



# **Epidemiology of COVID-19 Outbreaks/Clusters in Ireland**

## Weekly Report

## Prepared by HPSC on 25<sup>th</sup> January 2021

Week 3 2021 (week ending 23<sup>rd</sup> January 2021)

## Note: Data are provisional

This report includes data extracted from CIDR on 25<sup>th</sup> January 2021 at 09:45am and includes COVID-19 outbreaks notified on CIDR up to midnight 23/01/2021.

Total Number of COVID-19 outbreaks notified since week 10	11,539
Number of COVID-19 outbreaks notified from week 48:	2,503
Number of COVID-19 outbreaks notified since week 48: OPEN	2,306
Number of COVID-19 outbreaks notified since week 48: CLOSED	197
Number of COVID-19 outbreaks notified in week 3 2021	268

Waves (weeks)	Dates
Wave 1 (weeks 10-31)	01/03/2020 - 01/08/2020
Wave 2 (week 32-47)	02/08/2020 - 21/11/2020
Wave 3 (week 48 onwards)	22/11/2020 onwards

Due to the recent surge in case numbers, there is a delay in linking of cases to outbreaks on the national surveillance system (CIDR). Therefore, the number of linked cases to outbreaks in this report is likely to be an underestimate.

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

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.

### Note: Data are provisional

HSE-Health Protection Surveillance Centre

## Summary (week 48 2020 to week 3 2021)

**2,503** 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:

- 1,307 (52%) were in private houses\*
- 139 (5.6%) were reported in hospitals
- 175 (7%) were reported in nursing homes
- 193 (7.7%) were reported in residential institutions
- 689 (28%) were reported in a range of other settings, including workplaces (n=161; 6.4%), restaurant/cafés (n=20; 0.8%) and travel/transport related settings (n=13; 0.5%). See Table 1 for further details.

197 outbreaks have been closed and 2,306 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.)

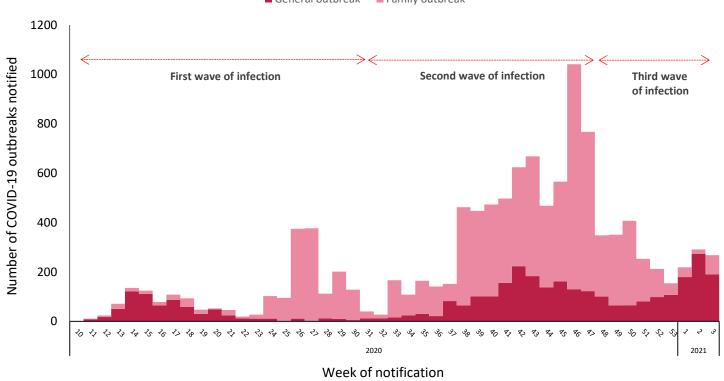
11,539 COVID-19 outbreaks have been reported in Ireland since week 10, 2020 (Figure 1).

#### Summary (week 3, 2021)

In week 3 2021, there were 268 COVID-19 outbreaks notified.

- The overall number of outbreaks notified in week 3 decreased by 23 compared to week 2
- There were 20 new acute hospital outbreaks reported
- There were 27 nursing home and five community hospital/long stay unit outbreaks notified
- There were 31 residential institution outbreaks reported
- Thirty-seven outbreaks associated with childcare facilities or with school children +/- school staff were notified in week 3
- There were 36 workplace outbreaks notified and locations are summarised in the workplaces section of this report
- The remaining 112 outbreaks included community outbreaks (n=3), private houses\* (n=71), extended family (n=13), Religious/other ceremony (n=1), retail (n=2), restaurant/cafe (n=1), other healthcare services (n=17) and other (n=4)

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



General outbreak Family outbreak

**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 23/01/2021, N=11,539. *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.

Week of Outbreak Notification Total Difference in number of **Outbreak location** (Week outbreaks notified since 48-3) last week Hospital -17 Nursing home -16 Community Hospital / Long-stay unit +2 -46 **Residential institution** -4 Community outbreak -7 Other healthcare services Hotel -1 Guest house/ B&B -3 Restaurant / Café Public house -1 Social gathering Retail outlet -5 -5 Workplace Travel related 

-1

+60

+2

+3

+14

+1

+1

-23

 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 23/01/2021, and difference in number of outbreaks notified in week 3 2021 compared to the previous week, N=2,503

\*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 1-3)

Private house: family outbreaks

Private house: general outbreaks

Transport

School\*

Other

Total

Extended family

Childcare Facility

University/College\*\*

Religious/Other ceremony

Personal grooming service

Sporting activity/fitness

Other recreation activity

#### 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.

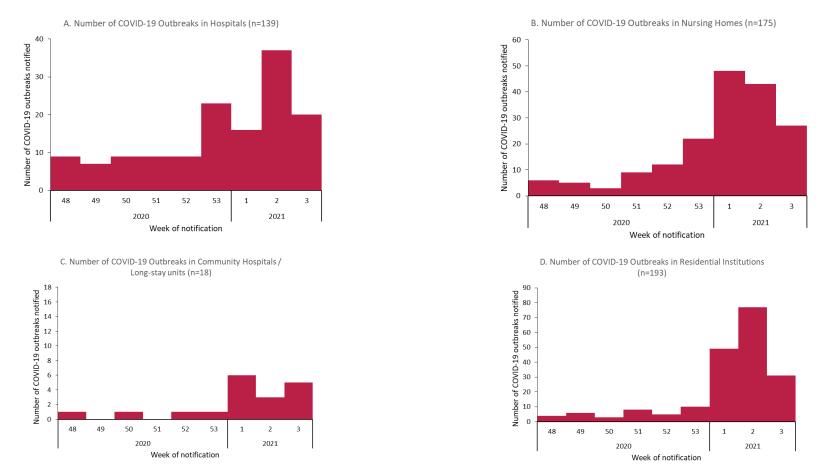


Figure 2 A-D: Epi-curve of COVID-19 outbreaks in (A) Acute Hospitals, (B) Nursing Homes, (C) Community Hospitals/Long-stay units and (D) Residential institutions notified in Ireland by week of notification, from 22/11/2020 to midnight on 23/01/2021. Data source: CIDR.

#### Focus on Nursing Homes and Community Hospitals

There have been **573** outbreaks in nursing homes and community hospital/long stay units, with **12,046** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 23/01/2021, **193** outbreaks in nursing homes or community hospital/long-stay units have been notified and 185 of these outbreaks remain open. A total of **4,096 laboratory confirmed cases** linked with outbreaks in nursing homes or community hospital/long-stay units have been notified. Of those cases, 213 were hospitalised, four were admitted to ICU, and 262 laboratory confirmed cases linked to outbreaks in these settings died (Table 2).

Cases were reported to be a healthcare worker (HCW) in 1,573 cases, not a HCW in 1,975 cases and HCW status was unknown for the remaining cases (Figure 3).

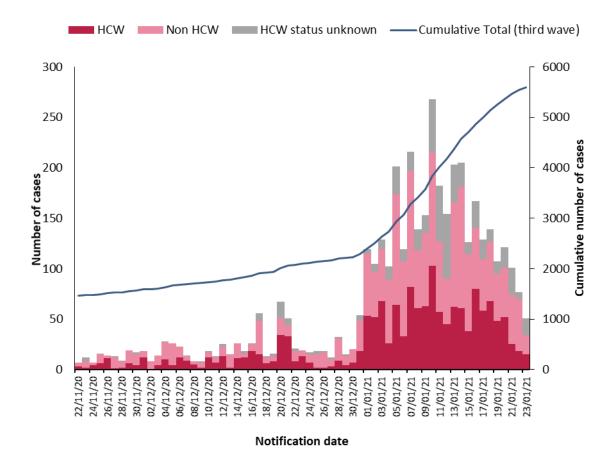
### There were 32 new outbreaks reported in nursing homes (n=27) and community hospital/long-stay units (n=5) during week 3 2021.

 Table 2: Number of COVID-19 outbreaks and cases<sup>‡</sup> in nursing homes and community hospital/long-stay units in Ireland, from 22/11/2020 to midnight on 23/01/2021. Data source: CIDR

		Number o	of outbre	aks notifie	d	Laboratory	confirmed	cases‡ linked to ວເ	utbreaks (w	/eek 48-3)*
Outbreak location	Week 3	Week 3 outbreaks: Range in no. of cases <sup>#</sup>	Week 48-3	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 3	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Nursing home	27	0-57	175	168	0-100	654	3705	166	<5	247
Community Hospital/Long-stay unit	5	2-13	18	17	2-54	71	391	47	<5	15
Total	32	0-57	193	185	0-100	725	4096	213	<5	262

‡Case numbers fewer than 5 are not presented here.

\*Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-3)



**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 23/01/2021. *Data source: CIDR* 

#### **Focus on Acute Hospitals**

There were **317** outbreaks in acute hospitals, with **3,537** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 23/01/2021, 139 outbreaks in acute hospitals have been notified and 116 of these outbreaks remain open. A total of 1,140 laboratory confirmed cases linked with outbreaks in acute hospitals have been notified. Of those, 21 were admitted to ICU and 106 died (Table 3). Cases were reported to be a healthcare worker (HCW) in 495 cases, not a HCW in 623 cases and HCW status was unknown for the remaining cases (Figure 4).

#### There were 20 new outbreaks reported in acute hospitals during week 3 2021:

Table 3: Number of COVID-19 outbreaks and cases<sup>‡</sup> in acute hospital settings in Ireland, from 22/11/2020 to midnight on 23/01/2021. Data source: CIDR

		Number o	f outbrea	ks notified				ned cases week 48-3	
Outbreak location: Acute Hospitals	Week 3	Week 3 outbreaks: Range in no. of cases	Open outbreaks: Range in no. of cases	Cases notified in week 3	Total cases	Total ICU cases	Total number of deaths		
	20	0-16	139	116	0-63	88	1140	21	106

\*Contains data from weeks in 2020 (48-53) and 2021 (weeks 1-3)



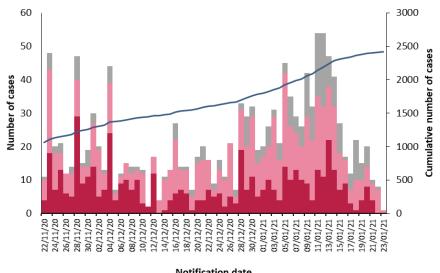


Figure 4: Epi-curve of confirmed COVID-19 cases linked to outbreaks in acute hospitals by healthcare worker (HCW) status and by date of notification, and cumulative number of confirmed cases during the second and third waves of infection by date of notification, from 22/11/2020 to 23/01/2021. Data source: CIDR

Notification date

#### Focus on Residential Institutions (see footnote<sup>1</sup>)

There were **391** outbreaks in residential institutions, with **2,075** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From 22/11/2020 to 23/01/2021, **153** outbreaks in residential institutions have been notified and 143 of these outbreaks remain open. There were **670 laboratory confirmed cases** linked with outbreaks in residential institutions. Of those, 34 cases linked to outbreaks in residential facilities were hospitalised, 1 was admitted to ICU and 11 died (Table 4). The majority of residential institution outbreaks were notified in centres for disabilities, with **103** outbreaks and **432** linked cases notified since week 48.

#### There were 25 new outbreaks reported in residential institutions during week 3 2021:

- Seventeen outbreaks were in centres for disabilities in six of the eight regions
- Six outbreaks were in mental health facilities
- The location of two residential institution outbreaks were not specified or 'other'

## Table 4: Number of COVID-19 outbreaks and cases<sup>‡</sup> in residential institutions in Ireland, from 22/11/2020 to midnight on 23/01/2021. Data source: CIDR

		Number o	of outbre	aks notified	i	Laboratory confirmed cases <sup>+</sup> linked to outbreaks (week 48-3)*					
Outbreak location	Week outbreaks: Week Number outbreaks: notified		Cases notified in week 3	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths				
Centre for disabilities	17	0-8	103	95	0-21	48	432	16	<5	5	
Children's / TUSLA residential centre	0	n/a	11	11	0-8	<5	25	<5	<5	<5	
Mental health facility	6	0-9	15	15	0-17	17	75	15	<5	<5	
Other	1	1-1	5	3	0-19	<5	29	<5	<5	<5	
Not Specified	1	4-4	19	19	0-36	25	109	<5	<5	<5	
Total	25	0-9	153	143	0-36	92	670	34	<5	11	

#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 1-3)

<sup>&</sup>lt;sup>1</sup> This section focusses 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**

There were **221** outbreaks in vulnerable populations, with **2,546** 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 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 23/01/2021 (Table 7).

#### There were 17 new outbreaks reported in vulnerable populations during week 3 2021:

- Eleven outbreaks among Irish Travellers
- Three outbreaks in people with addictions
- Two outbreaks in Direct Provision Centres
- One outbreak in homeless populations

**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 23/01/2021 and laboratory confirmed cases<sup>‡</sup> linked to these outbreaks. *Data source: CIDR* 

		Number of	of outbre	aks notifie	d	Laboratory confirmed cases <sup>‡</sup> linked to outbreaks (week 48-3)**					
Vulnerable populations	Week 3	Week 3 outbreaks: Range in no. of cases <sup>#</sup>	Week 48-3	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 3	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	11	0-70	39	36	0-70	62	468	18	<5	<5	
Direct provision centres	2	7-13	15	12	1-30	42	133	<5	<5	<5	
Homeless <sup>^</sup>	1	3-3	5	4	0-14	11	21	<5	<5	<5	
People with addictions	3	0-7	7	7	0-7	5	14	<5	<5	<5	
Prisons	0	n/a	3	3	3-32	<5	48	<5	<5	<5	
Total	17	0-70	73	62	0-70	120	712	26	6	<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 1-3)

#### **COVID-19 Outbreaks in Workplaces**

In total, **161** COVID-19 outbreaks in workplaces<sup>2</sup> have been notified from 22/11/2020 up to midnight on 23/01/2021. Since week 48, **32** COVID-19 outbreaks have been notified in businesses associated with the production or processing of food and beverages, of which **19** were in meat/poultry/fish plants in 7/8 HSE areas.

## There were 36 COVID-19 workplace outbreaks notified during week 3 2021:

- 11 related to food production in 6/8 regions, six in meat/poultry production and five in other food-production
- Ten outbreaks were associated with the Commercial sector
- There were six office-based outbreaks
- There were four outbreaks associated with Defence/Justice/Emergency services
- Other outbreaks occurred in Manufacturing (n=3) and the Construction sector (n=2)

**Table 6:** Number of COVID-19 workplace outbreaks notified from 22/11/2020 to midnight on 23/01/2021 and laboratory confirmed cases<sup>‡</sup> linked to workplace outbreaks.

		Number of	f outbreal	ks notified	Laboratory confirmed cases <sup>‡</sup> linked to outbreaks (week 48-3)***						
Workplace outbreaks	Week 3	Week 3 outbreaks: Range in no. of cases <sup>#</sup>	Week 48-3	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 3	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths*	
Meat/poultry Production and Processing	6	0-37	19	18	0-100	100	397	<5	<5	<5	
Other food/beverage Production and Processing	5	0-6	13	12	0-37	10	116	<5	<5	<5	
Construction industry**	2	0-2	8	7	0-4	<5	14	<5	<5	<5	
Commercial	10	0-52	34	26	0-52	10	174	<5	<5	<5	
Manufacturing	3	0-6	21	13	0-10	<5	70	<5	<5	<5	
Office-based	6	0-16	20	17	0-17	<5	59	<5	<5	<5	
Defence/Justice/Emergency services	4	2-3	26	24	0-10	<5	89	<5	<5	<5	
Other Workplace <sup>^</sup>	0	n/a	19	14	0-18	<5	65	<5	<5	<5	
Total	36	0-52	161	131	0-100	125	984	13	<5	<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. ^"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 1-3)

<sup>&</sup>lt;sup>2</sup> 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, **207** 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 23/01/2021.

During week 3 2021, there were 9 COVID-19 outbreaks associated with school children +/- staff and 28 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 23/01/2021 and laboratory confirmed cases<sup>‡</sup> linked to these outbreaks.

	Number of outbreaks notified							Laboratory confirmed cases <sup>+</sup> linked to outbreaks (week 48- 3) <sup>##</sup>						
Outbreak location	Week 3	Week 3 outbreaks: Range in no. of cases <sup>#</sup>	Week 48-3	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 3	Total cases	Total hospitalised cases	Total ICU cases***	Total number of deaths				
School*	9	0-3	115	90	0-50	<5	506	5	<5	<5				
University/college/third level students**	0	n/a	15	6	2-36	<5	73	<5	<5	<5				
Childcare facility	28	0-11	77	65	0-22	33	319	<5	<5	<5				
Total	37	0-11	207	161	0-50	35	898	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

\*\*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.

#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 1-3)

## Appendices Appendix 1

Table A: Number of COVID-19 outbreaks notified in Ireland by outbreak location and closure status,to midnight 23/01/2021, N=11,539

Outbreak Location	Outbreak closure s	status (all outbreak	classifications)
	Closed	Open	Total
Hospital	191	126	317
Nursing home	352	171	523
Community Hospital/Long-stay unit	32	18	50
Residential institution	290	183	473
Other healthcare service	28	59	87
Private house*	2784	5363	8147
Workplace	310	142	452
Travel related	57	12	69
Transport	8	6	14
Extended family	133	163	296
Childcare facility	86	70	156
Community outbreak	117	114	231
Hotel	12	3	15
Guest house/ B&B	1	0	1
Public house	21	9	30
Restaurant / Cafe	45	17	62
Social gathering	43	20	63
Retail outlet	26	25	51
School**	214	101	315
University/college***	31	1	32
Religious/Other ceremony	14	15	29
Sporting activities/fitness	28	0	28
Other recreation activity	1	0	1
Personal grooming service	4	3	7
Pet farm / Petting zoo	0	0	0
Other	65	22	87
Unknown	0	1	1
Not specified	1	0	1
Total	4894	6645	11539

\*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 21<sup>st</sup> 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 21<sup>st</sup> 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: <u>https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/</u>

- 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.