

Epidemiology of COVID-19 Outbreaks/Clusters in Ireland

Weekly Report

Prepared by HPSC on 21st December 2021

Week 50 2021 (week ending 18th December 2021)

Note: Data are provisional

This report includes data extracted from CIDR on 21st December 2021 at 8:30am and includes COVID-19 outbreaks notified on CIDR up to midnight 18/12/2021.

Total Number of COVID-19 outbreaks notified since Week 10 2020:	21,327
Number of COVID-19 outbreaks notified from Week 26 2021:	3,952
Number of COVID-19 outbreaks notified since Week 26 2021 OPEN:	1,298
Number of COVID-19 outbreaks notified since Week 26 2021 CLOSED:	2,654
Number of COVID-19 outbreaks notified in Week 50 2021:	96

Waves (weeks)	Dates
Wave 1 (Weeks 10 – 31 2020)	01/03/2020 – 01/08/2020
Wave 2 (Week 32 – 47 2020)	02/08/2020 – 21/11/2020
Wave 3 (Week 50 2020 – Week 25 2021)	22/11/2020 – 26/06/2021
Wave 4 (Week 26 2021 onwards)	27/06/2021 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).

Due to the cyber-attack on the HSE IT systems on 14/05/2021, CIDR was unavailable for the reporting of COVID-19 outbreaks from 14/05/2021 to the 28/06/2021. As a result, there has been a delay in reporting for many outbreaks on CIDR. To account for this, outbreak week for all outbreaks created between May 14th and October 9th is based on the following algorithm: earliest of 1. outbreak recognition date; 2. first reported date; 3. outbreak created date. Outbreak week is based on outbreak created date for all outbreaks created on or before May 13th 2021, and on or after October 10th 2021.

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.

Note: Data are provisional

Summary (Week 26 2021 to Week 50 2021)

3,952 COVID-19 outbreaks have been reported from Week 26 2021 onwards (week beginning 27/06/2021; fourth wave of COVID-19 infection in Ireland) and key outbreak locations are as follows:

- 192 (4.9%) were reported in hospitals
- 169 (4.3%) were reported in nursing homes
- 34 (0.9%) were reported in community hospital/long-stay units
- 308 (7.8%) were reported in residential institutions
- 127 (3.2%) were reported in 'other' healthcare services
- 500 (12.7%) were reported in schools[#]
- 242 (6.1%) were reported in childcare facilities
- 454 (11.5%) were reported in workplaces
- 1,926 (48.8%) were reported in a range of other settings*, including private houses (n=937, 23.7%), retail outlets (n=151, 3.8%) and social gatherings (n=119, 3.0%). See Table 1 for further details
- There have been eleven outbreaks identified with at least one confirmed Omicron VOC case

2,654 outbreaks have been closed and 1,298 outbreaks are open (See Appendix 1, Table A 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).

21,327 COVID-19 outbreaks have been reported in Ireland since week 10, 2020 (Figure 1).

Summary (Week 50, 2021)

In **Week 50** 2021, there were **96** COVID-19 outbreaks notified:

- The overall number of outbreaks notified in Week 50 decreased by 68 compared to Week 49 2021
- There were eight acute hospital outbreaks notified
- There were seven nursing home outbreaks notified
- There was one community hospital/long-stay unit outbreaks notified
- There were 21 residential institution outbreaks notified
- There were seven outbreaks associated with other healthcare services notified
- There were 22 outbreaks associated with schools notified
- There were two outbreaks associated with childcare facilities notified
- There were four outbreaks associated with workplaces notified
- The remaining 24 outbreaks* included private houses (n=14), extended family (n=4), religious/other ceremony (n=2), community (n=1), travel (n=1), social gathering (n=1), sporting activity/fitness (n=1)

**Regional Departments of Public Health are currently prioritising Public Health Risk Assessments and outbreak investigations in settings that have the greatest clinical need or would benefit most from Public Health intervention. For this reason, outbreaks in some settings may be underestimated in this report. Tables 1, 2A and 2B focus on these key settings, with the remaining settings coloured grey.*

#In Week 44 2021, 32 outbreaks associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified.

Note: Data are provisional

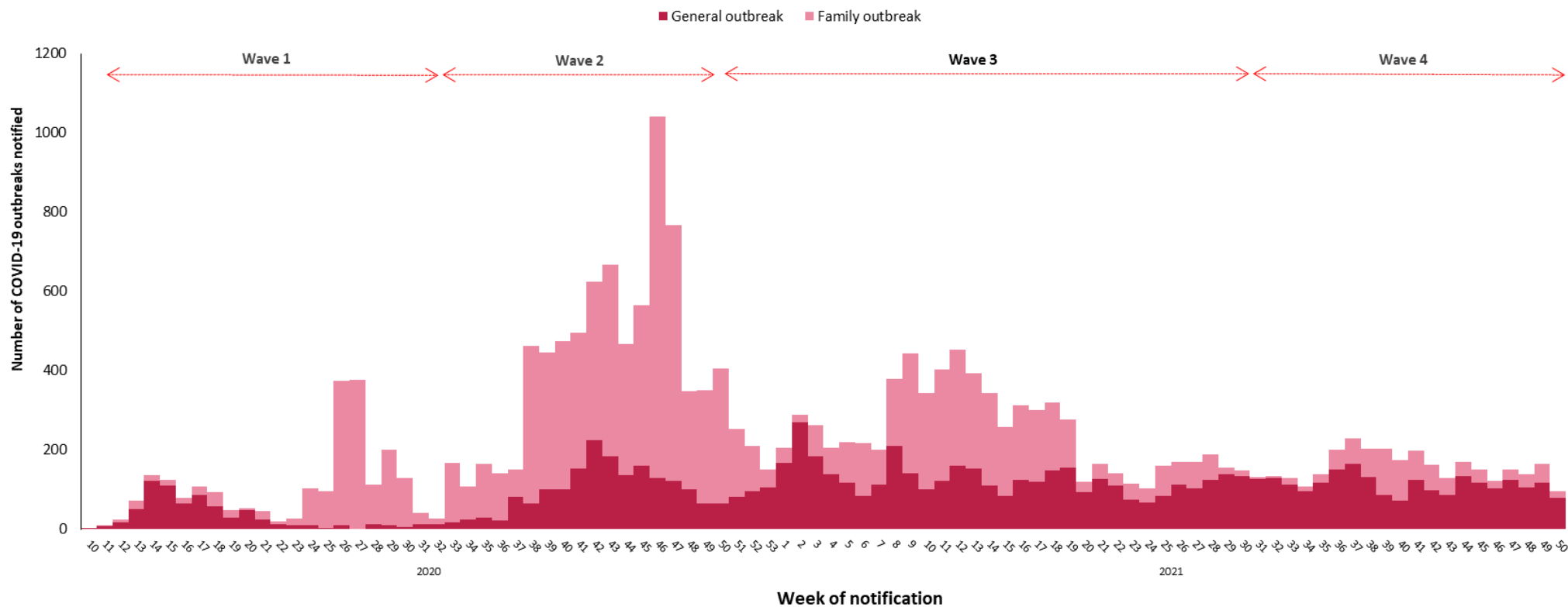


Figure 1: Epi-curve of COVID-19 outbreaks in all settings notified in Ireland by week of notification and outbreak type (see technical note 5, Appendix 2) to midnight on 18/12/2021, N=21,327 Data source: CIDR

Dashed red arrows indicate the timeline of the first, second, third and fourth waves of COVID-19 infection in Ireland (second wave of infection commenced in Week 32 2020 (week beginning 02/08/2020); the third wave commenced in Week 50 2020 (week beginning 22/11/2020); the fourth wave commenced Week 26 2021 (week beginning 27/06/2021)).

***Note:** Family outbreaks reported in July 2020 (weeks 27-31 2020) were composed largely of late notified outbreaks from the period March to May 2020 (weeks 10-22 2020). In addition, the creation of private house outbreaks is not prioritised in waves 3 and 4 and therefore the number of family outbreaks in these waves is likely to be an underestimate

Table 1: Number of COVID-19 outbreaks notified in Ireland by outbreak location and by week of notification from 27/06/2021 to midnight on 18/12/2021, and difference in number of outbreaks notified in Week 50 2021 compared to the previous week, N=3,952. *Data source: CIDR*

Outbreak location	Week of Outbreak Notification									Difference in number of outbreaks notified since last week	Total Wave 4 (Week 26-50)
	2021										
	week 26-42	43	44	45	46	47	48	49	50		
Hospital	108	6	9	27	7	12	10	5	8	+3	192
Nursing home	107	6	3	9	4	10	10	13	7	-6	169
Community Hospital / Long-stay unit	16	1	2	3	3	1	2	5	1	-4	34
Residential institution	124	7	20	21	25	30	29	31	21	-10	308
Other healthcare services	51	6	4	12	16	11	10	10	7	-3	127
School*	288	5	34	16	23	45	30	37	22	-15	500
Childcare Facility	194	1	7	9	6	6	8	9	2	-7	242
Workplace	375	18	24	6	10	7	7	3	4	+1	454
University/College**	8	1	1	1	0	1	0	0	0	0	12
Retail outlet	134	8	5	4	0	0	0	0	0	0	151
Restaurant / Cafe	101	1	1	1	0	0	1	0	0	0	105
Public house	62	4	3	1	0	0	0	0	0	0	70
Hotel	76	4	3	0	0	0	0	0	0	0	83
Guest house/ B&B	9	0	0	0	0	0	0	0	0	0	9
Private house: family outbreaks	687	40	34	28	15	24	25	38	13	-25	904
Private house: general outbreaks	22	3	5	0	1	0	1	0	1	+1	33
Extended family	100	3	2	5	4	3	3	8	4	-4	132
Community outbreak	50	0	0	1	0	0	0	0	1	+1	52
Travel related	48	3	1	2	0	0	1	2	1	-1	58
Transport	22	1	0	1	0	0	0	0	0	0	24
Social gathering	103	4	7	1	2	0	0	1	1	0	119
Religious/Other ceremony	44	3	3	2	3	0	0	1	2	+1	58
Sporting activity/fitness	47	1	0	0	1	0	2	0	1	+1	52
Other recreation activity	22	0	0	0	0	0	0	0	0	0	22
Personal grooming service	25	0	1	0	0	0	0	0	0	0	26
Other	8	2	1	0	1	1	0	1	0	-1	14
Unknown	2	0	0	0	0	0	0	0	0	0	2
Total	2833	128	170	150	121	151	139	164	96	-68	3952

*These outbreaks are outbreaks associated with school children +/- 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. #In Week 44 2021, 32 outbreaks associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified. Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present

Note: Data are provisional

Table 2A: Number of COVID-19 outbreaks by outbreak location and HSE-Area notified in Ireland from 27/06/2021 to midnight on 18/12/2021 N=3,952. *Data source: CIDR*

Outbreak Location	East	Midlands	MidWest	NorthEast	NorthWest	SouthEast	South	West	HPSC [#]	Total
Hospital	74	14	14	20	25	16	14	15	0	192
Nursing home	45	13	20	14	10	21	29	17	0	169
Community Hospital / Long-stay unit	8	2	3	1	5	6	6	3	0	34
Residential institution	95	15	50	34	18	30	44	22	0	308
Other healthcare service	19	1	30	12	11	17	19	18	0	127
School*	132	56	107	57	65	17	30	36	0	500
Childcare facility	82	21	29	45	17	10	11	27	0	242
Workplace	119	24	35	79	42	51	69	35	0	454
Travel related	7	10	1	6	10	1	21	1	1	58
University/college**	5	0	3	1	2	0	1	0	0	12
Retail outlet	65	0	11	21	16	16	16	6	0	151
Restaurant / Café	31	2	11	10	16	12	16	7	0	105
Public house	10	2	4	9	20	3	14	8	0	70
Hotel	7	1	4	14	11	12	19	15	0	83
Guest house/ B&B	3	0	0	1	1	2	2	0	0	9
Private house	29	180	188	38	420	7	32	43	0	937
Extended family	5	15	31	0	42	8	11	20	0	132
Community outbreak	4	3	2	1	11	1	26	4	0	52
Social gathering	3	6	36	15	36	6	15	2	0	119
Religious/Other ceremony	7	1	1	12	6	8	20	3	0	58
Transport	3	3	1	0	9	2	1	5	0	24
Sporting activity/fitness	12	0	6	9	6	9	7	3	0	52
Personal grooming service	10	1	2	5	0	3	5	0	0	26
Other recreation activity	11	1	0	3	0	3	2	2	0	22
Other/Unknown/Not specified	3	0	4	1	2	3	1	2	0	16
Total	789	371	593	408	801	264	431	294	1	3952

*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.

#Outbreak involves three or more public health regions. ##In Week 44 2021, 32 outbreaks associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified. Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present

Note: Data are provisional

Table 2B: Number of COVID-19 outbreaks by outbreak location and HSE-Area notified in Ireland during Week 50 2021 (week ending 18/12/2021), N=96. *Data source: CIDR*

Outbreak Location	East	Midlands	MidWest	NorthEast	NorthWest	SouthEast	South	West	Total
Hospital	3	2	0	3	0	0	0	0	8
Nursing home	3	0	0	0	0	2	1	1	7
Community Hospital / Long-stay unit	0	0	1	0	0	0	0	0	1
Residential institution	10	0	3	2	3	0	2	1	21
Other healthcare service	1	0	1	0	0	2	3	0	7
School*	8	0	3	2	7	0	0	2	22
Childcare facility	0	1	0	0	0	0	0	1	2
Workplace	1	0	0	1	0	0	1	1	4
Travel related	0	0	0	0	0	0	1	0	1
Private house	1	0	2	3	4	0	4	0	14
Extended family	0	0	2	0	2	0	0	0	4
Community outbreak	0	0	0	0	1	0	0	0	1
Social gathering	0	0	0	0	1	0	0	0	1
Religious/Other ceremony	0	1	0	0	0	0	1	0	2
Sporting activity/fitness	1	0	0	0	0	0	0	0	1
Total	28	4	12	11	18	4	13	6	96

*These outbreaks are outbreaks associated with school children +/- school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks. Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present

Note: Data are provisional

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

A summary of COVID-19 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 3-7.

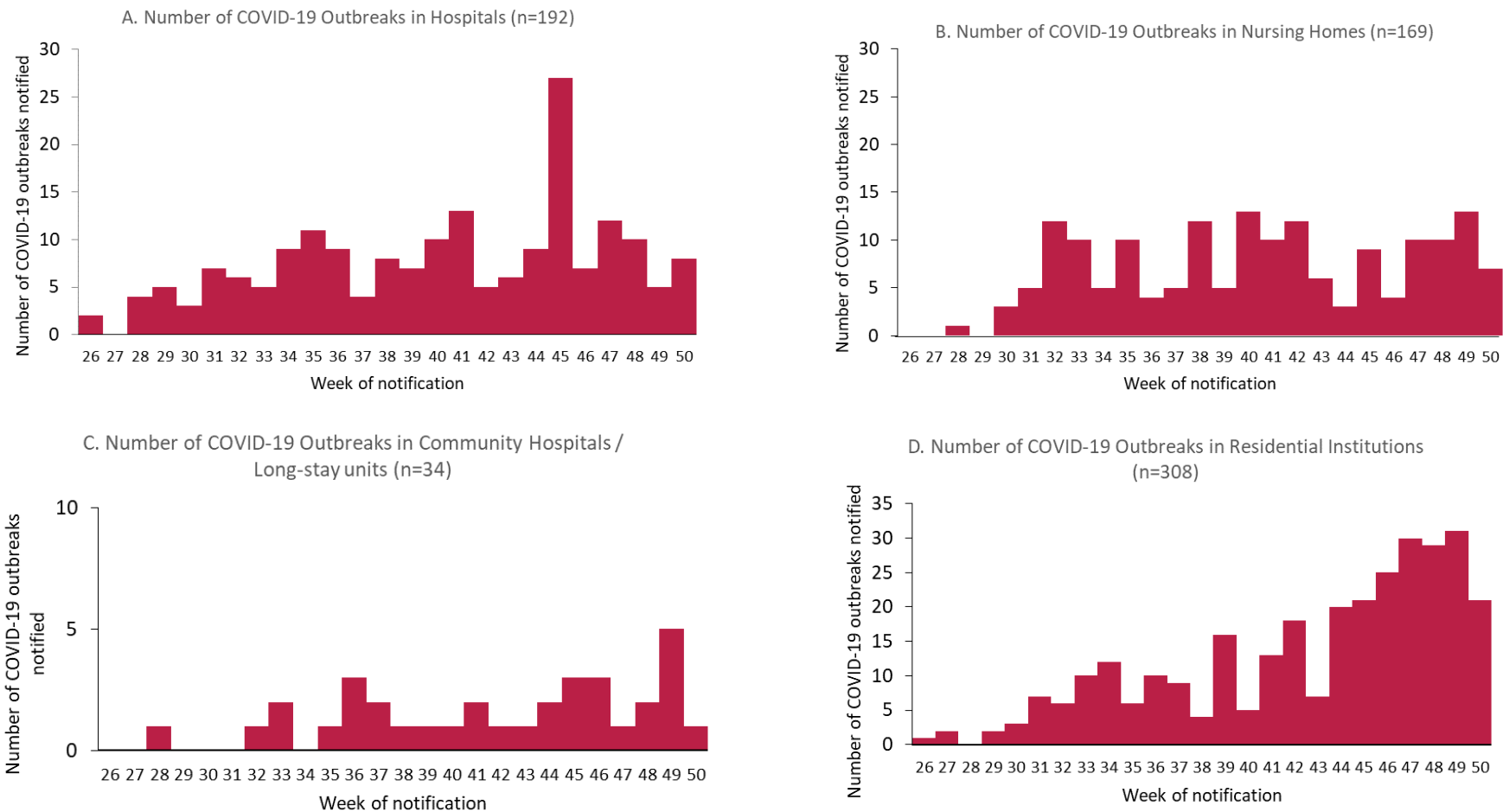


Figure 2 A-D: Epi-curve of COVID-19 outbreaks in (A) Acute Hospitals, (B) Nursing Homes, (C) Community Hospitals/Long-stay units and (D) Residential institutions notified in Ireland by week of notification, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Note: Data are provisional

Focus on Nursing Homes and Community Hospitals

There have been **852** COVID-19 outbreaks in nursing homes and community hospital/long stay units, with **18,710** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 18/12/2021, **203** outbreaks in nursing homes or community hospital/long-stay units have been notified and **73** of these outbreaks remain open. A total of **2,575 laboratory confirmed cases** linked to outbreaks in nursing homes or community hospital/long-stay units have been notified. Of those cases, 195 were hospitalised, <5 were admitted to ICU, and 173 cases died (Table 3).

There were seven new COVID-19 outbreaks reported in nursing homes and one in community hospital/long-term care facilities during Week 50 2021

Table 3: Number of COVID-19 outbreaks and cases in nursing homes and community hospital/long-stay units in Ireland, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	Week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Nursing home	7	2-14	169	58	1-41	27	2282	129	<5	159
Community Hospital/Long-stay unit	1	<5	34	15	1-56	<5	293	66	<5	14
Total	8	2-14	203	73	1-56	29	2575	195	<5	173

#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, Appendix 2).

Note: Data are provisional

Table 4: Summary of notified COVID-19 outbreaks and COVID-19 laboratory confirmed cases that were linked to COVID-19 outbreaks in nursing homes and community hospital/long-stay units by HSE-Area from 27/06/2021 to midnight on 18/12/2021, N=203 outbreaks. *Data source: CIDR*

HSE-Area	Number of outbreaks	Laboratory confirmed cases linked to outbreaks (week 26-50)			
		All cases	Hospitalised cases	Hospitalised cases that died	Total cases that died
East	53	466	25	8	30
Midlands	15	196	5	<5	9
Midwest	23	274	17	<5	17
Northeast	15	193	19	6	17
Northwest	15	178	21	8	19
Southeast	27	366	22	<5	16
South	35	550	78	11	46
West	20	352	8	<5	19
Total	203	2575	195	44	173

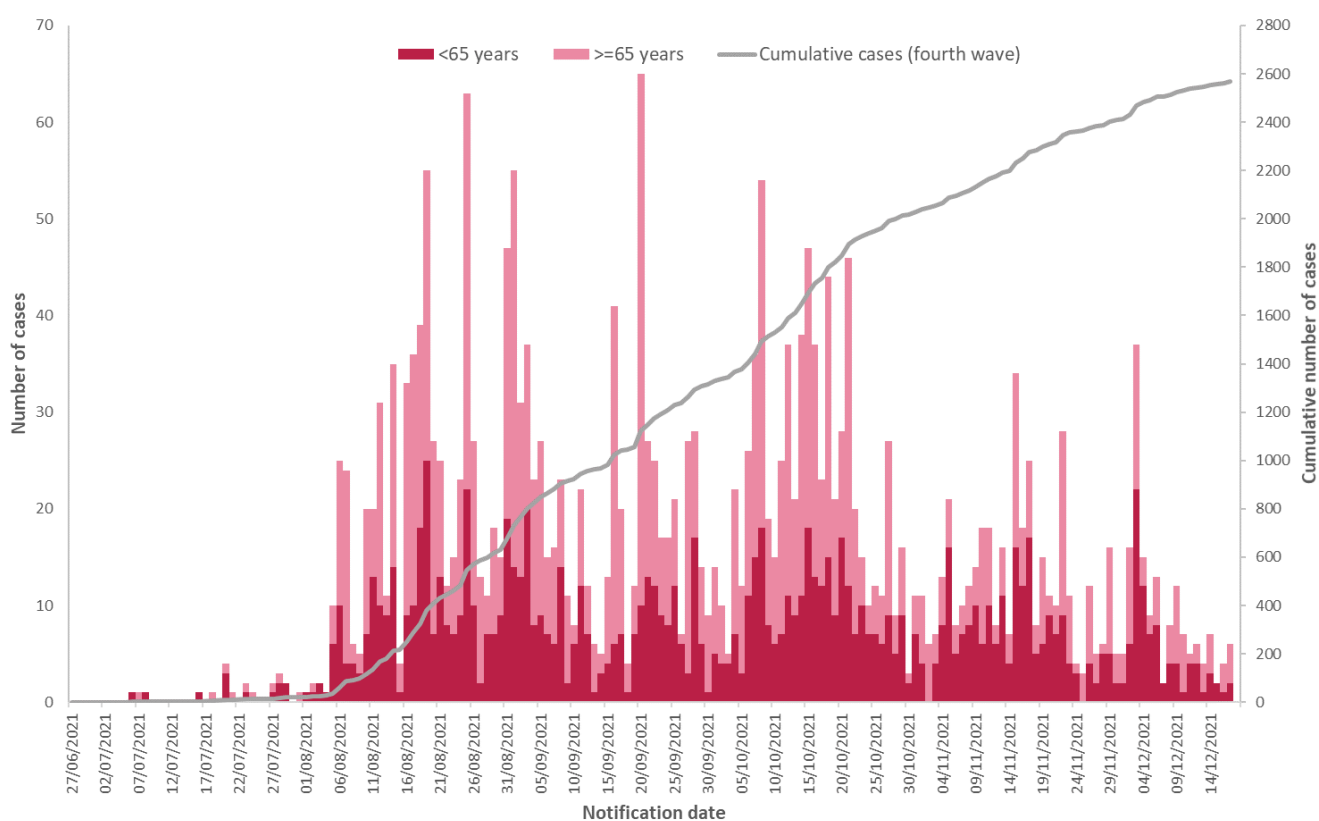


Figure 3: Epi-curve of confirmed COVID-19 cases linked to outbreaks in nursing homes and community hospital/long-stay units by age group (<65 years and ≥65 years), date of notification, and cumulative number of confirmed cases during the fourth wave of infection from 27/06/2021 to midnight 18/12/2021. *Data source: CIDR*

Focus on Acute Hospitals

There were **616** COVID-19 outbreaks in acute hospitals, with **6,856** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 18/12/2021, **192** outbreaks in acute hospitals have been notified and **60** of these outbreaks remain open. A total of **1,027 laboratory confirmed cases** linked to outbreaks in acute hospitals have been notified. Of those, 18 were admitted to ICU and 91 died (Table 5). Cases were reported to be a healthcare worker (HCW) in 285 cases, not a HCW in 462 cases and HCW status was unknown for the remaining cases (Figure 4).

There were eight new COVID-19 outbreaks reported in acute hospitals during Week 50 2021

Table 5: Number of COVID-19 outbreaks and cases in acute hospital settings in Ireland, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Outbreak location: Acute Hospitals	Number of outbreaks notified				Laboratory confirmed cases linked to outbreaks (week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases	week 26-50	Number open	Open outbreaks: Range in no. of cases	Cases notified in Week 50	Total cases	Total ICU cases	Total number of deaths
	8	1-5	192	60	1-20	11	1027	18	91

Note: Data are provisional

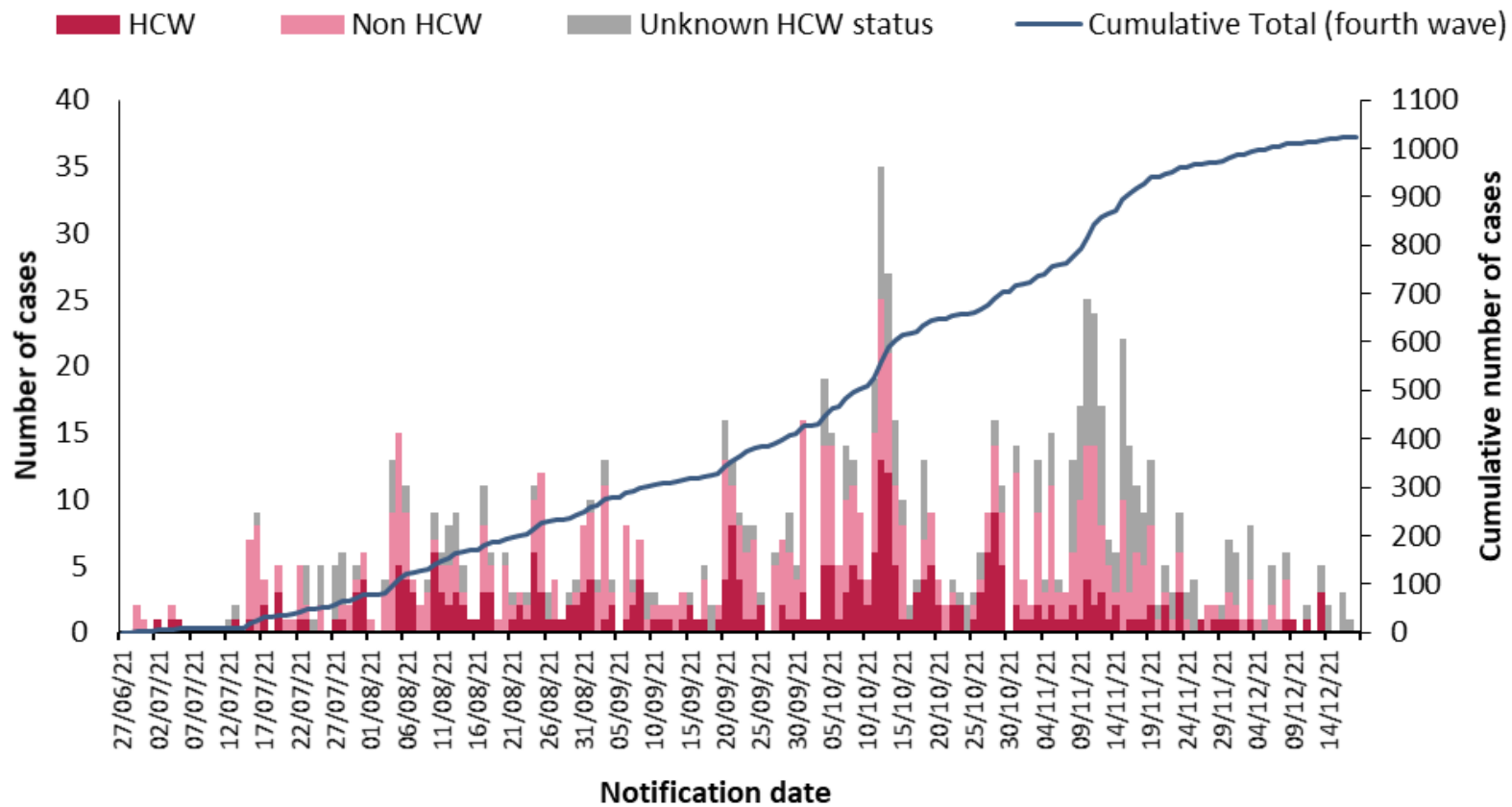


Figure 4: Epi-curve of confirmed COVID-19 cases linked to outbreaks in acute hospitals by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the fourth wave of infection by date of notification, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Focus on Residential Institutions (please see footnote¹)

There were **703** COVID-19 outbreaks in residential institutions, with **4,209** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 18/12/2021, **254** outbreaks in residential institutions have been notified and **138** of these outbreaks remain open. There were **1,078 laboratory confirmed cases** linked to outbreaks in residential institutions. Of those, **45** cases were hospitalised, three were admitted to ICU and seven cases died (Table 6). The majority of residential institution outbreaks were notified in centres for disabilities, with **183** outbreaks and **795** confirmed linked cases notified since Week 26 2021.

There were 16 new COVID-19 outbreaks reported in residential institutions in Week 50 2021: 13 in centres for disabilities; two in mental health facilities and; one in a Children's/TUSLA residential centre.

Table 6: Number of COVID-19 outbreaks and cases in residential institutions in Ireland, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	Week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Centre for disabilities	13	1-6	183	99	1-32	17	795	17	<5	<5
Centre for older people	0	n/a	4	1	12	0	28	<5	0	<5
Children's / TUSLA residential centre*	1	n/a	29	16	1-7	<5	95	0	0	0
Mental health facility	2	2-3	26	17	1-11	6	90	21	<5	<5
Other	0	n/a	10	5	3-10	0	62	5	0	<5
Not Specified	0	n/a	2	0	n/a	<5	8	0	0	0
Total	16	1-6	254	138	1-32	26	1078	45	<5	7

[#]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, Appendix 2). * no cases linked to date

¹ This section focuses on the following residential settings: Centres for disabilities, Centre for older people, 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 Healthcare Settings

There were **319** COVID-19 outbreaks associated with other healthcare settings, with **1,149** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

This brief overview of COVID-19 outbreaks in other healthcare settings notified up to midnight on 18/12/2021 (Table 7). Since week 26 2021 there have been **127** outbreaks associated with other healthcare services and **74** of these remain open. There were **332 linked laboratory confirmed cases** associated with other healthcare service outbreaks.

There were seven new COVID-19 outbreaks reported in other healthcare settings in Week 50 2021: six associated with services for people with disabilities and; one associated with home care services

Table 7: Number of COVID-19 outbreaks and cases associated with other healthcare settings in Ireland, from 27/06/2021 to midnight on 18/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Clients of home care services	1	<5	37	16	1-5	0	87	8	0	<5
People with disabilities	6	1-6	45	37	1-11	0	124	<5	<5	0
Clients of mental health facilities	0	n/a	12	8	1-3	0	28	<5	0	0
All other healthcare service	0	n/a	33	13	1-4	27	93	<5	<5	0
Total	7	1-6	127	74	1-11	27	332	17	<5	<5

[#]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, Appendix 2)

Note: Data are provisional

COVID-19 Outbreaks in Other Vulnerable Populations

There were **883** COVID-19 outbreaks associated with the below described vulnerable populations, with **8,174** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

This brief overview of COVID-19 outbreaks in vulnerable populations/settings only includes outbreaks involving Irish Travellers, the Roma community, outbreaks in Direct Provision Centres, facilities for the homeless/those with addiction issues and prisons notified up to midnight on 18/12/2021 (Table 8). From 27/06/2021 to 18/12/2021, there have been **283** outbreaks in vulnerable populations, of which **156** remain open. There were **1,607 linked laboratory confirmed cases** associated with outbreaks in vulnerable groups in this time period.

There were 13 new outbreaks reported in vulnerable populations during Week 50 2021:

- six outbreaks among Irish Travellers
- three outbreaks associated with the homeless
- two outbreaks related to Direct Provision Centres
- two outbreaks amongst the Roma community

Table 8: Number of COVID-19 outbreaks in settings involving vulnerable populations, including the Irish Traveller community, Roma community, outbreaks in Direct Provision Centres, facilities for the homeless/those with addiction issues and prisons notified from 27/06/2021 to midnight on 18/12/2021 and laboratory confirmed cases linked to these outbreaks. *Data source: CIDR*

Vulnerable populations	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	Week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths [*]
Irish Travellers	6	2-14	202	112	1-35	22	1123 [§]	28	<5	<5
Roma community	2	2-3	25	12	2-22	<5	131	9	<5	<5
Direct provision centres	2	1-8	27	16	1-23	7	154	7	0	0
Homeless [¥]	3	3-3	17	9	2-5	0	62	<5	0	0
Persons with addictions	0	n/a	5	2	1-5	0	20	0	0	0
Prisons	0	n/a	7	5	2-75	0	117	<5	<5	<5
Total	13	1-14	283	156	1-75	30	1607	50	8	5

[¥]Homeless facilities include some facilities that provide long term supported accommodation. Also includes staff of homeless facilities. ^{*}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. [#]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, Appendix 2). [§]There has been a delay in linking all outbreak cases among this vulnerable group

Note: Data are provisional

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

There were **1,279** COVID-19 outbreaks in schools, with **6,613** linked laboratory confirmed COVID-19 cases; **219** outbreaks in universities colleges/third-level students, with **2,257** linked laboratory confirmed COVID-19 cases; **639** outbreaks in childcare facilities, with **3,079** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

In total, **757** COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities have been notified from 27/06/2021 up to midnight on 18/12/2021 (Table 9) and **251** of these outbreaks remain open.

During Week 50 2021, there were 22 COVID-19 outbreaks notified associated with school children +/- staff, and there were two COVID-19 outbreaks associated with childcare facilities

Table 9: Number of COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities notified to midnight on 18/12/2021 and laboratory confirmed cases linked to these outbreaks. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Primary	16	0-13	368	128	0-32	18	2481	7	0	0
Post-primary	0	n/a	41	14	0-5	0	167	0	0	0
Special education	6	2-6	83	54	1-11	8	297	<5	<5	0
Not specified/other	0	n/a	8	5	0-16	0	37	0	0	0
Total School*^{###}	22	0-13	500	201	0-32	26	2982	9	<5	0
Childcare facility	2	11-11	242	44	1-15	<5	950	<5	0	0
University/college/third level students**	0	n/a	15	6	2-7	0	66	<5	0	0
Total	24	0-13	757	251	0-32	27	3998	13	<5	0

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

**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. [#]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, Appendix 2). [§]Due to delays in linkage of outbreak cases, an interim measure has been applied whereby the higher number between aggregate and outbreak linked confirmed case numbers is used in school settings. ^{###}In Week 44 2021, 32 outbreaks associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified. Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present

Note: Data are provisional

COVID-19 Outbreaks associated with Workplaces

There were **1,243** COVID-19 outbreaks in workplaces, with **8,949** linked laboratory confirmed COVID-19 cases; **139** outbreaks in meat/poultry production and processing facilities, with **3,657** linked laboratory confirmed COVID-19 cases and **150** outbreaks in other food/beverage production and processing facilities, with **1,326** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

In total, **454** COVID-19 outbreaks associated with workplaces have been notified from 27/06/2021 up to midnight on 18/12/2021 (Table 10) and **59** of these outbreaks remain open.

During **Week 50** 2021, there were **four** COVID-19 outbreaks notified associated with workplaces; **three** in meat/poultry production and processing facilities and; **one** in other food/beverage production and processing and; **one** in a manufacturing facility.

Table 10: Number of COVID-19 outbreaks associated with workplaces notified to midnight on 18/12/2021 and laboratory confirmed cases linked to these outbreaks.
Data source: CIDR

Workplace outbreaks	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases [#]	week 26-50	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Meat/poultry production and processing*	3	7-23	32	12	1-240	9	644	5	0	0
Other food/beverage production and processing	0	n/a	63	12	1-36	8	365	7	<5	0
Other workplaces*	1	n/a	359	35	0-23	55	1092	15	<5	0
Total	4	7-23	454	59	0-240	72	2101	27	5	0

[#]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, Appendix 2). Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present. *no cases/not all cases linked as yet

Note: Data are provisional

Appendices
Appendix 1

Table A: Number of COVID-19 outbreaks notified in Ireland by outbreak location and closure status, to midnight 18/12/2021, N=21,327. *Data source: CIDR*

Outbreak Location	Outbreak closure status (all outbreak classifications)		
	Closed	Open	Total
Hospital	556	60	616
Nursing home	704	58	762
Community Hospital/Long-stay unit	75	15	90
Residential institution	752	172	924
Other healthcare service	245	74	319
School**	1078	201	1279
Childcare facility	595	44	639
University/college***	57	4	61
Workplace	1184	59	1243
Retail outlet	375	9	384
Hotel	107	3	110
Guest house/ B&B	13	0	13
Public house	106	7	113
Restaurant / Cafe	215	6	221
Travel related	248	26	274
Transport	61	3	64
Private house*	6400	5691	12091
Extended family	723	194	917
Community outbreak	516	9	525
Social gathering	259	24	283
Religious/Other ceremony	118	18	136
Sporting activities/fitness	88	5	93
Other recreation activity	26	0	26
Personal grooming service	48	0	48
Other	78	9	87
Unknown	5	0	5
Not specified	4	0	4
Total	14636	6691	21327

*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 +/- 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.

2. 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 3, 5, and 6-10 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.