



# Epidemiology of COVID-19 Outbreaks/Clusters in Ireland

## Weekly Report

Prepared by HPSC on 14<sup>th</sup> December 2020

Week 50 2020 (week ending 12<sup>th</sup> December 2020)

### Note: Data are provisional

This report includes data extracted from CIDR on 14<sup>th</sup> December 2020 at 09:15am and includes COVID-19 outbreaks notified on CIDR up to midnight 12/12/2020.

<b>Total Number of COVID-19 outbreaks notified since week 10</b>	<b>10,150</b>
<b>Number of COVID-19 outbreaks notified from week 32 (02/08/2020) onwards</b>	<b>7,884</b>
<b>Number of COVID-19 outbreaks notified since week 32: OPEN</b>	<b>5,646</b>
<b>Number of COVID-19 outbreaks notified since week 32: CLOSED</b>	<b>2,238</b>
<b>Number of COVID-19 outbreaks notified in week 50 2020</b>	<b>410</b>

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.

**Note: Data are provisional**

### Summary (week 32-50, 2020)

**7,884** outbreaks have been reported from week 32 onwards (week commencing 02/08/2020; the second wave of COVID-19 infection in Ireland) and key outbreak locations are as follows:

- 6,213 (79%) were in private houses
- 100 (1%) were reported in hospitals
- 93 (1%) were reported in nursing homes
- 112 (1%) were reported in residential institutions
- 1,360 (17%) were reported in a range of other settings, including workplaces (n=279; 4%), restaurant/cafés (n=43; 0.5%) and travel/transport related settings (n=40; 0.5%). See Table 1 for further details.

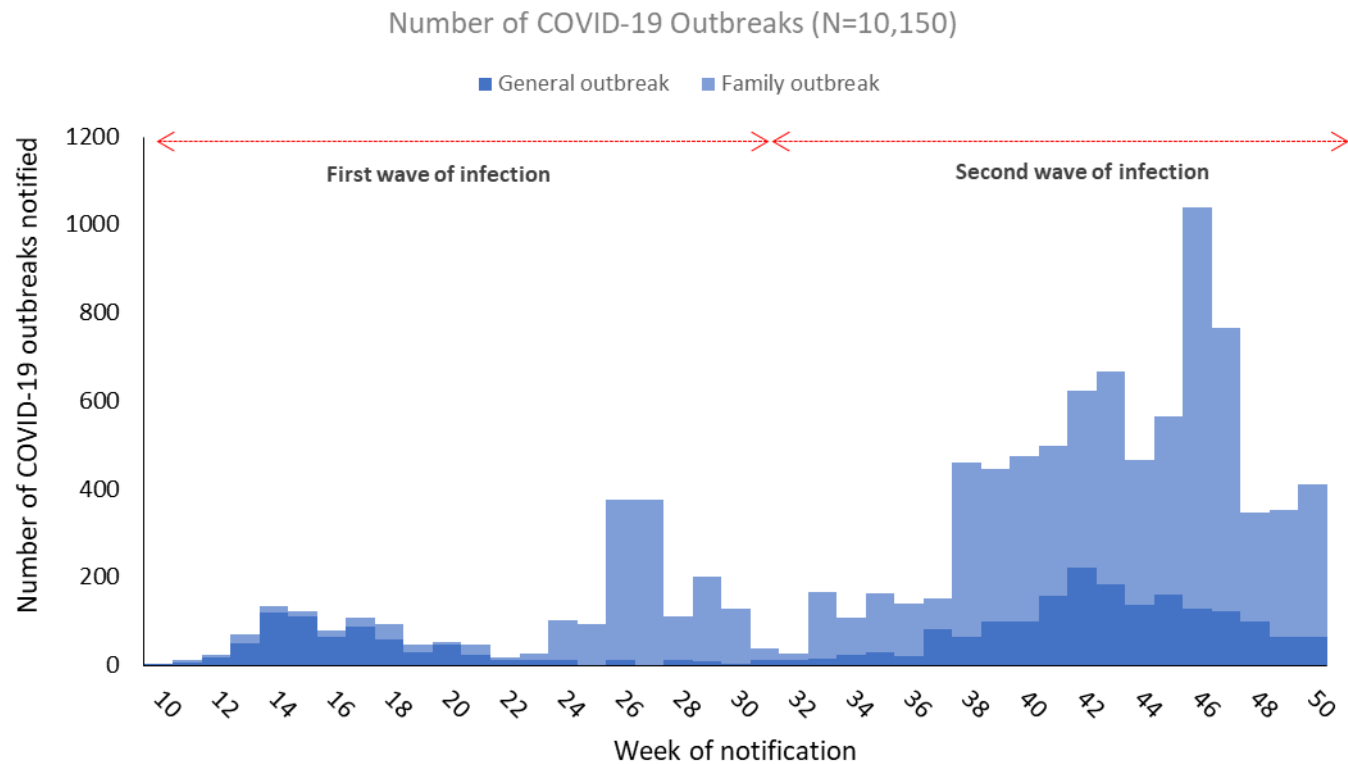
2,238 outbreaks have been closed and 5,646 outbreaks are open (See appendix 1 for breakdown of outbreaks by location and outbreak status. Note that it is common practice not to close private house outbreaks on CIDR due to the large volume of outbreaks in this category.)

10,150 COVID-19 outbreaks have been reported in Ireland since week 10 2020 (Figure 1).

### Summary (week 50, 2020)

In **week 50** 2020, there were **410** COVID-19 outbreaks notified.

- The overall number of outbreaks notified in week 50 increased by 58 compared to an updated number of 352 outbreaks notified in week 49
- Private houses remain the most commonly reported outbreak location
- There were 9 new acute hospital outbreaks reported this week
- There were 4 nursing home and 1 community hospital/long stay unit outbreaks notified in week 50
- Three residential institution outbreaks were reported
- Twenty-one outbreaks associated with childcare facilities or with school children +/- school staff were notified in week 50
- There were two travel or transport-associated outbreaks
- Nine workplace outbreaks were notified and locations are summarised in the workplaces section of this report



**Figure 1:** Epi-curve of COVID-19 outbreaks in all settings notified in Ireland by week of notification to midnight on 12/12/2020, N=10,152. *Data source: CIDR* Dashed red arrows indicate the timeline of the first and second waves of COVID-19 infection in Ireland (Second wave of infection commenced in week 32; week beginning 02/08/2020).

**\*Note:** Family outbreaks reported in July (weeks 26 and 27) were composed largely of late notified outbreaks from the period March to May.

**Table 1:** Number of COVID-19 outbreaks notified in Ireland by outbreak location and by week of notification from 02/08/2020 to midnight on 12/12/2020, and difference in number of outbreaks notified in week 50 compared to the previous week, N=7,884

Outbreak location	Week of Outbreak Notification									Difference in number of outbreaks notified since last week	Total (Week 32-50)
	32-42	43	44	45	46	47	48	49	50		
Hospital	31	4	7	11	9	13	9	7	9	+2	100
Nursing home	42	15	7	3	6	5	6	5	4	-1	93
Community Hospital / Long-stay unit	1	0	0	0	1	2	1	0	1	+1	6
Residential institution	52	11	16	7	8	5	4	6	3	-3	112
Community outbreak	110	9	7	21	16	18	6	1	6	+5	194
Other healthcare services	8	2	3	7	1	1	1	1	3	+2	27
Hotel	6	1	0	1	0	1	0	0	1	+1	10
Guest house/ B&B	1	0	0	0	0	0	0	0	0	0	1
Restaurant / Cafe	32	1	2	3	1	2	2	0	0	0	43
Public house	15	1	1	0	0	0	1	0	0	0	18
Social gathering	38	4	3	0	3	3	1	0	3	+3	55
Retail outlet	12	4	2	1	1	0	2	4	0	-4	26
Workplace	150	25	12	15	21	20	19	8	9	+1	279
Travel related	20	0	0	3	1	1	1	1	2	+1	29
Transport	3	1	1	1	3	1	0	1	0	-1	11
Private house: family outbreaks	2329	477	324	390	896	624	238	279	328	+49	5885
Private house: general outbreaks	113	38	29	46	41	23	23	9	6	-3	328
Extended family	97	5	5	12	13	20	9	8	13	+5	182
Childcare Facility	37	18	9	11	2	2	5	5	2	-3	91
School*	77	44	28	23	10	18	13	14	19	+5	246
University/College**	6	2	6	5	3	4	4	2	0	-2	32
Religious/Other ceremony	9	3	1	1	1	2	1	1	0	-1	19
Sporting activity/fitness	22	1	1	2	1	0	0	0	1	+1	28
Other recreation activity	1	0	0	0	0	0	0	0	0	0	1
Personal grooming service	1	2	1	0	1	0	0	0	0	0	5
Other	50	0	3	3	1	2	2	0	0	0	61
Unknown	0	0	0	0	1	0	0	0	0	0	1
Not specified	1	0	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>3264</b>	<b>668</b>	<b>468</b>	<b>566</b>	<b>1,041</b>	<b>767</b>	<b>348</b>	<b>352</b>	<b>410</b>	<b>+58</b>	<b>7,884</b>

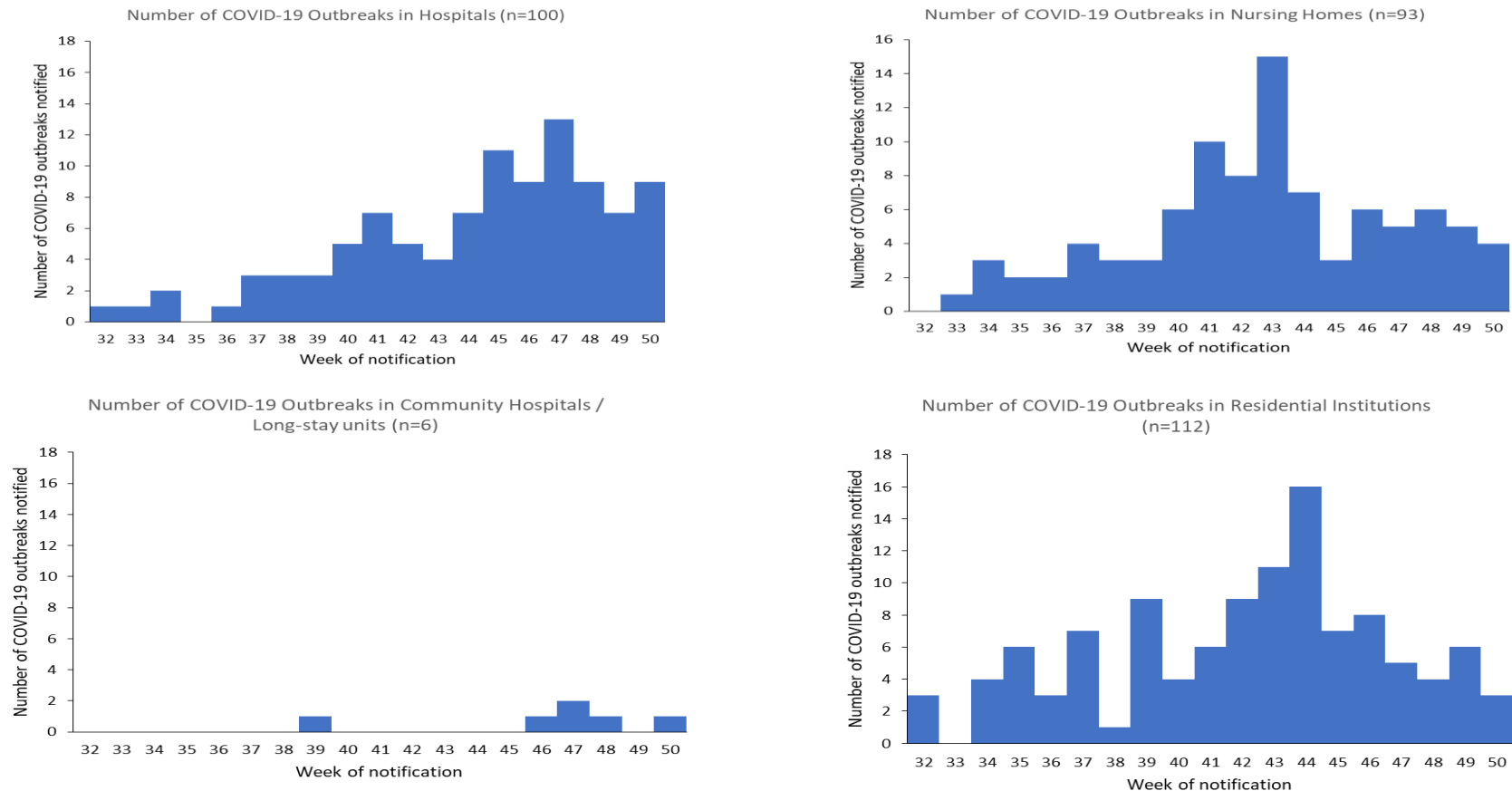
\*These outbreaks are outbreaks associated with school children +/- or school staff. Transmission of COVID-19 within the school has not necessarily been established in these outbreaks.

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

**Note: Data are provisional**

### 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. Further data on COVID-19 outbreaks in all acute hospitals, residential facilities and in nursing homes in Ireland by date of notification are available in the daily COVID-19 surveillance report.



**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 02/08/2020 to midnight on 12/12/2020. *Data source: CIDR.*

**Note: Data are provisional**

### Focus on Nursing Homes and Community Hospitals

There have been **400** outbreaks in nursing homes and community hospital/long stay units, with **8,133** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

From week 32 (week commencing 02/08/2020) to 12/12/2020, **99** outbreaks in nursing homes or community hospital/long-stay units have been notified and 39 of these outbreaks remain open. A total of **1,736 laboratory confirmed COVID-19 cases** have been linked to these 99 outbreaks. Of those cases, 102 were hospitalised and 115 laboratory confirmed cases linked to outbreaks in these settings died (Table 2).

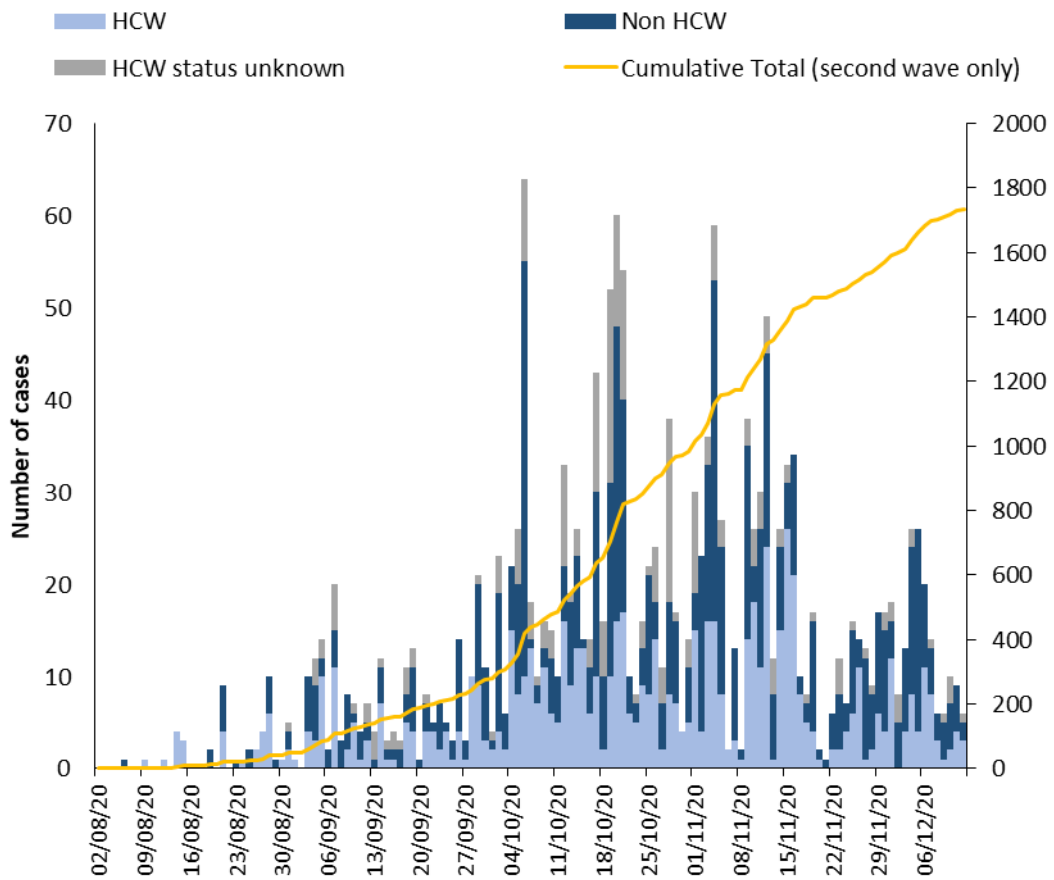
Cases were reported to be a healthcare worker (HCW) in 703 cases, not a HCW in 778 cases and HCW status was unknown for the remaining cases (Figure 3).

**There were 5 new outbreaks reported in nursing homes (n=4) and community hospital/long-stay units (n=1) during week 50.**

**Table 2:** Number of COVID-19 outbreaks and cases<sup>‡</sup> in nursing homes and community hospital/long-stay units in Ireland, from 02/08/2020 to midnight on 12/12/2020. *Data source: CIDR*

Outbreak location	Number of outbreaks notified				
	Week 50	Week 50 outbreaks: Range in no. of cases	Week 32-50	Number open	Open outbreaks: Range in no. of cases
Nursing home	4	1-11	93	34	1-86
Community Hospital/Long-stay unit	1	2-2	6	5	1-53
<b>Total</b>	<b>5</b>	<b>1-11</b>	<b>99</b>	<b>39</b>	<b>1-86</b>
Outbreak location	Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Cases notified in week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Nursing home	67	1663	101	<5	115
Community Hospital/Long-stay unit	<5	73	<5	<5	<5
<b>Total</b>	<b>71</b>	<b>1736</b>	<b>102</b>	<b>2</b>	<b>115</b>

‡Case numbers less than 5 are not presented here



**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 second wave of infection by date of notification, from 02/08/2020 to midnight 12/12/2020. *Data source: CIDR*

### Focus on Acute Hospitals

There were **203** outbreaks in acute hospitals, with **2,523** linked laboratory confirmed COVID-19 cases, notified in Ireland since 01/03/2020.

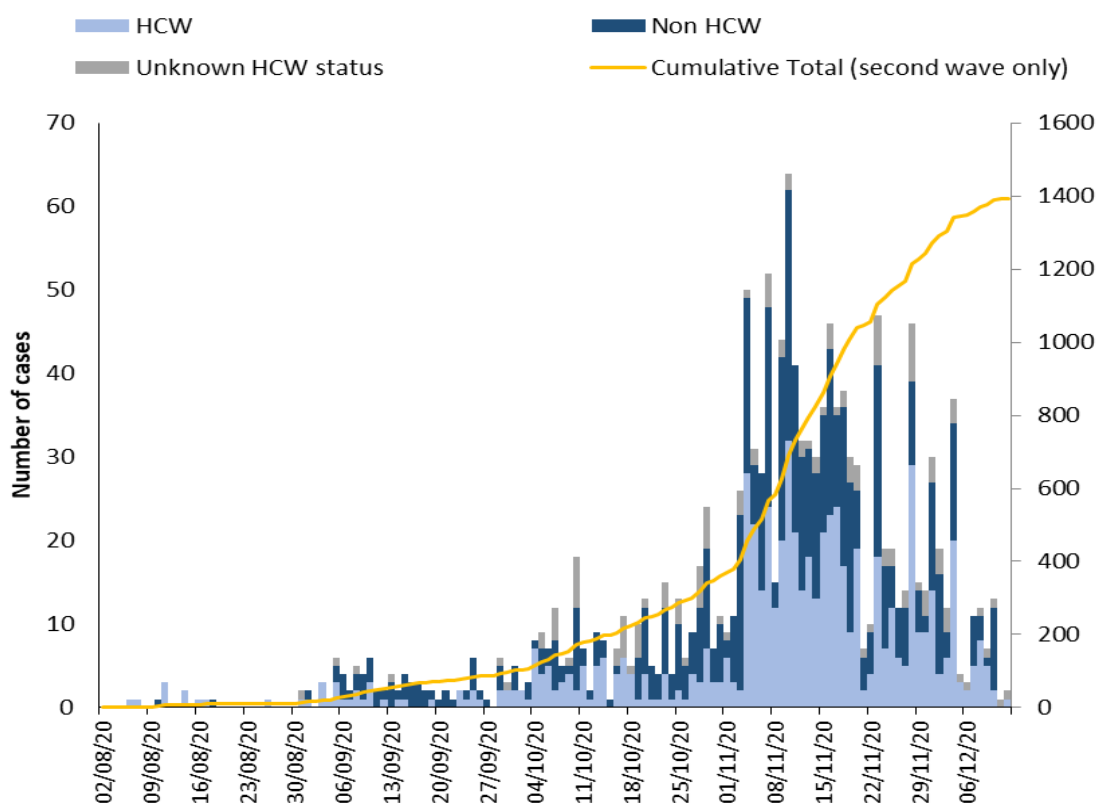
From week 32 (week commencing 02/08/2020) to 12/12/2020, **100** outbreaks in acute hospitals have been notified and 51 of these outbreaks remain open. A total of **1,395 laboratory confirmed COVID-19 cases** have been linked to these 100 outbreaks. Of those cases, 26 were admitted to ICU and 96 died (Table 3). Cases were reported to be a healthcare worker (HCW) in 652 cases, not a HCW in 615 cases and HCW status was unknown for the remaining cases (Figure 4).

### There were 9 new outbreaks reported in acute hospitals during week 50

**Table 3:** Number of COVID-19 outbreaks and cases<sup>‡</sup> in acute hospital settings in Ireland, from 02/08/2020 to midnight on 12/12/2020. *Data source: CIDR*

Outbreak location: Acute Hospitals	Number of outbreaks notified				Open outbreaks: Range in no. of cases
	Week 50	Week 50 outbreaks: Range in no. of cases	Week 32-50	Number open	
	9	0-6	100	51	0-138
Outbreak location: Acute Hospitals	Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Cases notified in week 50		Total cases	Total ICU cases	Total number of deaths
	49		1395	26	96

‡Case numbers less than 5 are not presented here



**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 wave of infection by date of notification, from 02/08/2020 to 12/12/2020. *Data source: CIDR*

**Note: Data are provisional**



### Focus on Residential Institutions<sup>1</sup>

From week 32 (week commencing 02/08/2020) to 12/12/2020, **86** outbreaks in residential institutions have been notified and 18 of these outbreaks remain open. There were **418 laboratory confirmed COVID-19 cases** linked to these 86 outbreaks. Of those cases, 19 were hospitalised (Table 4). The majority of residential institution outbreaks were notified in centres for disabilities, with **52** outbreaks and **263** linked cases notified since week 32.

**There were 3 new outbreaks reported in residential institutions during week 50:**

- One outbreak was in a centre for disabilities
- Two outbreaks were in residential facilities where residential facility type was not specified

**Table 4:** Number of COVID-19 outbreaks and cases<sup>‡</sup> in residential institutions in Ireland, from 02/08/2020 to midnight on 12/12/2020. *Data source: CIDR*

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-50	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Centre for disabilities	1	2-2	52	8	2-11	<5	263	9	<5	<5
Children's / TUSLA residential centre	0	n/a	8	1	n/a	<5	23	<5	<5	<5
Mental health facility	0	n/a	10	1	n/a	<5	77	<5	<5	<5
Other	0	n/a	8	4	0-6	<5	21	<5	<5	<5
Not Specified	2	2-4	8	4	2-9	<5	34	<5	<5	<5
<b>Total</b>	<b>3</b>	<b>0-4</b>	<b>86</b>	<b>18</b>	<b>0-11</b>	<b>&lt;5</b>	<b>418</b>	<b>19</b>	<b>&lt;5</b>	<b>&lt;5</b>

#n/a is used where there were no outbreaks or where there are no confirmed cases currently linked to an outbreak

‡Case numbers less than 5 are not presented here

<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

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 12/12/2020 (Table 5).

**There were 2 new outbreaks reported in vulnerable populations during week 50:**

- Both were among Irish Travellers

**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 32 (week commencing 02/08/2020) to midnight on 12/12/2020 and laboratory confirmed cases<sup>‡</sup> linked to these outbreaks. *Data source: CIDR*

Vulnerable populations	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Week 50	Week 40 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-50	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Roma community	0	n/a	8	6	3-71	<5	133	8	<5	<5
Irish Travellers	2	10-10	74	45	0-66	10	1128	51	<5	<5
Direct provision centres	0	n/a	15	3	6-13	<5	109	<5	<5	<5
Homeless <sup>^</sup>	0	n/a	6	0	n/a	<5	13	5	<5	<5
People with addictions	0	n/a	2	0	n/a	<5	33	<5	<5	<5
Prisons	0	n/a	3	2	2-9	<5	33	<5	<5	<5
<b>Total</b>	<b>2</b>	<b>0-10</b>	<b>108</b>	<b>56</b>	<b>0-71</b>	<b>10</b>	<b>1449</b>	<b>64</b>	<b>7</b>	<b>&lt;5</b>

<sup>^</sup> Homeless facilities include some facilities that provide long term supported accommodation. Also includes staff of homeless facilities.

<sup>#</sup>n/a is used where there were no outbreaks or where there are no confirmed cases currently linked to an outbreak

<sup>‡</sup>Case numbers less than 5 are not presented here

**Note: Data are provisional**

### COVID-19 Outbreaks in Workplaces

In total, **279** COVID-19 outbreaks in workplaces<sup>2</sup> have been notified from week 32 (week commencing 02/08/2020) to midnight on 12/12/2020. Since week 32, **54** COVID-19 outbreaks have been notified in businesses associated with the production or processing of food and beverages, of which **34** were in meat/poultry/fish plants in all HSE areas.

There were **9 COVID-19 workplace outbreaks notified during week 50**.

- One outbreak occurred in a business associated with food/beverage production and one in a business associated with the construction sector

**Table 6:** Number of COVID-19 workplace outbreaks notified from 02/08/2020 to midnight on 12/12/2020 and laboratory confirmed cases<sup>‡</sup> linked to workplace outbreaks.

Workplace outbreaks	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-50	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
Meat/poultry Production and Processing	0	n/a	34	13	2-57	30	596	9	<5	<5
Other food/beverage Production and Processing	1	14-14	20	7	0-14	8	157	<5	<5	<5
Construction industry**	1	2-2	48	18	0-11	<5	178	<5	<5	<5
Commercial	2	1-2	71	25	1-11	<5	311	<5	<5	<5
Manufacturing	3	2-6	28	20	0-27	<5	143	5	<5	<5
Office-based	1	n/a	40	16	0-22	<5	130	<5	<5	<5
Defence/Justice/Emergency services	0	n/a	14	5	1-4	<5	59	<5	<5	<5
Other Workplace <sup>^</sup>	1	0-2	22	10	2-11	<5	61	<5	<5	<5
<b>Total</b>	<b>9</b>	<b>0-14</b>	<b>279</b>	<b>115</b>	<b>0-57</b>	<b>45</b>	<b>1642</b>	<b>26</b>	<b>&lt;5</b>	<b>&lt;5</b>

\*\*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.

<sup>^</sup>“Other workplace” includes businesses that do not fit in the above workplace categories. #n/a is used where there were no outbreaks or where there are no confirmed cases currently linked to an outbreak.

‡Case numbers less than 5 are not presented here

<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.

**Note: Data are provisional**

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

In total, **425** COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities have been notified since week 32 (week commencing 02/08/2020) to midnight on 12/12/2020.

During Week 50, there were 19 COVID-19 outbreaks associated with school children +/- staff, two COVID-19 outbreaks associated with childcare facilities and one outbreak associated with universities/colleges/third level students. Sixteen of the 22 outbreaks in these settings in week 50 have more than one linked laboratory confirmed case.

**Table 7:** Number of COVID-19 outbreaks associated with school children (+/- staff), universities/colleges/third level students and childcare facilities notified to midnight on 12/12/2020 and laboratory confirmed cases<sup>‡</sup> linked to these outbreaks.

Outbreak location	Number of outbreaks notified					Laboratory confirmed cases linked to outbreaks (week 32-50)				
	Week 50	Week 50 outbreaks: Range in no. of cases <sup>#</sup>	Week 32-50	Number open	Open outbreaks: Range in no. of cases <sup>#</sup>	Cases notified in week 50	Total cases	Total hospitalised cases	Total ICU cases	Total number of deaths
School*	19	0-13	246	103	0-27	41	987	5	<5	<5
University/college/third level students**	1	0-1	88	40	1-187	<5	994	12	<5	<5
Childcare facility	2	0-4	91	39	0-16	11	434	<5	<5	<5
<b>Total</b>	<b>22</b>	<b>0-13</b>	<b>425</b>	<b>182</b>	<b>0-187</b>	<b>52</b>	<b>2415</b>	<b>20</b>	<b>&lt;5</b>	<b>&lt;5</b>

\*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

#n/a is used where there were no outbreaks or where there are no confirmed cases currently linked to an outbreak

‡Case numbers less than 5 are not presented here

**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 12/12/2020, N=10,150

Outbreak Location	Outbreak closure status (all outbreak classifications)		
	Closed	Open	Total
Hospital	152	51	203
Nursing home	330	34	364
Community Hospital/Long-stay unit	31	5	36
Residential institution	264	26	290
Other healthcare service	19	9	28
Private house*	2706	5026	7732
Workplace	215	115	330
Travel related	52	11	63
Transport	5	6	11
Extended family	127	94	221
Childcare facility	52	39	91
Community outbreak	98	111	209
Hotel	6	6	12
Guest house/ B&B	1	0	1
Public house	18	5	23
Restaurant / Cafe	38	6	44
Social gathering	38	18	56
Retail outlet	20	11	31
School**	143	103	246
University/college***	24	8	32
Religious/Other ceremony	13	6	19
Sporting activities/fitness	28	0	28
Other recreation activity	1	0	1
Personal grooming service	3	2	5
Pet farm / Petting zoo	0	0	0
Other	62	10	72
Unknown	0	1	1
Not specified	1	0	1
<b>Total</b>	<b>4,447</b>	<b>5,703</b>	<b>10,150</b>

\*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 COVID-19 Outbreak Definition

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.

### **This report includes confirmed and suspected COVID-19 outbreaks.**

These outbreaks are recorded on Ireland's Computerised Infectious Disease Reporting System (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/>