



# Weekly Report on the Epidemiology of COVID-19 in Ireland

## Week 49, 2021

Health Protection Surveillance Centre, HPSC  
COVID-19 Epidemiology Team, 13/12/2021

### 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 (1<sup>st</sup> to 7<sup>th</sup> March 2020) – the beginning of the pandemic in Ireland, also the start of the first wave
  - Week 32, 2020 (2<sup>nd</sup> to 8<sup>th</sup> August 2020) – the beginning of the 2<sup>nd</sup> wave
  - Week 48, 2020 (22<sup>nd</sup> to 28<sup>th</sup> November 2020) – the beginning of the 3<sup>rd</sup> wave
  - Week 26, 2021 (27<sup>th</sup> June to 3<sup>rd</sup> July 2021) – the beginning of the 4<sup>th</sup> wave
  - Week 49, 2021 (5<sup>th</sup> December to 11<sup>th</sup> December 2021) – most recent epidemiological week
- Data for this report is based on cases notified on the Computerised Infectious Disease Reporting (CIDR) up to the 11<sup>th</sup> December
- Data was extracted from CIDR system on 13/12/2021
- 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



	Total (week 10, 2020-week 49, 2021 )		Week 49, 2021	
	Number	Percent	Number	Percent
Total number of confirmed cases	623,618		29,470	
Incidence rate of confirmed cases per 100,000 population	13096.1		618.9	
Number of cases hospitalised	21,087	3.4	241*	0.8
Number of cases admitted to ICU	2,237	0.4	5*	0.02
Number of deaths among confirmed cases	5,546	0.9	<5*	
Case fatality ratio (CFR %)	0.9		0.01	
Incidence rate of confirmed deaths per 100,000 population	116.5		0.08	
Number of cases in healthcare workers	38801	6.2	92	0.3
% where HCW is known		8.0		3.4
Males	305,456	49.0	14,588	49.5
Females	317,812	51.0	14,819	50.3
M:F ratio	0.96		0.98	
Median (years)	33		31	
Mean age (years)	35		31	
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

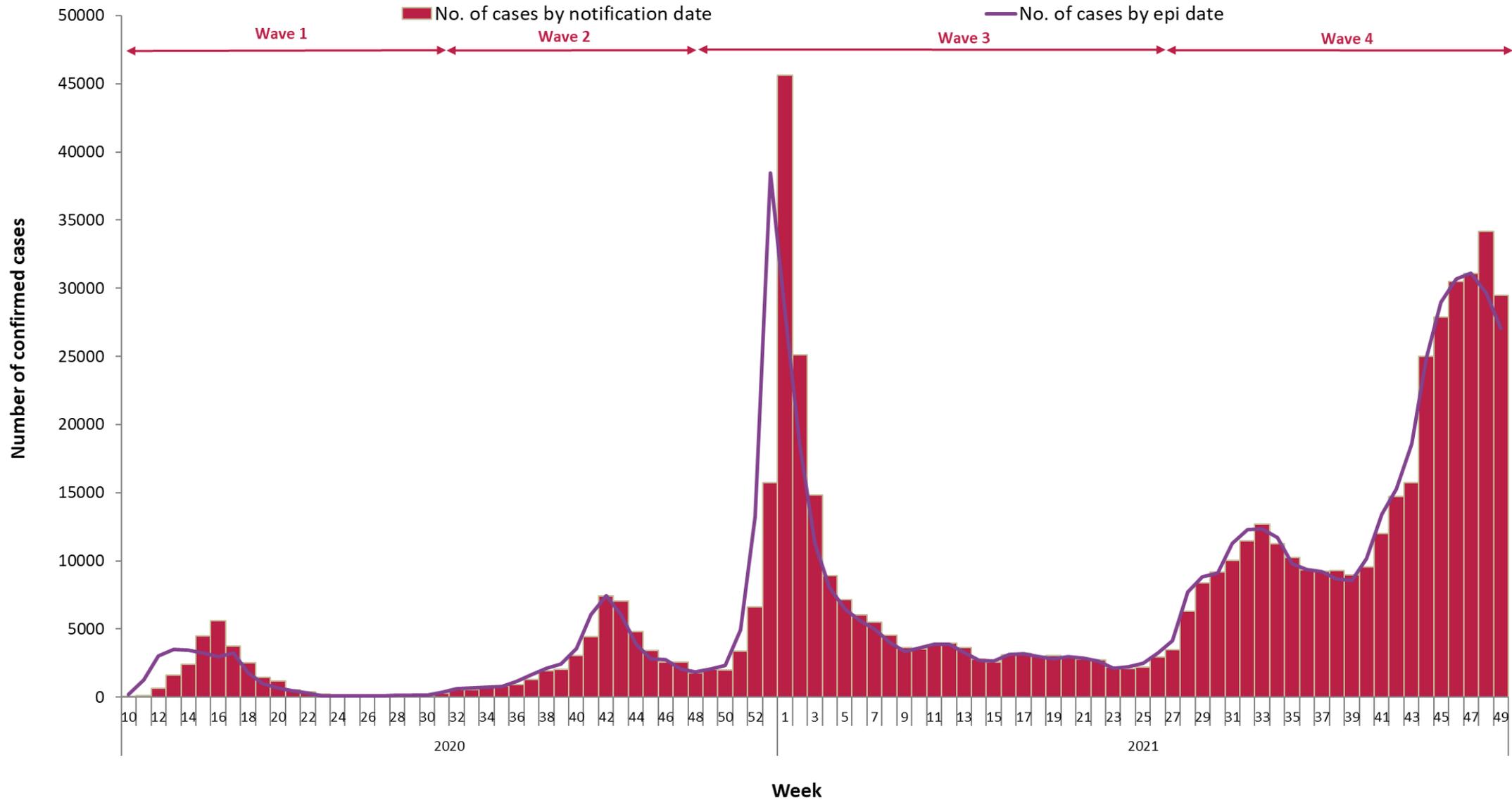
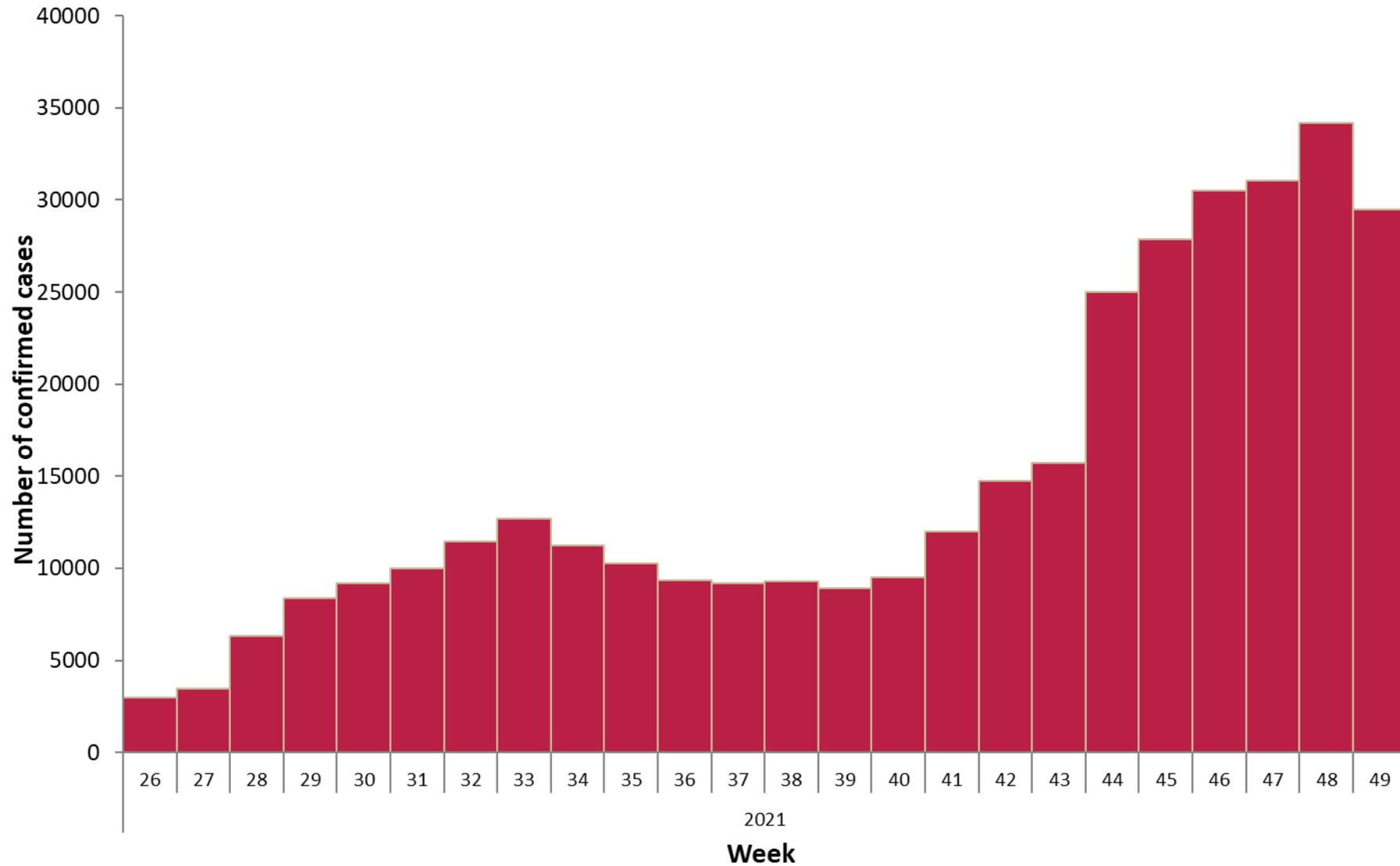


Figure 1: Number of confirmed COVID-19 cases by notification week and [epidemiological date](#) in Ireland between week 10, 2020 and week 49, 2021

# Epidemic curve of COVID-19 cases notified in Ireland during the 4<sup>th</sup> wave



**Figure 2:** Number of confirmed COVID-19 cases by notification week in Ireland for the 4<sup>th</sup> wave from week 26, 2021 to week 49, 2021

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



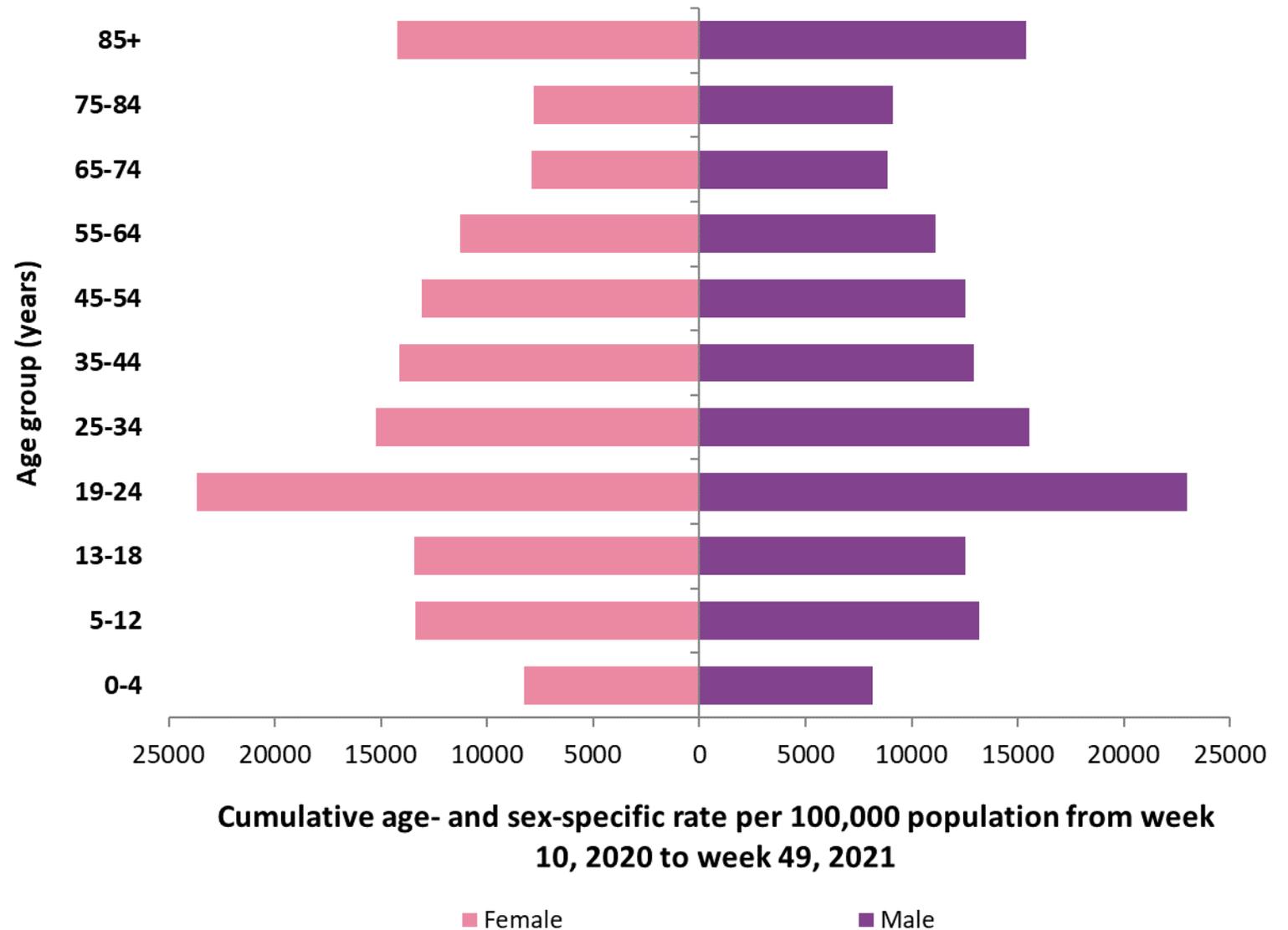
**Table 1:** Characteristics of confirmed COVID-19 cases notified in Ireland during week 49, 2021

Characteristic		Week 49	Percent
Total number of confirmed cases		29,470	100
<b>Sex</b>	Male:Female ratio	0.98	
	Male	14,588	49.5
	Female	14,819	50.3
	Unknown	63	0.2
<b>Age</b>	Mean age (years)	31	
	Median age (years)	31	
	Age range (years)	0-101	
	0-4 yrs	1601	5.4
	5-12 yrs	5,752	19.5
	13-18 yrs	1,755	6.0
	19-24 yrs	2,421	8.2
	25-34 yrs	4,784	16.2
	35-44 yrs	5,761	19.5
	45-54 yrs	3,798	12.9
	55-64 yrs	2,339	7.9
	65-74 yrs	960	3.3
	75-84 yrs	205	0.7
	85+ yrs	92	0.3
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 49, 2021

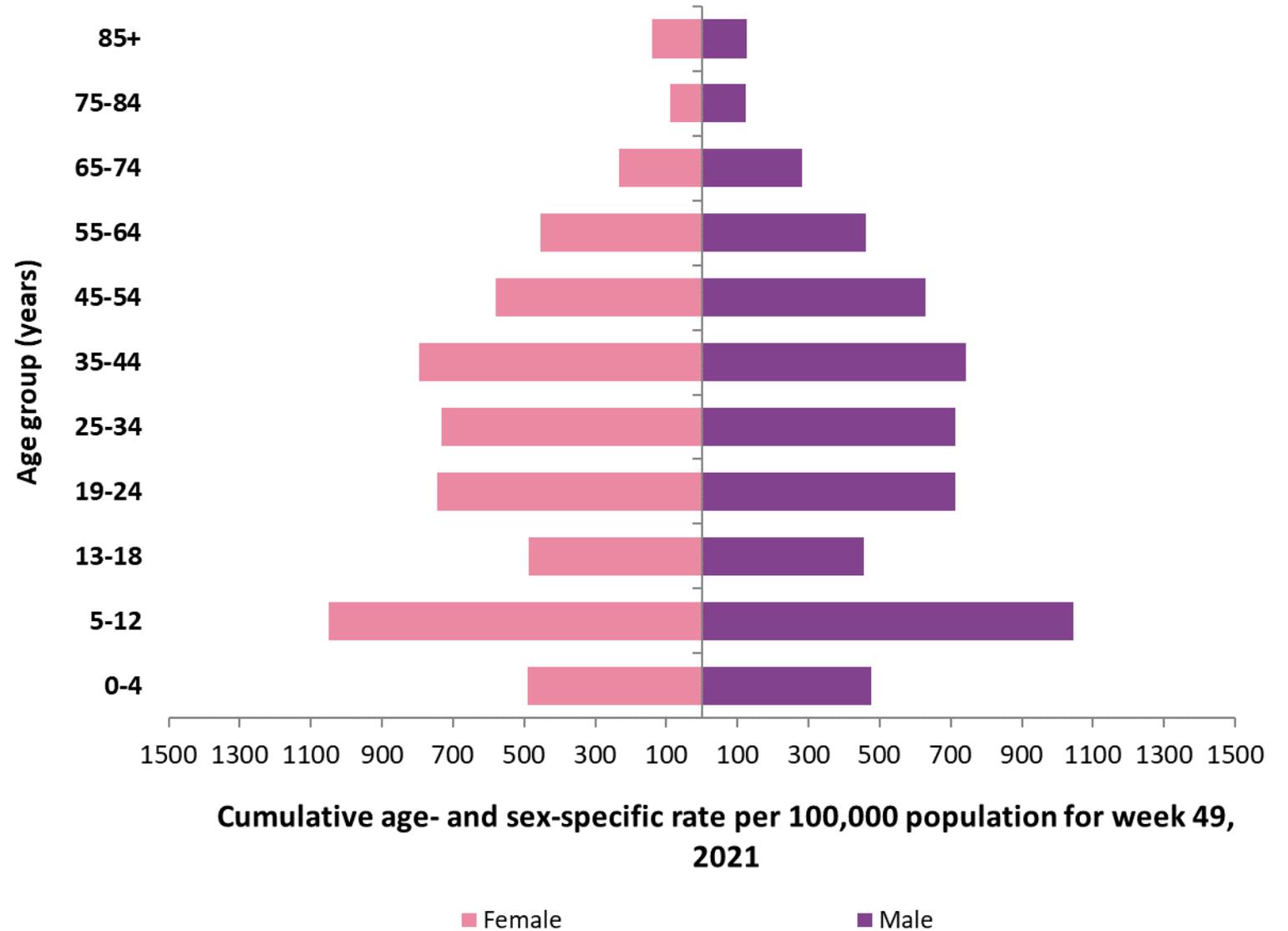
(excluding 82 cases for whom age is unknown, 349 cases for whom sex is unknown and one case for whom both are unknown)



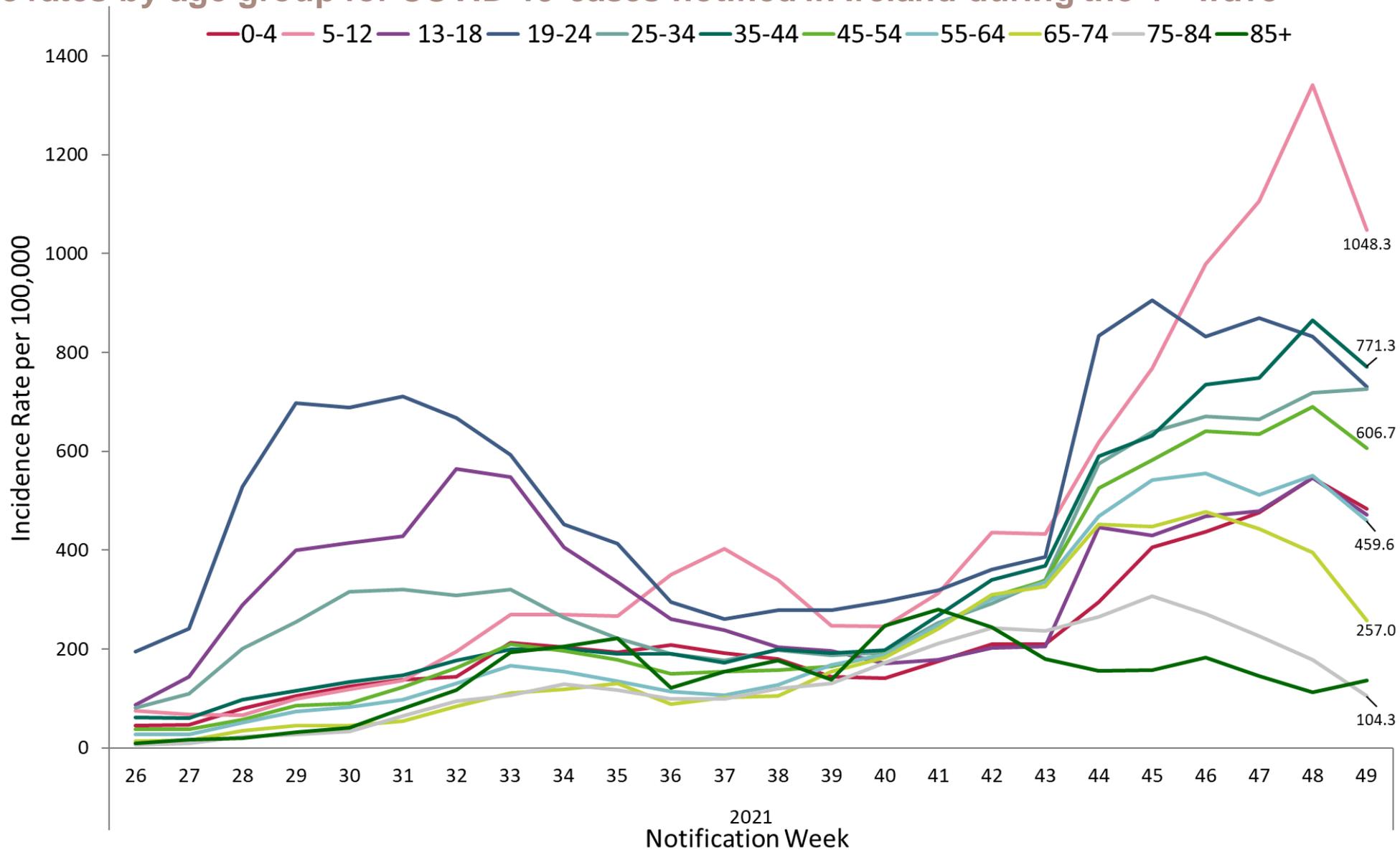
# Age and sex pyramid for COVID-19 cases notified in Ireland for the latest epidemiological week

**Figure 3b:** Cumulative age and sex-specific incidence rates of confirmed COVID-19 cases per 100,000 population notified in Ireland during week 49, 2021

(excluding 2 cases for whom age is unknown and 63 cases for whom sex is unknown)

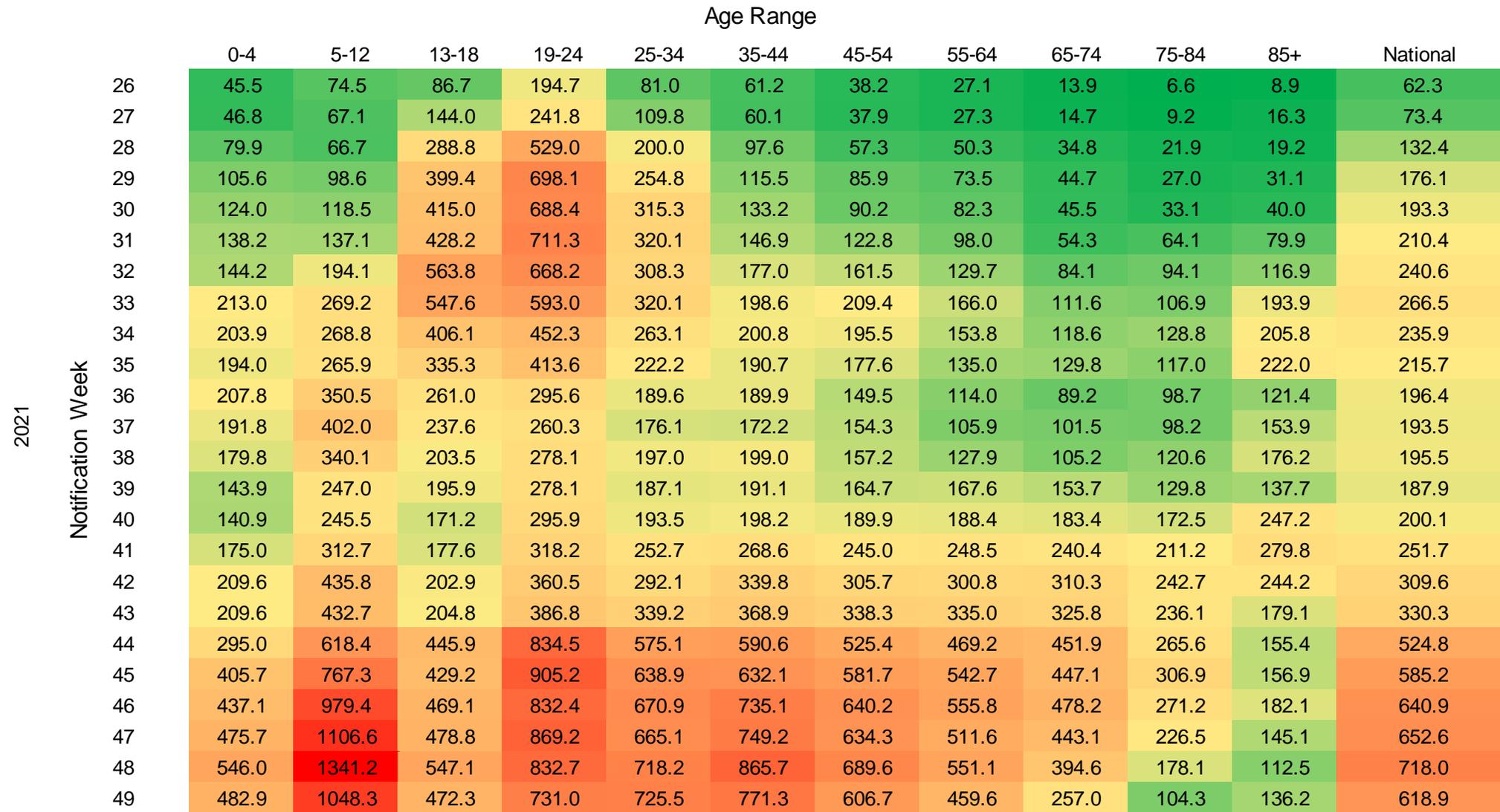


# Incidence rates by age group for COVID-19 cases notified in Ireland during the 4<sup>th</sup> wave



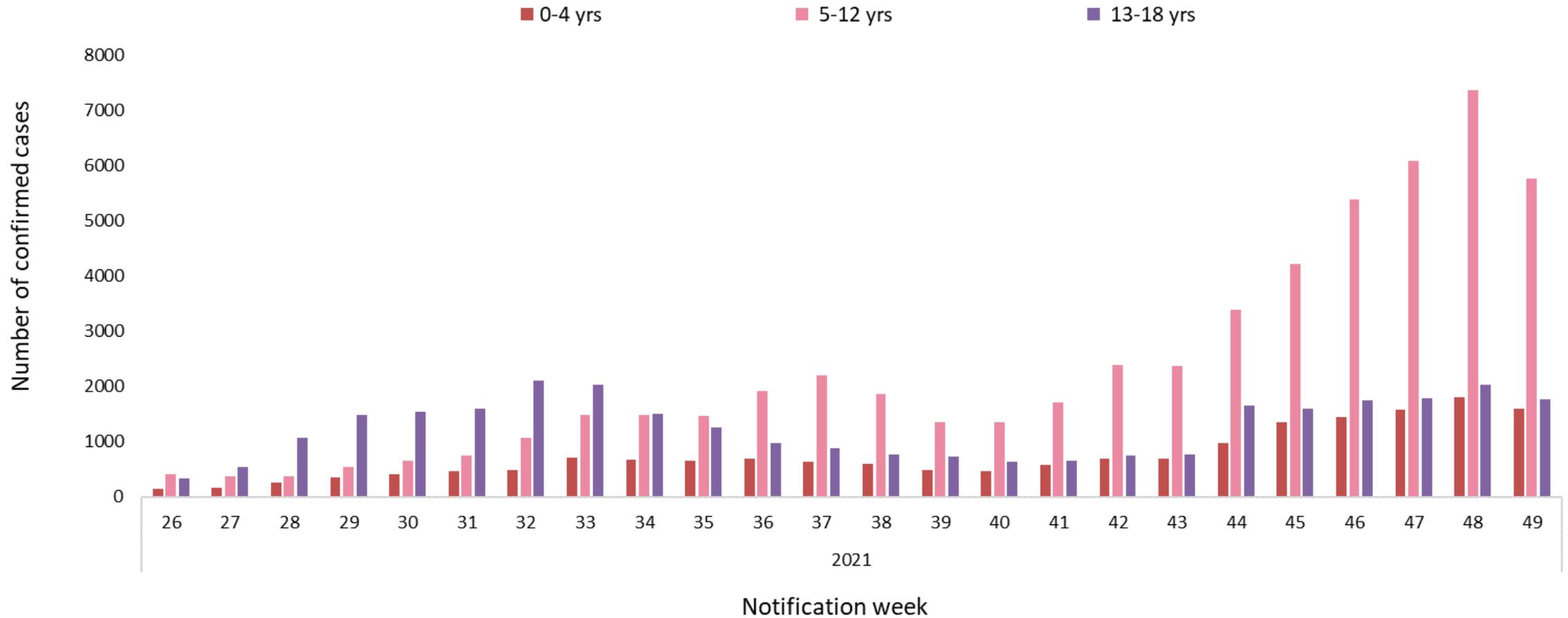
**Figure 4:** Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4<sup>th</sup> wave from week 26, 2021 to week 49, 2021

# Incidence by age groups for COVID-19 cases notified in Ireland during the 4<sup>th</sup> wave



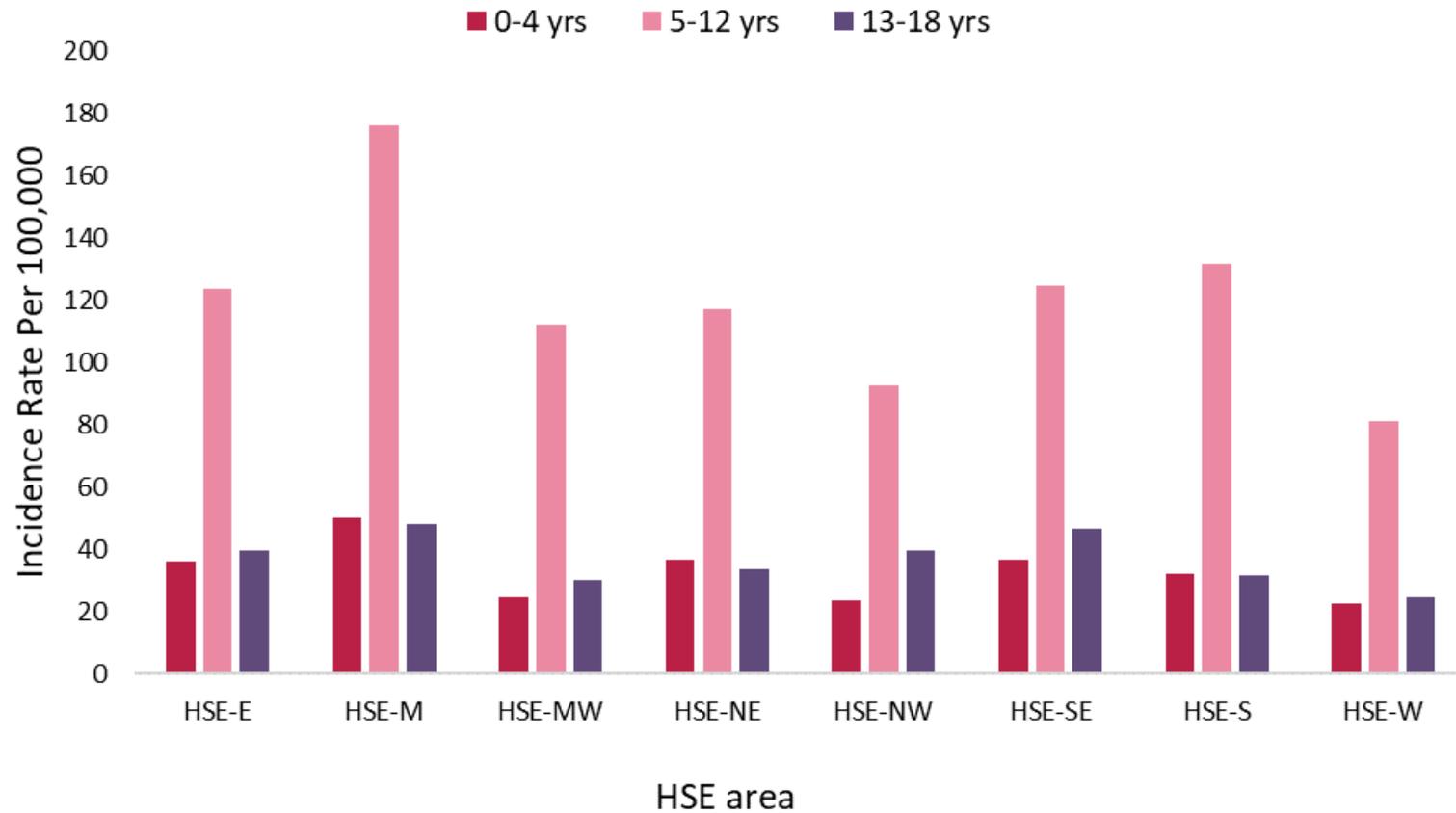
**Figure 5:** Heat map of weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the 4<sup>th</sup> wave between week 26, 2021 and week 49, 2021

# 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 4<sup>th</sup> wave between week 26, 2021 and week 49, 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 49, 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 49, 2021

County	Cases		M:F ratio	Median age	Incidence Rate per 100,000
	N	%		(years)	
Westmeath	791	2.7	0.9	30	891.1
Carlow	507	1.7	0.9	32	890.5
Laois	660	2.2	1.0	26	779.2
Dublin	10007	34.0	1.0	32	742.7
Kildare	1558	5.3	1.0	33	700.2
Waterford	809	2.7	0.9	31	696.4
Kilkenny	679	2.3	1.0	33	684.3
Cork	3424	11.6	1.1	31	630.7
Clare	744	2.5	0.9	28	626.2
Tipperary	996	3.4	1.1	29	624.2
Louth	785	2.7	1.0	31	609.1
Offaly	458	1.6	1.1	29	587.5
Meath	1111	3.8	1.0	32	569.6
Monaghan	308	1.0	1.3	31.5	501.7
Wicklow	711	2.4	1.1	32	499.2
Kerry	736	2.5	1.1	35	498.3
Wexford	744	2.5	0.8	33	496.9
Galway	1259	4.3	1.1	30	487.9
Donegal	774	2.6	0.9	30	486.2
Longford	195	0.7	1.0	30	477.1
Leitrim	148	0.5	0.9	34	461.9
Cavan	349	1.2	0.9	31	458.1
Sligo	266	0.9	0.8	30	405.9
Limerick	772	2.6	1.0	29	396.1
Mayo	455	1.5	0.9	31	348.6
Roscommon	224	0.8	1.0	32	347.1

# Incidence rates by county for COVID-19 cases notified in Ireland during the 4<sup>th</sup> 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	89.5	29.1	33.9	51.2	23.2	57.9	18.7	81.6	34.3	66.0	37.5	60.0	31.0	42.3	91.4	76.3	21.9	104.2	72.1	28.7	35.1	62.3
	27	49.2	51.2	38.7	29.3	212.3	96.1	50.8	63.0	79.1	40.3	42.5	34.3	121.6	29.4	94.7	76.6	72.3	58.6	55.2	85.2	125.1	23.2	36.2	66.5	48.8	43.5	73.4
	28	131.7	114.2	70.7	75.5	392.0	166.0	129.8	94.1	135.7	48.4	129.9	93.6	125.7	46.5	296.4	117.2	129.2	107.5	115.4	128.6	91.6	48.3	57.7	90.1	56.1	118.7	132.4
	29	202.0	152.3	70.7	118.4	533.3	191.5	259.2	124.6	165.4	69.5	278.6	246.5	140.6	127.2	249.8	196.2	160.0	236.2	114.2	170.4	145.0	99.7	80.9	118.3	90.2	171.3	176.1
	30	130.0	179.8	105.2	120.5	378.2	220.3	283.7	199.7	137.1	99.8	178.3	234.1	190.9	124.8	377.9	301.1	178.9	252.5	94.9	232.4	212.1	127.9	105.0	143.1	92.8	157.3	193.3
	31	172.1	233.7	143.9	163.0	321.0	238.7	303.4	205.1	152.4	105.8	181.8	159.2	179.1	181.0	269.2	314.2	189.7	351.9	170.6	292.8	175.5	129.1	125.7	149.8	173.0	193.8	210.4
	32	205.5	467.3	137.2	149.2	578.5	247.6	295.7	203.1	202.7	145.1	194.8	190.4	189.8	156.6	244.4	315.7	214.3	650.0	201.4	444.7	285.3	168.0	171.3	287.3	187.0	181.1	240.6
	33	226.6	740.4	155.7	191.0	598.6	253.2	256.1	286.4	204.5	135.0	230.2	215.3	296.6	208.0	373.2	272.8	240.5	829.2	202.7	379.6	196.8	296.5	218.6	252.3	167.6	183.3	266.5
	34	175.6	504.1	131.3	163.2	557.2	214.9	239.9	305.3	181.1	199.5	126.3	330.8	253.0	327.8	236.6	287.3	231.7	775.4	238.6	350.1	273.1	246.9	158.4	210.7	146.3	163.6	235.9
	35	230.1	338.7	194.4	185.3	498.1	207.7	193.8	225.4	151.5	166.3	211.3	405.7	228.8	259.3	262.3	245.2	196.4	495.2	225.8	311.4	172.4	184.9	99.0	167.8	156.3	161.5	215.7
	36	216.0	287.5	149.8	130.6	410.2	223.3	171.7	142.2	171.2	168.3	263.3	230.9	180.1	305.8	240.5	212.2	193.8	478.9	219.3	233.9	148.0	137.3	127.4	152.1	108.9	102.5	196.4
	37	242.4	215.3	140.6	144.2	389.5	211.0	119.7	173.3	196.4	163.3	229.1	143.6	193.9	215.3	323.5	185.4	233.8	430.1	160.3	159.6	135.8	162.3	148.9	201.6	145.6	74.4	193.5
	38	254.7	244.2	109.4	146.4	321.6	234.2	144.5	146.2	247.6	140.1	186.5	227.8	203.7	249.6	242.9	252.9	206.6	296.5	136.0	141.0	151.1	144.8	169.6	187.0	82.8	95.5	195.5
	39	274.0	261.2	186.0	142.2	282.0	200.8	156.6	257.3	163.6	108.8	165.3	218.4	223.7	393.9	160.6	113.4	212.8	255.8	144.9	198.3	174.0	155.4	327.1	143.1	124.2	113.0	187.9
	40	328.5	204.8	161.6	182.5	285.8	195.0	220.5	266.7	168.1	182.4	222.0	174.8	244.7	313.2	208.7	160.9	182.0	259.0	151.4	164.2	152.6	146.7	357.2	164.5	142.3	159.4	200.1
	41	354.8	273.1	291.2	221.2	302.8	236.5	194.5	427.2	229.2	198.5	321.1	312.1	285.3	494.2	292.5	187.7	289.2	268.8	144.9	257.2	221.3	209.3	461.4	272.6	162.3	181.9	251.7
	42	511.1	303.2	367.8	291.6	328.5	280.2	277.8	561.2	255.3	273.1	418.0	330.8	364.3	606.8	343.7	180.8	316.3	259.0	274.5	303.7	221.3	258.8	643.9	341.3	193.7	236.6	309.6
	43	372.4	300.6	374.5	372.5	329.2	294.1	288.3	490.8	294.8	312.4	388.4	493.1	361.7	508.9	400.4	241.4	308.6	236.2	239.9	255.6	242.6	299.0	642.1	306.4	307.9	320.2	330.3
	44	671.0	476.5	448.6	562.8	593.6	518.1	496.8	531.5	417.1	422.2	649.4	811.4	516.7	528.5	662.6	497.3	589.6	407.3	375.8	361.0	456.2	487.0	684.3	566.6	514.3	498.5	524.8
	45	764.1	617.0	542.0	579.5	569.8	594.1	574.3	563.3	541.1	623.8	686.0	805.1	504.4	645.9	884.5	514.9	660.4	373.0	609.3	435.4	622.6	540.9	589.6	802.1	402.1	478.1	585.2
	46	894.0	722.0	605.1	630.9	592.4	684.7	537.1	590.4	602.2	795.1	473.5	577.3	527.5	743.8	751.8	639.0	692.2	549.0	579.8	570.2	547.8	667.5	713.6	878.7	533.7	490.8	640.9
	47	902.8	539.5	574.0	655.2	522.6	759.9	551.0	463.1	658.9	723.6	606.9	514.9	499.7	836.7	762.7	498.1	592.2	461.0	469.5	484.9	505.1	745.8	738.5	900.1	619.1	492.2	652.6
	48	1359.5	543.5	597.6	743.6	550.3	754.4	615.8	595.1	835.0	752.8	792.2	571.1	514.1	721.7	841.8	542.5	752.7	594.6	636.2	655.4	660.7	842.4	751.4	926.0	643.2	709.8	718.0
49	890.5	458.1	626.2	630.7	486.2	742.7	487.9	498.3	700.2	684.3	779.2	461.9	396.1	477.1	609.1	348.6	569.6	501.7	587.5	347.1	405.9	624.2	696.4	891.1	496.9	499.2	618.9	

**Figure 7:** Heat map of weekly incidence rates of confirmed COVID-19 cases per 100,000 population, by county, notified in Ireland for the 4<sup>th</sup> wave between week 26, 2021 and week 49, 2021

Data are still being processed and are not yet available this week.

**Table 4:** Summary of hospitalisations, ICU admissions and deaths by age group and wave.

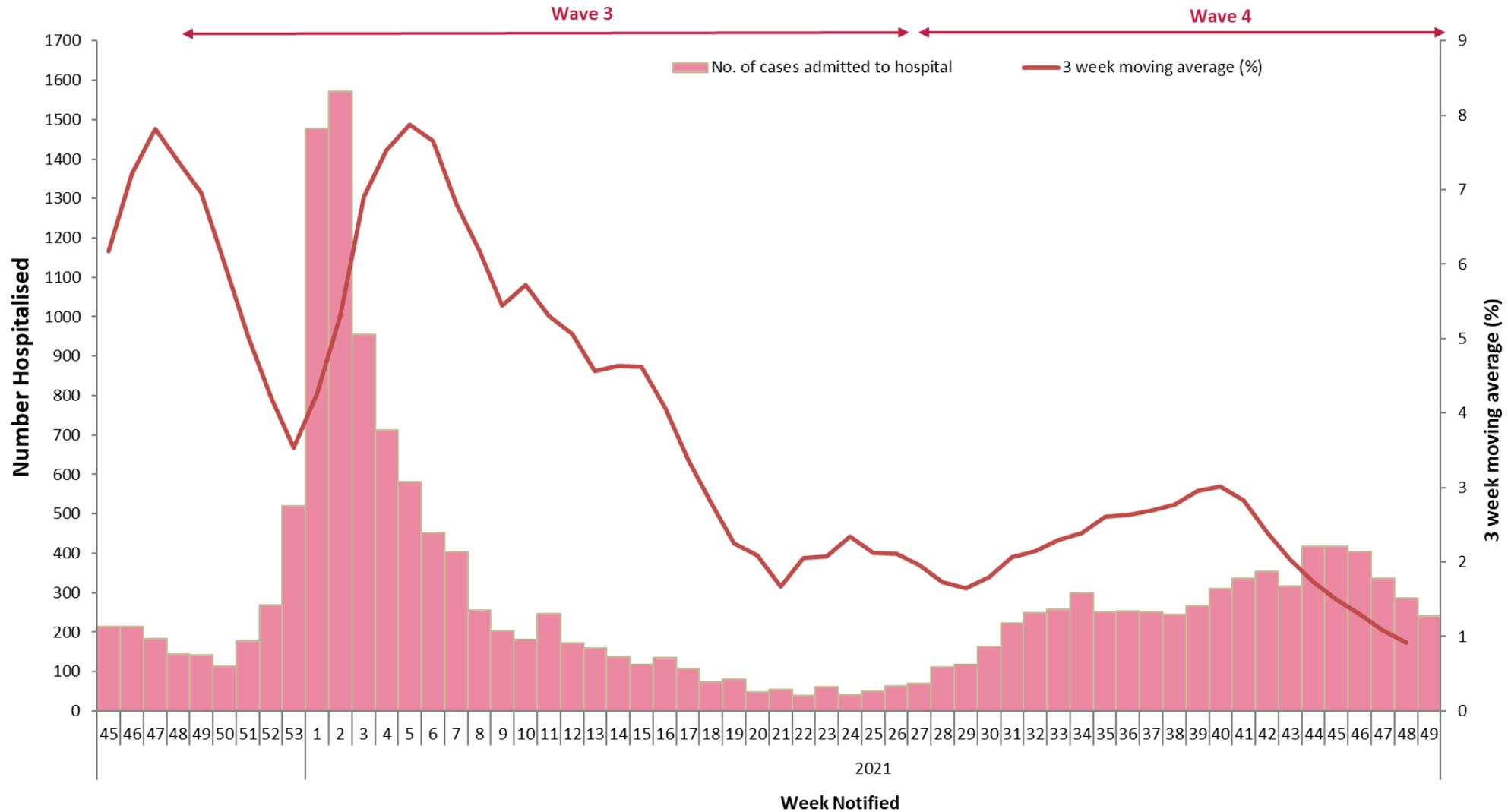
(This does not include 6 hospitalised cases for whom the age is unknown and 1 case who died for whom the age is also unknown)

Age group	Wave	Number of cases	Number of cases hospitalised	% hospitalised	Number of cases admitted to ICU	% admitted to ICU	Number of cases who died*	% deaths
<b>&lt;65 yrs</b>	1	19612	1522	7.8	277	1.4	109	0.6
	2	39954	873	2.2	79	0.2	29	0.1
	3	179385	4612	2.6	570	0.3	273	0.2
	4	326897	3689	1.1	402	0.1	134**	0.04
	<b>Total</b>	<b>565848</b>	<b>10696</b>	<b>1.9</b>	<b>1328</b>	<b>0.2</b>	<b>545</b>	<b>0.1</b>
<b>65+ yrs</b>	1	6524	1803	27.6	161	2.5	1421	21.8
	2	4229	962	22.7	104	2.5	360	8.5
	3	20928	5067	24.2	401	1.9	2603	12.4
	4	26006	2553	9.8	243	0.9	616**	2.4
	<b>Total</b>	<b>57687</b>	<b>10385</b>	<b>18.0</b>	<b>909</b>	<b>1.6</b>	<b>5000</b>	<b>8.7</b>

\* Deaths in confirmed cases only

\*\*Hospitalisations, ICU admissions, and deaths may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR.

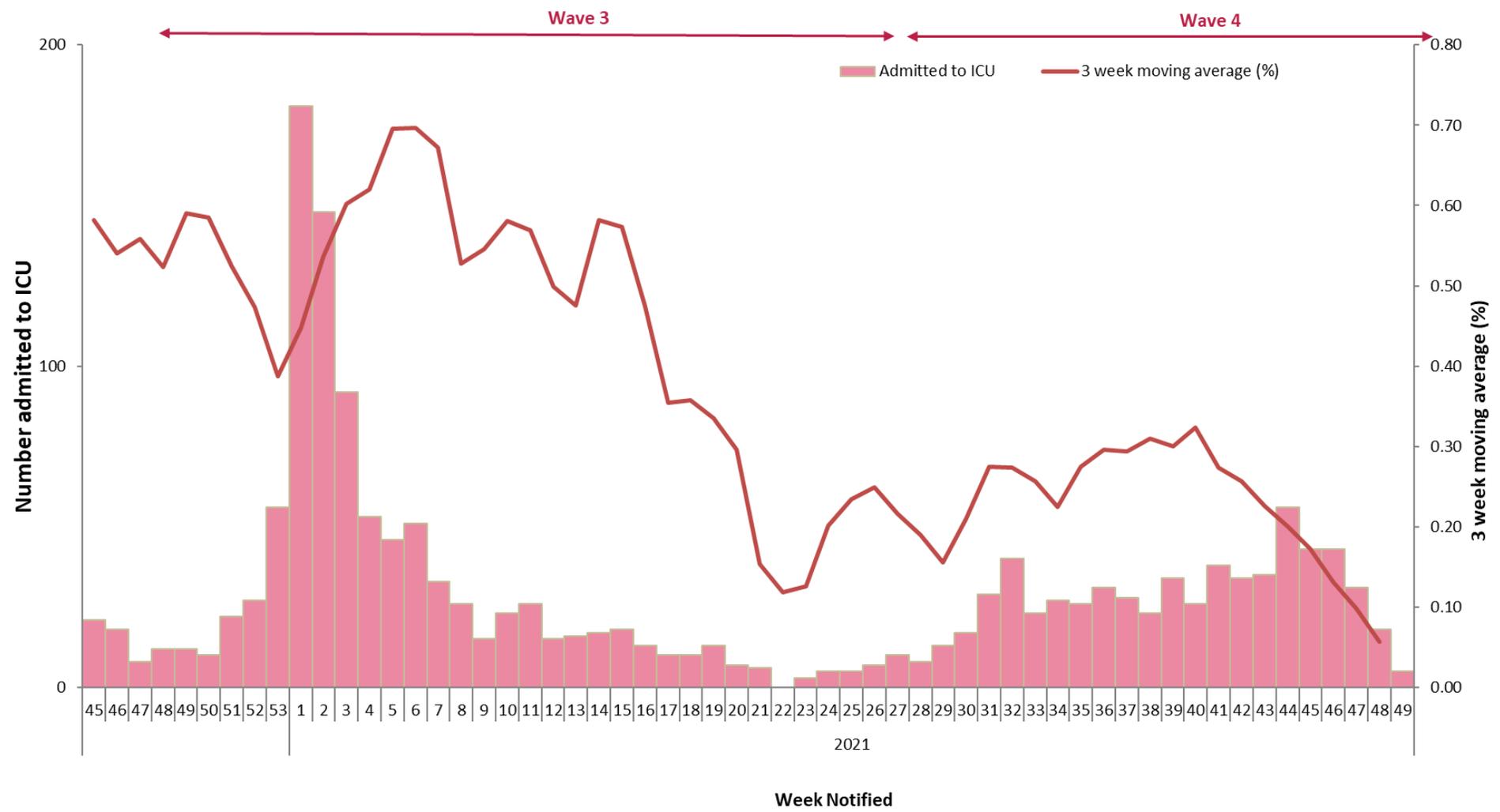
# Hospitalisations among COVID-19 cases during waves 3 and 4



**Figure 9:** Number of hospitalised COVID-19 cases and 3 week moving average (%) of overall cases hospitalised in Ireland between week 45, 2020 and week 49, 2021 based on week of notification

\*Hospitalisations may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR.

# ICU admissions among COVID-19 cases during waves 3 and 4



**Figure 10:** Number of ICU admissions in COVID-19 cases and 3 week moving average (%) of ICU admissions of overall case numbers in Ireland between week 45, 2020 and week 49, 2021 based on week of notification

\*ICU admissions may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR.

## Deaths among COVID-19 cases

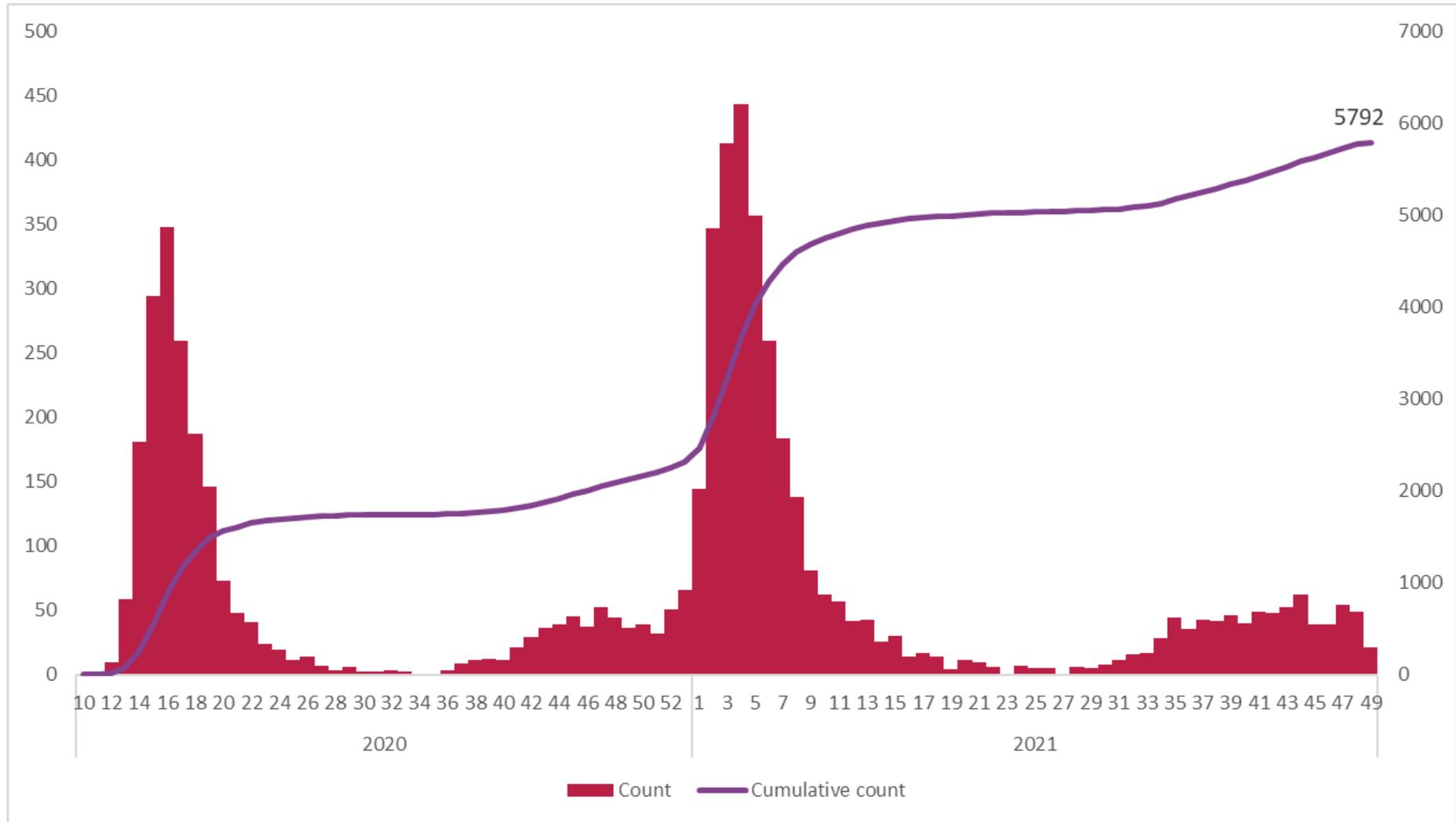
	Number	Percent
Total number of deaths	5,820	
confirmed	5,546	95.3
probable	98	1.7
possible	176	3.0
Number hospitalised who died	3,277	56.3
admitted to ICU who died	707	12.1
not admitted to ICU who died	5,113	87.9
Number of imported cases who died	17	0.3
Number of HCWs who died	19	0.3
Number with underlying conditions who died	4,946	85.0
Males who died	3,110	53.4
M:F ratio	1.15	
Median age (years)	82	
Mean age (years)	80	
Age range (years)	14-105	

**Table 5:** Summary of deaths in all COVID-19 cases notified in Ireland between week 10, 2020 and week 49, 2021

Age group (years)	Female	Male	Total	Percent
<45 yrs	31	39	70	1
45-54 yrs	43	88	131	2
55-64 yrs	127	230	357	6
65-74 yrs	350	611	961	17
75-84 yrs	826	1118	1944	33
85+ yrs	1330	1024	2354	40
Unknown	3	0	3	0
<b>Total</b>	<b>2710</b>	<b>3110</b>	<b>5820</b>	<b>100.0</b>
<b>Percent</b>	<b>46.6</b>	<b>53.4</b>		

**Table 6:** Number of deaths in all COVID-19 cases by sex and age group notified in Ireland between week 10, 2020 and week 49, 2021

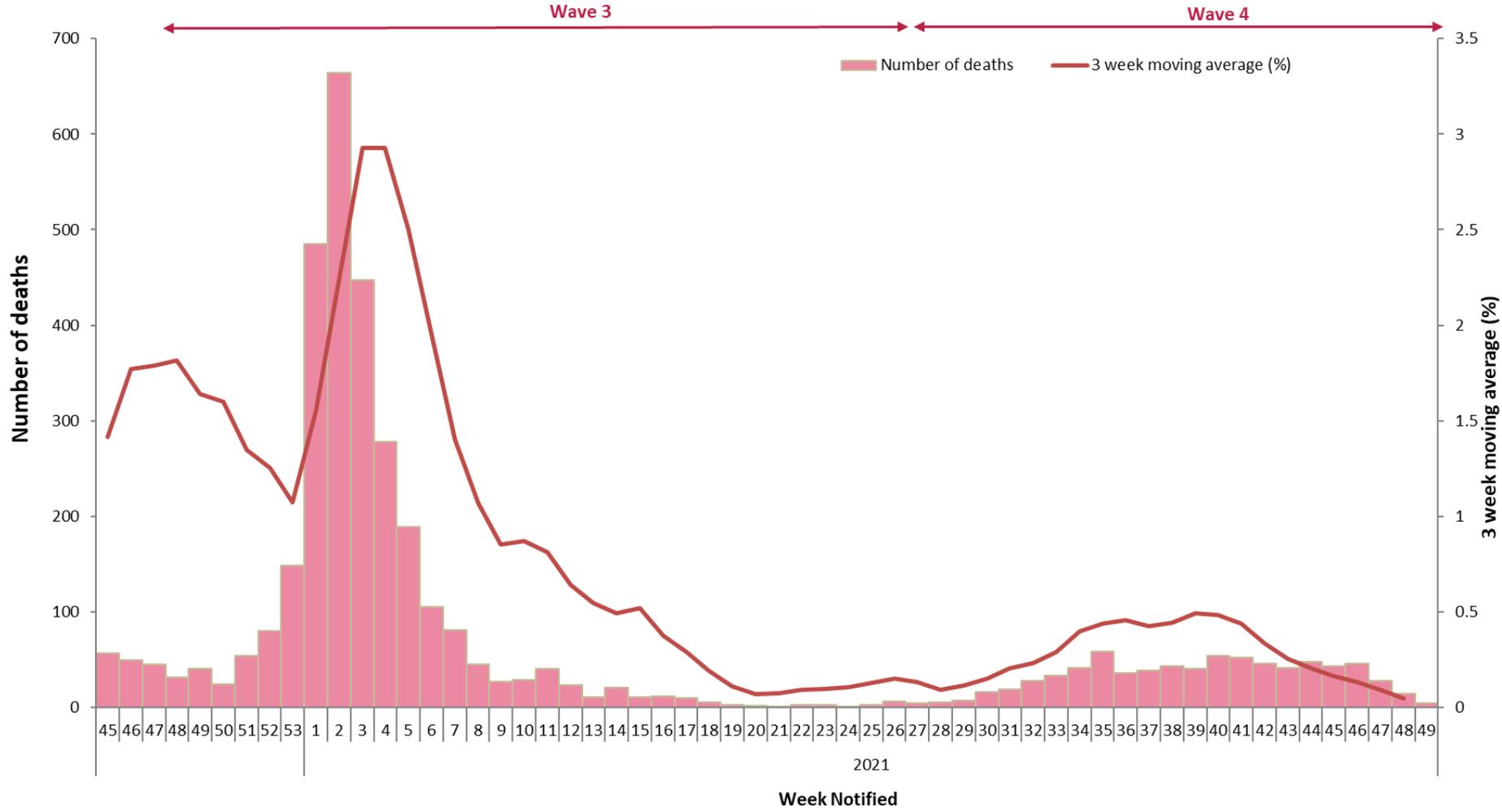
# Deaths among COVID-19 cases



**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 11/12/2021. Date of death reported for 5,792 of deaths.

\*Deaths may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR.

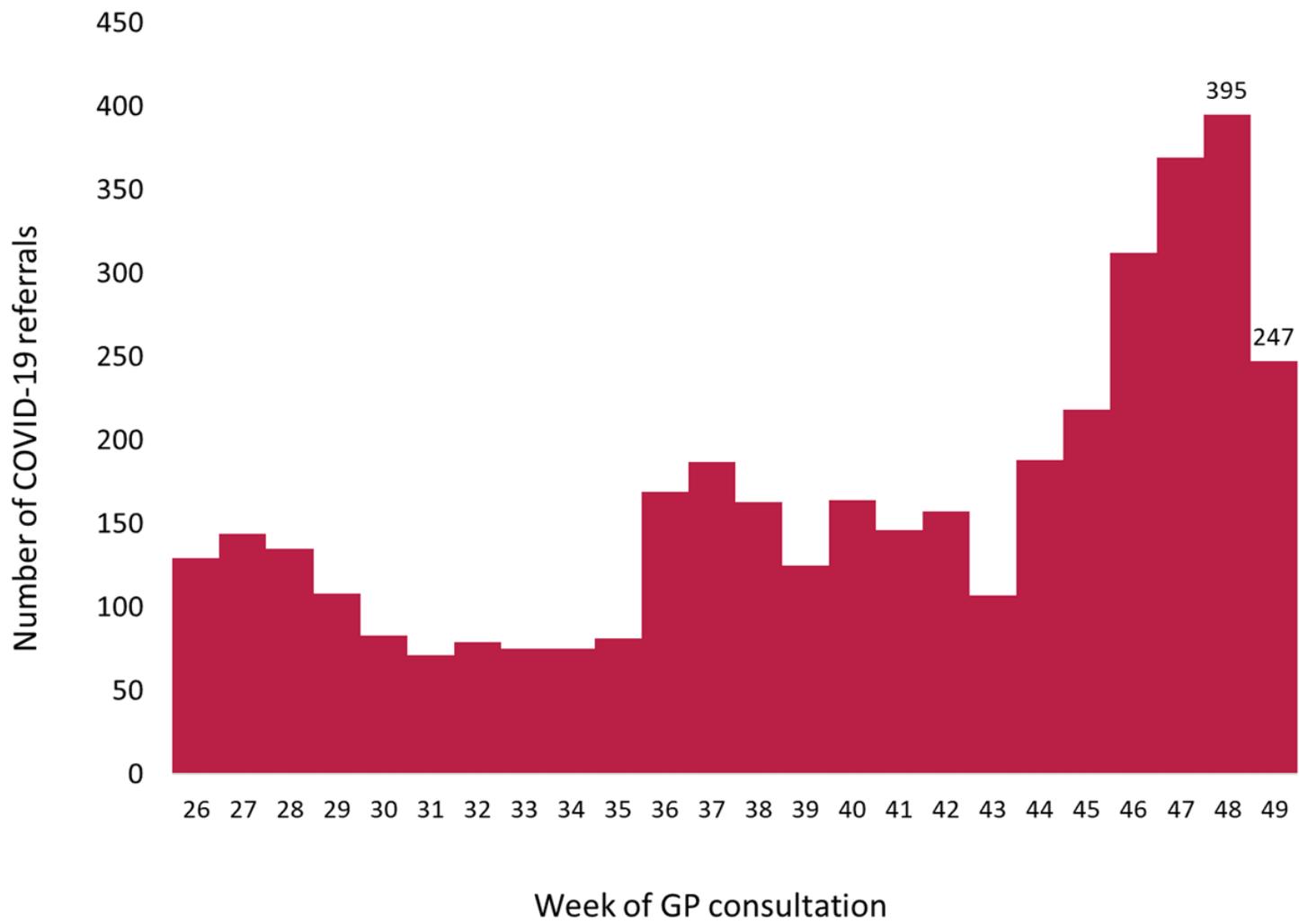
# Deaths among COVID-19 cases during waves 3 and 4



**Figure 12:** Number of deaths in confirmed COVID-19 cases and 3 week moving average (%) of deaths of overall case numbers in Ireland between week 45, 2020 and week 49, 2021 based on week of notification\*

\*Deaths may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR.

# Sentinel GP referrals for COVID-19 testing

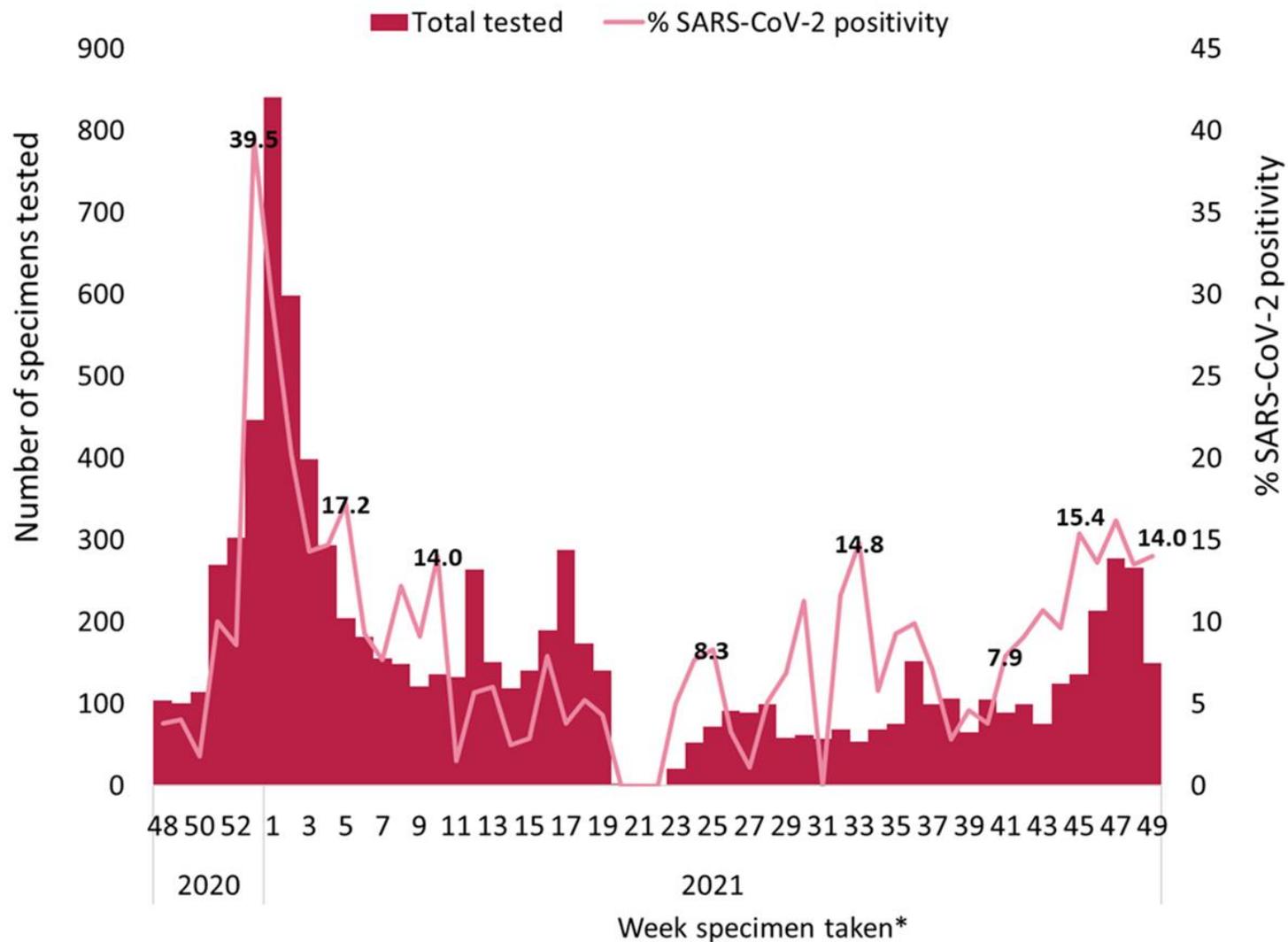


**Figure 13:** Number of sentinel GP COVID-19 referrals by week of consultation, week 26, 2021 – week 49, 2021

*\*Recent increases in sentinel GP COVID-19 referrals are reflecting community COVID-19 incidence and changes to health seeking behaviour resulting from high demands on online COVID-19 booking systems for community testing centres.*



# Sentinel GP referrals for COVID-19 testing

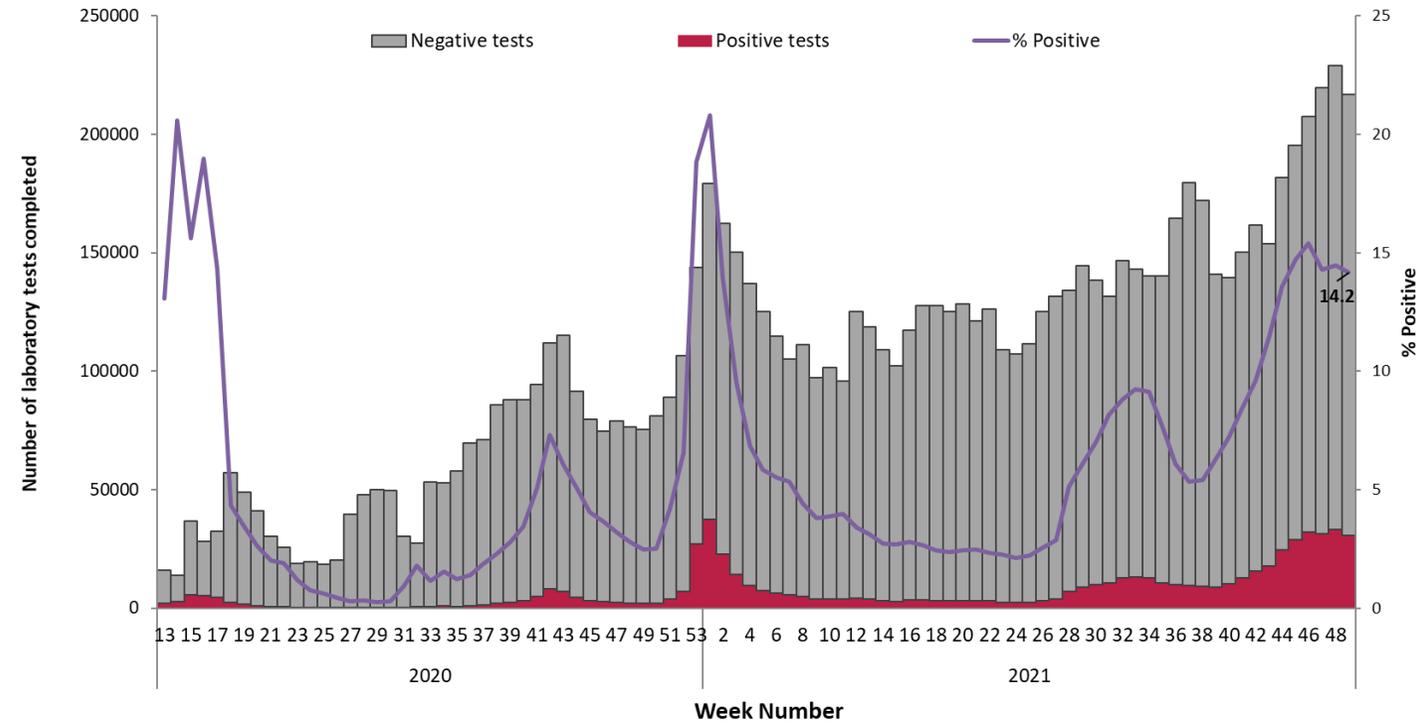
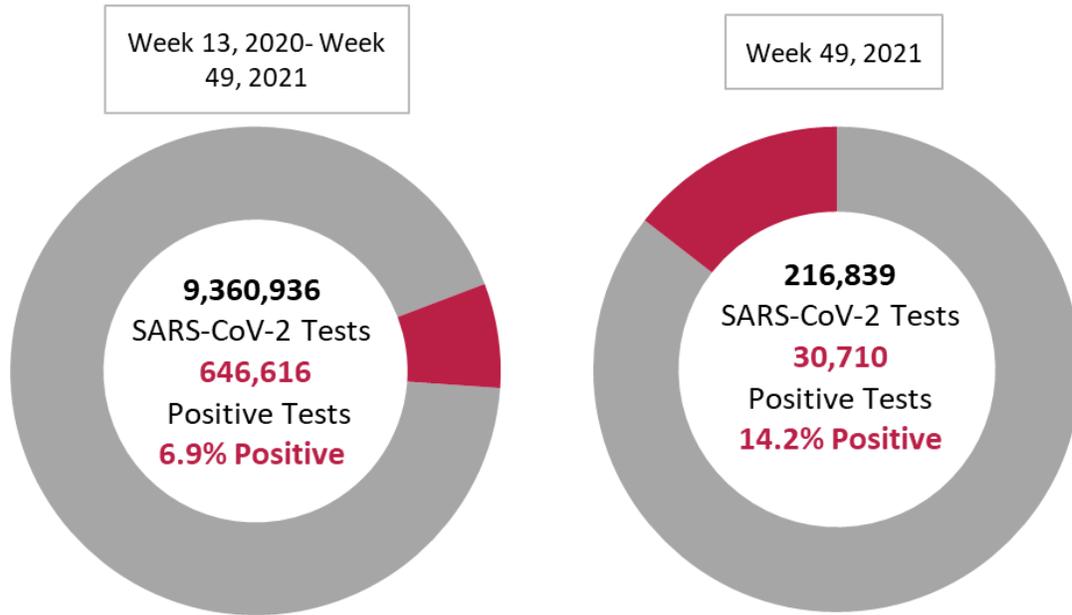


**Figure 14:** % SARS-CoV-2 positivity data from sentinel GP COVID-19 referrals tested by NVRL/ENFER\*, 2020-2021.

\*Including laboratories under the clinical governance of the NVRL

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





**Figure 15a:** Number of SARS-CoV-2 tests and positive tests\* in Ireland between week 13, 2020 and week 49, 2021

**Figure 15b:** Number of SARS-CoV-2 negative and positive tests\* completed in Ireland between week 13, 2020 and week 49, 2021

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

**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
- [Epidemiology of COVID-19 in Ireland](#) – cases aged 0-18 years

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## 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  $\geq 85$  years.