



# Weekly Epidemiological Report on COVID-19 cases aged 0-18 years and COVID-19 mass testing in schools in Ireland Week 1, 2022

Health Protection Surveillance Centre, HPSC COVID-19 Epidemiology Team, 10/01/2022

Dates to note:

- Week 1 2022 (2<sup>nd</sup> 8<sup>th</sup> January 2022-)
- Week 10 2020 (1<sup>st</sup> to 7<sup>th</sup> March 2020) The beginning of the pandemic in Ireland
- 2021/2022 academic year in Ireland (Week 35 2021 (week commencing 29/09/2021) to present)
- Wave 4 of the pandemic in Ireland (Week 26 2021 (week commencing 27/06/2021) to Week 50 2021 (week commencing 19/12/2021)
- Wave 5 of the pandemic in Ireland (Week 51 2021 (week commencing 26/12/2021) to present)
- Please see next slide for additional dates to note

Note: The epidemiological weeks in this report, run from Sunday to Saturday, please refer to the surveillance resources on the HPSC website for a complete list of epidemiological weeks with start and end dates.

Note: Data were extracted from the Computerised Infectious Disease Reporting (CIDR) system on 10/01/2022 and 11/01/2022. These data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.

The data source for the COVID-19 mass testing in schools summary was the HSE COVID Care Tracker (CCT) and SwiftQueue, extracted on 10/01/2022.

#### Summary of important dates for childcare facilities (CCFs) and schools

Also see Figures 1a and 1b for summary of key dates



Epidemiological Week*	Epi week start date	School and childcare facility closures/openings and other key dates
Week 11, 2020	08/03/2020	All Schools and Childcare facilities close.
Week 27, 2020	29/06/2020	Childcare facilities re-open.
Week 35, 2020	23/08/2020	Schools re-open for 2020/21 academic year.
Week 52, 2020	20/12/2020	All schools close for on-site education. Childcare facilities continue with reduced capacity.
Week 6, 2021: Phased re- opening of schools commences	07/02/2021	Partial re-opening of special education schools.
Week 9, 2021	28/02/2021	Junior classes in primary school (junior infants to 2 <sup>nd</sup> class) and leaving certificate students in secondary school return. Childcare facilities return to full capacity.
Week 11, 2021	14/03/2021	The remaining primary school classes and 5 <sup>th</sup> year students in secondary school return.
Week 13, 2021	28/03/2021	All schools close for Easter holiday
Week 15, 2021	11/04/2021	All schools re-open after Easter holiday. The remaining secondary school classes return.

\*Note: The epidemiological weeks in this report, run from Sunday to Saturday, please refer to the surveillance resources on the HPSC website for a complete list of epidemiological weeks with start and end dates.

# Summary of important dates for childcare facilities (CCFs) and schools: Continued

Also see Figures 1a and 1b for summary of key dates



Epidemiological Week*	Epi week start date	School and childcare facility closures/openings and other key dates
Week 21, 2021	23/05/2021	End of term for most post-primary schools to facilitate beginning of state examinations.
Week 25, 2021	20/06/2021	End of term for most primary schools.
week 35,2021	27/06/2021	Beginning of 2021/2022 academic year of the pandemic in Ireland.
Week 30, 2021	25/07/2021	Vaccine registration opens for 16 and 17 year olds.
Week 32, 2021	08/08/2021	Vaccine registration opens for 12-15 year olds.
Week 35, 2021	29/08/2020	Schools re-open for 2021/22 academic year.
Week 39, 2021	26/09/2021	From Monday 27 <sup>th</sup> of September, routine contact tracing will no longer take place for asymptomatic close contacts among children (aged 12 years and younger) in settings such as childcare facilities, primary education and social and sporting groups.
Week 43, 2021	24/10/2021	All schools close for mid-term break.
Week 48, 2021	28/11/2021	From Monday 29 <sup>th</sup> of November, antigen tests will be offered to primary school children if there is a confirmed case of COVID-19 in their pod OR if there are two or more confirmed cases of COVID-19 in different pods in their class within a 7 day period. From Wednesday 1 <sup>st</sup> of December, pupils from third class and up in primary schools are required to wear a face mask/covering unless otherwise exempt.

## Summary of important dates for childcare facilities (CCFs) and schools: Continued

Also see Figures 1a and 1b for summary of key dates



Epidemiological Week*	Epi week start date	School and childcare facility closures/openings and other key dates
Week 51, 2021	18/12/2021	School closures for Christmas holidays.
Week 1, 2022	04/01/2022	Schools re-open. Change in testing policy: Symptomatic people aged between 4 and 39 years are now advised to undertake antigen self-testing, and to book a PCR test if an antigen test is positive.

# Notes on data during this surge period



- Since 22/12/2021 the daily COVID-19 case number reported publicly is an estimate based on positive SARS-CoV-2 results uploaded to the HSE COVID Care Tracker the preceding day. This transition was in anticipation of a large volume of cases and decreased capacity among surveillance partners over the Christmas period. Given the ongoing surge in cases, the daily case number reported continues to be an estimate. These data are provisional and do not represent notified cases. They serve to provide an up-to-date picture of trends during this surge period. The notification of cases on the Computerised Infectious Disease Reporting system (CIDR) has continued.
- Data in this report are based on CIDR.
- Due to the surge in case numbers, alongside a technical issue and reduced capacity over the holiday period, the overall reporting time (time from when a case is diagnosed to when they are notified) has increased. Data on cases diagnosed in recent days is subject to reporting delays and therefore may not be complete.
- Due to the surge, there may also be a delay in reporting of outbreaks on CIDR.
- Notifications among children aged 4-18 in week 1, 2022 may have been affected by the change in testing policy since 3<sup>rd</sup> January 2022. Symptomatic people aged between 4 and 39 years were advised to undertake antigen self-testing, and to book a PCR test if an antigen test is positive.
- The overall access to PCR testing during this surge period will also impact notifications.

#### Definitions



#### 1. Outbreak Definition

- 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

The detection of a case or the declaration of an outbreak in a school or childcare facility does not of itself indicate that transmission occurred within the school or facility; clusters of cases may be detected within a particular setting despite exposure and transmission having occurred elsewhere

#### 2. Age Breakdown

 Cases were broadly categorised by age groups that are associated with different school types: 0-4 years (preschool), 5-12 years (primary school) and 13-18 years (secondary school). However, it is likely that there is some overlap in the ages of children attending all school types and children do not necessarily attend the school type indicated by their age grouping.

#### Introduction



Between March 1<sup>st</sup> 2020 and January 8<sup>th</sup> 2022, a total of **850,777** confirmed COVID-19 cases were notified on CIDR:

- **34,960 (4.1%)** of these cases were pre-school aged children (aged 0-4 years)
- 94,387 (11.1%) were primary school aged children (aged 5-12 years)
- **66,473 (7.8%)** were secondary school aged children (aged 13-18 years)
- **654,867 (77.0%)** were adults (aged over 18 years)
- Age was unknown for 90 cases

A total of **195,820** confirmed cases of COVID-19 in the 0-18 year old population represents **15.6%** of the 0-18 population in Ireland\* and **23.0%** of all confirmed COVID-19 cases in Ireland reported between week 10 2020 and week 1 2022

\*Age-specific population data were taken from Census 2016

### Summary of trends among 0-18 year olds, 2021/2022 academic year 2021



- The 2021/22 academic year commenced for the majority of students during week 35 2021.
- The incidence among 5-12 year olds increased from 266.1/100,000 in week 35 to 402.1/100,000 in week 37. Similar increases
  were observed in this age group when primary schools re-opened in September 2020 and in February/March 2021 and may
  have reflected increased testing of mildly symptomatic and asymptomatic children.
- After these initial increases, the incidence among 0-18 year olds then remained relatively stable for several weeks, before steadily increasing again from week 41 to week 48, particularly among children aged 5-12 years. The incidence increased among the adult population during this period also. The proportion of cases among children aged 0-18 years also increased during this time period, however this is likely to be associated with increased vaccination rates among older age groups and the impact of vaccination status on testing pathways.
- From week 51, 2021, the start of the 5<sup>th</sup> pandemic wave\* in Ireland, the incidence has increased markedly across all agegroups, including 0-18 years olds, due to the spread of the Omicron variant of concern.
- In week 1, the incidence among 0-4 year olds was 824.4/100,000 and among 5-12 year olds it was 1341.9/100,000, both lower than the national incidence of 1867.5/100,000. The proportion of cases in these age groups years has continued to remain relatively stable since week 51, and lower than the pre-Christmas period. Infections among 5-12 year olds represented 11.1% of all infections notified during week 1.
- In week 1, 2022, the incidence among 13-18 year olds was 2095.1/100,000, higher than the national incidence rate. Infections among 13-18 year olds represented 7.8% of all infections notified during week 1.
- The positivity rate among those tested as part of the COVID-19 mass testing for Post Primary schools and schools in the Special Education (SEN) sector increased in week 1, 2022 compared to Term 1. However, given the holiday period the number of cases tested is small. The positivity is consistent with the positivity in the general population during week 1, 2022 of 51%.

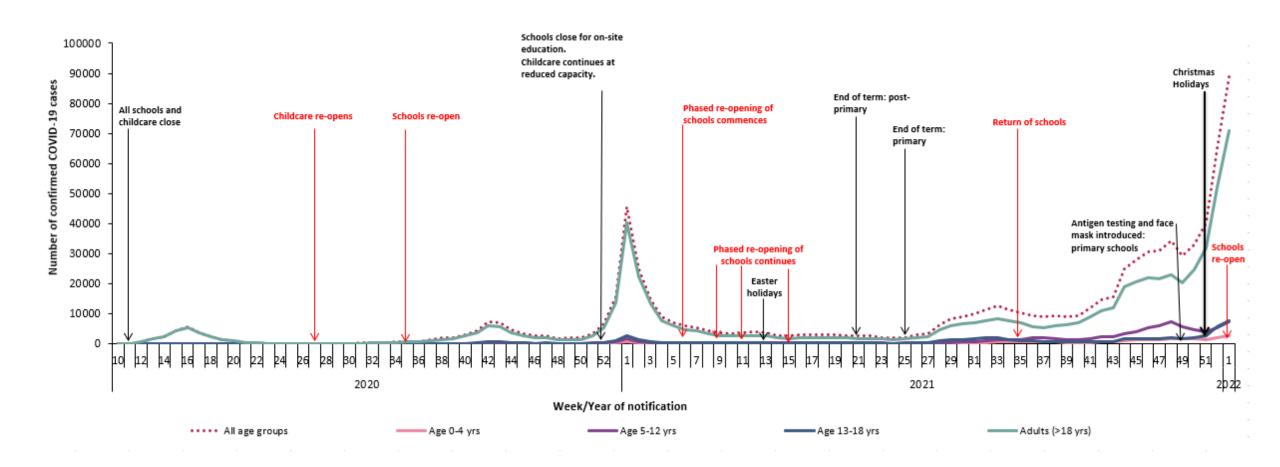
<sup>\*</sup> The start of the 5<sup>th</sup> pandemic wave was designated based on when the omicron variant of concern was estimated to have become the dominant circulating variant in Ireland, and when the incidence of COVID-19 markedly increased.

#### Summary of trends among 0-18 year olds, 2021/2022 academic year 2021: Continued



- Three outbreaks associated with schools were reported to HPSC during week 1 2022.
- Two childcare outbreaks were reported in week 1 2022.
- Increases in the disease incidence among school-aged children or the detection of an outbreak in a school or childcare facility does not of itself indicate that transmission occurred within the school or childcare facility; clusters of cases may be detected within a particular setting despite exposure and transmission having occurred elsewhere.

#### Number of confirmed COVID-19 cases across age groups, week 10, 2020 - week 1, 2022



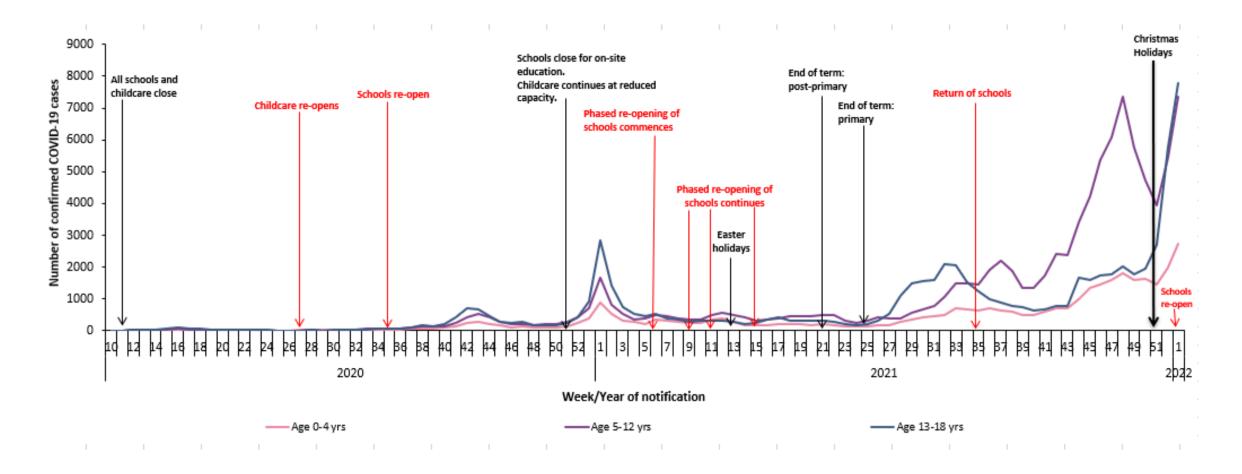
Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

Figure 1a: Number of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 1, 2022

11

#### Number of confirmed COVID-19 cases in children aged 0-18 years, week 10, 2020 – week 1, 2022





Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

Figure 1b: Number of confirmed COVID-19 cases by age group in children aged 0-18 years in Ireland between week 10, 2020 and week 1, 2022

#### Proportion of confirmed COVID-19 cases across age groups, week 10, 2020 – week 1, 2022



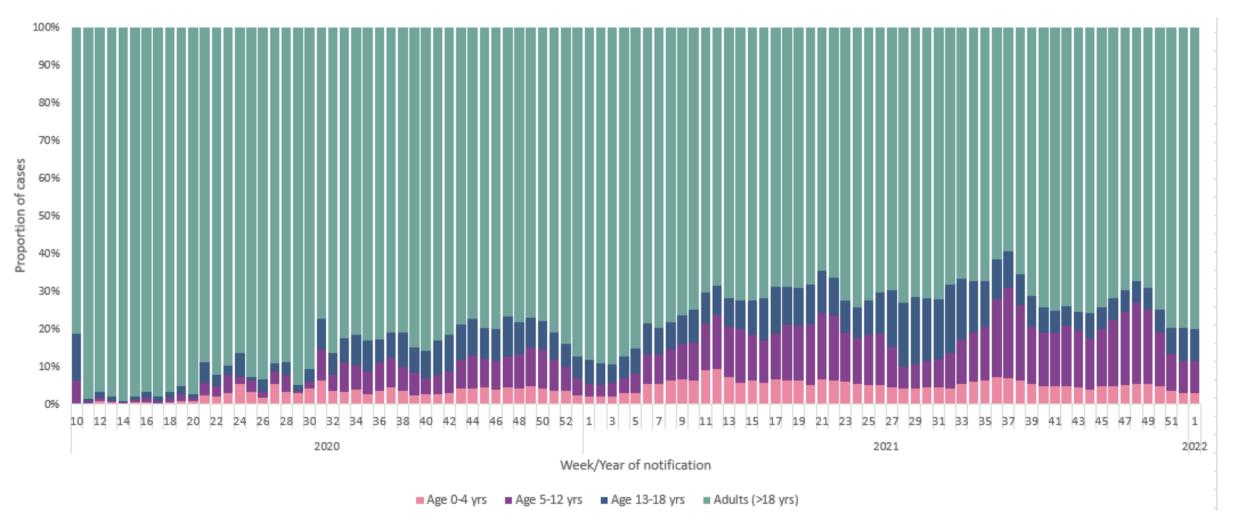
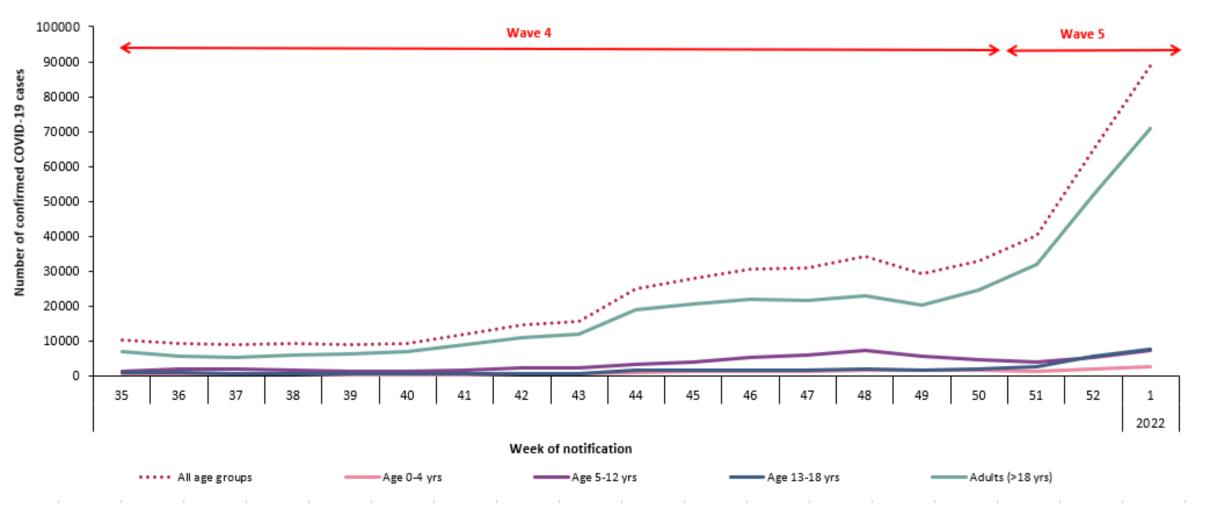


Figure 2: Proportion of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 1, 2022

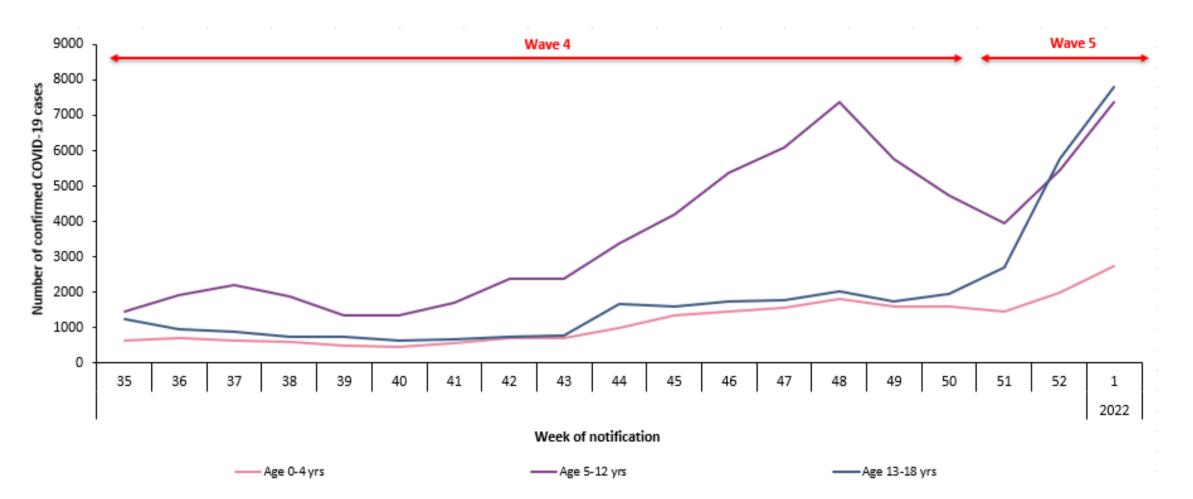
### Number of confirmed COVID-19 cases across age groups, 2021/2022 academic year (week 35 2021 – week 1, 2022)



Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

Figure 3a: Number of confirmed COVID-19 cases by age group in Ireland between week 35, 2021 and week 1, 2022

### Number of confirmed COVID-19 cases in children aged 0-18 years, 2021/2022 academic year (week 35, 2021 – week 1, 2022)



Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

Figure 3b: Number of confirmed COVID-19 cases by age group in children aged 0-18 years in Ireland between week 35, 2021 and week 1, 2022

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## COVID-19 weekly incidence\* rate across age groups, 2021/2022 academic year (week 35, 2021 - week 1, 2022)



\*Age-specific population data were taken from Census 2016

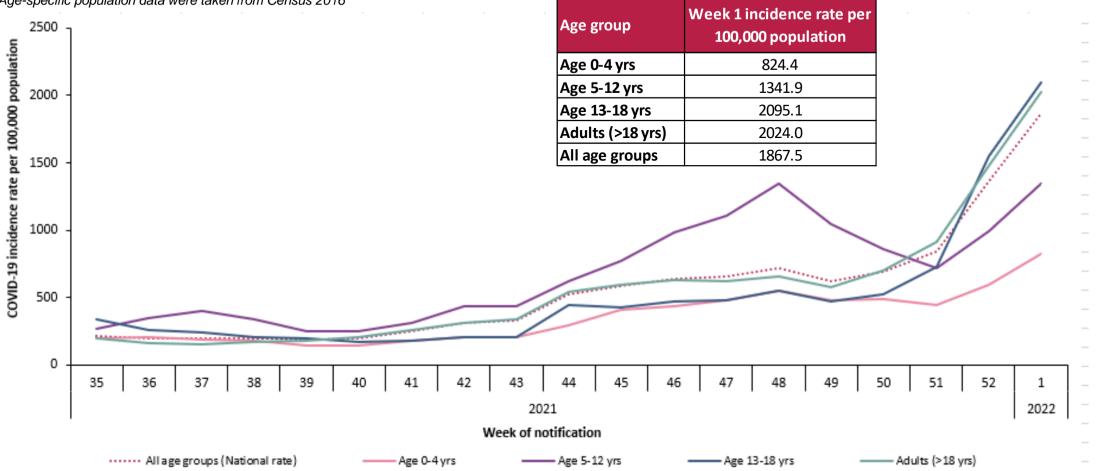
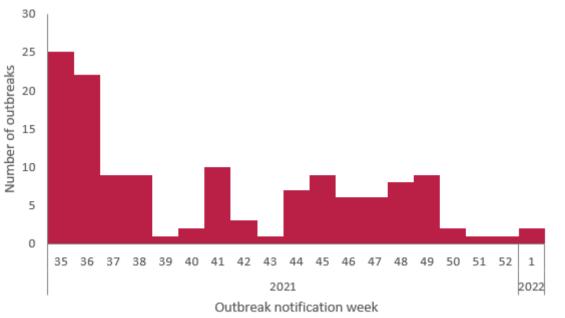


Figure 3c: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population by age group in Ireland between week 35, 2021 and week 1, 2022

### Outbreaks associated with children and staff in childcare facilities

## **Childcare facility outbreaks:**

- 643 childcare facility outbreaks, involving 3,401 linked confirmed cases, were notified to HPSC since week 32
   2020
- 133 childcare facility outbreaks, involving 601 linked confirmed cases, were notified to HPSC during 2021/2022 academic year
- Two childcare facility outbreaks, involving nine linked confirmed cases, were newly reported to HPSC in week 1.



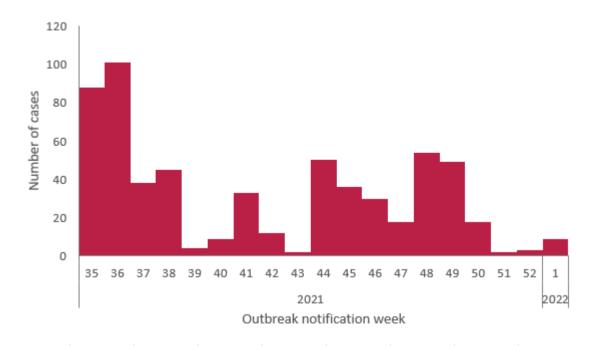
**Figure 4:** Number of COVID-19 outbreaks associated with staff and children in childcare facilities during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)



# Cases linked to outbreaks associated with children and staff in childcare facilities during 2021/2022 academic year



24% of outbreaks associated with childcare facilities reported during 2021/2022 academic year have involved only 2 cases



Number of outbreaks Outbreak size (number of cases)

**Figure 5:** Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in childcare facilities during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)

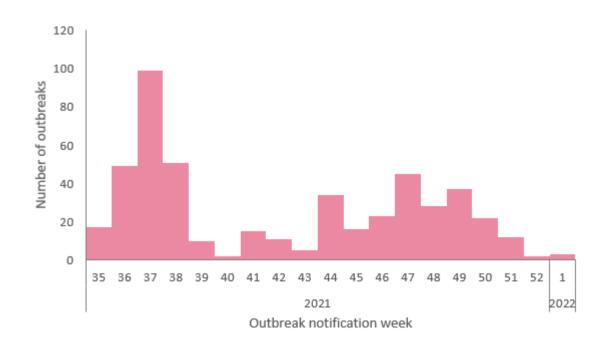
**Figure 6:** Number of COVID-19 outbreaks associated with staff and children in childcare facilities by the number of confirmed cases per outbreak during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)

Please see Technical note 4 for information on number of cases associated with outbreaks and on outbreak size.

## Outbreaks associated with children and staff in schools

#### School outbreaks:

- 1,294 school outbreaks, involving 6,633 linked confirmed cases, were notified to HPSC since week 37 2020
- 481 school outbreaks, involving 2,912 linked confirmed cases, were notified to HPSC during 2021/2022 academic year
- Three school outbreaks, involving seven linked confirmed cases, were newly reported to HPSC in week 1.



**Figure 7:** Number of COVID-19 outbreaks associated with staff and children in schools during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)

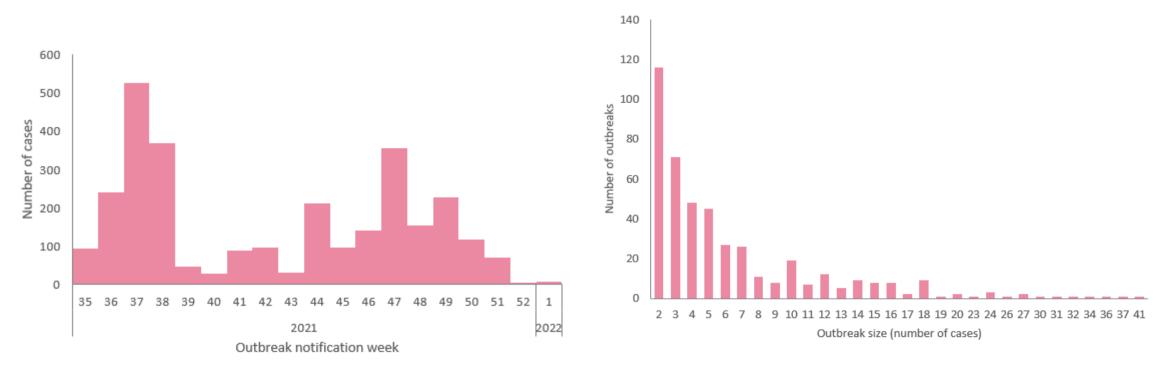
\*In week 44 2021, 32 outbreaks (involving 192 cases) associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified.



# Cases linked to outbreaks associated with children and staff in schools during 2021/2022 academic year



24% of outbreaks associated with schools reported during 2021/2022 academic year have involved only 2 cases



**Figure 8:** Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in schools during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)

**Figure 9:** Number of COVID-19 outbreaks associated with staff and children in schools by the number of confirmed cases per outbreak during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 1, 2022)

\*In week 44 2021, 32 outbreaks (involving 192 cases) associated with schools that occurred during May and June 2021 (2020/21 academic year) were retrospectively notified.

Please see Technical note 4 for information on number of cases associated with outbreaks and on outbreak size.

# Week 1 Summary: Cases and outbreaks in current week and in 2021/2022 academic year in Ireland, week 35, 2021 - week 1, 2022



Confirmed COVID-19 cases:	Number of confirmed Proportion of all		Week 35, 2021 - Week 1, 2022		
Age group			Number of confirmed cases <sup>1</sup>	Proportion of all cases (%)	
0-4 yrs	2,733	3.1	22,009	4.4	
5-12 yrs	7,363	8.3	70,270	13.9	
13-18 yrs	7,785	8.8	36,159	7.2	
>18 yrs	71,046	79.9	375,879	74.5	
Total	88,927	100.0	504,317	100.0	

Outbreaks:	Week 1			Week 35, 2021 - Week 1, 2022		
Outbreak Location	Number of outbreaks	Number of confirmed cases linked to outbreaks	Range in number of linked cases <sup>2</sup>	Number of outbreaks	Number of confirmed cases linked to outbreaks	Range in number of linked cases <sup>2</sup>
Childcare facility	2	9	4-5	133	601	0 - 19
School	3	7	2-3	481	2,912	0 - 41
Total	5	16	2-5	614	3,513	0 - 41

1. Excludes cases of unknown age.

2. All confirmed cases may not yet have been linked to the outbreak on CIDR. Ranges in number of linked cases that contain "0" currently have no linked cases on CIDR or the aggregate number of associated cases has not been specified.

# COVID-19 mass testing data for Post Primary schools and schools in the Special Education (SEN) sector (Academic year 2021/22)



The following data are the results of close contact testing undertaken in Post Primary and Special Education schools, following notification to Departments of Public Health of a confirmed case of COVID-19 who had attended the facility during the infectious time period.

#### Results Summary for Schools Testing Term 1 Academic year 2021/22 (29/08/2021 – 01/01/2022)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	613	5,858	471	8.0%	5,373
Special Education	79	1,800	166	9.2%	1,630
Total	692	7,658	637	8.3%	7,003

#### Results Summary for Schools Testing Week 1 2022 (Term 2)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	49	54	30	55.5%	23
Special Education	9	9	4	44.4%	5
Total	58	63	34	53.4%	28

**Of note**: Weekly data and cumulative term data, from the COVID-19 Schools and childcare facilities mass testing reports are now being presented as part of the HPSC weekly report on 0-18 year olds, as close contact identification and testing within this sector are only occurring in the post primary and SEN sector.

#### Please refer to the Health Protection Surveillance (HPSC) website for specific reports on



- <u>14 Day report</u> epidemiology of COVID-19 in Ireland
- <u>Outbreaks/clusters</u> in Ireland COVID-19 weekly report
- <u>Weekly report</u> on the epidemiology of COVID-19 in Ireland

## <u>Please refer to the HSE website for COVID-19 schools and childcare facility mass testing reports</u> produced between November 2020 and September 2021:

<u>Schools and Childcare facilities COVID-19 mass testing</u>

#### Acknowledgements

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, Departments of Public Health, nurses, surveillance scientists, microbiologists and administrative staff.

#### **Technical Notes**

1. Data Sources



- Data are based on statutory notifications and were extracted from 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.
- Weekly data and cumulative term data from the COVID-19 Schools and childcare facilities mass testing programme in Post Primary and SEN schools were extracted from the HSE COVID Care Tracker and SwiftQueue.

#### 2. Population data

Population data were taken from Census 2016. Data were aggregated into the following age groups for the analysis: 0-4 years, 5-12 years, 13-18 years, >18 years.

#### 3. Outbreak dates

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 14<sup>th</sup> and October 9<sup>th</sup> is based on the following algorithm: 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 13<sup>th</sup> 2021, and on or after October 10<sup>th</sup> 2021.

#### 4. Outbreak size

For outbreaks notified prior to week 19 2021, the number of linked confirmed cases/outbreak size is based on laboratory confirmed cases linked to an outbreak in CIDR. For outbreaks notified since week 19 2021, the number of associated cases/outbreak size is based either on laboratory confirmed cases linked to an outbreak in CIDR OR on an aggregate number of cases provided at the time of outbreak notification, whichever number is largest. The number of associated cases was correct at the time of reporting to HPSC but outbreaks may have grown in size since the time of reporting.