



Weekly Epidemiological Report on COVID-19 cases aged 0-18 years and COVID-19 mass testing in schools in Ireland Week 50, 2021

Health Protection Surveillance Centre, HPSC
COVID-19 Epidemiology Team, 20/12/2021

Dates to note:

- Week 50 2021 (12th December to 18th December 2021)
- Week 10 2020 (1st to 7th March 2020) – The beginning of the pandemic in Ireland
- Wave 4 of the pandemic in Ireland (Week 26 2021 (week commencing 27/06/2021) 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 20/12/2021 and 21/12/2021. 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 20/12/2021.

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 nd 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 th 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 26, 2021	27/06/2021	Beginning of wave 4 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 th 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 th 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 st of December, pupils from third class and up in primary schools are required to wear a face mask/covering unless otherwise exempt.

*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.

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 (pre-school), 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.

Between March 1st 2020 and December 18th 2021, a total of **656,589** confirmed COVID-19 cases were notified on CIDR:

- **28,796 (4.4%)** of these cases were pre-school aged children (aged 0-4 years)
- **77,635 (11.8%)** were primary school aged children (aged 5-12 years)
- **50,222 (7.6%)** were secondary school aged children (aged 13-18 years)
- **499,853 (76.1%)** were adults (aged over 18 years)
- Age was unknown for 83 cases

A total of **156,653** confirmed cases of COVID-19 in the 0-18 year old population represents **12.5%** of the 0-18 population in Ireland* and **23.9%** of all confirmed COVID-19 cases in Ireland reported between week 10 2020 and week 50 2021

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

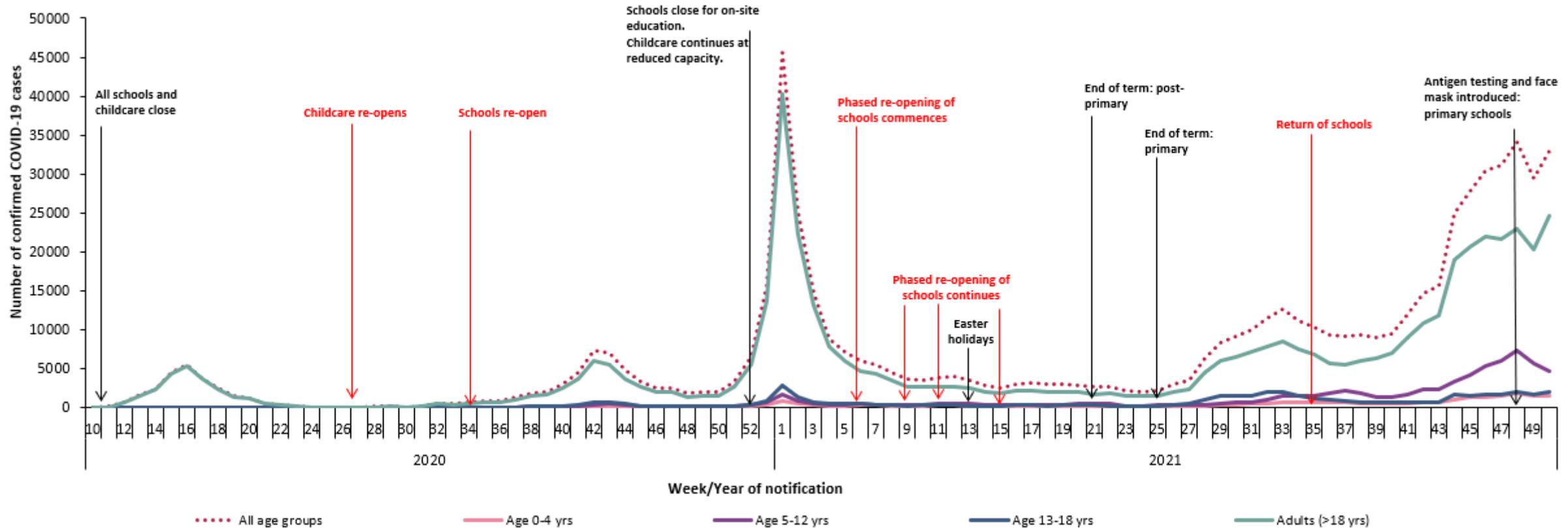
Summary of trends among 0-18 year olds, wave 4 2021



- The majority of schools had closed for summer before wave 4 of the COVID-19 pandemic in Ireland commenced (week 26).
- The incidence of COVID-19 in all children aged 0-18 years increased during the initial weeks of wave 4, reflecting general increases in the incidence in the country during this time. 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.
- In week 30 (week commencing 25/07/2021), COVID-19 vaccines began to be offered to those aged under 18 years; and a downturn in incidence in the vaccine-eligible cohort was observed.
- The 2021/22 academic year commenced for the majority of students during week 35 2021. The incidence among 5-12 year olds increased from 265.9/100,000 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.
- The incidence remained relatively stable among children aged 0-18 years for several weeks, and then began to steadily increase from week 41 to week 48, particularly among children aged 5-12 years. The incidence increased among the adult population during this period also.
- In week 50, the incidence among 5-12 year olds again decreased for the second consecutive week to 861.3/100,000. The incidence in this age groups remains higher than the national incidence of 693.3/100,000. Due to the decrease in the number of cases among 5-12 year olds alongside increases in the number of cases among some adult age groups, the proportion of infections among 5-12 year olds has decreased to 14.3% during week 50, compared to 19.5%-21.5% in the preceding three weeks.
- In week 50, the incidence among 0-4 year olds was 484.7/100,000 and among 13-18 year olds it was 526.1/100,000, both lower than the national incidence. The proportion of cases in these age groups years has continued to remain relatively stable over recent weeks.

- Twenty-two outbreaks associated with schools were reported to HPSC during week 50 2021, an decrease from 37 outbreaks reported in week 49 2021.
- The number of childcare outbreaks decreased to two outbreaks in week 50 from nine outbreaks in week 49.
- The change in the contact tracing policy for children aged 12 years and younger does not impact on the notification of outbreaks within a school or childcare setting. To date 24% of notified outbreaks associated with schools and 29% of outbreaks associated with childcare facilities involved only 2 linked cases. These limited transmission events may now be less likely to be detected, particularly if cases remain asymptomatic. The risk of onward transmission from undetected asymptomatic cases within the school setting remains low.
- 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.

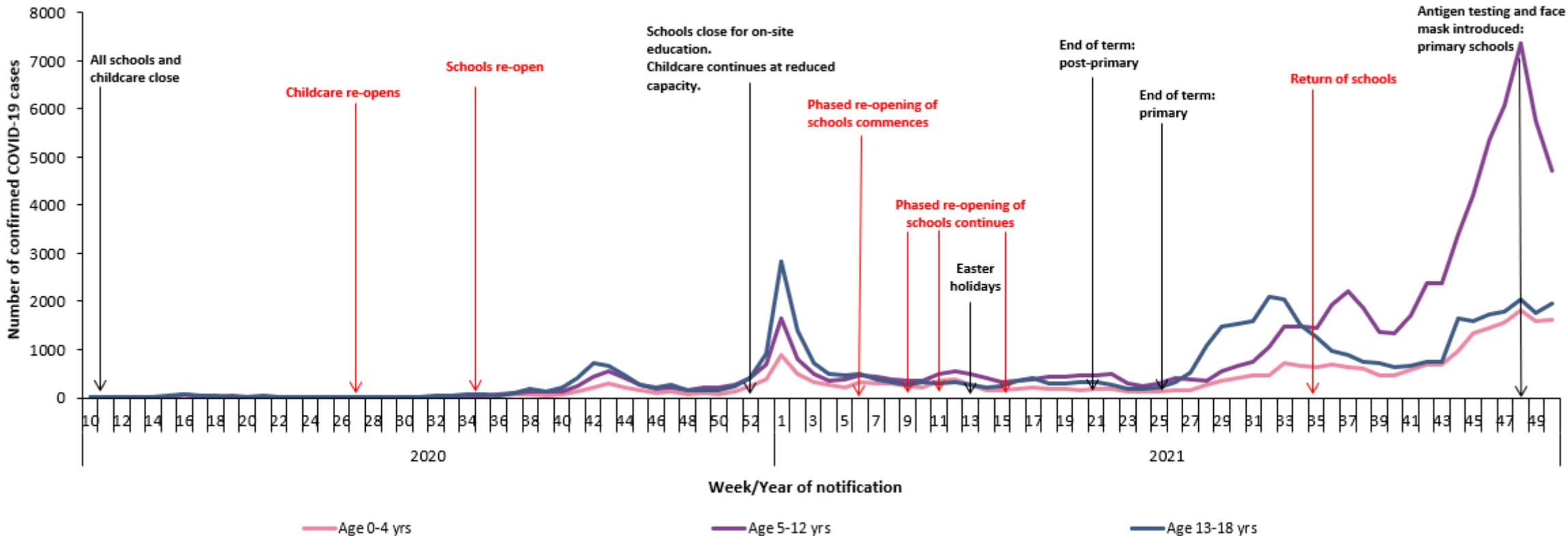
Number of confirmed COVID-19 cases across age groups, week 10 2020 - week 50 2021



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 50, 2021

Number of confirmed COVID-19 cases in children aged 0-18 years, week 10 2020 - week 50 2021



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 50, 2021

Proportion of confirmed COVID-19 cases across age groups, week 10, 2020 – week 50, 2021

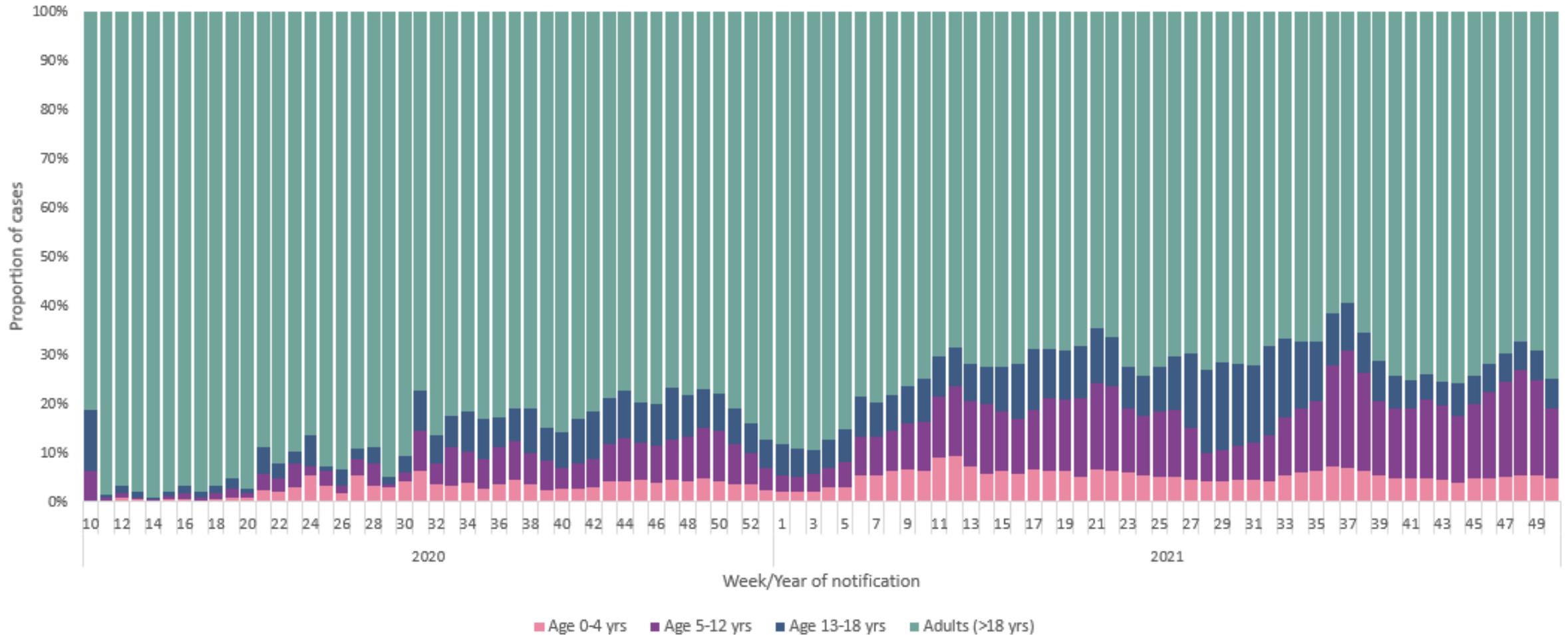
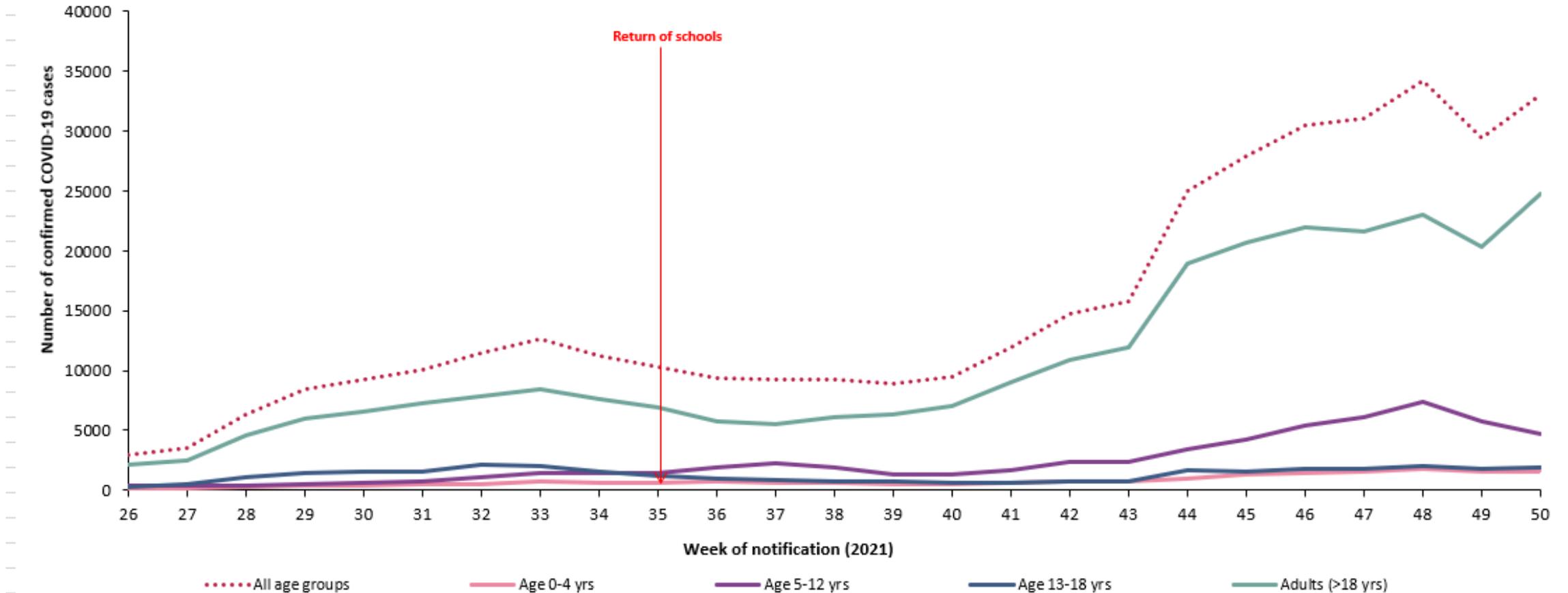


Figure 2: Proportion of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 50, 2021

Number of confirmed COVID-19 cases across age groups, wave 4 (week 26 – 50, 2021)



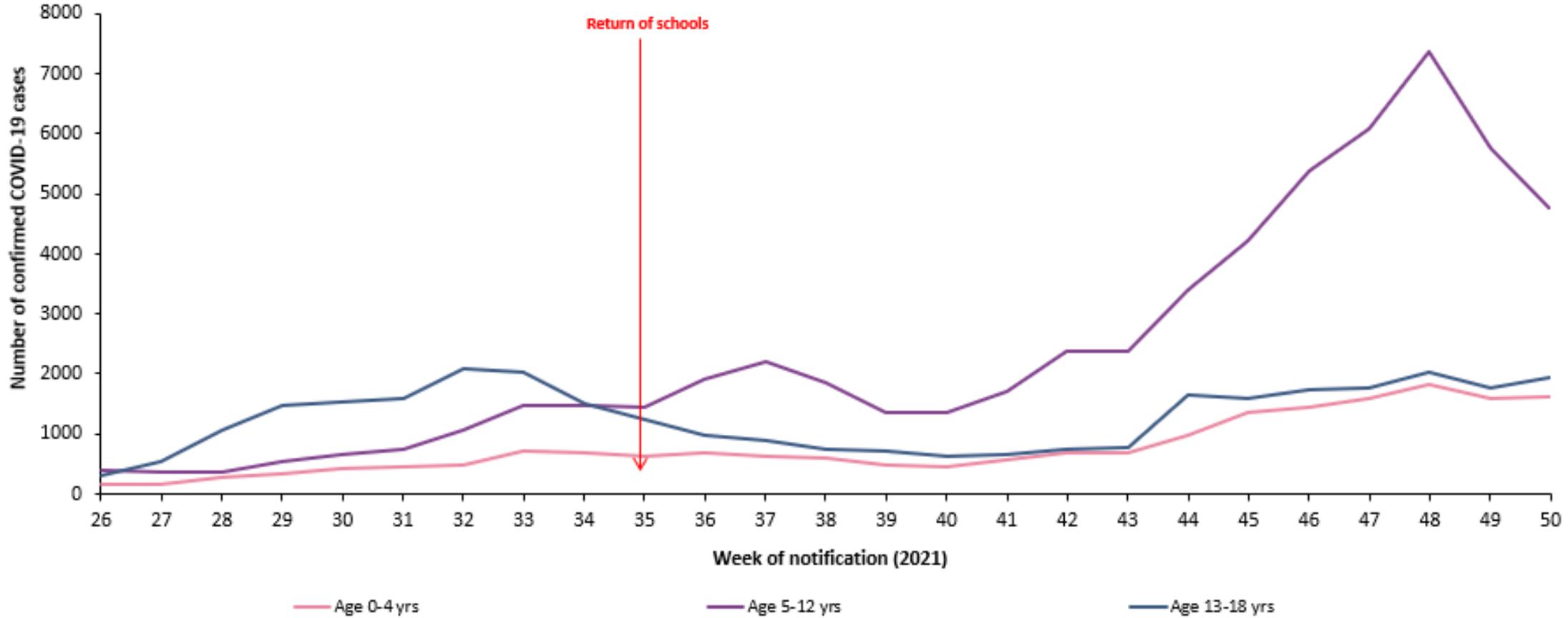
Primary and post-primary school terms ended for the summer prior to the beginning of wave 4 of the pandemic in Ireland.



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 26 and week 50, 2021

Number of confirmed COVID-19 cases in children aged 0-18 years, wave 4 (week 26 – 50, 2021)



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 26 and week 50, 2021

COVID-19 weekly incidence* rate across age groups, wave 4 (week 26 - week 50 2021)

*Age-specific population data were taken from Census 2016

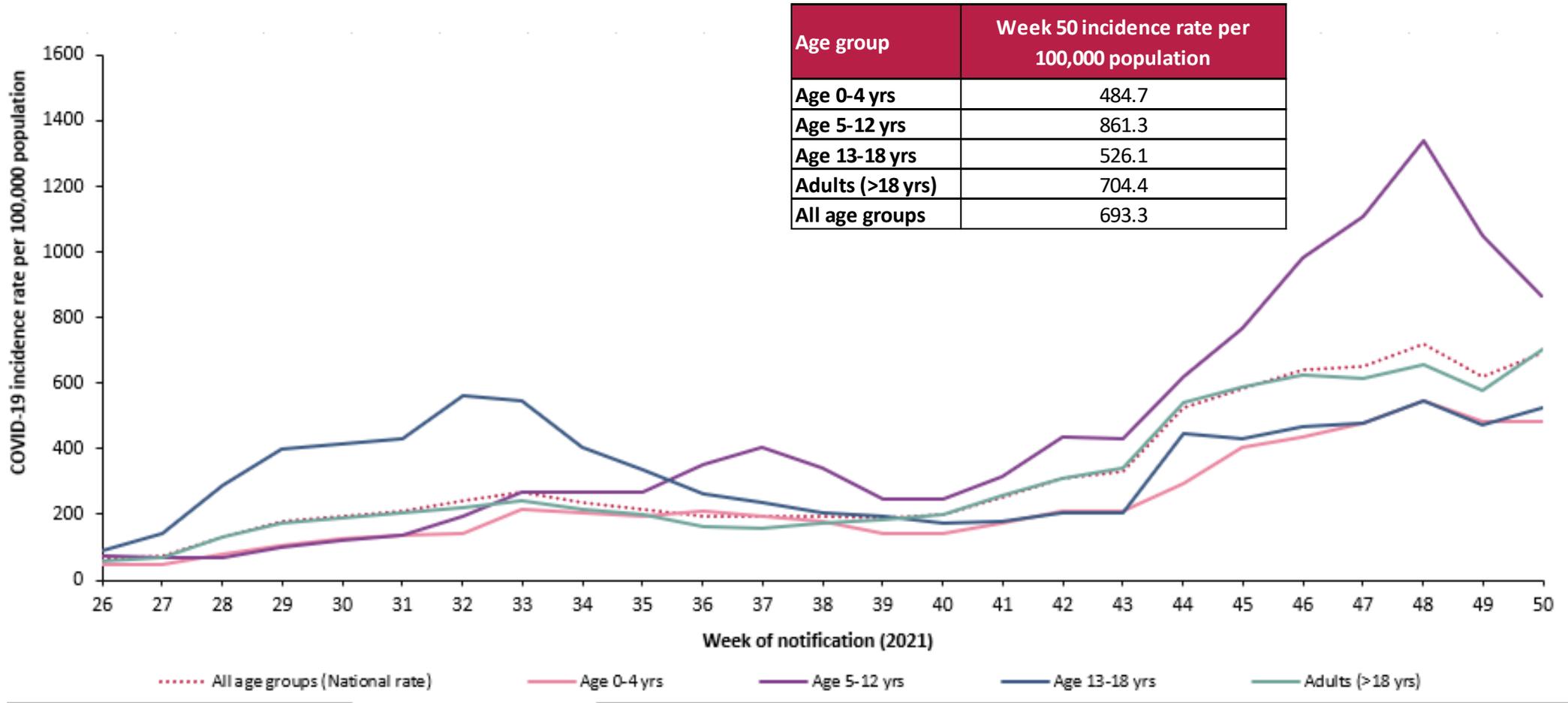


Figure 3c: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population by age group in Ireland between week 26 and week 50, 2021

Childcare facility outbreaks:

- 639 childcare facility outbreaks, involving 3,386 linked confirmed cases, were notified to HPSC since week 32 2020
- 242 childcare facility outbreaks, involving 1,187 linked confirmed cases, were notified to HPSC during wave 4
- Two childcare facility outbreaks, involving 18 linked confirmed cases, were newly reported to HPSC in week 50.

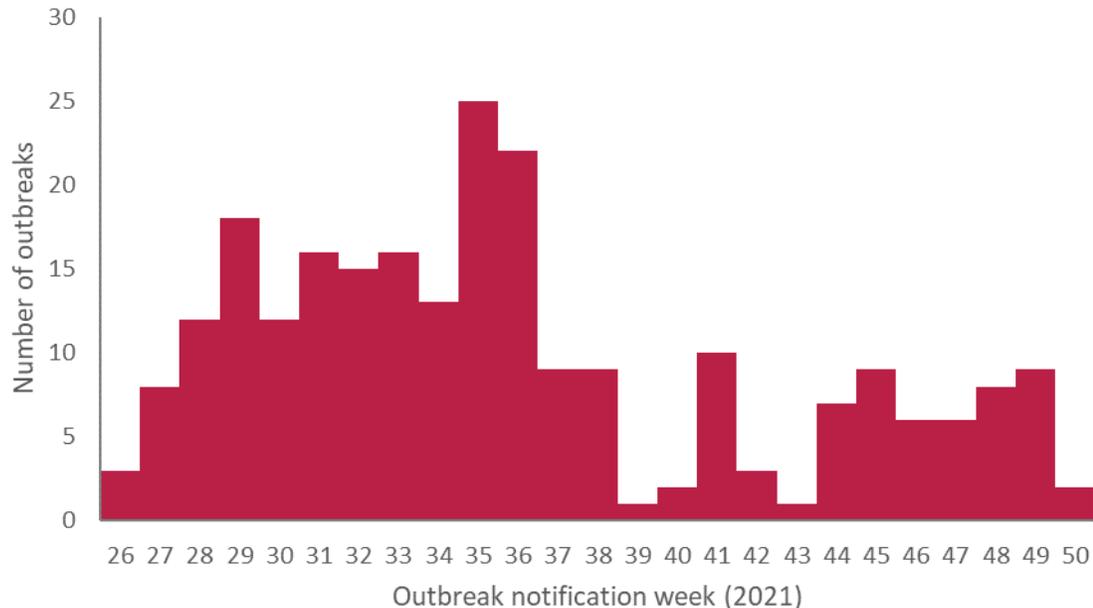


Figure 4: Number of COVID-19 outbreaks associated with staff and children in childcare facilities during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

Please note that there were delays to the notification of outbreaks and linking of outbreak-associated cases on CIDR due to the May 2021 cyber-attack on the HSE IT system. For this reason, the number of outbreaks reported between May 14th and June 28th 2021 may be an underestimate, and the number of cases linked to outbreaks reported during this time period may also be an underestimate.

Cases linked to outbreaks associated with children and staff in childcare facilities during wave 4



29% of outbreaks associated with childcare facilities reported during wave 4 have involved only 2 cases

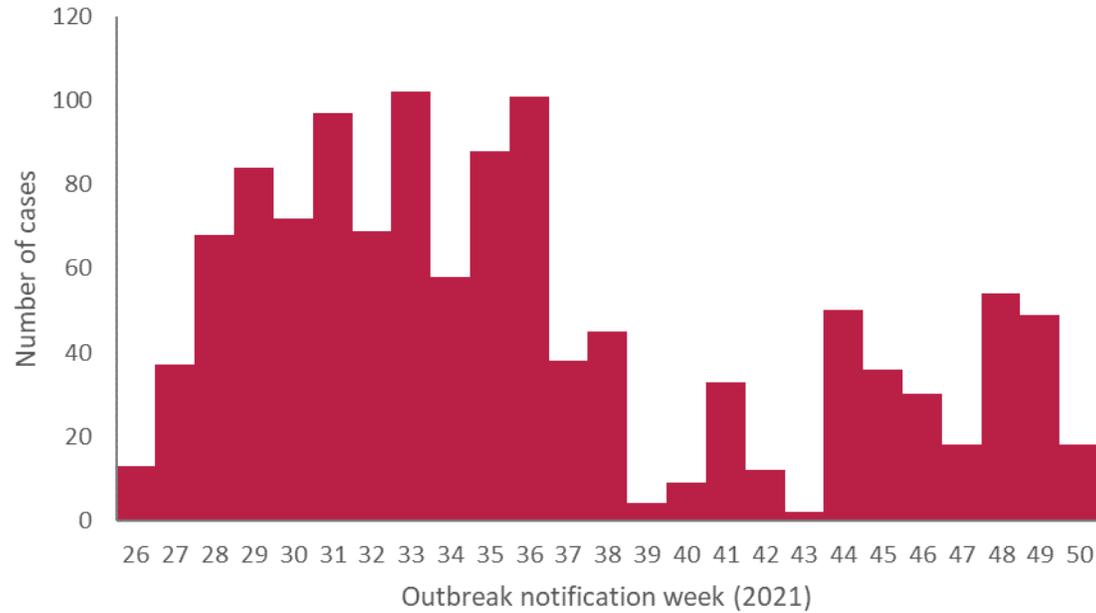


Figure 5: Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in childcare facilities during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

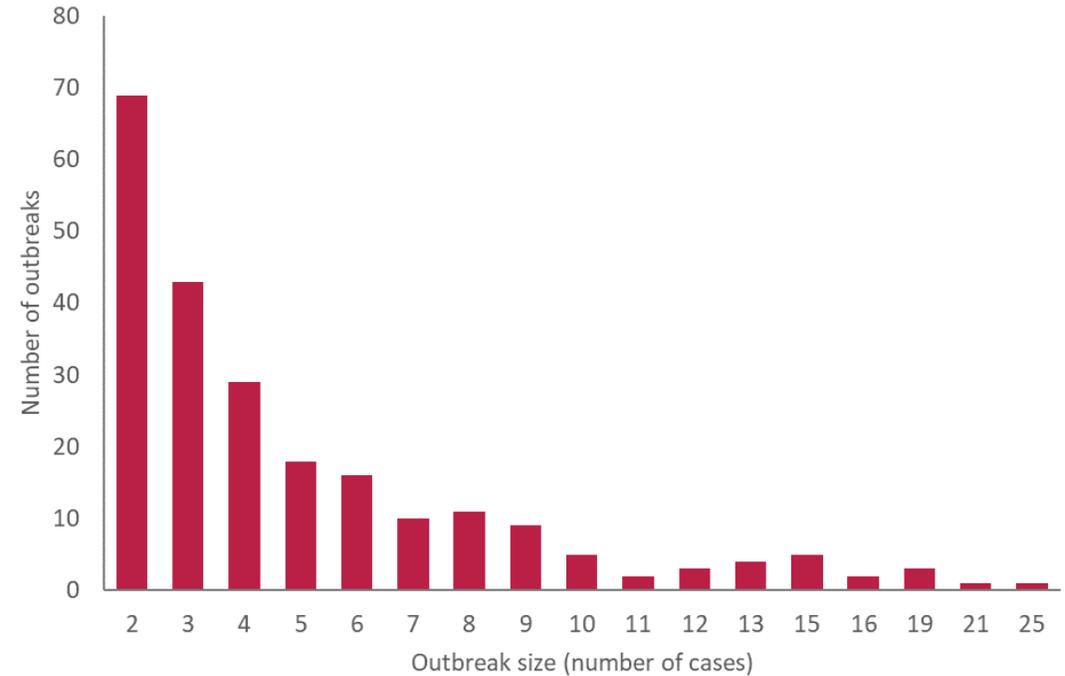


Figure 6: Number of COVID-19 outbreaks associated with staff and children in childcare facilities by the number of confirmed cases per outbreak during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

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:

- 1,279 school outbreaks, involving 6,521 linked confirmed cases, were notified to HPSC since week 37 2020
- 500 school outbreaks, involving 2,982 linked confirmed cases, were notified to HPSC during wave 4
- 22 school outbreaks, involving 106 linked confirmed cases, were newly reported to HPSC in week 50.

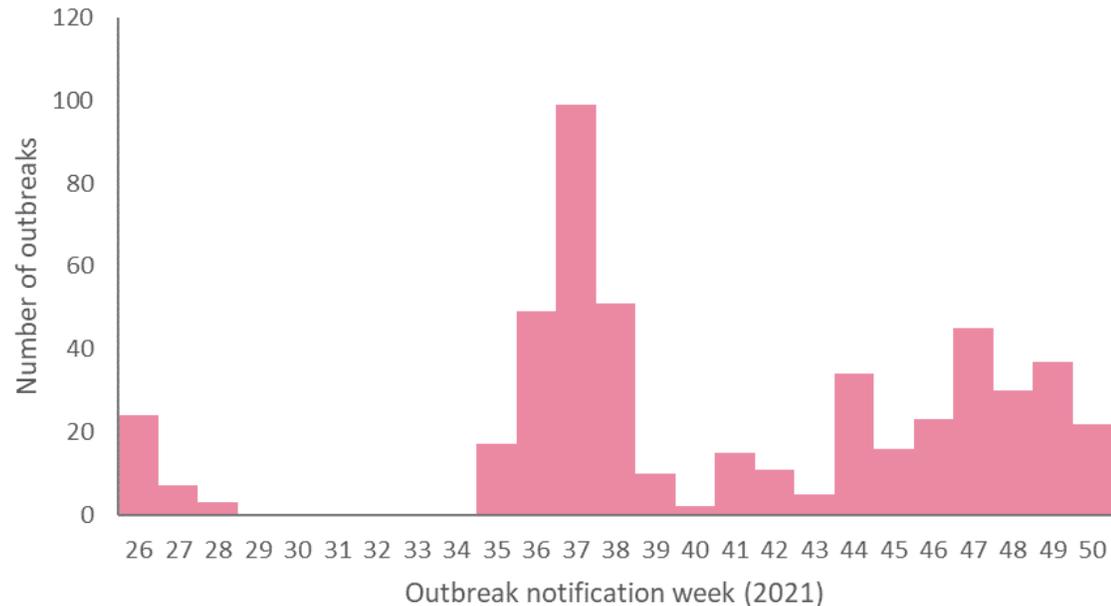


Figure 7: Number of COVID-19 outbreaks associated with staff and children in schools during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

Please note these data incorporate outbreaks associated with both the 2020/21 and 2021/22 academic year.

**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 note that there were delays to the notification of outbreaks and linking of outbreak-associated cases on CIDR due to the May 2021 cyber-attack on the HSE IT system. For this reason, the number of outbreaks reported between May 14th and June 28th 2021 may be an underestimate, and the number of cases linked to outbreaks reported during this time period may also be an underestimate.

Cases linked to outbreaks associated with children and staff in schools during wave 4



24% of outbreaks associated with schools reported during wave 4 have involved only 2 cases

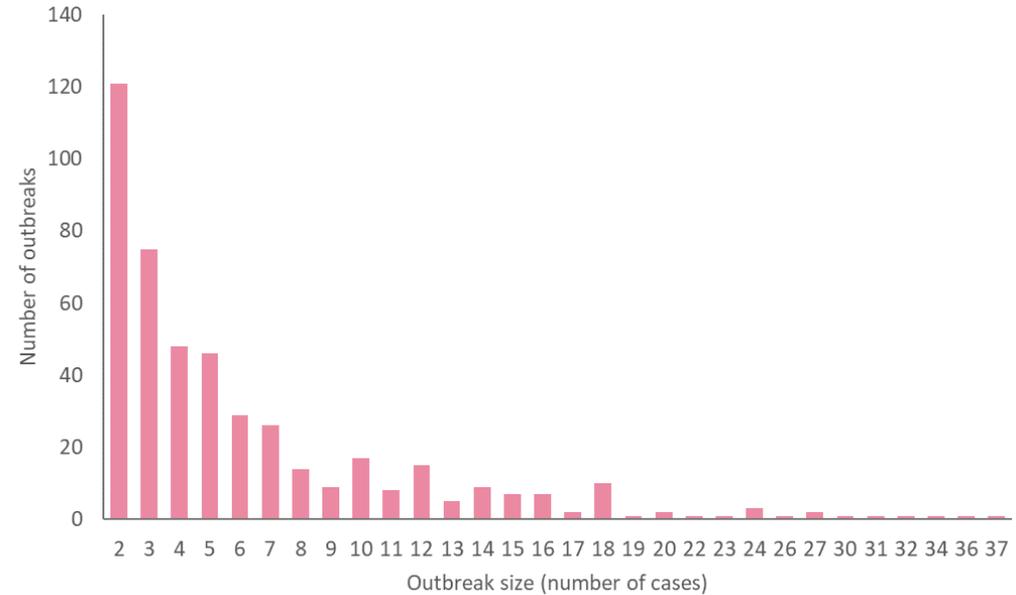
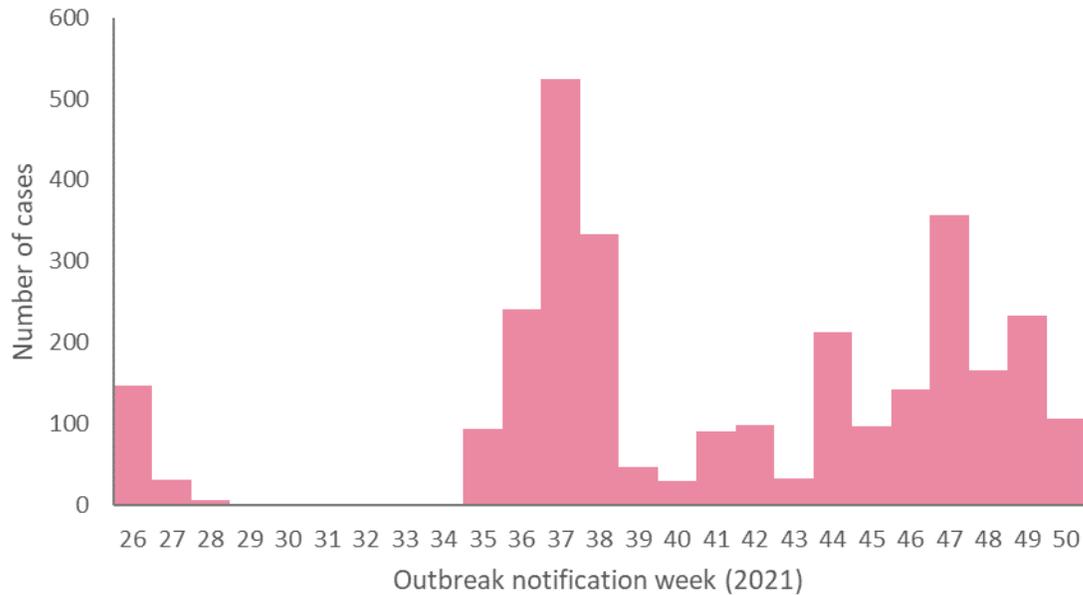


Figure 8: Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in schools during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

Figure 9: Number of COVID-19 outbreaks associated with staff and children in schools by the number of confirmed cases per outbreak during wave 4 of the pandemic in Ireland (week 26 to week 50, 2021)

**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 50 Summary: Cases and outbreaks in current week and in wave 4 of the pandemic in Ireland, week 26 - week 50 2021



Confirmed COVID-19 cases: Age group	Week 50		Wave 4 (Week 26 - Week 50)	
	Number of confirmed cases ¹	Proportion of all cases (%)	Number of confirmed cases ¹	Proportion of all cases (%)
0-4 yrs	1,607	4.9	19,495	5.1
5-12 yrs	4,726	14.3	60,621	15.7
13-18 yrs	1,955	5.9	32,094	8.3
>18 yrs	24,724	74.9	273,668	70.9
Total	33,012	100.0	385,878	100.0

Outbreaks: Outbreak Location	Week 50			Wave 4 (Week 26 - Week 50)		
	Number of outbreaks	Number of confirmed cases linked to outbreaks	Range in number of linked cases ²	Number of outbreaks	Number of confirmed cases linked to outbreaks	Range in number of linked cases ²
Childcare facility	2	18	6 - 12	242	1,187	0 - 25
School	22	106	0 - 13	500	2,982	0 - 37
Total	24	124	0 - 13	742	4,169	0 - 37

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.

Please note that there were delays to the notification of outbreaks and linking of outbreak-associated cases on CIDR due to the May 2021 cyber-attack on the HSE IT system. For this reason, the number of outbreaks reported between May 14th and June 28th 2021 may be an underestimate, and the number of cases linked to outbreaks reported during this time period may also be an underestimate.

COVID-19 mass testing data for Post Primary schools and schools in the Special Education (SEN) sector (Term 1 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 – 18/12/2021)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	595	5,427	315	5.8%	5,098
Special Education	77	1,614	137	8.5%	1,470
Total	672	7,041	452	6.4%	6,568

Results Summary for Schools Testing Week 50 2021

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	136	246	29	11.8%	212
Special Education	19	137	13	9.5%	121
Total	155	383	42	10.9%	333

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

- [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

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

- [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 14th and October 9th 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 13th 2021, and on or after October 10th 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.