



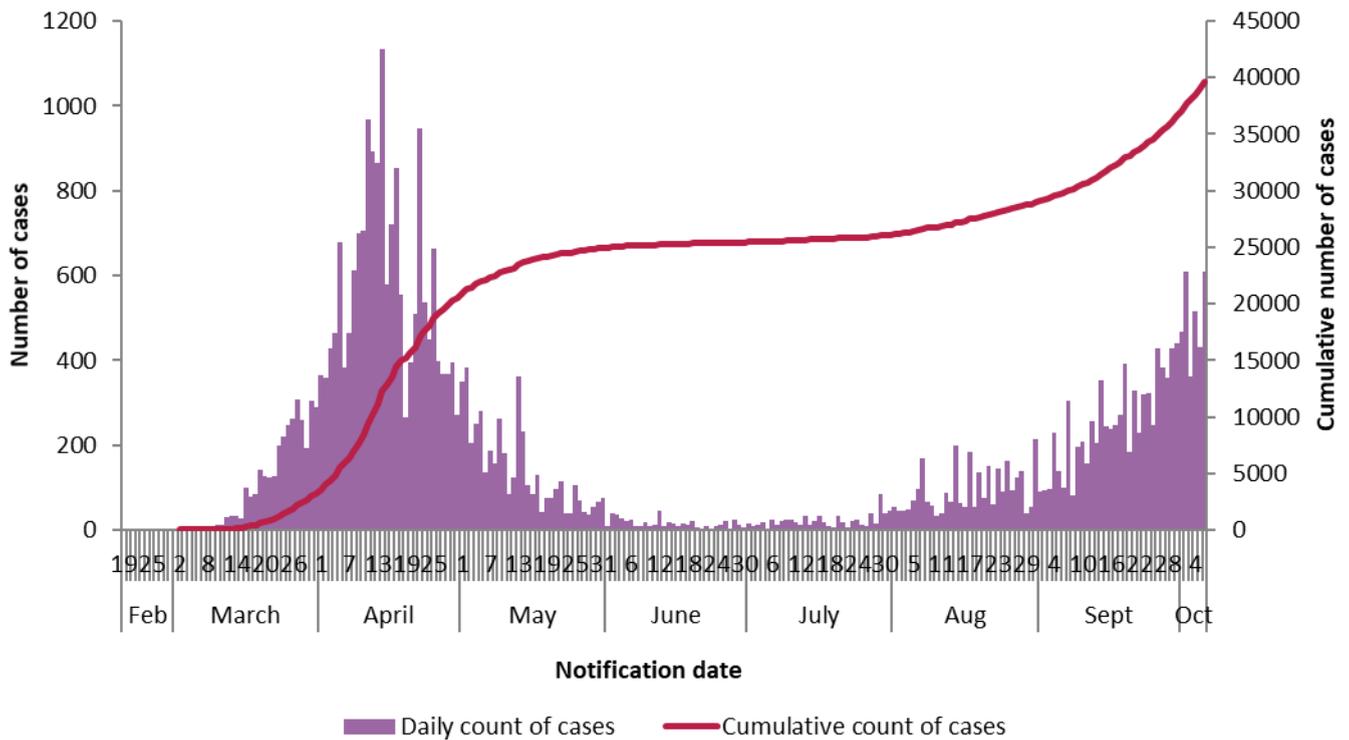
# Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 08/10/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 06/10/2020

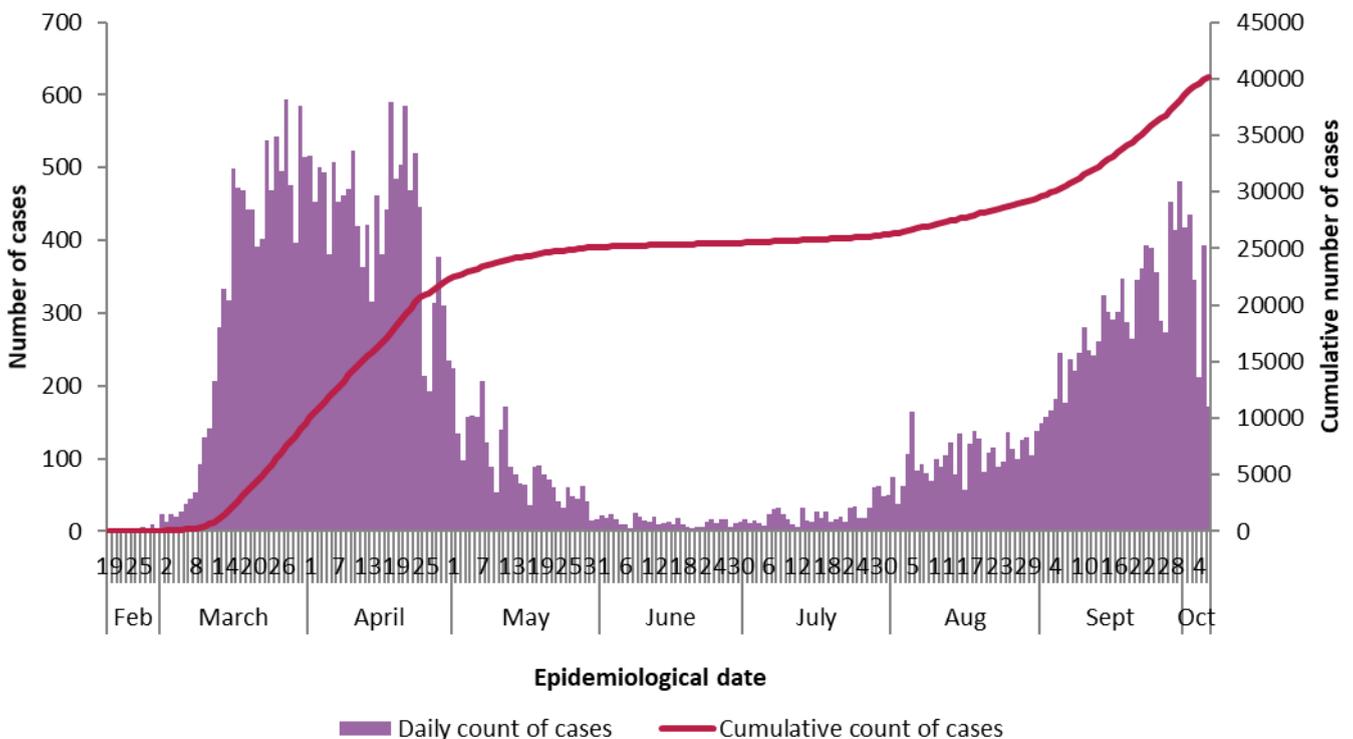
	Number	Percent
Total number of confirmed cases	39,580	
National cumulative incidence of confirmed cases per 100,000 population	831.19	
Total number of cases hospitalised	3,729	9.42
Total number of cases admitted to ICU	482	1.22
Total number of deaths among confirmed cases	1,564	3.95
Case fatality ratio (CFR, %)	3.95	
National cumulative incidence of confirmed deaths per 100,000 population	32.84	
Total number of outbreaks/clusters	4,651	
Total number of cases associated with clusters	21,821	55.13
Total number of imported cases	610	1.54
Number of cases in healthcare workers	9,490	23.98
Males	17,972	45.41
Females	21,568	54.49
M:F ratio	0.83	
Median age (years)	43	
Mean age (years)	45	
Age range (years)	0 - 106	

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:15 on 08/10/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.



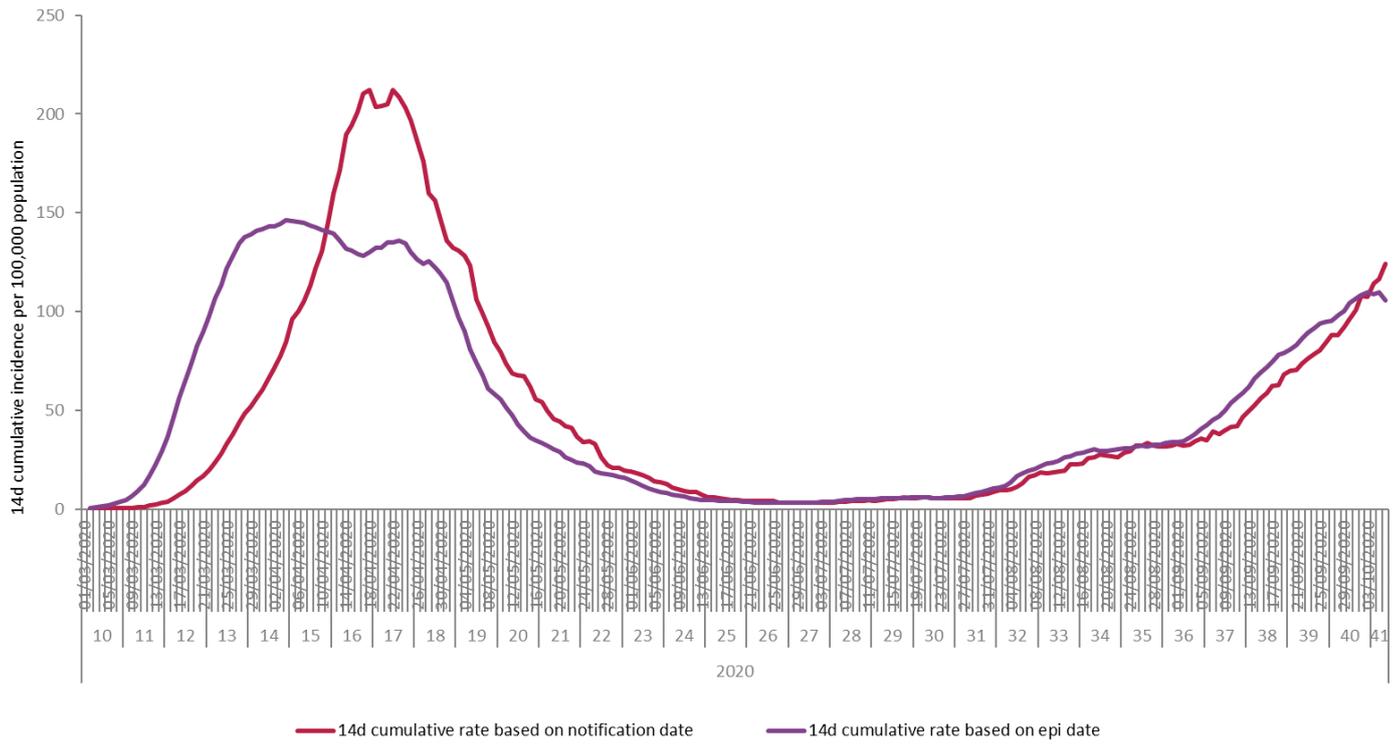
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 06/10/2020**

\*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 06/10/2020**

\*\*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.



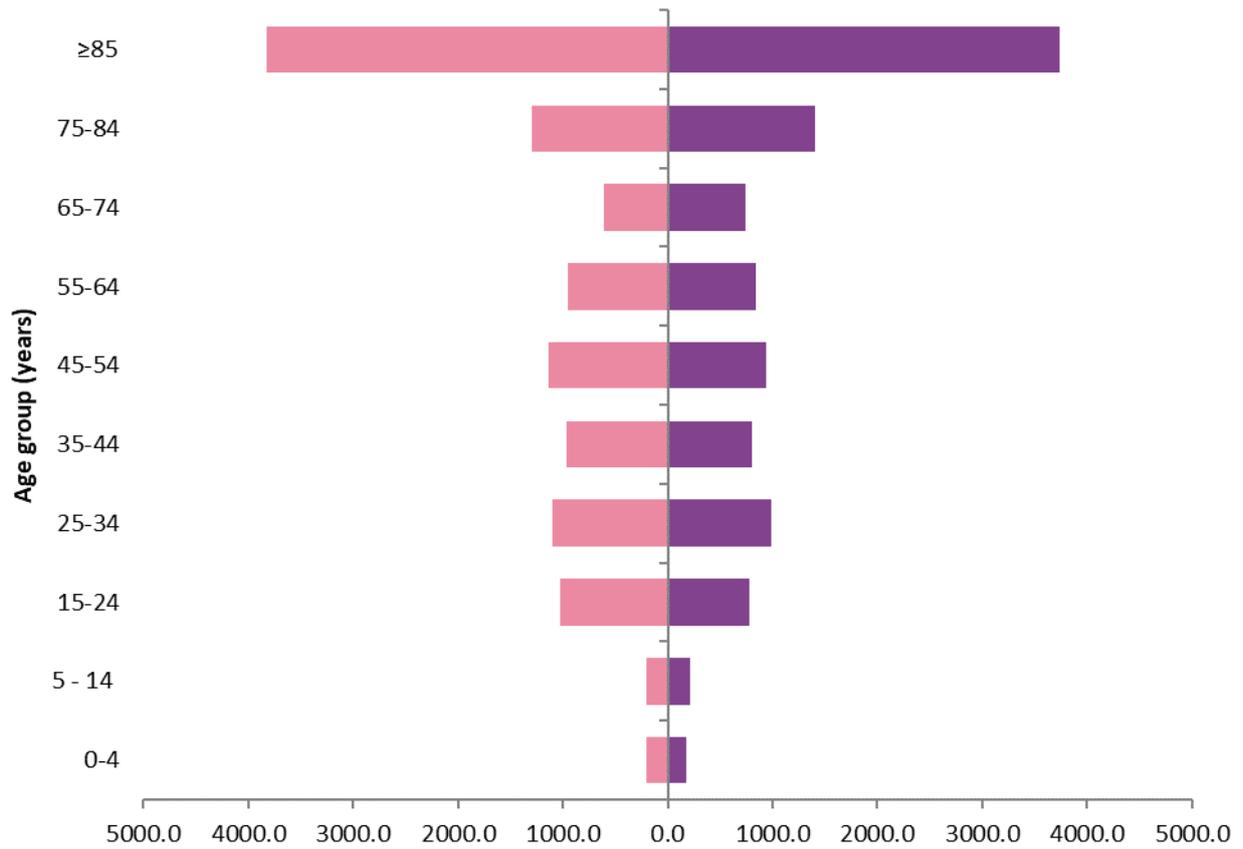
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 06/10/2020**

\* 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 06/10/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>39,580</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.83	
	Male	17,972	45.41
	Female	21,568	54.49
	Unknown	40	0.1
<b>Age</b>	Median age (years)	43	
	Mean age (years)	45	
	Age range (years)	0 - 106	
	0-4 yrs	624	1.58
	5-14 yrs	1,393	3.52
	15-24 yrs	5,181	13.09
	25-34 yrs	6,938	17.53
	35-44 yrs	6,633	16.76
	45-54 yrs	6,489	16.39
	55-64 yrs	4,575	11.56
	65-74 yrs	2,508	6.34
	75-84 yrs	2,650	6.7
	85+ yrs	2,565	6.48
	Unknown	24	0.06

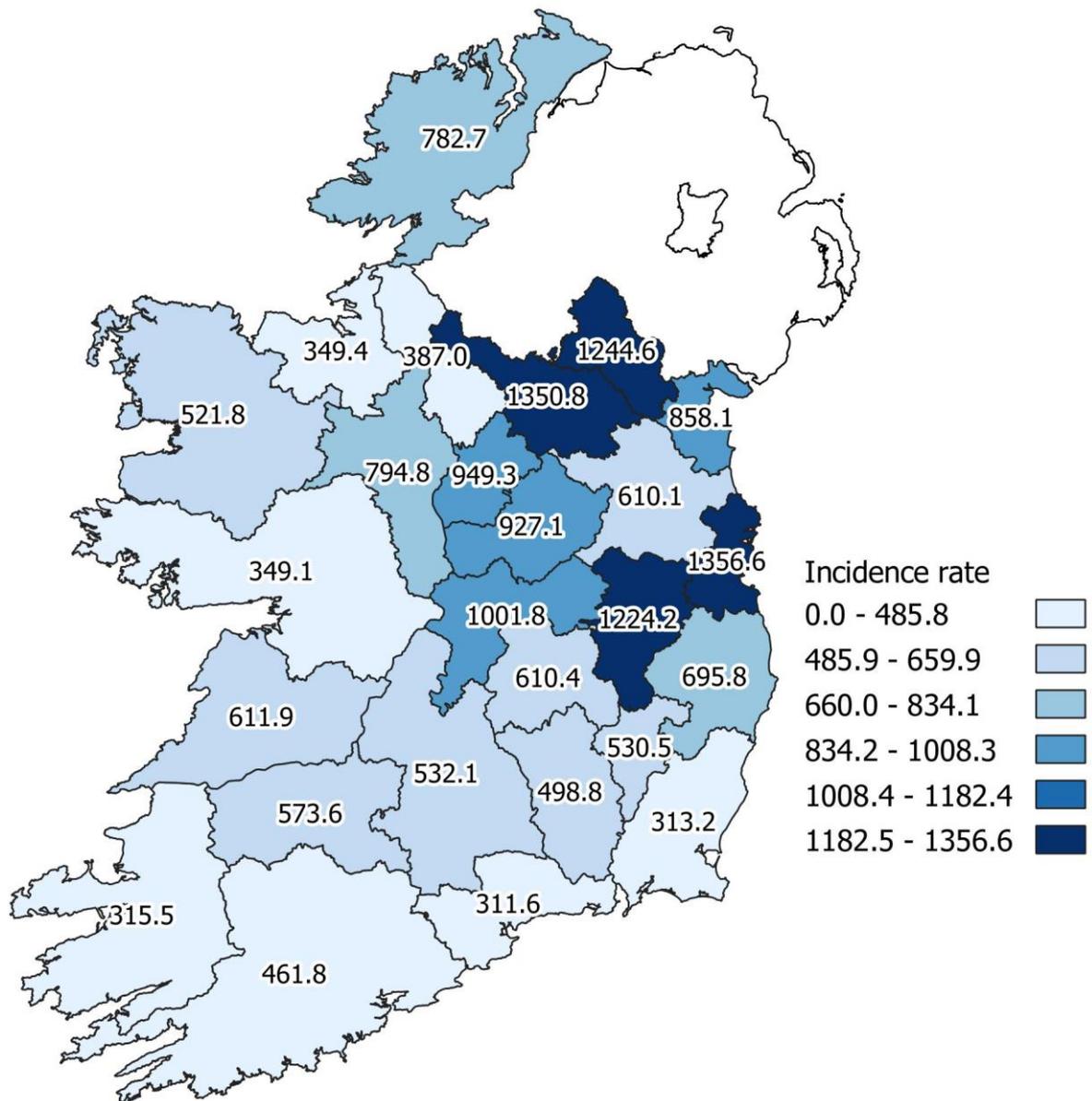


	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	≥85
Female	200.3	196.9	1021.3	1105.5	967.3	1131.1	955.9	604.1	1299.5	3823.1
Male	175.6	214.6	778.5	991.2	804.0	938.5	841.0	740.5	1407.4	3742.1

**Cumulative age- and sex-specific rate per 100,000 population**

Female Male

**Figure 3: Cumulative age- and sex-specific incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 06/10/2020 (excluding 23 cases for whom age is unknown and 39 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 06/10/2020**

*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 06/10/2020**

<b>County Name</b>	<b>Number of cases</b>	<b>Percent</b>
Carlow	302	0.76
Cavan	1,029	2.6
Clare	727	1.84
Cork	2,507	6.33
Donegal	1,246	3.15
Dublin	18,278	46.18
Galway	901	2.28
Kerry	466	1.18
Kildare	2,724	6.88
Kilkenny	495	1.25
Laois	517	1.31
Leitrim	124	0.31
Limerick	1,118	2.82
Longford	388	0.98
Louth	1,106	2.79
Mayo	681	1.72
Meath	1,190	3.01
Monaghan	764	1.93
Offaly	781	1.97
Roscommon	513	1.3
Sligo	229	0.58
Tipperary	849	2.15
Waterford	362	0.91
Westmeath	823	2.08
Wexford	469	1.18
Wicklow	991	2.5
<b>Total</b>	<b>39,580</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 06/10/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	10,993	27.77%
Local transmission, incl. possible local transmission	26,915	68.00%
Travel abroad, incl. possible travel abroad	868	2.19%
Unknown	804	2.03%
<b>Total</b>	<b>39,580</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 06/10/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	624	35	0.94	1	0.21
5-14 yrs	1393	27	0.72	2	0.41
15-24 yrs	5181	105	2.82	5	1.04
25-34 yrs	6938	227	6.09	17	3.53
35-44 yrs	6633	303	8.13	42	8.71
45-54 yrs	6489	499	13.38	97	20.12
55-64 yrs	4575	562	15.07	138	28.63
65-74 yrs	2508	663	17.78	124	25.73
75-84 yrs	2650	808	21.67	50	10.37
85+ yrs	2565	499	13.38	6	1.24
Unknown	24	1	0.03	0	0
<b>Total</b>	<b>39,580</b>	<b>3,729</b>	<b>100</b>	<b>482</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 06/10/2020**

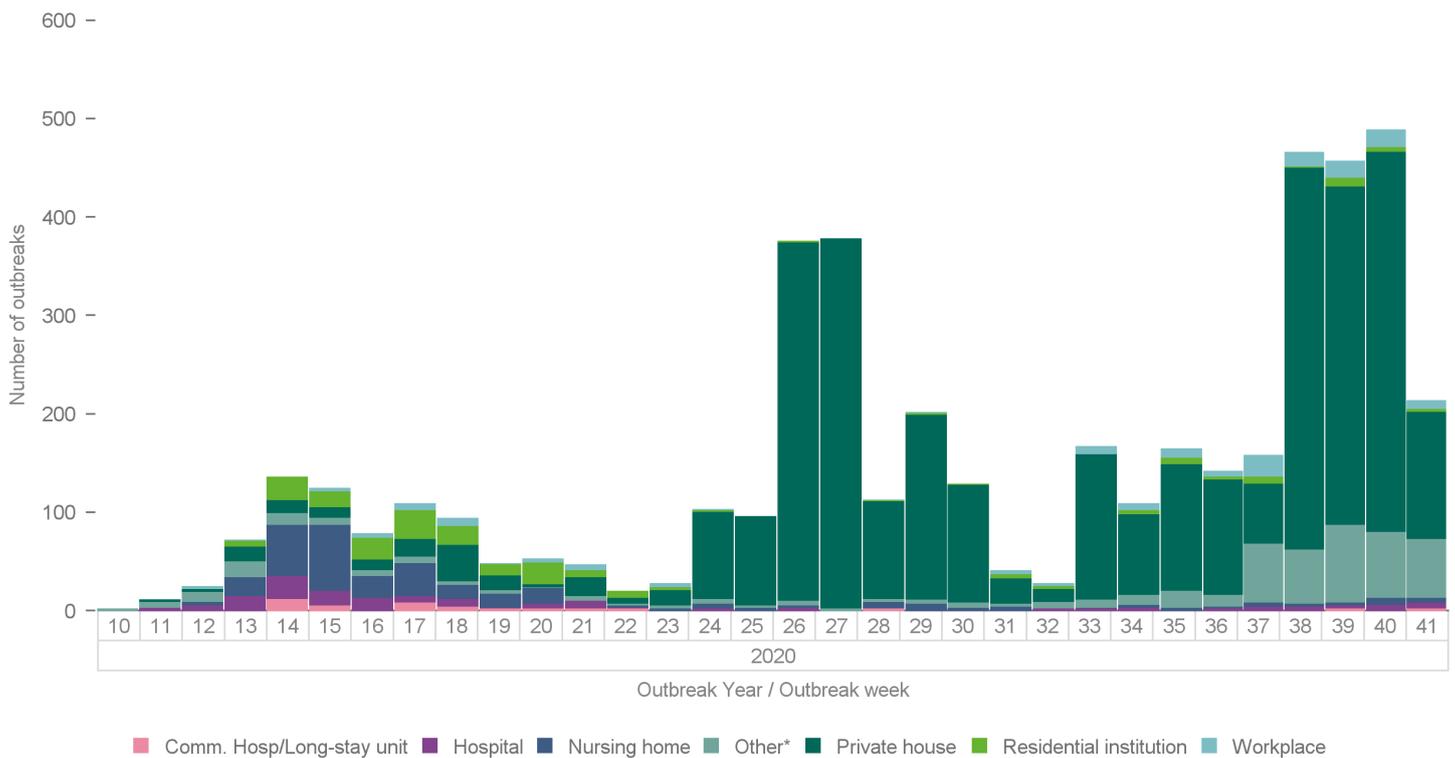
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	624	1,393	5,181	6,938	6,633	6,489	4,575	2,508	2,650	2,565	24
Cases hospitalised (n)	35	27	105	227	303	499	562	663	808	499	1
Cases hospitalised (%)	5.61	1.94	2.03	3.27	4.57	7.69	12.28	26.44	30.49	19.45	4.17
Cases admitted to ICU (n)	1	2	5	17	42	97	138	124	50	6	0
Cases admitted to ICU (%)	0.16	0.14	0.1	0.25	0.63	1.49	3.02	4.94	1.89	0.23	0
Deaths (n)	0	0	1	6	12	29	74	234	534	674	0
Case fatality ratio (%)	0	0	0.02	0.09	0.18	0.45	1.62	9.33	20.15	26.28	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 06/10/2020**

Outbreak Location	E	HPSC	M	MW	NE	NW	S	SE	W	Total
Private house	2,185		59	149	258	138	240	184	105	<b>3,318</b>
Other*	102	2	47	106	27	47	81	27	48	<b>487</b>
Nursing home	148		13	19	45	7	15	18	36	<b>301</b>
Residential institution	127		12	11	27	5	22	10	5	<b>219</b>
Workplace	52		13	16	25	19	14	13	14	<b>166</b>
Hospital	73		5	4	18	4	13	5	6	<b>128</b>
Comm. Hosp/Long-stay unit	6		4	2		4	6	5	5	<b>32</b>
<b>Total</b>	<b>2,693</b>	<b>2</b>	<b>153</b>	<b>307</b>	<b>400</b>	<b>224</b>	<b>391</b>	<b>262</b>	<b>219</b>	<b>4,651</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 06/10/2020**

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

Note: 3,815 COVID-19 outbreaks were reported on CIDR between week 24 and week 41 2020 to date (9th June to 6th October). Of these, 3,194 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 41 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, 531 in August, 1,180 in September and 25 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 06/10/2020

	Number	Percent
Total number of deaths	1,817	
Confirmed	1,564	86.08
Probable	95	5.23
Possible	158	8.7
Total number of cases hospitalised	777	42.76
Cases admitted to ICU	98	5.39
Cases not admitted to ICU	679	37.37
Total number of imported cases	6	0.33
Number of cases in healthcare workers	8	0.44
Number with underlying clinical conditions	1,719	94.61
Total number of male cases	899	49.48
M:F ratio	0.98	
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 06/10/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.06
25-34 yrs	<5	<5	6	0.33
35-44 yrs	6	7	13	0.72
45-54 yrs	11	20	31	1.71
55-64 yrs	27	52	79	4.35
65-74 yrs	98	162	260	14.31
75-84 yrs	281	334	615	33.85
85+ yrs	490	320	810	44.58
Unknown	<5	<5	2	0.11
<b>Total</b>	<b>918</b>	<b>899</b>	<b>1,817</b>	<b>100</b>
<b>Percent</b>	<b>50.52</b>	<b>49.48</b>		

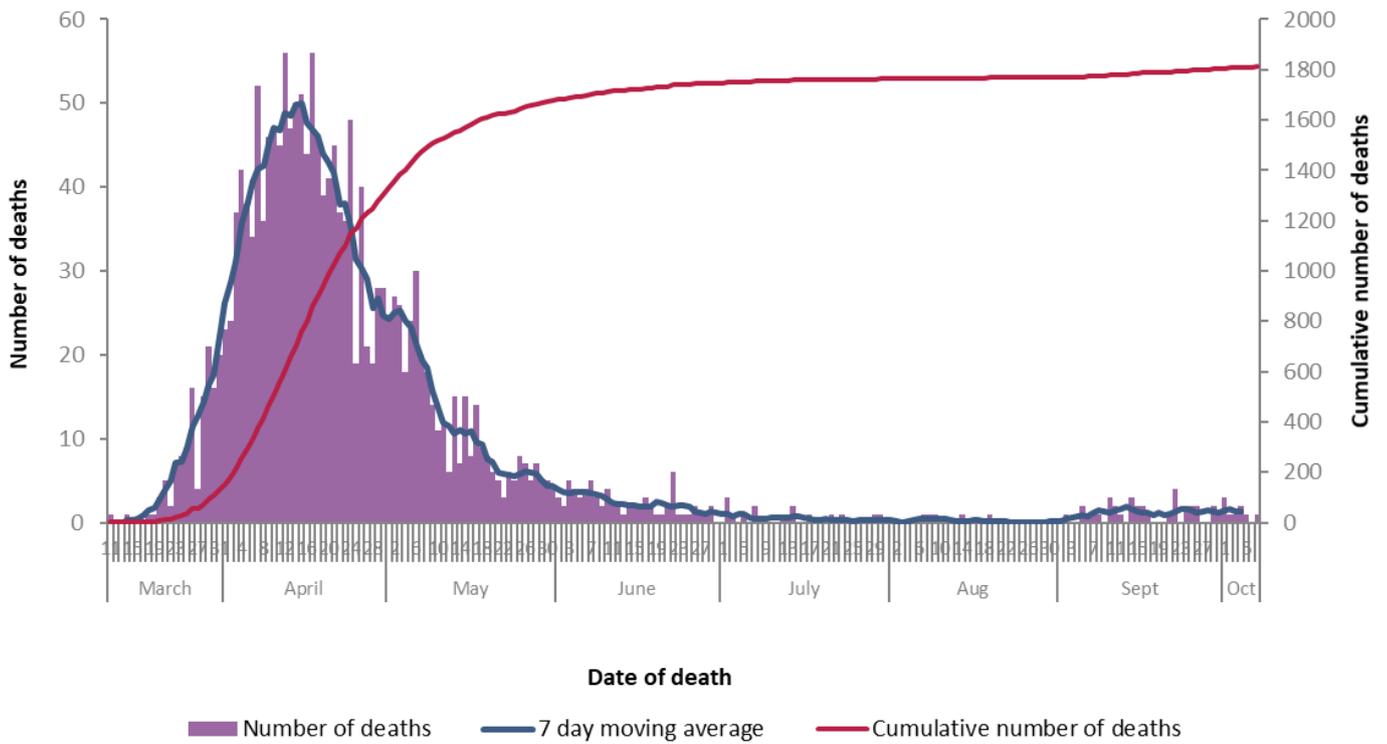


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 06/10/2020

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

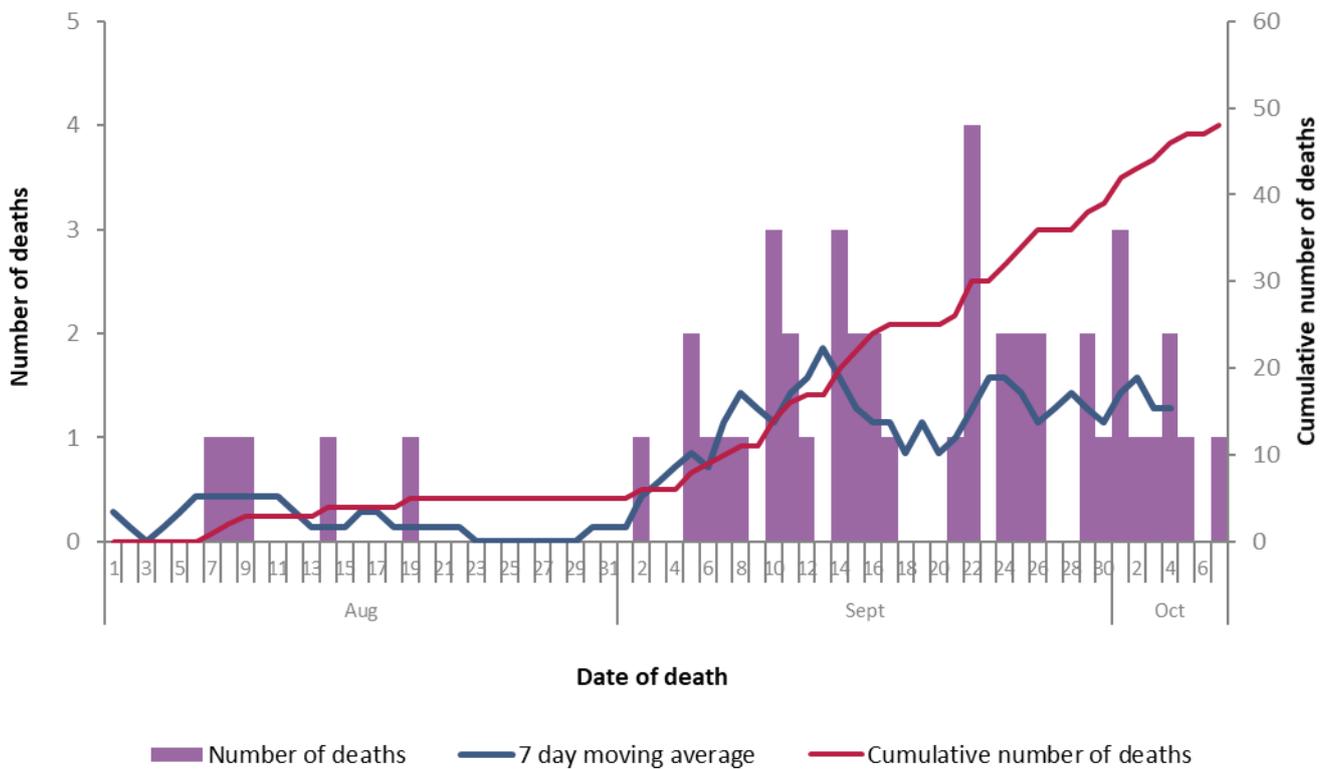


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/08/2020 to midnight 06/10/2020

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 08/10/2020. 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 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.

### 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.
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### 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.