

# Vaccine hesitancy

## An evidence review and toolkit



Library & Knowledge Service: 06 September 2021

This paper aims to bring together selected research on vaccine hesitancy, anti-vaccination groups and suggestions on how to encourage vaccine uptake.

In comparison with other areas, Cheshire East has a good number of the adult population fully vaccinated. This changes daily and the most up to date statistics can be found on the [Cheshire East Vaccination Dashboard](#) or to compare with other areas the [Interactive map of vaccinations](#).

A significant number of people may not be willing to take the COVID-19 vaccine which makes the management of the disease more difficult and enables new variants. The reasons for people not wanting to take the vaccine are complex and often misunderstood. However, they can be generally split into 2 groups, the vaccine hesitant and anti-vaccination.

### Features of Vaccine Hesitant People

- Concerns over safety
- Fear of injection/needles
- Side effects in pregnancy, breastfeeding and fertility
- Inconvenient (lack of transport to vaccine centre etc)
- Religious and cultural reasons
- Complacency

### Features of Anti-Vax

- Connected to far-right extremism and conspiracy theories (especially to do with COVID-19)
- Anti-vaccine ideology (that vaccines cause autism and other bad health effects)
- Supporters of alternative and natural 'medicine'
- Distrust of pharmaceutical companies and state intervention

### How many people are vaccine hesitant/anti-vax?

In a recently published paper in the journal; Vaccine, ([Trent et al., 2021](#)) "suggests more than 25% of adults may not be willing to receive a COVID-19 vaccine, but many of them were not explicitly anti-vaccination and thus may become more willing to vaccinate over time. Among the three countries surveyed, there appears to be cultural differences, political influences, and differing experiences with COVID-19 that may affect willingness to receive a COVID-19 vaccine." The research looked at over 18's in Sydney, Melbourne, London, New York City and Phoenix.

## Distinguishing between the groups

Writing in the Lancet ([Burgess et al., 2021](#)) say “From the outset it is important to distinguish between people wholly opposed to vaccination (anti-vaxxers) and individuals with limited or inaccurate health information or who have genuine concerns and questions about any given vaccine, its safety, and the extent to which it is being deployed in their interests before accepting it (vaccine hesitancy). In conflating and problematising the spectrum of those who do not accept vaccination, authorities might further erode trust and confidence, thereby exacerbating rather than resolving the factors underlying vaccine hesitancy.

The UPTAKE study ([The UPTAKE study: a cross-sectional survey examining the insights and beliefs of the UK population on COVID-19 vaccine uptake and hesitancy | BMJ Open, no date](#)) “emphasises policies targeting the needs of increased participation from the BAME community, young people and those with no diagnosed health conditions to uptake approved COVID-19 vaccines. This will allow the UK to effectively reach population immunity thresholds nationwide and in controlling further outbreaks of this rapidly spreading disease. Widespread vaccine uptake will be a crucial turning point in rebuilding the nation’s social, health and financial losses from this unprecedented pandemic.”

The OCEANS-III Randomised controlled trial ([Freeman et al., 2021](#)) looked at the effects of different types of written vaccination information on COVID-19 vaccine hesitancy in the UK. There is some really rich data in this paper including age, ethnicity, socio-economic and education. It found that; “In the approximately 10% of the population who are strongly hesitant about COVID-19 vaccines, provision of information on personal benefit reduces hesitancy to a greater extent than information on collective benefits. Where perception of risk from vaccines is most salient, decision making becomes centred on the personal. As such, messaging that stresses the counterbalancing personal benefits is likely to prove most effective. The messaging from this study could be used in public health communications. Going forwards, the study highlights the need for future health campaigns to engage with the public on the terrain that is most salient to them.”

## Reasons and common factors for these views

An article from 2020 ([The Anti-Vaccine Movement in 2020 | Office for Science and Society - McGill University, 2020](#)) finds that “Interviews with Australian parents who reject vaccines revealed they see themselves as virtuous but oppressed, and vaccinators are perceived as an “[Unhealthy Other](#)”. Those who reject vaccines may have a skewed perception of the risks posed by them and the diseases they prevent, with [some evidence](#) showing that Internet searches may increase the perception that childhood vaccines are risky. And a [large investigation](#) into the anti-vaccination phenomenon, conducted in 24 countries by a team at the University of Queensland, revealed a strong pattern: people who reported more conspiratorial beliefs tended to be more anti-vaccine. This association was particularly strong in Western nations, like Canada and the U.S. Next in line was the link between anti-vaccination attitudes and the resistance to having their freedom taken away from them. The authors report that “more conservative participants also had stronger antivaccination attitudes.” What was not linked to antivaxx beliefs was education”

The take home message from the article is:

- Even though well-known parts of the anti-vaccine movement are on the political left, anti-vaccine sentiment is more pronounced on the right
- There is a strong association between anti-vaccination and belief in conspiracy theories and a significant link between anti-vaccination and the resistance to having your freedom taken away from you

- Anti-vaccine Facebook users, although relatively small in numbers, have been very successful at spreading their message on the platform, which has facilitated their fraternization with other conspiracy theorists.

([Pullan and Dey, 2021](#)) draw attention to the continued online anti-vaccination presence by using Google trends. It finds that “throughout the pandemic the search interest in a coronavirus vaccine has increased and remained high throughout. Peaks are found when public declarations are made, the case number increases significantly, or when vaccine breakthroughs are announced”

Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom were studied by ([Murphy et al., 2021](#)) In this data rich paper, they looked at psychological indicators/reasoning such as analytical/reflective reasoning, control, altruism, conspiracy beliefs, paranoia, religious beliefs, trust in institutions, authoritarianism, social dominance and attitude towards migrants. There are some nice graphs in this paper which may be useful in presentations.

Trust in government and other institutions is also an issue, ([Jennings et al., 2021](#)) note that “Trust is a core predictor, with distrust in vaccines in general and mistrust in government raising vaccine hesitancy. Trust in health institutions and experts and perceived personal threat are vital, with focus groups revealing that COVID-19 vaccine hesitancy is driven by a misunderstanding of herd immunity as providing protection, fear of rapid vaccine development and side effects, and beliefs that the virus is man-made and used for population control. In particular, those who obtain information from relatively unregulated social media sources—such as YouTube—that have recommendations tailored by watch history, and who hold general conspiratorial beliefs, are less willing to be vaccinated.”

There is a wealth of emerging evidence on the complexities of vaccine hesitancy so if you would like a further evidence search please ask the Library on [ecn-tr.stafflibrary@nhs.net](mailto:ecn-tr.stafflibrary@nhs.net).

## Toolkit

### General

#### **COVID-19: vaccination case studies**

A series of case studies on the roll out of the COVID-19 vaccinations.

Local Government Association

<https://www.local.gov.uk/our-support/coronavirus-information-councils/covid-19-good-council-practice/covid-19-vaccination>

([Razai et al., 2021](#)) suggest using the 5 C’s to tackle behavioural and sociodemographic factors, there is also a nice infograph.

- **Confidence:** the person's trust in the vaccines efficacy and safety, the health services offering them, and the policy makers deciding on their rollout
- **Complacency:** whether or not the person considers the disease itself to be a serious risk to their health
- **Calculation:** the individual's engagement in extensive information searching to weigh up the costs and benefits
- **Constraints (or convenience):** how easy it is for the person in question to access the vaccine
- **Collective responsibility:** the willingness to protect others from infection, through one's own vaccination

## Pregnancy, breastfeeding and fertility

To address the fears of women who are pregnant, breastfeeding or hoping to get pregnant, The Royal College of Obstetricians & Gynaecologists key messages are:

- COVID-19 vaccines are recommended in pregnancy. Vaccination is the best way to protect against the known risks of COVID-19 in pregnancy for both women and babies, including admission of the woman to intensive care and premature birth of the baby
- Women may wish to discuss the benefits and risks of having the vaccine with their healthcare professional and reach a joint decision based on individual circumstances. However, as for the non-pregnant population, pregnant women can receive a COVID-19 vaccine even if they have not had a discussion with a healthcare professional.
- You should not stop breastfeeding in order to be vaccinated against COVID-19.
- Women trying to become pregnant do not need to avoid pregnancy after vaccination and there is no evidence to suggest that COVID-19 vaccines will affect fertility.

All information can be found on their information page: <https://www.rcog.org.uk/en/guidelines-research-services/coronavirus-covid-19-pregnancy-and-womens-health/covid-19-vaccines-and-pregnancy/>

## Vulnerable patients

The following websites provide advice for encouraging vaccine uptake in vulnerable patients and hard to reach groups:

### **Increasing uptake of vaccinations for vulnerable groups of patients**

Royal College of General Practitioners

*Last modified: Tuesday, 27 July 2021*

<https://elearning.rcgp.org.uk/mod/page/view.php?id=11930>

### **COVID-19 vaccine programme Maximising vaccine uptake in underserved communities: a framework for systems, sites and local authorities leading vaccination delivery**

NHS England

*26 March 2021*

<https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2021/03/C1226-maximising-vaccine-uptake-in-underserved-communities-a-framework-.pdf>

### **Better access to healthcare for Gypsy, Roma and Traveller communities is key to increasing vaccination rates: research makes five recommendations**

National Institute for Health Research

*Published on 11 May 2021*

<https://evidence.nihr.ac.uk/alert/better-access-healthcare-gypsy-roma-traveller-communities-key-increasing-vaccination-rates/>

### **How to tackle vaccine hesitancy amongst BAME groups.**

Oxford Vaccine Group.

*19<sup>th</sup> March 2021*

<https://www.ovg.ox.ac.uk/news/covid-19-how-to-tackle-vaccine-hesitancy-among-bame-groups>

**Covid Vaccination Hub. Includes “answering the myths FAQs”**

British Islamic Medical Association

<https://britishima.org/operation-vaccination/hub/>**South Asian Health Foundation COVID-19 Vaccination Safety Video**

South Asian Health Federation.

<https://www.sahf.org.uk/covid19>**COVID-19 vaccine hesitancy – debunking the myths using a community engagement approach underpinned by NICE guidance**

Black Women in Health (BWIH)

March 2021

<https://www.nice.org.uk/sharedlearning/covid-19-vaccine-hesitancy-debunking-the-myths-using-a-community-engagement-approach-underpinned-by-nice-guidance>

## Bibliography

Burgess, R. A. *et al.* (2021) '[The COVID-19 vaccines rush: participatory community engagement matters more than ever](#)', *The Lancet*, 397(10268), pp. 8–10. doi: 10.1016/S0140-6736(20)32642-8.

Freeman, D. *et al.* (2021) '[Effects of different types of written vaccination information on COVID-19 vaccine hesitancy in the UK \(OCEANS-III\): a single-blind, parallel-group, randomised controlled trial](#)', *The Lancet Public Health*, 6(6), pp. e416–e427. doi: 10.1016/S2468-2667(21)00096-7.

Jennings, W. *et al.* (2021) '[Lack of Trust, Conspiracy Beliefs, and Social Media Use Predict COVID-19 Vaccine Hesitancy](#)', *Vaccines*, 9(6). doi: 10.3390/vaccines9060593.

Murphy, J. *et al.* (2021) '[Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom](#)', *Nature Communications*, 12(1), p. 29. doi: 10.1038/s41467-020-20226-9.

Pullan, S. and Dey, M. (2021) '[Vaccine hesitancy and anti-vaccination in the time of COVID-19: A Google Trends analysis](#)', *Vaccine*, 39(14), pp. 1877–1881. doi: 10.1016/j.vaccine.2021.03.019.

Razai, M. S. *et al.* (2021) '[COVID-19 vaccine hesitancy: the five Cs to tackle behavioural and sociodemographic factors](#)', *Journal of the Royal Society of Medicine*, 114(6), pp. 295–298. doi: 10.1177/01410768211018951.

[The Anti-Vaccine Movement in 2020 | Office for Science and Society - McGill University \(no date\)](#). Available at: <https://www.mcgill.ca/oss/article/covid-19-pseudoscience/anti-vaccine-movement-2020> (Accessed: 29 July 2021).

[The UPTAKE study: a cross-sectional survey examining the insights and beliefs of the UK population on COVID-19 vaccine uptake and hesitancy | BMJ Open \(no date\)](#). Available at: <https://bmjopen.bmj.com/content/11/6/e048856> (Accessed: 29 July 2021).

Trent, M. *et al.* (2021) '[Trust in government, intention to vaccinate and COVID-19 vaccine hesitancy: A comparative survey of five large cities in the United States, United Kingdom, and Australia](#)', *Vaccine*. doi: 10.1016/j.vaccine.2021.06.048.