



An Roinn Sláinte
Department of Health

NPHET COVID Update 22nd April 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.)	09-Apr	13-Apr	17-Apr	21-Apr
14-day incidence	96.08	306.20	86.90	320.63	1494.56	144.46	131.42	117.05	113.44
5-day average cases	407.0	919.4	261.0	1477.0	4459.4	408.0	394.8	386.0	376.0
Total weekly cases	2607	7000	1893	9419	35371	3001	2787	2626	2605

	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 rd wave peak 14 day inc.)	09-Apr	13-Apr	17-Apr	21-Apr
No. Hospital (8.A.M)	122	344	224	508	1792	212	206	183	182
No. in ICU (11.30 A.M)	20	40	31	42	172	55	50	53	48

	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	01-Jan	14-Jan (3 rd wave peak 14 day inc.)	09-Apr	13-Apr	17-Apr	21-Apr
Positivity rate (7 day average)	3.0%	6.1%	2.7%	12.5%	17.0%	2.9%	2.7%	2.7%	2.8%

	November	December	January	February	March	April
Total Deaths	188	198	1,402	866	224	47
Deaths associated with Nursing Home outbreaks	56	65	529	320	37	3
Deaths associated with Hospital outbreaks	69	69	229	157	45	13

Cases, numbers in hospital and intensive care

Daily case numbers and the numbers of people in hospital and ICU continue to decrease slowly. Notably, admissions to hospital have averaged 13 per day for 3 weeks, an decrease on preceding weeks.



	Apr 2020	Summer 2020	Oct 2020	Dec 2020	Jan 2021	24 Mar	31 Mar	7 Apr	14 Apr	21 Apr	Daily count 21 Apr
Cases confirmed per day	859 18-04	8.7 25-06	1158 21-10	262 12-12	6520 10-01	564	533	499	400	372	401
14-day incidence <i>per 100,000 population</i>	212 19-04	3.0 04-07	306 26-10	79 09-12	1532 15-01	159	161	152	132	113	
Hospital in-patients	862 17-04	9 02-08	333 01-11	198 16-12	1949 24-01	345	313	254	212	183	182
<i>Hospital admissions per day</i>	85 04-04	<1 10-07	27 26-10	11 13-12	158 15-01	24	22	13	13	13	19
ICU confirmed cases	150 14-04	4 04-08	43 04-11	26 27-12	217 28-01	81	68	50	51	50	50
<i>ICU admissions per day</i>	14 31-03	<1 03-06	4 03-11	1 16-12	20 17-01	3	3	2	2	2	2
Deaths confirmed per day	46 22-04	<1 30-07	7 01-12	4 17-12	57 03-02	9	9	6	12	7	15

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. The highest and lowest values of each indicator are given for each wave of the pandemic, along with the date on which that value was recorded, as well as the data for recent weeks. The historic incidence data may change due to denotification of cases.



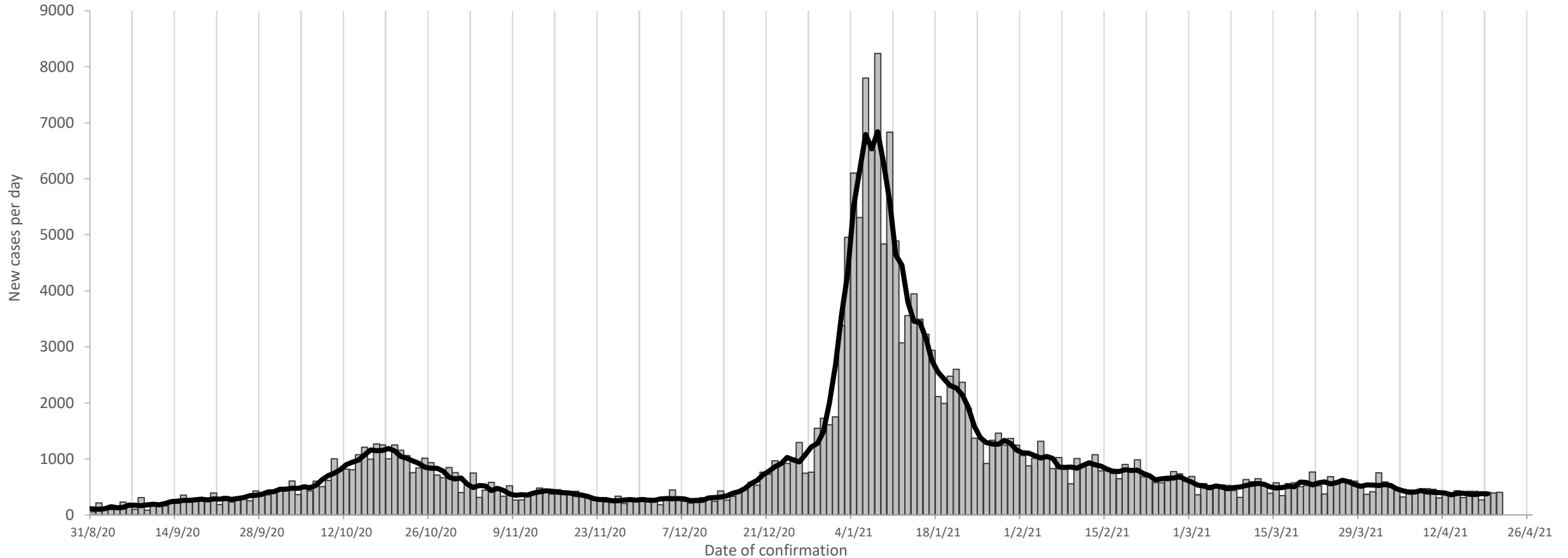
Cases, Incidence Rates & Testing

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, peaked again at 6847 on 8 January, and is now **376**



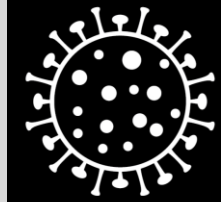
Cases per week	912	1303	1947	2059	3031	4457	7398	7073	4838	3424	2583	2580	1798	2028	1964	3368	6597	15722	45616	25113	14806	8921	7143	6027	5525	4547	3629	3535	3838	3982	3615	2798	2592
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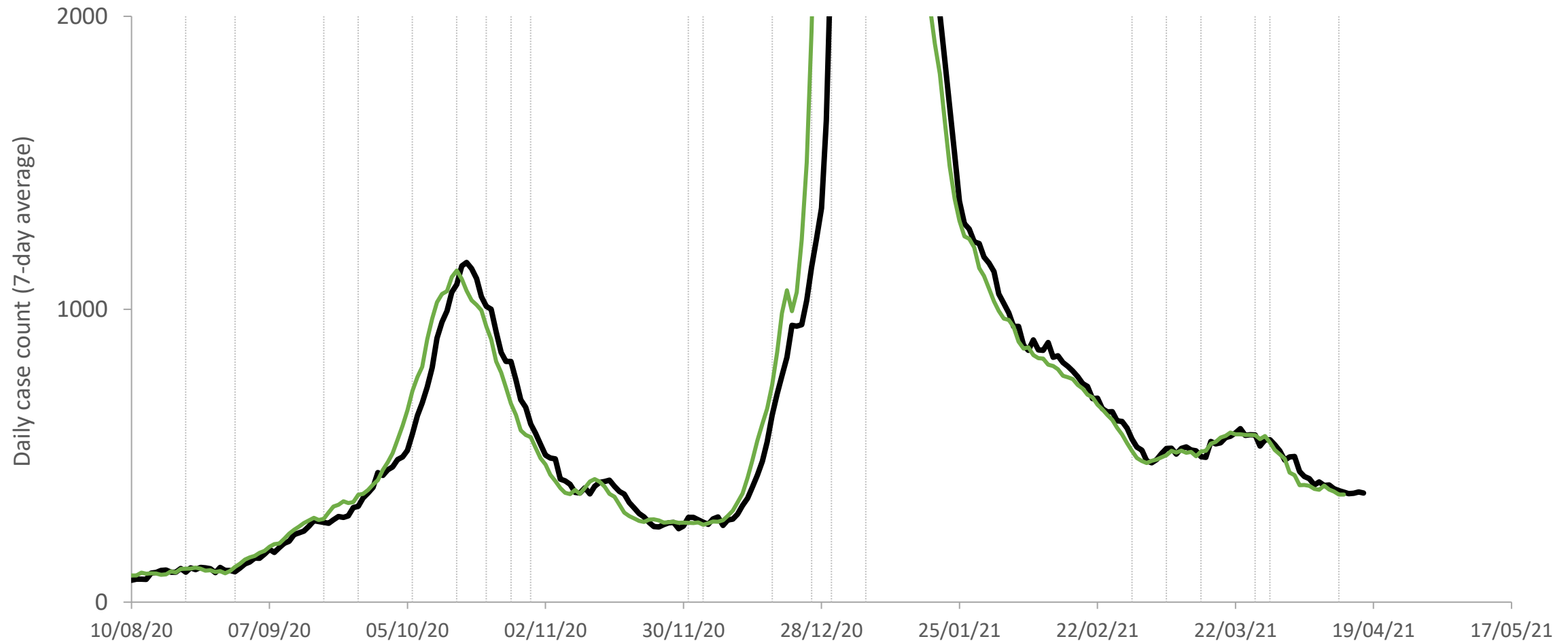
Daily count (bars) 5-day average (line) and weekly counts of the number of laboratory confirmed new cases by date on which they were confirmed by HPSC. Case counts may change due to denotification of cases. Weekly case counts are by notification (event) date and standard epidemiological week.

Daily incidence

Daily incidence remains high: approximately 40% higher than in early December, and approximately 40 times what it was in late June 2020. Incidence appears to be stable at approximately 350-400 cases per day.



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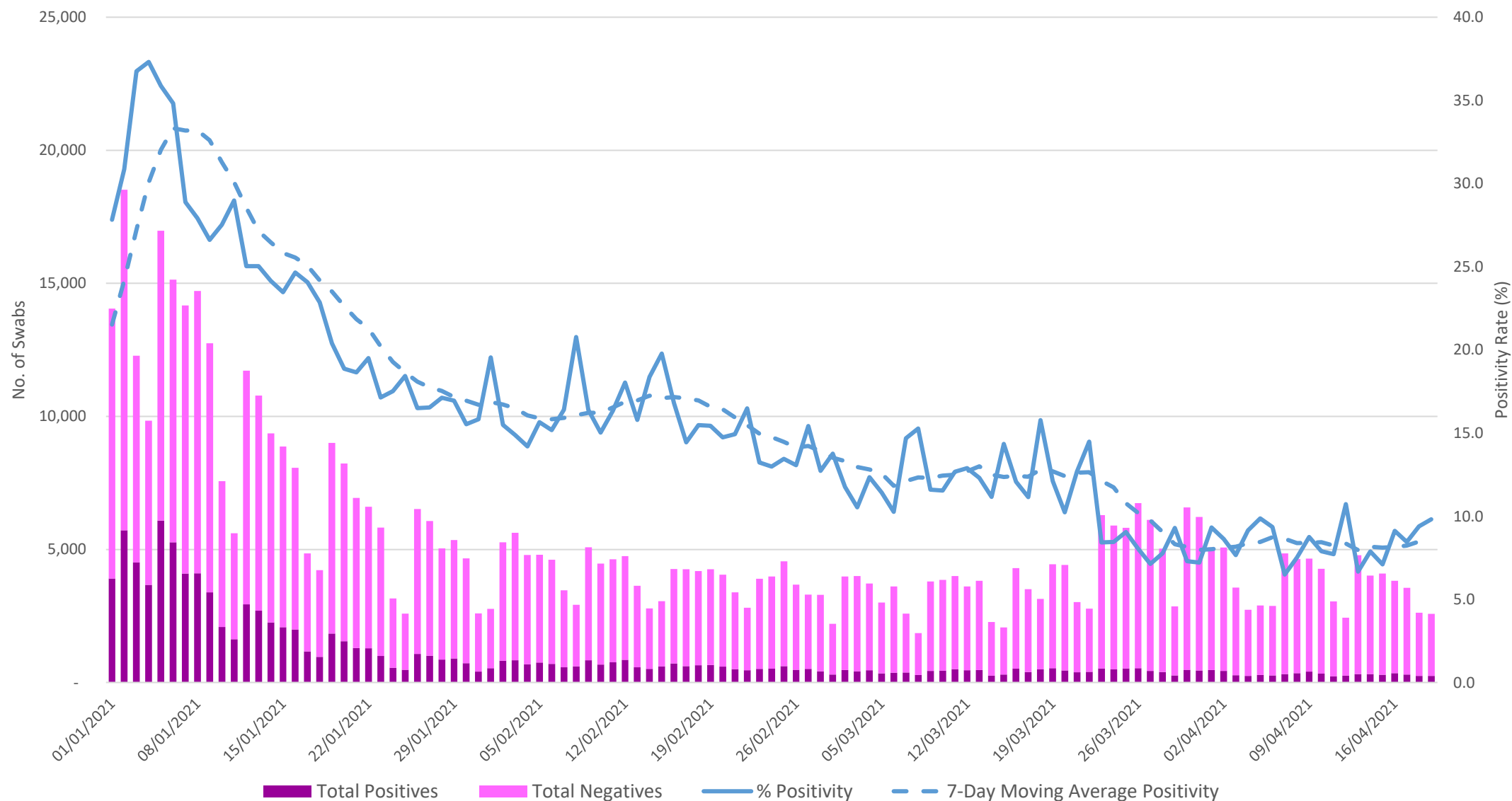


Daily cases by notification (event) date (black, the date the case was entered on the CIDR database) and specimen collection date (green). The vertical dashed lines indicate the dates of escalation and de-escalation of public health restrictions. Data are 7-day moving averages.



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Community Testing (Swabs taken in Community Test Centres for GP and CMP referrals inc. symptomatic and close contacts but ex. serial, mass testing and walk-in): Total tests and % Positivity



Incidence across different age groups (excluding HCW and LTRC)

Incidence is stable or decreasing across all age groups. The decrease in incidence in those aged 75 and older is likely due, at least in part, to the protective effect of vaccination



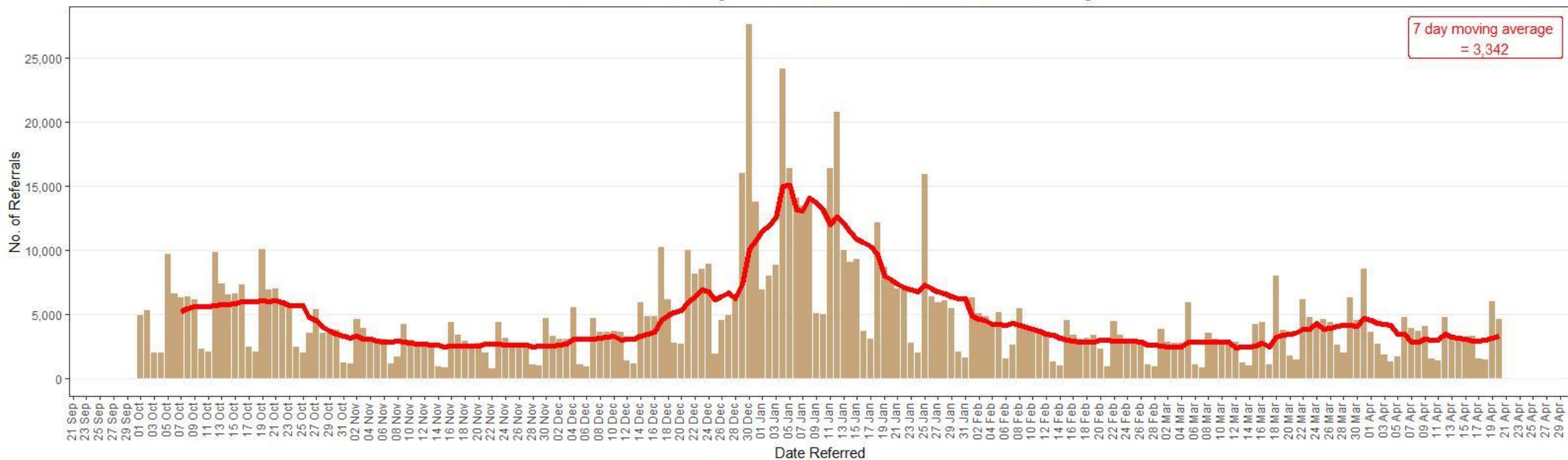
Week	Age band								
	0-4	5-12	13-18	19-24	25-39	40-64	65-74	75-84	85+
47	22.0	34.1	59.7	79.1	34.6	33.0	28.9	39.7	62.2
48	23.2	31.3	45.5	66.7	33.8	29.6	22.2	36.1	40.0
49	28.4	36.8	37.7	40.5	33.2	30.1	25.4	28.5	41.4
50	21.4	39.9	44.1	57.4	39.7	35.0	22.5	31.0	22.2
51	51.9	58.5	74.5	128.3	88.0	80.9	54.3	55.0	51.8
52	77.5	76.9	120.0	326.1	175.6	134.5	95.8	94.7	119.9
53	218.1	236.6	513.7	1401.8	760.9	636.2	423.6	350.1	361.2
1	183.7	208.9	568.9	1328.8	789.9	720.7	497.4	446.8	558.1
2	130.6	126.7	302.2	580.9	414.6	419.8	301.5	410.2	575.8
3	93.5	81.3	169.3	328.5	253.8	243.3	169.7	251.4	413.0
4	74.2	60.9	128.4	228.0	154.8	146.3	119.4	161.8	267.9
5	78.1	72.9	126.8	208.6	126.3	123.4	85.7	116.0	210.2
6	92.0	85.7	125.9	225.8	118.5	101.6	68.3	90.1	124.3
7	87.5	76.4	96.3	253.6	106.5	88.4	59.7	78.4	109.5
8	87.5	70.7	89.6	186.0	94.8	77.5	43.6	52.4	85.9
9	67.0	57.0	65.1	125.0	75.6	57.6	44.7	44.8	40.0
10	68.2	68.0	89.9	145.2	78.9	58.7	39.1	39.7	40.0
11	107.7	90.8	78.3	87.3	85.6	62.0	45.8	55.0	57.7
12	106.8	102.2	85.3	104.2	92.9	69.5	41.2	42.2	44.4
13	70.0	86.4	65.1	115.0	80.7	66.8	39.1	35.1	40.0
14	49.8	65.2	57.9	92.7	66.4	48.6	24.4	22.9	20.7
15	50.1	55.6	64.9	74.9	61.9	50.4	25.2	14.8	14.8

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 specimen collection date.



GP referrals

GP Referrals excluding Close Contacts, Schools, and Walk-In Testing



Mar

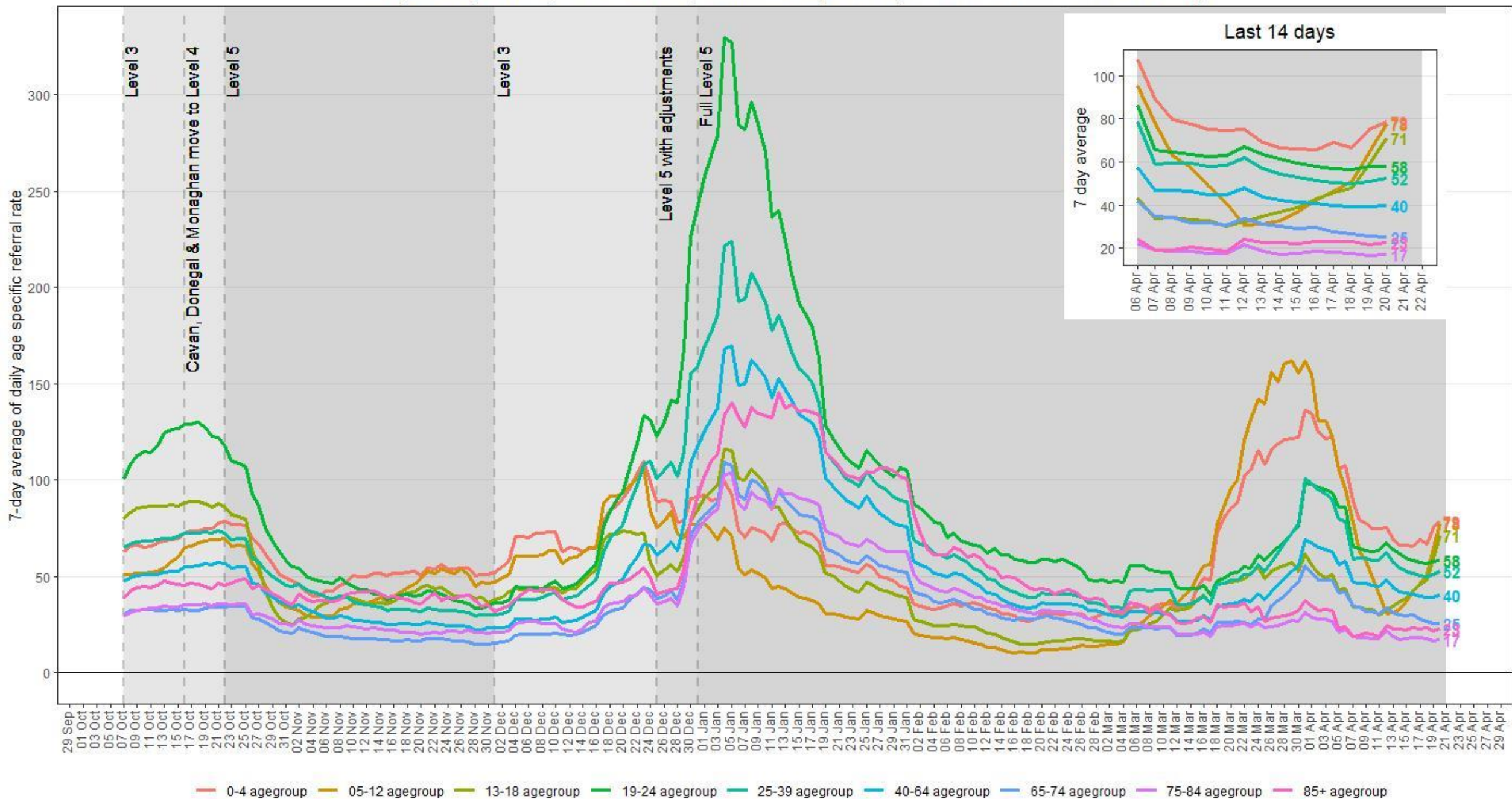
	1 3,853 referrals (-14%)	2 2,897 referrals (-16%)	3 2,779 referrals (-7%)	4 2,766 referrals (-3%)	5 5,933 referrals (+103%)	6 1,108 referrals (-2%)
7 911 referrals (-1%)	8 3,589 referrals (-7%)	9 3,070 referrals (+6%)	10 2,876 referrals (+3%)	11 2,719 referrals (-2%)	12 2,889 referrals (-51%)	13 1,228 referrals (+11%)
14 1,069 referrals (+17%)	15 4,253 referrals (+19%)	16 4,433 referrals (+44%)	17 1,122 referrals (-61%)	18 8,061 referrals (+196%)	19 3,817 referrals (+32%)	20 1,772 referrals (+44%)
21 1,511 referrals (+41%)	22 6,165 referrals (+45%)	23 4,823 referrals (+9%)	24 4,373 referrals (+290%)	25 4,669 referrals (-42%)	26 4,434 referrals (+16%)	27 2,609 referrals (+47%)
28 2,002 referrals (+32%)	29 6,317 referrals (+2%)	30 4,564 referrals (-5%)	31 8,559 referrals (+96%)			
Sun	Mon	Tue	Wed	Thu	Fri	Sat

Apr

				1 3,667 referrals (-21%)	2 2,711 referrals (-39%)	3 1,901 referrals (-27%)
4 1,306 referrals (-35%)	5 1,699 referrals (-73%)	6 4,815 referrals (+5%)	7 3,947 referrals (-54%)	8 3,738 referrals (+2%)	9 4,085 referrals (+51%)	10 1,542 referrals (-19%)
11 1,391 referrals (+7%)	12 4,822 referrals (+184%)	13 3,444 referrals (-28%)	14 3,125 referrals (-21%)	15 3,133 referrals (-16%)	16 3,352 referrals (-18%)	17 1,603 referrals (+4%)
18 1,495 referrals (+7%)	19 6,023 referrals (+25%)	20 4,661 referrals (+35%)	21	22	23	24
25	26	27	28	29	30	
Sun	Mon	Tue	Wed	Thu	Fri	Sat



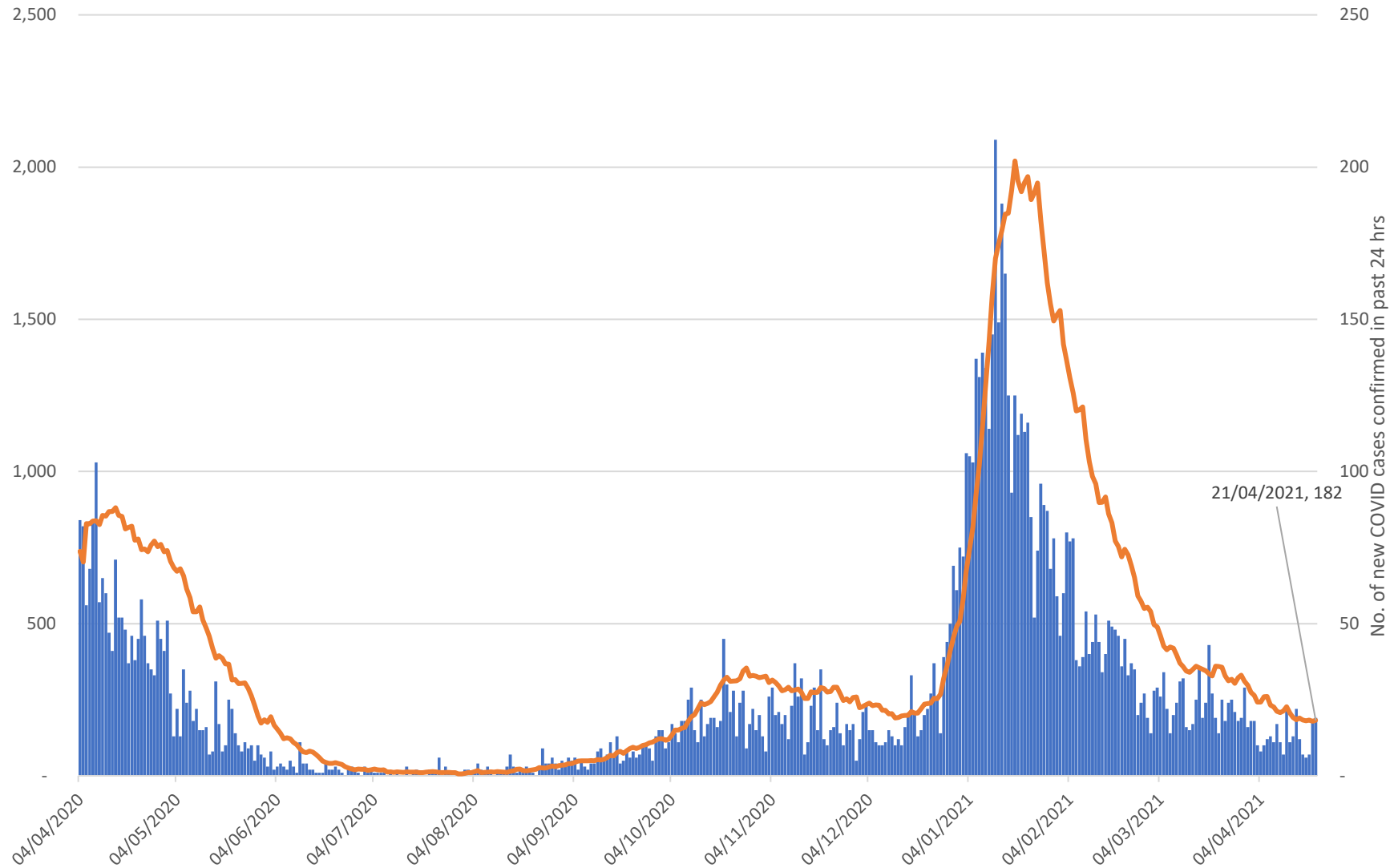
7-day Average of Daily Referral Rate per 100,000 Population (GP Referrals excl. Close Contacts)



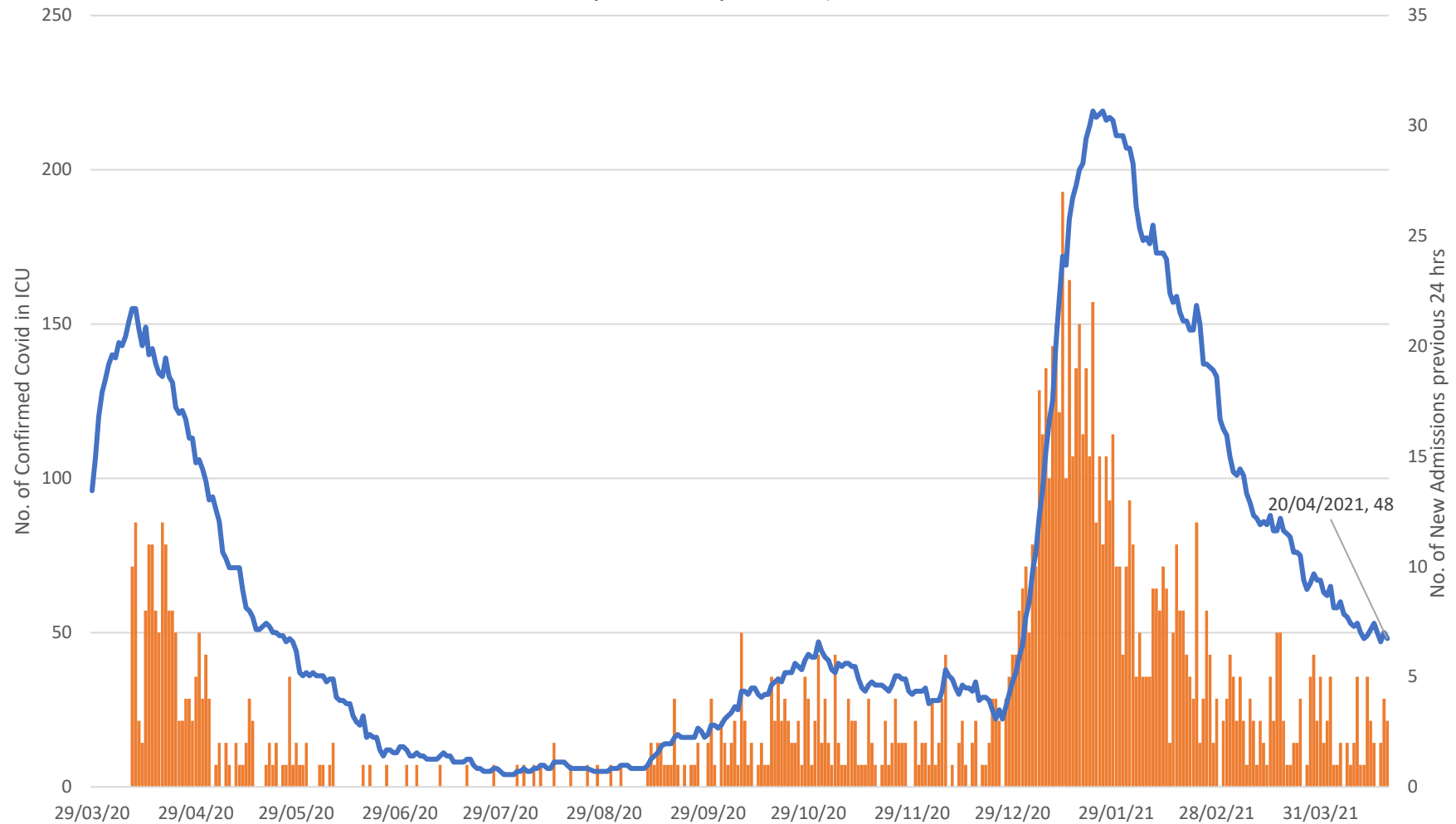


Hospital & ICU Data

Total No. of Confirmed Covid Cases in Hospital at 8AM & No. of New Confirmed Covid Cases in Past 24 hrs



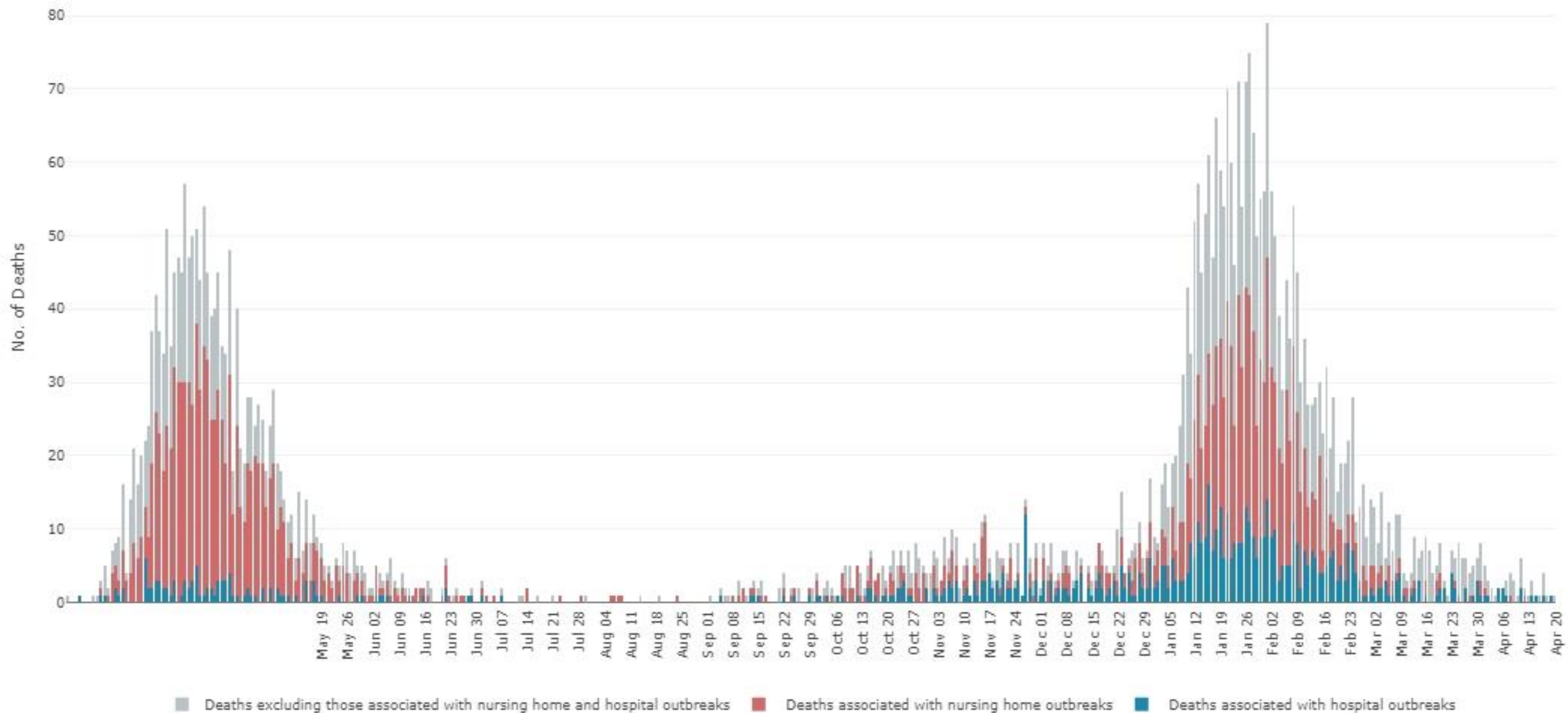
Total No. of Confirmed Covid Cases in ICU at 11.30AM & No. of New Confirmed Covid Admissions to ICU in past 24 hrs (includes all reporting public & private hospitals and may differ from no. reported by HSE in public hospital ICU)





Deaths

Deaths by Date of Death since March





Outbreaks & Clusters

COVID-19 outbreaks by key outbreak locations, week 15 2021 and overall, 2020-2021 Ireland



- Since March 1st 2020, 15,213 outbreaks have been notified to CIDR
- In week 15, 2021, 252 outbreaks were notified. 31 of which were late notifications of outbreaks from October (n=1), December (n=9) January (n=16) and February (n=5)

Key outbreak locations	Week 15	Weeks 10-47	Weeks 48-15
Workplace	16	248	383
Direct Provision Centre	2	37	43
Vulnerable groups*	12	101	354
Prisons	0	9	6
Nursing Home/Community Hospital	1	378	256
Acute hospitals	5	178	237
Schools^	5	199	260
Childcare facility	11	77	222

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

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

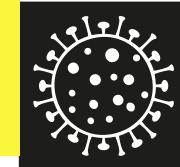
Data source: CIDR April 20th 2021 – data to midnight April 17th 2021

Weekly Summary

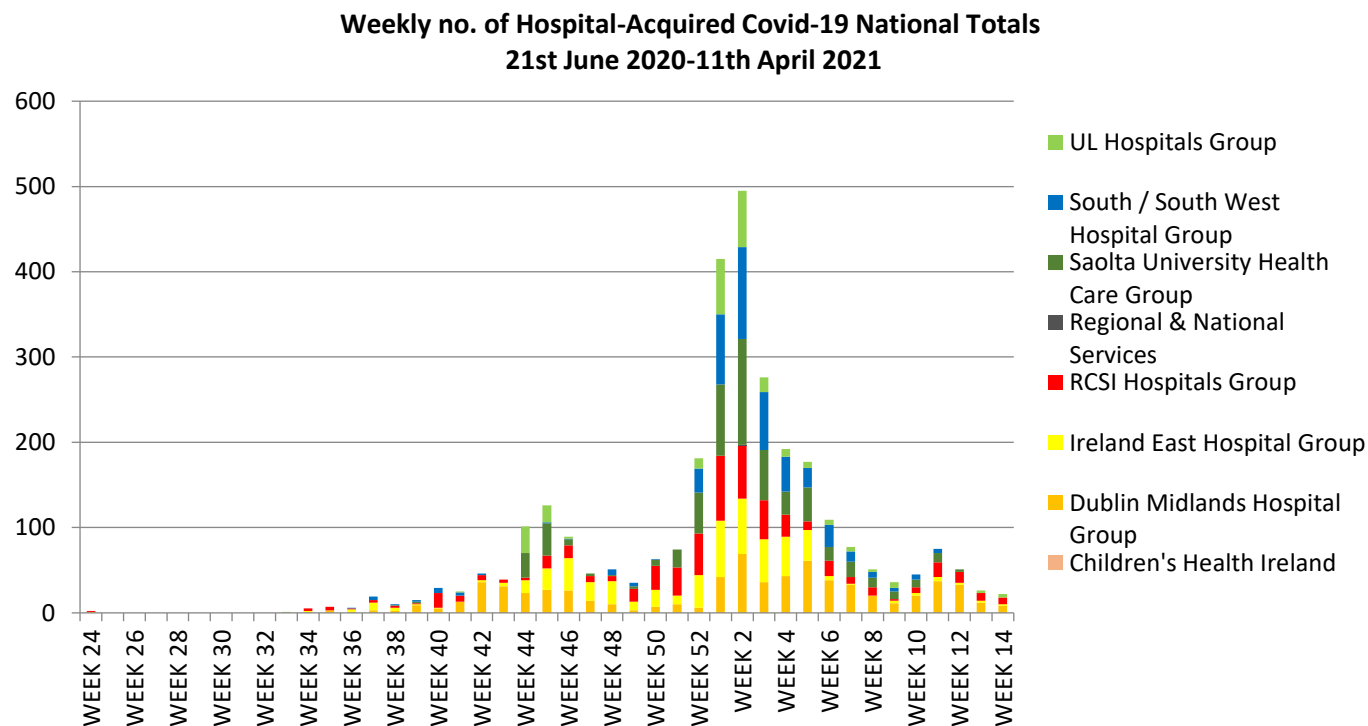


- **Total** number of outbreaks week 15, 2021 n=252 (including 31 late notifications) compared with week 14, 2021 n=337 (included 78 late notifications)
- **Vulnerable groups**
 - Irish Travellers – wave 3 -286 outbreaks, 4012 cases
 - Week 15 – 10 new outbreaks, 47 linked cases
 - 1 new outbreak in Roma population – 5 linked cases
 - 1 new outbreak in homeless populations – 11 linked case
- **Workplace outbreaks**
 - 18 open outbreaks in food industry with 283 linked cases
 - 3 new food industry outbreak since last week's report – 30 linked cases (range 4-22)
 - 3 new construction sector outbreaks – 6 linked cases
 - 7 open outbreaks in other key workplaces, 146 linked cases (range 2-76)
- **Residential institution outbreaks**
 - 21 outbreaks are 'open' with 149 linked cases (range 0-19)
 - 0 outbreak reported since last week's report
- **Home care Teams**
 - 14 open outbreaks – 47 linked cases (range 1-11)
 - no new outbreaks notified since last report
- **Nursing Homes & Community Hospitals**
 - 19/634 outbreaks remain open with 619 linked cases
 - One NH outbreak notified, with two linked cases (identified before Wk 15)
 - Since November 22nd 2020, 1008 deaths
- **Acute hospitals**
 - 26/415 outbreaks across 18 acute hospitals remain open, 352 linked cases (range 1-155)
 - 5 outbreaks notified last week with 11 linked cases
 - Since November 22nd 2020, 489 deaths have occurred in cases linked to acute hospitals outbreaks
- **Schools**
 - 5 new outbreaks since last week's report, 11 linked cases
 - 25 cases linked to 10 older outbreaks
- **Childcare facilities**
 - 11 new outbreaks since last week's report with 52 linked cases
 - 3 cases linked to 3 previously notified outbreaks
- **Third-level students/University/college**
 - 23 open outbreaks with 804 confirmed linked cases
 - Large student 'community outbreak' – 84 linked cases
 - In week 15, three new outbreaks with 6 linked cases

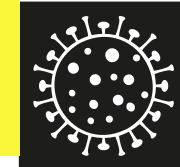
Data source: CIDR April 20th 2021 – data to midnight April 17th 2021



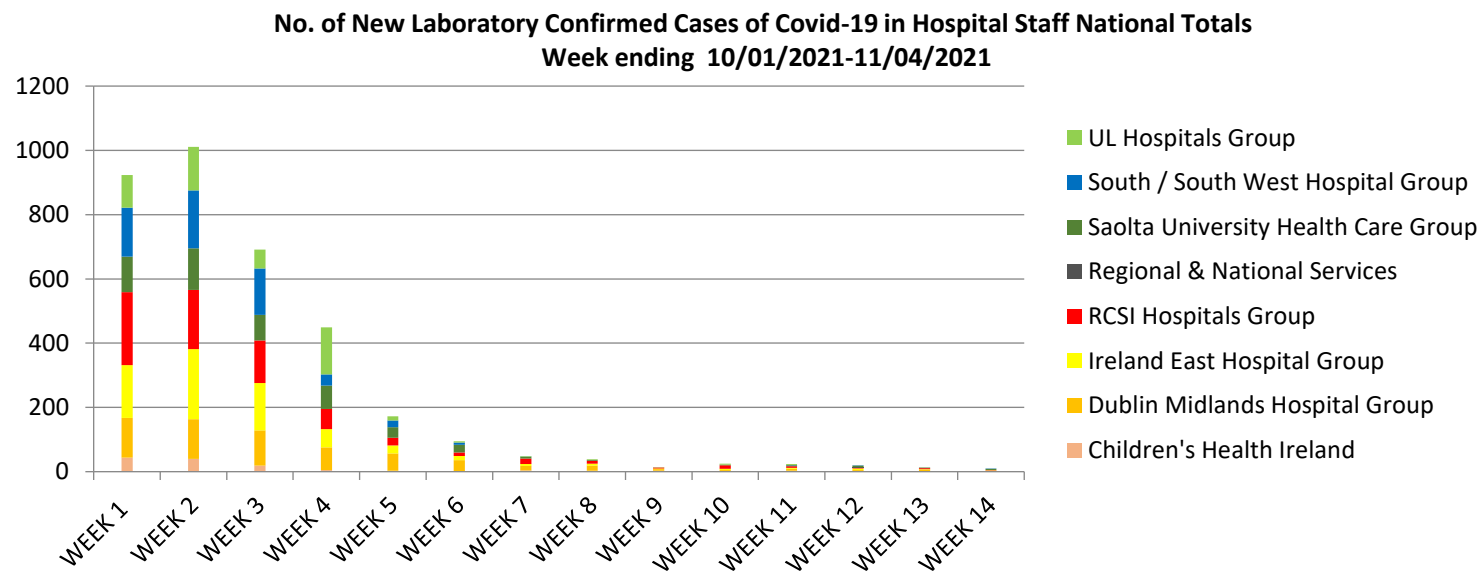
Acute Hospital



Week ending April 11
22 cases of cases of hospital acquired
COVID-19



Acute Hospital



Week ending April 11
10 cases in acute hospital staff



Test & Trace Update

Testing/sampling and contact tracing NPHE update



Sampling

Over the seven-day period, 14th April – 20th April, there has been approximately 115,256 swabs taken for COVID-19 testing.

Of total swabs:

- 40,717 (35%) of these were taken in the community
- 11,473 (10%) of these were taken by the National Ambulance Service
- 42,625 (37%) swabs were taken in acute and private acute settings.
- 20,441 (18%) swabs taken were taken as part of the Serial Testing programmes of staff in residential care facilities including mental health facilities and disability facilities meeting the agreed criteria, as well as staff in food production facilities.

Turnaround Times (14th-20th April)

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 **1.2 days**.
- The median turnaround time for time, from referral to communication of a **detected result** by call, in community settings was **1.6 days**.
- The median end-to-end turnaround time, from referral to the end of contact tracing by call, for **detected cases** in the community setting was **1.8 days**.



Overall Swab to laboratory result communicated – Medians: 24 hours in Acute, 25 hours in Serial Testing, 26 hours in Community

Overall, 46% of people get their result in less than 24 hours, 88% in less than 36 hours and 96% in less than 48 hours.

Referral to appointment

In the community, the median time from referral to appointment was 0.2 days.

94.7% of community referrals are provided with a COVID-19 test appointment within 24 hours.

Contact Tracing:

The mean time and median time to complete all calls are 7.1 hours and 4.4 hours, respectively.

Education and Childcare Facility turnaround times

The median turnaround time from swab taken to result communicated in education and childcare settings was **1 day**

Education and Childcare Testing Programme



COVID-19 testing has re-started in schools and is ongoing in special education and childcare facilities. In the last week (11th-17th April 2021):

- 535 tests were completed in 31 primary schools resulting in in a **2.2% positivity rate**.
- 206 tests were completed in 18 post-primary schools resulting in a **0.5% positivity rate**.
- 127 tests were completed in 1 Special Education setting resulting in a **1.6% positivity rate**
- 869 tests were completed in 42 childcare facilities resulting in a **4.0% positivity rate**

CMP close contact update (12th – 18th April)



- The number of close contacts reported during the week ending 18th April was 8,423, a 28% increase on the previous week (6,571).
- In total, 97% of these close contacts have been contacted.
- The mean number of close contacts per case (incl. cases with no close contacts) is 2.3, which is the same as the previous week.
- The number of complex contact episodes identified during the week ending 18th April was 1,262, a 26% increase from the week ending 11th April (1,004).

**Source: HSE – COVID-19 Contact Management
Programme Weekly report**



Close Contact Attendance and Positivity Rates at Test 1 – 5th – 11th April

- Of the close contacts created between 5th-11th April, 4,080 (87%) of those who were referred for a Test 1 appointment attended for testing.
- Results were available at the time of report preparation for 4,014 close contacts, 21.9% (878) of whom were positive.
- Household close contact positivity rate at 31.6%

Source: HSE – COVID-19 Contact Management Programme Weekly report

Table 1.11 – SARS-CoV2 Test 1 Results by Circumstances of Contact – Contacts Created 05/04/2021 to 11/04/2021

<i>Circumstances of Contact</i>	<i>Number of Results Reported</i>	<i>Positive Results</i>	<i>Positivity Rate</i>
<i>Household</i>	1961	620	31.6%
<i>Social</i>	852	114	13.4%
<i>Childcare Facilities</i>	295	26	8.8%
<i>Primary School</i>	40	<5	*
<i>Secondary School</i>	16	<5	*
<i>Third Level Education</i>	<5	<5	*
<i>Workplace</i>	164	22	13.4%
<i>Transport</i>	75	9	12.0%
<i>Healthcare Setting: Patient**</i>	16	<5	*
<i>Healthcare Setting: Staff**</i>	<5	<5	*
<i>Sport</i>	35	<5	*
<i>Other</i>	11	<5	*
<i>Not Recorded</i>	545	80	14.7%
<i>Total</i>	4014	878	21.9%

** Unstable positivity rate due to small numbers.*

*** The majority of patients and staff who are close contacts in a healthcare setting are managed by Infection Prevention and Control and Occupational Health teams off the CCT.*



Close Contact Attendance and Positivity Rates at Test 2 – 29th-4th April

- Of the close contacts created between 29th March-4th April, 4,283 (87%) of those who were referred for a Test 2 appointment attended for testing.
- Results were available at the time of report preparation for 3,858 close contacts, 146 (3.8%) of whom were positive.
- Household close contact positivity rate at 9.1%

Table 1.14 – SARS-CoV2 Test 2 Results by Circumstances of Contact – Contacts Created 29/03/2021 – 04/04/2021

<i>Circumstances of Contact</i>	<i>Number of Results Reported</i>	<i>Positive Results</i>	<i>Positivity Rate</i>
<i>Household</i>	1155	105	9.1%
<i>Social</i>	689	8	1.2%
<i>Childcare Facilities</i>	417	5	1.2%
<i>Primary School</i>	768	<5	*
<i>Secondary School</i>	119	<5	*
<i>Special School</i>	23	<5	*
<i>Third Level Education</i>	<5	<5	*
<i>Workplace</i>	167	<5	*
<i>Transport</i>	11	<5	*
<i>Healthcare Setting: Patient**</i>	10	<5	*
<i>Healthcare Setting: Staff**</i>	5	<5	*
<i>Sport</i>	40	<5	*
<i>Other</i>	9	<5	*
<i>Not Recorded</i>	429	23	4.8%
Total	3858	146	3.8%

** Unstable positivity rate due to small numbers.*

*** The majority of patients and staff who are close contacts in a healthcare setting are managed by Infection Prevention and Control and Occupational Health teams off the CCT.*

Source: HSE – COVID-19 Contact Management Programme Weekly report

Variants update



Confirmed variants of concern (new in the last week):

Confirmed P1: 27 (8)

Confirmed B.1.351 cases: 68 (22)

Other confirmed variants of note (new in the last week):

B.1.525 cases: 17 (1)

B.1.526 cases: 6 (1)

P.2 cases: 15 (1)

B.1.1.7 with E484K mutation: 2 (0)

B.1.429: 2 (2)

B.1.617: 3 (3)

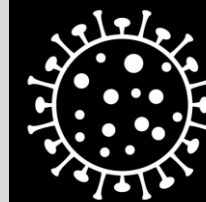
(Based on NVRL and Eurofins-Biomnis results up to 21st April 2021)



Growth in Cases & R number

Close contacts of adult confirmed cases

The mean number of close contacts per confirmed case. The number of contacts was very low (2 or less) during April, but increased to 5-6 per case during the summer. The public health measures during October were associated with a progressive reduction in close contacts, to below 3. The number of close contacts remained below 3.3 on average until early December, rose to almost 5 on average by 28 December and fell to 2.1 in January. It has increased to ≈ 2.6 in the latter half of February 2021, and remains stable at that level



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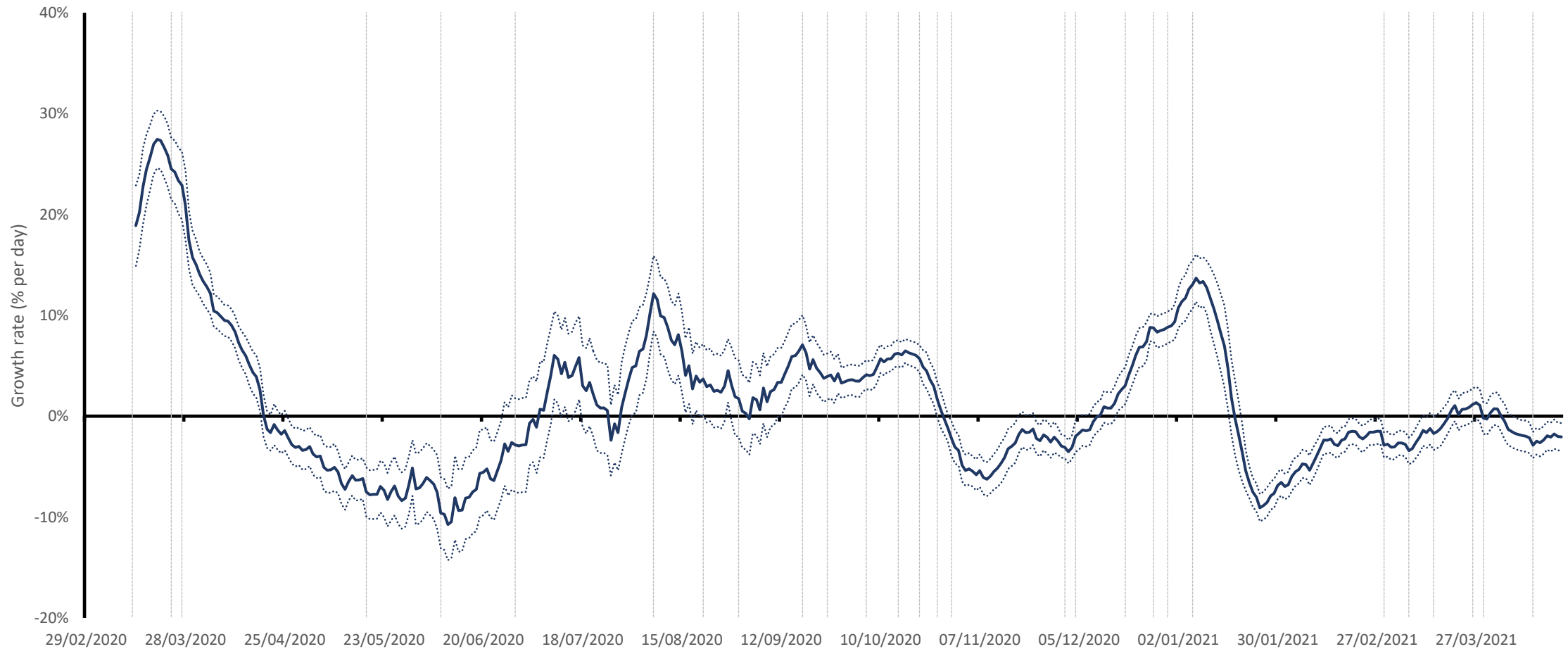
The average number of close contacts per confirmed case. Data from COVID-19 Care Tracker (CCT). Cases dated by case creation date. Cases (but not contacts) aged 18 and younger are excluded. Data are 7-day trailing averages except for the months of June – August where a 21-day trailing average is used due to very low case counts.



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Growth rate for case numbers

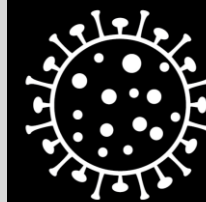
Growth rate peaked at 13% per day over the 21-day period up to 10 January 2021. While case numbers decreased very rapidly in January (-6 to -10% per day) the rate of decline slowed to -2 to -4% per day from mid-February, and from mid-March case numbers were static or growing slowly (growth rate 0% to +2% per day). The growth/decline rate is currently estimated at 0% to -2% per day.



Growth rate calculated as the average growth rate over a 21-day trailing window, with 95% confidence interval; cases dated by notification (event) date.

Week-on-week decline in cases

Case counts have decreased each week for the last three weeks



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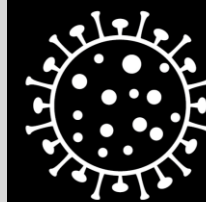
Week	Cases	Week-on week change
2021 - 1	45,616	
2	25,113	-45 %
3	14,807	-41 %
4	8,921	-40 %
5	7,143	-20 %
6	6,027	-16 %
7	5,525	-8 %
8	4,547	-18 %
9	3,629	-20%
10	3,535	-3%
11	3,838	+9%
12	3,982	+4%
13	3,615	-9%
14	2,798	-22%
15	2,592	-7%



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Estimates of effective reproduction number (R)

Reproduction number is close to or just below 1.0 with high levels of uncertainty in its estimation;
it is currently estimated at 0.9 – 1.1



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Method	Estimate	95% confidence interval
SEIR model-inferred	0.89	0.66 – 1.16
Bayesian model	1.11	0.63– 1.61
Time-dependent R	0.91	0.82 – 1.00
GAM estimate 13 Apr 2021	0.94	0.86 – 1.01
GAM estimate 20 Apr 2021	0.97	0.83 – 1.10

Estimates generated 21 April 2021, 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. The time-dependent R estimate lags behind other estimates. 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 21 April 2021

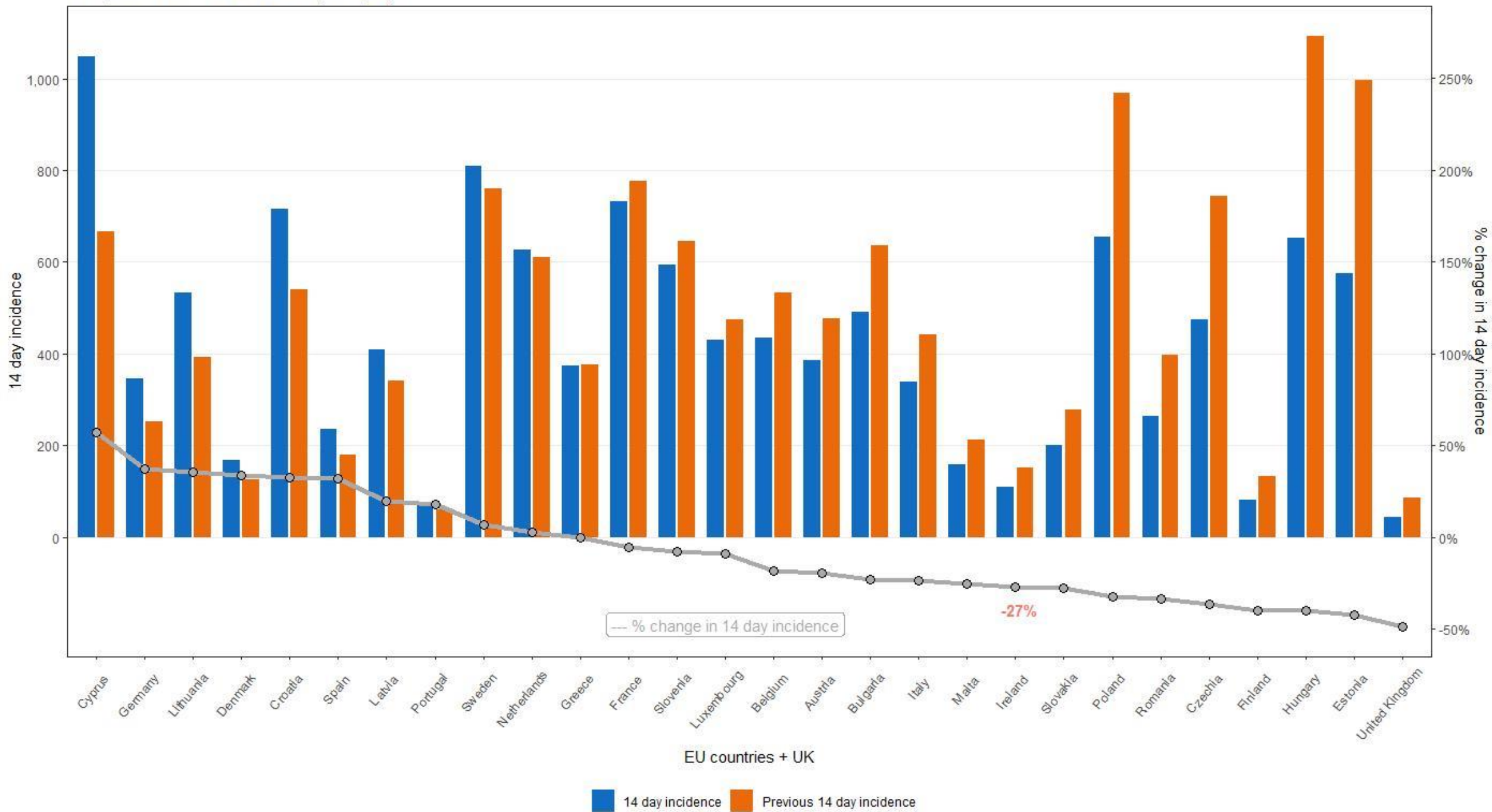


- All indicators of disease **stable or declining slowly** up to 21 April 2021
 - any impact of 12 April changes should become apparent in the coming weeks
- **Incidence is stable, with significant variability and uncertainty**
 - Cases (5-day average) **376 cases per day**; 14-day incidence **113 per 100,000**
 - Incidence stable decreasing across all age groups
 - Test positivity low at 2.5-3.5%
 - **Reproduction number (R)** is close to 1.0, **estimated at 0.9 – 1.1**, rate of decline **0 to -2% per day**
- Numbers in hospital, critical care and dying are stable or decreasing
- Level of close contact is constant
 - The efforts of the majority of the population are achieving a 75-85% suppression of viral transmission
- Anticipate at least a transient increase in case numbers in the coming weeks - we need to keep close contacts low and minimize the risks of transmission during any close contact
- Significant impact of vaccination in HCW and LTRC, seeing early effects in those aged 75+
- While there is strong evidence of protective effect of vaccination in those vaccinated, the population is not protected, so the situation remains **volatile** and any increase in close contact represents a **high risk**



European Data

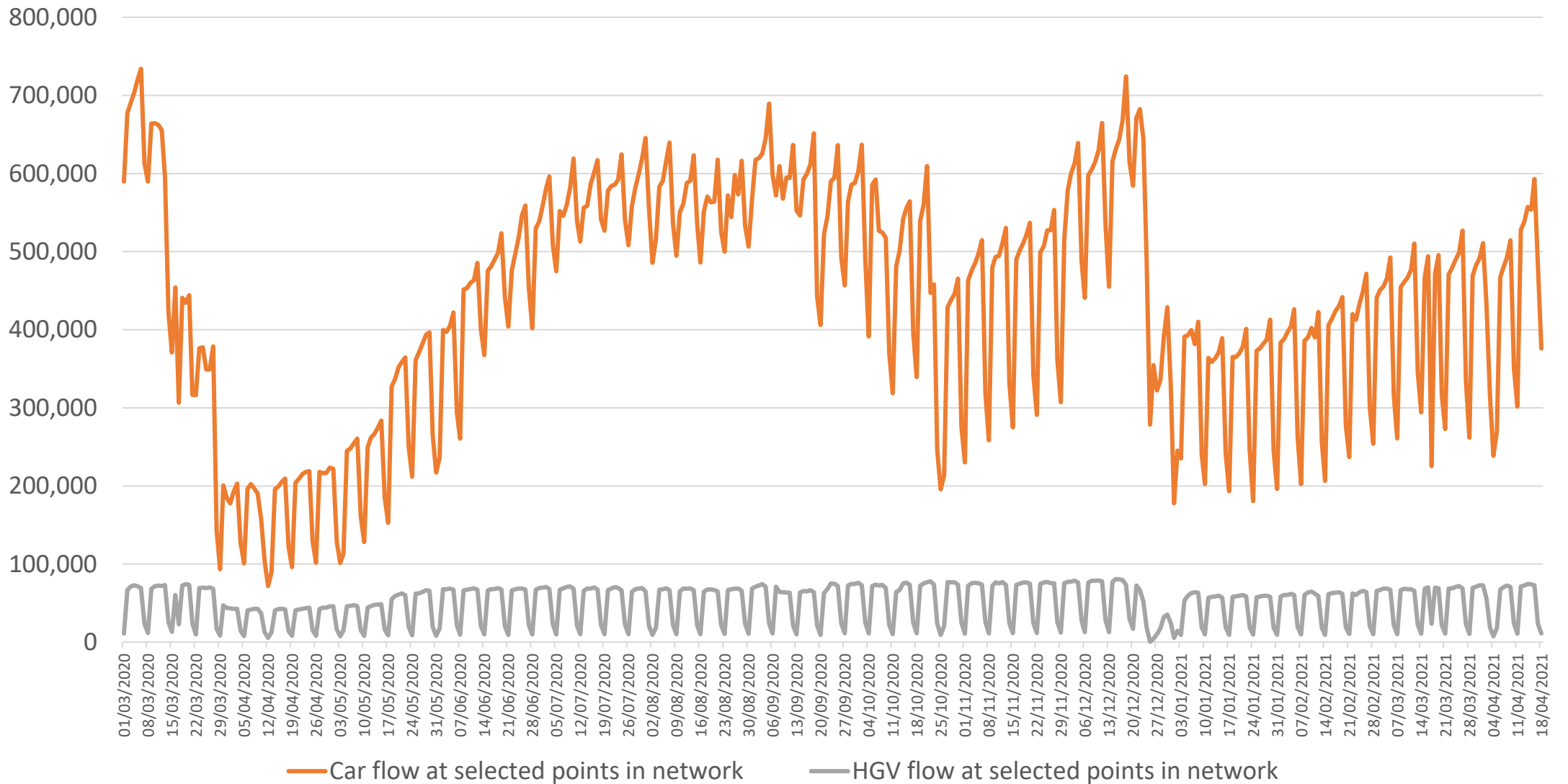
European 14 incidence rates (20 April)



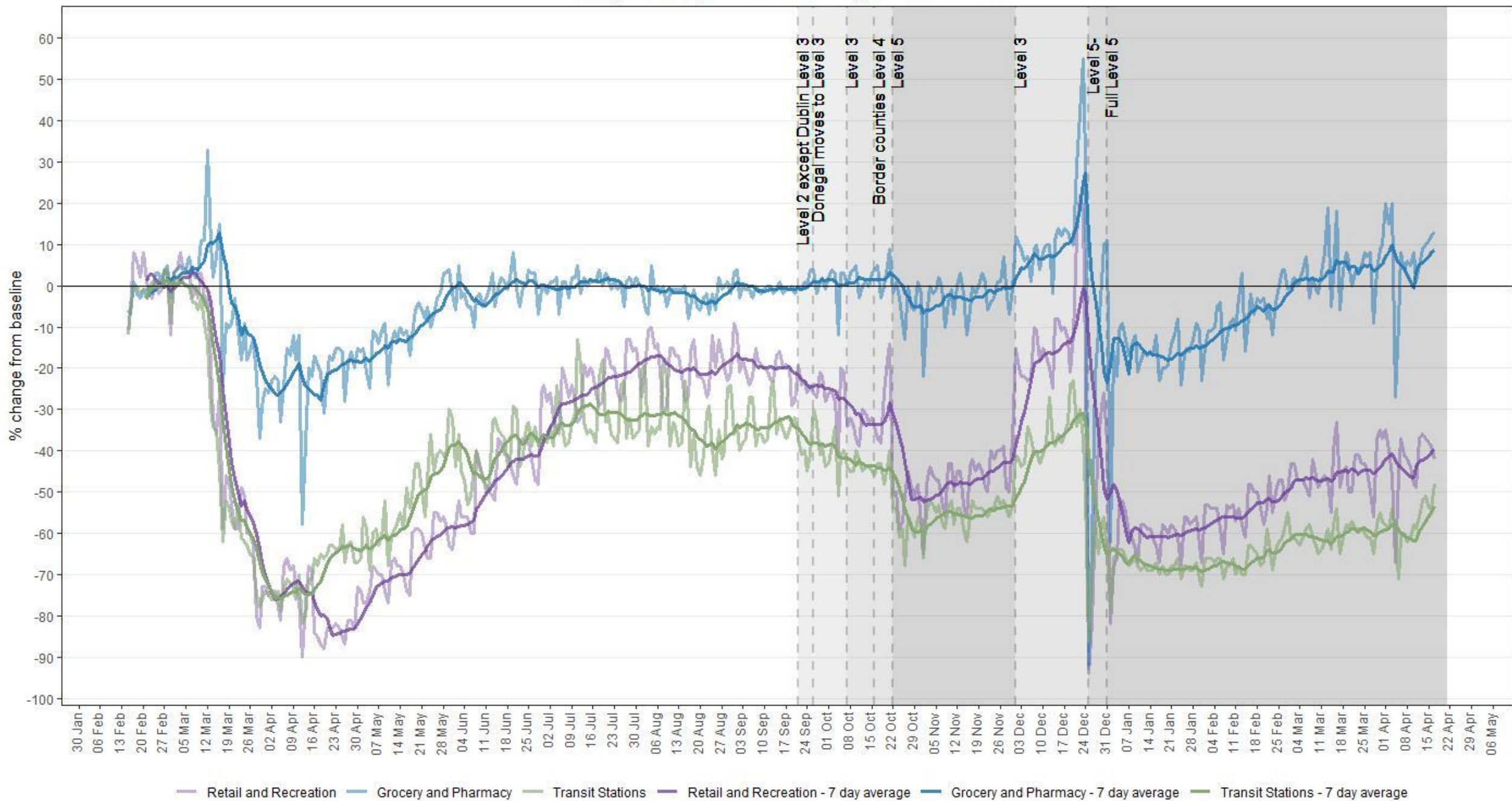


Compliance Data

Daily Traffic Flow



Google Mobility Ireland - % change from baseline



Google Mobility Ireland - % change from baseline

