



# Epidemiology of COVID-19 in Ireland

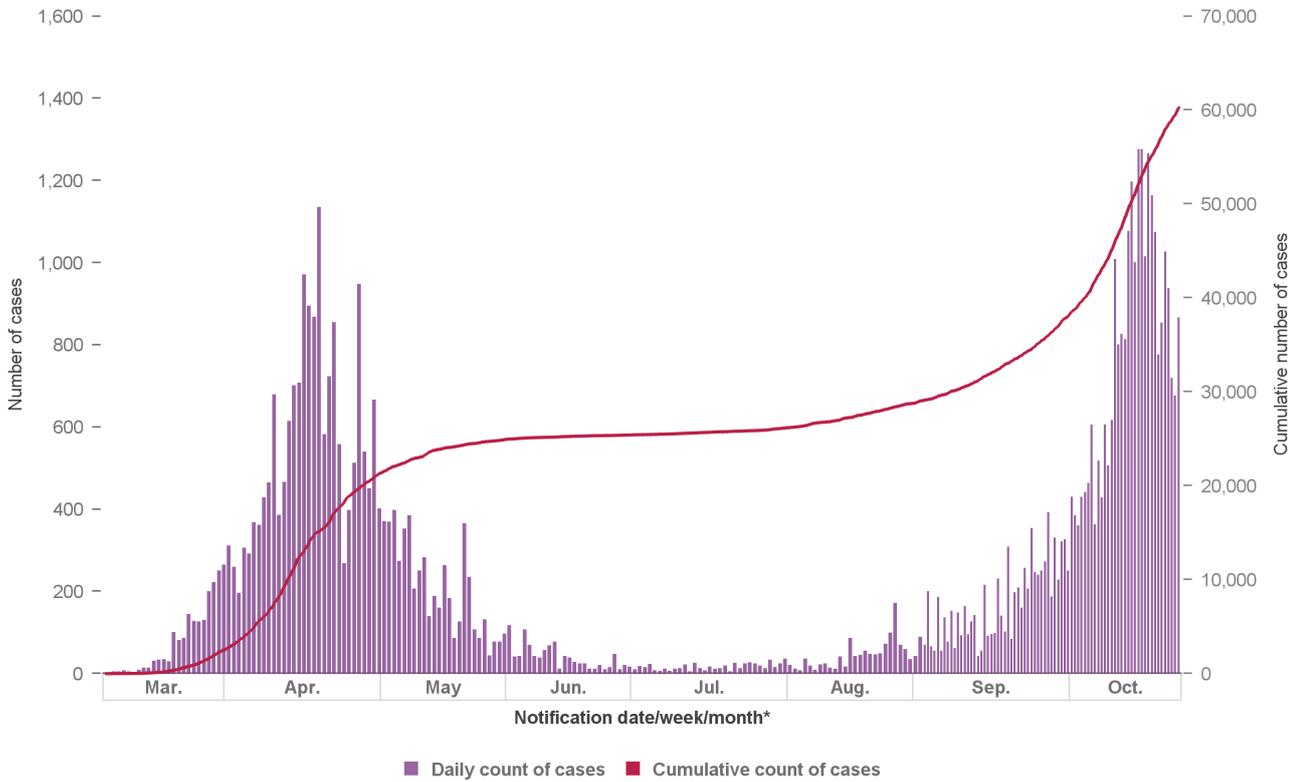
Report prepared by HPSC on 30/10/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 28/10/2020

	Number	Percent
Total number of confirmed cases	60,287	
National cumulative incidence of confirmed cases per 100,000 population	1,266.04	
Total number of cases hospitalised	4,348	7.21
Total number of cases admitted to ICU	542	0.9
Total number of deaths among confirmed cases	1,649	2.74
Case fatality ratio (CFR, %)	2.74	
National cumulative incidence of confirmed deaths per 100,000 population	34.63	
Total number of outbreaks/clusters	6,494	
Total number of cases associated with clusters	28,924	47.98
Total number of imported cases*	623	1.03
Number of cases in healthcare workers*	10,440	17.32
Males	28,256	46.87
Females	31,998	53.08
M:F ratio	0.88	
Median age (years)	39	
Mean age (years)	42	
Age range (years)	0 - 106	

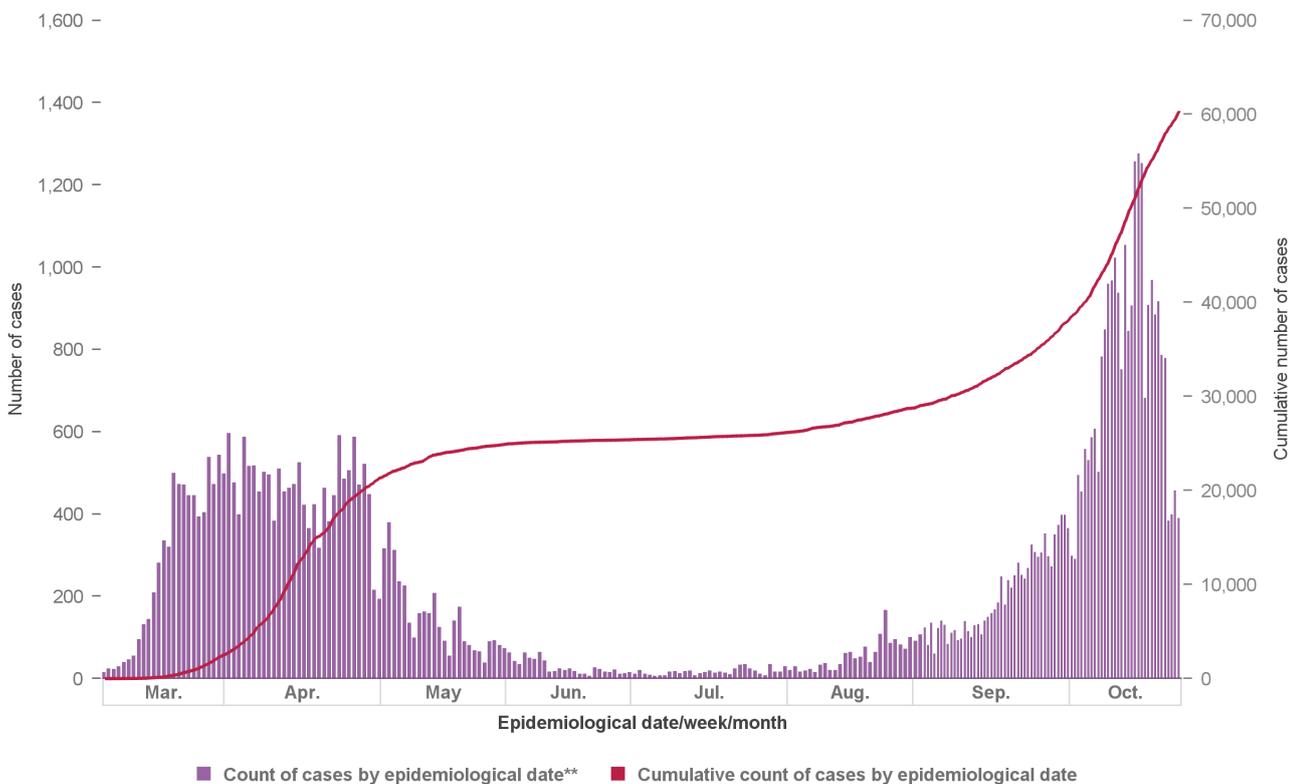
\*Data are incomplete for these variables

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:15 on 30/10/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.



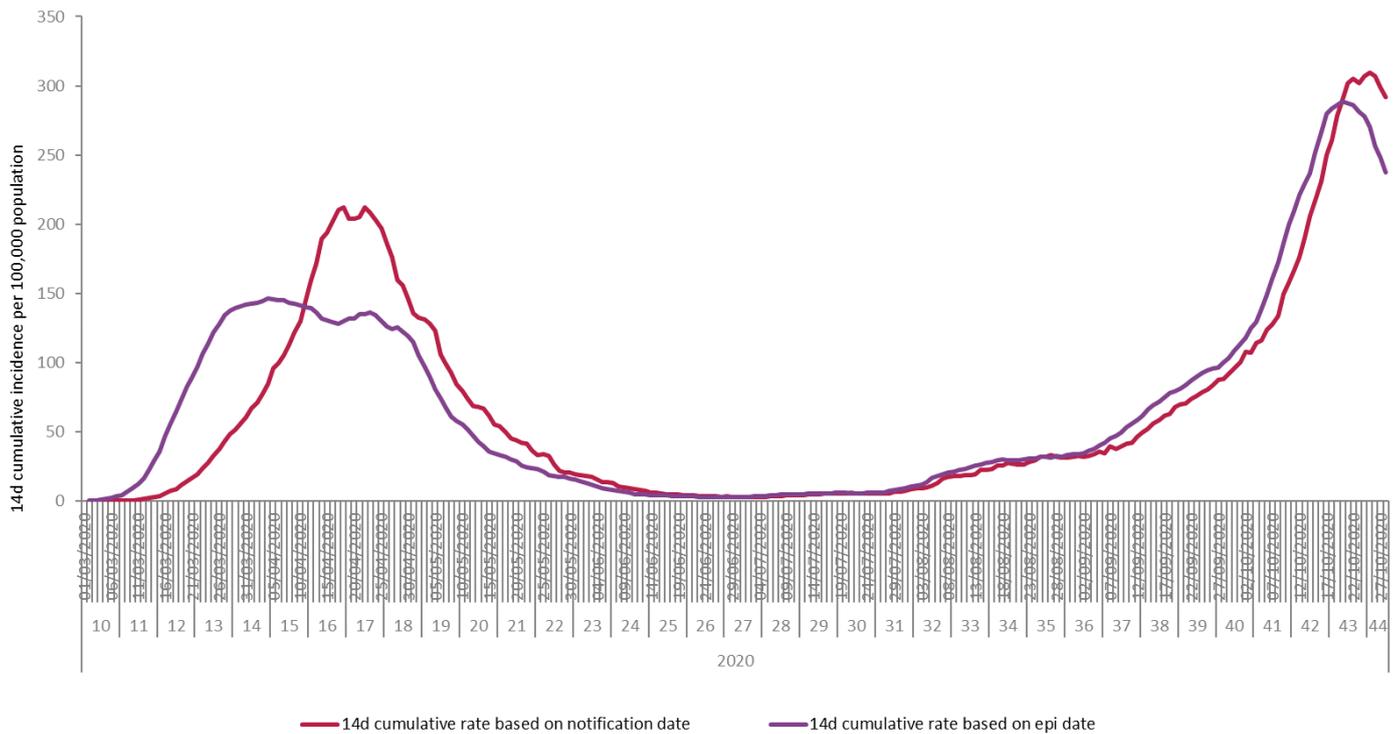
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 28/10/2020**

\*Between 05/04/2020 – 19/04/2020, the daily number of COVID-19 events notified in Ireland is inflated due to batch reporting of cases with specimen dates between from 19/03/2020 – 01/04/2020 in addition to real-time reporting of cases with contemporaneous specimen dates



**Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date\*\* to midnight 28/10/2020**

\*\*Epidemiological date is derived from epidemiological date, which is the earliest of onset date, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date, event creation/notification date.



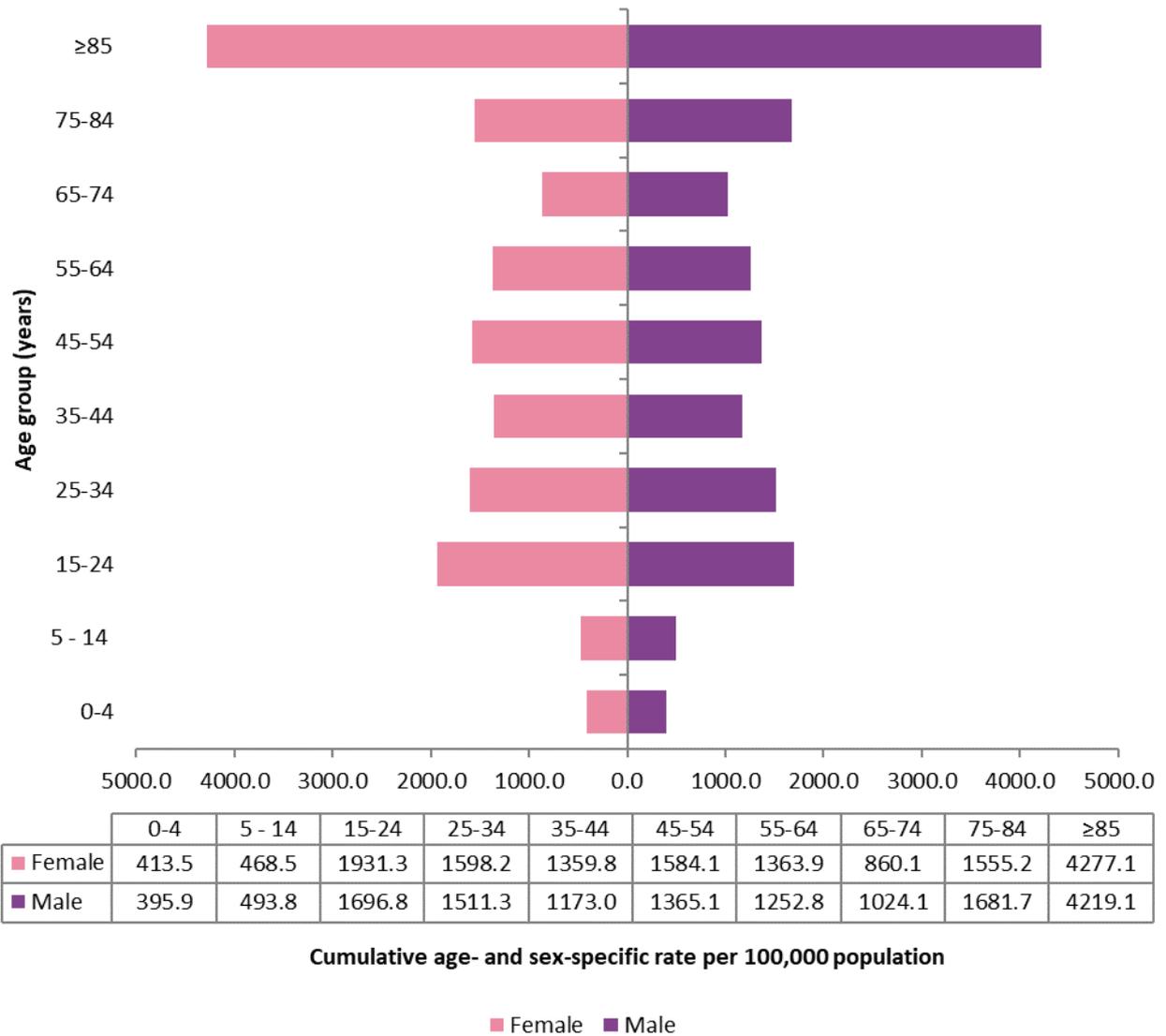
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 28/10/2020**

\* Between 05/04/2020 – 19/04/2020, the daily number of COVID-19 events notified in Ireland is inflated due to batch reporting of cases with specimen dates between from 19/03/2020 – 01/04/2020 in addition to real-time reporting of cases with contemporaneous specimen dates

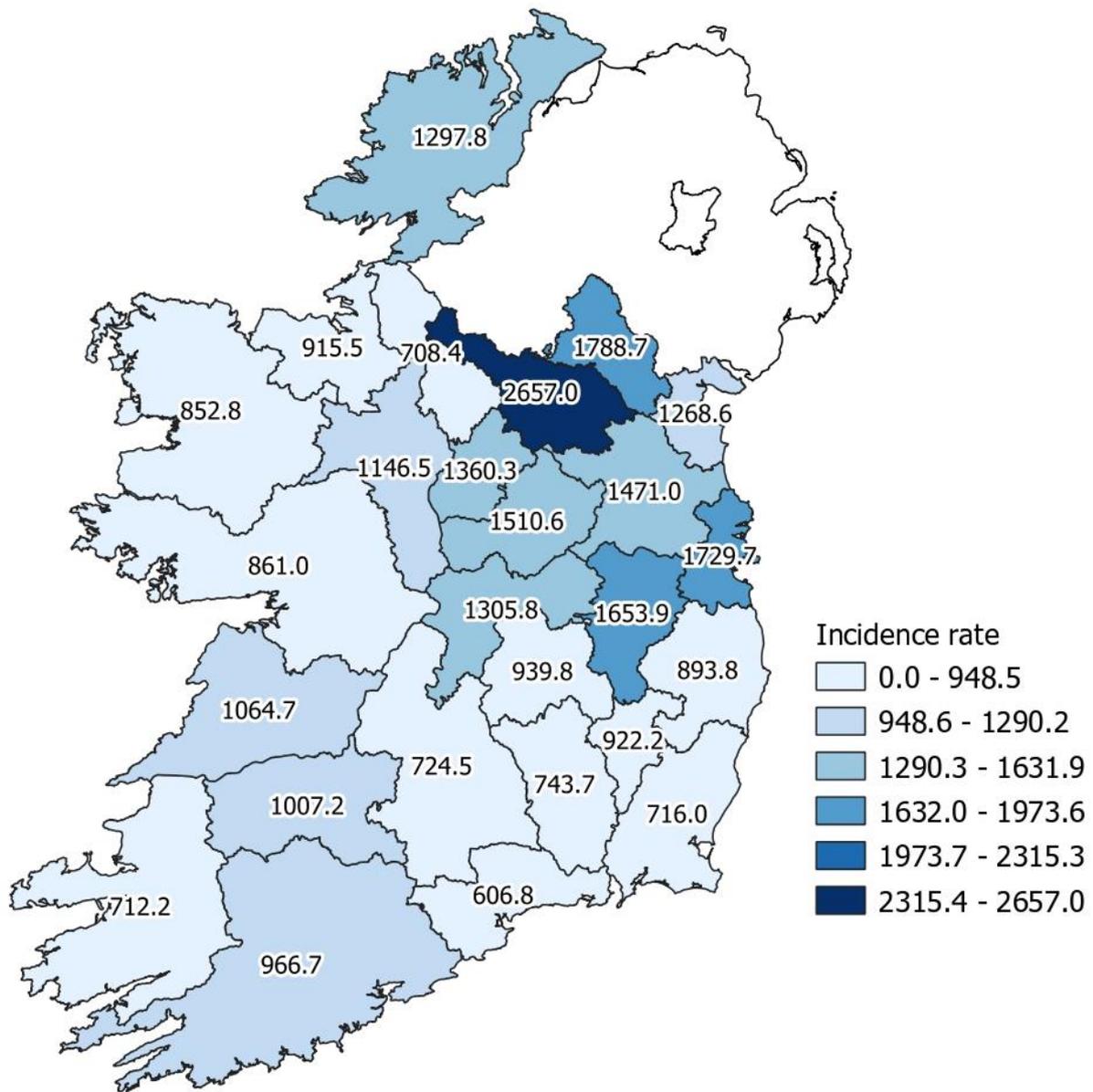
\*\*Epidemiological date is derived from epidemiological date, which is the earliest of onset date, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date, event creation/notification date.

**Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland up to midnight on 28/10/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>60,287</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.88	
	Male	28,256	46.87
	Female	31,998	53.08
	Unknown	33	0.05
<b>Age</b>	Median age (years)	39	
	Mean age (years)	42	
	Age range (years)	0 - 106	
	0-4 yrs	1,343	2.23
	5-14 yrs	3,254	5.4
	15-24 yrs	10,450	17.33
	25-34 yrs	10,269	17.03
	35-44 yrs	9,476	15.72
	45-54 yrs	9,241	15.33
	55-64 yrs	6,663	11.05
	65-74 yrs	3,515	5.83
	75-84 yrs	3,169	5.26
	85+ yrs	2,877	4.77
	Unknown	30	0.05



**Figure 3: Cumulative age- and sex-specific incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 28/10/2020 (excluding 29 cases for whom age is unknown and 32 cases for whom sex is unknown and 1 case for whom both are unknown)**



**Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 28/10/2020**

*Please do not directly compare county shades to previous maps. The numbers of cases by county are increasing and as such the categories listed will broaden which may result in changes to the map shading.*

**Table 2: Number of confirmed COVID-19 cases by county notified to midnight 28/10/2020**

<b>County Name</b>	<b>Number of cases</b>	<b>Percent</b>
Carlow	525	0.87
Cavan	2,024	3.36
Clare	1,265	2.1
Cork	5,248	8.71
Donegal	2,066	3.43
Dublin	23,305	38.66
Galway	2,222	3.69
Kerry	1,052	1.74
Kildare	3,680	6.1
Kilkenny	738	1.22
Laois	796	1.32
Leitrim	227	0.38
Limerick	1,963	3.26
Longford	556	0.92
Louth	1,635	2.71
Mayo	1,113	1.85
Meath	2,869	4.76
Monaghan	1,098	1.82
Offaly	1,018	1.69
Roscommon	740	1.23
Sligo	600	1
Tipperary	1,156	1.92
Waterford	705	1.17
Westmeath	1,341	2.22
Wexford	1,072	1.78
Wicklow	1,273	2.11
<b>Total</b>	<b>60,287</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 28/10/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	18,043	29.93%
Local transmission, incl. possible local transmission	36,562	60.65%
Travel abroad, incl. possible travel abroad	920	1.53%
Unknown	4,762	7.90%
<b>Total</b>	<b>60,287</b>	<b>100.00%</b>

\*See technical note 3 for definition of WHO transmission classification

Cases which were notified more than 2 weeks ago and have not yet been reported as imported or linked to an outbreak are classified as possible community transmission.

**Table 4: Cumulative number of confirmed cases of COVID-19 notified in Ireland by age group, hospitalisation, and ICU admission as of midnight 28/10/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	1343	45	1.03	1	0.18
5-14 yrs	3254	39	0.9	4	0.74
15-24 yrs	10450	131	3.01	6	1.11
25-34 yrs	10269	271	6.23	17	3.14
35-44 yrs	9476	351	8.07	46	8.49
45-54 yrs	9241	568	13.06	100	18.45
55-64 yrs	6663	646	14.86	148	27.31
65-74 yrs	3515	773	17.78	152	28.04
75-84 yrs	3169	940	21.62	61	11.25
85+ yrs	2877	582	13.39	7	1.29
Unknown	30	2	0.05	0	0
<b>Total</b>	<b>60,287</b>	<b>4,348</b>	<b>100</b>	<b>542</b>	<b>100</b>

**Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation, ICU admission and vital status 28/10/2020**

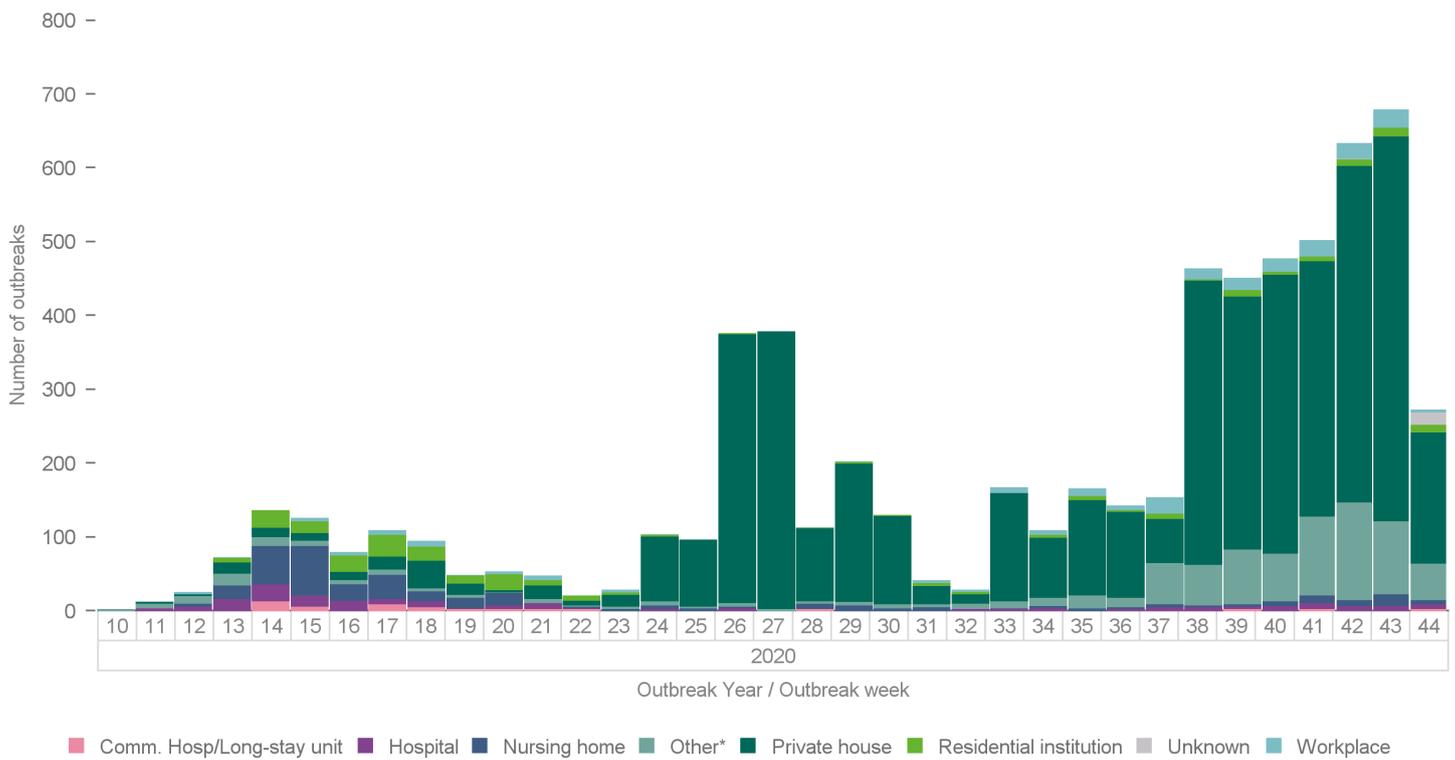
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	1,343	3,254	10,450	10,269	9,476	9,241	6,663	3,515	3,169	2877	30
Cases hospitalised (n)	45	39	131	271	351	568	646	773	940	582	2
Cases hospitalised (%)	3.35	1.20	1.25	2.64	3.70	6.15	9.70	21.99	29.66	20.23	6.67
Cases admitted to ICU (n)	1	4	6	17	46	100	148	152	61	7	0
Cases admitted to ICU (%)	0.07	0.12	0.06	0.17	0.49	1.08	2.22	4.32	1.92	0.24	0
Deaths (n)	0	0	1	7	12	29	78	250	565	707	0
Case fatality ratio (%)	0	0	0.01	0.07	0.13	0.31	1.17	7.11	17.83	24.57	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 28/10/2020**

Outbreak Location	E	M	MW	NE	NW	S	SE	W	HPSC	Total
Private house	2,810	66	162	337	236	348	326	388		<b>4,673</b>
Other*	184	55	136	48	78	164	48	92	2	<b>807</b>
Nursing home	162	15	20	49	8	19	19	43		<b>335</b>
Residential institution	135	14	13	32	10	26	14	8		<b>252</b>
Workplace	77	15	19	39	26	18	17	19		<b>230</b>
Hospital	82	7	6	19	4	16	5	7		<b>146</b>
Comm. Hosp/Long-stay unit	6	4	2		4	7	5	5		<b>33</b>
Unknown	17				1					<b>18</b>
<b>Total</b>	<b>3,473</b>	<b>176</b>	<b>358</b>	<b>524</b>	<b>367</b>	<b>598</b>	<b>434</b>	<b>562</b>	<b>2</b>	<b>6,494</b>

\*Other outbreak location includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.



**Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 28/10/2020**

\*Other outbreak location includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.

Note: 5,658 COVID-19 outbreaks were reported on CIDR between week 24 and week 44 2020 to date (9th June to 28th October). Of these, 4,468 were family outbreaks. Based on the earliest date associated with each outbreak, a large proportion of these family outbreaks occurred earlier and were reported between weeks 24 and 44 as a result of data validation: 1 occurred in February, 636 in March, 474 in April, 94 in May, 126 in June, 127 in July, 533 in August, 1,495 in September and 982 in October to date.

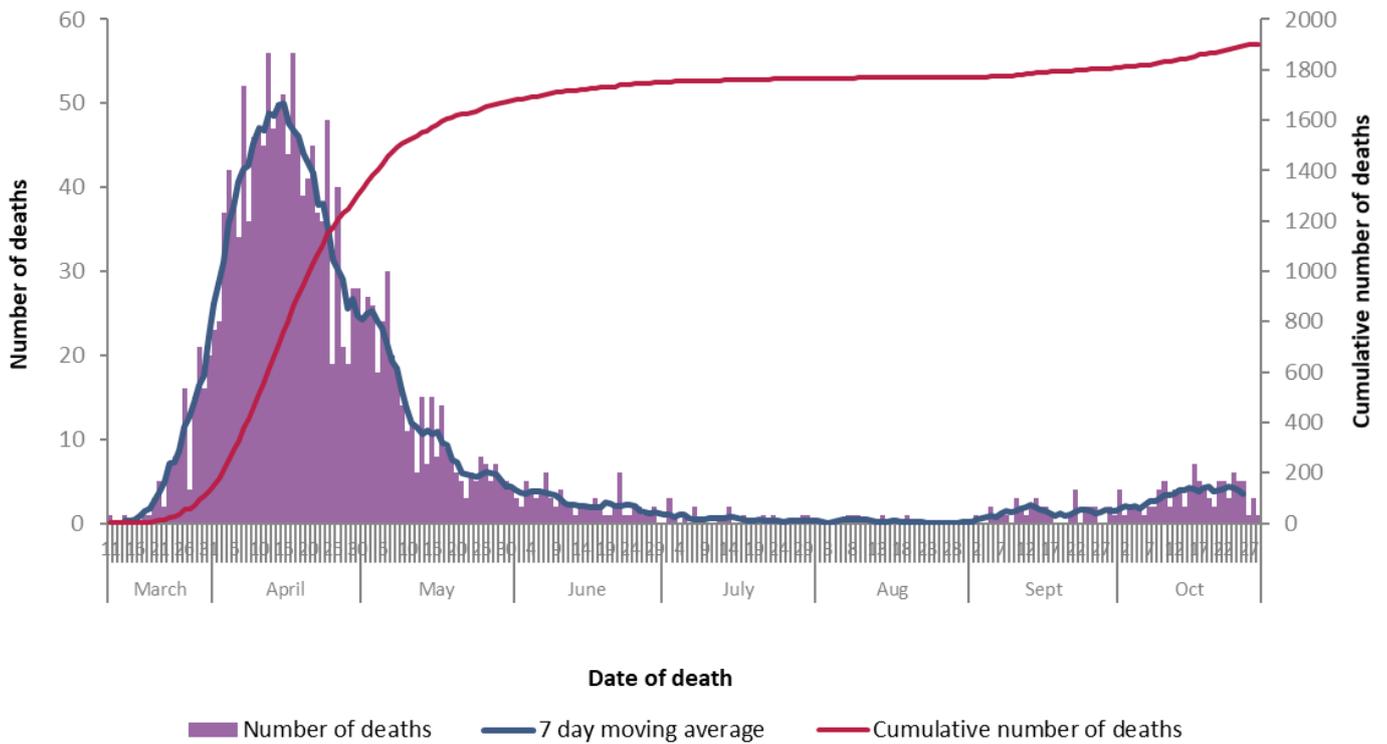
## Deaths among COVID-19 cases

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 28/10/2020

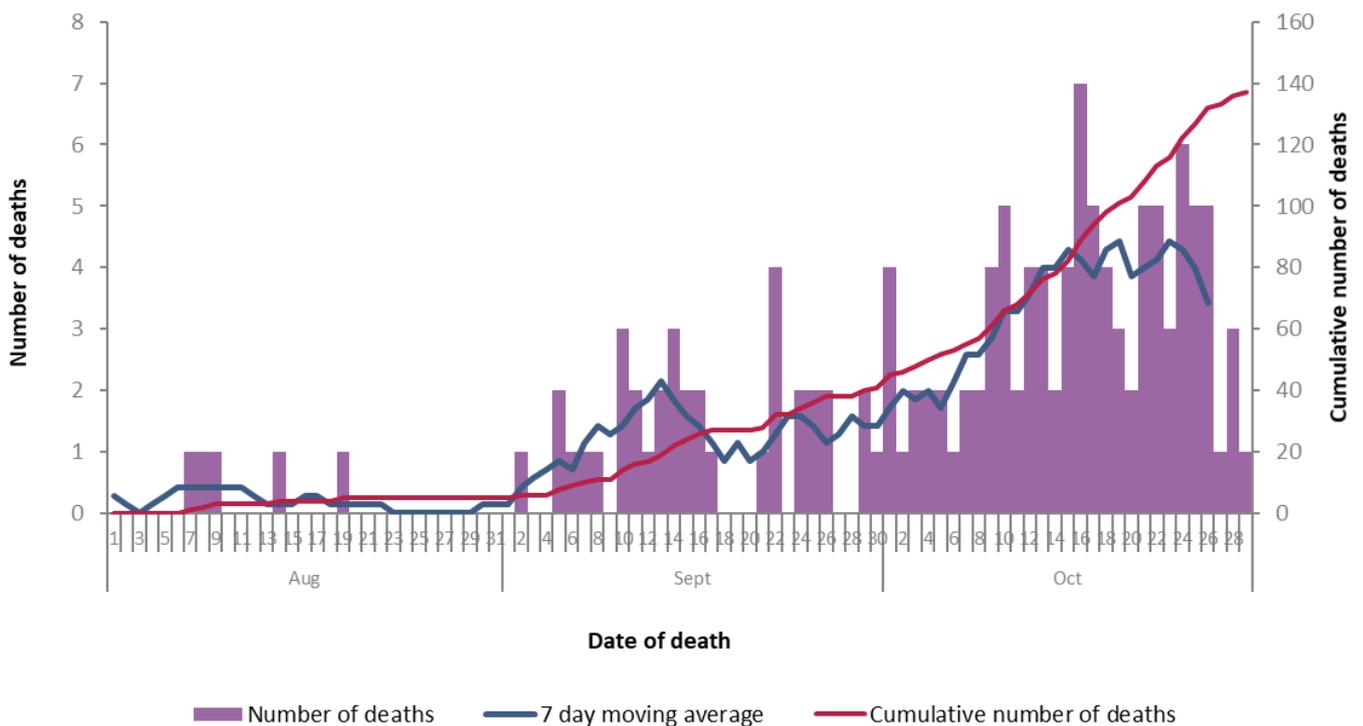
	Number	Percent
Total number of deaths	1,908	
Confirmed	1,649	86.43
Probable	95	4.98
Possible	164	8.6
Total number of cases hospitalised	830	43.5
Cases admitted to ICU	108	5.66
Cases not admitted to ICU	722	37.84
Total number of imported cases	7	0.37
Number of cases in healthcare workers	8	0.42
Number with underlying clinical conditions	1,785	93.55
Total number of male cases	955	50.05
M:F ratio	1	
Median age (years)	83	
Mean age (years)	81	
Age range (years)	17 - 105	

Table 8: Number of deaths in all COVID-19 cases by sex and age group notified in Ireland up to midnight 28/10/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.05
25-34 yrs	<5	5	7	0.37
35-44 yrs	6	7	13	0.68
45-54 yrs	11	20	31	1.62
55-64 yrs	27	57	84	4.4
65-74 yrs	103	175	278	14.57
75-84 yrs	295	352	647	33.91
85+ yrs	506	339	845	44.29
Unknown	<5	<5	2	0.1
<b>Total</b>	<b>953</b>	<b>955</b>	<b>1,908</b>	<b>100</b>
<b>Percent</b>	<b>49.95</b>	<b>50.05</b>		



**Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 28/10/2020**



**Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/08/2020 to midnight 28/10/2020**

\* Date of death is not yet available for six cases

Please note: a lag in time between reporting of deaths and data extraction is expected and as such most recent dates will not yet reflect all deaths on that date

## **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 at 09:15 on 30/10/2020. Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

### 2. Epidemiological date

Epidemiological date is derived from the earliest of onset date, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date, event creation/notification date.

### 3. Population data

Population data were taken from Census 2016. Data were aggregated into the following age groups for the analysis: 0-4 years, 5-14 years, 15-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, 75-84 years and  $\geq 85$  years.

### 3. Transmission classification

Transmission classification is based on country of infection as well as enhanced exposure data (international travel; close contact of a case) recorded in CIDR. Transmission is classified as 'unknown' due to incomplete data on CIDR.

WHO definition of transmission classification is specified below:

- Community transmission is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through routine screening of sentinel samples.
- Local transmission indicates locations where the source of infection is within the reporting location.
- Imported cases only indicates locations where all cases have been acquired outside the location of reporting.

### 4. HSE areas

The counties covered by each HSE area are as follows:

HSE East (E): Dublin, Kildare & Wicklow;  
HSE Midlands (M): Laois, Longford, Offaly & Westmeath;  
HSE Midwest (MW): Clare, Limerick & N. Tipperary;  
HSE Northeast (NE): Cavan, Louth, Meath & Monaghan;  
HSE Northwest (NW): Donegal, Leitrim & Sligo;  
HSE South (S): Kerry & Cork;  
HSE Southeast (SE): Carlow, Kilkenny, S. Tipperary, Waterford & Wexford;  
HSE West (W): Galway, Mayo & Roscommon.

### 5. Outbreak location

Where an outbreak location is reported as a residential facility (RF) this includes nursing homes, community hospitals, long-stay units and residential institutions including mental health facilities, prisons and direct provision centres.

Other outbreak location includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.