NPHET COVID Update 21st January 2021

Current situation

	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	31-Dec	04-Jan	08-Jan	12-Jan	16-Jan	20-Jan
14-day incidence	96.12	306.29	86.94	296.59	582.44	1087.01	1408.99	1530.03	1222.78
5-day average cases	407.2	920.0	261.0	1278.4	3564.2	6795.0	5584.4	3465.0	2555.8
Total weekly cases	2608	7003	1894	8703	21089	42325	42239	29083	20229



	01-Oct	26-Oct (2 nd wave peak 14 day inc.)	01-Dec	31-Dec	04-Jan	08-Jan	12-Jan	16-Jan	20-Jan
No. Hospital (8.A.M)	122	344	224	491	744	1153	1690	1848	1919
No. in ICU (6.30 P.M)	22	40	30	39	65	101	147	186	209

	01-Oct	26-Oct (2nd wave peak 14 day inc.)	01-Dec	31-Dec	04-Jan	08-Jan	12-Jan	16-Jan	20-Jan
Positivity rate (7 day average)	3.0%	6.1%	2.7%	10.9%	17.9%	22.7%	19.5%	15.3%	12.2%

	September	October	November	December	January
Total Deaths	41	130	167	177	487
Deaths associated with Nursing Home outbreaks	12	51	53	62	140
Deaths associated with Hospital outbreaks	8	25	59	56	55

Cases, numbers in hospital and intensive care

Case numbers remain very high. The number of people in hospital and ICU, and the number of admissions per day, increased very quickly to unprecedented levels. The numbers in hospital have now started to fall. The number of deaths per day is increasing.



	16 Apr	24 Jun	29 Jul	21 Oct	16 Dec	23 Dec	31 Dec	6 Jan	13 Jan	20 Jan	Daily count 20 Jan
Cases confirmed per day	547	10	18	1160	330	711	1243	4420	5436	2891	2488
14-day incidence per 100,000 population	157	4.0	5.6	288	88	153	297	818	1449	1223	
Hospital in-patients	858	42	11	279	198	222	365	676	1414	1901	1919
Hospital admissions per day	56	2	2	23	14	22	43	94	146	132	119
ICU confirmed cases	147	15	5	32	33	29	31	63	133	194	210
ICU admissions per day	8	< 1	< 1	3	1	2	5	11	20	19	19
Deaths confirmed per day	32	< 1	< 1	5	5	6	7	11	23	44	61

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. NPHET 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.





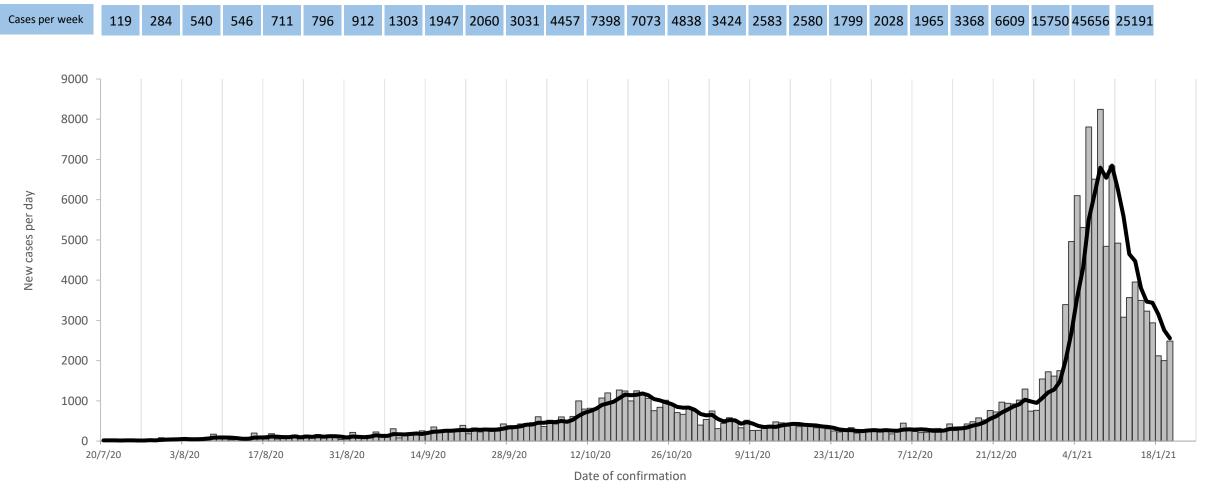


Cases, Incidence Rates & Testing

Confirmed cases each day

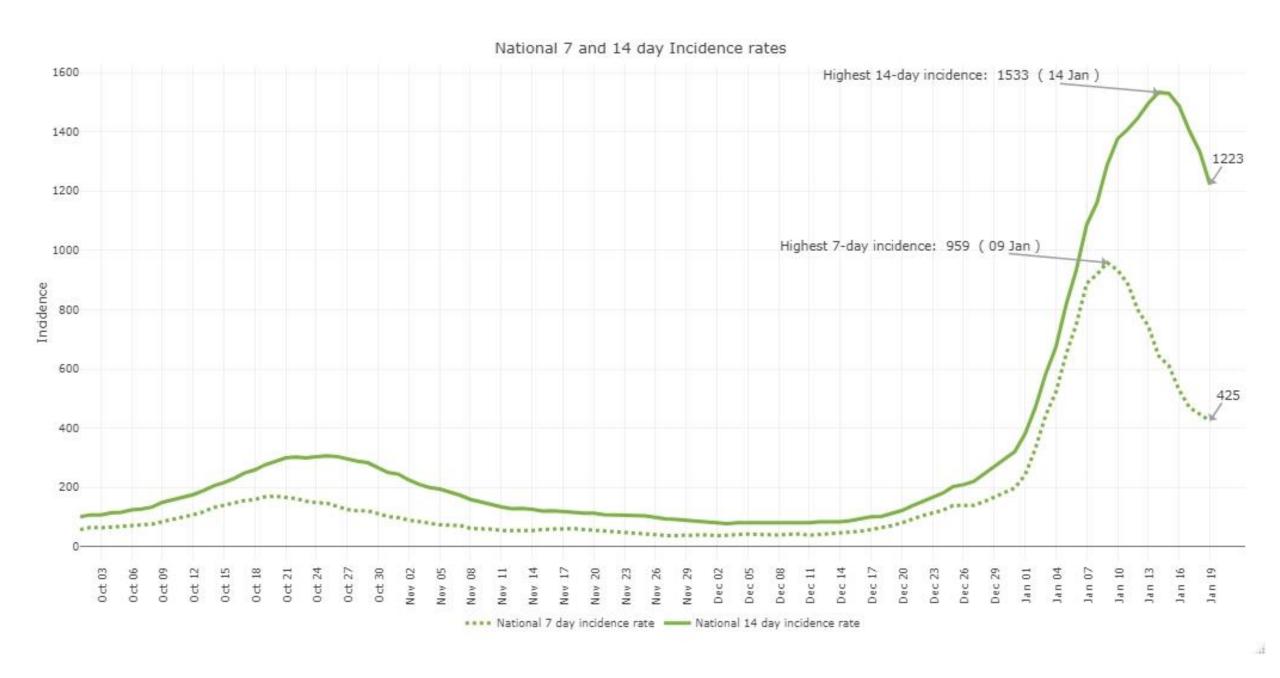
Daily and weekly count and 5-day rolling average. The 5-day average peaked at 1186 on 21 October, reached a low of 251 on 28 November, peaked again at 6860 on 10 January and is now 2556

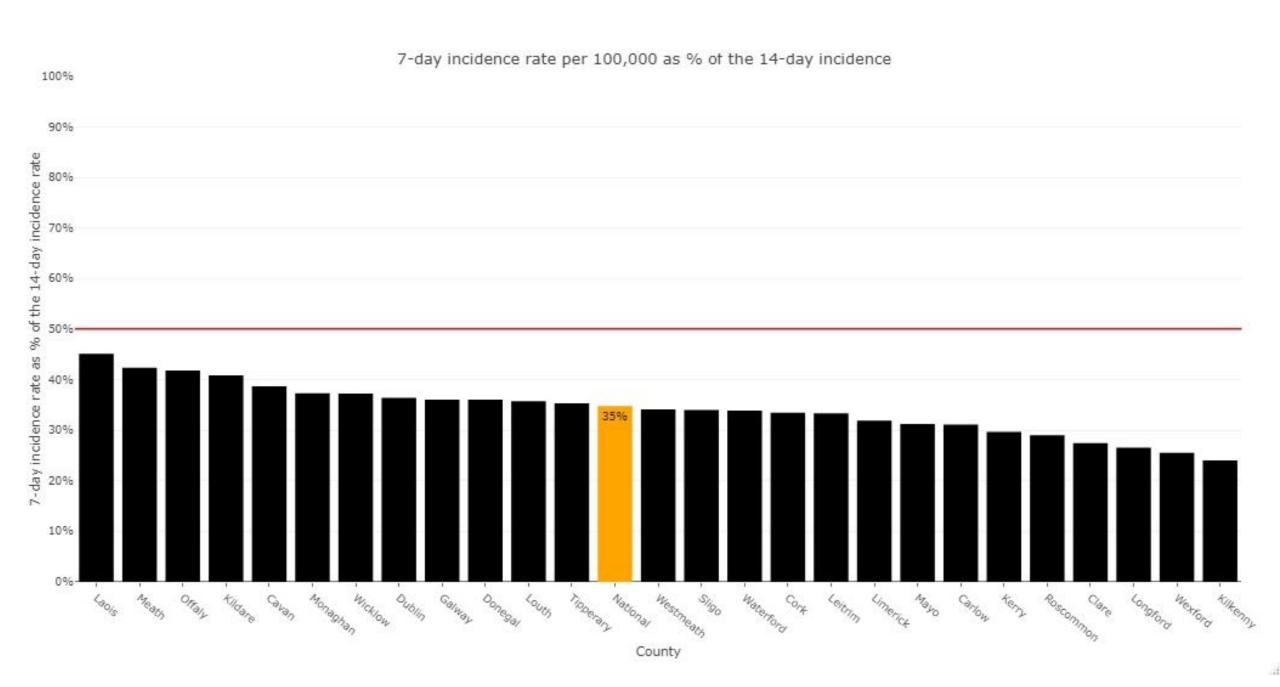




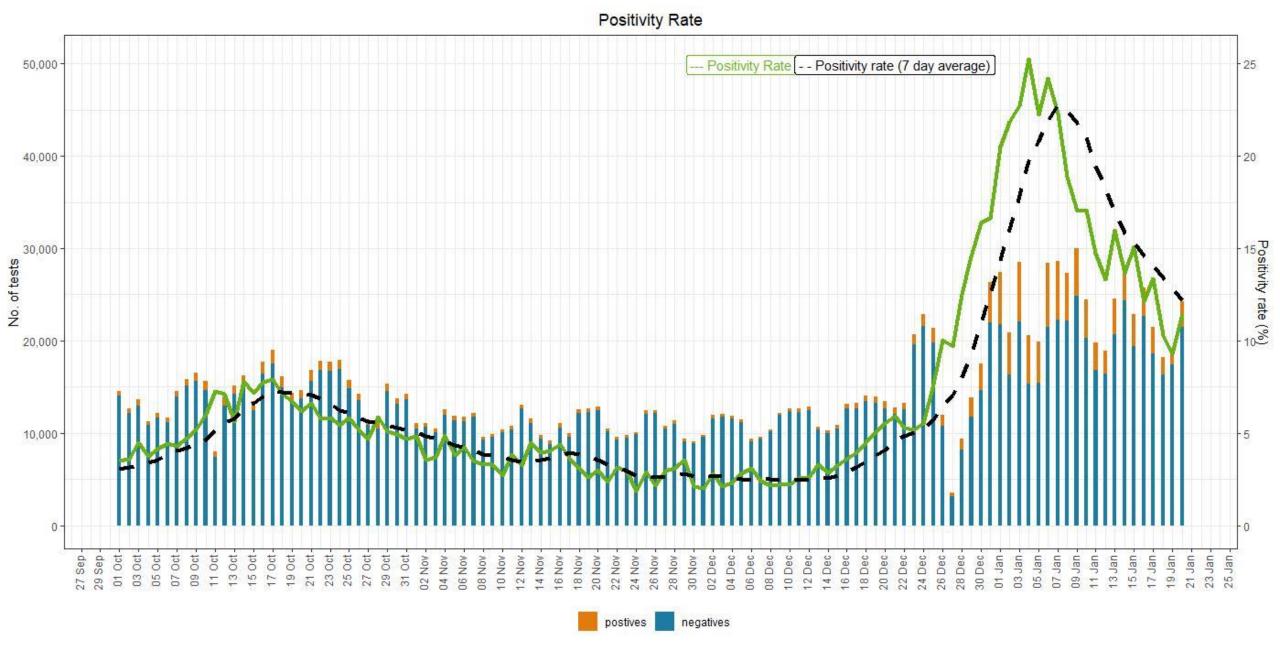








Recent trend in positivity rate



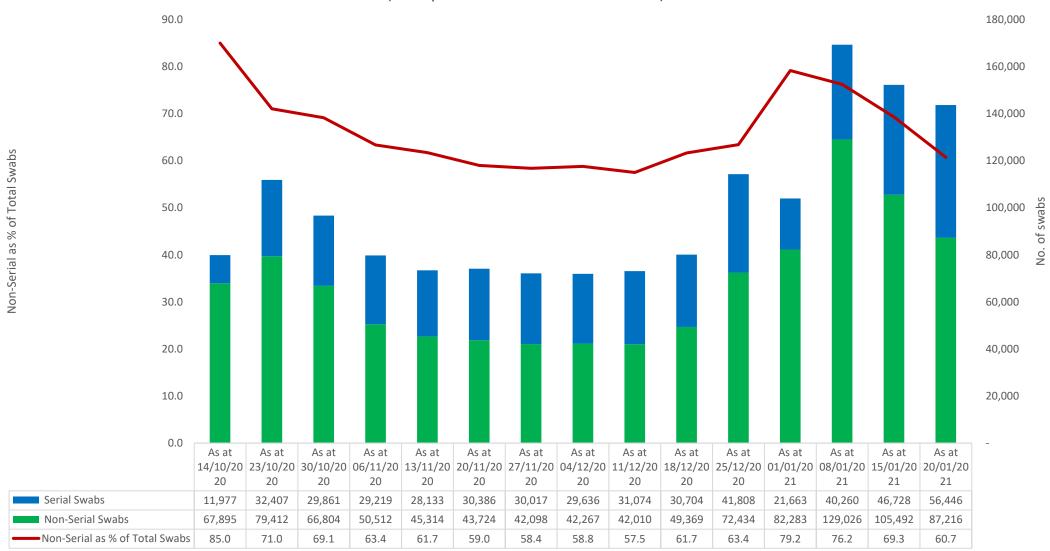
% Positivity Rate in Past 7 Days inc./ex. Serial Testing (data not provided every day)





No. of Non-Serial and Serial Swabs in Past 7 Days and Non-Serial as a % of Total Swabs (Friday of each week and latest date)

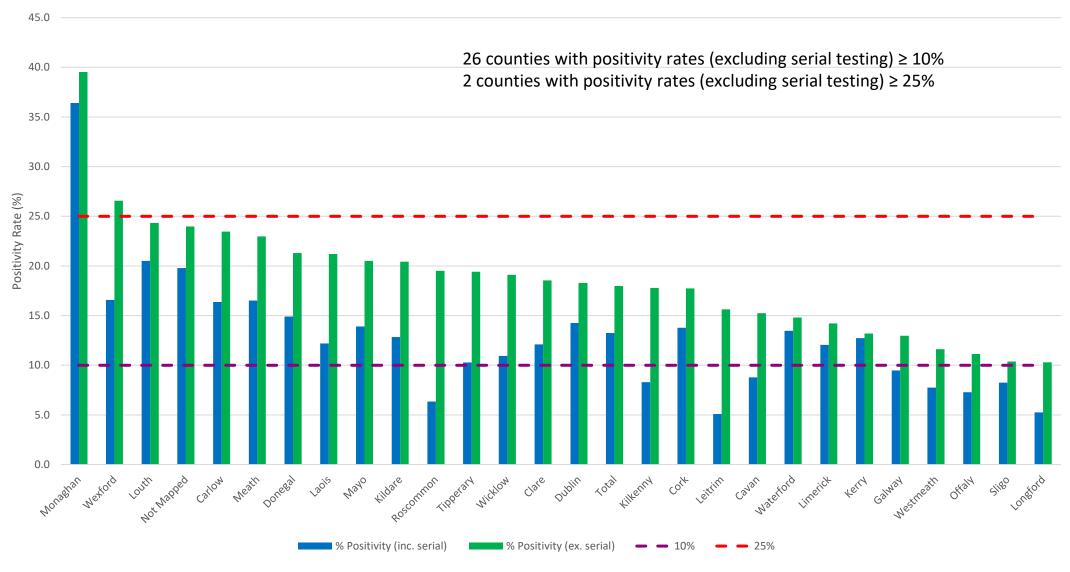




¹⁰ An Roinn Sláinte | Department of Health

% Positivity Rate Past 7 Days (inc./ex. serial testing) by County as at 20/01/21 (data provided by HSE Contact and Tracing Team)

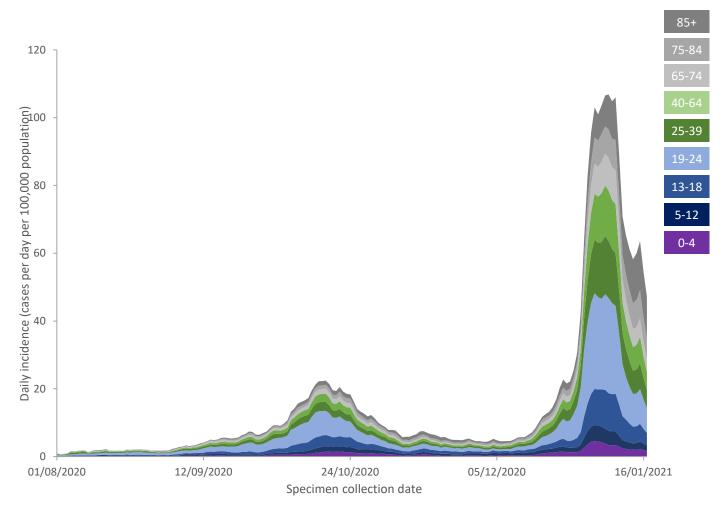




Incidence across different age groups (excluding HCW and LTRC)

Incidence is very high across all age groups in all age groups, with a very concerning level of disease in those aged 65 and older, and an exceptionally high incidence in thise aged 85 and older.

A number of cases in those aged 65 and older will be linked in the coming days to outbreaks in LTRC.



Week					Age band	l			
	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	42.8	46.7	132.9	317.0	115.0	89.5	61.6	51.9	51.8
42	79.3	91.7	198.6	436.0	156.8	144.7	92.4	67.7	59.2
43	82.7	93.5	175.5	304.9	122.7	121.6	84.6	82.9	69.6
44	54.0	66.9	93.9	152.5	74.4	76.5	54.3	54.5	45.9
45	34.4	39.7	57.9	83.9	58.0	46.1	42.8	44.3	41.4
46	41.9	37.2	65.9	89.7	45.5	45.3	32.7	43.3	56.3
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	29.8	22.2	36.1	31.1
49	28.4	36.6	37.7	40.5	33.3	30.0	25.4	30.0	32.6
50	21.4	39.7	44.1	57.4	40.1	35.2	22.5	31.0	17.8
51	51.6	58.5	74.5	128.6	88.4	81.8	54.9	55.5	45.9
52	77.2	76.7	120.0	328.2	179.6	138.6	97.2	98.7	100.7
53	217.8	235.7	510.8	1424.8	778.1	655.9	431.9	365.4	371.5
1	182.2	208.7	570.3	1337.2	803.9	738.7	510.0	470.7	552.1
2	130.0	126.8	306.3	604.5	442.5	448.9	322.1	494.1	743.1
3	20.5	16.9	41.7	86.0	71.3	82.1	54.3	87.5	202.8
£									

Chart shows 5-day rolling average of total incidence (cases per day per 100,000 population) with coloured bands showing the contribution of each age cohort to the total incidence, having adjusted for the number of people in that age cohort (CSO 2016 census data). 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. A number of cases in those aged 65 and older will be linked in the coming days to outbreaks in LTRC.

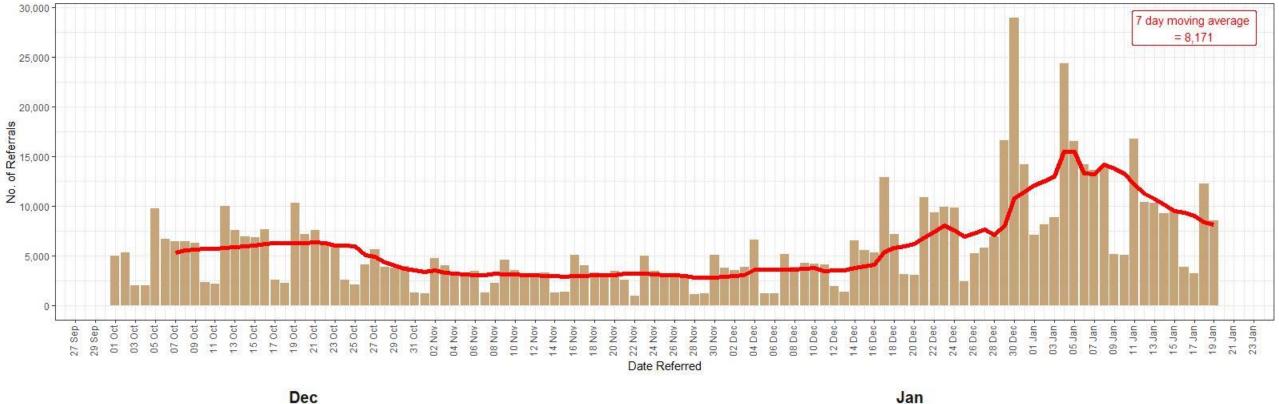






GP referrals

GP Referrals excluding Close Contacts



Dec

		1 3,818 referrals (+9%)	2 3,555 referrals (+18%)	3 3,881 referrals (+25%)	4 6,644 referrals (+121%)	5 1,222 referrals (+5%)
6	7	8	9	10	11	12
1,219 referrals	5,203 referrals	3,926 referrals	4,274 referrals	4,261 referrals	4,153 referrals	1,937 referrals
(-3%)	(+2%)	(+3%)	(+20%)	(+10%)	(-37%)	(+59%)
13	14	15	16	17	18	19
1,407 referrals	6,519 referrals	5,573 referrals	5,351 referrals	12,887 referrals	7,177 referrals	3,214 referrals
(+15%)	(+25%)	(+42%)	(+25%)	(+202%)	(+73%)	(+66%)
20	21	22	23	24	25	26
3,133 referrals	10,876 referrals	9,349 referrals	9,927 referrals	9,839 referrals	2,436 referrals	5,290 referrals
(+123%)	(+67%)	(+68%)	(+86%)	(-24%)	(-66%)	(+65%)
27 5,825 referrals (+86%)	28 6,967 referrals (-36%)	29 16,606 referrals (+78%)	30 28,939 referrals (+192%)	31 14,228 referrals (+45%)		

Wed

Thu

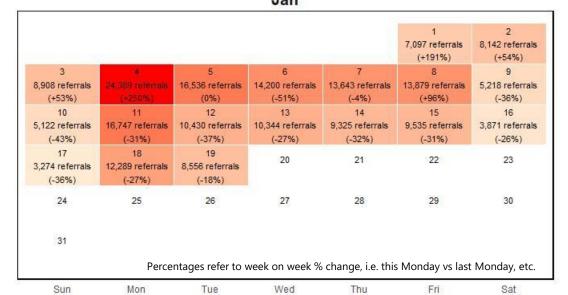
Sun

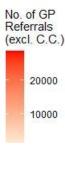
Mon

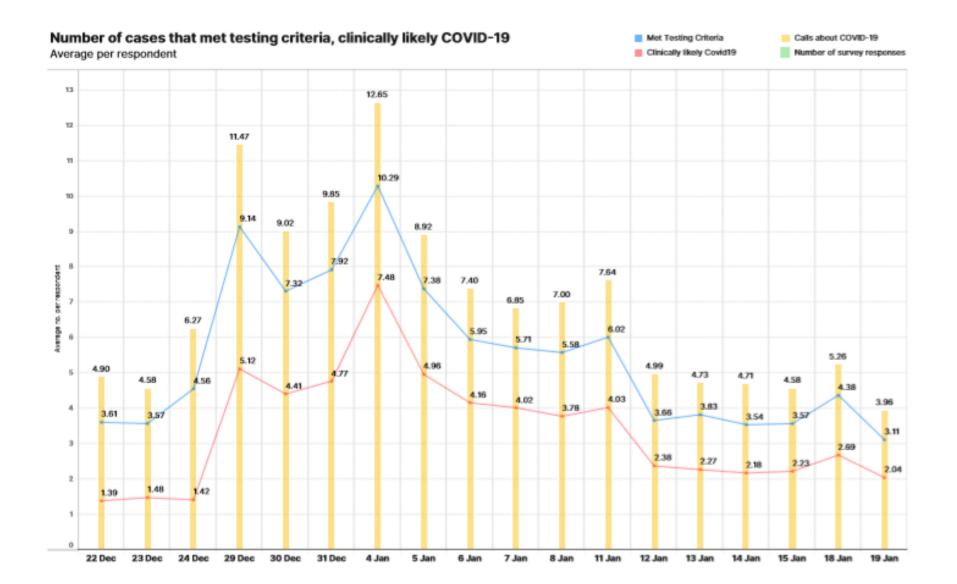
Tue

Fri

Sat









Source:

COVID-19
GP Community Tracker

McKeogh S, Creane D, Moe K, Ó Clardha D. Powered by: M MEDVAULT





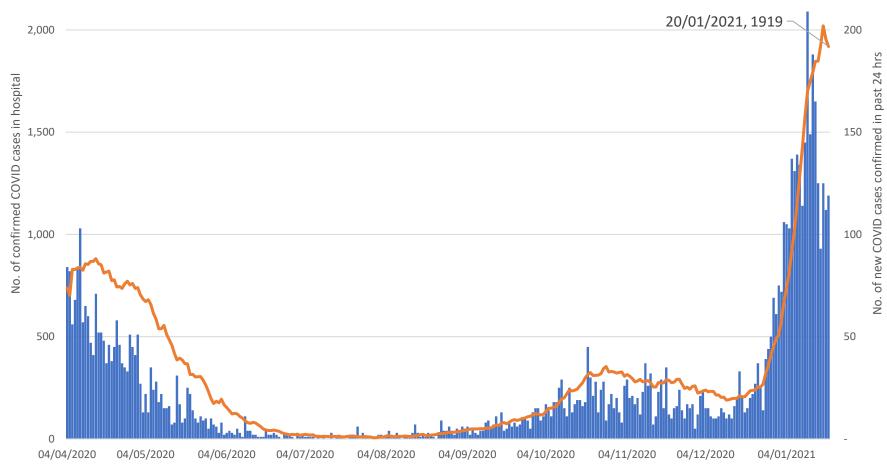


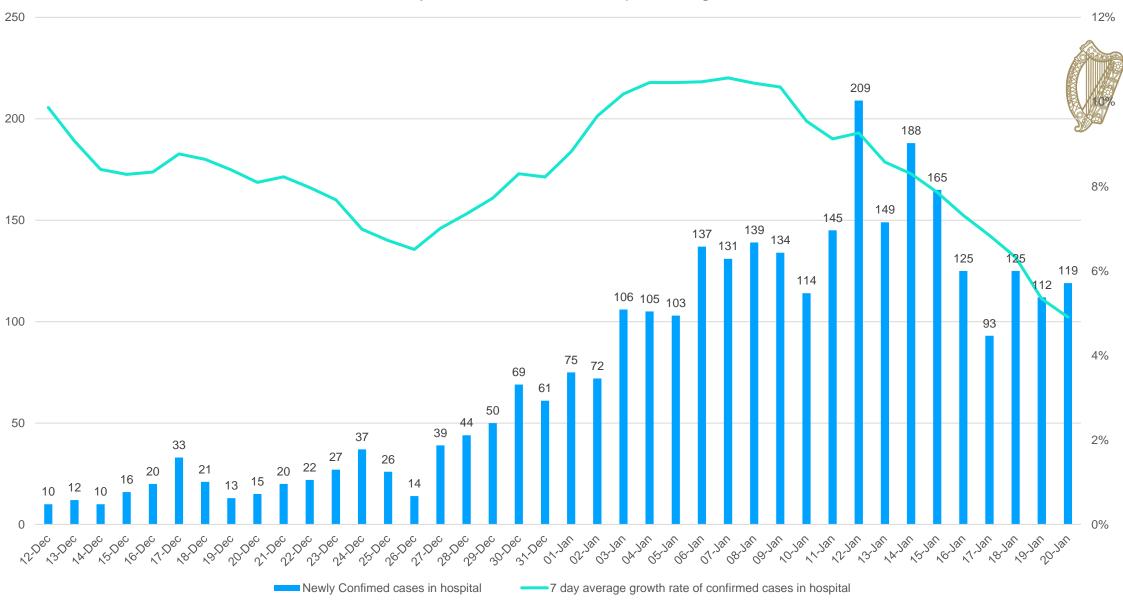
Hospital & ICU Data

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



2,500 — 250





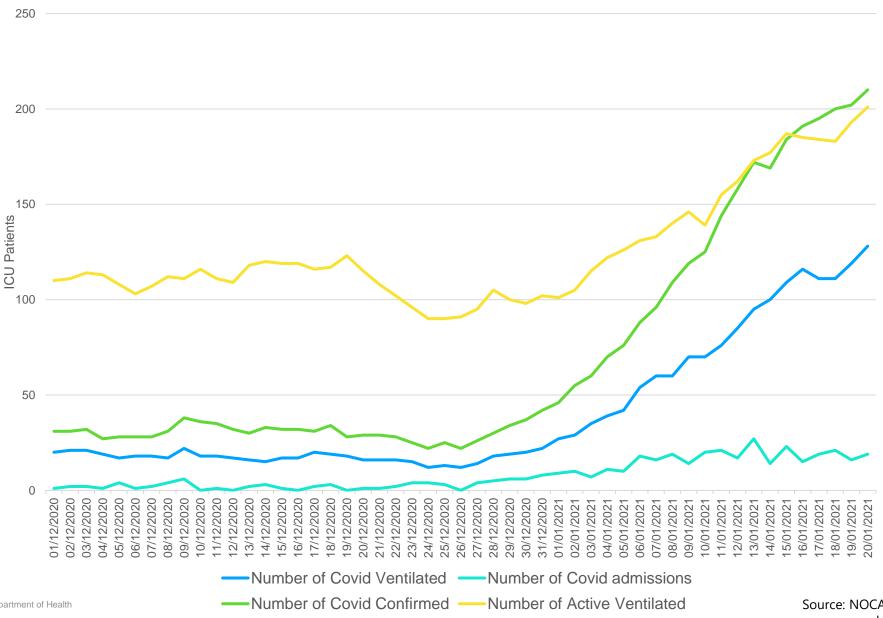
Total No. of Confirmed Covid Cases in ICU at 11.30AM & No. of New Confirmed Covid Admissions to ICU in past 24 hrs

(includes all reporting public & private hospitals and may differ from no. reported by HSE in public hospital ICU)





Total Ventilated in ICU, Total Covid in ICU, Covid Ventilated & New Covid Admissions





Hospital SDU graph 2250 200 No. of confirmed covid cases admitted on site 8AM 2000 175 1750 150 1500 125 1250 100 1000 Hospital admissions/discharges 750 Total number in hospital -75 -100 -125 -150 -175 -200 20 Feb 05 Mar 12 Mar 26 Mar 09 Apr 16 Apr 23 Apr. 30 Apr. 07 May 14 May 21 May 04 Jun 11 Jun 18 Jun 25 Jun. 02 Jul. Inc 60 16 Jul 23 Jul 30 Jul 06 Aug 13 Aug 20 Aug 27 Aug 03 Sep 10 Sep 17 Sep 24 Sep 01 Oct 08 Oct. 15 Oct. 22 Oct. 29 Oct. 05 Nov 12 Nov 19 Nov 03 Dec 10 Dec 07 Jan 14 Jan 21 Jan 28 Jan No. of new confirmed covid positive in past 24hrs 8AM No. of new admissions covid positive in past 24hrs 8AM No. of deceased covid positive in past 24hrs 8AM Vo. of new confirmed covid positive in past 24hrs 8AM No. of discharges covid positive in past 24hrs 8AM

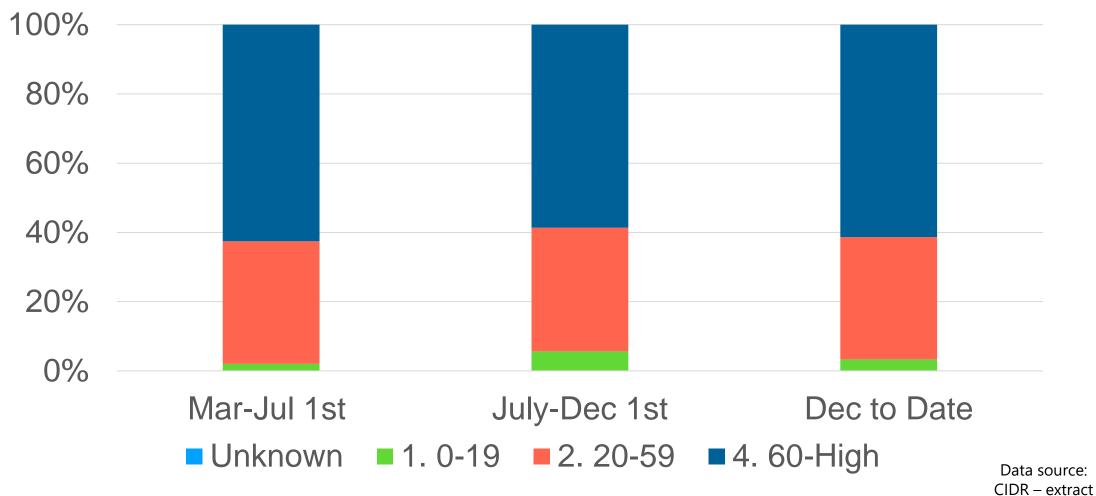
No. of deceased covid positive in past 24hrs 8AM No. of confirmed covid cases admitted on site 8AM

14 Jan	15 Jan	16 Jan	17 Jan	18 Jan	19 Jan	20 Jan
188	165	125	93	125	112	119
116	109	137	45	39	164	140
32	26	21	34	29	26	35
1792	1846	1848	1923	2020	1954	1919

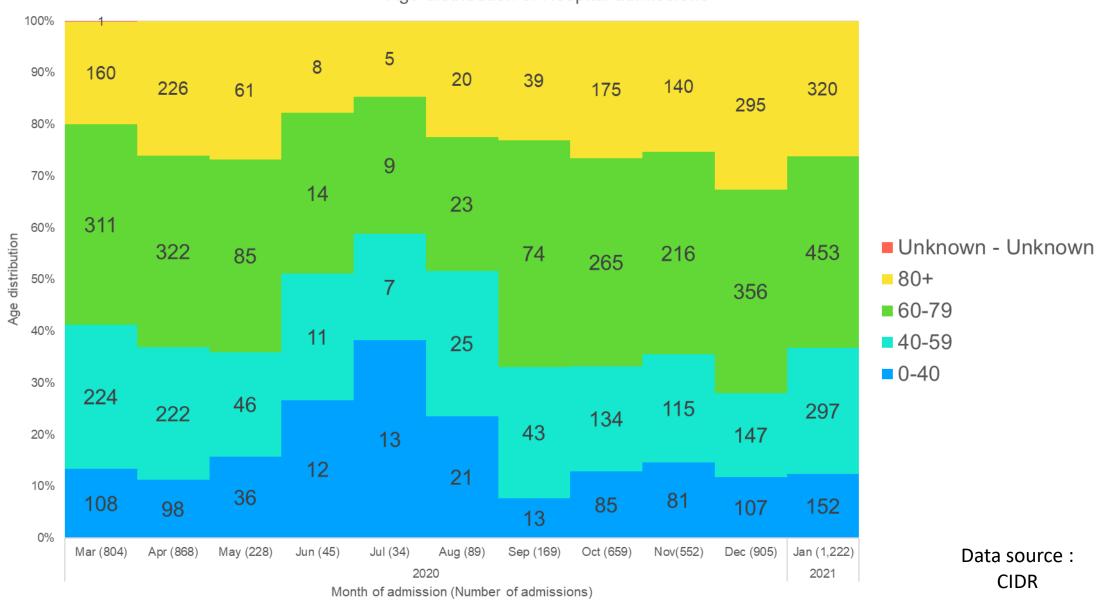


20/01/21

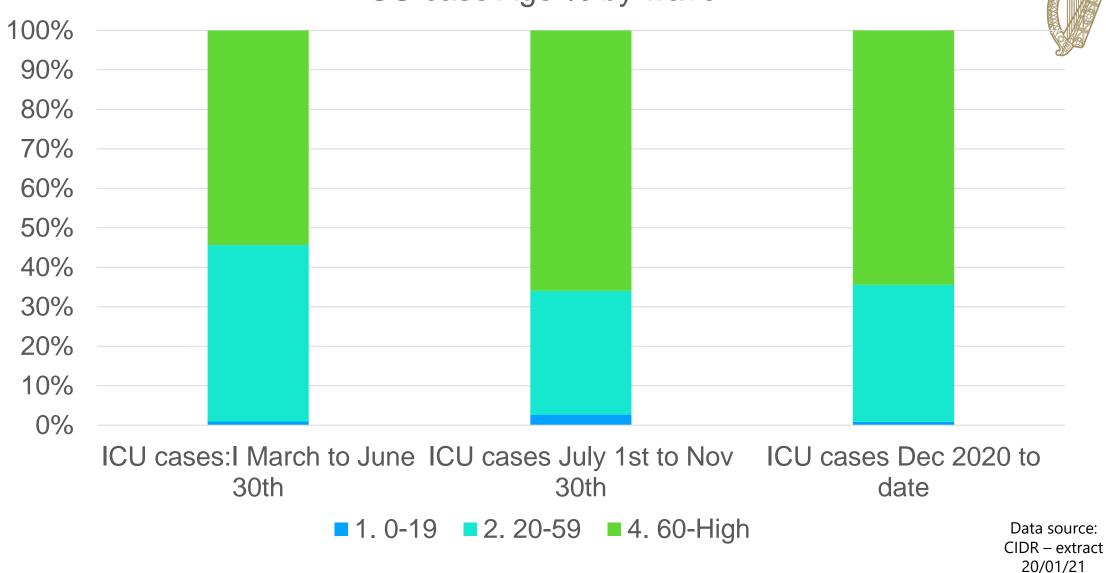
Hospitalised by Age group



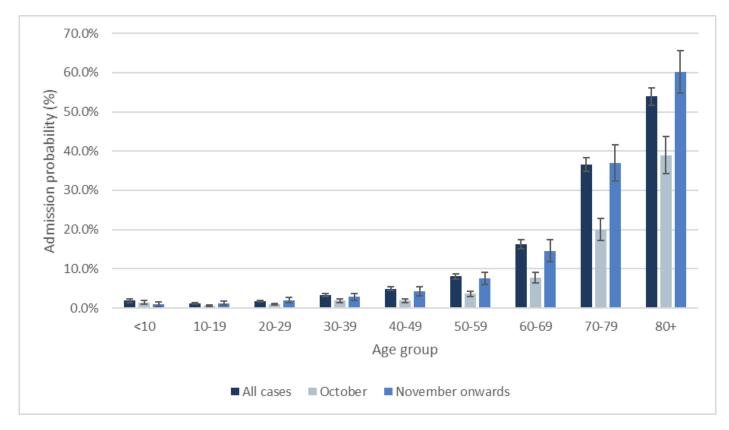
Age distribution of Hospital admissions







Age-specific hospital admission probability



Source: IEMAG/ **ESRI**

Notes

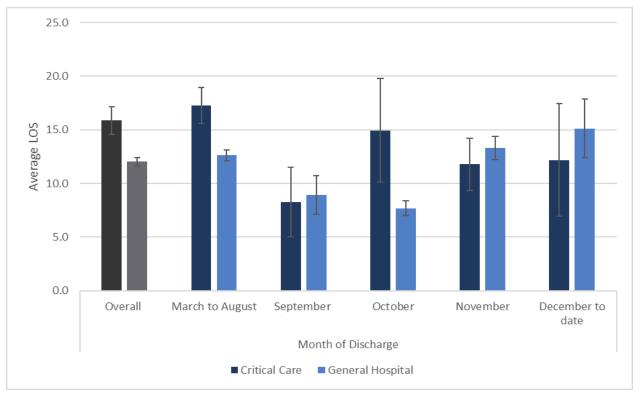
- 1) 95% confidence intervals calculated through resampling observations (with replacement) from the data 500 replications
- 2) Case notifications capped 14 days prior to file date
- 3) Excludes cases flagged as healthcare workers or with an outbreak location flag of "Nursing home" "Comm. Hosp/Long-stay unit" or "Residential institution"

Source CIDR file – 16th December 2020

Length of Hospital Stay

General hospital discharges and critical care

Excl. general hospital LOS for critical care patients



Notes

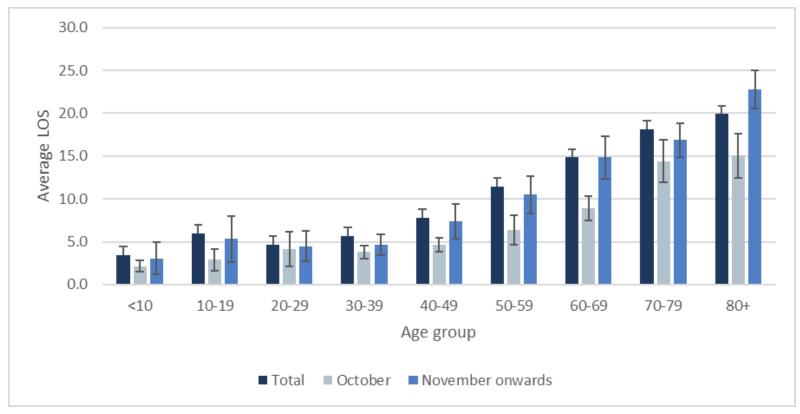
- 1) 95% confidence intervals calculated through resampling observations (with replacement) from the data 500 replications
- 2) Critical Care ALOS is reported from CIDR; General Hospital ALOS is reported from HIPE.
- 3) Excludes cases flagged as healthcare workers or with an outbreak location flag of "Nursing home" "Comm. Hosp/Long-stay unit" or "Residential institution" (CIDR file)
- 4) Excludes cases with an admission source of "Nursing home/convalescent home or other long stay accommodation" (HIPE file)
- 5) Excludes cases with an admission date earlier than 1st March 2020

Source: IEMAG/ ESRI

Age-specific Average Length of Stay

All hospital (general and critical care) discharges

Incl. general hospital LOS for critical care patients



Source: IEMAG/ ESRI

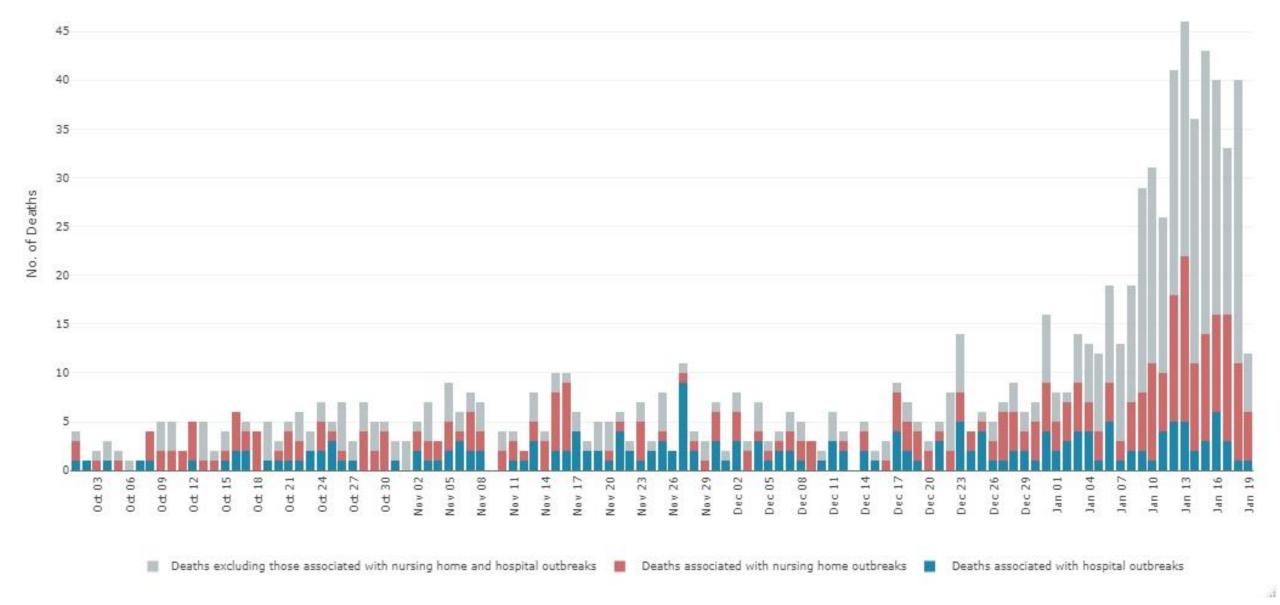
Notes

- 1) 95% confidence intervals calculated through resampling observations (with replacement) from the data 500 replications
- 4) Excludes cases with an admission source of "Nursing home/convalescent home or other long stay accommodation" (HIPE file)
- 5) Excludes cases with an admission date earlier than 1st March 2020

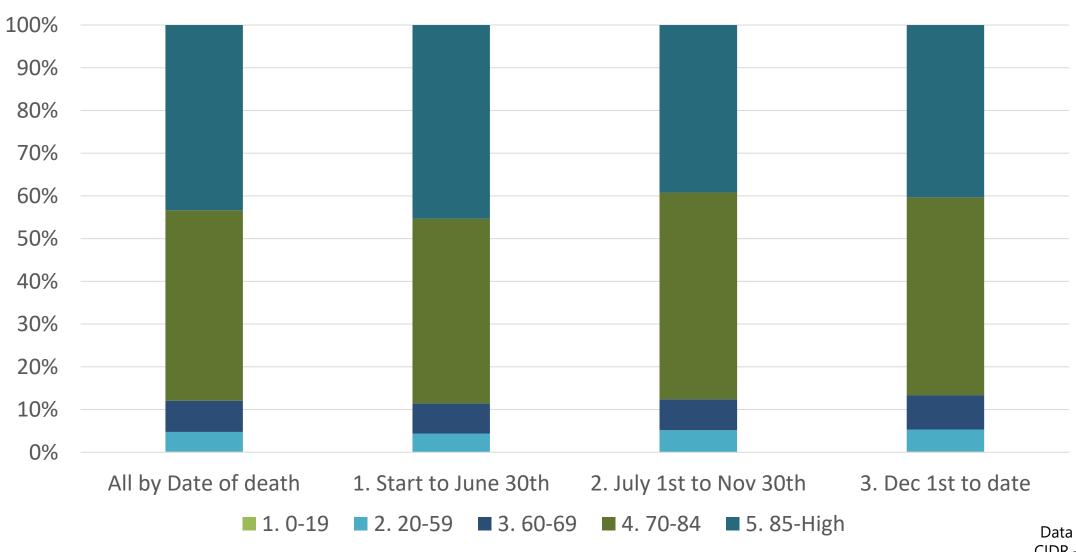


Deaths

Deaths by Date of Death



All Deaths by Age group



Data source: CIDR – extract 20/01/21



Outbreaks & Clusters

COVID-19 outbreaks by key outbreak locations, week 2 2021 and overall, 2020-2021



Note: Due to the recent surge in case numbers, the number of outbreaks and linked cases in week 2 are likely an underestimate

- Since March 1st 2020, 11,275 outbreaks have been notified to CIDR
- In week 2, 2021 293 outbreaks were notified

Ireland

Key outbreak locations	Week 2	Weeks 10-31	Weeks 32-2
Workplace	41	51	369
Direct Provision Centre	7	21	28
Vulnerable groups*	16	19	122
Prisons	0	6	6
Nursing Home/Community Hospital	48	301	244
Acute hospitals	37	103	194
Schools^	8	0	306
Childcare facility	14	0	128

^{*}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 January 19th 2020 – data to midnight 18/01/2021

Weekly Summary

Total number of outbreaks week 2, 2021 n=293 compared with week 1, 2021 n=226

Vulnerable groups

- Irish Traveller outbreaks
 - Week 2 14 new outbreaks, 25 linked cases
 - Week 3 3 new outbreaks already
- 4 new outbreaks DPCs since last weeks report 53 linked cases
 - 30 cases linked to DPC outbreak
- 2 new outbreaks in homeless population
- 1 new outbreak addiction services

Workplace outbreaks

- 11 new food industry outbreaks since last week's report – with 175 linked cases (range 2-53)
 - Meat factory outbreak -53 linked cases

Residential institution outbreaks

- 369 outbreaks in residential institutions with 1,832 linked cases
- 140 outbreaks are 'open' with 527 linked cases
- 47 new outbreaks since last week's report with 273 linked cases

Home care Teams

Week 2 2021 – 11 outbreaks – 31 linked cases

Nursing Homes & Community Hospitals

164/545 outbreaks remain open with 2726 linked cases

hpsc

- 48 new outbreaks with 400 linked cases since last week's report
- One new outbreak has 55 linked cases already 4 others have >30 linked cases
- 100 cases in one open outbreak
- Since August 1st, 281 deaths

Acute hospitals

- 119 open outbreaks involving 40 hospitals, 1253 linked cases (range 1-138)
- 37 new outbreaks since last week's report with 103 linked cases
- Since August 1st 2020, 170 deaths have occurred in cases linked to acute hospitals outbreaks

Schools

10 new outbreaks since last week's report with 23 linked cases (range 1-5)

Childcare facilities

- 23 new outbreaks since last week's report with 70 linked cases (range 1-10)
- Largest outbreak (n=10) CHO-9 5 staff/5 child cases

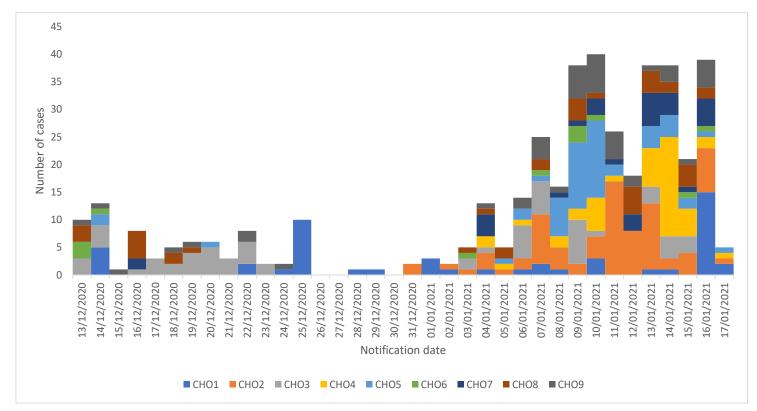
Key points



- The volume and size of nursing home outbreaks continues to be of concern
 - Both new and several ongoing outbreaks
 - One NH outbreak 100 cases
 - Considerable mortality 281 deaths since August 1st
- Steep rise in the number of residential institutions recently 140 open outbreaks – 527 linked cases
- Large number of acute hospital outbreaks continue to occur 37 in week 2
- Eleven new food production/processing outbreaks one with 53 linked cases
- Increase in outbreaks in vulnerable groups
 - 7 DPC outbreaks
 - 17 Irish Traveller outbreaks between weeks 2 and 3 to date
- 23 CCF outbreaks this week largest 10 cases, mix of staff and children

COVID-19 infections among Irish Travellers – (December 13th 2020 – January 17th 2021





Data source: CIDR January 1th 2021 – data to midnight 17th January 2021

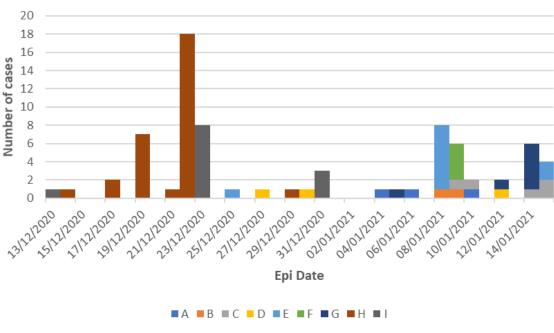
Inclusion criteria

Cases linked to outbreaks reported as affecting Irish Travellers OR whose ethnicity is reported as Irish Traveller, December 13th 2020 to midnight January 17th 2021

- 427 confirmed cases
- Includes 74 in Dublin (17%) and
 67 in Galway (16%)
- 46% (198/427) male
- Median age 27 years
- 2.8% hospitalised, no ICU admissions and one death
- Among 26 outbreaks, 3 had >15 linked cases
- Fourteen new outbreaks in week2, with 25 cases between them
- Three new outbreaks already in week 3, 2021

Direct Provision Centre Outbreaks as of midnight January 18th 2021

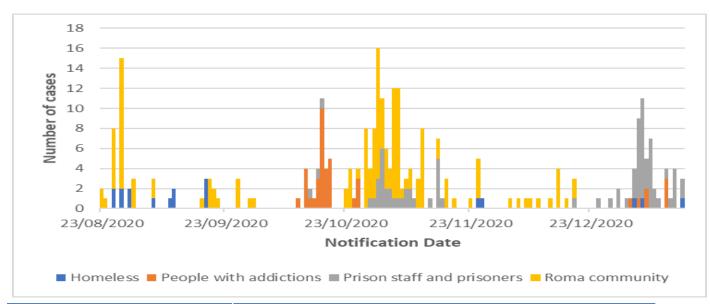




- To date, total of 457 confirmed cases linked to 48 notified outbreaks in DPCs
- There were four new outbreaks since last report 53 linked cases
- Nine DPC outbreaks notified since July 1st remain 'open'
- 76 confirmed cases linked to the nine 'open' outbreaks
- Among the 76 cases, there are two hospitalisations and no ICU admissions or deaths

Outbreaks linked with Roma, Homeless, Addiction Services and Prisons: August 1st to January 11th 2021





Vulnerable group	Outbreak	Linked confirmed cases							
	Number of outbreaks	Number of cases	Number hospitalised	Number admitted to ICU -	Number who died				
Homeless	10	18	1	1					
People with addictions	6	40							
Prison staff and prisoners	5	78							
Roma community	9	149	9	3					
Total	30	285	10	4					

Since August 1st

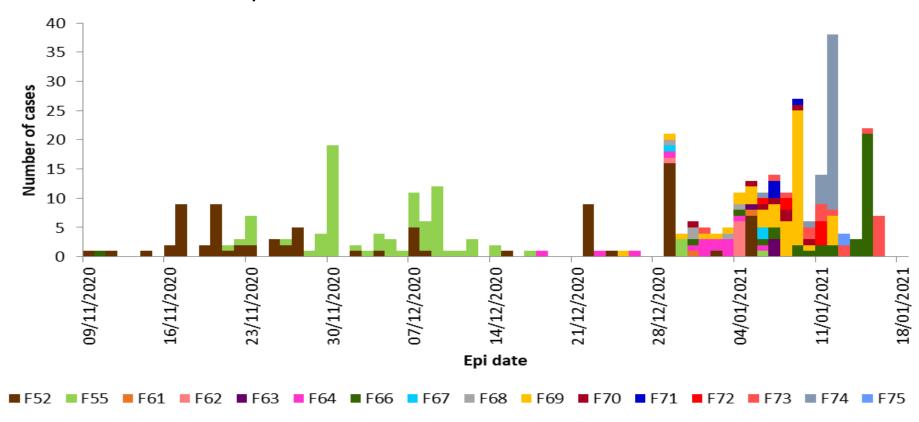
- 30 outbreaks with 285 associated cases
- 19% (54/285) are <15 years and all are Roma)
- Nine outbreaks are 'open' (two in prisons, four in people with addictions and three in the homeless population)
- Since last update, three new outbreaks occurred, two in homeless populations (n=9) and a one in a service for people with addictions (n=10)

Data source: CIDR January 19th 2021 – data to midnight 18th January 2021

Workplace outbreaks – Food production/processing: Oct 1st 2020-Jan 18th 2021



- 362 cases are linked to 18 **open** outbreaks in this sector (range: 0-83 linked confirmed cases)
- 11 new outbreaks were reported this week (175 confirmed cases linked to 10 of the outbreaks (range: 2-53 linked confirmed cases)
- Overall, 170 cases linked to outbreaks in this sector have an epi date within the last 14 days; and 36 within the last 7 days

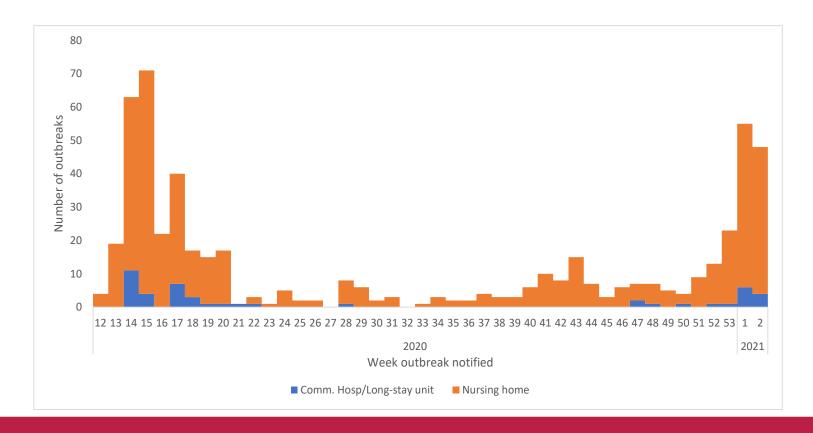


Data source: CIDR January 19th 2021 *Data to midnight 18/01/2021

Nursing Homes and Community Hospital/Long Stay Units: to midnight January 16th 2020



Outbreaks location	Outbreak	Linked confirmed cases						
	Number of outbreaks	Number of cases	Number hospitalised	Number admitted to ICU	Number hospitalised and died	Number who died		
Comm. Hosp/Long-stay unit	46	804	69	1	11	78		
Nursing home	499	9762	643	17	221	1091		
Total	545	10566	712	18	232	1169		



March 2020 – January 16th 2021

 545 outbreaks in Nursing Homes and Community Hospital/Long Stay Units

 Forty-four new Nursing Home and four new Community Hospital/Longstay Unit outbreaks notified in week 2 2021

Data source: CIDR January 18th 2021 – data to midnight 16th January 2021

Focus on 164 'OPEN' Nursing Homes and Community Hospital/Long Stay Units to midnight January 16th 2021

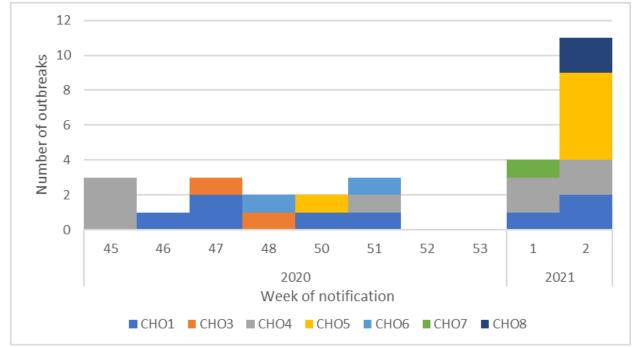


- 2726 associated cases (819 HCW/staff cases, 1079 client cases, 814 cases HCW status unknown, of which 380 were <65 years)
- 10 outbreaks include only HCW/staff cases, 87 include both HCW/staff cases and client cases, 3 outbreaks includes client cases only, for 37 outbreaks the mix of cases is unclear, and for 27* outbreaks, there were no linked cases
- 48 new outbreaks since last week's report 400 linked cases
 - One new outbreak 55 linked cases
 - Four new outbreaks > 30 linked cases each
- 73 previously notified 'open' outbreaks 1008 additional cases since last week's report
- 43 previously notified 'open' outbreaks no additional cases since last week's report

^{*}For 20 of 27outbreaks with no linked cases, aggregate data on the number of associated cases suggest that there should be an additional 185 linked cases

Summary of outbreaks associated with home help/home care services week starting 01/11/2020 to midnight 18/01/2021 (n=29)





СНО	Number of Outbreaks	Number of linked confirmed cases	Number of lab confirmed cases (aggregate data)
CHO1	8	24	19
CHO3	2	9	8
CHO4	8	32	22
CHO5	6	13	14
CHO6	2	10	10
CHO7	1	6	6
CHO8	2	3	5
Total	29	97	84

Overview

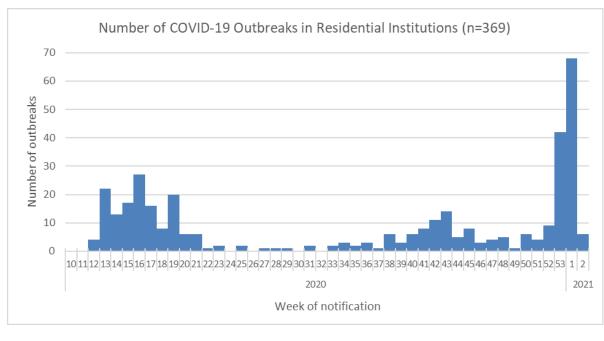
- Since 01/11/2020 there have been 29 outbreaks associated with home help services in 7/8 CHOs
- 25 Outbreaks remain 'open'
- 97 confirmed cases linked to these
 25 outbreaks, median 3 (range (1-8)
 - 33 HCW cases
 - 4 deaths among cases
 - 13 hospitalised with 1 ICU admission
- Week 2 11 outbreaks 31 linked cases
- No new outbreaks week 3 to date

Data source: CIDR January 18th 2021 – data to midnight 18th January 2021

Residential Institution outbreaks March 2020 to midnight 11th January 2021 (n=369)



	All o	utbreaks	Open outbreaks					
	Total number of outbreaks	Total number of linked confirmed cases	Total number of open outbreaks	Total number of linked confirmed cases	Total number hospitalised	Total number ICU	Total number Died	
Residential Facilities - Total	369	1832	140	527	20	0	8	
Centre for disabilities	235	967	84	282	10	0	4	
Centre for older people	26	370	11	85		0	1	
Children's / TUSLA residential centre	27	47	12	18		0		
Mental health facility	36	243	10	48	8	0		
Other	20	113	3	19	1	0	2	
Not Specified	25	92	20	75	1	0	1	



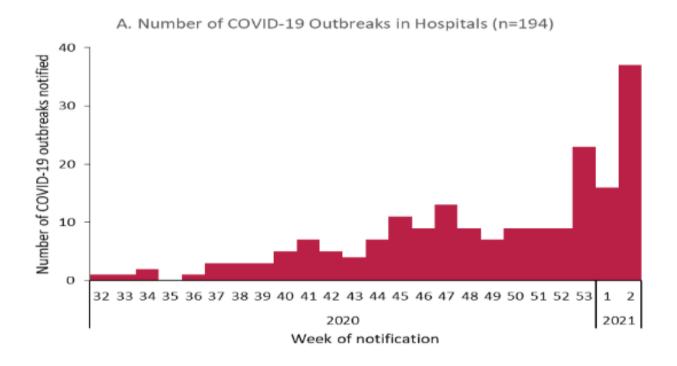
Overview

- 369 outbreaks in residential institutions with 1,832 linked confirmed cases
- 140 outbreaks remain open with 527 linked confirmed cases
 - Range in number of cases 0 to 38; median 4
 - 84 of 'open' outbreaks in centres for disabilities
- 47 new outbreaks since last week's report with 273 linked cases

Data source: CIDR January 19th 2021 – data to midnight 18th January 2021

Acute Hospital outbreaks to midnight 16th January 2021 (n=297)





Outbreak status	Number of outbreaks	Confirmed linked cases	Number admitted to ICU	Number Died	Number HCWs
All	297	3139	69	274	1559
Open	119	1253	18	99	510

Overview

- 297 outbreaks in acute hospitals
- 119 'open' acute hospital outbreaks (all occurring since 1st September 2020)
- 1253 confirmed cases linked to 92 of the open outbreaks (range 1-138)
- The 119 open outbreaks correspond to outbreaks in 40 Acute Hospitals

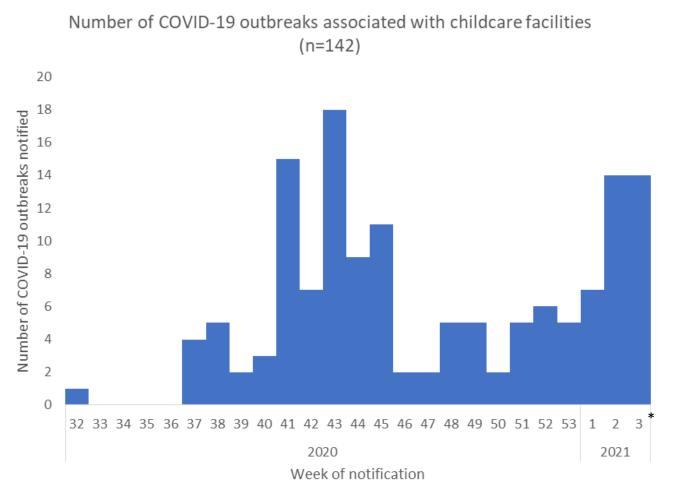
Update

- 37 new outbreaks in week 2 2021
- 103 confirmed cases linked to 16 of these outbreaks (range 1-22)
- A total of 38 additional cases were linked to 12 previously reported open hospital outbreaks
- One outbreaks was closed since last week

Data source: CIDR January 18th 2021 *Data to midnight 16/01/2021

Outbreaks associated with childcare facilities to midnight 18th January 2021 (n=142)





Overview

- 142 outbreaks associated with children and staff in childcare facilities notified
- 635 linked events in total
- 121 outbreaks have ≥2 linked confirmed cases (range 2-39)
- 84 outbreaks have been closed; 58 remain open

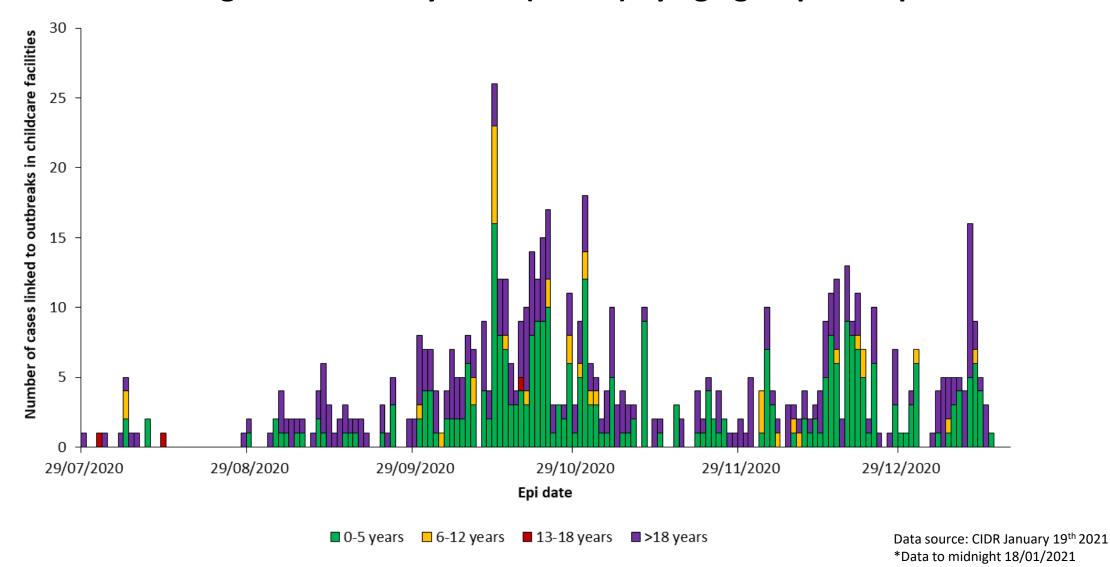
Update

- 23 new outbreaks reported since last week
- 70 confirmed cases linked to 18 of these outbreaks (range 1-10)
- The most notable outbreak, with 10 linked cases among a mixture of children and adults, occurred in CHO9
- 2 outbreaks were closed since last week

Data source: CIDR January 19th 2021 *Data to midnight 18/01/2021

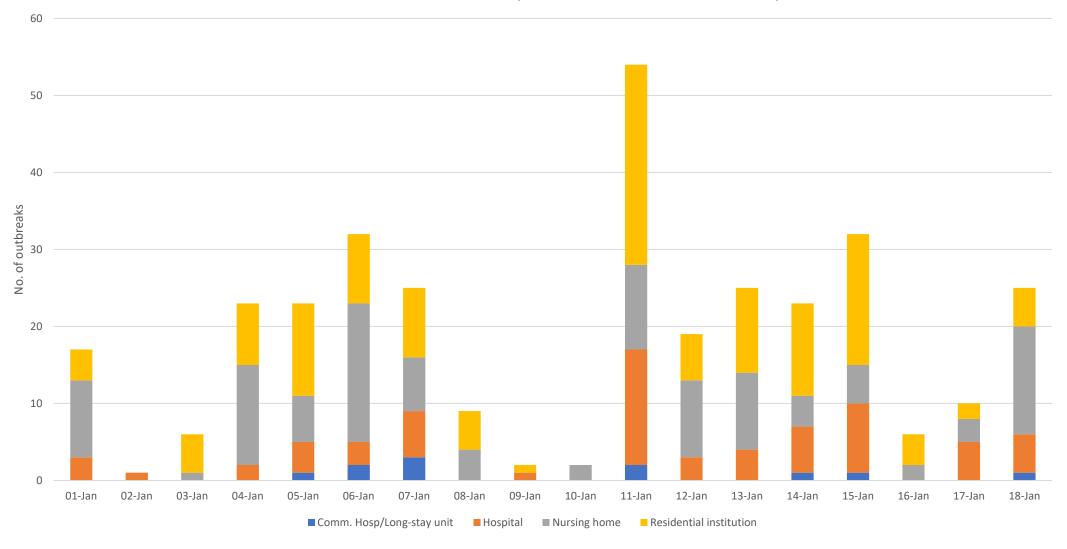
Epidemic curve of cases linked to outbreaks associated with childcare facility outbreaks to midnight 18th January 2021 (n=635) by age group and epi date





Acute Hospitals and Residential Care Facilities No. of new outbreaks created by date outbreak created in January

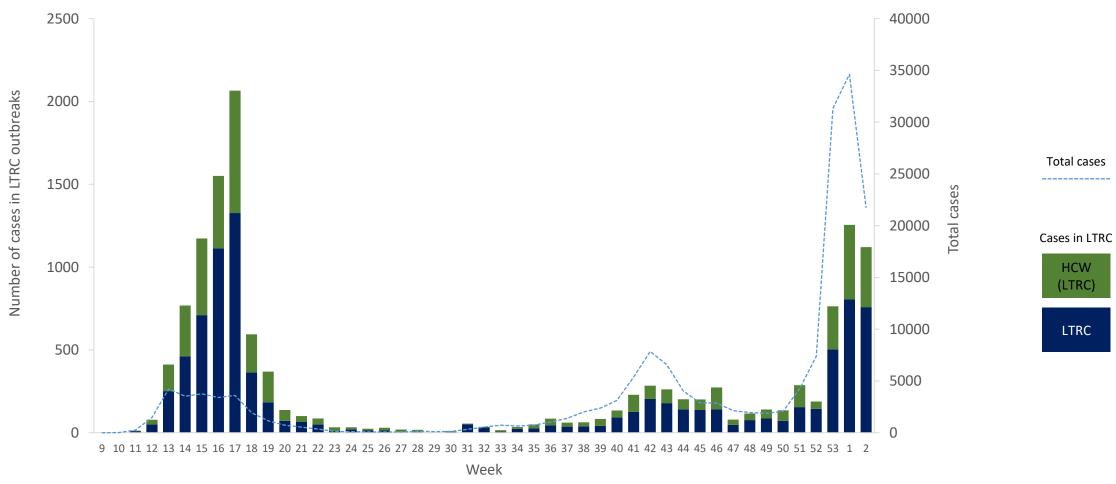




Cases in long-term residential settings

The number of cases in LTRC was less in the second wave compared to the first; however, the number of cases linked to outbreaks in LTRC, following the unprecedented levels of infection in the community, is now very high, similar to the numbers seen in April and May 2020. These numbers are an underestimate, as some cases under investigation will be linked, in the coming days, to outbreaks in LTRC





Weekly cases by setting. LTRC: cases amongst residents of long-term residential settings where outbreaks have occurred. HCW (LTRC): Cases in healthcare workers associated with outbreaks in LTRC. The dashed blue line shows the total number of newly confirmed cases each week, referred to the secondary y-axis

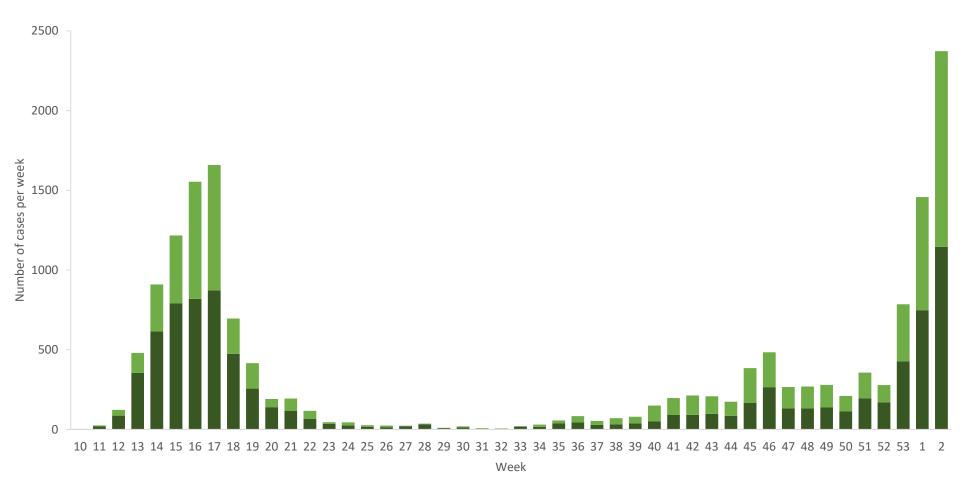




Infections in the healthcare setting

The number of healthcare-setting-acquired infections had decreased from the peak in October, but is now very high. 3.3% of all cases in the last 14 days are reported as 'healthcare setting acquired: patient' and 3.4% as 'healthcare setting acquired: staff'





HEALTHCARE
SETTING AQUIRED
(PATIENT)

HEALTHCARE
SETTING ACQUIRED
(STAFF)







Test & Trace Update

Testing and contact tracing NPHET update

Testing

Over the past seven days, 13th-19th Jan, there has been approximately 139,595 swabs taken for COVID-19 testing

Of these:

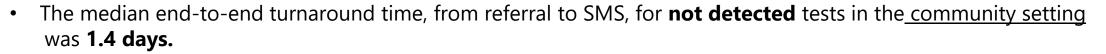
- 73,688 (53%) of these were taken in the community
- 32,723 (23%) swabs were taken in acute settings.
- 33,184 (24%) swabs taken were taken as part of the Serial Testing programmes of staff in residential care facilities and staff in food production facilities.

Contact Tracing

From 13th–19th Jan, a total of 22,636 calls were made in the Contact Tracing Centres. Over the past seven days, the average number of close contacts per case was 2.8, compared to 3 in the previous week.

Turnaround Times (13th- 19th Jan)

End-to-end turnaround time





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

Overall Swab to laboratory result communicated – Medians: 28 hours in Acute, 30 hours in Serial Testing, 27 hours in Community

Referral to appointment

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

95.7% of GP 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 4.2 hours and 2.1 hours, respectively.

Source: HSE

CMP close contact update (week ending 17th Jan)



- The number of close contacts during week ending 17th Jan was 37,541, a decrease of 55% compared to the previous week (83,514)
- In total, 36,074 (96%) of these contacts had been informed of their close contact status by time of CMP report preparation.
- The number of complex contact setting contacts decreased by 9% to 6,648

Source: HSE – CMP report

Variants of concern update

Growth Rate

Week 45 2020

<u>Retrospective</u> analysis of Irish specimens dating from prior to the notification of the VOC by the UK authorities on the 21st December 2020 indicates that the VOC was first detected in Ireland in early November (week 45 in the surveillance year). In that week, a single VOC was identified (retrospectively) in 52 specimens tested.

The NVRL has since tested (based on S-Gene Target Failure) in excess of 1,500 PCR-positive SARS-CoV-2 specimens for the VOC (B.1.1.7). The VOC has been detected in approximately 300 of these specimens and has been identified in all regions of the country.

<u>Retrospective</u> analysis of Irish specimens dating from prior to the notification of the VOC by the UK authorities on the 21st December 2020 indicates that the VOC was first detected in Ireland in early November (week 45 in the surveillance year). In that week, a single VOC was identified (retrospectively) in 52 specimens tested. Further detections were identified retrospectively and prospectively as follows;

VVCCR 13 2020	1/ 52	
Week 46	0/36	
Week 47	0/32	
Week 48	3/50	
Week 49	1/62	
Week 50	2/141	1.4%
Week 51	6/70	8.6%
Week 52	29/178	16.3%
Week 53	111/424	26.2%
Week 1 2021	87/188	46.3%

1/52

Plotting the detection rate of the VOC in recent weeks demonstrates a significant increase in the second half of December 2020.

Source: NVRL

Whole Genome Sequencing of VOC



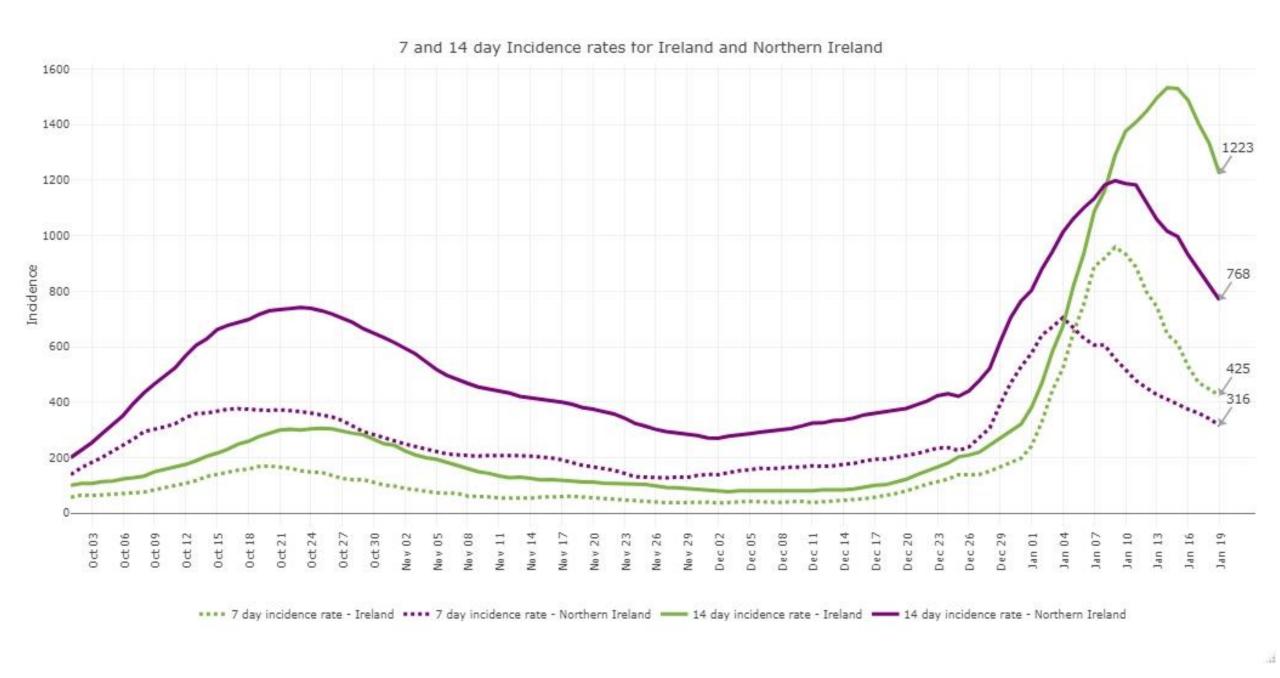
The NVRL has reported that it has completed whole genome sequencing of 80 suspected variants of concern taken since December 21st, 2020.

Based on these analyses:

- The presence of both UK (B.1.1.7) (n=77 cases identified out of 77 samples sequenced) and South African (501.V2) SARS-CoV-2 lineages (n=3 cases identified) has been confirmed by whole-genome sequencing in the Republic of Ireland.
- VOC associated with Brazil have not been detected in Ireland to date but targeted testing continues.

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Source: NVRL





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



Sentinel GP ILI consultation/100,000 pop.	Week	of Co	nsulta	ation												
consultation, 100,000 pop.	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2
All Ages	21.9	33.5	31.4	35.3	15.7	16.8	15.6	17.7	19.2	21.6	28.1	41.9	42.7	63.0	120.4	69.7
<15 yrs	17.6	24.5	26.4	30.2	9.5	15.2	23.5	17.7	26.6	23.6	31.3	39.0	29.3	18.8	37.1	21.7
15-64 yrs	23.8	40.1	35.2	38.6	17.9	18.0	12.7	18.8	18.2	21.3	27.3	44.3	46.2	73.9	155.7	88.5
≥65 yrs	19.4	15.5	20.9	27.6	15.0	13.4	17.3	12.7	12.4	19.9	27.2	34.5	46.2	79.2	78.9	53.8
Number of reporting practices (N=60)	51	55	55	56	57	54	58	57	58	58	58	58	58	58	56	57

MEM Threshold Levels	Below Baseline	Low	Moderate	High	Extraordinary

 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



Growth in Cases & R number

Estimates of effective reproduction number (R)

Reproduction number is below 1.0. The estimates based on confirmed cases (below) are 0.1-0.2 lower than estimates based on confirmed cases by date of specimen collection. R is thus estimated at 0.5 - 0.8



Method	Estimate	95% confidence interval
SEIR model-inferred	0.51	0.26 - 0.82
Bayesian model	0.49	0.34 – 1.29
Time-dependent R	0.55	0.52 - 0.58
GAM estimate 12 Jan 2021	1.11	0.91 – 1.31
GAM estimate 19 Jan 2021	0.88	0.66 – 1.11

Estimates generated 20 January 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.





Situation analysis 20 January 2021

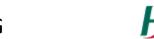


- Incidence is falling but remains very high (10-15 times that in early December)
- Cases (5-day average) 2557 cases per day; 14-day incidence 1223 per 100,000
 - Incidence very high across all age groups, exceptionally high in those aged 85 and older
 - Incidence in those 65 and older continues to increase and a cause for concern
 - Incidence in those aged 18 and younger remains at or below population average
- We, collectively, have achieved suppression of transmission
 - Rate of decline -7 to -10%, halving time 7-10 days
 - R estimated at 0.5-0.8
- Numbers in hospital starting to decrease, and numbers in ICU have plateaued
 - These are tracking close to optimistic model predictions there will be a very slow decrease in numbers in hospital
- Rapidly increasing incidence in long-term care settings and vulnerable groups
- Mortality increasing: there will be a large number of deaths in the coming weeks
- This remains a signal to maintain our efforts: we have a long way to go, and we must maintain suppression to protect each other from serious illness, and to protect our health services and healthcare workers.















European Data

EU/UK ranked by 14 day percentage change (19th January)

EU/EEA and the UK	,		% change in 14 day incidence
Spain	830.29	326.47	154%
Portugal	1278.64	568.06	125%
Ireland	1286.34	649.97	98%
Malta	578.43	334.74	73%
France	396.64	291.55	36%
Belgium	246.04	203.85	21%
Czechia	1306.08	1159.97	13%
Slovenia	1095.13	989.21	11%
Latvia	677.45	615.15	10%
Estonia	602.39	550.53	9%
Italy	362.18	337.81	7%
Germany	306.8	291.46	5%
United Kingdom	1022.44	981.2	4%
Hungary	243.83	241.74	1%
Romania	257.88	257.29	0%
Finland	63.24	63.19	0%
Slovakia	644.84	657	-2%
Poland	299.26	306.55	-2%
Austria	296.5	305.28	-3%
Greece	76.84	86.57	-11%
Sweden	628.93	795.2	-21%
Luxembourg	291.7	373.82	-22%
Netherlands	517.55	725.96	-29%
Bulgaria	108.47	160.02	-32%
Croatia	274.23	415.73	-34%
Lithuania	705.69	1217.32	-42%
Cyprus	466.49	822.47	-43%
Denmark	308.45	564.26	-45%

- 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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EU/UK ranked by 14 day incidence (19th January)

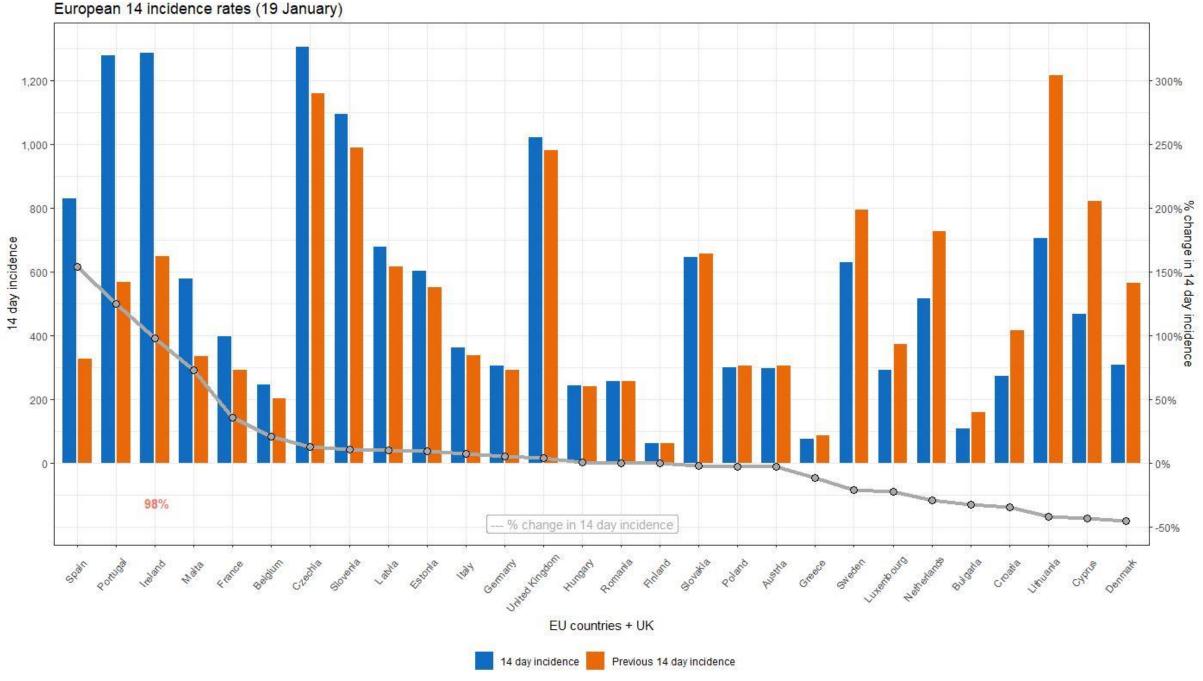
EU/EEA and the UK	14 day incidence		% change in 14 day incidence
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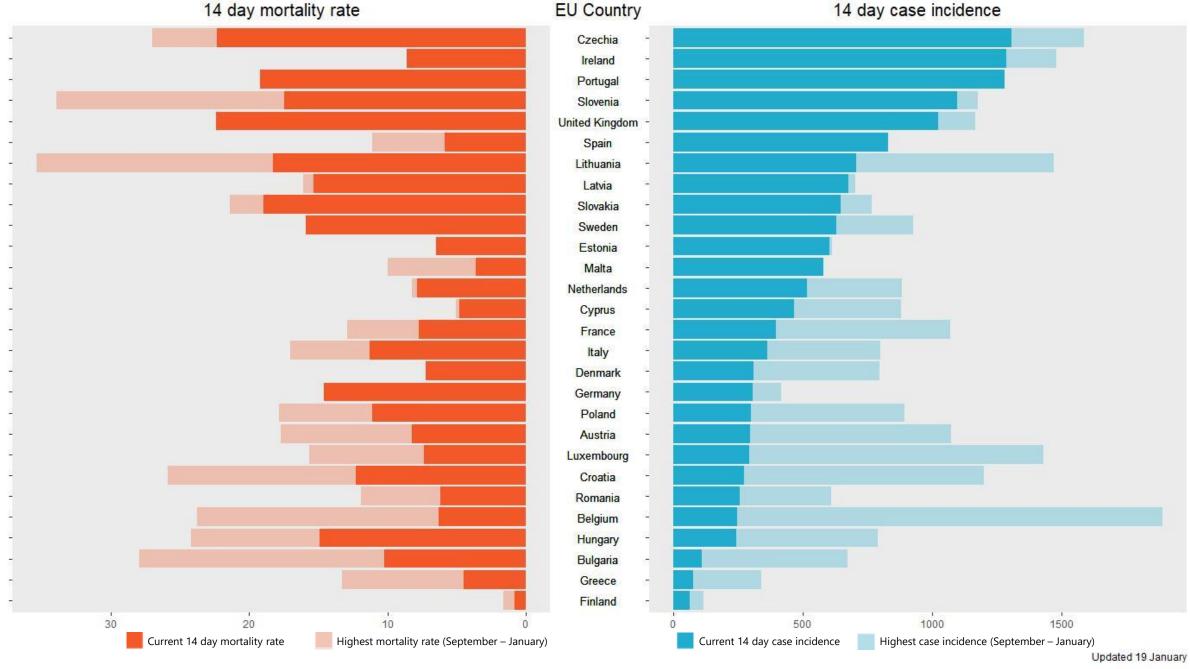
EU/UK ranked by 7 day percentage change (19th January)

EU/EEA and the UK	7 day incidence	Previous 7 day	% change in 7 day incidence
Spain	499.46		
Portugal	690.48		
France	202.88		
Belgium	120.18		
Finland	30.88	32.36	-5%
Estonia	286.69		-9%
Austria	139.81	156.69	-11%
Latvia	315.08	362.37	-13%
Malta	265.66	312.77	-15%
Italy	160.99	201.19	-20%
Netherlands	227.37	290.17	-22%
United Kingdom	447.09	575.35	-22%
Luxembourg	126.84	164.86	-23%
Greece	33.02	43.82	-25%
Poland	126.89	172.37	-26%
Romania	108.8	149.08	-27%
Slovakia	271.35	373.49	-27%
Slovenia	459.37	635.76	-28%
Sweden	261.4	367.53	-29%
Croatia	113.66	160.57	-29%
Bulgaria	43.84	64.63	-32%
Germany	123.28	183.52	-33%
Czechia	510.82	795.26	-36%
Lithuania	270.36	435.33	-38%
Denmark	117.8	190.65	-38%
Hungary	92.38	151.45	-39%
Cyprus	159.49	307	-48%
Ireland	430.31	856.03	-50%

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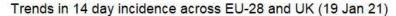


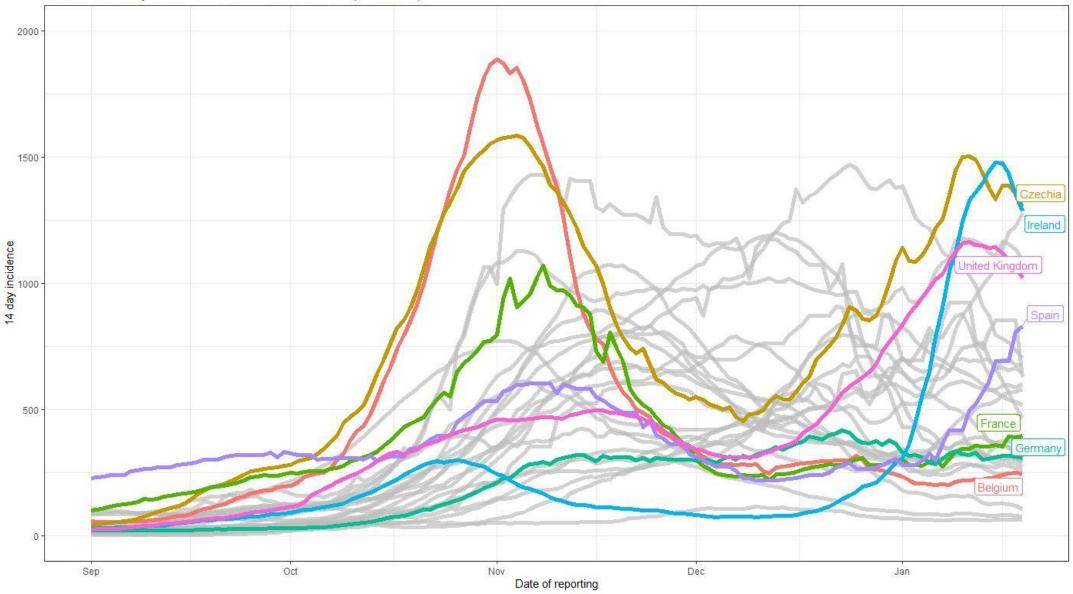
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European trends since start September (14 day incidence)

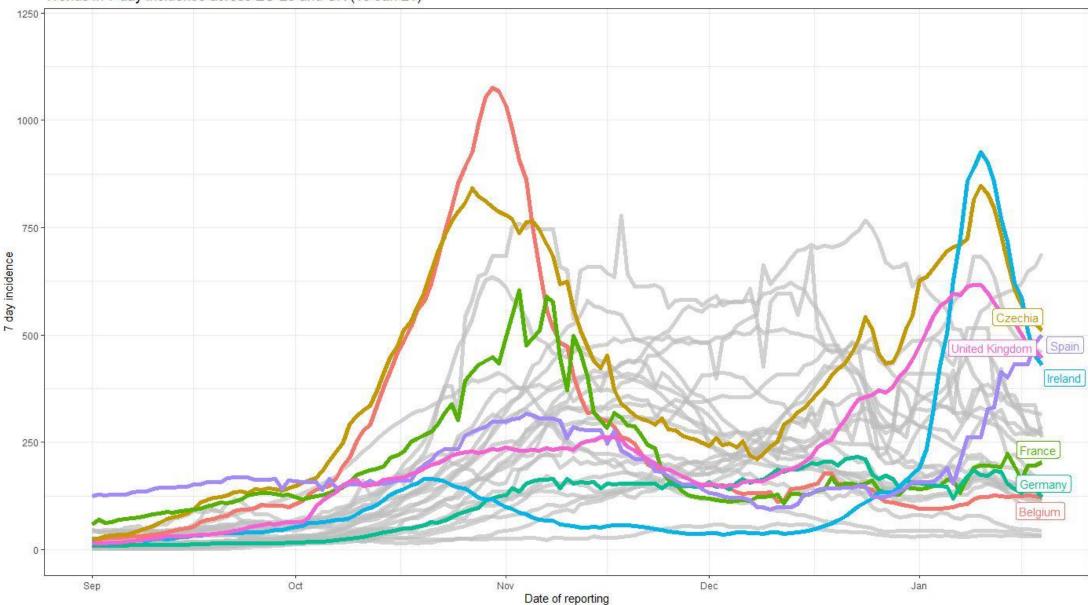




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European trends since start September (7 day incidence)

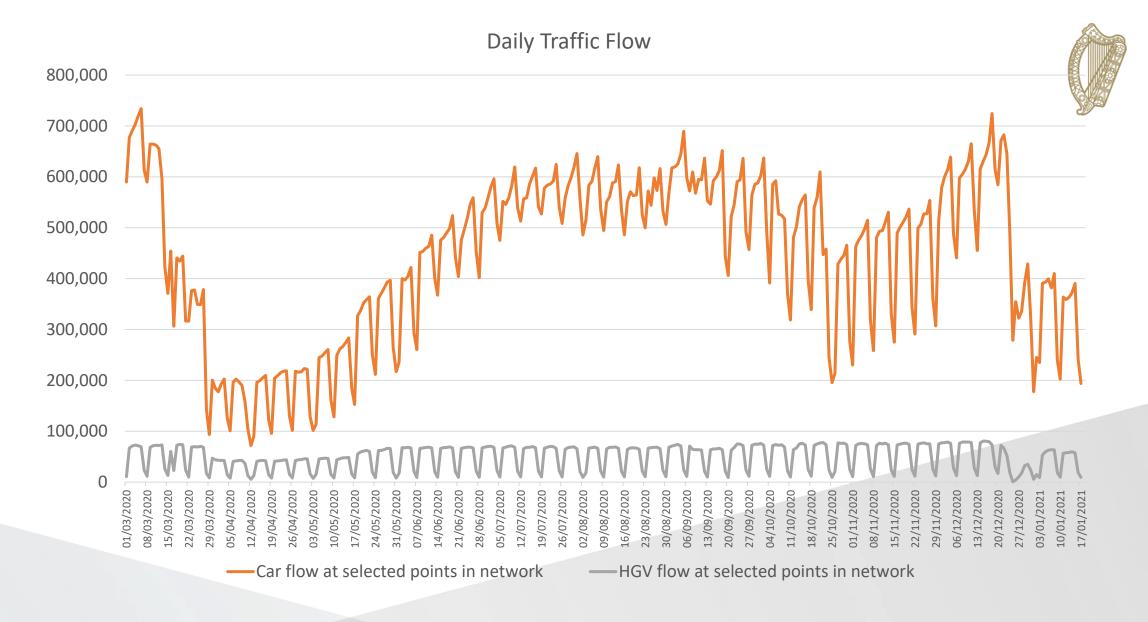
Trends in 7 day incidence across EU-28 and UK (19 Jan 21)



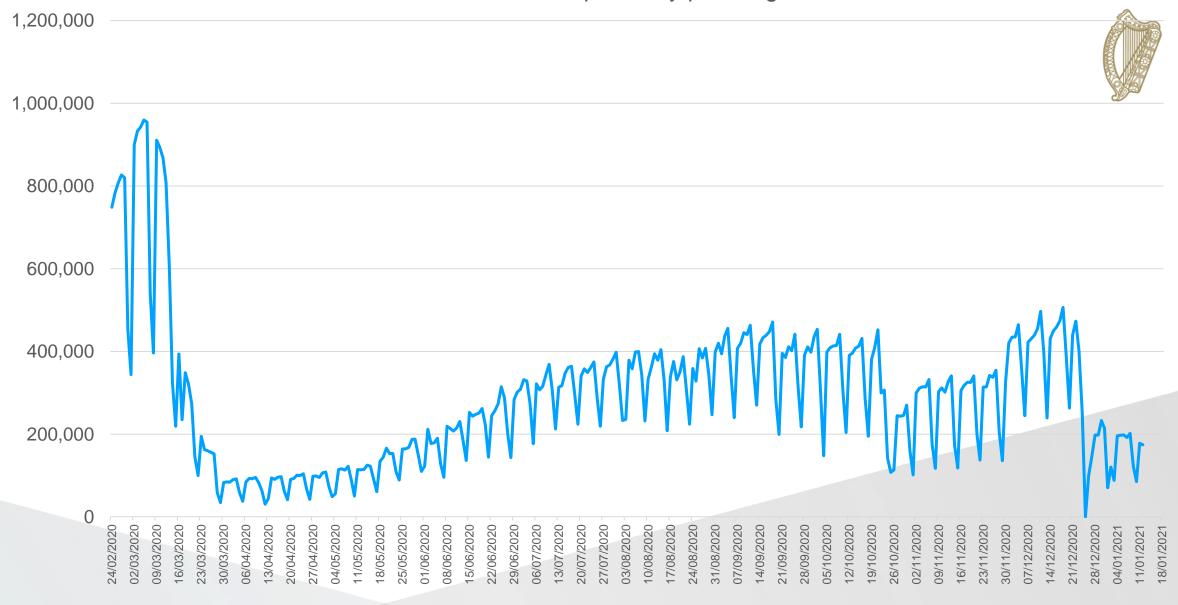
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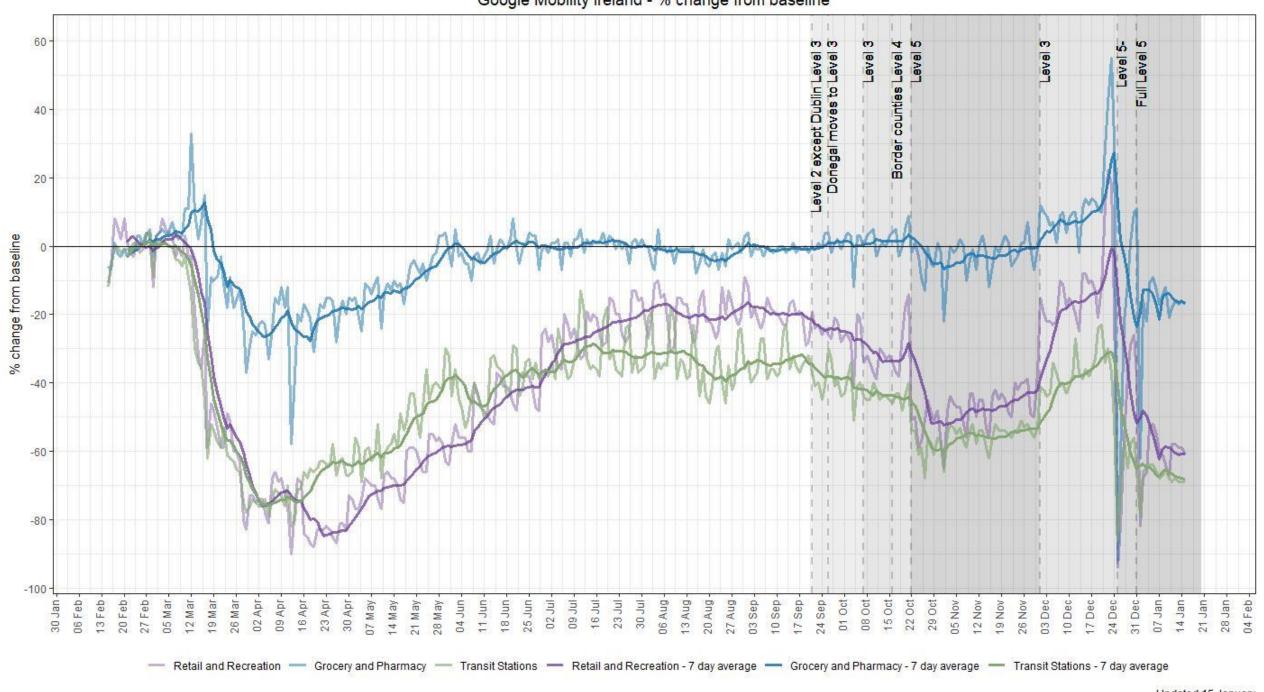
Compliance Data



Overall Public Transport daily passengers



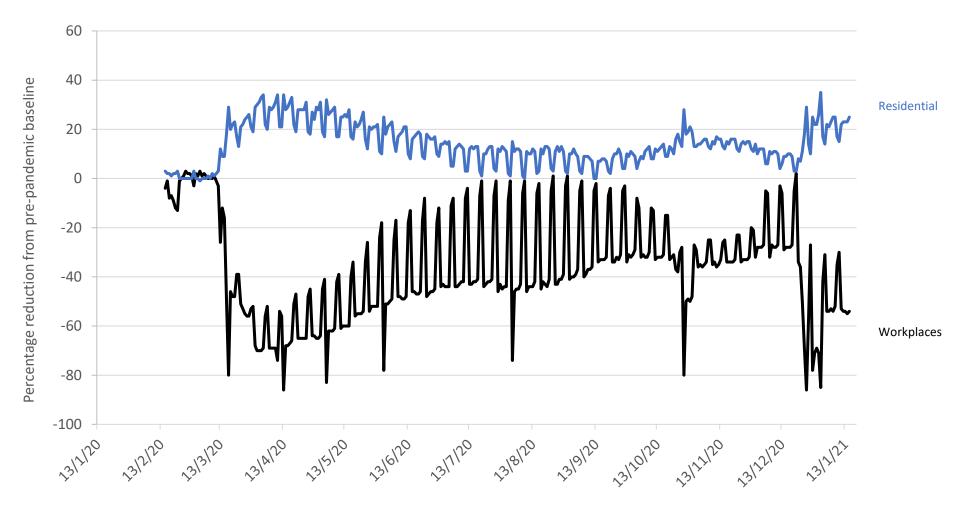
Google Mobility Ireland - % change from baseline



Google community mobility

These data show time spent in residential areas and attendance at workplaces for those who enable location sharing on their Google account; each day of the week is compared with the average for that day of the week over January and February 2020. While attendance at workplaces is very much reduced (to ~50% of baseline) it is higher than in April (~25% of baseline)







Google Mobility Ireland - % change from baseline 40 20 % change from baseline Level 2 except Dublin Level 3 Donegal moves to Level 3 -60 Border counties Level 4 -80 Full Level 5 Level 3 Level 5 Level 3 Level 5--100 30 Jan-24 Sep. 22 Oct. 02 Apr 23 Apr. 21 May 18 Jun 02 Jul Inc 60 16 Jul 23 Jul. 27 Aug 17 Sep 01 Oct 08 Oct 15 Oct. 29 Oct. 19 Nov 03 Dec. 17 Dec 24 Dec. 07 Jan 28 Jan 04 Feb 06 Feb 13 Feb 20 Feb 27 Feb 05 Mar 12 Mar 19 Mar 26 Mar 09 Apr 16 Apr 30 Apr 07 May 14 May 28 May 04 Jun 11 Jun 25 Jun 30 Jul 06 Aug 13 Aug 20 Aug 03 Sep 10 Sep 05 Nov 12 Nov 26 Nov 10 Dec 31 Dec 14 Jan 21 Jan

Workplaces

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

