



# Weekly Epidemiological Report on COVID-19 cases aged 0-18 years and COVID-19 mass testing in schools in Ireland Week 43, 2021

Health Protection Surveillance Centre, HPSC  
COVID-19 Epidemiology Team, 01/11/2021

## Dates to note:

- Week 43 2021 (24<sup>th</sup> to 30<sup>th</sup> October 2021)
- Week 10 2020 (1<sup>st</sup> to 7<sup>th</sup> 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 01/11/2021 and 02/11/2021. 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 01/11/2021.*

# 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
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



<b>Epidemiological Week*</b>	<b>Epi week start date</b>	<b>School and childcare facility closures/openings</b>
<b>Week 21, 2021</b>	23/05/2021	End of term for most post-primary schools to facilitate beginning of state examinations.
<b>Week 25, 2021</b>	20/06/2021	End of term for most primary schools.
<b>Week 26, 2021</b>	27/06/2021	Beginning of wave 4 of the pandemic in Ireland.
<b>Week 30, 2021</b>	25/07/2021	Vaccine registration opens for 16 and 17 year olds.
<b>Week 32, 2021</b>	08/08/2021	Vaccine registration opens for 12-15 year olds.
<b>Week 35, 2021</b>	29/08/2020	Schools re-open for 2021/22 academic year.
<b>Week 39, 2021</b>	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.
<b>Week 43, 2021</b>	24/10/2021	All schools close for mid-term break.

\*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 1<sup>st</sup> 2020 and October 30<sup>th</sup> 2021, a total of **445,594** confirmed COVID-19 cases were notified on CIDR:

- **18,434 (4.1%)** of these cases were pre-school aged children (aged 0-4 years)
- **40,764 (9.1%)** were primary school aged children (aged 5-12 years)
- **37,713 (8.5%)** were secondary school aged children (aged 13-18 years)
- **348,623 (78.2%)** were adults (aged over 18 years)
- Age was unknown for 60 cases

A total of **96,911** confirmed cases of COVID-19 in the 0-18 year old population represents **7.7%** of the 0-18 population in Ireland\* and **21.7%** of all confirmed COVID-19 cases in Ireland reported between week 10 2020 and week 43 2021

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

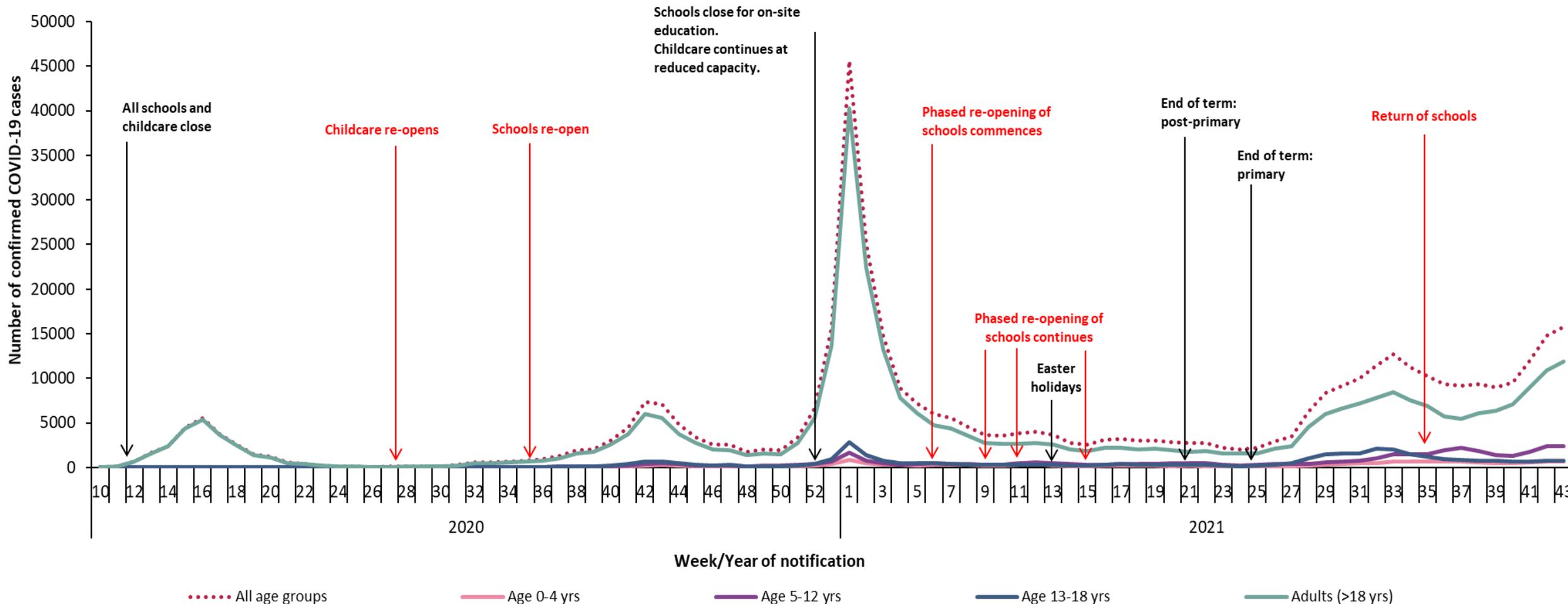
## Summary of trends among 0-18 year olds, wave 4 2021



- The majority of schools had closed for summer before wave 4 of the COVID-19 pandemic in Ireland commenced.
- The incidence of COVID-19 in all children aged 0-18 years increased during wave 4, reflecting general increases in the disease incidence in the country at that 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.
- 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 disease incidence in the vaccine-eligible cohort was observed until recent weeks. There has been a slight increase in disease incidence among this group since week 41, consistent with a generalised increase in disease incidence in the community, but the proportion of cases among this group continues to decrease and disease incidence remains lower than the national incidence rate.
- The rate of infection 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 reflect increased testing of mildly symptomatic and asymptomatic children.
- The infection rate in 5-12 year olds decreased in week 38 and continued to decrease until week 40 to 245.7/100,000. However, this rate increased in week 41 and plateaued in week 43 at 432.7/100,000. Infection rates also increased for 0-4 year olds in week 41, again plateauing in week 43 at 209.9/100,000. These increases are consistent with increases across other age groups during the same time period and the proportion of cases aged 0-4 years and 5-12 years has remained relatively stable between week 39 and week 43.

- The 2021/22 academic year commenced for the majority of students during week 35 2021. Five outbreaks associated with schools were reported to HPSC during week 43 2021, a decrease from 11 outbreaks reported in week 42 2021. The number of childcare outbreaks also decreased to one outbreak in week 43 from a revised number of three outbreaks in week 42.
- 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 31% of notified outbreaks associated with schools and 28% 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.

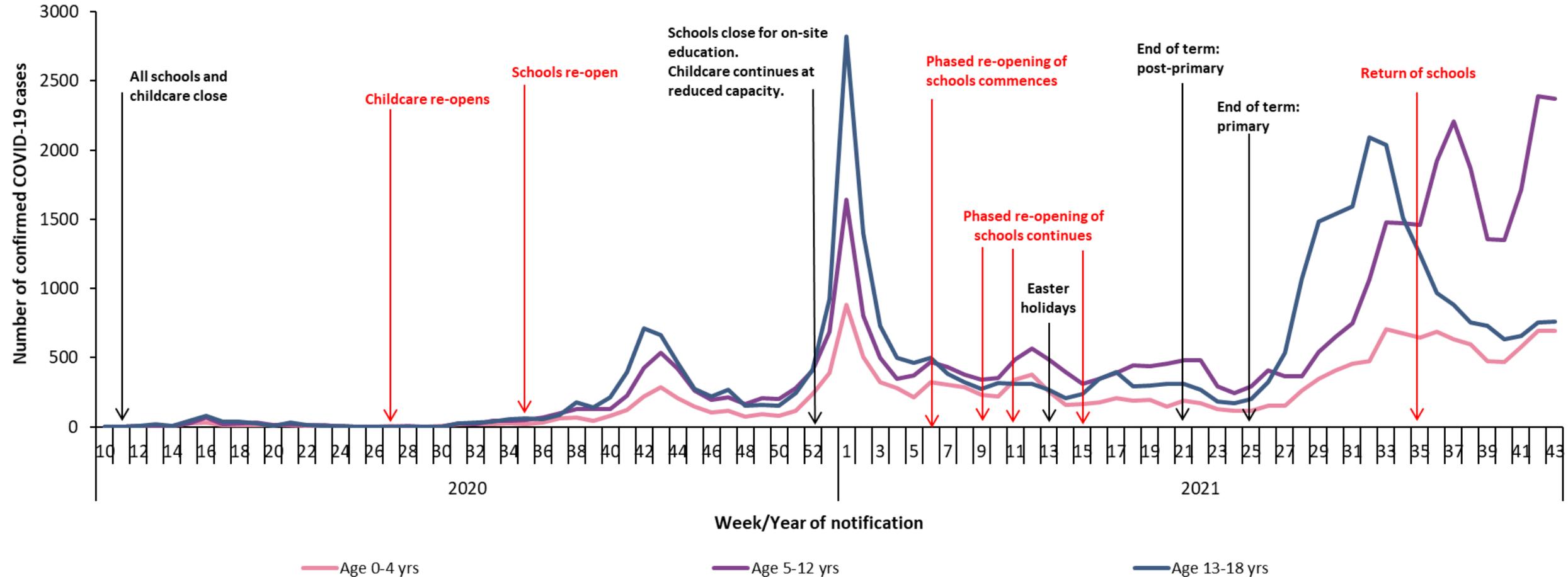
# Number of confirmed COVID-19 cases across age groups, week 10 2020 - week 43 2021



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 43, 2021

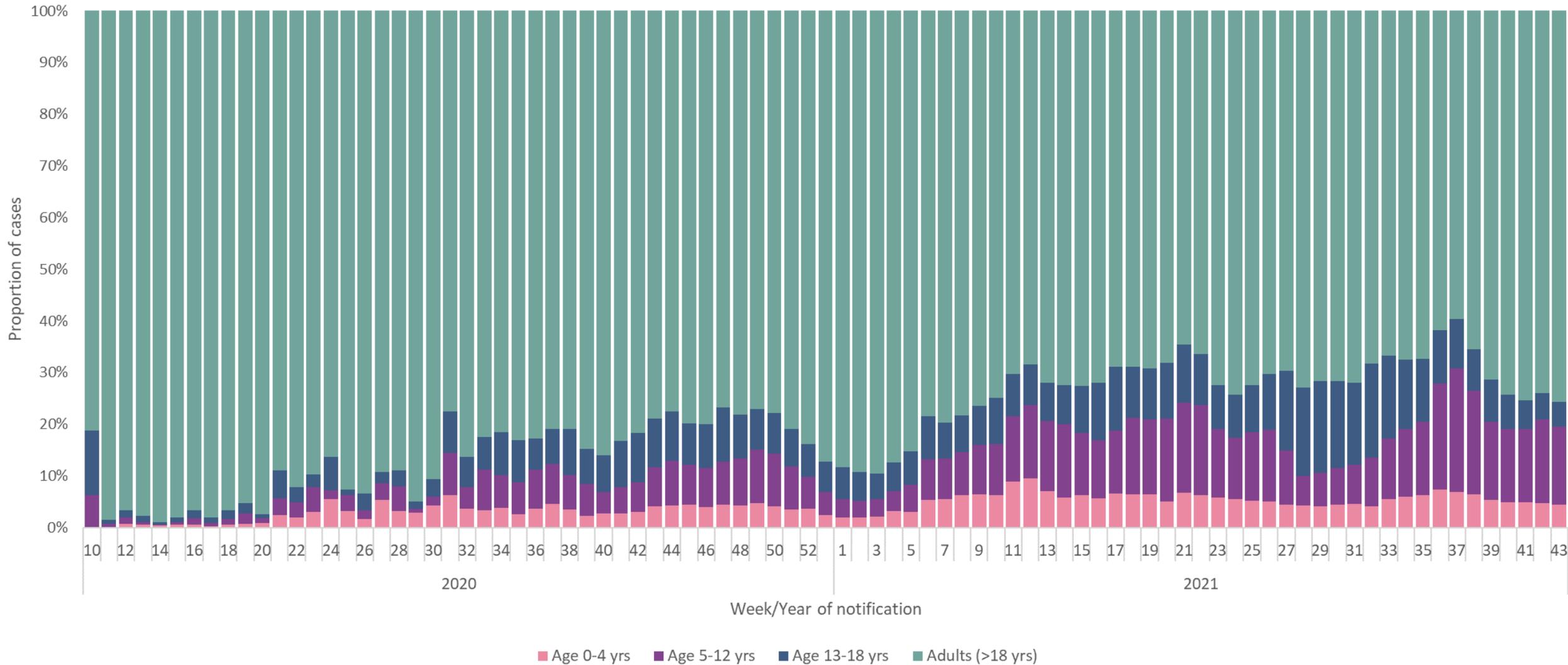
# Number of confirmed COVID-19 cases in children aged 0-18 years, week 10 2020 - week 43 2021



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 43, 2021

# Proportion of confirmed COVID-19 cases across age groups, week 10, 2020 – week 43, 2021

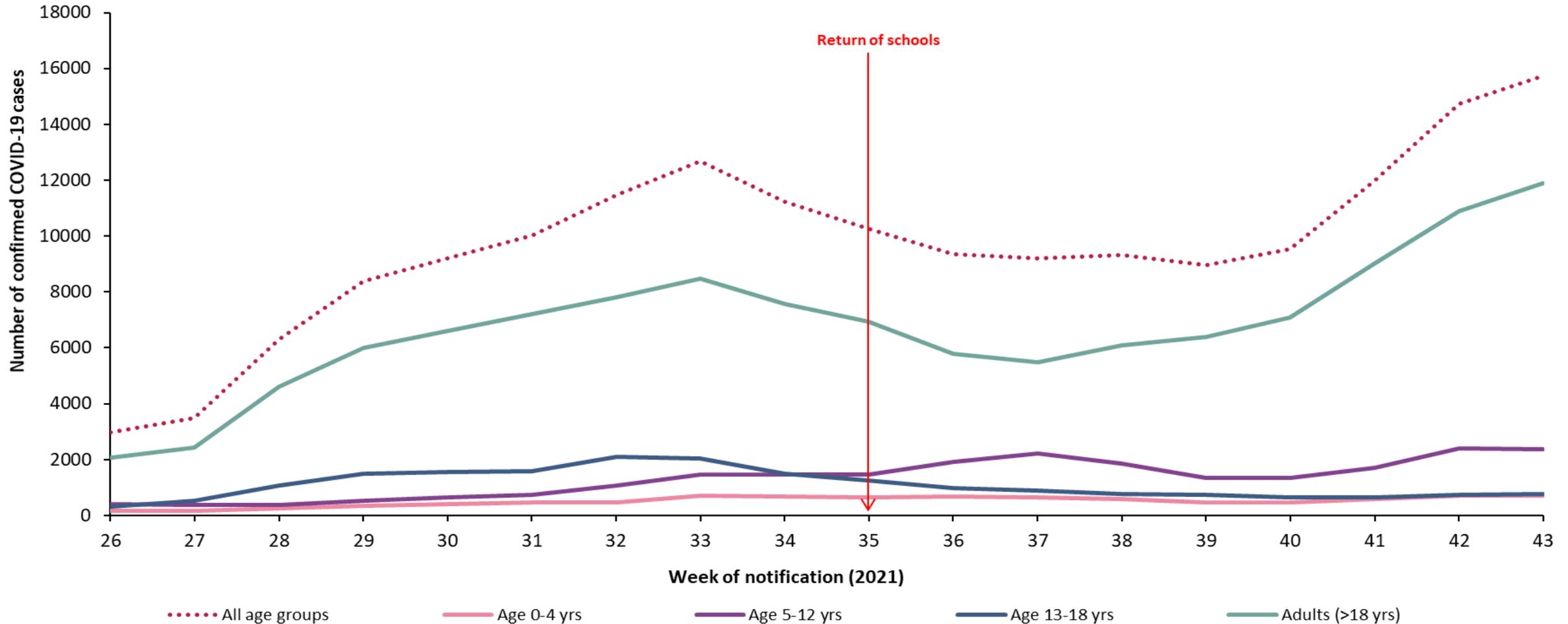


**Figure 2:** Proportion of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 43, 2021

# Number of confirmed COVID-19 cases across age groups, wave 4 (week 26 – 43, 2021)



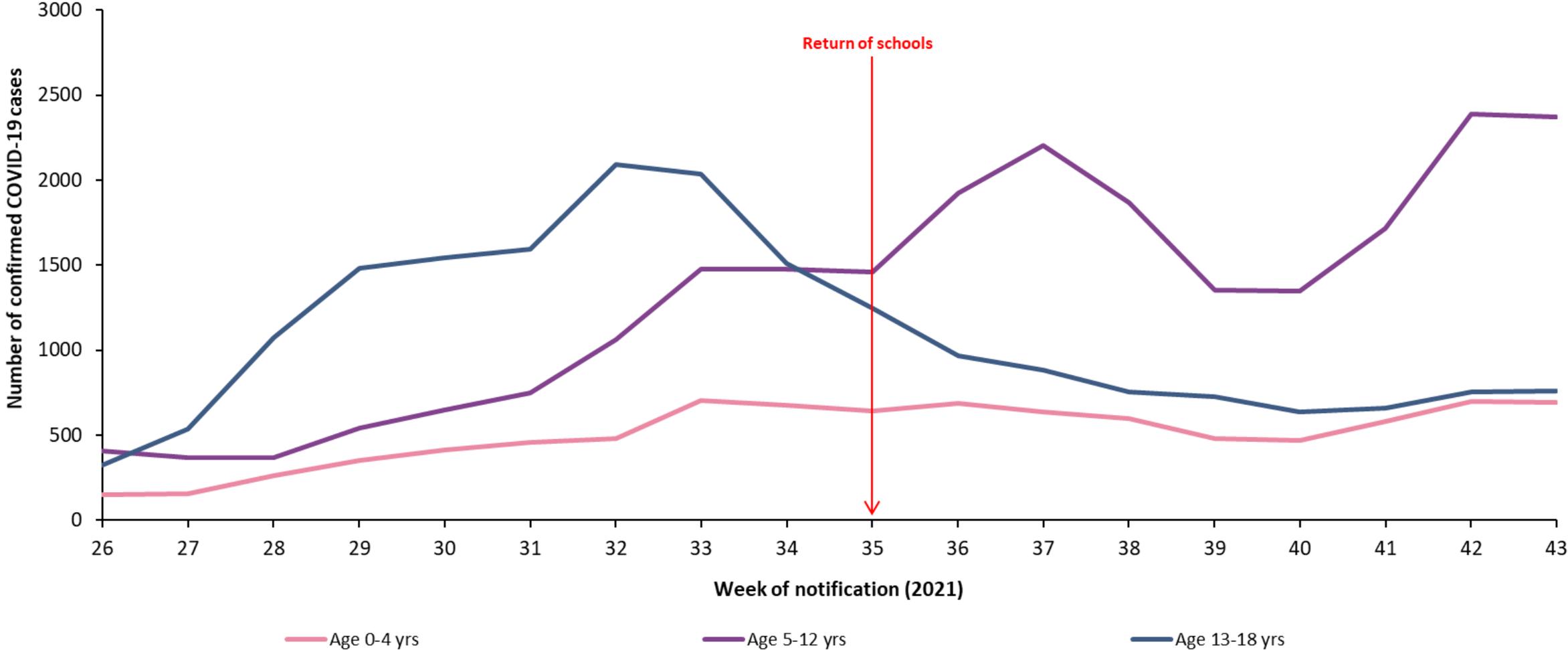
Primary and post-primary school terms ended for the summer prior to the beginning of wave 4 of the pandemic in Ireland.



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 43, 2021

# Number of confirmed COVID-19 cases in children aged 0-18 years, wave 4 (week 26 – 43, 2021)



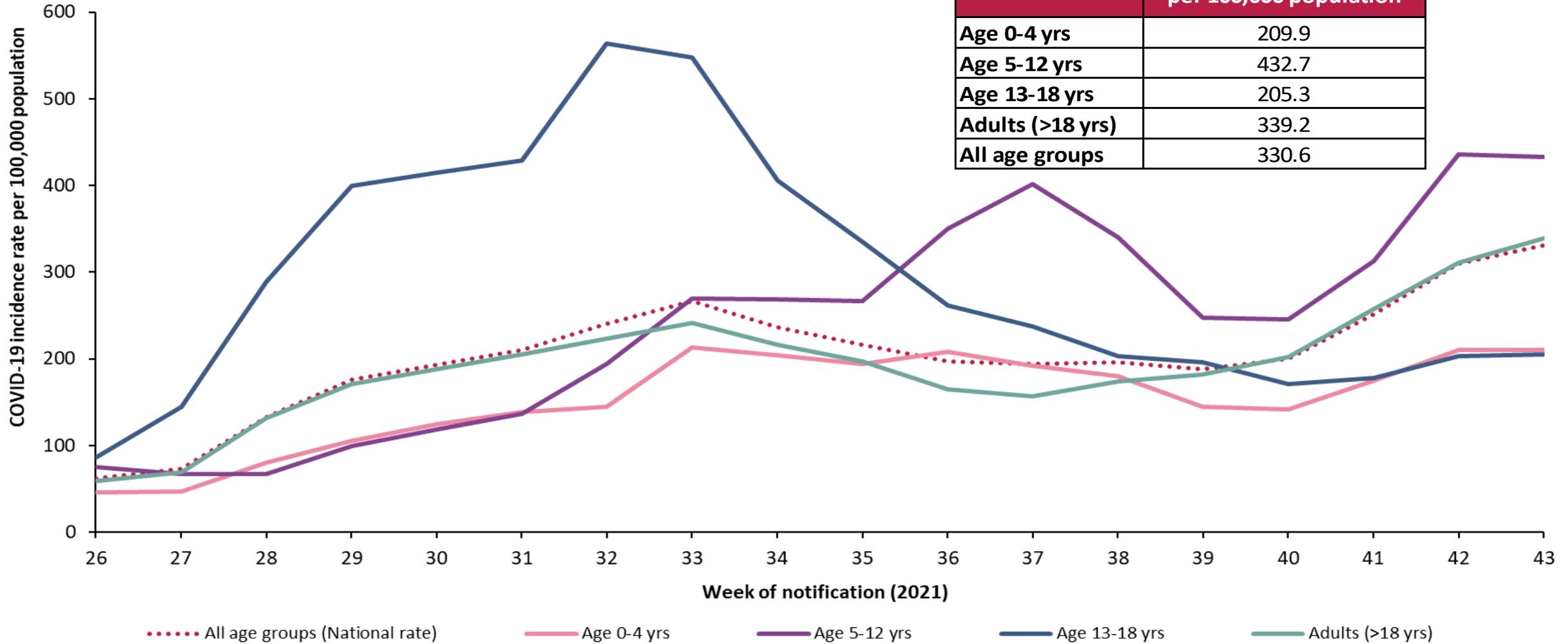
Please note that school and CCF closures/reduction in capacity have reflected patterns of COVID-19 in the general population, rather than the number of cases in schools and CCFs.

**Figure 3b:** Number of confirmed COVID-19 cases by age group in children aged 0-18 years in Ireland between week 26 and week 43, 2021

# COVID-19 weekly incidence\* rate across age groups, wave 4 (week 26 - week 43 2021)



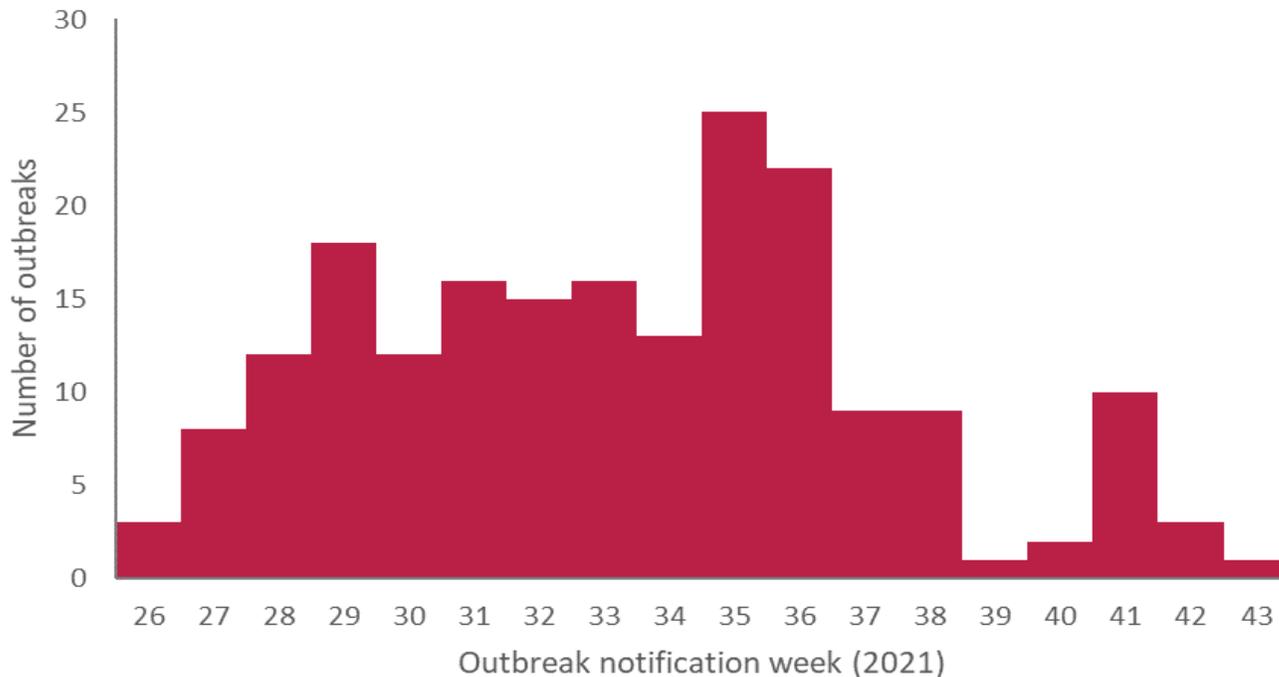
\*Age-specific population data were taken from Census 2016



**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 43, 2021

## Childcare facility outbreaks:

- 592 childcare facility outbreaks, involving 3,126 linked confirmed cases, were notified to HPSC since week 32 2020
- 195 childcare facility outbreaks, involving 925 linked confirmed cases, were notified to HPSC during wave 4
- One childcare facility outbreak, involving 2 linked confirmed cases, was newly reported to HPSC in week 43



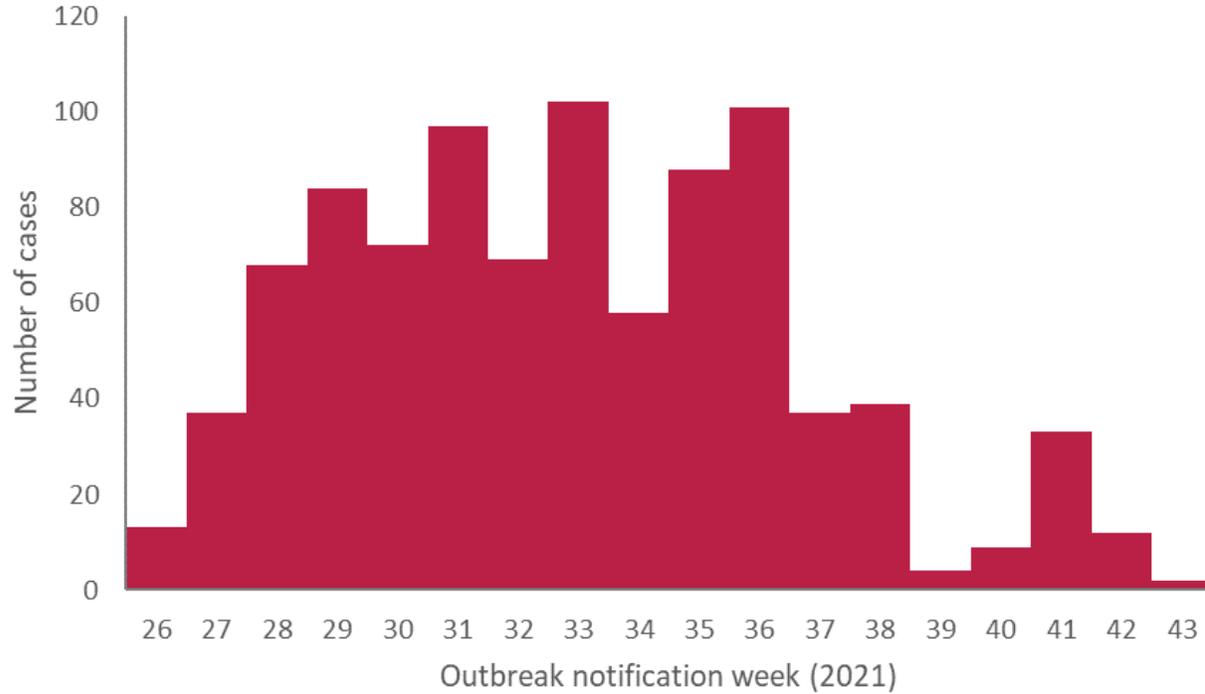
**Figure 4:** Number of COVID-19 outbreaks associated with staff and children in childcare facilities during wave 4 of the pandemic in Ireland (week 26 to week 43, 2021)

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 14<sup>th</sup> and June 28<sup>th</sup> 2021 may be an underestimate, and the number of cases linked to outbreaks reported during this time period may also be an underestimate.

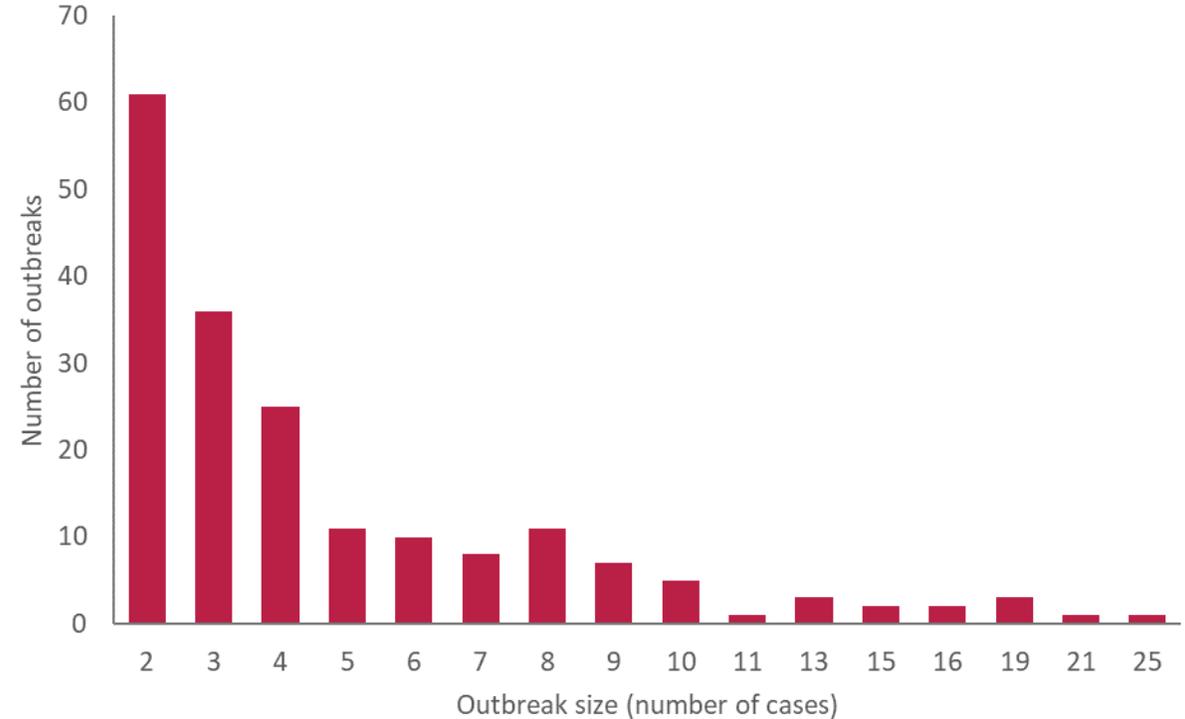
# Cases linked to outbreaks associated with children and staff in childcare facilities



**31% 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 43, 2021)

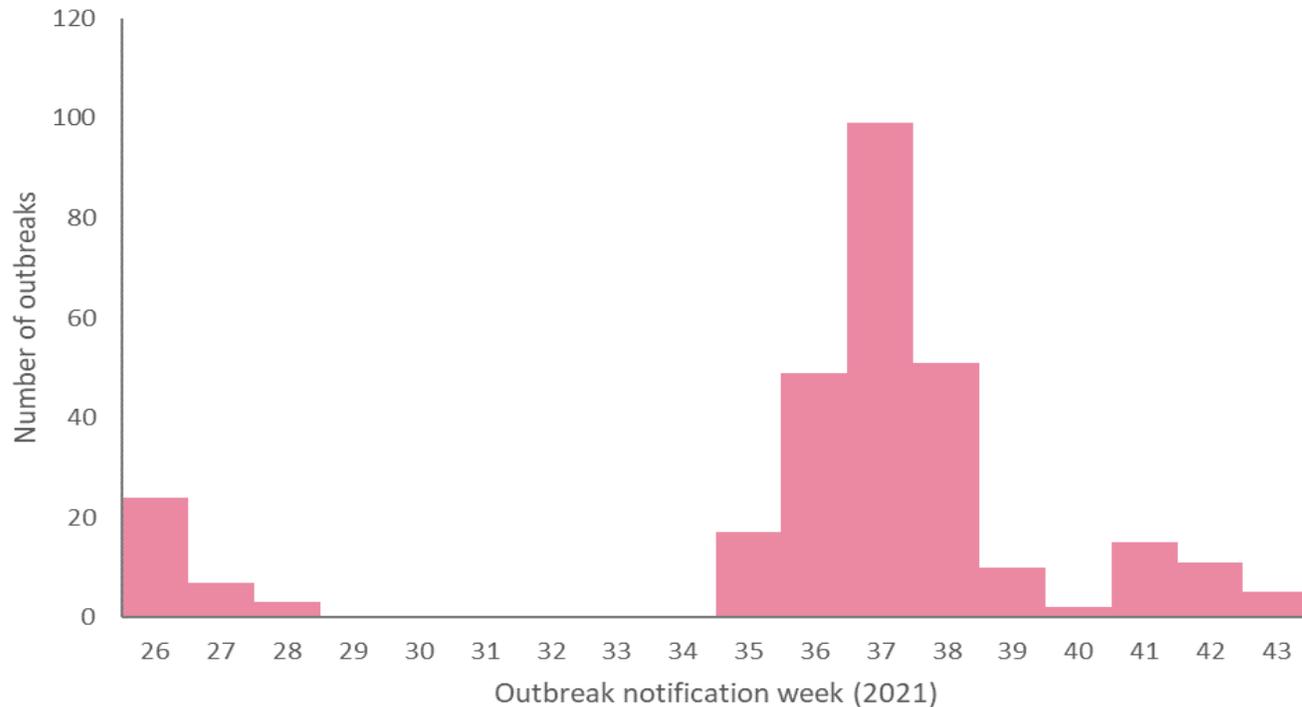


**Figure 6:** Number of COVID-19 outbreaks associated with staff and children in childcare facilities by the number of confirmed cases per outbreak during wave 4 of the pandemic in Ireland (week 26 to week 43, 2021)

Please see [Technical note 4](#) for information on number of cases associated with outbreaks and on outbreak size.

## School outbreaks:

- 813 school outbreaks, involving 3,720 linked confirmed cases, associated with the 2020/21 academic year
- 293 school outbreaks, involving 1,667 linked confirmed cases, were notified to HPSC during wave 4
- 259 school outbreaks, involving 1,485 linked confirmed cases, associated with the 2021/22 academic year
- 5 school outbreaks, involving 32 linked confirmed cases, were newly reported to HPSC in week 43



**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 43, 2021)

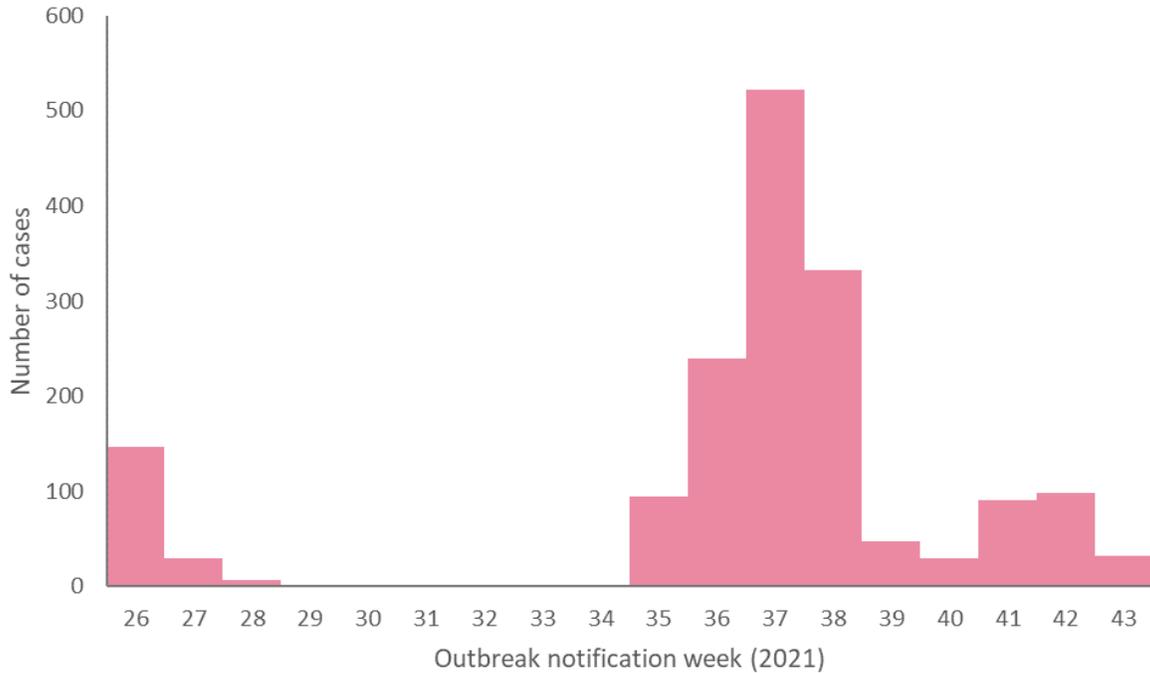
Please note these data incorporate outbreaks associated with both the 2020/21 and 2021/22 academic year.

**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 14<sup>th</sup> and June 28<sup>th</sup> 2021 may be an underestimate, and the number of cases linked to outbreaks reported during this time period may also be an underestimate.**

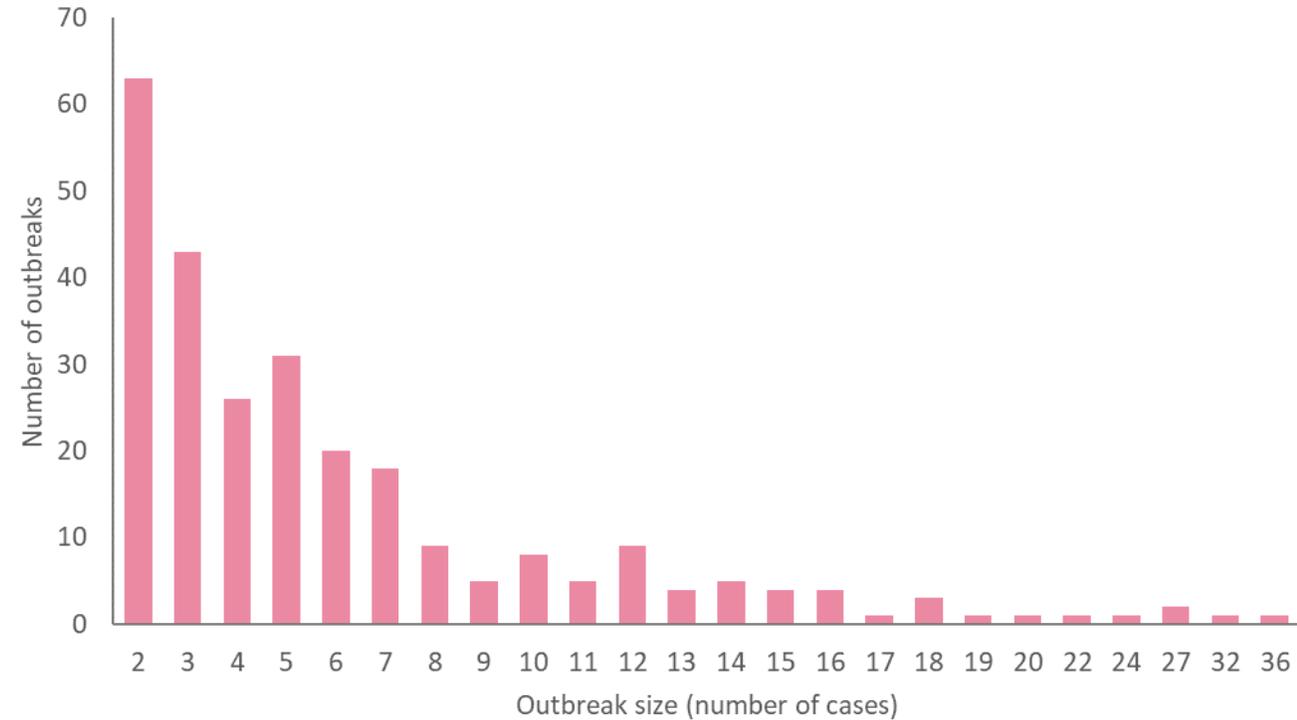
# Cases linked to outbreaks associated with children and staff in schools



**22% 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 43, 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 43, 2021)

Please see [Technical note 4](#) for information on number of cases associated with outbreaks and on outbreak size.

# Week 43 Summary: Cases and outbreaks in current week and in wave 4 of the pandemic in Ireland, week 26 - week 43 2021



Confirmed COVID-19 cases: Age group	Week 43		Wave 4 (Week 26 - Week 43)	
	Number of confirmed cases <sup>1</sup>	Proportion of all cases (%)	Number of confirmed cases <sup>1</sup>	Proportion of all cases (%)
0-4 yrs	696	4.4	9,133	5.2
5-12 yrs	2,374	15.1	23,747	13.6
13-18 yrs	763	4.8	19,584	11.2
>18 yrs	11,906	75.6	122,419	70.0
<b>Total</b>	<b>15,739</b>	<b>100.0</b>	<b>174,883</b>	<b>100.0</b>

Outbreaks: Outbreak Location	Week 43			Wave 4 (Week 26 - Week 43)		
	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	1	2	2	195	925	1 - 25
School	5	32	1 - 17	293	1,667	0 - 36
<b>Total</b>	<b>6</b>	<b>34</b>	<b>1 - 17</b>	<b>488</b>	<b>2,592</b>	<b>0 - 36</b>

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 14<sup>th</sup> and June 28<sup>th</sup> 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 – 30/10/2021)

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	466	3,506	144	4.1%	3,355
Special Education	56	791	62	7.8%	727
<b>Total</b>	<b>522</b>	<b>4,297</b>	<b>206</b>	<b>4.8%</b>	<b>4,082</b>

## Results Summary for Schools Testing week 43 2021

Facility Type	No. Facilities	No. Tested	No. Detected	Detected %	No. Not Detected
Post Primary	76	121	7	5.8%	114
Special Education	11	69	2	2.9%	67
<b>Total</b>	<b>87</b>	<b>190</b>	<b>9</b>	<b>4.7%</b>	<b>181</b>

***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 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.