



Weekly Report on the Epidemiology of COVID-19 in Ireland Week 43, 2021

Health Protection Surveillance Centre, HPSC COVID-19 Epidemiology Team, 01/11/2021

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 43, 2021 (24th to 30th October 2021) most recent epidemiological week
- Data for this report is based on case notified on the Computerised Infectious Disease Reporting (CIDR) up to the 30th October
- Data was extracted from CIDR system on 01/11/2021
- Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

Summary characteristics of COVID-19 cases notified in Ireland



	(week 10,	otal 2020-week 2021)	Week 4	13, 2021
	Number	Percent	Number	Percent
Total number of confirmed cases	445,594		15,741	
Incidence rate of confirmed cases per 100,000 population	9357.6		330.6	
Number of cases hospitalised	18,763	4.2	192*	1.2
Number of cases admitted to ICU	1,989	0.4	6*	0.04
Number of deaths among confirmed cases	5,205	1.2	7*	0.04
Case fatality ratio (CFR %)	1.2		0.04	
Incidence rate of confirmed deaths per 100,000 population	109.3		0.15	
Number of cases in healthcare workers	28912	6.5	257	1.6
% where HCW is known		12.3		4.7
Males	217,524	48.8	7,789	49.5
Females	227,956	51.2	7,934	50.4
M:F ratio	0.95		0.98	
Median (years)	33		37	
Mean age (years)	36		36	
Age range (years)	0-108		0-99	

^{*} 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



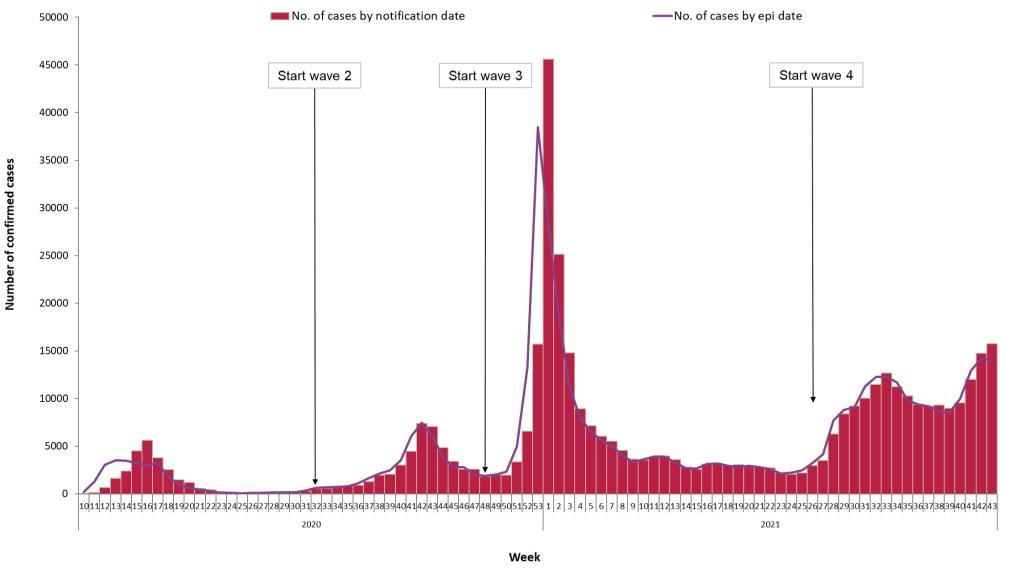


Figure 1: Number of confirmed COVID-19 cases by notification week and <u>epidemiological date</u> in Ireland between week 10, 2020 and week 43, 2021

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



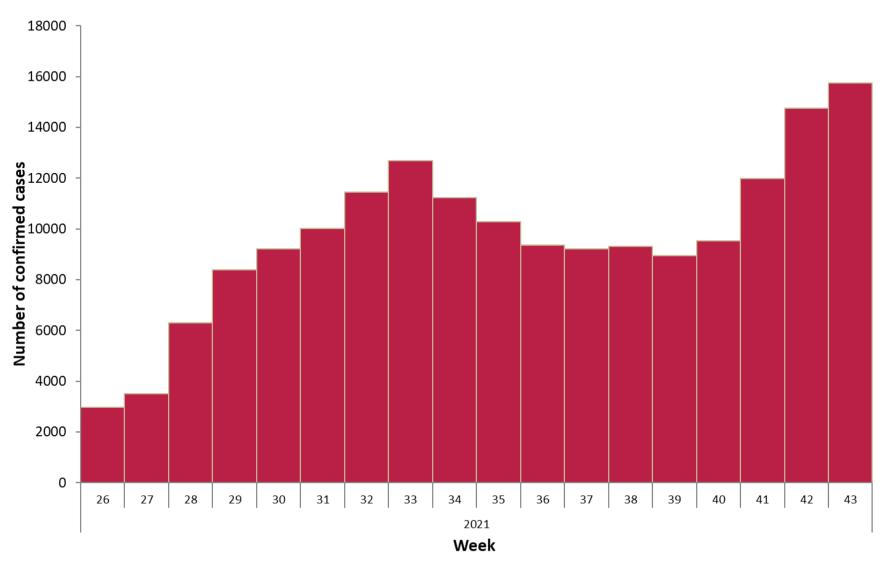


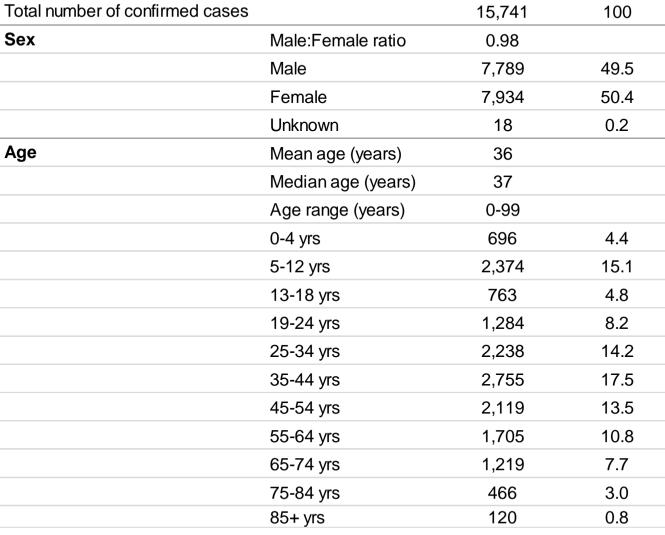
Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 43, 2021

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 43, 2021

	aring the latest		
Characteristic		Week 43	Percent
otal number of confirmed cases		15,741	100
ex	Male:Female ratio	0.98	
	Male	7,789	49.5

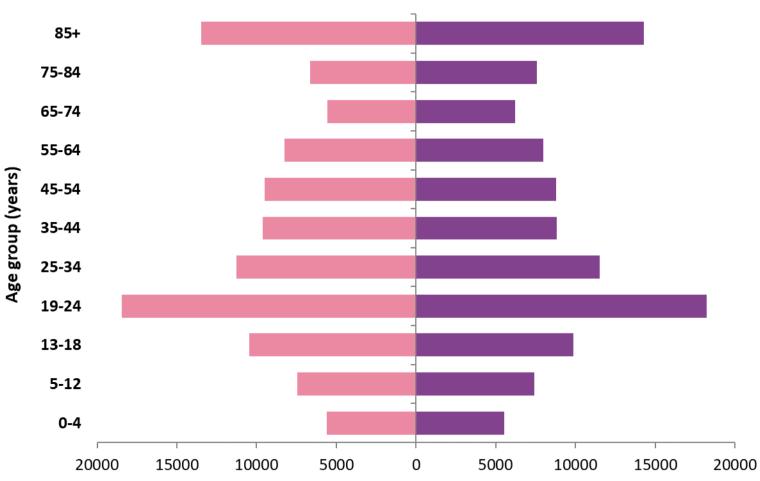


Age and sex pyramid for COVID-19 cases notified in Ireland



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 43, 2021

(excluding 58 cases for whom age is unknown, 112 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 43, 2021

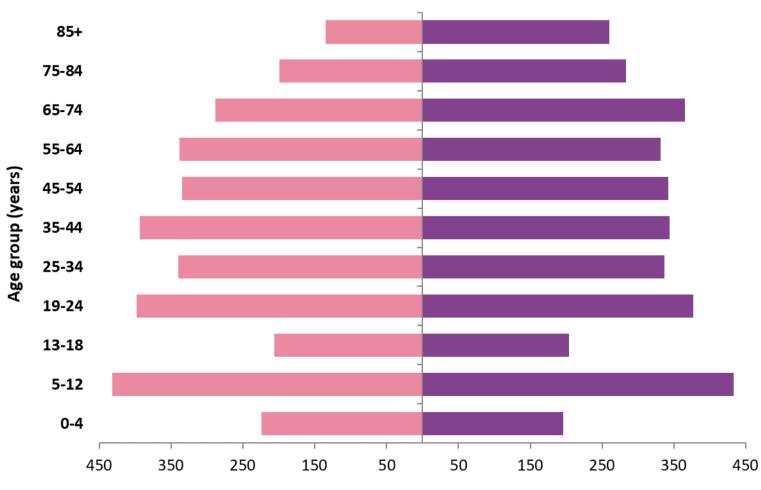
■ Female ■ Male

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 43, 2021

(excluding 2 cases for whom age is unknown and 18 cases for whom sex is unknown)



Cumulative age- and sex-specific rate per 100,000 population for week 43, 2021

■ Female ■ Male

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



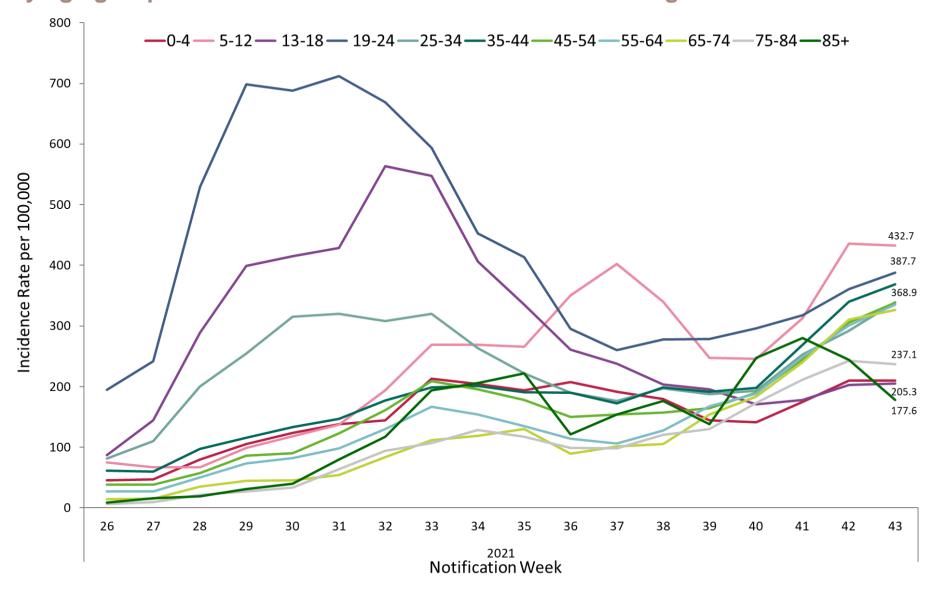


Figure 4: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave from week 26, 2021 to week 43, 2021

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



						,	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	45.5	74.7	86.7	194.7	81.0	61.2	38.2	27.1	13.9	6.6	8.9	62.3
	27	46.8	67.3	144.2	241.8	109.8	60.1	38.0	27.3	14.7	9.2	16.3	73.4
\	£ 28	79.9	66.9	288.8	529.0	200.0	97.6	57.3	50.3	34.8	21.9	19.2	132.5
700///	29	105.6	98.8	399.4	698.4	254.8	115.8	85.9	73.7	44.7	27.0	31.1	176.2
	20	124.0	118.5	415.0	688.4	315.4	133.2	90.2	82.3	45.5	33.1	40.0	193.3
	31	138.2	137.1	428.4	711.6	320.1	146.9	122.8	98.0	54.3	64.1	79.9	210.4
į.	32	144.2	194.1	563.8	668.8	308.3	177.1	161.5	129.7	84.1	94.1	116.9	240.6
<u>†</u>	33	213.0	269.2	547.6	593.6	320.1	198.6	209.4	166.4	111.6	106.9	193.9	266.6
2021	34	203.9	268.8	406.1	452.6	263.3	200.8	195.5	153.8	118.9	128.8	205.8	236.0
20	35	194.0	266.1	335.3	413.6	222.2	190.7	177.6	135.0	130.1	117.6	222.0	215.8
	36	207.8	350.5	261.0	295.6	189.6	190.3	149.7	114.0	89.2	98.7	121.4	196.5
	37	191.8	402.0	237.6	260.3	176.1	172.2	154.1	106.1	101.5	98.2	153.9	193.5
	38	179.8	340.1	203.5	278.1	197.0	199.0	157.3	127.9	105.2	120.6	176.2	195.6
	39	144.2	247.1	195.9	278.7	187.4	191.2	164.7	167.8	153.7	130.3	137.7	188.1
	40	141.2	245.7	171.2	296.2	193.5	198.2	189.9	188.4	183.4	173.0	247.2	200.2
	41	175.0	312.7	177.6	317.9	252.8	268.6	245.2	248.7	240.4	211.2	279.8	251.7
	42	210.2	435.8	202.9	360.5	292.1	339.8	305.9	301.2	310.3	242.7	244.2	309.7
	43	209.9	432.7	205.3	387.7	339.4	368.9	338.5	335.0	326.4	237.1	177.6	330.6

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 43, 2021

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



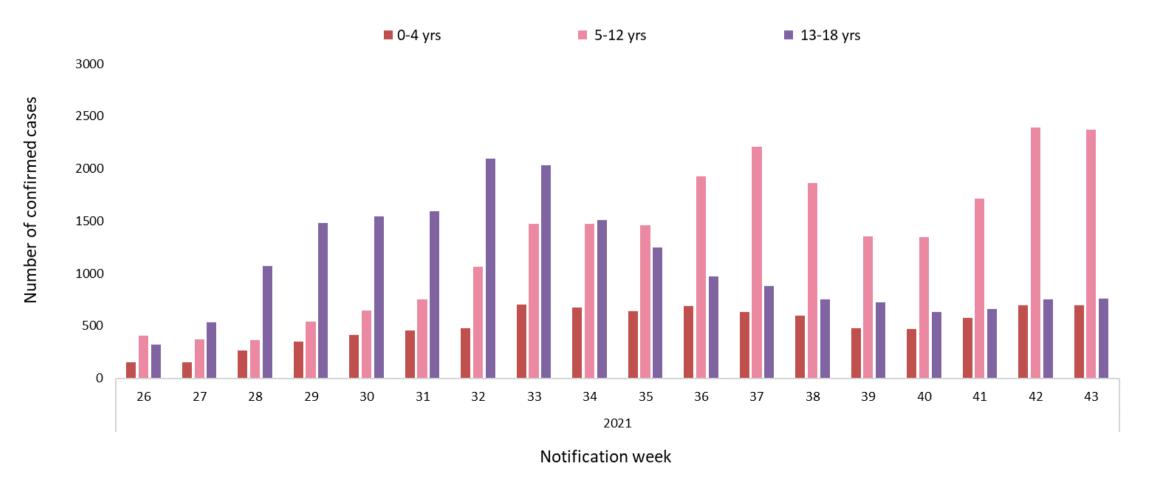


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 43, 2021

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



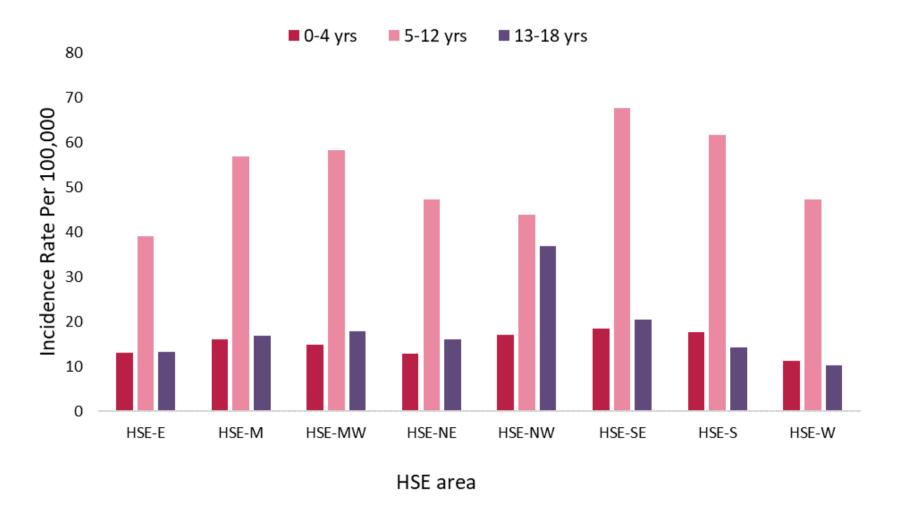


Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 43, 2021

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 43, 2021

	Cas	ses		Median age	Incidence Rate
County	N	%	M:F ratio	(years)	per 100,000
Waterford	757	4.8	1.0	36	651.6
Longford	221	1.4	0.8	35	540.7
Carlow	304	1.9	0.9	32.5	534.0
Kerry	748	4.8	1.0	39	506.4
Leitrim	145	0.9	1.1	40	452.5
Louth	550	3.5	1.0	36	426.7
Clare	445	2.8	1.0	41	374.5
Cork	1994	12.7	1.1	36	367.3
Limerick	708	4.5	0.9	37	363.3
Laois	292	1.9	0.9 35		344.8
Westmeath	302	1.9	0.9	37	340.2
Donegal	524	3.3	0.9	33.5	329.2
Wexford	488	3.1	1.0	38	325.9
Kilkenny	319	2.0	1.0	33	321.5
Tipperary	479	3.0	1.1	36	300.2
Dublin	3973	25.2	1.0	37	294.9
Cavan	223	1.4	1.0	37	292.7
Wicklow	416	2.6	1.0	41	292.1
Galway	744	744 4.7 0.8 34		34	288.3
Kildare	614	3.9	1.1	34	276.0
Meath	535	3.4	1.1	38	274.3
Roscommon	160	1.0	1.3	36	247.9
Sligo	161	1.0	0.8	34	245.7
Mayo	313	2.0	1.0	38	239.8
Offaly	186	1.2	0.9	34	238.6
Monaghan	140	0.9	1.0	41	228.1

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	Mayo	Meath	Monaghan	Offaly	Roscommon	Sligo	Tipperary	Waterford	Westmeath	Wexford	Wicklow	National
	26	14.1	40.7	48.0	19.7	215.5	89.5	29.1	33.9	51.2	23.2	63.8	18.7	82.1	34.3	66.0	37.5	60.0	31.0	41.0	91.4	76.3	21.9	104.2	73.2	25.4	35.1	62.3
	∠ 27	49.2	51.2	38.7	29.3	213.0	96.1	50.8	62.3	79.1	40.3	43.7	31.2	122.1	34.3	95.4	76.6	71.8	58.6	55.2	74.4	126.6	23.2	36.2	74.3	48.1	43.5	73.4
	⊋ 27 ⊕ 28	131.7	107.6	70.7	75.5	391.4	165.9	129.8	94.1	134.8	48.4	138.1	93.6	125.7	68.5	296.4	117.2	125.6	107.5	110.3	114.7	91.6	48.9	57.7	109.3	53.4	118.7	132.5
	≥ 29	203.8	151.0	70.7	118.6	535.2	191.5	258.9	123.9	162.2	69.5	289.3	243.4	140.6	139.5	250.6	196.2	154.8	236.2	111.6	162.7	146.5	99.7	80.9	136.3	87.5	171.3	176.2
	_ 30	130.0	182.5	104.4	120.7	378.2	220.1	283.7	198.4	133.9	99.8	198.4	199.7	191.4	149.2	378.6	301.1	173.3	252.5	93.6	220.0	213.6	127.9	105.0	162.2	90.2	155.9	193.3
	Notification 31 33 34	172.1	236.3	143.9	163.6	321.0	238.6	303.0	203.1	152.4	105.8	181.8	152.9	179.6	181.0	269.2	314.9	189.7	351.9	173.2	292.8	175.5	129.1	125.7	149.8	173.0	193.8	210.4
	8 32	205.5	467.3	137.2	149.4	578.5	247.6	295.7	202.4	202.7	145.1	194.8	187.2	190.4	156.6	245.2	315.7	213.8	651.6	201.4	444.7	288.4	168.0	171.3	287.3	187.0	181.1	240.6
	₩ 33	226.6	739.1	155.7	191.4	599.3	253.2	256.1	286.4	204.0	135.0	230.2	221.6	296.6	205.5	377.9	272.8	238.4	830.8	202.7	379.6	196.8	296.5	218.6	252.3	167.6	183.3	266.6
2021	$\frac{9}{2}$ 34	175.6	502.8	131.3	163.9	557.2	214.9	239.9	303.3	181.1	199.5	126.3	330.8	254.0	327.8	237.4	287.3	231.2	777.1	238.6	350.1	273.1	246.9	158.4	210.7	146.3	163.6	236.0
20	35	230.1	334.8	196.1	185.3	498.8	207.7	194.1	225.4	151.5	166.3	211.3	402.6	228.8	259.3	262.3	245.2	196.9	498.5	225.8	309.9	172.4	185.5	99.0	167.8	156.3	161.5	215.8
,	36	216.0	292.7	149.8	130.8	409.6	223.3	171.7	142.2	171.2	168.3	263.3	221.6	181.1	305.8	251.4	212.2	186.6	478.9	219.3	233.9	149.5	137.3	127.4	152.1	108.9	102.5	196.5
	37	242.4	216.6	140.6	144.2	389.5	211.0	119.7	173.3	196.4	163.3	229.1	137.3	193.9	215.3	345.3	185.4	222.0	423.5	160.3	159.6	135.8	162.3	148.9	201.6	145.6	74.4	193.5
	38	254.7	248.1	109.4	146.4	321.6	234.2	144.5	146.2	247.6	140.1	186.5	221.6	203.7	249.6	252.9	252.9	202.0	290.0	136.0	141.0	151.1	145.4	169.6	187.0	82.8	95.5	195.6
,	39	274.0	259.9	186.0	142.4	282.7	200.8	156.6	256.6	163.6	108.8	165.3	215.3	225.8	393.9	173.0	113.4	208.7	247.6	144.9	198.3	174.0	156.1	327.1	144.2	124.9	113.0	188.1
,	40	328.5	206.1	163.3	183.7	285.8	194.9	220.5	264.0	168.1	182.4	222.0	168.5	245.8	315.6	211.8	160.9	177.4	259.0	151.4	164.2	152.6	146.0	357.2	170.1	142.3	159.4	200.2
,	41	370.6	274.4	291.2	222.0	302.8	236.6	194.1	424.5	229.2	189.5	320.0	305.8	285.3	499.1	296.4	187.7	287.1	265.5	147.5	255.6	221.3	208.7	461.4	274.9	162.3	181.9	251.7
	42	660.4	301.9	368.6	290.5	329.2	279.7	277.8	561.9	238.6	282.2	380.2	324.6	364.3	611.7	346.0	180.8	309.7	257.4	277.1	303.7	222.8	258.2	650.7	353.7	203.7	212.7	309.7
	43	534.0	292.7	374.5	367.3	329.2	294.9	288.3	506.4	276.0	321.5	344.8	452.5	363.3	540.7	426.7	239.8	274.3	228.1	238.6	247.9	245.7	300.2	651.6	340.2	325.9	292.1	330.6

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 43, 2021

Data source: CIDR, November 1st 2021

Laboratory testing for SARS-CoV-2



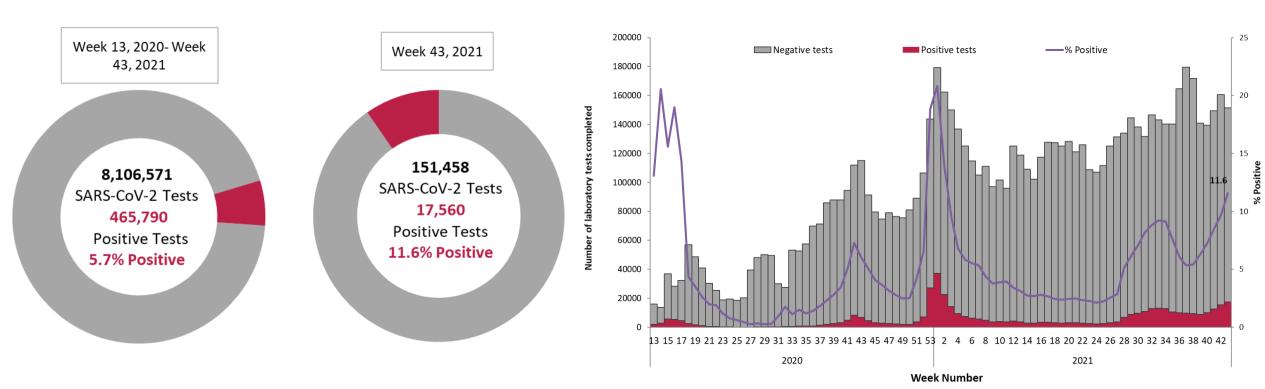


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 43, 2021

Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 43, 2021

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

Sentinel GP referrals for COVID-19 testing

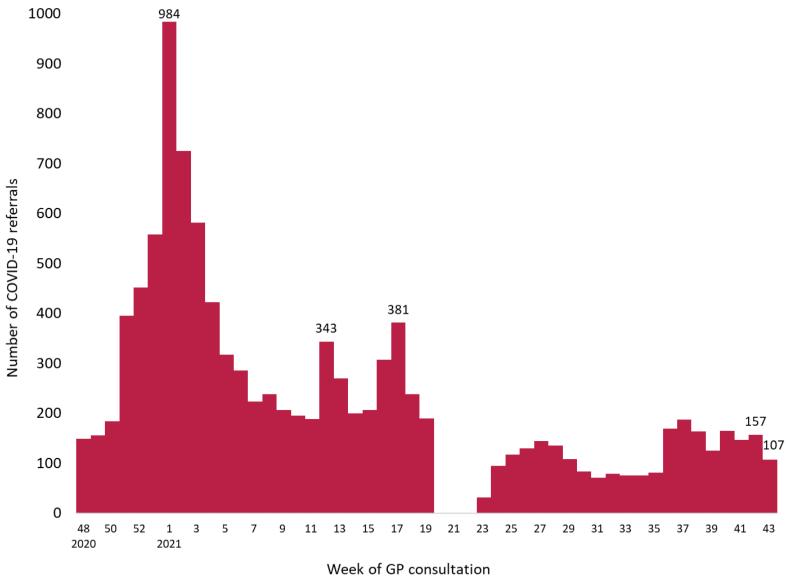


Figure 9: Number of sentinel GP COVID-19 referrals by week of consultation, 2020-2021

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









Sentinel GP referrals for COVID-19 testing

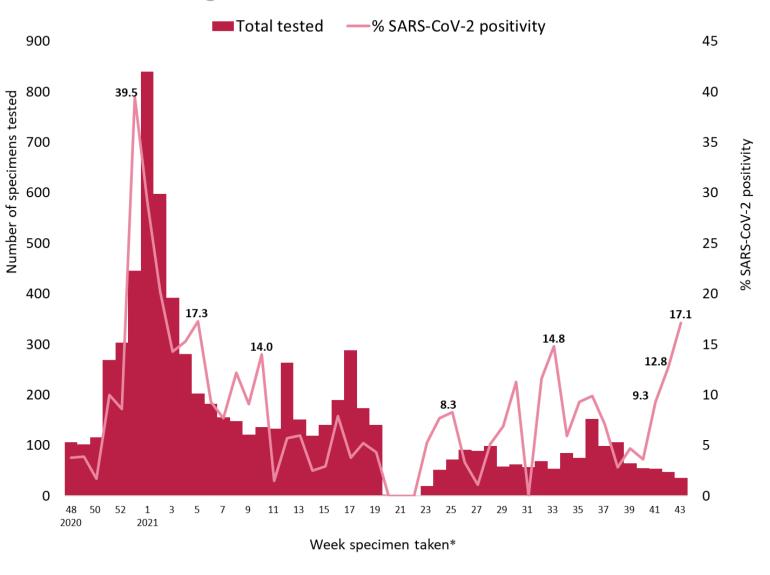


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021









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

Hospitalisations and ICU admissions among COVID-19 cases



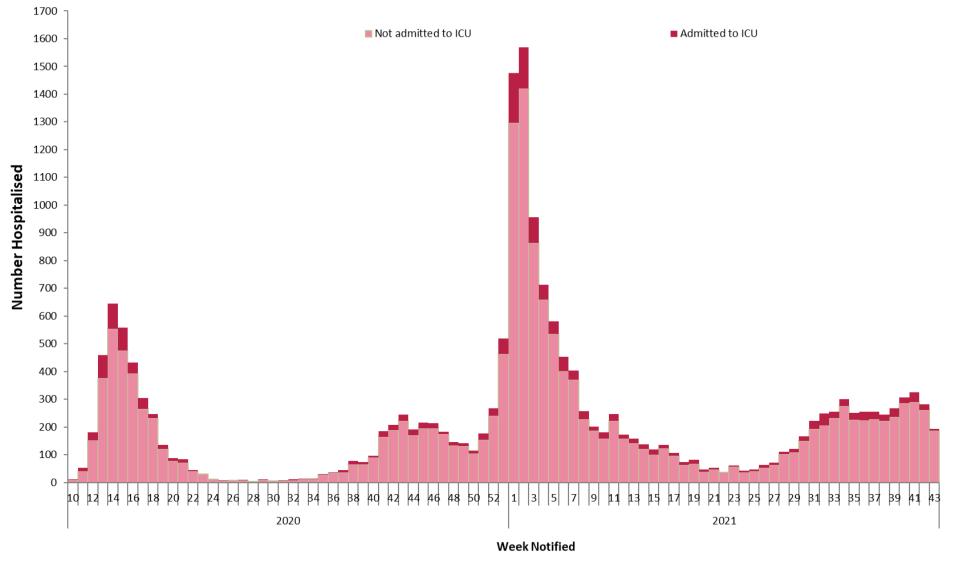


Figure 11: Number of hospitalised COVID-19 cases based on ICU admission status in Ireland between week 10, 2020 and week 43, 2021* *Please note that the most recent weeks may not yet reflect all admissions.

Deaths among COVID-19 cases



	Number	Percent
Total number of deaths	5,477	
confirmed	5,205	95.0
probable	97	1.8
possible	175	3.2
Number hospitalised who died	3,027	55.3
admitted to ICU who died	604	11.0
not admitted to ICU who died	4,873	89.0
Number of imported cases who died	15	0.3
Number of HCWs who died	18	0.3
Number with underlying conditions who died	4,720	86.2
Males who died	2,892	52.8
M:F ratio	1.12	
Median age (years)	82	
Mean age (years)	80	
Age range (years)	17-105	

Table 3: Summary of deaths in all COVID-19 cases notified in Ireland between week 10, 2020 and week 43, 2021

Age group (years)	Female	Male	Total	Percent
<45 yrs	27	33	60	1
45-54 yrs	39	76	115	2
55-64 yrs	110	198	308	6
65-74 yrs	321	559	880	16
75-84 yrs	789	1051	1840	34
85+ yrs	1296	975	2271	41
Unknown	3	0	3	0
Total	2585	2892	5477	100.0
Percent	47.2	52.8		

Table 4: Number of deaths in all COVID-19 cases by sex and age group notified in Ireland between week 10, 2020 and week 43, 2021

Deaths among COVID-19 cases

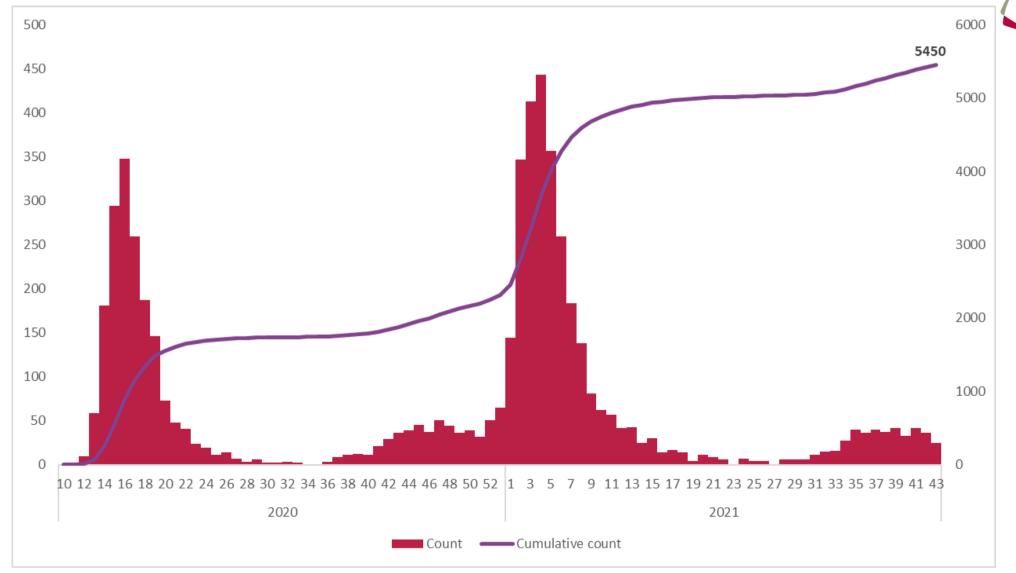


Figure 12: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 30/10/2021. Date of death reported for 5,450 of deaths.

Most likely transmission source of COVID-19 cases



Table 5: Most likely transmission source for cases notified in week 43, 2021.

Most likely transmission source for 43, 2021	Number of cases	Percent
Close contact with a known confirmed case	2716	17.3
Travel related	162	1.0
Community transmission	2216	14.1
Healthcare setting acquired: patient	17	0.1
Healthcare setting acquired: staff	38	0.2
Under investigation*	10592	67.3
Total	15741	100

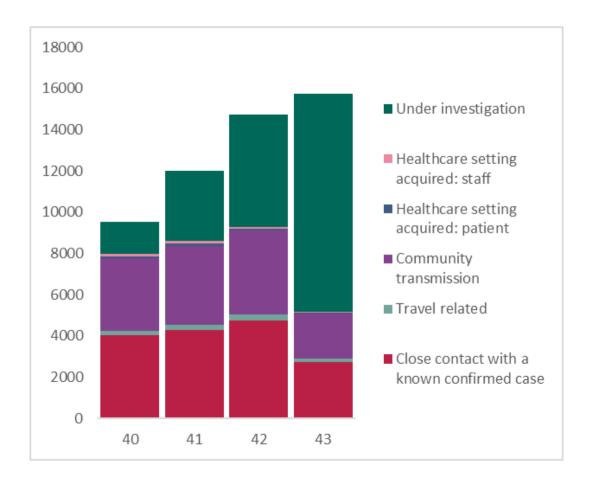


Figure 13: Most likely transmission source by week, from week 40 - week 43, 2021.

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
- <u>Healthcare Workers COVID-19</u> cases in Ireland monthly reports
- Weekly reports on vaccination status of COVID-19 deaths and cases admitted to ICU
- Epidemiology of COVID-19 in Ireland cases aged 0-18 years

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.