





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

Report prepared by HPSC on 12/08/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 10/08/2020

	Number	Percent
Total number of confirmed cases	26,798	
National cumulative incidence of confirmed cases per 100,000 population	562.76	
Total number of cases hospitalised	3,376	12.6
Total number of cases admitted to ICU	441	1.65
Total number of deaths among confirmed cases	1,516	5.66
Case fatality ratio (CFR, %)	5.66	
National cumulative incidence of confirmed deaths per 100,000 population	31.84	
Total number of outbreaks/clusters	2,391	
Total number of cases associated with clusters	14,572	54.38
Total number of imported cases	467	1.74
Number of cases in healthcare workers	8,469	31.6
Males	11,623	43.37
Females	15,146	56.52
M:F ratio	0.77	
Median age (years)	47	
Mean age (years)	50	
Age range (years)	0 - 106	

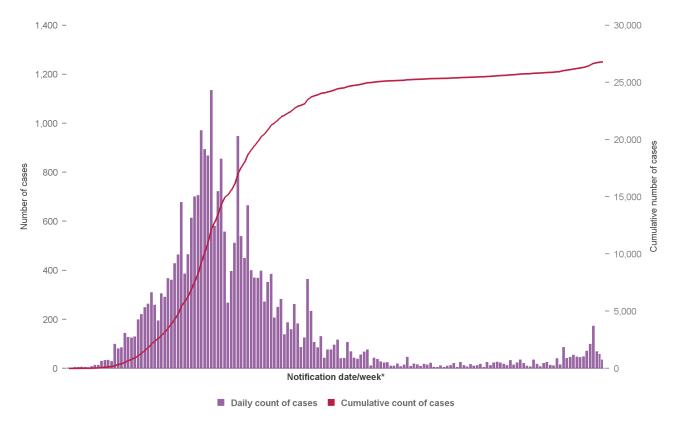


Figure 1a: Number\* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date\* to midnight 10/08/2020

\*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

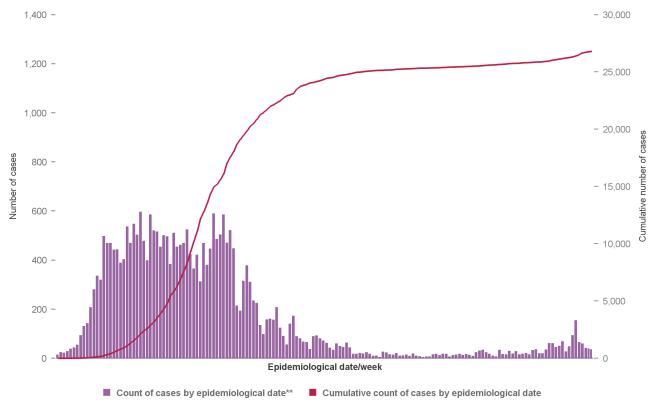


Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date\*\* to midnight 10/08/2020

<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.

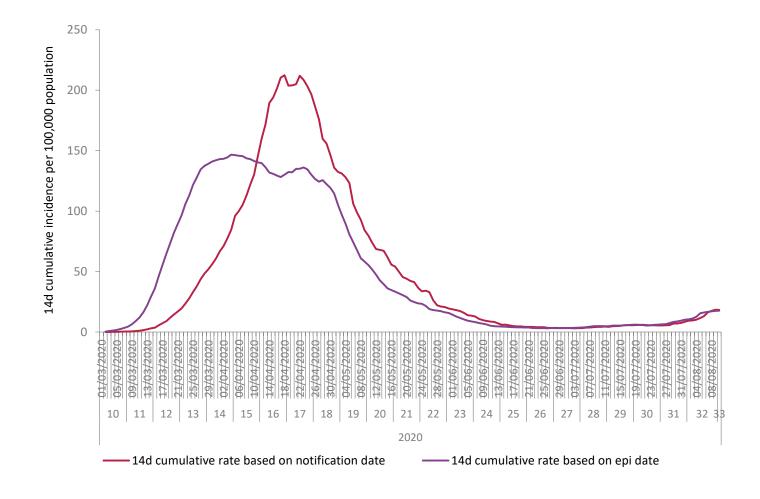


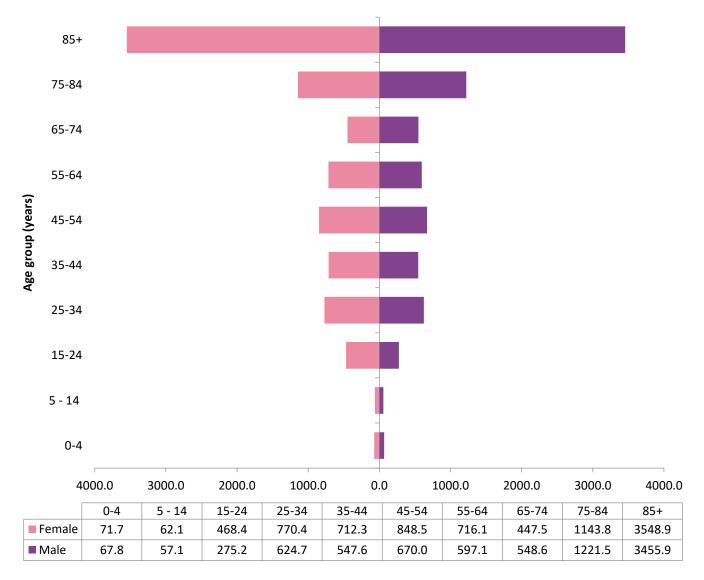
Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification\* and epidemiological date\*\* to midnight 10/08/2020

<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 10/08/2020

Characteristic		Number of cases	Percent
Total number of confirmed cases		26,798	100
Sex	Male:Female ratio	0.77	
	Male	11,623	43.37
	Female	15,146	56.52
	Unknown	29	0.11
Age	Median age (years)	47	
	Mean age (years)	50	
	Age range (years)	0 - 106	
	0-4 yrs	231	0.86
	5-14 yrs	403	1.5
	15-24 yrs	2,136	7.97
	25-34 yrs	4,623	17.25
	35-44 yrs	4,723	17.62
	45-54 yrs	4,765	17.78
	55-64 yrs	3,344	12.48
	65-74 yrs	1,858	6.93
	75-84 yrs	2,317	8.65
	85+ yrs	2,377	8.87
	Unknown	21	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 10/08/2020 (excluding 20 cases for whom age is unknown and 28 cases for whom sex is unknown and 1 case for whom both are unknown)

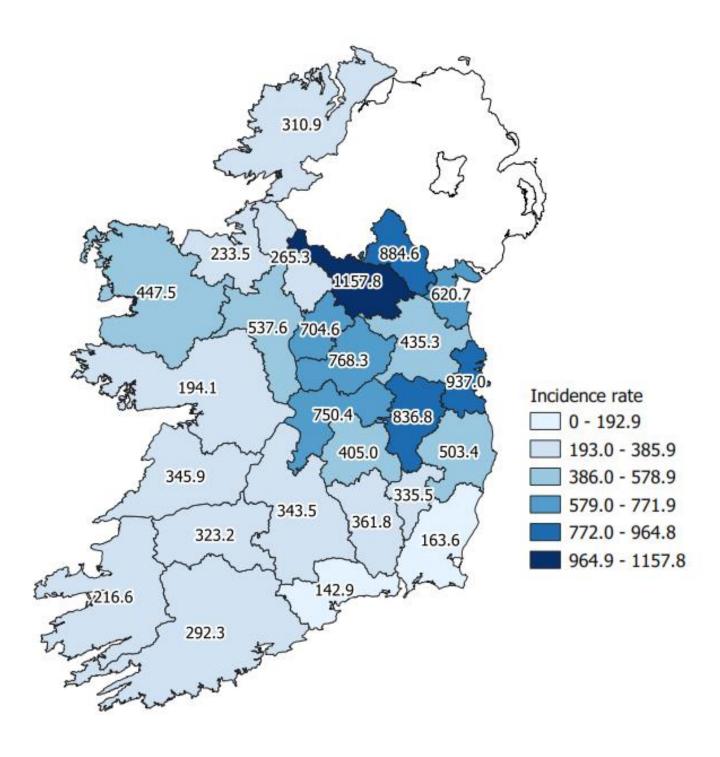


Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 10/08/2020

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 10/08/2020

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County Name	Number of cases	Percent		
Carlow	191	0.71		
Cavan	882	3.29		
Clare	411	1.53		
Cork	1,587	5.92		
Donegal	495	1.85		
Dublin	12,625	47.11		
Galway	501	1.87		
Kerry	320	1.19		
Kildare	1,862	6.95		
Kilkenny	359	1.34		
Laois	343	1.28		
Leitrim	85	0.32		
Limerick	630	2.35		
Longford	288	1.07		
Louth	800	2.99		
Mayo	584	2.18		
Meath	849	3.17		
Monaghan	543	2.03		
Offaly	585	2.18		
Roscommon	347	1.29		
Sligo	153	0.57		
Tipperary	548	2.04		
Waterford	166	0.62		
Westmeath	682	2.54		
Wexford	245	0.91		
Wicklow	717	2.68		
Total	26,798	100		

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 10/08/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	8,185	30.54%
Local transmission, incl. possible local transmission	17,922	66.88%
Travel abroad, incl. possible travel abroad	660	2.46%
Unknown	31	0.12%
Total	26,798	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 10/08/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	231	24	0.71	0	0
5-14 yrs	403	18	0.53	2	0.45
15-24 yrs	2136	77	2.28	5	1.13
25-34 yrs	4623	202	5.98	15	3.4
35-44 yrs	4723	276	8.18	37	8.39
45-54 yrs	4765	454	13.45	91	20.63
55-64 yrs	3344	502	14.87	128	29.02
65-74 yrs	1858	593	17.57	109	24.72
75-84 yrs	2317	752	22.27	48	10.88
85+ yrs	2377	477	14.13	6	1.36
Unknown	21	1	0.03	0	0
Total	26,798	3,376	100	441	100

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 10/08/2020

	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)	231	403	2,136	4,623	4,723	4,765	3,344	1,858	2,317	2,377	21
Cases hospitalised (n)	24	18	77	202	276	454	502	593	752	477	1
Cases hospitalised (%)	10.39	4.47	3.6	4.37	5.84	9.53	15.01	31.92	32.46	20.07	4.76
Cases admitted to ICU (n)	0	2	5	15	37	91	128	109	48	6	0
Cases admitted to ICU (%)	0	0.5	0.23	0.32	0.78	1.91	3.83	5.87	2.07	0.25	0
Deaths (n)	0	0	1	5	12	24	68	228	519	659	0
Case fatality ratio (%)	0	0	0.05	0.11	0.25	0.5	2.03	12.27	22.4	27.72	0

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

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 10/08/2020

Outbreak Location	E	HPSC	M	MW	NE	NW	s	SE	w	Total
Private house	1,134		6	94	122	54	115	79	28	1,632
Nursing home	131		10	17	41	5	14	17	36	271
Residential institution	105		10	8	18	4	21	10	4	180
Other*	13	2	8	31	7	8	29	11	9	118
Hospital	61		3	3	14	2	10	5	6	104
Workplace	13		7	5	14	1	8	2	4	54
Comm. Hosp/Long-stay unit	5		4	2		4	6	5	5	31
Unknown							1			1
Total	1,462	2	48	160	216	78	204	129	92	2,391

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

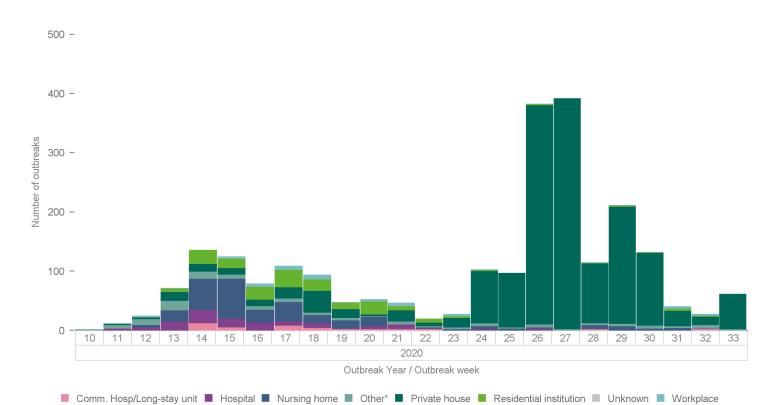


Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 10/08/2020

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

Note: 1,555 COVID-19 outbreaks were reported on CIDR between week 24 and week 33 2020 (June 7th to 10th August). Of these, 1,479 were family outbreaks. Most of these family outbreaks occurred earlier and were reported between weeks 24 and 33 as a result of data validation: 1 occurred in February, 723 in March, 545 in April, 101 in May, 20 in June, 75 in July and 14 in August.

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

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 10/08/2020

	Number	Percent
Total number of deaths	1,774	
Confirmed	1,516	85.46
Probable	99	5.58
Possible	159	8.96
Total number of cases hospitalised	755	42.56
Cases admitted to ICU	93	5.24
Cases not admitted to ICU	662	37.32
Total number of imported cases	6	0.34
Number of cases in healthcare workers	8	0.45
Number with underlying clinical conditions	1,674	94.36
Total number of male cases	872	49.15
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 10/08/2020

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	16	26	1.47
55-64 yrs	26	47	73	4.11
65-74 yrs	93	160	253	14.26
75-84 yrs	279	324	603	33.99
85+ yrs	483	315	798	44.98
Unknown	<5	<5	2	0.11
Total	902	872	1,774	100
Percent	50.85	49.15		

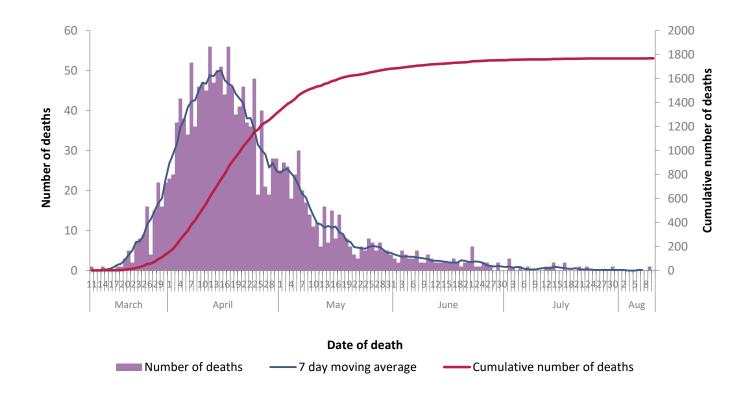


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 10/08/2020

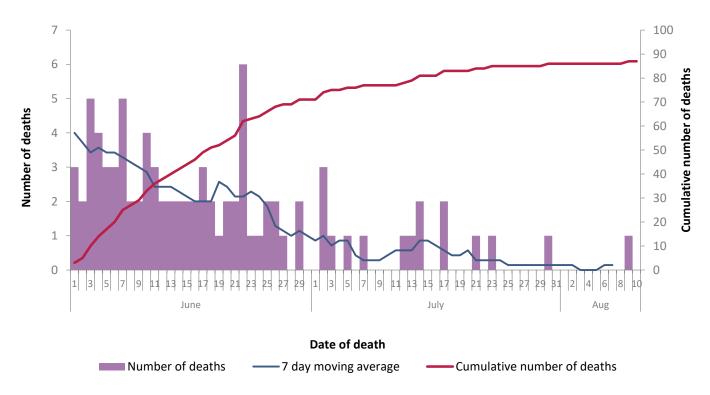


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/06/2020 to midnight 10/08/2020 (n=87)

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

<sup>\*</sup> Date of death is not yet available for five cases

### **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 09:27 on 12/08/2020. 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.
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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.