



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

Prepared by HPSC on 1st February 2021

Week 4 2021 (week ending 30th January 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 30/01/2021.

Total Number of COVID-19 outbreaks notified since week 10	11,727
Number of COVID-19 outbreaks notified from week 48:	2,691
Number of COVID-19 outbreaks notified since week 48: OPEN	2,383
Number of COVID-19 outbreaks notified since week 48: CLOSED	308
Number of COVID-19 outbreaks notified in week 4 2021	196

waves (weeks)								
Wave 1 (weeks 10-31)								
Wave 2 (week 32-47)								
Wave 3 (week 48 onwards)								

Dates01/03/2020 - 01/08/2020
02/08/2020 - 21/11/2020
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 4 2021)

2,691 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:

- 1,343 (50%) were in private houses*
- 148 (5.5%) were reported in hospitals
- 199 (7.4%) were reported in nursing homes
- 225 (8.4%) were reported in residential institutions
- 776 (29%) were reported in a range of other settings, including workplaces (n=186; 6.9%), restaurant/cafés (n=22; 0.8%) and travel/transport related settings (n=19; 0.7%). See Table 1 for further details.

308 outbreaks have been closed and 2,383 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.)

11,727 COVID-19 outbreaks have been reported in Ireland since week 10, 2020 (Figure 1).

Summary (week 4, 2021)

In week 4 2021, there were 196 COVID-19 outbreaks notified.

- The overall number of outbreaks notified in week 4 decreased by 69 compared to week 3
- There were 13 new acute hospital outbreaks reported in week 4
- There were 23 nursing home and one community hospital/long stay unit outbreaks notified in week 4
- There were 31 residential institution outbreaks reported
- Seventeen outbreaks associated with childcare facilities, universities/college or with school children +/- school staff were notified in week 4
- There were 29 workplace outbreaks notified and locations are summarised in the workplaces section of this report
- The remaining 82 outbreaks included community outbreaks (n=3), private houses* (n=37), extended family (n=21), Religious/other ceremony (n=2), retail (n=4), other healthcare services (n=6), travel related (n=6) and other (n=3)

^{*}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.

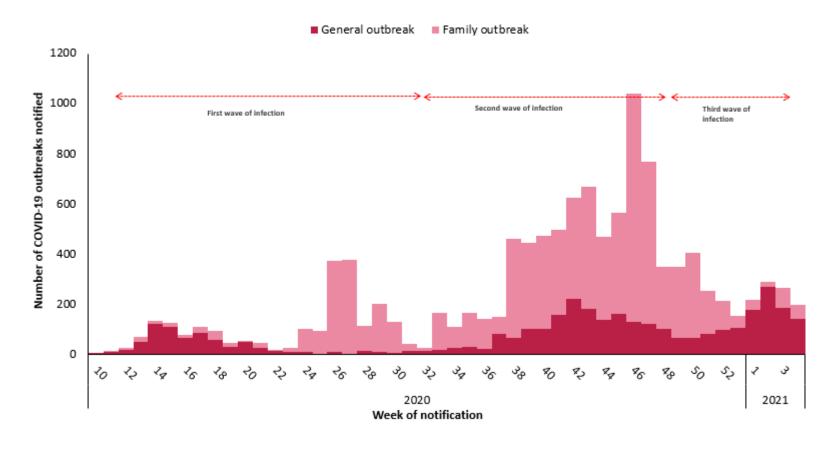


Figure 1: Epi-curve of COVID-19 outbreaks in all settings notified in Ireland by week of notification and outbreak type (see technical note 5) to midnight on 30/01/2021, N=11,727. Data source: CIDR

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 32; 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 30/01/2021, and difference in number of outbreaks notified in week 4 2021 compared to the previous week, N=2,691

			W	eek of O	utbreak N	Notificati	on				Total
Outbreak location			2020				20	21		Difference in number of outbreaks	(Week 48-
	48-49	50	51	52	53	1	2	3	4	notified since last week	4)
Hospital	16	9	9	9	23	16	34	19	13	-6	148
Nursing home	11	3	9	12	22	48	44	27	23	-4	199
Community Hospital / Long-stay unit	1	1	0	1	1	6	2	4	1	-3	17
Residential institution	10	3	8	5	10	48	77	33	31	-2	225
Community outbreak	7	4	8	5	0	0	7	3	3	0	37
Other healthcare services	3	3	3	2	2	9	25	17	6	-11	70
Hotel	0	1	0	2	0	0	1	0	0	0	4
Guest house/ B&B	0	0	0	0	0	0	0	0	0	0	0
Restaurant / Cafe	2	0	0	4	7	2	6	1	0	-1	22
Public house	1	0	0	2	3	2	0	0	0	0	8
Social gathering	1	2	1	3	1	1	1	0	0	0	10
Retail outlet	6	0	0	1	2	7	8	2	4	+2	30
Workplace	27	9	5	9	10	24	37	36	29	-7	186
Travel related	2	2	2	3	0	0	0	0	6	+6	15
Transport	1	0	0	2	0	0	1	0	0	0	4
Private house: family outbreaks	516	326	161	100	40	17	9	69	36	-33	1274
Private house: general outbreaks	32	6	9	8	9	2	0	2	1	-1	69
Extended family	17	13	10	11	6	23	10	13	21	+8	124
Childcare Facility	10	2	5	6	5	7	14	27	15	-12	91
School*	27	19	17	21	11	3	8	9	1	-8	116
University/College**	6	0	0	0	0	0	0	0	1	+1	7
Religious/Other ceremony	2	1	2	2	2	1	1	1	2	+1	14
Sporting activity/fitness	0	1	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	0	1	1	0	0	0	0	0	0	2
Other	1	1	3	3	0	2	3	2	3	+1	18
Total	699	406	253	212	154	218	288	265	196	-69	2691

^{*}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 1-4)

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.

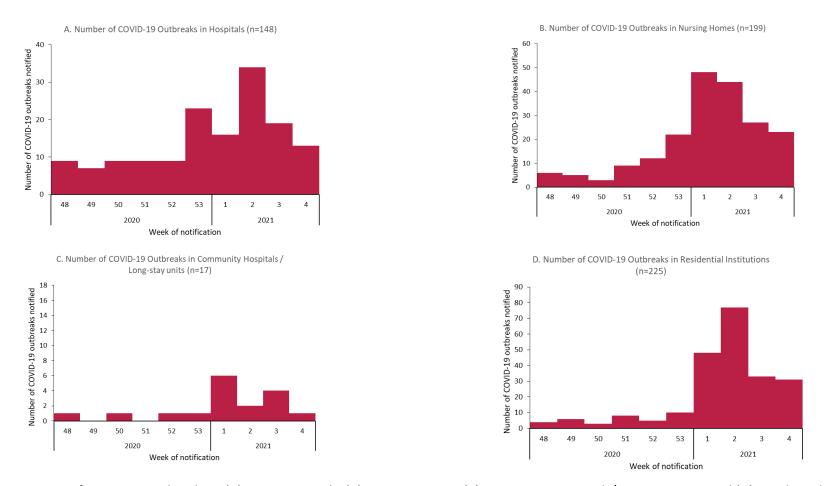


Figure 2 A-D: Epi-curve of COVID-19 outbreaks in (A) Acute Hospitals, (B) Nursing Homes, (C) Community Hospitals/Long-stay units and (D) Residential institutions notified in Ireland by week of notification, from 22/11/2020 to midnight on 30/01/2021. *Data source: CIDR.*

Note: Data are provisional

Focus on Nursing Homes and Community Hospitals

There have been **596** outbreaks in nursing homes and community hospital/long stay units, with **13,450** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 30/01/2021, **216** outbreaks in nursing homes or community hospital/long-stay units have been notified and **206** of these outbreaks remain open. A total of **5,500 laboratory confirmed cases** linked with outbreaks in nursing homes or community hospital/long-stay units have been notified. Of those cases, 331 were hospitalised, six were admitted to ICU, and 440 laboratory confirmed cases linked to outbreaks in these settings died (Table 2).

Cases were reported to be a healthcare worker (HCW) in 2,140 cases, not a HCW in 2,680 cases and HCW status was unknown for the remaining cases (Figure 3).

There were 24 new outbreaks reported in nursing homes (n=23) and community hospital/long-stay units (n=1) during week 4 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 30/01/2021. *Data source: CIDR*

		Number	of outbre	aks notified		Laboratory confirmed cases‡ linked to outbreaks (week 48-4)*					
Outbreak location	Week 4	Week 4 outbreaks: Range in no. of cases#	Week 48-4	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 4	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths	
Nursing home	23	0-19	199	190	0-112	579	5017	263	5	416	
Community Hospital/Long-stay unit	1	13	17	16	5-75	36	483	68	<5	24	
Total	24	0-19	216	206	0-112	615	5500	331	6	440	

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

^{*}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-4)

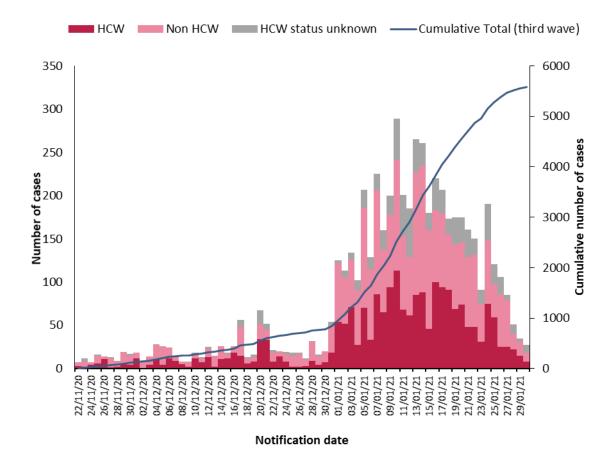


Figure 3: Epi-curve of confirmed COVID-19 cases linked to outbreaks in nursing homes and community hospital/long-stay units by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the third wave of infection by date of notification, from 22/11/2020 to midnight 30/01/2021. *Data source: CIDR*

Focus on Acute Hospitals

There were 326 outbreaks in acute hospitals, with 3,813 linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 30/01/2021, **148** outbreaks in acute hospitals have been notified and 123 of these outbreaks remain open. A total of **1,413** laboratory confirmed cases linked with outbreaks in acute hospitals have been notified. Of those, 30 were admitted to ICU and 124 died (Table 3). Cases were reported to be a healthcare worker (HCW) in 624 cases, not a HCW in 726 cases and HCW status was unknown for the remaining cases (Figure 4).

There were 13 new outbreaks reported in acute hospitals during week 4 2021:

Table 3: Number of COVID-19 outbreaks and cases[‡] in acute hospital settings in Ireland, from 22/11/2020 to midnight on 30/01/2021. Data source: CIDR

		Number	of outbrea	Laboratory confirmed cases linked to outbreaks (week 48-4)*					
Outbreak location: Acute Hospitals	Week 4	Week 4 outbreaks: Range in no. of cases	Week 48-4	Number open	Open outbreaks: Range in no. of cases	Cases notified in week 4	Total cases	Total ICU cases	Total number of deaths
	13	0-17	148	123	0-100	43	1413	30	124

^{*}Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-4)

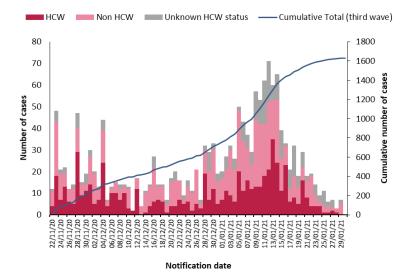


Figure 4: Epi-curve of confirmed COVID-19 cases linked to outbreaks in acute hospitals by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the third wave of infection by date of notification, from 22/11/2020 to 30/01/2021. *Data source: CIDR*

Focus on Residential Institutions (see footnote¹)

There were 414 outbreaks in residential institutions, with 2,338 linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 30/01/2021, **177** outbreaks in residential institutions have been notified and 166 of these outbreaks remain open. There were **932 laboratory confirmed cases** linked with outbreaks in residential institutions. Of those, 40 cases linked to outbreaks in residential facilities were hospitalised, two were admitted to ICU and 19 cases died (Table 4). The majority of residential institution outbreaks were notified in centres for disabilities, with **122** outbreaks and **652** linked cases notified since week 48.

There were 24 new outbreaks reported in residential institutions during week 4 2021:

- Eighteen outbreaks were in centres for disabilities in seven of the eight regions
- Two outbreaks were in mental health facilities
- The location of four residential institution outbreaks were not specified or 'other'

Table 4: Number of COVID-19 outbreaks and cases[‡] in residential institutions in Ireland, from 22/11/2020 to midnight on 30/01/2021. Data source: CIDR

		Number	of outbrea	aks notified		Laboratory confirmed cases [‡] linked to outbreaks (week 48-4)*					
Outbreak location	Week 4	Week 4 outbreaks: Range in no. of cases#	Week 48-4	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 4	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths	
Centre for disabilities	18	0-15	122	114	0-35	37	652	24	<5	11	
Children's / TUSLA residential centre	0	n/a	11	11	0-7	<5	31	<5	<5	<5	
Mental health facility	2	n/a	17	17	0-17	<5	92	13	<5	<5	
Other	1	n/a	6	4	0-19	<5	29	<5	<5	<5	
Not Specified	3	4-5	21	20	0-44	10	128	<5	<5	<5	
Total	24	0-15	177	166	0-44	50	932	40	<5	19	

#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)

*Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-4)

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

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 30/01/2021 (Table 5).

There were 37 new outbreaks reported in vulnerable populations during week 4 2021:

- Twenty-nine outbreaks among Irish Travellers
- One outbreak in people who attend addiction services
- Seven outbreaks in Direct Provision Centres

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 30/01/2021 and laboratory confirmed cases[‡] linked to these outbreaks. *Data source: CIDR*

		Number	of outbre	aks notified		Laboratory confirmed cases [‡] linked to outbreaks (week 48-4)**						
Vulnerable populations	Week 4	Week 4 outbreaks: Range in no. of cases#	Week 48-4	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 4	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	29	0-27	68	63	0-70	74	787	31	5	<5		
Direct provision centres	7	0-14	22	19	0-30	19	172	<5	<5	<5		
Homeless^	0	n/a	5	4	0-14	<5	21	<5	<5	<5		
People with addictions	1	3	8	8	0-7	<5	20	<5	<5	<5		
Prisons	0	n/a	3	3	3-40	<5	56	<5	<5	<5		
Total	37	0-27	110	97	0-70	94	1084	40	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 1-4)

COVID-19 Outbreaks in Workplaces

In total, **186** COVID-19 outbreaks in workplaces² have been notified from 22/11/2020 up to midnight on 30/01/2021. Since week 48, **40** COVID-19 outbreaks have been notified in businesses associated with the production or processing of food and beverages, of which **24** were in meat/poultry/fish plants in 7/8 HSE areas.

There were 29 COVID-19 workplace outbreaks notified during week 4 2021:

- Eight related to food production in 6/8 HSE regions, five in meat/poultry production and three in other food-production workplaces
- Nine outbreaks were associated with the commercial sector
- There were four office-based outbreaks
- There were two outbreaks associated with Defence/Justice/Emergency services
- Other outbreaks occurred in manufacturing (n=2), the construction sector (n=2) and two were specified as other workplaces

Table 6: Number of COVID-19 workplace outbreaks notified from 22/11/2020 to midnight on 30/01/2021 and laboratory confirmed cases[‡] linked to workplace outbreaks.

		Number o	of outbreak	s notified		Laboratory confirmed cases [‡] linked to outbreaks (week 48-4)***					
Workplace outbreaks	Week 4	Week 4 outbreaks: Range in no. of cases#	Week 48-4	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 4	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths*	
Meat/poultry Production and Processing	5	0-6	24	23	0-120	26	587	<5	<5	<5	
Other food/beverage Production and Processing	3	0-4	16	14	0-54	<5	149	5	<5	<5	
Construction industry**	2	1-2	11	10	0-4	<5	20	<5	<5	<5	
Commercial	9	0-8	43	34	0-52	12	234	5	<5	<5	
Manufacturing	2	n/a	23	14	0-11	<5	81	<5	<5	<5	
Office-based	4	0-3	23	19	0-19	<5	76	<5	<5	<5	
Defence/Justice/Emergency services	2	2	31	28	0-13	<5	111	<5	<5	<5	
Other Workplace^	2	0-8	15	10	0-17	10	66	<5	<5	<5	
Total	29	0-8	186	152	0-120	50	1324	16	6	<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 1-4)

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, **223** 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 30/01/2021.

During week 4 2021, there was **one** COVID-19 outbreak associated with school children +/- staff, **one** associated with University/college/third level students and **15** COVID-19 outbreaks associated with childcare facilities.

Table 7: Number of COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities notified to midnight on 30/01/2021 and laboratory confirmed cases[‡] linked to these outbreaks.

		Number	of outbre	aks notified		Laboratory confirmed cases [‡] linked to outbreaks (week 48-4) ^{##}					
Outbreak location	Week 4	Week 4 outbreaks: Range in no. of cases#	Week 48-4	Number open	Open outbreaks: Range in no. of cases#	Cases notified in week 4	Total cases	Total hospitalised cases	Total ICU cases***	Total number of deaths	
School*	1	2	116	83	0-50	<5	512	5	<5	<5	
University/college/third level students**	1	0-7	16	7	2-36	7	80	<5	<5	<5	
Childcare facility	15	0-9	91	78	0-22	19	426	<5	<5	<5	
Total	17	0-9	223	168	0-50	28	1018	7	<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 1-4)

Appendices Appendix 1

Table A: Number of COVID-19 outbreaks notified in Ireland by outbreak location and closure status, to midnight 30/01/2021, N=11,727

Outbreak Location	Outbreak closure	e status (all outbreak cl	assifications)
	Closed	Open	Total
Hospital	193	133	326
Nursing home	354	193	547
Community Hospital/Long-stay unit	32	17	49
Residential institution	291	214	505
Other healthcare service	30	64	94
Private house*	2905	5279	8184
Workplace	316	162	478
Travel related	57	18	75
Transport	8	6	14
Extended family	138	179	317
Childcare facility	87	83	170
Community outbreak	121	113	234
Hotel	12	3	15
Guest house/ B&B	1	0	1
Public house	21	9	30
Restaurant / Cafe	46	18	64
Social gathering	45	17	62
Retail outlet	26	30	56
School**	222	94	316
University/college***	31	2	33
Religious/Other ceremony	14	17	31
Sporting activities/fitness	28	0	28
Other recreation activity	1	0	1
Personal grooming service	4	3	7
Other	65	23	88
Unknown	0	1	1
Not specified	1	0	1
Total	5049	6678	11727

^{*}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.