ACT COVID-19 Epidemiology Overview

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Produced by ACT Health

Week ending 3 April 2022

Reporting period Monday to Sunday inclusive

Key points:

- The ACT continues to experience increased COVID-19 cases and high community transmission at levels resembling the peak in January 2022.
- Whilst we have seen case numbers trending down in the last week, we will continue to monitor the situation closely. Despite the ongoing high case numbers and PCR test positivity, hospitalisations and ICU admission continue to remain stable.
- Increased case numbers are likely the result of several factors, including increased social interactions and movements owing to relaxed public health and social measures, and increased incidence of the more transmissible BA.2 Omicron subvariant.

Key statistics

6,577 TOTAL NEW CASES (LAST 7 DAYS)	**80,964** TOTAL CASES (SINCE MAR 2020)	**20,014** NEGATIVE TESTS (LAST 7 DAYS)
42 LIVES LOST (SINCE MAR 2020)	**20** CASES ADMITTED TO HOSPITAL (LAST 7 DAYS)	**0** CASES ADMITTED TO ICU (LAST 7 DAYS)
80.2% VACCINATIONS (ONE DOSE: 5-11 YEAR OLDS)	**96.3%** [1] VACCINATIONS (TWO DOSES: 5 YRS+)	**73.4%** VACCINATIONS (THREE DOSES: 16 YRS+)

Note:
[1]The percentage of ACT residents aged 5 years and over who have received 2 doses of a COVID-19 vaccine has decreased due to a revision in ACT Health's estimate of the ACT population. Where first dose vaccinations to ACT residents are greater than the estimated number of residents, the population is revised to equal the number with a first dose. This is consistent with how ACT Health had previously calculated the percentage for other age groups.

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Explanatory Notes:

Reporting period is Monday 28 March to Sunday 3 April 2022 inclusive, Epidemiological Week 14.

This report analyses COVID-19 case notifications, positive by Polymerase Chain Reaction (PCR) or Rapid Antigen Test (RAT) self-declaration, received by ACT Health. Some data in this report are based on online surveys sent to all people positive for COVID-19 in the ACT, by both PCR and RAT.

All analyses are based on data available in the ACT Health Notifiable Disease Management System (NDMS) at the time of reporting and is subject to change. There may be case notifications received after the release of the report that fall within the reporting period resulting in data lag. Additionally, case numbers may change due to reclassifying some of the cases following further investigation or merging of duplicate records. These will be reflected in subsequent reports.

All case notification data are for ACT residents or non-ACT residents who fall under the management of ACT Health (i.e. they have a residential address outside of the ACT but will remain in the ACT for their period of isolation). Other case notifications that have a residential address outside of the ACT have been excluded.

ACT Health must balance the importance of transparency with its legal and ethical obligations to maintain the confidentiality of the personal health information of individuals. As such, not all data tables are updated every week, if the count difference between the weeks is less than 5 and if there is a chance of individuals being identified.

Diagnosis date is used to estimate the disease activity within the reporting period. This date represents when a person reported that their symptoms started, or the earliest of the date the PCR was collected/positive RAT was declared or the date ACT Health received the positive PCR/RAT declaration. Due to potential delays in people seeking a COVID-19 test and the time taken for the test to be notified, the diagnosis date and notification date may differ by several days. This can result in under-estimates of case numbers late in the reporting period, with data often appearing to trend down towards the end of the reporting period. This should be interpreted with caution and may smooth out or increase in subsequent reports as further notifications are received and data are reanalysed.

Daily case reporting by ACT Health represents COVID-19 case notifications received in the last 24 hours, also known as the notification received date. The notification received date provides a useful 'snapshot' of COVID-19 numbers over a shorter time. The diagnosis date can differ from the Notification Received Date, as explained above, hence why case numbers in this report may not match the number of cases reported daily elsewhere for the same period.

Age is calculated as the age of the person on the date when their PCR specimen was collected or the positive RAT was declared.

All cases are asked if they identify as Aboriginal and/or Torres Strait Islander in the online survey. People may choose to answer this question as 'not stated.' ACT Health attempts to contact all those that have not responded to their case survey. No data will be available for this question if a person refuses to respond to their survey or for a small proportion of people that ACT Health is unable to contact.

Hospitalisation is defined as a person admitted to an ACT hospital for any reason and does not differentiate between a person admitted for COVID-19 related reasons or for other reasons. It may also include those with a residential address outside of the ACT. Those admitted may be active or cleared cases as defined by the CDNA National Guidelines for Public Health Units of a COVID-19 death (COVID-19 SoNG). ACT Health may receive notification of a case being admitted to hospital after the release of the report that falls within the reporting period. These will be reflected in subsequent reports.

Vaccination status is based on Australian Immunisation Register (AIR) records. Where a vaccination status is listed as 'Unknown', this is because no record was found for the individual in AIR or the record was not accessible. Hospitalised cases, deaths and people who identify as Aboriginal and/or Torres Strait Islander with missing vaccination status are prioritised for review and the data updated accordingly.

The definition of a COVID-19 related death for surveillance purposes is according to the CDNA National Guidelines for Public Health Units of a COVID-19 death (COVID-19 SoNG). A COVID-19 related death is reported if the person dies with COVID-19, though it may not be the cause of death. Deaths under investigation by the Coroner will not be reported until the findings have been issued. ACT Health may receive notification of a COVID-19 related death after the release of the report that fall within the reporting period. These will be reflected in subsequent reports. COVID-19 related deaths are reported by the date of death, as recorded on the death certificate.

Whole Genome Sequencing (WGS) is currently being prioritised for cases from outbreaks in high-risk settings, recently returned overseas travellers, hospitalised cases, deaths and a small proportion of other community cases.

Number of people reported to be diagnosed with COVID-19 in the ACT

Table 1: COVID-19 Case Status by Test Type

	Test type	WEEK 14[2] Ending 03/04/2022	TOTAL[1]
New Cases	PCR	3,539	51,917
	RAT	3,038	29,047
	Total	**6,577**	**80,964**
New Deaths		2	42

Note:

[1]Total cases since the start of the pandemic, March 2020.

[2]Cases notified to ACT Health during the reporting period.

- One historical death has been included in the total number of deaths since the start of the pandemic, March 2020 bringing the total to 42. This is not counted as a new death in the week ending 3 April 2022 because it occurred outside of this reporting period.
- Of the total 42 deaths, 4 had received 3 doses of the vaccine, 19 had received 2 doses of vaccine, 3 had received a single dose of vaccine, 15 were unvaccinated and the vaccination status for the remaining person is unknown.

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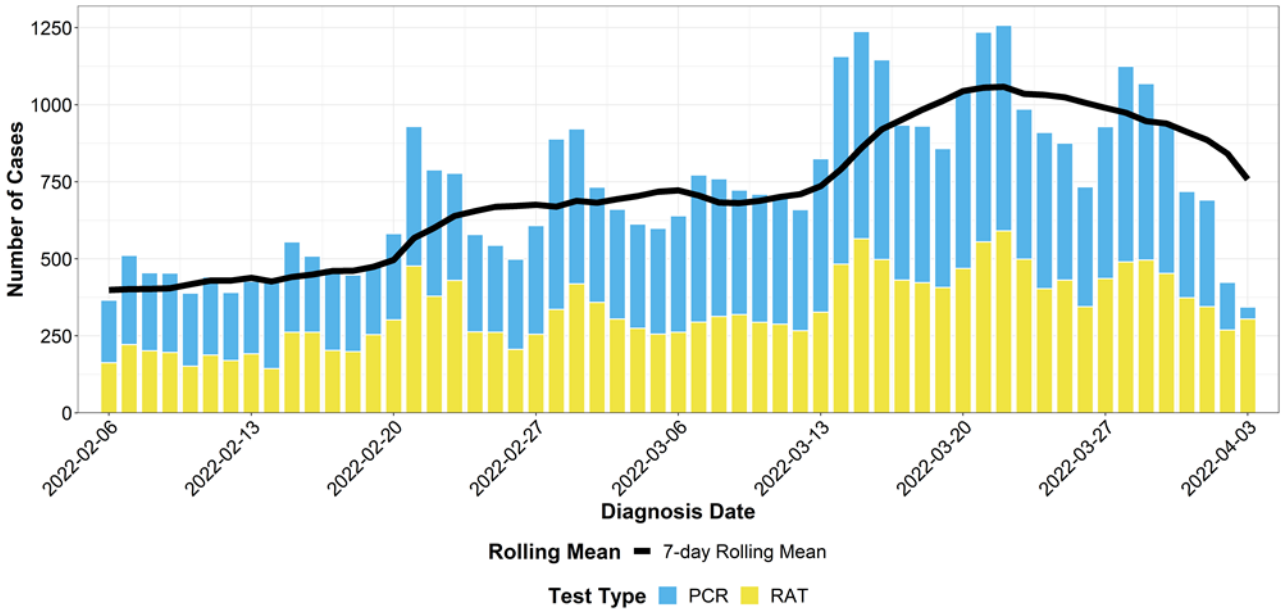
Figure 1: COVID-19 Cases by Test Type and Diagnosis Date[1]

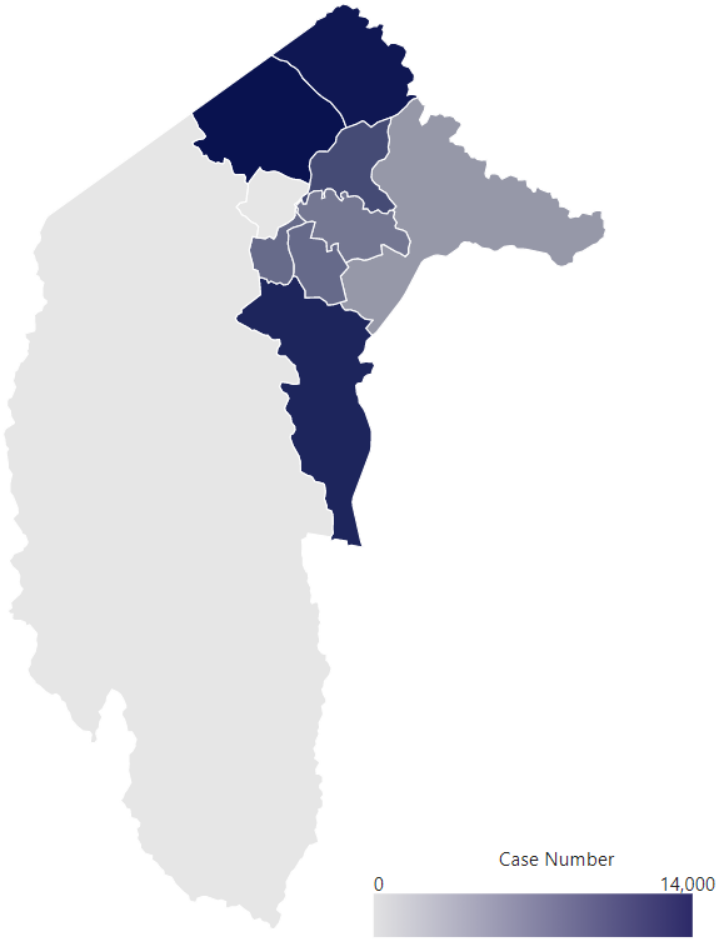
Last 8 Weeks



Notes:
[1]Diagnosis date is determined based on the earliest date of the symptom onset date, specimen collection date and notification received date.

- For the week ending 3 April 2022, 6,577 COVID-19 cases were reported in the ACT. This is a slight decrease compared to the 6,985 cases reported last week.
- Of the cases that were reported in the week ending 3 April 2022, 3,539 (54%) were from PCR tests and 3,038 (46%) were from RATs.
- The 7-day rolling mean continued to fall across the week, starting at 518 cases per day and decreasing to 368 cases per day, noting the data lag. This compares to a peak of 1,048 cases at the beginning of last week.

Figure 2: Map of COVID-19 Cases by Statistical Area Level 3 (SA3) since 15 December 2021[1]



SA3 Region	Cases[2]
Belconnen	13,813
Canberra East	318
Gungahlin	13,271
North Canberra	8,055
South Canberra	3,598
Tuggeranong	11,879
Weston Creek	4,841
Woden Valley	4,940

Notes:
[1]Data show cases notified to ACT Health since the beginning of the Omicron wave on 15 December 2021, using the *Australian Statistical Geography Standard (ASGS) Edition 3*.
[2]Those with a residential postcode outside of the ACT are excluded.

Table 2: COVID-19 Cases by Age Group for Reporting Period

Age Group	WEEK 14 Ending 03/04/2022	Age Group Percentage (%) of TOTAL WEEK 14
0–4	361	5.5%
5–11	609	9.3%
12–17	654	9.9%
18–24	706	10.7%
25–39	1,972	30%
40–49	1,051	16%
50–64	808	12.3%
65+	416	6.3%
Not stated/inadequately described[1]	0	0%
Total	**6,577**	**100%**

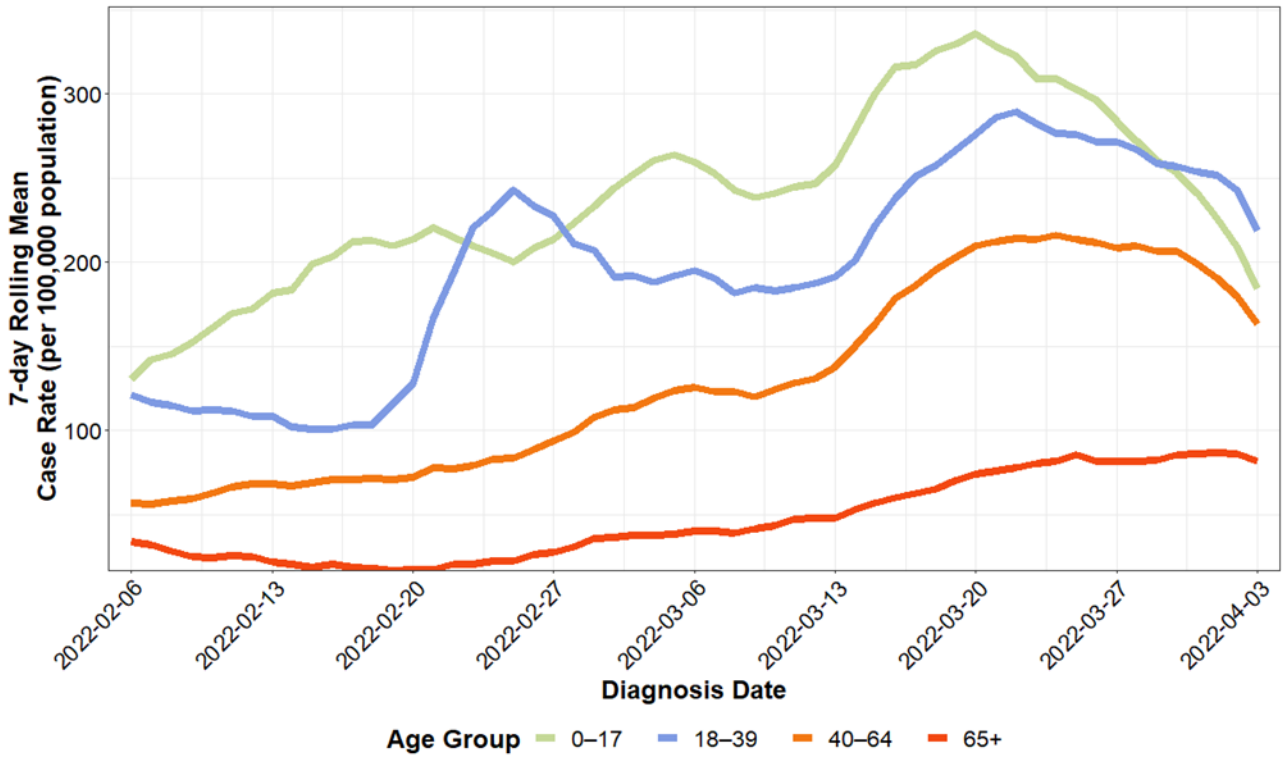
Notes:

[1]Dates of birth were invalid or not available.

- For this reporting period, the total reported case numbers remained stable across most age groups.
- The largest increase in case numbers were in the 25-39-year age and the 65+ year age groups for the reporting period.

Figure 3: Rolling Mean of COVID-19 Case Rate by Age Group and Diagnosis Date[1]

Last 8 Weeks

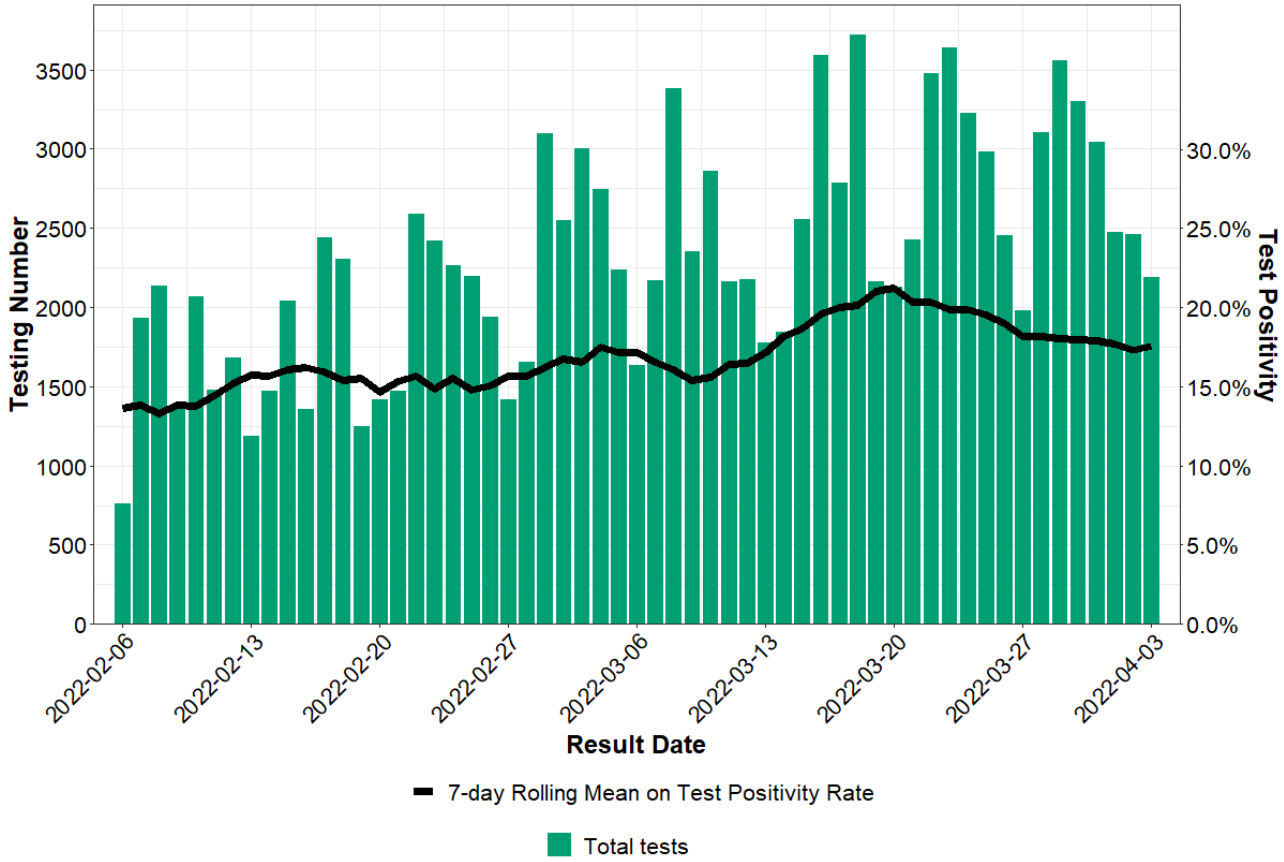


Notes:
[1]Diagnosis date is determined based on the earliest date of the symptom onset date, specimen collection date and notification received date.

- The rate is calculated as the number of reported cases divided by the population count of the people in the ACT in that age group multiplied by 100,000. The rolling mean is the average of the rate for that day and the previous 6 days. A rolling mean provides an average line over time and smooths out predictable peaks and troughs (e.g., case numbers usually fall around a weekend as there is less testing demand).
- The 7-day rolling average case rate decreased across most age groups, with a stabilisation for the 65+ year age group.

Figure 4: Testing[1] by Result Date with Test Positivity

Last 8 Weeks



Notes:
[1]Testing number includes positive and negative tests for PCR only.

- Test positivity is calculated as the number of positive PCR tests divided by the total number of PCR tests, both positive and negative. The rolling mean is the average of the test positivity for that day and the previous 6 days.
- Based on PCR tests only, the positivity rolling mean decreased slightly this week to 17-18% compared to 18-20% last week.
- The number of PCR tests performed this week remained stable; n=20,014 compared to n=20,185.

Table 3: COVID-19 Cases by Aboriginal and/or Torres Strait Islander Status for the Reporting Period

Indigenous Status	WEEK 14 Ending 03/04/2022	TOTAL Pandemic[1]
Aboriginal and/or Torres Strait Islander People	122	1717 / 69603 (2%)
Neither Aboriginal nor Torres Strait Islander People	5,411	58721 / 69603 (84%)
Not stated/inadequately described[2]	279	2924 / 69603 (4%)
Not available[3]	489	6241 / 69603 (9%)

Notes:

[1]Data are cases by positive PCR since the beginning of the pandemic (March 2020) and positive RATs since 14 February 2022.

[2]Individuals have chosen not to self-disclose their Aboriginal and/or Torres Strait Islander status.

[3]Data were not available on Aboriginal and/or Torres Strait Islander status. These data not available if an individual has not completed the survey, is awaiting a case interview, or has refused to respond to a case interview.

Hospitalisation due to COVID-19 in the ACT overview

Table 4: COVID-19 Cases by Vaccination Status and Hospitalisation Status (Non-Mutually Exclusive[1])

Status (NON-MUTUALLY EXCLUSIVE)	3 doses of COVID-19 vaccine N (%)	2 doses of COVID-19 vaccine N (%)	1 doses of COVID-19 vaccine N (%)	Unvaccinated N (%)	Unvalidated/ Unknown N (%)	TOTAL
In hospital[2]	95 (15%)	231 (37%)	37 (6%)	255 (41%)	6 (1%)	624 (100%)
In ICU	12 (12%)	26 (26%)	7 (7%)	54 (54%)	1 (1%)	100[3] (100%)

Note:

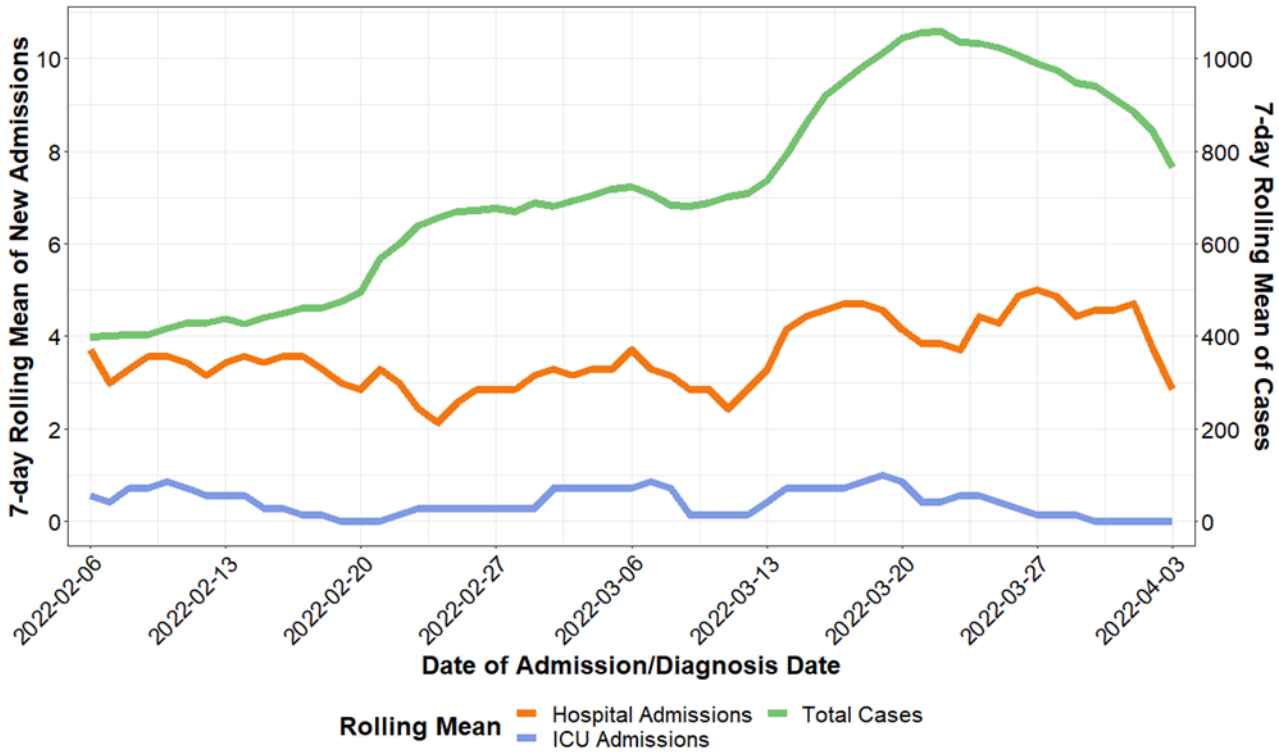
[1]Cases are counted multiple times for the different types of hospital admissions (admitted to the hospital ward or ICU), hence why the table is non-mutually exclusive

[2]Cases admitted to an ACT hospital, including those with a residential address in the ACT or another state or territory.

[3]Includes two new ICU admissions due to data lag and two historical ICU admissions due to data cleansing.

Figure 5: Rolling Mean of Number of COVID-19 Cases Admitted[1] to ACT Hospitals and ICU, by Date of Admission and Cases by Diagnosis Date[2]

Last 8 Weeks



Notes:

[1]Cases admitted to an ACT hospital, including those with a residential address in the ACT or another state or territory. If the case was admitted to an ACT hospital on multiple occasions, the earliest date of the hospital admission is used in the reporting week.

[2]Diagnosis date is determined based on the earliest date of the symptom onset date, specimen collection date and notification received date.

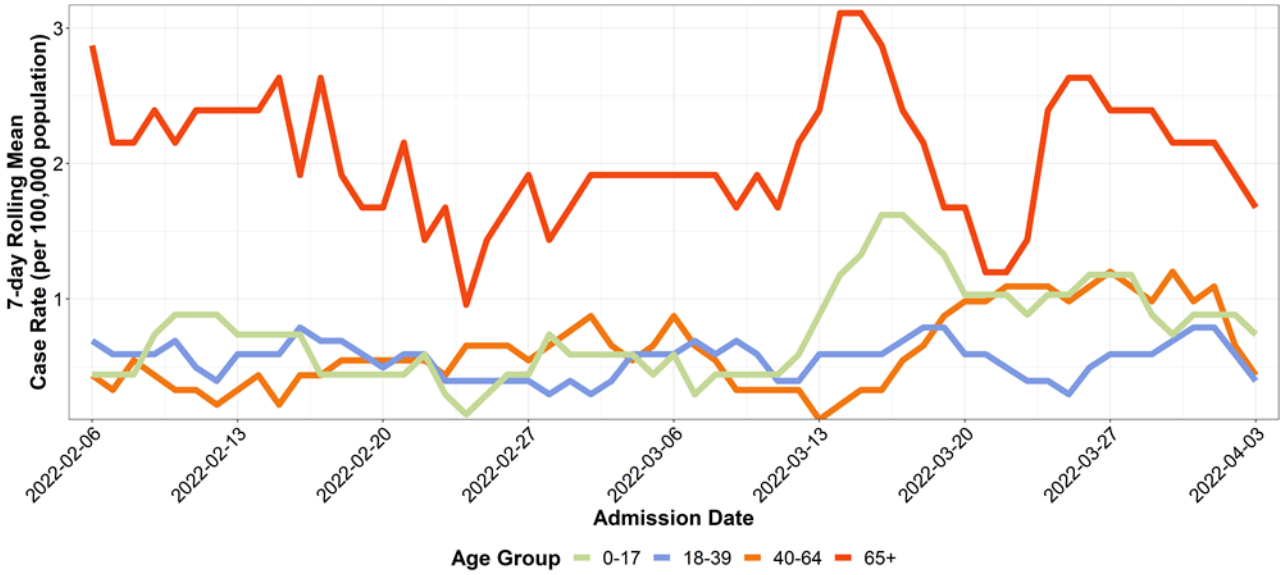
Table 5: Hospitalised COVID-19 Cases[1] by Age Group and Vaccination Status

Age Group	3 doses of COVID-19 vaccine N (%)	2 doses of COVID-19 vaccine N (%)	1 doses of COVID-19 vaccine N (%)	Unvaccinated N (%)	Unvalidated/ Unknown N (%)	TOTAL Pandemic
0–17	1 (1%)	13 (15%)	11 (12%)	64 (72%)	0 (0%)	89 (100%)
18-39	20 (13%)	54 (36%)	7 (5%)	66 (44%)	3 (2%)	150 (100%)
40-64	29 (17%)	59 (36%)	7 (4%)	70 (42%)	1 (1%)	166 (100%)
65+	45 (21%)	105 (48%)	12 (5%)	55 (25%)	2 (1%)	219 (100%)
TOTAL	**95 (15%)**	**231 (37%)**	**37 (6%)**	**255 (41%)**	**6 (1%)**	**624 (100%)**

Note:
[1]Cases admitted to an ACT hospital, including those with a residential address in the ACT or another state or territory

Figure 6: Rolling Mean of Hospitalised[1] COVID-19 Case Rate by Date of Admission

Last 8 Weeks



Notes:
[1]Cases admitted to an ACT hospital, including those with a residential address in the ACT or another state or territory. If the case was admitted to an ACT hospital on multiple occasions, the earliest date of the hospital admission is used in the reporting week. Admissions are counted whether it was for COVID-related reasons or for other reasons.

- Hospitalisations have decreased this reporting period with 20 new hospital admissions (by date of admission), compared to 24 new hospital admissions reported last week.
- There were no new admissions to the ICU in this reporting period. Please note, last week there were 2 new admissions to the ICU that were initially reported as zero as the result of a data lag and 2 historical ICU admissions identified as part of data cleansing.
- Of the 50 ICU admissions since 1 January 2022, 12 had received 3 doses of the vaccine, 23 had received 2 doses of the vaccine, 2 had received a single dose of vaccine, 12 were unvaccinated and the vaccination status for the remaining person was unknown.
- For the Omicron subvariant, 3 doses of vaccine appears to provide the greatest protection against severe disease.
- The rolling mean is the average of new admissions or cases by diagnosis date for that day and the previous 6 days.
- The rate is calculated as the number of reported cases divided by the population count of the people in the ACT in that age group multiplied by 100,000. The rolling mean is the average of the rate for that day and the previous 6 days.
- Hospitalisations continue to be consistently highest in the 65+ age group (see Figure 6). By contrast, the 7-day rolling mean case rate is lowest in the 65+ age group (see Figure 3), highlighting the increased risk of severe disease, including hospitalisation, in the older age group.

Whole Genome Sequencing

Table 6: Whole Genome Sequencing results

Last 8 Weeks

Reporting Week	Omicron sub lineage BA.1	Omicron Sub lineage BA.2	Unassigned[1]	Total
WEEK 7: Ending 13/02/2022	166 (83%)	28 (14%)	5 (3%)	199
WEEK 8: Ending 20/02/2022	116 (77%)	28 (18.5%)	7(4%)	151
WEEK 9: Ending 27/02/2022	159 (65%)	50 (21%)	34 (14%)	243
WEEK 10: Ending 06/03/2022	96 (62%)	52 (34%)	7 (4%)	155
WEEK 11: Ending 13/03/2022	114 (50%)	103 (45%)	10 (4%)	227
WEEK 12: Ending 20/03/2022	33 (18%)	144 (78%)	8 (4%)	185
WEEK 13: Ending 27/03/2022	19 (11%)	147 (86%)	4 (2%)	170
Week 14: Ending 03/04/2022	17 (11%)	134 (87%)	3 (2%)	154

Notes:
[1]Unassigned refers to specimens that were unable to be typed as either BA.1 or BA.2. This may be due to mixed infection (both BA.1 and BA.2) or sequences of poor quality and unable to be assigned to a sublineage.

- Since 1 January 2022, Whole Genome Sequencing (WGS) has been attempted on 3% (2,207/72,710) of all PCR samples in the ACT.
- The proportion of these specimens that have been identified as the BA.2 sublineage of the Omicron variant has slightly increased from 86% (147/170) in last week to 88% (134/154) this week.
- Overall, the BA.2 sub lineage accounts for 30% (733/2,445) of the Omicron cases sequenced in the ACT since December 2021.
- The Delta variant has not been detected in any of the samples sequenced since January 2022.