



COVID-19 VACCINE SURVEY








# COVID-19 Vaccine Survey

## Survey 2 Key Findings: Policy Brief

13 April 2022

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## Survey 2 Key Findings

 <p>The majority of the unvaccinated individuals in Survey 2 do not want to get vaccinated – a significant change since Survey 1.</p>	 <p>Government information about COVID-19 is considered untrustworthy.</p>	 <p>Only one in five think they will get very sick if they catch COVID-19, with most stating there is no need for the vaccine.</p>	
 <p>Few believe that the vaccine is effective and a majority think it harms people rather than keeps them healthy.</p>	 <p>High risk groups such as those with chronic illnesses do not intend to get vaccinated.</p>	 <p>Mandates may be the most effective strategy remaining to increase vaccination coverage.</p>	 <p>Vaccinated individuals are happy with their decision, and likely to recommend vaccination to others.</p>

The COVID-19 Vaccine Survey (CVACS) collects information on facilitators and barriers to COVID-19 vaccine uptake in South Africa. CVACS provides rapid answers to the most pressing policy-relevant questions to support vaccine demand-creation strategies. The survey provides insights from samples of unvaccinated individuals, and from a sample who were vaccinated between CVACS Surveys 1 and Survey 2. CVACS was conducted by the Southern Africa Labour and Development Research Unit, University of Cape Town, and funded by the Bill & Melinda Gates Foundation. CVACS data were collected using telephone surveys.

**SURVEY 1** interviewed 3,510 individuals unvaccinated against COVID-19 (vaccination status was self-reported). Telephone surveys were conducted between 15 November – 15 December 2021.

The Survey 1 sample was drawn from a large credit bureau database, which includes individuals who had applied for credit, regardless of the outcome, and individuals who have had a credit check. The sample was stratified on several characteristics to ensure representation across provinces, area types, age groups (based on the age categories used for the national vaccine roll-out), gender, and income groups.

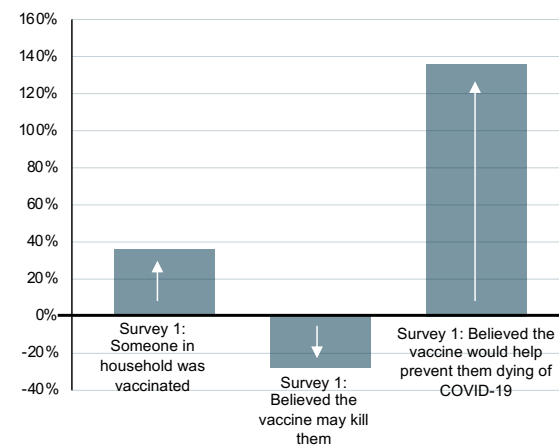
**SURVEY 2** attempted to re-interview the original Survey 1 sample of 3,510 individuals: 1,772 were successfully re-interviewed, with 386 vaccinated between the surveys (self-reported)<sup>1</sup>, and 1,386 remaining unvaccinated. A new top-up sample of 2,222 unvaccinated individuals was interviewed to achieve a total sample of 3,608 unvaccinated individuals. Survey 2 interviews were conducted from 23 February - 25 March 2022. Design weights were used to account for sample selection and non-response. It is important to note that CVACS is not a prevalence survey. Results are not nationally representative.

<sup>1</sup> This reflects a vaccination rate of 19% among the re-interviewed unvaccinated CVACS Survey 1 sample between November/December 2021 to March 2022 (calculated using the Survey 2 panel weights). This is much higher than the national average: the equivalent vaccination rate among adult South Africans unvaccinated by mid-December 2021 was approximately 7.5% over the same period. This difference is likely driven by selection bias arising from survey attrition and sample selection.



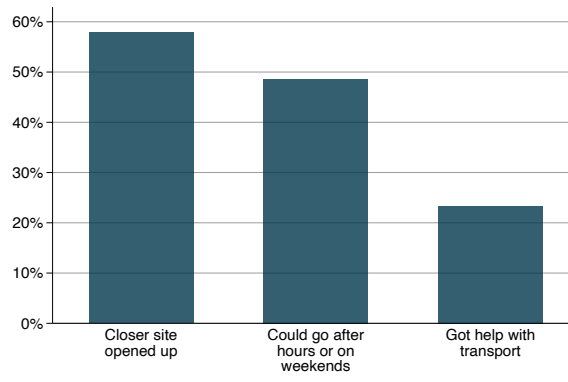
**Who got vaccinated?** The vaccinated sample was evenly split by gender, with half aged 18-34 years old. Survey 1 respondents were asked: ‘Regarding the COVID-19 vaccine, do you plan to: 1. get it as soon as possible; 2. wait and see; 3. only get it if it is required (for example, if it is required for school or work); or 4. definitely not get it?’. The majority vaccinated by Survey 2 had expressed in Survey 1 that their intention was to get vaccinated “as soon as possible.” 18% of those vaccinated by Survey 2 had reported intentions as “only if required” or “definitely not” in Survey 1. Three factors measured in Survey 1 were substantial, statistically significant predictors of vaccination<sup>2</sup> (see Figure 1). Individuals who lived with a vaccinated person, and those who believed that the vaccine helps prevent death were more likely to vaccinate. Individuals who believed that the vaccine could kill were less likely to vaccinate. In Survey 2, 78% of vaccinated individuals lived in a household with another vaccinated person.

Figure 1  
Percentage change in the odds of being vaccinated between Surveys 1 & 2



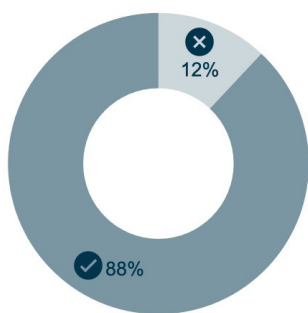
**Why did respondents get vaccinated?** In open-ended questions, respondents were asked their main reason for being vaccinated, and the main thing which changed or helped them decide. The most common main reason that respondents got vaccinated was to protect themselves from COVID-19, with far fewer saying to protect those around them. Mandates had the greatest influence on decisions, with 1 in 5 vaccinated because of employment-related mandates, and 1 in 10 because of other mandates. Individuals got vaccinated both to keep their jobs and because they were looking for employment. Other, but less common, factors included: a) seeing or becoming aware of others getting vaccinated; b) becoming aware of, or seeing first-hand, the negative health impacts of COVID-19; c) a change in physical status, including improved health or no longer being pregnant or breastfeeding.

Figure 2  
Percent responding “Yes” to each potential reason why the respondent got vaccinated



**Improved access and more time:** Nearly 60% stated a closer vaccination site, and nearly 50% stated after work or on weekends availability, as one of the reasons for getting vaccinated (Figure 2). Almost 1 in 3 of the age-eligible (50-plus) for a Vooma Voucher (launched in November 2021) reported that the shopping voucher incentive influenced their decision.

Figure 3  
Happy to be vaccinated



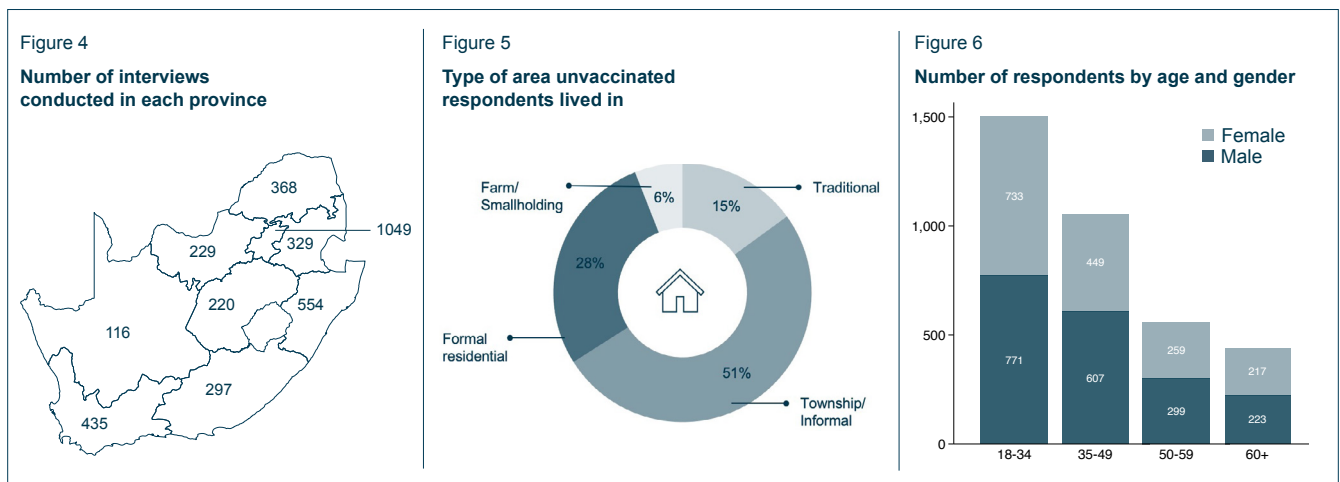
**Were they happy to get vaccinated?** Yes! 9 in 10 vaccinated were happy with their decision (Figure 3), 75% had recommended the vaccine to someone else, and 84% intended to get their second dose (Pfizer) or booster shot (J&J). 4 in 5 felt the same or better than expected after getting vaccinated.

**Policy implications:** Mandates/requirements are potentially the most effective strategy going forward. Creating awareness of others getting vaccinated could still influence decisions through social norms and by convincing people that the vaccine is safe (social proof). Making the health risks of COVID-19 salient, especially during future waves of infection, might also have some influence. Vaccinated individuals themselves are likely our best vaccine ambassadors - they are happy to recommend it to others and they provide examples that the vaccine is safe. Attitudes can change: some of the vaccinated had little intention to vaccinate in November/December 2021.

<sup>2</sup> Results from multivariable logistic regression modeling controlling for demographic and socioeconomic factors. p<0.05 was considered significant.



**Sample characteristics:** The CVACS Survey 2 unvaccinated sample was evenly split by gender. Average age was 38 years old, with the sample skewed more to the younger side of the age distribution<sup>3</sup>. 68% of the sample had completed Matric/Grade 12, 24% had health insurance and 45% lived in a household with a running vehicle. Many in the sample were resource-constrained: 54% lived in a household with a total monthly income of less than R5000 ( $\pm$ US\$312); 19% reported that someone in the household had gone hungry in the past 7 days; and grant receipt was common - 57% of respondents lived in households receiving a government grant such as the child support grant, older persons grant or R350 social relief of distress grant. Nearly half of the sample lived in township or informal areas.

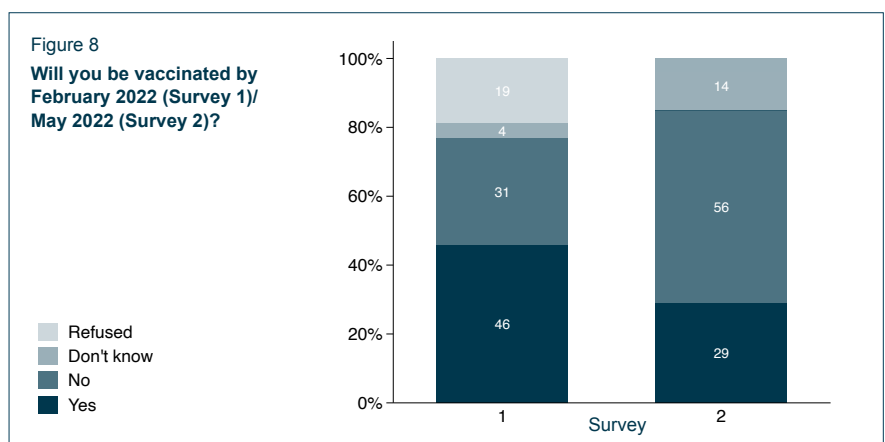
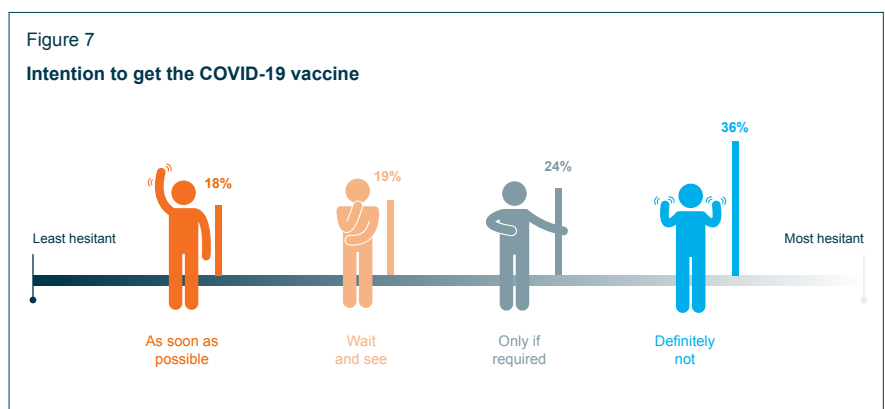


**Poor physical and mental health:** 1 in 5 respondents had a chronic condition<sup>4</sup> while 30% of the sample reported suffering from depressive symptoms<sup>5</sup>. 19% of the sample reported having contracted COVID-19, although 46% of respondents lived in a household with a vaccinated person.

## Vaccination intentions

**The majority do not intend to get vaccinated:** When asked about their intentions to vaccinate against COVID-19, 36% said “definitely not” and 24% said “only if required” (Figure 7).

**We observed a significant shift in intentions** among the unvaccinated since CVACS Survey 1 (Nov-Dec 2021), when the majority said either “as soon as possible” or “wait and see”. In Survey 2, only 29% thought they would be vaccinated by May 2022, which is significantly lower than future intentions stated in Survey 1 (Figure 8).



<sup>3</sup> Weighted shares of the sample for the vaccine rollout age categories 18 to 34, 35 to 49, 50 to 59, and 60-plus are 53%, 30%, 10% and 7% respectively. This distribution likely reflects the differences in length of exposure to the vaccination program by age, and the correspondingly lower proportion of older individuals eligible for participation in the study.

<sup>4</sup> HIV, a lung condition, heart condition, high blood pressure, or diabetes.

<sup>5</sup> PHQ-2 > 2. This rate is similar to other South African surveys: in NIDS-CRAM wave 5 (April/May 2021) the corresponding figure was 27%.



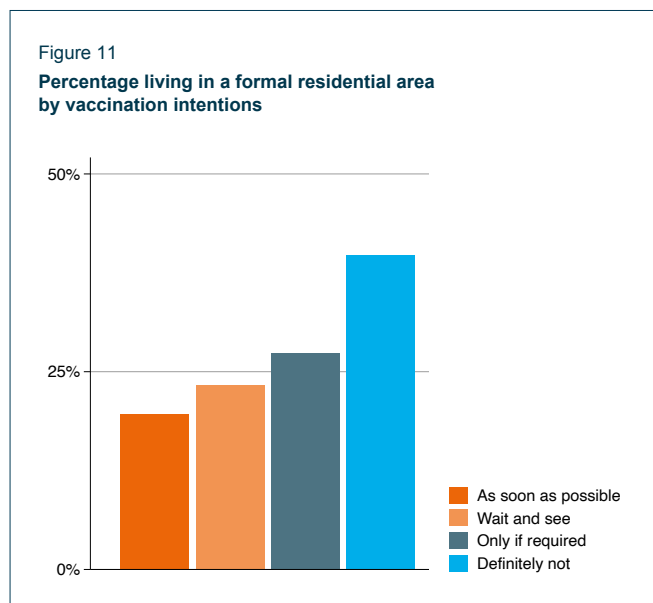
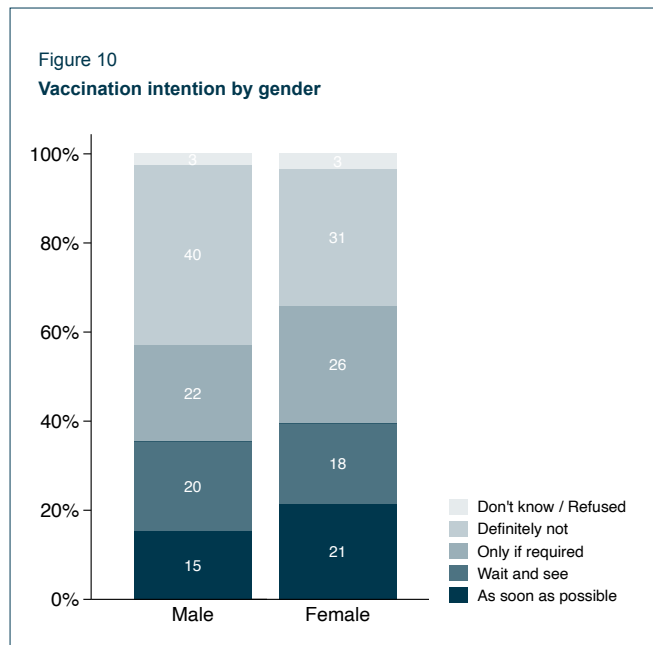
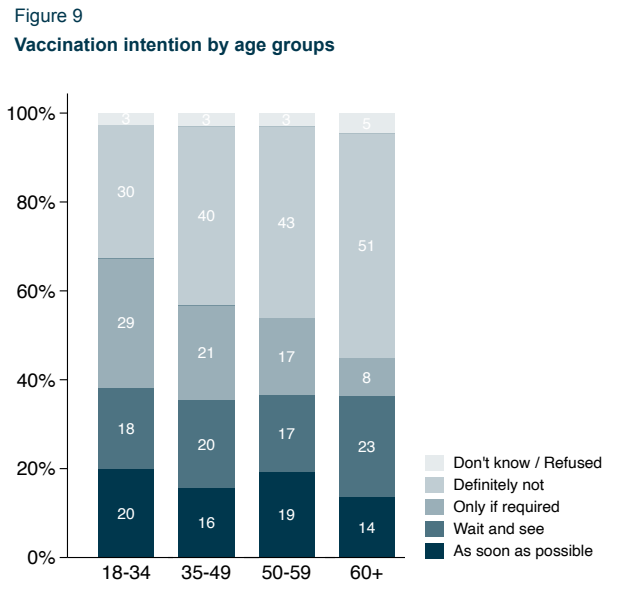
**Attitudes are becoming entrenched:** Among unvaccinated respondents interviewed in Surveys 1 & 2, only 44% planning to vaccinate “as soon as possible” in Survey 1 still have the same intention in Survey 2. Although this group has not had an extreme shift in attitudes, with 22% now deciding to “wait and see”, more do fall into the harder to vaccinate category (23% will get vaccinated “only if required”, and 8% will “definitely not”), with only a small remainder not knowing, or refusing to answer. Many of the “wait and see” and vaccinate “only if required” groups have become less likely to vaccinate (53% and 28% respectively). Encouragingly, 1 in 4 of the “definitely not” group have become more willing to vaccinate.

**Age and gender differences:** Vaccination intent differs across the age categories used during the vaccine roll-out, with a much lower appetite for vaccination present in older respondents. Figure 9 shows that fewer than 1 in 5 of those 50 or older intend to get vaccinated soon. More than 60% of the sample state they will either not vaccinate, or will vaccinate only if required. This pattern is seen across all the age groups. Younger adults are the most likely to say that they will only get vaccinated if required - 29% of this age group compared to only 8% of 60-plus individuals. Men were more vaccine hesitant than women (40% saying definitely not, vs 31% of women), and slightly more women than men plan to be vaccinated only if required to (26% vs 22%) (Figure 10).

**High risk groups:** Respondents with chronic conditions are no more likely to want to be vaccinated than all other respondents, and are only slightly less hesitant. Only 19% of respondents with a chronic illness intend to get vaccinated as soon as possible, and nearly 1 in 3 definitely do not intend to be vaccinated, a proportion only slightly lower than respondents with no chronic illnesses (37%).

**Vaccine hesitancy is higher among the privileged:** ‘Vaccine hesitancy’ is defined as a state of indecision and reluctance resulting in people deferring or declining vaccines. In CVACS Survey 2, hesitancy is correlated with more education, with approximately 70% of the harder to vaccinate groups having attained Matric, compared to only 60% of the relatively easier to vaccinate groups. This pattern is reflected in other socio-economic indicators such as living in a formal residential area (Figure 11), being covered by medical aid, and living in a household owning a running vehicle.

**Policy implications:** Mandates are more likely to work in the younger age groups. Other more intensive measures will be needed to capture the last group of older and harder to vaccinate individuals. Interventions tailored by gender are needed given the current vaccination gap between men and women 18-34 years old (41% of women vs 31% of men in April 2022). Vaccination appears to be a privilege that is being turned down by the privileged. While access is still a concern, increasing access is unlikely to have an impact on the large and most hesitant group. Tailored interventions for high-risk groups are important.

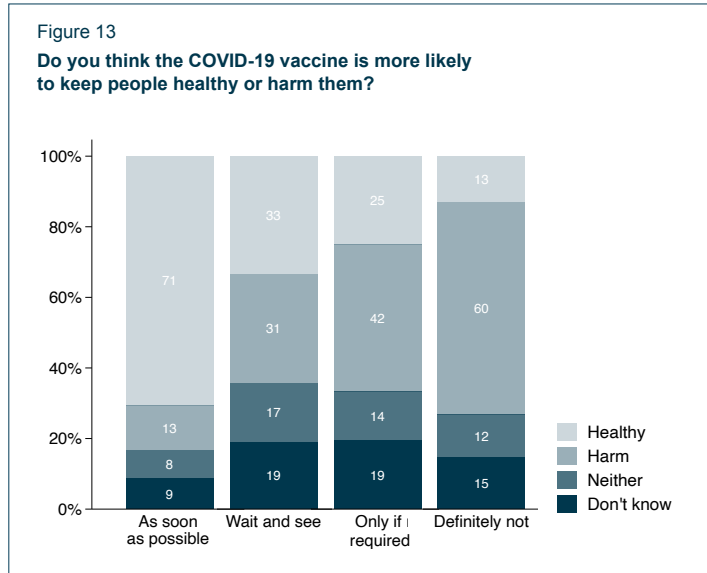
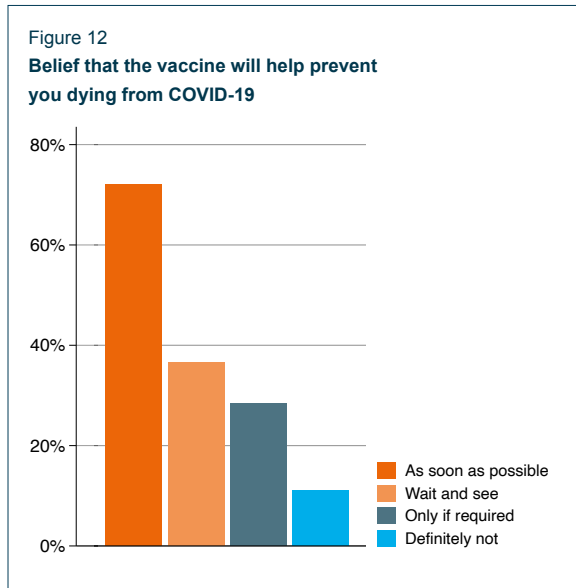




## Beliefs, fear, and mistrust

**Belief in vaccine efficacy is low** and strongly correlated with vaccination intentions. 2 in 3 of all respondents either do not believe that the vaccine will help prevent them from dying of COVID-19 (61%) or don't know (7%). Approximately 70% of those that want to get vaccinated "as soon as possible" believe that the vaccine helps prevent death from COVID-19, while only 10% of the most hesitant group do (Figure 12).

**Most do not believe that they need a vaccine:** Half or more than half of the vaccine hesitant individuals (i.e. excluding the "as soon as possible" group) believe their body is strong enough to fight COVID-19 (60%), that God or the ancestors will protect them (50%), and that their infection risk is low (approximately 50%). Fewer than 20% (of all unvaccinated respondents) believe they will get very sick if they get COVID-19.



**High levels of concern about the safety of vaccines:** High levels of mistrust in the safety of the vaccine for the babies of pregnant or breastfeeding mothers were observed. These beliefs are more prevalent among the more vaccine hesitant (71% in the "definitely not" group said the vaccine is not safe, versus only 23% for the "as soon as possible"). Similar beliefs are present regarding **vaccine safety for people with chronic illnesses**. Approximately 80% of all respondents either did not know if the vaccine was safe for those with chronic illnesses, or believed it was not. The more reluctant to vaccinate are more certain in these beliefs. Similar patterns were found when respondents were asked the degree to which the vaccine could kill someone; and whether the vaccine is more likely to keep a person healthy or harm them (Figure 13).

**Mistrust in government information** about COVID-19 is high, and is strongly correlated with lower intentions to vaccinate. 64% of those not intending to get vaccinated do not trust the government's information about COVID-19 at all, and only 55% of the "as soon as possible" group trust this information with certainty.

**Policy implications:** Improving belief in the efficacy of the vaccine is key. Spreading information regarding the consequences of COVID-19 infection is important. Dissemination of the correct information about the safety of the vaccine for key groups such as pregnant/breastfeeding mothers or those with chronic illnesses is needed. Sharing information through community-based NGOs and local trusted health providers may be successful.

**Why have the unvaccinated not been vaccinated?** Responses to the open-ended question on their single biggest reason they have not been vaccinated revealed different patterns between those intending to get vaccinated "as soon as possible" and the rest of the sample.



**As soon as possible:** The two main reasons for not being vaccinated for this group were access issues and lack of time, approximately 28% of all responses. Access issues included vaccination sites being too far away, respondents being discouraged by (perceived) long queues, and not having an identity document. The next most common reasons were all health related - mentioned by 1 in 3 respondents. Health-related issues included 1) respondents being sick when they wanted to get vaccinated and either thought that they could not be vaccinated, or were turned away; 2) respondents who were concerned that their current health status precluded them from getting vaccinated - specifically because they were pregnant or breastfeeding (10% of responses) or because they had a chronic illness (10% of responses). Fear-based reasons or beliefs were less common.



**All other groups:** The most common reason among these three groups was the perception that **they do not need the vaccine**. This umbrella category includes beliefs that overall good health, a healthy lifestyle, a strong immune system, or following other COVID-19 precautions will protect against COVID-19 infection. Having a health issue, including chronic illnesses, was also a common factor among the “wait and see” and “only if required” groups. Safety-related concerns

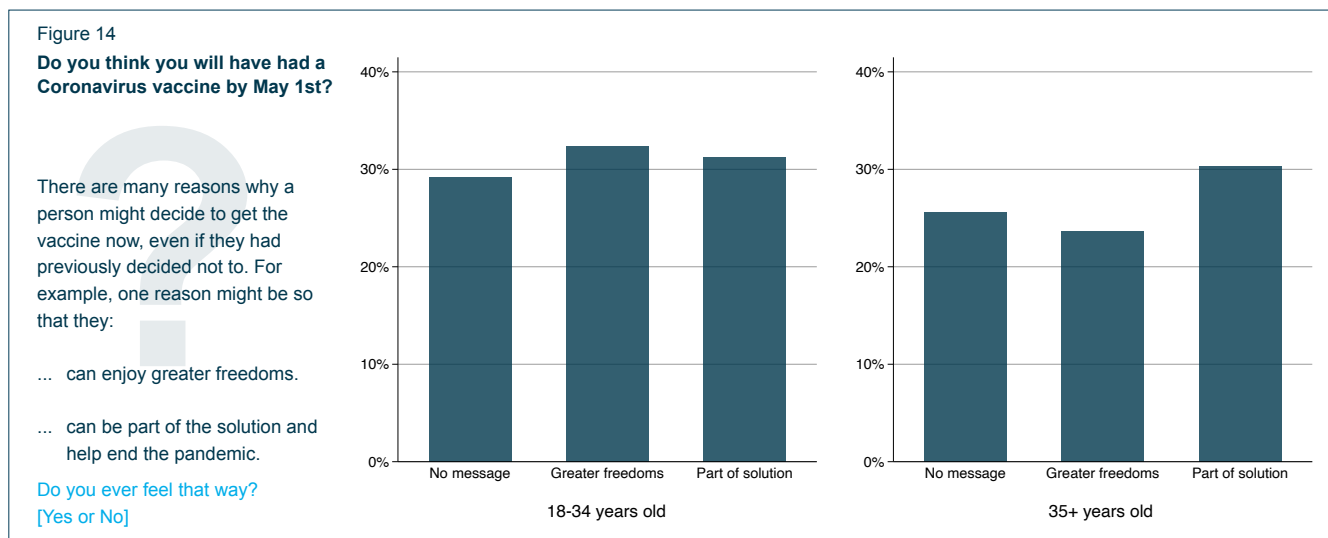
consistently featured in the top four reasons, with respondents expressing beliefs that the vaccine could harm or kill them. Concern about side-effects was similarly common, with approximately 10% of the most hesitant groups reporting general distrust of the vaccine. Low belief in vaccine efficacy is also common in these groups, regarding both preventing infection and preventing serious illness and death. Other specific factors mentioned were rumours and stories about the negative consequences of the vaccine, ‘COVID-19 doesn’t exist’, and that the vaccine is still being tested. Notably, the “definitely not” group was suspicious about conspiracies and mentioned religious and faith-based reasons, with approximately 7% giving the reason as either that ‘their health is in God’s hands’, or vaccination is against their religion. Very few of these respondents cited access or time-constraints as a reason for not vaccinating.

**Policy implications:** For the least likely to vaccinate groups, which comprise a large portion of the Survey 2 sample, improving access or providing incentives are not likely to be effective at this point. Approaches which combat fear and dispel damaging rumours and misinformation are urgently required. Benefits of the vaccine should be made more salient by highlighting the dangers of contracting COVID-19. Reframing vaccine efficacy to emphasize reductions in severe disease and death is critical. Going forward, vaccine promotion strategies must be tailored and targeted at specific groups. While promotion and demand creation initiatives may have minimal impact at this stage, these can also be low-cost strategies; this makes the analysis of the cost-effectiveness of any COVID-19 vaccine programming investments of central importance.

## Messaging

**Testing value propositions:** As in Survey 1, Survey 2 included a brief test of two different vaccine promotion messages at the end of the survey. Building on work done by the National Department of Health ‘Demand Acceleration Task Team and Chief Directorate: Communications’ Team, we tested two different ‘value propositions’ (reasons to get the vaccine) that emerged from focus groups with youth (ages 18-34) and that informed the current KeReady campaign. Participants heard either no message, a message about “enjoying greater freedoms”, or a message about being “part of the solution” to help end the pandemic. After hearing the randomly assigned message, participants were asked if they expected to be vaccinated by May 2022. We looked at the results separately for 18-34 year-olds compared to those 35+ because the message testing was informed by youth-focused formative work.

**Marginal change in intentions:** The results (Figure 14) suggest that it is hard to change vaccine intentions with messaging at this stage of the vaccine roll-out. Among 18-34 year-olds, the Freedoms and Solution messages increased intention to be vaccinated by May 2022 by about 3 percentage points compared to the group who heard no message. The older group had lower intention to be vaccinated by May overall, and only the Solution message increased that intention, by approximately 4 percentage points.



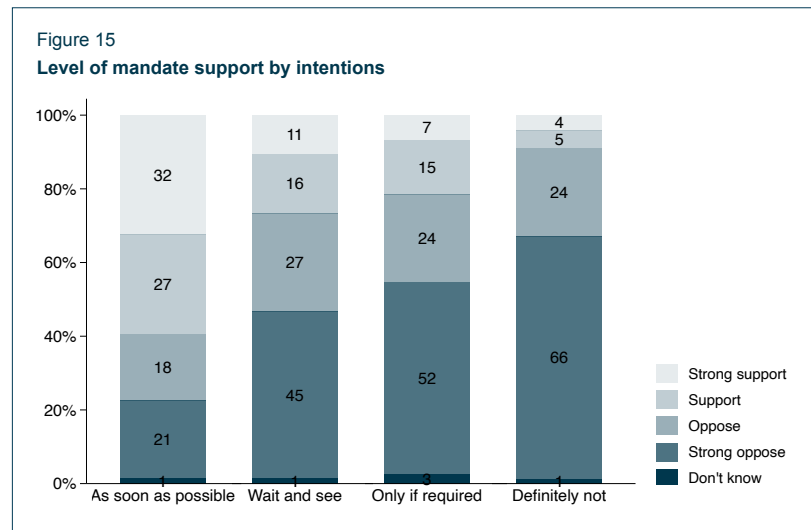


**Intentions vs behaviour:** These small effects of messaging on intentions are in line with other studies around the world demonstrating the diminishing effects of messaging as the COVID-19 vaccine roll-out progresses. In addition, because intentions only partially predict behaviour, we should view these results with caution in terms of what they say about actual future behaviour. On the other hand, messaging interventions are very low cost to implement, suggesting that the cost effectiveness of a messaging campaign could be favorable compared to other demand creation or vaccine services investments.

**Policy implications:** These results underscore the importance of rapid but rigorous cost-effectiveness studies of various components of the vaccine program, so that investment decisions going forward can best support coverage and equity goals.

## Mandates

Despite almost 1 in 2 respondents believing that mandates would work fairly or very well to increase vaccine coverage, there is strong opposition to mandates among the vaccine hesitant (Figure 15). Opposition is driven mainly by the belief that it is an individual's right to decide to get vaccinated or not (cited by more than 1 in 2 of those in opposition), with about 5% of those in opposition citing that the President (or the government more generally) said that vaccination would not be mandated. A further 15% were opposed because they believed that the vaccine is not needed, the vaccine may harm people, or the vaccine is not effective.



**Policy implications:** Overall, the combined findings from the CVACS Survey 2 vaccinated and unvaccinated respondents point towards mandates or other vaccine requirements being the most effective strategy remaining to increase vaccination coverage. In the absence of mandates it will be difficult to convince people to get vaccinated because the unvaccinated respondents, in general, don't think the vaccine is effective, don't think it is safe, and don't think they need it. As a result, most say either that they will only get vaccinated if they have to or will definitely not get vaccinated. In addition, the most common reason why respondents got vaccinated was because it was a requirement for work, for looking for a job, or for doing other normal activities.

However, findings indicate that such strategies will be met with resistance and will need to be designed with sensitivity to opposition. Careful framing will be required. The role of the government may be to support and facilitate NGO and private institutions' mandates/requirements, while maintaining government mandates where feasible and effective.

Recommended citation: Eyal, K., Maughan-Brown, B., Buttenheim, A., Ingle, K., Brophy, T., Njozela, L., Köhler, T. (2022). COVID-19 Vaccine Survey (CVACS) Survey 2 Key Findings: Policy Brief.



The full slide deck of key findings is available [here](#).



Survey 2 data, together with the questionnaire, will be made freely available to the public by May 2022 through [DataFirst's Open Data Portal](#).



For more information on CVACS, please visit our [project page](#).



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