



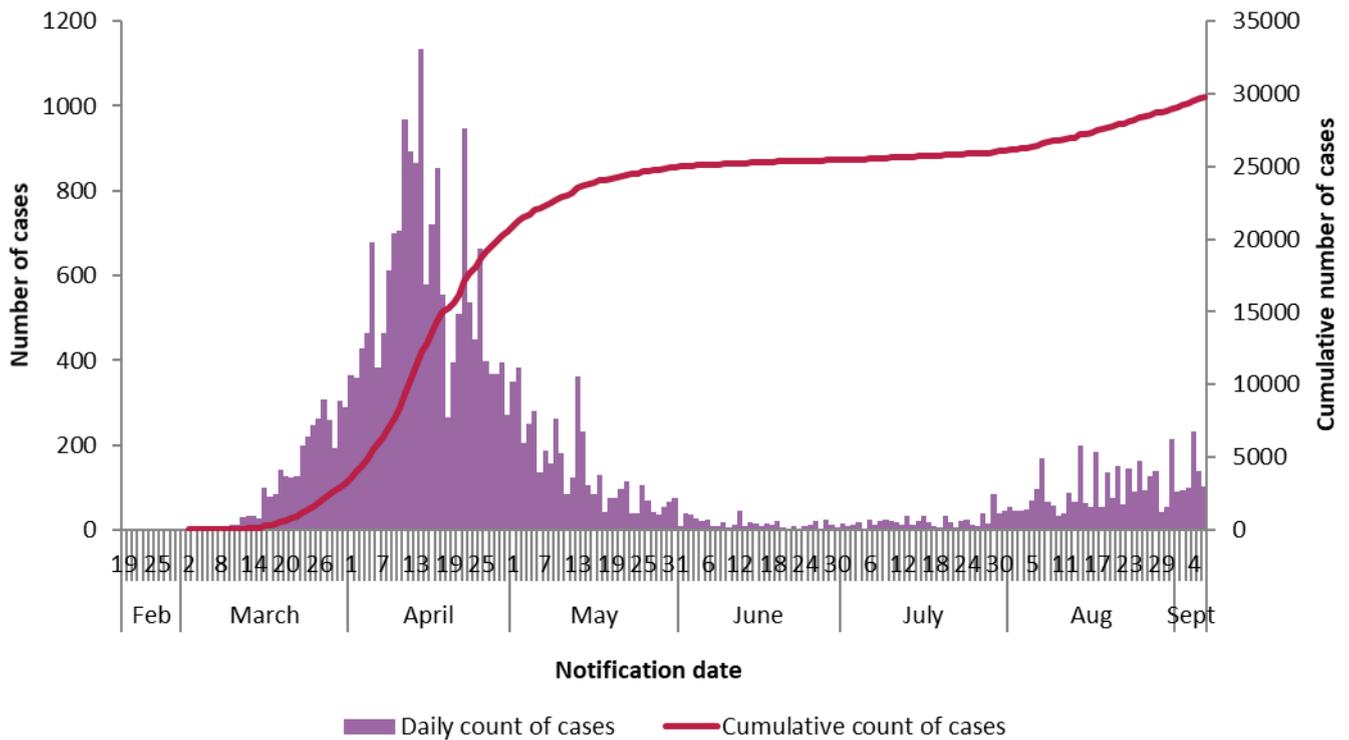
# Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 08/09/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 06/09/2020

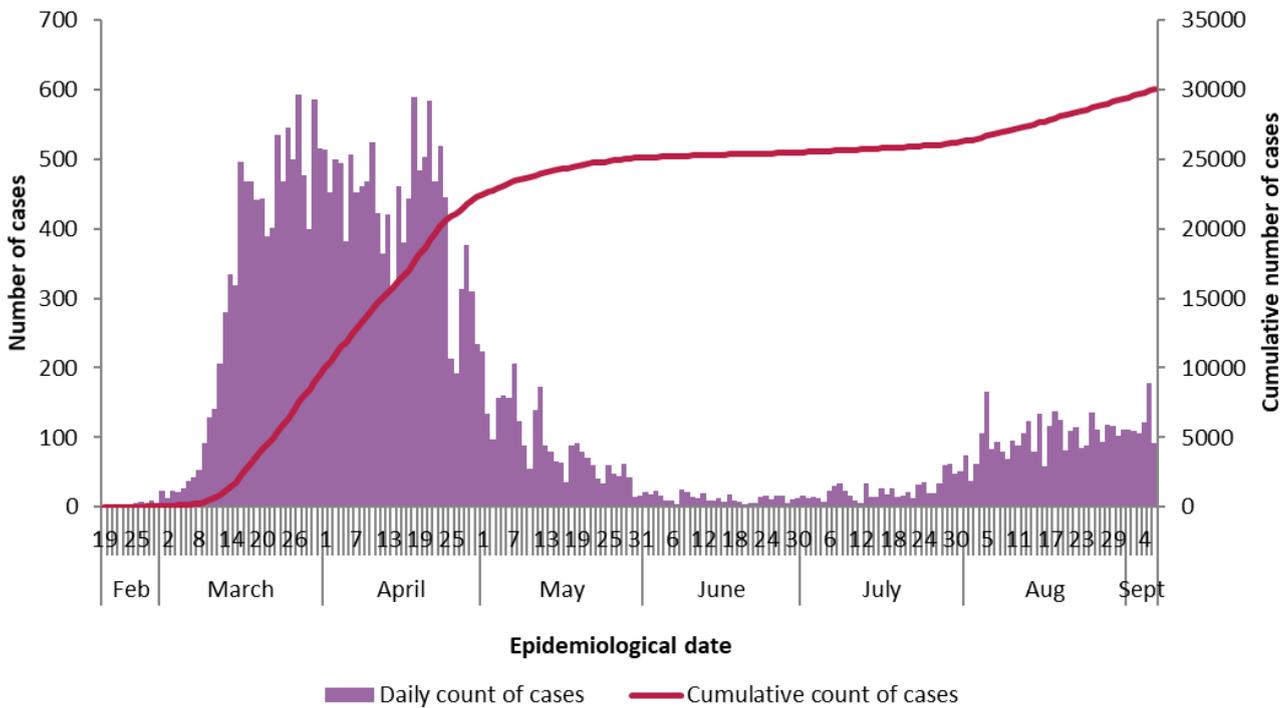
	Number	Percent
Total number of confirmed cases	29,773	
National cumulative incidence of confirmed cases per 100,000 population	625.24	
Total number of cases hospitalised	3,429	11.52
Total number of cases admitted to ICU	449	1.51
Total number of deaths among confirmed cases	1,520	5.11
Case fatality ratio (CFR, %)	5.11	
National cumulative incidence of confirmed deaths per 100,000 population	31.92	
Total number of outbreaks/clusters	2,885	
Total number of cases associated with clusters	16,237	54.54
Total number of imported cases	541	1.82
Number of cases in healthcare workers	8,780	29.49
Males	13,093	43.98
Females	16,650	55.92
M:F ratio	0.79	
Median age (years)	46	
Mean age (years)	48	
Age range (years)	0 - 106	

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



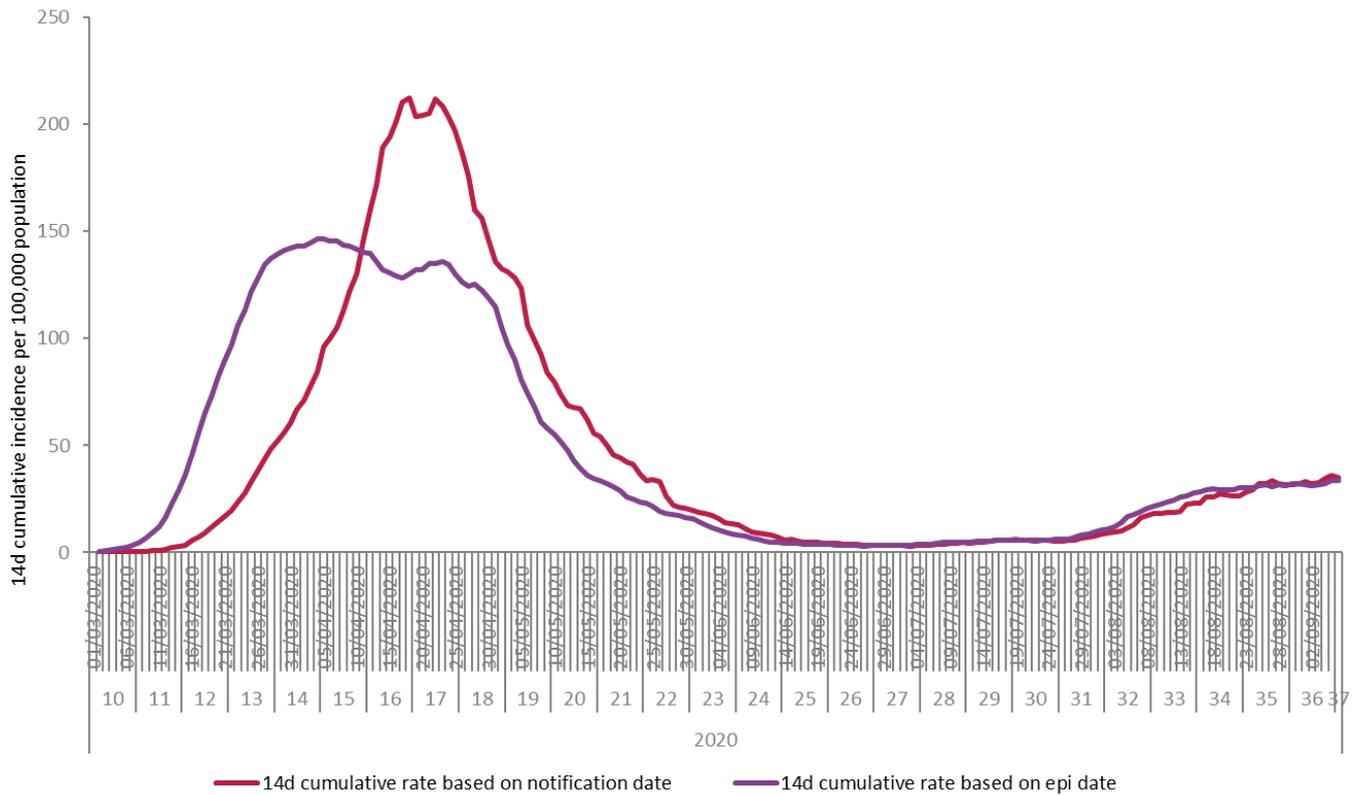
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 06/09/2020**

\*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 06/09/2020**

\*\*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.



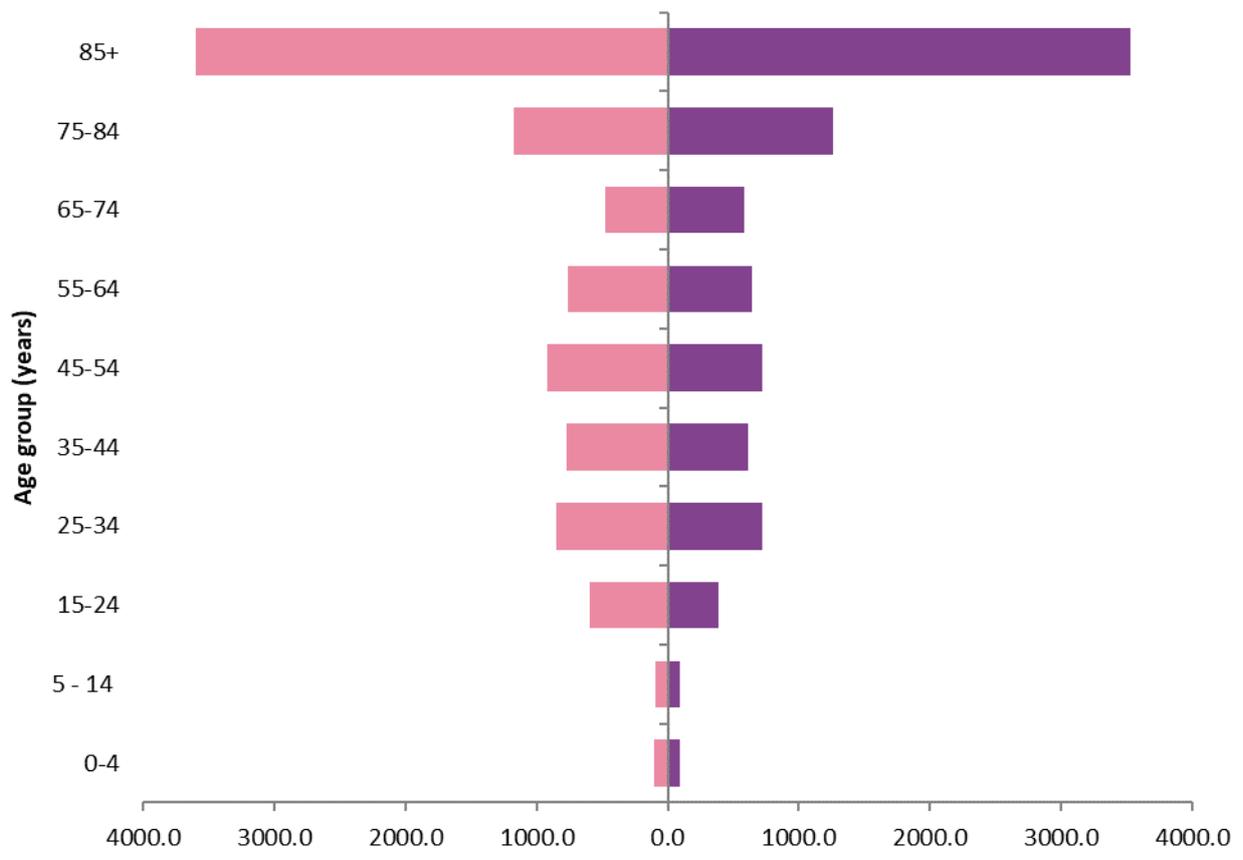
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 06/09/2020**

\* 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 06/09/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>29,773</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.79	
	Male	13,093	43.98
	Female	16,650	55.92
	Unknown	30	0.1
<b>Age</b>	Median age (years)	46	
	Mean age (years)	48	
	Age range (years)	0 - 106	
	0-4 yrs	333	1.12
	5-14 yrs	649	2.18
	15-24 yrs	2,816	9.46
	25-34 yrs	5,221	17.54
	35-44 yrs	5,203	17.48
	45-54 yrs	5,159	17.33
	55-64 yrs	3,588	12.05
	65-74 yrs	1,977	6.64
	75-84 yrs	2,387	8.02
	85+ yrs	2,416	8.11
	Unknown	24	0.08

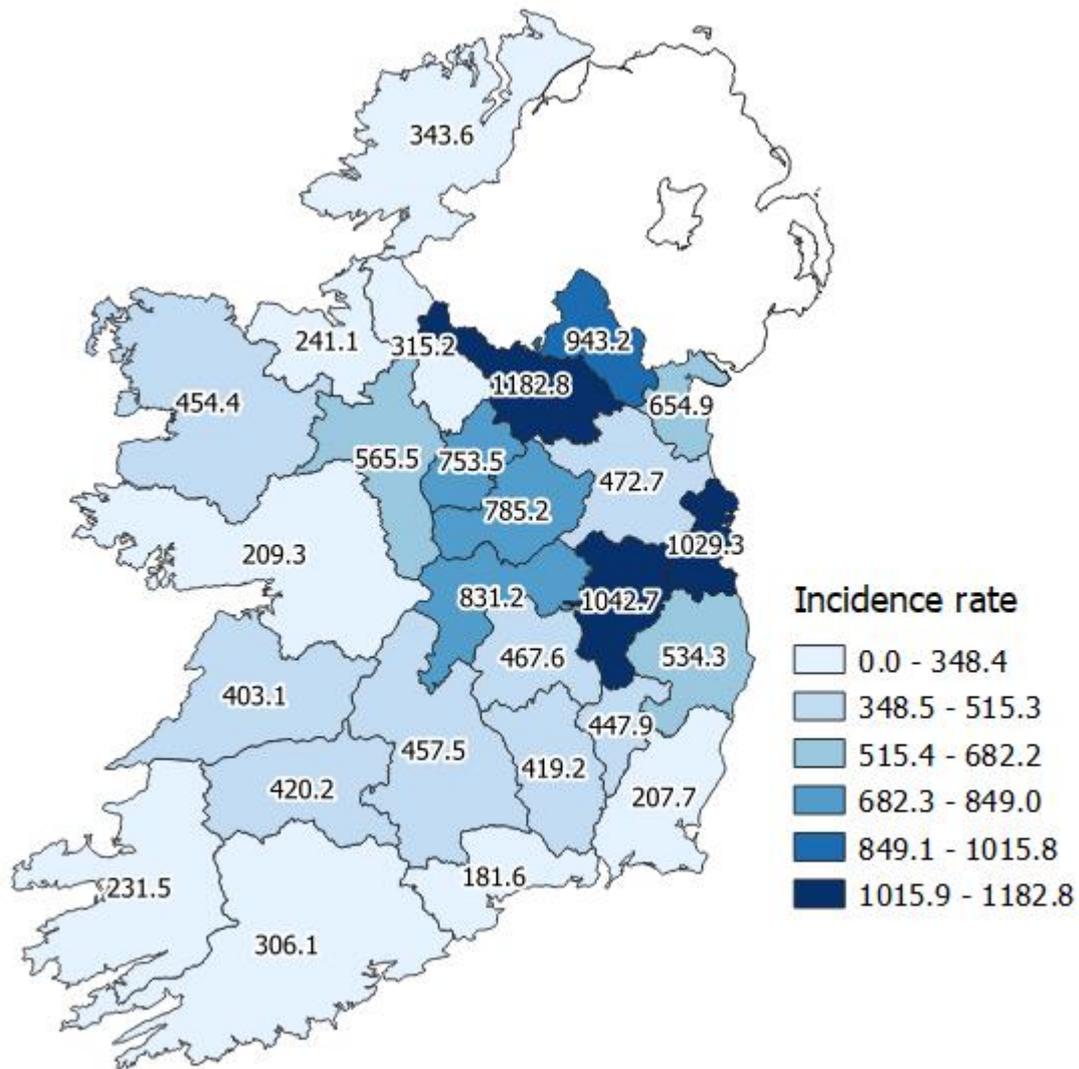


	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	105.1	98.4	593.4	854.8	775.2	917.8	762.1	478.2	1173.6	3598.3
Male	96.0	94.0	386.3	721.1	613.5	726.9	647.0	581.1	1264.1	3529.6

**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 06/09/2020 (excluding 23 cases for whom age is unknown and 29 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 06/09/2020**

*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 06/09/2020**

County Name	Number of cases	Percent
Carlow	255	0.86
Cavan	901	3.03
Clare	479	1.61
Cork	1,662	5.58
Donegal	547	1.84
Dublin	13,868	46.58
Galway	540	1.81
Kerry	342	1.15
Kildare	2,320	7.79
Kilkenny	416	1.4
Laois	396	1.33
Leitrim	101	0.34
Limerick	819	2.75
Longford	308	1.03
Louth	844	2.83
Mayo	593	1.99
Meath	922	3.1
Monaghan	579	1.94
Offaly	648	2.18
Roscommon	365	1.23
Sligo	158	0.53
Tipperary	730	2.45
Waterford	211	0.71
Westmeath	697	2.34
Wexford	311	1.04
Wicklow	761	2.56
<b>Total</b>	<b>29,773</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 06/09/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	8,999	30.23%
Local transmission, incl. possible local transmission	19,794	66.48%
Travel abroad, incl. possible travel abroad	734	2.47%
Unknown	246	0.83%
<b>Total</b>	<b>29,773</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 06/09/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	333	26	0.76	1	0.22
5-14 yrs	649	19	0.55	2	0.45
15-24 yrs	2816	84	2.45	5	1.11
25-34 yrs	5221	209	6.1	17	3.79
35-44 yrs	5203	278	8.11	38	8.46
45-54 yrs	5159	460	13.41	93	20.71
55-64 yrs	3588	505	14.73	129	28.73
65-74 yrs	1977	603	17.59	110	24.5
75-84 yrs	2387	761	22.19	48	10.69
85+ yrs	2416	483	14.09	6	1.34
Unknown	24	1	0.03	0	0
<b>Total</b>	<b>29,773</b>	<b>3,429</b>	<b>100</b>	<b>449</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 06/09/2020**

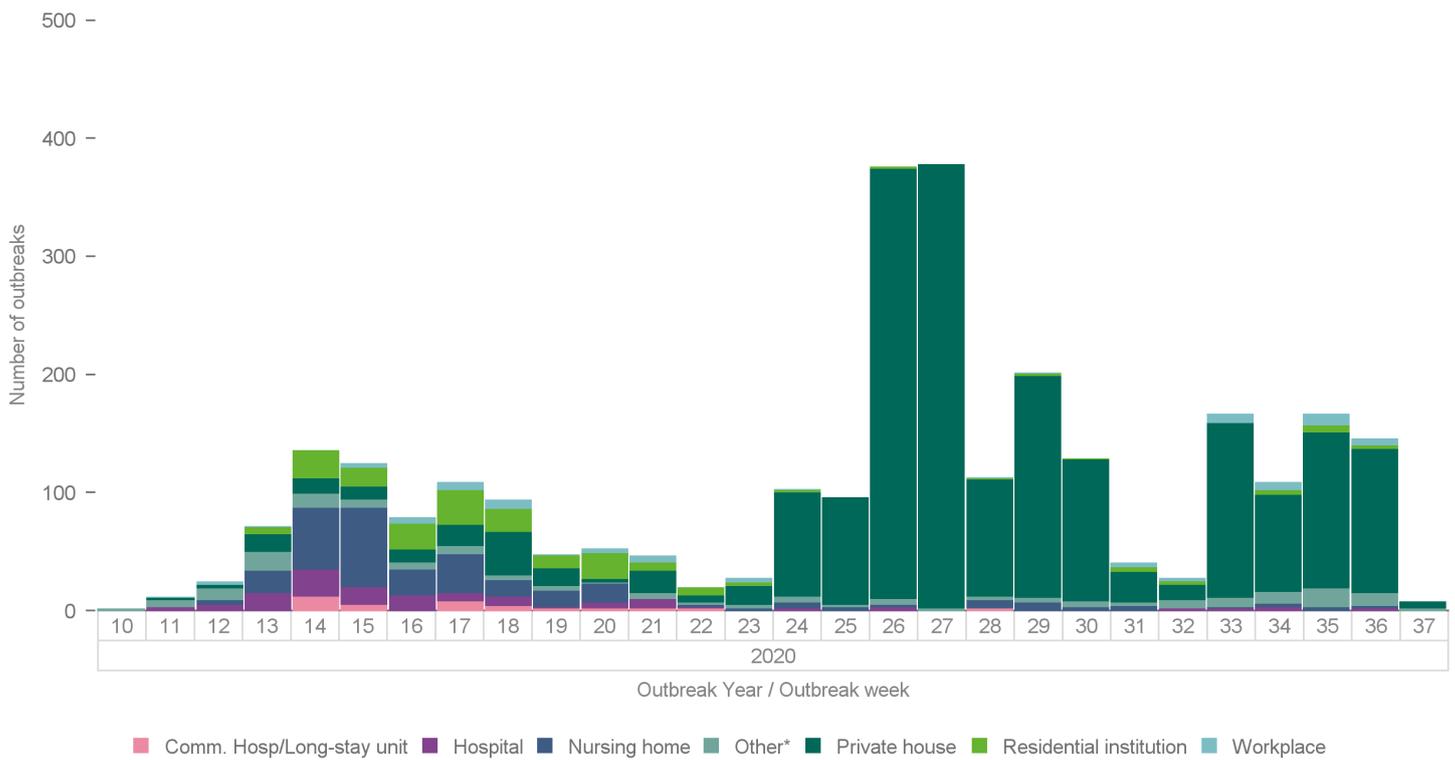
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	333	649	2,816	5,221	5,203	5,159	3,588	1,977	2,387	2,416	24
Cases hospitalised (n)	26	19	84	209	278	460	505	603	761	483	1
Cases hospitalised (%)	7.81	2.93	2.98	4	5.34	8.92	14.07	30.5	31.88	19.99	4.17
Cases admitted to ICU (n)	1	2	5	17	38	93	129	110	48	6	0
Cases admitted to ICU (%)	0.3	0.31	0.18	0.33	0.73	1.8	3.6	5.56	2.01	0.25	0
Deaths (n)	0	0	1	5	12	25	68	228	522	659	0
Case fatality ratio (%)	0	0	0.04	0.1	0.23	0.48	1.9	11.53	21.87	27.28	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 06/09/2020**

Outbreak Location	E	HPSC	M	MW	NE	NW	S	SE	W	Total
Private house	1,427		27	105	143	56	125	108	33	<b>2,024</b>
Nursing home	134		10	19	44	5	14	17	36	<b>279</b>
Residential institution	114		10	11	20	4	21	10	4	<b>194</b>
Other*	19	2	11	49	8	12	39	13	12	<b>165</b>
Hospital	63		4	4	14	2	10	5	6	<b>108</b>
Workplace	28		10	8	16	2	9	7	5	<b>85</b>
Comm. Hosp/Long-stay unit	4		4	2		4	6	5	5	<b>30</b>
<b>Total</b>	<b>1,789</b>	<b>2</b>	<b>76</b>	<b>198</b>	<b>245</b>	<b>85</b>	<b>224</b>	<b>165</b>	<b>101</b>	<b>2,885</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 06/09/2020**

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

Note: 2,047 COVID-19 outbreaks were reported on CIDR between week 24 and week 37 2020 to date (9th June to 6th September). Of these, 1,882 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 37 as a result of data validation: 1 occurred in February, 635 in March, 472 in April, 94 in May, 127 in June, 126 in July, 411 in August and 16 in September to date.

## Deaths among COVID-19 cases

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 06/09/2020

	Number	Percent
Total number of deaths	1,778	
Confirmed	1,520	85.49
Probable	99	5.57
Possible	159	8.94
Total number of cases hospitalised	759	42.69
Cases admitted to ICU	94	5.29
Cases not admitted to ICU	665	37.4
Total number of imported cases	6	0.34
Number of cases in healthcare workers	8	0.45
Number with underlying clinical conditions	1,678	94.38
Total number of male cases	875	49.21
M:F ratio	0.97	
Median age (years)	83.5	
Mean age (years)	82	
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 06/09/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.06
25-34 yrs	<5	<5	5	0.28
35-44 yrs	6	7	13	0.73
45-54 yrs	10	17	27	1.52
55-64 yrs	25	48	73	4.11
65-74 yrs	94	159	253	14.23
75-84 yrs	279	327	606	34.08
85+ yrs	484	314	798	44.88
Unknown	<5	<5	2	0.11
<b>Total</b>	<b>903</b>	<b>875</b>	<b>1,778</b>	<b>100</b>
<b>Percent</b>	<b>50.79</b>	<b>49.21</b>		

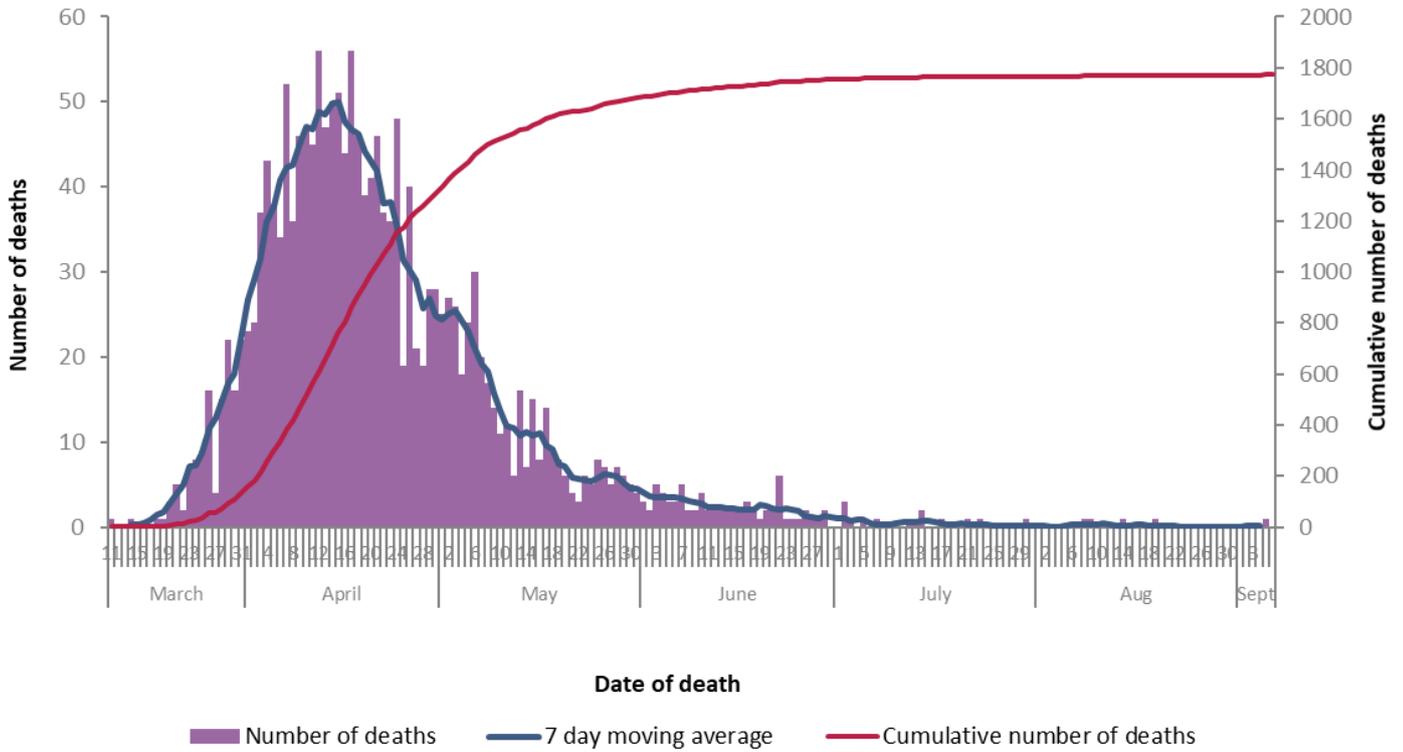


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 06/09/2020

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

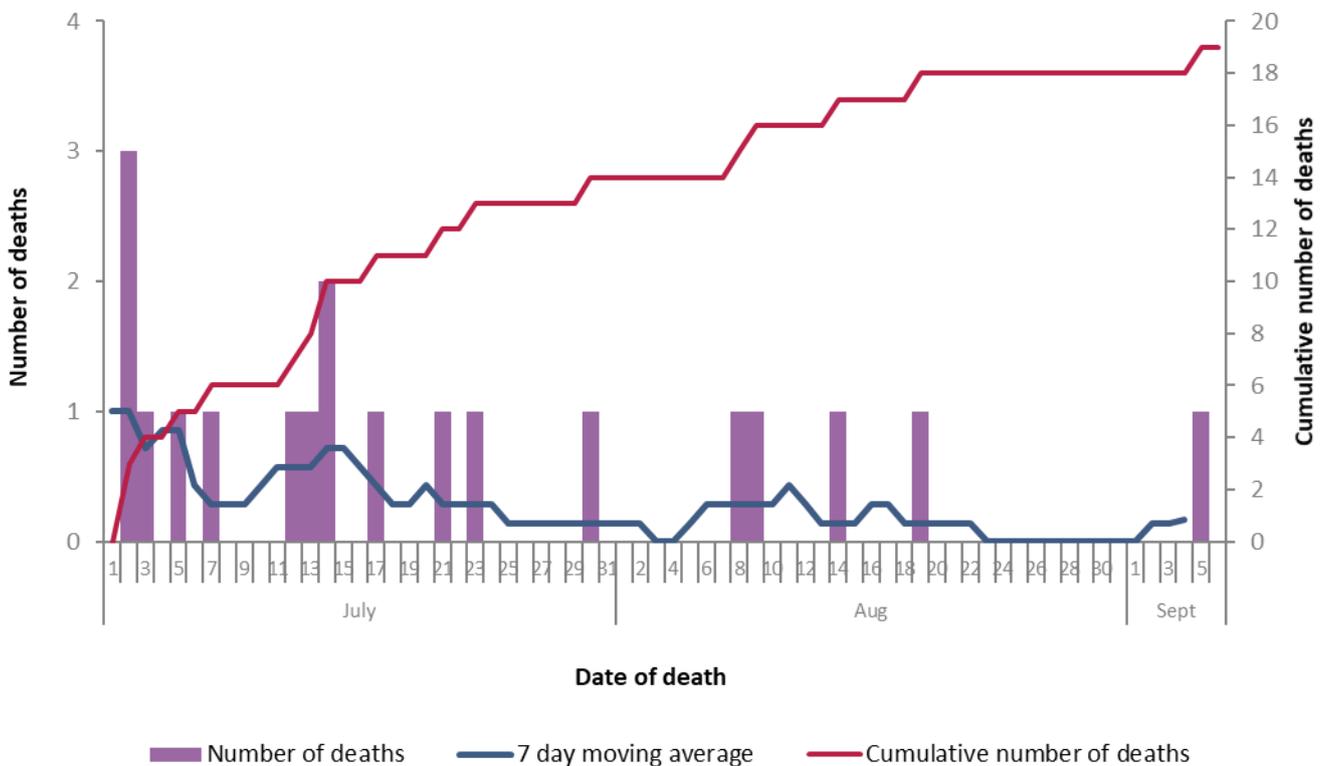


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/07/2020 to midnight 06/09/2020

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 08/09/2020. 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.
- 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.