





Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 14/06/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 12/06/2020

Total number of confirmed cases25,295National cumulative incidence of confirmed cases per 100,000 population531.2Total number of cases hospitalised3,27912.96Total number of cases admitted to ICU4161.64Total number of deaths among confirmed cases1,4465.72Case fatality ratio (CFR, %)5.72National cumulative incidence of confirmed deaths per 100,000 population30.37Total number of outbreaks/clusters970Total number of cases associated with clusters10,63242.03Total number of imported cases3681.45
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Total number of imported cases 368 1.45
Number of cases in healthcare workers 8,130 32.14
Males 10,804 42.71
Females 14,460 57.17
M:F ratio 0.75
Median age (years) 48
Mean age (years) 51
Age range (years) 0 - 106

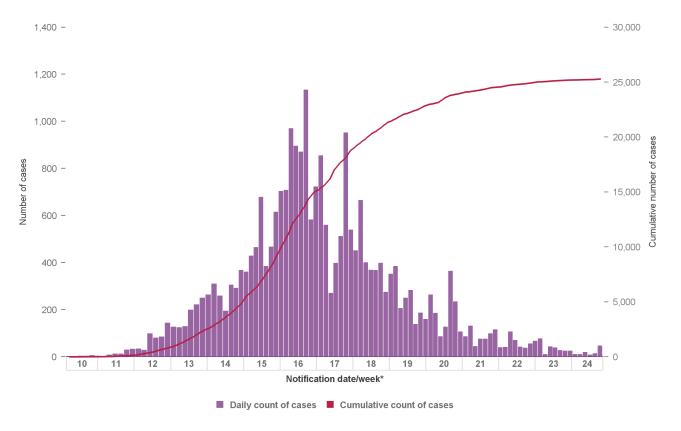


Figure 1a: Number* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date* to midnight 12/06/2020

*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

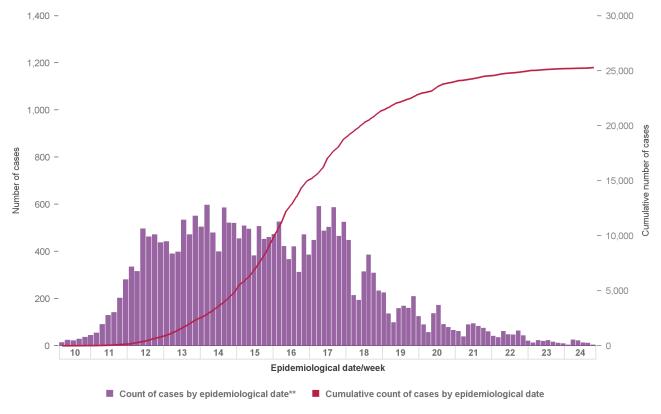


Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date** to midnight 12/06/2020

^{**}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.

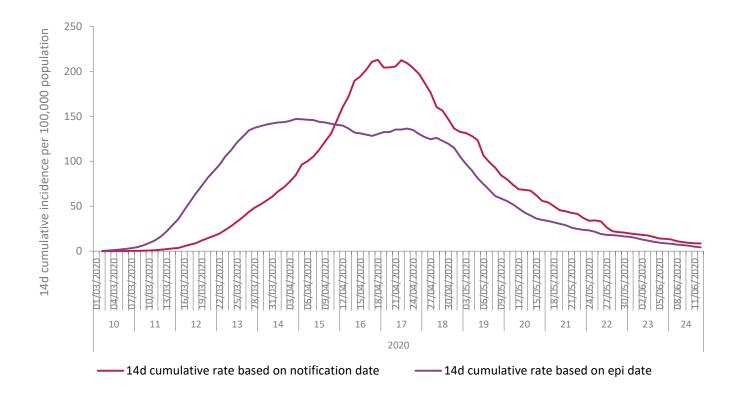


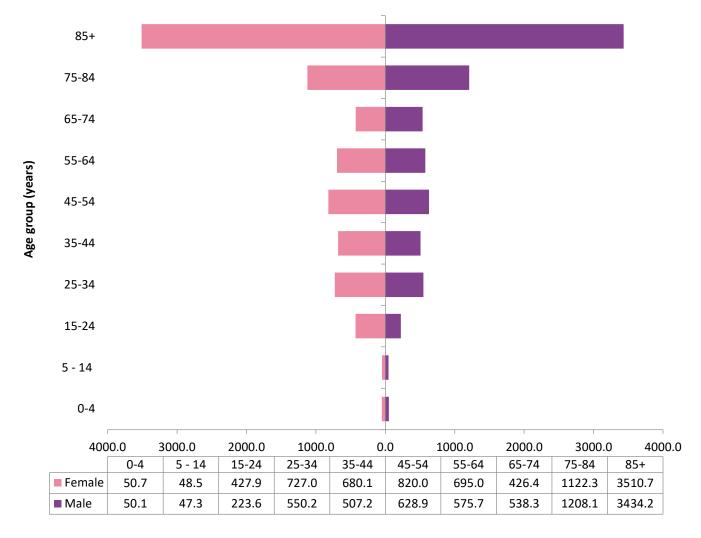
Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification* and epidemiological date** to midnight 12/06/2020

^{*} 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

^{**}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 12/06/2020

Characteristic		Number of cases	Percent
Total number of confirmed case	es	25,295	100
Sex	Male:Female ratio	0.75	
	Male	10,804	42.71
	Female	14,460	57.17
	Unknown	31	0.12
Age	Median age (years)	48	
	Mean age (years)	51	
	Age range (years)	0 - 106	
	0-4 yrs	167	0.66
	5-14 yrs	323	1.28
	15-24 yrs	1,871	7.4
	25-34 yrs	4,239	16.76
	35-44 yrs	4,452	17.6
	45-54 yrs	4,548	17.98
	55-64 yrs	3,236	12.79
	65-74 yrs	1,799	7.11
	75-84 yrs	2,282	9.02
	85+ yrs	2,355	9.31
	Unknown	23	0.09



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 12/06/2020 (excluding 22 cases for whom age is unknown, 30 cases for whom sex is unknown and one case for whom both age and sex are unknown)

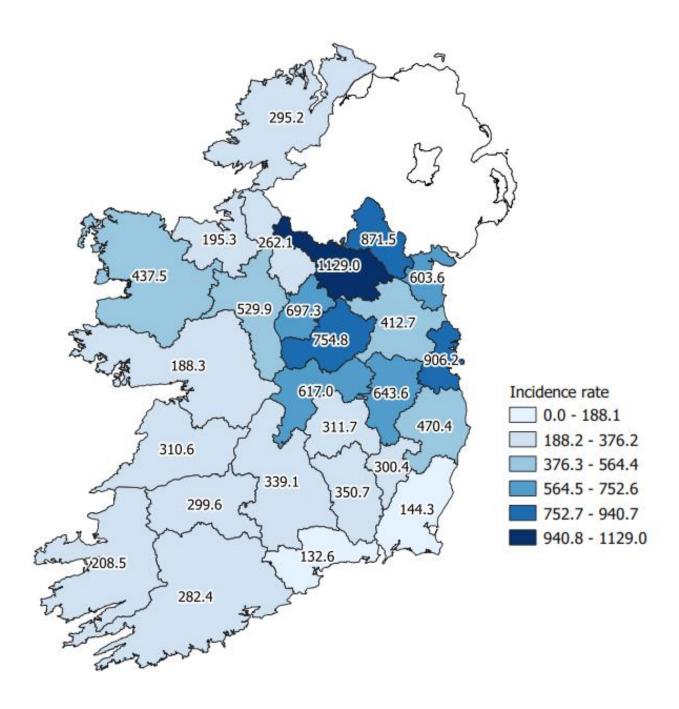


Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 12/06/2020

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 12/06/2020

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County Name	Number of cases	Percent
Carlow	171	0.68
Cavan	860	3.4
Clare	369	1.46
Cork	1,533	6.06
Donegal	470	1.86
Dublin	12,210	48.27
Galway	486	1.92
Kerry	308	1.22
Kildare	1,432	5.66
Kilkenny	348	1.38
Laois	264	1.04
Leitrim	84	0.33
Limerick	584	2.31
Longford	285	1.13
Louth	778	3.08
Mayo	571	2.26
Meath	805	3.18
Monaghan	535	2.12
Offaly	481	1.9
Roscommon	342	1.35
Sligo	128	0.51
Tipperary	541	2.14
Waterford	154	0.61
Westmeath	670	2.65
Wexford	216	0.85
Wicklow	670	2.65
Total	25,295	100

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 12/06/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	9,445	37.34%
Local transmission, incl. possible local transmission	15,247	60.28%
Travel abroad, incl. possible travel abroad	582	2.30%
Unknown	21	0.08%
Total	25,295	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 12/06/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	167	20	0.61	0	0
5-14 yrs	323	17	0.52	2	0.48
15-24 yrs	1871	69	2.1	5	1.2
25-34 yrs	4239	200	6.1	15	3.61
35-44 yrs	4452	261	7.96	34	8.17
45-54 yrs	4548	444	13.54	84	20.19
55-64 yrs	3236	491	14.97	122	29.33
65-74 yrs	1799	575	17.54	106	25.48
75-84 yrs	2282	733	22.35	42	10.1
85+ yrs	2355	467	14.24	6	1.44
Unknown	23	2	0.06	0	0
Total	25,295	3,279	100	416	100

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 12/06/2020

	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	Unknow n
Number of cases (n)	167	323	1,871	4,239	4,452	4,548	3,236	1,799	2,282	2,355	23
Cases hospitalised (n)	20	17	69	200	261	444	491	575	733	467	2
Cases hospitalised (%)	11.98	5.26	3.69	4.72	5.86	9.76	15.17	31.96	32.12	19.83	8.7
Cases admitted to ICU (n)	0	2	5	15	34	84	122	106	42	6	0
Cases admitted to ICU (%)	0	0.62	0.27	0.35	0.76	1.85	3.77	5.89	1.84	0.25	0
Deaths (n)	0	0	2	5	11	23	63	211	494	637	0
Case fatality ratio (%)	0	0	0.11	0.12	0.25	0.51	1.95	11.73	21.65	27.05	0

Outbreaks of COVID-19

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 12/06/2020

Outbreak Location	E	М	MW	NE	NW	S	SE	W	Total
Private house	5	6	44	94	6	58	27	25	265
Nursing home	125	10	13	38	5	9	16	36	252
Residential institution	115	9	7	17	4	20	10	5	187
Hospital	60	3	2	13	2	11	4	6	101
Other*	14	8	23	7	4	18	6	9	89
Workplace	8	5	5	14	1	8	3	4	48
Comm. Hosp/Long-stay unit	4	3	2		4	6	5	4	28
Total	331	44	96	183	26	130	71	89	970

^{*}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.

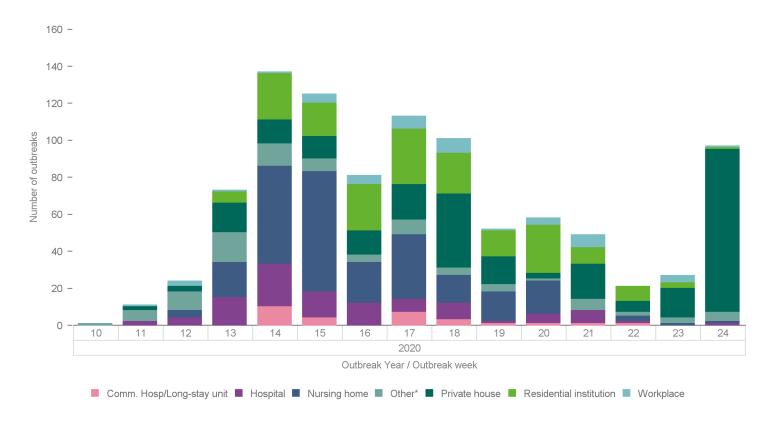


Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 12/06/2020

*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 12/06/2020

	Number	Percent
Total number of deaths	1,706	
Confirmed	1,446	84.76
Probable	96	5.63
Possible	164	9.61
Total number of cases hospitalised	709	41.56
Cases admitted to ICU	85	4.98
Cases not admitted to ICU	624	36.58
Total number of imported cases	6	0.35
Number of cases in healthcare workers	7	0.41
Number with underlying clinical conditions	1,566	91.79
Total number of male cases	842	49.36
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 12/06/2020

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	13.83
75-84 yrs	265	315	580	34
85+ yrs	468	308	776	45.49
Unknown	<5	<5	2	0.12
Total	864	842	1,706	100
Percent	50.64	49.36		

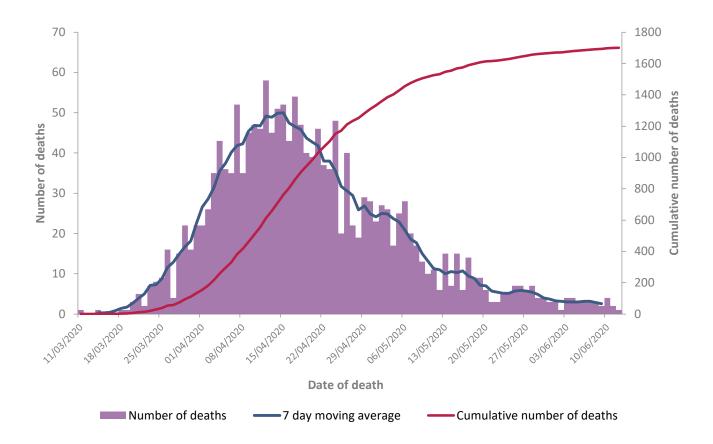


Figure 6: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 12/06/2020

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

^{*} Date of death is not yet available for six cases

Acknowledgements

Sincere thanks are extended to all those who are participating in the collection of data and reporting of data used in this report. This includes 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 09:27 on 14/06/2020. 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.