



Epidemiology of COVID-19 in Ireland

Report prepared by HPSC on 27/10/2020 for National Public Health Emergency Team

Summary characteristics of confirmed COVID-19 cases notified in Ireland up to midnight 25/10/2020

	Number	Percent
Total number of confirmed cases	58,047	
National cumulative incidence of confirmed cases per 100,000 population	1,219	
Total number of cases hospitalised	4,232	7.29
Total number of cases admitted to ICU	534	0.92
Total number of deaths among confirmed cases	1,632	2.81
Case fatality ratio (CFR, %)	2.81	
National cumulative incidence of confirmed deaths per 100,000 population	34.27	
Total number of outbreaks/clusters	6,254	
Total number of cases associated with clusters	27,924	48.11
Total number of imported cases*	619	1.07
Number of cases in healthcare workers*	10,203	17.58
Males	27,168	46.8
Females	30,826	53.11
M:F ratio	0.88	
Median age (years)	40	
Mean age (years)	42	
Age range (years)	0 - 106	

*Data is incomplete for these variables

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:15 on 27/10/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

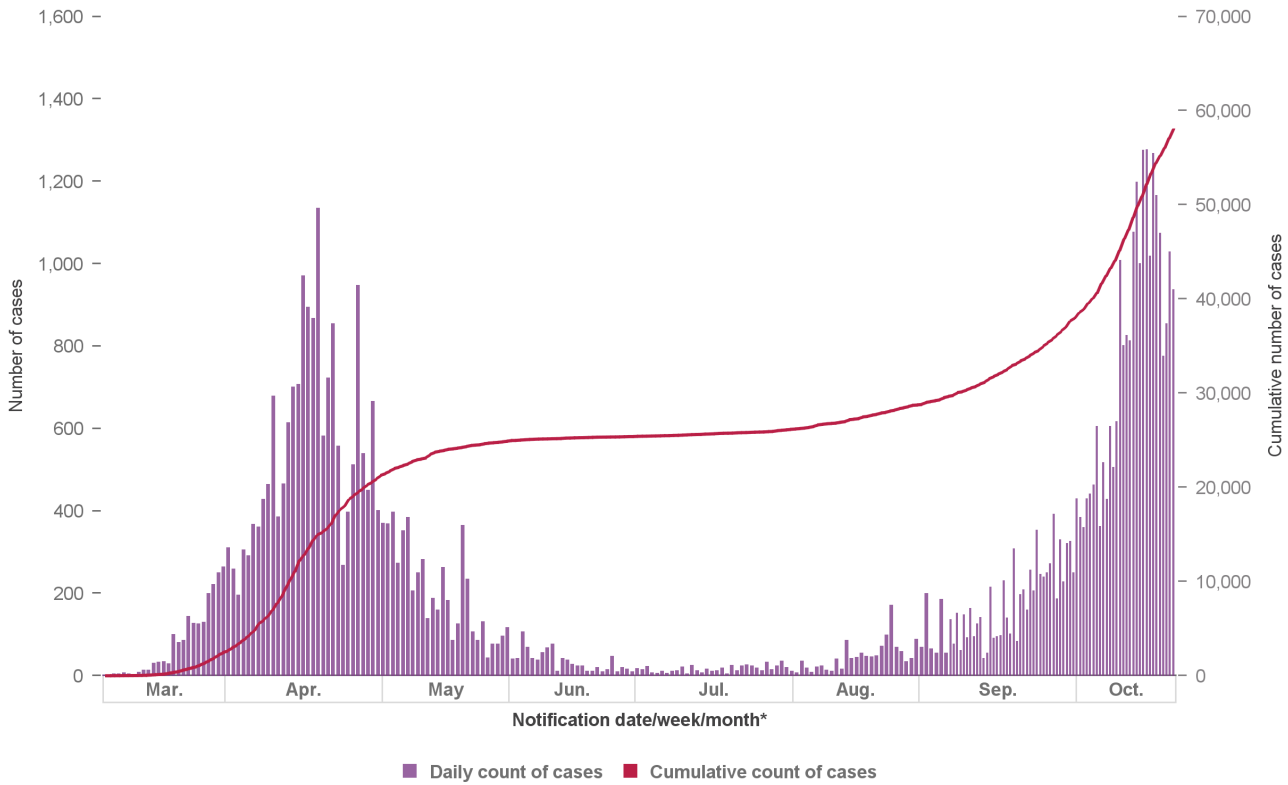


Figure 1a: Number* and cumulative number of confirmed COVID-19 cases notified in Ireland by notification date* to midnight 25/10/2020

*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

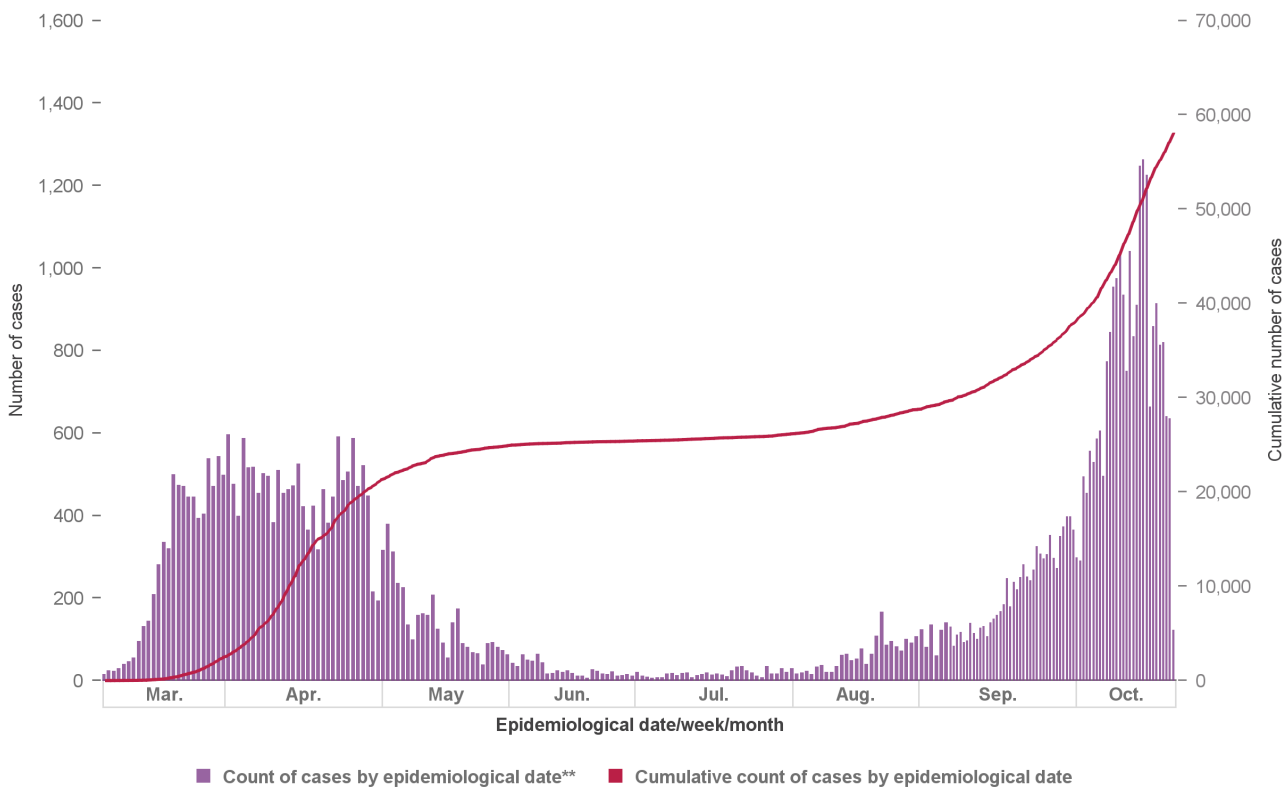


Figure 1b: Number and cumulative number of confirmed COVID-19 cases notified in Ireland by epidemiological date to midnight 25/10/2020**

**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.

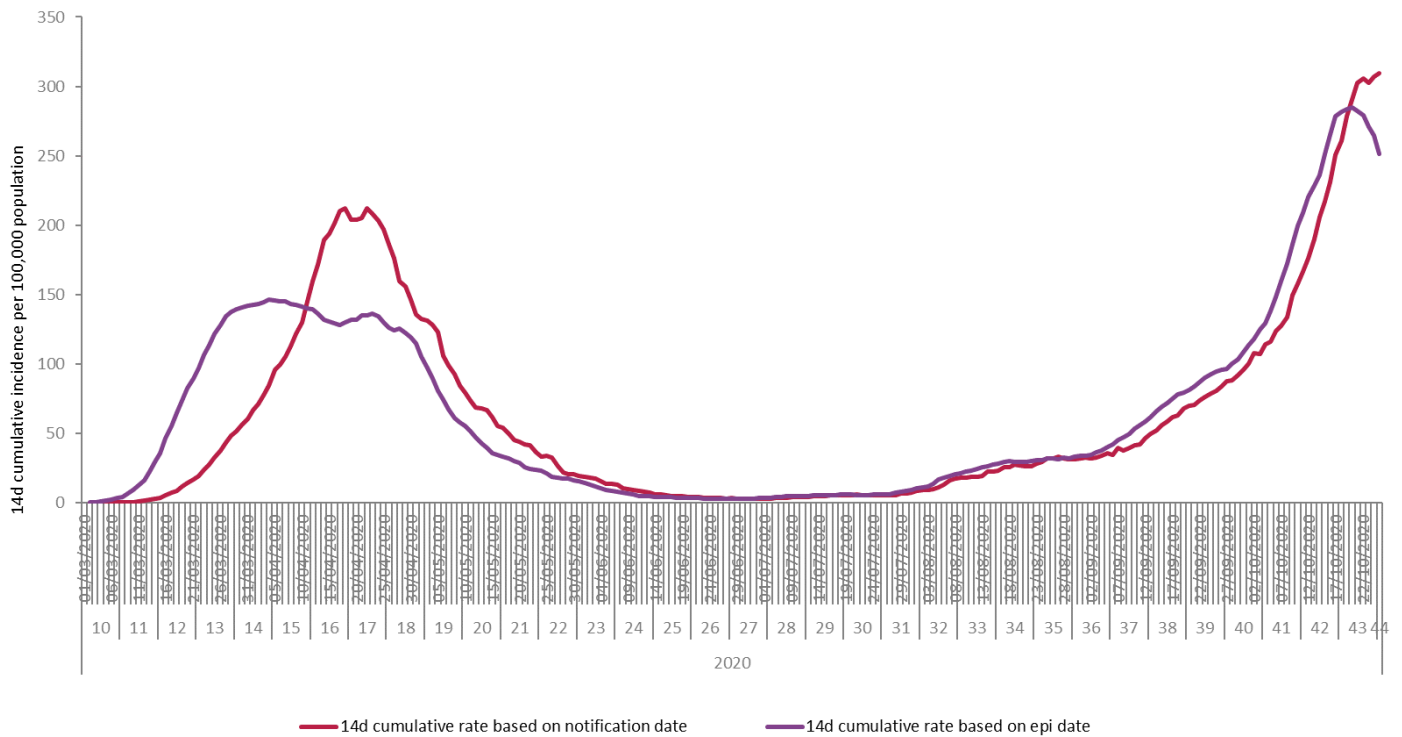


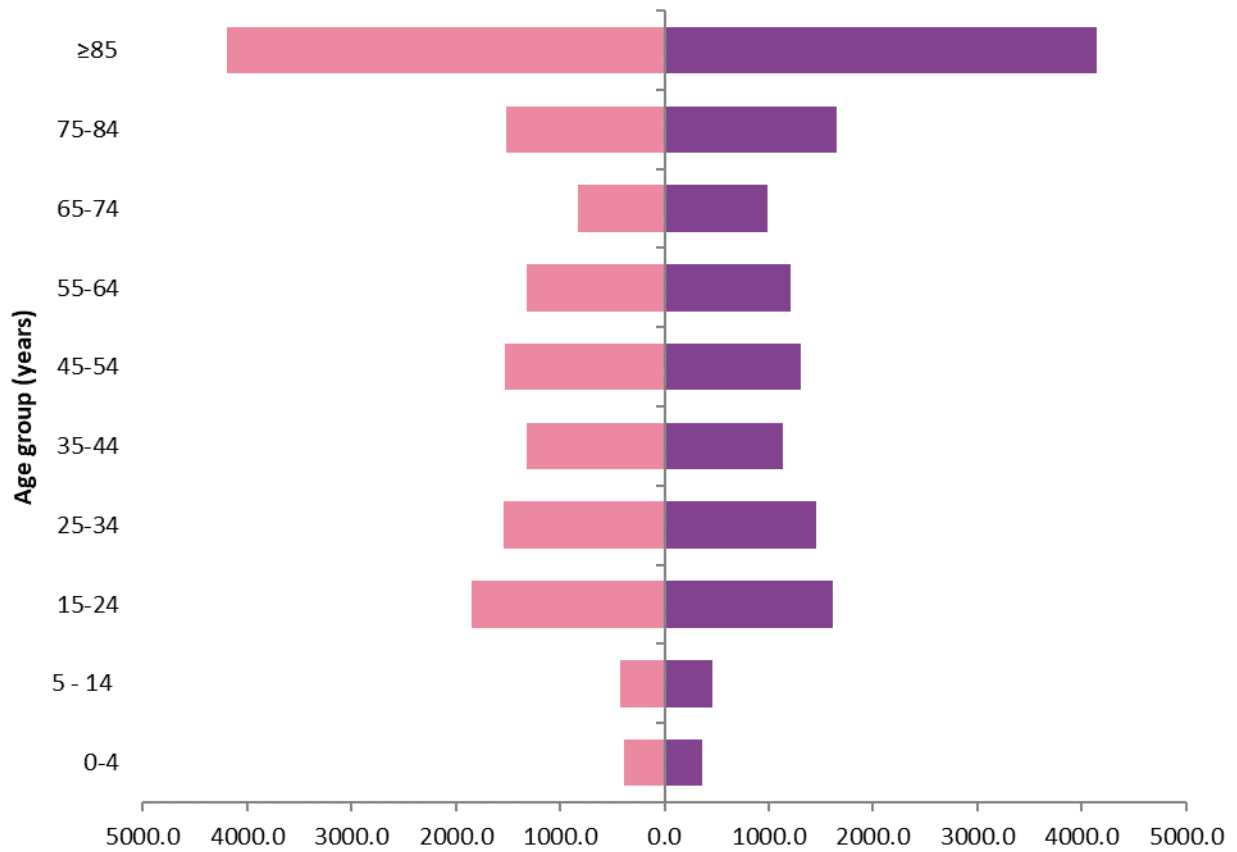
Figure 2: Cumulative 14 day incidence rate of confirmed COVID-19 cases per 100,000 population notified in Ireland by notification* and epidemiological date to midnight 25/10/2020**

* 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 25/10/2020

Characteristic		Number of cases	Percent
Total number of confirmed cases		58,047	100
Sex	Male:Female ratio	0.88	
	Male	27,168	46.8
	Female	30,826	53.11
	Unknown	53	0.09
Age	Median age (years)	40	
	Mean age (years)	42	
	Age range (years)	0 - 106	
	0-4 yrs	1,250	2.15
	5-14 yrs	3,016	5.2
	15-24 yrs	9,993	17.22
	25-34 yrs	9,934	17.11
	35-44 yrs	9,155	15.77
	45-54 yrs	8,905	15.34
	55-64 yrs	6,437	11.09
	65-74 yrs	3,402	5.86
	75-84 yrs	3,102	5.34
	85+ yrs	2,824	4.87
	Unknown	29	0.05



	0-4	5 - 14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	≥85
Female	386.3	429.5	1851.7	1545.4	1315.2	1528.2	1317.5	829.4	1522.5	4198.4
Male	365.3	462.5	1616.8	1459.8	1130.7	1312.7	1210.8	994.2	1645.9	4141.0

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 25/10/2020 (excluding 28 cases for whom age is unknown and 52 cases for whom sex is unknown and 1 case for whom both are unknown)

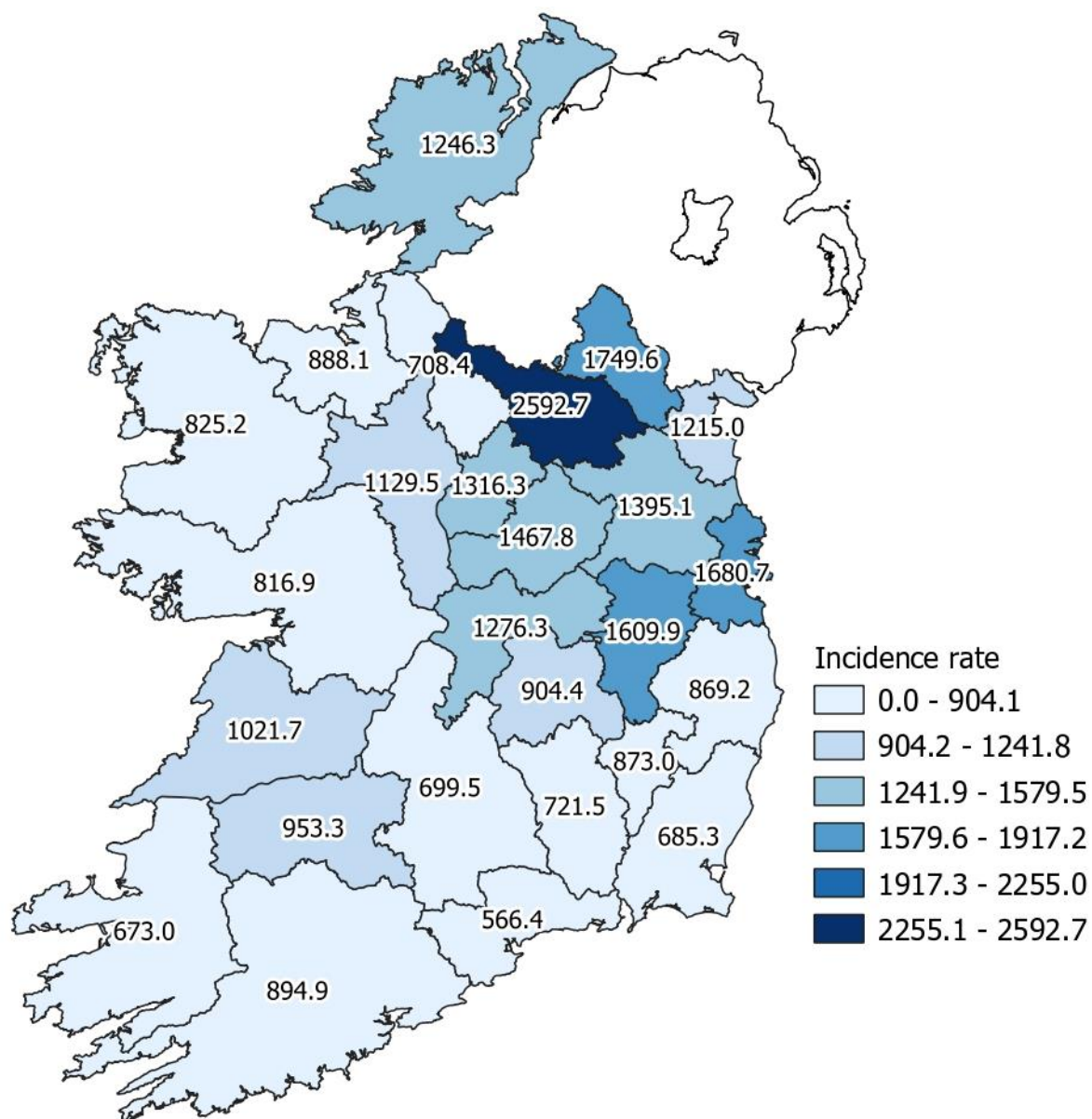


Figure 4: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population notified in Ireland to midnight 25/10/2020

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 25/10/2020

County Name	Number of cases	Percent
Carlow	497	0.86
Cavan	1,975	3.4
Clare	1,214	2.09
Cork	4,858	8.37
Donegal	1,984	3.42
Dublin	22,645	39.01
Galway	2,108	3.63
Kerry	994	1.71
Kildare	3,582	6.17
Kilkenny	716	1.23
Laois	766	1.32
Leitrim	227	0.39
Limerick	1,858	3.2
Longford	538	0.93
Louth	1,566	2.7
Mayo	1,077	1.86
Meath	2,721	4.69
Monaghan	1,074	1.85
Offaly	995	1.71
Roscommon	729	1.26
Sligo	582	1
Tipperary	1,116	1.92
Waterford	658	1.13
Westmeath	1,303	2.24
Wexford	1,026	1.77
Wicklow	1,238	2.13
Total	58,047	100

Table 3: Number of confirmed COVID-19 cases by WHO transmission classification notified to midnight 25/10/2020

Transmission classification*	Count of Events	%
Community transmission, incl. possible community transmission	16,650	28.68%
Local transmission, incl. possible local transmission	35,196	60.63%
Travel abroad, incl. possible travel abroad	915	1.58%
Unknown	5,286	9.11%
Total	58,047	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 25/10/2020

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	1250	43	1.02	1	0.19
5-14 yrs	3016	39	0.92	4	0.75
15-24 yrs	9993	125	2.95	6	1.12
25-34 yrs	9934	265	6.26	17	3.18
35-44 yrs	9155	338	7.99	46	8.61
45-54 yrs	8905	549	12.97	100	18.73
55-64 yrs	6437	631	14.91	147	27.53
65-74 yrs	3402	758	17.91	147	27.53
75-84 yrs	3102	917	21.67	59	11.05
85+ yrs	2824	565	13.35	7	1.31
Unknown	29	2	0.05	0	0
Total	58,047	4,232	100	534	100

Table 5: Number and proportion of confirmed cases of COVID-19 notified in Ireland by age-group, hospitalisation and ICU admission 25/10/2020

	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)	1,250	3,016	9,993	9,934	9,155	8,905	6,437	3,402	3,102	2,824	29
Cases hospitalised (n)	43	39	125	265	338	549	631	758	917	565	2
Cases hospitalised (%)	3.44	1.29	1.25	2.67	3.69	6.17	9.80	22.28	29.56	20.01	6.90
Cases admitted to ICU (n)	1	4	6	17	46	100	147	147	59	7	0
Cases admitted to ICU (%)	0.08	0.13	0.06	0.17	0.50	1.12	2.28	4.32	1.90	0.25	0
Deaths (n)	0	0	1	7	12	29	77	245	560	701	0
Case fatality ratio (%)	0	0	0.01	0.07	0.13	0.33	1.20	7.20	18.05	24.82	0

Outbreaks of COVID-19

Table 6: Number of clusters/outbreaks COVID-19 by location and HSE area notified to midnight 25/10/2020

Outbreak Location	E	M	MW	NE	NW	S	SE	W	HPSC	Total
Private house	2,751	66	155	337	212	347	300	353		4,521
Other*	171	51	133	47	76	151	41	90	2	762
Nursing home	157	14	20	49	8	19	19	42		328
Residential institution	132	14	13	31	8	26	12	7		243
Workplace	75	15	19	38	26	18	17	18		226
Hospital	76	7	6	19	4	16	5	7		140
Comm. Hosp/Long-stay unit	6	5	2		4	6	5	5		33
Unknown					1					1
Total	3,368	172	348	521	339	583	399	522	2	6,254

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

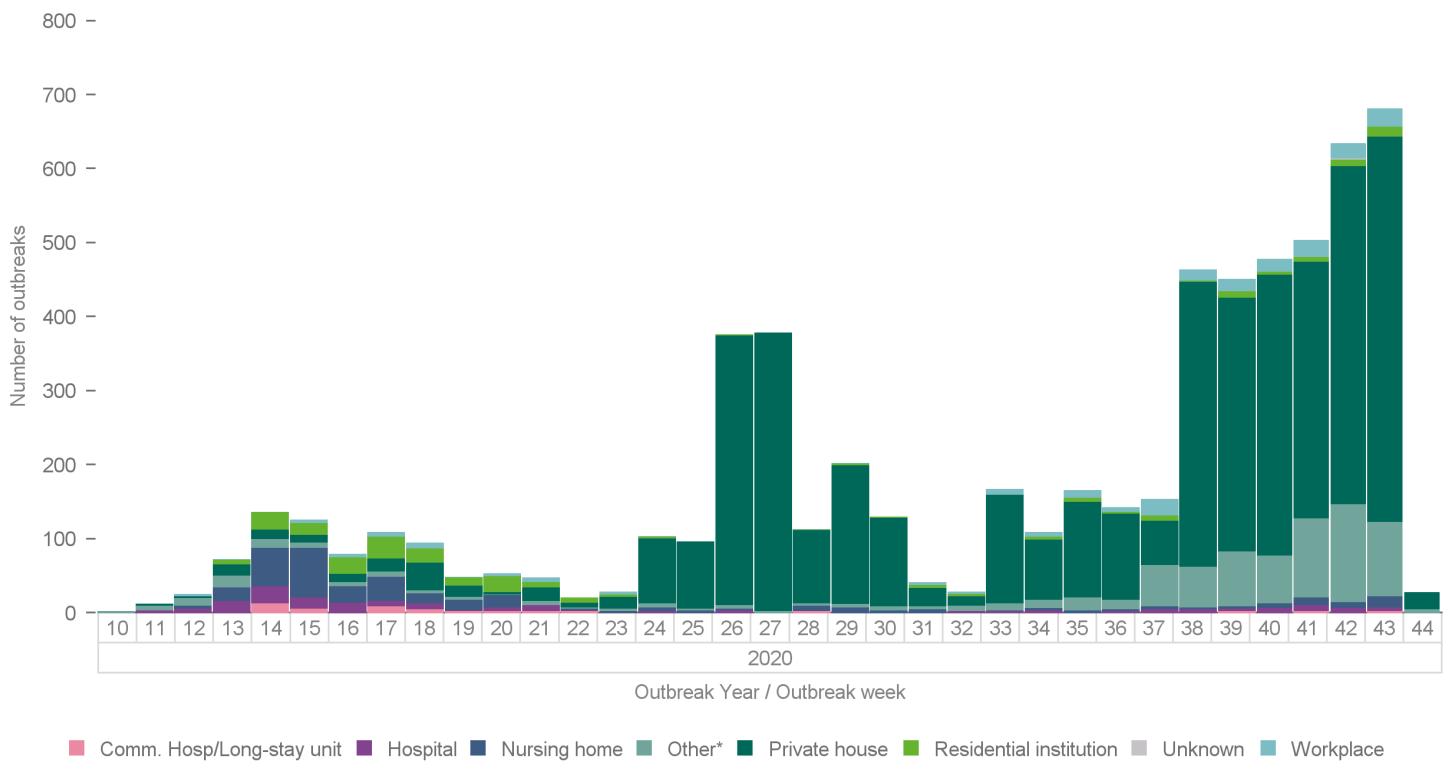


Figure 5: Trend in number of COVID-19 clusters by location and week notified to midnight 25/10/2020

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

Note: 5,418 COVID-19 outbreaks were reported on CIDR between week 24 and week 44 2020 to date (9th June to 25th October). Of these, 4,320 were family outbreaks. Based on the earliest date associated with each outbreak, a large proportion of these family outbreaks occurred earlier and were reported between weeks 24 and 44 as a result of data validation: 1 occurred in February, 636 in March, 474 in April, 94 in May, 126 in June, 127 in July, 533 in August, 1,486 in September and 843 in October to date.

Deaths among COVID-19 cases

Table 7: Summary of deaths in all COVID-19 cases notified in Ireland up to midnight 25/10/2020

	Number	Percent
Total number of deaths	1,889	
Confirmed	1,632	86.39
Probable	95	5.03
Possible	162	8.58
Total number of cases hospitalised	817	43.25
Cases admitted to ICU	105	5.56
Cases not admitted to ICU	712	37.69
Total number of imported cases	6	0.32
Number of cases in healthcare workers	8	0.42
Number with underlying clinical conditions	1,767	93.54
Total number of male cases	944	49.97
M:F ratio	1	
Median age (years)	83	
Mean age (years)	81	
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 25/10/2020

Age group (years)	Female	Male	Total	Percent
15-24 yrs	<5	<5	1	0.05
25-34 yrs	<5	5	7	0.37
35-44 yrs	6	7	13	0.69
45-54 yrs	11	20	31	1.64
55-64 yrs	27	56	83	4.39
65-74 yrs	101	170	271	14.35
75-84 yrs	293	349	642	33.99
85+ yrs	502	337	839	44.42
Unknown	<5	<5	2	0.11
Total	945	944	1,889	100
Percent	50.03	49.97		

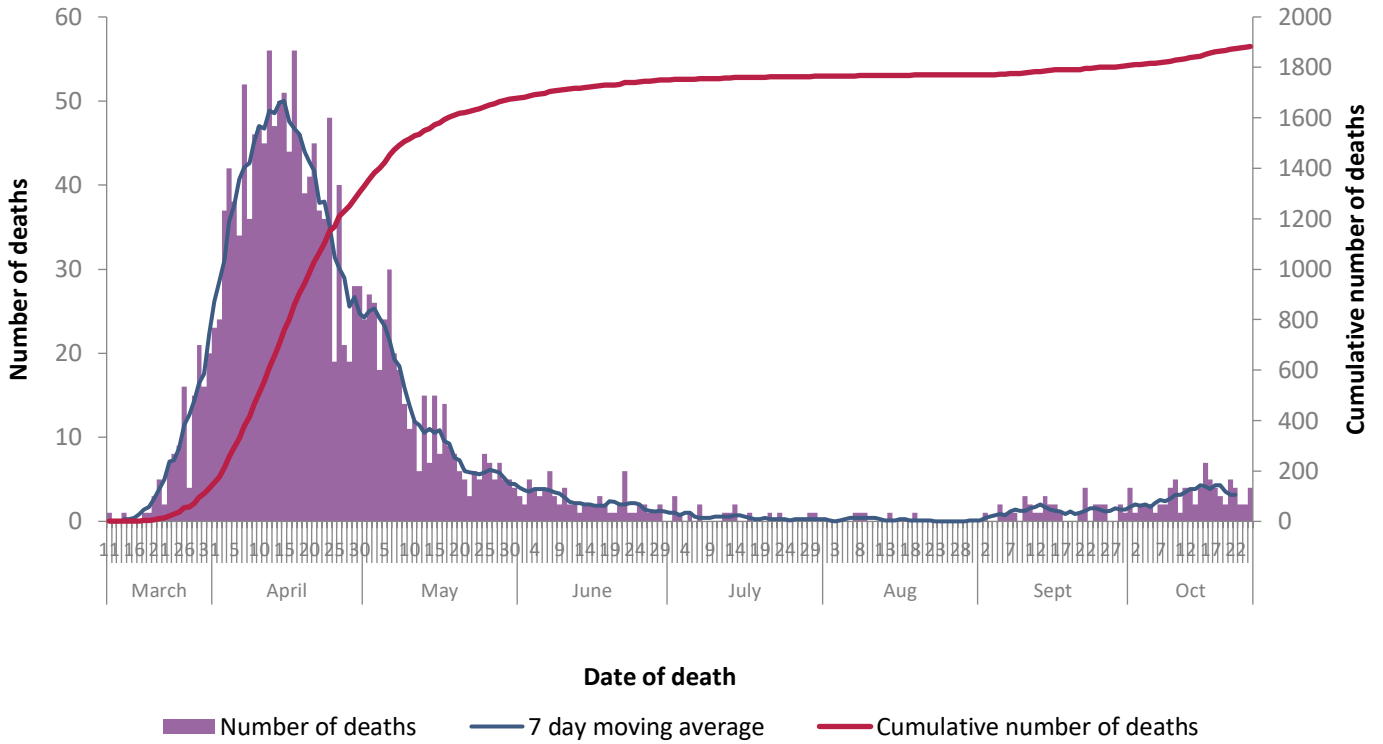


Figure 6a: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total to midnight 25/10/2020

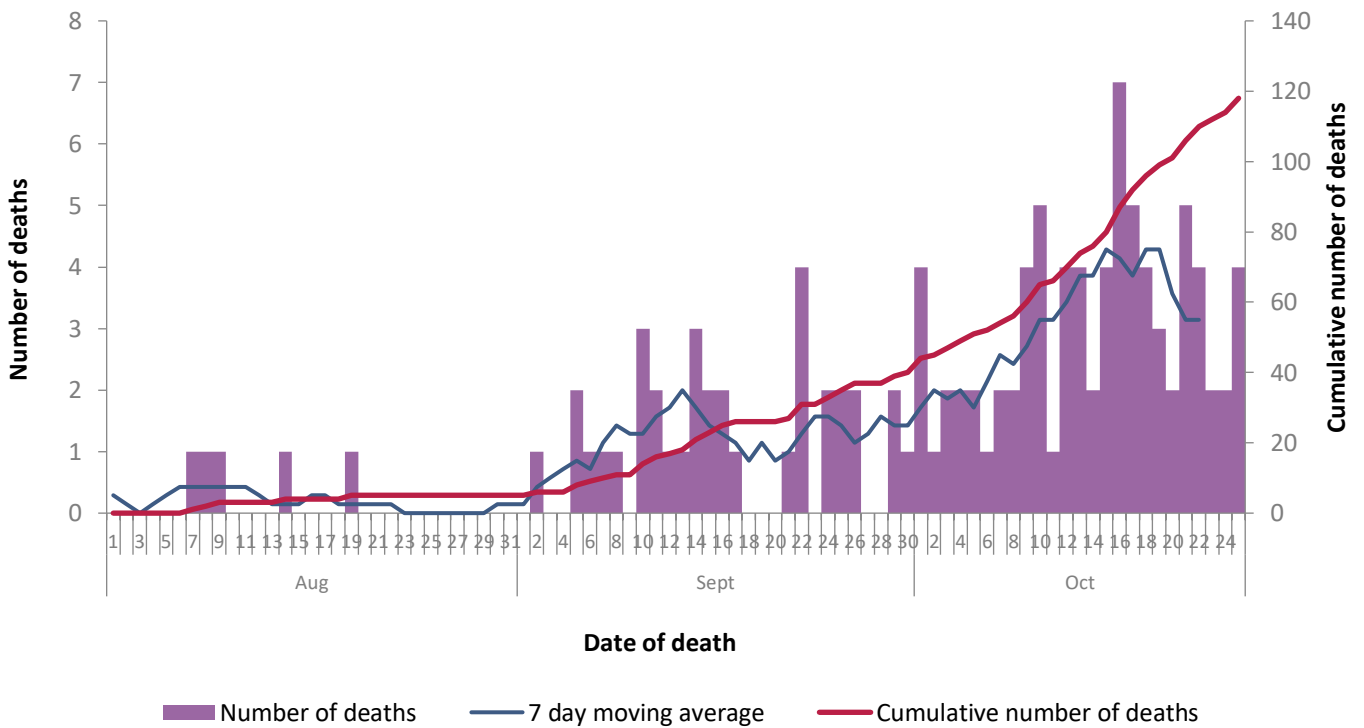


Figure 6b: Daily and 7 day moving average number of deaths among COVID-19 cases notified in Ireland by date of death and cumulative total, 01/08/2020 to midnight 25/10/2020

* 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

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 09:15 on 27/10/2020. 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 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 community, extended family, hotel, public house, retail outlet, travel related and all other locations.