



Weekly Epidemiological Report on COVID-19 cases aged 0-18 years and COVID-19 mass testing in schools in Ireland Week 46, 2021

Health Protection Surveillance Centre, HPSC
COVID-19 Epidemiology Team, 23/11/2021

Dates to note:

- Week 46 2021 (14th to 20th November 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 22/11/2021 and 23/11/2021. 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 22/11/2021.

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 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 |
|------------------------------|----------------------------|---|
| 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. |

*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 November 20th 2021, a total of **528,960** confirmed COVID-19 cases were notified on CIDR:

- **22,202 (4.2%)** of these cases were pre-school aged children (aged 0-4 years)
- **53,741 (10.2%)** were primary school aged children (aged 5-12 years)
- **42,709 (8.1%)** were secondary school aged children (aged 13-18 years)
- **410,246 (77.6%)** were adults (aged over 18 years)
- Age was unknown for 62 cases

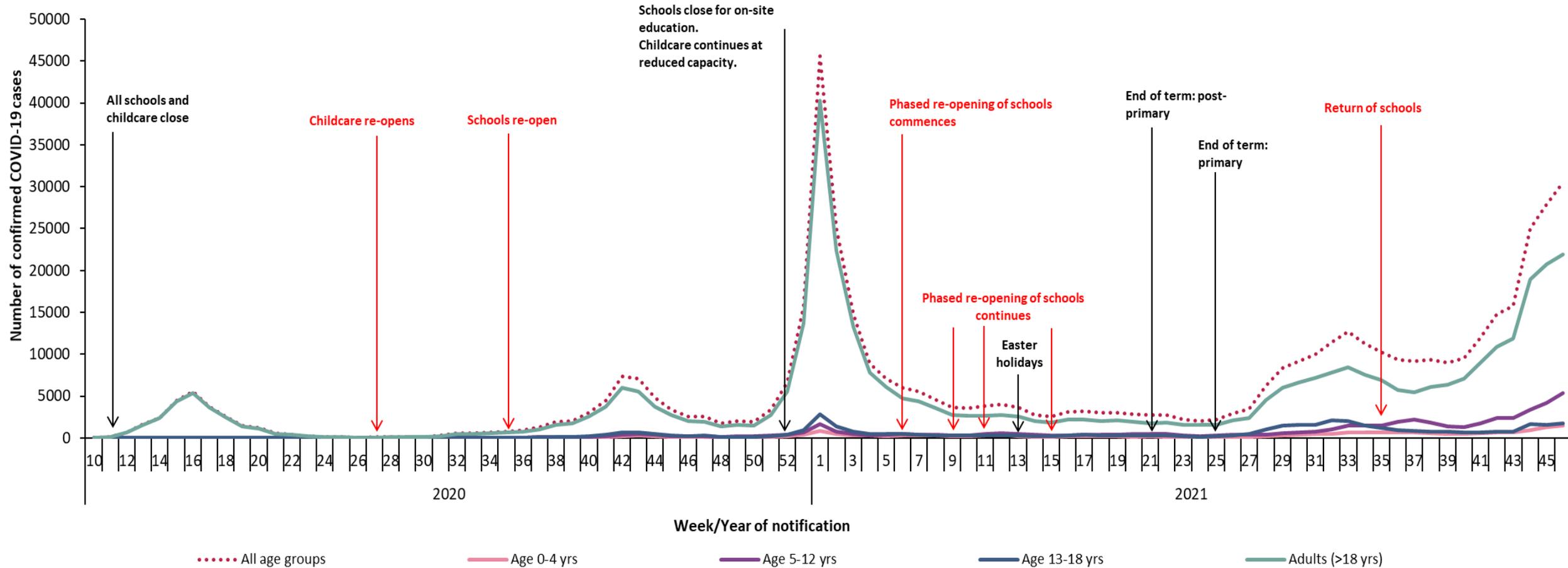
A total of **118,652** confirmed cases of COVID-19 in the 0-18 year old population represents **9.5%** of the 0-18 population in Ireland* and **22.4%** of all confirmed COVID-19 cases in Ireland reported between week 10 2020 and week 46 2021

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

- 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. Disease incidence among this group has increased since week 41, consistent with a generalised increase in disease incidence in the community, but remains lower among this group than the national incidence rate and the proportion of cases among this group has remained relatively stable over recent weeks.
- 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 began to increase again in week 41 and continued to 979.4/100,000 in week 46. Infection rates have also increased for 0-4 year olds since week 41, and were at 437.1/100,000 in week 46. 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 continued to remain relatively stable over recent weeks, despite increases in incidence rates.

- The 2021/22 academic year commenced for the majority of students during week 35 2021. Twenty-four outbreaks associated with schools were reported to HPSC during week 46 2021, an increase from 16 outbreaks reported in week 45 2021.
- The number of childcare outbreaks decreased to six outbreaks in week 46 from nine outbreaks in week 45.
- 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 27% 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.

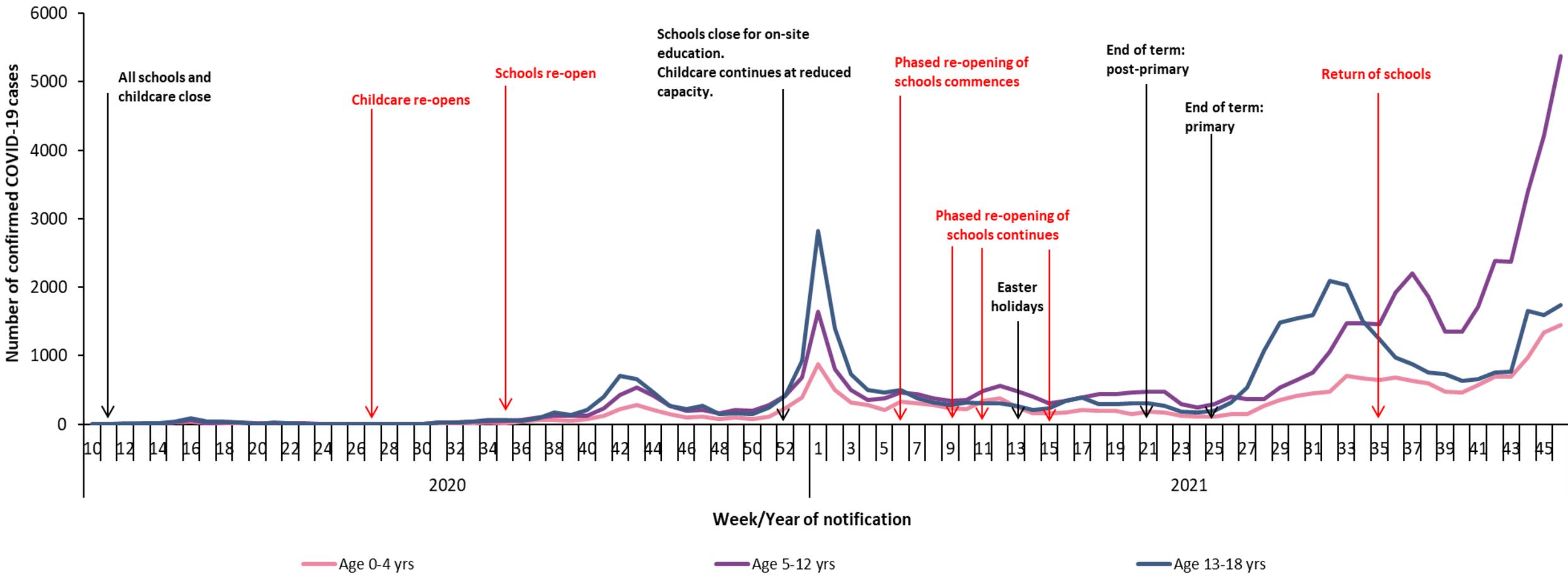
Number of confirmed COVID-19 cases across age groups, week 10 2020 - week 46 2021



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 46, 2021

Number of confirmed COVID-19 cases in children aged 0-18 years, week 10 2020 - week 46 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 46, 2021

Proportion of confirmed COVID-19 cases across age groups, week 10, 2020 – week 46, 2021

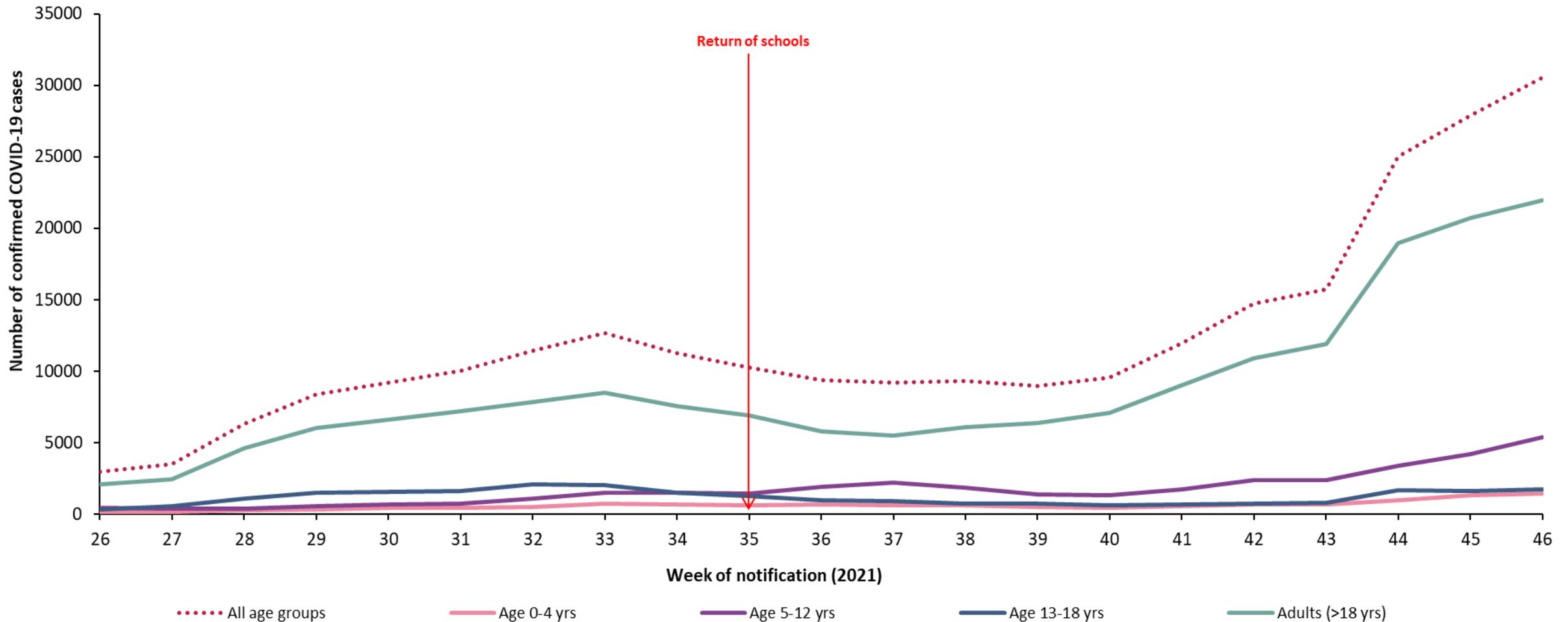


Figure 2: Proportion of confirmed COVID-19 cases by age group in Ireland between week 10, 2020 and week 46, 2021

Number of confirmed COVID-19 cases across age groups, wave 4 (week 26 – 46, 2021)



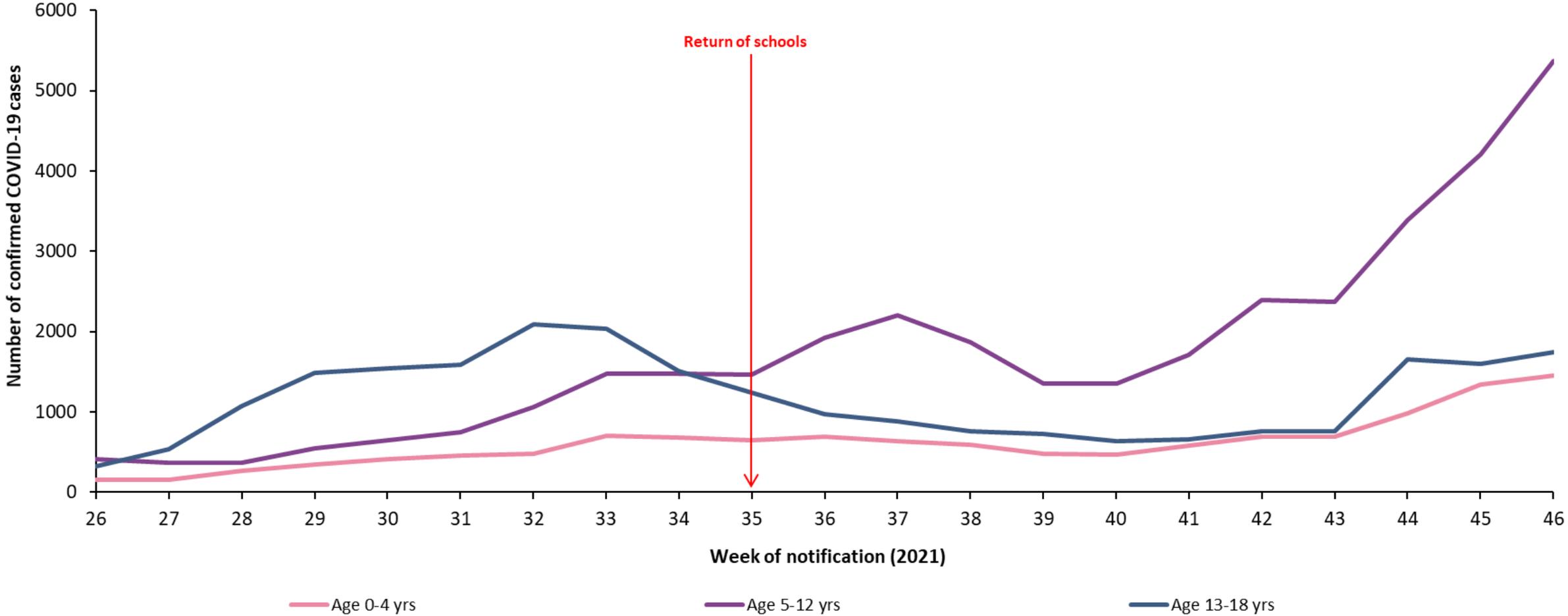
Primary and post-primary school terms ended for the summer prior to the beginning of wave 4 of the pandemic in Ireland.



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 46, 2021

Number of confirmed COVID-19 cases in children aged 0-18 years, wave 4 (week 26 – 46, 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 46, 2021

COVID-19 weekly incidence* rate across age groups, wave 4 (week 26 - week 46 2021)



*Age-specific population data were taken from Census 2016

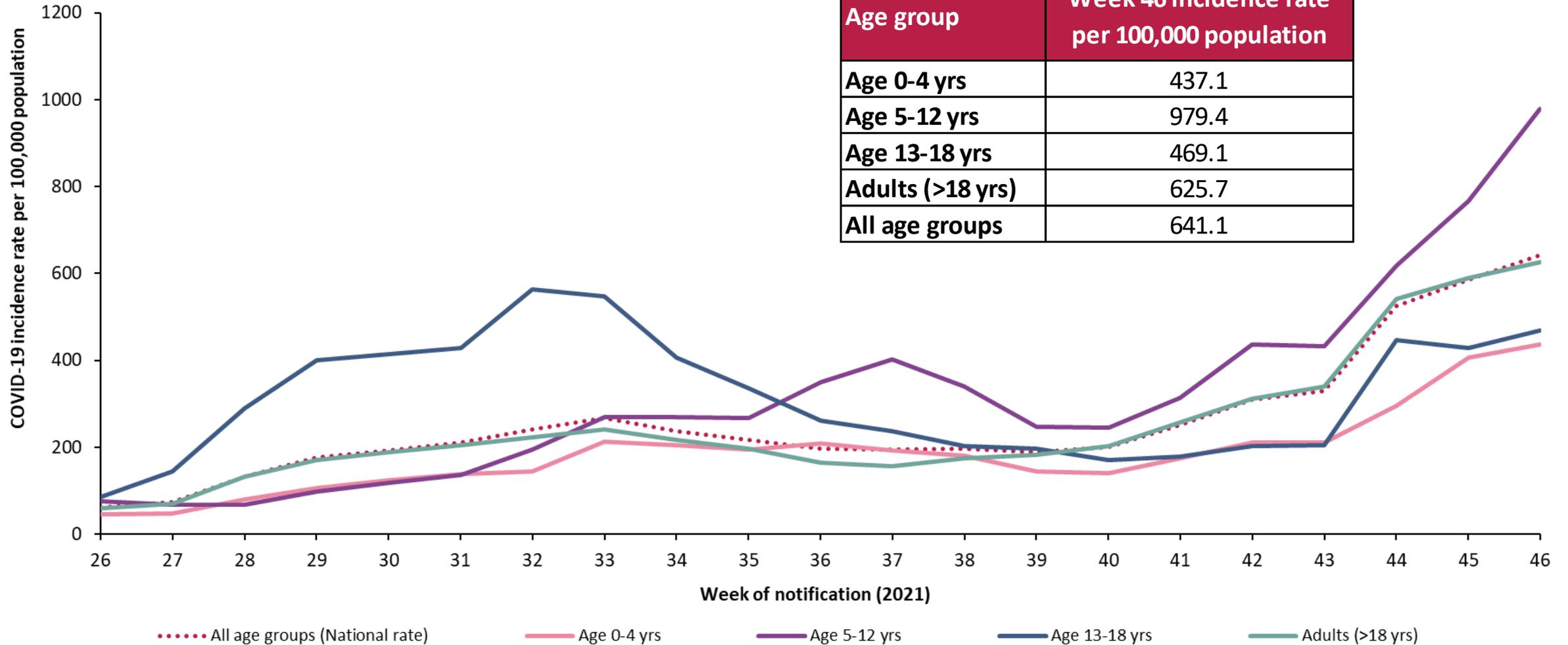


Figure 3c: Weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population by age group in Ireland between week 26 and week 46, 2021

Childcare facility outbreaks:

- 614 childcare facility outbreaks, involving 3,239 linked confirmed cases, were notified to HPSC since week 32 2020
- 217 childcare facility outbreaks, involving 1,039 linked confirmed cases, were notified to HPSC during wave 4
- Six childcare facility outbreaks, involving 27 linked confirmed cases, were newly reported to HPSC in week 46.

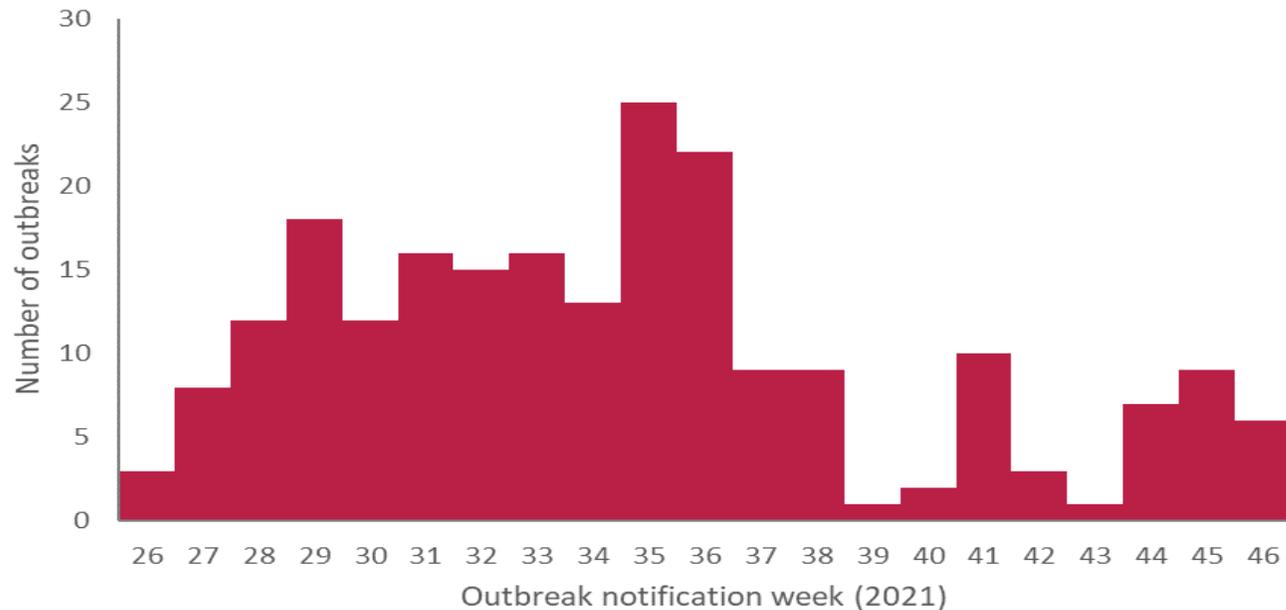


Figure 4: Number of COVID-19 outbreaks associated with staff and children in childcare facilities during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

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



30% of outbreaks associated with childcare facilities reported during wave 4 have involved only 2 cases

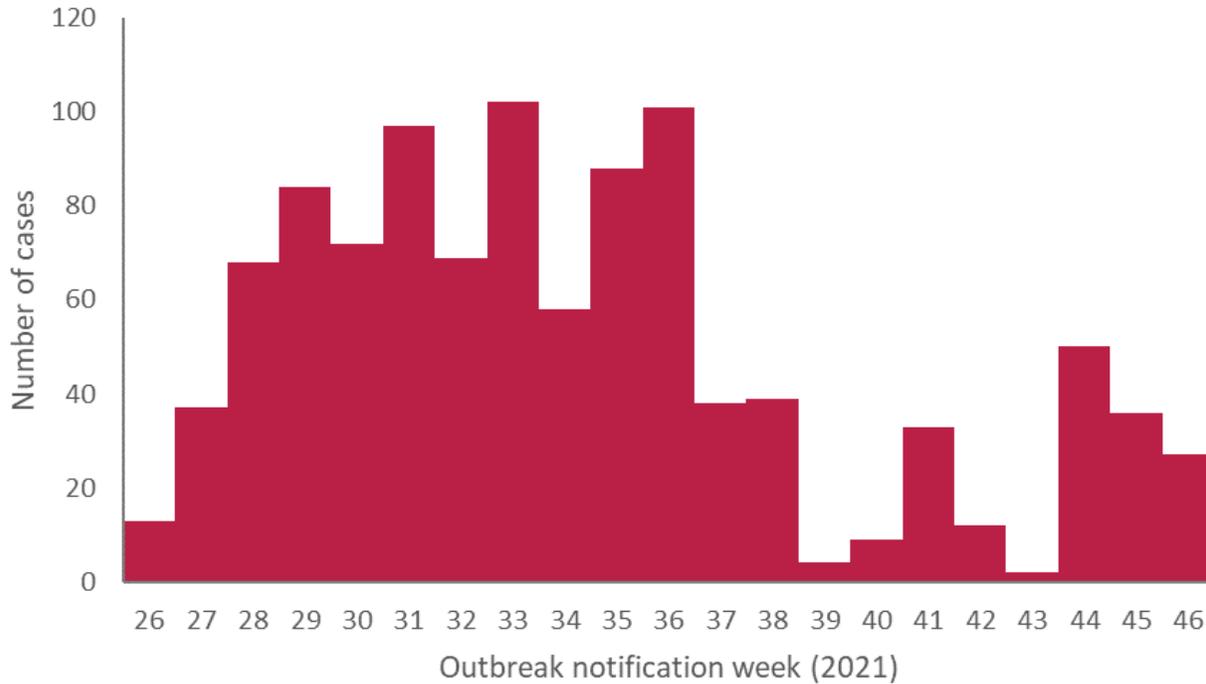


Figure 5: Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in childcare facilities during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

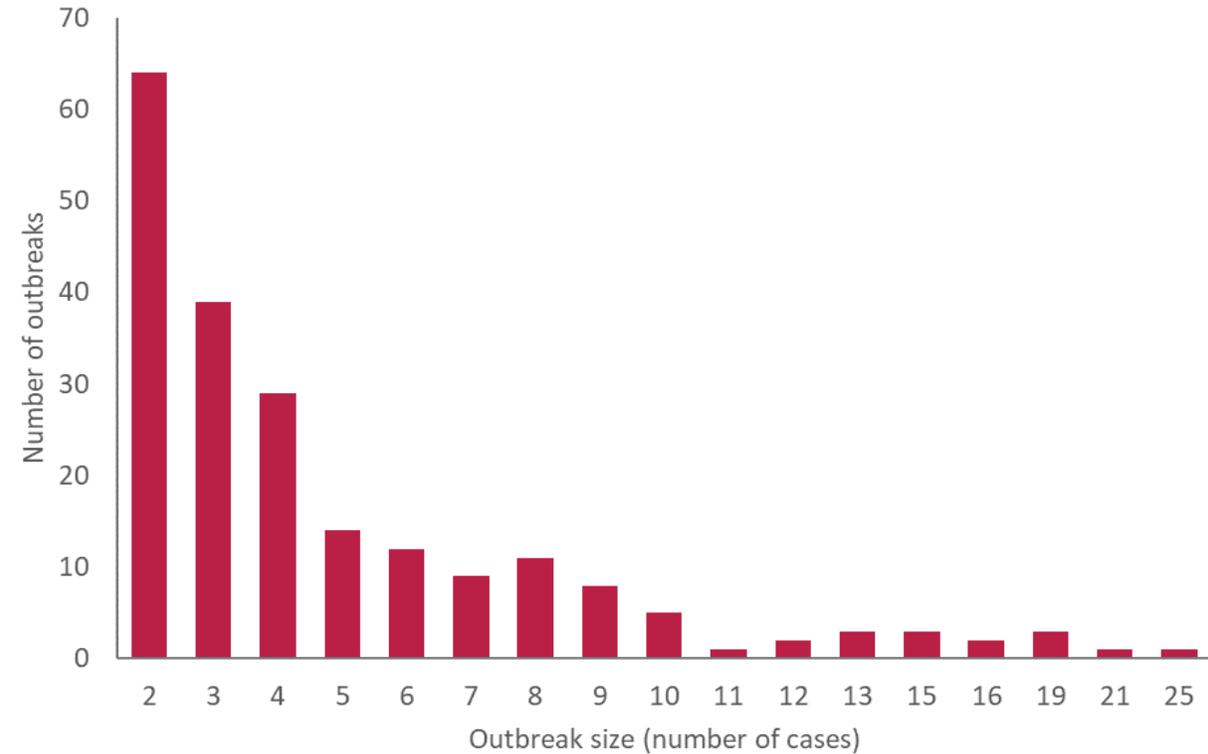


Figure 6: Number of COVID-19 outbreaks associated with staff and children in childcare facilities by the number of confirmed cases per outbreak during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

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:

- 1,146 school outbreaks, involving 5,640 linked confirmed cases, were notified to HPSC since week 37 2020
- 367 school outbreaks, involving 2,101 linked confirmed cases, were notified to HPSC during wave 4
- 24 school outbreaks, involving 139 linked confirmed cases, were newly reported to HPSC in week 46.

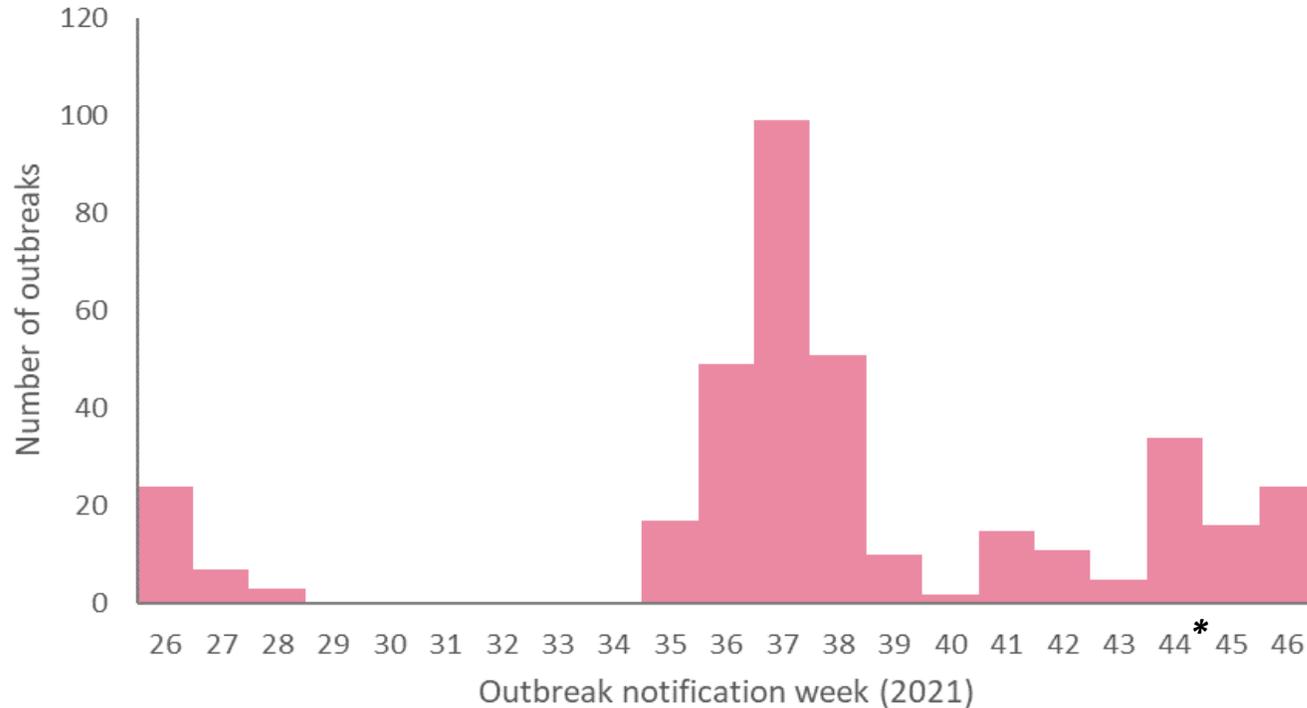


Figure 7: Number of COVID-19 outbreaks associated with staff and children in schools during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

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



25% of outbreaks associated with schools reported during wave 4 have involved only 2 cases

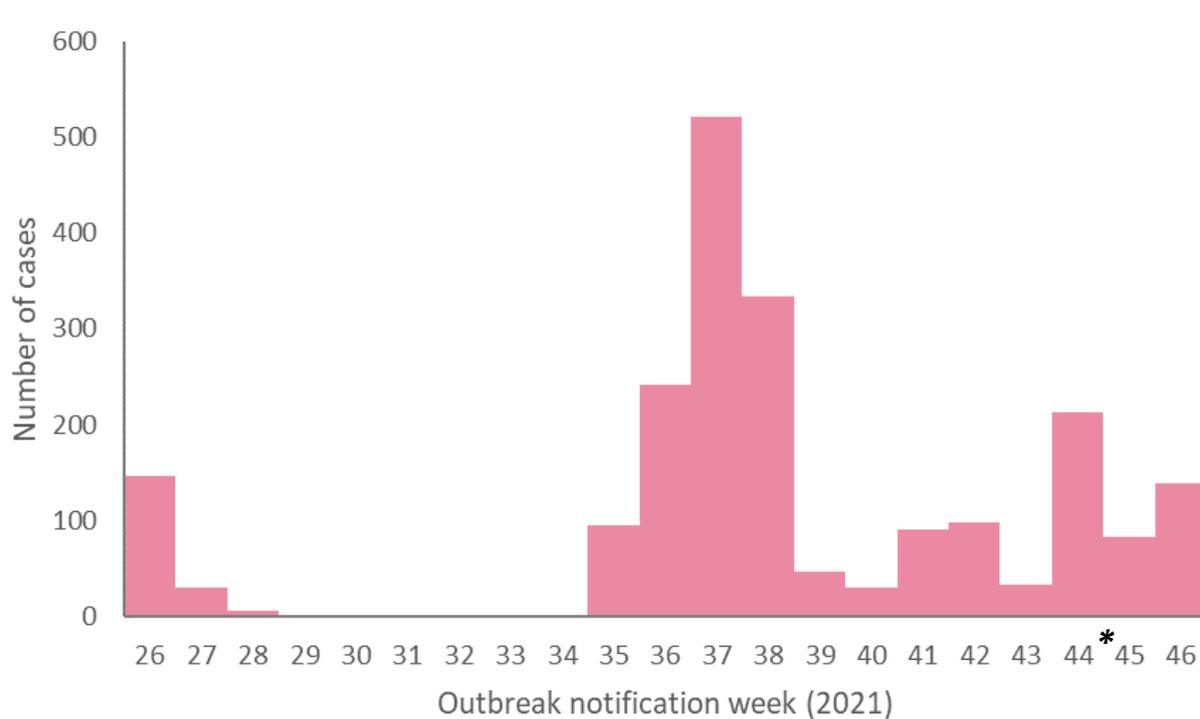


Figure 8: Number of confirmed COVID-19 cases linked to outbreaks associated with staff and children in schools during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

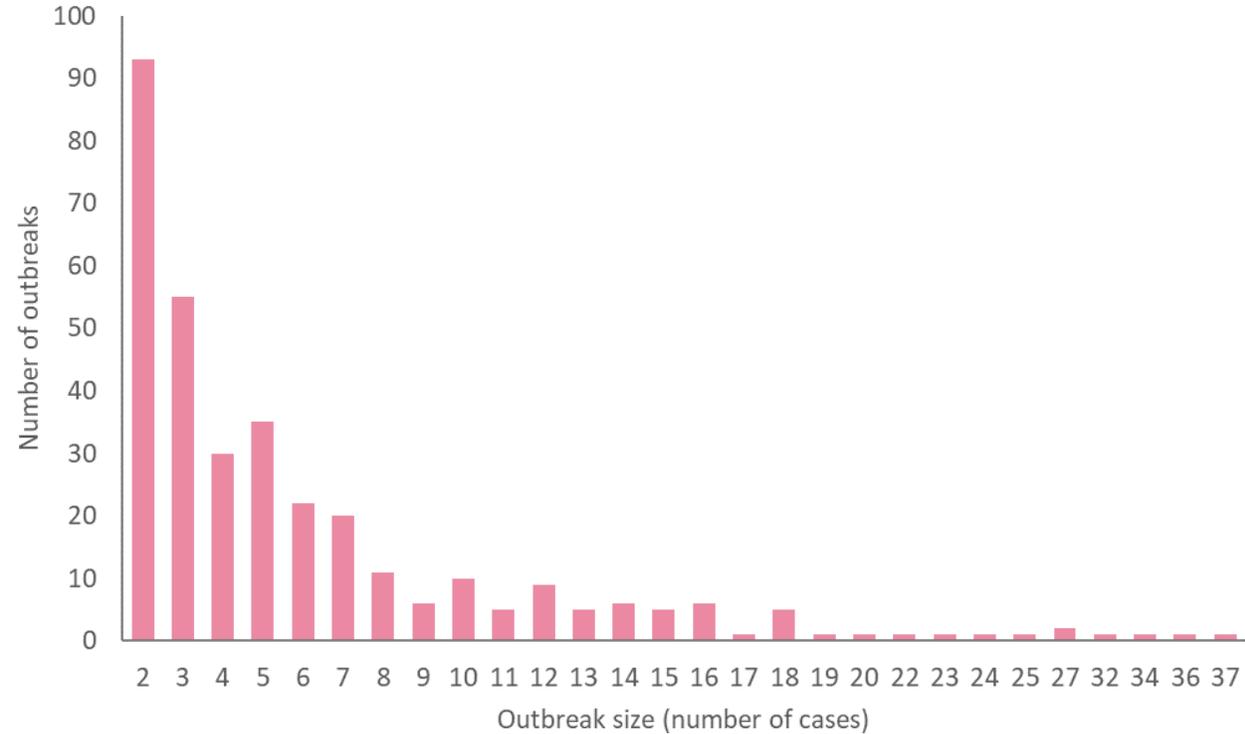


Figure 9: Number of COVID-19 outbreaks associated with staff and children in schools by the number of confirmed cases per outbreak during wave 4 of the pandemic in Ireland (week 26 to week 46, 2021)

**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 46 Summary: Cases and outbreaks in current week and in wave 4 of the pandemic in Ireland, week 26 - week 46 2021



| Confirmed COVID-19 cases: Age group | Week 46 | | Wave 4 (Week 26 - Week 46) | |
|--|--|-----------------------------|--|-----------------------------|
| | Number of confirmed cases ¹ | Proportion of all cases (%) | Number of confirmed cases ¹ | Proportion of all cases (%) |
| 0-4 yrs | 1,449 | 4.7 | 12,901 | 5.0 |
| 5-12 yrs | 5,374 | 17.6 | 36,724 | 14.2 |
| 13-18 yrs | 1,743 | 5.7 | 24,579 | 9.5 |
| >18 yrs | 21,961 | 71.9 | 184,056 | 71.3 |
| Total | 30,527 | 100.0 | 258,260 | 100.0 |

| Outbreaks: Outbreak Location | Week 46 | | | Wave 4 (Week 26 - Week 46) | | |
|---------------------------------|---------------------|---|--|----------------------------|---|--|
| | 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 | 6 | 27 | 2 - 12 | 217 | 1,039 | 0 - 25 |
| School | 24 | 139 | 2 - 16 | 367 | 2,101 | 0 - 37 |
| Total | 30 | 166 | 2 - 16 | 584 | 3,140 | 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 – 20/11/2021)

| Facility Type | No. Facilities | No. Tested | No. Detected | Detected % | No. Not Detected |
|-------------------|----------------|--------------|--------------|-------------|------------------|
| Post Primary | 531 | 4,183 | 206 | 4.9% | 3,969 |
| Special Education | 68 | 1,040 | 91 | 8.8% | 946 |
| Total | 599 | 5,223 | 297 | 5.7% | 4,915 |

Results Summary for Schools Testing week 46 2021

| Facility Type | No. Facilities | No. Tested | No. Detected | Detected % | No. Not Detected |
|-------------------|----------------|------------|--------------|-------------|------------------|
| Post Primary | 166 | 324 | 24 | 7.4% | 300 |
| Special Education | 20 | 145 | 14 | 9.7% | 130 |
| Total | 186 | 469 | 38 | 8.1% | 430 |

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.