COVID-19

Weekly Surveillance Report

Report for the epidemiological week ending 21 January 2023

Department of **Health**

Tasmanian Government

COVID-19 Weekly Surveillance Report, Tasmania

Public Health Services

Report for the epidemiological week ending 21 January 2023

This report describes trends in COVID-19 case notifications, PCR, and rapid antigen testing (RAT), vaccination status, and hospitalisations and deaths from 15 December 2021 to 21 January 2023.

The focus of this report is on COVID-19 cases notified in Tasmania since the lifting of restrictions to the Tasmanian borders on 15 December 2021. The weekly number of COVID-19 cases reported to Public Health Services underestimates the true number of new COVID-19 infections in the community.

Prior to 15 December 2021 there were 238 cases of COVID-19 recorded in Tasmania, with 13 deaths caused by COVID-19 or with COVID-19 as a contributing factor. Of these earlier cases, 232 cases and all 13 deaths were notified in 2020. A further six cases were notified in 2021 prior to 15 December 2021.

Following the border changes on 15 December 2021, COVID-19 was imported from interstate, with subsequent widespread community transmission of COVID-19 in the Tasmanian community.

Caveats to the data: Information presented in this report is based on data available in the Tasmanian Notifiable Diseases Surveillance System (TNDSS) at the time of reporting and is subject to change. COVID-19 pathology data are received daily from public and private laboratories in Tasmania.

Population estimates are calculated using population data from the Australian Bureau of Statistics. The data in this report are calculated using the most recent population data, for 30 June 2021, released on 26 July 2022.

Hospitalisations are reported daily from public and private hospitals in Tasmania and include all individuals with COVID-19 admitted to hospital, including those diagnosed after their admission. The reason for hospital admission, either “with” or “due to” COVID-19, is based on clinician determination. Hospital admissions with COVID-19 also include admissions whereby COVID-19 was not the primary reason for admission (i.e. incidental diagnosis), and cases diagnosed with COVID-19 after admission (i.e. potentially hospital-acquired infections).

Reporting week is the epidemiological week from Sunday to Saturday. Data are presented for the week ending on the date shown in the column header (e.g., data for the week of 27 February to 5 March have the column header “05March2022”). Rates presented are calculated as the number of reported cases of COVID-19 per 1,000 people per week and the number of PCR tests performed per 1,000 people per week.

Summary for the epidemiological week ending 21 January 2023

The number of reported cases decreased statewide, with 653 cases in the week ending 21 January 2023, following 1,055 cases in the week ending 14 January 2023. This corresponds to a 7-day rolling average of 93 cases per day in the last week compared to a 7-day rolling average of 151 cases per day in the previous week. This is the lowest 7-day rolling average of cases since community transmission was established in December 2021.

PCR testing for COVID-19 decreased statewide by 13.4 per cent to 2,808 tests in the week ending 21 January 2023 following 3,244 tests in the week ending 14 January 2023. The percentage of PCR tests positive for COVID-19 decreased statewide to 6.1 per cent from 9.0 per cent in the previous week.

A range of Omicron subvariants and sub-lineages continue to be detected by whole genome sequencing in Tasmania. In recent weeks, the Omicron Recombinant XBF has become the most common SARS-CoV-2 sub-lineages identified, with Omicron BA.2.75 and its sub-lineages (including BR.2) comprising the largest proportion of the remainder.

There were 41 reported COVID-19 cases admitted to hospital; 15 of whom were admitted to hospital due to COVID-19. One case was admitted to ICU and one case died where COVID-19 was a cause or contributor to death. The decreases in reported COVID-19 case numbers, percentage of PCR tests positive, hospital admissions, deaths and outbreaks in recent weeks indicate a decrease in infections from the current wave. This is consistent with national trends. The description of the classification of COVID-19 risk in Tasmania was changed from medium to low on 20 January 2023.

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Section 1: Total COVID-19 Cases and Number of Cases per 1000 People in Tasmania

1.1 Weekly COVID-19 case numbers and the number of cases per 1000 people, by region of residence

Table 1: COVID-19 cases and number of cases per 1000 people (rate) per week for each of the last four weeks, and total cases notified since 15 December 2021, by region of residence in Tasmania.

	31Dec2022		07Jan2023		14Jan2023		21Jan2023		Total Since 15 December 2021	
Region of Residence	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Total Cases**	**Overall Rate**
North	656	4.2	423	2.7	296	1.9	178	1.1	**70,860**	**457.4**
North-West	485	4.1	279	2.3	162	1.4	102	0.9	**54,808**	**460.1**
South	1,636	5.6	848	2.9	585	2.0	362	1.2	**146,426**	**498.3**
Unknown Region		-	2	-	12	-	11	-	**624**	**-**
Tasmania Total	**2,777**	**4.9**	**1,552**	**2.7**	**1,055**	**1.9**	**653**	**1.1**	**272,718**	**480.2**

*Region is based on residential address provided at time of PCR testing or reporting of a positive RAT. All rates presented are calculated as cases per 1000 people. There have been an additional 11378 cases with an interstate or overseas postcode, with 59 occurring the latest reporting week.

- From 15 December 2021 to 21 January 2023, a total of 272,718 COVID-19 cases were reported in Tasmanian residents.
- Of these total cases, 70,860 cases resided in the North, 54,808 cases resided in the North-West, and 146,426 cases resided in the South.
- The weekly number of cases decreased statewide, with 653 cases in the week ending 21 January 2023 compared to 1,055 cases in the week ending 14 January 2023.

1.2 Weekly COVID-19 case numbers and the number of cases per 1000 people since 15 December 2021, by region of residence and overall, for Tasmanian residents

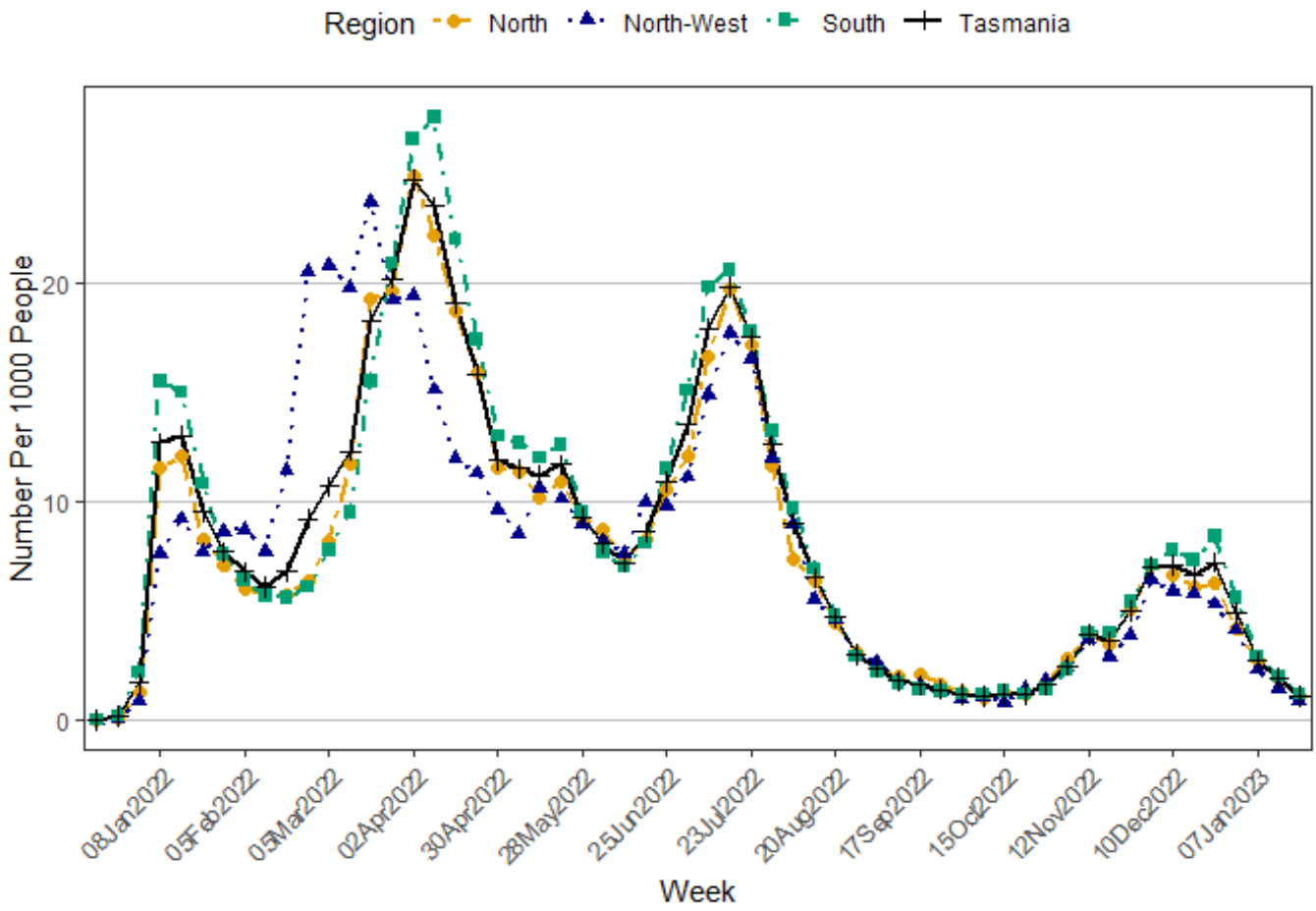

Figure 1: Number of weekly COVID-19 cases per 1000 people (rate) since 15 December 2021, by region of residence and overall, for Tasmanian residents.

- The number of cases per 1,000 people per week was highest in mid to late March 2022 in the North-West, and early April 2022 in both the South and North of Tasmania.
- The number of cases per 1,000 people per week increased from mid-June in all three regions of Tasmania, peaking in the reporting week ending 16 July 2022.
- From 16 July 2022 until mid-September, the number of cases per 1,000 people per week decreased in all three regions of Tasmania and remained stable until mid-October.
- From mid-October to the week ending 24 December 2022, the number of cases per 1,000 people per week increased, with minor fluctuations, in all three regions of Tasmania.
- Since 24 December 2022, the number of cases per 1,000 people has decreased in all three regions of Tasmania to the lowest level recorded since community transmission was established in Tasmania in December 2021.

1.3 Weekly COVID-19 case numbers and number of cases per 1000 people, by Local Government Area

Table 2: COVID-19 cases and number of cases per 1000 people (rate) notified per week in Tasmania for each of the last four weeks, and total cases notified since 15 December 2021, by Local Government Area (LGA)*.

		31Dec2022		07Jan2023		14Jan2023		21Jan2023		Total Since 15 December 2021	
LGA	**Population**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Total Cases**	**Overall Rate**
Break O'Day	6,936	14	2.0	12	1.7	9	1.3	12	1.7	**2,603**	**375.3**
Brighton	19,263	112	5.8	60	3.1	36	1.9	26	1.3	**13,634**	**707.8**
Burnie	20,441	75	3.7	44	2.2	43	2.1	21	1.0	**10,685**	**522.7**
Central Coast	23,278	119	5.1	65	2.8	31	1.3	25	1.1	**10,641**	**457.1**
Central Highlands	2,580	4	1.6	3	1.2	1	0.4	1	0.4	**330**	**127.9**
Circular Head	8,335	18	2.2	11	1.3	3	0.4	3	0.4	**3,091**	**370.8**
Clarence	62,396	402	6.4	195	3.1	131	2.1	78	1.3	**31,940**	**511.9**
Derwent Valley	11,114	68	6.1	18	1.6	12	1.1	8	0.7	**5,643**	**507.7**
Devonport	26,922	137	5.1	81	3.0	35	1.3	25	0.9	**14,389**	**534.5**
Dorset	6,991	21	3.0	8	1.1	16	2.3	8	1.1	**2,518**	**360.2**
Flinders	938	0	0.0	1	1.1	1	1.1	0	0.0	**333**	**355.0**
George Town	7,213	60	8.3	21	2.9	26	3.6	21	2.9	**3,223**	**446.8**
Glamorgan-Spring Bay	5,118	16	3.1	7	1.4	7	1.4	4	0.8	**1,504**	**293.9**
Glenorchy	51,233	298	5.8	145	2.8	100	2.0	59	1.2	**26,237**	**512.1**
Hobart	56,084	345	6.2	150	2.7	125	2.2	76	1.4	**28,291**	**504.4**
Huon Valley	18,809	71	3.8	50	2.7	37	2.0	27	1.4	**7,531**	**400.4**
Kentish	6,778	28	4.1	15	2.2	2	0.3	7	1.0	**2,315**	**341.5**
King Island	1,654	3	1.8	1	0.6	3	1.8	1	0.6	**611**	**369.4**
Kingborough	40,815	223	5.5	147	3.6	97	2.4	49	1.2	**20,514**	**502.6**
Latrobe	12,705	63	5.0	24	1.9	19	1.5	12	0.9	**5,662**	**445.7**
Launceston	71,906	329	4.6	225	3.1	147	2.0	76	1.1	**41,146**	**572.2**
Meander Valley	21,153	63	3.0	65	3.1	28	1.3	23	1.1	**6,477**	**306.2**
LGA	**Population**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Total Cases**	**Overall Rate**

Northern Midlands	14,030	66	4.7	39	2.8	22	1.6	11	0.8	**6,533**	**465.6**
Sorell	16,975	65	3.8	53	3.1	30	1.8	17	1.0	**8,074**	**475.6**
Southern Midlands	6,838	15	2.2	8	1.2	7	1.0	12	1.8	**1,805**	**264.0**
Tasman	2,643	17	6.4	12	4.5	2	0.8	5	1.9	**840**	**317.8**
Waratah-Wynyard	14,641	32	2.2	36	2.5	23	1.6	8	0.5	**5,816**	**397.2**
West Coast	4,373	10	2.3	2	0.5	3	0.7	0	0.0	**1,592**	**364.1**
West Tamar	25,747	103	4.0	52	2.0	47	1.8	27	1.0	**8,012**	**311.2**

*LGA is based on residential address provided at time of PCR testing or reporting of a positive RAT. This table excludes those who reported their region of residence to be interstate or overseas. All rates presented are calculated as cases per 1000 people.

- From 15 December 2021 to 21 January 2023, the Local Government Area (LGA) with the highest total number of cases per 1,000 people was Brighton with 707.8 cases, followed by Launceston with 572.2 cases.
- In the week ending 21 January 2023, the LGA with the highest number of reported cases per 1,000 people was George Town with 2.9 cases per 1,000 people, followed by Tasman with 1.9 cases per 1,000 people and Southern Midlands with 1.8 cases per 1,000 people. The greatest numbers of recent cases were reported from LGAs in greater Hobart and Launceston.

1.4 Weekly number of COVID-19 cases per 1000 people, presented as a metric, by Local Government Area

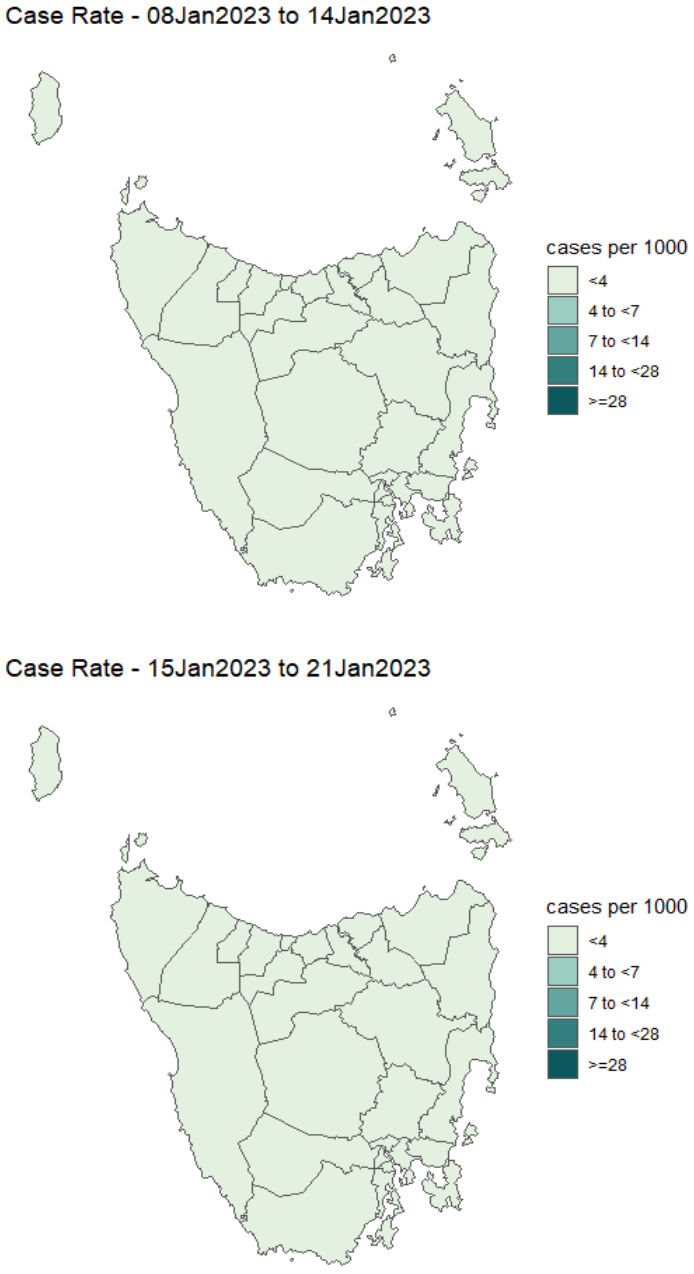

Figure 2: Weekly number of COVID-19 cases per 1,000 people (rate), presented as a metric from low (<4 cases) to very high (>28 cases) for the previous two weeks, by Local Government Area (LGA), in Tasmania.

- In the week ending 21 January 2023, all 29 LGAs had a case rate of <4 cases per 1,000 people, as they had the previous week.

1.5 Weekly COVID-19 case numbers and the number of cases per 1000 people, by age group

Table 3: COVID-19 cases and number of cases per 1000 people (rate) per week notified in Tasmania for each of the last four weeks, and total number and overall number of cases per 1000 people (rate) since 15 December 2021, by age group.

		31Dec2022		07Jan2023		14Jan2023		21Jan2023		Total Since 15 December 2021	
Age Group	**Population**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**	**Total Cases**	**Overall Rate**
0-4	30,762	79	2.6	62	2.0	33	1.1	19	0.6	**12,857**	**418.0**
5-11	47,316	133	2.8	60	1.3	32	0.7	13	0.3	**26,400**	**558.0**
12-15	27,641	72	2.6	32	1.2	18	0.7	12	0.4	**15,931**	**576.4**
16-19	25,947	56	2.2	40	1.5	30	1.2	17	0.7	**14,507**	**559.1**
20-29	68,883	273	4.0	193	2.8	146	2.1	99	1.4	**44,168**	**641.2**
30-39	68,662	431	6.3	210	3.1	144	2.1	85	1.2	**44,919**	**654.2**
40-49	67,481	342	5.1	199	2.9	123	1.8	73	1.1	**36,307**	**538.0**
50-59	75,657	361	4.8	214	2.8	156	2.1	96	1.3	**31,477**	**416.0**
60-69	74,484	398	5.3	203	2.7	136	1.8	95	1.3	**23,403**	**314.2**
70-79	53,489	328	6.1	183	3.4	115	2.1	93	1.7	**14,378**	**268.8**
80-84	14,342	126	8.8	65	4.5	48	3.3	26	1.8	**4,062**	**283.2**
85+	13,245	178	13.4	91	6.9	74	5.6	24	1.8	**4,301**	**324.7**
Unknown Age			0.0		0.0		0.0	1	0.0	**8**	
Total	**567,909**	**2,777**	**4.9**	**1,552**	**2.7**	**1,055**	**1.9**	**653**	**1.1**	**272,718**	**480.2**

Age group is based on age or date of birth provided at time of PCR testing or reporting of a positive RAT. People who have not provided a valid age or date of birth have been excluded. All rates presented are calculated as cases per 1000 people. This table excludes those who reported their region of residence to be interstate or overseas. Only Tasmanians are presented in this table. There have been an additional 11378 cases with an interstate or overseas postcode, with 59 occurring the latest reporting week.

- From 15 December 2021 to 21 January 2023, adults aged 30-39 years had the highest total number of cases per 1,000 people with 654.2 cases, followed by young adults aged 20-29 years with 641.2 cases.
- In the week ending 21 January 2023, weekly case numbers decreased in all age groups. Adults aged 80 years and older continued to have the highest case rates with 1.8 cases per 1,000 people.

1.6 Weekly number of COVID-19 cases per 1000 people notified in Tasmania since 15 December 2021, by age group

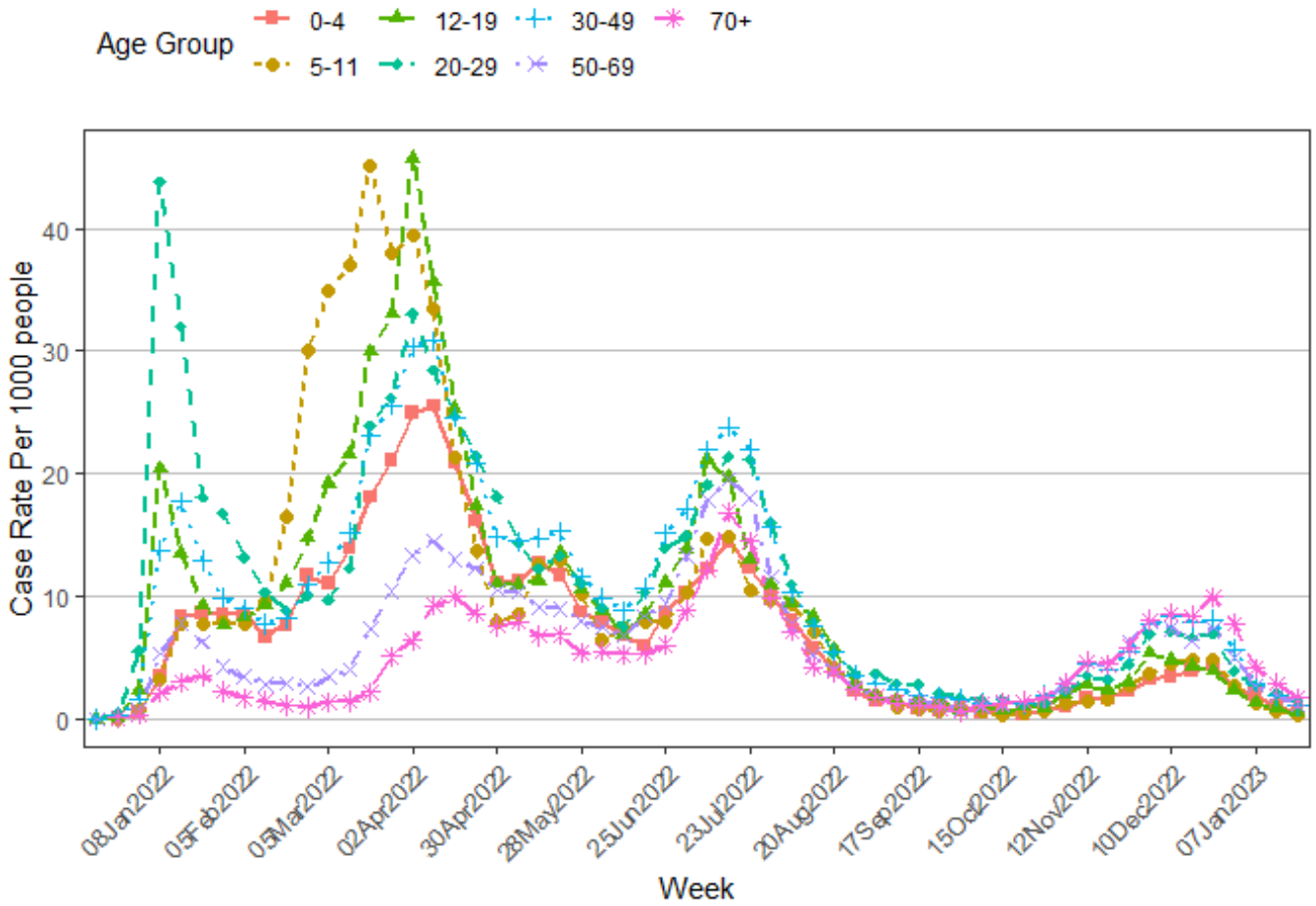

Figure 3: Weekly number of COVID-19 cases per 1000 people (rate) notified in Tasmania since 15 December 2021, by age group.

- The third and previous wave peaked in the week ending 16 July 2022, before the number of cases per 1,000 people in all age groups declined steadily until early September.
- From mid-October to 24 December 2022, the number of cases per 1,000 people increased, with minor fluctuations, in all age groups with the greatest increase in adults aged 70 years and older.
- Since 24 December 2022, the number of cases per 1,000 people has decreased in all age groups.

1.7 Weekly COVID-19 case numbers in Aboriginal and Torres Strait Islander people

Table 4: Weekly number of COVID-19 cases notified in Tasmania for each of the last four weeks, and total number of cases since 15 December 2021, by reported Aboriginal and Torres Strait Islander status.

Reported Aboriginal and Torres Strait Islander status	31Dec2022	07Jan2023	14Jan2023	21Jan2023	Total since 15 December 2021
People who identify as Aboriginal and/or Torres Strait Islander	149 (5.4%)	98 (6.3%)	53 (5.0%)	21 (3.2%)	**16,029 (5.9%)**
Non-Indigenous	2,221 (80.0%)	1,156 (74.5%)	769 (72.9%)	494 (75.7%)	**218,266 (80.0%)**
Not Stated	407 (14.7%)	298 (19.2%)	233 (22.1%)	138 (21.1%)	**38,423 (14.1%)**
Total	**2,777 (100.0%)**	**1,552 (100.0%)**	**1,055 (100.0%)**	**653 (100.0%)**	**272,718 (100.0%)**

*This table excludes those who reported their region of residence to be interstate or overseas. Region is based on residential postcode provided to Public Health Services. Percentages are based on total cases per region per week. Percentages have been rounded to the nearest decimal point and may not add up to 100 per cent.

- From 15 December 2021 to 21 January 2023, 16,029 Aboriginal and Torres Strait Islander people were diagnosed with COVID-19. This comprised 5.9 per cent of overall cases diagnosed in Tasmania.
- There was a decrease in the number of cases in people who identify as Aboriginal and/or Torres Strait Islander from 53 in the week ending 14 January 2023 to 21 in the week ending 21 January 2023.
- Overall, 85.9 per cent of cases have reported their Aboriginal and Torres Strait Islander status.

1.8 Weekly COVID-19 case numbers by method of diagnosis

Table 5: Weekly number of people diagnosed with COVID-19 in Tasmania from 15 December 2021 to 21 January 2023 by PCR and rapid antigen testing (RAT).

Reporting Week	PCR	RAT	Total Recorded Cases
03Dec2022	894 (22.6%)	3,056 (77.4%)	**3,950**
10Dec2022	921 (22.9%)	3,096 (77.1%)	**4,017**
17Dec2022	838 (22.2%)	2,932 (77.8%)	**3,770**
24Dec2022	921 (22.5%)	3,167 (77.5%)	**4,088**
31Dec2022	541 (19.5%)	2,236 (80.5%)	**2,777**
07Jan2023	345 (22.2%)	1,207 (77.8%)	**1,552**
14Jan2023	251 (23.8%)	804 (76.2%)	**1,055**
21Jan2023	162 (24.8%)	491 (75.2%)	**653**
Total Since 15 December 2021	**62,428 (22.9%)**	**210,290 (77.1%)**	**272,718**

*Case numbers include positive notifications to Public Health Services from pathology laboratories providing PCR results, and self-reported rapid antigen tests (RATs). Where both a PCR and RAT are notified to Public Health Services for the same individual, the PCR test is reported.

- Rapid antigen tests (RATs) have comprised 77.1 per cent of all positive COVID-19 case notifications to Public Health Services since 15 December 2021.
- The number of PCR tests declined from 894 in the week ending 3 December 2021 to 162 in the week ending 21 January 2023. The proportion of cases diagnosed by PCR testing during that time has remained relatively stable. .

1.9 Number of COVID-19 cases in Tasmania per day since 15 December 2021, by testing method (PCR and rapid antigen tests), with a 7-day rolling average of total COVID-19 cases notified

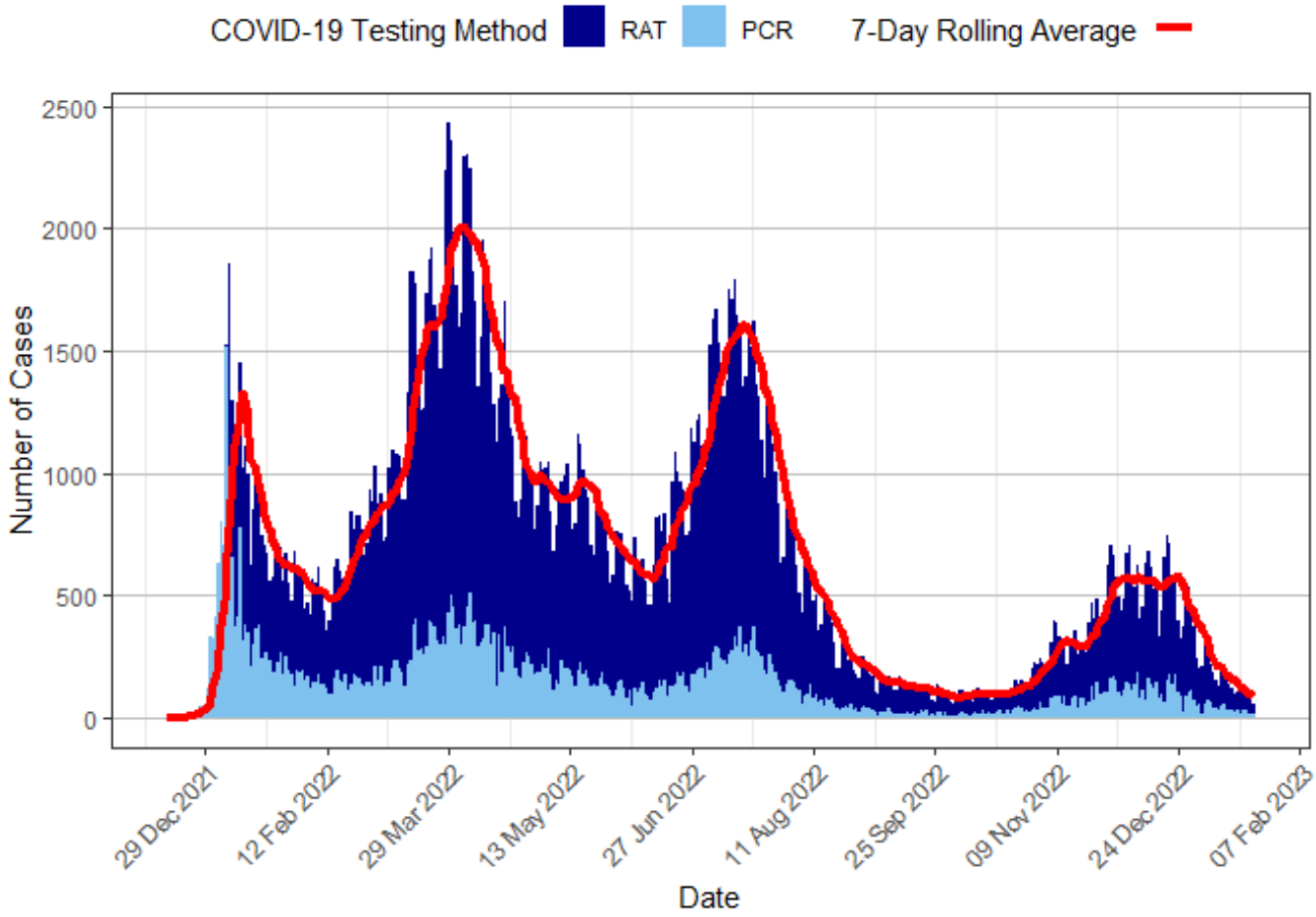

Figure 4. Number of COVID-19 cases in Tasmania notified per day from 15 December 2021 to 21 January 2023, by testing method (PCR and rapid antigen tests).

- The first wave of COVID-19 cases peaked in mid-January 2022 with a 7-day rolling average of 1,445 reported cases per day.
- The second and highest wave of COVID-19 cases began in February 2022 and peaked in early April 2022 with a 7-day rolling average of 2,082 reported cases per day.
- The third wave began in June 2022 and peaked mid-July with a 7-day rolling average of 1608 cases. The number of cases at the peak of the third wave was approximately 75 per cent of the number of cases at the peak of the previous wave in April 2022.
- The fourth wave began in late October 2022 and peaked in late December with a 7-day rolling average of 584 cases per day.
- The 7-day rolling average of COVID-19 cases decreased from 151 reported cases per day in the week ending 14 January 2023 to 93 reported cases per day in the week ending 21 January 2023.

1.10 Number of SARS-CoV-2 reinfections per month in Tasmania since 15 December 2021

Table 6: Number and per cent of SARS-CoV-2 reinfections* in reported cases per month in Tasmania from 15 December 2021 to 21 January 2023.

Month	Total Cases	Total Reinfections	Percent of Cases that were Reinfections
Dec 2021	732	0	0.0
Jan 2022	25,869	5	0.0
Feb 2022	16,974	67	0.4
Mar 2022	43,920	67	0.2
Apr 2022	43,303	220	0.5
May 2022	26,929	409	1.5
Jun 2022	23,175	701	3.0
Jul 2022	41,263	2,664	6.5
Aug 2022	13,350	1,997	15.0
Sep 2022	3,806	1,121	29.5
Oct 2022	3,311	642	19.4
Nov 2022	10,671	2,182	20.4
Dec 2022	16,155	4,257	26.4
Jan 2023	3,260	919	28.2
Total	**272,718**	**15,251**	**5.6**

*The definition of reinfection is a subsequent confirmed (positive PCR) or probable (positive RAT) SARS-CoV-2 infection in a person with a past known confirmed or probable SARS-CoV-2 infection as defined in the Communicable Diseases Network of Australia Series of National Guidelines. The current time period for a case to be included as a reinfection is 35 days or more from the positive test date of the previous infection.

- From 15 December 2021 to 21 January 2023, a total of 15,251 reinfections were identified in Tasmania which accounts for 5.6 per cent of all reported COVID-19 cases.
- Overall, 28.2 per cent of cases have been identified as reinfections so far in January 2023.

1.11 Number of SARS-CoV-2 reinfections in Tasmania since 15 December 2021, by age group

Table 7: Number and per cent of SARS-CoV-2 reinfections in reported cases in Tasmania from 15 December 2021 to 21 January 2023, by age group

Age Group	Total Cases	Total Reinfections	Percent of Cases that were Reinfections
0-4	12,857	483	3.8
5-11	26,400	1,327	5.0
12-15	15,931	732	4.6
16-19	14,507	938	6.5
20-29	44,168	3,510	7.9
30-39	44,919	3,057	6.8
40-49	36,307	2,306	6.4
50-59	31,477	1,482	4.7
60-69	23,403	709	3.0
70-79	14,378	370	2.6
80-84	4,062	126	3.1
85+	4,301	211	4.9
Unknown Age	8	0	0.0
Total	**272,718**	**15,251**	**5.6**

- From 15 December 2021 to 21 January 2023, adults aged 20-29 years had the highest proportion of reinfections at 7.9 per cent, and adults aged 70-79 years had the lowest proportion of reinfections at 2.6 per cent.

Section 2: PCR Testing in Tasmania

2.1 PCR positivity percentage by region of residence

Table 8: Number of COVID-19 PCR tests (both positive and negative) and percentage of PCR tests positive for COVID-19 (% Pos) for each of the last four weeks and since 15 December 2021, by region of residence in Tasmania.

	31Dec2022		07Jan2023		14Jan2023		21Jan2023		Since 15 December 2021	
Region of Residence	**Tests**	**% Pos**	**Tests**	**% Pos**	**Tests**	**% Pos**	**Tests**	**% Pos**	**Total Tests**	**Overall % Pos**
North	810	23.2	924	14.9	840	11.4	729	6.0	**105,383**	**16.9**
North-West	817	8.8	809	8.5	547	6.8	445	6.1	**78,164**	**13.8**
South	2,514	12.5	2,075	8.8	1,857	8.6	1,634	6.1	**246,796**	**14.7**
Unknown Region	0	0.0	0	0.0	0	0.0	0	0.0	**9**	**0.0**
Tasmania	**4,141**	**13.9**	**3,808**	**10.2**	**3,244**	**9.0**	**2,808**	**6.1**	**430,352**	**15.1**

*This table excludes those who reported their region of residence to be interstate or overseas. Region is based on residential address provided at time of PCR testing.

- From 15 December 2021 to 21 January 2023, a total of 430,352 PCR tests were performed in Tasmania. Of these, 15.1 per cent were positive for COVID-19.
- The number of PCR tests performed statewide decreased by 13.4 per cent from 3,244 in the week ending 14 January 2023 to 2,808 in the week ending 21 January 2023.
- In the week ending 21 January 2023, the percentage of PCR tests positive for COVID-19 decreased in all three regions of Tasmania to 6.0 per cent in the North and 6.1 per cent in the North-West and South.

2.2 Weekly percentage of PCR tests positive for COVID-19 since 15 December 2021, by region of residence and overall, for Tasmanian residents

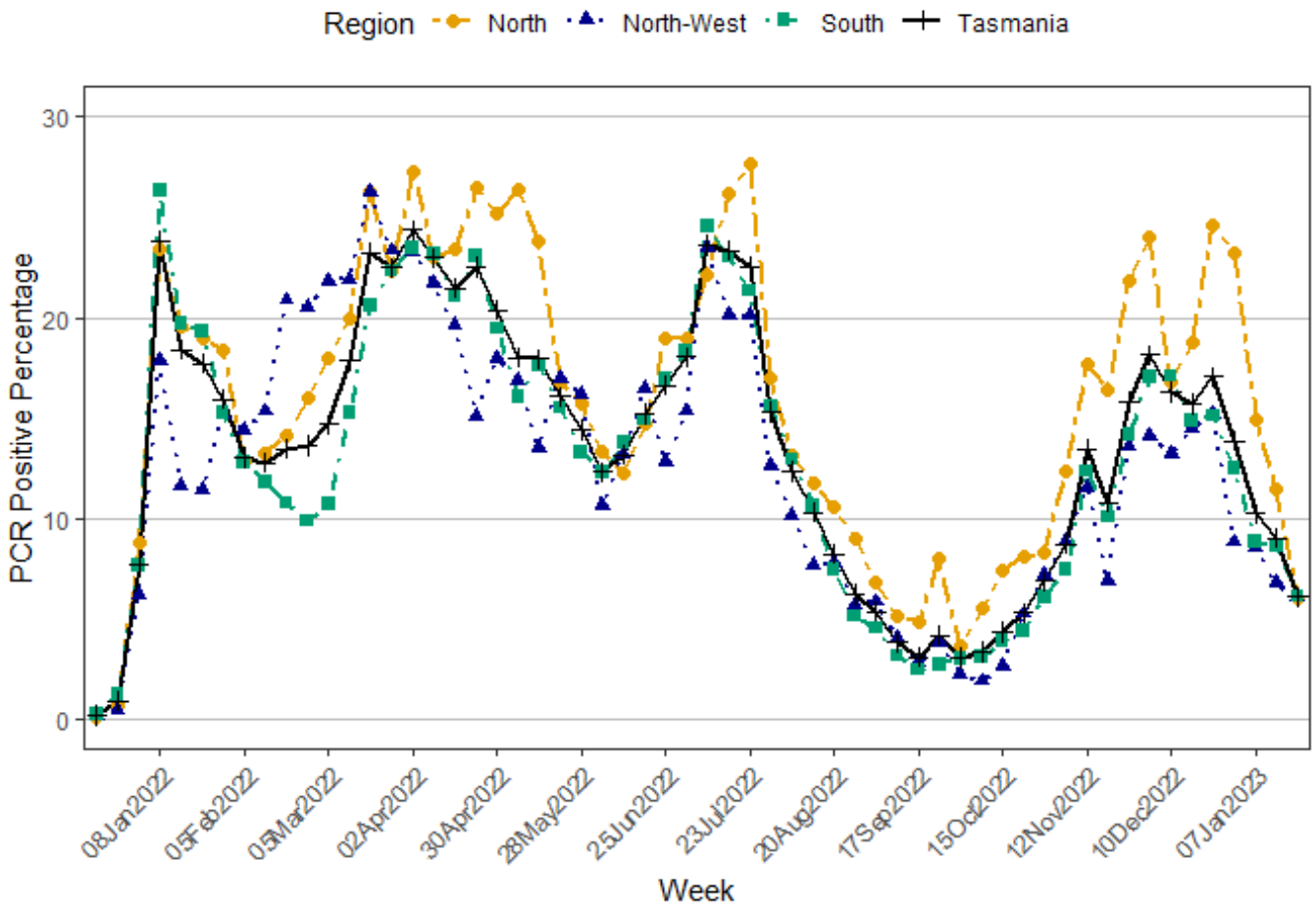

Figure 5: Weekly percentage of PCR tests positive for COVID-19 from 15 December 2021 to 21 January 2023, by region of residence and overall for Tasmanian residents.

- From the week ending 8 October to the week ending 3 December 2022, the percentage of positive PCR tests increased, with minor fluctuations, in all three regions of Tasmania, particularly in the North.
- Since 24 December 2022, the percentage of positive PCR tests has decreased in all three regions of Tasmania.

2.3 PCR testing by region of residence

Table 9: Number of PCR tests performed and number of PCR tests per 1000 people (rate) per week for each of the last four weeks and since 15 December 2021, by region of residence in Tasmania.

	31Dec2022		07Jan2023		14Jan2023		21Jan2023		Total Since 15 December 2021	
Region of Residence	**Tests**	**Rate**	**Tests**	**Rate**	**Tests**	**Rate**	**Tests**	**Rate**	**Total Tests**	**Overall Rate**
North	810	5.2	924	6.0	840	5.4	729	4.7	**105,383**	**680.3**
North-West	817	6.9	809	6.8	547	4.6	445	3.7	**78,164**	**656.1**
South	2,514	8.6	2,075	7.1	1,857	6.3	1,634	5.6	**246,796**	**839.8**
Tasmania	4,141	7.3	3,808	6.7	3,244	5.7	2,808	4.9	**430,352**	**757.8**
Unknown Region		**-**		**-**		**-**		**-**	**9**	**-**

*This table excludes those who reported their region of residence to be interstate or overseas. Region of residence is based on residential address provided at the time of PCR testing. All rates presented are calculated as PCR tests per 1000 people.

- From 15 December 2021 to 21 January 2023, the overall PCR testing rate per 1,000 people was highest in the South with 839.8 tests, followed by the North with 680.3 tests and the North-West with 656.1 tests.
- In the week ending 21 January 2023, the PCR testing rate was highest in the South with 5.6 tests per 1,000 people.

2.4 Weekly number of PCR tests per 1,000 people since 15 December 2021, by region of residence and overall, for Tasmanian residents

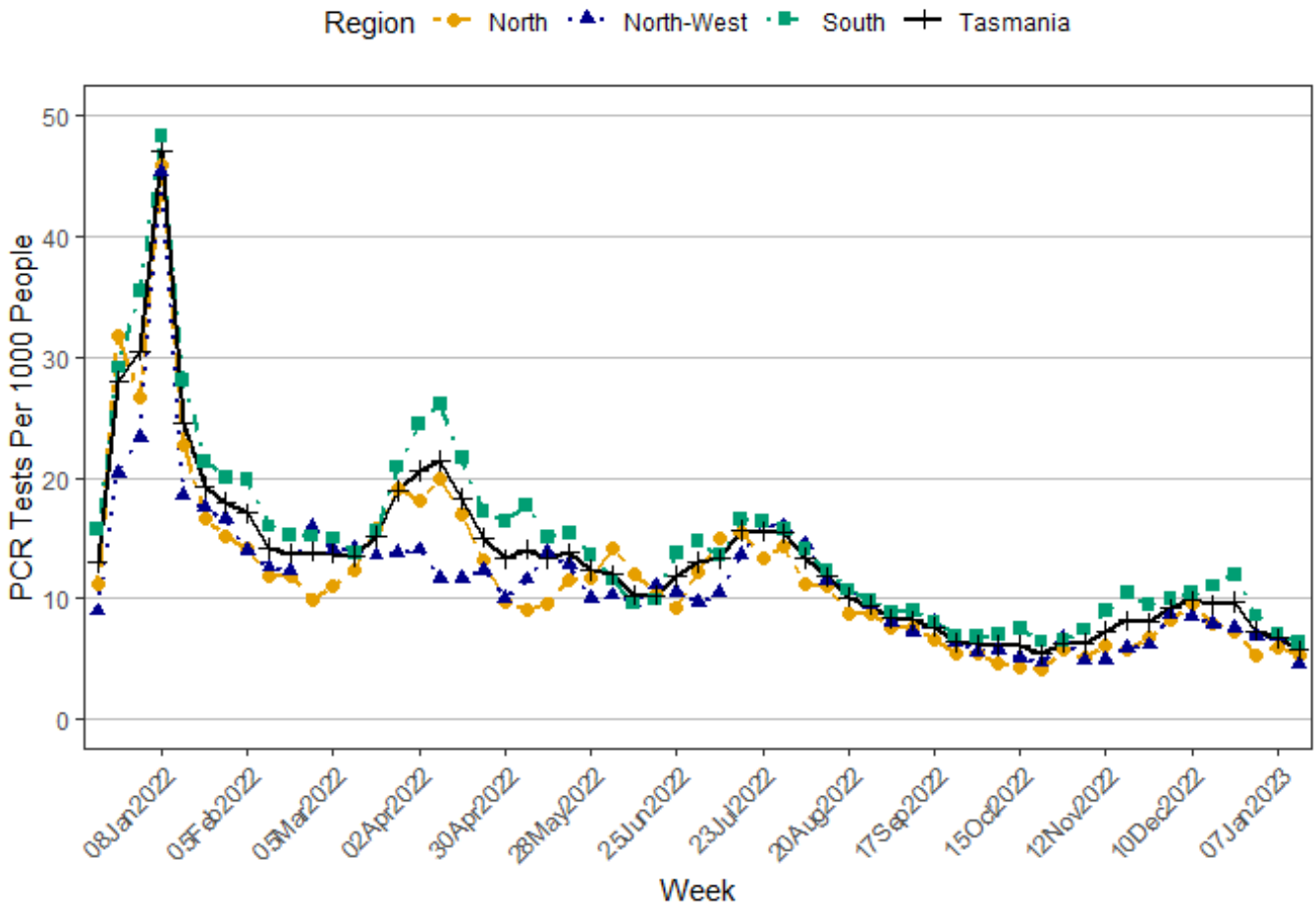

Figure 6: Weekly number of PCR tests per 1000 people (rate) from 15 December 2021 to 21 January 2023, by region of residence and overall for Tasmanian residents.

- The highest rate of PCR testing occurred in early January 2022 at 49 tests per 1,000 people.
- From 22 October to 17 December 2022, the PCR testing rate increased with minor fluctuations in all three regions of Tasmania.
- Since 24 December 2022, the PCR testing rate has declined in all three regions of Tasmania.

Section 3: COVID-19 Whole Genome Sequencing in Tasmania

Like all viruses, SARS-CoV-2 changes over time. The World Health Organization monitors these changes and classifies lineages according to the risk that they pose to global public health. Those that they identify as having changes that increase transmissibility, increase virulence, or decrease the effectiveness of vaccines or treatments are designated as variants of concern.

Whole genome sequencing is used in Tasmania to monitor for new SARS-CoV-2 variants circulating in the community, in particular variants of concern. Whole genome sequencing is a laboratory procedure that identifies the genetic profile of an organism. Whole genome sequencing can help understand how a virus transmits, responds to vaccination and the severity of disease it may cause. It can also help to monitor the spread of the virus by identifying specimens that are genomically similar. In Tasmania, whole genome sequencing is conducted at the Royal Hobart Hospital Pathology Laboratory.

Not all case specimens are sequenced. Specimens from people with COVID-19 who are admitted to hospital, or an ICU are prioritised, to identify and understand lineages with increased disease severity. Specimens from overseas arrivals are also prioritised to monitor for the introduction of new variants into the community. This is not a random sample, therefore the proportion of sequences identified is not necessarily reflective of their distribution in the community.

There is a time lag between the date a PCR test is taken and the date that the results of whole genome sequencing are reported to Public Health Services. The count of specimens which have been sequenced for recent weeks will therefore increase over time.

3.1 Variants identified by whole genome sequencing in Tasmania

Table 10: SARS-CoV-2 variants, selected subvariants and selected sub-lineages identified by whole genome sequencing, by specimen collection date in the four weeks to 14 January 2023, Tasmania

Variant	Week ending			
	24 December	31 December	07 January	14 January
Omicron variants				
BA.2 (other*)	0 (0%)	0 (0%)	1 (2%)	1 (1%)
BA.2.75 sub-lineage BR.2	22 (31%)	15 (30%)	8 (18%)	18 (22%)
BA.2.75 sub-lineages BL, BM, BN, BY, CH and other*	9 (13%)	6 (12%)	14 (32%)	10 (12%)
BA.5	6 (8%)	1 (2%)	0 (0%)	0 (0%)
BA.5 sub-lineage BF.7	4 (6%)	2 (4%)	1 (2%)	1 (1%)
BA.5 sub-lineage BQ	8 (11%)	7 (14%)	3 (7%)	7 (9%)
BA.5 sub-lineages BE, BF, BU, CK and other*	0 (0%)	1 (2%)	0 (0%)	0 (0%)
Recombinant XBB^	0 (0%)	1 (2%)	0 (0%)	1 (1%)
Recombinant XBC^	0 (0%)	3 (6%)	3 (7%)	3 (4%)
Recombinant XBF^	22 (31%)	14 (28%)	14 (32%)	38 (48%)
Recombinant XAY^	0 (0%)	0 (0%)	0 (0%)	1 (1%)
Total	**71 (100%)**	**50 (100%)**	**44 (100%)**	**80 (100%)**

*This includes sub-lineages and sub-sub-lineages of this variant. These have been grouped for simplicity as they are either not a sub-lineage of concern or have been detected in very low numbers during this reporting period. ^Recombinant variants arise when two SARS CoV-2 variants hybridise, that is exchange a part of their DNA. These recombinant variants may then be transmitted and become established, further acquiring new mutations. Percentages have been rounded to the nearest decimal point and may not add up to 100 per cent.

- A range of Omicron sub-lineages have been detected in Tasmania in the four weeks to 14 January 2023.
- In the week ending 14 January 2023, 80 COVID-19 case specimens were subjected to whole genome sequencing, with Omicron recombinant XBF and Omicron BA.2.75 sub-lineage BR.2 being the most common sub-lineages identified.
- Recombinant XBF comprised 38 (48%) of the 80 specimens sequenced in the most recent reporting week.

Section 4: Clinical Severity and Deaths in Tasmania

4.1 Clinical severity and deaths in reported COVID-19 cases by reporting week

Table 11: All hospital admissions with COVID-19, number of hospital admissions due to COVID-19, number of ICU admissions (for any reason), and deaths for which COVID-19 was a cause or contributing factor, in Tasmania from 15 December 2021 to 21 January 2023.

Reporting Week	All Hospital Admissions with COVID-19	Hospital Admissions due to COVID-19	Intensive Care Admissions	Deaths
03Dec2022	83	36	3	5
10Dec2022	102	36	6	2
17Dec2022	119	36	1	12
24Dec2022	151	51	4	5
31Dec2022	95	34	2	6
07Jan2023	68	28	2	3
14Jan2023	52	26	4	4
21Jan2023	41	15	1	1
Total Since 15 Dec 2021	**3,318**	**1,201**	**115**	**228**

*Reporting week is based on the earliest admission date for each case. Cases may be admitted to hospital more than once. Hospital admissions include cases admitted with COVID-19 or cases diagnosed with COVID-19 after admission. Reason for hospital admission is based on clinician determination at discharge date. Only recorded deaths, where the death was caused or contributed to by COVID-19 have been included.

- From 15 December 2021 to 21 January 2023, 3,318 reported COVID-19 cases were admitted to hospital. Of these, 1,201 reported cases (36.2 per cent) were admitted to hospital due to COVID-19.
- From 15 December 2021 to 21 January 2023, 115 reported COVID-19 cases were admitted to ICU.
- From 15 December 2021 to 21 January 2023, 228 reported COVID-19 cases died where COVID-19 caused or contributed to their death.
- The number of hospitalisations decreased in the last four weeks, with 41 cases admitted to hospital with COVID-19 in the most recent week, including 15 admitted due to COVID-19.
- In the week ending 21 January 2023, one case was admitted to ICU, and one case died where COVID-19 caused or contributed to death.

4.2 Clinical severity and deaths in reported COVID-19 cases by age group

Table 12: All hospital admissions with COVID-19, number of hospital admissions due to COVID-19, number of ICU admissions (for any reason), and deaths for which COVID-19 was a cause or contributing factor, in Tasmania from 15 December 2021 to 21 January 2023, by age group.

Age Group (years)	All Hospital Admissions with COVID-19	Hospital Admissions due to COVID-19*	Intensive Care Admissions	Deaths
0-4	147 (4.4%)	86 (7.2%)	7 (6.1%)	0 (0.0%)
5-11	32 (1.0%)	7 (0.6%)	1 (0.9%)	0 (0.0%)
12-15	21 (0.6%)	4 (0.3%)	0 (0.0%)	0 (0.0%)
16-19	38 (1.1%)	4 (0.3%)	2 (1.7%)	0 (0.0%)
20-29	171 (5.2%)	36 (3.0%)	9 (7.8%)	0 (0.0%)
30-39	193 (5.8%)	45 (3.7%)	4 (3.5%)	1 (0.4%)
40-49	181 (5.5%)	62 (5.2%)	8 (7.0%)	4 (1.8%)
50-59	296 (8.9%)	108 (9.0%)	21 (18.3%)	11 (4.8%)
60-69	453 (13.7%)	155 (12.9%)	22 (19.1%)	28 (12.3%)
70-79	727 (21.9%)	276 (23.0%)	31 (27.0%)	44 (19.3%)
80-84	458 (13.8%)	190 (15.8%)	6 (5.2%)	44 (19.3%)
85+	601 (18.1%)	228 (19.0%)	4 (3.5%)	96 (42.1%)
Unknown Age	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	**3,318**	**1,201**	**115**	**228**

*Age group is based on age provided at time of PCR testing or reporting of a positive RAT. Cases may be admitted to hospital more than once. Hospital admissions include cases admitted with COVID-19 or cases diagnosed with COVID-19 after admission. Reason for hospital admission is based on clinician determination at discharge date. Only recorded deaths, where the death was caused or contributed to by COVID-19 have been included.

- From 15 December 2021 to 21 January 2023, 957 reported cases aged 50 years and older were hospitalised due to COVID-19. These comprised 79.7 per cent of all hospitalisations due to COVID-19.
- From 15 December 2021 to 21 January 2023, 84 reported cases aged 50 years and older with COVID-19 were admitted to ICU. These comprised 73.0 per cent of all ICU admissions with or due to COVID-19.
- From 15 December 2021 to 21 January 2023, 223 reported cases aged 50 years and older died where COVID-19 caused or contributed to their death. These comprised 97.8 per cent of all deaths where COVID-19 caused or contributed to death.

4.3 Hospital admissions in reported COVID-19 cases, by week and age group

Table 13: Number of COVID-19 hospital admissions* and the proportion of COVID-19 cases in each age group that were in hospital in Tasmania, for each of the last four weeks and from 15 December 2021 to 21 January 2023, by age group.

Age Group (years)	25Dec2022 to 31Dec2022	01Jan2023 to 07Jan2023	08Jan2023 to 14Jan2023	15Jan2023 to 21Jan2023	Total Since 15 December 2021
0-4	4 (5.1%)	1 (1.6%)	2 (6.1%)	1 (5.3%)	147 (1.1%)
5-11	0 (0.0%)	0 (0.0%)	1 (3.1%)	0 (0.0%)	32 (0.1%)
12-19	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.9%)	59 (0.2%)
20-29	4 (1.5%)	3 (1.6%)	3 (2.1%)	0 (0.0%)	171 (0.4%)
30-39	2 (0.5%)	4 (1.9%)	3 (2.1%)	2 (2.4%)	193 (0.4%)
40-49	2 (0.6%)	4 (2.0%)	0 (0.0%)	2 (2.7%)	181 (0.5%)
50-59	7 (1.9%)	7 (3.3%)	6 (3.8%)	2 (2.1%)	296 (0.9%)
60-69	20 (5.0%)	5 (2.5%)	7 (5.1%)	6 (6.3%)	453 (1.9%)
70-79	17 (5.2%)	22 (12.0%)	9 (7.8%)	10 (10.8%)	727 (5.1%)
80-84	17 (13.5%)	7 (10.8%)	11 (22.9%)	5 (19.2%)	458 (11.3%)
85+	22 (12.4%)	15 (16.5%)	10 (13.5%)	11 (45.8%)	601 (14.0%)
Unknown Age	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	**95 (3.4%)**	**68 (4.4%)**	**52 (4.9%)**	**41 (6.3%)**	**3318 (1.2%)**

*Reporting week is based on the earliest admission date for each case. Cases may be admitted to hospital more than once. Hospital admissions include cases admitted with COVID-19 or cases diagnosed with COVID-19 after admission. Reason for hospital admission is based on clinician determination at discharge date. Only recorded deaths, where the death was caused or contributed to by COVID-19 have been included.

- From 15 December 2021 to 21 January 2023, 3,318 reported COVID-19 cases were hospitalised. These 3,318 cases comprised 1.2 per cent of all COVID-19 cases in Tasmania.
- From 15 December 2021 to 21 January 2023, the highest proportion of hospitalised cases was in adults aged 85 years and older. In this age group, 14.0 per cent all cases were admitted to hospital.
- In the week ending 21 January 2023, 41 reported COVID-19 cases were hospitalised, accounting for 6.3 per cent of all COVID-19 cases notified to Public Health Services during that week.
- In the week ending 21 January 2023, the number and proportion of adults in hospital remained highest in those aged 70 years and over.

4.4 Clinical severity and deaths in reported COVID-19 cases by vaccination status

Table 14: All hospital admissions with COVID-19, number of hospital admissions due to COVID-19, number of ICU admissions (for any reason), and deaths for which COVID-19 was a cause or contributing factor, in Tasmania from 15 December 2021 to 21 January 2023, by vaccination status.

Number of Reported Vaccination Doses	Reported Cases	All Hospital Admissions with COVID-19	Hospital Admissions due to COVID-19	Intensive Care Admissions	Deaths
0 doses	31,513	426	178	20	39
1 dose	12,834	81	30	3	5
2 or more doses	217,897	2,729	963	86	182
Unknown	10,474	82	30	6	2
Total	**272,718**	**3,318**	**1,201**	**115**	**228**

*Data should be interpreted with caution as vaccination information is based on self-report at the time of notification of a positive PCR or RAT. Cases may be admitted to hospital more than once. Hospital admissions include cases admitted with COVID-19 or cases diagnosed with COVID-19 after admission. Reason for hospital admission is based on clinician determination at discharge date. Only recorded deaths, where the death was caused or contributed to by COVID-19 have been included.

- From 15 December 2021 to 21 January 2023, the death rate in reported cases who were unvaccinated was 0.124 per cent while the death rate in reported cases who had received two or more doses of vaccine was 0.084 per cent.
- From 15 December 2021 to 21 January 2023, the death rate in reported cases who were unvaccinated was 1.48 times the death rate in reported cases who had received two or more doses of vaccine.

4.5 Deaths in reported COVID-19 cases by region of residence

Table 15: Number of deaths for which COVID-19 was a cause or contributing factor, per week for each of the last four weeks and from 15 December 2021 to 21 January 2023, in Tasmania by region of residence.

Region	31Dec2022	07Jan2023	14Jan2023	21Jan2023	Total Since 15 December 2021
North	0	1	1	0	**55**
North-West	2	0	1	0	**48**
South	4	2	2	1	**124**
Interstate	0	0	0	0	**1**
Total	6	3	4	1	**228**

*Region is based on residential address provided at time of PCR testing or reporting of a positive RAT. Only recorded deaths, where the death was caused or contributed to by COVID-19 have been included.

- From 15 December 2021 to 21 January 2023, 228 reported cases died in Tasmania where COVID-19 caused or contributed to their death. Of these, 55 reported cases lived in the North, 48 reported cases lived in the North-West and 124 reported cases lived in the South. One reported case who died stated residential address as interstate.
- In the week ending 21 January 2023, one reported case from the South died where COVID-19 caused or contributed to death.

Tasmanian Government

Department of Health
GPO Box 125
Hobart TAS 7001

1300 135 513

www.health.tas.gov.au