Epidemiology of COVID-19 in Ireland - 14 day report

Report prepared by HPSC on 29/12/2020

Summary characteristics of confirmed COVID-19 cases notified in Ireland from 15/12/2020 up to midnight 28/12/2020

	Number	Percent
Total number of confirmed cases	11,697	
National incidence of confirmed cases per 100,000 population	245.64	
Number of cases hospitalised*	402	3.44
Number of cases admitted to ICU*	10	0.09
Number of deaths among confirmed cases	24	0.21
Case fatality ratio (CFR, %)	0.21	
National incidence of confirmed deaths per 100,000 population	0.5	
Number of cases** associated with clusters	1,326	11.34
Number of imported cases	15	0.13
Number of cases in healthcare workers	692	5.92
Males	5,803	49.61
Females	5,843	49.95
M:F ratio	0.99	
Median age (years)	35	
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 15/12/2020 - 28/12/2020

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 09:36 on 29/12/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
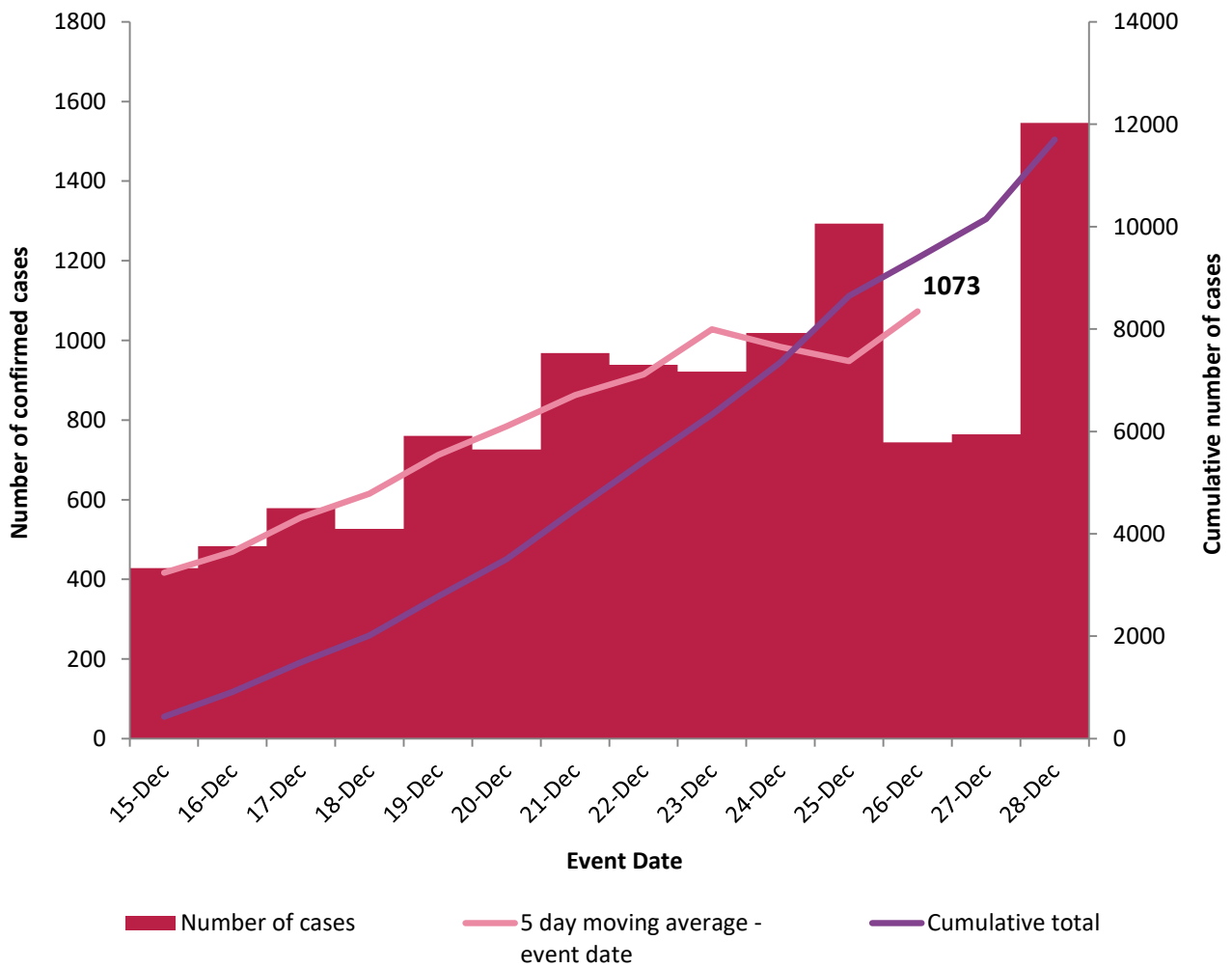
Figure 1. Daily number and cumulative number of confirmed cases of COVID-19, and 5-day moving average, by notification date (n=11,697)

Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland from 15/12/2020 up to midnight on 28/12/202

Characteristic		Number of cases	Percent
Total number of confirmed cases		**11,697**	**100**
Sex	Male:Female ratio	0.99	
	Male	5,803	49.61
	Female	5,843	49.95
	Unknown	51	0.44
Age	Median age (years)	35	
	Mean age (years)	37	
	Age range (years)	0 - 102	
	0-4 yrs	422	3.61
	5-12 yrs	755	6.45
	13-18 yrs	716	6.12
	19-24 yrs	1,643	14.05
	25-34 yrs	2,245	19.19
	35-44 yrs	1,857	15.88
	45-54 yrs	1,611	13.77
	55-64 yrs	1,286	10.99
	65-74 yrs	598	5.11
	75-84 yrs	361	3.09
	85+ yrs	201	1.72
	Unknown	2	0.02
Underlying clinical conditions	Yes	1,800	15.39
	No	4,665	39.88
	Unknown	5,232	44.73
Symptom status at time of test*	Yes	4,747	40.58
	No	1,599	13.67
	Unknown	5,351	45.75

*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 15/12/2020 to midnight 28/12/2020

CHO Area	Number of confirmed cases	Incidence per 100,000 population
CHO1	1,374	351.2
CHO2	675	149.0
CHO3	999	259.5
CHO4	1,550	224.5
CHO5	1,172	229.7
CHO6	1106	288.6
CHO7	1,447	204.5
CHO8	1,383	223.3
CHO9	1,991	320.4
Unknown	0	
Total	**11,697**	**245.6**

Table 3: Number of confirmed COVID-19 cases by county notified in Ireland from 15/12/2020 to midnight 28/12/2020

| County	Number of confirmed cases	Incidence per 100,000 population
Donegal	728	457.3
Monaghan	279	454.5
Louth	510	395.7
Limerick	722	370.4
Wexford	532	355.3
Dublin	3932	291.8
Kerry	422	285.7
Kilkenny	266	268.1
Cavan	188	246.8
Sligo	150	228.9
Meath	442	226.6
Laois	191	225.5
Carlow	120	210.8
Cork	1128	207.8
Kildare	426	191.5
Mayo	229	175.5
Waterford	194	167.0
Clare	175	147.3
Galway	370	143.4
Westmeath	121	136.3
Wicklow	186	130.6
Roscommon	76	117.7
Tipperary	163	102.2
Longford	41	100.3
Offaly	77	98.8
Leitrim	29	90.5
Total	**11,697**	**245.6**
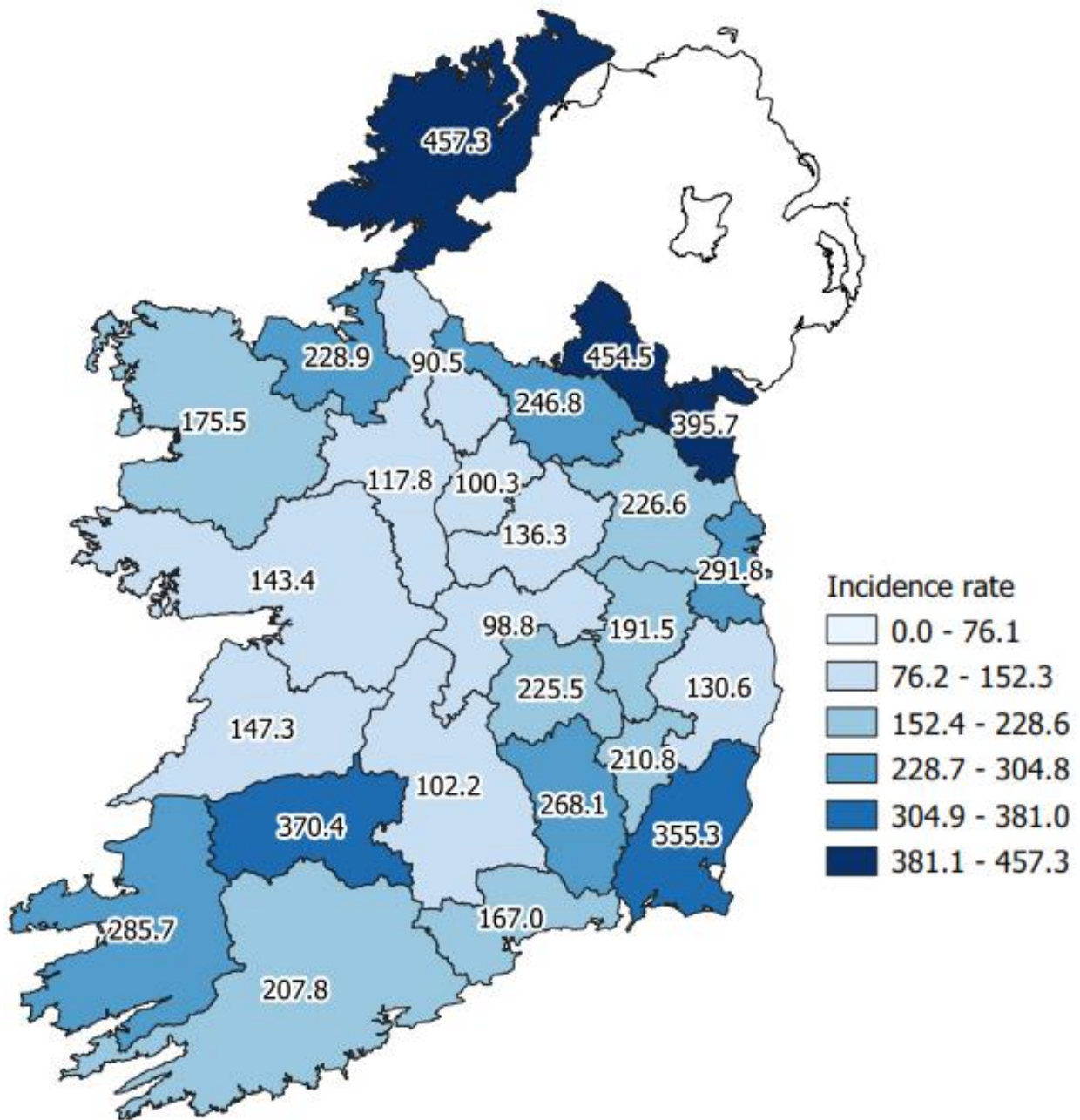
Figure 2: Cumulative incidence rates of confirmed COVID-19 cases per 100,000 population by county notified in Ireland between 15/12/2020 and 28/12/2020

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 15/12/2020 and 28/12/2020

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	255	187.4
CCA2	Dublin South East	672	543.2
CCA3	Dublin South City	295	196.8
CCA4	Dublin South West	318	197.6
CCA5	Dublin West	401	258.1
CCA6	Dublin North West	693	333.7
CCA7	Dublin North Central	712	460.6
CCA8	Dublin North	586	226.1
	Dublin	**3,932**	**291.8**

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.
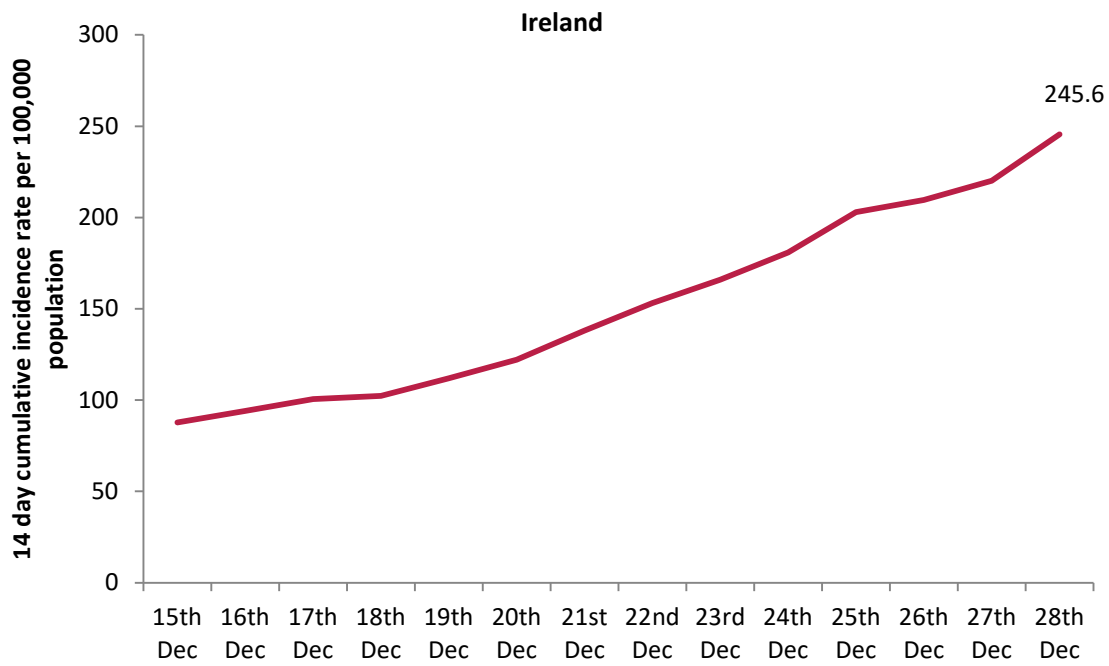
Ireland

Figure 3: 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 in Ireland (15/12/2020 to 28/12/2020)

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 15/12/2020 to midnight 28/12/2020

Most likely transmission source	Number of cases	Percent
Travel related *	121	1.03%
Close contact with a known confirmed case	3,413	29.18%
Healthcare setting acquired: patient	222	1.90%
Healthcare setting acquired: staff	300	2.56%
Community transmission	1,890	16.16%
Under investigation	5,751	49.17%
Total	**11,697**	**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 15/12/2020 to midnight 28/12/2020 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	422	2	0.50	0	0
5-12 yrs	755	8	1.99	0	0
13-18 yrs	716	10	2.49	0	0
19-24 yrs	1643	25	6.22	0	0
25-34 yrs	2245	31	7.71	0	0
35-44 yrs	1857	32	7.96	1	10.00
45-54 yrs	1611	46	11.44	1	10.00
55-64 yrs	1286	48	11.94	4	40.00
65-74 yrs	598	58	14.43	1	10.00
75-84 yrs	361	84	20.90	3	30.00
85+ yrs	201	58	14.43	0	0
Unknown	2			0	0
Total	**11,697**	**402**	**100**	**10**	**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 09:36 on 29/12/2020. 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.
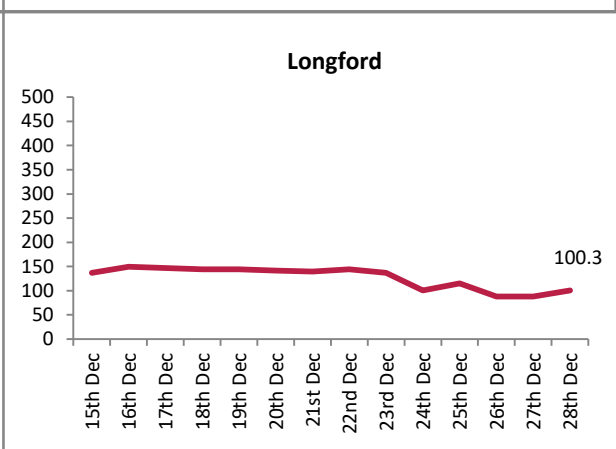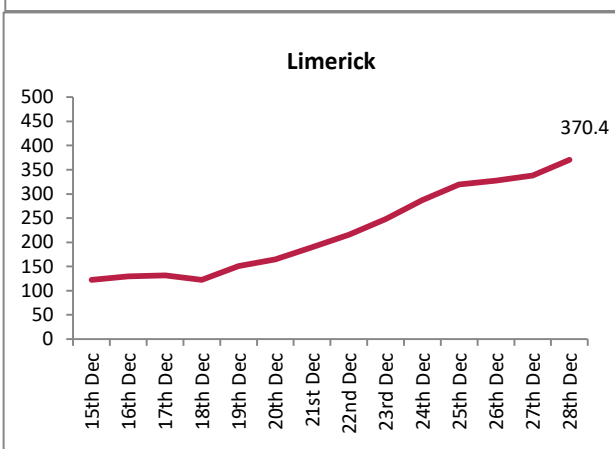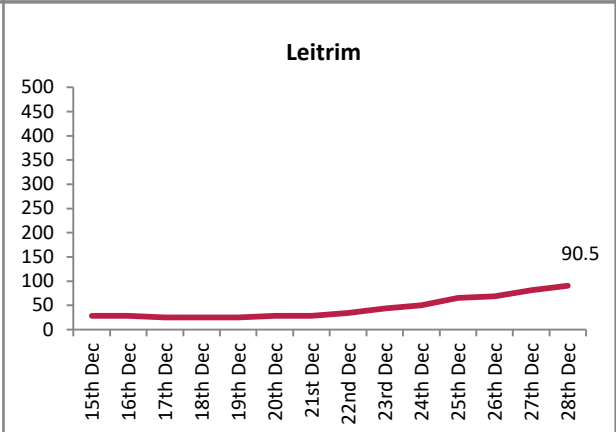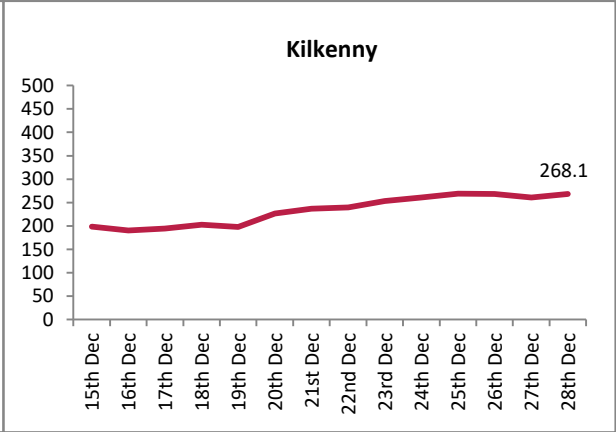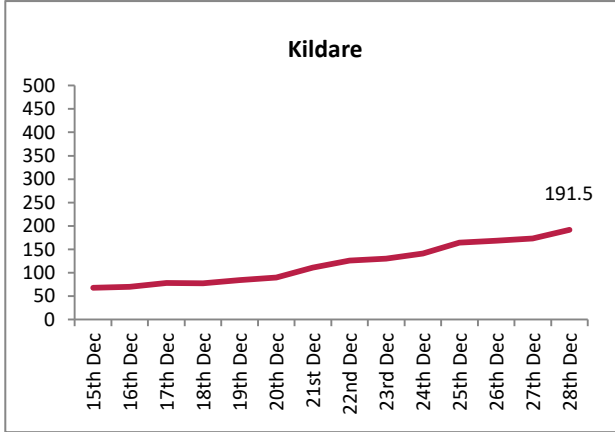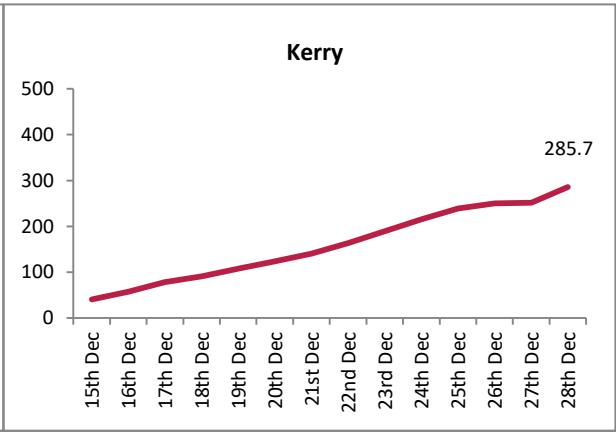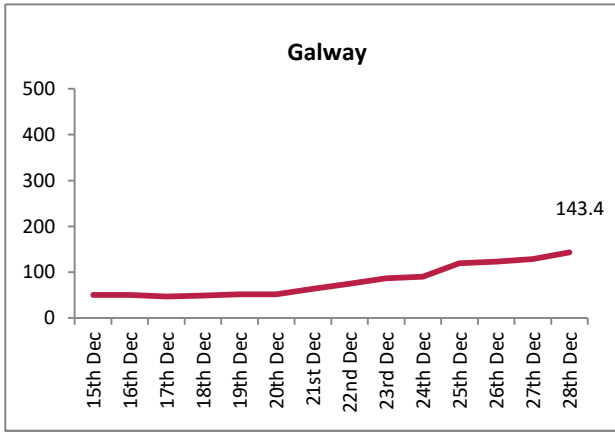
5. Outbreak location

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.
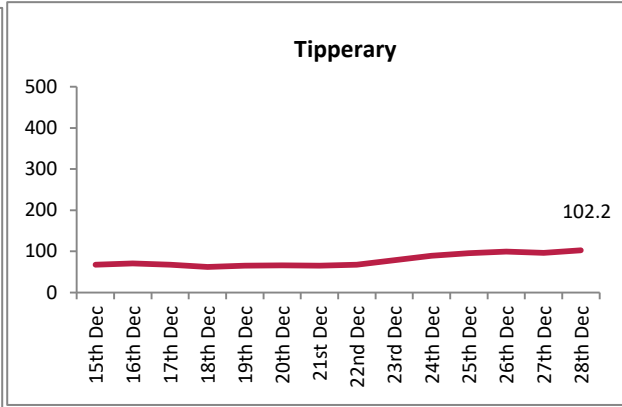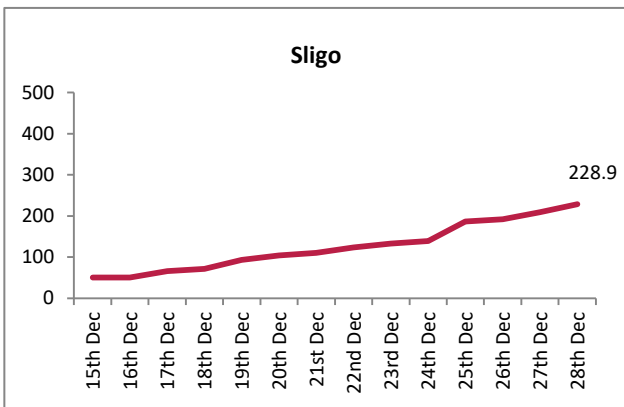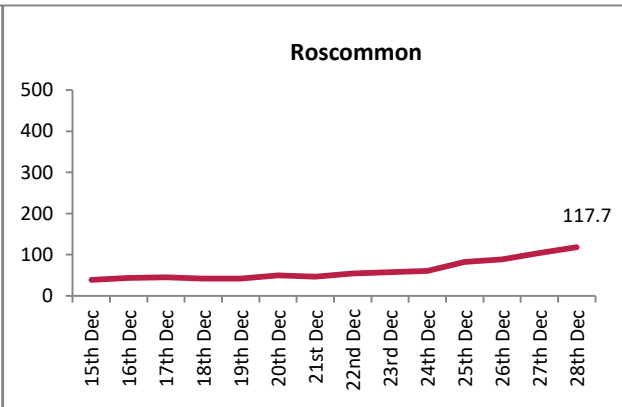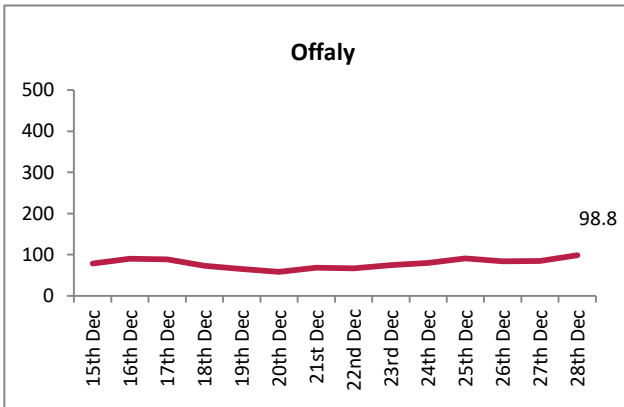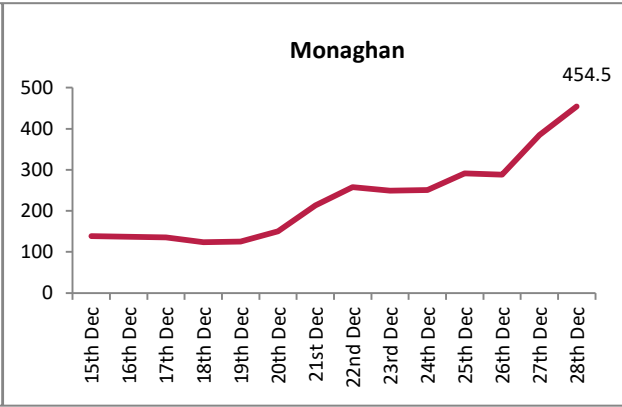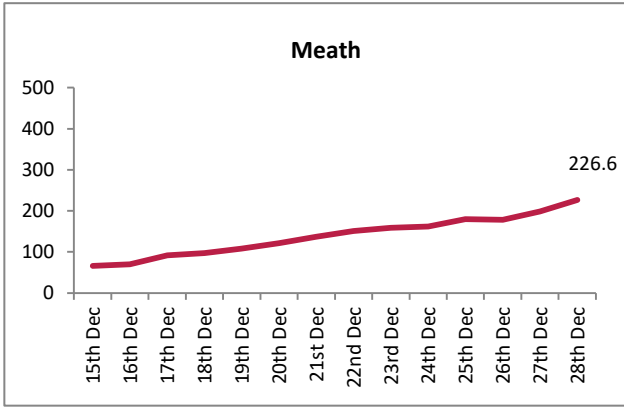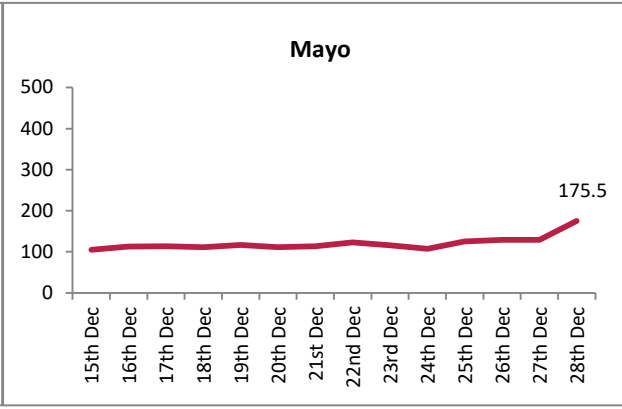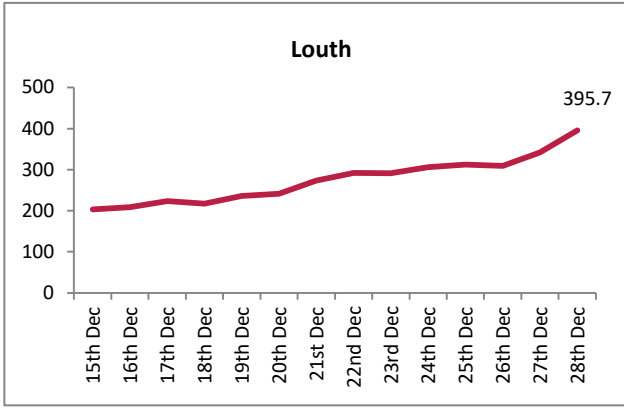
Other outbreak location includes community, extended family, hotel, public house, retail outlet, travel related and all other locations.
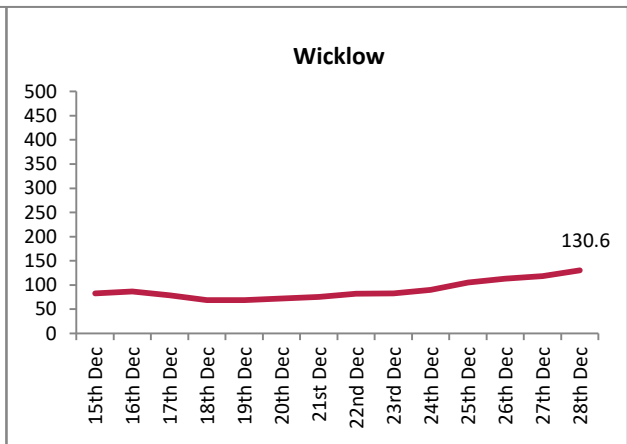
Figure A. 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 by county (15/12/2020 to 28/12/2020)

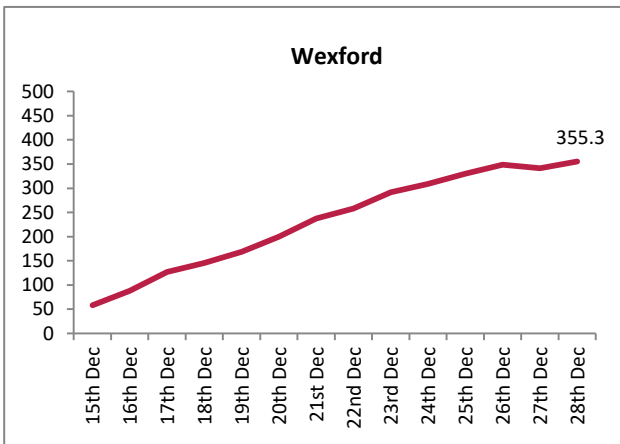Carlow — 210.8

Cavan — 246.8

Clare — 147.3

Cork — 207.8

Donegal — 457.3

Dublin — 291.8

Galway

143.4

Kerry

285.7

Kildare

191.5

Kilkenny

268.1

Laois

225.5

Leitrim

90.5

Limerick

370.4

Longford

100.3

Louth — 395.7

Mayo — 175.5

Meath — 226.6

Monaghan — 454.5

Offaly — 98.8

Roscommon — 117.7

Sligo — 228.9

Tipperary — 102.2

Waterford

167

Westmeath

136.3

Wexford

355.3

Wicklow

130.6

X-axis (all charts): 15th Dec, 16th Dec, 17th Dec, 18th Dec, 19th Dec, 20th Dec, 21st Dec, 22nd Dec, 23rd Dec, 24th Dec, 25th Dec, 26th Dec, 27th Dec, 28th Dec
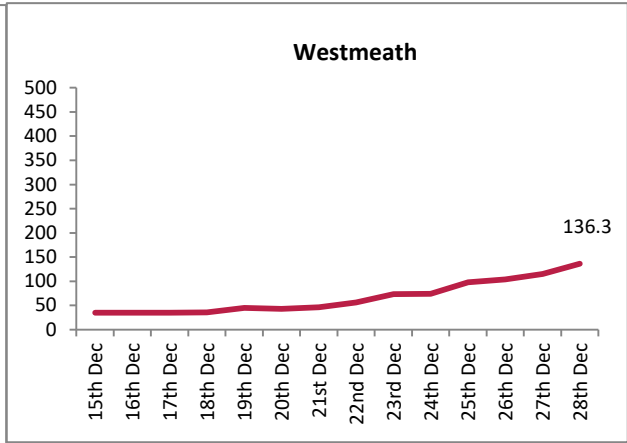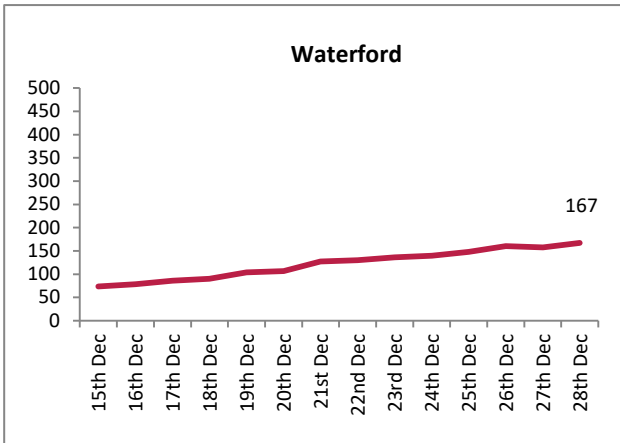
Figure B. 14 day cumulative incidence rates per 100,000 population of confirmed cases of COVID-19 by Dublin CCA (15/12/2020 to 28/12/2020)