





# **Epidemiology of COVID-19 in Ireland**

Report prepared by HPSC on 28/08/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 26/08/2020

Number	Percent
28,451	
597.48	
3,384	11.89
446	1.57
1,519	5.34
5.34	
31.9	
2,656	
15,515	54.53
497	1.75
8,598	30.22
12,446	43.75
15,977	56.16
0.78	
46	
49	
0 - 106	
	28,451 597.48 3,384 446 1,519 5.34 31.9 2,656 15,515 497 8,598 12,446 15,977 0.78 46 49

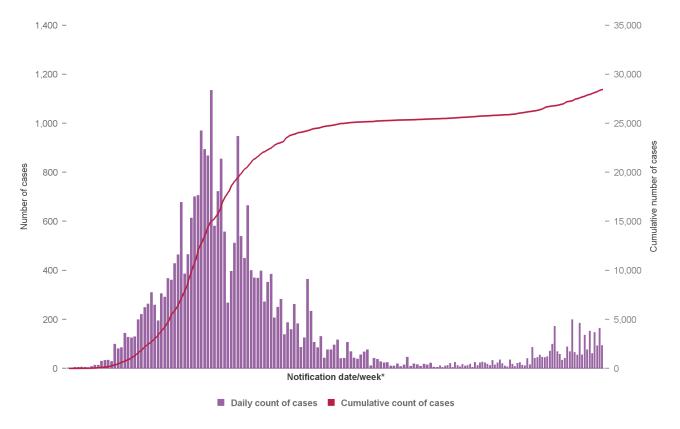


Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 26/08/2020

\*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

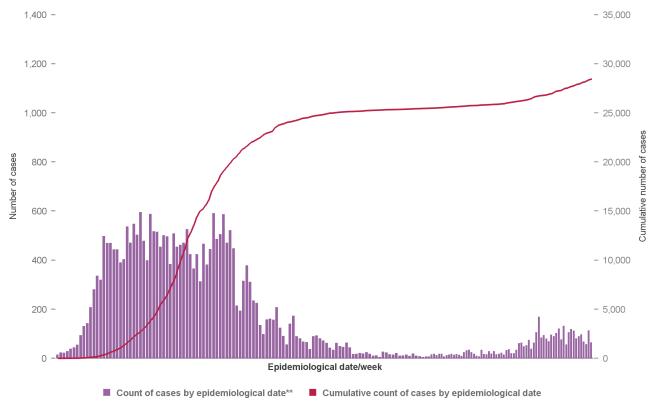


Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date\*\* to midnight 26/08/2020

<sup>\*\*</sup>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.

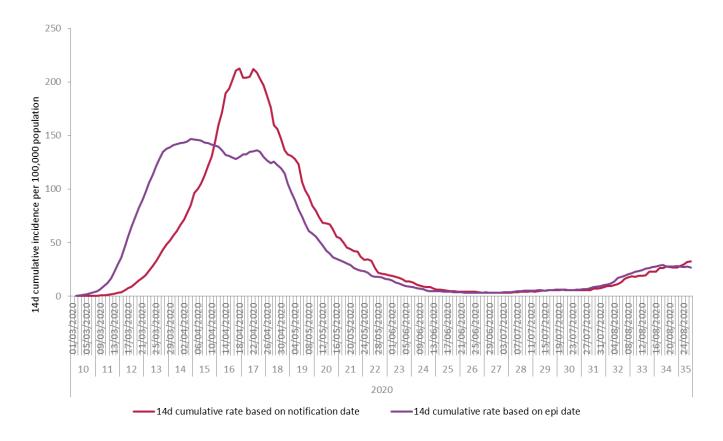


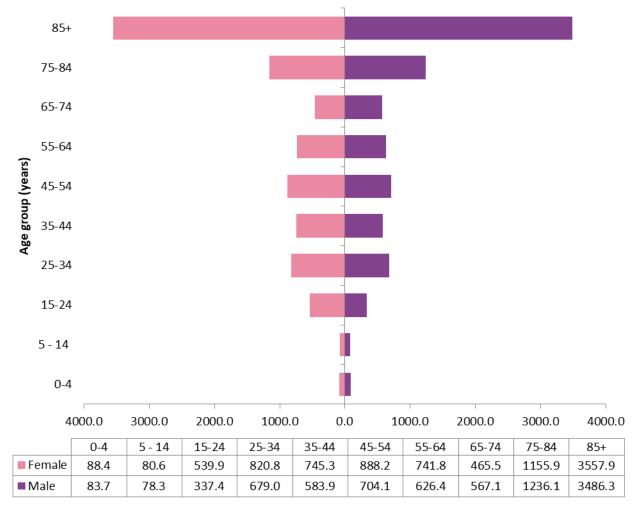
Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 26/08/2020

<sup>\*</sup> 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

<sup>\*\*</sup>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 26/08/2020

Characteristic		Number of cases	Percent
Total number of confirmed case	es	28,451	100
Sex	Male:Female ratio	0.78	
	Male	12,446	43.75
	Female	15,977	56.16
	Unknown	28	0.1
Age	Median age (years)	46	
	Mean age (years)	49	
	Age range (years)	0 - 106	
	0-4 yrs	285	1
	5-14 yrs	537	1.89
	15-24 yrs	2,521	8.86
	25-34 yrs	4,968	17.46
	35-44 yrs	4,982	17.51
	45-54 yrs	4,995	17.56
	55-64 yrs	3,484	12.25
	65-74 yrs	1,926	6.77
	75-84 yrs	2,343	8.24
	85+ yrs	2,388	8.39
	Unknown	22	0.08



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 26/08/2020 (excluding 22 cases for whom age is unknown and 27 cases for whom sex is unknown and 1 case for whom both are unknown)

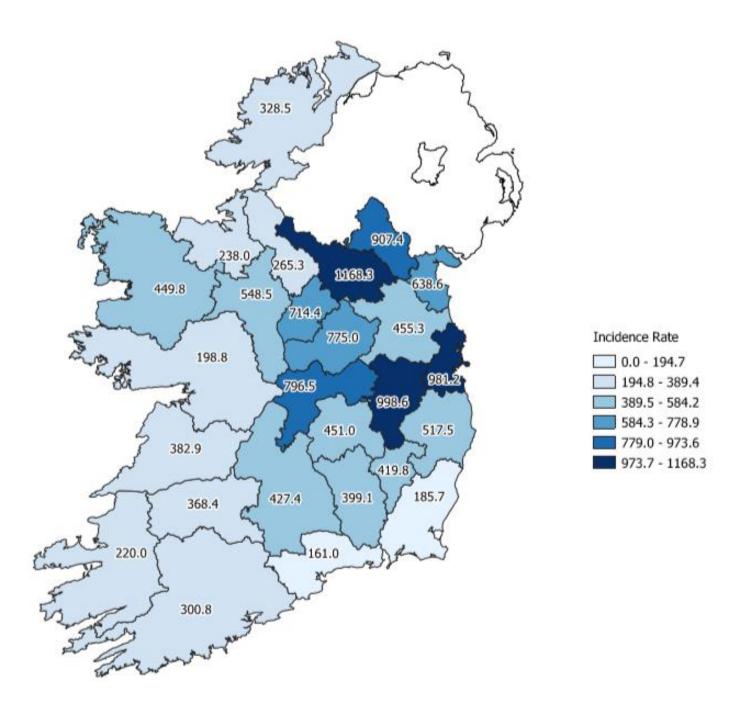


Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 25/08/2020

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 26/08/2020

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County Name	Number of cases	Percent
Carlow	239	0.84
Cavan	890	3.13
Clare	455	1.6
Cork	1,633	5.74
Donegal	523	1.84
Dublin	13,220	46.47
Galway	513	1.8
Kerry	325	1.14
Kildare	2,222	7.81
Kilkenny	396	1.39
Laois	382	1.34
Leitrim	85	0.3
Limerick	718	2.52
Longford	292	1.03
Louth	823	2.89
Mayo	587	2.06
Meath	888	3.12
Monaghan	557	1.96
Offaly	621	2.18
Roscommon	354	1.24
Sligo	156	0.55
Tipperary	682	2.4
Waterford	187	0.66
Westmeath	688	2.42
Wexford	278	0.98
Wicklow	737	2.59
Total	28,451	100

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 26/08/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	8,582	30.16%
Local transmission, incl. possible local transmission	18,995	66.76%
Travel abroad, incl. possible travel abroad	692	2.43%
Unknown	182	0.64%
Total	28,451	100.00%

<sup>\*</sup>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 26/08/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	285	25	0.74	0	0
5-14 yrs	537	18	0.53	2	0.45
15-24 yrs	2521	80	2.36	5	1.12
25-34 yrs	4968	205	6.06	16	3.59
35-44 yrs	4982	279	8.24	38	8.52
45-54 yrs	4995	454	13.42	93	20.85
55-64 yrs	3484	501	14.8	129	28.92
65-74 yrs	1926	594	17.55	110	24.66
75-84 yrs	2343	751	22.19	47	10.54
85+ yrs	2388	476	14.07	6	1.35
Unknown	22	1	0.03	0	0
Total	28,451	3,384	100	446	100

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 26/08/2020

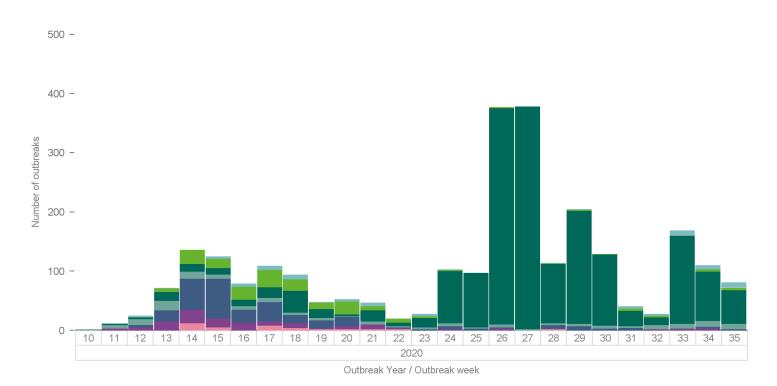
	0-4 yrs	5-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75-84 yrs	85+ yrs	Unknow n
Number of cases (n)	285	537	2,521	4,968	4,982	4,995	3,484	1,926	2,343	2,388	22
Cases hospitalised (n)	25	18	80	205	279	454	501	594	751	476	1
Cases hospitalised (%)	8.77	3.35	3.17	4.13	5.6	9.09	14.38	30.84	32.05	19.93	4.55
Cases admitted to ICU (n)	0	2	5	16	38	93	129	110	47	6	0
Cases admitted to ICU (%)	0	0.37	0.2	0.32	0.76	1.86	3.7	5.71	2.01	0.25	0
Deaths (n)	0	0	1	5	12	25	68	227	521	660	0
Case fatality ratio (%)	0	0	0.04	0.1	0.24	0.5	1.95	11.79	22.24	27.64	0

#### **Outbreaks of COVID-19**

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 26/08/2020

Outbreak Location	E	HPSC	М	MW	NE	NW	s	SE	w	Total
Private house	1,283		23	100	135	55	121	82	30	1,829
Nursing home	133		10	18	43	5	14	17	36	276
Residential institution	110		10	10	20	4	21	10	4	189
Other*	16	2	10	43	7	11	35	12	10	146
Hospital	63		3	4	14	2	10	5	6	107
Workplace	25		11	6	15	1	9	6	4	77
Comm. Hosp/Long-stay unit	4		4	2		4	6	5	5	30
Unknown	2									2
Total	1,636	2	71	183	234	82	216	137	95	2,656

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



■ Comm. Hosp/Long-stay unit
■ Hospital
■ Nursing home
■ Other\*
■ Private house
■ Residential institution
■ Unknown
■ Workplace

Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 26/08/2020

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

Note: 1,818 COVID-19 outbreaks were reported on CIDR between week 24 and week 35 2020 (June 9th to 26th August). Of these, 1,684 were family outbreaks. Most of these family outbreaks occurred earlier and were reported between weeks 24 and 35 as a result of data validation: 1 occurred in February, 635 in March, 474 in April, 94 in May, 126 in June, 126 in July and 228 in August to date

## **Deaths among COVID-19 cases**

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 26/08/2020

	Number	Percent
Total number of deaths	1,777	
Confirmed	1,519	85.48
Probable	99	5.57
Possible	159	8.95
Total number of cases hospitalised	757	42.6
Cases admitted to ICU	93	5.23
Cases not admitted to ICU	664	37.37
Total number of imported cases	6	0.34
Number of cases in healthcare workers	8	0.45
Number with underlying clinical conditions	1,677	94.37
Total number of male cases	875	49.24
M:F ratio	0.97	
Median age (years)	84	
Mean age (years)	82	
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 26/08/2020

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	93	159	252	14.18
75-84 yrs	279	326	605	34.05
85+ yrs	484	315	799	44.96
Unknown	<5	<5	2	0.11
Total	902	875	1,777	100
Percent	50.76	49.24		

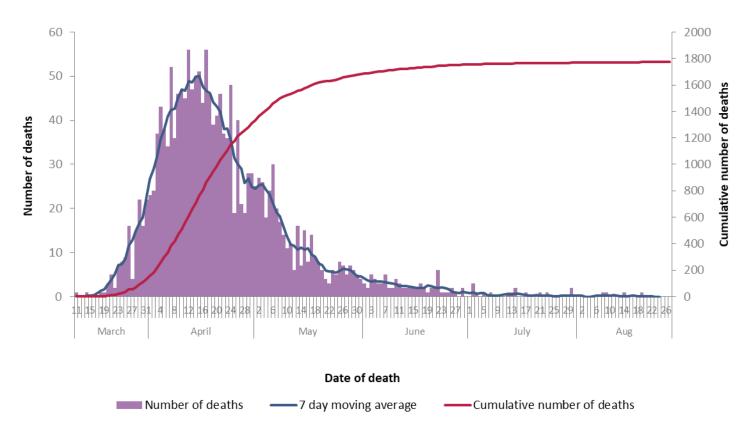


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 26/08/2020

\* Date of death is not yet available for five cases

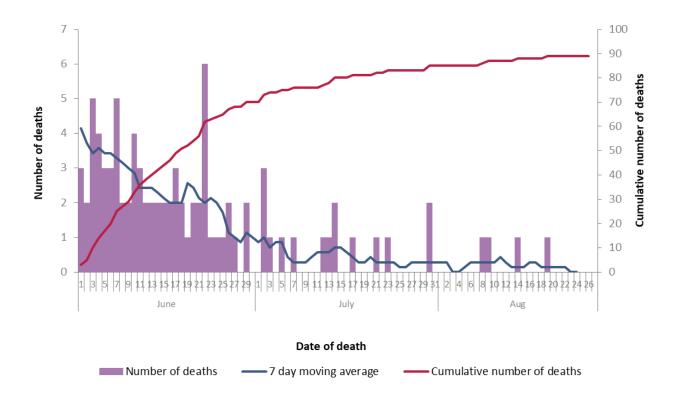


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/06/2020 to midnight 26/08/2020 (n=89)

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 09:23 on 8/28/20. 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.
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#### 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.