



# Weekly Epidemiological Report on COVID-19 cases aged 0-18 years and COVID-19 mass testing in schools in Ireland Week 3, 2022

Health Protection Surveillance Centre, HPSC COVID-19 Epidemiology Team, 24/01/2022

#### Dates to note:

- Week 3 2022 (week commencing 16/01/2022)
- Week 10 2020 (week commencing 01/03/2020) The beginning of the pandemic in Ireland
- 2021/2022 academic year in Ireland (Week 35 2021 (week commencing 29/08/2021) to present)
- Wave 4 of the pandemic in Ireland (Week 26 2021 (week commencing 27/06/2021) to Week 50 2021 (week commencing 12/12/2021)
- Wave 5 of the pandemic in Ireland (Week 51 2021 (week commencing 19/12/2021) 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 <u>surveillance resources</u> 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 24/01/2022 and 25/01/2022. 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 24/01/2022.

### 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.

### 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 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	Beginning of 2021/2022 academic year of the pandemic in Ireland. 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	19/12/2021	School closures for Christmas holidays.
Week 1, 2022	02/01/2022	Schools re-open. From Monday 6 <sup>th</sup> January there was a change in testing policy: 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.
Week 2, 2022	09/01/2022	From Friday 14 <sup>th</sup> January people aged between 4 and 39 years are not required to have a confirmatory PCR test after a positive antigen test. A system to register positive antigen tests on the HSE website was launched.

### Notes on data during this surge period



- Since 22<sup>nd</sup> December 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 early January and the ongoing increased reporting time (time from when a case is notified to when they are uploaded to the Computerised Infectious Disease Reporting system (CIDR)), the daily case number reported continued to be an estimate. These data are provisional and do not represent notified cases. They served to provide an up-to-date picture of trends during the surge period and until reporting time has returned to normal.
- Due to the surge in case numbers during week 51, 2021 to week 2, 2022 leading to an increased reporting time, notifications in these weeks were artificially reduced compared to the number of cases diagnosed. Notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during week 3, due to the ongoing processing of cases diagnosed during previous weeks. Reporting time will return to normal in the coming weeks as cases diagnosed during the surge are processed and case numbers fall.
- Due to the surge, there may also be a delay in reporting of outbreaks on CIDR. In addition, regional Departments of Public Health are currently prioritising Public Health Risk Assessments, outbreak investigations, and outbreak reporting to 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 at this time.
- Since 14<sup>th</sup> January 2022, a confirmatory PCR test is no longer necessary for some groups of people testing positive on an antigen test, see <u>guidance</u>. This change, will affect notifications for children aged 4-18 years. However, the full effect may not yet be evident in this report due to the current increased reporting time.
- All case-based data in this report are based on confirmed PCR positive cases notified on CIDR.

#### **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 15<sup>th</sup> 2022, a total of **1,039,725** confirmed COVID-19 cases were notified on CIDR:

- 42,942 (4.1%) of these cases were pre-school aged children (aged 0-4 years)
- **113,396 (10.9%)** were primary school aged children (aged 5-12 years)
- 84,756 (8.2%) were secondary school aged children (aged 13-18 years)
- **798,536 (76.8%)** were adults (aged over 18 years)
- Age was unknown for 94 cases

A total of **241,094** confirmed cases of COVID-19 in the 0-18 year old population represents **19.3%** of the 0-18 population in Ireland\* and **23.2%** of all confirmed COVID-19 cases in Ireland reported between week 10 2020 and week 3 2022

Data source: CIDR, January 24<sup>th</sup> 2022

<sup>\*</sup>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 incidence has increased markedly across all age-groups, including 0-18 years olds, due to the spread of the Omicron variant of concern.
- In week 3, compared to the national incidence of 2080.3/100,000, the incidence among 0-4 year olds was lower at 1419.8/100,000, it was similar among 5-12 year olds at 2014.1/100,000, while it was higher among among 13-18 year olds at 2752.8/100,000.
- The proportion of cases aged 0-18 years increased slightly, from 21.5% in week 2 to 26.2% in week 3. Infections among 0-4 year olds represented 4.8% of all infections notified during week 3, 13-18 year olds represented 10.3%, and 0-18 year olds represented 10.3%.
- Due to the increased reporting time, data for the most recent week is incomplete and should be interpreted with caution. The change in the requirement for a confirmatory PCR since 14<sup>th</sup> January, means that data for 0-18 years olds also needs to be interpreted with caution. However, the full impact of this is likely not yet evident due to the increased reporting time.
- 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 is increased compared to Term 1. However, the number of cases tested is small.

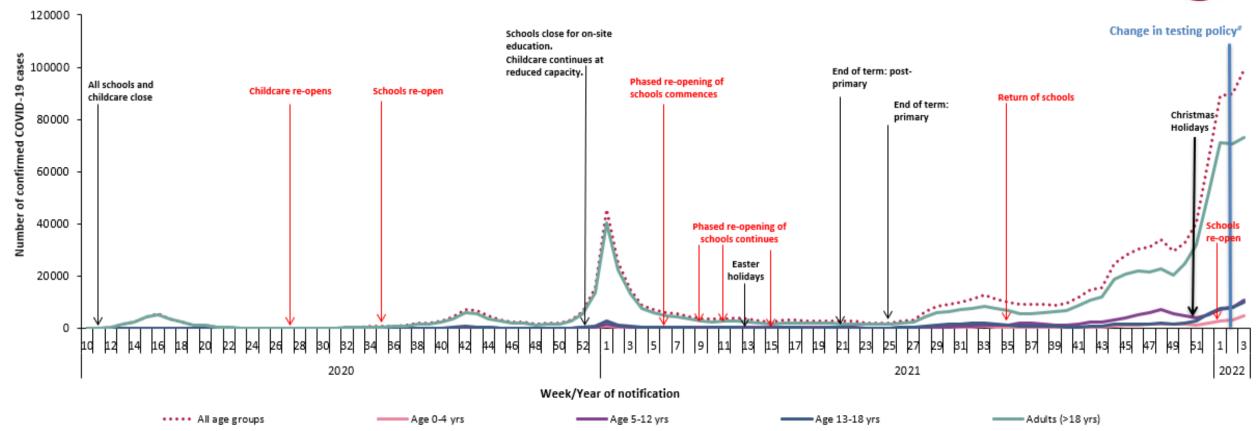
### Summary of trends among 0-18 year olds, 2021/2022 academic year 2021: Continued



- Eighteen outbreaks associated with schools were reported to HPSC during week 3 2022.
- Four childcare outbreaks were reported in week 3 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 3, 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.

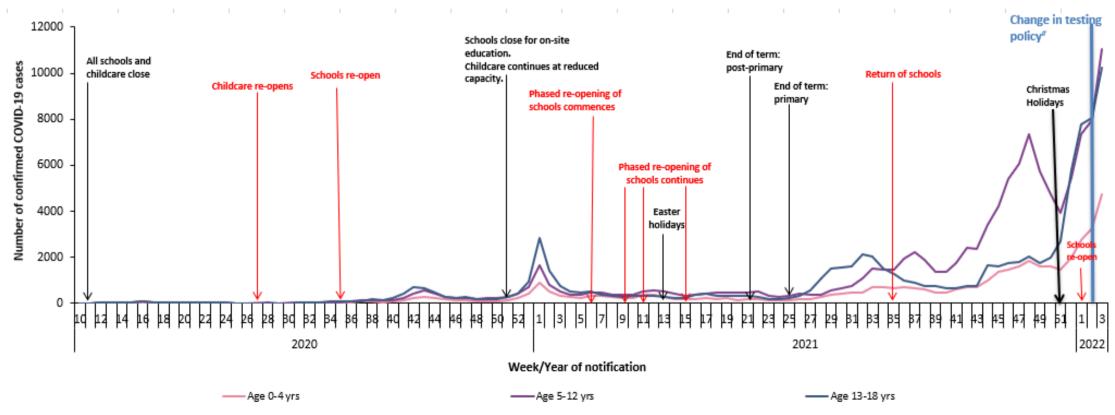
Figure 1a: Number of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 3, 2022

Data source: CIDR, January 24<sup>th</sup> 2022

<sup>\*</sup>Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks. #Change to testing policy: confirmatory PCR test no longer necessary for some groups. Due to the increased reporting time, the affect of this change may not be evident yet.

### Number of confirmed COVID-19 cases in children aged 0-18 years, week 10, 2020 – week 3, 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 3, 2022

Data source: CIDR, January 24<sup>th</sup> 2022

<sup>\*</sup>Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks. #Change to testing policy: confirmatory PCR test no longer necessary for some groups. Due to the increased reporting time, the affect of this change may not be evident yet.

### Proportion of confirmed COVID-19 cases across age groups, week 10, 2020 – week 3, 2022



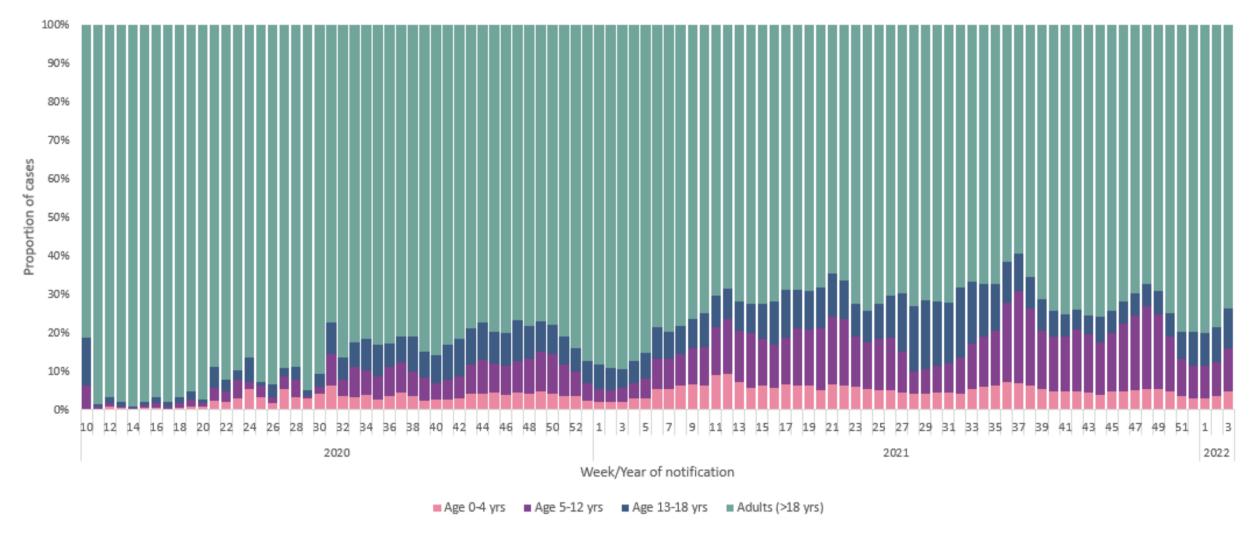
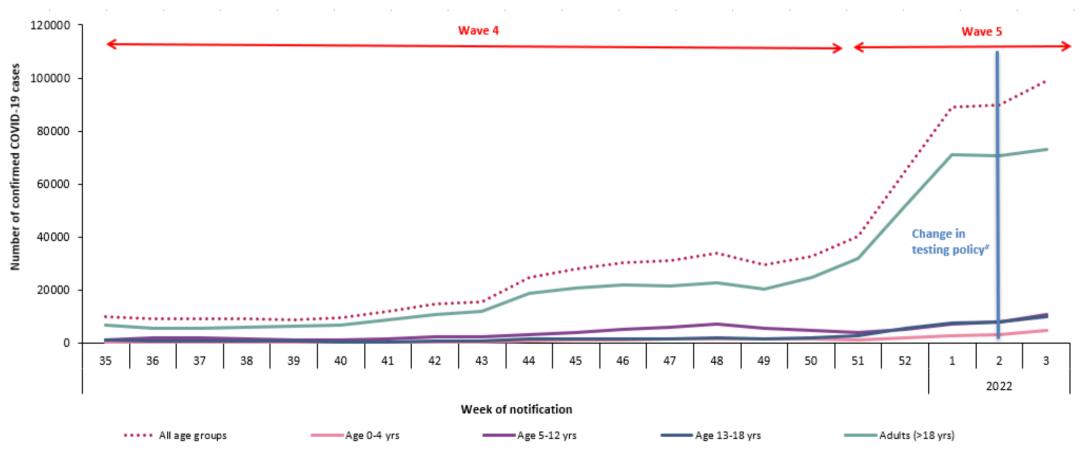


Figure 2: Proportion of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 3, 2022

\*Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks.

# Number of confirmed COVID-19 cases across age groups, 2021/2022 academic year (week 35 2021 – week 3, 2022)





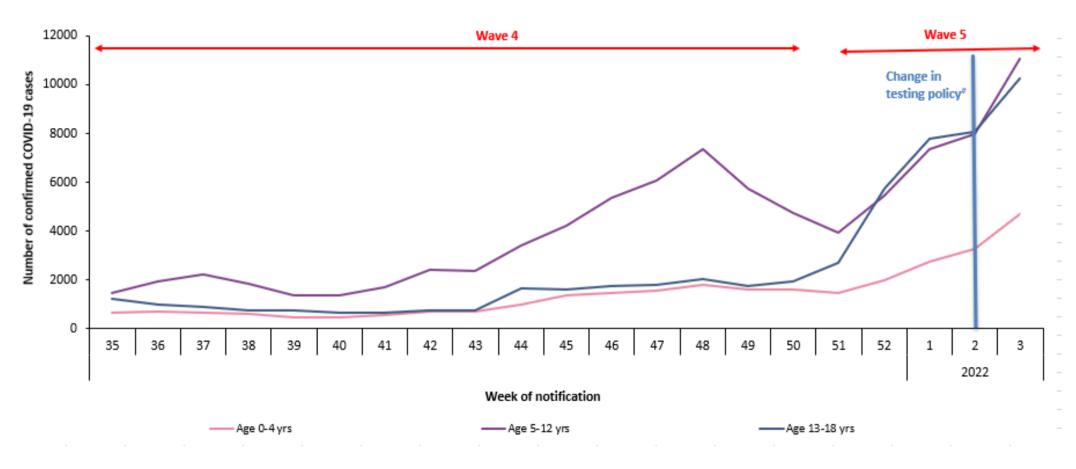
Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

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

<sup>\*</sup>Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks. #Change to testing policy: confirmatory PCR test no longer necessary for some groups. Due to the increased reporting time, the affect of this change may not be evident yet.

# Number of confirmed COVID-19 cases in children aged 0-18 years, 2021/2022 academic year (week 35, 2021 – week 3, 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.

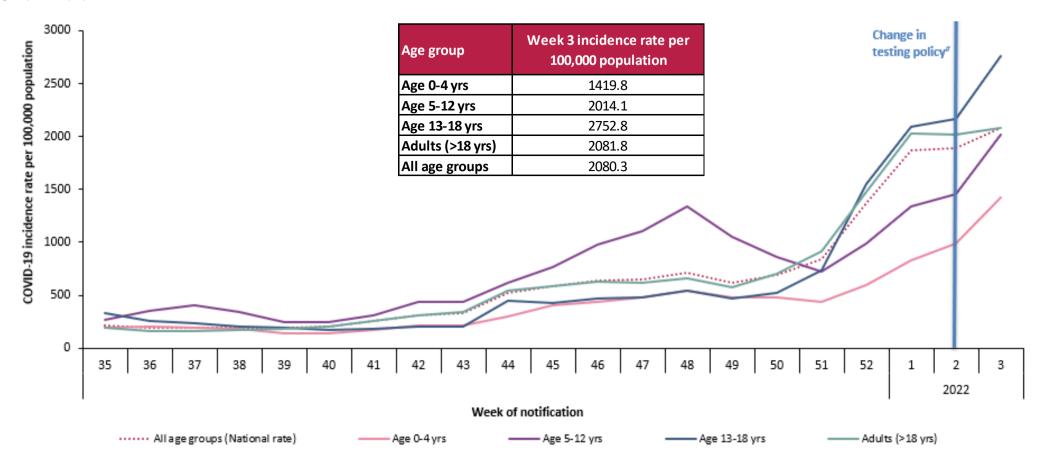
Figure 3b: Number of confirmed COVID-19 cases by age group in children aged 0-18 years in Ireland between week 35, 2021 and week 3, 2022

<sup>\*</sup>Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks. #Change to testing policy: confirmatory PCR test no longer necessary for some groups. Due to the increased reporting time, the affect of this change may not be evident yet.

## COVID-19 weekly incidence\* rate across age groups, 2021/2022 academic year (week 35, 2021 - week 3, 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 3, 2022

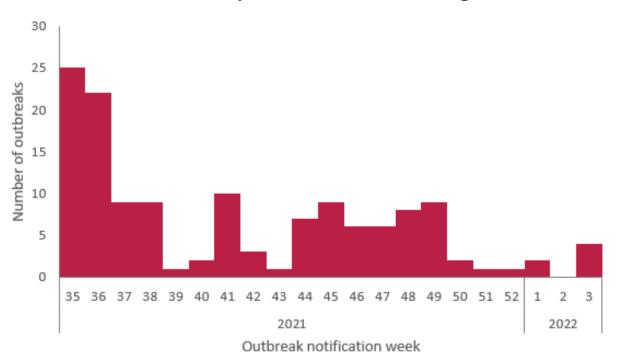
<sup>\*\*</sup>Notifications in week 51, 2021 to week 2, 2022 are artificially reduced, while notifications in week 3, 2022 are artificially inflated compared to cases diagnosed during these weeks. #Change to testing policy: confirmatory PCR test no longer necessary for some groups.

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



### **Childcare facility outbreaks:**

- 647 childcare facility outbreaks, involving 3,419 linked confirmed cases, were notified to HPSC since week 32 2020
- 137 childcare facility outbreaks, involving 619 linked confirmed cases, were notified to HPSC during 2021/2022 academic year
- Four childcare facility outbreaks, involving 16 linked confirmed cases, were reported to HPSC in week 3.



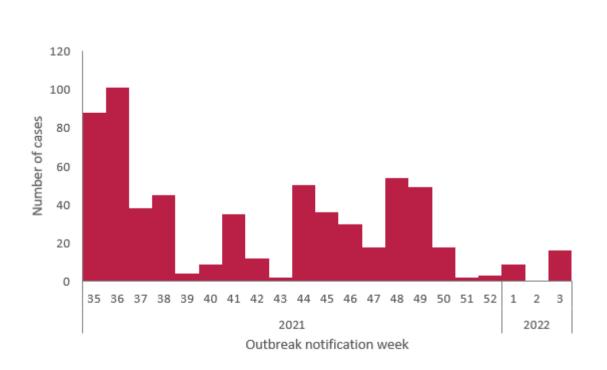
**Figure 4:** Number of COVID-19 outbreaks associated with staff and children in childcare facilities during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 3, 2022)

<sup>\*</sup>Departments of Public Health are currently prioritising Public Health Risk Assessments, outbreak investigations, and outbreak reporting to 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 at this time.

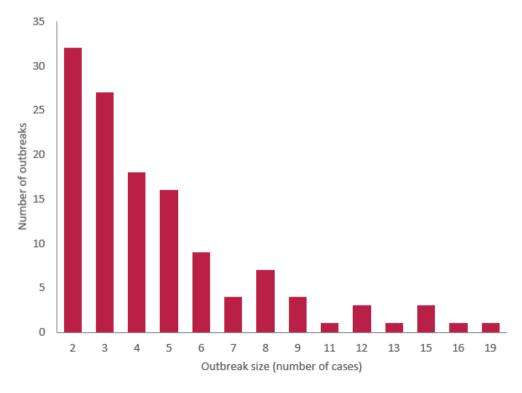
### Cases linked to outbreaks associated with children and staff in childcare facilities during 2021/2022 academic year



### 23% of outbreaks associated with childcare facilities reported during 2021/2022 academic year have involved only 2 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 3, 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 3, 2022)

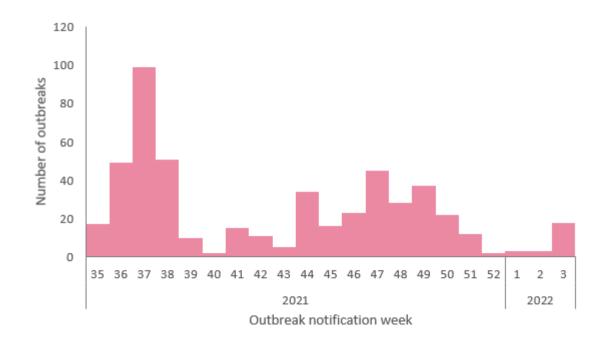
Please see Technical note 4 for information on number of cases associated with outbreaks and on outbreak size.

### Outbreaks associated with children and staff in schools

## hpsc

#### School outbreaks:

- 1,315 school outbreaks, involving 6,765 linked confirmed cases, were notified to HPSC since week 37 2020
- 502 school outbreaks, involving 3,044 linked confirmed cases, were notified to HPSC during 2021/2022 academic year
- Eighteen school outbreaks, involving 79 linked confirmed cases, were newly reported to HPSC in week 3.



**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 3, 2022)

<sup>\*</sup>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.

<sup>\*</sup>Departments of Public Health are currently prioritising Public Health Risk Assessments, outbreak investigations, and outbreak reporting to 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 at this time.

### 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

140

120

100

80

40

Number of outbreaks

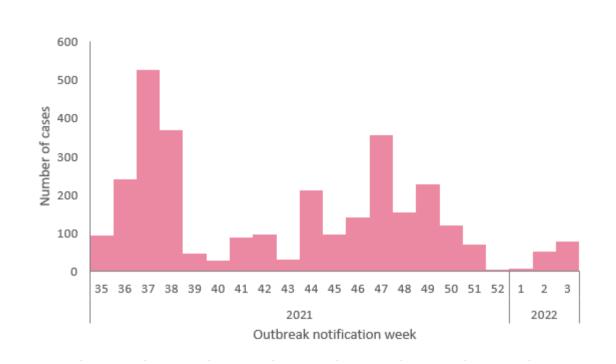


Figure 9: Number of COVID-19 outbreaks associated with staff and children in schools by the number of confirmed cases per outbreak during 2021/2022 academic year of the pandemic in Ireland (week 35, 2021 to week 3, 2022)

**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 3, 2022)

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

<sup>\*</sup>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.

### Week 3 Summary: Cases and outbreaks in current week and in 2021/2022 academic year in Ireland, week 35, 2021 - week 3, 2022



Confirmed COVID-19 cases:	Number of Proportion of all		Week 35, 2021 - Week 3, 2022		
Age group			Number of confirmed cases <sup>1</sup>	Proportion of all cases (%)	
0-4 yrs	4,707	4.8	29,991	4.3	
5-12 yrs	11,051	11.2	89,279	12.9	
13-18 yrs	10,229	10.3	54,442	7.9	
>18 yrs	73,074	73.8	519,549	74.9	
Total	99,061	100.0	693,261	100.0	

Outbreaks:	Week 3			Week 35, 2021 - Week 3, 2022		
Outbreak Location	Number of confirmed cases linked to outbreaks  Number of confirmed Range in number of confirmed cases linked to of linked cases²		Number of outbreaks	cases linked to		
Childcare facility	4	16	1-8	137	619	0 - 19
School	18	79	0-14	502	3,044	0-43
Total	22	95	0-14	639	3,663	0-43

<sup>1.</sup> Excludes cases of unknown age.

<sup>2.</sup> 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.

<sup>\*</sup>Departments of Public Health are currently prioritising Public Health Risk Assessments, outbreak investigations, and outbreak reporting to 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 at this time.

### 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 2 Academic year 2021/22 (02/01/2022 – 22/01/2022)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	124	158	122	77.2%	36
Special Education	54	369	87	23.6%	281
Total	178	527	209	39.7%	317

Results Summary for Schools Testing Week 3 2022 (Term 2)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	74	93	88	94.7%	5
Special Education	40	250	54	21.6%	196
Total	114	343	142	41.4%	201



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

- 14 Day report epidemiology of COVID-19 in Ireland
- Outbreaks/clusters in Ireland COVID-19 weekly report
- Weekly report 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> <u>produced between November 2020 and September 2021:</u>

Schools and Childcare facilities COVID-19 mass testing

### **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.