



Epidemiology of COVID-19 in Ireland - 14 day report

Report prepared by HPSC on 23/09/2020

Summary characteristics of confirmed COVID-19 cases notified in Ireland from 09/09/2020 up to midnight 22/09/2020

	Number	Percent
Total number of confirmed cases	3,517	
National incidence of confirmed cases per 100,000 population	73.86	
Number of cases hospitalised*	116	3.3
Number of cases admitted to ICU*	14	0.4
Number of deaths among confirmed cases	6	0.17
Case fatality ratio (CFR, %)	0.17	
National incidence of confirmed deaths per 100,000 population	0.13	
Number of cases** associated with clusters	1,834	52.15
Number of imported cases	27	0.77
Number of cases in healthcare workers	244	6.94
Males	1,734	49.3
Females	1,780	50.61
M:F ratio	0.97	
Median age (years)	33	
Mean age (years)	36	
Age range (years)	0 - 99	

* 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
09/09/2020 - 22/09/2020

Note: Data were extracted from Computerised Infectious Disease Reporting (CIDR) system at 13:21 on 23/09/2020 and are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

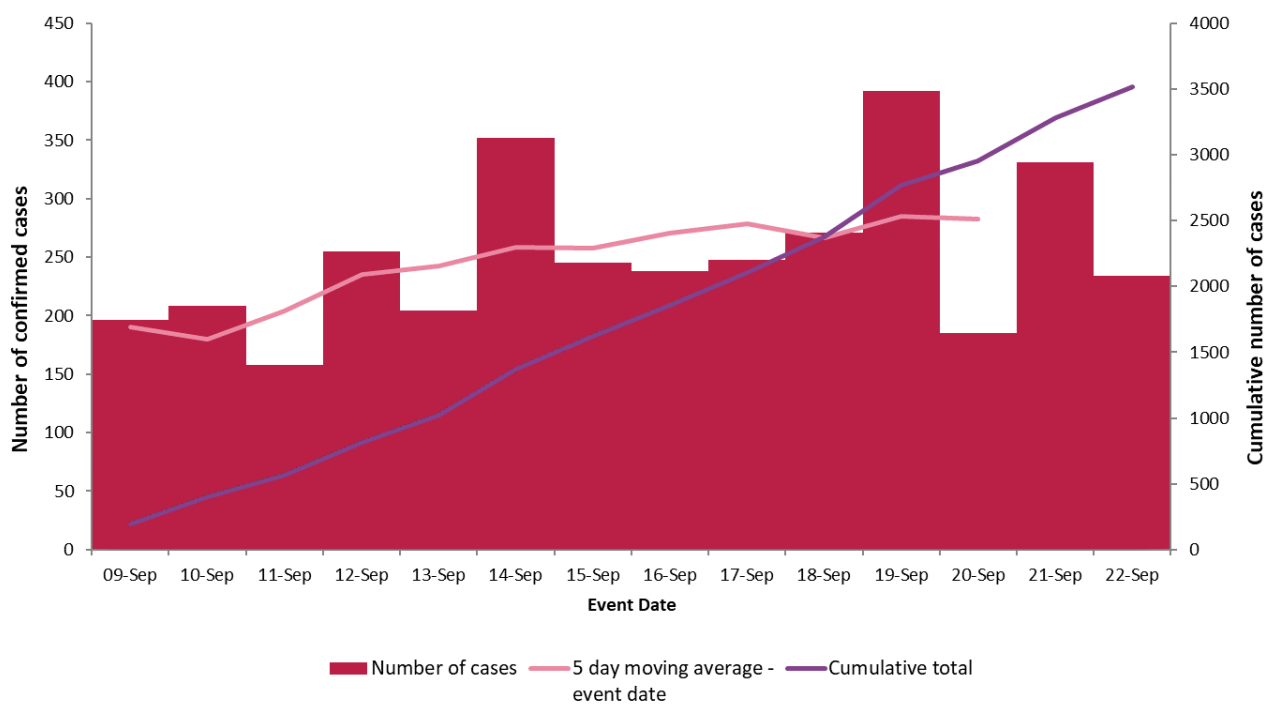


Figure 1. Daily number and cumulative number of confirmed cases of COVID-19, and 5-day moving average, by notification date (n=3,517)

Table 1: Characteristics of confirmed COVID-19 cases notified in Ireland from 09/09/2020 up to midnight on 22/09/202

Characteristic		Number of cases	Percent
Total number of confirmed cases		3,517	100
Sex	Male:Female ratio	0.97	
	Male	1,734	49.3
	Female	1,780	50.61
	Unknown	3	0.09
Age	Median age (years)	33	
	Mean age (years)	36	
	Age range (years)	0 - 99	
	0-4 yrs	115	3.27
	5-14 yrs	309	8.79
	15-24 yrs	811	23.06
	25-34 yrs	603	17.15
	35-44 yrs	513	14.59
	45-54 yrs	478	13.59
	55-64 yrs	340	9.67
	65-74 yrs	222	6.31
	75-84 yrs	84	2.39
	85+ yrs	41	1.17
	Unknown	1	0.03
Underlying clinical conditions	Yes	1,006	28.6
	No	2,194	62.38
	Unknown	317	9.01

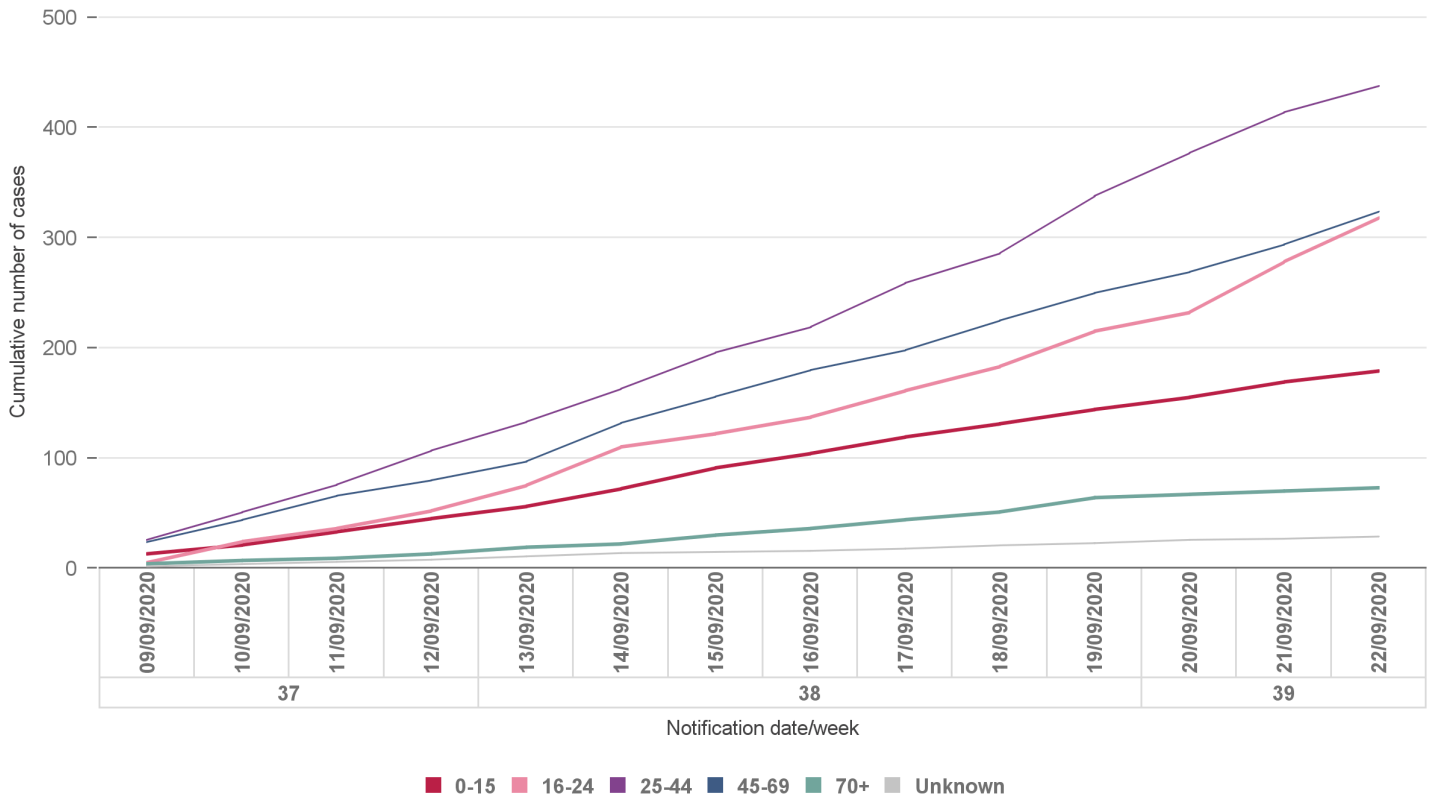


Figure 2: Cumulative number of confirmed COVID-19 cases notified in Ireland by date/week of notification and age group from 09/09/2020 to midnight 22/09/2020

Table 2: Characteristics of confirmed COVID-19 cases by county notified from 09/09/2020 to midnight 22/09/2020

County	Cases		M:F ratio	Median age (years)	Healthcare workers		Associated with clusters	
	N	%			N	%	N	%
Dublin	1,890	53.74	0.87	33	146	7.72	805	42.59
Cork	195	5.54	0.99	32	11	5.64	138	70.77
Donegal	195	5.54	1.19	29	7	3.59	113	57.95
Kildare	157	4.46	1.45	32	8	5.1	79	50.32
Louth	137	3.9	0.93	26	14	10.22	107	78.1
Waterford	113	3.21	1.51	34	4	3.54	85	75.22
Wicklow	109	3.1	1.02	36	6	5.5	50	45.87
Galway	100	2.84	1.22	22.5	2	2	66	66
Limerick	75	2.13	1.14	35	2	2.67	58	77.33
Meath	74	2.1	0.9	39.5	5	6.76	37	50
Clare	53	1.51	0.96	46	4	7.55	39	73.58
Westmeath	46	1.31	1.56	38	3	6.52	30	65.22
Offaly	44	1.25	0.83	44.5	10	22.73	35	79.55
Laois	40	1.14	0.67	33	1	2.5	33	82.5
Mayo	39	1.11	0.63	36	7	17.95	18	46.15
Roscommon	37	1.05	1.31	37	4	10.81	24	64.86
Wexford	35	1	1.5	32	0	0	18	51.43
Kerry	28	0.8	0.65	43	2	7.14	21	75
Tipperary	27	0.77	1.45	38	2	7.41	13	48.15
Carlow	23	0.65	1.3	39	1	4.35	13	56.52
Kilkenny	23	0.65	0.92	29	2	8.7	8	34.78
Monaghan	23	0.65	0.92	22	1	4.35	15	65.22
Cavan	16	0.45	2.2	24	0	0	6	37.5
Longford	15	0.43	2	38	0	0	7	46.67
Sligo	12	0.34	0.5	39	1	8.33	8	66.67
Leitrim	11	0.31	1.75	35	1	9.09	8	72.73
National	3,517	100	0.97	33	244	6.94	1,834	52.15

Table 3: Characteristics of confirmed COVID-19 cases by CHO notified from 09/09/2020 to midnight 22/09/2020

CHO Area	Cases		M:F ratio	Mean age (years)	Healthcare workers		Associated with clusters	
	N	%			N	%	N	%
CHO1	257	7.31	1.18	34	10	3.89	150	58.37
CHO2	176	5	1.07	31	13	7.39	108	61.36
CHO3	140	3.98	1.06	42	8	5.71	105	75
CHO4	223	6.34	0.94	37	13	5.83	159	71.3
CHO5	208	5.91	1.45	34	7	3.37	128	61.54
CHO6	382	10.86	0.84	38	23	6.02	171	44.76
CHO7	820	23.32	0.98	35	53	6.46	398	48.54
CHO8	357	10.15	0.96	35	33	9.24	250	70.03
CHO9	954	27.13	0.88	38	84	8.81	365	38.26
National	3,517	100	0.97	36	244	6.94	1,834	52.15

Table 4: Number of confirmed COVID-19 cases by most likely transmission source notified from 09/09/2020 to midnight 22/09/2020

Most likely transmission source	Number of cases	Percent
Travel related *	103	2.93%
Close contact with a known confirmed case	2,009	57.12%
Healthcare setting acquired: patient	54	1.54%
Healthcare setting acquired: staff	52	1.48%
Community transmission	959	27.27%
Under investigation	340	9.67%
Total	3,517	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 5: Number of confirmed COVID-19 cases by community healthcare organisation (CHO) notified in Ireland from 09/09/2020 to midnight 22/09/2020

CHO Area	Number of confirmed cases	Incidence per 100,000 population
CHO1	257	65.7
CHO2	176	38.8
CHO3	140	36.4
CHO4	223	32.3
CHO5	208	40.8
CHO6	382	99.7
CHO7	820	115.9
CHO8	357	57.6
CHO9	954	153.5
Ireland	3,517	73.9

Table 6: Number of confirmed COVID-19 cases by county notified in Ireland from 09/09/2020 to midnight 22/09/2020

County	Number of confirmed cases	Incidence per 100,000 population
Carlow	23	40.4
Cavan	16	21.0
Clare	53	44.6
Cork	195	35.9
Donegal	195	122.5
Dublin	1890	140.3
Galway	100	38.8
Kerry	28	19.0
Kildare	157	70.6
Kilkenny	23	23.2
Laois	40	47.2
Leitrim	11	34.3
Limerick	75	38.5
Longford	15	36.7
Louth	137	106.3
Mayo	39	29.9
Meath	74	37.9
Monaghan	23	37.5
Offaly	44	56.4
Roscommon	37	57.3
Sligo	12	18.3
Tipperary	27	16.9
Waterford	113	97.3
Westmeath	46	51.8
Wexford	35	23.4
Wicklow	109	76.5
Ireland	3,517	73.9

Table 7: Number of confirmed COVID-19 cases by country of infection notified from 09/09/2020 to midnight 22/09/2020

Country of infection	Number of cases	Percent
Austria	1	0.03%
Bangladesh	1	0.03%
Brazil	2	0.06%
Canada	1	0.03%
Croatia	2	0.06%
Greece	6	0.17%
Hungary	5	0.14%
India	1	0.03%
Ireland	2,614	74.32%
Isle of Man	1	0.03%
Lithuania	2	0.06%
Not specified	862	24.51%
Spain	2	0.06%
United kingdom	3	0.09%
Unknown	14	0.40%
Total	3,517	100.00%

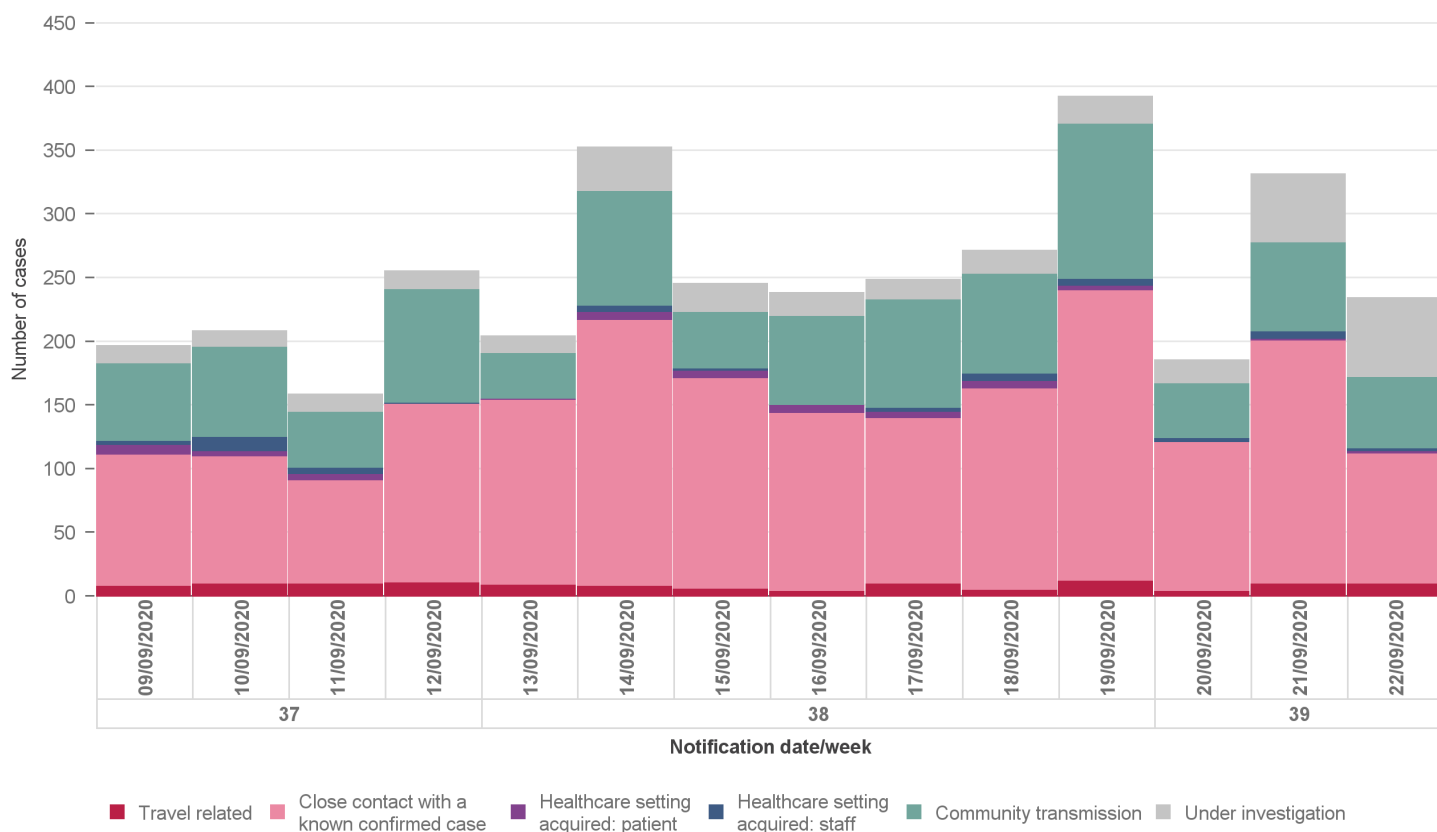


Figure 3: Number of confirmed COVID-19 cases notified in Ireland by date/week of notification and most likely transmission source from 09/09/2020 to midnight 22/09/2020

Table 8: Cumulative number of confirmed cases of COVID-19 notified in Ireland from 09/09/2020 to midnight 22/09/2020 by age group and hospital, ICU* and vital status

Age Group (years)	Number of cases (n)	Cases hospitalised (n)	Cases hospitalised (%)	Cases admitted to ICU (n)	Cases admitted to ICU (%)
0-4 yrs	115	3	2.59	0	0
5-14 yrs	309			0	0
15-24 yrs	811	7	6.03	0	0
25-34 yrs	603	6	5.17	0	0
35-44 yrs	513	8	6.9	2	14.29
45-54 yrs	478	19	16.38	3	21.43
55-64 yrs	340	21	18.1	5	35.71
65-74 yrs	222	28	24.14	4	28.57
75-84 yrs	84	15	12.93	0	0
85+ yrs	41	9	7.76	0	0
Unknown	1			0	0
Total	3,517	116	100	14	100

Table 9: Number and proportion of confirmed cases of COVID-19 notified in Ireland from 09/09/2020 to midnight 22/09/2020 by age-group, hospitalisation and ICU admission*

	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)	115	309	811	603	513	478	340	222	84	41	1
Cases hospitalised (n)	3		7	6	8	19	21	28	15	9	
Cases hospitalised (%)	2.61		0.86	1	1.56	3.97	6.18	12.61	17.86	21.95	
Cases admitted to ICU (n)	0	0	0	0	2	3	5	4	0	0	0
Cases admitted to ICU (%)	0	0	0	0	0.39	0.63	1.47	1.8	0	0	0
Deaths (n)	0	0	0	0	0	0	0	2	2	2	0
Case fatality ratio (%)	0	0	0	0	0	0	0	0.9	2.38	4.88	0

* 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

Table 10: Characteristics of sporadic confirmed COVID-19 cases notified in Ireland from 09/09/2020 up to midnight on 22/09/2020**

Characteristic		Number of cases	Percent
Total number of sporadic confirmed cases		1,683	100
Sex	Male:Female ratio	1	
	Male	841	49.97
	Female	839	49.85
	Unknown	3	0.18
Age	Median age (years)	32	
	Mean age (years)	36	
	Age range (years)	0 - 95	
	0-4 yrs	34	2.02
	5-14 yrs	90	5.35
	15-24 yrs	448	26.62
	25-34 yrs	353	20.97
	35-44 yrs	245	14.56
	45-54 yrs	212	12.6
	55-64 yrs	150	8.91
	65-74 yrs	105	6.24
	75-84 yrs	27	1.6
	85+ yrs	18	1.07
	Number of HCW	129	7.66
	Number hospitalised*	66	3.92
Number admitted to ICU*	8	0.48	
Number of deaths	1	0.06	
Number with underlying condition	457	27.15	
Most likely transmission source	Travel related	60	3.57
	Close contact with a known confirmed case	716	42.54
	Healthcare setting acquired: patient	22	1.31
	Healthcare setting acquired: staff	25	1.49
	Community transmission	642	38.15
	Under investigation	218	12.95

* 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

** Sporadic cases are cases not currently linked to an outbreak in CIDR

Deaths among COVID-19 cases

Table 11: Summary of deaths in all COVID-19 cases notified in Ireland from 09/09/2020 up to midnight 22/09/2020

	Number	Percent
Total number of deaths	6	
Confirmed	6	100
Total number of cases hospitalised	0	
Cases admitted to ICU	0	
Cases not admitted to ICU	0	
Total number of imported cases	0	
Number of cases in healthcare workers	0	
Number with underlying clinical conditions	1	16.67
Total number of male cases	3	50
M:F ratio	1	
Median age (years)	79	
Mean age (years)	81	
Age range (years)	70 - 98	

Table 12: Number of deaths in all COVID-19 cases by sex and age group notified in Ireland from 09/09/2020 up to midnight 22/09/2020

Age group (years)	Female	Male	Total	Percent
65-74 yrs	2		2	33.33
75-84 yrs		2	2	33.33
85+ yrs	1	1	2	33.33
Total	3	3	6	100
Percent	50	50		

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 13:21 on 23/09/2020. 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.

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: Trends in confirmed COVID-19 cases notified in Ireland by HSE area

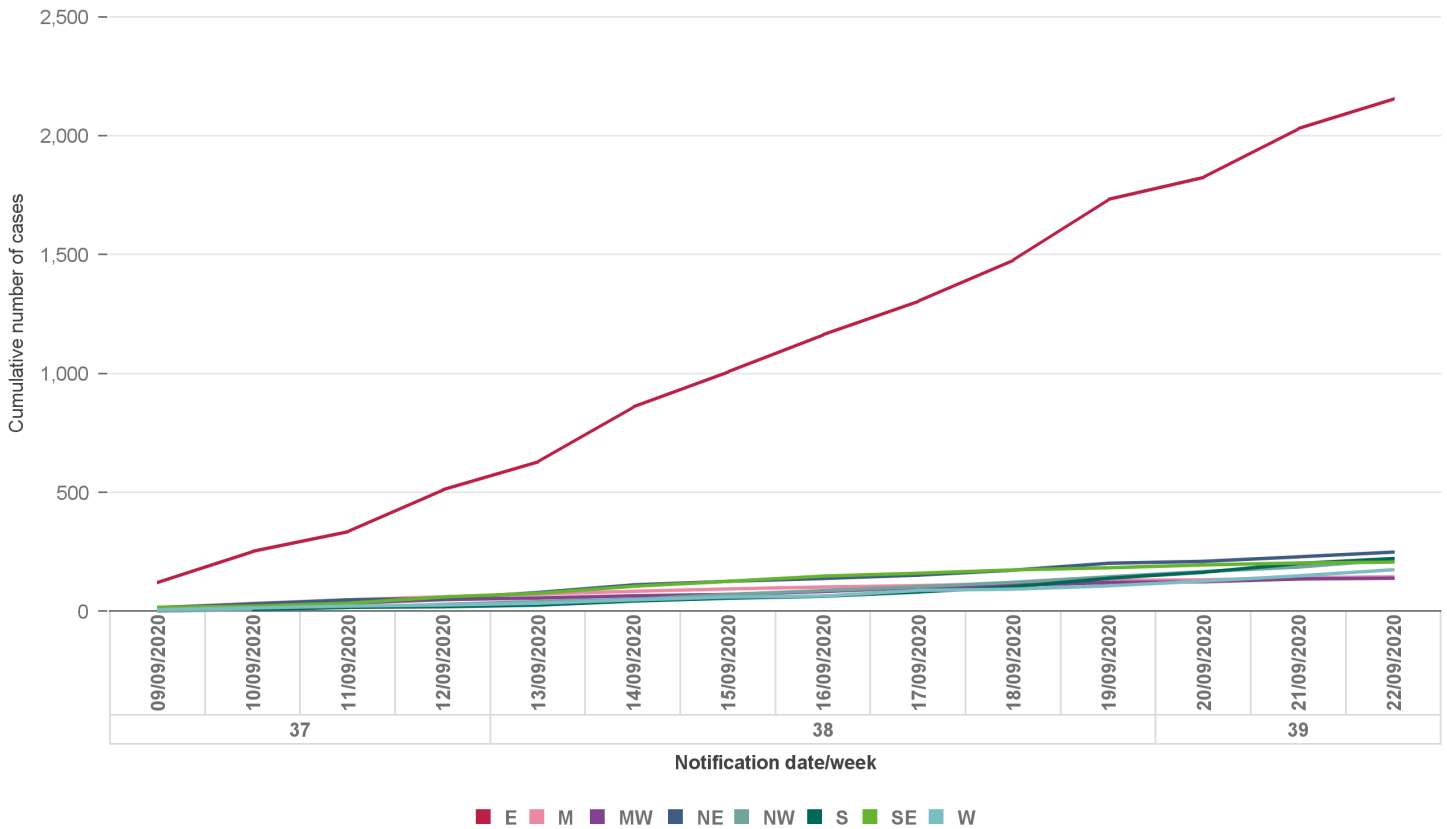


Figure A: Cumulative number of confirmed COVID-19 cases notified in Ireland by date/week of notification and HSE area from 09/09/2020 to midnight 22/09/2020

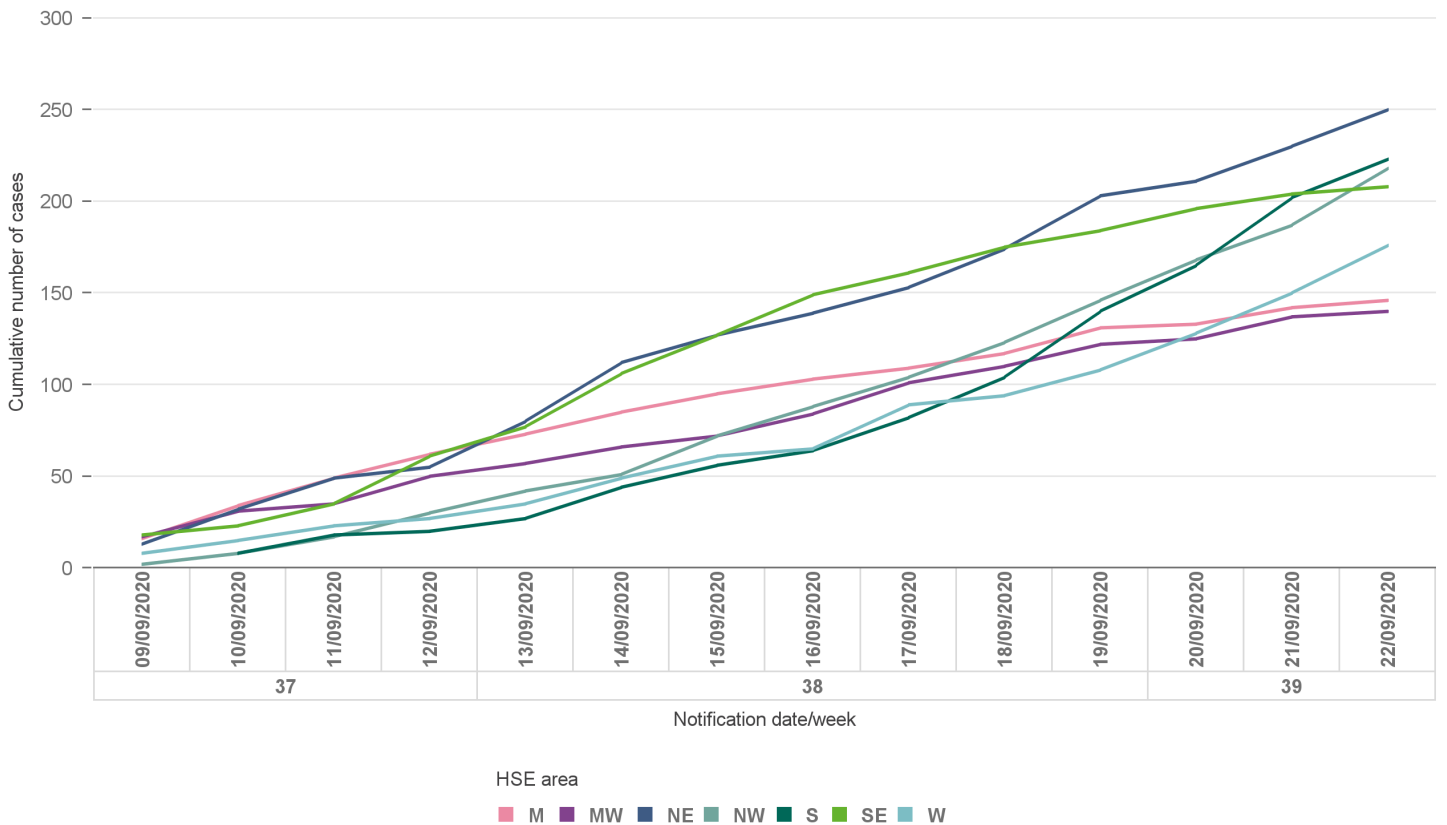


Figure B: Cumulative number of confirmed COVID-19 cases notified in Ireland by date/week of notification and HSE area (excluding HSE East) from 09/09/2020 to midnight 22/09/2020

Appendix 1: Trends in confirmed COVID-19 cases notified in Ireland by HSE area

Table A: Cumulative number of confirmed COVID-19 cases notified in Ireland by week of notification and HSE area from 09/09/2020 to midnight 22/09/2020

Week	Date	E	M	MW	NE	NW	S	SE	W	Total
37	09/09/2020	122	16	17	13	2	0	18	8	196
37	10/09/2020	131	18	14	19	6	8	5	7	208
37	11/09/2020	83	15	4	17	9	10	12	8	158
37	12/09/2020	176	13	15	6	13	2	26	4	255
38	13/09/2020	118	11	7	25	12	7	16	8	204
38	14/09/2020	230	12	9	32	9	17	29	14	352
38	15/09/2020	148	10	6	15	21	12	21	12	245
38	16/09/2020	156	8	12	12	16	8	22	4	238
38	17/09/2020	141	6	17	14	16	18	12	24	248
38	18/09/2020	173	8	9	21	19	22	14	5	271
38	19/09/2020	255	14	12	29	23	36	9	14	392
39	20/09/2020	93	2	3	8	22	25	12	20	185
39	21/09/2020	205	9	12	19	19	37	8	22	331
39	22/09/2020	125	4	3	20	31	21	4	26	234

Appendix 2: Trends in confirmed COVID-19 cases notified in Ireland by occupation

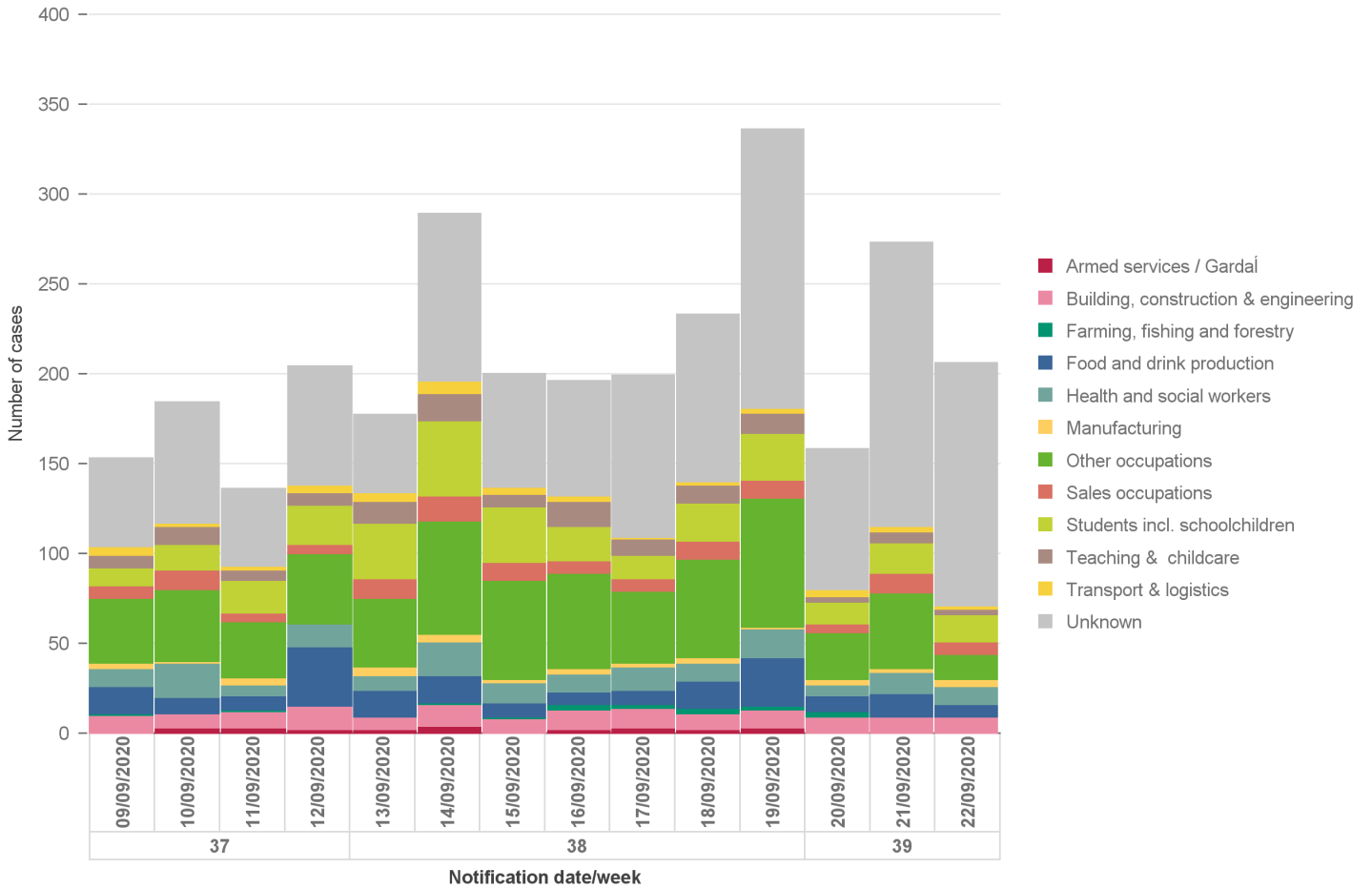


Figure C: Number of confirmed COVID-19 cases notified in Ireland by date/week of notification and occupation* from 09/09/2020 to midnight 22/09/2020

*Among cases aged 16-69 years

Appendix 3: Epidemiological weeks, 2020-2021

Table B: List of epidemiological weeks, start and end dates, 2020

Year	Week	Start date	End date
2020	1	29/12/2019	04/01/2020
2020	2	05/01/2020	11/01/2020
2020	3	12/01/2020	18/01/2020
2020	4	19/01/2020	25/01/2020
2020	5	26/01/2020	01/02/2020
2020	6	02/02/2020	08/02/2020
2020	7	09/02/2020	15/02/2020
2020	8	16/02/2020	22/02/2020
2020	9	23/02/2020	29/02/2020
2020	10	01/03/2020	07/03/2020
2020	11	08/03/2020	14/03/2020
2020	12	15/03/2020	21/03/2020
2020	13	22/03/2020	28/03/2020
2020	14	29/03/2020	04/04/2020
2020	15	05/04/2020	11/04/2020
2020	16	12/04/2020	18/04/2020
2020	17	19/04/2020	25/04/2020
2020	18	26/04/2020	02/05/2020
2020	19	03/05/2020	09/05/2020
2020	20	10/05/2020	16/05/2020
2020	21	17/05/2020	23/05/2020
2020	22	24/05/2020	30/05/2020
2020	23	31/05/2020	06/06/2020
2020	24	07/06/2020	13/06/2020
2020	25	14/06/2020	20/06/2020
2020	26	21/06/2020	27/06/2020
2020	27	28/06/2020	04/07/2020
2020	28	05/07/2020	11/07/2020
2020	29	12/07/2020	18/07/2020
2020	30	19/07/2020	25/07/2020
2020	31	26/07/2020	01/08/2020
2020	32	02/08/2020	08/08/2020
2020	33	09/08/2020	15/08/2020
2020	34	16/08/2020	22/08/2020
2020	35	23/08/2020	29/08/2020
2020	36	30/08/2020	05/09/2020
2020	37	06/09/2020	12/09/2020
2020	38	13/09/2020	19/09/2020

2020	39	20/09/2020	26/09/2020
2020	40	27/09/2020	03/10/2020
2020	41	04/10/2020	10/10/2020
2020	42	11/10/2020	17/10/2020
2020	43	18/10/2020	24/10/2020
2020	44	25/10/2020	31/10/2020
2020	45	01/11/2020	07/11/2020
2020	46	08/11/2020	14/11/2020
2020	47	15/11/2020	21/11/2020
2020	48	22/11/2020	28/11/2020
2020	49	29/11/2020	05/12/2020
2020	50	06/12/2020	12/12/2020
2020	51	13/12/2020	19/12/2020
2020	52	20/12/2020	26/12/2020
2020	53	27/12/2020	02/01/2021

Appendix 4

Table 1: Number and incidence of confirmed COVID-19 cases by Dublin Local Health Offices (LHOs) notified in Ireland with a notification date between 09/09/2020 and 22/09/2020

CCA	Local Health Office	Number of cases in past 14 days based on event date	14 day incidence rates based on event dates	Population (2016 Census)
CCA1	Dublin South	88	64.7	136,074
CCA2	Dublin South East	186	150.4	123,704
CCA3	Dublin South City	186	124.1	149,935
CCA4	Dublin South West	245	152.3	160,898
CCA5	Dublin West	231	148.7	155,343
CCA6	Dublin North West	416	200.3	207,670
CCA7	Dublin North Central	249	161.1	154,583
CCA8	Dublin North	289	111.5	259,152
	Dublin	1890	140.3	1,347,359

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.

Appendix 5

Table 2: Number and incidence of confirmed COVID-19 cases by county including and excluding outbreaks notified in Ireland between 09/09/2020 and 22/09/2020

County	Population	Number of cases in past 14 days based on event date	14 day incidence rates based on event dates	Number of cases in past 14 days based on event date excluding outbreaks	14 day incidence rates based on event dates excluding outbreaks
Carlow	56932	23	40.4	10	17.6
Cavan	76176	16	21.0	10	13.1
Clare	118817	53	44.6	14	11.8
Cork	542868	195	35.9	57	10.5
Donegal	159192	195	122.5	82	51.5
Dublin	1347359	1890	140.3	1085	80.5
Galway	258058	100	38.8	34	13.2
Kerry	147707	28	19.0	7	4.7
Kildare	222504	157	70.6	78	35.1
Kilkenny	99232	23	23.2	15	15.1
Laois	84697	40	47.2	7	8.3
Leitrim	32044	11	34.3	3	9.4
Limerick	194899	75	38.5	17	8.7
Longford	40873	15	36.7	8	19.6
Louth	128884	137	106.3	30	23.3
Mayo	130507	39	29.9	21	16.1
Meath	195044	74	37.9	37	19.0
Monaghan	61386	23	37.5	8	13.0
Offaly	77961	44	56.4	9	11.5
Roscommon	64544	37	57.3	13	20.1
Sligo	65535	12	18.3	4	6.1
Tipperary	159553	27	16.9	14	8.8
Waterford	116176	113	97.3	28	24.1
Westmeath	88770	46	51.8	16	18.0
Wexford	149722	35	23.4	17	11.4
Wicklow	142425	109	76.5	59	41.4
National	4761865	3,517	73.9	1,683	35.3

Appendix 6

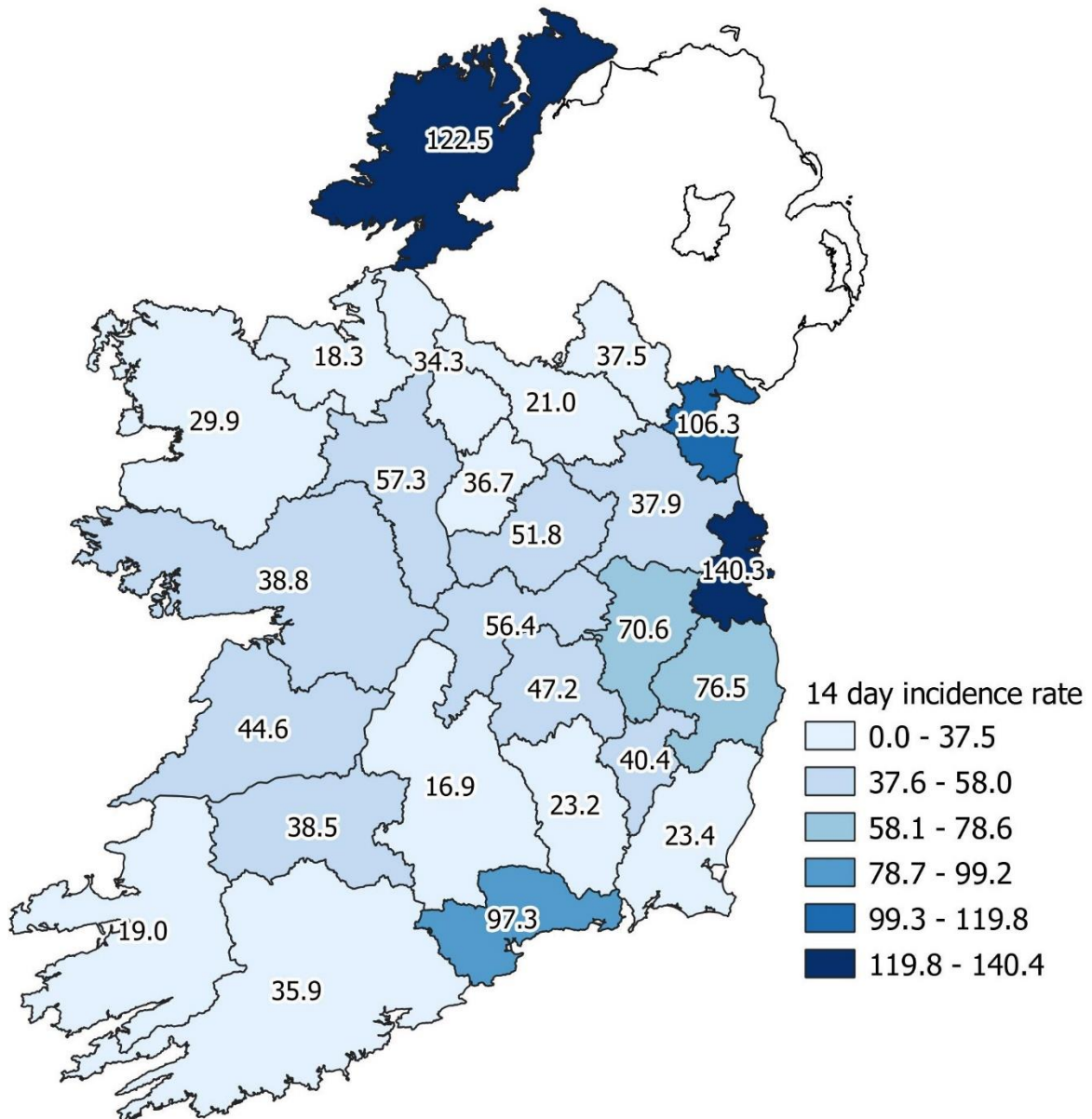


Figure D: Cumulative incidence rates of confirmed cases of COVID-19 per 100,000 population, by county, notified in Ireland between 09/09/2020 and midnight 22/09/2020

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.