



Weekly Report on the Epidemiology of COVID-19 in Ireland Week 42, 2021

Health Protection Surveillance Centre, HPSC COVID-19 Epidemiology Team, 26/10/2021

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 42, 2021 (17th to 23rd 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 24th October
- Data was extracted from CIDR system on 26/10/2021
- Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

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 epidemiology of COVID19 cases was based on data uploaded to the HSE-CovidCare Tracker (CCT).
- The recommencement of reporting from CIDR has occurred gradually as various processes have been restored.
- The final process to be restored, the transfer of information gathered during the patient interview from the CCT to CIDR, is now complete. In the past weeks, data from over 120,000 cases diagnosed since the cyber-attack have been processed.
- We would like to thank all those involved in the restoration of surveillance processes in the aftermath of the cyber-attack.

Summary characteristics of COVID-19 cases notified in Ireland



	(week 10,	otal 2020-week 2021)	Week 4	42, 2021
	Number	Percent	Number	Percent
Total number of confirmed cases	429,864		14,756	
Incidence rate of confirmed cases per 100,000 population	9027.2		309.9	
Number of cases hospitalised	18,451	4.3	243*	1.6
Number of cases admitted to ICU	1,973	0.5	11*	0.07
Number of deaths among confirmed cases	5,160	1.2	8*	0.05
Case fatality ratio (CFR %)	1.2		0.05	
Incidence rate of confirmed deaths per 100,000 population	108.4		0.17	
Number of cases in healthcare workers	28912	6.7	392	2.7
Males	209,739	48.8	7,274	49.3
Females	220,028	51.2	7,464	50.6
M:F ratio	0.95		0.97	
Median (years)	33		36	
Mean age (years)	36		36	
Age range (years)	0-108		0-101	

^{*} 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



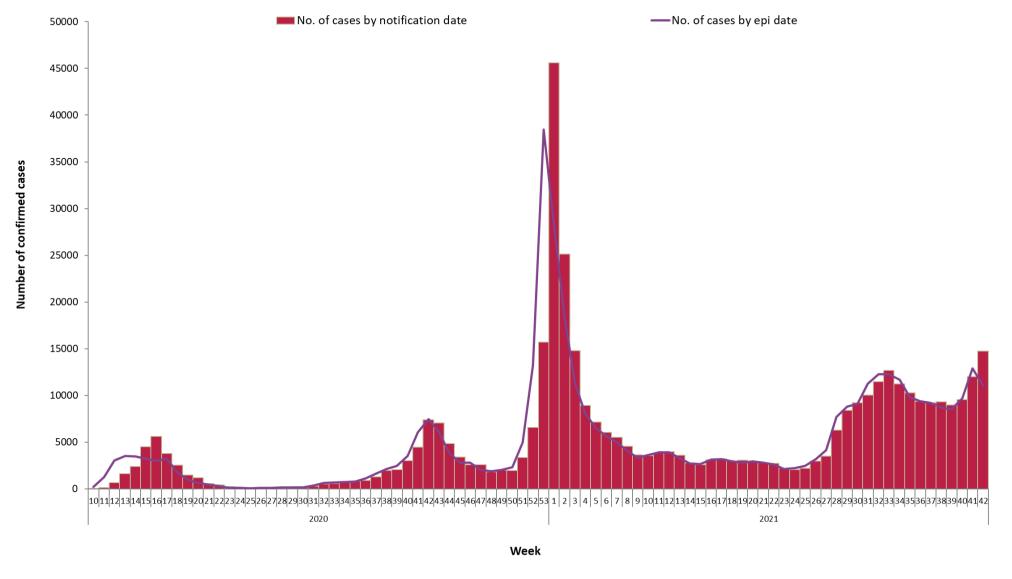


Figure 1: Number of confirmed COVID-19 cases by notification week and epidemiological date in Ireland between week 10, 2020 and week 42, 2021

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



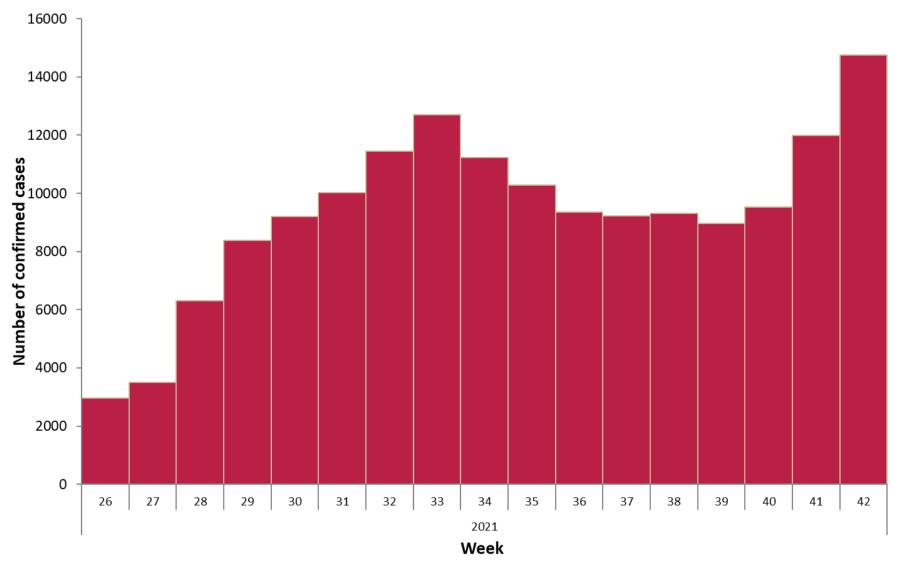


Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 42, 2021

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 42, 2021

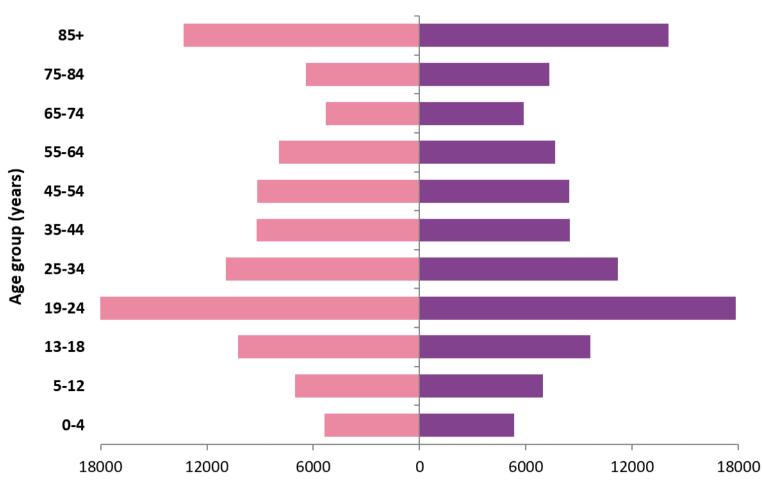
Characteristic		Week 42	Percent
Total number of confirmed cases		14,756	100
Sex	Male:Female ratio	0.97	
	Male	7,274	49.3
	Female	7,464	50.6
	Unknown	18	0.2
Age	Mean age (years)	36	
	Median age (years)	36	
	Age range (years)	0-101	
	0-4 yrs	698	4.7
	5-12 yrs	2,393	16.2
	13-18 yrs	755	5.1
	19-24 yrs	1,196	8.1
	25-34 yrs	1,927	13.1
	35-44 yrs	2,538	17.2
	45-54 yrs	1,915	13.0
	55-64 yrs	1,533	10.4
	65-74 yrs	1,159	7.9
	75-84 yrs	477	3.2
	85+ yrs	165	1.1
	Unknown	0	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 42, 2021

(excluding 56 cases for whom age is unknown, 95 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 40, 2021

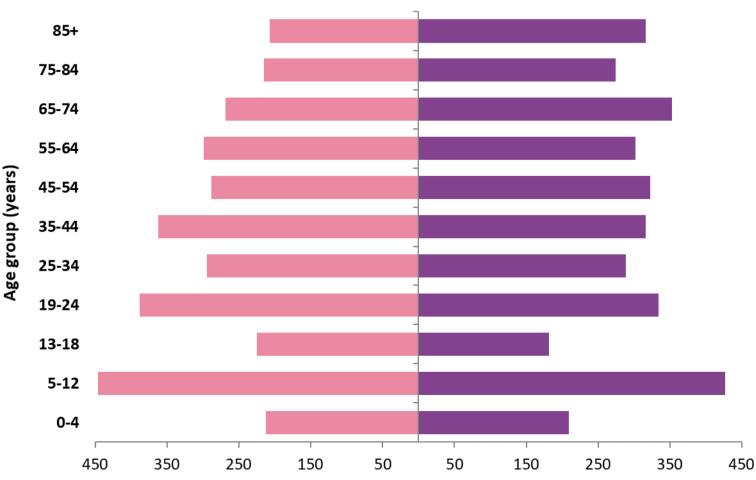
■ Female ■ Male

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 42, 2021

(excluding 18 cases for whom sex is unknown)



Cumulative age- and sex-specific rate per 100,000 population for week 40, 2021

■ Female ■ Male

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



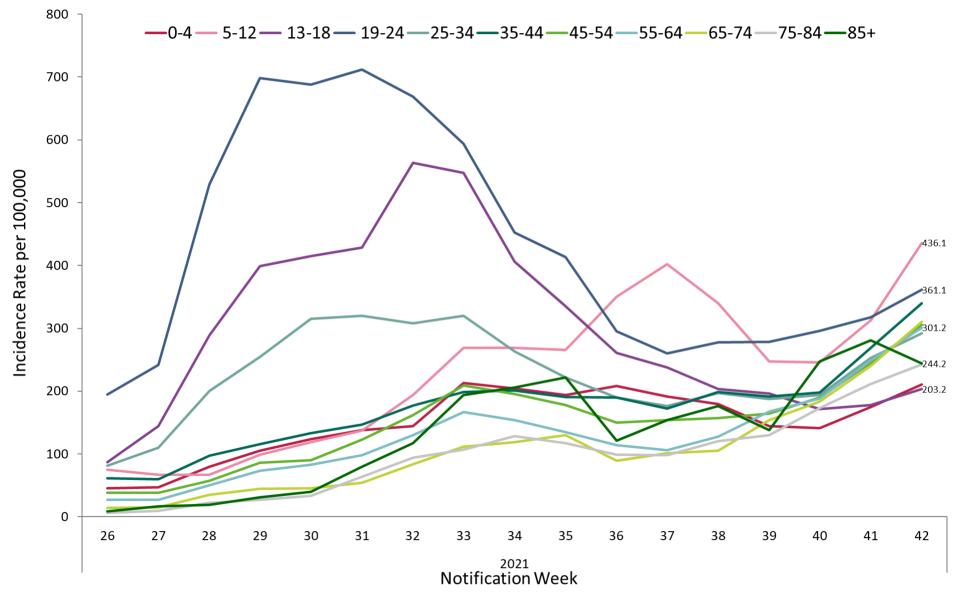


Figure 4: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave from week 26, 2021 to week 42, 2021

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



		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
:	¥ 28 ⊕ 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
	\sim	124.0	118.5	415.0	688.4	315.4	133.2	90.2	82.5	45.5	33.1	40.0	193.3
,	atic 31	138.2	137.1	428.4	711.6	320.1	146.9	122.8	98.2	54.3	64.1	79.9	210.4
;	Notification 31 32 33	144.2	194.1	563.8	668.8	308.3	177.1	161.6	129.7	84.1	94.1	116.9	240.7
_	∑ 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
	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	281.3	251.7
	42	210.5	436.1	203.2	361.1	292.2	339.8	305.9	301.2	310.3	242.7	244.2	309.9

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 42, 2021

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



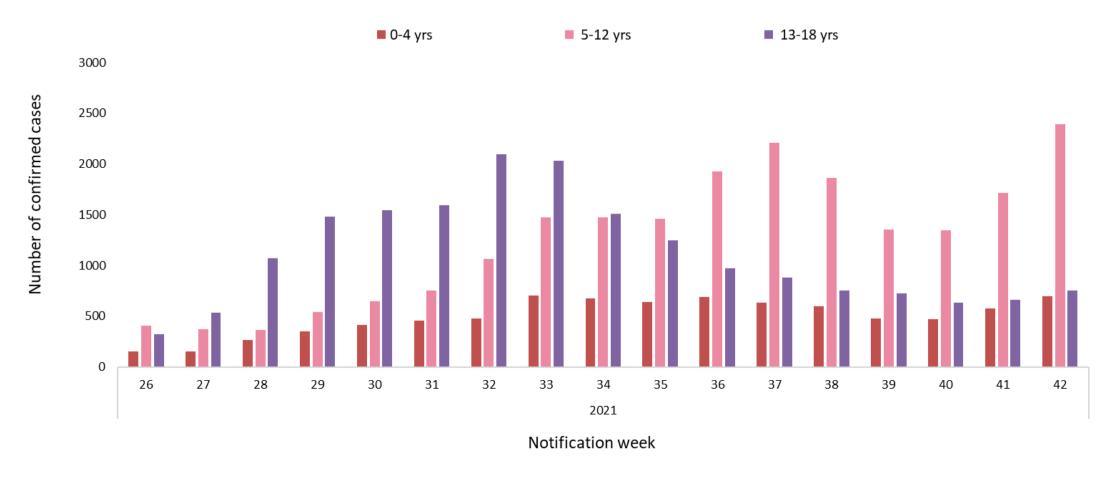


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 42, 2021

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



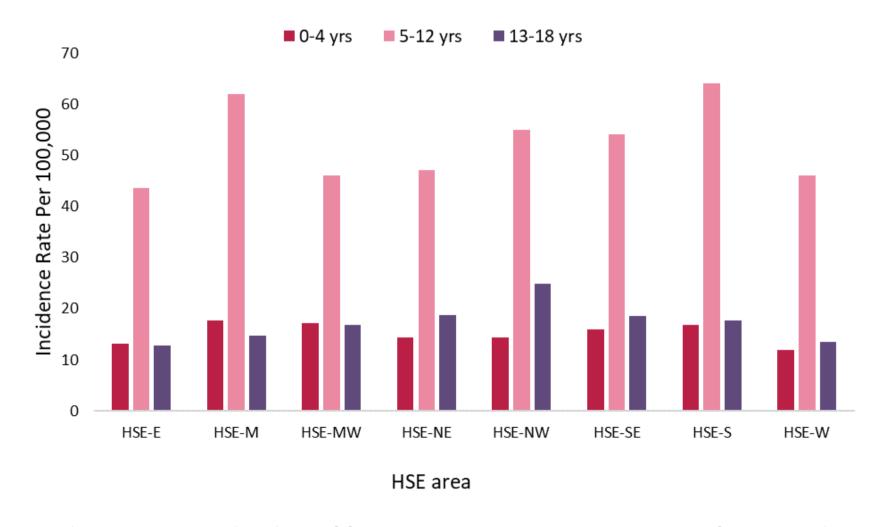


Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 42, 2021

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 42, 2021

County	Cas	ses	M:F ratio	Median age	Incidence Rate		
County	N	%	WI.F FALIO	(years)	per 100,000		
Carlow	378	2.6	0.8	33.5	663.9		
Waterford	756	5.1	1.0	35	650.7		
Longford	250	1.7	1.0	32	611.7		
Kerry	832	5.6	1.0	38.5	563.3		
Laois	321	2.2	1.0	38	379.0		
Clare	437	3.0	0.9	38	367.8		
Limerick	709	4.8	0.9	38	363.8		
Louth	462	3.1	1.1	36	358.5		
Westmeath	318	2.2	0.7	33	358.2		
Roscommon	217	1.5	1.0	39	336.2		
Donegal	524	3.6	0.8	34	329.2		
Leitrim	104	0.7	1.0	27	324.6		
Meath	591	4.0	1.0	38	303.0		
Cavan	227	1.5	1.0	39	298.0		
Cork	1581	10.7	1.0	36	291.2		
Kilkenny	280	1.9	1.0	42.5	282.2		
Dublin	3777	25.6	1.0	35	280.3		
Offaly	217	1.5	1.0	43	278.3		
Galway	704	4.8	1.0	34	272.8		
Tipperary	411	2.8	1.0	38	257.6		
Monaghan	158	1.1	1.0	37	257.4		
Kildare	524	3.6	1.0	32.5	235.5		
Sligo	143	1.0	0.8	31	218.2		
Wicklow	300	2.0	1.1	39.5	210.6		
Wexford	305	2.1	1.0	40	203.7		
Mayo	230	1.6	1.0	43	176.2		

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	89.5	29.1	33.9	51.2	23.2	62.6	18.7	82.1	34.3	66.0	37.5	60.0	31.0	44.9	89.9	76.3	21.9	104.2	72.1	25.4	35.1	62.3
	y 27	49.2	51.2	38.7	29.3	213.0	96.0	50.8	62.3	79.5	40.3	40.1	31.2	122.1	34.3	95.4	76.6	71.8	58.6	61.6	72.8	126.6	23.2	36.2	73.2	48.1	43.5	73.4
	⊋ 27 ⊕ 28	131.7	107.6	70.7	75.5	391.4	165.9	129.8	94.1	133.9	48.4	135.8	93.6	125.7	68.5	296.4	117.2	125.6	107.5	119.3	114.7	91.6	48.9	57.7	105.9	53.4	118.7	132.5
	Š 29	203.8	151.0	70.7	118.3	535.2	191.4	258.9	125.9	161.8	69.5	273.9	243.4	140.1	139.5	250.6	196.2	154.8	236.2	137.2	161.1	146.5	99.7	80.9	131.8	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	194.8	199.7	190.4	149.2	378.6	301.1	173.3	252.5	107.7	218.5	213.6	127.9	105.0	157.7	90.2	155.9	193.3
	.⊑ 31	172.1	236.3	143.9	163.6	321.0	238.8	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	193.1	210.4
	catio 32	205.5	467.3	137.2	148.5	579.2	248.8	295.7	205.8	199.1	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	175.5	240.7
_	Notific 33 34	226.6	739.1	155.7	190.3	599.3	254.3	256.1	290.4	198.6	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	180.4	266.6
202	9 34	175.6	502.8	131.3	163.8	557.2	214.9	239.9	304.0	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
7	35	230.1	334.8	196.1	184.8	498.8	207.7	194.1	227.5	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	130.2	409.6	223.3	171.7	144.2	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	143.5	389.5	210.9	119.7	176.0	196.9	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	201.5	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	142.2	282.7	200.8	156.6	257.3	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	183.8	285.8	194.9	220.5	264.0	167.6	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	148.8	255.6	221.3	208.7	461.4	274.9	162.3	181.9	251.7
	42	663.9	298.0	367.8	291.2	329.2	280.3	272.8	563.3	235.5	282.2	379.0	324.6	363.8	611.7	358.5	176.2	303.0	257.4	278.3	336.2	218.2	257.6	650.7	358.2	203.7	210.6	309.9

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 42, 2021



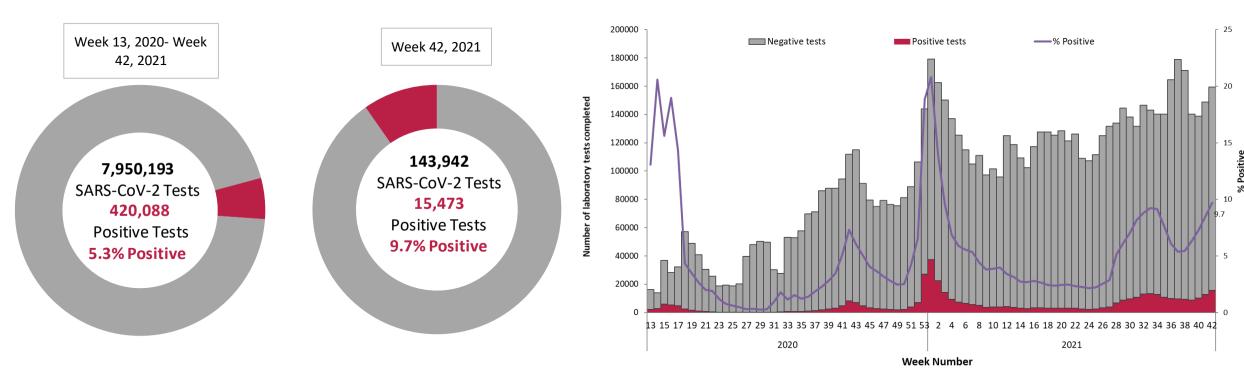


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 42, 2021

Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 42, 2021

Data source: Deloitte Ireland LLP, October 26th 2021

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

Sentinel GP referrals for COVID-19 testing

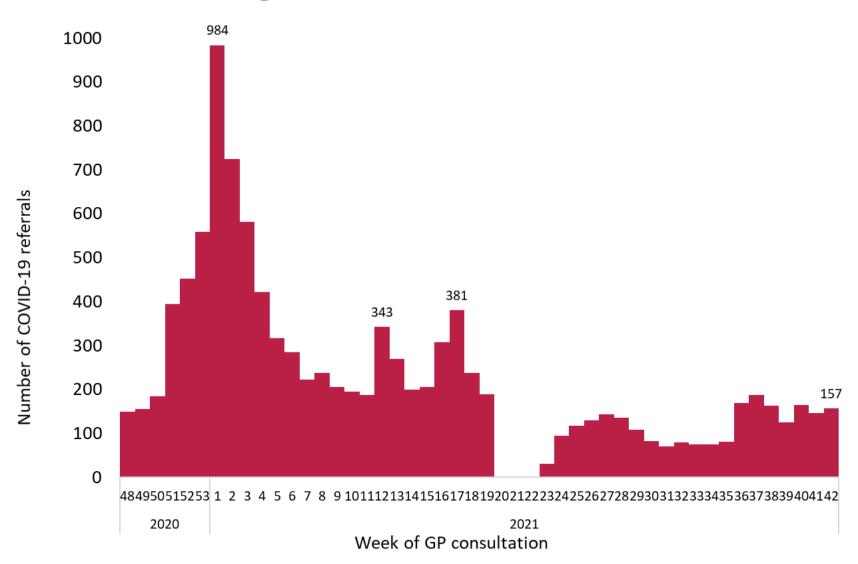


Figure 9: Number of sentinel GP COVID-19 referrals by week of consultation, 2020-2021

*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

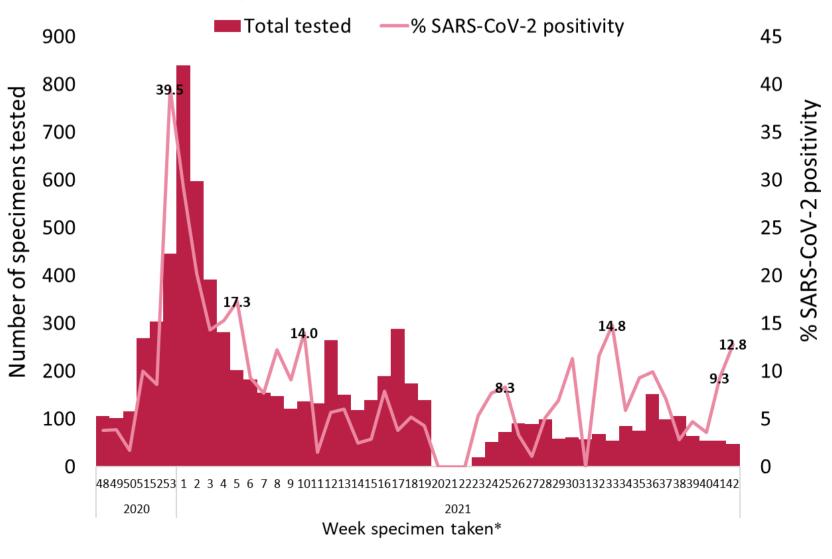


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021 *Please note, from week 19-23 2021, the GP sentinel virology data were incomplete due to the HSE cyber-attack

hpsc







Deaths among COVID-19 cases



	Number	Percent
Total number of deaths	5,432	
confirmed	5,160	95.0
probable	97	1.8
possible	175	3.2
Number hospitalised who died	2,994	55.1
admitted to ICU who died	595	11.0
not admitted to ICU who died	4,837	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	4,690	86.3
Males who died	2,864	52.7
M:F ratio	1.12	
Median age (years)	82	
Mean age (years)	80	
Age range (years)	17-105	

Age group (years)	Female	Male	Total	Percent
<45 yrs	27	32	59	1
45-54 yrs	39	75	114	2
55-64 yrs	109	192	301	6
65-74 yrs	319	550	869	16
75-84 yrs	778	1046	1824	34
85+ yrs	1293	969	2262	42
Unknown	3	0	3	0
Total	2568	2864	5432	100.0
Percent	47.3	52.7		

Table 3: Summary of deaths in all COVID-19 cases notified in Ireland between week 10, 2020 and week 42, 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 42, 2021

Deaths among COVID-19 cases

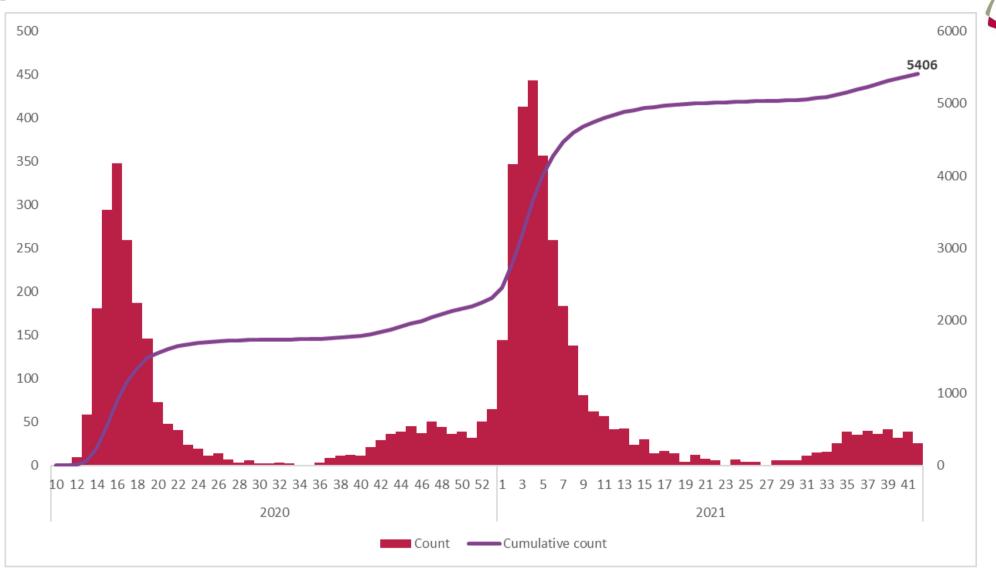


Figure 11: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 23/10/2021. Date of death reported for 5,406 of deaths.

Most likely transmission source of COVID-19 cases



Table 5: Most likely transmission source for cases notified in week 42, 2021.

Most likely transmission source for 42, 2021	Number of cases	Percent
Close contact with a known confirmed case	4033	27.3
Travel related	225	1.5
Community transmission	3426	23.2
Healthcare setting acquired: patient	55	0.4
Healthcare setting acquired: staff	69	0.5
Under investigation*	6948	47.1
Total	14756	100

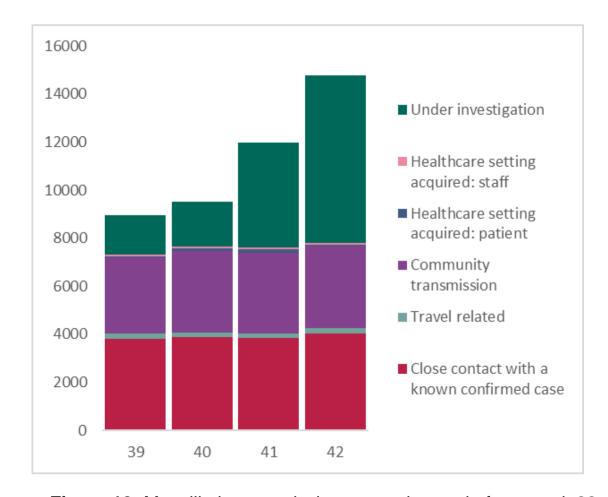


Figure 12: Most likely transmission source by week, from week 38 - week 42, 2021.

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
- Healthcare Workers COVID-19 cases in Ireland monthly reports
- Weekly reports on vaccination status of COVID-19 deaths and cases admitted to ICU

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.