



# Weekly report on the epidemiology of COVID-19 in Ireland

## Week 45, 2022

- The epidemiological weeks in this report, run from Sunday to Saturday. Please refer to the HPSC website for a complete list of epidemiological weeks with start and end dates for 2020-2022.
- Reference dates:
  - Week 10, 2020 (01/03/2020 to 07/03/2020) the beginning of the pandemic in Ireland, also the start of the first wave
  - Week 32, 2020 (02/08/2020 to 08/08/2020) the beginning of the 2nd wave
  - Week 48, 2020 (22/11/2020 to 28/11/2020) the beginning of the 3rd wave
  - Week 26, 2021 (27/06/2021 to 03/07/2021) the beginning of the 4th wave
  - Week 51, 2021 (19/12/2021 to 25/12/2021) the beginning of the 5th wave
  - Week 45, 2022 (06/11/2022 to 12/11/2022) most recent epidemiological week
- Data for this report are based on cases notified on the Computerised Infectious Disease Reporting (CIDR) and HSE Positive Antigen Portal up to midnight 12/11/2022. Data were extracted from CIDR system on 15/11/2022. Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures.
- A confirmed case of COVID-19 is any person for whom SARS-CoV-2 is detected by PCR. At present, antigen testing undertaken outside the governance of the public laboratory service is not recognised for the purpose of notification of COVID-19. For surveillance purposes, a self-administered positive antigen test registered on the HSE Antigen Portal is not considered to be a confirmed COVID-19 case as it is not subject to data validation and linkage to previous or subsequent PCR results is not feasible.
- In this report, confirmed cases notified on CIDR and cases who have registered a positive antigen test result on the HSE Antigen Portal are presented separately.
- Data from both sources (CIDR and the HSE Antigen Portal) should be interpreted in the context
  of the current testing policy. Testing policies can affect the number and age distribution of
  confirmed cases notified on CIDR. Information on the current testing policy in Ireland can be
  found here
- Data for late December 2021, and January 2022, do not accurately reflect trends. Due to a surge in case numbers the turnaround time for processing notifications increased. Notifications between 19/12/2021 and 15/01/2022 (week 51, 2021 to week 2, 2022) are reduced, while notifications

between 16/01/2022 and 29/01/2022 (weeks 3 and 4, 2022) are inflated compared to cases diagnosed during these weeks.

## **Key points**

#### **Notified confirmed cases**

- In week 45 (between November 06 and November 12 2022) there were 1,876 new confirmed COVID-19 cases reported on CIDR. This is an increase of 32.2% compared to week 44 when there were 1,419 confirmed COVID-19 cases notified.
- The highest number of new confirmed COVID-19 cases in week 45 was in the age group of 35-44 years with 17.3% of notified cases in week 45.

#### Laboratory data of SARS-CoV-2 PCR tests

• In week 45, a total of 15,808 SARS-CoV-2 tests were performed, of which 1,909 (12.1%) were positive. This is stable compared to the previous week, 44, when 12% were positive.

#### Self-reported antigen positive cases

• In week 45, a total of 3,684 positive antigen test results were registered on the HSE Positive Antigen Portal. This is an increase of 21.4% reported results compared to week 44 when 3,035 cases were registered.

#### **Deaths**

 Since the start of the pandemic 8,141 COVID-19 deaths among notified COVID-19 cases have been reported on CIDR. Of these, 4 had a date of death in week 45.

Table 1: Summary characteristics of COVID-19 cases notified in Ireland during week 45, 2022

	Number	Percentage
Total number of confirmed cases	1,876	
Incidence rate of confirmed cases per 100,000 population	39.4	
Healthcare workers	277	14.80
Healthcare workers where known		22.60
Severe cases		
Number of cases hospitalised	472*	25.16
Number of cases admitted to ICU	2*	0.11
Number of deaths among confirmed cases	7*	0.37

<sup>\*</sup> The number of cases hospitalised, cases admitted to ICU and deaths described in the above table relate only to COVID-19 cases who were notified during this reporting period, and where the outcome is known at the time of reporting. It does not reflect all hospitalisations, ICU admissions and deaths related to COVID-19 which occurred during the period covered by the report. It also does not reflect the final number of cases hospitalised, admitted to ICU or deaths for these cases notified during this period as the outcome may not yet have occurred, or is yet to be notified

#### **Confirmed cases of COVID-19**

Since the start of the pandemic, 1,676,892 confirmed COVID-19 cases have been notified on CIDR. In the past week, week 45 2022, 1,876 confirmed COVID-19 cases were reported on CIDR. This is an increase of 32.2% compared to week 44 when 1,419 confirmed COVID-19 cases were notified. Figure 1 shows the epidemiological curve of COVID-19 cases notified in Ireland from week 1 2021 to week 45 2022.

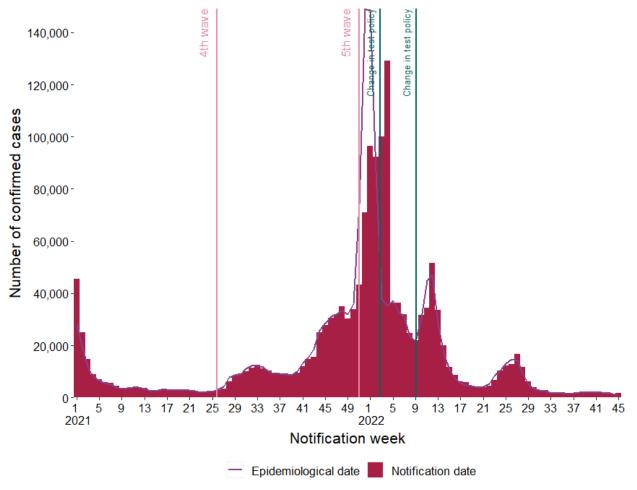


Figure 1a: Number of confirmed COVID-19 cases by notification week and epidemiological date in Ireland between week 1, 2021 and week 45, 2022. The red bars represent the number of confirmed cases by notification date. The purple line represents the number of cases by epidemiological date. The pink horizontal lines indicate when a new wave starts. The dark blue horizontal lines indicate a change in test policy<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Since 14/01/2022 (week 2), a confirmatory PCR test after a positive antigen test was no longer needed for those in the community aged between 4 and 39 years of age outside of a risk group.

<sup>&</sup>lt;sup>2</sup> Since 28/02/2022 (week 9), PCR testing is only needed for symptomatic people in the community within certain risk groups: those who have not had booster vaccination and are aged 55 years and older; those with a high-risk medical conditions; those who are immunocompromised; those who live in the same household as a person who is immunocompromised; those who provide care or support for person they know to be immunocompromised; those who are pregnant; Healthcare Workers.

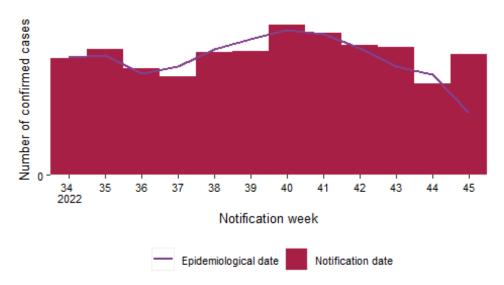
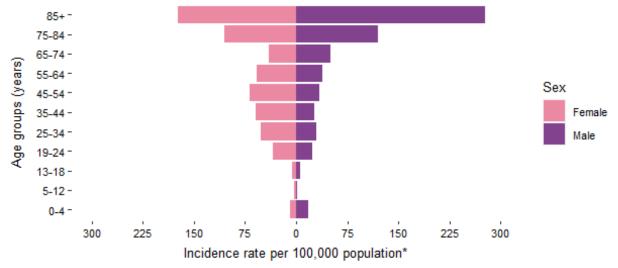


Figure 1b: Number of confirmed COVID-19 cases by notification week and epidemiological date in Ireland in the last 12 weeks. The red bars represent the number of confirmed cases by notification date. The purple line represents the number of cases by epidemiological date.

## Confirmed COVID-19 cases by age and sex

Table 2: Summary characteristics by age and sex of COVID-19 cases notified in Ireland during week 45, 2022

	Number	Percentage
Gender		
Males	754	40.2
Females	1,122	59.8
M:F ratio	0.67	
Age (years)		
Mean age	51	
Median age	49	
Age range	0 - 100	
Age groups (years)		
0-4	45	2.4
5-12	13	0.7
13-18	21	1.1
19-24	96	5.1
25-34	275	14.7
35-44	325	17.3
45-54	321	17.1
55-64	247	13.2
65-74	170	9.1
75-84	221	11.8
85+	141	7.5
Unknown	1	0.1



\*Excluding 1 for whom age is unknown, 0 for whom sex is unknown and 0 for whom both are unknown

Figure 2: Cumulative age and sex specific incidence rates of confirmed COVID-19 cases per 100,000 population for current week 45, 2022

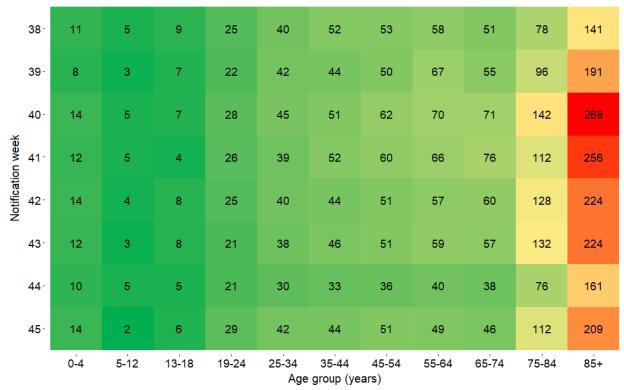


Figure 3: Heat map of weekly age-specific incidence rates of confirmed COVID-19 cases per 100,000 population in Ireland for the last 8 weeks

## Cases and incidence by county

**Table 3**: Characteristics of confirmed COVID-19 cases by county and descending incidence rate per 100,000 notified in Ireland, during week 45, 2022

County	Number of cases	Percent	M:F ratio	Median age	Incidence rate per 100,000
Waterford	96	5.1	0.6	48.0	82.6
Carlow	41	2.2	0.4	51.0	72.0
Wexford	105	5.6	0.7	53.0	70.1
Kilkenny	54	2.9	0.9	51.0	54.4
Offaly	39	2.1	0.8	47.0	50.0
Laois	42	2.2	1.3	58.0	49.6
Louth	61	3.3	0.8	53.0	47.3
Cork	233	12.4	0.5	52.0	42.9
Kildare	89	4.7	0.6	43.0	40.0
Kerry	59	3.1	1.0	43.0	39.9
Tipperary	59	3.1	0.4	48.0	37.0
Dublin	492	26.2	0.8	49.0	36.5
Westmeath	32	1.7	1.5	43.5	36.0
Meath	68	3.6	0.4	47.0	34.9
Wicklow	49	2.6	0.4	49.0	34.4
Limerick	66	3.5	0.5	51.0	33.9
Galway	86	4.6	0.8	48.0	33.3
Mayo	43	2.3	0.4	49.0	32.9
Donegal	51	2.7	0.7	51.0	32.0
Monaghan	19	1.0	0.6	48.0	31.0
Leitrim	9	0.5	0.5	54.0	28.1
Sligo	18	1.0	1.0	44.0	27.5
Clare	31	1.7	0.5	46.0	26.1
Longford	9	0.5	0.8	56.0	22.0
Cavan	14	0.7	1.0	47.0	18.4
Roscommon	11	0.6	1.8	64.0	17.0

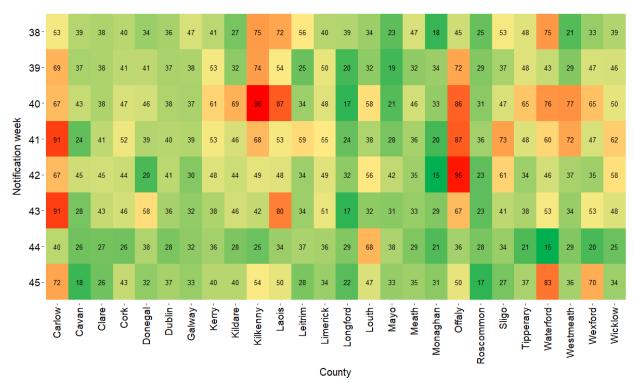


Figure 4: Heat map of weekly incidence rates of confirmed COVID-19 cases per 100,000 population, by county, notified in Ireland for the last 8 weeks

## Hospitalisations

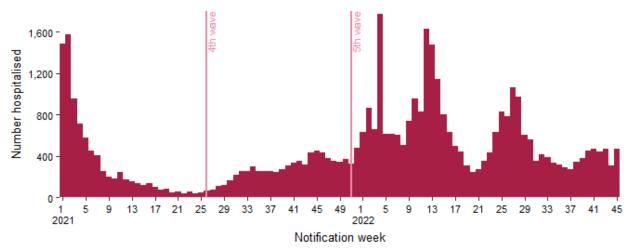


Figure 5: Hospitalisations among confirmed COVID-19 cases notified on CIDR in Ireland between week 1, 2021 and week 45, 2022

**Table 4**: Number of COVID-19 cases and hospital admissions by age group in Ireland for week<sup>3</sup> 45, 2022 based on week of notification<sup>4</sup>

	Total cases	Hospitalised cases		
Age group	Number of cases	Number of cases	Percentage	
0-4	45	20	44.4	
5-12	13	2	15.4	
13-18	21	5	23.8	
19-24	96	10	10.4	
25-34	275	17	6.2	
35-44	325	32	9.8	
45-54	321	32	10.0	
55-64	247	53	21.5	
65-74	170	81	47.6	
75-84	221	129	58.4	
85+	141	91	64.5	
Unknown	1	0	0.0	

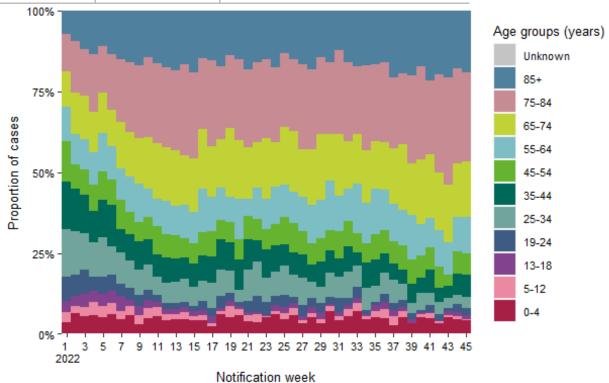


Figure 6: Age distribution of hospitalised confirmed COVID-19 cases notified on CIDR in Ireland between week 1, 2022 and week 45, 2022

<sup>&</sup>lt;sup>3</sup> Hospitalisations may be underestimated for recent weeks as the outcome may not yet have occurred or may not yet have been reported to CIDR

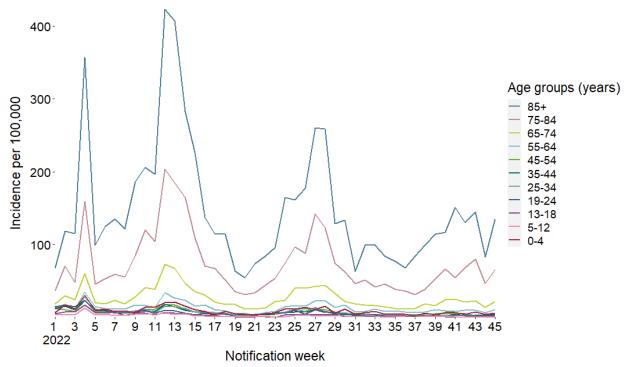


Figure 7: Incidence rate by age group of hospitalisations among confirmed COVID-19 cases on CIDR in Ireland between week 1, 2022 and week 45, 2022

<sup>4</sup> Data are based on the date the case was notified on CIDR, and not the date of hospital admission

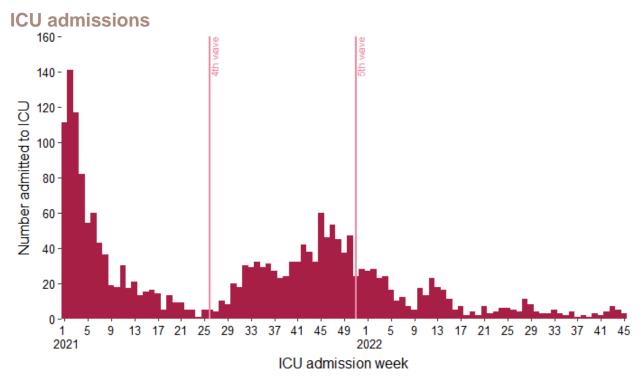


Figure 8: Number of ICU COVID-19 ICU admissions in Ireland by week of ICU admission, between week 1, 2021 and week 45, 2022<sup>5</sup>

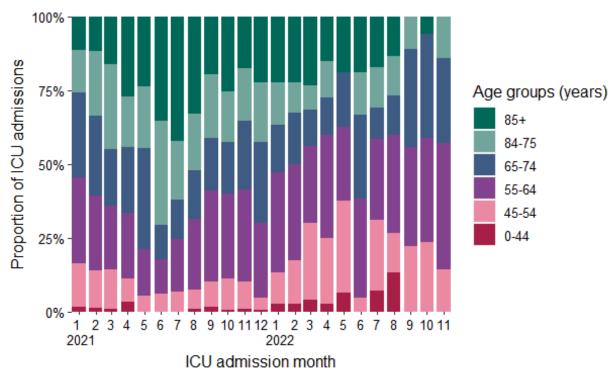


Figure 9: Age distribution of confirmed COVID-19 cases admitted to by month of admission January, 2021 and November, 2022

<sup>&</sup>lt;sup>5</sup> Please note that most recent weeks may not yet reflect all admissions

#### **Deaths**

Please note the below figures and tables include all cases (confirmed, probable and possible) who have died.

A total of 4 cases had a date of death in the latest epidemiological week, 45. The mean and median age of those who died in the previous epidemiological week was 83 and 86 years respectively.

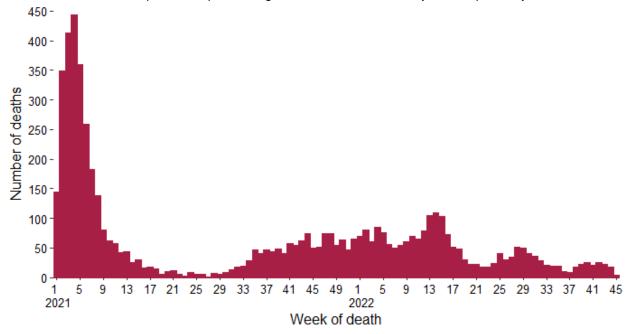


Figure 10: Total number of COVID-19 deaths notified by week of death, cases with a date of notification from week 1, 2021 to 45, 2022. Date of death missing for 0 of the reported deaths

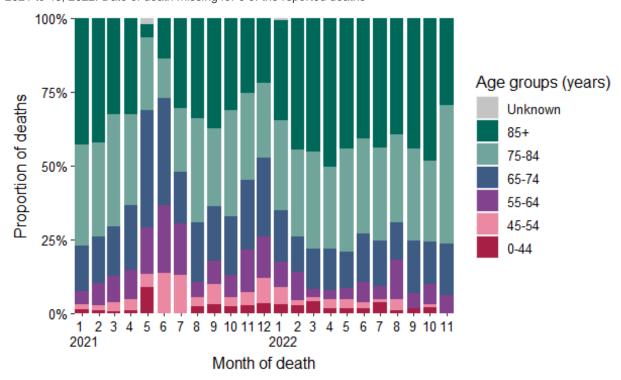


Figure 11: Age distribution of COVID-19 deaths notified on CIDR in Ireland between January, 2021 and November, 2022

## Laboratory data of SARS-CoV-2 PCR tests

In week 45, a total of 15,808 SARS-CoV-2 tests were performed, of which 1,909 (12.1%) were positive.

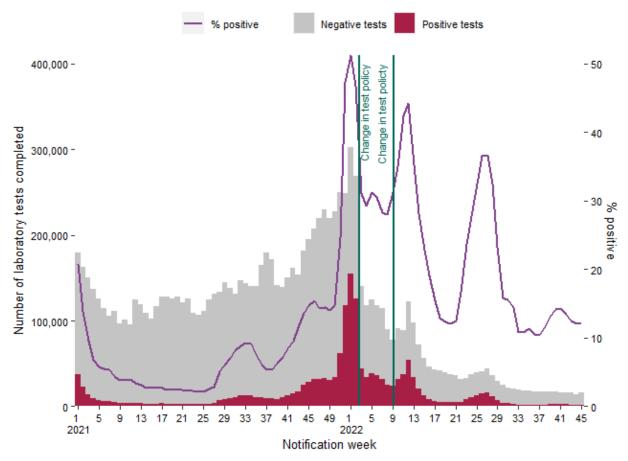


Figure 12: Number of completed laboratory tests by result and % positive tests<sup>6</sup> in Ireland between week 1, 2021 and week 45, 2022. Data source: Deloitte Ireland LLP<sup>7</sup>, <sup>8</sup>

<sup>&</sup>lt;sup>6</sup> Positive tests refer to all positive specimens and includes duplicates and individuals who were retested.

<sup>&</sup>lt;sup>7</sup> Since 14/01/2022 (week 2), a confirmatory PCR test after a positive antigen test was no longer needed for those in the community aged between 4 and 39 years of age outside of a risk group.

<sup>&</sup>lt;sup>g</sup> Since 28/02/2022 (week 9), PCR testing is only needed for symptomatic people in the community within certain risk groups: those who have not had booster vaccination and are aged 55 years and older; those with a high-risk medical conditions; those who are immunocompromised; those who live in the same household as a person who is immunocompromised; those who provide care or support for person they know to be immunocompromised; those who are pregnant; Healthcare Workers.

## Self-reported antigen positive cases

The following figures and tables are based on cases who registered a self-administered positive antigen test on the HSE Positive Antigen Portal. The are not considered confirmed cases and have undergone no data validation.

Table 5: Characteristics of COVID-19 cases who registered a positive antigen test to the HSE Positive Antigen Portal

	Week 2, 2022 - 45, 2022		Week 45, 2022	
	Number	Percentage	Number	Percentage
Total number of registered cases	705,985		3,684	
Incidence rate of registered cases per 100,000 population	14,825.8		77	
Gender				
Males	293,032	41.5	1,259	34.2
Females	394,737	55.9	2,358	64.0
M:F ratio	0.74		0.53	
Age (years)				
Mean age	33		40	
Median age	34		40	
Age range	0 - 105		0 - 98	

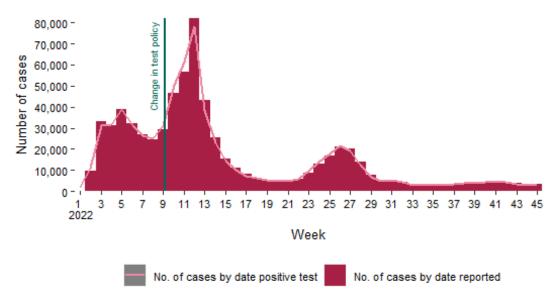


Figure 13: Number of COVID-19 cases who registered a positive antigen test on the HSE Positive Antigen Portal by week of registration<sup>9</sup>, and week of epidemiological date in Ireland between week 1, 2022 and week 45, 2022<sup>10</sup>

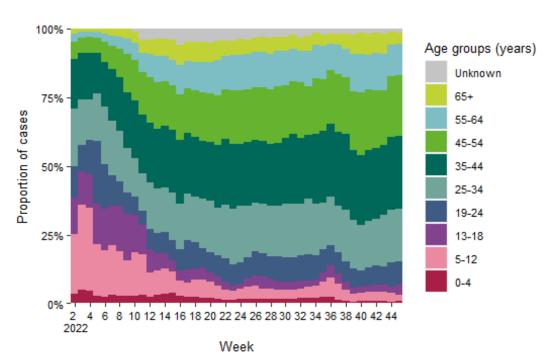


Figure 14: Age distribution of COVID-19 cases who registered a positive antigen test on the HSE Positive Antigen Portal by week of registration<sup>12</sup> in Ireland between week 2<sup>8</sup>, 2022 and week 45, 2022

<sup>&</sup>lt;sup>9</sup> Reporting to the HSE Positive Antigen Portal commenced on Friday 14th January 2022, and therefore week 2 only includes 2 days.

<sup>&</sup>lt;sup>10</sup> Some cases reported a date of positive test much earlier than the date it was registered in the portal. Dates of positive test earlier than week 1, 2022 are not shown in the number of case by date of positive test. Dates of positive test which erronously were reported to be later than the current epi week are excluded.

<sup>&</sup>lt;sup>11</sup> Please note, the week of registration on the HSE Positive Antigen Portal may differ from the week the positive test was obtained.

#### **Notes**

#### **Technical Notes**

#### Data Source

Data are based on statutory notifications and were extracted from Computerised Infectious Disease Reporting (CIDR) system and the HSE COVID care tracker. Data are provisional and subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures. Slide with Laboratory testing for SARS-CoV-2 data provided by Deloitte Ireland LLP

#### 2. Epidemiological date

Epidemiological date is based on the earliest of dates available on the case and taken from date of onset of symptoms, date of diagnosis, laboratory specimen collection date, laboratory received date, laboratory reported date or event creation date/notification date on CIDR. By using this date rather than event creation/ notification date, adjusts for any delays in testing/notification. Further information on epidemiological dates and weeks can be found on the HPSC website.

#### 3. 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, 19-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years, 75-84 years and ≥ 85 years.

#### **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, public health doctors, nurses, surveillance scientists, microbiologists and administrative staff.

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

- Epidemiology of COVID-19 in Ireland infohub
- Outbreaks/clusters in Ireland COVID-19 weekly report
- Monthly report on COVID-19 deaths reported in Ireland
- SARS-CoV-2 wastewater surveillance programme weekly reports
- Virus variants in Ireland COVID-19 summary report
- Epidemiology of intensive care admissions in cases of COVID-19 in Ireland