The Optimise Study: Summer 2021–2022 Snapshot

Special Report | April 2022

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Summer 2021–2022 Snapshot

In January 2022, Victoria experienced its largest wave of COVID-19 to date, with over 660,000 people testing positive in January alone. On occasions, over 10,000 people tested positive for COVID-19 infection each day. However, recorded cases are likely to underestimate the true number of Victorians infected with COVID-19 during this period due to problems accessing COVID-19 testing. There were long wait times in queues for PCR testing, with people sometimes being turned away without receiving a test. There was also a shortage of Rapid Antigen Tests (RATs), and when available, the cost of tests was prohibitive for some people. These factors meant an unknown number of people with COVID-19 infection were unable to be tested and diagnosed in a timely way, if at all.

To better understand the challenges faced by Victorians during the COVID-19 peak in January 2022, and to estimate the likely prevalence of infection, we asked participants of the Optimise cohort a series of questions about their experiences during the Summer of 2021–2022, with a particular focus on January 2022. The survey was conducted between 11 and 19 February 2022 to assess Optimise participants' testing and risk reduction behaviours. Of the 697 participants invited to complete the survey, 577 (83%) responded. The participants who completed the survey were representative of the Optimise survey cohort. Sixteen participants completed phone-administered surveys with bilingual data collectors in Mandarin, Arabic, or Dinka.

The findings from this report were then presented to a Community Engagement Group that met on 23 March 2022. The Community Engagement Group was comprised of members representing healthcare workers, people who have had COVID-19, people with chronic disease and culturally and linguistically diverse communities (including Afghan, Fijian and Pasifika, Indian, and South Asian communities).

SUMMARY OF FINDINGS

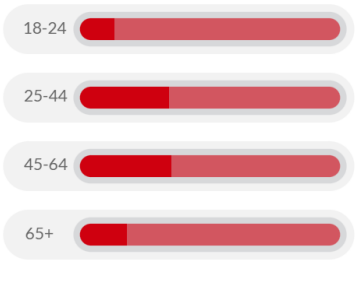
Testing and COVID-19 positivity

- In January 2022, 58% (n=337) of the 577 participants who completed the Summer Snapshot tested for COVID-19.
- Of those that tested, 23% (n=78) tested positive, giving an overall COVID-19 period prevalence of 14% in January, in the Optimise cohort.
- Of the 357 participants who experienced symptoms, 266 (75%) tested, of whom 73 tested positive, giving a test positivity rate of 27% (73/266).
- Of the 216 participants who did not report COVID-like symptoms, 68 (31%) tested, of whom three tested positive, giving a test positivity rate of 4% (3/68).
- **Combining the observed proportion positive (in those with and without symptoms), and extrapolating this positivity to participants not tested, we give a conservative estimate that 19% of participants in our study had COVID-19 in January 2022.**
- Some members of the Community Engagement Group reported fewer people were testing in their communities compared to the figures presented above because of perceptions that COVID-19 is now like 'the flu'.

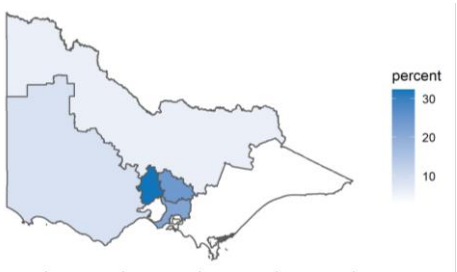
Risk reduction strategies

- Over the December 2021 to January 2022 period, 37% of participants reported avoiding large crowds, 33% reduced their social activity, and 7% strictly isolated several days before a significant cultural or family event.
- During this period over three quarters of participants reported having always, mostly, or sometimes restricted their attendance at bars and restaurants or avoided crowded spaces or avoided indoor gatherings with family and friends due to concerns about COVID-19.
- Young people (those aged 18–34 years) were less likely to avoid social gatherings due to COVID-19, however, they were more likely to ask others to take a RAT prior to attending a social gathering. Young people were also more likely to take a test in the lead up to a significant cultural event to ensure they were negative before attending.
- People who spoke a language other than English at home were more likely to avoid social gatherings and crowded places and to ask others to take a RAT prior to attending a social gathering. People who spoke a language other than English at home were also less likely to take a test in the lead up to a significant cultural event to ensure they were negative compared to people who spoke English at home.
- The Community Engagement Group presented a range of views about the adoption of risk reduction behaviours. Some described being very cautious over the summer period due to heightened anxiety associated with the Omicron variant, while others reported people in their communities continued to hold large gatherings and had 'stopped listening' to risk reduction advice.

DEMOGRAPHICS



30% are aged between **18–34**



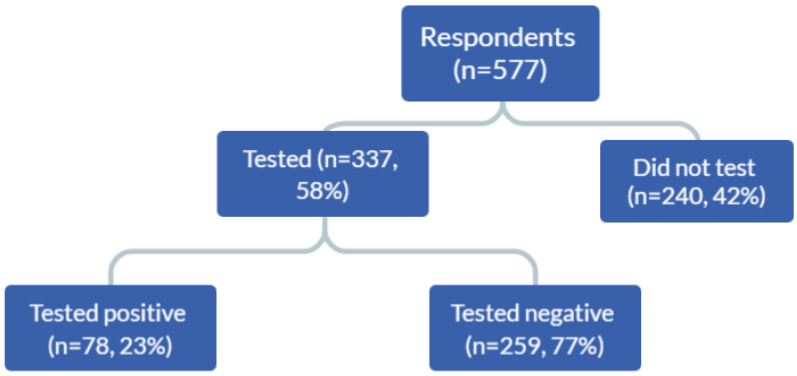
81% live in **metropolitan Melbourne**

16% speak a **language other than English** at home

TESTING AND REPORTED RESULTS

Of the 577 participants who completed the survey, 337 (58%) took at least one COVID-19 test in January 2022, of whom 78 tested positive, giving a test positivity rate of 23% (78/337, Figure 1), and an estimated **overall COVID-19 prevalence of 14% (78/577).** Participants had on average 1.3 negative PCR tests and 2.7 negative RATs.

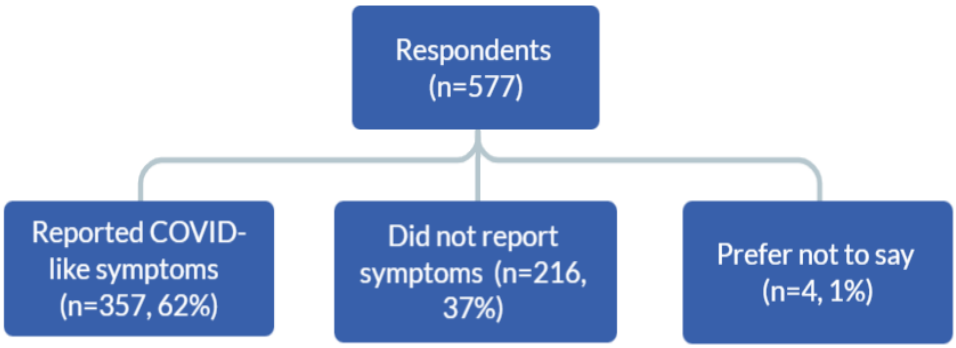
Figure 1: Testing and reported results amongst participants



SYMPTOMS

We asked participants how frequently they tested when they experienced symptoms (always, most of the time, sometimes, never, not applicable). Of all respondents, 357 (62%, Figure 2) Optimise participants were identified as experiencing COVID-like symptoms in January 2022 (that is, participants who responded anything other than 'not applicable' were classified as having had symptoms in January).

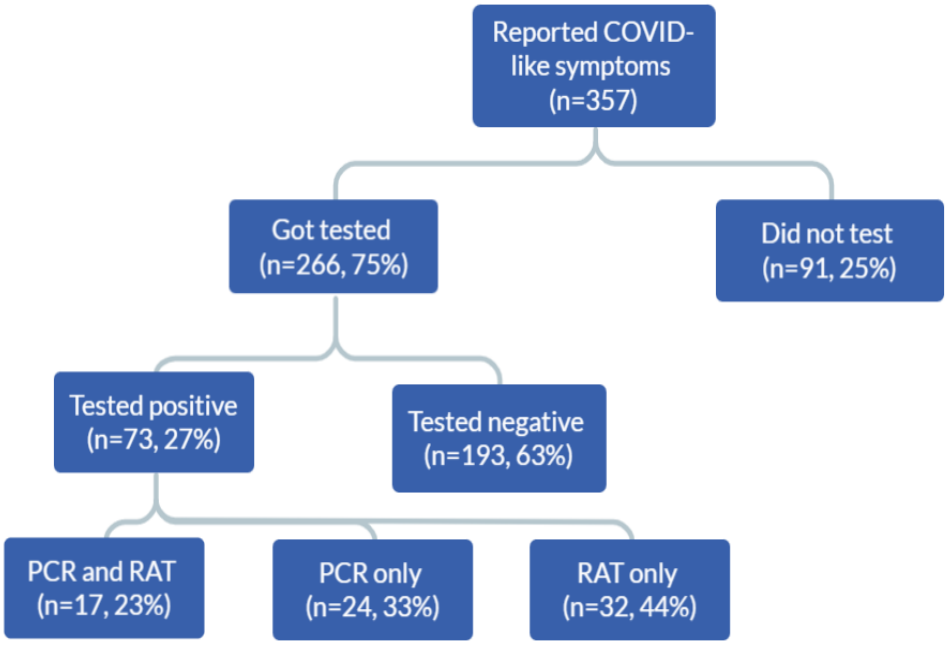
Figure 2: COVID-like symptoms reported by participants



SYMPTOMATIC TESTING AND POSITIVITY

Of the 357 participants who experienced symptoms, 139 (39%) indicated they 'always' tested when symptoms occurred. Of the 357 who experienced symptoms, 266 (75%) tested at some point, of whom, 73 tested positive, giving a test positivity rate of 27% (73/266, Figure 3).

Figure 3: Symptomatic testing and positivity



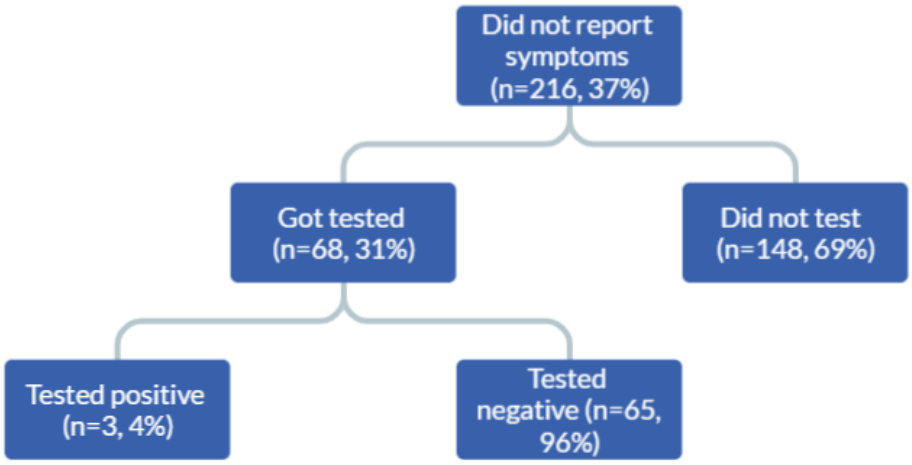
When discussed at the Community Engagement Group, the participant representing Fijian and Pasifika communities stated the testing rates for their community would be much lower than those presented in this report. The representative of Afghan communities in south-east Melbourne also reported some people in their community were not being tested because they perceived COVID was now like the 'flu'. The participant said this lack of testing had led to COVID-19 spreading throughout the community, with most people contracting COVID-19 once, and some twice.

A participant who worked at a testing venue over the summer reported that people were waiting three to five hours to get a PCR test. Others were being turned away because the testing centre's capacity was full. The participant reported some people were waiting seven days for PCR results which was financially stressful for people in casual jobs.

ASYMPTOMATIC TESTING AND POSITIVITY

Of the 216 participants who did not report COVID-like symptoms, 68 (31%) reported they got tested, of whom, three tested positive, giving a test positivity rate of 4% (Figure 4).

Figure 4: Asymptomatic testing and positivity



TOTAL POSITIVE OVER JANUARY

Of 577 participants who completed the Summer Snapshot Survey, 78 (14%) tested positive at least once during January 2022 (Figure 1).

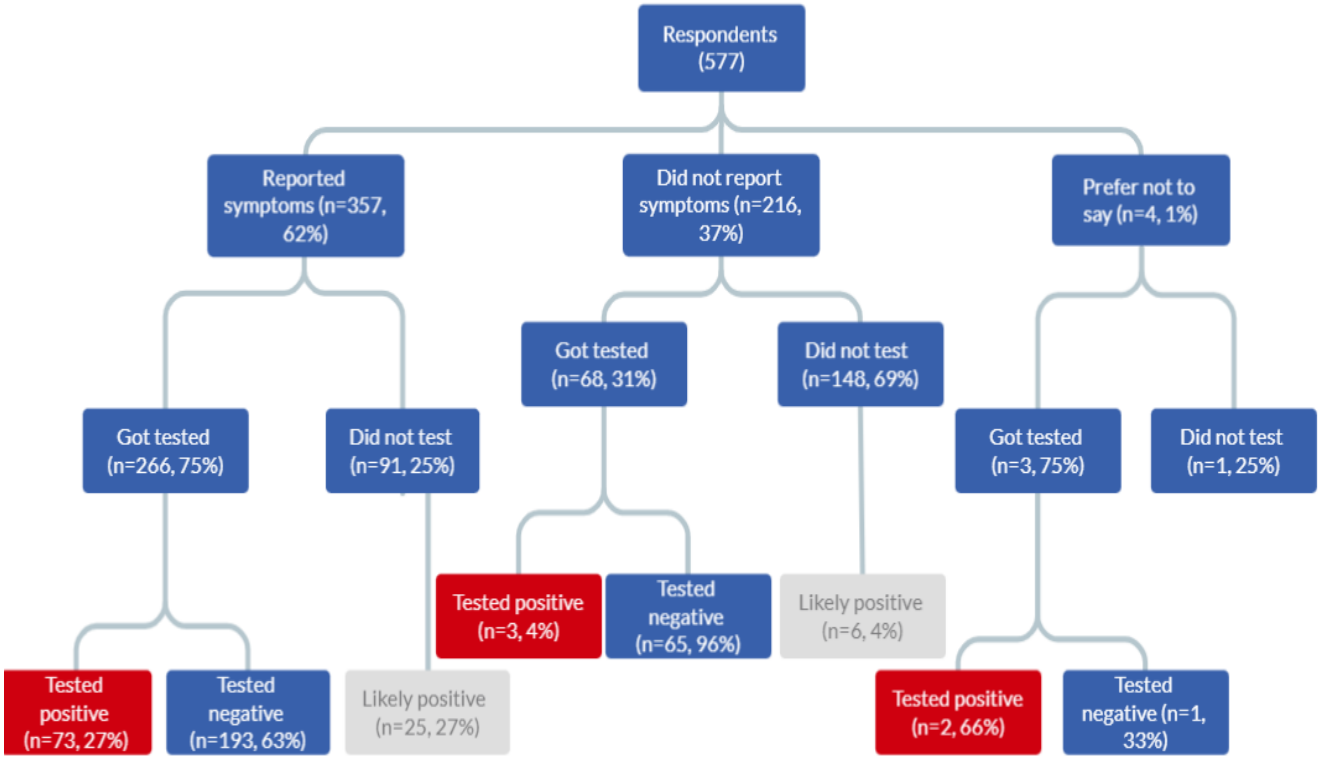
However, it is reasonable to assume that the prevalence of 14% in January in the Optimise cohort is an underestimate given:

- Of all respondents, 357 people were identified as having COVID-19-like symptoms at some point in January 2022 (Figure 2).
- Of the 357 people with symptoms, 266 tested, of whom 73 tested positive, giving a test positivity of 27%. Of the 357 people with symptoms, 91 did not test for COVID-19 (Figure 3).
- Assuming a test positivity rate of 27% for participants with symptoms that *did not* test (n=91), a further 25 people with symptoms may have had COVID-19 in January 2022 (Figure 5).
- Of all respondents, 216 were identified as *not* having COVID-19-like symptoms during January 2022 (Figure 2).
- Of the 216 people who did *not* have symptoms, 68 tested, of whom three tested positive, giving a test positivity rate of 4%. Of the 216 people who did *not* have symptoms, 148 did not test for COVID-19 (Figure 4).

- Assuming the test positivity rate of 4% for participants who did not have symptoms and that *did not* test (n=148), a further six people who did not have symptoms may have COVID-19 in January 2022.

In total, this means **73** (symptomatic and tested) plus **three** (asymptomatic and tested) plus **two** (prefer not to say if they experienced symptoms and tested) participants had observed COVID-19 infection, and a further **25** (symptomatic and did not test) plus **six** (asymptomatic and did not test) may have had COVID-19 in January 2022, giving an estimated COVID-19 prevalence of 19% (109/577) in January 2022 (Figure 5).

Figure 5: Total positive over January



Importantly, when considering the observed and estimated prevalence of COVID-19 in January 2022, there is additional data available on reason for testing among those tested (Table 9); a test positivity rate of 39% among participants who tested due to symptoms was observed. Further, among participants tested for routine reasons (that is, for work, travel, peace of mind) a test positivity rate of 11% was observed. Therefore, a further 35 people with symptoms that did not test may have had COVID-19 (39% times 91) and a further 16 without symptoms may have had COVID-19 (11% times 148), **giving an upper estimate of prevalence of 22%** (78 known positive plus 35 plus 16 assumed positive).

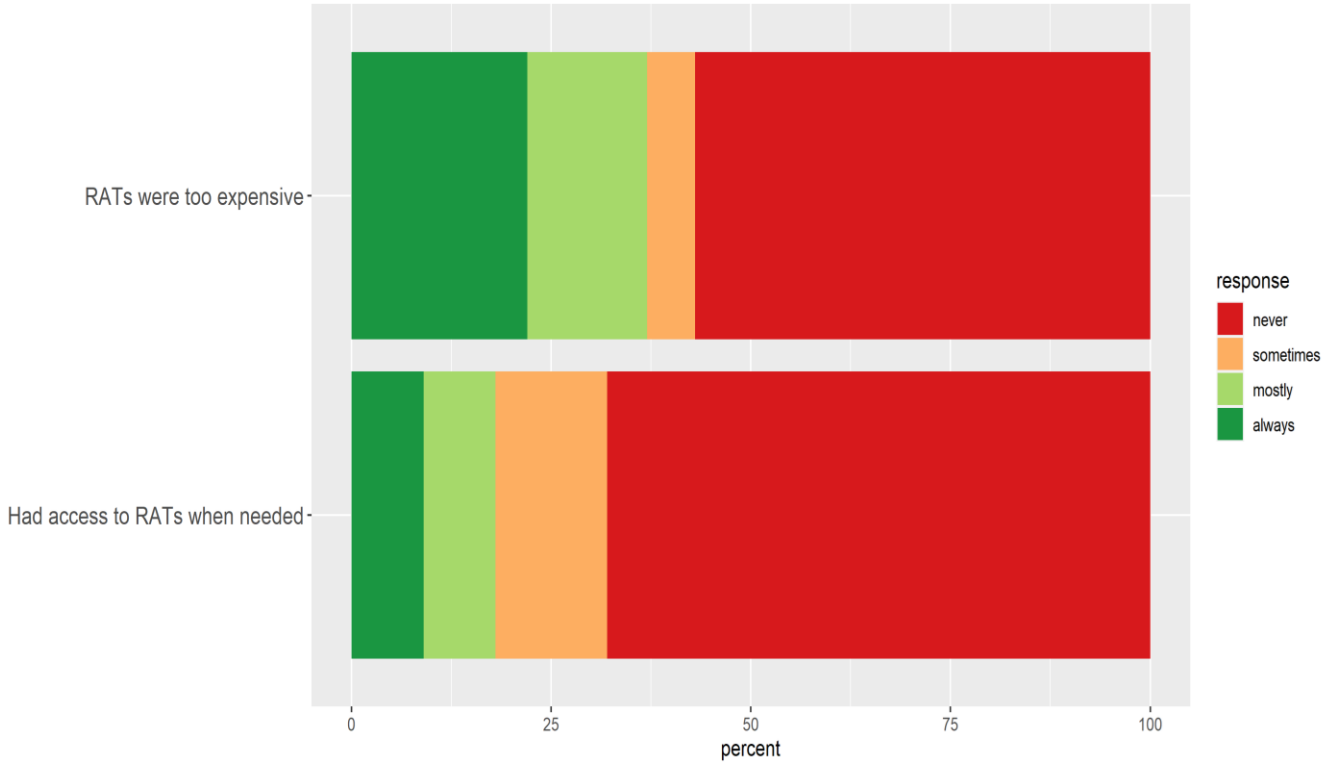
Further, there are some caveats on the estimates of COVID-19 prevalence worth noting. It is reasonable to propose that some COVID-19 infections were likely to have been missed due to infrequent testing (mean number of negative RATs was observed to be ‹3 per person for the entire month) among Optimise participants, there is the possibility of false negative RATs, and there were known delays in access to PCR testing which may have also contributed to missed diagnoses.

ACCESSIBILITY OF RATS

The 91 participants who experienced symptoms but did not test were asked about access to testing, of whom 22 responded ‘not applicable’ or ‘prefer not to say’, leaving 69 respondents. Of the 69, 9% (n=6) reported that they always had access, 9% (n=6) reported they mostly had access, 14% (n=10) reported they sometimes had access and 68% (n=47) reported they never had access to RATs when they needed them.

The 91 participants who experienced symptoms but did not test in January were also asked why they did not test. When asked about the cost of tests, 37 responded 'not applicable' or 'prefer not to say', leaving 54 participants who responded to this question. Of the 54 participants, 22% (n=12) reported RATs were always too expensive, 15% (n=8) reported they were mostly too expensive, 6% (n=3) reported they were sometimes too expensive and 57% (n=31) said they were never too expensive.

Figure 6: Accessibility of RATs for participants who experienced symptoms but did not test



*Top bar presents results from 54 participants who did not respond N/A or prefer not to say

**Bottom bar presents results from 69 participants who did not respond N/A or prefer not to say

People who spoke a language other than English at home were less likely to report they got tested (either with a PCR test or RAT) when they had COVID-19 symptoms (24%) compared to people who spoke English at home (42%). People who spoke a language other than English at home were also more likely to report that RATs were always or mostly too expensive to purchase when needed (35%) when compared to people who spoke English at home (26%). Participants who spoke English at home indicated they had better access to RATs, with 42% indicating that they always or mostly had access to RATs when they needed them, as opposed to 30% of people who spoke a language other than English at home.

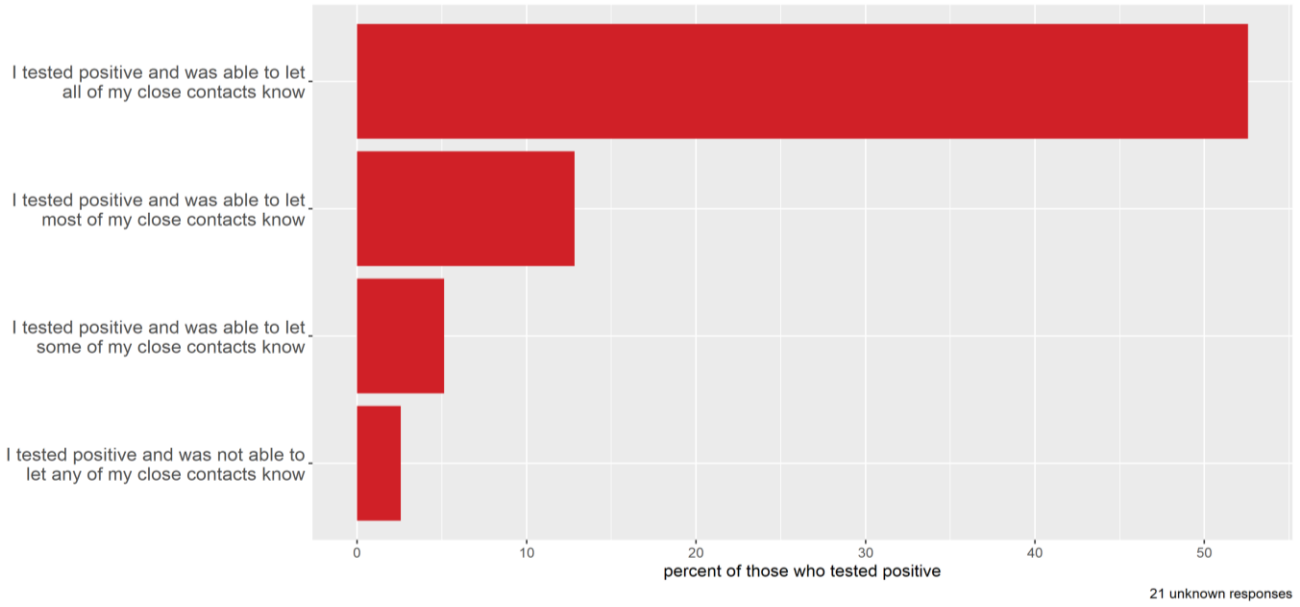
Problems accessing RATs over the summer were reported by several Community Engagement Group participants. The representative for healthcare workers stated finding RATs in the community was like "survival of the fittest". Strategies this person used to obtain RATs included using the "Find a RAT" application, bulk buying with friends, and queuing outside pharmacies that had supplies. The representative for healthcare workers reported the RAT shortage was particularly frustrating because people were wanting to do the right thing by testing but were unable to. Another participant who lives in community housing reported people were angry about pharmacies trying to profit from the RAT shortage.

One Community Engagement Group participant who runs a club for older Indian community members reported they were well-supported to access RATs by their local health service and local council. The participant was given a supply of RATs which members in need could collect from his letterbox. Another participant, a representative of Afghan communities in south-east Melbourne, said RATs were useful in their community because they allowed people to test and isolate in private, avoiding the stigma of having a PCR test.

NOTIFYING CLOSE CONTACTS

Of the 78 participants who tested positive via a PCR test or RAT, 53% reported being able to notify all their contacts, 13% were able to notify most, 5% were able to notify some and 3% were not able to notify any of their close contacts (now known as household or household-like contacts).

Figure 7: Experiences notifying close contacts of the 78 participants who tested positive

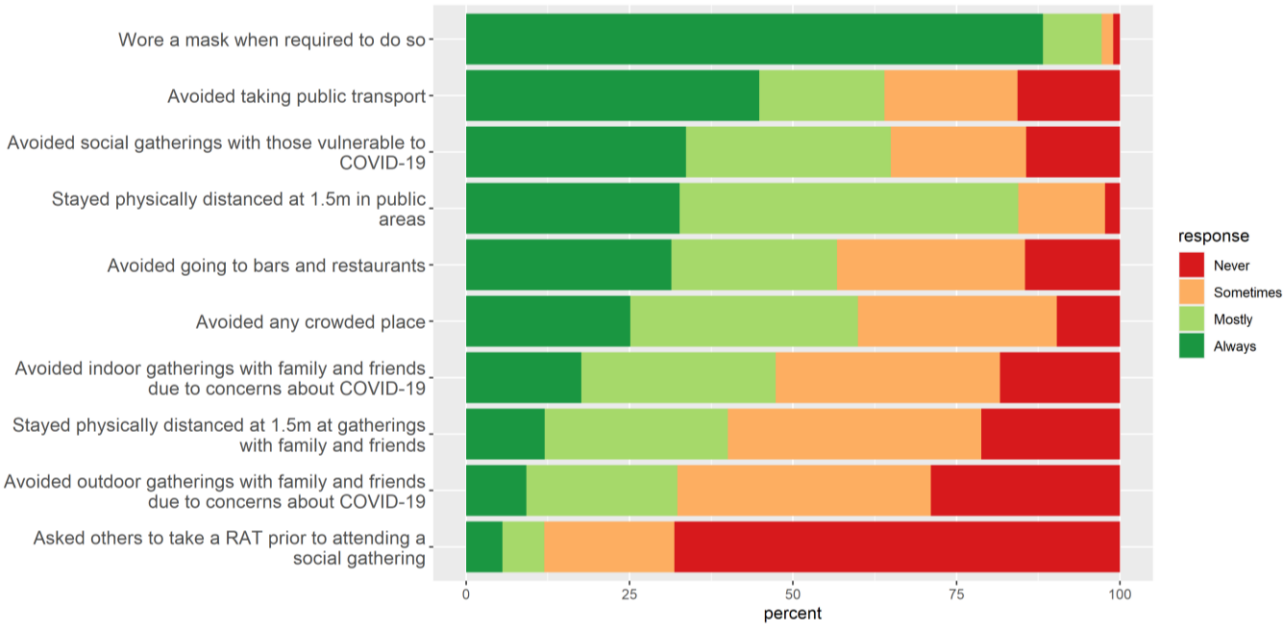


RISK REDUCTION

In January 2022, 88% of participants reported 'always' wearing a mask when required. Over 50% of participants 'mostly' or 'always' avoided taking public transport, avoided crowded places, bars and restaurants and social gatherings with people vulnerable to COVID-19. One in three (31%) reported always avoiding bars and restaurants, while one in four (25%) reported always avoiding crowded places. Six percent of participants reported they 'always' asked others to take a RAT prior to attending a social gathering.

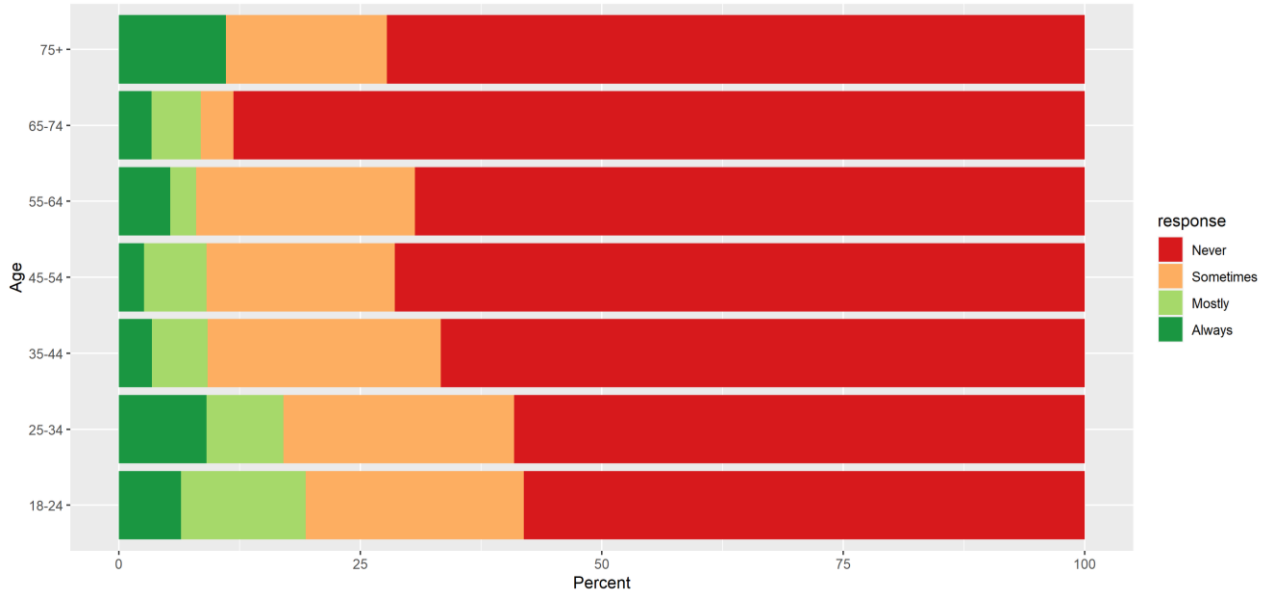
Including those who 'sometimes', 'mostly', or 'always' avoided these activities, 75% of people restricted their attendance at bars and restaurants, avoided crowded spaces and indoor gatherings with family and friends, due to their concerns about COVID-19.

Figure 8: Frequency of adoption of risk reduction behaviours



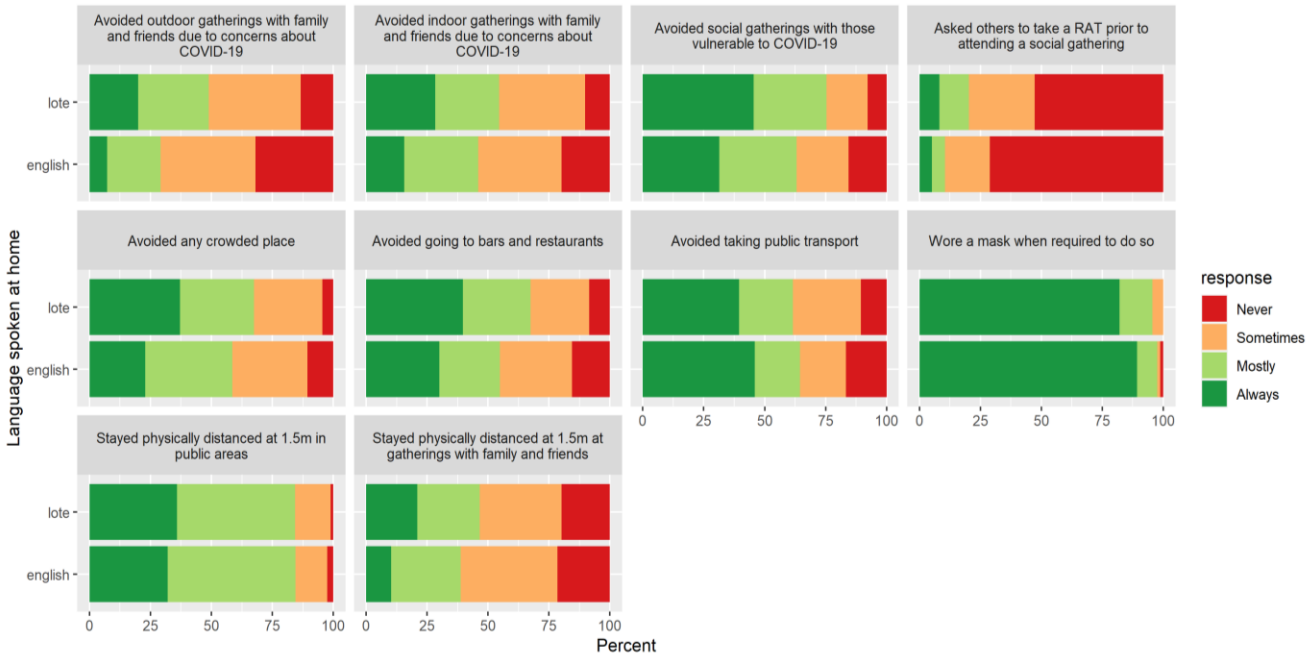
People aged 18–34 years were less likely to 'always' avoid indoor (8% of people aged 18–24 and 12% of people aged 25–34, years compared to over 17% of people in other age groups) and outdoor gatherings (3% of people aged 18–24 years compared to over 7% of people in other age groups) or going to bars and restaurants compared to other age groups. Young people were more likely to 'always' or 'mostly' ask others to take a RAT prior to attending a social gathering (19% of people aged 18–24 and 17% of people aged 25–34 years 'always' or 'mostly' asked others to take a RAT, compared to around 8% of people in other age groups).

Figure 9: Frequency that participants asked others to take a RAT prior to attending a social gathering in January 2022



People who spoke a language other than English at home were more likely in January 2022 to 'always' or 'mostly' avoid outdoor (49% *vs* 29%) and indoor (55% *vs* 46%) gatherings, gatherings with people vulnerable to COVID-19 (75% *vs* 63%), bars and restaurants (67% *vs* 55%) and crowded areas (67% *vs* 58%), compared to people who spoke English at home. People who spoke a language other than English at home were also more likely to 'always' or 'mostly' ask others to take a RAT prior to attending a social gathering (20% *vs* 10%).

Figure 10: Frequency that participants adopted risk reduction behaviours by language spoken at home



In the Community Engagement Group meeting, several participants reported engaging in risk reducing behaviours, such as mask wearing, socialising outdoors, and avoiding crowds over the summer. For the two participants who had long COVID, the Omicron variant caused more anxiety about contracting COVID-19 again due to the higher levels of transmission. This led to heightened risk reduction behaviours such as avoiding crowds and mask wearing.

However, one participant reported it was difficult to maintain mask wearing now most people were no longer wearing masks: "I was the only one at the [social event] with a mask on. People were looking at me and I thought I've got to take my mask off."

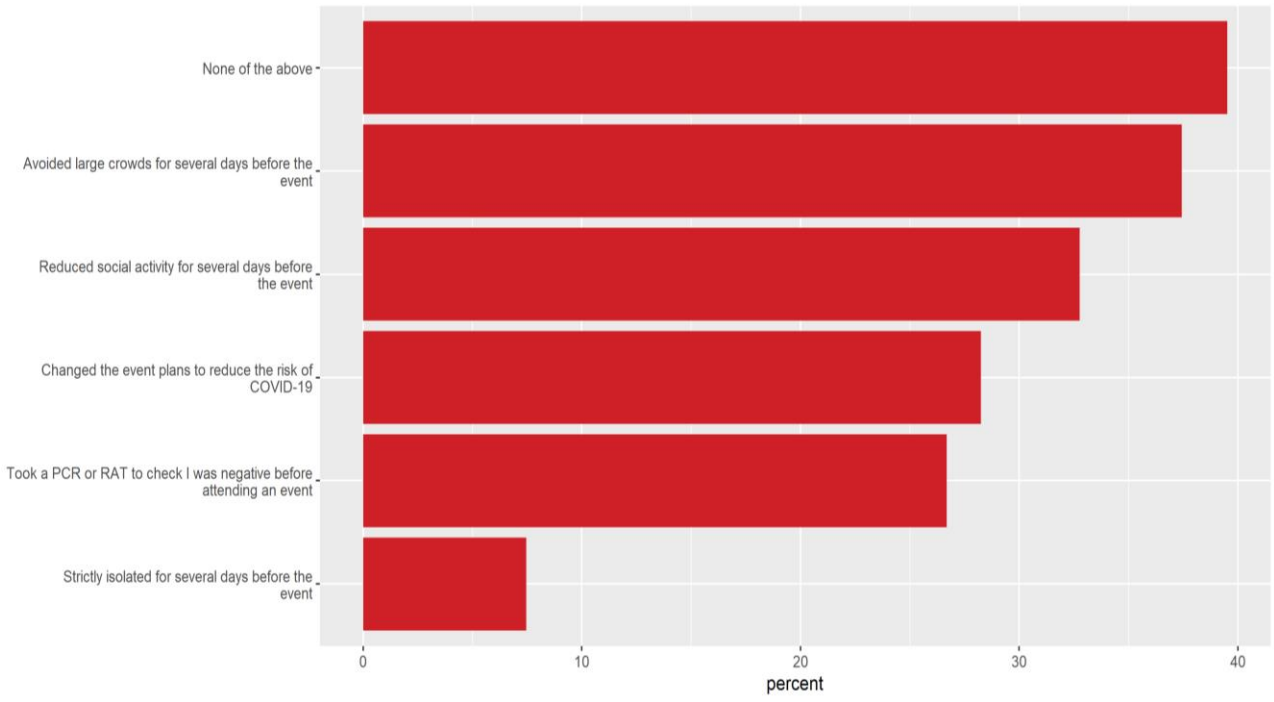
The participant who runs a club for older Indian community members stated group members were continuing to be very cautious when socialising. When they attended the local community centre for events, there was a COVID-19 marshal checking vaccination certificates and ensuring social distancing, and food was always in individual packs, rather than shared. One participant of the Community Engagement Group described visiting their (older) parents overseas where they reported taking a daily RAT while visiting to ensure not passing the virus on to parents.

The representative for healthcare workers said the summer period had been a very challenging time. They said a lot of staff with older teenage children were getting COVID-19 or having to be furloughed, which caused pressure on those delivering the services. Although health workers who were close contacts could continue to work, they needed to test every day, wear an N95 all day and have their lunch break outside, on their own. The representative said this further impacted healthcare workers who were already completely depleted.

SIGNIFICANT CULTURAL AND FAMILY EVENTS

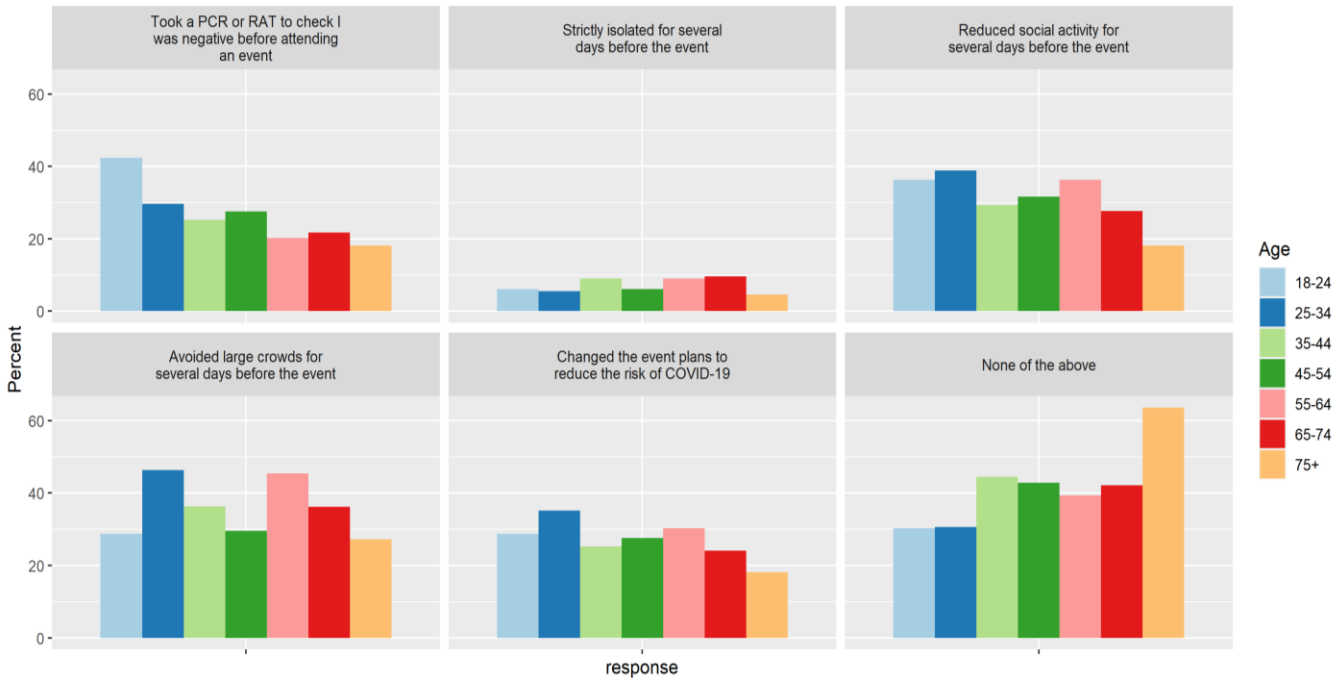
Over the December–January period, 37% of participants reported avoiding large crowds several days before a significant cultural or family event. One in three (33%) reduced their social activity several days before an event and less than one in ten (7%) strictly isolated beforehand.

Figure 11: Risk reduction behaviours in December–January in the lead up to significant cultural or family events (e.g. Christmas, New Year, Lunar New Year, or large one-off religious gatherings).



People aged 18–25 years were more likely than other age groups to take a PCR test or RAT before attending an event to check they were negative (42%). People aged 25–34 years were more likely to reduce social activity before an event or avoid large crowds compared to other age groups.

Figure 12: Risk reduction behaviours in December-January in the lead up to significant cultural or family events by age group



In the Community Engagement Group meeting, the participant representing Fijian and Pasifika communities stated the data reported above about avoiding social gatherings was not reflective of their community's experience. The participant stated large family gatherings, such as birthdays and funerals, were occurring in their community over the summer. The participant said people had 'stopped listening' to risk reduction guidance.

Appendix 1

Table 1: The number and proportion of participants who tested

Result	Number	Denominator	Percent (%)
Took a test	337	577	58
Did not test	240	577	42

Table 2: The number and proportion who tested and test results

Result	Number	Denominator	Percent (%)
Positive	78	337	23
Negative	259	337	77

Table 3: The number and proportion who reported COVID-like symptoms

Response	Number	Denominator	Percent (%)
Reported having COVID-like symptoms	357	577	62
Prefer not to say	4	577	0.7
Did not report symptoms)	216	577	37

Table 4: The number and proportion with symptoms who tested/did not test

Response	Number	Denominator	Percent (%)
Had symptoms and got a test	266	357	75
Had symptoms and did not test	91*	357	25

Table 5: The number and proportion who tested and did/did not experience symptoms

Response	Number	Denominator	Percent (%)
Tested and had symptoms	266	337	79
Tested and did not have symptoms	68	337	20
Tested and prefer not to say about symptoms	3	337	1

Table 6: The number and proportion who tested when symptoms occurred

Response	Number	Denominator	Percent (%)
Always	139	357	39
Most of the time	50	357	14
Sometimes	57	357	16
Never	111*	357	31

* The 91 refers to participants who experienced symptoms at some point in January but never took a test. 111 participants responded that they 'never' tested when they experienced symptoms. Some of these people tested at other points for reasons unrelated to symptoms.

Table 7: The number and proportion who did not test by symptoms and no symptoms

Response	Number	Denominator	Percent (%)
Did not test but had symptoms	91	240	38
Did not test and did not have symptoms	148	240	62
Did not test and preferred not to say about symptoms	1	240	0.4

Table 8: The number and proportions by each by reasons for undertaking a COVID-19 test**

Reason	Number	Denominator	Percent (%)
Symptoms	160	357	47
Close/other contact without symptoms	48	357	14
Reasons unrelated to symptoms (e.g. travel, workplace testing, health appointment, peace of mind)	129	357	38

***Respondents could select more than one response

Table 9: The number and proportion of test results of COVID-19 testing by reason for testing

Reason for testing	Testing result	Number	Denominator	Percent (%)
Symptoms	Positive	62	160	39
	Negative	98	160	61
Close/other contact without symptoms	Positive	2	48	4
	Negative	46	48	96
Reasons unrelated to symptoms	Positive	14	129	11
	Negative	115	129	89

Table 10: The number and proportion who had symptoms and did not test who were able to access RATs when they were needed

Response	Number	Denominator	Percent (%)
Always	6	69	9
Mostly	6	69	9
Sometimes	10	69	14
Never	47	69	68

Table 11: The number and proportion who had symptoms and did not test who reported that RATs were too expensive

Response	Number	Denominator	Percent (%)
Always	12	54	22
Mostly	8	54	15
Sometimes	3	54	6
Never	31	54	57

Table 12: The number and proportion who tested at some point but were unable to get tested at another point***

Response	Number	Denominator	Percent (%)
Took a test but were sometimes unable to	257	337	76
Tested sometimes and had symptoms	220	257	86
Tested sometimes and had no symptoms	34	257	13
Tested sometimes and prefer not to say about symptoms	3	257	1

*** The 257 participants who took at least one test but reported that at some point they were unable to take a test:

- Responded 'mostly', 'sometimes' or 'never' to the question "how often did you have access to RATs when you needed them?" *i.e. didn't **always** have access to RATs when needed*
- Responded 'mostly', 'sometimes' or 'never' to the question "how often did you test when symptoms occurred?" *i.e. didn't **always** test when they had symptoms*
- Selected any of the following as something they experienced in January 2022:
    - I had symptoms, couldn't test, but isolated anyway
    - I had symptoms, couldn't test and did not isolate
    - I had symptoms/was a close contact but was delayed/unable to get a PCR because the testing queue closed
    - I had symptoms/was a close contact but was unable to test
    - I had symptoms/was a close contact but was unable to access a RAT

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