Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 13/06/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 11/06/2020

	Number	Percent
Total number of confirmed cases	25,249	
National cumulative incidence of confirmed cases per 100,000 population	530.23	
Total number of cases hospitalised	3,276	12.97
Total number of cases admitted to ICU	416	1.65
Total number of deaths among confirmed cases	1,445	5.72
Case fatality ratio (CFR, %)	5.72	
National cumulative incidence of confirmed deaths per 100,000 population	30.35	
Total number of outbreaks/clusters	941	
Total number of cases associated with clusters	10,586	41.93
Total number of imported cases	368	1.46
Number of cases in healthcare workers	8,123	32.17
Males	10,784	42.71
Females	14,434	57.17
M:F ratio	0.75	
Median age (years)	48	
Mean age (years)	51	
Age range (years)	0 - 106	

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:22 on 13/06/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
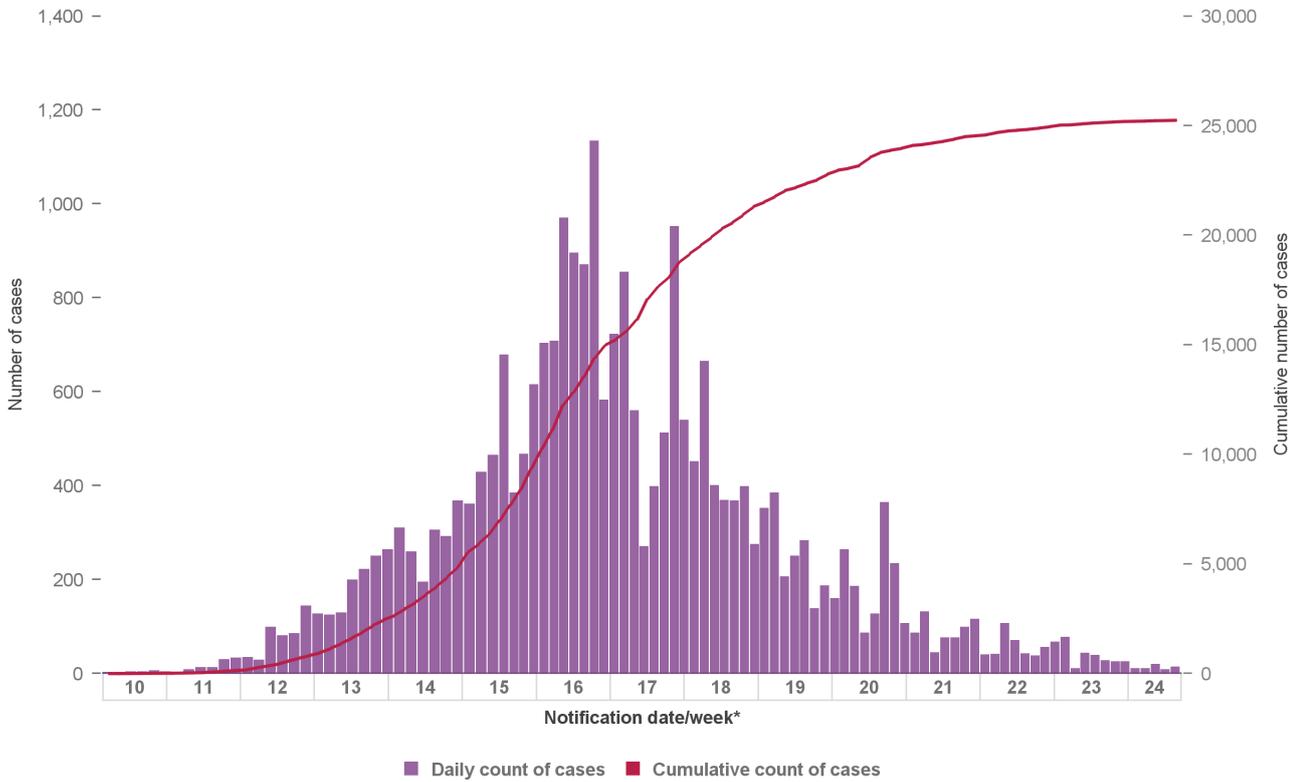
Figure 1a: Number* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date* to midnight 11/06/2020

*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
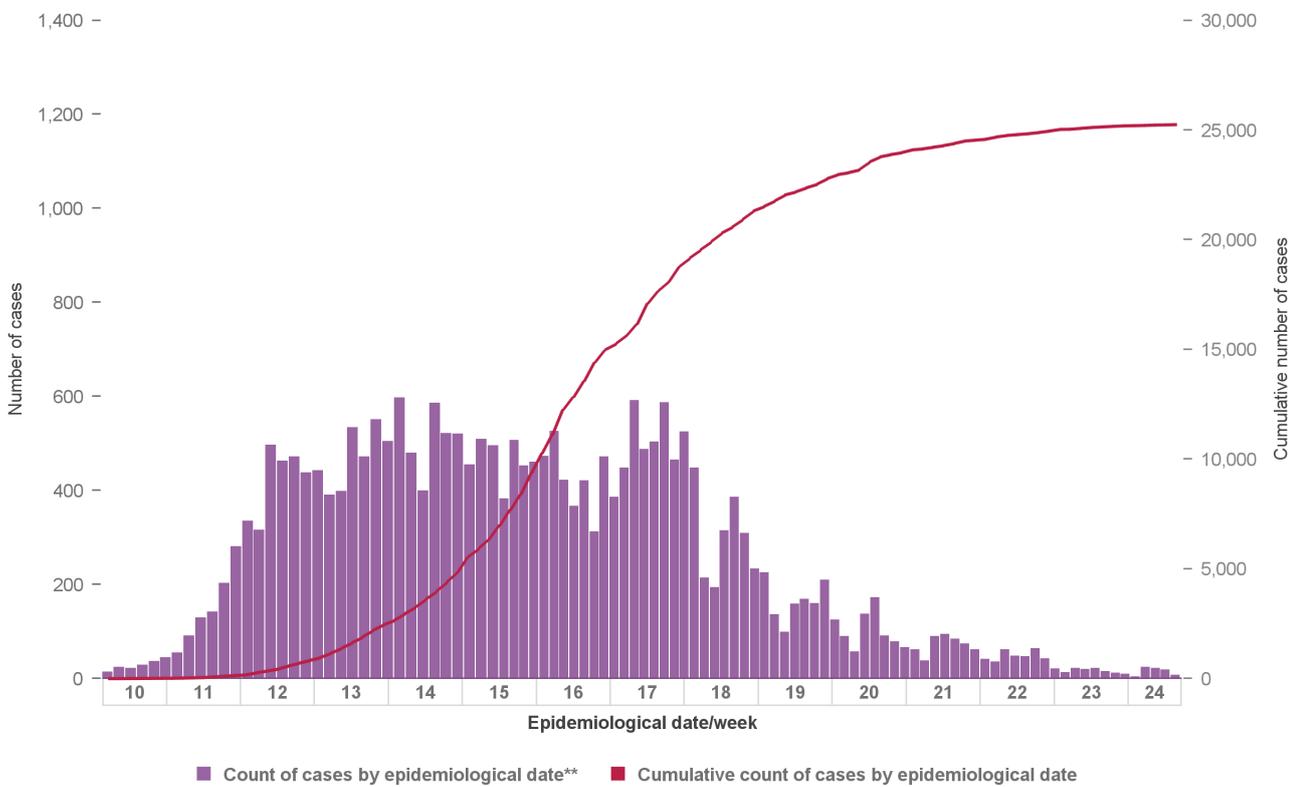

Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date to midnight 11/06/2020**

**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 11/06/2020

* 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

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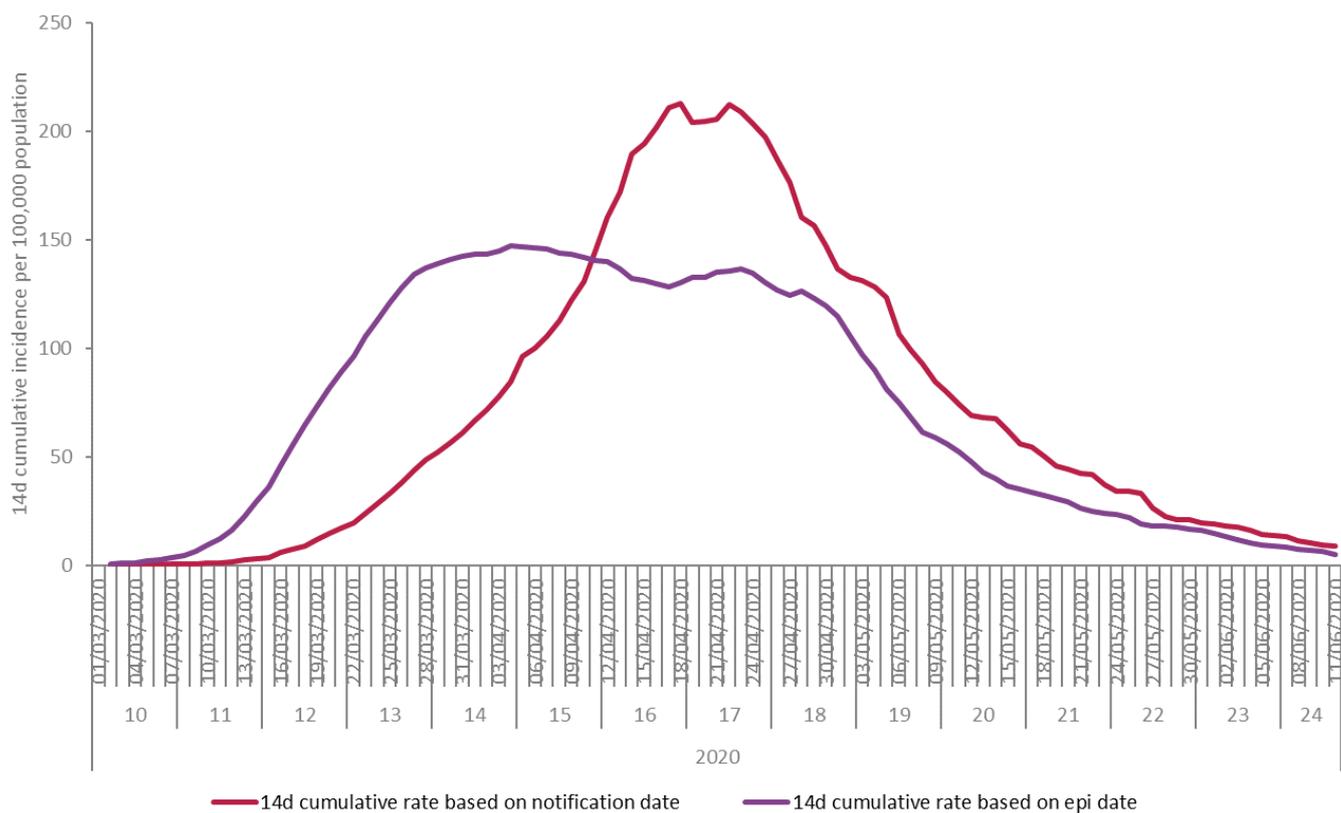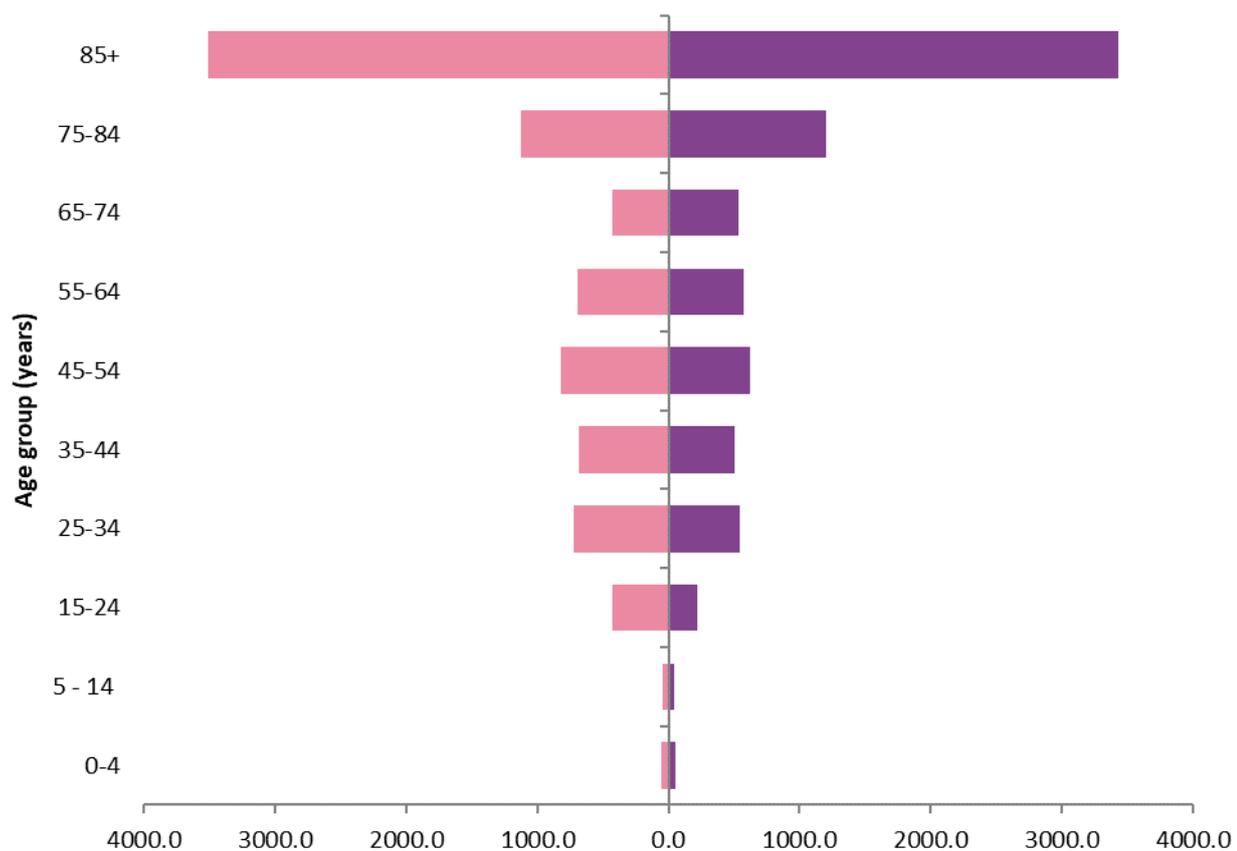
Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland up to midnight on 11/06/2020

Characteristic		Number of cases	Percent
Total number of confirmed cases		**25,249**	**100**
Sex	Male:Female ratio	0.75	
	Male	10,784	42.71
	Female	14,434	57.17
	Unknown	31	0.12
Age	Median age (years)	48	
	Mean age (years)	51	
	Age range (years)	0 - 106	
	0-4 yrs	165	0.65
	5-14 yrs	320	1.27
	15-24 yrs	1,867	7.39
	25-34 yrs	4,230	16.75
	35-44 yrs	4,443	17.6
	45-54 yrs	4,540	17.98
	55-64 yrs	3,232	12.8
	65-74 yrs	1,798	7.12
	75-84 yrs	2,278	9.02
	85+ yrs	2,353	9.32
	Unknown	23	0.09

	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Female	50.1	48.2	426.5	724.9	679.0	818.4	694.6	425.8	1121.4	3508.4
Male	49.5	46.7	223.6	549.6	505.8	627.9	574.5	538.3	1204.8	3429.9

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 11/06/2020 (excluding 23 cases for whom age is unknown, 31 cases for whom sex is unknown and one case for whom both age and sex are unknown)
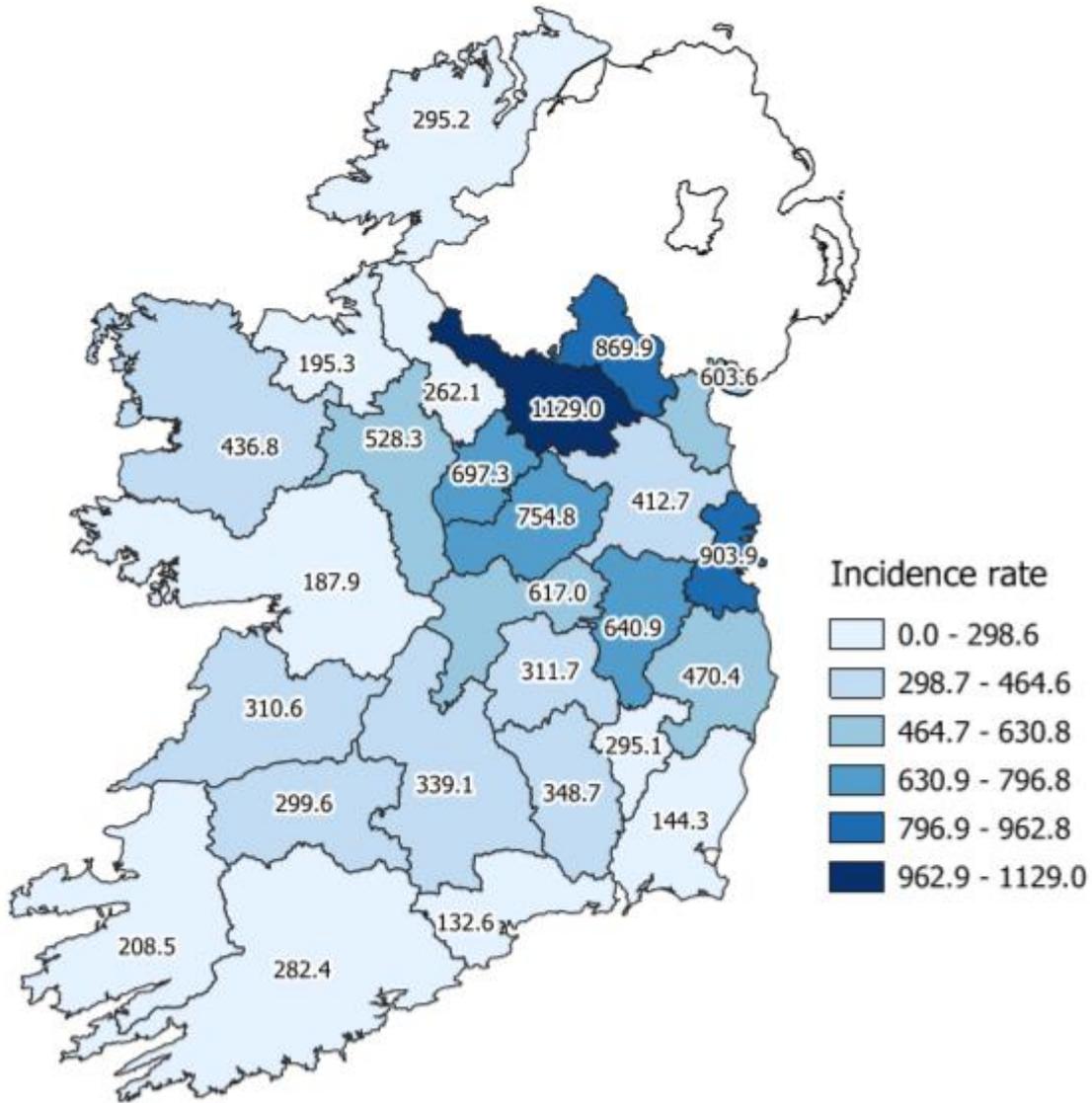
Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 11/06/2020

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 11/06/2020

County Name	Number of cases	Percent
Carlow	168	0.67
Cavan	860	3.41
Clare	369	1.46
Cork	1,533	6.07
Donegal	470	1.86
Dublin	12,179	48.24
Galway	485	1.92
Kerry	308	1.22
Kildare	1,426	5.65
Kilkenny	346	1.37
Laois	264	1.05
Leitrim	84	0.33
Limerick	584	2.31
Longford	285	1.13
Louth	778	3.08
Mayo	570	2.26
Meath	805	3.19
Monaghan	534	2.11
Offaly	481	1.91
Roscommon	341	1.35
Sligo	128	0.51
Tipperary	541	2.14
Waterford	154	0.61
Westmeath	670	2.65
Wexford	216	0.86
Wicklow	670	2.65
Total	**25,249**	**100**

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 11/06/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	9,421	37.31%
Local transmission, incl. possible local transmission	15,228	60.31%
Travel abroad, incl. possible travel abroad	582	2.31%
Unknown	18	0.07%
Total	**25,249**	**100.00%**

*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 11/06/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	165	20	0.61	0	0
5-14 yrs	320	17	0.52	2	0.48
15-24 yrs	1867	69	2.11	5	1.2
25-34 yrs	4230	199	6.07	15	3.61
35-44 yrs	4443	261	7.97	34	8.17
45-54 yrs	4540	444	13.55	84	20.19
55-64 yrs	3232	490	14.96	122	29.33
65-74 yrs	1798	575	17.55	106	25.48
75-84 yrs	2278	733	22.37	42	10.1
85+ yrs	2353	466	14.22	6	1.44
Unknown	23	2	0.06	0	0
Total	**25,249**	**3,276**	**100**	**416**	**100**

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 11/06/2020

	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)	165	320	1,867	4,230	4,443	4,540	3,232	1,798	2,278	2,353	23
Cases hospitalised (n)	20	17	69	199	261	444	490	575	733	466	2
Cases hospitalised (%)	12.12	5.31	3.7	4.7	5.87	9.78	15.16	31.98	32.18	19.8	8.7
Cases admitted to ICU (n)	0	2	5	15	34	84	122	106	42	6	0
Cases admitted to ICU (%)	0	0.63	0.27	0.35	0.77	1.85	3.77	5.9	1.84	0.25	0
Deaths (n)	0	0	2	5	11	23	63	211	493	637	0
Case fatality ratio (%)	0	0	0.11	0.12	0.25	0.51	1.95	11.74	21.64	27.07	0

Outbreaks of COVID-19

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 11/06/2020

Outbreak Location	E	M	MW	NE	NW	S	SE	W	Total
Nursing home	124	10	13	38	5	9	16	36	**251**
Private house	5	6	38	76	6	58	26	25	**240**
Residential institution	114	9	7	17	4	20	10	5	**186**
Hospital	60	3	2	13	2	11	3	6	**100**
Other*	14	8	23	7	4	17	6	9	**88**
Workplace	8	5	5	14	1	8	3	4	**48**
Comm. Hosp/Long-stay unit	4	3	2		4	6	5	4	**28**
Total	**329**	**44**	**90**	**165**	**26**	**129**	**69**	**89**	**941**

*Other outbreak location includes all outbreaks locations other than residential facilities, acute hospitals, private houses and workplaces. This includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.
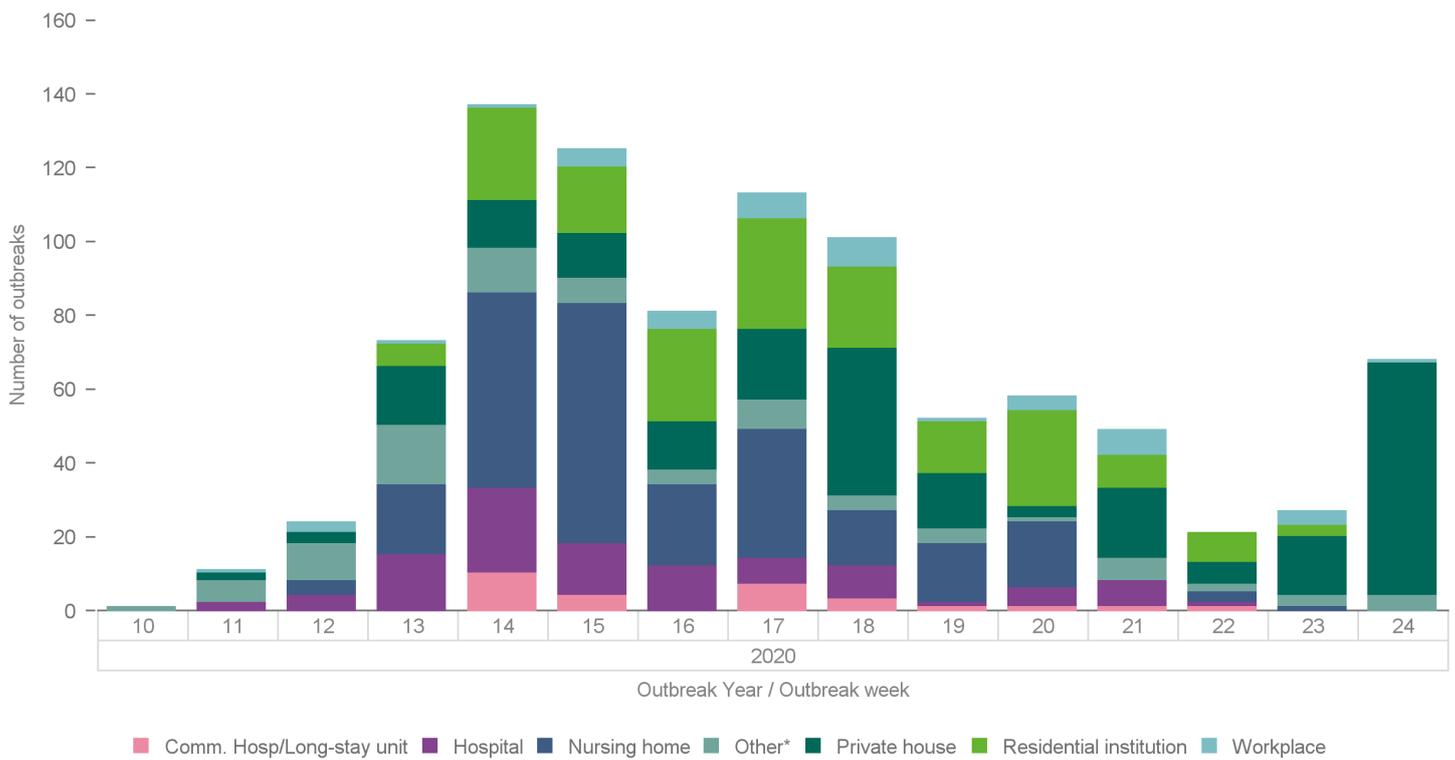
Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 11/06/2020

*Other outbreak location includes all outbreaks locations other than residential facilities, acute hospitals, private houses and workplaces. This includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.

Deaths among COVID-19 cases

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 11/06/2020

		Number	Percent
Total number of deaths		1,704	
	Confirmed	1,445	84.8
	Probable	96	5.63
	Possible	163	9.57
Total number of cases hospitalised		708	41.55
	Cases admitted to ICU	85	4.99
	Cases not admitted to ICU	623	36.56
Total number of imported cases		6	0.35
Number of cases in healthcare workers		7	0.41
Number with underlying clinical conditions		1,565	91.84
Total number of male cases		840	49.3
M:F ratio		0.97	
Median age (years)		84	
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 11/06/2020

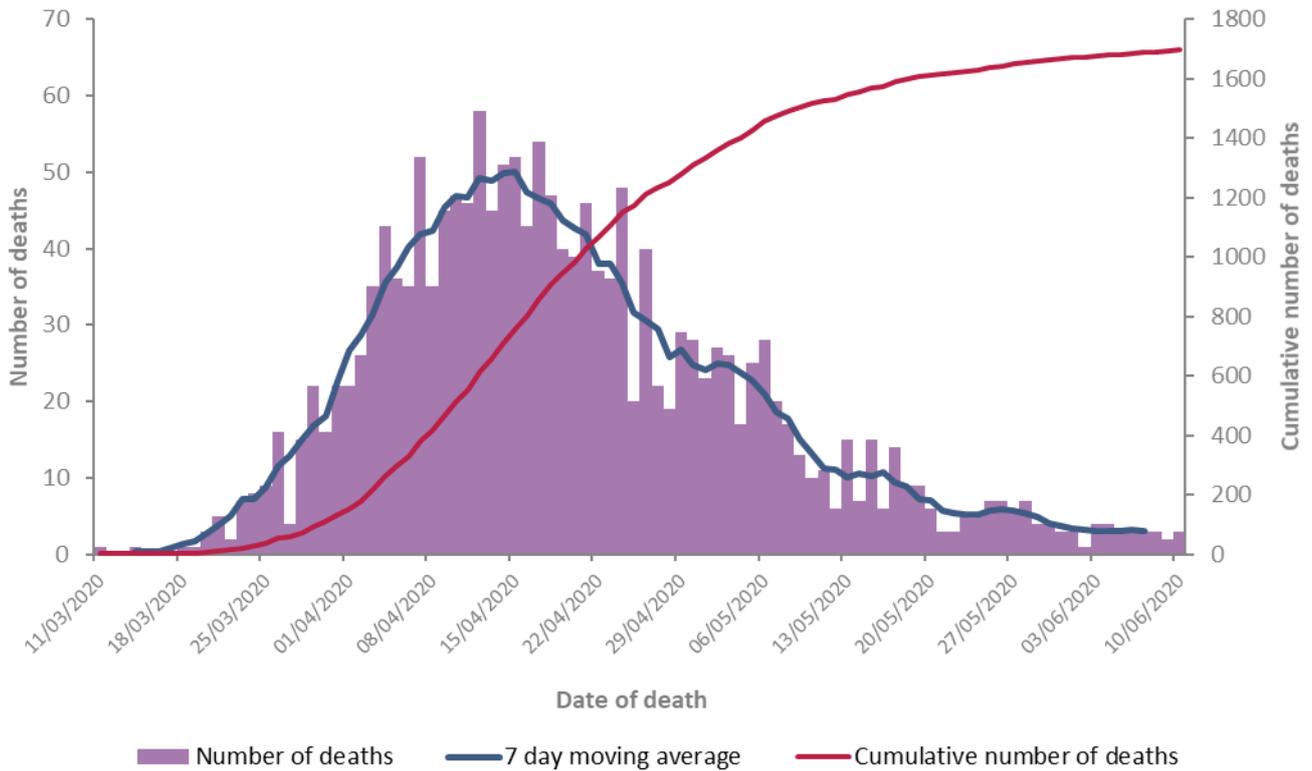| Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	2	0.12
25-34 yrs	<5	<5	5	0.29
35-44 yrs	5	7	12	0.7
45-54 yrs	10	15	25	1.47
55-64 yrs	24	44	68	3.99
65-74 yrs	86	150	236	13.85
75-84 yrs	265	313	578	33.92
85+ yrs	468	308	776	45.54
Unknown	<5	<5	2	0.12
Total	**864**	**840**	**1,704**	**100**
Percent	**50.7**	**49.3**		

Figure 6: 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 11/06/2020

* 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

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 09:22 on 13/06/2020. 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 ≥ 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 all outbreaks locations other than residential facilities, acute hospitals, private houses and workplaces. This includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.