

Epidemiology of COVID-19 Outbreaks/Clusters in Ireland

Weekly Report

Prepared by HPSC on 7th December 2021

Week 48 2021 (week ending 4th December 2021)

Note: Data are provisional

This report includes data extracted from CIDR on 7th December 2021 at 8:30am and includes COVID-19 outbreaks notified on CIDR up to midnight 04/12/2021.

Total Number of COVID-19 outbreaks notified since Week 10 2020:	21,067
Number of COVID-19 outbreaks notified from Week 26 2021:	3,692
Number of COVID-19 outbreaks notified since Week 26 2021 OPEN:	1,254
Number of COVID-19 outbreaks notified since Week 26 2021 CLOSED:	2,438
Number of COVID-19 outbreaks notified in Week 48 2021:	139

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 48 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 48 2021)

3,692 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:

- 179 (4.9%) were reported in hospitals
- 149 (4%) were reported in nursing homes
- 31 (0.8%) were reported in community hospital/long-stay units
- 252 (6.8%) were reported in residential institutions
- 110 (3%) were reported in 'other' healthcare services
- 441 (11.9%) were reported in schools[#]
- 231 (6.3%) were reported in childcare facilities
- 447 (12.1%) were reported in workplaces
- 1,852 (50.3%) were reported in a range of other settings*, including private houses (n=886, 24%), retail outlets (n=151, 4.1%) and social gatherings (n=117, 3.2%). See Table 1 for further details

2,438 outbreaks have been closed and 1,254 outbreaks are open (415 private house outbreaks and 839 outbreaks in all other locations) (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).

21,067 COVID-19 outbreaks have been reported in Ireland since week 10, 2020 (Figure 1).

Summary (Week 48, 2021)

In **Week 48** 2021, there were **139** COVID-19 outbreaks notified:

- The overall number of outbreaks notified in Week 48 decreased by 12 compared to Week 47 2021
- There were 10 acute hospital outbreaks notified
- There were 10 nursing home outbreaks notified
- There were five community hospital/long-stay unit outbreaks notified
- There were 26 residential institution outbreaks notified
- There were 10 outbreaks associated with other healthcare services notified
- There were 30 outbreaks associated with schools notified
- There were eight outbreaks associated with childcare facilities notified
- There were seven outbreaks associated with workplaces notified (see Table 10 for further details)
- There was a one travel-related outbreak which included one confirmed VOC Omicron case
- The remaining 32 outbreaks* included private houses (n=26), extended family (n=3), sporting activity/fitness (n=2), restaurant/café (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

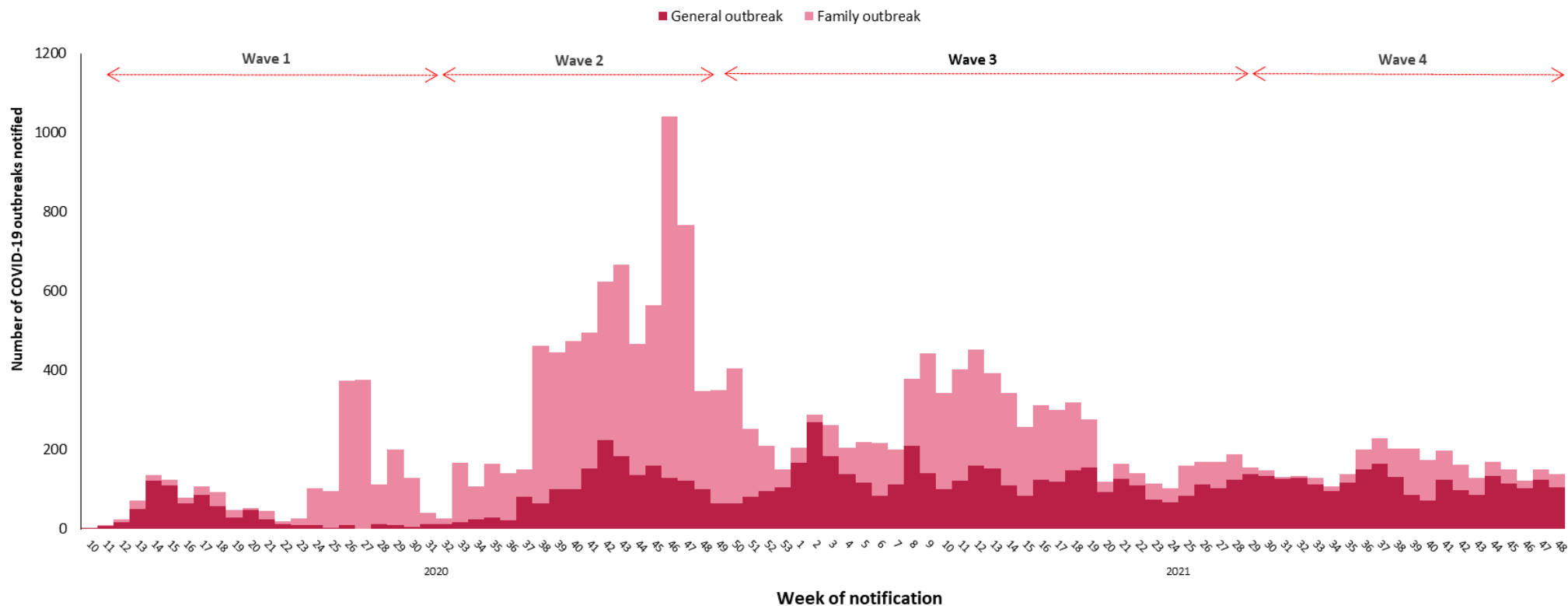


Figure 1: Epi-curve of COVID-19 outbreaks in all settings notified in Ireland by week of notification and outbreak type (see technical note 5, Appendix 2) to midnight on 04/12/2021, N=21,067 Data source: CIDR

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 48 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 04/12/2021, and difference in number of outbreaks notified in Week 48 2021 compared to the previous week, N=3,692. *Data source: CIDR*

Outbreak location	Week of Outbreak Notification									Difference in number of outbreaks notified since last week	Total Wave 4 (Week 26-48)
	week 26-40	41	42	43	44	45	46	47	48		
Hospital	90	13	5	6	9	27	7	12	10	-2	179
Nursing home	85	10	12	6	3	9	4	10	10	0	149
Community Hospital / Long-stay unit	13	2	1	1	2	3	3	1	5	+4	31
Residential institution	93	13	18	7	20	21	24	30	26	-4	252
Other healthcare services	38	9	4	6	4	12	16	11	10	-1	110
School*	262	15	11	5	34	16	23	45	30	-15	441
Childcare Facility	181	10	3	1	7	9	6	6	8	+2	231
Workplace	323	33	19	18	24	6	10	7	7	0	447
Travel related	42	1	5	3	1	2	0	0	1	+1	55
University/College**	7	0	1	1	1	1	0	1	0	-1	12
Retail outlet	125	5	4	8	5	4	0	0	0	0	151
Restaurant / Cafe	95	3	3	1	1	1	0	0	1	+1	105
Public house	59	2	1	4	3	1	0	0	0	0	70
Hotel	72	0	4	4	3	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	568	63	56	40	34	28	15	25	25	0	854
Private house: general outbreaks	21	0	1	3	5	0	1	0	1	+1	32
Extended family	84	9	7	3	2	5	4	2	3	+1	119
Community outbreak	48	0	2	0	0	1	0	0	0	0	51
Transport	19	2	1	1	0	1	0	0	0	0	24
Social gathering	98	3	2	4	7	1	2	0	0	0	117
Religious/Other ceremony	39	2	3	3	3	2	3	0	0	0	55
Sporting activity/fitness	47	0	0	1	0	0	1	0	2	+2	51
Other recreation activity	21	1	0	0	0	0	0	0	0	0	22
Personal grooming service	24	1	0	0	1	0	0	0	0	0	26
Other	8	0	0	2	1	0	2	1	0	-1	14
Unknown	2	0	0	0	0	0	0	0	0	0	2
Total	2473	197	163	128	170	150	121	151	139	-12	3692

*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. #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 04/12/2021 N=3,692. *Data source: CIDR*

Outbreak Location	East	Midlands	MidWest	NorthEast	NorthWest	SouthEast	South	West	HPSC [#]	Total
Hospital	69	12	14	17	24	15	13	15	0	179
Nursing home	37	13	17	13	10	19	25	15	0	149
Community Hospital / Long-stay unit	7	1	2	0	5	9	6	1	0	31
Residential institution	75	15	45	28	13	24	31	21	0	252
Other healthcare service	16	1	25	12	10	15	15	16	0	110
School*	109	47	99	52	55	17	30	32	0	441
Childcare facility	79	18	29	43	17	10	11	24	0	231
Workplace	117	24	35	77	42	50	68	34	0	447
Travel related	7	10	1	5	9	1	20	1	1	55
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	28	180	181	31	397	7	20	42	0	886
Extended family	5	15	28	0	36	8	9	18	0	119
Community outbreak	4	3	2	1	10	1	26	4	0	51
Social gathering	3	6	36	15	34	6	15	2	0	117
Transport	3	3	1	0	9	2	1	5	0	24
Religious/Other ceremony	7	0	1	11	6	8	19	3	0	55
Sporting activity/fitness	11	0	6	9	6	9	7	3	0	51
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	4	0	4	1	1	3	1	2	0	16
Total	723	355	561	379	750	255	392	276	1	3692

*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 48 2021 (week ending 04/12/2021), N=139. *Data source: CIDR*

Outbreak Location	East	Midlands	MidWest	NorthEast	NorthWest	SouthEast	South	West	Total
Hospital	4	0	1	3	0	2	0	0	10
Nursing home	7	0	0	0	0	2	0	1	10
Community Hospital / Long-stay unit	1	0	0	0	0	4	0	0	5
Residential institution	7	1	2	6	1	2	4	3	26
Other healthcare service	0	0	6	0	2	0	2	0	10
School*	14	2	4	1	4	0	3	2	30
Childcare facility	2	1	0	1	2	0	1	1	8
Workplace	4	0	1	1	1	0	0	0	7
Travel related	0	0	0	1	0	0	0	0	1
Restaurant / Café	1	0	0	0	0	0	0	0	1
Private house	1	0	8	3	13	0	1	0	26
Extended family	0	0	2	0	1	0	0	0	3
Sporting activity/fitness	0	0	1	0	0	0	1	0	2
Total	41	4	25	16	24	10	12	7	139

*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.

Outbreaks in settings in grey may be underestimated due to public health focus on key settings at present

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.

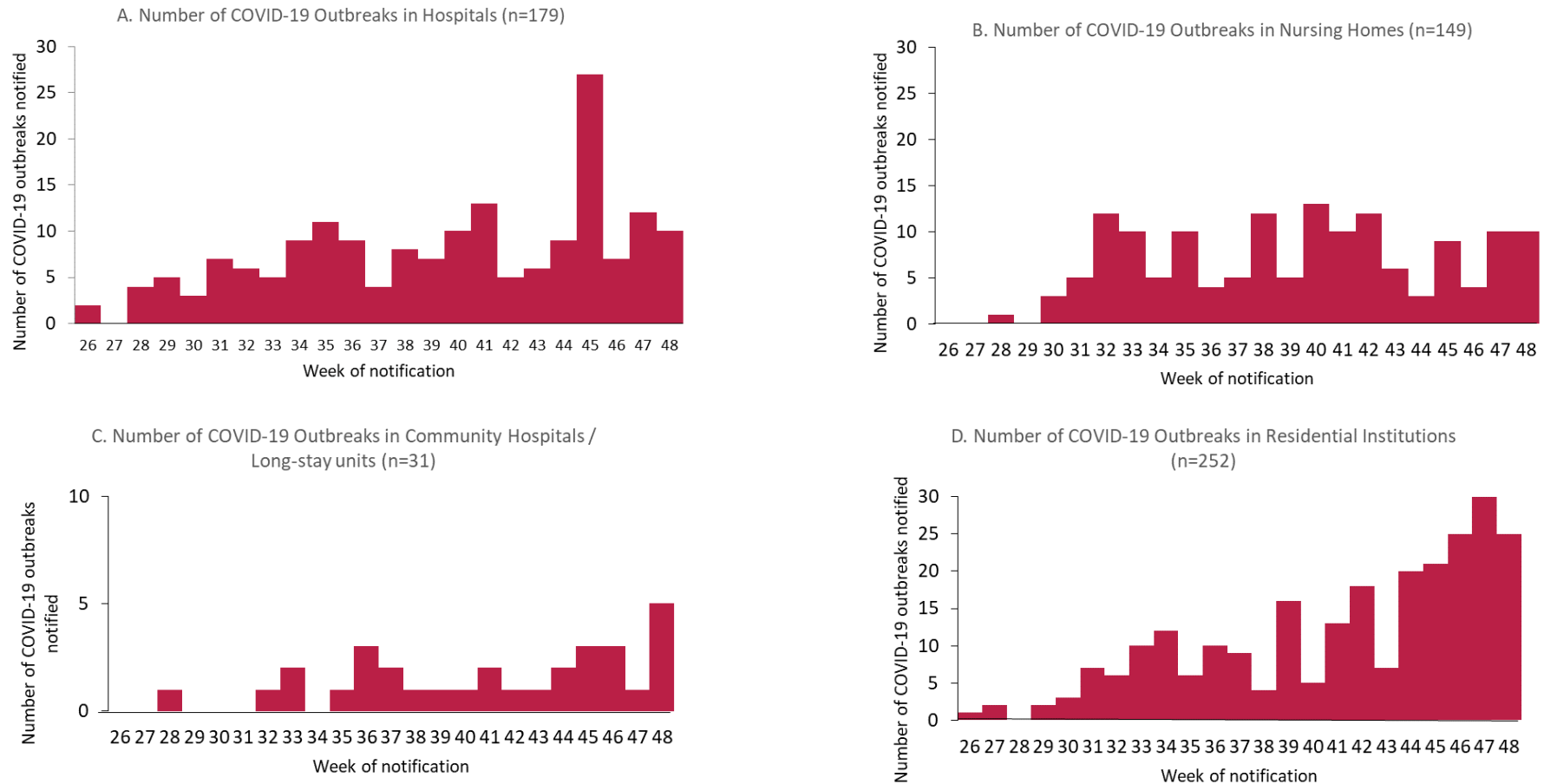


Figure 2 A-D: Epi-curve of COVID-19 outbreaks in (A) Acute Hospitals, (B) Nursing Homes, (C) Community Hospitals/Long-stay units and (D) Residential institutions notified in Ireland by week of notification, from 27/06/2021 to midnight on 04/12/2021. *Data source: CIDR*

Note: Data are provisional

Focus on Nursing Homes and Community Hospitals

There have been **829** COVID-19 outbreaks in nursing homes and community hospital/long stay units, with **18,551** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 04/12/2021, **180** outbreaks in nursing homes or community hospital/long-stay units have been notified and **71** of these outbreaks remain open. A total of **2,416 laboratory confirmed cases** linked to outbreaks in nursing homes or community hospital/long-stay units have been notified. Of those cases, 183 were hospitalised, <5 were admitted to ICU, and 158 cases died (Table 3).

There were ten new COVID-19 outbreaks reported in nursing homes and five in community hospital/long-term care facilities during Week 48 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 04/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	Week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Nursing home	10	2-11	149	56	1-64	28	2126	119	<5	145
Community Hospital/Long-stay unit	5	1-22	31	15	1-56	28	290	64	<5	13
Total	15	1-22	180	71	1-64	56	2416	183	<5	158

#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 04/12/2021, N=180 outbreaks. *Data source: CIDR*

HSE-Area	Number of outbreaks	Laboratory confirmed cases linked to outbreaks (week 26-48)			
		All cases	Hospitalised cases	Hospitalised cases that died	Total cases that died
East	44	392	24	6	24
Midlands	14	196	5	<5	9
Midwest	19	266	16	<5	15
Northeast	13	188	19	6	17
Northwest	15	178	21	8	19
Southeast	28	328	14	<5	14
South	31	528	77	9	42
West	16	340	7	<5	18
Total	180	2416	183	38	158

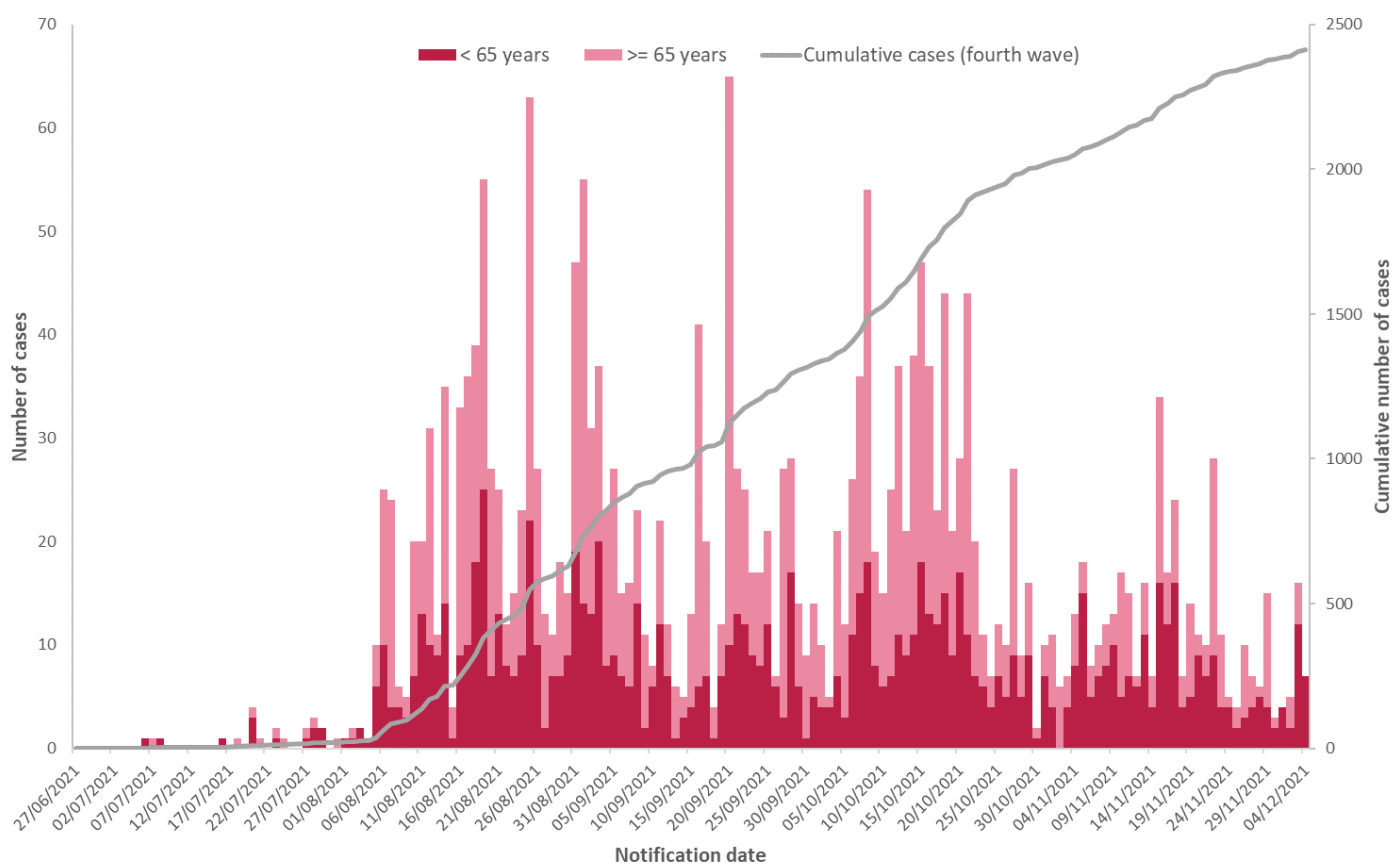


Figure 3: Epi-curve of confirmed COVID-19 cases linked to outbreaks in nursing homes and community hospital/long-stay units by age group (<65 years and ≥65 years), date of notification, and cumulative number of confirmed cases during the fourth wave of infection from 27/06/2021 to midnight 04/12/2021. *Data source: CIDR*

Focus on Acute Hospitals

There were **603** COVID-19 outbreaks in acute hospitals, with **6,800** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 04/12/2021, **179** outbreaks in acute hospitals have been notified and **73** of these outbreaks remain open. A total of **971 laboratory confirmed cases** linked to outbreaks in acute hospitals have been notified. Of those, 18 were admitted to ICU and 85 died (Table 5). Cases were reported to be a healthcare worker (HCW) in 274 cases, not a HCW in 445 cases and HCW status was unknown for the remaining cases (Figure 4).

There were ten new COVID-19 outbreaks reported in acute hospitals during Week 48 2021

Table 5: Number of COVID-19 outbreaks and cases in acute hospital settings in Ireland, from 27/06/2021 to midnight on 04/12/2021. *Data source: CIDR*

Outbreak location: Acute Hospitals	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-48)			
	Week 48	Week 48 outbreaks: Range in no. of cases	week 26-48	Number open	Open outbreaks: Range in no. of cases	Cases notified in Week 48	Total cases	Total ICU cases	Total number of deaths
	10	1-8	179	73	1-27	15	971	18	85

Note: Data are provisional

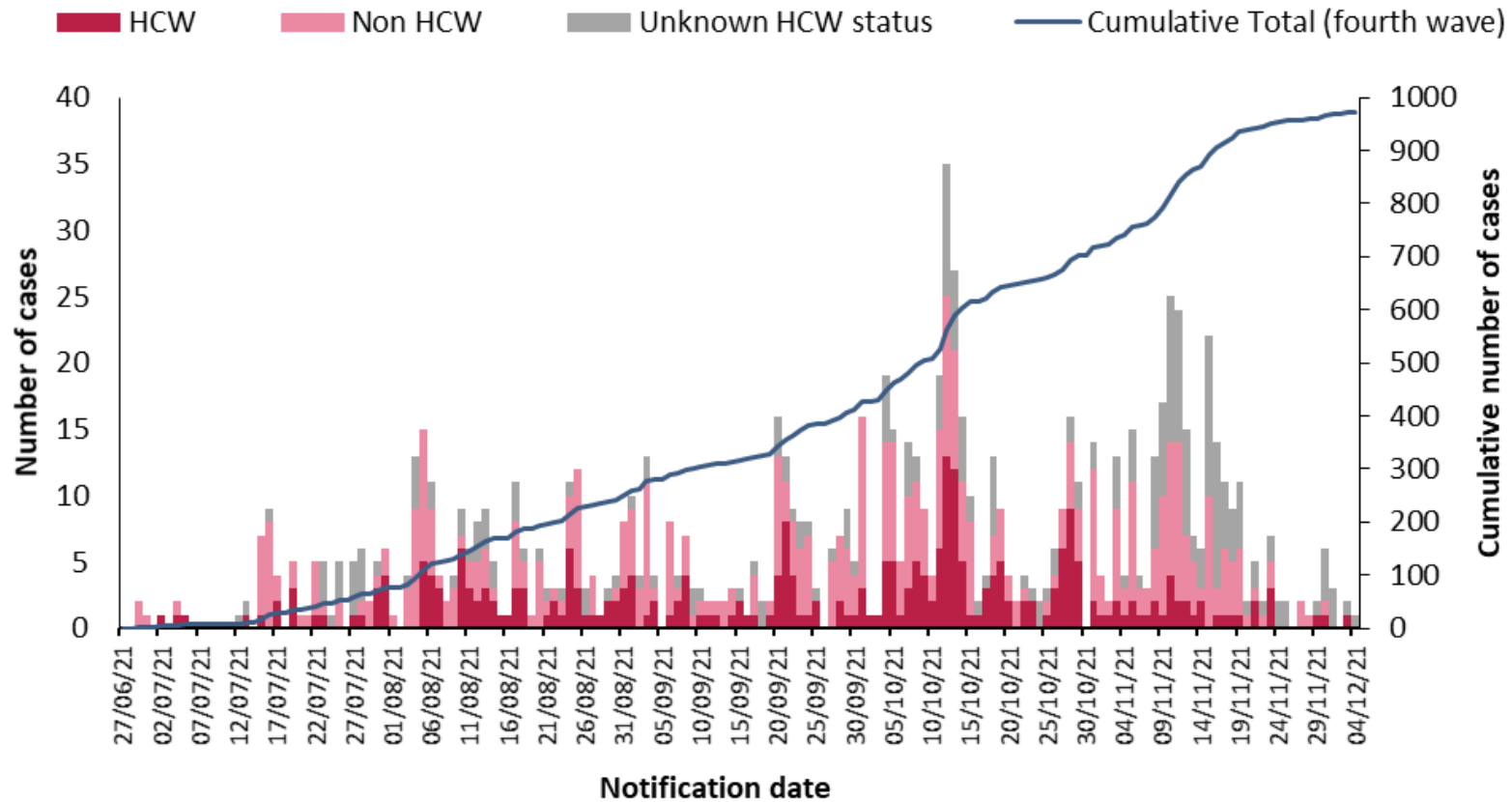


Figure 4: Epi-curve of confirmed COVID-19 cases linked to outbreaks in acute hospitals by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the fourth wave of infection by date of notification, from 27/06/2021 to midnight on 04/12/2021. *Data source: CIDR*

Note: Data are provisional

Focus on Residential Institutions (please see footnote¹)

There were **663** COVID-19 outbreaks in residential institutions, with **4,022** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 27/06/2021 to 04/12/2021, **214** outbreaks in residential institutions have been notified and **122** of these outbreaks remain open. There were **891 laboratory confirmed cases** linked to outbreaks in residential institutions. Of those, **29** cases were hospitalised, two were admitted to ICU and seven cases died (Table 6). The majority of residential institution outbreaks were notified in centres for disabilities, with **157** outbreaks and **675** confirmed linked cases notified since Week 26 2021.

There were 22 new COVID-19 outbreaks reported in residential institutions in Week 48 2021: 18 in centres for disabilities; three in a Children's/TUSLA residential centre; one in a mental health facility

Table 6: Number of COVID-19 outbreaks and cases in residential institutions in Ireland, from 27/06/2021 to midnight on 04/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	Week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Centre for disabilities	18	1-6	157	92	1-32	39	675	15	<5	<5
Centre for older people	0	n/a	4	3	4-5	0	15	<5	0	<5
Children's / TUSLA residential centre	3	1-7	24	12	1-7	9	81	0	0	0
Mental health facility*	1	n/a	17	10	1-10	<5	50	7	<5	<5
Other	0	n/a	10	5	3-10	<5	62	5	0	<5
Not Specified	0	n/a	2	0	n/a	0	8	0	0	0
Total	22	1-7	214	122	1-32	50	891	29	<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 this outbreak as yet.

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 **302** COVID-19 outbreaks associated with other healthcare settings, with **1,102** 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 04/12/2021 (Table 7). Since week 26 2021 there have been **110** outbreaks associated with other healthcare services and **70** of these remain open. There were **285 linked laboratory confirmed cases** associated with other healthcare service outbreaks.

There were ten new COVID-19 outbreaks reported in other healthcare settings in Week 48 2021: six associated with services for people with disabilities, three associated with home care services and one in other healthcare services.

Table 7: Number of COVID-19 outbreaks and cases associated with other healthcare settings in Ireland, from 27/06/2021 to midnight on 04/12/2021. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Clients of home care services	3	2-2	35	19	1-4	0	80	7	0	<5
People with disabilities	6	1-4	30	26	1-11	0	86	0	0	0
Clients of mental health facilities	0	n/a	12	8	1-3	0	26	<5	0	0
All other healthcare service	1	2	33	17	1-4	7	93	<5	<5	0
Total	10	1-4	110	70	1-11	7	285	14	<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 **843** COVID-19 outbreaks associated with the below described vulnerable populations, with **7,990** 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 04/12/2021 (Table 8). From 27/06/2021 to 04/12/2021, there have been **243** outbreaks in vulnerable populations, of which 130 remain open. There were **1,423 linked laboratory confirmed cases** associated with outbreaks in vulnerable groups in this time period.

There were seven new outbreaks reported in vulnerable populations during Week 48 2021:

- Three outbreaks among Irish Travellers
- Four outbreaks related to a Direct Provision Centre

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 04/12/2021 and laboratory confirmed cases linked to these outbreaks. *Data source: CIDR*

Vulnerable populations	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (Week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	Week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths*
Irish Travellers	3	3-4	183	98	1-33	25	1028	26	<5	<5
Roma community	0	n/a	20	12	1-22	0	116	8	<5	<5
Direct provision centres	4	2-3	18	8	2-23	11	120	7	0	0
Homeless ^{‡**}	0	n/a	13	7	2-5	0	54	<5	0	0
Persons with addictions	0	n/a	4	2	1-10	0	15	0	0	0
Prisons	0	n/a	5	3	2-75	5	90	<5	<5	<5
Total	7	2-4	243	130	1-75	41	1423	46	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). **No cases linked to this outbreak as yet.

Note: Data are provisional

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

There were **1,220** COVID-19 outbreaks in schools, with **6,226** linked laboratory confirmed COVID-19 cases; **219** outbreaks in universities colleges/third-level students, with **2,414** linked laboratory confirmed COVID-19 cases; **628** outbreaks in childcare facilities, with **3,352** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

In total, **687** 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 04/12/2021 (Table 9) and 209 of these outbreaks remain open.

During Week 48 2021, there were 30 COVID-19 outbreaks notified associated with school children +/- staff, and there were eight 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 04/12/2021 and laboratory confirmed cases linked to these outbreaks. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases [§]	Total hospitalised cases	Total ICU cases	Total number of deaths
Primary	12	0-18	330	99	0-36	22	2160	7	0	0
Post-primary	1	1	39	13	0-5	<5	159	0	0	0
Special education	15	1-5	64	47	1-17	10	239	<5	<5	0
Not specified/other	2	3-5	8	5	0-16	0	37	0	0	0
Total School*##	30	0-18	441	164	0-36	33	2595	8	<5	0
Childcare facility	8	2-15	231	38	0-15	14	1113	<5	0	0
University/college/third level students**	0	n/a	15	7	2-12	0	93	<5	0	0
Total	38	0-18	687	209	0-36	47	3801	11	<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, and interim measure has been applied whereby the higher number between aggregate and outbreak linked confirmed case numbers is used in the above 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 **1,236** COVID-19 outbreaks in workplaces, with **8,873** linked laboratory confirmed COVID-19 cases; **135** outbreaks in meat/poultry production and processing facilities, with **3,616** linked laboratory confirmed COVID-19 cases and **149** outbreaks in other food/beverage production and processing facilities, with **1,301** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

In total, **447** COVID-19 outbreaks associated with workplaces have been notified from 27/06/2021 up to midnight on 04/12/2021 (Table 10) and 95 of these outbreaks remain open.

During **Week 48** 2021, there were **seven** COVID-19 outbreaks notified associated with workplaces; **one** in a meat/poultry production and processing facility; **two** in other food/beverage production and processing and; four in a variety of other workplace settings including construction (n=2), commercial (n=1) and office (n=1).

Table 10: Number of COVID-19 outbreaks associated with workplaces notified to midnight on 04/12/2021 and laboratory confirmed cases linked to these outbreaks.
Data source: CIDR

Workplace outbreaks	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 26-48)				
	Week 48	Week 48 outbreaks: Range in no. of cases [#]	week 26-48	Number open	Open outbreaks: Range in no. of cases [#]	Cases notified in Week 48	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Meat/poultry production and processing	1	3	28	12	1-240	8	603	5	0	0
Other food/beverage production and processing	2	1-16	62	15	1-27	8	340	7	<5	0
Other workplaces	4	0-5	357	68	0-23	54	1082	15	<5	0
Total	7	0-16	447	95	0-240	70	2025	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

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 04/12/2021, N=21,067. *Data source: CIDR*

Outbreak Location	Outbreak closure status (all outbreak classifications)		
	Closed	Open	Total
Hospital	530	73	603
Nursing home	686	56	742
Community Hospital/Long-stay unit	72	15	87
Residential institution	724	140	864
Other healthcare service	231	71	302
School**	1056	164	1220
Childcare facility	590	38	628
University/college***	56	5	61
Workplace	1141	95	1236
Retail outlet	365	19	384
Hotel	100	10	110
Guest house/ B&B	13	0	13
Public house	100	13	113
Restaurant / Cafe	213	8	221
Travel related	247	24	271
Transport	59	5	64
Private house*	6382	5662	12044
Extended family	719	185	904
Community outbreak	515	9	524
Social gathering	255	26	281
Religious/Other ceremony	111	22	133
Sporting activities/fitness	87	5	92
Other recreation activity	26	0	26
Personal grooming service	46	2	48
Other	77	10	87
Unknown	5	0	5
Not specified	4	0	4
Total	14410	6657	21067

*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 6-9 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.