Epidemiology of COVID-19 in Ireland - 14 day report

Report prepared by HPSC on 16/12/2020

Summary characteristics of confirmed COVID-19 cases notified in Ireland from 02/12/2020 up to midnight 15/12/2020

	Number	Percent
Total number of confirmed cases	4,185	
National incidence of confirmed cases per 100,000 population	87.89	
Number of cases hospitalised*	223	5.33
Number of cases admitted to ICU*	14	0.33
Number of deaths among confirmed cases	12	0.29
Case fatality ratio (CFR, %)	0.29	
National incidence of confirmed deaths per 100,000 population	0.25	
Number of cases** associated with clusters	1,420	33.93
Number of imported cases	17	0.41
Number of cases in healthcare workers	476	11.37
Males	1,970	47.07
Females	2,206	52.71
M:F ratio	0.89	
Median age (years)	36	
Mean age (years)	37	
Age range (years)	0 - 102	

* The number of cases hospitalised and admitted to ICU relate only to events notified in the last 14 days and do not include cases notified prior to this and admitted to hospital or ICU in the last 14 days

**Cases may be associated with outbreaks notified outside the timeframe of this report 02/12/2020 - 15/12/2020

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:21 on 16/12/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
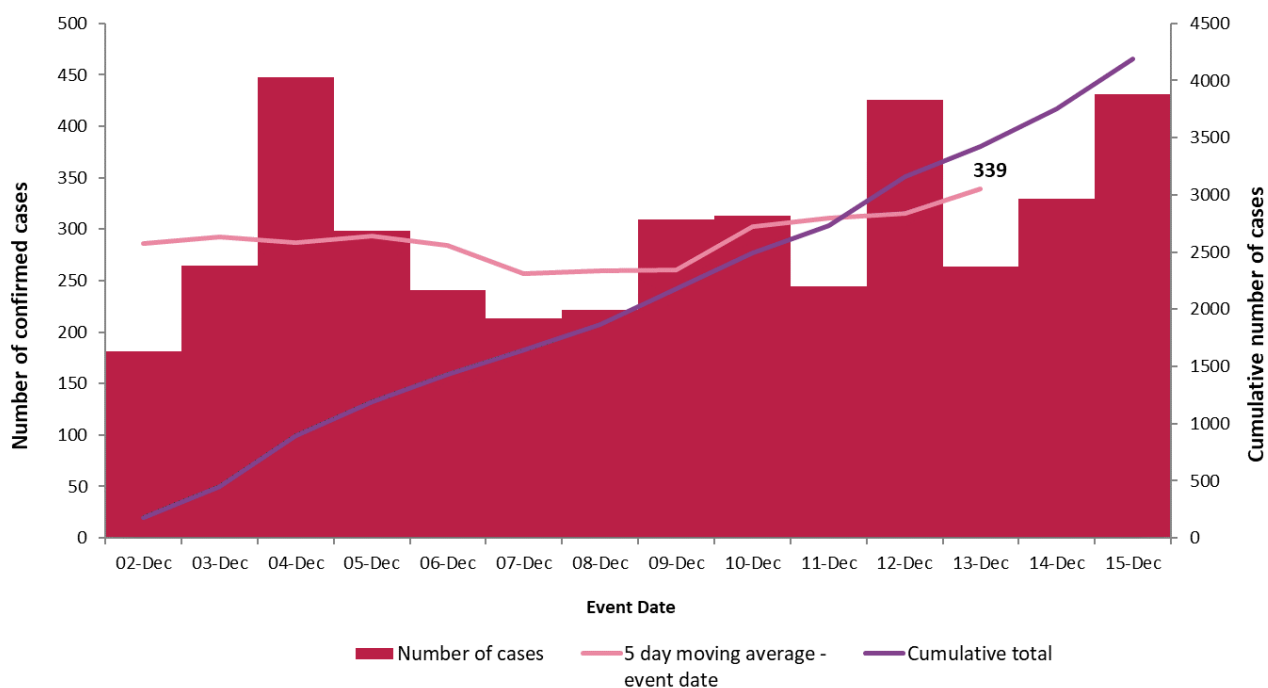
Figure 1. Daily number and cumulative number of confirmed cases of COVID-19, and 5-day moving average, by notification date (n=4,185)

Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland from 02/12/2020 up to midnight on 15/12/202

Characteristic		Number of cases	Percent
Total number of confirmed cases		**4,185**	**100**
Sex	Male:Female ratio	0.89	
	Male	1,970	47.07
	Female	2,206	52.71
	Unknown	9	0.22
Age	Median age (years)	36	
	Mean age (years)	37	
	Age range (years)	0 - 102	
	0-4 yrs	169	4.04
	5-12 yrs	453	10.82
	13-18 yrs	334	7.98
	19-24 yrs	384	9.18
	25-34 yrs	687	16.42
	35-44 yrs	651	15.56
	45-54 yrs	604	14.43
	55-64 yrs	407	9.73
	65-74 yrs	207	4.95
	75-84 yrs	163	3.89
	85+ yrs	126	3.01
Underlying clinical conditions	Yes	1,231	29.41
	No	2,391	57.13
	Unknown	563	13.45
Symptom status at time of test*	Yes	2,498	59.69
	No	1,042	24.9
	Unknown	645	15.41

*Symptom status is recorded at the time of test and is not updated, therefore a proportion of the asymptomatic cases may subsequently develop symptoms however this will not be captured in the data.

Table 2: Number of confirmed COVID-19 cases by community healthcare organisation (CHO) notified in Ireland from 02/12/2020 to midnight 15/12/2020

CHO Area	Number of confirmed cases	Incidence per 100,000 population
CHO1	629	160.8
CHO2	291	64.2
CHO3	305	79.2
CHO4	212	30.7
CHO5	532	104.2
CHO6	411	107.3
CHO7	462	65.3
CHO8	632	102.1
CHO9	711	114.4
Unknown	0	
Total	**4,185**	**87.9**

Table 3: Number of confirmed COVID-19 cases by county notified in Ireland from 02/12/2020 to midnight 15/12/2020

County	Number of confirmed cases	Incidence per 100,000 population
Donegal	391	245.6
Louth	260	201.7
Kilkenny	196	197.5
Carlow	89	156.3
Cavan	112	147.0
Longford	56	137.0
Monaghan	84	136.8
Limerick	239	122.6
Laois	96	113.3
Mayo	137	105.0
Dublin	1316	97.7
Wicklow	117	82.1
Waterford	92	79.2
Offaly	61	78.2
Kildare	151	67.9
Tipperary	108	67.7
Meath	128	65.6
Wexford	85	56.8
Sligo	33	50.4
Galway	129	50.0
Kerry	62	42.0
Roscommon	25	38.7
Westmeath	31	34.9
Leitrim	9	28.1
Cork	150	27.6
Clare	28	23.6
Total	**4,185**	**87.9**

Figure 2: Cumulative incidence rates of confirmed COVID-19 cases per 100,000 population by county notified in Ireland between 02/12/2020 and 15/12/2020

Please do not directly compare county shades to previous maps. The categories listed will change as the number of cases change, which may result in changes to the map shading.

Table 4: Number and incidence of confirmed COVID-19 cases by Dublin Local Health Offices (LHOs) notified in Ireland with a notification date between 02/12/2020 and 15/12/2020

CCA	Local Health Office	Number of cases in past 14 days based on notification date	14 day incidence rates based on notification dates
CCA1	Dublin South	93	68.3
CCA2	Dublin South East	202	163.3
CCA3	Dublin South City	86	57.4
CCA4	Dublin South West	94	58.4
CCA5	Dublin West	130	83.7
CCA6	Dublin North West	231	111.2
CCA7	Dublin North Central	227	146.8
CCA8	Dublin North	253	97.6
	Dublin	**1,316**	**97.7**

Note: Local health offices (LHOs) came into operation on 1st September 2005, replacing Community Care Areas (CCAs). LHO population denominators are used in this report rather than CCA population denominators. The LHO rates were calculated using Census 2016 LHO denominator data extracted from the HSE Health Atlas and are not a direct match to the corresponding CCAs.
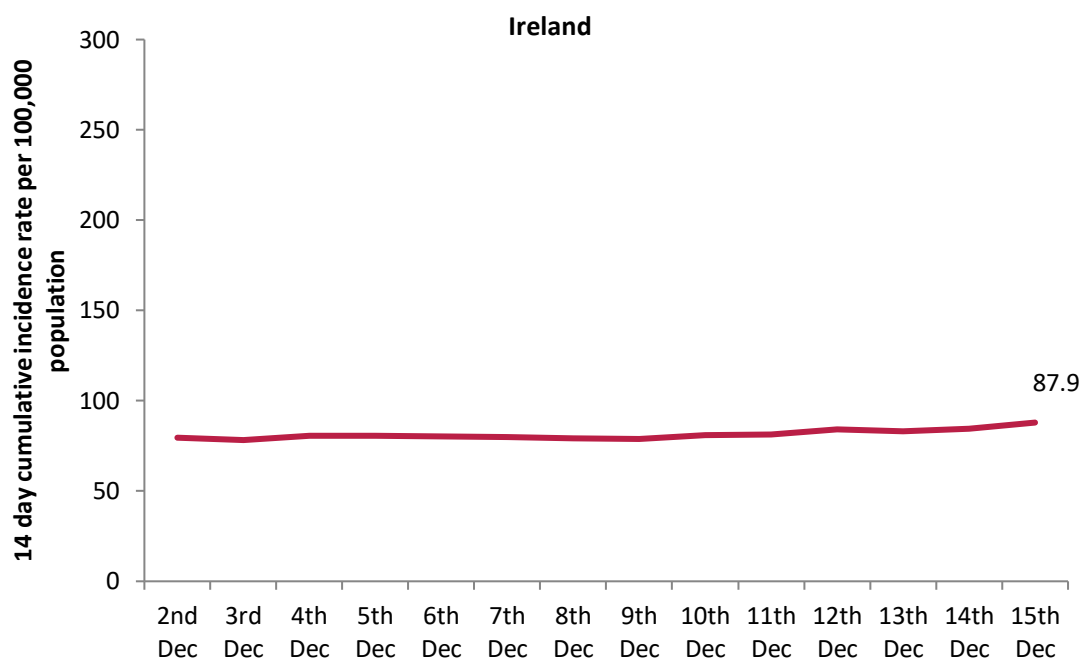
Ireland

14 day cumulative incidence rate per 100,000 population

87.9

| | 2nd Dec | 3rd Dec | 4th Dec | 5th Dec | 6th Dec | 7th Dec | 8th Dec | 9th Dec | 10th Dec | 11th Dec | 12th Dec | 13th Dec | 14th Dec | 15th Dec |

Figure 3: 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 in Ireland (02/12/2020 to 15/12/2020)

14 day incidence rates per 100,000 populations of confirmed cases of COVID-19 for individual counties can be found in appendix 1 of this report

Table 5: Number of confirmed COVID-19 cases by most likely transmission source notified from 02/12/2020 to midnight 15/12/2020

Most likely transmission source	Number of cases	Percent
Travel related*	90	2.15%
Close contact with a known confirmed case	2105	50.30%
Healthcare setting acquired: patient	254	6.07%
Healthcare setting acquired: staff	225	5.38%
Community transmission	807	19.28%
Under investigation	704	16.82%
Total	**4185**	**100.00%**

*Travel related cases include cases who acquire COVID-19 infection outside of Ireland (imported cases) and cases who acquire COVID-19 infection directly from imported cases

Table 6: Cumulative number of confirmed cases of COVID-19 notified in Ireland from 02/12/2020 to midnight 15/12/2020 by age group, hospitalisation and ICU admission*

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	169	2	0.896860987	0	0
5-12 yrs	453	2	0.896860987	0	0
13-18 yrs	334	6	2.69058296	0	0
19-24 yrs	384	5	2.242152466	0	0
25-34 yrs	687	13	5.829596413	1	7.142857143
35-44 yrs	651	13	5.829596413	2	14.28571429
45-54 yrs	604	20	8.968609865	3	21.42857143
55-64 yrs	407	36	16.14349776	2	14.28571429
65-74 yrs	207	53	23.76681614	2	14.28571429
75-84 yrs	163	45	20.1793722	3	21.42857143
85+ yrs	126	28	12.55605381	1	7.142857143
Total	**4,185**	**223**	**100**	**14**	**100**

* The number of cases hospitalised and admitted to ICU relate only to events notified in the last 14 days and do not include cases notified prior to this and admitted to hospital or ICU in the last 14 days

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

1. Data Source

Data are based on statutory notifications and were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:21 on 16/12/2020. 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 and 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.

Travel related cases include cases who acquire COVID-19 infection outside of Ireland (imported cases) and cases who acquire COVID-19 infection directly from imported cases.

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;
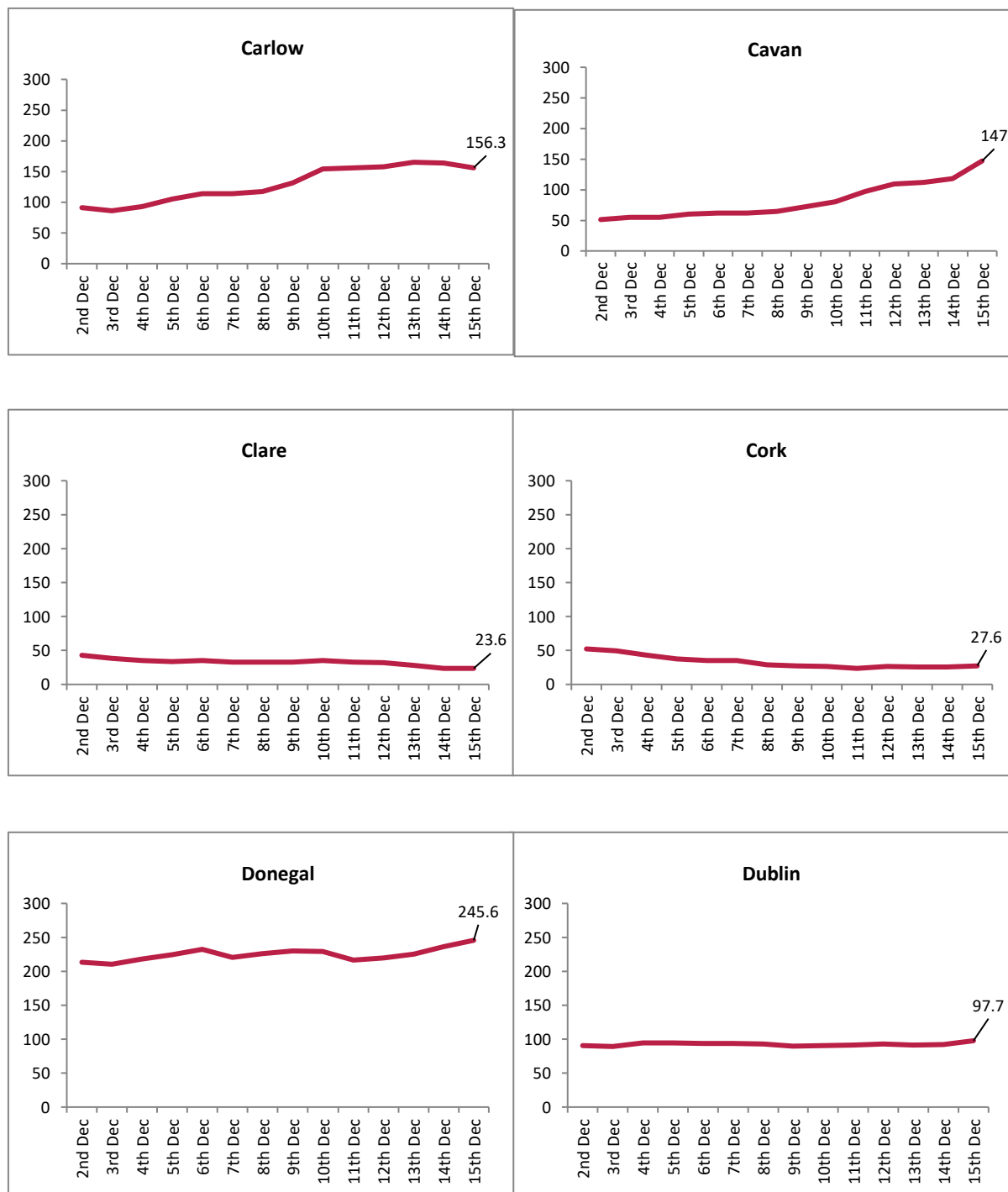 HSE West (W): Galway, Mayo & Roscommon.
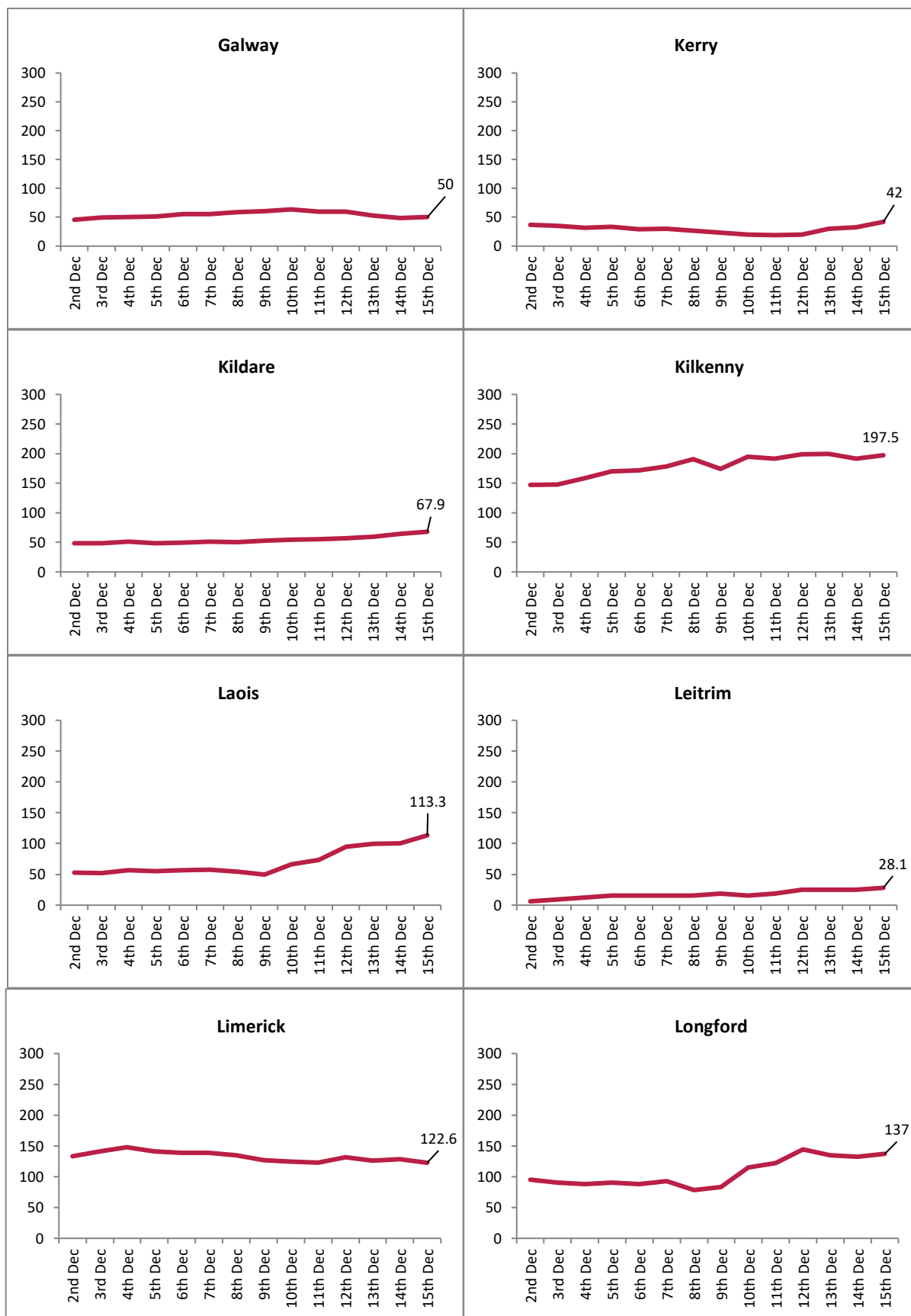
5. Outbreak location

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.

Appendix 1

Figure A. 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 by county (02/12/2020 to 15/12/2020)

Carlow — 156.3

Cavan — 147

Clare — 23.6

Cork — 27.6

Donegal — 245.6

Dublin — 97.7

Louth — 2nd Dec … 15th Dec: 201.7

Mayo — 2nd Dec … 15th Dec: 105

Meath — 2nd Dec … 15th Dec: 65.6

Monaghan — 2nd Dec … 15th Dec: 136.8

Offaly — 2nd Dec … 15th Dec: 78.2

Roscommon — 2nd Dec … 15th Dec: 38.7

Sligo — 2nd Dec … 15th Dec: 50.4

Tipperary — 2nd Dec … 15th Dec: 67.7

Report prepared by Health Protection Surveillance Centre on 16/12/2020

Waterford

79.2

Westmeath

34.9

Wexford
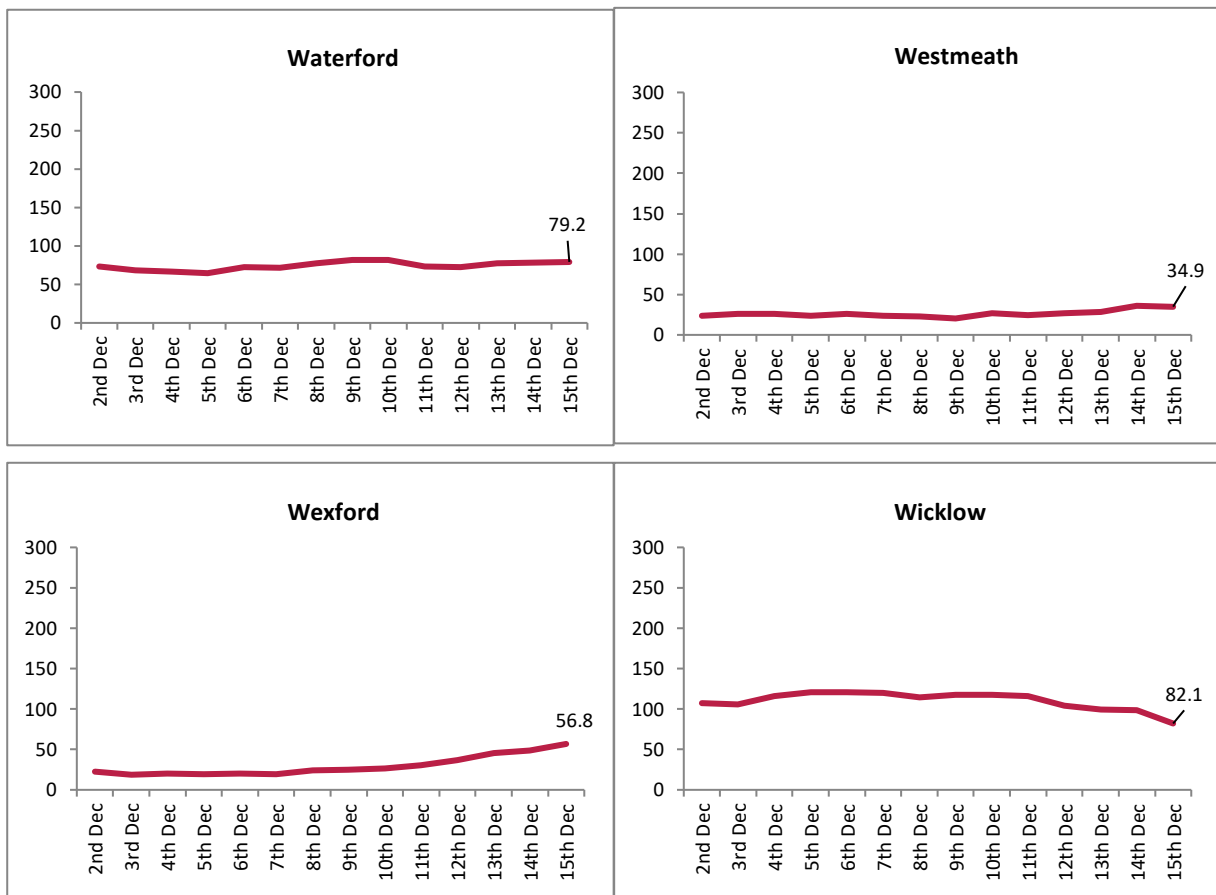

56.8

Wicklow

82.1

Figure B. 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 by Dublin CCA (02/12/2020 to 15/12/2020)