



Weekly Report on the Epidemiology of COVID-19 in Ireland

Week 40, 2021

Health Protection Surveillance Centre, HPSC
COVID-19 Epidemiology Team, 11/10/2021

Please note:

- The epidemiological weeks in this report, run from Sunday to Saturday. Please refer to the [HPSC website](#) 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 40, 2021 (3rd to 9th 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 9th October
- Data was extracted from CIDR system on 11/10/2021
- 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 [here](#).

Summary characteristics of COVID-19 cases notified in Ireland



	Total (week 10, 2020-week 40, 2021)		Week 40, 2021	
	Number	Percent	Number	Percent
Total number of confirmed cases	403,156		9,533	
Incidence rate of confirmed cases per 100,000 population	8466.3		200.2	
Number of cases hospitalised	16,924	4.2	205*	2.2
Number of cases admitted to ICU	1,881	0.5	<5*	
Number of deaths among confirmed cases	5,024	1.2	6*	0.06
Case fatality ratio (CFR %)	1.2		0.06	
Incidence rate of confirmed deaths per 100,000 population	105.5		0.13	
Number of cases in healthcare workers	33929	8.4	472	5.0
Males	196,645	48.8	4,615	48.4
Females	206,444	51.2	4,909	51.5
M:F ratio	0.95		0.94	
Median (years)	33		35	
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

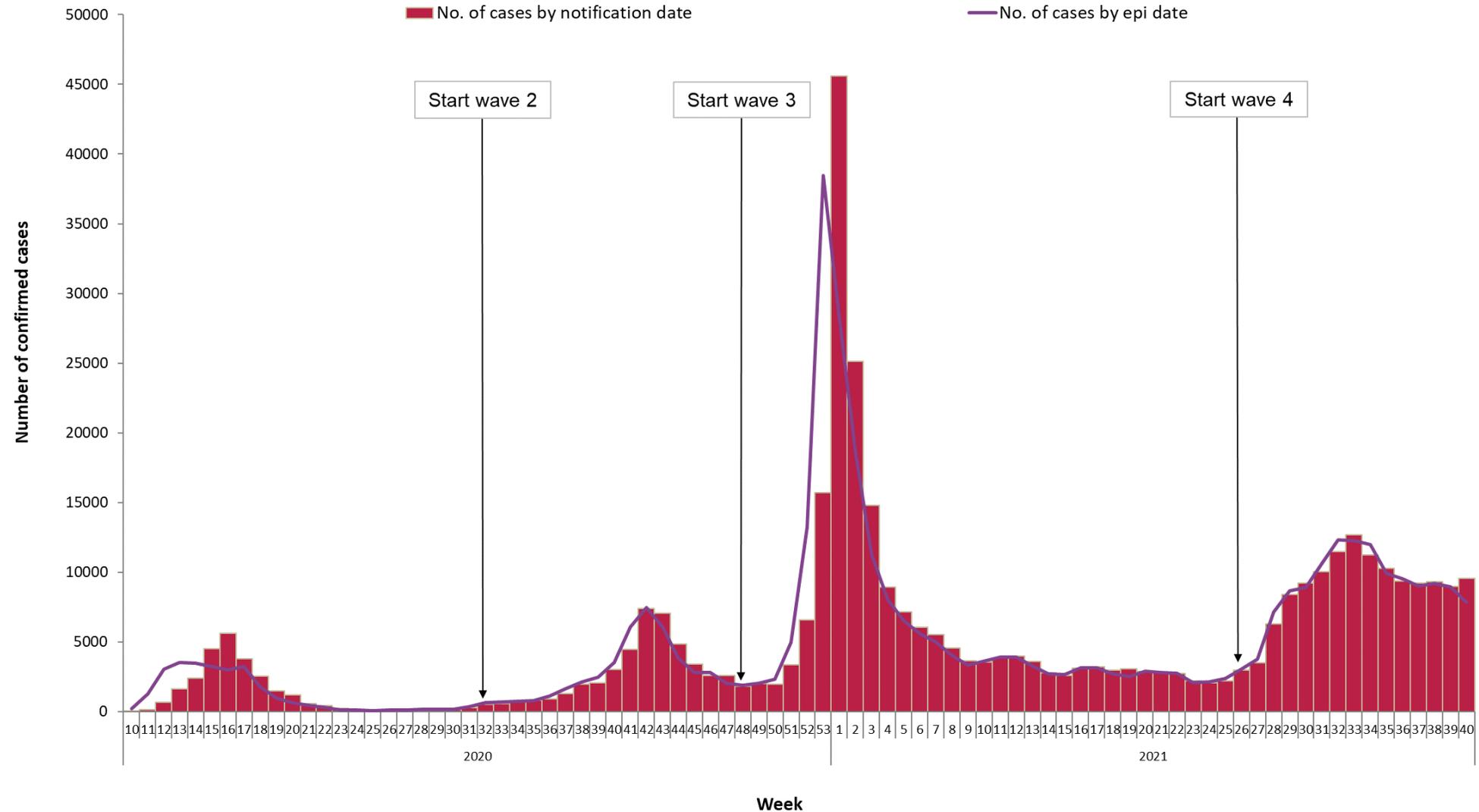


Figure 1: Number of confirmed COVID-19 cases by notification week and [epidemiological date](#) in Ireland between week 10, 2020 and week 40, 2021

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

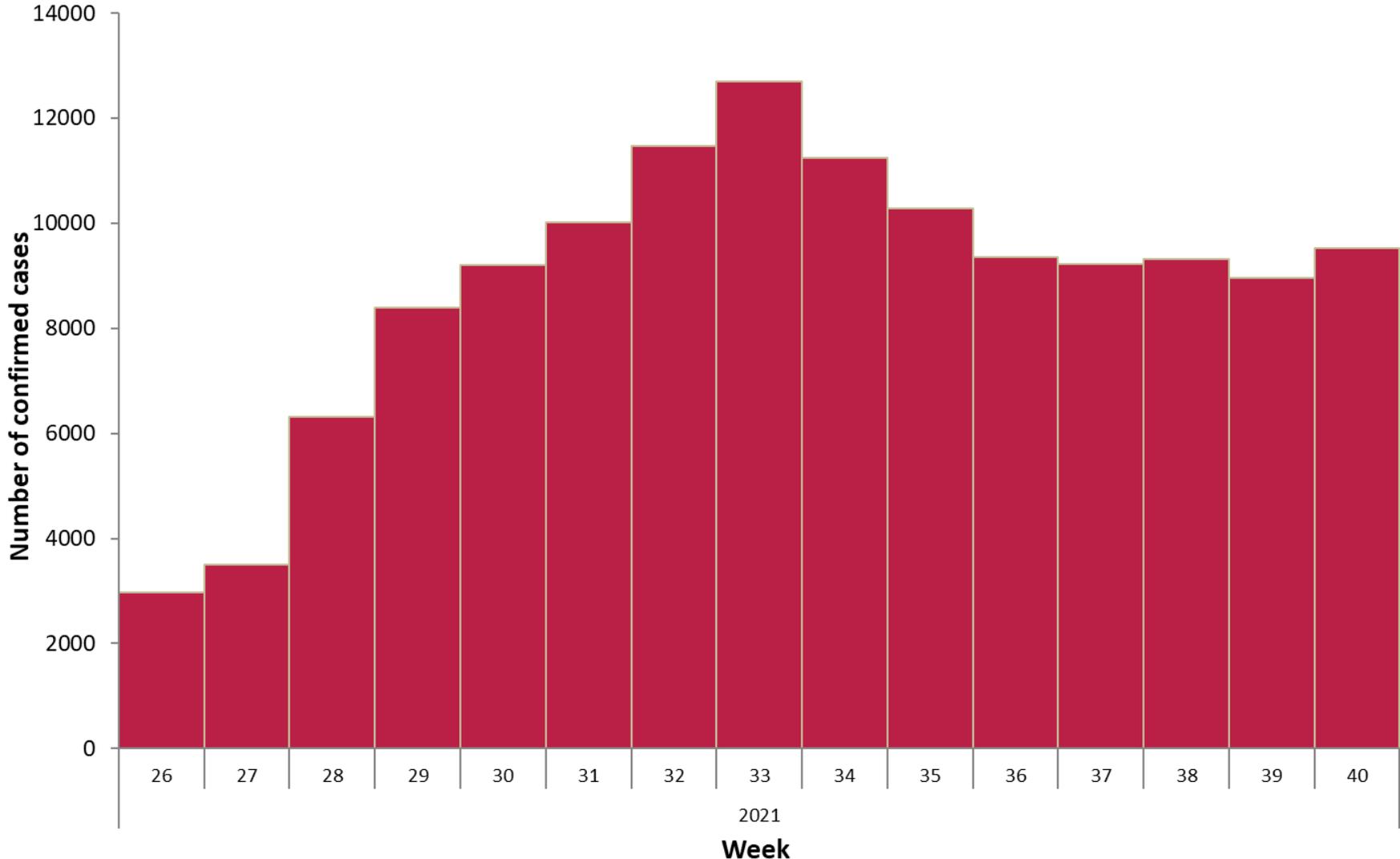


Figure 2: Number of confirmed COVID-19 cases by notification week in Ireland for the 4th wave from week 26, 2021 to week 40, 2021

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



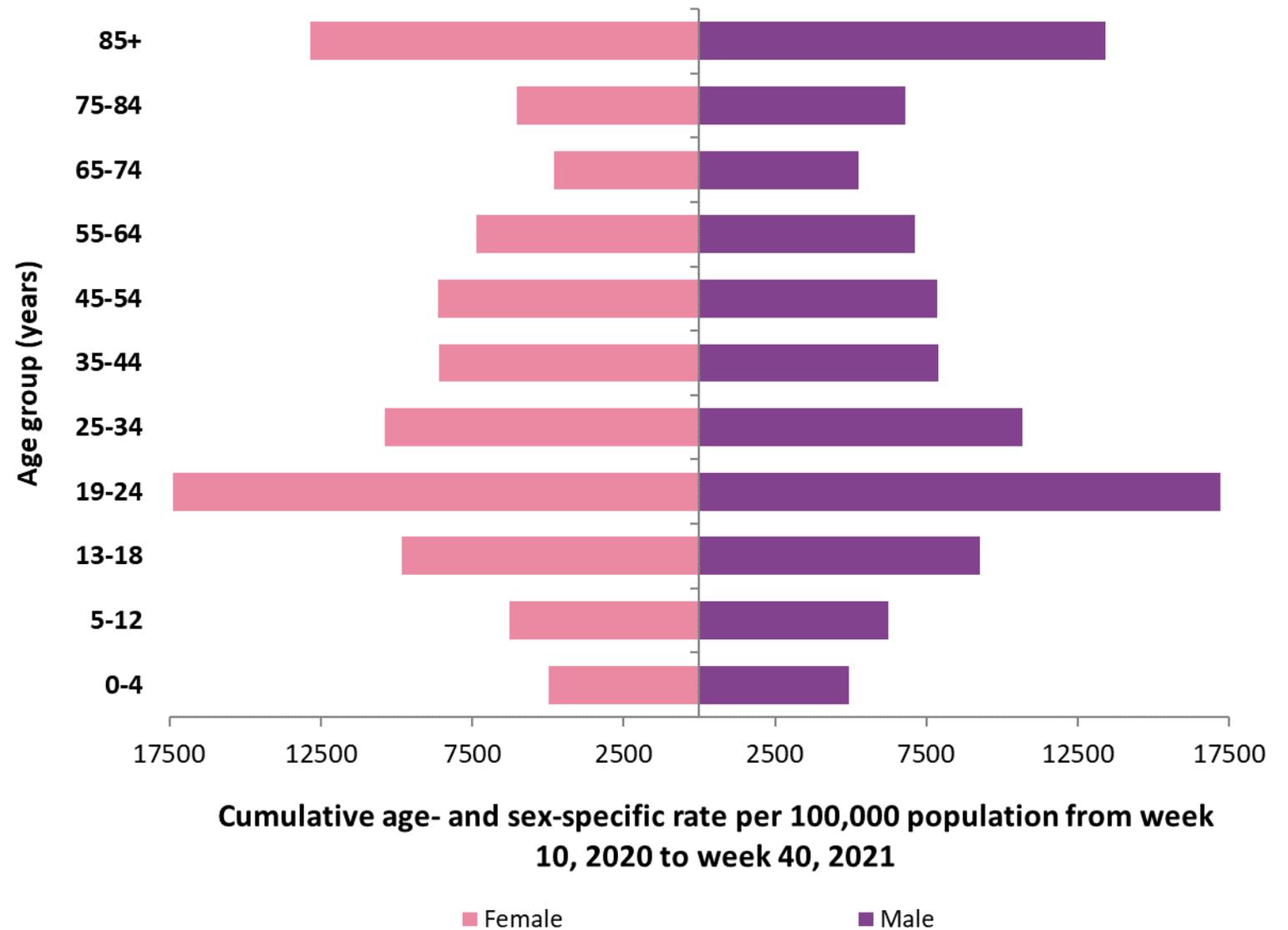
Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland during week 40, 2021

Characteristic		Week 40	Percent
Total number of confirmed cases		9,533	100
Sex	Male:Female ratio	0.94	
	Male	4,615	48.4
	Female	4,909	51.5
	Unknown	9	0.2
Age	Mean age (years)	36	
	Median age (years)	35	
	Age range (years)	0-101	
	0-4 yrs	468	4.9
	5-12 yrs	1,349	14.2
	13-18 yrs	636	6.7
	19-24 yrs	980	10.3
	25-34 yrs	1,275	13.4
	35-44 yrs	1,482	15.5
	45-54 yrs	1,189	12.5
	55-64 yrs	959	10.1
	65-74 yrs	685	7.2
	75-84 yrs	341	3.6
	85+ yrs	167	1.8
Unknown	2	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 40, 2021

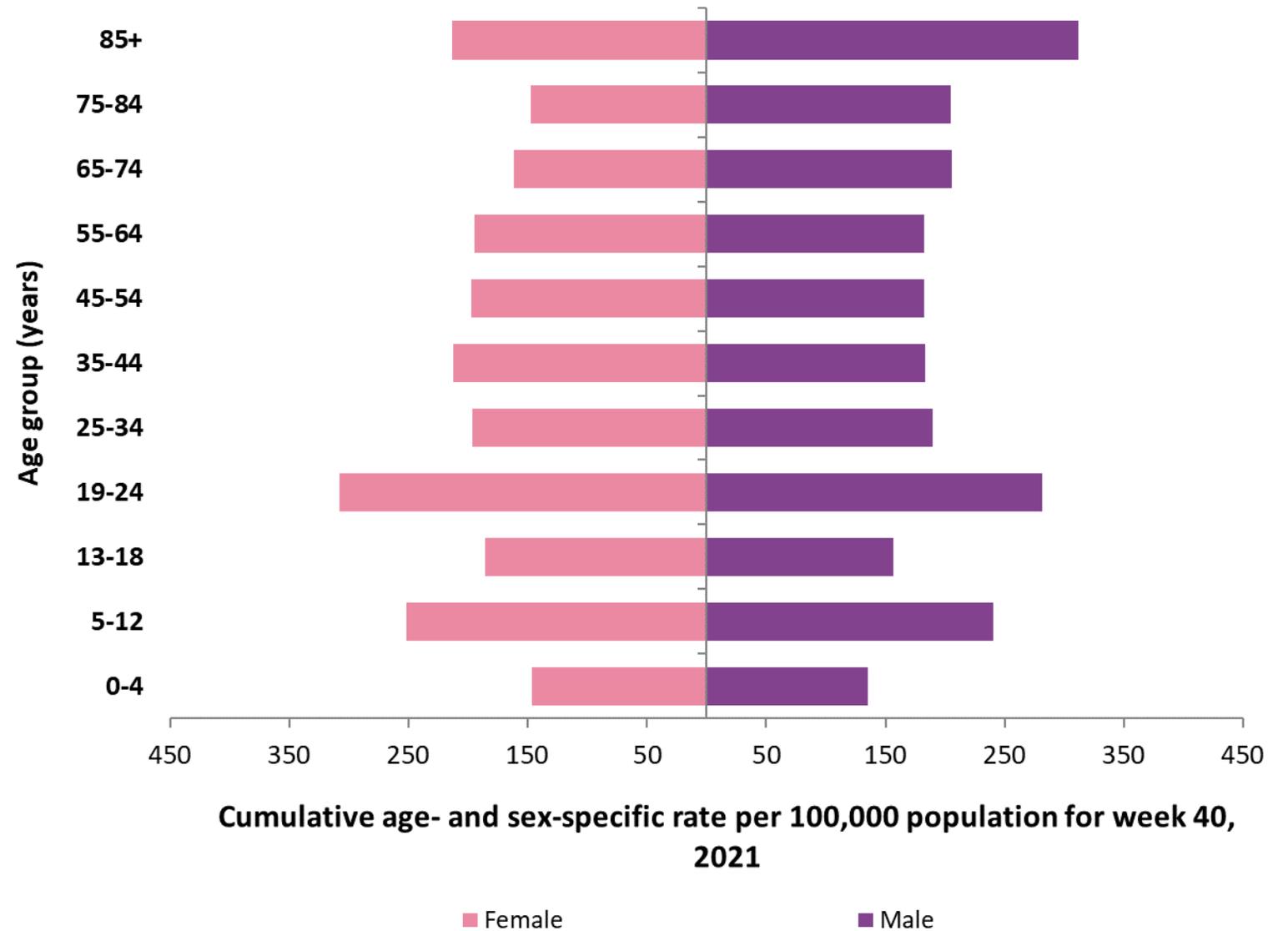
(excluding 56 cases for whom age is unknown, 65 cases for whom sex is unknown and two cases for whom both are unknown)



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 40, 2021

(excluding 2 cases for whom age is unknown and 9 cases for whom sex is unknown)



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

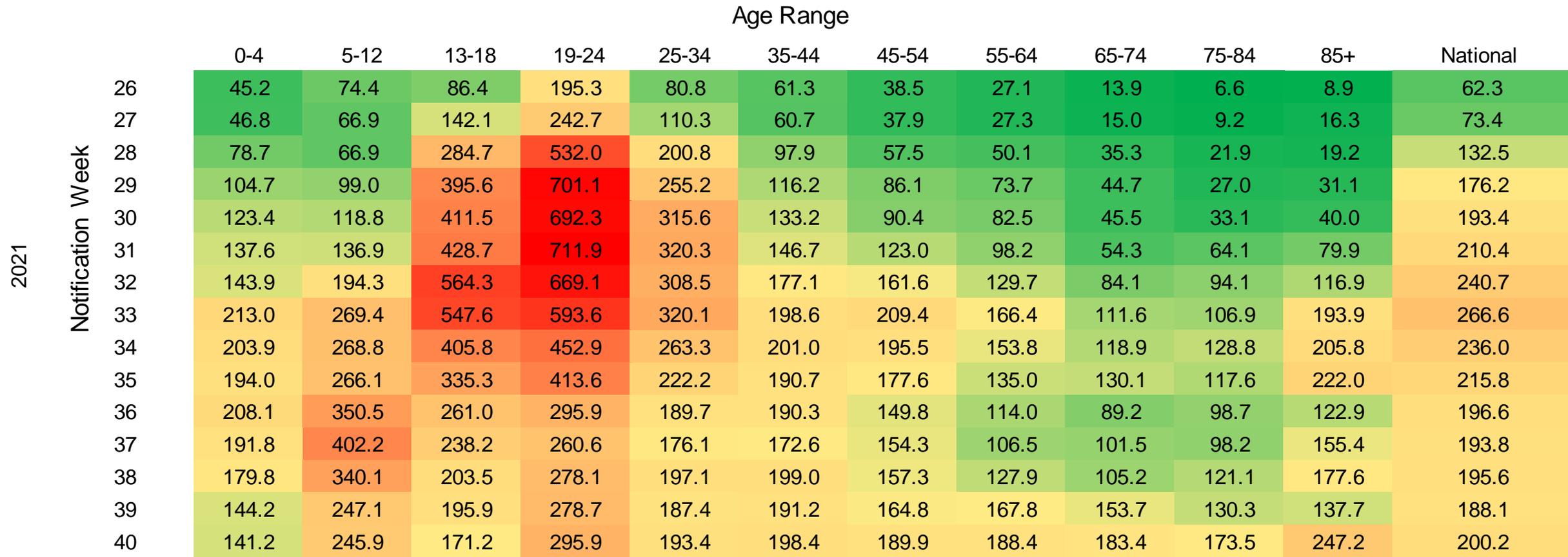


Figure 5: Heat map of weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4th wave between week 26, 2021 and week 40, 2021

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

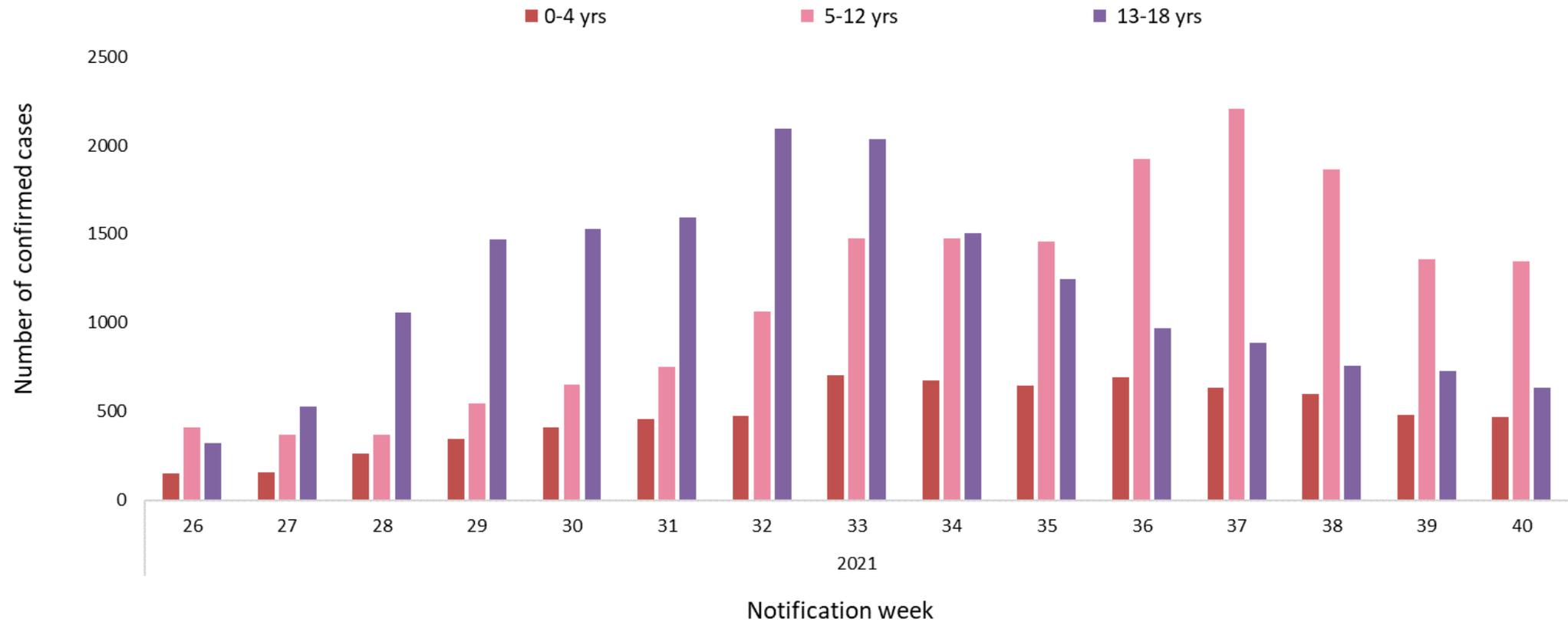


Figure 6a: Weekly number of age-specific confirmed COVID-19 cases by notification week in Ireland for the 4th wave between week 26, 2021 and week 40, 2021

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

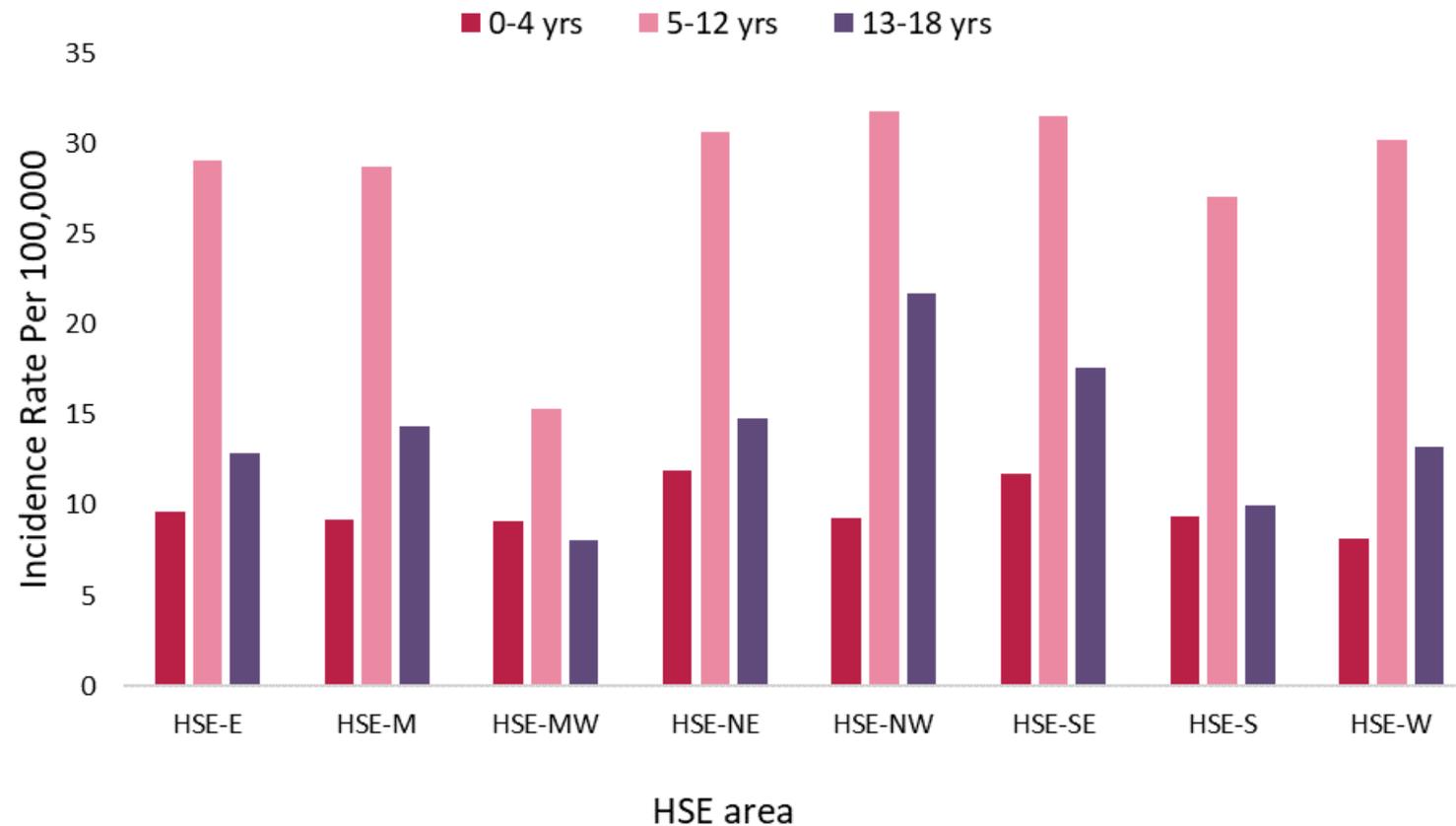


Figure 6b: Age-specific incidence rates of confirmed COVID-19 cases per 100,000 population, by HSE area, notified in Ireland during week 40, 2021

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

Table 2: Characteristics of confirmed COVID-19 cases by county notified in Ireland, during week 40, 2021

County	Cases		M:F ratio	Median age	Incidence Rate per 100,000
	N	%		(years)	
Carlow	231	2.4	1.0	25	405.7
Waterford	470	4.9	0.9	34.5	404.6
Longford	132	1.4	1.0	34	323.0
Kerry	425	4.5	1.0	42	287.7
Donegal	454	4.8	0.9	34	285.2
Monaghan	157	1.6	1.0	37	255.8
Limerick	473	5.0	1.0	41	242.7
Galway	571	6.0	0.9	34	221.3
Louth	271	2.8	1.1	33	210.3
Cavan	156	1.6	0.9	35	204.8
Westmeath	180	1.9	0.8	33	202.8
Laois	167	1.8	0.9	36	197.2
Dublin	2639	27.7	0.9	32	195.9
Cork	969	10.2	0.9	39	178.5
Leitrim	56	0.6	0.6	48	174.8
Meath	320	3.4	1.0	33	164.1
Mayo	210	2.2	1.1	35	160.9
Clare	190	2.0	1.0	48.5	159.9
Roscommon	102	1.1	0.9	38	158.0
Kildare	347	3.6	1.2	33	156.0
Wicklow	220	2.3	0.9	35	154.5
Sligo	99	1.0	1.1	33	151.1
Offaly	116	1.2	1.1	42.5	148.8
Tipperary	233	2.4	0.9	39	146.0
Wexford	215	2.3	1.0	34	143.6
Kilkenny	130	1.4	0.8	37	131.0

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
2021	Notification Week 26	14.1	40.7	48.0	19.7	215.5	89.8	29.1	33.9	50.3	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	33.7	62.3
	Notification Week 27	49.2	51.2	38.7	29.3	213.0	96.7	50.8	62.3	75.5	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	42.8	73.4
	Notification Week 28	133.5	106.3	70.7	75.3	392.0	167.0	129.4	94.8	129.0	48.4	133.4	103.0	125.7	71.0	296.4	117.2	125.1	107.5	116.7	100.7	91.6	48.9	57.7	121.7	54.1	112.3	132.5
	Notification Week 29	203.8	151.0	70.7	118.1	537.7	192.2	258.5	126.6	158.6	69.5	273.9	262.1	140.1	139.5	250.6	196.2	152.8	233.0	137.2	141.0	151.1	99.7	80.9	145.3	87.5	165.7	176.2
	Notification Week 30	130.0	182.5	104.4	120.8	378.8	222.7	283.7	198.4	122.7	99.8	196.0	215.3	190.4	146.8	378.6	300.4	169.7	252.5	110.3	207.6	213.6	127.9	104.2	170.1	90.2	148.1	193.4
	Notification Week 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
	Notification Week 32	205.5	467.3	137.2	148.1	580.4	250.8	295.7	207.2	187.4	145.1	196.0	190.4	190.4	156.6	245.2	314.9	212.8	651.6	207.8	441.6	291.4	168.0	170.4	287.3	187.7	173.4	240.7
	Notification Week 33	228.3	740.4	155.7	189.2	599.9	254.3	256.1	295.2	196.9	134.0	226.7	230.9	296.6	205.5	377.9	272.0	237.9	829.2	211.6	371.8	199.9	296.5	220.4	252.3	167.0	180.4	266.6
	Notification Week 34	175.6	505.4	131.3	163.8	558.4	214.7	239.5	304.7	181.1	199.5	124.0	362.0	253.5	325.4	237.4	287.3	230.2	773.8	241.1	334.7	270.1	246.9	158.4	218.5	146.3	163.6	236.0
	Notification Week 35	230.1	340.0	196.9	184.4	497.5	207.8	194.5	228.2	151.5	166.3	211.3	411.9	228.8	259.3	262.3	244.4	195.9	488.7	225.8	305.2	178.5	185.5	99.0	167.8	156.3	161.5	215.8
	Notification Week 36	216.0	292.7	149.8	130.1	410.2	223.5	171.7	145.6	171.2	168.3	265.7	227.8	181.1	305.8	252.2	212.2	185.6	477.3	219.3	230.9	149.5	137.3	127.4	153.2	108.9	102.5	196.6
	Notification Week 37	242.4	216.6	140.6	142.6	389.5	210.9	119.7	180.1	196.9	163.3	235.0	140.4	193.9	227.5	346.8	185.4	221.0	421.9	164.2	154.9	137.3	162.3	148.1	201.6	145.6	74.4	193.8
	Notification Week 38	254.7	249.4	109.4	146.4	321.6	234.2	144.9	145.6	247.6	140.1	186.5	224.7	203.7	252.0	253.7	252.9	201.0	290.0	136.0	137.9	151.1	146.0	169.6	187.0	82.8	96.2	195.6
	Notification Week 39	274.0	259.9	185.2	142.2	282.7	200.9	156.6	259.3	163.1	108.8	164.1	221.6	226.3	393.9	173.0	113.4	207.1	247.6	146.2	189.0	174.0	156.1	324.5	152.1	124.9	113.0	188.1
	Notification Week 40	405.7	204.8	159.9	178.5	285.2	195.9	221.3	287.7	156.0	131.0	197.2	174.8	242.7	323.0	210.3	160.9	164.1	255.8	148.8	158.0	151.1	146.0	404.6	202.8	143.6	154.5	200.2

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 40, 2021

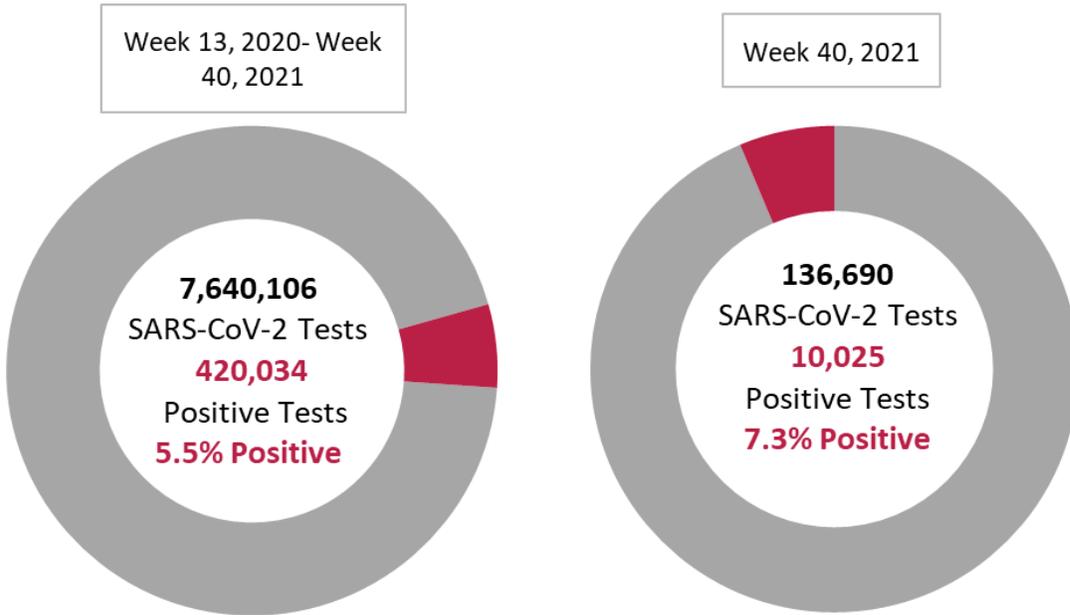


Figure 8a: Number of SARS-CoV-2 tests and positive tests* in Ireland between week 13, 2020 and week 40, 2021

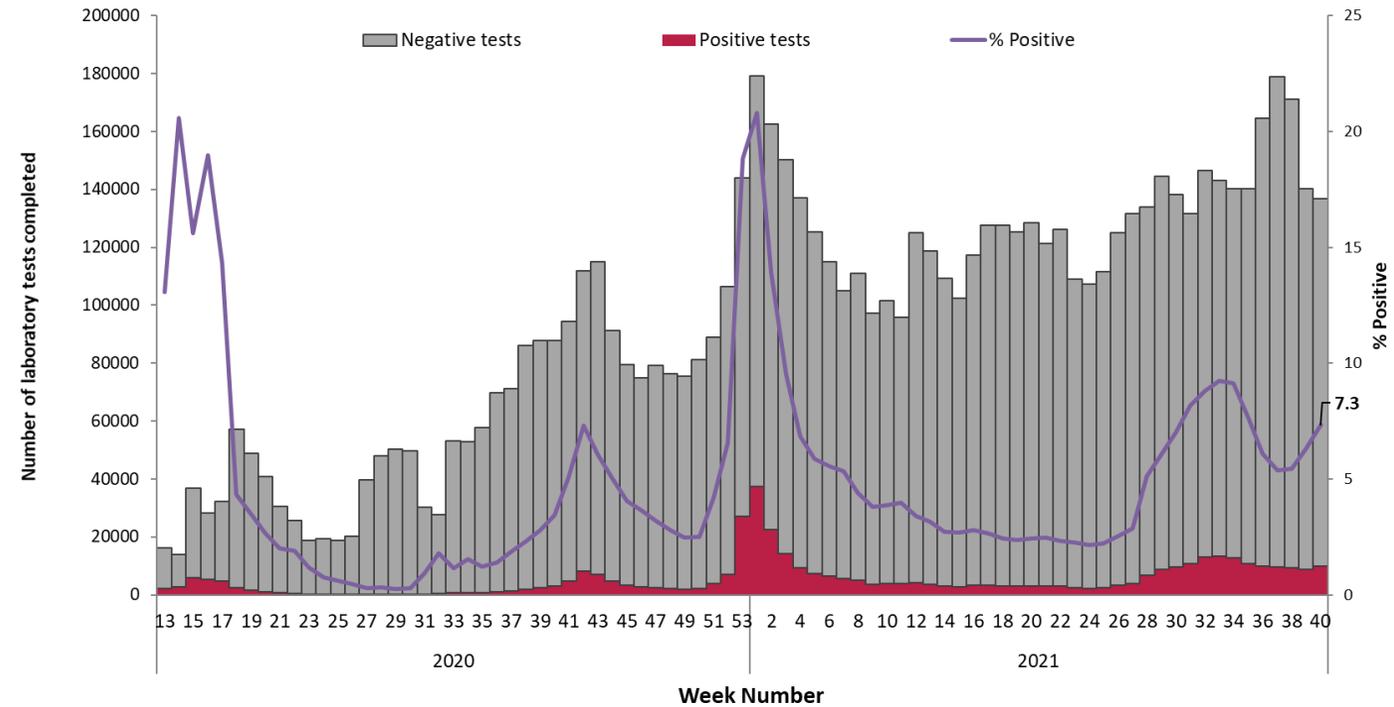


Figure 8b: Number of SARS-CoV-2 negative and positive tests* completed in Ireland between week 13, 2020 and week 40, 2021

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



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Sentinel GP referrals for COVID-19 testing

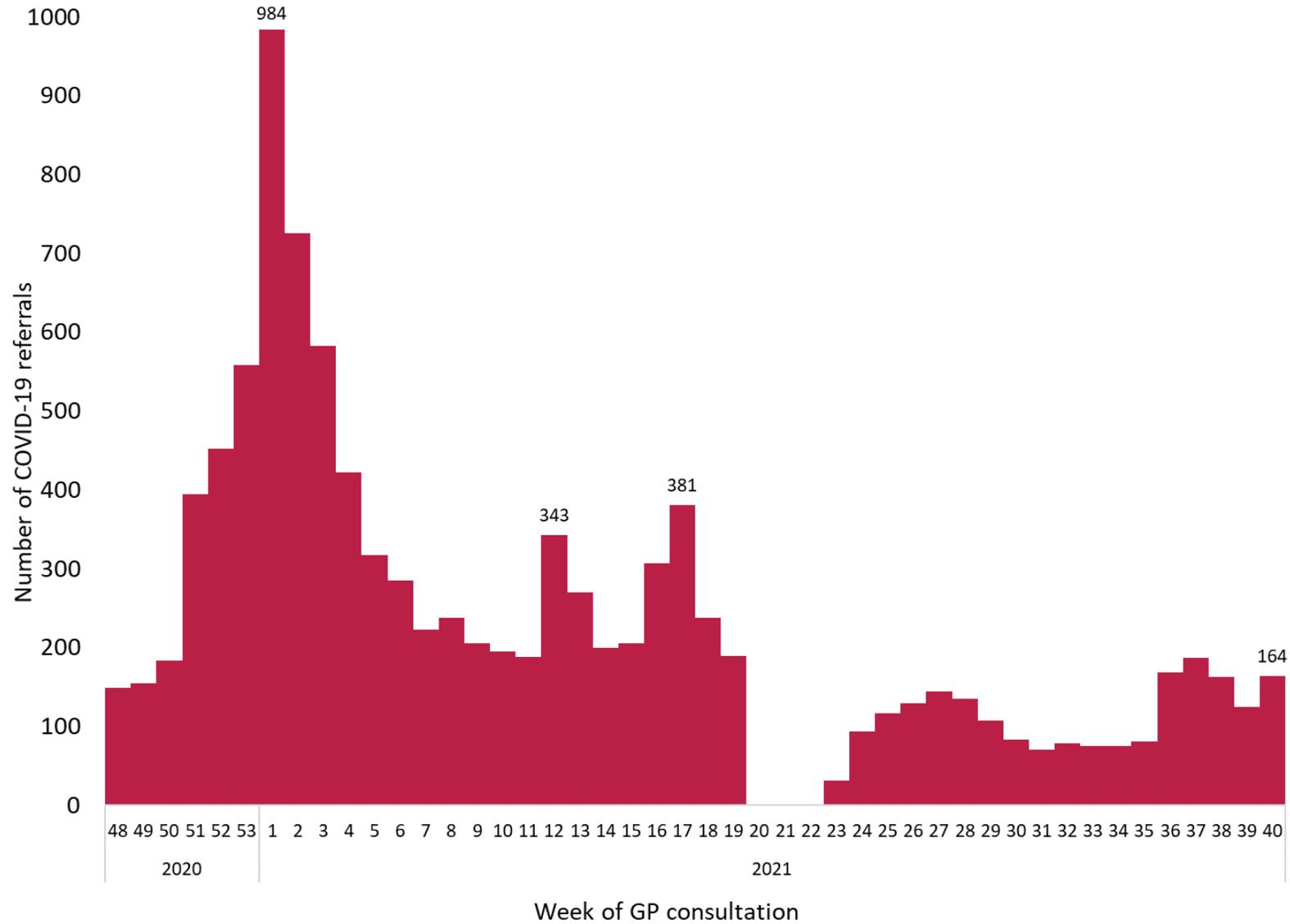


Figure 9: Number of sentinel GP COVID-19 referrals by week of consultation, 2020-2021

*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

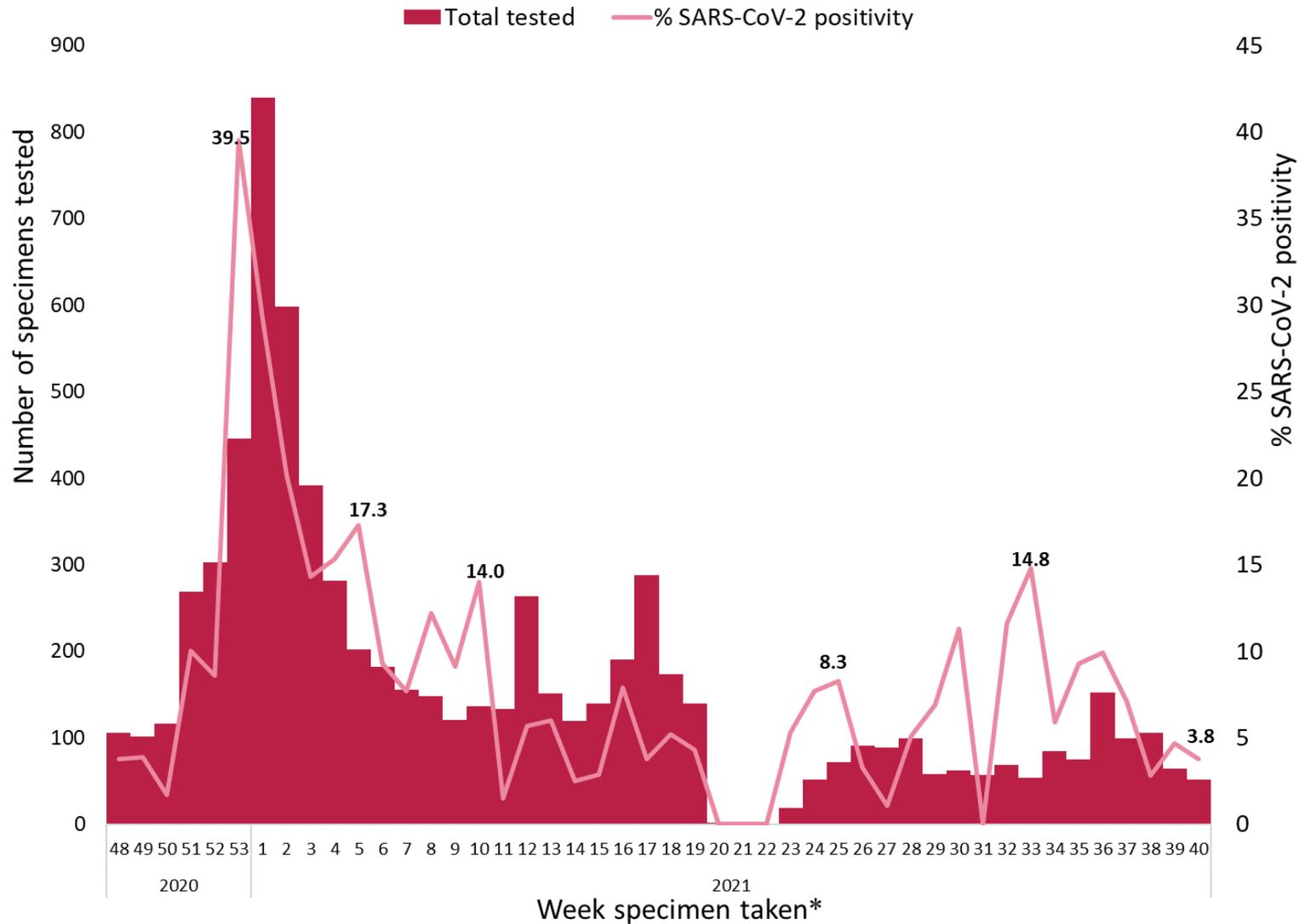


Figure 10: % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER, 2020-2021

*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

	Number	Percent
Total number of deaths	5,295	
confirmed	5,024	94.9
probable	97	1.8
possible	174	3.3
Number hospitalised who died	2,900	54.8
admitted to ICU who died	568	10.7
not admitted to ICU who died	4,727	89.3
Number of imported cases who died	12	0.2
Number of HCWs who died	18	0.3
Number with underlying conditions who died	4,574	86.4
Males who died	2,796	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 40, 2021

Age group (years)	Female	Male	Total	Percent
<45 yrs	25	28	53	1
45-54 yrs	37	72	109	2
55-64 yrs	109	186	295	6
65-74 yrs	308	534	842	16
75-84 yrs	761	1024	1785	34
85+ yrs	1256	952	2208	42
Unknown	3	0	3	0
Total	2499	2796	5295	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 40, 2021

Deaths among COVID-19 cases

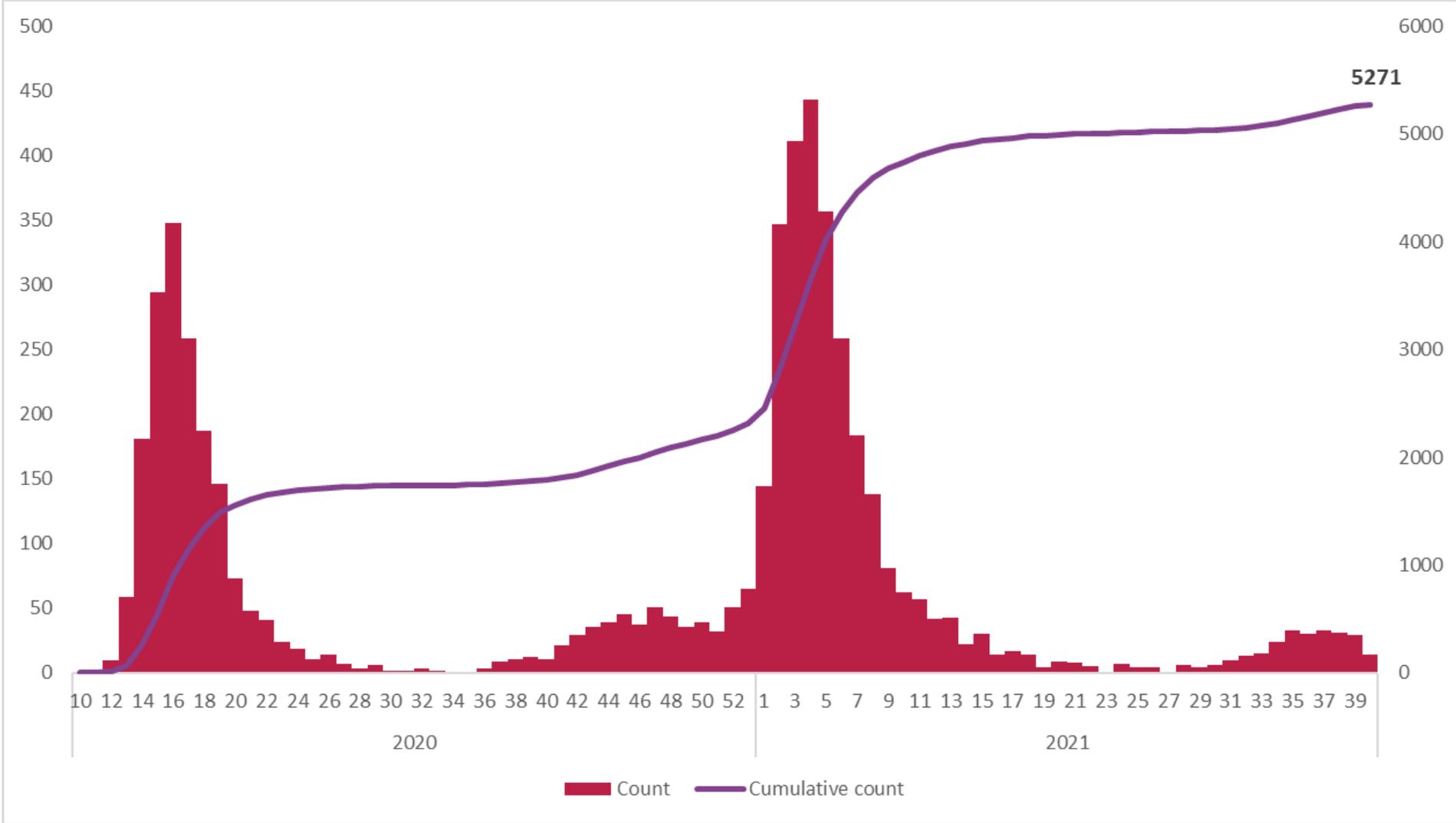


Figure 11: Total number of COVID-19 deaths notified in and cumulative number by week of death, cases with a date of notification from 01/03/2020 to 09/10/2021. Date of death reported for 5,271 of deaths.

Most likely transmission source of COVID-19 cases

Table 5: Most likely transmission source for cases notified in week 40, 2021. Data based on CCT/PPA data.

Most likely transmission source for 40, 2021	Number of cases	Percent
Close contact with a known confirmed case	3971	41.7
Travel related	188	2.0
Community transmission	3430	36.0
Healthcare setting acquired: patient	73	0.8
Healthcare setting acquired: staff	92	1.0
Under investigation*	1779	18.7
Total	9533	100

* Includes cases without a matching record for CCT/PPA

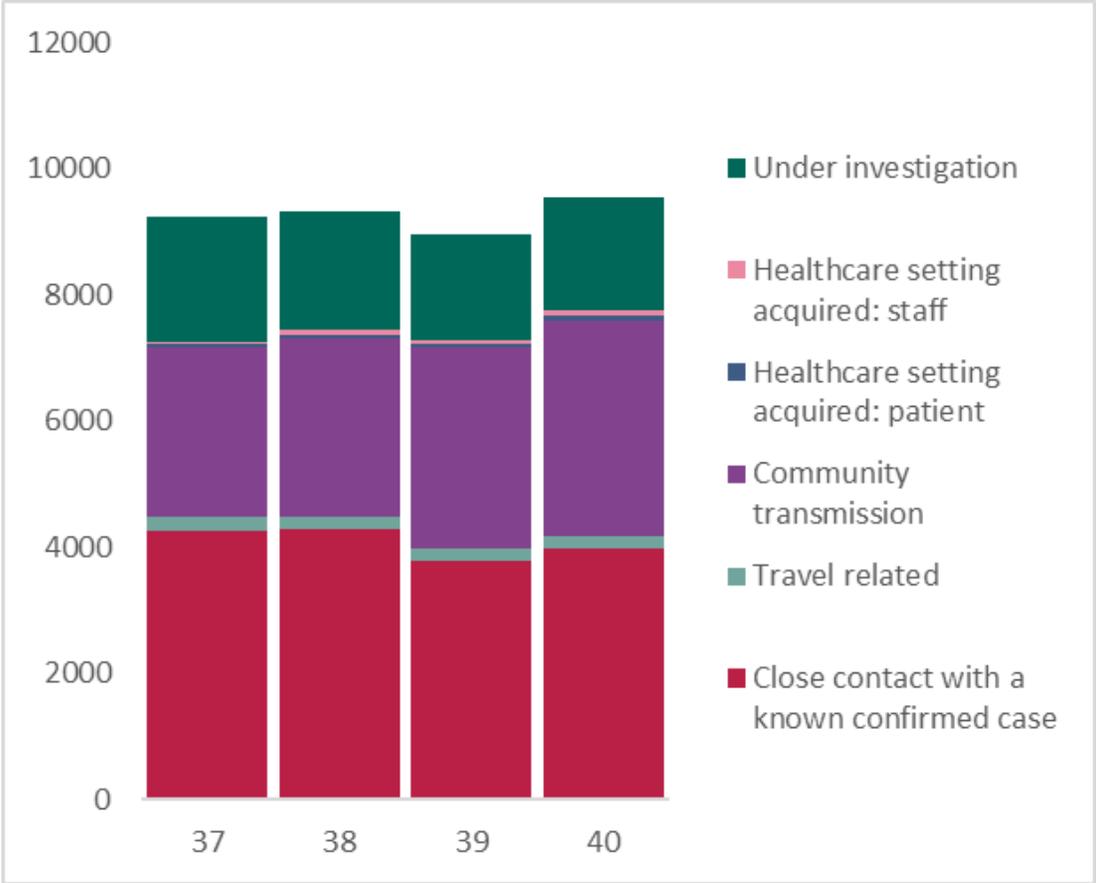


Figure 12: Most likely transmission source by week, from week 37 - week 40, 2021. Data based on CCT/PPA data

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
- [SARS-CoV-2 wastewater surveillance](#) 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.