



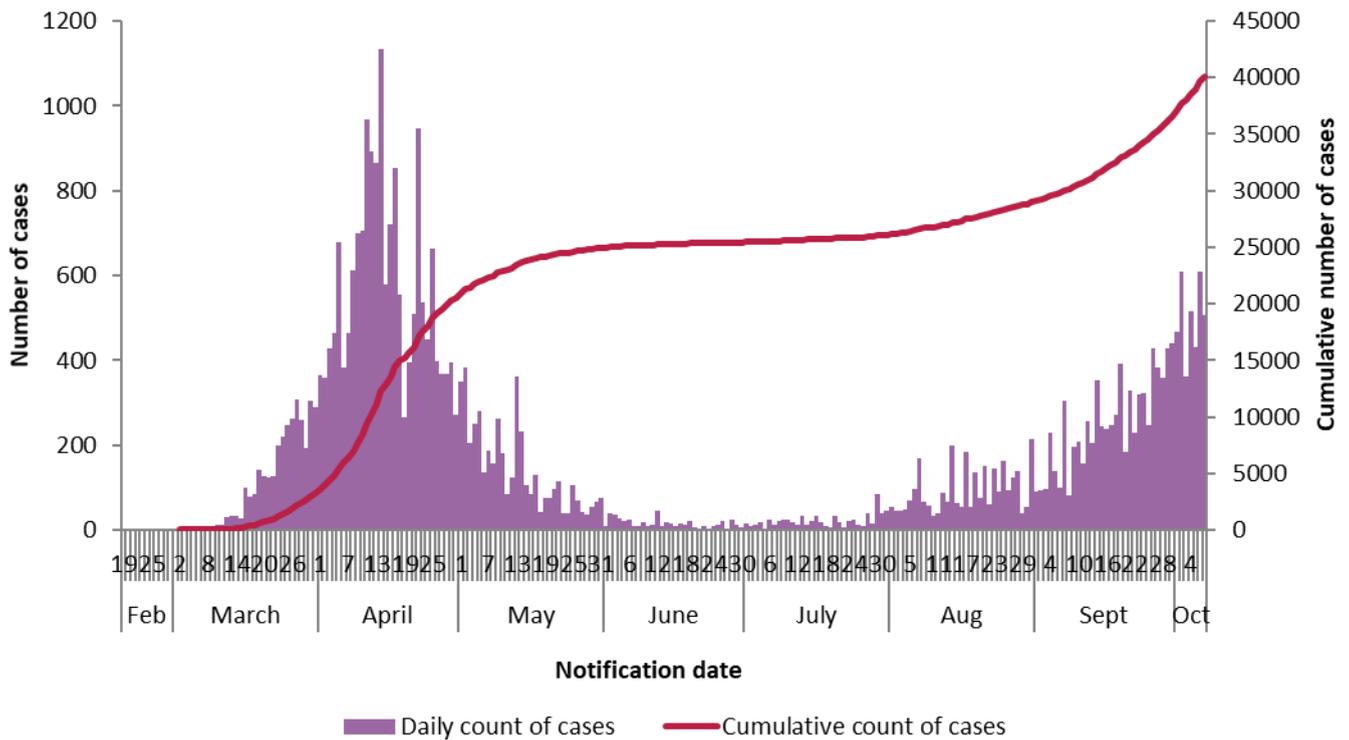
# Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 09/10/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 07/10/2020

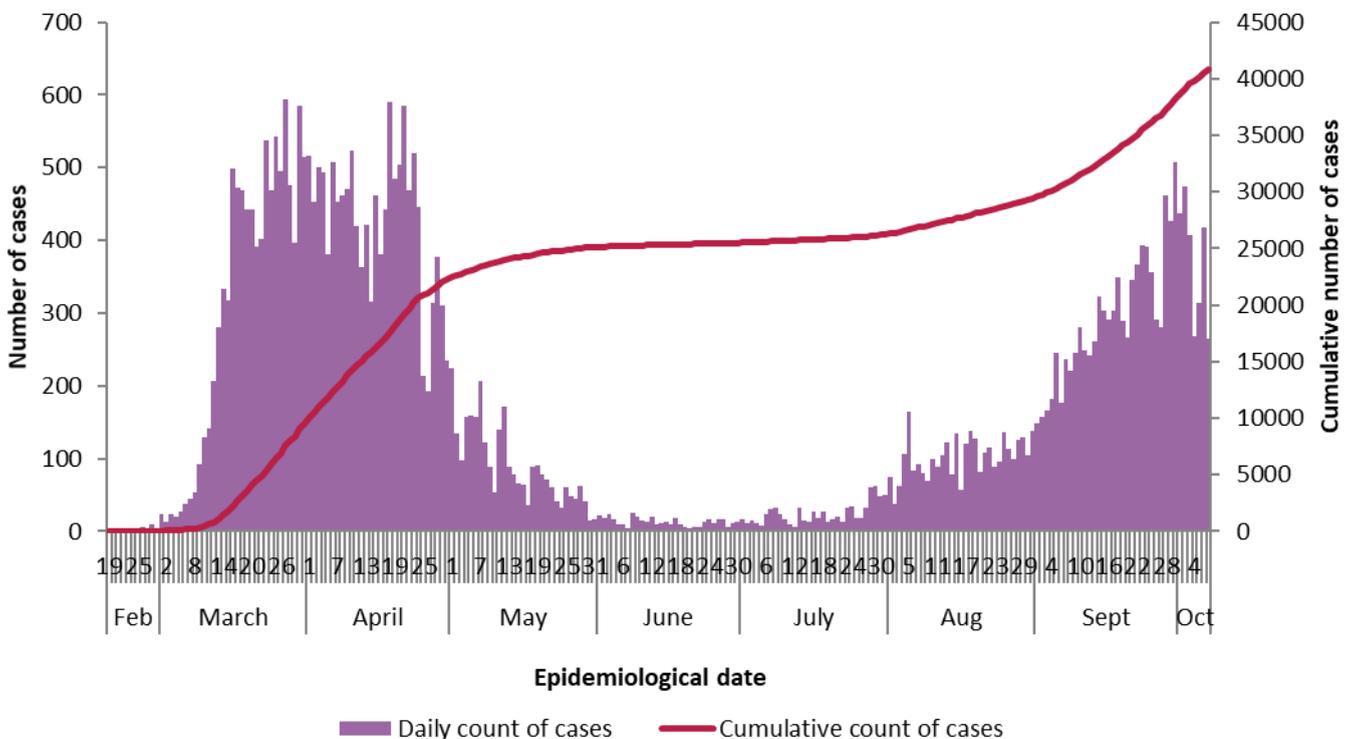
	Number	Percent
Total number of confirmed cases	40,086	
National cumulative incidence of confirmed cases per 100,000 population	841.81	
Total number of cases hospitalised	3,755	9.37
Total number of cases admitted to ICU	484	1.21
Total number of deaths among confirmed cases	1,566	3.91
Case fatality ratio (CFR, %)	3.91	
National cumulative incidence of confirmed deaths per 100,000 population	32.89	
Total number of outbreaks/clusters	4,795	
Total number of cases associated with clusters	22,293	55.61
Total number of imported cases	611	1.52
Number of cases in healthcare workers	9,536	23.79
Males	18,212	45.43
Females	21,833	54.47
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 09/10/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.



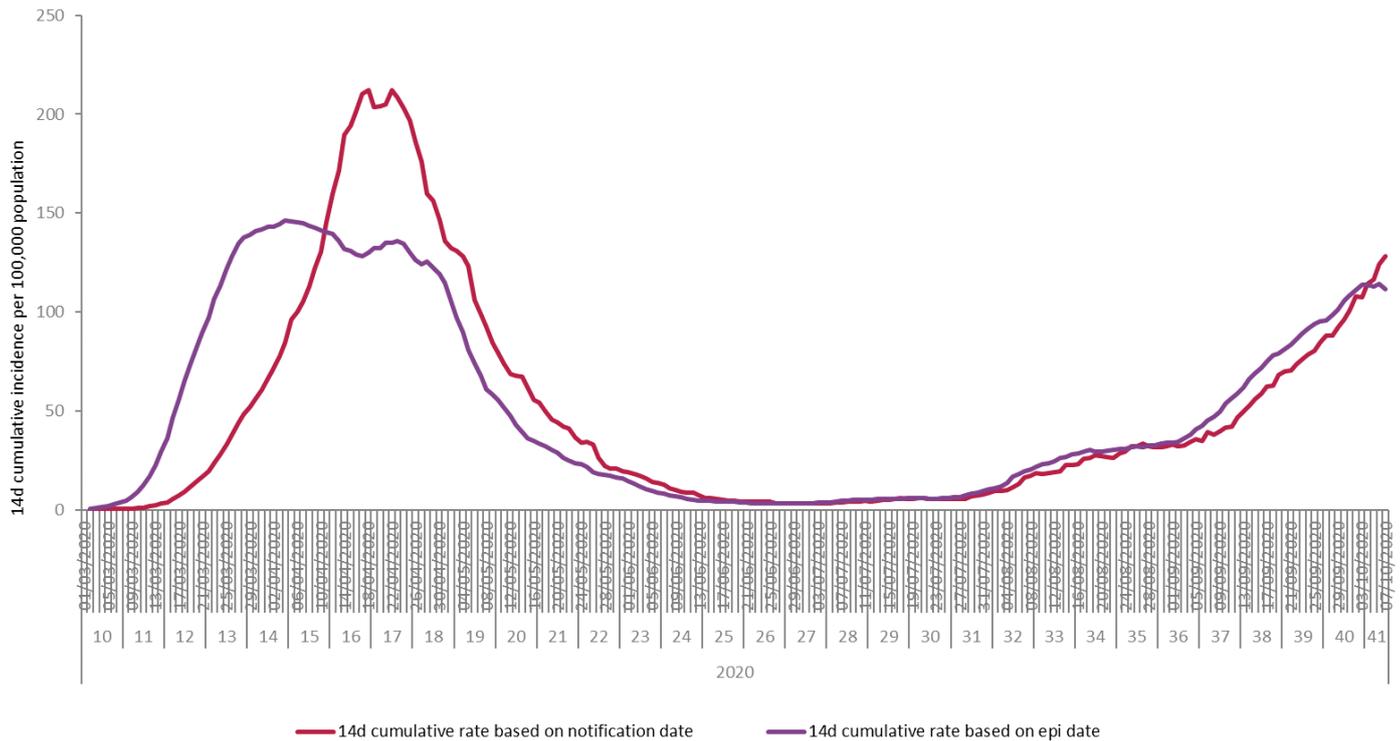
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 07/10/2020**

\*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 07/10/2020**

\*\*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.



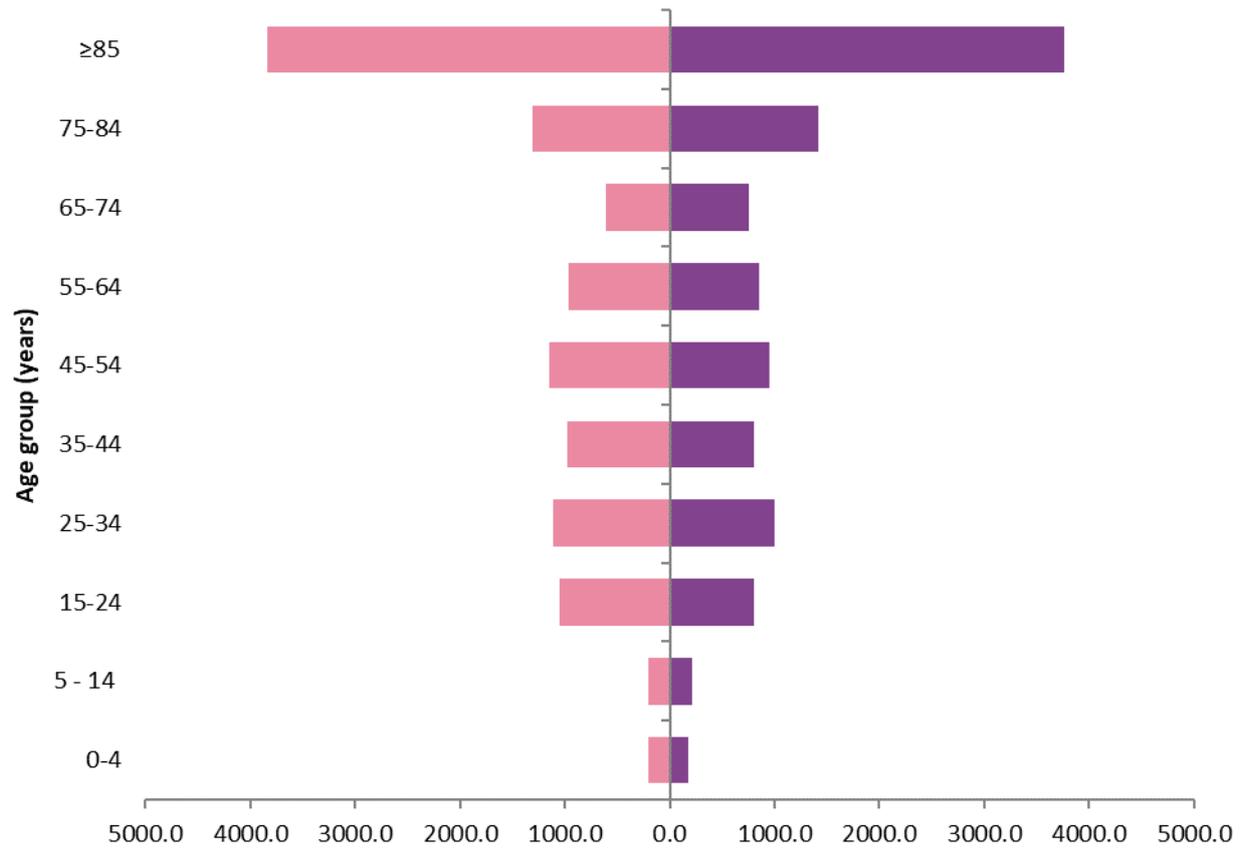
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 07/10/2020**

\* 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 07/10/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>40,086</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.83	
	Male	18,212	45.43
	Female	21,833	54.47
	Unknown	41	0.1
<b>Age</b>	Median age (years)	43	
	Mean age (years)	45	
	Age range (years)	0 - 106	
	0-4 yrs	636	1.59
	5-14 yrs	1,418	3.54
	15-24 yrs	5,331	13.3
	25-34 yrs	7,016	17.5
	35-44 yrs	6,694	16.7
	45-54 yrs	6,560	16.36
	55-64 yrs	4,624	11.54
	65-74 yrs	2,544	6.35
	75-84 yrs	2,665	6.65
	85+ yrs	2,574	6.42
	Unknown	24	0.06

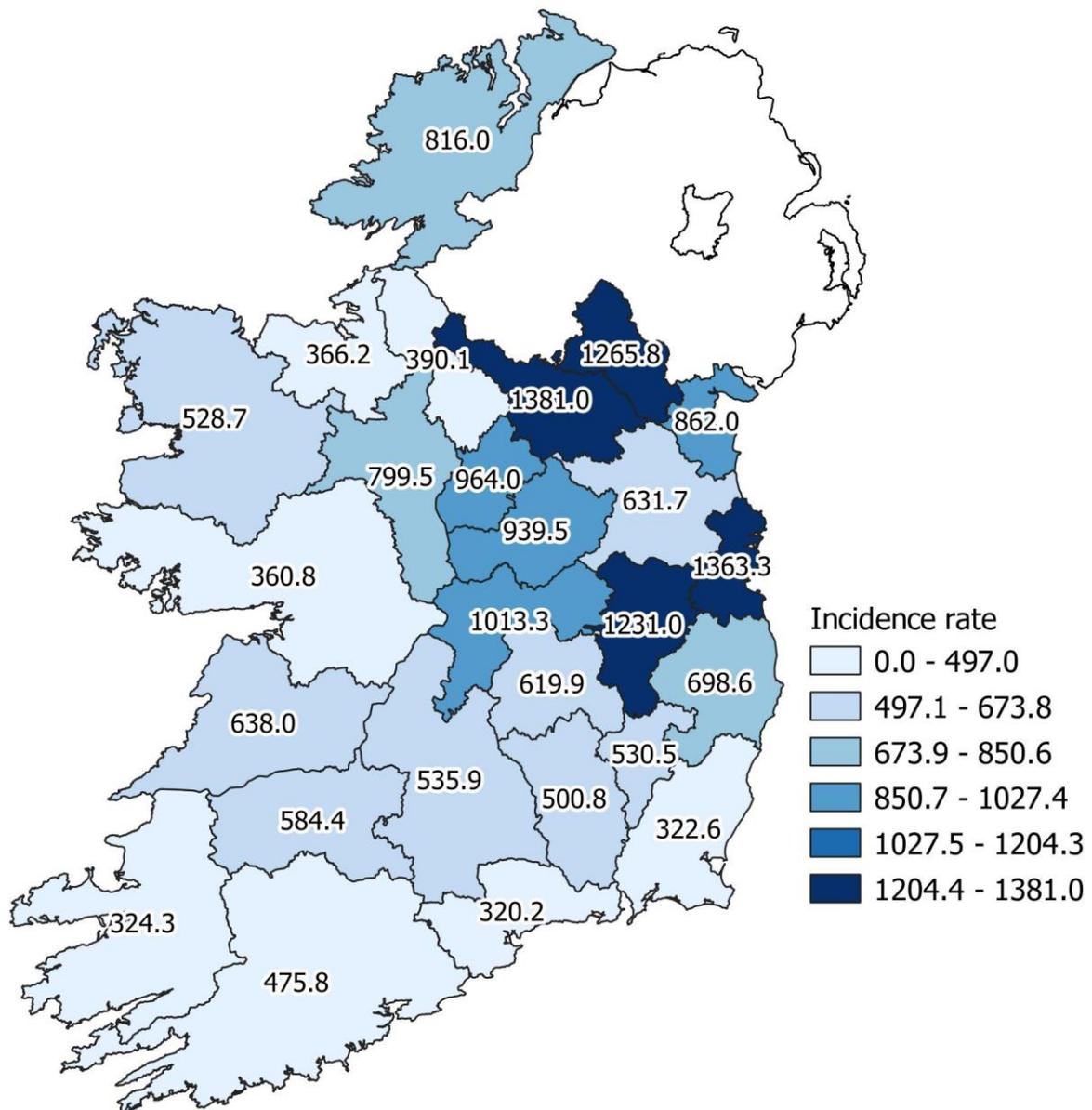


	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	≥85
Female	204.6	200.8	1046.6	1117.6	977.1	1143.8	964.9	614.1	1307.0	3834.3
Male	178.5	218.1	805.2	1002.5	810.5	948.4	851.3	749.7	1415.2	3759.4

**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 07/10/2020 (excluding 23 cases for whom age is unknown and 40 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 07/10/2020**

*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 07/10/2020**

<b>County Name</b>	<b>Number of cases</b>	<b>Percent</b>
Carlow	302	0.75
Cavan	1,052	2.62
Clare	758	1.89
Cork	2,583	6.44
Donegal	1,299	3.24
Dublin	18,368	45.82
Galway	931	2.32
Kerry	479	1.19
Kildare	2,739	6.83
Kilkenny	497	1.24
Laois	525	1.31
Leitrim	125	0.31
Limerick	1,139	2.84
Longford	394	0.98
Louth	1,111	2.77
Mayo	690	1.72
Meath	1,232	3.07
Monaghan	777	1.94
Offaly	790	1.97
Roscommon	516	1.29
Sligo	240	0.6
Tipperary	855	2.13
Waterford	372	0.93
Westmeath	834	2.08
Wexford	483	1.2
Wicklow	995	2.48
<b>Total</b>	<b>40,086</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 07/10/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	11,065	27.60%
Local transmission, incl. possible local transmission	27,338	68.20%
Travel abroad, incl. possible travel abroad	872	2.18%
Unknown	811	2.02%
<b>Total</b>	<b>40,086</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 07/10/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	636	35	0.93	1	0.21
5-14 yrs	1418	29	0.77	2	0.41
15-24 yrs	5331	105	2.8	5	1.03
25-34 yrs	7016	229	6.1	17	3.51
35-44 yrs	6694	305	8.12	43	8.88
45-54 yrs	6560	499	13.29	97	20.04
55-64 yrs	4624	568	15.13	138	28.51
65-74 yrs	2544	667	17.76	125	25.83
75-84 yrs	2665	814	21.68	50	10.33
85+ yrs	2574	503	13.4	6	1.24
Unknown	24	1	0.03	0	0
<b>Total</b>	<b>40,086</b>	<b>3,755</b>	<b>100</b>	<b>484</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 07/10/2020**

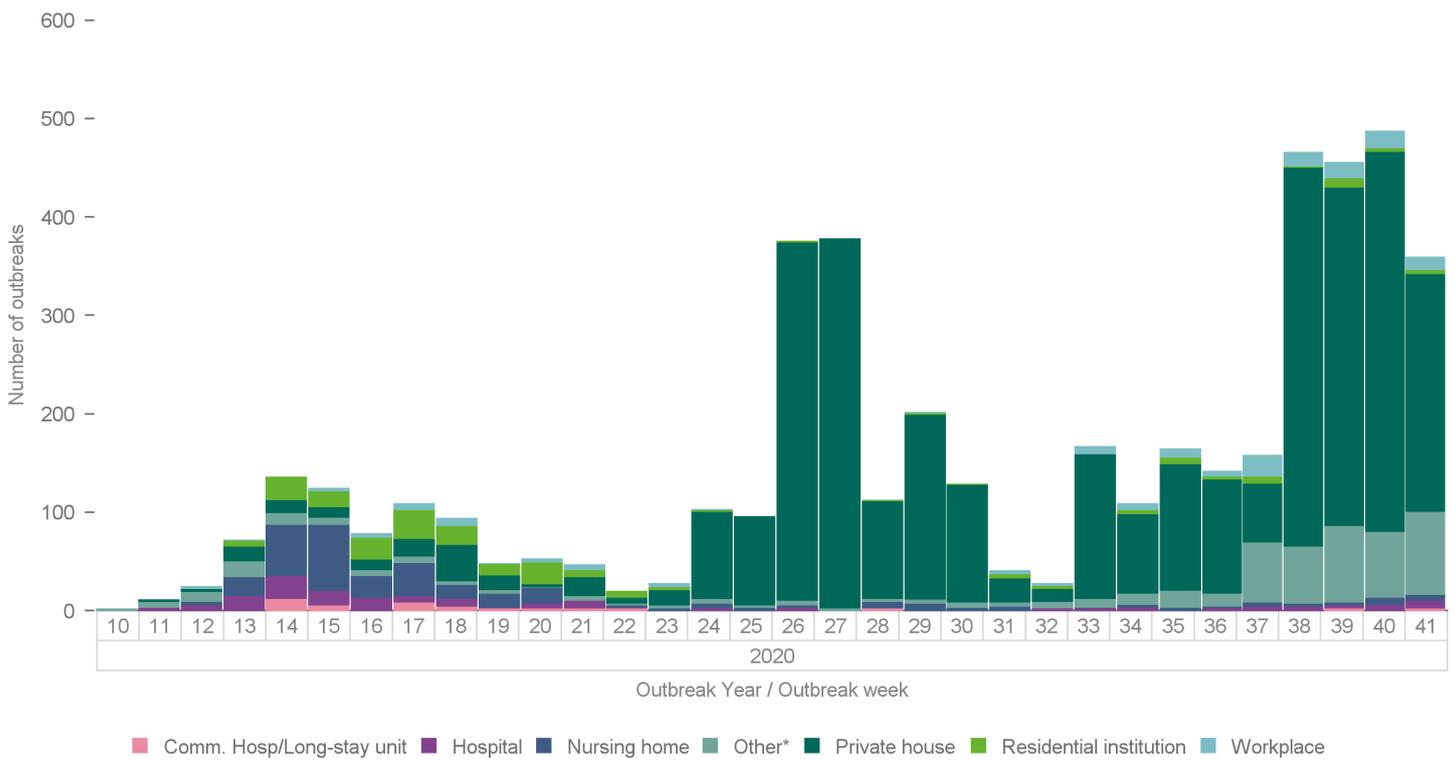
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	636	1,418	5,331	7,016	6,694	6,560	4,624	2,544	2,665	2,574	24
Cases hospitalised (n)	35	29	105	229	305	499	568	667	814	503	1
Cases hospitalised (%)	5.5	2.05	1.97	3.26	4.56	7.61	12.28	26.22	30.54	19.54	4.17
Cases admitted to ICU (n)	1	2	5	17	43	97	138	125	50	6	0
Cases admitted to ICU (%)	0.16	0.14	0.09	0.24	0.64	1.48	2.98	4.91	1.88	0.23	0
Deaths (n)	0	0	1	6	12	29	73	234	535	676	0
Case fatality ratio (%)	0	0	0.02	0.09	0.18	0.44	1.58	9.2	20.08	26.26	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 07/10/2020**

Outbreak Location	E	HPSC	M	MW	NE	NW	S	SE	W	Total
Private house	2,270		59	149	272	142	243	184	104	<b>3,423</b>
Other*	110	2	48	111	28	53	87	27	52	<b>518</b>
Nursing home	149		13	19	45	7	15	18	36	<b>302</b>
Residential institution	127		12	11	27	5	22	10	5	<b>219</b>
Workplace	57		13	16	26	19	14	13	13	<b>171</b>
Hospital	73		5	5	18	4	14	5	6	<b>130</b>
Comm. Hosp/Long-stay unit	6		4	2		4	6	5	5	<b>32</b>
<b>Total</b>	<b>2,792</b>	<b>2</b>	<b>154</b>	<b>313</b>	<b>416</b>	<b>234</b>	<b>401</b>	<b>262</b>	<b>221</b>	<b>4,795</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 07/10/2020**

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

Note: 3,959 COVID-19 outbreaks were reported on CIDR between week 24 and week 41 2020 to date (9th June to 7th October). Of these, 3,314 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, 1,280 in September and 45 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 07/10/2020

	Number	Percent
Total number of deaths	1,820	
Confirmed	1,566	86.04
Probable	95	5.22
Possible	159	8.74
Total number of cases hospitalised	780	42.86
Cases admitted to ICU	98	5.38
Cases not admitted to ICU	682	37.47
Total number of imported cases	6	0.33
Number of cases in healthcare workers	8	0.44
Number with underlying clinical conditions	1,723	94.67
Total number of male cases	903	49.62
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 07/10/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.05
25-34 yrs	<5	<5	6	0.33
35-44 yrs	6	7	13	0.71
45-54 yrs	11	20	31	1.7
55-64 yrs	26	52	78	4.29
65-74 yrs	98	162	260	14.29
75-84 yrs	281	335	616	33.85
85+ yrs	490	323	813	44.67
Unknown	<5	<5	2	0.11
<b>Total</b>	<b>917</b>	<b>903</b>	<b>1,820</b>	<b>100</b>
<b>Percent</b>	<b>50.38</b>	<b>49.62</b>		

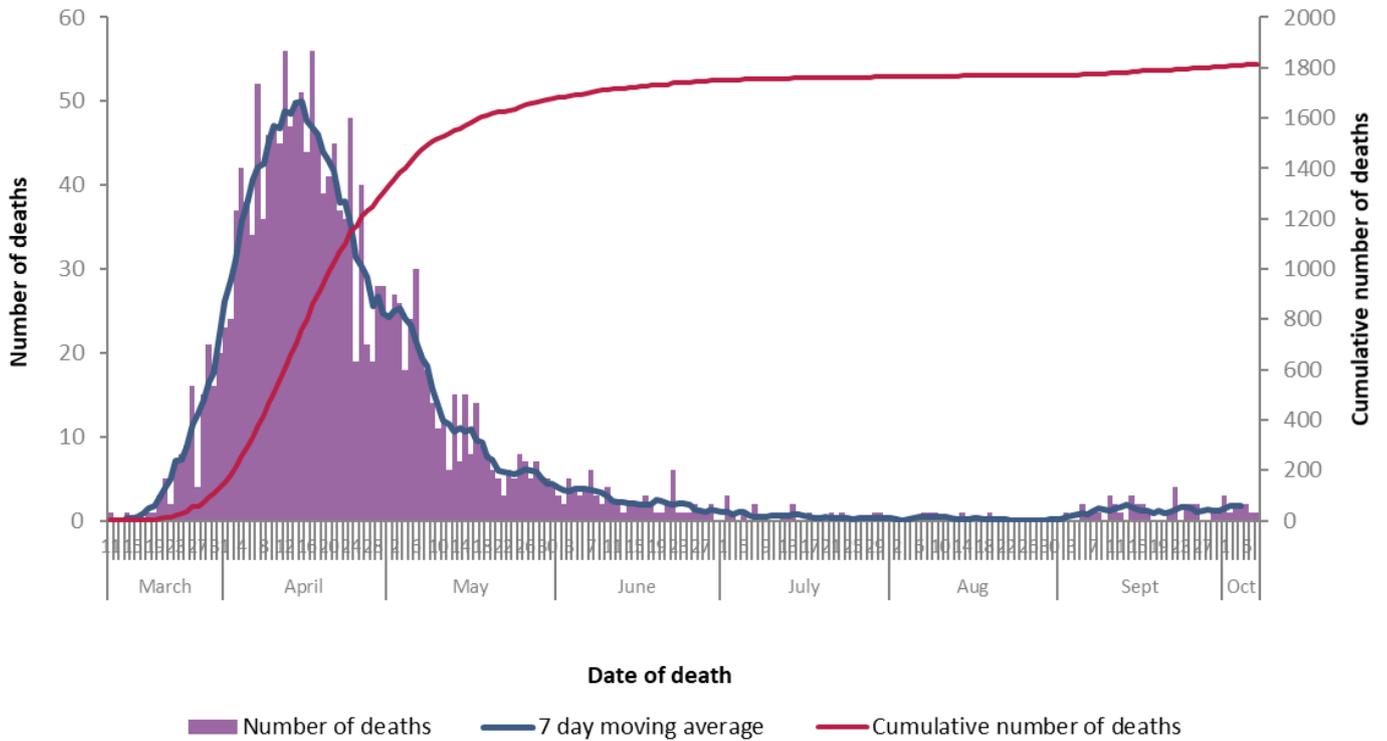


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 07/10/2020

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

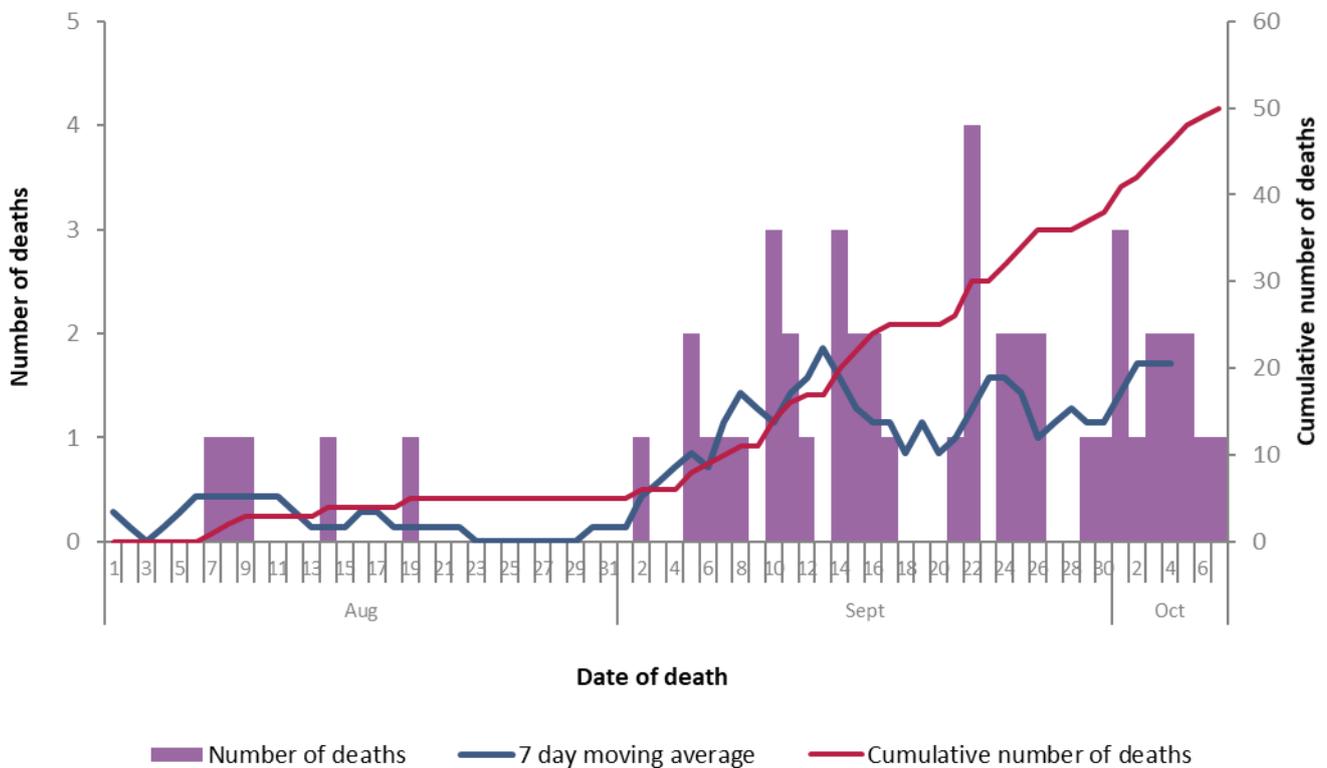


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/08/2020 to midnight 07/10/2020

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 09/10/2020. 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.