



Weekly Report on the Epidemiology of COVID-19 in Ireland Week 41, 2021

Health Protection Surveillance Centre, HPSC

COVID-19 Epidemiology Team, 18/10/2021

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 41, 2021 (10th to 16th 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 16th October
- Data was extracted from CIDR system on 18/10/2021
- 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	11, 2021
	Number	Percent	Number	Percent
Total number of confirmed cases	415,112		11,986	
Incidence rate of confirmed cases per 100,000 population	8717.4		251.7	
Number of cases hospitalised	17,668	4.3	213*	1.8
Number of cases admitted to ICU	1,922	0.5	6*	0.05
Number of deaths among confirmed cases	5,071	1.2	8*	0.07
Case fatality ratio (CFR %)	1.2		0.07	
Incidence rate of confirmed deaths per 100,000 population	106.5		0.17	
Number of cases in healthcare workers	28886	7.0	0	0.0
Males	202,463	48.8	5,832	48.7
Females	212,568	51.2	6,138	51.2
M:F ratio	0.95		0.95	
Median (years)	33		36	
Mean age (years)	36		37	
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

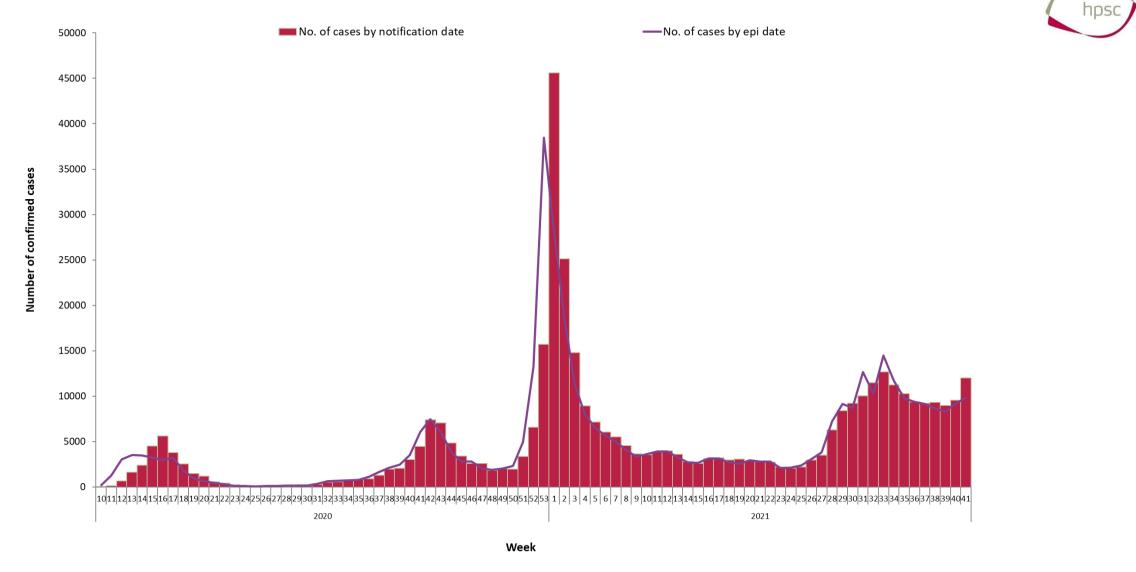


Figure 1: Number of confirmed COVID-19 cases by notification week and <u>epidemiological date</u> in Ireland between week 10, 2020 and week 41, 2021

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

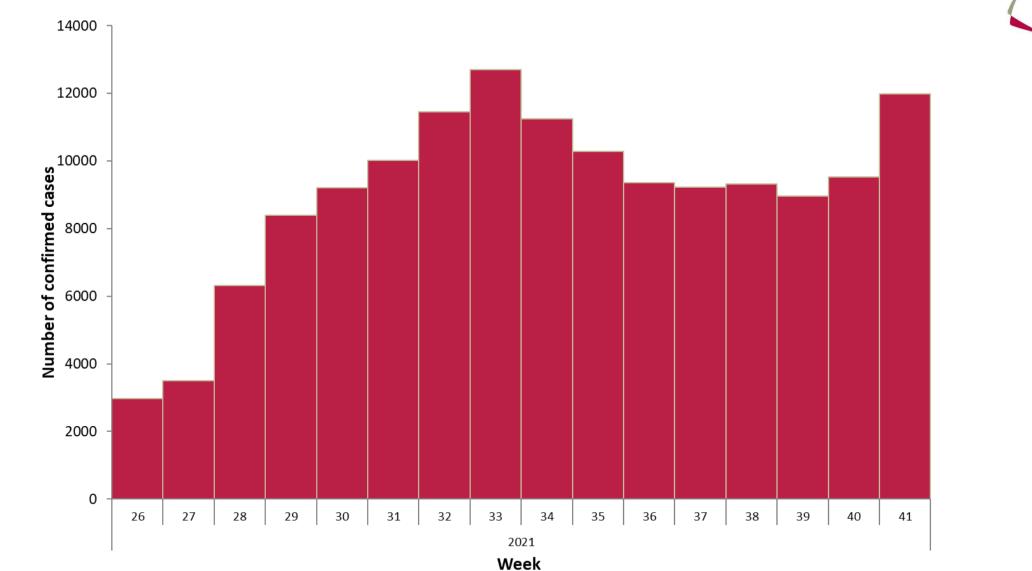


Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 41, 2021

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

hpsc

Table 1: Characteristics of confirmed COVID-19 casesnotified in Ireland during week 41, 2021

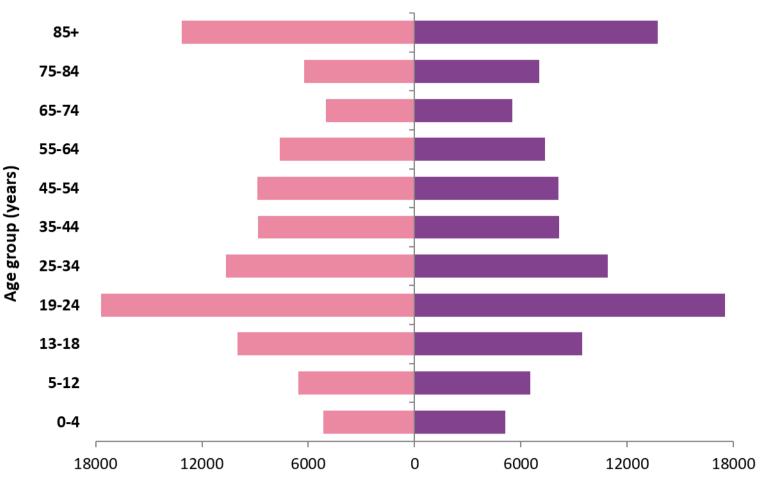
Characteristic		Week 41	Percent
Total number of confirmed case	S	11,986	100
Sex	Male:Female ratio	0.95	
	Male	5,832	48.7
	Female	6,138	51.2
	Unknown	16	0.2
Age	Mean age (years)	37	
	Median age (years)	36	
	Age range (years)	0-100	
	0-4 yrs	580	4.8
	5-12 yrs	1,716	14.3
	13-18 yrs	660	5.5
	19-24 yrs	1,053	8.8
	25-34 yrs	1,667	13.9
	35-44 yrs	2,006	16.7
	45-54 yrs	1,535	12.8
	55-64 yrs	1,265	10.6
	65-74 yrs	898	7.5
	75-84 yrs	415	3.5
	85+ yrs	190	1.6
	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 41, 2021

(excluding 56 cases for whom age is unknown, 79 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 41, 2021

Female

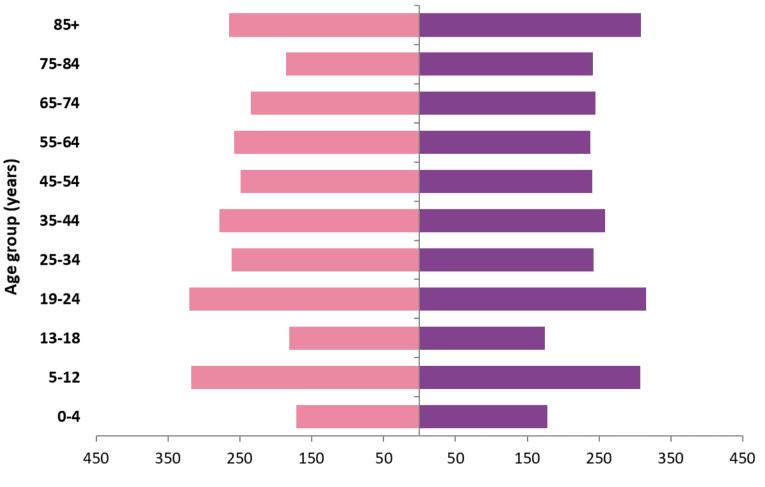
Male

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



rates of confirmed COVID-19 cases per 100,000 population notified in Ireland during week 41, 2021 (excluding 1 case for whom age is unknown and 16 cases for whom sex is unknown)

Figure 3b: Cumulative age and sex-specific incidence



Cumulative age- and sex-specific rate per 100,000 population for week 41,

2021

Female

Male

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

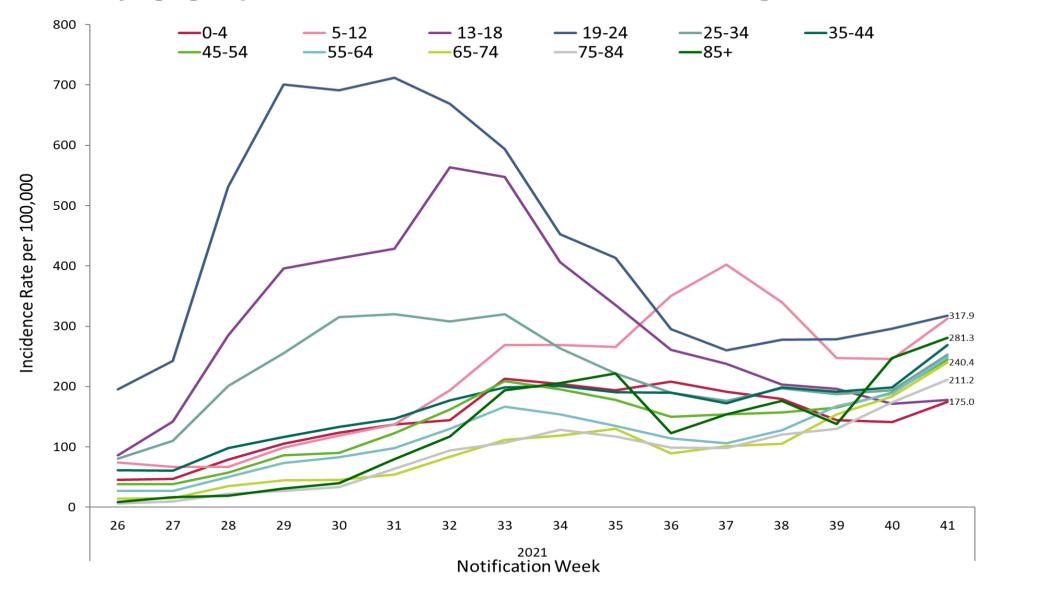


Figure 4: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave from week 26, 2021 to week 41, 2021

hps

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



					ŀ	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
청 28	79.0	66.7	285.3	531.4	200.8	97.9	57.5	50.1	35.3	21.9	19.2	132.5
28 29 29	105.3	98.6	395.9	700.8	255.4	116.1	86.1	73.7	44.7	27.0	31.1	176.2
	123.7	118.6	412.8	690.8	315.3	133.2	90.4	82.5	45.5	33.1	40.0	193.3
Notification 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
<u>.</u>	144.2	194.1	563.8	669.1	308.3	177.1	161.6	129.7	84.1	94.1	116.9	240.7
^{to} 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
34	203.9	268.8	406.1	452.6	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	207.8	350.5	261.0	295.6	189.6	190.3	149.7	114.0	89.2	98.7	122.9	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	164.8	167.8	153.7	130.3	137.7	188.1
40	141.2	245.7	171.2	295.9	193.5	198.3	189.9	188.4	183.4	173.5	247.2	200.2
41	175.0	312.7	177.6	317.9	252.8	268.6	245.2	248.5	240.4	211.2	281.3	251.7

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 41, 2021

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



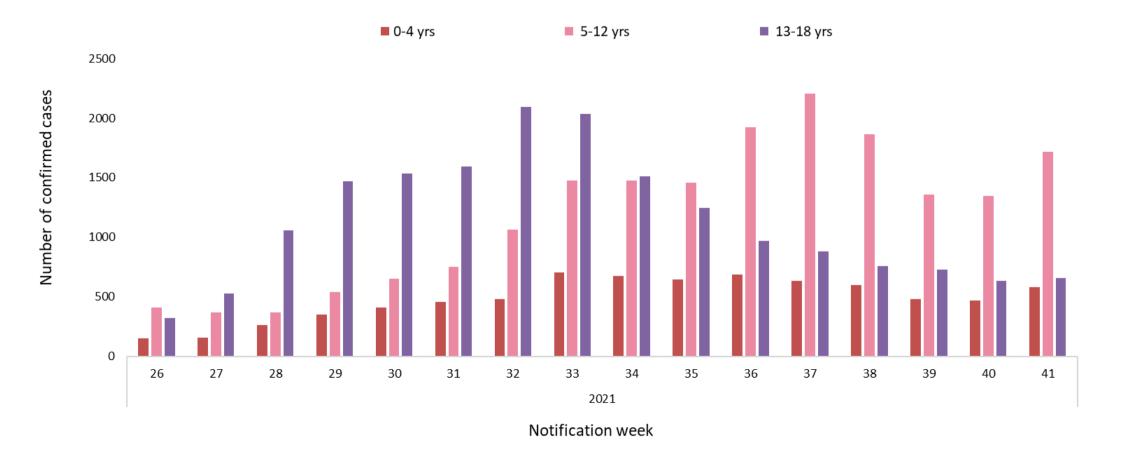
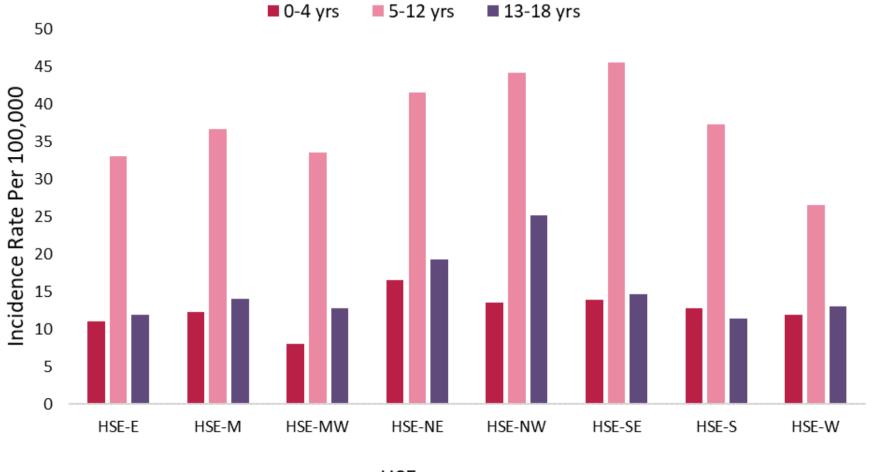


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 41, 2021

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



HSE area

Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 41, 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 41, 2021

Country	Cas	ses	M.E. notio	Median age	Incidence Rate per 100,000		
County	N	%	M:F ratio	(years)			
Longford	207	1.7	0.8	33	506.4		
Carlow	269	2.2	0.9	30	472.5		
Waterford	539	4.5	1.1	36	464.0		
Kerry	641	5.3	1.1	40	434.0		
Leitrim	98	0.8	0.8	38	305.8		
Donegal	482	4.0	1.0	33	302.8		
Louth	389	3.2	0.9	36	301.8		
Laois	254	2.1	1.2	40	299.9		
Clare	344	2.9	1.0	39	289.5		
Westmeath	254	2.1	0.9	37	286.1		
Limerick	552	4.6	0.9	40	283.2		
Meath	548	4.6	0.9	38	281.0		
Cavan	206	1.7	1.0	39.5	270.4		
Monaghan	161	1.3	0.9	34	262.3		
Roscommon	162	1.4	0.7	39.5	251.0		
Dublin	3190	26.6	1.0	34	236.8		
Sligo	146	1.2	0.7	30	222.8		
Cork	1193	10.0	0.9	38	219.8		
Kildare	476	4.0	1.1	34.5	213.9		
Tipperary	331	2.8	0.9	41	207.5		
Galway	501	4.2	0.9	35	194.1		
Kilkenny	190	1.6	1.0	41	191.5		
Mayo	245	2.0	0.8	42	187.7		
Wicklow	248	2.1	0.9	37	174.1		
Wexford	244	2.0	1.0	36	163.0		
Offaly	116	1.0	1.0	42.5	148.8		





		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	89.6	29.1	33.9	51.2	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	34.4	62.3
<u>-</u>	¥ 27	49.2	51.2	38.7	29.3	213.0	96.0	50.8	62.3	79.1	40.3	40.1	31.2	122.1	34.3	95.4	76.6	70.2	58.6	59.0	72.8	126.6	23.2	36.2	80.0	48.1	43.5	73.4
	0) 28	133.5	107.6	70.7	75.3	392.0	166.1	129.4	94.8	130.8	48.4	133.4	103.0	125.7	66.1	296.4	117.2	125.1	107.5	116.7	100.7	91.6	48.9	57.7	121.7	54.1	118.7	132.5
	≩ 29	203.8	151.0	70.7	118.1	537.7	191.1	258.5	126.6	161.3	69.5	273.9	259.0	140.1	137.0	250.6	196.2	152.8	234.6	137.2	144.1	149.5	99.7	80.9	145.3	87.5	171.3	176.2
9	<u> </u>	130.0	182.5	104.4	120.8	378.8	220.3	283.7	198.4	133.0	99.8	194.8	206.0	190.4	146.8	378.6	300.4	170.2	252.5	107.7	212.3	213.6	127.9	104.2	169.0	90.2	155.2	193.3
(월 31	172.1	236.3	143.9	163.4	321.6	239.4	302.6	203.8	149.2	105.8	181.8	156.0	179.6	181.0	269.2	314.9	189.2	351.9	173.2	291.3	177.0	129.1	125.7	149.8	173.0	192.4	210.4
(<u>0</u> 32	205.5	467.3	137.2	148.1	580.4	250.6	295.7	207.2	188.8	145.1	194.8	190.4	190.4	156.6	245.2	314.9	213.3	651.6	206.5	441.6	291.4	168.0	170.4	285.0	187.7	173.4	240.7
	31 32 33 33	228.3	739.1	155.7	189.0	599.3	254.4	256.1	295.2	196.9	134.0	226.7	234.1	296.6	205.5	377.9	272.0	238.4	830.8	210.4	371.8	199.9	296.5	220.4	251.2	167.0	180.4	266.6
	<mark>9</mark> 34	175.6	502.8	131.3	163.8	559.1	214.7	239.5	304.0	181.1	199.5	124.0	330.8	254.0	327.8	237.4	287.3	231.2	777.1	241.1	348.6	271.6	246.9	158.4	214.0	146.3	163.6	236.0
	35	230.1	334.8	196.1	184.6	498.8	207.8	194.1	228.2	151.5	166.3	211.3	402.6	228.8	259.3	262.3	245.2	195.9	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	129.9	410.2	223.5	171.7	145.6	171.2	168.3	263.3	221.6	181.1	305.8	251.4	212.2	185.6	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	142.6	389.5	210.9	119.7	180.1	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	148.1	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	253.7	252.9	201.0	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	200.9	156.6	258.6	163.6	108.8	165.3	218.4	225.8	393.9	173.0	113.4	208.2	247.6	144.9	196.8	174.0	156.1	324.5	144.2	124.9	113.0	188.1
	40	332.0	204.8	161.6	183.5	285.8	194.9	220.5	270.1	167.6	172.3	219.6	171.6	243.2	315.6	211.8	160.9	168.7	259.0	148.8	162.7	152.6	146.0	366.7	192.6	142.3	159.4	200.2
	41	472.5	270.4	289.5	219.8	302.8	236.8	194.1	434.0	213.9	191.5	299.9	305.8	283.2	506.4	301.8	187.7	281.0	262.3	148.8	251.0	222.8	207.5	464.0	286.1	163.0	174.1	251.7

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 41, 2021

2021

Laboratory testing for SARS-CoV-2



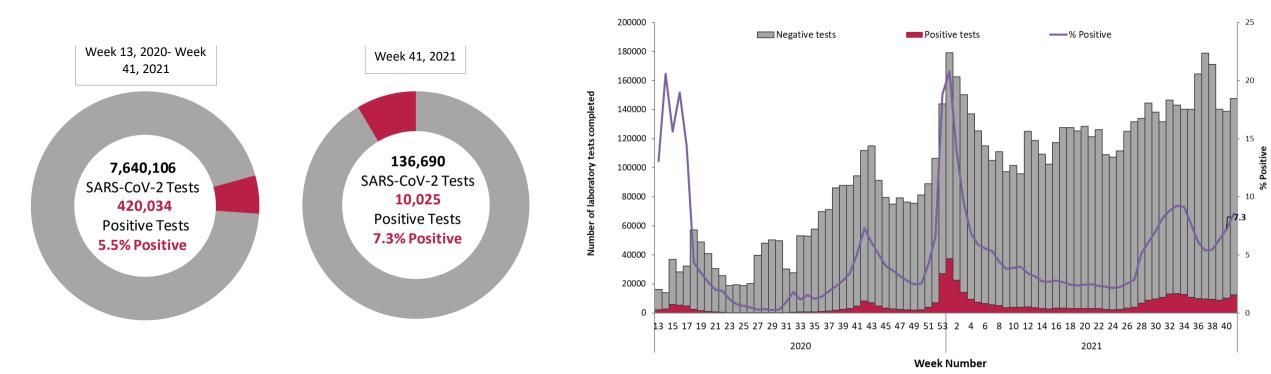
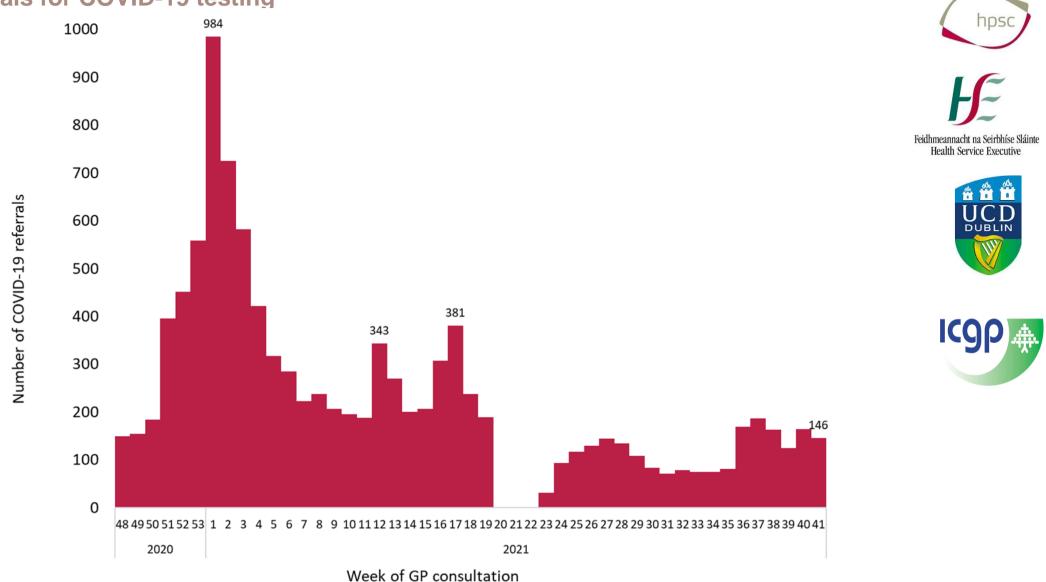


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 41, 2021

Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 41, 2021

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

Sentinel GP referrals for COVID-19 testing



*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

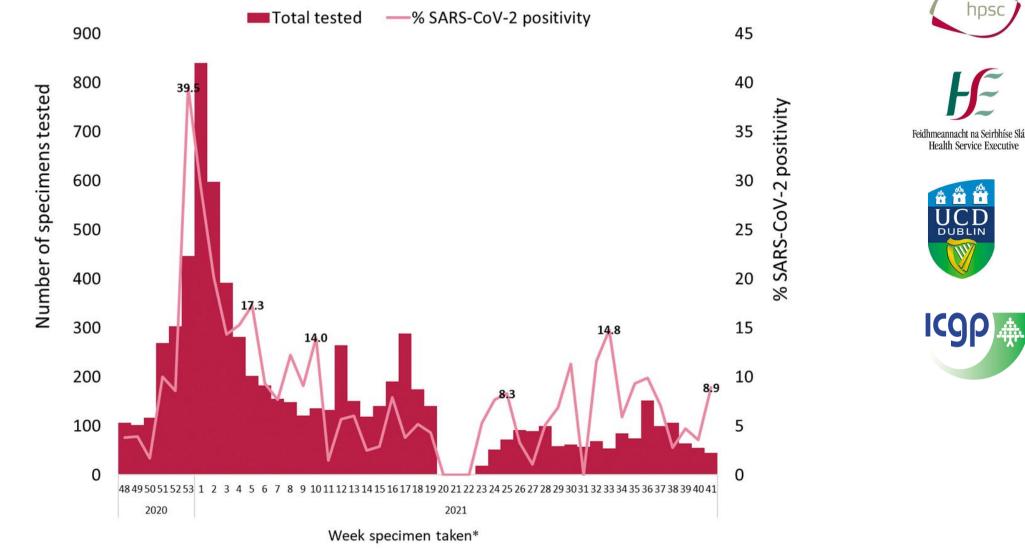


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021 *Please note, from week 19-23 2021, the GP sentinel virology data were incomplete due to the HSE cyber-attack

Deaths among COVID-19 cases

1	
	hpsc /

	Number	Percent
Total number of deaths	5,342	
confirmed	5,071	94.9
probable	97	1.8
possible	174	3.3
Number hospitalised who died	2,928	54.8
admitted to ICU who died	577	10.8
not admitted to ICU who died	4,765	89.2
Number of imported cases who died	12	0.2
Number of HCWs who died	18	0.3
Number with underlying conditions who died	4,619	86.5
Males who died	2,824	52.9
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	26	30	56	1
45-54 yrs	37	72	109	2
55-64 yrs	109	189	298	6
65-74 yrs	310	542	852	16
75-84 yrs	764	1032	1796	34
85+ yrs	1269	959	2228	42
Unknown	3	0	3	0
Total	2518	2824	5342	100.0
Percent	47.1	52.9		

Table 3: Summary of deaths in all COVID-19 cases notified inIreland between week 10, 2020 and week 41, 2021

Table 4: Number of deaths in all COVID-19 cases by sex andage group notified in Ireland between week 10, 2020 and week41, 2021

Deaths among COVID-19 cases

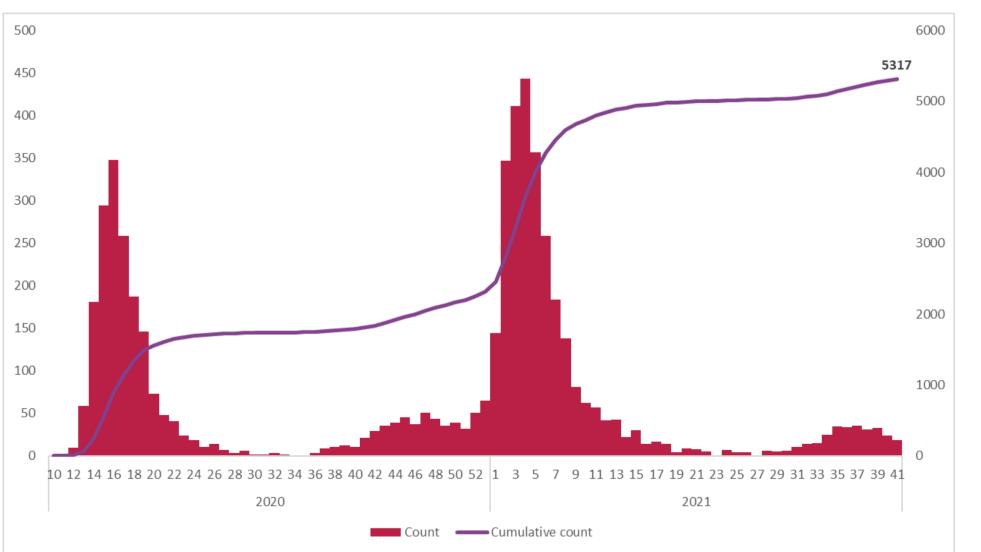


Figure 11: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 16/10/2021. Date of death reported for 5,317 of deaths.

Most likely transmission source of COVID-19 cases

Table 5: Most likely transmission source for cases notified inweek 41, 2021. Data based on CCT/PPA data.

Most likely transmission source for 41, 2021	Number of cases	Percent
Close contact with a known confirmed case	4312	36.0
Travel related	194	1.6
Community transmission	3872	32.3
Healthcare setting acquired: patient	113	0.9
Healthcare setting acquired: staff	85	0.7
Under investigation*	3410	28.4
Total	11986	100

* Includes cases without a matching record for CCT/PPA

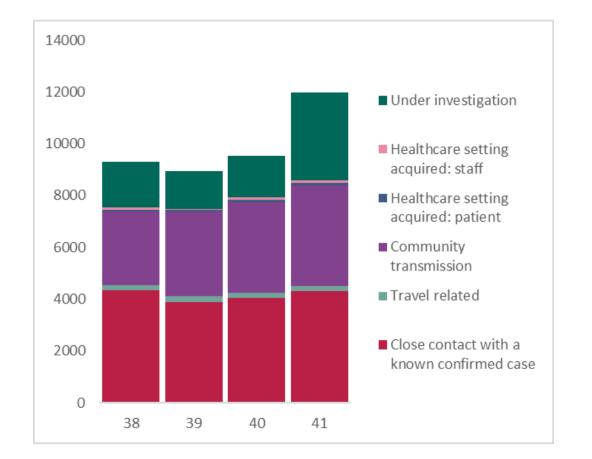


Figure 12: Most likely transmission source by week, from week 38 - week 41, 2021. Data based on CCT/PPA data

hpsc

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

- <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>
- <u>Healthcare Workers COVID-19</u> cases in Ireland monthly reports
- <u>Weekly reports on vaccination status</u> 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





- 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.