



## Epidemiology of COVID-19 in Ireland

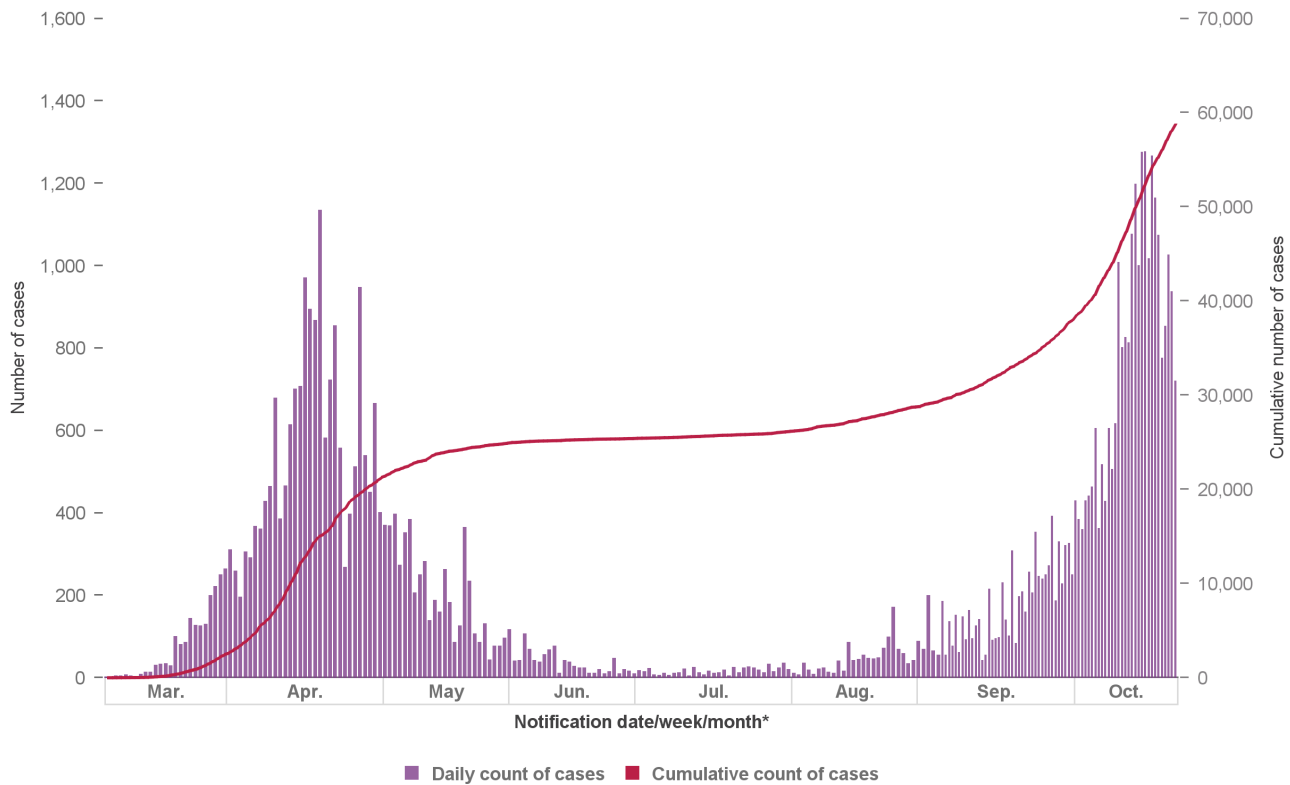
Report prepared by HPSC on 28/10/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 26/10/2020

	Number	Percent
Total number of confirmed cases	58,759	
National cumulative incidence of confirmed cases per 100,000 population	1,233.95	
Total number of cases hospitalised	4,254	7.24
Total number of cases admitted to ICU	538	0.92
Total number of deaths among confirmed cases	1,636	2.78
Case fatality ratio (CFR, %)	2.78	
National cumulative incidence of confirmed deaths per 100,000 population	34.36	
Total number of outbreaks/clusters	6,291	
Total number of cases associated with clusters	28,137	47.89
Total number of imported cases*	623	1.06
Number of cases in healthcare workers*	10,241	17.43
Males	27,509	46.82
Females	31,196	53.09
M:F ratio	0.88	
Median age (years)	40	
Mean age (years)	42	
Age range (years)	0 - 106	

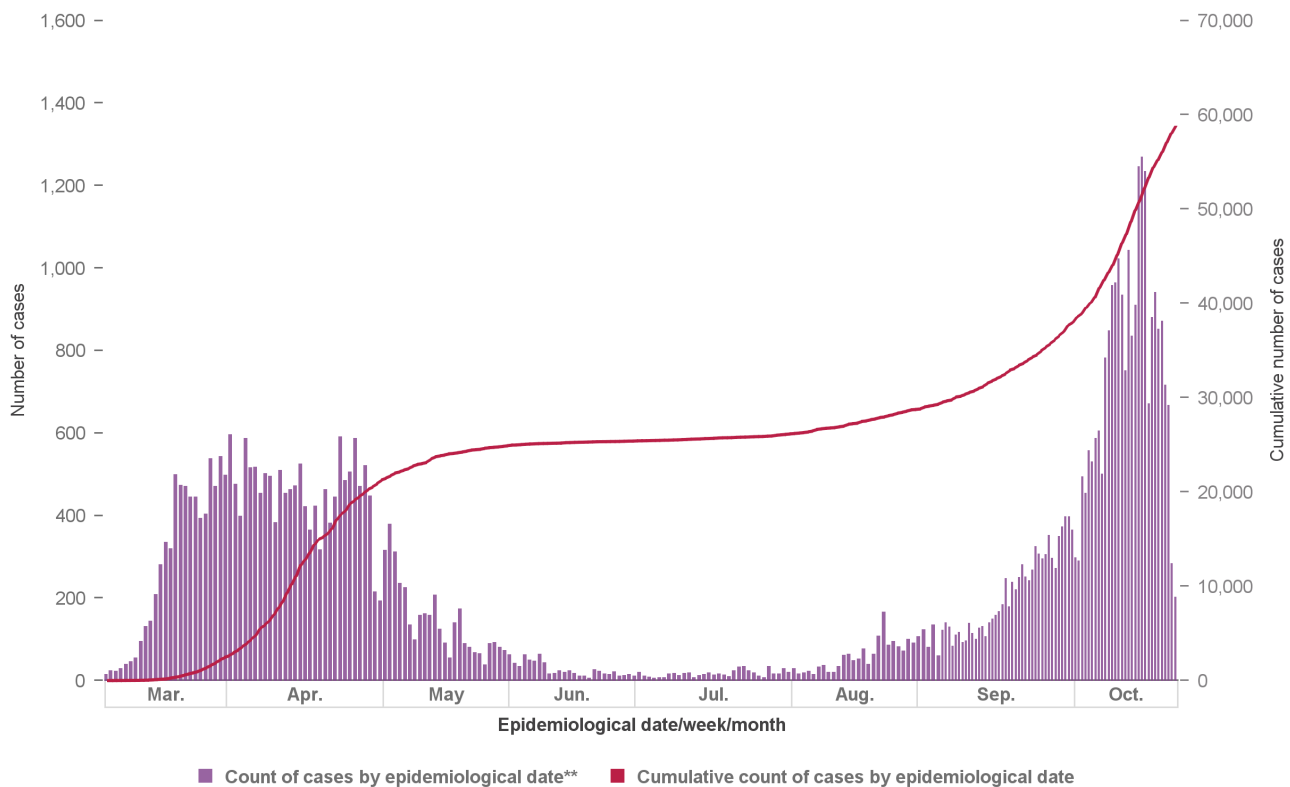
\* Data is incomplete for these variables

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:15 on 28/10/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.



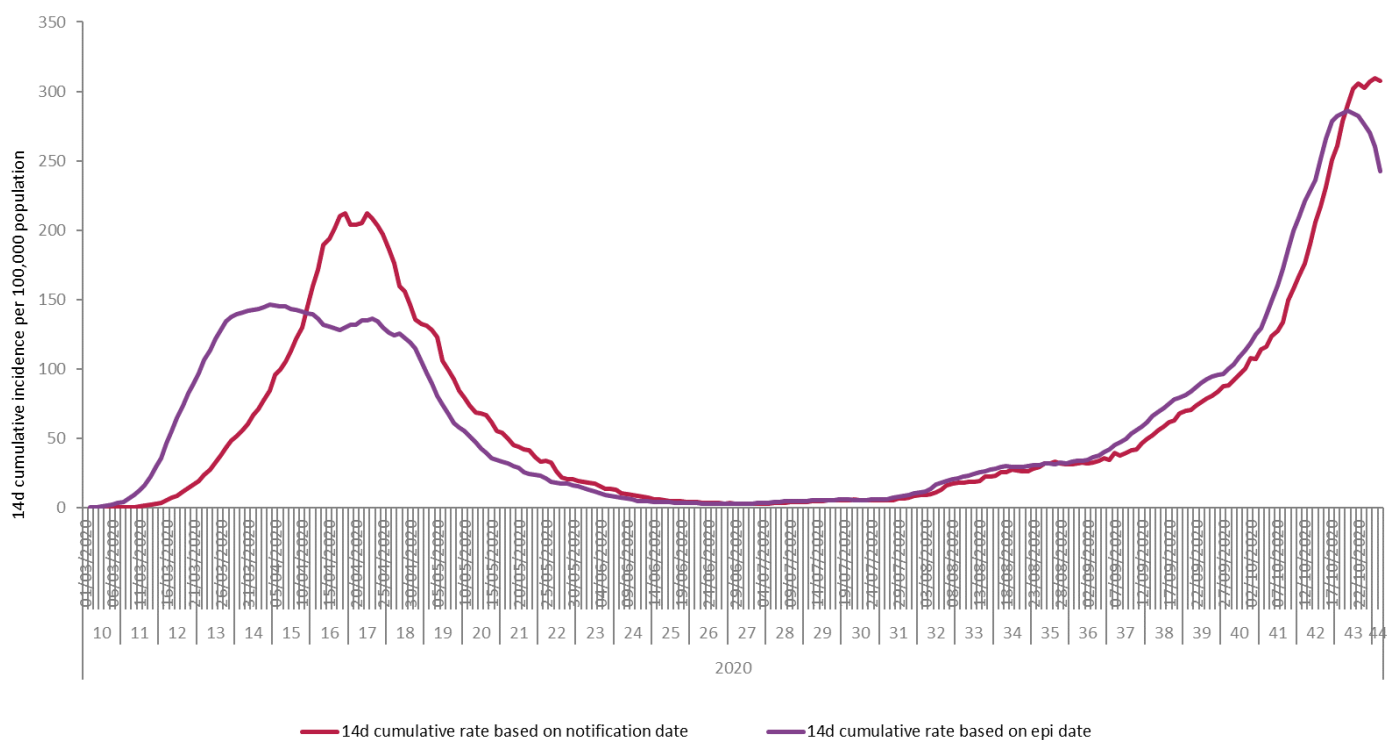
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 26/10/2020**

\*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 26/10/2020**

\*\*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.



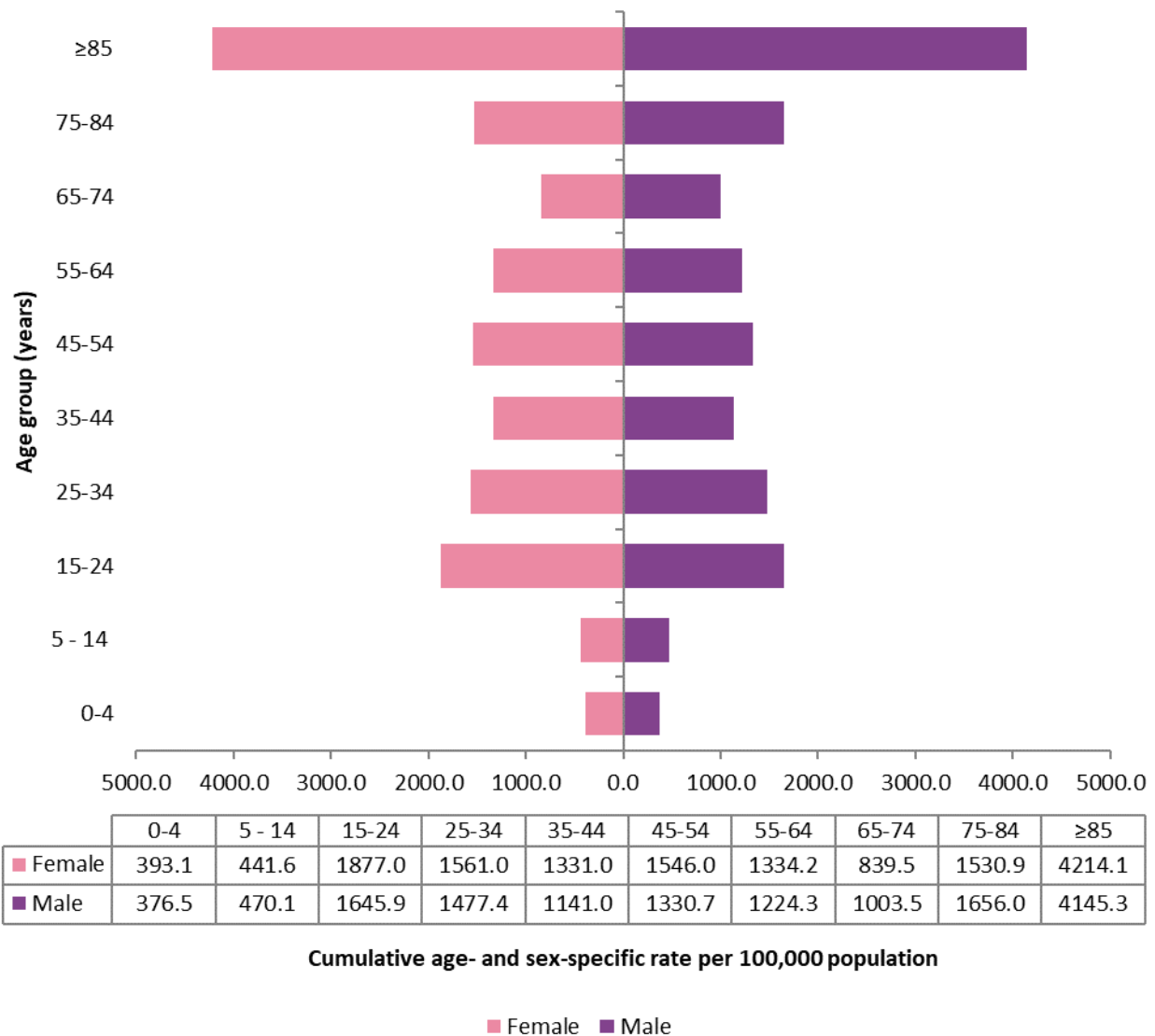
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 26/10/2020**

\* 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

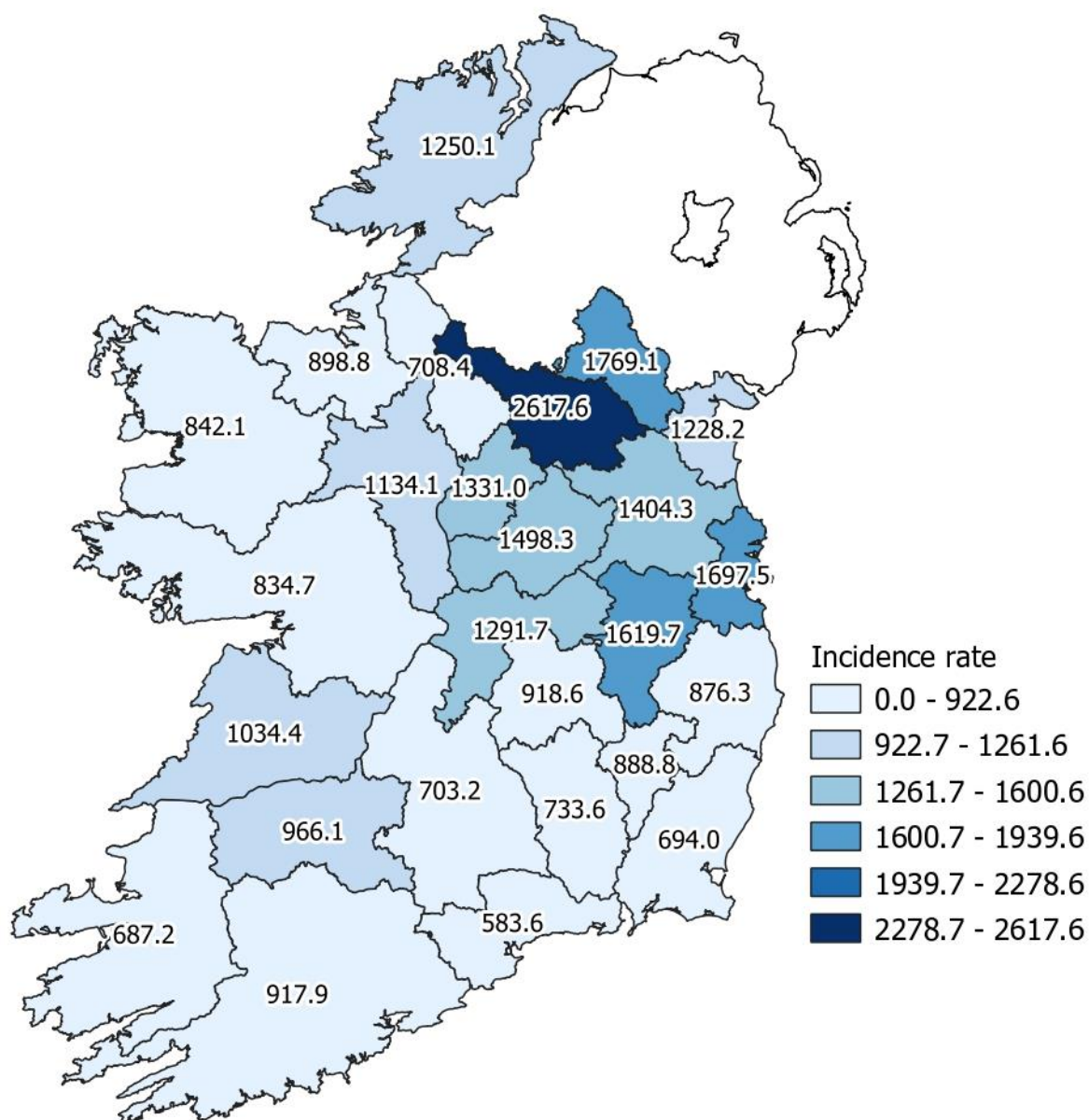
\*\*Epidemiological date is derived from epidemiological date, which is the earliest of onset date, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date, event creation/notification date.

**Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland up to midnight on 26/10/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>58,759</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.88	
	Male	27,509	46.82
	Female	31,196	53.09
	Unknown	54	0.09
<b>Age</b>	Median age (years)	40	
	Mean age (years)	42	
	Age range (years)	0 - 106	
	0-4 yrs	1,280	2.18
	5-14 yrs	3,083	5.25
	15-24 yrs	10,150	17.27
	25-34 yrs	10,043	17.09
	35-44 yrs	9,253	15.75
	45-54 yrs	9,017	15.35
	55-64 yrs	6,514	11.09
	65-74 yrs	3,438	5.85
	75-84 yrs	3,120	5.31
	85+ yrs	2,832	4.82
	Unknown	29	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 26/10/2020 (excluding 28 cases for whom age is unknown and 53 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 26/10/2020**

*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 26/10/2020**

County Name	Number of cases	Percent
Carlow	506	0.86
Cavan	1,994	3.39
Clare	1,229	2.09
Cork	4,983	8.48
Donegal	1,990	3.39
Dublin	22,872	38.93
Galway	2,154	3.67
Kerry	1,015	1.73
Kildare	3,604	6.13
Kilkenny	728	1.24
Laois	778	1.32
Leitrim	227	0.39
Limerick	1,883	3.2
Longford	544	0.93
Louth	1,583	2.69
Mayo	1,099	1.87
Meath	2,739	4.66
Monaghan	1,086	1.85
Offaly	1,007	1.71
Roscommon	732	1.25
Sligo	589	1
Tipperary	1,122	1.91
Waterford	678	1.15
Westmeath	1,330	2.26
Wexford	1,039	1.77
Wicklow	1,248	2.12
<b>Total</b>	<b>58,759</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 26/10/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	17,140	29.17%
Local transmission, incl. possible local transmission	35,666	60.70%
Travel abroad, incl. possible travel abroad	919	1.56%
Unknown	5,034	8.57%
<b>Total</b>	<b>58,759</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 and hospital, ICU and vital status as of midnight 26/10/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	1280	43	1.01	1	0.19
5-14 yrs	3083	39	0.92	4	0.74
15-24 yrs	10150	126	2.96	6	1.12
25-34 yrs	10043	265	6.23	17	3.16
35-44 yrs	9253	341	8.02	46	8.55
45-54 yrs	9017	553	13	100	18.59
55-64 yrs	6514	636	14.95	148	27.51
65-74 yrs	3438	759	17.84	149	27.7
75-84 yrs	3120	920	21.63	60	11.15
85+ yrs	2832	570	13.4	7	1.3
Unknown	29	2	0.05	0	0
<b>Total</b>	<b>58,759</b>	<b>4,254</b>	<b>100</b>	<b>538</b>	<b>100</b>



**Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 26/10/2020**

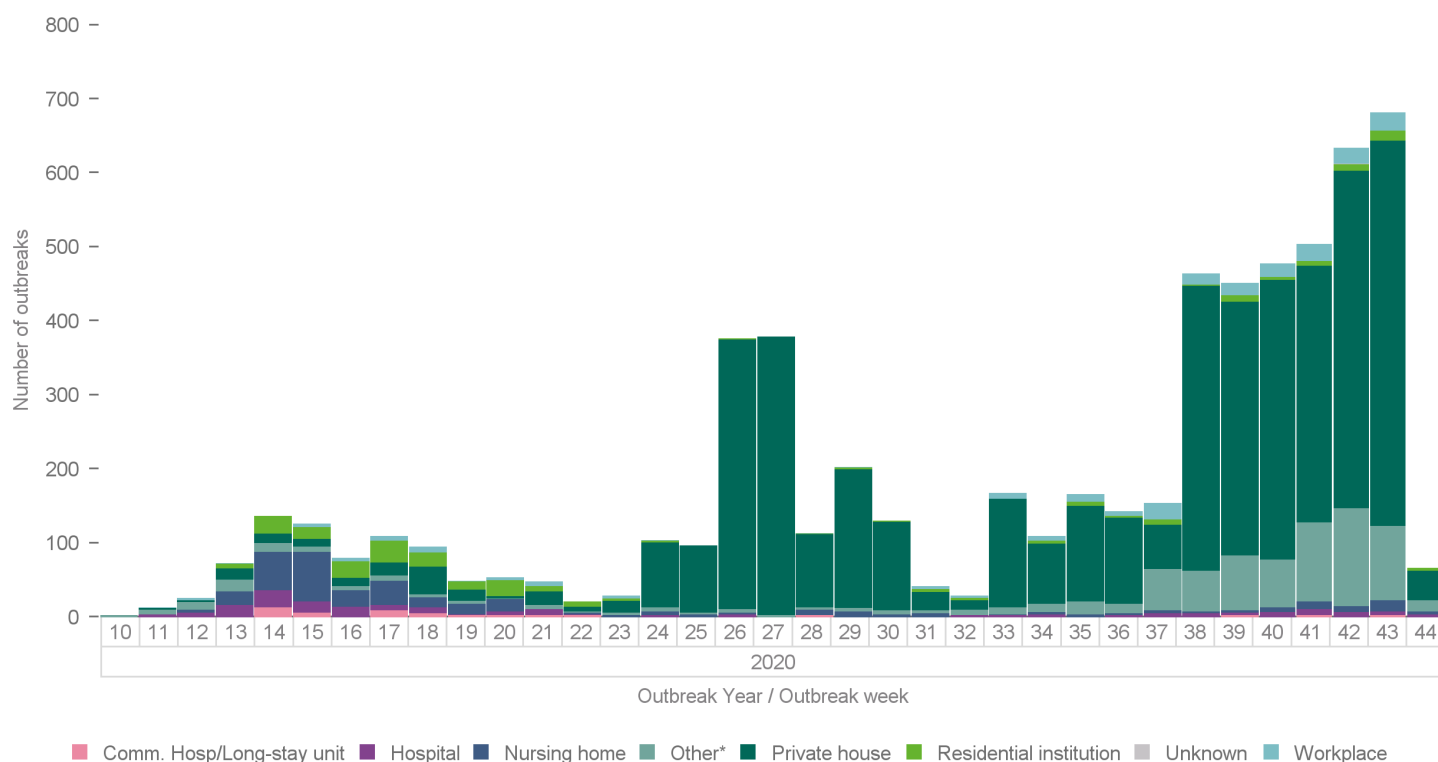
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	1,280	3,083	10,150	10,043	9,253	9,017	6,514	3,438	3,120	2,832	29
Cases hospitalised (n)	43	39	126	265	341	553	636	759	920	570	2
Cases hospitalised (%)	3.36	1.27	1.24	2.64	3.69	6.13	9.76	22.08	29.49	20.13	6.90
Cases admitted to ICU (n)	1	4	6	17	46	100	148	149	60	7	0
Cases admitted to ICU (%)	0.08	0.13	0.06	0.17	0.50	1.11	2.27	4.33	1.92	0.25	0
Deaths (n)	0	0	1	7	12	29	77	246	561	703	0
Case fatality ratio (%)	0	0	0.01	0.07	0.13	0.32	1.18	7.16	17.98	24.82	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 26/10/2020**

Outbreak Location	E	M	MW	NE	NW	S	SE	W	HPSC	Total
Private house	2,751	66	155	337	212	347	299	369		4,536
Other*	176	51	133	47	77	154	43	91	2	774
Nursing home	160	14	20	49	8	19	19	43		332
Residential institution	135	14	13	31	8	26	12	8		247
Workplace	75	15	19	38	26	18	17	18		226
Hospital	78	7	6	19	4	16	5	7		142
Comm. Hosp/Long-stay unit	6	5	2		4	6	5	5		33
Unknown					1					1
<b>Total</b>	<b>3,381</b>	<b>172</b>	<b>348</b>	<b>521</b>	<b>340</b>	<b>586</b>	<b>400</b>	<b>541</b>	<b>2</b>	<b>6,291</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 26/10/2020**

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

Note: 5,455 COVID-19 outbreaks were reported on CIDR between week 24 and week 44 2020 to date (9th June to 26th October). Of these, 4,328 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, 1,485 in September and 852 in October to date.

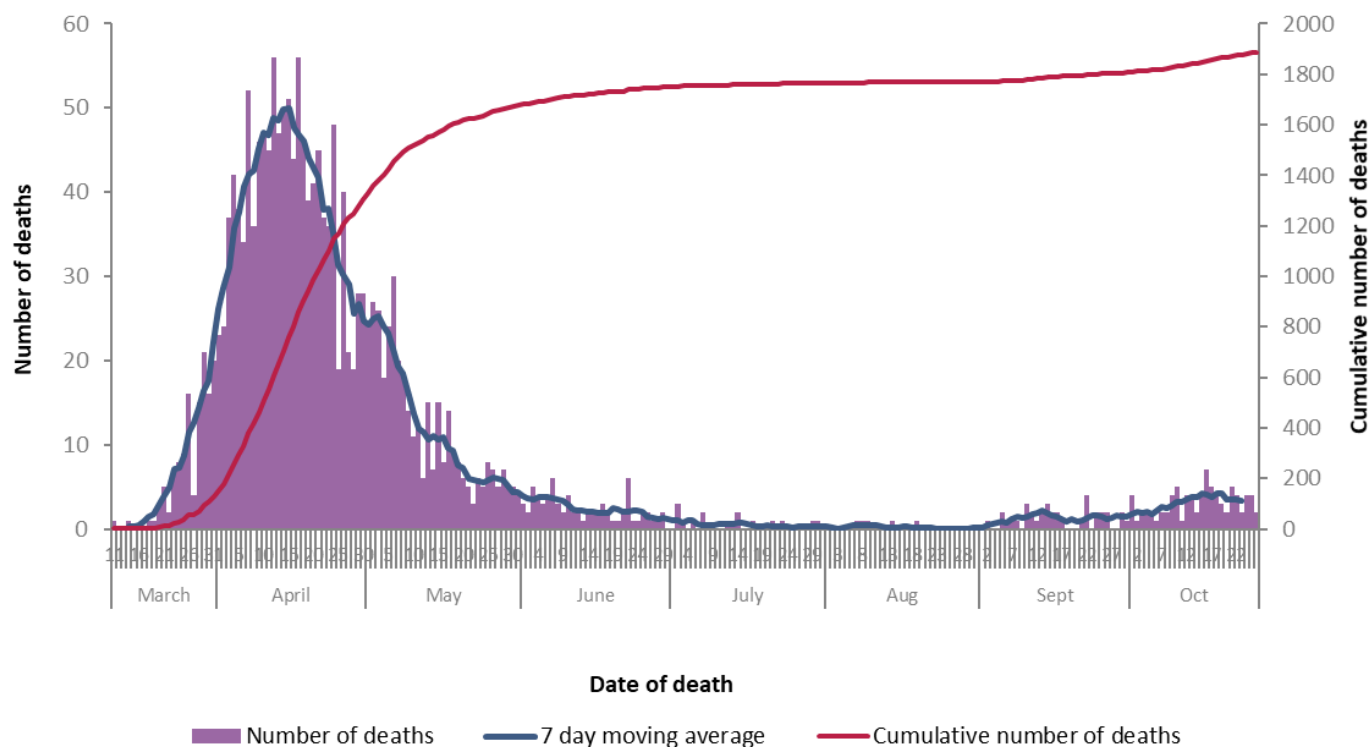
## Deaths among COVID-19 cases

**Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 26/10/2020**

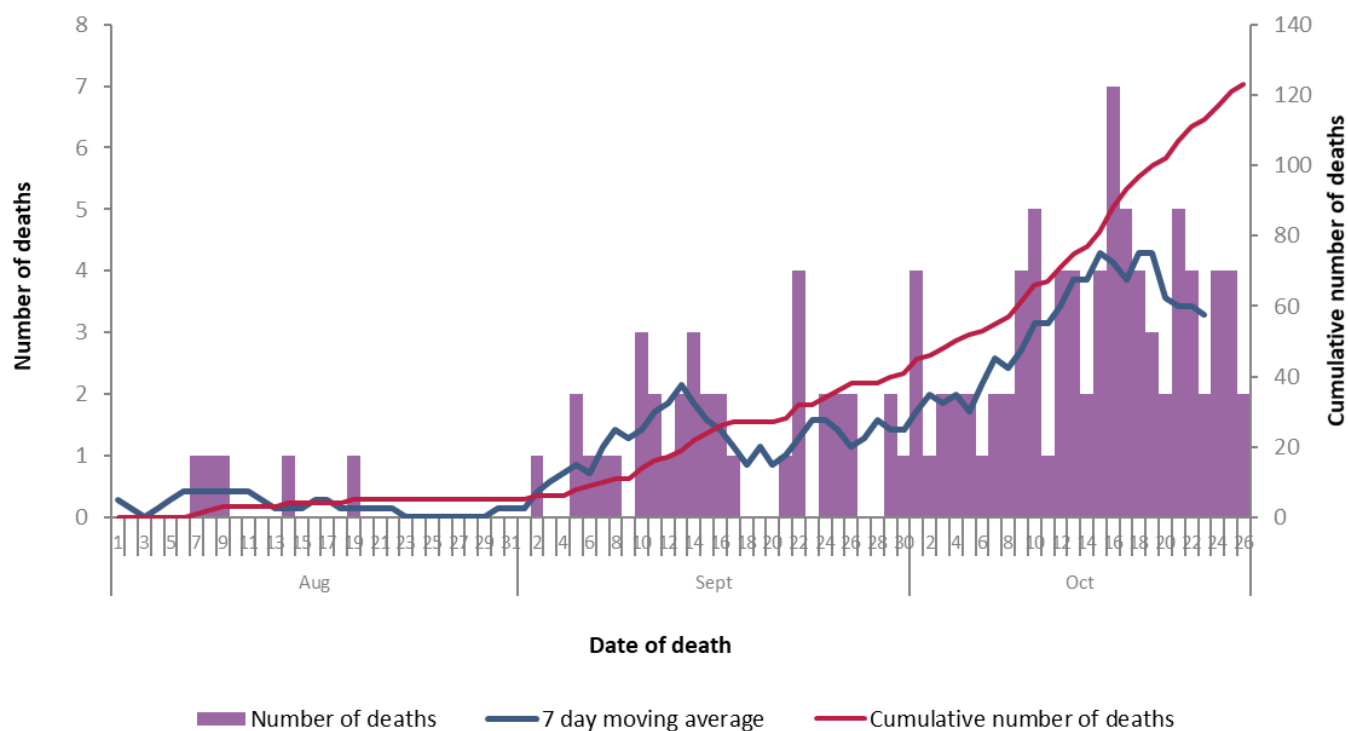
	Number	Percent
Total number of deaths	1,894	
Confirmed	1,636	86.38
Probable	95	5.02
Possible	163	8.61
Total number of cases hospitalised	820	43.29
Cases admitted to ICU	106	5.6
Cases not admitted to ICU	714	37.7
Total number of imported cases	6	0.32
Number of cases in healthcare workers	8	0.42
Number with underlying clinical conditions	1,770	93.45
Total number of male cases	948	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 26/10/2020**

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	0.69
45-54 yrs	11	20	31	1.64
55-64 yrs	27	56	83	4.38
65-74 yrs	101	172	273	14.41
75-84 yrs	294	349	643	33.95
85+ yrs	502	339	841	44.4
Unknown	<5	<5	2	0.11
<b>Total</b>	<b>946</b>	<b>948</b>	<b>1,894</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 26/10/2020**



**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 26/10/2020**

\* 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 28/10/2020. 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.