



Weekly Report on the Epidemiology of COVID-19 in Ireland Week 39, 2021

Health Protection Surveillance Centre, HPSC

COVID-19 Epidemiology Team, 04/10/2021

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 39, 2021 (26th September to 2nd 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 2nd October
- Data was extracted from CIDR system on 04/10/2021
- CIDR data was 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	39, 2021
	Number	Percent	Number	Percent
Total number of confirmed cases	393,627		8,962	
Incidence rate of confirmed cases per 100,000 population	8266.2		188.2	
Number of cases hospitalised	16,641	4.2	154*	1.7
Number of cases admitted to ICU	1,855	0.5	0*	0.0
Number of deaths among confirmed cases	4,986	1.3	<5*	
Case fatality ratio (CFR %)	1.3		0.00	
Incidence rate of confirmed deaths per 100,000 population	104.7		0.00	
Number of cases in healthcare workers	33447	8.5	337	3.8
Males	192,005	48.8	4,390	49.0
Females	201,500	51.2	4,547	50.7
M:F ratio	0.95		0.97	
Median (years)	33		33	
Mean age (years)	36		34	
Age range (years)	0-108		0-100	

* 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

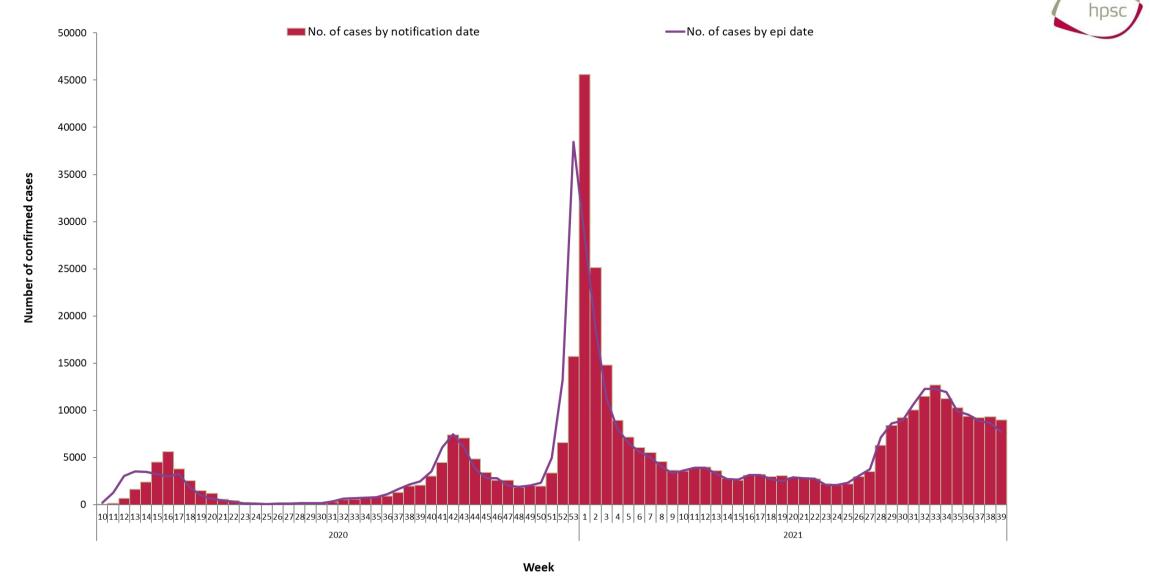


Figure 1: Number of confirmed COVID-19 cases by notification week and <u>epidemiological date</u> in Ireland between week 10, 2020 and week 39, 2021

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



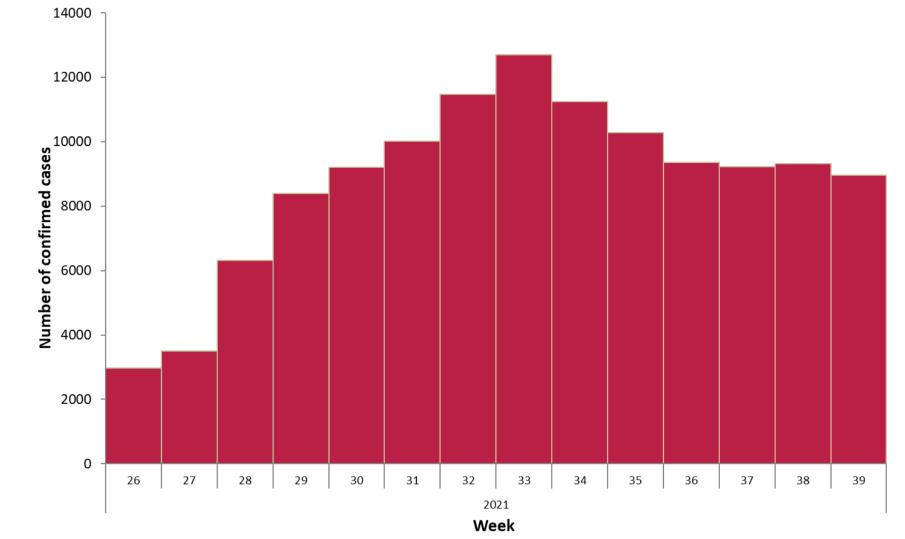


Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 39, 2021

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



Table 1: Characteristics of confirmed COVID-19 casesnotified in Ireland during week 39, 2021

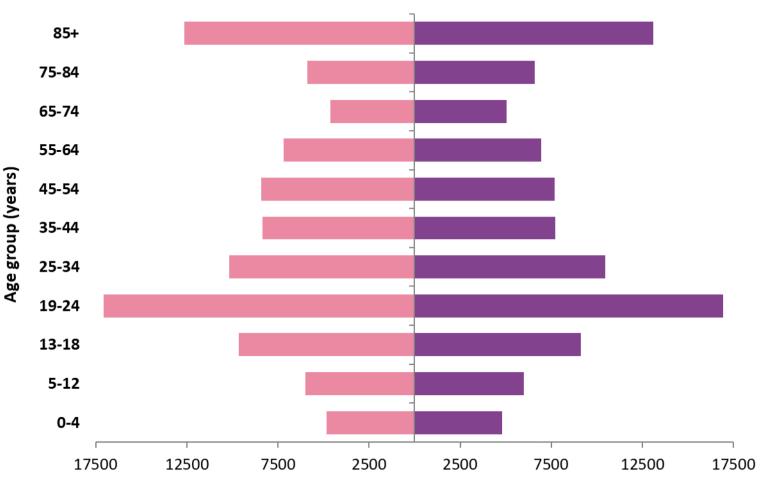
Characteristic		Week 39	Percent
Total number of confirmed cases		8,962	100
Sex	Male:Female ratio	0.97	
	Male	4,390	49.0
	Female	4,547	50.7
	Unknown	25	0.2
Age	Mean age (years)	34	
	Median age (years)	33	
	Age range (years)	0-100	
	0-4 yrs	478	5.3
	5-12 yrs	1,356	15.1
	13-18 yrs	727	8.1
	19-24 yrs	925	10.3
	25-34 yrs	1,236	13.8
	35-44 yrs	1,428	15.9
	45-54 yrs	1,032	11.5
	55-64 yrs	854	9.5
	65-74 yrs	574	6.4
	75-84 yrs	258	2.9
	85+ yrs	93	1.0
	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 39, 2021

(excluding 54 cases for whom age is unknown, 120 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 39, 2021



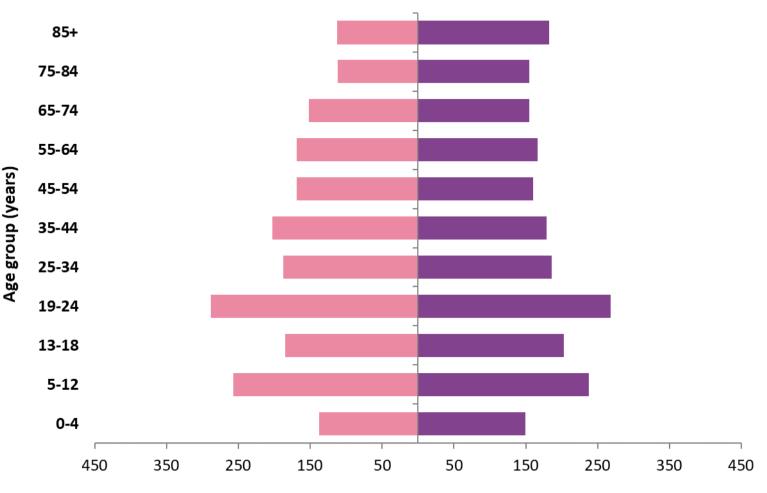
Male

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 39, 2021

(excluding 1 case for whom age is unknown and 25 cases for whom sex is unknown)



Cumulative age- and sex-specific rate per 100,000 population for week 39, 2021

Female

Male

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

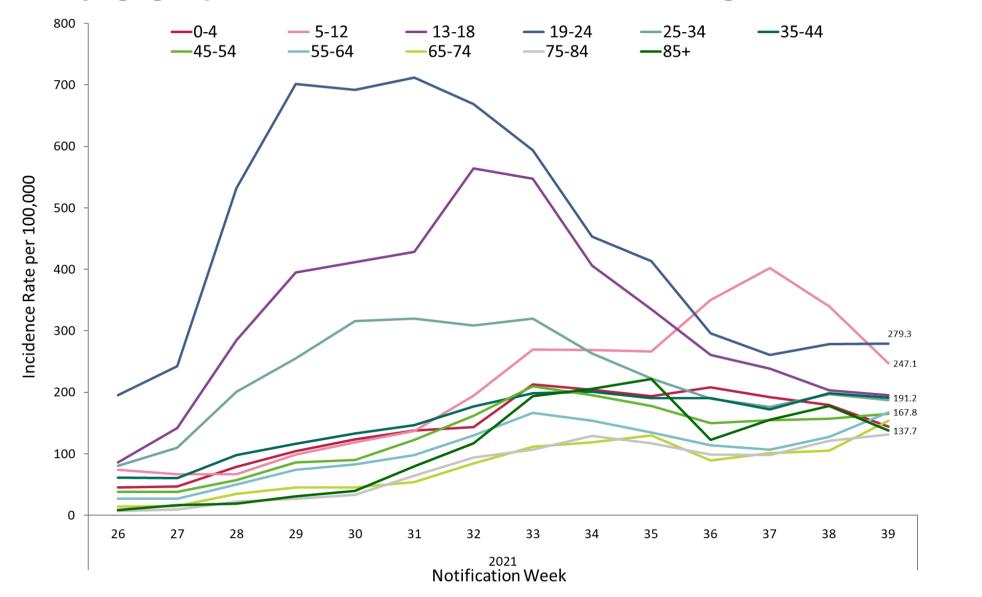


Figure 4: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave from week 26, 2021 to week 39, 2021

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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	45.2	74.4	86.4	195.3	80.8	61.3	38.5	27.1	13.9	6.6	8.9	62.3	
27	46.8	66.9	142.1	242.7	110.3	60.7	37.9	27.3	15.0	9.2	16.3	73.4	
<u>+</u> 28	78.7	66.9	284.7	532.0	200.8	97.9	57.5	50.1	35.3	21.9	19.2	132.5	
28 X eek 29	104.7	99.0	395.3	701.4	255.2	116.2	86.1	73.7	45.0	27.0	31.1	176.2	
<u> </u>	123.4	118.8	411.5	692.3	315.6	133.2	90.4	82.5	45.5	33.1	40.0	193.4	
Notification 30 31 33 33	137.6	136.9	428.7	711.9	320.3	146.7	123.0	98.2	54.3	64.1	79.9	210.4	
jji 32	143.9	194.3	564.3	669.1	308.5	177.1	161.6	129.7	84.1	94.1	116.9	240.7	
⁵⁰ 33	213.0	269.4 547.6 593.6		593.6	320.1	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	266.1	335.3	413.6	222.2	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	402.2	238.2	260.6	176.1	172.6	154.3	106.5	101.5	98.2	155.4	193.8	
38	179.8	340.1	203.5	278.4	197.0	199.0	157.3	127.9	105.2	121.1	177.6	195.6	
39	144.2	247.1	195.6	279.3	187.4	191.2	164.8	167.8	153.7	131.3	137.7	188.2	

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 39, 2021

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



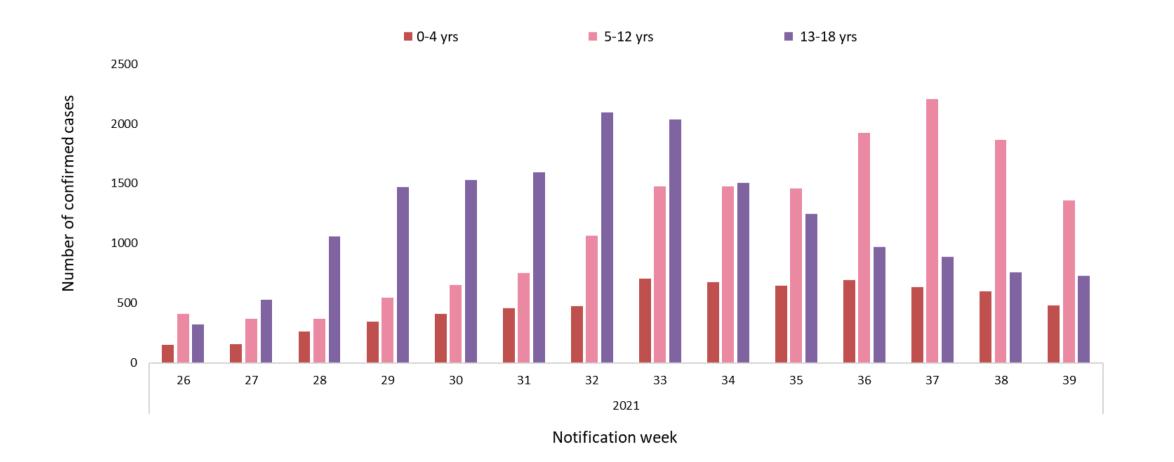


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 39, 2021

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



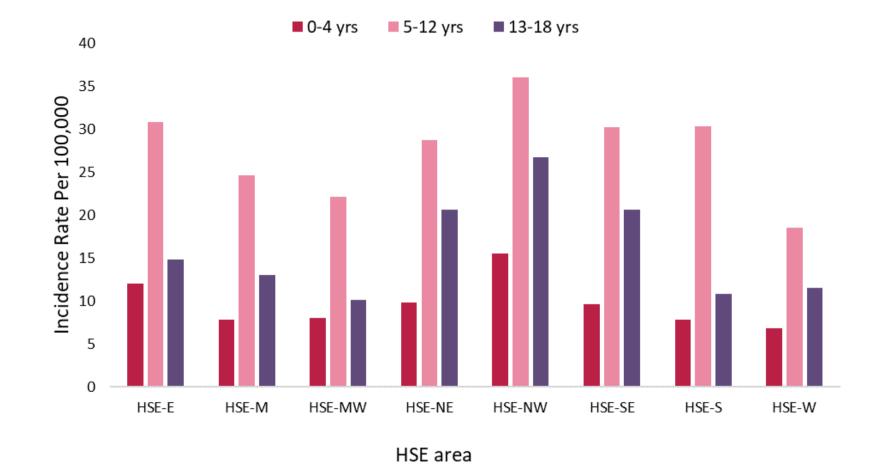


Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 39, 2021

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

Table 2: Characteristics of confirmedCOVID-19 cases by county notified inIreland, during week 39, 2021

County	Cas	ses		Median age	Incidence Rate per 100,000		
County	N	%	M:F ratio	(years)			
Longford	169	1.9	1.2	30	413.5		
Carlow	203	2.3	1.1	30	356.6		
Waterford	406	4.5	1.0	30	349.5		
Donegal	452	5.0	0.8	28	283.9		
Kerry	399	4.5	0.9	34	270.1		
Cavan	198	2.2	0.9	37	259.9		
Monaghan	147	1.6	1.1	27	239.5		
Limerick	427	4.8	1.1	34	219.1		
Leitrim	69	0.8	1.0	44	215.3		
Meath	404	4.5	1.2	36	207.1		
Dublin	2707	30.2	0.9	30	200.9		
Roscommon	125	1.4	0.9	40	193.7		
Clare	213	2.4	1.0	49	179.3		
Sligo	115	1.3	0.9	28	175.5		
Louth	223	2.5	1.1	30	173.0		
Offaly	123	1.4	0.8	35	157.8		
Galway	407	4.5	0.9	33	157.7		
Tipperary	249	2.8	1.0	35	156.1		
Kildare	338	3.8	1.1	34	151.9		
Laois	123	1.4	1.0	40	145.2		
Westmeath	128	1.4	0.8	42	144.2		
Cork	773	8.6	0.9	38	142.4		
Wexford	184	2.1	1.0	36	122.9		
Mayo	148	1.7	0.9	38	113.4		
Wicklow	153	1.7	0.7	25	107.4		
Kilkenny	79	0.9	1.1	23	79.6		



		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	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
	<u>×</u> 27	49.2	51.2	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	58.6	59.0	72.8	126.6	23.2	36.2	82.2	48.1	42.8	73.4
	0 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	117.2	124.6	107.5	116.7	100.7	91.6	48.9	57.7	121.7	54.1	112.3	132.5
	≥ 29	203.8	149.7	70.7	118.1	537.7	192.8	258.5	126.6	156.9	69.5	273.9	262.1	140.1	141.9	250.6	196.2	151.2	233.0	137.2	141.0	151.1	99.7	80.9	145.3	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	215.3	190.4	146.8	378.6	301.1	169.2	252.5	110.3	207.6	212.1	127.9	104.2	170.1	90.2	148.1	193.4
-	· 음 31	172.1	236.3	143.9	163.4	321.6	241.0	302.6	203.8	143.4	105.8	181.8	156.0	179.6	181.0	269.2	314.9	188.7	351.9	173.2	291.3	177.0	129.1	125.7	151.0	173.0	186.1	210.4
02	8 32	205.5	467.3	137.2	148.1	580.4	250.9	295.7	208.5	187.9	145.1	196.0	190.4	189.3	156.6	245.2	314.9	210.7	651.6	207.8	441.6	291.4	168.0	170.4	288.4	187.7	173.4	240.7
2	Notification 31 35 37 37	228.3	737.8	155.7	189.2	599.9	254.8	256.1	295.2	194.6	134.0	226.7	230.9	296.6	195.7	377.1	272.0	233.8	829.2	203.9	370.3	199.9	296.5	220.4	276.0	167.0	180.4	266.6
	₽ 34	175.6	505.4	131.3	163.8	558.4	214.8	239.5	304.7	181.6	199.5	124.0	362.0	253.5	325.4	237.4	287.3	229.2	773.8	241.1	334.7	270.1	246.9	158.4	218.5	146.3	163.6	236.0
	— 35	230.1	340.0	196.9	184.6	497.5	207.8	194.5	233.6	151.5	166.3	210.2	405.7	224.2	259.3	262.3	244.4	195.9	488.7	227.0	305.2	181.6	185.5	99.0	167.8	156.3	161.5	215.8
	36	216.0	292.7	149.8	130.1	409.6	223.5	171.7	153.7	171.2	168.3	265.7	227.8	175.0	305.8	252.9	212.2	185.1	475.7	219.3	230.9	151.1	137.3	127.4	154.3	108.9	102.5	196.6
	37	242.4	216.6	141.4	142.8	389.5	210.9	119.7	182.8	196.9	163.3	233.8	140.4	190.9	227.5	346.8	185.4	221.0	421.9	166.8	154.9	137.3	162.3	148.1	200.5	145.6	74.4	193.8
	38	254.7	249.4	106.9	146.8	321.6	234.2	144.5	145.6	246.3	141.1	186.5	224.7	204.2	252.0	253.7	252.9	201.0	290.0	137.2	137.9	151.1	146.0	169.6	187.0	82.8	97.6	195.6
	39	356.6	259.9	179.3	142.4	283.9	200.9	157.7	270.1	151.9	79.6	145.2	215.3	219.1	413.5	173.0	113.4	207.1	239.5	157.8	193.7	175.5	156.1	349.5	144.2	122.9	107.4	188.2

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 39, 2021



25

% Positive

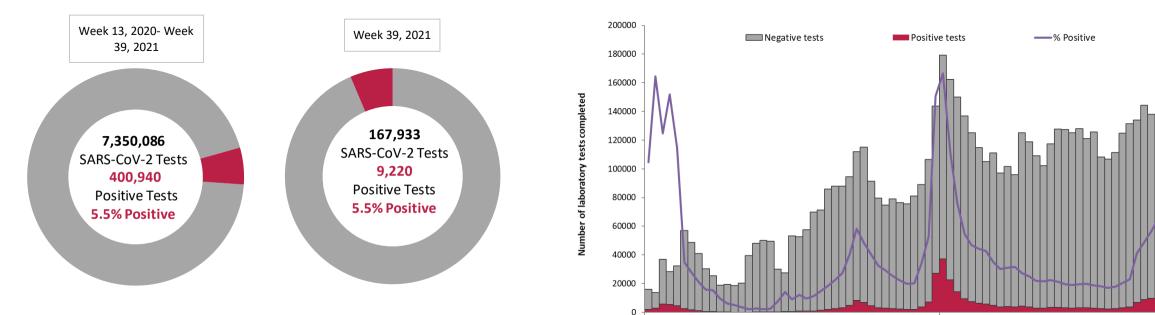


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 39, 2021

Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 39, 2021

2 4 6

Week Number

8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

2021

31 33 35 37 39 41 43 45 47 49 51 53

2020

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

13 15 17 19 21 23 25 27 29

Sentinel GP referrals for COVID-19 testing

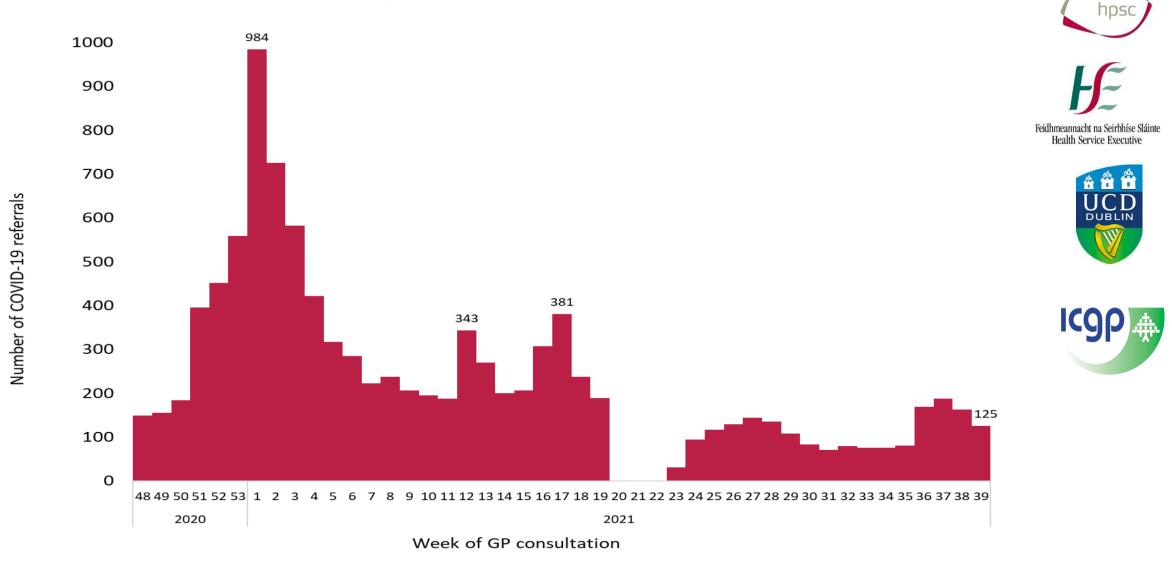


Figure 9: Number of sentinel GP COVID-19 referrals by week of consultation, 2020-2021

*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

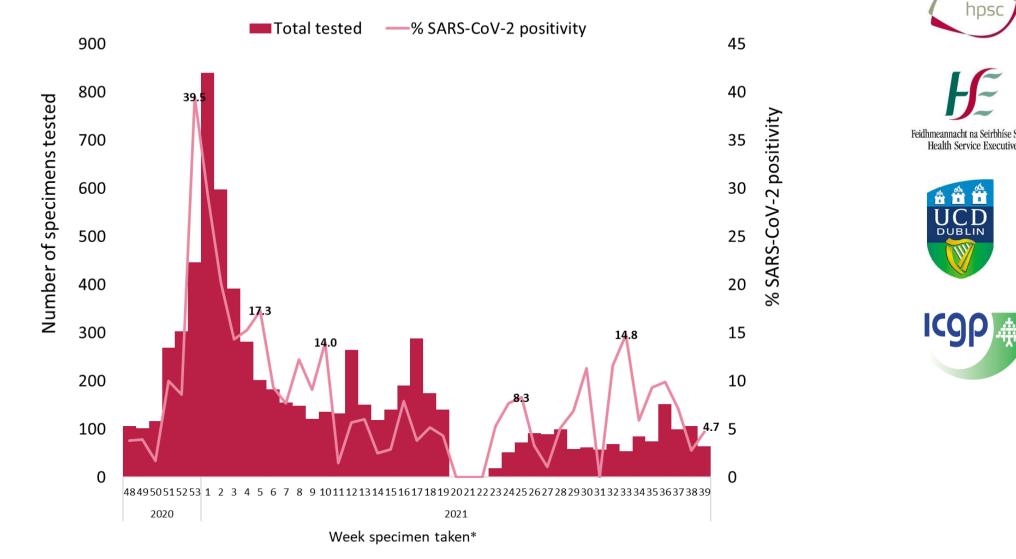


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021 *Please note, from week 19-23 2021, the GP sentinel virology data were incomplete due to the HSE cyber-attack

Deaths among COVID-19 cases

1	
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	Number	Percent
Total number of deaths	5,259	
confirmed	4,986	94.8
probable	97	1.8
possible	176	3.3
Number hospitalised who died	2,874	54.6
admitted to ICU who died	558	10.6
not admitted to ICU who died	4,701	89.4
Number of imported cases who died	12	0.2
Number of HCWs who died	18	0.3
Number with underlying conditions who died	4,317	82.1
Males who died	2,768	52.6
M:F ratio	1.11	
Median age (years)	82	
Mean age (years)	80	
Age range (years)	16-105	

Table 3: Summary of deaths in all COVID-19 cases notified inIreland between week 10, 2020 and week 39, 2021

Age group (years)	Female	Male	Total	Percent
<35 yrs	7	10	17	0.3
35-44 yrs	17	20	37	0.7
45-54 yrs	37	69	106	2.0
55-64 yrs	111	183	294	5.6
65-74 yrs	307	528	835	15.9
75-84 yrs	760	1016	1776	33.8
85+ yrs	1,249	942	2191	41.7
Unknown	3	0	3	0.1
Total	2,491	2,768	5259	100.0
Percent	47.4	52.6		

Table 4: Number of deaths in all COVID-19 cases by sex andage group notified in Ireland between week 10, 2020 and week39, 2021

Deaths among COVID-19 cases

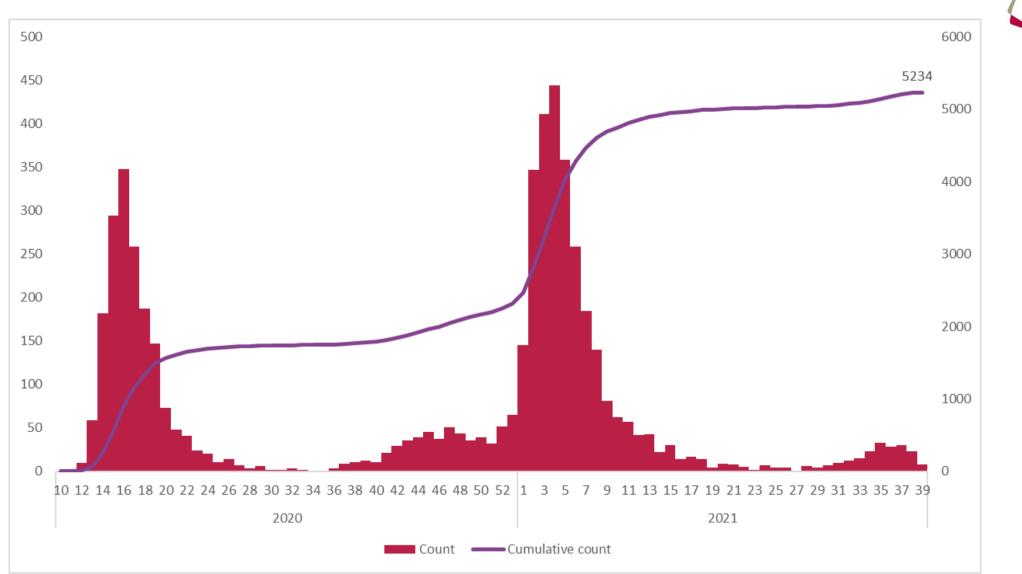


Figure 11: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 02/10/2021. Date of death reported for 5,234 of deaths.

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Most likely transmission source of COVID-19 cases



Table 5: Most likely transmission source for cases notified inweek 39, 2021. Data based on CCT/PPA data.

Most likely transmission source for 39, 2021	Number of cases	Percent
Close contact with a known confirmed case	3746	41.8
Travel related	212	2.4
Community transmission	3156	35.2
Healthcare setting acquired: patient	53	0.6
Healthcare setting acquired: staff	48	0.5
Under investigation*	1747	19.5
Total	8962	100

* Includes cases without a matching record for CCT/PPA

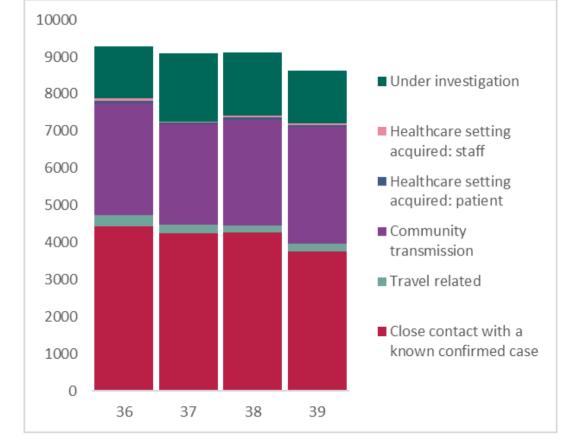


Figure 12: Most likely transmission source by week, from week 36 - week 39, 2021. Data based on CCT/PPA data

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

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- <u>14 Day report</u> 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 programme weekly reports</u>
- Healthcare Workers COVID-19 cases in Ireland monthly 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





- 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 <u>HPSC</u> <u>website</u>.

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.