



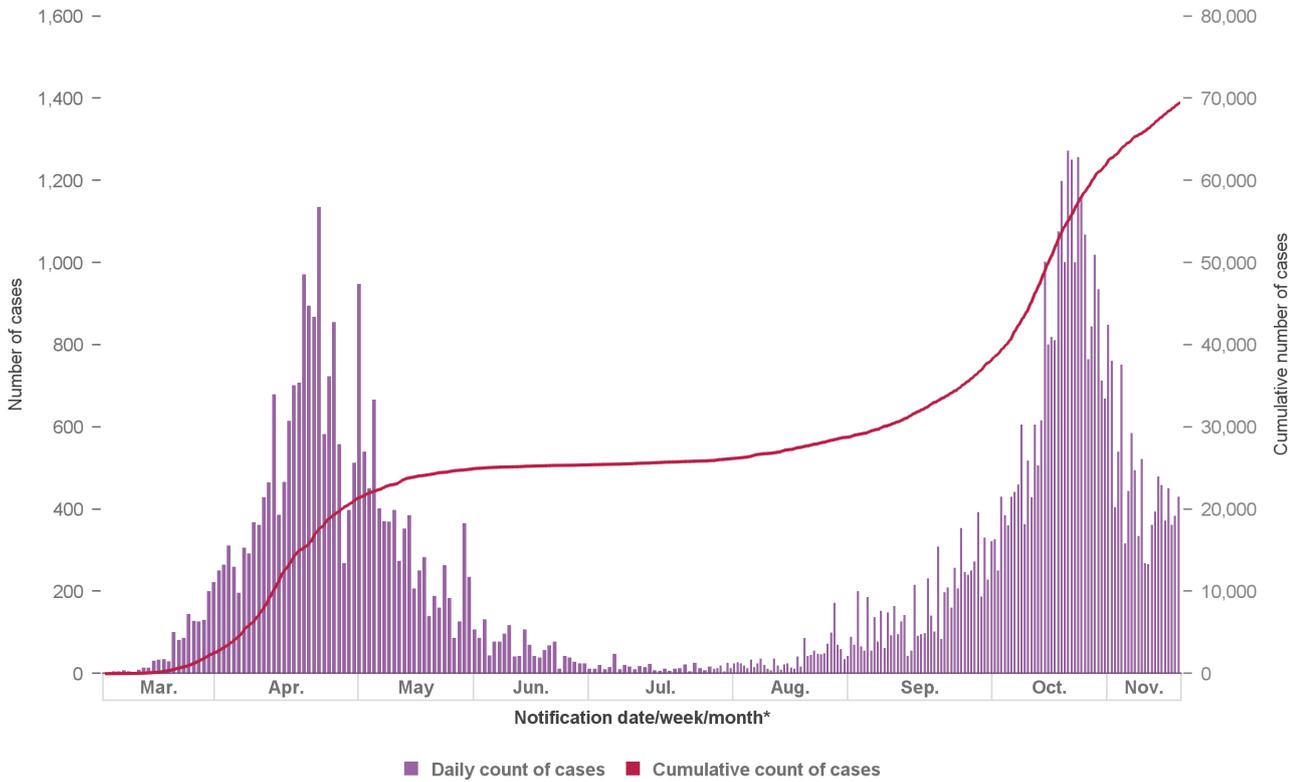
# Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 20/11/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 18/11/2020

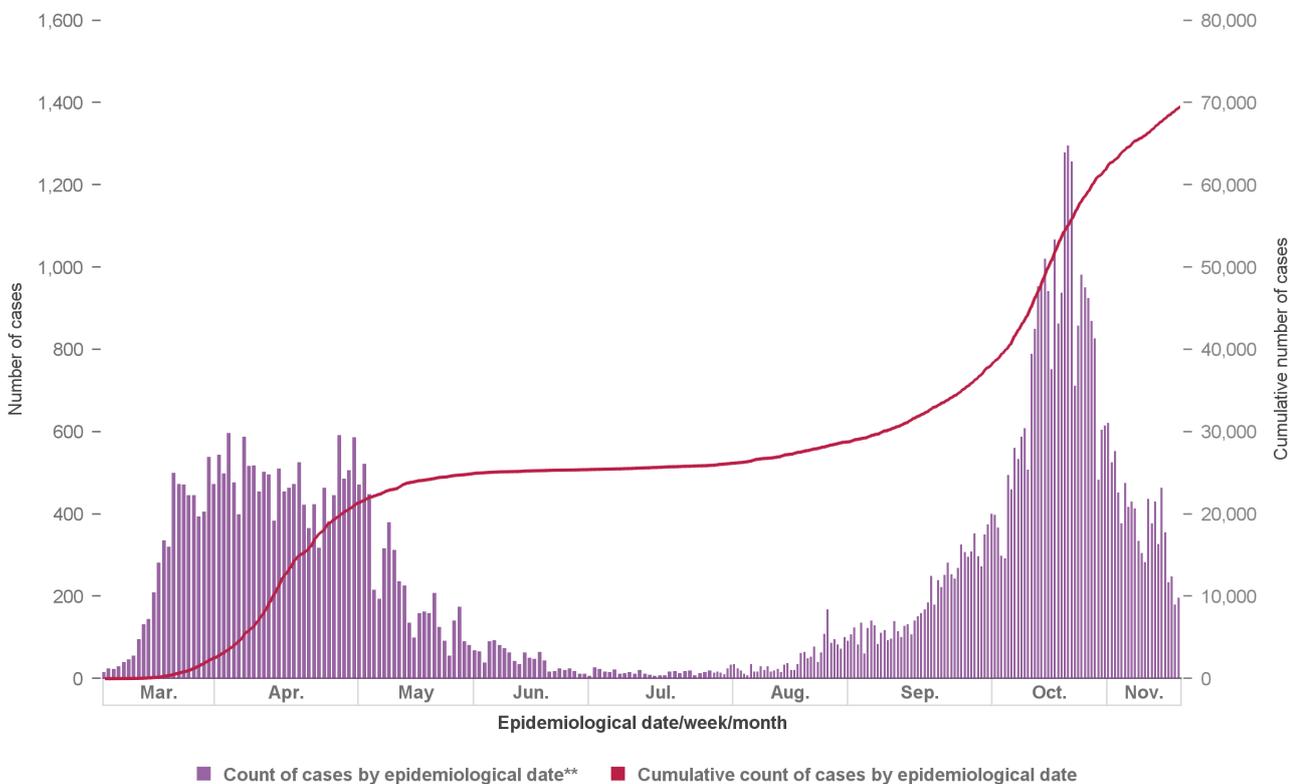
	Number	Percent
Total number of confirmed cases	69,472	
National cumulative incidence of confirmed cases per 100,000 population	1,458.92	
Total number of cases hospitalised	5,003	7.2
Total number of cases admitted to ICU	604	0.87
Total number of deaths among confirmed cases	1,759	2.53
Case fatality ratio (CFR, %)	2.53	
National cumulative incidence of confirmed deaths per 100,000 population	36.94	
Total number of outbreaks/clusters	8,708	
Total number of cases associated with clusters	37,127	53.44
Total number of imported cases	656	0.94
Number of cases in healthcare workers	11,565	16.65
Males	32,643	46.99
Females	36,805	52.98
M:F ratio	0.89	
Median age (years)	39	
Mean age (years)	41	
Age range (years)	0 - 108	

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:41 on 20/11/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.



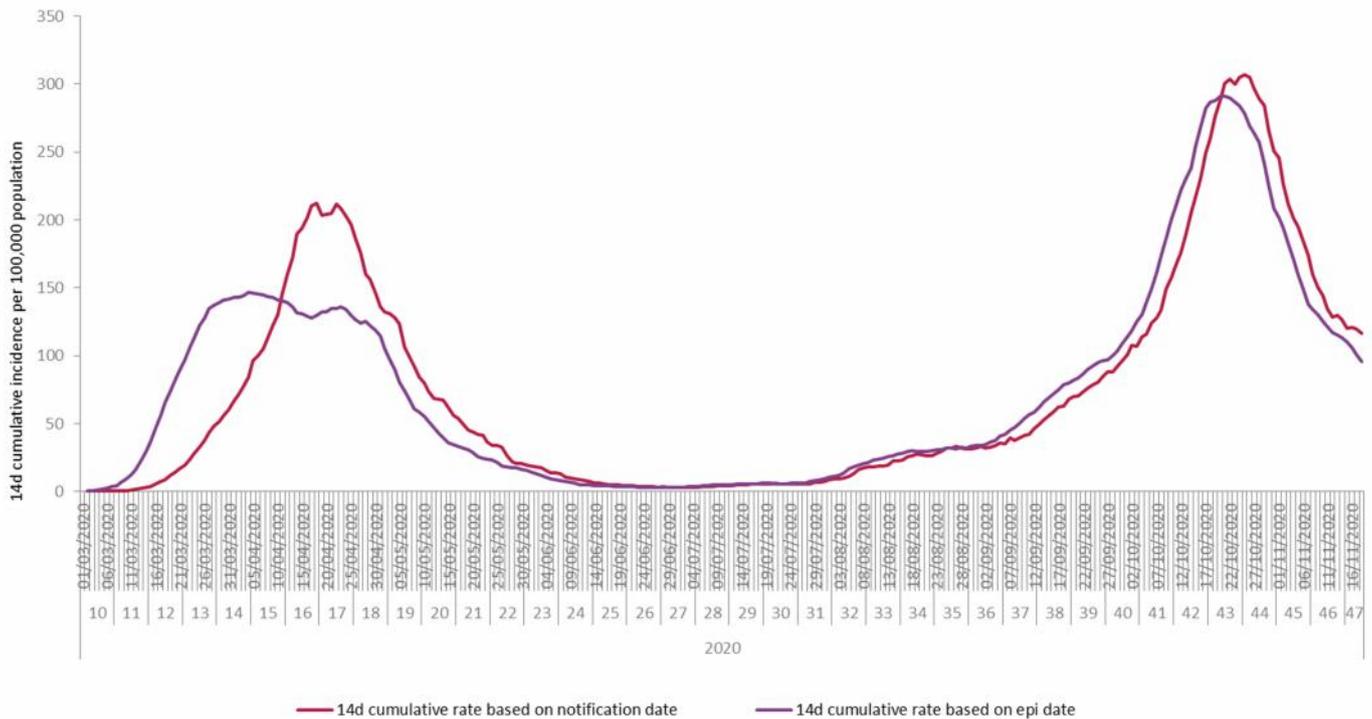
**Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 18/11/2020**

\*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 18/11/2020**

\*\*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.



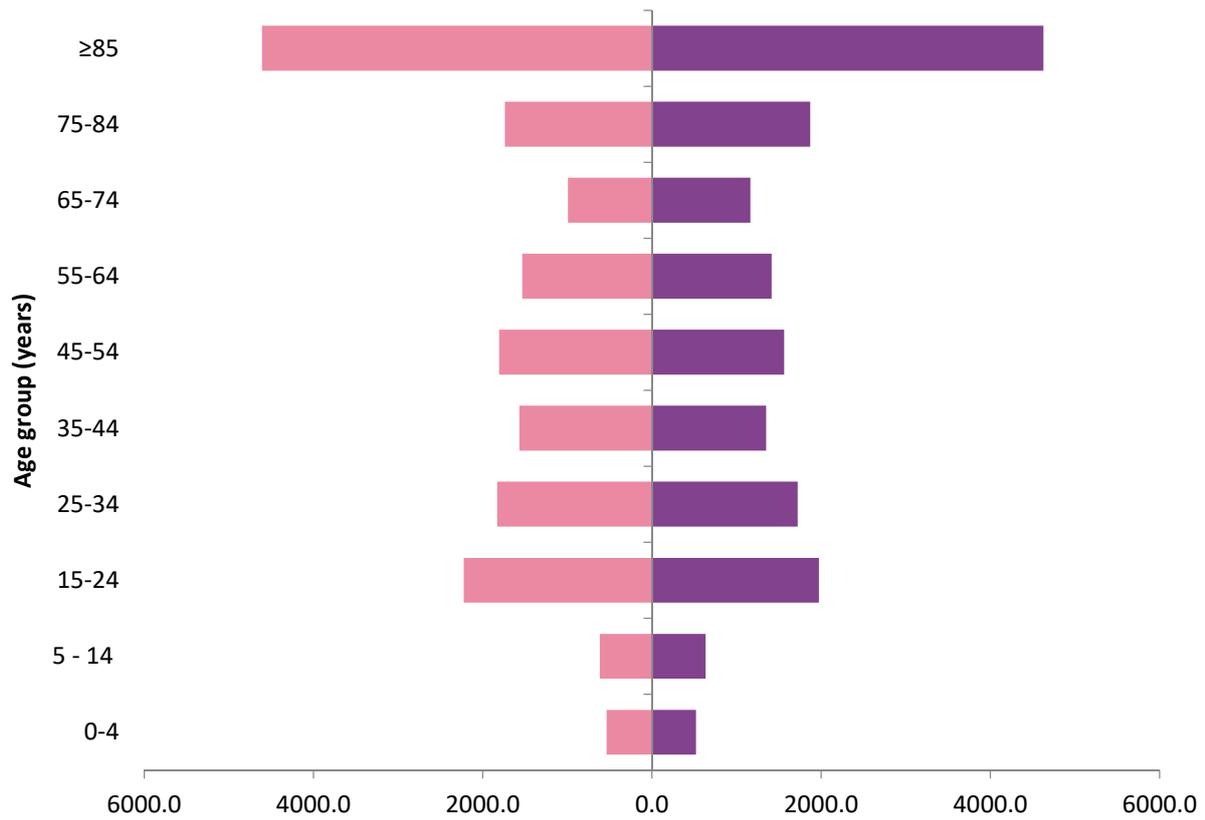
**Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 18/11/2020**

\* 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 18/11/2020**

Characteristic		Number of cases	Percent
<b>Total number of confirmed cases</b>		<b>69,472</b>	<b>100</b>
<b>Sex</b>	Male:Female ratio	0.89	
	Male	32,643	46.99
	Female	36,805	52.98
	Unknown	24	0.03
<b>Age</b>	Median age (years)	39	
	Mean age (years)	41	
	Age range (years)	0 - 108	
	0-4 yrs	1,752	2.52
	5-14 yrs	4,223	6.08
	15-24 yrs	12,088	17.4
	25-34 yrs	11,735	16.89
	35-44 yrs	10,903	15.69
	45-54 yrs	10,559	15.2
	55-64 yrs	7,507	10.81
	65-74 yrs	4,023	5.79
	75-84 yrs	3,533	5.09
	85+ yrs	3,117	4.49
	Unknown	32	0.05



	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	≥85
Female	536.5	614.5	2222.1	1830.2	1566.8	1806.6	1532.7	991.8	1738.0	4607.5
Male	519.6	635.1	1974.4	1723.3	1349.4	1564.4	1415.5	1163.9	1869.8	4626.7

**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 18/11/2020 (excluding 31 cases for whom age is unknown, 21 cases for whom sex is unknown and 1 case for whom both are unknown)**



**Table 2: Number of confirmed COVID-19 cases by county notified to midnight 18/11/2020**

<b>County Name</b>	<b>Number of cases</b>	<b>Percent</b>
Carlow	610	0.88
Cavan	2,157	3.1
Clare	1,458	2.1
Cork	6,130	8.82
Donegal	2,704	3.89
Dublin	26,064	37.52
Galway	2,574	3.71
Kerry	1,291	1.86
Kildare	4,003	5.76
Kilkenny	918	1.32
Laois	940	1.35
Leitrim	264	0.38
Limerick	2,581	3.72
Longford	622	0.9
Louth	1,961	2.82
Mayo	1,360	1.96
Meath	3,311	4.77
Monaghan	1,200	1.73
Offaly	1,142	1.64
Roscommon	918	1.32
Sligo	716	1.03
Tipperary	1,427	2.05
Waterford	970	1.4
Westmeath	1,534	2.21
Wexford	1,176	1.69
Wicklow	1,441	2.07
<b>Total</b>	<b>69,472</b>	<b>100</b>

**Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 18/11/2020**

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	21,632	31.14%
Local transmission, incl. possible local transmission	45,975	66.18%
Travel abroad, incl. possible travel abroad	971	1.40%
Unknown	894	1.29%
<b>Total</b>	<b>69,472</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 and ICU as of midnight 18/11/2020**

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	1752	55	1.1	1	0.17
5-14 yrs	4223	49	0.98	4	0.66
15-24 yrs	12088	161	3.22	8	1.32
25-34 yrs	11735	309	6.18	18	2.98
35-44 yrs	10903	398	7.96	49	8.11
45-54 yrs	10559	636	12.71	109	18.05
55-64 yrs	7507	725	14.49	159	26.32
65-74 yrs	4023	896	17.91	174	28.81
75-84 yrs	3533	1,101	22.01	74	12.25
85+ yrs	3117	671	13.41	8	1.32
Unknown	32	2	0.04	0	0
<b>Total</b>	<b>69,472</b>	<b>5,003</b>	<b>100</b>	<b>604</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 18/11/2020**

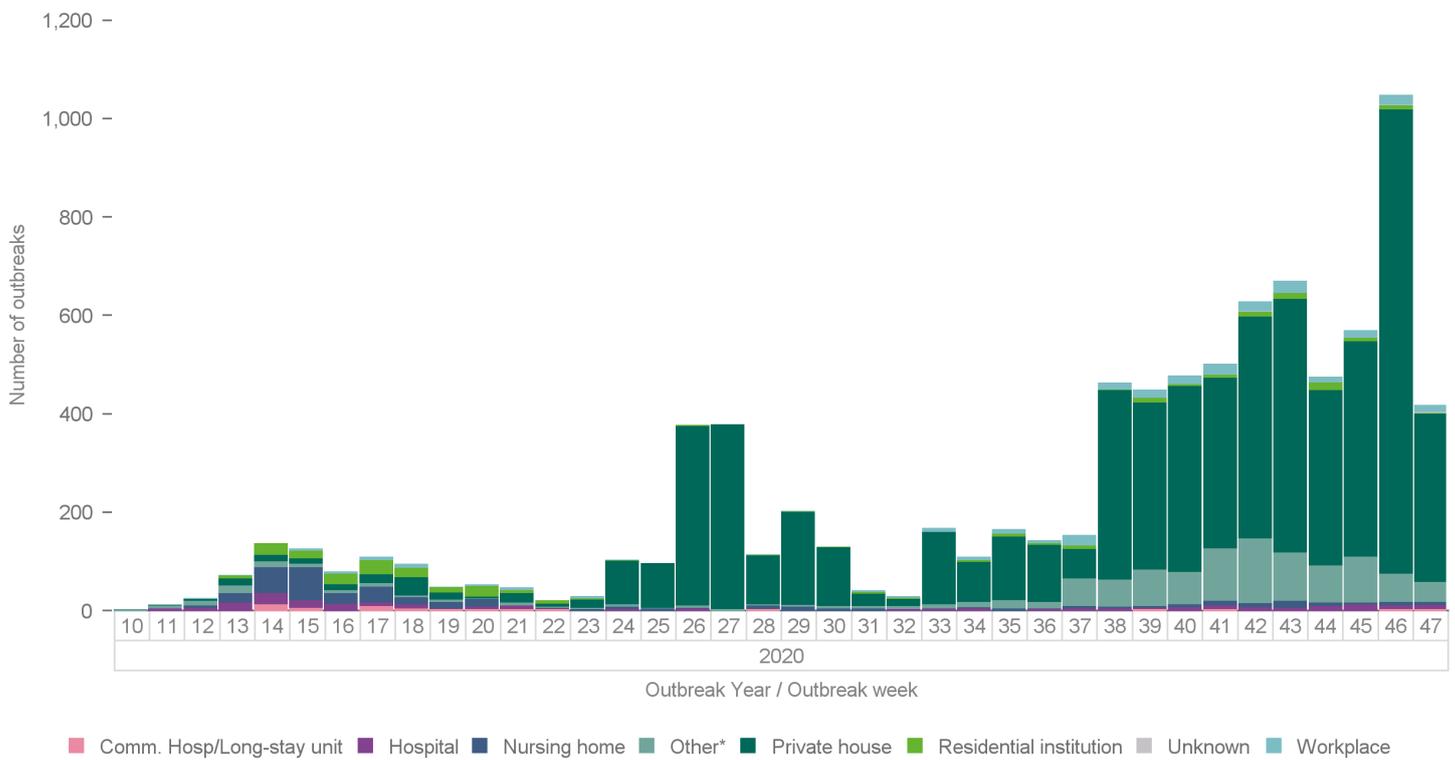
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknown
Number of cases (n)	1,752	4,223	12,088	11,735	10,903	10,559	7,507	4,023	3,533	3,117	32
Cases hospitalised (n)	55	49	161	309	398	636	725	896	1,101	671	2
Cases hospitalised (%)	3.14	1.16	1.33	2.63	3.65	6.02	9.66	22.27	31.16	21.53	6.25
Cases admitted to ICU (n)	1	4	8	18	49	109	159	174	74	8	0
Cases admitted to ICU (%)	0.06	0.09	0.07	0.15	0.45	1.03	2.12	4.33	2.09	0.26	0
Deaths (n)	0	0	1	7	12	30	81	271	602	755	0
Case fatality ratio (%)	0	0	0.01	0.06	0.11	0.28	1.08	6.74	17.04	24.22	0

## Outbreaks of COVID-19

**Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 18/11/2020**

Outbreak Location	E	M	MW	NE	NW	S	SE	W	HPSC	Total
Private house	3,813	159	180	440	353	523	572	521		6,561
Other*	229	69	153	64	108	218	58	124	2	1,025
Nursing home	165	16	20	50	10	23	20	44		348
Workplace	96	18	21	46	34	24	27	22		288
Residential institution	143	16	17	33	10	30	16	10		275
Hospital	98	7	9	20	8	16	8	7		173
Comm. Hosp/Long-stay unit	7	4	2		5	6	5	5		34
Unknown	2				2					4
<b>Total</b>	<b>4,553</b>	<b>289</b>	<b>402</b>	<b>653</b>	<b>530</b>	<b>840</b>	<b>706</b>	<b>733</b>	<b>2</b>	<b>8,708</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 18/11/2020**

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

Note: 8,073 COVID-19 outbreaks were reported on CIDR between week 24 and week 47 2020 (9th June to 18th Nov). Of these, 6,429 were family outbreaks. Based on the earliest date associated with each outbreak, some of these family outbreaks occurred earlier and were reported between weeks 24 and 47 as a result of data validation: 1 occurred in February, 636 in March, 475 in April, 94 in May, 126 in June, 128 in July, 533 in August, 1,511 in September, 2,396 in October and 529 to date in November.

## Deaths among COVID-19 cases

**Table 16: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 18/11/2020**

	Number	Percent
Total number of deaths	2,018	
Confirmed	1,759	87.17
Probable	95	4.71
Possible	164	8.13
Total number of cases hospitalised	898	44.5
Cases admitted to ICU	132	6.54
Cases not admitted to ICU	766	37.96
Total number of imported cases	6	0.3
Number of cases in healthcare workers	8	0.4
Number with underlying clinical conditions	1,864	92.37
Total number of male cases	1,021	50.59
M:F ratio	1.02	
Median age (years)	83	
Mean age (years)	81	
Age range (years)	17 - 105	

**Table 17: Number of deaths in all COVID-19 cases by sex and age group notified in Ireland up to midnight 18/11/2020**

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.05
25-34 yrs	<5	5	7	0.35
35-44 yrs	6	7	13	0.64
45-54 yrs	12	20	32	1.59
55-64 yrs	29	58	87	4.31
65-74 yrs	107	192	299	14.82
75-84 yrs	311	373	684	33.89
85+ yrs	527	366	893	44.25
Unknown	<5	<5	2	0.1
<b>Total</b>	<b>997</b>	<b>1,021</b>	<b>2,018</b>	<b>100</b>
<b>Percent</b>	<b>49.41</b>	<b>50.59</b>		

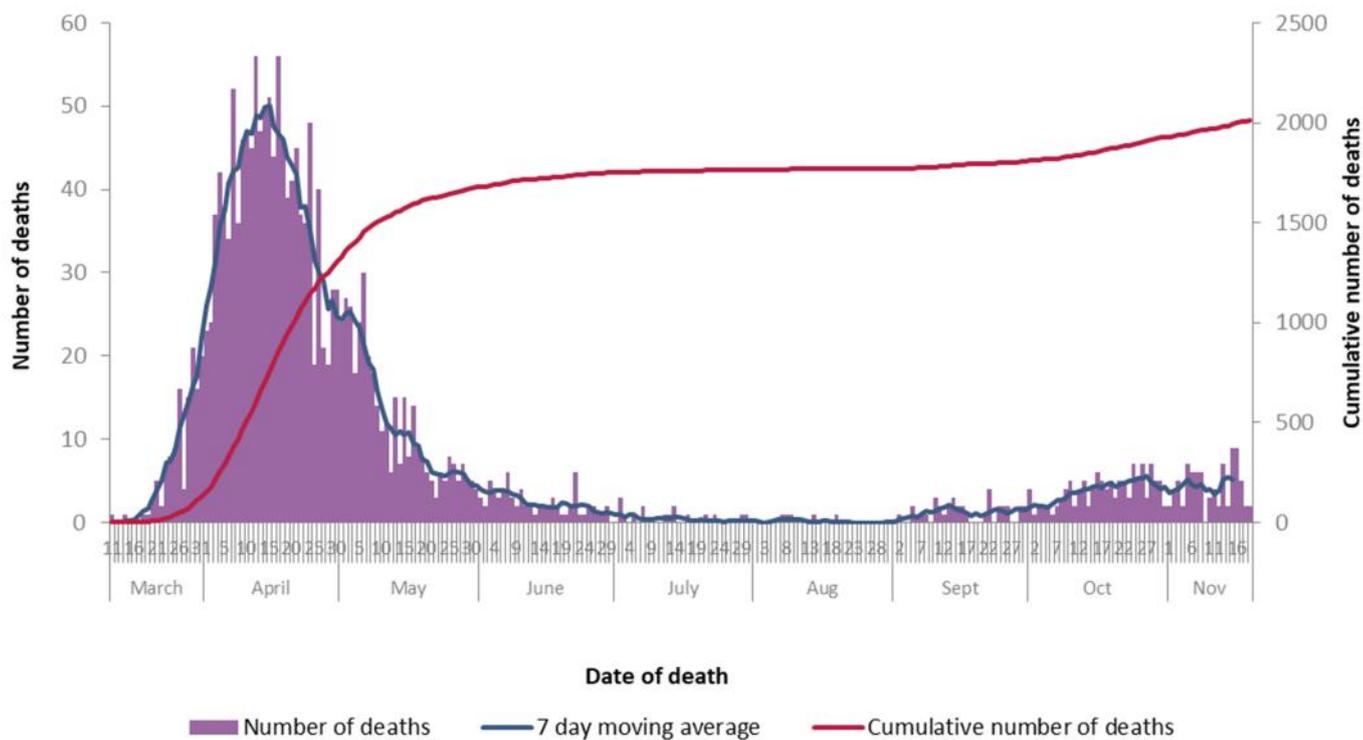


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 18/11/2020

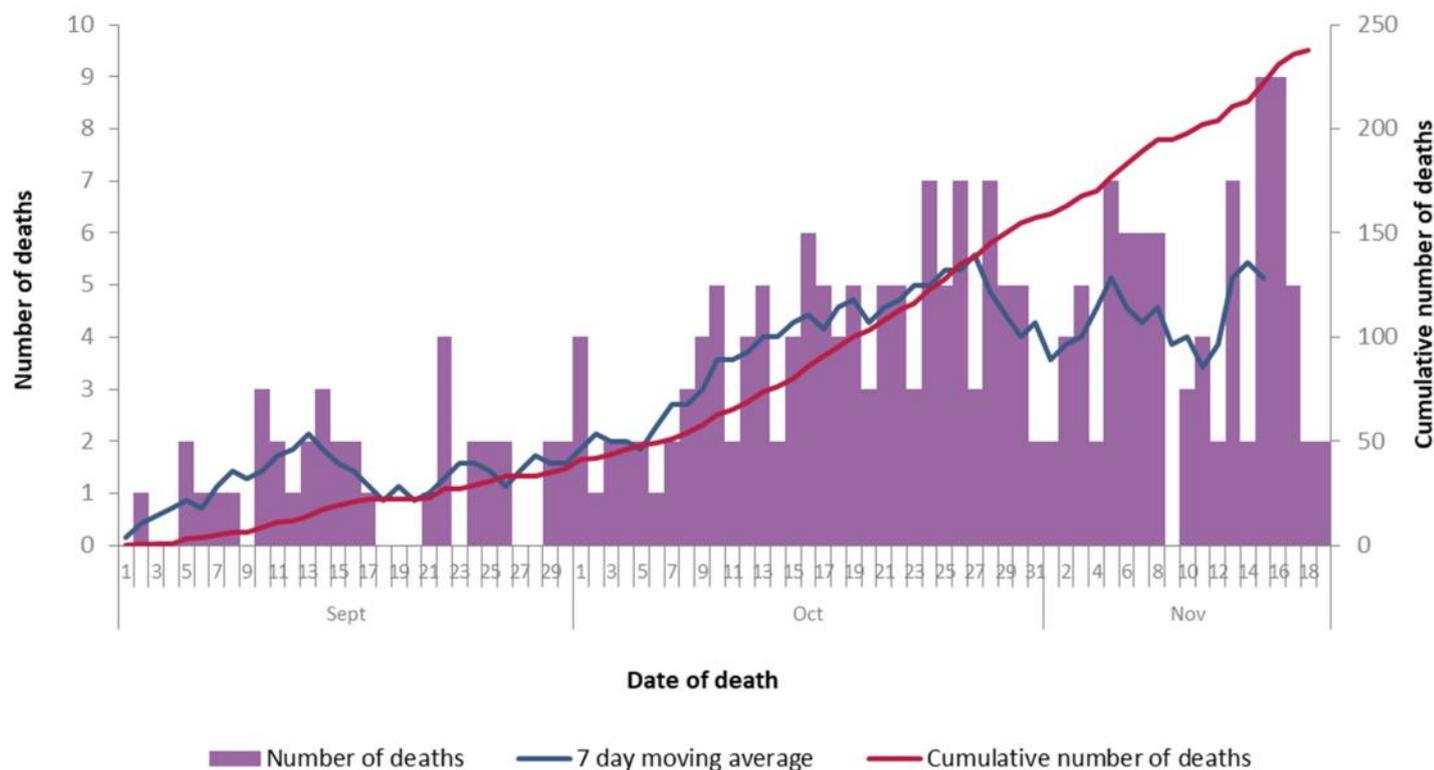


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/09/2020 to midnight 18/11/2020

\* Date of death is not yet available for eight 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 09:41 on 20/11/2020. 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.