-14)
- 34 events were linked to 10 previously reported open hospital outbreaks
- 4 outbreaks were closed since last week

Outbreak status	Number of outbreaks	Confirmed linked cases	Number admitted to ICU	Number Died	Number HCWs
All	212	2,628	62	210	1,437
Open	54	1,026	19	64	511

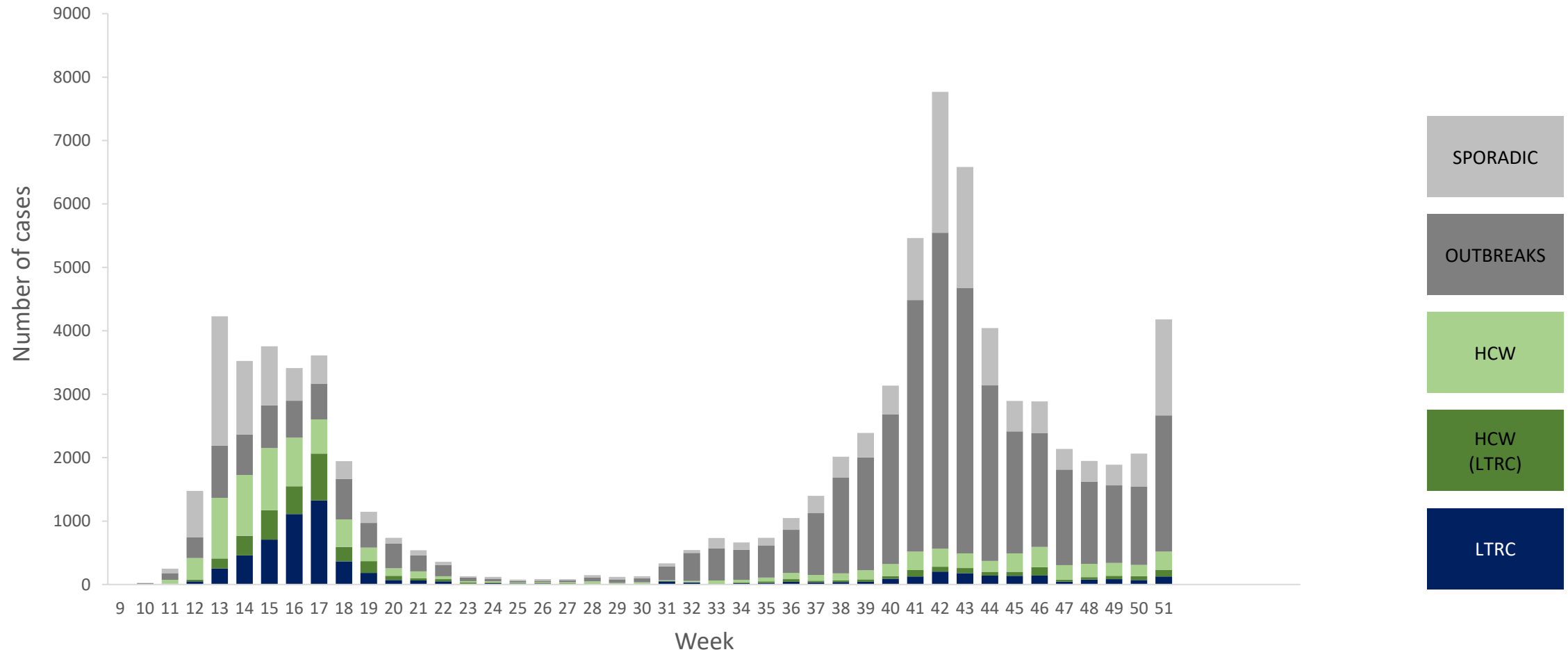
Data source: CIDR December 21st 2020
*Data to midnight 19/12/2020

Where are cases arising?

The number of cases in week 51 is 70% greater than the number of cases in week 50, and there is an associated increase in sporadic and unlinked cases, infections in healthcare workers, and cases in outbreaks in LTRC. The majority of HCW infections (~75%) are in settings other than LTRC



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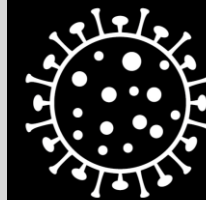
Weekly total cases by setting. LTRC: residents of long-term residential care. HCW (LTRC): Healthcare workers associated with outbreaks in long-term residential care. HCW: healthcare workers in other settings. Outbreaks: all other outbreaks. Sporadic: cases not associated with outbreaks or healthcare work. Date of specimen collection



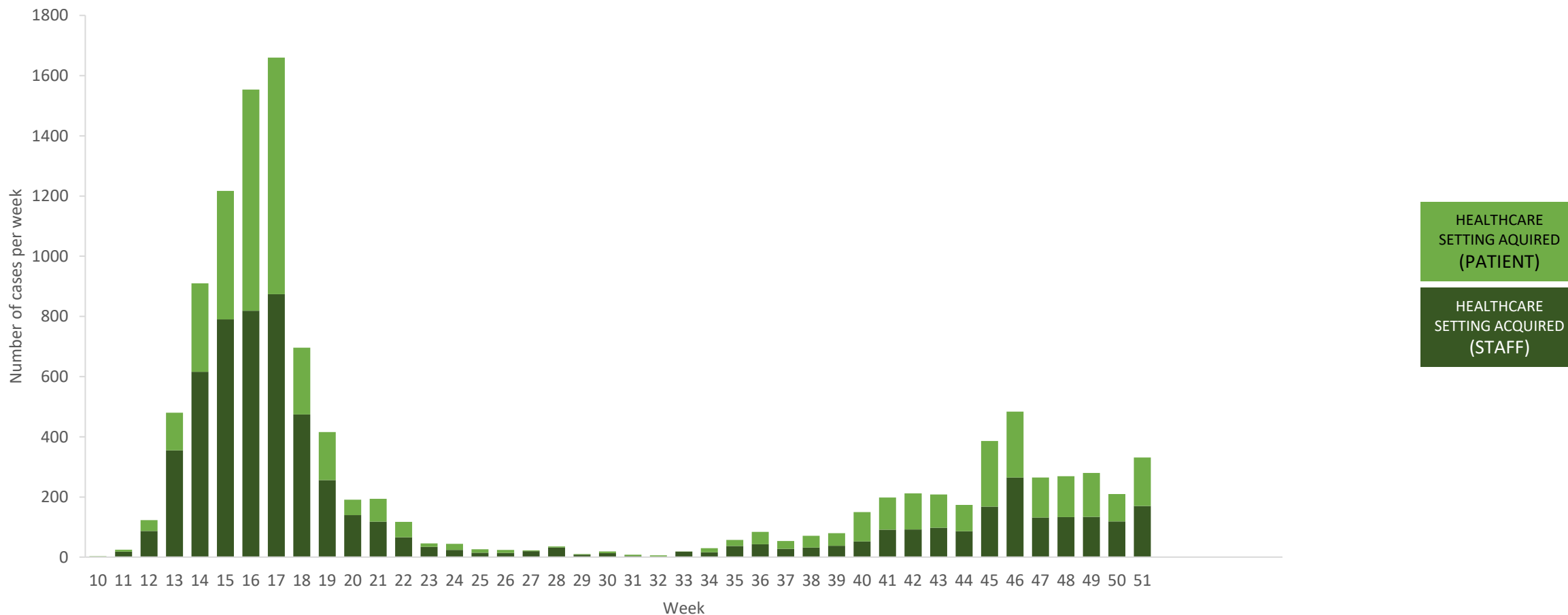
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Infections in the healthcare setting

The number of healthcare-setting-acquired infections had decreased from the peak in October, but increased again in week 51



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Weekly total number of cases recorded in CIDR as 'healthcare setting acquired' Cases dated by date of specimen collection



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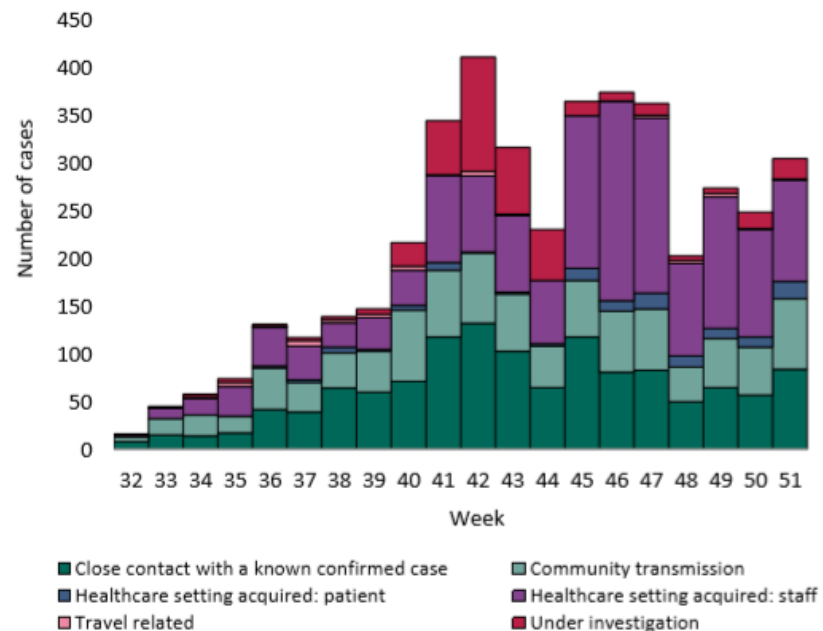


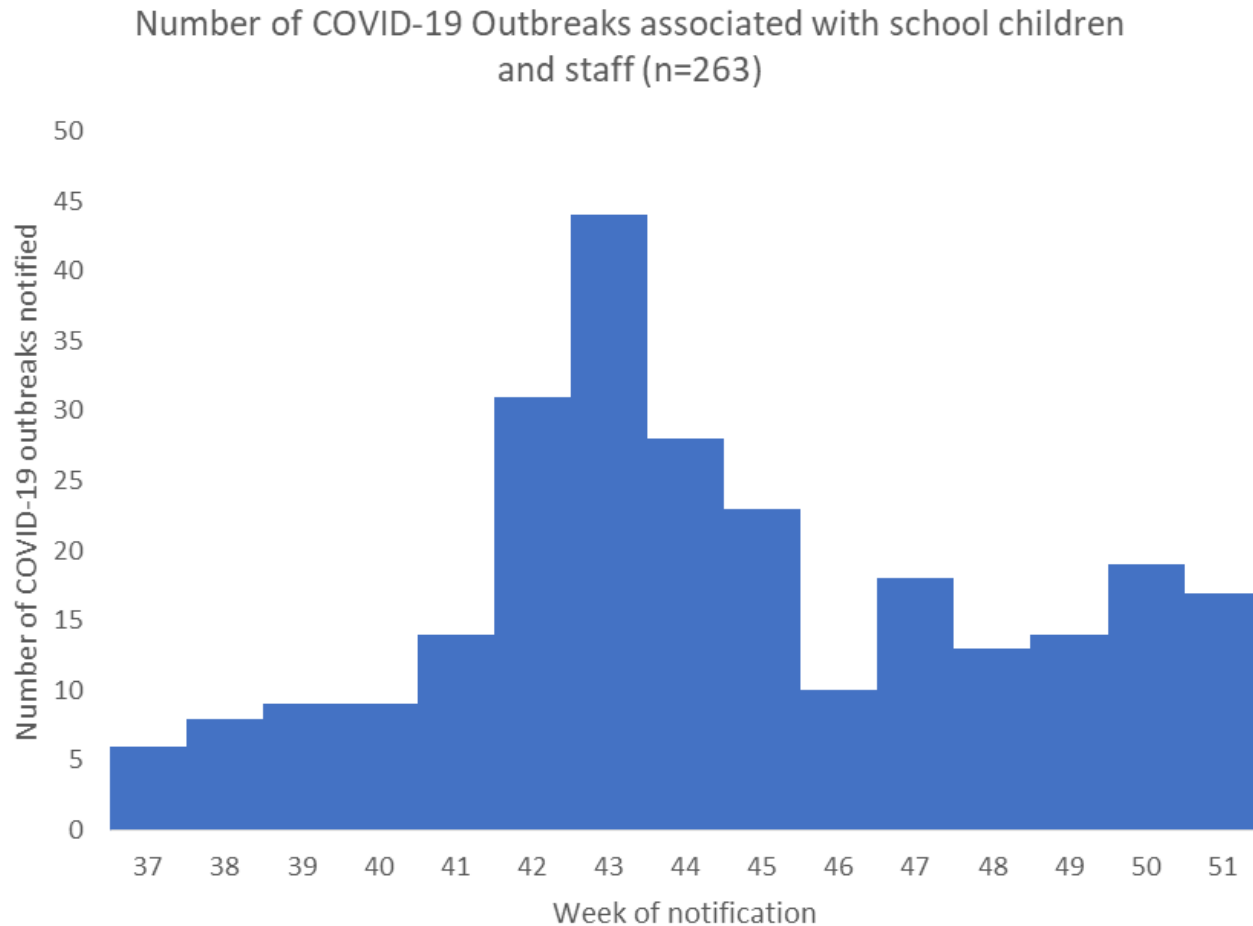
Figure 3: Healthcare worker COVID-19 cases by notification week and most likely transmission source, week 32- week 51, Ireland, (n=4,383)

Table 6: COVID-19 cases in HCW notified to HPSC, linked to outbreaks by outbreak location, week 32 - week 51, Ireland, (n=4,383)

Outbreak location	Number of HCW cases	Proportion of all HCW cases (%)	Number of new cases week 51
Nursing home	758	17.3	62
Private house	753	17.2	5
Hospital	713	16.3	22
Residential institution	166	3.8	4
Other healthcare service	54	1.2	2
Community outbreak	53	1.2	3
Workplace	44	1.0	1
Comm. Hosp/Long-stay unit	39	0.9	3
Extended family	39	0.9	2
Social gathering	26	0.6	0
Other	68	1.5	4
Not linked to an outbreak	1,670	38.1	197

Source:
HPSC

Outbreaks associated with school children and staff to midnight 19th December 2020 (n=263)



Overview

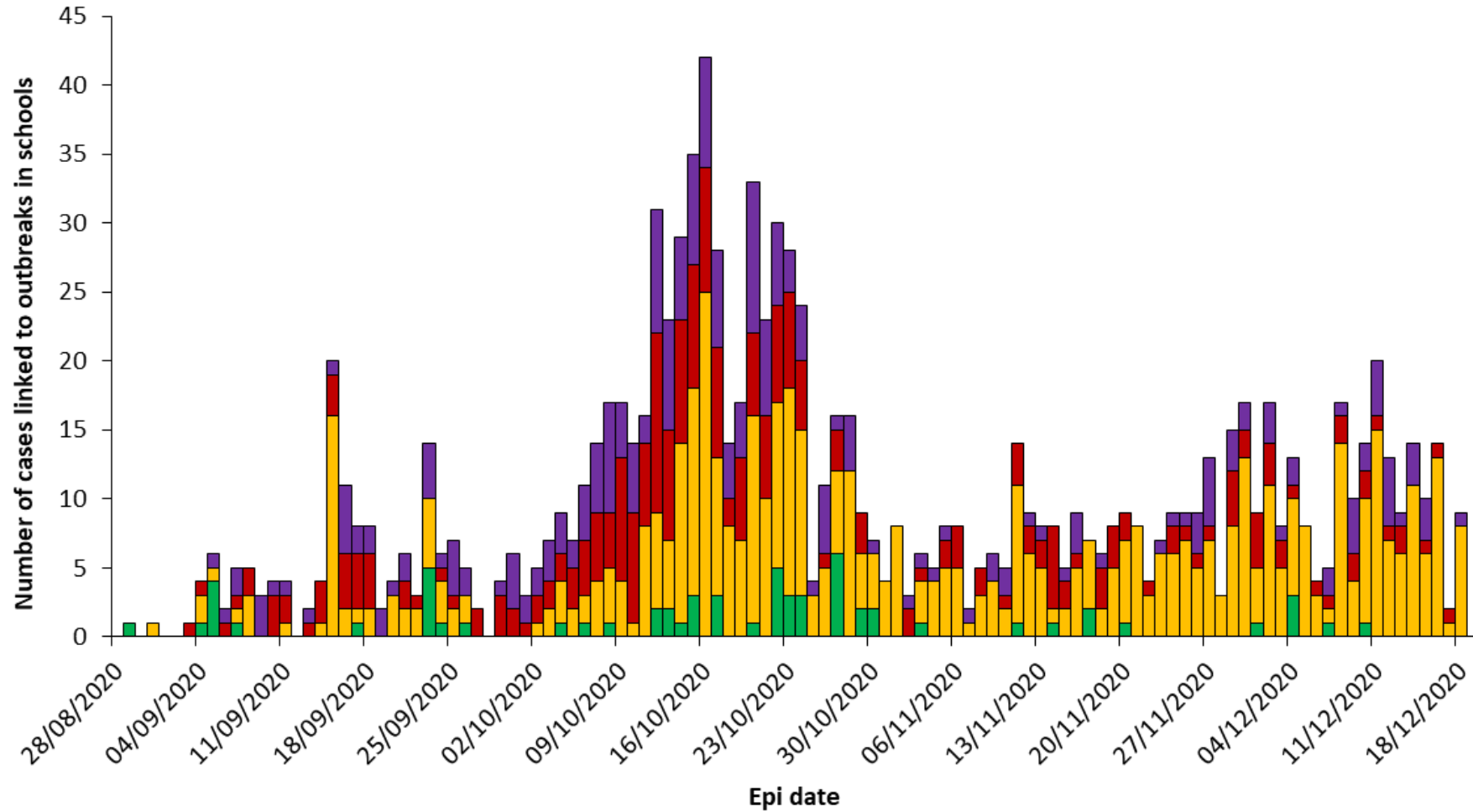
- 263 outbreaks associated with school children and staff notified
- 1,114 linked confirmed cases in total
- 235 outbreaks have ≥ 2 linked cases (range 2- 32)
- 172 outbreaks have been closed; 91 remain open

Update

- 12 new outbreaks reported since report on 15/12/2020
- 53 confirmed cases were linked to these outbreaks (range 2-12)
- An additional 18 confirmed cases were linked to one previously reported notable outbreak, bringing the number of confirmed cases linked to this outbreak to 32
- 28 outbreaks were closed since last week

Data source: CIDR December 21st 2020
*Data to midnight 19/12/2020

Epidemic curve of cases linked to outbreaks associated with school children and staff to midnight 19th December 2020 (n=1,121*) by age group and epi date

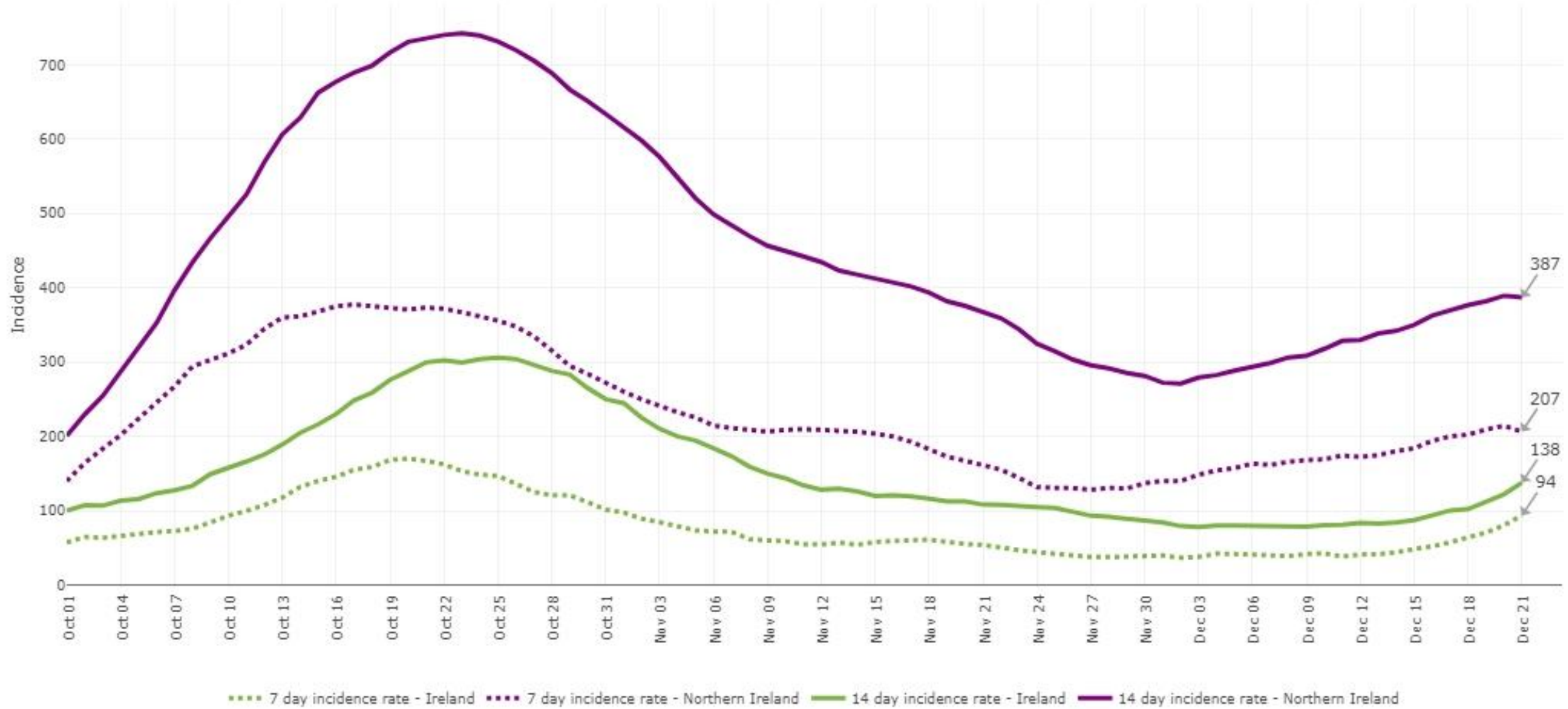


*Excludes cases with epi dates prior to March 2020 (n=1). Also includes cases linked to outbreaks notified after 19/12/2020 (n=8).

■ 0-5 years
 ■ 6-12 years
 ■ 13-18 years
 ■ >18 years

Data source: CIDR December 21st 2020
*Data to midnight 19/12/2020

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 22122020 and health-ni.gov.uk daily data 22/12/20.

Laboratory Completed Tests during Last 7 Days (15 - 21 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	276	193.5	2,838
Ards and North Down	170	105.7	3,217
Armagh City, Banbridge and Crai...	538	251.8	4,846
Belfast	533	156.2	7,808
Causeway Coast and Glens	260	180.2	2,761
Derry City and Strabane	301	199.8	3,284
Fermanagh and Omagh	344	294.4	3,026
Lisburn and Castlereagh	223	153.6	3,475
Mid and East Antrim	322	232.3	2,691
Mid Ulster	349	236.6	2,809
Newry, Mourne and Down	402	223.1	3,962
Not Known	129		1,711
Total	3,847	204.4	42,428

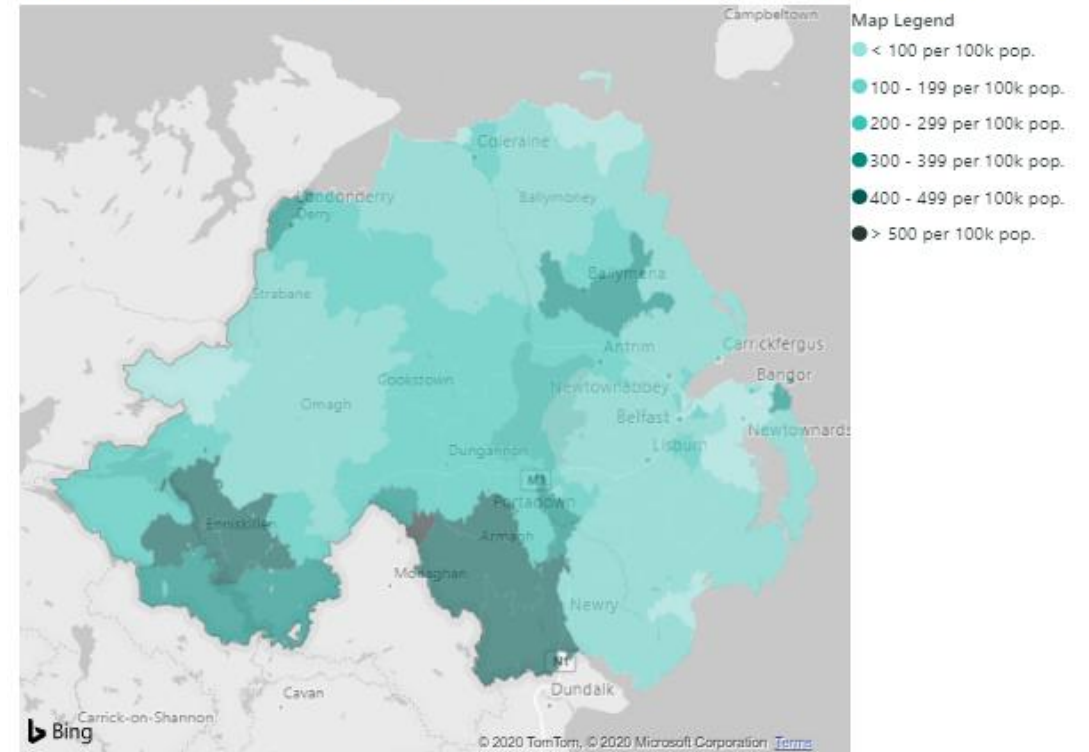
Monaghan 156 - 213

Donegal 178 - 291

Cavan 102 - 184

Louth 161 - 273

Positive Cases in last 7 Days per 100K Pop. by Postal District (14 Dec-20 Dec 2020)





Test & Trace Update

Testing and contact tracing NPHE update

Testing

Over the past seven days, 14th – 20th December, there has been approximately 95,537 swabs taken for COVID-19 testing.

Of these:

- 49,657 (52%) of these were taken in the community
- 24,645 (26%) swabs were taken in acute settings.
- 21,235 (22%) 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 14th – 20th December, a total of 19,531 calls were made in the Contact Tracing Centres. Over the past seven days, the average number of close contacts per case was 4.2, compared to 3.8 in the previous week.

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

Turnaround Times (14th– 20th 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 **1.5 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 **2.1 days**.

Overall Swab to laboratory result communicated – Medians: 25 hours in Acute , 29 hours in Serial Testing, 28 hours in Community

Referral to appointment

In the community, the median time from referral to appointment was 0.3 days.

91% 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 14th – 20th of December was 0.7 days

Source: HSE

CMP close contact update (week ending 20th Dec)

The number of close contacts captured during the week ending December 20th was 15,218, an 81% increase compared to the previous week. 87% of these contacts have been successfully informed of their close contact status. 86% of those referred for testing have attended their day 0 test.

The current positivity rate at day 0 is 13.4%. The number of complex contact settings increased by 100%, from 1,160 to 2,315 this week.

Overall positivity rates are presented by circumstances of close contact are presented in Table 1.3 for contacts created between the 19th of October and 20th of December. Positivity rates for last week, December 14th to 20th, reflect positivity rates at day 0 testing only.

	Household	Educational Setting	Social	Workplace	Healthcare Setting	Transport	Sport	Other	Not Recorded	Total
19/10/2020 - 25/10/2020	16.0%	4.2%	7.9%	4.3%	5.3%**	4.7%**	1.0%**	7.2%	10.2%	10.1%
26/10/2020 - 01/11/2020	23.4%	3.4%	11.6%	6.9%	10.0%	25.5%	0.0%**	7.2%	12.2%	14.2%
02/11/2020 - 08/11/2020	22.7%	3.0%	9.3%	5.0%	2.9%**	13.3%**	11.1%	9.6%	12.4%	13.3%
09/11/2020 - 15/11/2020	22.9%	2.7%	10.4%	5.9%	13.5%**	11.4%**	0.0%**	8.2%	10.5%	12.7%
16/11/2020 - 22/11/2020	20.6%	2.6%	11.8%	6.6%	8.8%	5.6%**	0.0%**	11.4%	14.1%	11.6%
23/11/2020 - 29/11/2020	23.3%	3.4%	10.8%	12.2%	16.1%	2.6%**	0.0%**	8.2%	14.9%	12.8%
30/11/2020 - 06/12/2020	24.8%	3.4%	13.0%	3.8%	13.5%	18.8%	14.3%**	7.1%	16.2%	14.0%
07/12/2020 - 13/12/2020	26.8%	4.4%	11.8%	15.4%	15.4%	11.9%	8.3%**	13.0%	14.8%	14.0%
14/12/2020 - 20/12/2020*	21.9%	4.7%	13.3%	5.2%	6.7%	0.0%	2.9%**	4.8%	14.8%	13.1%
Total	21.6%	3.6%	10.8%	6.9%	10.1%	9.3%	3.5%	8.1%	12.5%	12.5%

Table 1.3 - Overall Positivity Rate by Circumstances of Contact

* Positivity rates for December 14th to 20th reflect positivity rates at day 0 testing only

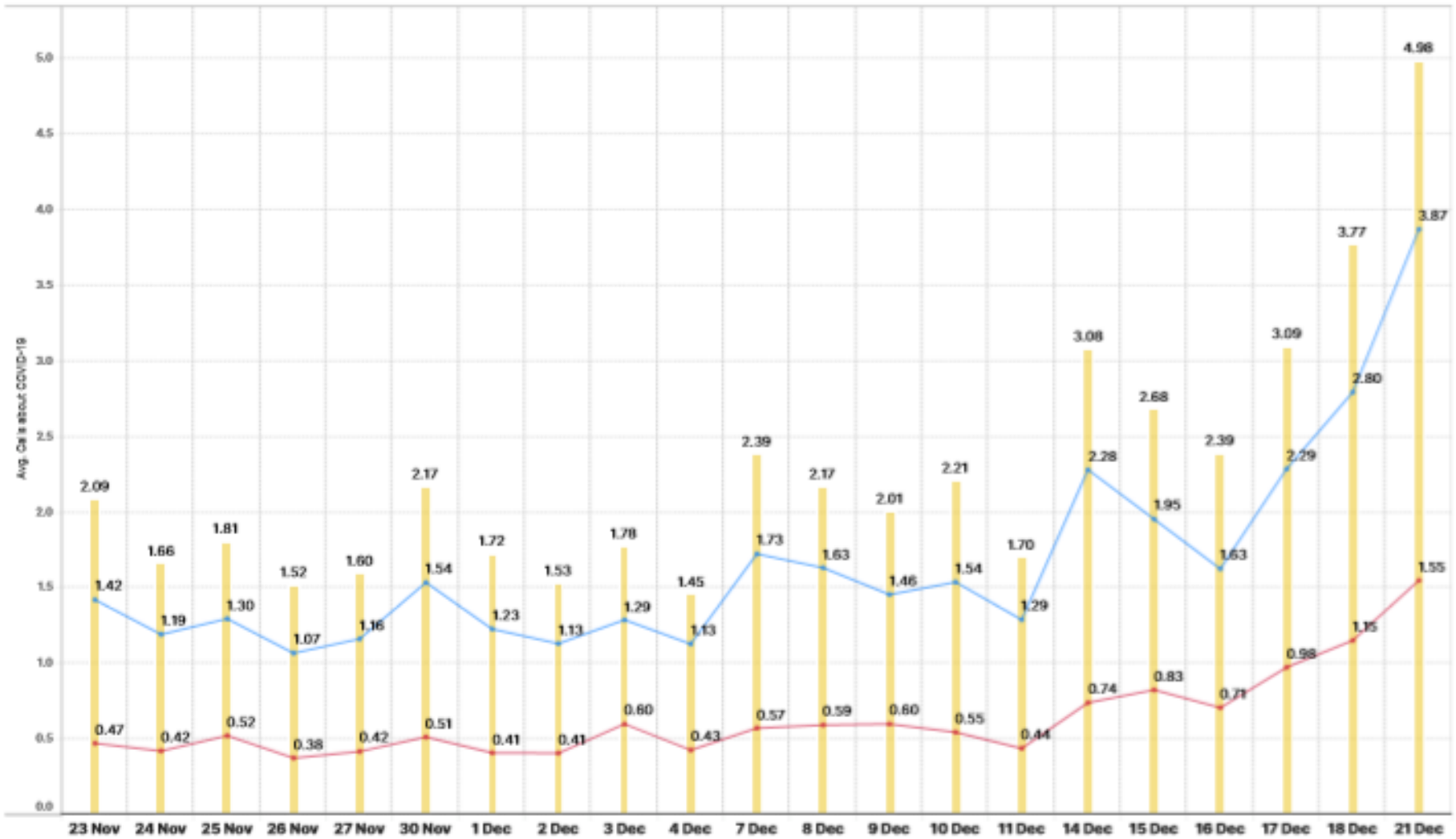
Note: Circumstances of Contact with fewer than 5 positive results are indicated by an **.

Note: Circumstances of Contact with fewer than 5 positive results are indicated by an *. Further details can be found in Appendix 3 of relevant report

Number of cases that met testing criteria, clinically likely COVID-19

Average per respondent

- Met Testing Criteria
- Clinically likely Covid19
- Calls about COVID-19
- Number of survey responses



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



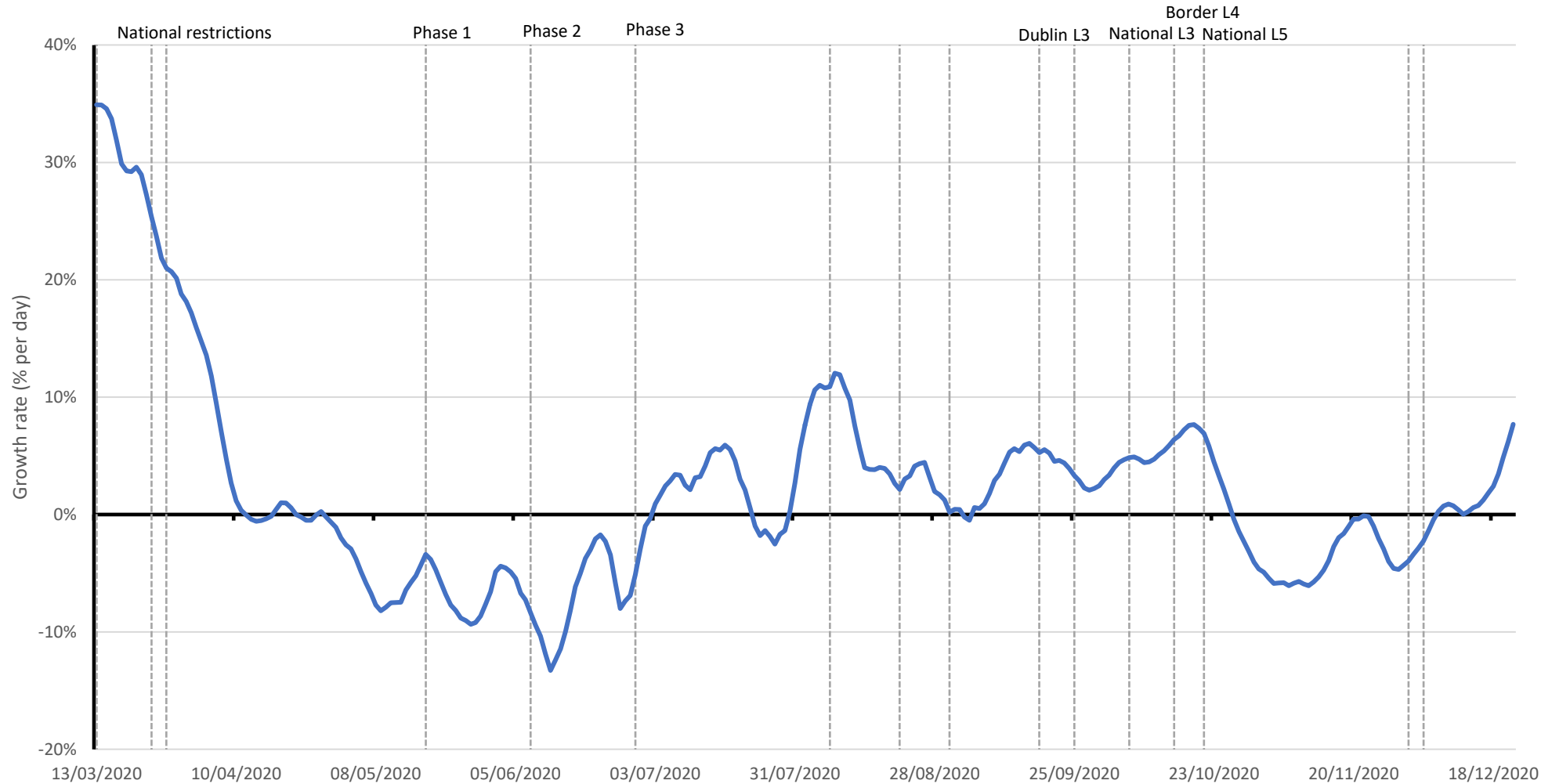
21st December 2020



Growth in Cases & R number

Growth rate for case numbers

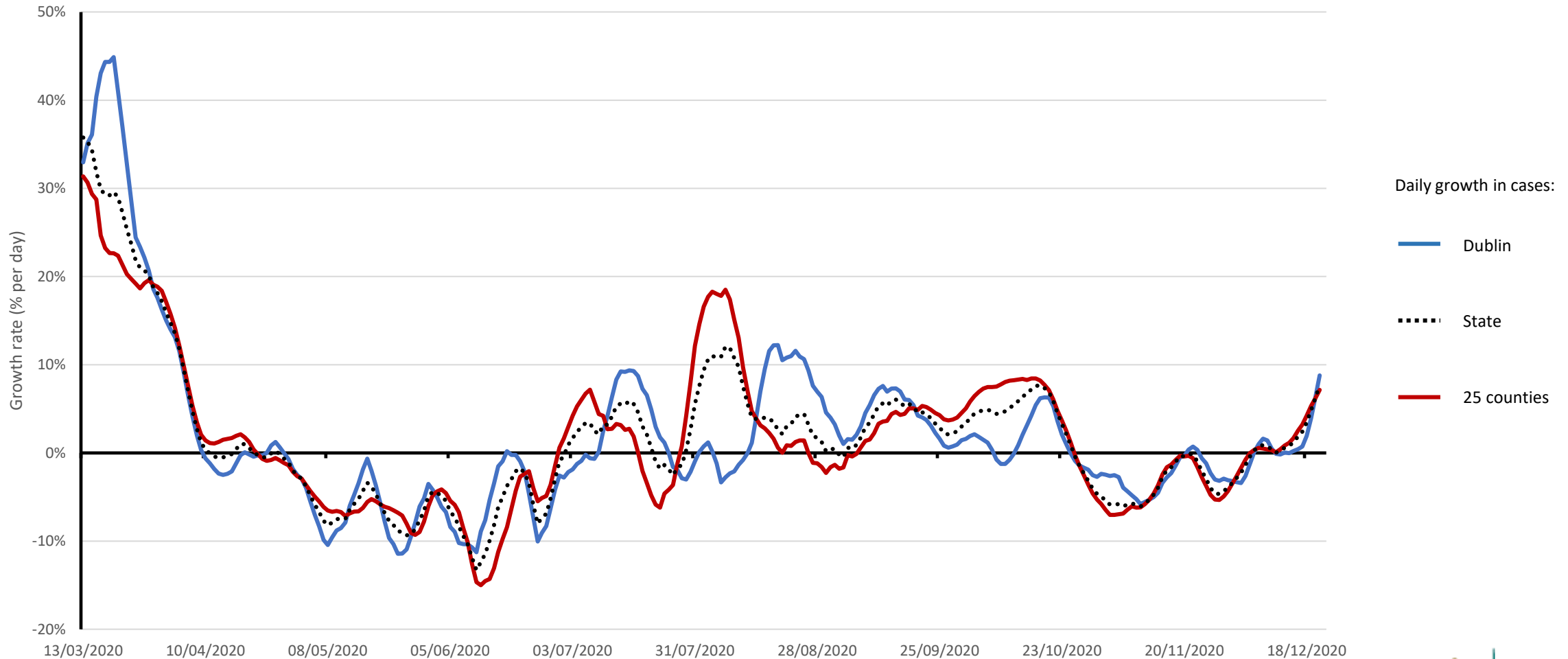
When the pandemic in Ireland grew very rapidly in early March, at over 30% per day. The national restrictions introduced in late March suppressed transmission, with daily incidence decreasing at -5% to -10% per day. This was sustained until the end of June, after which case numbers started to grow, on 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 at least 5% - 7% per day



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

Growth rate for case numbers - 14 day window

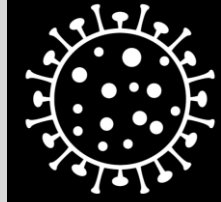
We can calculate growth rate over a shorter window, giving a noisier result but one which responds more rapidly to change. This analysis would suggest that, over the last two weeks the number of cases is increasing at about +7% per day for the country as a whole, and is similar in Dublin and the rest of the country



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 difficult to estimate as the situation is changing – it is currently estimated at 1.5 to 1.7.



Coronavirus
COVID-19
Public Health
Advice

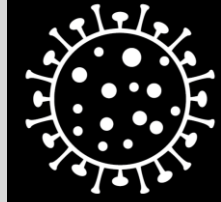
Method	Estimate	95% confidence interval
SEIR model-inferred		
Bayesian model		
Time-dependent R	1.66	1.53 – 1.80
GAM estimate 14 Dec 2020	1.35	1.11 – 1.59
GAM estimate 21 Dec 2020	1.59	1.20 – 1.99

Estimates generated 22 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 22 December 2020



Coronavirus
COVID-19
Public Health
Advice

- The level of infection now **increasing rapidly**
 - Cases (5-day average) **714 cases per day**; 14-day incidence **138 per 100,000**
 - 3373 cases last week, compared with 1968 in the preceding week (71% increase)
 - Incidence rising across **all age groups**
 - **Growth rate** estimated to be **at least 7- 8% per day**, and **doubling time 8-10 days or less**
 - note that 5-day average case count has doubled from 311 cases per day to 616 cases per day **in 7 days**, suggesting growth rate is increasing
 - **Reproduction number** very high – at least **1.5 – 1.7**
 - Growth rates similar to or greater than those seen approaching the peak of the second wave
- Numbers in hospital increasing, numbers in intensive care and deaths per day static
- We are now **in a surge** with older and vulnerable adults a key concern
 - Growth rate of 5% per day: average 1100 cases per day by 31 Dec, 1500 per day by 6 Jan
 - Growth rate of 8% per day: average 1400 cases per day by 31 Dec, 2300 per day by 6 Jan
- Stay home if possible
 - revise Christmas plans to limit numbers and duration, hand hygiene, distance, masks, ventilation
 - self-isolate and seek referral for test immediately if symptomatic



ECDC Data

EU/UK ranked by 14 day percentage change (21st December)

EU/EEA and the UK	14 day incidence	Previous 14 day incidence	% change in 14 day incidence
Denmark	777.37	362.64	114%
Netherlands	804.15	444.99	81%
Slovakia	646.05	381.18	69%
Czechia	753.48	468.72	61%
United Kingdom	496.65	311.2	60%
Ireland	117.44	76.09	54%
Lithuania	1412.45	1021.57	38%
Germany	398.9	302.19	32%
Cyprus	586.48	447.54	31%
Estonia	516.91	397.27	30%
Sweden	873.41	699.23	25%
France	282.98	234.67	21%
Latvia	520.36	439.19	18%
Belgium	295.92	282.26	5%
Spain	250.07	256.04	-2%
Slovenia	962.32	986.56	-2%
Croatia	1059.35	1133.86	-7%
Finland	99.86	107.3	-7%
Portugal	501.62	591.06	-15%
Luxembourg	975.44	1176.56	-17%
Romania	397.9	490.62	-19%
Poland	368.5	506.09	-27%
Bulgaria	407.1	564.43	-28%
Italy	366.34	513.98	-29%
Malta	258.87	374.83	-31%
Hungary	527.74	788.75	-33%
Greece	142.72	227.52	-37%
Austria	385.06	614.67	-37%



- 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>

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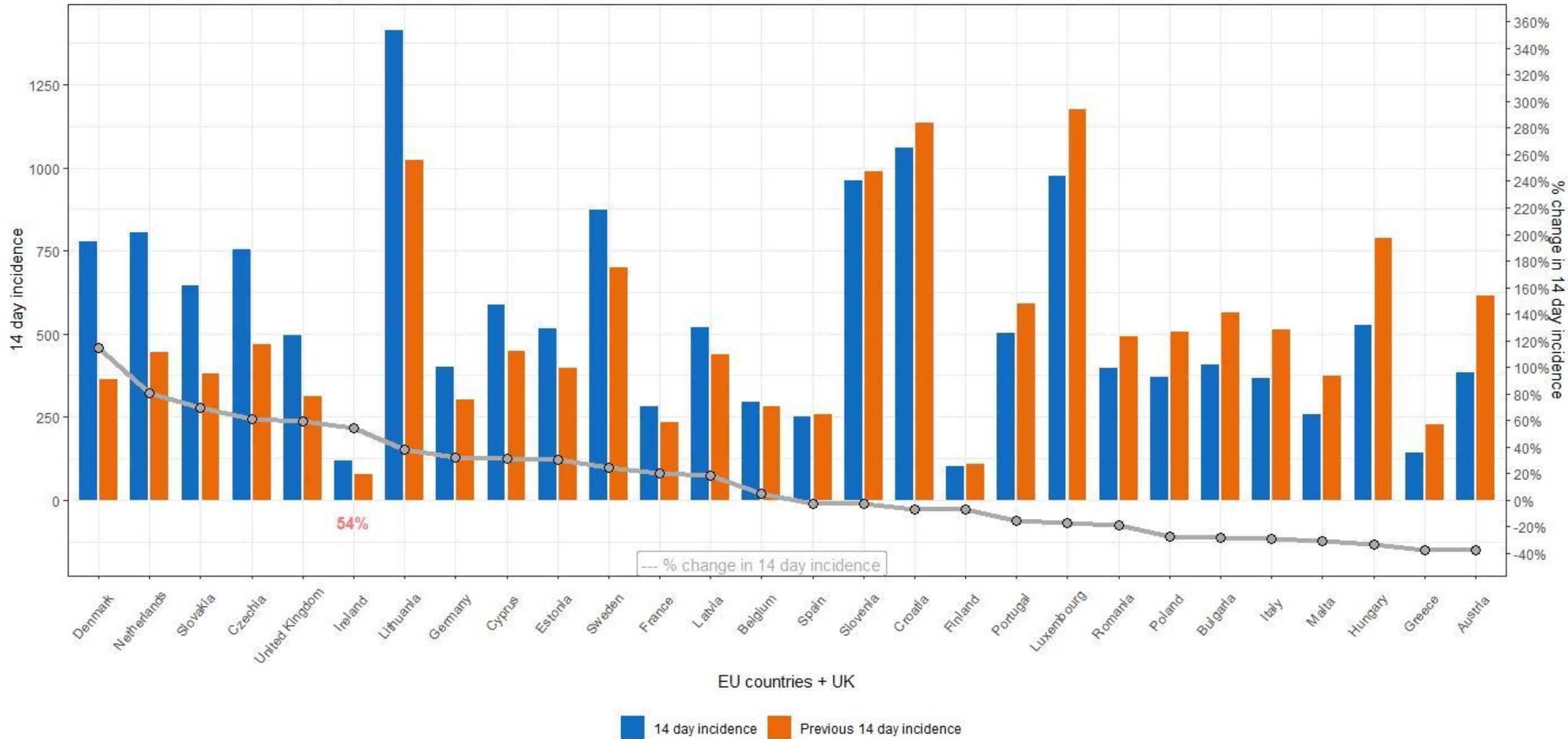
EU/UK ranked by 7 day percentage change (21st December)

EU/EEA and the UK	7 day incidence	Previous 7 day incidence	% change in 7 day incidence
Ireland	77.32	40.12	93%
United Kingdom	301.7	194.95	55%
Netherlands	463.7	340.45	36%
Spain	144.08	105.99	36%
Czechia	433.69	319.79	36%
Latvia	288.94	231.42	25%
Denmark	424.05	353.32	20%
France	153.15	129.83	18%
Slovakia	349.22	296.83	18%
Estonia	278.77	238.14	17%
Sweden	465.6	407.81	14%
Germany	211.21	187.69	13%
Belgium	152.72	143.2	7%
Lithuania	715.06	697.39	3%
Cyprus	291.59	294.9	-1%
Portugal	247.94	253.68	-2%
Italy	179.15	187.19	-4%
Malta	124.11	134.76	-8%
Poland	176.4	192.1	-8%
Slovenia	459.32	503	-9%
Romania	177.76	220.15	-19%
Austria	170.12	214.94	-21%
Luxembourg	428.45	546.99	-22%
Greece	61.63	81.09	-24%
Croatia	447.47	611.87	-27%
Hungary	220.07	307.67	-28%
Finland	41.58	58.28	-29%
Bulgaria	157.27	249.83	-37%



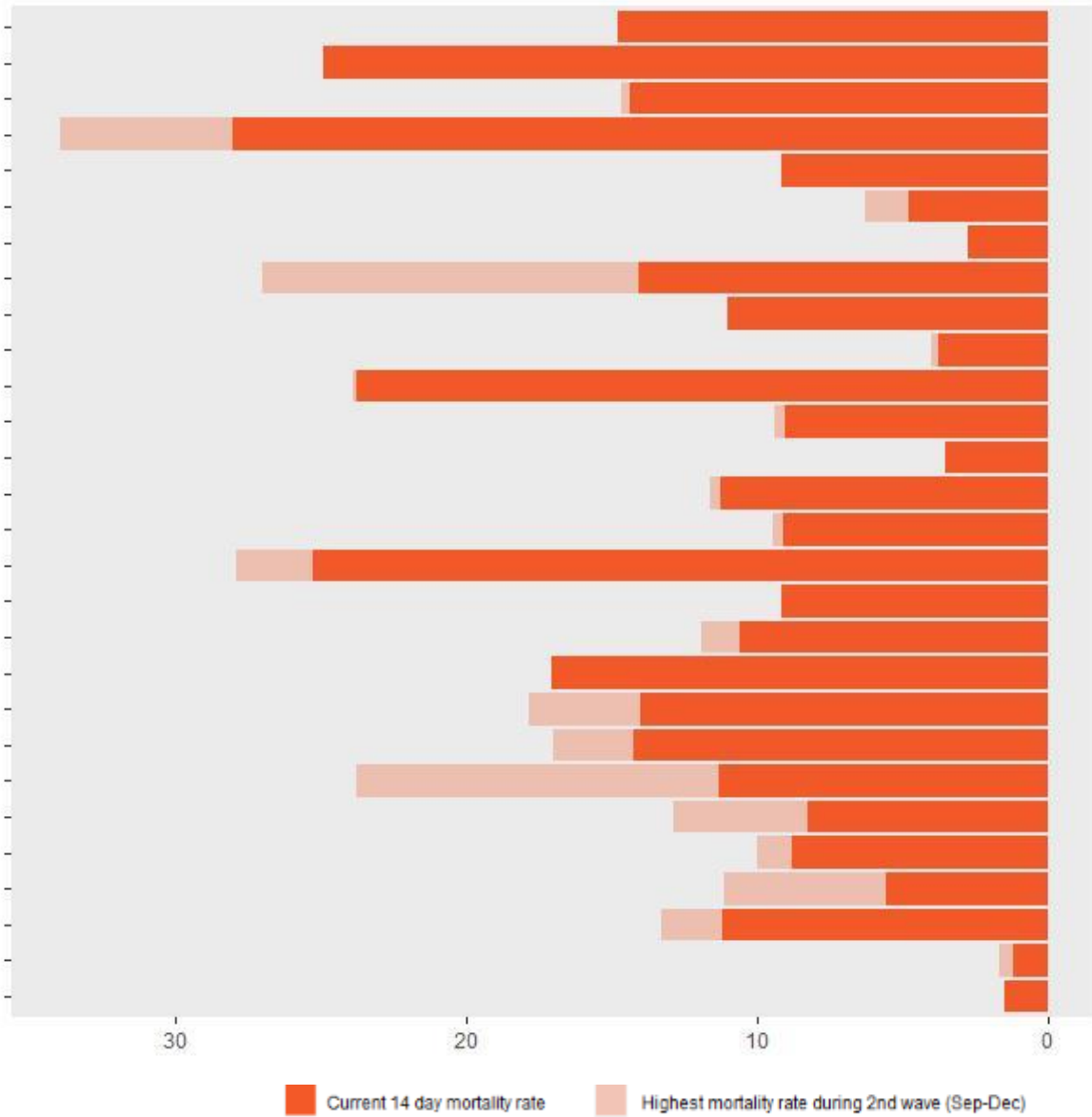
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European 14 incidence rates (21 December)



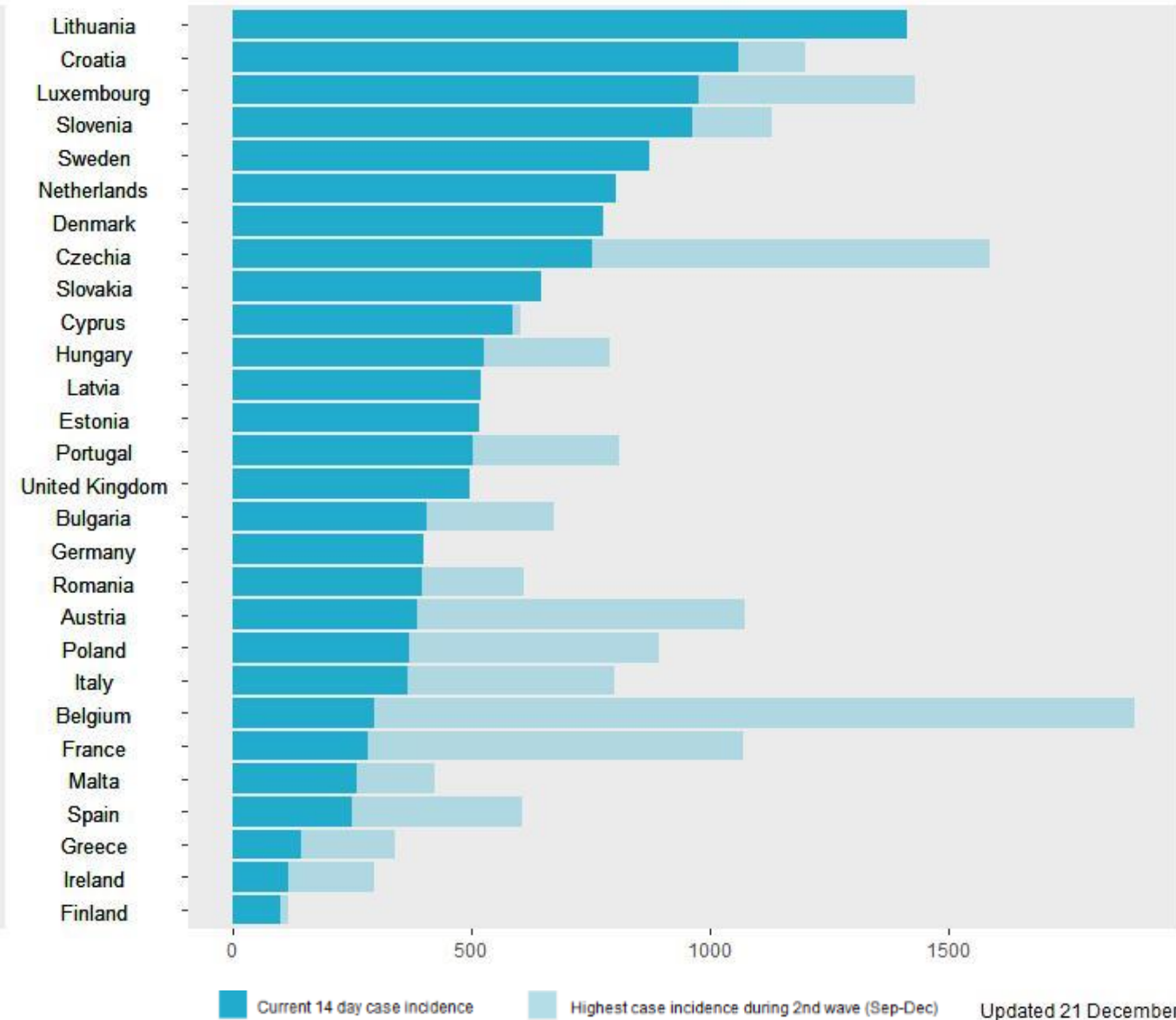
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14 day mortality rate



EU Country

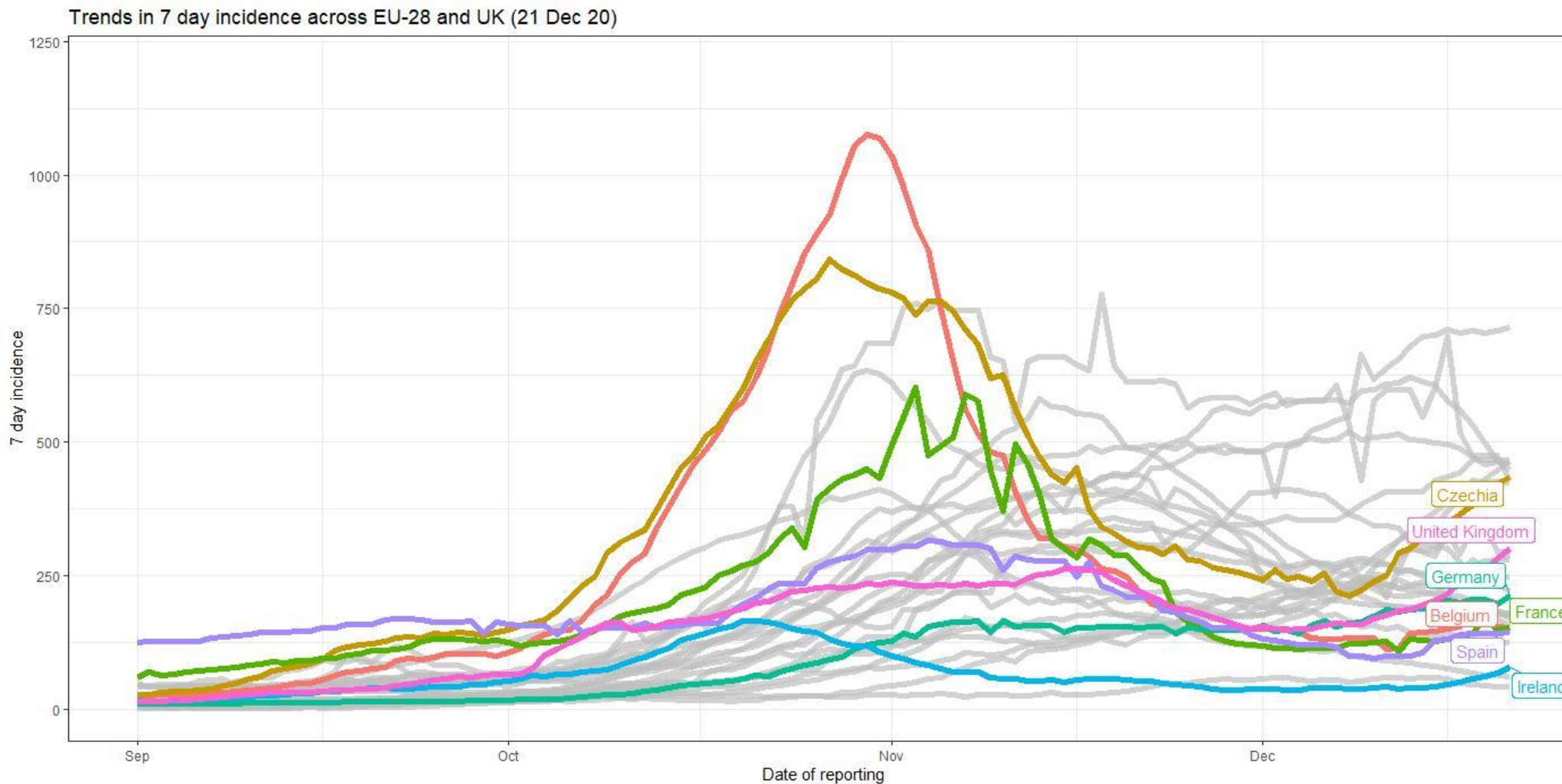
14 day case incidence



Updated 21 December

- 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).
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European trends since start September (7 day incidence)

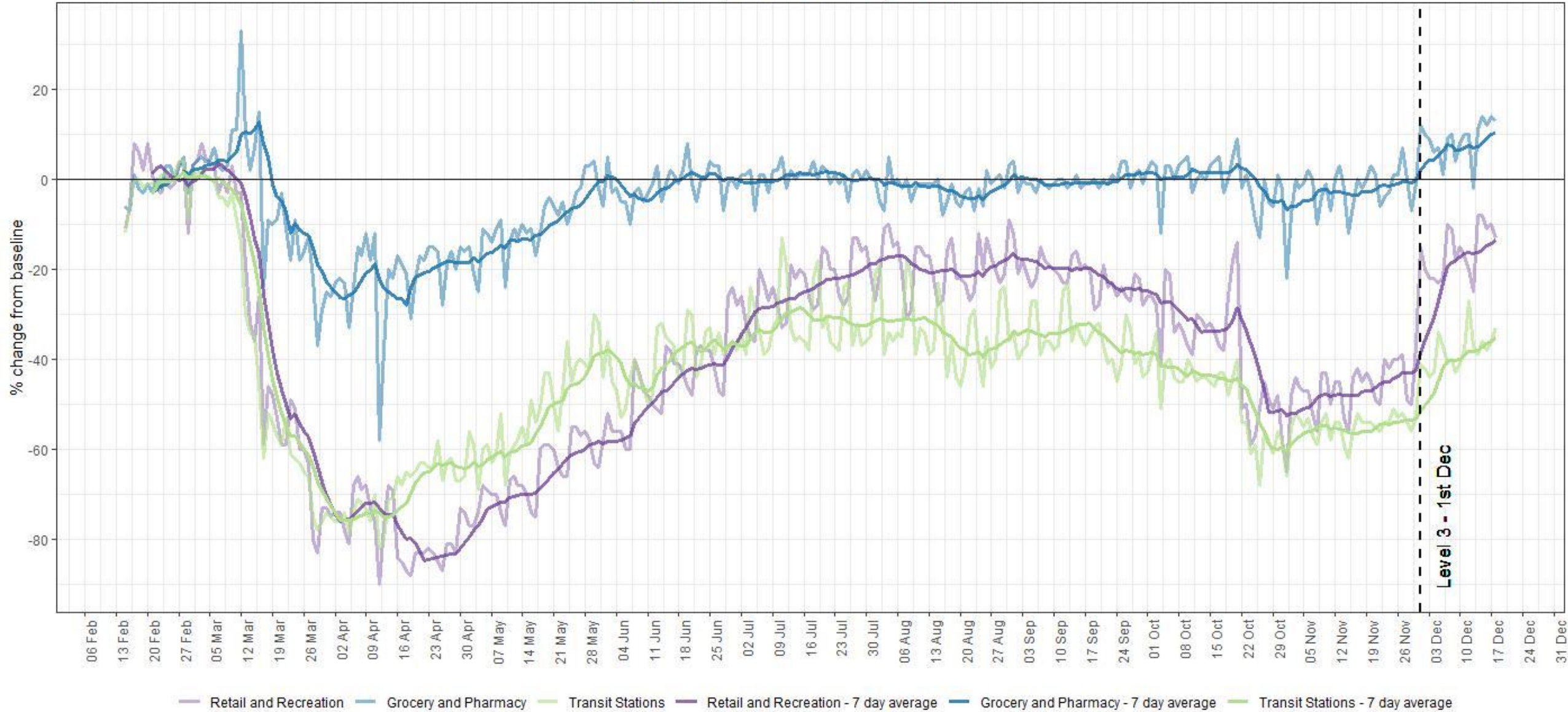


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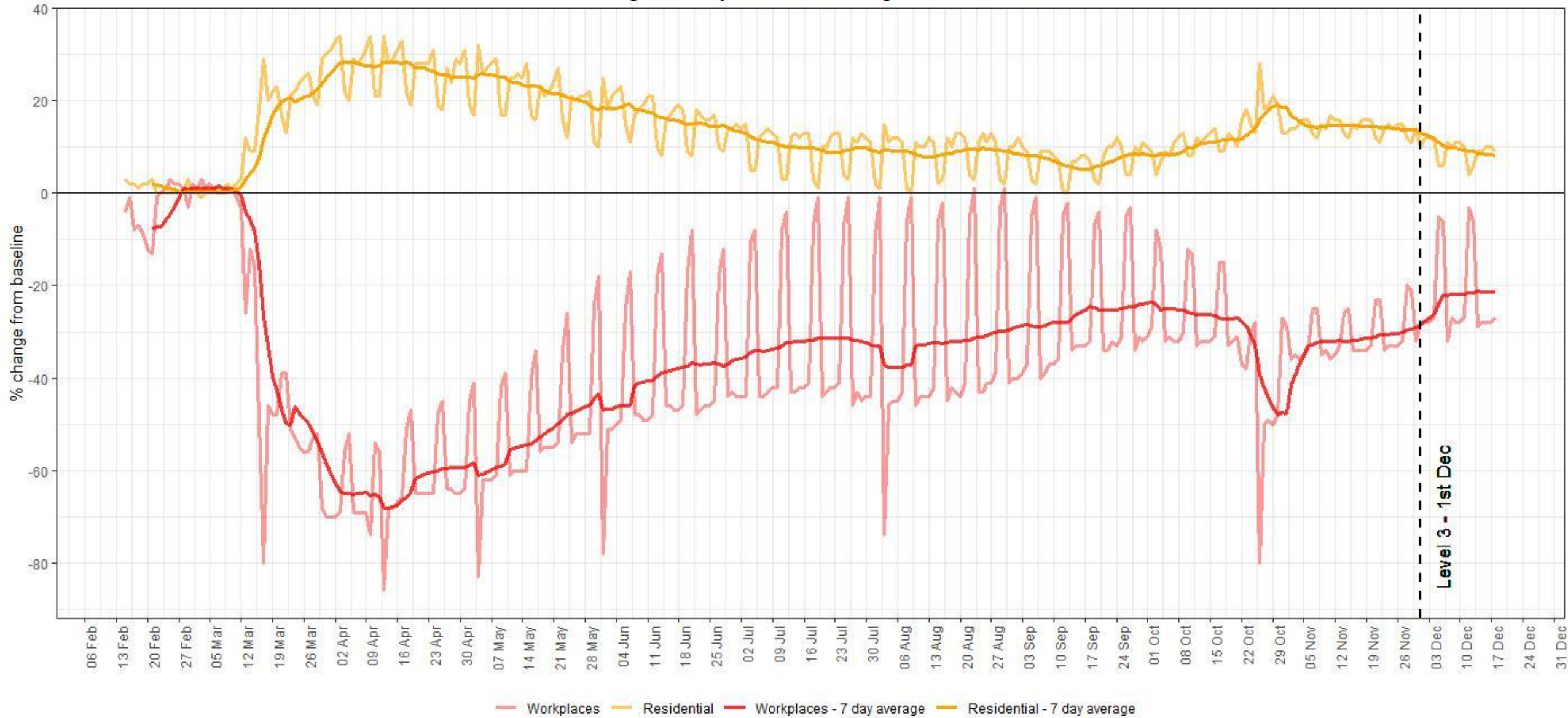


Compliance Data

Google Mobility Ireland - % change from baseline



Google Mobility Ireland - % change from baseline



Apple Mobility Ireland - % change from baseline

