



# UK General Population COVID-19 Vaccine Uptake Survey SUMMARY

## Overview

How easy will it be to get a majority of people in the United Kingdom to take the COVID-19 vaccine? To answer that question, Surgo administered a nationally representative survey of 3,658 adults from February 18-24, 2021 using [Ipsos MORI's UK Knowledge Panel](#).<sup>1</sup> Then, with our proprietary framework for analyzing human behavior called [CUBES \(to Change behavior, Understand Barriers, Enablers, and Stages of change\)](#), we divided respondents into psychobehavioral segments, focusing on the specific barriers those segments perceive to getting vaccinated, in order to drive solutions to increase vaccine uptake.

Respondents were asked questions about their perceptions and beliefs about Covid-19, about Covid-19 vaccines, and about barriers or enablers relevant to vaccination. They were also asked about past vaccination behaviour in relation to flu vaccines, and current/likely post-vaccination behaviours and compliance with guidelines. Surgo also explored broader impacts such as those on mental health.

We found that **38% of respondents had already received one or two doses of the vaccine**, or had a confirmed appointment to get the vaccine, at the time they completed the survey. **And of the unvaccinated, 82% said they intended to get the vaccine as soon as it is available.** But although a majority of unvaccinated adults are ready and willing to get the COVID-19 vaccine, we found that **unvaccinated adults who are “unsure” about getting the vaccine (18%) may be hard to persuade**, due to a range of perceived barriers.

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<sup>1</sup> 3,736 responses were received to the 25-minute survey, of which 78 were removed after data quality checks. Analysis was performed on 3,658 completed responses. All numbers in this document are weighted to reflect national-level population metrics, unless noted otherwise.

Selected demographic highlights from the data include:

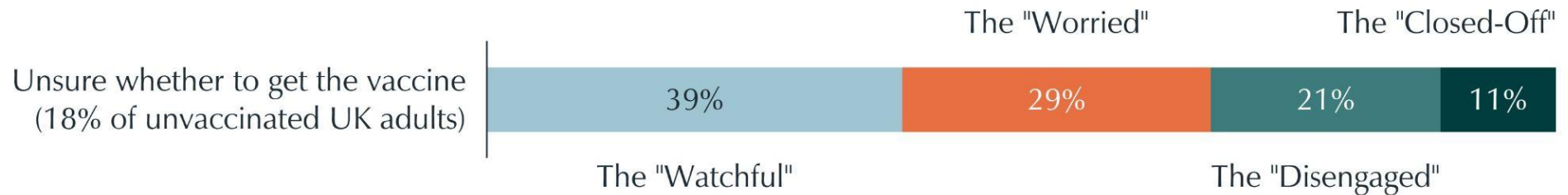
Category	Insight from the survey data
Regional variation across the UK	<ul style="list-style-type: none"> <li>❑ Greater London and North West England are the two regions with the smallest proportion of those who would get the vaccine as soon as it is offered – 71% in London and 76% in the North West compared to 85% across all other regions</li> </ul>
Link with socio-economic deprivation	<ul style="list-style-type: none"> <li>❑ Only 71% of those in the most deprived regions (IMD 1<sup>2</sup>) are likely to get the vaccine immediately when offered, compared to 91% of those in the least deprived regions (IMD 5)</li> </ul>
Variation by ethnicity	<ul style="list-style-type: none"> <li>❑ Only 38% of the Black community<sup>3</sup> would get the vaccine as soon as it is offered – the lowest among all ethnic groups</li> </ul>
Variation by religion	<ul style="list-style-type: none"> <li>❑ 42% of Muslims<sup>4</sup> would not get the vaccine immediately when offered</li> <li>❑ 73% of these are Muslims of South Asian origin</li> <li>❑ Among those who follow other religions, only 18% would not get the vaccine immediately when offered</li> </ul>

<sup>2</sup> UK Office for National Statistics, Index of Multiple Deprivation: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>

<sup>3</sup> Among Black people, 77 out of 98 were in the unvaccinated group; the higher rate of “Unsure” in Black unvaccinated compared to White unvaccinated population is statistically significant

<sup>4</sup> Among Muslims, 92 out of 115 were in the unvaccinated group; the higher rate of “Unsure” in unvaccinated Muslims compared to Christian or Non-religious populations is statistically significant

We segmented the 18% of unvaccinated UK adults who reported they were “unsure” about the vaccine **into four psychobehavioral segments:**



- **The “Watchful” (39% of the “Unsure” respondents).** The respondents in this group feel moderate worries around vaccine safety, but they also believe in their personal responsibility to get vaccinated and the need for vaccination to get life back to normal.
- **The “Worried” (29% of the “Unsure” respondents).** This group has low confidence in the vaccine: they are both worried about side effects and do not believe in the efficacy of the vaccine in protecting themselves or their loved ones from COVID-19. A significant proportion of this group believes in conspiracy theories.
- **The “Disengaged” (21% of the “Unsure” respondents).** While they believe in the efficacy of the vaccine, the people in this group do not perceive any risk of COVID-19 to themselves or those around them, nor do they feel a responsibility to get vaccinated to protect others
- **The “Closed-Off” (11% of the “Unsure” respondents).** This group is the most mistrustful of all the groups and does not feel responsible for the transmission of COVID-19 to others nor the responsibility to get vaccinated to protect others. They are most likely to hold conspiracy beliefs.

The table on the next few pages further characterises the segments with selected insights from the survey results.



Segment	The Ready	The Watchful	The Worried	The Disengaged	The Closed-Off
% of unvaccinated population	82%	7%	5%	4%	2%
The rows that follow report the % of the population in each relevant segment					
Who are they?	48% are female 96% are employed 11% are ethnic minorities	62% are female 95% are employed 33% are ethnic minorities	39% are female 94% are employed 33% are ethnic minorities 44% live in IMD 1 regions	55% are female 93% are employed 21% are ethnic minorities	43% are female 80% are employed 25% are ethnic minorities 42% live in IMD 2 regions
Likelihood of getting the vaccine when offered (out of 10)	9.76	6.86	4.14	3.12	0.53
When are they likely to get the vaccine?	100% would get it as soon as it is available	66% would wait three months	43% would wait a year	40% would not get it	77% would not get it
Likelihood to follow coronavirus safety guidelines after one vaccine dose	99%	98%	91%	82%	53%



Segment	The Ready	The Watchful	The Worried	The Disengaged	The Closed-Off
Key beliefs and barriers (which contributed the most to differentiating the segments)					
% who agree that Covid-19 is still a serious problem					
	98%	96%	82%	86%	34%
% who believe they have a moderate to almost certain chance of catching it, getting seriously ill from it, and/or infecting family and friends if not vaccinated					
	67%	50%	48%	15%	19%
% who believe that the disease is being exploited by the government to control people					
	10%	17%	72%	44%	96%
% who believe that the vaccine will change their DNA					
	1%	2%	26%	7%	42%
% who worry about unknown long-term side-effects from the vaccine					
	21%	69%	79%	81%	94%
% who are not convinced about vaccine efficacy					
	5%	17%	59%	9%	47%
% who believe they have a responsibility to get vaccinated against Covid-19 to protect others					
	95%	82%	27%	0%	0%



Segment	The Ready	The Watchful	The Worried	The Disengaged	The Closed-Off
What's likely to change their minds?					
Statement most likely to <b>encourage</b> people in that segment to get the vaccine					
% who agree with that statement	"I have a responsibility to get vaccinated for Covid-19 to protect others."		"The Covid-19 vaccine will allow my social and family life to get back to normal."		
	87%	71%	22%	27%	9%
Statement most likely to <b>discourage</b> people in that segment from getting the vaccine					
% who agree with that statement	"The Covid-19 vaccine supply is limited and other people need it more than me."		"I worry about having unknown long-term side effects from the Covid-19 vaccine."		
	25%	63%	59%	77%	80%
What <b>actionable</b> possibilities would increase their likelihood of getting the vaccine?	N/A	If the vaccine was required for work (34%)  If the vaccine was required to go to places I want to go (e.g., travel, sporting events, stores) (35%)	If the vaccine was required for work (54%)  If the vaccine was required to go to places I want to go (e.g., travel, sporting events, stores) (46%)	If the vaccine was required for work (42%)  If the vaccine was required to go to places I want to go (e.g., travel, sporting events, stores) (43%)	If the vaccine was required for work (15%)  If the vaccine was required to go to places I want to go (e.g., travel, sporting events, stores) (20%)

Segment	The Ready	The Watchful	The Worried	The Disengaged	The Closed-Off
What else could have increased their likelihood of getting the vaccine?	N/A	If the vaccine was developed over many years (46%)	If the vaccine was developed over many years (67%)  If vaccine was made from natural rather than artificial ingredients (43%)  If most adults in UK (41%) or most adults you know (42%) had already taken the vaccine	If the vaccine was developed over many years (61%)	If the vaccine was developed over many years (54%)
Where do they get their COVID-19 information?	NHS (65%), PHE (56%)	NHS (69%), PHE (44%)	NHS (47%), PHE (33%)	Top three include the NHS (48%), public health bodies (40%) and people they know (40%)	Social media contacts stand out (55%) compared to the other segments Also public health bodies (55%)
Which sources do they trust the most for COVID-19 information?	NHS (91%) Doctors (91%)	Doctors (86%) NHS (83%) Scientists (81%)	Doctors (54%) NHS (53%) WHO (51%) Scientists (48%)	Scientists (65%) NHS (59%) Health professionals (60%) Doctors (52%)	Scientists (39%) Health professionals (29%) Friends and family (21%) Doctors (20%)



Segment	The Ready	The Watchful	The Worried	The Disengaged	The Closed-off
How do they think their reference community will decide? <sup>5</sup>					
% who believe that more than half of their reference community will get vaccinated for COVID-19					
	92%	76%	46%	42%	14%
% who believe that their reference community considers the threat of COVID-19 to have been exaggerated for political reasons					
	8%	15%	50%	28%	60%
% who believe that their reference community will vaccinate children					
	84%	77%	52%	59%	30%

<sup>5</sup> NOTE: Reference community refers to the people described by the respondent to the question: “When deciding whether or not to take the COVID-19 vaccine, who would you be most likely to discuss information with or seek advice from?”





## **Segmentation Methodology**

To focus on the group where intervention is most needed (the “Unsure”), a manual split was first conducted on the sample to separate those who reported that they would get the vaccine immediately when it becomes available (the “Ready”) and those who were unsure. This manual split was confirmed using clustering algorithms (decision trees and partitioning around medoids).

A weighted k-medoid partitioning around medoids (PAM) clustering algorithm (with a Gower distance metric) was used to identify clusters of individuals within the “Unsure” group that differed on the following five variables:

- *Side effects*: Score combining perceived chance of experiencing side effects from COVID-19 vaccine, worry about long term side effects, and bad physical reactions from the vaccine
- *Conspiracy theory*: Score combining beliefs about a tracking chip being implanted via the vaccine, the vaccine changing DNA, and COVID-19 being exploited by government to control people
- *COVID-19 seriousness*: Score combining beliefs that we are now facing strains of COVID-19 that spread more easily, COVID-19 still being a serious problem, and COVID-19 being more dangerous than the seasonal flu
- *COVID-19 vaccine efficacy*: Score combining perceived chance of catching, becoming ill from, and/or infecting friends and family with COVID-19 after getting the vaccine
- *Responsibility*: Score of belief that they have a responsibility to get vaccinated for COVID-19 to protect others

These variables were selected for segmentation based on their relationship to self-reported COVID-19 vaccine likelihood, as observed in predictive models, and their utility in defining population groups and suggesting effective interventions.

After segments were defined, they were then profiled on COVID-19 vaccine uptake likelihood, as well as a variety of demographic, structural, perceptual, and behavioural characteristics (according to [CUBES](#)). Cluster solutions from 3-5 groups were explored. A 4 cluster solution for the “Unsure” group, with an additional 5th cluster for the “Ready” group, was considered most actionable based on differences between segments in vaccine likelihood barriers and perceptions, and supported by examining silhouette width (>0.25).