



Epidemiology of COVID-19 Outbreaks/Clusters in Ireland Weekly Report

Prepared by HPSC on 8th February 2021

Week 5 2021 (week ending 6th February 2021)

Note: Data are provisional

This report includes data extracted from CIDR on 1st February 2021 at 08:15am and includes COVID-19 outbreaks notified on CIDR up to midnight 06/02/2021.

Total Number of COVID-19 outbreaks notified since week 10	11,921
Number of COVID-19 outbreaks notified from week 48:	2,885
Number of COVID-19 outbreaks notified since week 48 OPEN:	2,349
Number of COVID-19 outbreaks notified since week 48 CLOSED:	536
Number of COVID-19 outbreaks notified in week 5 2021	210

Waves (weeks)	Dates
Wave 1 (weeks 10-31)	01/03/2020 - 01/08/2020
Wave 2 (week 52-47)	02/08/2020 - 21/11/2020
Wave 3 (week 48 onwards)	22/11/2020 onwards

The COVID-19 outbreak definition is available in appendix 2 of this report and on the HPSC website at: https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/covid-19outbreakcasedefinitionforireland/

Please note COVID-19 outbreaks and cases are continuously validated/updated on Ireland's national Computerised Infectious Disease Reporting System (CIDR).

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.

Summary (week 48 2020 to week 5 2021)

2,885 outbreaks have been reported from week 48 onwards (week beginning 22/11/2020; third wave of COVID-19 infection in Ireland) and key outbreak locations are as follows:

- 1,414 (49%) were in private houses*
- 163 (5.7%) were reported in hospitals
- 209 (7.2%) were reported in nursing homes
- 233 (8.1%) were reported in residential institutions
- 866 (30%) were reported in a range of other settings, including workplaces (n=207; 7%), restaurant/cafés (n=22; 0.8%) and travel/transport related settings (n=19; 0.7%). See Table 1 for further details.

536 outbreaks have been closed and 2,349 outbreaks are open (See appendix 1 for breakdown of outbreaks by location and outbreak status. Note that it is common practice not to close private house outbreaks on CIDR due to the large volume of outbreaks in this category.)

11,921 COVID-19 outbreaks have been reported in Ireland since week 10, 2020 (Figure 1).

Summary (week 5, 2021)

In week 5 2021, there were 210 COVID-19 outbreaks notified.

- The overall number of outbreaks notified in week 5 increased by 17 compared to week 4
- There were 15 new acute hospital outbreaks notified in week 5
- There were 12 nursing home outbreaks notified in week 5
- There were 17 residential institution outbreaks notified in week 5
- Fifteen outbreaks associated with childcare facilities, universities/college or with school children +/- school staff were notified in week 5
- There were 29 workplace outbreaks notified and locations are summarised in the workplaces section of this report
- The remaining 122 outbreaks included community outbreaks (n=2), private houses* (n=75), extended family (n=25), Religious/other ceremony (n=1), retail (n=3), other healthcare services (n=12), one in a guesthouse/B & B, one in a public house (delayed notification from December) and social gatherings (n=2)

^{*}Public Health report outbreaks to HPSC and link cases to these outbreaks. This process is taking longer with the recent surge in case numbers. Public Health are prioritising the reporting of outbreaks in key settings e.g. RCFs, hospitals. Therefore, the number of private house outbreaks is underestimated.

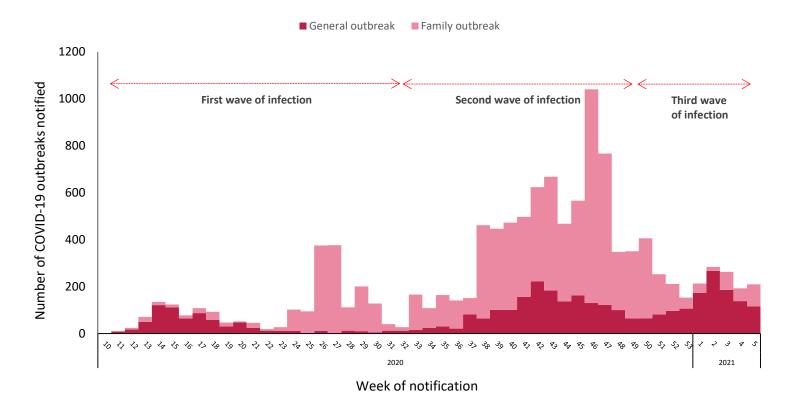


Figure 1: Epi-curve of COVID-19 outbreaks in all settings notified in Ireland by week of notification and outbreak type (see technical note 5) to midnight on 06/02/2021, N=11,921. Data source: CIDR

Dashed red arrows indicate the timeline of the first, second and third waves of COVID-19 infection in Ireland (Second wave of infection commenced in week 52; week beginning 02/08/2020 and the third wave commenced in week 48 (22/11/2020)).

Note: Family outbreaks reported in July 2020 were composed largely of late notified outbreaks from the period March to May 2020.

Table 1: Number of COVID-19 outbreaks notified in Ireland by outbreak location and by week of notification from 22/11/2020 to midnight on 06/02/2021, and difference in number of outbreaks notified in week 5 2021 compared to the previous week, N=2,885

			,	Week of	Outbreak	Notifica	tion			Difference in number of	Total (Week
Outbreak location		20	20				2021			outbreaks notified since	48-5)
	48-50	51	52	53	1	2	3	4	5	last week	48-5)
Hospital	25	9	9	23	16	34	19	13	15	+2	163
Nursing home	14	9	11	22	48	44	26	23	12	-11	209
Community Hospital / Long-stay unit	2	0	1	1	6	2	4	1	0	-1	17
Residential institution	13	8	5	9	43	74	33	31	17	-14	233
Community outbreak	11	8	5	0	0	7	3	3	2	-1	39
Other healthcare services	6	3	2	2	10	26	17	7	12	+5	85
Hotel	1	0	2	0	0	1	0	0	0	0	4
Guest house/ B&B	0	0	0	0	0	0	0	0	1	+1	1
Restaurant / Cafe	2	0	4	7	2	6	1	0	0	0	22
Public house^	1	0	2	3	2	0	0	0	1	+1	9
Social gathering	3	1	3	1	1	1	0	0	2	+2	12
Retail outlet	6	0	1	2	7	8	2	6	3	-3	35
Workplace	36	5	9	10	23	35	36	24	29	+5	207
Travel related	4	2	3	0	0	0	0	6	0	-6	15
Transport	1	0	2	0	0	1	0	0	0	0	4
Private house: family outbreaks	842	161	100	40	17	9	67	35	72	+37	1343
Private house: general outbreaks	38	9	8	9	2	0	2	0	3	+3	71
Extended family	30	10	11	6	23	10	15	22	25	+3	152
Childcare Facility	12	5	6	5	7	14	27	14	13	-1	103
School*	46	17	21	11	3	8	8	1	1	0	116
University/College**	6	0	0	0	0	0	0	2	1	-1	9
Religious/Other ceremony	3	2	2	2	1	1	1	2	1	-1	15
Sporting activity/fitness	1	0	0	0	0	0	0	0	0	0	1
Other recreation activity	0	0	0	0	0	0	0	0	0	0	0
Personal grooming service	0	1	1	0	0	0	0	0	0	0	2
Other	2	3	3	0	2	3	2	3	0	-3	18
Total	1105	253	211	153	213	284	263	193	210	+17	2885

^{*}These outbreaks are outbreaks associated with school children +/or school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks.

^{**}These outbreaks are associated with a university/college location and do not include outbreaks among third level students that occurred at other locations. ***Contains outbreaks for weeks in 2020 (48-53) and 2021 (weeks 1-5). ^table includes a late outbreak notification from December 2020

COVID-19 Outbreaks/Clusters in Residential Facilities and Hospital settings in Ireland

A summary of outbreaks linked to nursing homes, acute hospitals, community hospital/long-stay units, and other residential institutions is shown in Figure 2 (A-D), in the subsequent "Focus" sections and Tables 2-5.

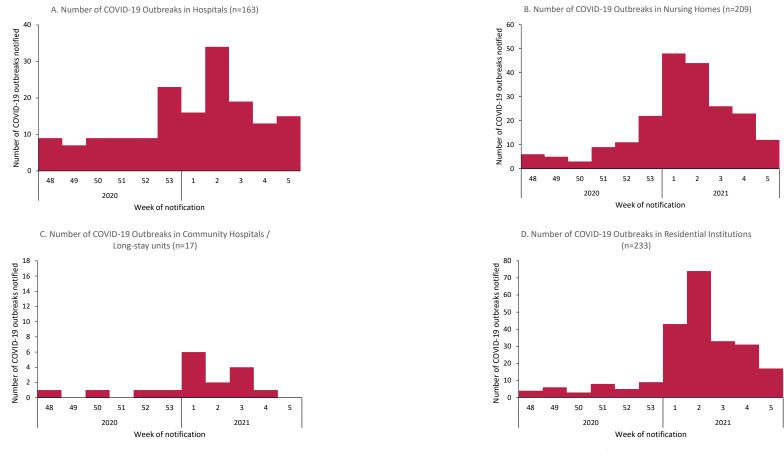


Figure 2 A-D: Epi-curve of COVID-19 outbreaks in (A) Acute Hospitals, (B) Nursing Homes, (C) Community Hospitals/Long-stay units and (D) Residential institutions notified in Ireland by week of notification, from 22/11/2020 to midnight on 06/02/2021. *Data source: CIDR*.

Focus on Nursing Homes and Community Hospitals

There have been **606** outbreaks in nursing homes and community hospital/long stay units, with **14,430** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 06/02/2021, **226** outbreaks in nursing homes or community hospital/long-stay units have been notified and 203 of these outbreaks remain open. A total of **6,480 laboratory confirmed cases** linked with outbreaks in nursing homes or community hospital/long-stay units have been notified. Of those cases, 371 were hospitalised, eight were admitted to ICU, and 596 laboratory confirmed cases linked to outbreaks in these settings died (Table 2).

Cases were reported to be a healthcare worker (HCW) in 2,577 cases, not a HCW in 3,233 cases and HCW status was unknown for the remaining cases (Figure 3).

There were 12 new outbreaks reported in nursing homes and none in community hospital/long-stay units during week 5 2021.

Table 2: Number of COVID-19 outbreaks and cases[‡] in nursing homes and community hospital/long-stay units in Ireland, from 22/11/2020 to midnight on 06/02/2021. *Data source: CIDR*

		Number	of outbre	aks notified	d	Laboratory confirmed cases‡ linked to outbreaks (week 48-5)*					
Outbreak location	Week 5	Week 5 outbreaks: Range in no. of cases#	Week 48-5	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 5	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths	
Nursing home	12	0-26	209	187	0-119	473	5974	303	7	569	
Community Hospital/Long-stay unit	0	n/a	17	16	5-87	9	506	68	<5	27	
Total	12	0-26	226	203	0-119	482	6480	371	8	596	

[‡]Case numbers fewer than 5 are not presented here.

^{*}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

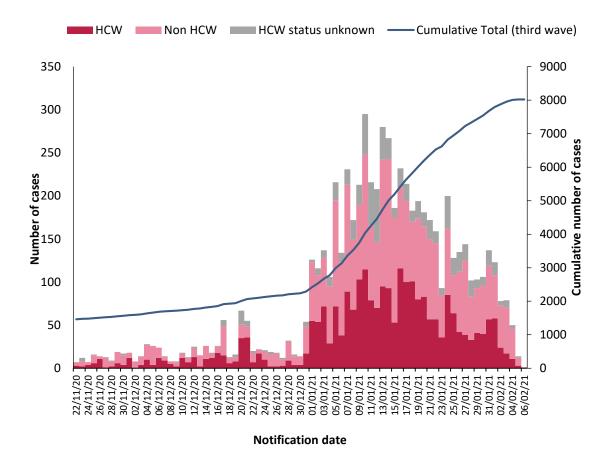


Figure 3: Epi-curve of confirmed COVID-19 cases linked to outbreaks in nursing homes and community hospital/long-stay units by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the third wave of infection by date of notification, from 22/11/2020 to midnight 06/02/2021. *Data source: CIDR*

Focus on Acute Hospitals

There were 341 outbreaks in acute hospitals, with 4,228 linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 06/02/2021, **163** outbreaks in acute hospitals have been notified and 126 of these outbreaks remain open. A total of **1,792 laboratory confirmed cases** linked with outbreaks in acute hospitals have been notified. Of those, 35 were admitted to ICU and 185 died (Table 3). Cases were reported to be a healthcare worker (HCW) in 757 cases, not a HCW in 942 cases and HCW status was unknown for the remaining cases (Figure 4).

There were 15 new outbreaks reported in acute hospitals during week 5 2021.

Table 3: Number of COVID-19 outbreaks and cases[‡] in acute hospital settings in Ireland, from 22/11/2020 to midnight on 06/02/2021. Data source: CIDR

		Number (of outbreaks	Laboratory confirmed cases linked to outbreaks (week 48-5)*					
Acute Hospitals	Week 5	Week 5 outbreaks:	Week 48-	Number	Open outbreaks:	Cases notified	Total	Total ICU	Total number of
Acute nospitais	week 5	Range in no. of cases	5	open	Range in no. of cases	in week 5	cases	cases	deaths
	15	0-9	163	126	0-130	37	1792	35	185

^{*}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

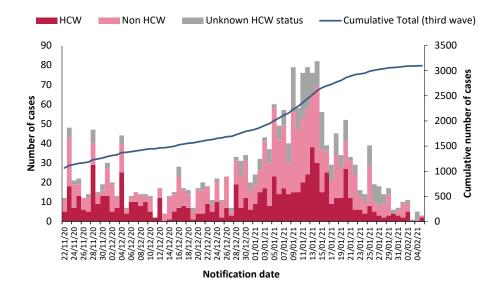


Figure 4: Epi-curve of confirmed COVID-19 cases linked to outbreaks in acute hospitals by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the second and third waves of infection by date of notification, from 22/11/2020 to 06/02/2021. *Data source: CIDR*

Focus on Residential Institutions (see footnote¹)

There were 388 outbreaks in residential institutions, with 2,150 linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 06/02/2021, **178** outbreaks in residential institutions have been notified and 153 of these outbreaks remain open. There were **1,142 laboratory confirmed cases** linked with outbreaks in residential institutions. Of those, 47 cases linked to outbreaks in residential facilities were hospitalised, three were admitted to ICU and 24 cases died (Table 4). The majority of residential institution outbreaks were notified in centres for disabilities, with **125** outbreaks and **823** linked cases notified since week 48.

There were 8 new outbreaks reported in residential institutions during week 5 2021.

Table 4: Number of COVID-19 outbreaks and cases[‡] in residential institutions in Ireland, from 22/11/2020 to midnight on 06/02/2021. Data source: CIDR

		Number	of outbrea	aks notified		Laboratory confirmed cases [‡] linked to outbreaks (week 48-5)*					
Outbreak location	Week 5	Week 5 outbreaks: Range in no. of cases#	Week 48-5	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 5	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths	
Centre for disabilities	5	0-4	125	109	0-37	18	823	30	<5	14	
Children's / TUSLA residential centre	0	n/a	11	7	0-7	<5	42	0	<5	<5	
Mental health facility	3	1-4	19	19	0-18	5	116	15	<5	<5	
Other	0	n/a	6	4	0-19	<5	42	<5	<5	<5	
Not Specified	0	n/a	17	14	0-45	<5	119	<5	<5	6	
Total	8	0-4	178	153	0-45	24	1142	47	<5	24	

#n/a is used where there were no outbreaks in a category or where there are no confirmed cases currently linked to any outbreak in that category (see technical note 6)

[‡]Case numbers fewer than 5 are not presented here

^{*}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

¹ This section focuses on the following residential settings: Centres for disabilities, Children's/TUSLA residential centres and mental health facilities. Homeless services, addiction services, direct provision centres and prisons are reported in the Focus on Vulnerable Populations section.

COVID-19 Outbreaks in Other Vulnerable Populations

This brief overview of COVID-19 outbreaks in vulnerable populations/settings only includes outbreaks involving the Roma community, Irish Traveller community, outbreaks in Direct Provision Centres, facilities for the homeless/those with addiction issues and prisons notified up to midnight on 06/02/2021 (Table 5).

There were 33 new outbreaks reported in vulnerable populations during week 5 2021:

- Twenty-two outbreaks among Irish Travellers
- Five outbreaks in the homeless population
- Four outbreaks in Direct Provision Centres
- Two outbreaks in people who attend addiction services

Table 5: Number of COVID-19 outbreaks in settings involving vulnerable populations, including the Roma community, Irish Traveller community, outbreaks in Direct Provision Centres, facilities for the homeless/those with addiction issues and prisons notified from week 48 (week commencing 22/11/2020) to midnight on 06/02/2021 and laboratory confirmed cases[‡] linked to these outbreaks. *Data source: CIDR*

		Number	of outbre		Laboratory confirmed cases [‡] linked to outbreaks (week 48-5)**					
Vulnerable populations	Week 5	Week 5 outbreaks: Range in no. of cases#	Week 48-5	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 5	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths*
Roma community	0	n/a	4	0	n/a	<5	28	<5	<5	<5
Irish Travellers	22	0-8	90	82	0-81	78	1019	36	5	<5
Direct provision centres	4	0-14	25	22	0-30	5	207	<5	<5	<5
Homeless^	5	2-6	10	9	0-14	8	42	<5	<5	<5
People with addictions	2	0-4	10	9	0-7	<5	24	<5	<5	<5
Prisons	0	n/a	3	3	3-40	<5	56	<5	<5	<5
Total	33	0-14	142	125	0-81	91	1376	47	7	<5

[^] Homeless facilities include some facilities that provide long term supported accommodation. Also includes staff of homeless facilities.

#n/a is used where there were no outbreaks in a category or where there are no confirmed cases currently linked to any outbreak in that category (see technical note 6)

[‡]Case numbers fewer than 5 are not presented here

^{**}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

COVID-19 Outbreaks in Workplaces

In total, **207** outbreaks in workplaces² have been notified from 22/11/2020 up to midnight on 06/02/2021. Since week 48, **47** COVID-19 outbreaks have been notified in businesses associated with the production or processing of food and beverages, of which **28** were in meat/poultry/fish plants in all HSE areas (Table 6).

There were 29 workplace outbreaks notified during week 5 2021:

- Ten outbreaks were associated with the commercial sector
- Eight related to food production; five in meat/poultry production and three in other food-production workplaces.
- There were five outbreaks related to the construction sector
- There were four outbreaks related to manufacturing
- There were two office-based outbreaks

Table 6: Number of COVID-19 workplace outbreaks notified from 22/11/2020 to midnight on 06/02/2021 and laboratory confirmed cases[‡] linked to workplace outbreaks.

		N	umber of outbreak	s notified		Labo	ratory confirmed	cases‡ linked to ou	itbreaks (week 48-5	5)***
Workplace outbreaks	Week 5	Week 5 outbreaks: Range in no. of cases#	Week 48-5	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 5	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths*
Meat/poultry Production and Processing	5	0-9	28	27	0-121	24	702	<5	<5	<5
Other food/beverage Production and Processing	3	0-3	19	17	0-84	26	193	6	<5	<5
Construction industry**	5	0-22	16	14	0-22	31	61	<5	<5	<5
Commercial	10	1-5	48	38	0-52	12	255	5	<5	<5
Manufacturing	4	1-17	30	19	0-17	10	133	5	<5	<5
Office-based	2	2-8	24	20	0-19	9	91	<5	<5	<5
Defence/Justice/Emergency services	0	n/a	31	27	0-13	<5	120	<5	<5	<5
Other Workplace [^]	0	n/a	11	6	0-18	<5	48	<5	<5	<5
Total	29	0-22	207	168	0-121	112	1603	22	7	<5

^{*}All COVID-19 cases that died and were linked to outbreaks in these settings have been laboratory confirmed. No deaths in probable/possible cases linked to outbreaks in these settings have been notified.

^{**}Cases linked to some construction site outbreaks may reside in Northern Ireland and consequently will be notified in that jurisdiction. These cases will not be included in the case numbers for Ireland.

^{^&}quot;Other workplace" includes businesses that do not fit in the above workplace categories. #n/a is used where there were no outbreaks in a category or where there are no confirmed cases currently linked to any outbreak in that category (see technical note 6) ‡Case numbers fewer than 5 are not presented here. ***Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

² Workplace outbreaks exclude the following workplaces: hospitals, residential facilities, hotels, public houses, retail outlets, and other settings (outbreaks in GP practices and outbreaks associated with home carers). These are reported under those headings.

COVID-19 Outbreaks associated with school children (+/- staff), universities/colleges and childcare facilities

In total, **238** COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities have been notified from 21/11/2020 up to midnight on 06/02/2021.

During week 5 2021, there was **one** COVID-19 outbreak associated with school children +/- staff, **two** associated with University/college or third level students and **13** COVID-19 outbreaks associated with childcare facilities (Table 7).

Table 7: Number of COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities notified to midnight on 06/02/2021 and laboratory confirmed cases[‡] linked to these outbreaks.

Number of outbreaks notified							Laboratory confirmed cases [‡] linked to outbreaks (week 48-5) ^{##}				
Outbreak location	Week 5	Week 5 outbreaks: Range in no. of cases#	Week 48-5	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 5	Total cases	Total hospitalised cases	Total ICU cases***	Total number of deaths	
School*	1	7	116	72	1-50	13	545	5	<5	<5	
University/college/third level students**	2	0-2	19	10	0-36	6	88	<5	<5	<5	
Childcare facility	13	0-19	103	85	0-22	41	522	<5	<5	<5	
Total	16	0-19	238	167	0-50	60	1155	8	<5	<5	

^{*}These outbreaks are outbreaks associated with school children +/or school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks

#n/a is used where there were no outbreaks in a category or where there are no confirmed cases currently linked to any outbreak in that category (see technical note 6)

^{**}These outbreaks also include outbreaks among third level students that may have occurred in other locations, such as private houses or social gatherings, and may not be directly linked to a University/college location

^{***}Case admitted to ICU is an adult

[‡]Case numbers fewer than 5 are not presented here

^{##}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-5)

Appendices Appendix 1

Table A: Number of COVID-19 outbreaks notified in Ireland by outbreak location and closure status, to midnight 06/02/2021, N=11,921

Outbreak Location	Outbreak closure status (all outbreak classifications)								
	Closed	Open	Total						
Hospital	205	136	341						
Nursing home	368	189	557						
Community Hospital/Long-stay unit	32	17	49						
Residential institution	308	205	513						
Other healthcare service	33	76	109						
Private house*	3052	5202	8254						
Workplace	322	176	498						
Travel related	58	17	75						
Transport	8	6	14						
Extended family	142	203	345						
Childcare facility	92	90	182						
Community outbreak	122	114	236						
Hotel	12	3	15						
Guest house/ B&B	1	1	2						
Public house	25	7	32						
Restaurant / Cafe	48	17	65						
Social gathering	45	19	64						
Retail outlet	28	33	61						
School**	233	83	316						
University/college***	31	4	35						
Religious/Other ceremony	14	18	32						
Sporting activities/fitness	28	0	28						
Other recreation activity	1	0	1						
Personal grooming service	4	3	7						
Other	66	22	88						
Unknown	0	1	1						
Not specified	1	0	1						
Total	5279	6642	11921						

^{*}It is common practice not to close private house outbreaks on CIDR due to the large volume of these types of outbreaks on CIDR

^{**}These outbreaks are outbreaks associated with school children +/or school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks.

^{***}These outbreaks are associated with a university/college location and do not include outbreaks among third level students that occurred at other locations

Appendix 2 Technical Notes

- 1. Data are based on statutory notifications and were extracted from the National Computerised Infectious Disease Reporting (CIDR) system. Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
- For surveillance purposes, the following COVID-19 outbreak definition is used for notifying COVID-19 outbreaks/clusters:
 Confirmed*
 - There is a cluster/outbreak, with two or more cases of laboratory confirmed COVID-19 infection regardless of symptom status. This includes cases with symptoms and cases who are asymptomatic.
 OR
 - There is a cluster/outbreak, with two or more cases of illness with symptoms consistent
 with COVID-19 infection (as per the COVID-19 case definition), and at least one person is a
 confirmed case of COVID-19.

* From September 21st 2020, suspected COVID outbreaks should be reported with the disease category 'Acute Respiratory Infection (ARI)'. If one or more cases linked to the outbreak are subsequently confirmed as COVID-19, the ARI outbreak should be reclassified to being a COVID-19 outbreak. Outbreaks of suspected COVID-19 which were notified before September 21st 2020, and met the previous COVID-19 outbreak definition should remain as COVID-19 outbreaks on CIDR.

The COVID-19 case definition is detailed on the Health Protection Surveillance Centre (HPSC) website: https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/

- 3. This report includes confirmed and suspected COVID-19 outbreaks.
- 4. An "Open" or "Closed" outbreak is defined as an outbreak where the outbreak status is "Open" or "Closed" on CIDR. In order to declare an outbreak "Closed" the outbreak location should not have experienced any new cases of infection which meet the case definition for a period of 28 days (two incubation periods).
- 5. Outbreak type (family/general) indicates whether an outbreak is confined to a family (family outbreak) or affects members of more than one household (general outbreak).
- 6. The "range in number of cases" presented in Tables 2 to 7 is based on laboratory confirmed cases linked to an outbreak in CIDR. The priority is to notify outbreaks to CIDR in a timely fashion and, while every effort is made to link cases to outbreaks as quickly as possible, there can sometimes be a delay in linking cases to the outbreak. Ranges in number of cases that include "0" include outbreaks that currently have no linked cases. Data in CIDR are continuously reviewed and updated and this includes the identification and linking of outbreak-associated cases.