



Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 07/06/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 05/06/2020

	Number	Percent
Total number of confirmed cases	25,176	
National cumulative incidence of confirmed cases per 100,000 population	528.7	
Total number of cases hospitalised	3,321	13.19
Total number of cases admitted to ICU	409	1.62
Total number of deaths among confirmed cases	1,420	5.64
Case fatality ratio (CFR, %)	5.64	
National cumulative incidence of confirmed deaths per 100,000 population	29.82	
Total number of outbreaks/clusters	888	
Total number of cases associated with clusters	10,217	40.58
Total number of imported cases	360	1.43
Number of cases in healthcare workers	8,057	32
Males	10,751	42.7
Females	14,393	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 07/06/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

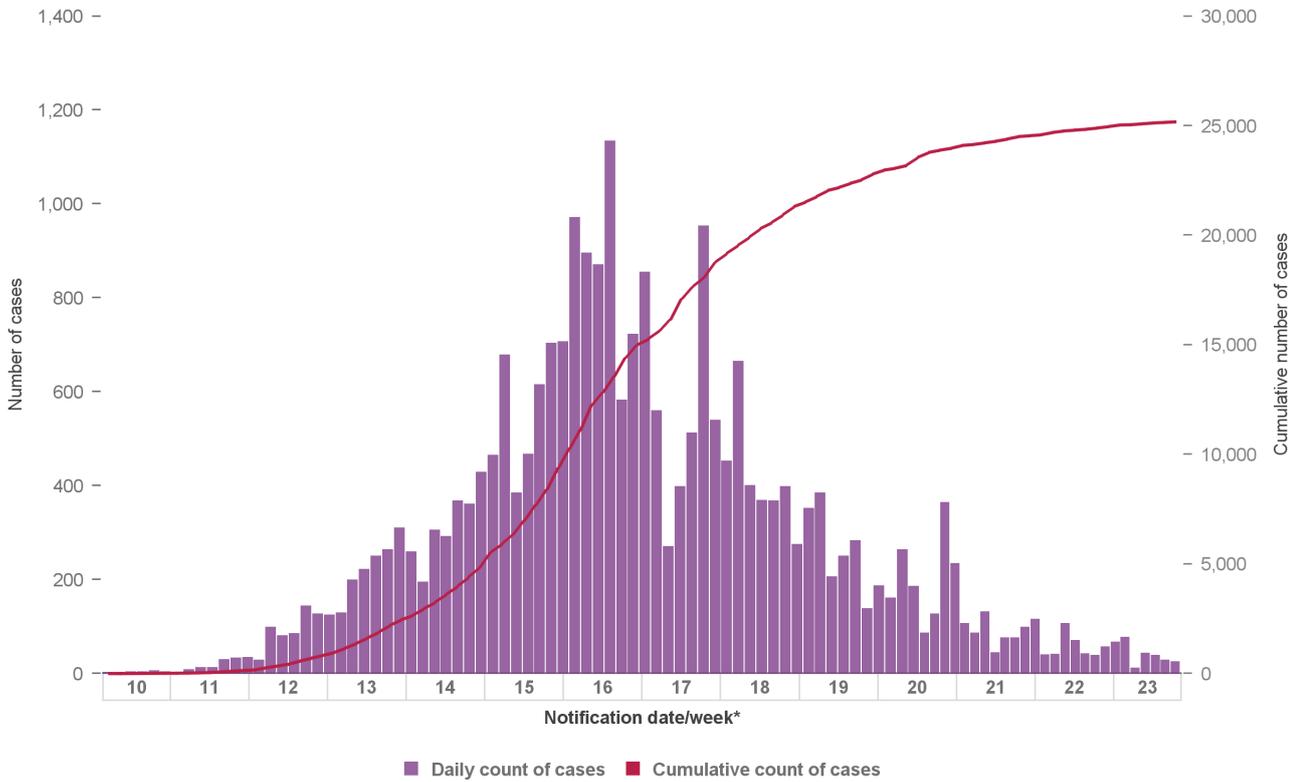


Figure 1a: Number* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date* to midnight 05/06/2020

*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

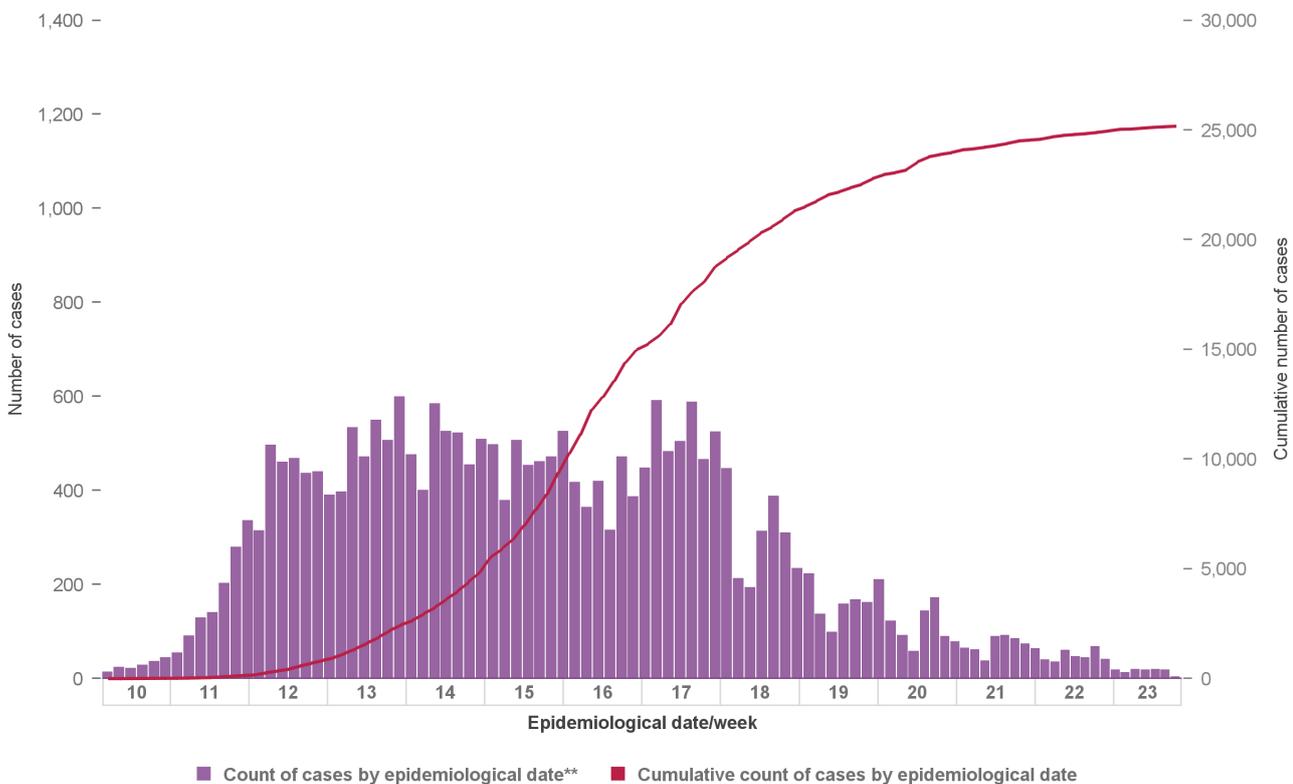


Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date to midnight 05/06/2020**

**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.

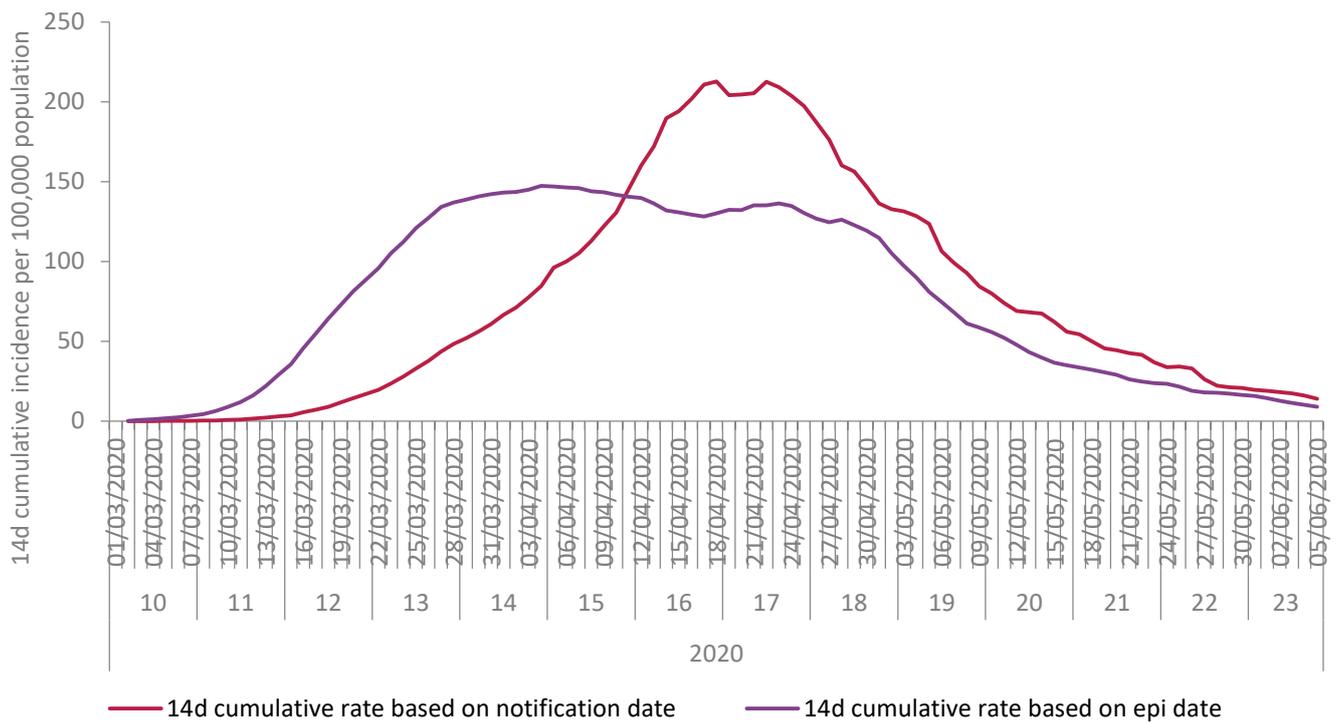


Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification* and epidemiological date to midnight 05/06/2020**

* 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 05/06/2020

Characteristic		Number of cases	Percent
Total number of confirmed cases		25,176	100
Sex	Male:Female ratio	0.75	
	Male	10,751	42.7
	Female	14,393	57.17
	Unknown	32	0.13
Age	Median age (years)	48	
	Mean age (years)	51	
	Age range (years)	0 - 106	
	0-4 yrs	161	0.64
	5-14 yrs	320	1.27
	15-24 yrs	1,854	7.36
	25-34 yrs	4,219	16.76
	35-44 yrs	4,430	17.6
	45-54 yrs	4,527	17.98
	55-64 yrs	3,226	12.81
	65-74 yrs	1,793	7.12
	75-84 yrs	2,277	9.04
	85+ yrs	2,346	9.32
	Unknown	23	0.09

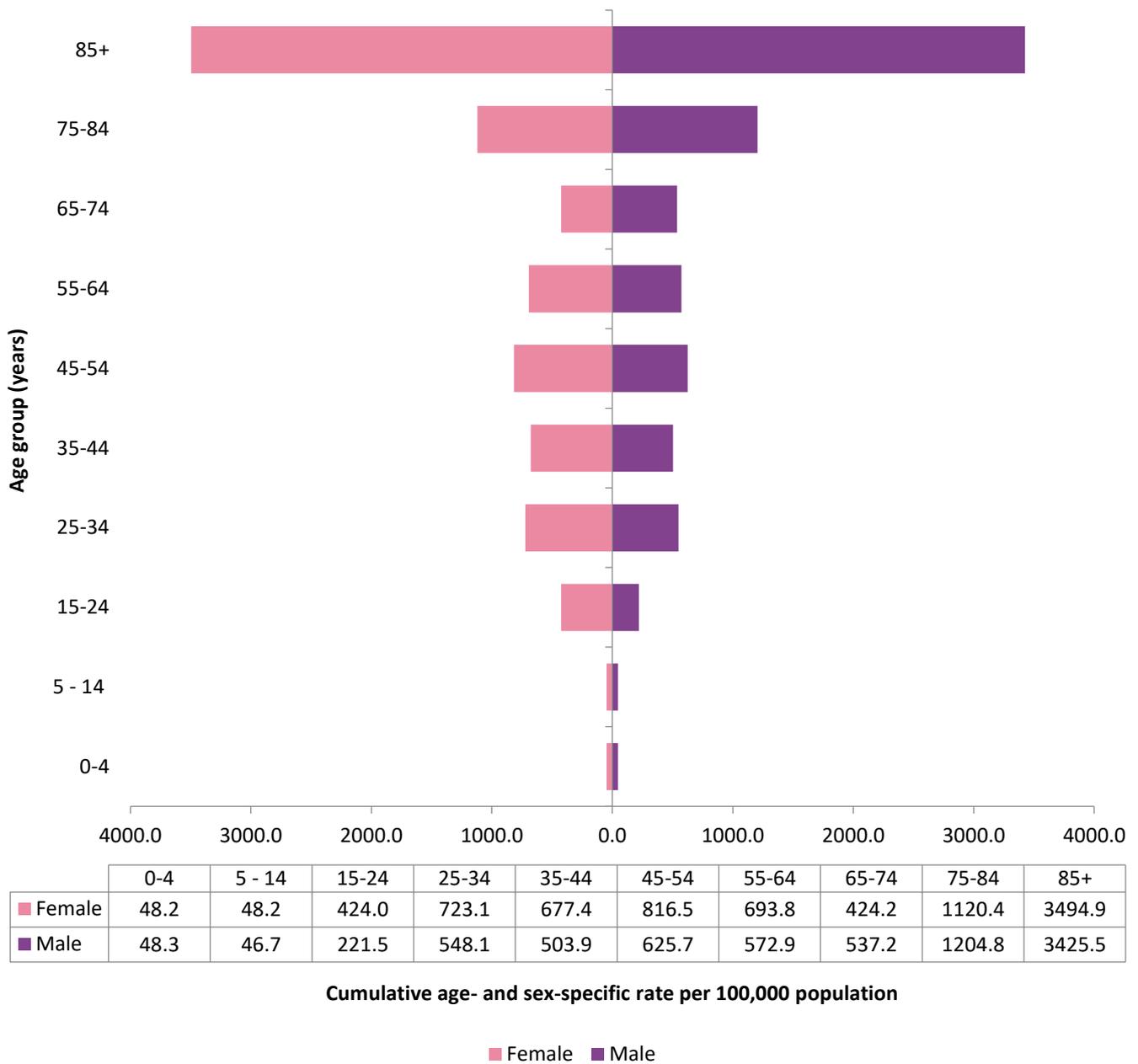


Figure 3: Cumulative age- and sex-specific incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 05/06/2020 (excluding 22 cases for whom age is unknown, 31 cases for whom sex is unknown and one case for whom both age and sex are unknown)

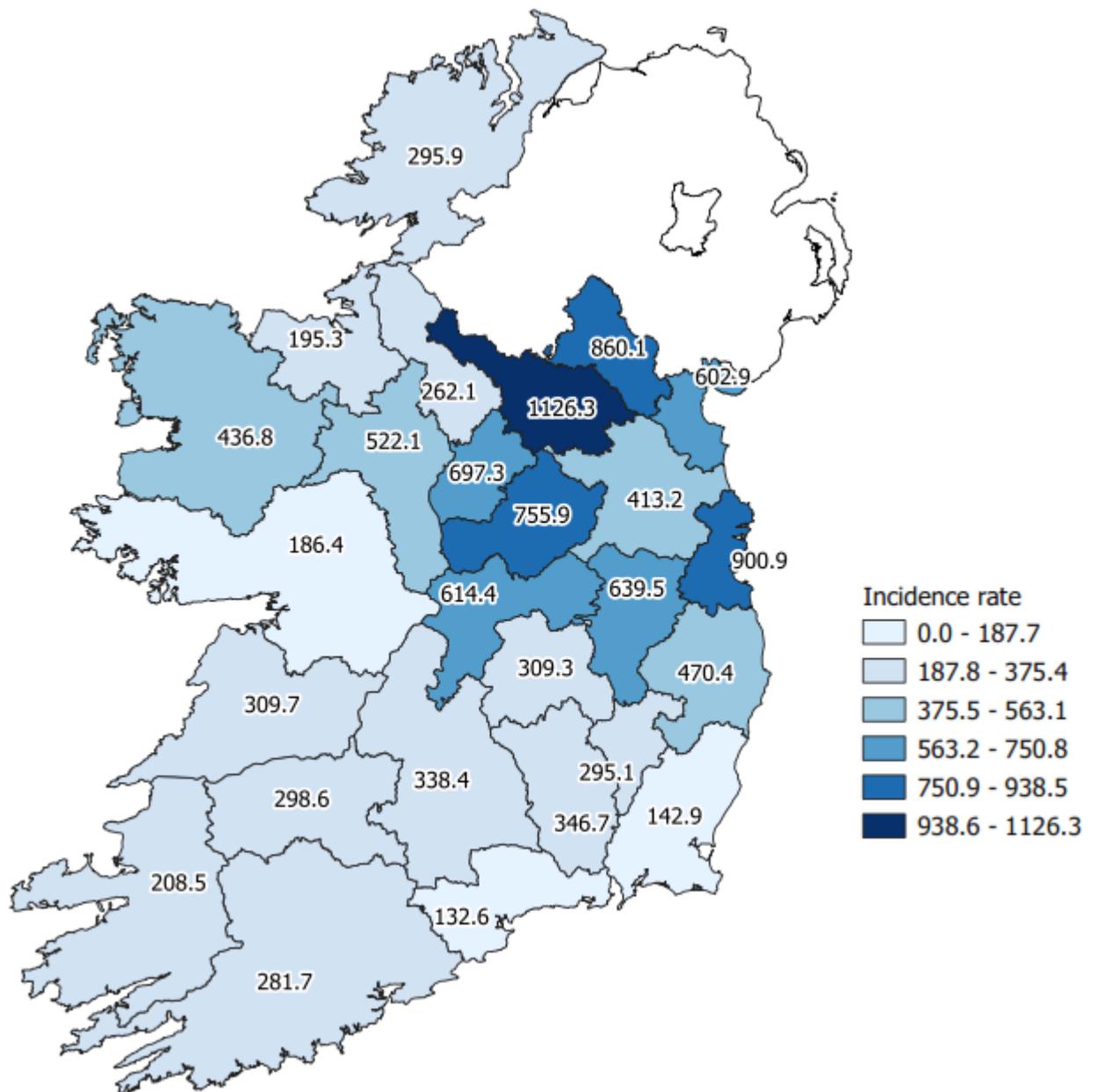


Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 05/06/2020

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 05/06/2020

County Name	Number of cases	Percent
Carlow	168	0.67
Cavan	858	3.41
Clare	368	1.46
Cork	1,529	6.07
Donegal	471	1.87
Dublin	12,139	48.22
Galway	481	1.91
Kerry	308	1.22
Kildare	1,423	5.65
Kilkenny	344	1.37
Laois	262	1.04
Leitrim	84	0.33
Limerick	582	2.31
Longford	285	1.13
Louth	777	3.09
Mayo	570	2.26
Meath	806	3.2
Monaghan	528	2.1
Offaly	479	1.9
Roscommon	337	1.34
Sligo	128	0.51
Tipperary	540	2.14
Waterford	154	0.61
Westmeath	671	2.67
Wexford	214	0.85
Wicklow	670	2.66
Total	25,176	100

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 05/06/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	9,771	38.81%
Local transmission, incl. possible local transmission	14,807	58.81%
Travel abroad, incl. possible travel abroad	573	2.28%
Unknown	25	0.10%
Total	25,176	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 05/06/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	161	20	0.6	0	0
5-14 yrs	320	17	0.51	2	0.49
15-24 yrs	1854	73	2.2	5	1.22
25-34 yrs	4219	197	5.93	15	3.67
35-44 yrs	4430	258	7.77	34	8.31
45-54 yrs	4527	443	13.34	83	20.29
55-64 yrs	3226	490	14.75	119	29.1
65-74 yrs	1793	580	17.46	104	25.43
75-84 yrs	2277	758	22.82	41	10.02
85+ yrs	2346	482	14.51	6	1.47
Unknown	23	3	0.09	0	0
Total	25,176	3,321	100	409	100

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 05/06/2020

	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)	161	320	1,854	4,219	4,430	4,527	3,226	1,793	2,277	2,346	23
Cases hospitalised (n)	20	17	73	197	258	443	490	580	758	482	3
Cases hospitalised (%)	12.42	5.31	3.94	4.67	5.82	9.79	15.19	32.35	33.29	20.55	13.04
Cases admitted to ICU (n)	0	2	5	15	34	83	119	104	41	6	0
Cases admitted to ICU (%)	0	0.63	0.27	0.36	0.77	1.83	3.69	5.8	1.8	0.26	0
Deaths (n)	0	0	2	5	10	23	61	205	489	625	0
Case fatality ratio (%)	0	0	0.11	0.12	0.23	0.51	1.89	11.43	21.48	26.64	0

Outbreaks of COVID-19

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 05/06/2020

Outbreak Location	E	M	MW	NE	NW	S	SE	W	Total
Other*	21	14	51	28	9	81	31	33	268
Nursing home	123	16	13	38	5	10	16	36	257
Residential institution	112	12	6	17	4	19	10	5	185
Hospital	60	3	2	14	2	12	3	6	102
Workplace	8	5	5	14	1	8	3	3	47
Comm. Hosp/Long-stay unit	4	4	2		4	6	5	4	29
Total	328	54	79	111	25	136	68	87	888

*Other outbreak location includes all outbreaks locations other than residential facilities, acute hospitals and workplaces. This includes community, extended family, hotel, private house, 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 05/06/2020

	Number	Percent
Total number of deaths	1,679	
Confirmed	1,420	84.57
Probable	96	5.72
Possible	163	9.71
Total number of cases hospitalised	710	42.29
Cases admitted to ICU	83	4.94
Cases not admitted to ICU	627	37.34
Total number of imported cases	6	0.36
Number of cases in healthcare workers	7	0.42
Number with underlying clinical conditions	1,520	90.53
Total number of male cases	830	49.43
M:F ratio	0.98	
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 05/06/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	2	0.12
25-34 yrs	<5	<5	5	0.3
35-44 yrs	5	6	11	0.66
45-54 yrs	10	15	25	1.49
55-64 yrs	23	43	66	3.93
65-74 yrs	82	147	229	13.64
75-84 yrs	260	313	573	34.13
85+ yrs	463	303	766	45.62
Unknown	<5	<5	2	0.12
Total	849	830	1,679	100
Percent	50.57	49.43		

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Unknown	<5	<5	2	0.12
Total	849	830	1,679	100
Percent	50.57	49.43		

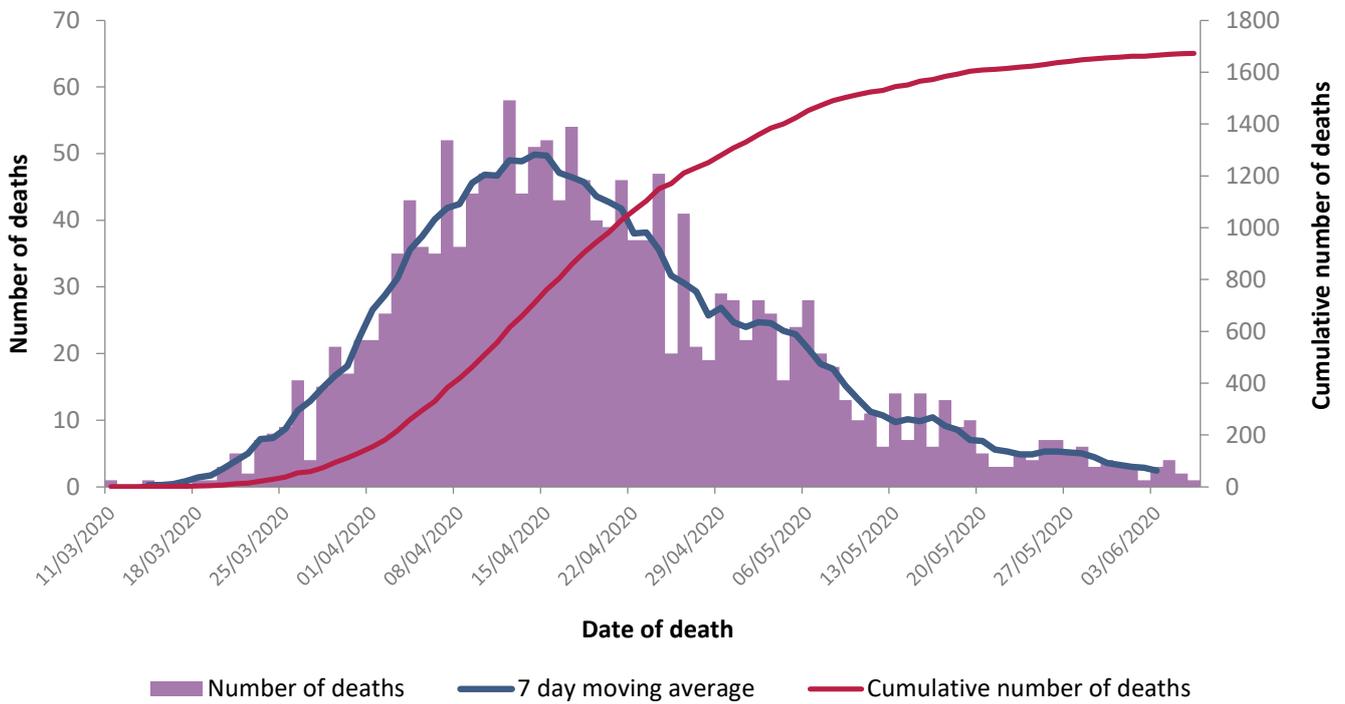


Figure 6: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 05/06/2020

* Date of death is not yet available for seven 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 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 09:22 on 07/06/2020. 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 and acute hospitals. This includes community, extended family, hotel, private house, public house, retail outlet, travel related and all other locations.