



Weekly Report on the Epidemiology of COVID-19 in Ireland Week 37, 2021

Health Protection Surveillance Centre, HPSC COVID-19 Epidemiology Team, 20/09/2021

Please note:

- The epidemiological weeks in this report, run from Sunday to Saturday. Please refer to the <u>HPSC website</u> for a complete list of epidemiological weeks with start and end dates for 2020/2021.
- Reference dates:
 - Week 10, 2020 (1st to 7th March 2020) the beginning of the pandemic in Ireland, also the start of the first wave
 - Week 32, 2020 (2nd to 8th August 2020) the beginning of the 2nd wave
 - Week 48, 2020 (22nd to 28th November 2020) the beginning of the 3rd wave
 - Week 26, 2021 (27th June to 3rd July 2021) the beginning of the 4th wave
 - Week 37, 2021 (12th to 18th September 2021) most recent epidemiological week
- Data for this report is based on case notified on the Computerised Infectious Disease Reporting (CIDR) up to the 18th September
- Data was extracted from CIDR system on 20/09/2021
- CIDR data were merged with data from the HSE COVID care tracker to report on some enhanced variables
- Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

Note



- On 14 May 2021 the HSE suffered a major cyber-attack on its IT systems. While HSE-HPSC and CIDR were not directly compromised by the cyber-attack, our surveillance partners (Departments of Public Health, laboratories, and others) were. As an interim measure after the cyber-attack, the reported daily number of COVID-19 cases was based on data uploaded to the HSE-CovidCare Tracker (CCT). The data extracted from CCT did not represent notified cases and had not undergone the extent of data validation which is undertaken by Departments of Public Health and HPSC. All cases were retrospectively notified to CIDR and reporting on the number of cases from CIDR recommenced on 2 September.
- The number of cases reported from CIDR for the period affected by the cyber-attack will differ from the estimates reported based on interim arrangements.
- Not all surveillance processes have returned to normal. The transfer of information gathered during the patient interview from the CCT to CIDR is not yet restored. For this reason CIDR data has been merged with CCT data to report on some variables.
- Further information is available <u>here</u>.

Summary characteristics of COVID-19 cases notified in Ireland



	(week 10,	otal 2020-week 2021)	Week	37, 2021
	Number	Percent	Number	Percent
Total number of confirmed cases	375,363		9,233	
Incidence rate of confirmed cases per 100,000 population	7882.7		193.9	
Number of cases hospitalised	16,229	4.3	119	1.3
Number of cases admitted to ICU	1,818	0.5	<5*	
Number of deaths among confirmed cases	4,920	1.3	<5*	
Case fatality ratio (CFR %)	1.3			
Incidence rate of confirmed deaths per 100,000 population	103.3			
Number of cases in healthcare workers	32770	8.7	249	2.7
Males	182,972	48.7	4,519	48.9
Females	192,287	51.2	4,702	50.9
M:F ratio	0.95		0.96	
Median (years)	33		25	
Mean age (years)	36		29	
Age range (years)	0-108		0-103	

^{*} The number of cases hospitalised, cases admitted to ICU and deaths described in the above table relate only to COVID-19 cases who were notified during this reporting period, and where the outcome is known at the time of reporting. It does not reflect all hospitalisations, ICU admissions and deaths related to COVID-19 which occurred during the period covered by the report. It also does not reflect the final number of cases hospitalised, admitted to ICU or deaths for these cases notified during this period as the outcome may not yet have occurred, or is yet to be notified

Epidemic curve of COVID-19 cases notified in Ireland



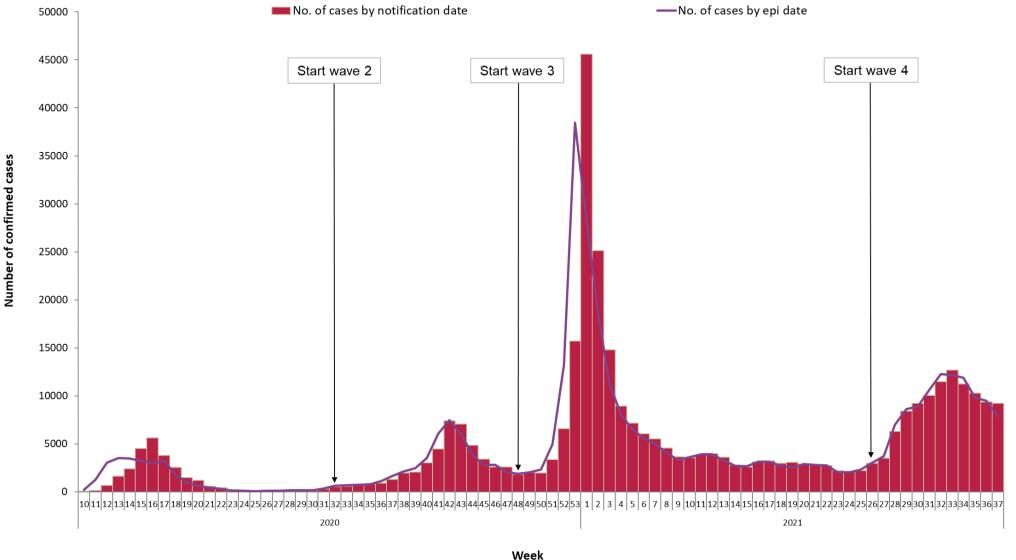


Figure 1: Number of confirmed COVID-19 cases by notification week and <u>epidemiological date</u> in Ireland between week 10, 2020 and week 37, 2021

Epidemic curve of COVID-19 cases notified in Ireland during the 4th wave



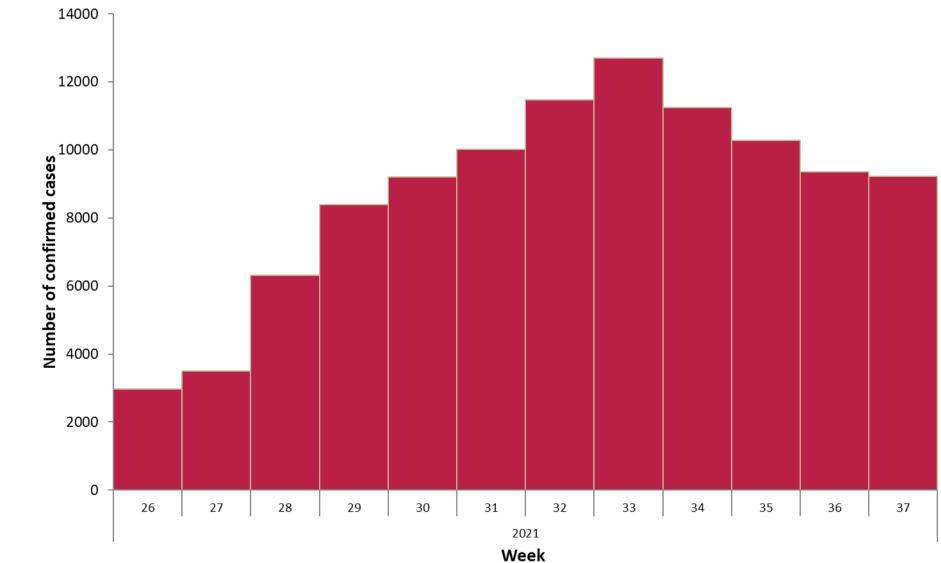


Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 37, 2021

Summary characteristics of COVID-19 cases notified in Ireland during the latest epidemiological week



Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland during week 37, 2021

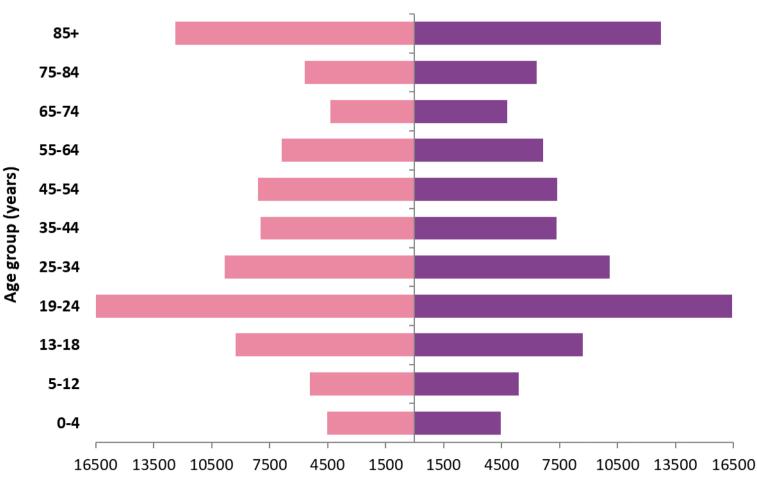
Characteristic		Week 37	Percent
Total number of confirmed cases		9,233	100
Sex	Male:Female ratio	0.96	
	Male	4,519	48.9
	Female	4,702	50.9
	Unknown	12	0.2
Age	Mean age (years)	29	
	Median age (years)	25	
	Age range (years)	0-103	
	0-4 yrs	636	6.9
	5-12 yrs	2,209	23.9
	13-18 yrs	886	9.6
	19-24 yrs	863	9.3
	25-34 yrs	1,161	12.6
	35-44 yrs	1,290	14.0
	45-54 yrs	966	10.5
	55-64 yrs	542	5.9
	65-74 yrs	380	4.1
	75-84 yrs	194	2.1
	85+ yrs	105	1.1
	Unknown	1	0.0

Age and sex pyramid for COVID-19 cases notified in Ireland



Figure 3a: Cumulative age and sex-specific incidence rates of confirmed COVID-19 cases per 100,000 population notified in Ireland between week 10, 2020 and week 37, 2021

(excluding 50 cases for whom age is unknown, 102 cases for whom sex is unknown and two cases for whom both are unknown)



Cumulative age- and sex-specific rate per 100,000 population from week 10, 2020 to week 37, 2021

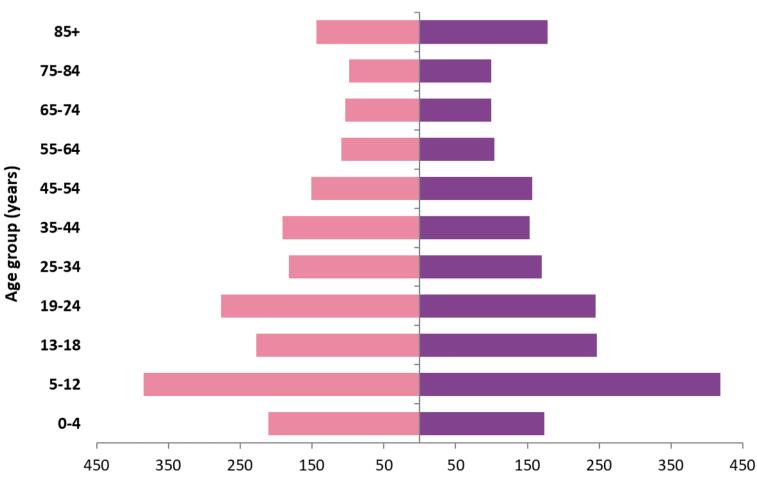
■ Female ■ Male

Age and sex pyramid for COVID-19 cases notified in Ireland for the latest epidemiological week



Figure 3b: Cumulative age and sex-specific incidence rates of confirmed COVID-19 cases per 100,000 population notified in Ireland during week 37, 2021

(excluding one case for whom age is unknown and 12 cases for whom sex is unknown)



Cumulative age- and sex-specific rate per 100,000 population for week 37, 2021

■ Female ■ Male

Incidence rates by age group for COVID-19 cases notified in Ireland during the 4th wave



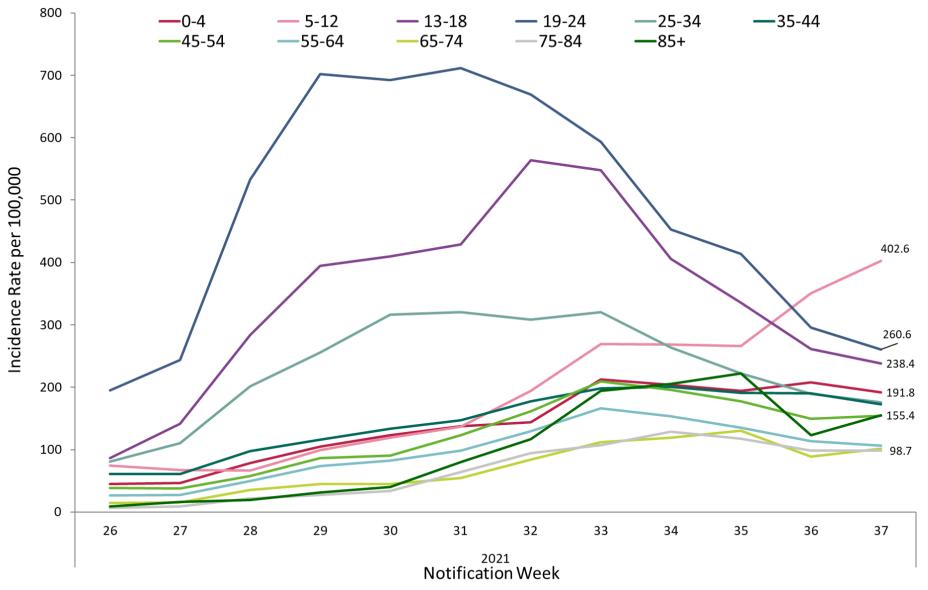


Figure 4: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave from week 26, 2021 to week 37, 2021

Incidence by age groups for COVID-19 cases notified in Ireland during the 4th wave



						A	Age Range						
		0-4	5-12	13-18	19-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	National
	26	44.9	74.4	86.4	195.3	81.0	61.2	38.7	26.9	14.2	6.6	8.9	62.3
	27	46.8	66.9	141.3	243.7	110.1	60.7	38.0	27.3	15.0	9.2	16.3	73.4
	≼ 28	78.4	66.7	283.9	532.6	201.1	97.9	57.7	50.1	35.3	21.9	19.2	132.5
	¥ 28 ⊕ 29	104.7	99.0	394.8	701.7	255.4	116.2	86.1	73.5	45.0	27.5	31.1	176.2
	20	123.1	119.0	410.1	692.6	316.2	133.2	90.4	82.5	45.2	33.6	40.0	193.4
2021	Notification 31 32 33	137.6	136.9	428.7	711.6	320.4	146.7	123.0	98.2	54.3	64.1	79.9	210.4
70	<u>iii</u> 32	143.9	194.3	564.1	669.4	308.6	177.3	161.6	129.7	84.1	94.1	116.9	240.8
	∑ 33	213.0	269.4	547.6	593.6	320.3	198.6	209.4	166.4	111.6	106.9	193.9	266.6
	34	203.9	268.8	405.8	452.9	263.3	201.0	195.5	153.8	118.9	128.8	205.8	236.0
	35	194.0	266.3	335.3	413.6	222.5	190.7	177.6	135.0	130.1	117.6	222.0	215.8
	36	208.1	350.5	261.0	295.9	189.7	190.3	149.8	114.0	89.2	98.7	122.9	196.6
	37	191.8	402.6	238.4	260.6	176.1	172.7	154.3	106.5	101.7	98.7	155.4	193.9

Figure 5: Heat map of weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave between week 26, 2021 and week 37, 2021

COVID-19 cases in children 18 years and under by notification date



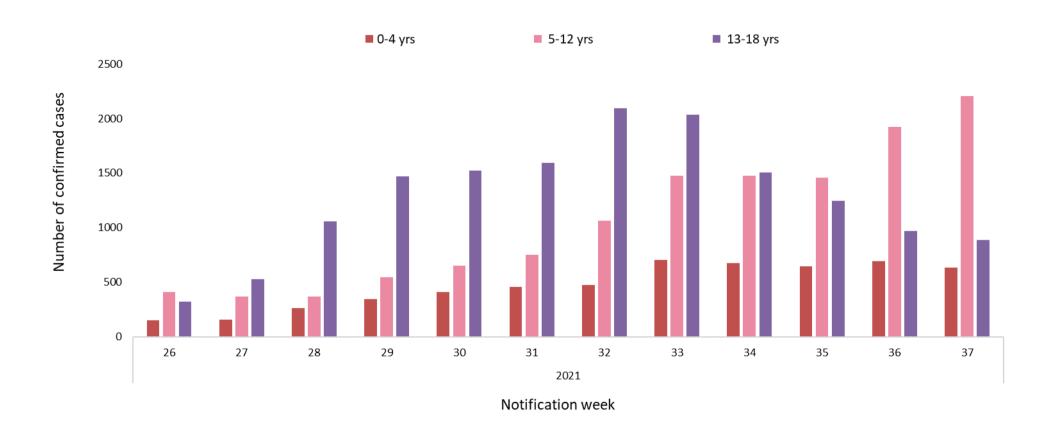


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 37, 2021

COVID-19 incidence rate by HSE area in children 18 years and under



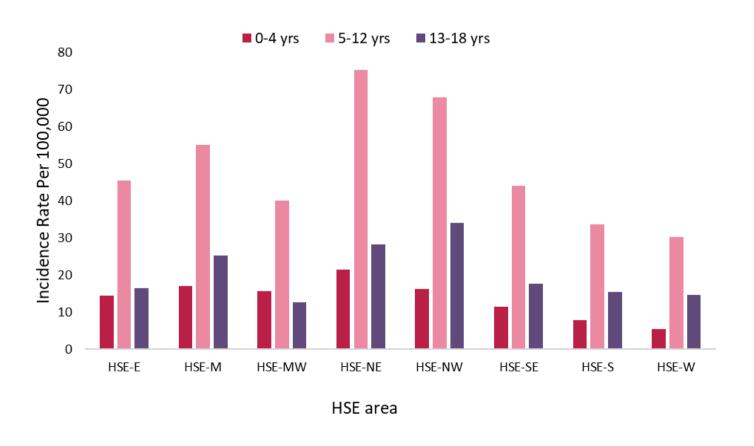


Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 37, 2021

Characteristics for COVID-19 cases notified in Ireland by county for the latest

epidemiological week

hpsc

Table 2: Characteristics of confirmed COVID-19 cases by county notified in Ireland, during week 37, 2021

			î	1					
County	Ca	ses	M:F ratio	Median age	Incidence Rate per 100,000				
County	N	%	iii.i ratio	(years)					
Monaghan	259	2.8	0.9	20	421.9				
Donegal	621	6.7	1.1	24	390.1				
Louth	477	5.2	0.9	27	370.1				
Carlow	184	2.0	8.0	28	323.2				
Laois	214	2.3	1.1	19	252.7				
Longford	91	1.0	1.0	24	222.6				
Cavan	169	1.8	0.9	31	221.9				
Westmeath	188	2.0	0.8	30	211.8				
Dublin	2848	30.8	1.0	25	211.4				
Meath	390	4.2	1.0	20.5	200.0				
Limerick	370	4.0	0.8	28	189.8				
Offaly	146	1.6	1.0	19.5	187.3				
Kerry	270	2.9	1.1	23	182.8				
Mayo	228	2.5	0.9	25	174.7				
Roscommon	110	1.2	1.2	21	170.4				
Kildare	364	3.9	1.0	24	163.6				
Tipperary	260	2.8	1.0	21	163.0				
Kilkenny	160	1.7	1.1	18	161.2				
Waterford	180	1.9	0.9	23.5	154.9				
Wexford	218	2.4	0.8	26	145.6				
Leitrim	46	0.5	0.7	21.5	143.6				
Cork	777	8.4	0.9	28	143.1				
Clare	168	1.8	0.9	20	141.4				
Sligo	88	1.0	1.0	18	134.3				
Galway	315	3.4	1.2	27	122.1				
Wicklow	92	1.0	0.9	32	64.6				

Incidence rates by county for COVID-19 cases notified in Ireland during the 4th wave



		Carlow	Cavan	Clare	Cork	Donegal	Dublin	Galway	Kerry	Kildare	Kilkenny	Laois	Leitrim	Limerick	Longford	Louth	Мауо	Meath	Monaghan	Offaly	Roscommon	Sligo	Tipperary	Waterford	Westmeath	Wexford	Wicklow	National
	26	14.1	40.7	48.0	19.7	215.5	90.5	29.1	33.9	47.6	23.2	62.6	18.7	82.1	34.3	66.0	37.5	60.0	31.0	42.3	88.3	76.3	21.9	104.2	75.5	25.4	31.6	62.3
	27 👱	49.2	53.8	38.7	29.3	213.0	96.8	50.8	62.3	76.0	40.3	40.1	31.2	122.1	34.3	95.4	76.6	68.2	55.4	59.0	71.3	126.6	23.2	36.2	83.4	48.1	42.8	73.4
	ψ 28	133.5	106.3	70.7	75.3	392.0	167.1	129.4	94.8	128.5	48.4	133.4	103.0	126.2	71.0	296.4	118.0	124.6	107.5	116.7	100.7	90.0	48.9	57.7	121.7	54.1	112.3	132.5
	≥ 29	203.8	153.6	70.7	118.1	537.7	192.9	258.5	126.6	156.0	69.5	275.1	259.0	140.1	141.9	250.6	196.2	151.2	229.7	137.2	137.9	151.1	99.7	80.9	147.6	87.5	165.0	176.2
	_ 30	130.0	182.5	104.4	120.8	378.8	222.9	283.7	198.4	122.2	99.8	196.0	212.2	190.9	149.2	378.6	301.1	168.7	252.5	111.6	206.1	212.1	127.2	104.2	171.2	90.2	148.1	193.4
21	을 31	172.1	232.4	143.9	163.4	321.6	240.8	302.6	203.8	141.6	105.8	184.2	137.3	179.6	225.1	269.2	314.9	184.1	351.9	173.2	275.8	177.0	129.1	125.7	166.7	173.0	186.1	210.4
20	© 32	212.5	466.0	137.2	148.1	581.1	250.9	295.7	208.5	184.7	145.1	192.5	190.4	189.3	181.0	246.0	314.9	205.6	645.1	207.8	426.1	291.4	168.0	170.4	312.0	187.7	173.4	240.8
	≣ 33	228.3	744.3	155.7	188.1	599.9	254.8	256.1	295.2	193.7	134.0	229.1	230.9	296.6	217.7	378.6	272.0	232.8	821.0	203.9	365.6	199.9	296.5	220.4	277.1	167.0	180.4	266.6
	2 34	175.6	508.0	131.3	163.8	556.6	215.0	239.5	304.7	181.6	199.5	124.0	358.9	253.5	327.8	237.4	287.3	229.2	768.9	241.1	334.7	271.6	246.9	158.4	218.5	146.3	163.6	236.0
	35	230.1	341.3	197.8	184.6	497.5	207.9	194.9	233.6	150.6	166.3	217.2	405.7	224.2	264.2	262.3	244.4	192.3	485.5	228.3	300.6	181.6	184.9	99.0	175.7	155.0	161.5	215.8
	36	217.8	288.8	149.8	130.1	409.6	223.5	171.3	155.0	168.1	166.3	271.6	227.8	173.9	313.2	255.3	211.5	179.4	470.8	228.3	227.8	151.1	137.3	128.3	165.6	108.9	102.5	196.6
	37	323.2	221.9	141.4	143.1	390.1	211.4	122.1	182.8	163.6	161.2	252.7	143.6	189.8	222.6	370.1	174.7	200.0	421.9	187.3	170.4	134.3	163.0	154.9	211.8	145.6	64.6	193.9

Figure 7: Heat map of weekly incidence rates of confirmed COVID-19 cases per 100,000 population, by county, notified in Ireland for the 4th wave between week 26, 2021 and week 37, 2021

Laboratory testing for SARS-CoV-2



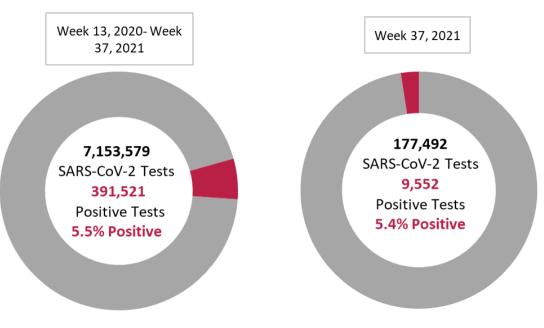


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 37, 2021

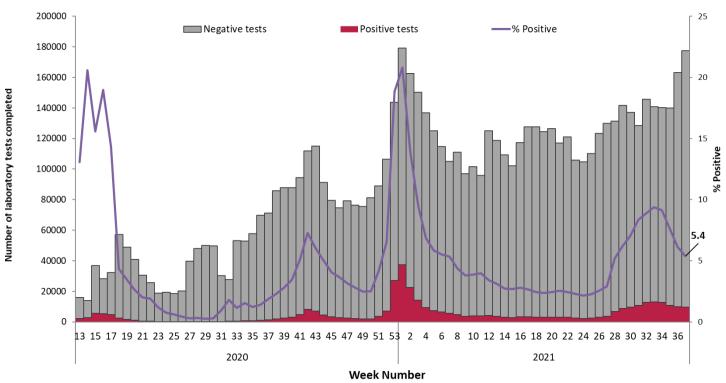


Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 37, 2021

^{*}Positive tests refers to all positive specimens and includes duplicates and individuals who were retested

Sentinel GP referrals for COVID-19 testing

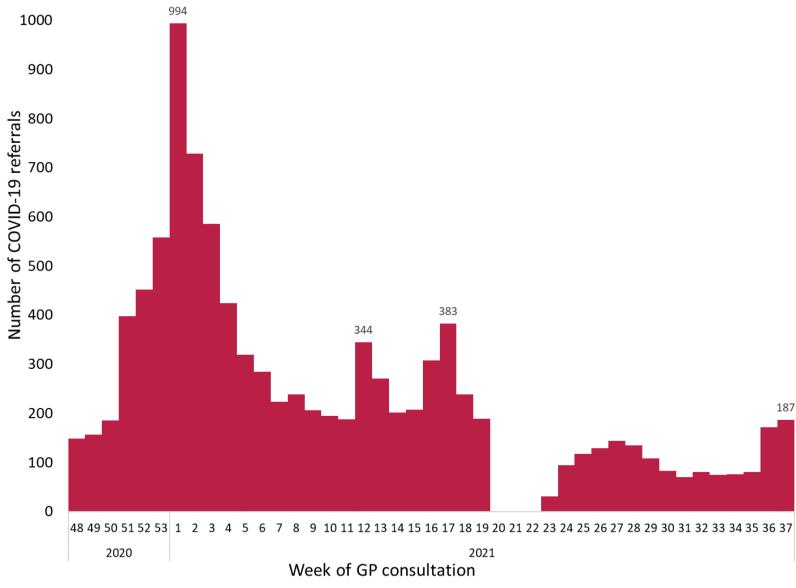


Figure 9: Number of sentinel GP COVID-19 referrals by week of consultation, 2020-2021









^{*}Please note, from weeks 19-23 2021, the GP sentinel referral data were incomplete due to the cyber-attack

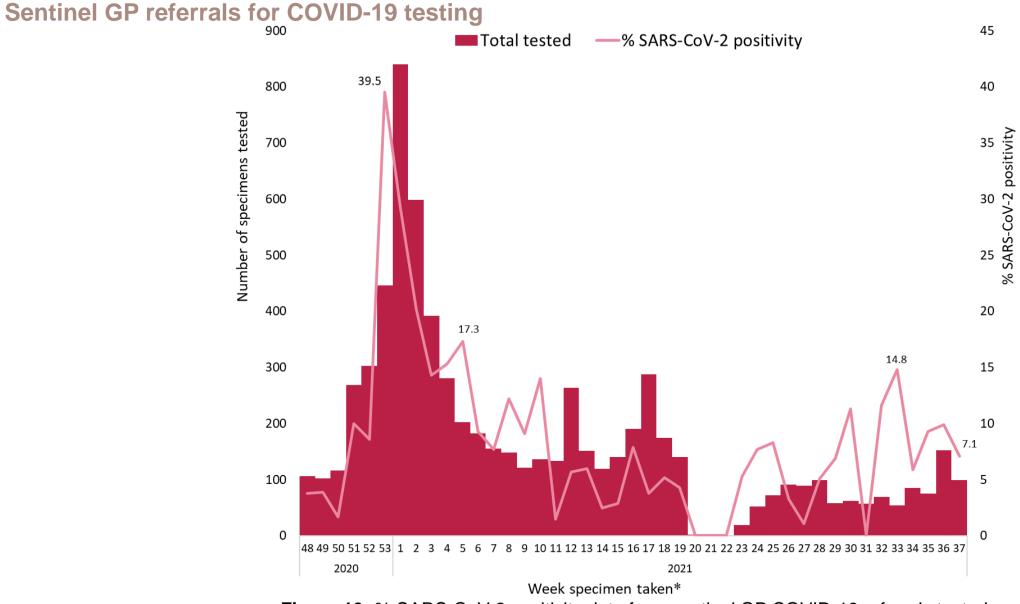


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021









^{*}Please note, from weeks 19-23 2021, the GP sentinel virology data were incomplete due to the HSE cyber-attack

Deaths among COVID-19 cases



	Number	Percent
Total number of deaths	5,193	
confirmed	4,920	94.7
probable	96	1.8
possible	177	3.4
Number hospitalised who died	2,831	54.5
admitted to ICU who died	544	10.5
not admitted to ICU who died	4,649	89.5
Number of imported cases who died	11	0.2
Number of HCWs who died	18	0.3
Number with underlying conditions who died	4,517	87.0
Males who died	2,733	52.6
M:F ratio	1.11	
Median age (years)	82	
Mean age (years)	80	
Age range (years)	0-105	

Female Male Total Percent Age group (years) <45 yrs 26 30 56 45-54 yrs 35 66 101 2 6 55-64 yrs 109 179 288 65-74 yrs 300 520 820 16 34 75-84 yrs 755 1006 1761 85+ yrs 1232 932 2164 42 Unknown 3 3 0 0 **Total** 2460 2733 5193 100.0 **Percent** 47.4 52.6

Table 3: Summary of deaths in all COVID-19 cases notified in Ireland between week 10, 2020 and week 37, 2021

Table 4: Number of deaths in all COVID-19 cases by sex and age group notified in Ireland between week 10, 2020 and week 37, 2021

Deaths among COVID-19 cases



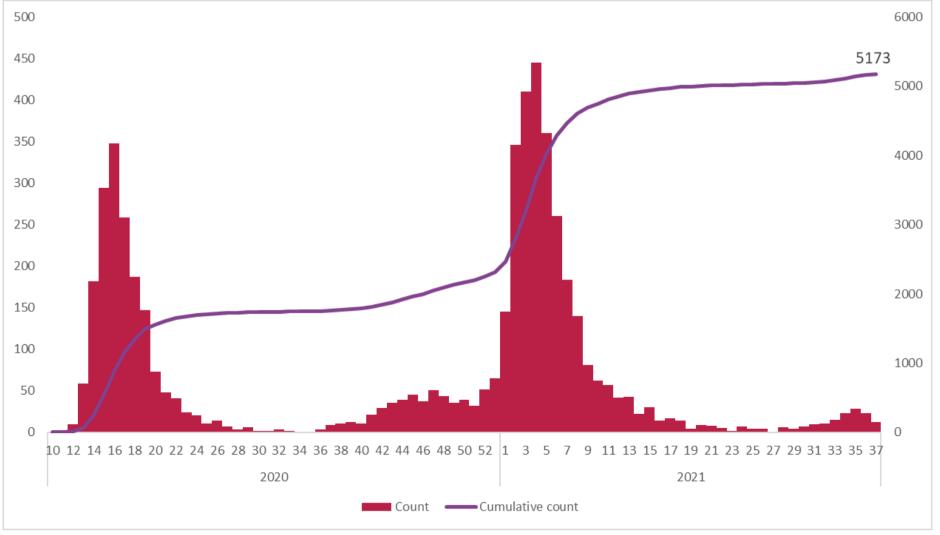


Figure 11: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 18/09/2021. Date of death reported for 5,173 of deaths.

Most likely transmission source of COVID-19 cases



Table 5: Most likely transmission source for cases notified in week 37, 2021. Data based on CCT/PPA data.

Most likely transmission source for 37, 2021	Number of cases	Percent
Close contact with a known confirmed case	4213	45.6
Travel related	230	2.5
Community transmission	2701	29.3
Healthcare setting acquired: patient	44	0.5
Healthcare setting acquired: staff	33	0.4
Under investigation*	2012	21.8
Total	9233	100

^{*} Includes cases without a matching record for CCT/PPA

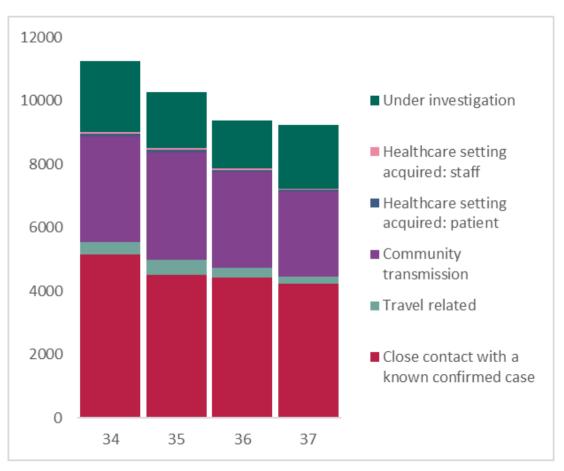


Figure 12: Most likely transmission source by week, from week 34 - week 37, 2021. Data based on CCT/PPA data

Please refer to the Health Protection Surveillance (HPSC) website for specific reports on



- 14 Day report epidemiology of COVID-19 in Ireland
- Outbreaks/clusters in Ireland COVID-19 weekly report
- Weekly report on COVID-19 deaths reported in Ireland
- <u>SARS-CoV-2 wastewater surveillance</u> programme weekly reports
- Healthcare Workers COVID-19 cases in Ireland monthly reports
- <u>Vaccination status of COVID-19</u> deaths in Ireland weekly reports
- Vaccination status of COVID-19 cases admitted to ICU in Ireland weekly reports

Acknowledgements

Sincere thanks are extended to all those who are participating in the collection of data and reporting of data used in these reports. This includes the HSE COVID-19 Contact Management Programme (CMP), staff in ICU units, notifying clinicians, laboratory staff, public health doctors, nurses, surveillance scientists, microbiologists and administrative staff.

Report prepared by COVID-19 Epidemiology Team, HPSC

Technical Notes



1. Data Source

- Data are based on statutory notifications and were extracted from Computerised Infectious Disease Reporting (CIDR)
 system and the HSE COVID care tracker. Data are provisional and subject to ongoing review, validation and update. As a
 result, figures in this report may differ from previously published figures.
- Slide with Laboratory testing for SARS-CoV-2 data provided by Deloitte Ireland LLP

2. Epidemiological date

 Epidemiological date is based on the earliest of dates available on the case and taken from date of onset of symptoms, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date or event creation date/notification date on CIDR. By using this date rather than event creation/ notification date, adjusts for any delays in testing/notification. Further information on epidemiological dates and weeks can be found on the HPSC website.

3. Population data

Population data were taken from Census 2016. Data were aggregated into the following age groups for the analysis: 0-4 years, 5-12 years, 13-18 years, 19-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, 75-84 years and ≥ 85 years.