

U.S. COVID-19 Vaccine Study

In its latest COVID-19 Vaccine Study conducted in the U.S., SQREEM Technologies provides insights into the attitudes and motivations of anti-vaxxers and the vaccine hesitant, through an analysis of their online engagement with topics/aspects surrounding COVID-19 vaccinations.

SQREEM

Methodology

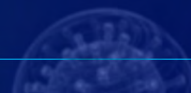
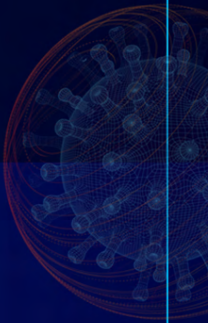
The U.S. COVID-19 Vaccine Study employs SQREEM Technologies' proprietary AI technology to analyse anonymised monthly online behaviours including searches, interactions on websites, apps and publicly available social interactions, on topics surrounding COVID-19 vaccination in the United States.

'Anti vaxxers' are audiences that do not agree with the COVID-19 vaccine and its use, while 'vaccine hesitant' are audiences that are reluctant to use the COVID-19 vaccine despite its availability.

Monthly behaviours are represented by online engagement scores. Values between 0 and 5 signify unawareness, 5 to 10 signify awareness, while values greater than 10 signify a strong engagement with the topic. Engagement scores are deemed relevant and can be used to understand the level of engagement by the audience with the topic.



COVID-19 vaccination rollout in the United States



General attitudes and perceptions towards COVID-19 vaccines

Anti-Vaxxers

Primarily influenced by religious leaders and anti-vaccination key opinion leaders, anti-vaxxers are not convinced about the benefits of vaccines and are doubtful if it offers lasting protection against COVID-19. Anti-vaxxers believe that vaccines are unsuitable for people with underlying conditions and worry about their effect on women's fertility and pregnancies. Among their top concerns is the impact COVID-19 is having on businesses.



Confused about the topic of COVID-19 vaccinations



Consider vaccines an inconvenience



Skeptical about vaccine benefits

Vaccine-Hesitant

Influenced by pro-vaccination key opinion leaders, the vaccine-hesitant are more focused on the prospect of returning to their pre-COVID lives. While they most value the social benefits of vaccinations, the undesirable effects weigh heavily in their considerations. Job security and unemployment may be their vaccine tipping points, and they need to be assured of the efficacy of vaccines to balance against the risks they perceive. As they seek and consume more information on vaccines, this may lead to greater exposure to fake news resulting in the vaccine-hesitant being significantly confused.



Significantly confused about the topic COVID-19 vaccines



Has misconceptions about vaccines

Main concerns about the impact of COVID-19 towards

Both groups share similar concerns around economic and social aspects

Economic concerns

Anti-Vaxxers



Businesses going bankrupt

11.76

Vaccine-Hesitant



Businesses going bankrupt

5.1



Rising unemployment rate

16.08

Main concerns about the impact of COVID-19

Social concerns

Anti-Vaxxers



Prolonged isolation

10.74



Being quarantined

5.47



School closures

10.38



Anti-vaccine protests

8.86

Vaccine-Hesitant



Prolonged isolation

9.93



Being quarantined

7.78

Main concerns about the impact of COVID-19

...but their concerns differed slightly when it comes to health

Anti-Vaxxers



Rise in COVID-19 ICU Admissions

9.05



Rise in COVID-19 hospitalisations

7.45

Vaccine-Hesitant



Rise in COVID-19 cases

7.91



Rise in COVID-19 Deaths

6.72

Perceived benefits of COVID-19 vaccines

Anti-vaxxers demonstrate general skepticism towards vaccine benefits

Economic benefits

Anti-Vaxxers



Economy recovery

5.42

Vaccine-Hesitant



Economic recovery

10.37



Increase in employment

10.96

Perceived benefits of COVID-19 vaccines

Social aspects

Anti-Vaxxers



Herd immunity

3.57



Life returning to normal

3.3

Vaccine-Hesitant



Herd immunity

14.75



Life returning to normal

6.07



No social distancing

12.39



Protection against new variants

6.74

Perceived benefits of COVID-19 vaccines

Health aspects

Anti-Vaxxers



Long-term health protection

2.81

Vaccine-Hesitant



Long-term health protection

26.28



Reconnecting with family & friends

17.82

COVID-19 vaccine hesitation and refusal factors

Anti-vaxxers are skeptical about the vaccine. Vaccine-hesitant persons have a strong interest in vaccine benefits but are skeptical about its efficacy and reluctant because of possible side effects.

Anti-Vaxxers



Vaccines & its side effects

6.27



Blood clots

5.77



Death as side effect

2.84

Vaccine-Hesitant



Vaccines & its side effects

13.34



Blood clots

13.53



Death as side effect

9.23

COVID-19 vaccine hesitation and refusal factors

Anti-Vaxxers



FDA information and
speed of vaccine approval

5.5



Safety of vaccines

8.06



Duration of protection

7.96

Vaccine-Hesitant



Speed of FDA approval for vaccine

4.99



Vaccine efficacy

7.82



Protective effect
against new variants

3.06

COVID-19 vaccine hesitation and refusal factors

Vaccine-hesitant people believe in myths and conspiracy theories

Anti-Vaxxers



Mistrust against the government

4.59



Misinformation (fake news)

4.63

Vaccine-Hesitant



Mistrust against the government

4.99



Misinformation (fake news)

11.06

Concerns surrounding vaccine brands

Efficacy rate of vaccines are a top concern for both groups

Moderna Vaccines

Anti-Vaxxers



Duration of protection

8.72



Efficacy

5.8



Side effects

8.62

Vaccine-Hesitant



Duration of protection

8.93



Efficacy

8.11



Efficacy of second dose

6.16

Concerns surrounding vaccine brands

Pfizer vaccines

Anti-Vaxxers



Presence of live virus

6.05



Vaccine ingredients

5.15

Vaccine-Hesitant



Mechanism of action

12.66



Vaccine ingredients

13.08



Vaccine clinical trials

9

Concerns surrounding vaccine brands

Jannsen vaccines

Anti-Vaxxers



Vaccine ingredients

5.3

Vaccine-Hesitant



Vaccine ingredients

10.91



Vaccine side effects

11.75

Sources of information

Both groups are heavily influenced by key opinion leaders

Anti-vaxxers



Anti-vaccination KOLs

11.86



Pro-vaccination KOLs

1.2

Vaccine hesitant



Anti-vaccination KOLs

5.6



Pro-vaccination KOLs

10.14

Sources of information

Influencers include key political, medical, and scientific personalities as well as activists

Anti-vaxxers



Donald Trump
10.35



Sherry Tenpenny
10.23

Vaccine hesitant



Anthony Fauci
9.39



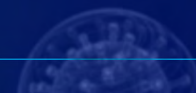
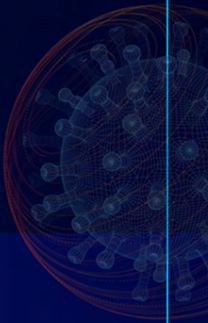
Eric Topol
6.75



Robert Langer
5.11

Anti-vaxxers also referenced sites such as vaccinefinder.org, vaccines.com and CDC vaccines

Coronavirus variants: Changes in attitudes and motivations in the United States



Main concerns about the impact of COVID-19

As coronavirus variants emerged, both groups become more concerned about health aspects

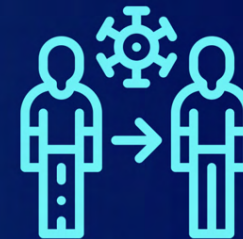
Anti-vaxxers



Increased severity of symptoms

9.55

Vaccine-hesitant



Greater risk of transmission

9.9

Myths and conspiracy theories

Increased belief in myths heighten vaccination rejection and hesitation

Anti-vaxxers



Vaccines are ineffective against severe infections

5.32

Vaccine-hesitant



Vaccines contain unsafe ingredients

8.67



Vaccines contain microchips and implants

5.21



mRNA Technology too new to be safe

5.38

Myths and conspiracy theories

Increase in concerns about the safety of vaccines, especially for vulnerable groups

Anti-vaxxers



Vaccine are not for people with underlying conditions

12.04



Vaccine affect women's fertility

9



Pregnant women should not be vaccinated

5.56

Vaccine-hesitant



Children do not need the vaccine

6.43



Infection severity and need for vaccination depends on blood type

5.31



Women who breastfeed should not be vaccinated

5.09

Myths and conspiracy theories

Heightened concerns around the side-effects of vaccines, particularly amongst the vaccine-hesitant

Anti-vaxxers



Vaccines alter DNA

6.25



Vaccine have dangerous side effects

5.72

Vaccine-hesitant



Vaccines makes people susceptible to COVID

9.32



Vaccines alter DNA causing cancer

8.11



Vaccines shed components
and are harmful

7.39



Vaccines cause Bell's Palsy

7.13



Vaccines make people magnetic

6.81

Sources of information

Influencers include religious leaders and celebrities

Anti-Vaxxers



Religious leaders

7.32

Vaccine-Hesitant



Celebrities

9.75



Religious leaders

5.21

Sources of information

Anti-vaxxers place greater value on the opinion of religious leaders, while the vaccine hesitant value the opinion of celebrities.

Anti-Vaxxers



Russel Moore

11.19



Rick Warren

6.4



Franklin Graham

6.32

Vaccine-Hesitant



Rick Warren

10.93



Richard Petty

10.03



Lin-Manuel Miranda

8.01

Sources of information

Both groups also turned to mainstream media as an important source

Mainstream channels

Anti-Vaxxers



News Channels

5.49



News Radio Stations

2.52



News TV Shows

2.74

Vaccine-Hesitant



News Channel

8.12



News Radio Stations

6.31

Sources of information

TV and radio news outlets become an important information source, particularly for the vaccine hesitant

