

Trust in vaccines

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“Is any medical procedure more misunderstood or charged with anxiety than vaccination?”

Honigsbaum, The Lancet 2015

Need for effective healthy aging strategies

- Improve quality of life
- Mitigate antimicrobial resistance
- Reduce the burden of vaccine-preventable diseases

Sauer et al. 2021

Social sciences and research on vaccines

- What we do ...
- We analyze...
 - vaccine hesitant behavior
 - **perceptions and attitudes** that are related to culture and worldview (e.g. VH among religious groups, “herd” immunity)
 - **critical view** on social, political and economic dimensions (e.g. perceptions towards mandatory vaccinations)

Social sciences and research on vaccines

- How do we work?
- Qualitative methods: interviews with adults (e.g. parents); small number but in-depth understanding
- We attempt to **capture the voices of the patients, clients and health workers**

Critical view of campaigns



„... we are waiting for you“



European Centre for Disease Prevention and Control

An agency of the European Union



[Home](#) > [About ECDC](#) > [Media centre](#) > [ECDC reports: Threat of outbreaks in EU/EEA countries due to persistent gaps in vaccination coverage](#)

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ECDC reports: Threat of outbreaks in EU/EEA countries due to persistent gaps in vaccination coverage

News story

24 Apr 2023

Burden of VPDs among adults in the EU

- Tetanus: In 2018, 92 cases of tetanus were reported in the EU/EEA, of which 48 were confirmed cases. **Adults aged 65 years and above were the most affected age group (75%), with women accounting for the majority of cases (68,5%).** The current epidemiology of tetanus in the EU/EEA may be explained by **lower vaccination coverage** or waning immunity in **older populations.** (ECDC 2020)

Diphtheria

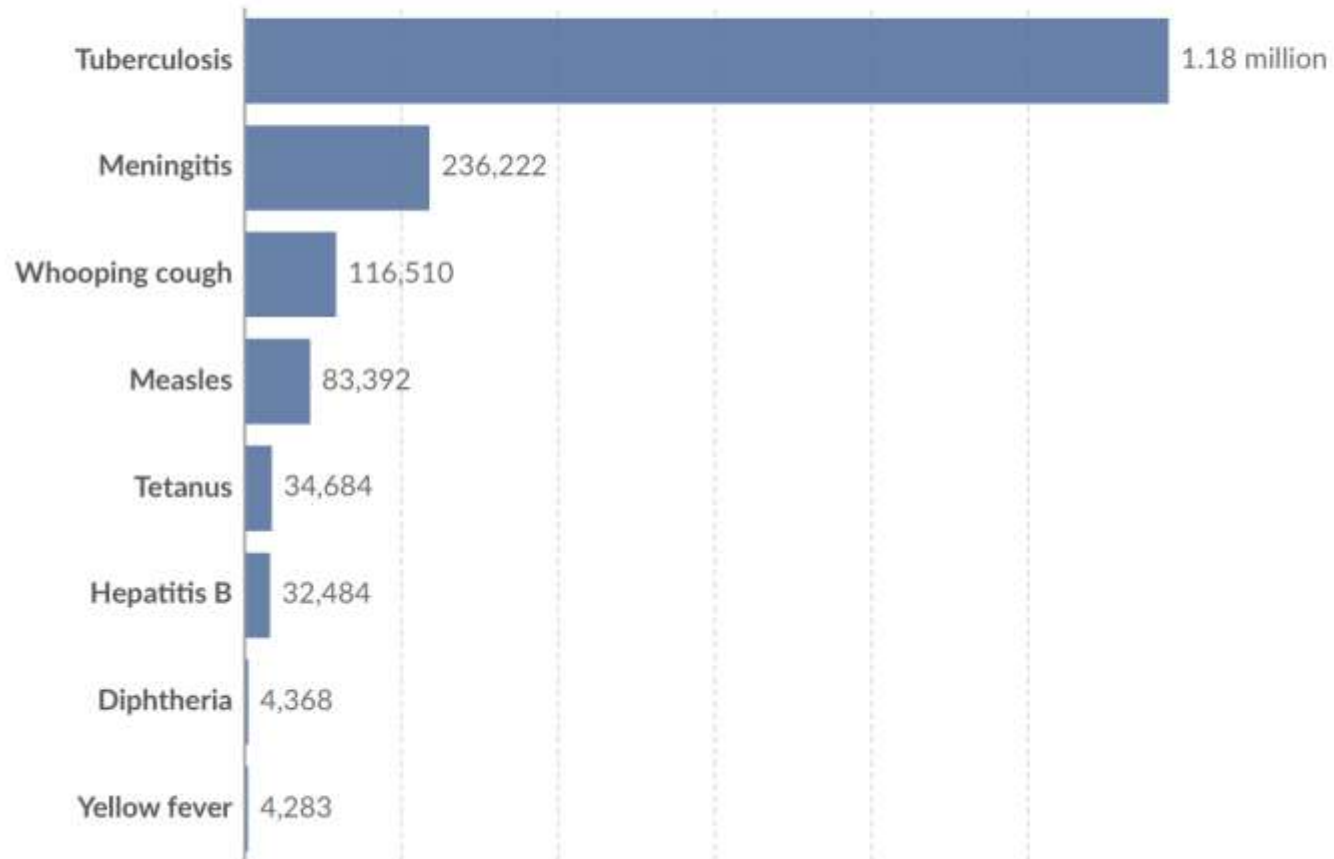
Annual Epidemiological Report for 2018

Key facts

- For 2018, 63 cases of diphtheria were reported to ECDC; 62 due to toxigenic *Corynebacterium diphtheriae* or *C. ulcerans* and one case with an unknown pathogen.
- The highest proportion of *C. ulcerans* cases was among adults 65 years and over, whereas *C. diphtheriae* cases were more common in younger age groups.
- Among the *C. diphtheriae* cases, 60% were reported as imported.
- High vaccination coverage is crucial to prevent diphtheria.

Deaths caused by vaccine-preventable diseases, World, 2019

[↔ Change country or region](#)



Source: IHME, Global Burden of Disease (2019)

OurWorldInData.org/vaccination/ • CC BY

10 Health threats



Vaccine hesitancy



Vaccine hesitancy – the reluctance or refusal to vaccinate despite the availability of vaccines – threatens to reverse progress made in tackling vaccine-preventable diseases. Vaccination is one of the most cost-effective ways of avoiding disease – it currently prevents 2-3 million deaths a year, and a further 1.5 million could be avoided if global coverage of vaccinations improved.

Mumps, for example, has seen a 30% increase in cases globally. The reasons for this rise are complex, and not all of these cases are due to vaccine hesitancy. However, some countries that were close to eliminating the disease have seen a resurgence.

The reasons why people choose not to vaccinate are complex, a [summary advisory group](#) to WHO identified complacency, inconvenience in accessing vaccines, and lack of confidence are key reasons underlying hesitancy. Health workers, especially those in communities, remain the most trusted adviser and influencer of vaccination decisions, and they must be supported to provide trusted, credible information on vaccines.

In 2018, WHO will carry up work to eliminate cervical cancer worldwide by increasing coverage of the HPV vaccine, among other interventions. 2019 may also be the year when transmission of wild poliovirus is stopped in Afghanistan and Pakistan. Last year, less than 30 cases were reported in both countries. WHO and partners are committed to supporting these countries to vaccinate every last child to eradicate this crippling disease for good.

<https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019>

Vaccine hesitancy

- “Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific varying across time, place and vaccines. It includes factors such as complacency, convenience and confidence.” (MacDonald, SAGE Working Group on Vaccine Hesitancy 2015)
- „important distinction to be drawn between hesitancy and outright rejection“ (Yaqub et al. 2014)

„Acceptance of vaccination is an **outcome behavior** resulting from a complex decision-making process that can be potentially influenced by a wide range of factors.“

MacDonald, SAGE Working Group on Vaccine Hesitancy 2015

Continuum of Vaccine hesitancy

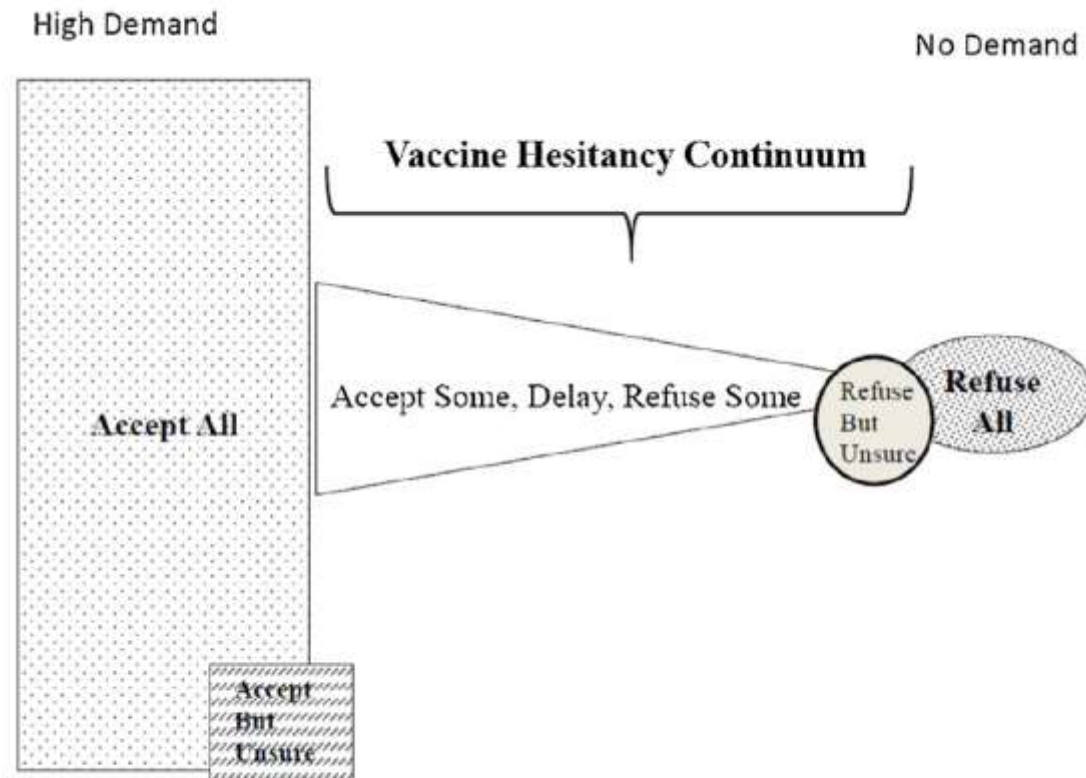
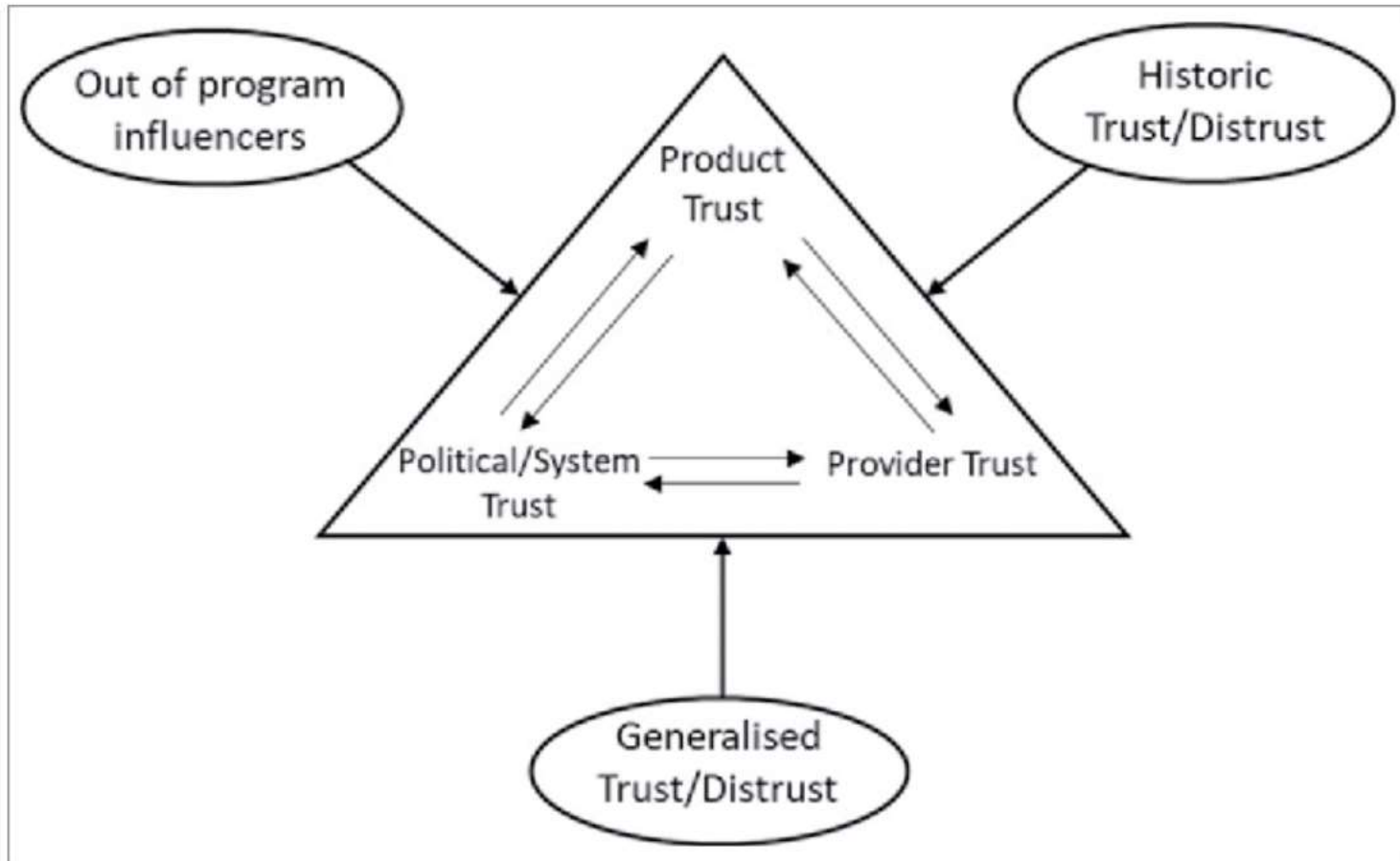


Fig. 1. The continuum of vaccine hesitancy between full acceptance and outright refusal of all vaccines.

MacDonald, SAGE Working Group on Vaccine Hesitancy 2015

Factors that may influence trust

- Communication!
- Behavior of opinion leaders (e.g. politicians, influencers)
- Behavior of health care providers
- Political factors (mandatory vaccinations, imperialism, historic)
- Health system factors (primary care institutions)

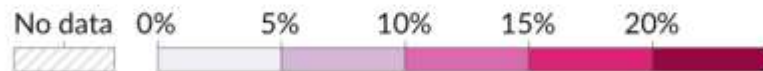
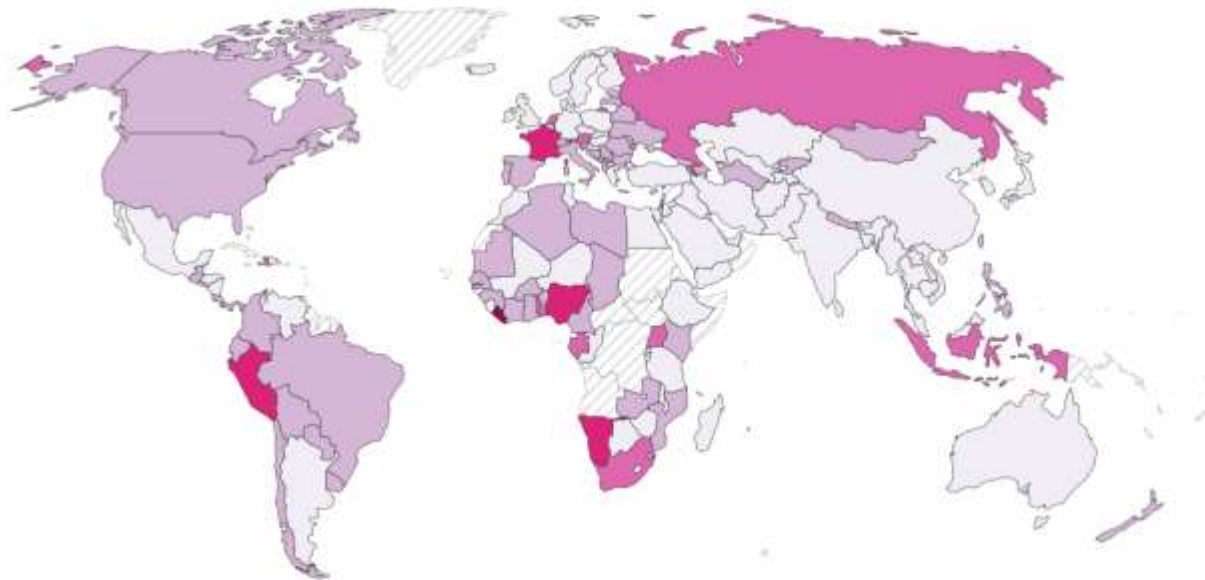


Trust relationship in vaccination, Larson et al 2018

Share that disagrees that vaccines are effective, 2019

The share of people who responded "strongly disagree" or "somewhat disagree" to the statement 'Vaccines are effective'.

World



Source: Wellcome Global Monitor (2019)

OurWorldInData.org/vaccination • CC BY

Table 5.3: Countries where people are most likely to disagree that vaccines are safe, effective and important for children to have

Percentage of people who answered 'strongly disagree' or 'somewhat disagree'.

Do you agree, disagree, or neither agree nor disagree with the following statement?

Vaccines are safe. Vaccines are effective. Vaccines are important for children to have.

Vaccines are safe		Vaccines are effective		Vaccines are important for children to have	
Strongly/somewhat disagree		Strongly/somewhat disagree		Strongly/somewhat disagree	
France	33%	Liberia	28%	Armenia	12%
Gabon	26%	France	19%	Austria	12%
Togo	25%	Nigeria	16%	France	10%
Russia	24%	Namibia	15%	Russia	9%
Switzerland	22%	Peru	15%	Switzerland	9%
Armenia	21%	Uganda	13%	Azerbaijan	8%
Austria	21%	Armenia	12%	Belarus	8%
Belgium	21%	Gabon	12%	Italy	8%
Iceland	21%	Russia	12%	Bulgaria	7%
Burkina Faso	20%	Togo	12%	Moldova	7%
Haiti	20%	Austria	11%	Montenegro	7%
		Indonesia	11%		
		Netherlands	11%		
		South Africa	11%		

Wellcome Global Monitor 2018

Box 5.4: Why is vaccine scepticism so common in France?

The French are the most sceptical people in the world about the safety of vaccines, with one in three French people (33%) disagreeing that vaccines are safe. This level of scepticism is present and

consistent across several demographic groupings within French society; it does not vary significantly by education, age, gender, urban or rural status, or whether people are parents.

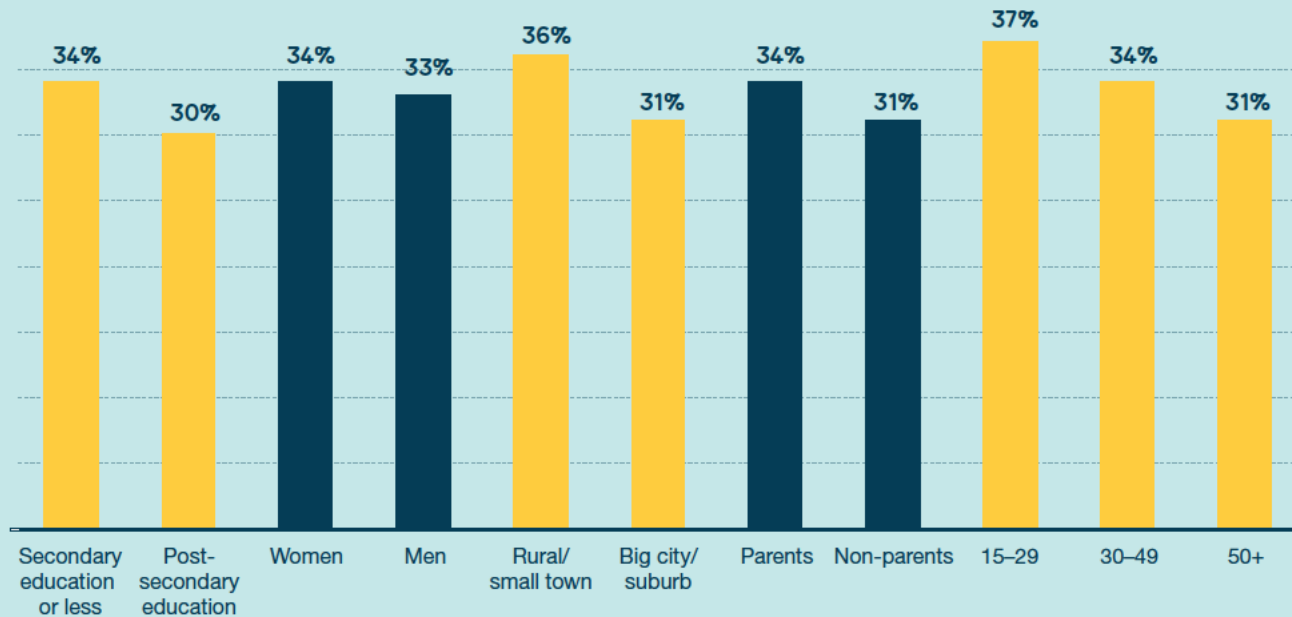
Wellcome Global Monitor 2018

Chart 5.5: Perceived safety of vaccines in France by demographic breakdown

Percentage of People in France who answered 'disagree'.

Do you agree, disagree, or neither agree nor disagree with the following statement?

Vaccines are safe.



Wellcome Global Monitor 2018

**Coronavirus (COVID-19)**

Home // Coronavirus (COVID-19) // Latest Data on COVID-19 Vaccinations by Race/Ethnicity

Latest Data on COVID-19 Vaccinations by Race/Ethnicity

[Nambi Ndugga](#)  , [Latoya Hill](#)  , [Samantha Artiga](#)  , and [Sweta Haldar](#)

Published: Jul 14, 2022

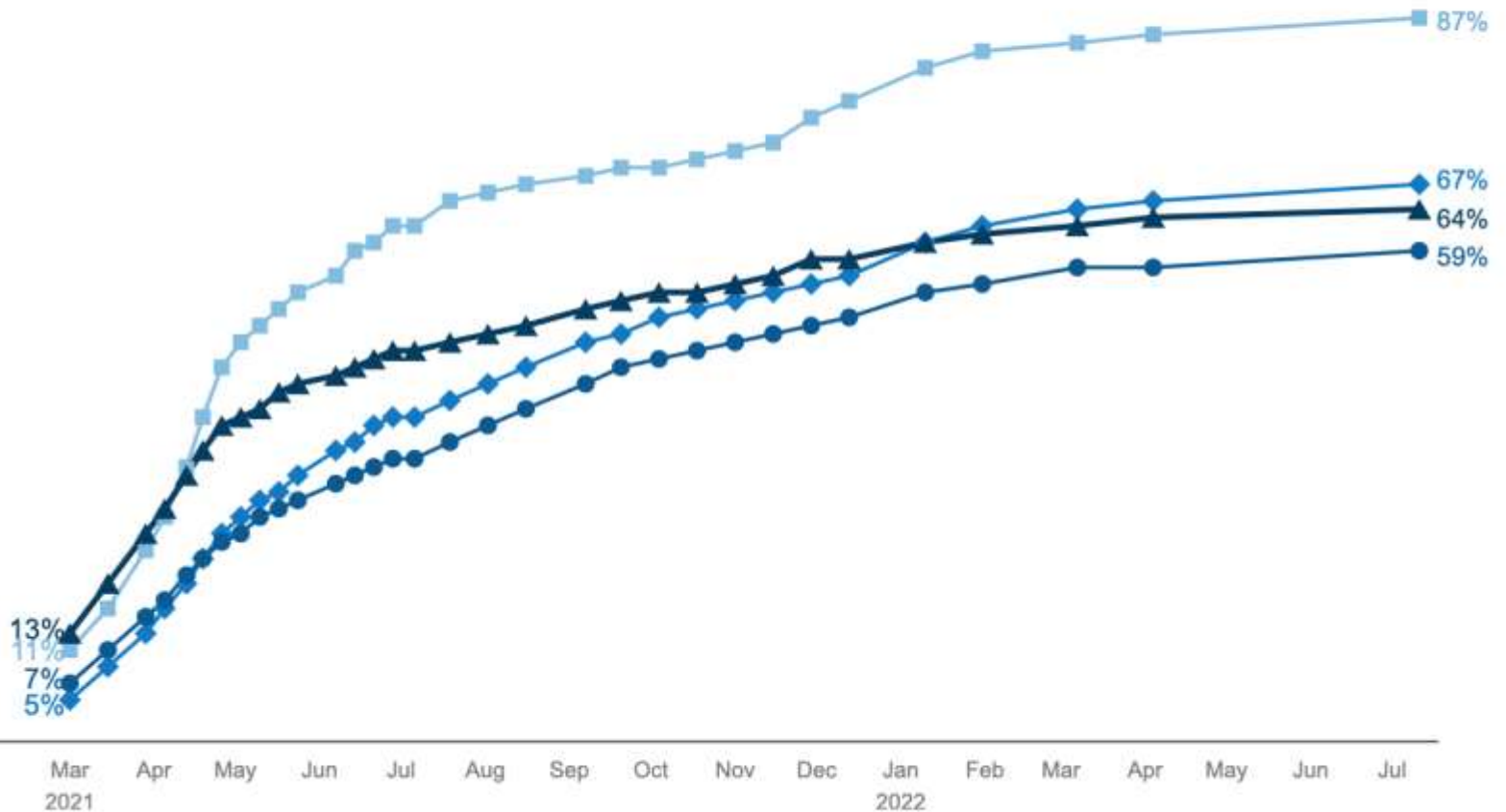


Kaiser Family Foundation <https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-by-race-ethnicity/>

Figure 2

Percent of Total Population that Has Received at Least One COVID-19 Vaccine Dose by Race/Ethnicity, March 1, 2021 to July 11, 2022

▲ White ● Black ◆ Hispanic □ Asian



SOURCE: Vaccination data based on KFF analysis of publicly available data on state websites; total population data used to calculate rates based on KFF analysis of 2019 American Community Survey data. Number of states included in analysis varies based on available data at time of data collection.
• PNG



[nature](#) > [nature communications](#) > [articles](#) > [article](#)

Article | [Open Access](#) | [Published: 01 February 2022](#)

Self-reported COVID-19 vaccine hesitancy and uptake among participants from different racial and ethnic groups in the United States and United Kingdom

[Long H. Nguyen](#), [Amit D. Joshi](#), [David A. Drew](#), [Jordi Merino](#), [Wenjie Ma](#), [Chun-Han Lo](#), [Sohee Kwon](#), [Kai Wang](#), [Mark S. Graham](#), [Lorenzo Polidori](#), [Cristina Menni](#), [Carole H. Sudre](#), [Adjoa Anyane-Yeboah](#), [Christina M. Astley](#), [Erica T. Warner](#), [Christina Y. Hu](#), [Somesh Selvachandran](#), [Richard Davies](#), [Denis Nash](#), [Paul W. Franks](#), [Jonathan Wolf](#), [Sebastien Ourselin](#), [Claire J. Steves](#), [Tim D. Spector](#), [COPE](#)

[Consortium](#) [+ Show authors](#)

<https://www.nature.com/articles/s41467-022-28200-3>

Worldwide, racial and ethnic minorities have been disproportionately impacted by COVID-19 with increased risk of infection, its related complications, and death. In the initial phase of population-based vaccination in the United States (U.S.) and United Kingdom (U.K.), vaccine hesitancy may result in differences in uptake. We performed a cohort study among U.S. and U.K. participants who volunteered to take part in the smartphone-based COVID Symptom Study (March 2020-February 2021) and used logistic regression to estimate odds ratios of vaccine hesitancy and uptake. In the U.S. ($n = 87,388$), compared to white participants, vaccine hesitancy was greater for Black and Hispanic participants and those reporting more than one or other race. In the U.K. ($n = 1,254,294$), racial and ethnic minority participants showed similar levels of vaccine hesitancy to the U.S. However, associations between participant race and ethnicity and levels of vaccine uptake were observed to be different in the U.S. and the U.K. studies. Among U.S. participants, vaccine uptake was significantly lower among Black participants, which persisted among participants that self-reported being vaccine-willing. In contrast, statistically significant racial and ethnic disparities in vaccine uptake were not observed in the U.K. sample. In this study of self-reported vaccine hesitancy and uptake, lower levels of vaccine uptake in Black participants in the U.S. during the initial vaccine rollout may be attributable to both hesitancy and disparities in access.

Main result: Greater vaccine hesitancy among minority participants

How can this be explained?

- Lack of knowledge on COVID-19?
- Access to health care?
- Discrimination, lack of trust, historic violence in the health care system
- “Deep-rooted and ongoing mistrust of the medical system among people of color and a lack of diverse representation in clinical trials may play a role in explaining this hesitancy” (Nguyen 2022:4)

Tuskegee Syphilis Study, Alabama

- 1932-1972
- US Public Health Service, John Charles Cutler
- 400 African Americans (poor tenants) with Syphilis
- Persons in trial often could not read and write
- Aim: to investigate the „natural“ course of the disease when untreated
- Trial participants were not informed on the diagnosis, nor on the aim of the study
- 2010 the US government apologized for these trials



Public domain: NAID 956104

US apologizes for infecting Guatemalans with STDs in the 1940s

By the CNN Wire Staff

October 2, 2010 — Updated 0218 GMT (1018 HKT)



President Obama offers "profound apologies" to the Guatemalan president for the tests.

STORY HIGHLIGHTS

- Obama offers "profound apologies"
- Guatemala accepts the apology, the presidential spokesman said
- The United States is launching an investigation
- The research was "reprehensible," the U.S. statement said

Washington (CNN) — The United States apologized Friday for a 1946-1948 research study in which people in Guatemala were intentionally infected with sexually transmitted diseases.

A statement by Secretary of State Hillary Clinton and Secretary of Health and Human Services Secretary Kathleen Sebelius called the action "reprehensible."

"We deeply regret that it happened, and we apologize to all the individuals who were affected by such abhorrent research practices," the joint statement said. "The conduct exhibited during the study does not represent the values of the United States, or our commitment to human dignity and great respect for the people of Guatemala."

President Barack Obama called his Guatemalan counterpart Friday "offering profound apologies and asking pardon for the deeds of the 1940s," President Alvaro Colom told CNN en Espanol in a telephone interview from Guatemala City.

<https://edition.cnn.com/2010/WORLD/americas/10/01/us.guatemala.apology/index.html>

Access to COVID-19 Vaccinations among Roma in Europe

- Knowledge on COVID-19
- Access to health care
- Discrimination, distrust
- Violent experiences with the health care system (Holt 2021)

COVID-19 vaccination among Roma populations in Europe

As countries across Europe speed up their COVID-19 vaccination programmes, there are growing concerns about low vaccination uptake among the continent's largest ethnic minority—the Roma.

An estimated 12 million Roma live in Europe and they are among the most discriminated and disadvantaged groups in the continent. In many countries, particularly in central and eastern Europe, large numbers live in segregated settlements characterised by poor living conditions, extreme poverty, and higher burdens of infectious and non-communicable diseases.

These factors have made Roma particularly vulnerable to COVID-19, and across Europe they have been disproportionately affected by the disease, both directly (in terms of increased rates of infections, hospitalisations, and deaths,

up to 60% in some communities. Furthermore, 45% of individuals living in settlements hospitalised with COVID-19 and 22% of those who died with the disease were younger than 50 years. According to Health Ministry data, in the general population 98% of deaths were among people older than 65 years.

"All these numbers indicate a much harsher pandemic impact in lower age groups in segregated settlements, compared to national (and international) averages", said Belak. He added that the situation was likely to be similar in Roma communities in other parts of Europe.

However, there appears to be a deep hesitancy towards COVID-19 vaccinations among Roma. Although no exact data on vaccine uptake among Roma in Europe are available as health authorities in this region do

disease, and a mistaken belief that previous infection confers permanent immunity, groups working with Roma told *The Lancet Microbe*.

Mistrust of national health-care systems and authorities is also a problem and can be partly linked to specific episodes of violation of health ethics principles, such as decades of coerced or involuntary sterilisation of Roma women, primarily in former Czechoslovakia.

Furthermore, vaccines can also be difficult to access. In some European countries, large numbers of Roma are undocumented or do not have health-care coverage and thus cannot access COVID-19 vaccination programmes. Others cannot afford travel to often far vaccination centres, or are put off by what they perceive as widespread discrimination against them in the health-care system.



For more on Roma and the COVID-19 pandemic see <https://reliefweb.int/sites/reliefweb.int/files/resources/Roma%20in%20the%20COVID-19%20crisis%20-%20in%20early%20warnings%20from%20in%20EU%20Member%20States.pdf>

For more on vaccination rates by ethnicity see <https://www.hf.org/romania-covid-19-issue-brief/latest-data-on-covid-19-vaccinations-race-ethnicity/>

For more on vaccine hesitancy among Roma see <https://ec.europa.eu/research-roma-children/?publications/415/>

For more on the sterilisation of Roma women see [Health from Rights 2017; 19: 23-34](https://www.healthfromrights.org/2017/11/23-34)


Intersectional Discrimination of Romani Women Forcibly Sterilized in the Former Czechoslovakia and Czech Republic

GWENDOLYN ALBERT AND MAREK SZILVASI

2017

Restore trust among Roma community


- Peer education and trust building



COVID-19
Finden Sie hier die neuesten Informationen des BMSGPK zum Coronavirus. [WEITERE INFORMATIONEN](#)

[Weitere Informationen auf Google](#)

Gypsies, Roma, Travellers and Showmen unite to Give COVID the Jab

 **jake bowers**
133 Abonnenten [ABONNIEREN](#)

63 Mag ich nicht Teilen + Speichern ...

6.549 Aufrufe 15.04.2021 A powerful new film from Romany journalist and film maker Jake Bowers, backed by the NHS in Surrey, is encouraging Gypsy, Roma, Traveller and Showmen to give COVID the jab and get vaccinated! [mehr](#)

Kommentare
3

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The European Journal of Public Health, Vol. 31, No. 6, 1157–1163

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doi:10.1093/eurpub/ckab174 Advance Access published on 28 September 2021
.....

‘I’m not an anti-vaxer!’—vaccine hesitancy among physicians: a qualitative study

Franziska Ecker, Ruth Kutalek

Department of Social and Preventive Medicine, Center for Public Health, Medical University of Vienna, Vienna, Austria

Lehner et al. *BMC Public Health* (2021) 21:1671
<https://doi.org/10.1186/s12889-021-11710-y>

BMC Public Health

RESEARCH

Open Access

Beyond the “information deficit model” - understanding vaccine-hesitant attitudes of midwives in Austria: a qualitative study



Lisa Lehner^{1,2,3*}, Janna Gribi¹, Kathryn Hoffmann¹, Katharina T. Paul¹ and Ruth Kutalek¹

Doubt at the core: Unspoken vaccine hesitancy among healthcare workers

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The Lancet: <https://doi.org/10.1016/j.lanepe.2021.100289>

Results

- Broad spectrum of vaccine hesitancy
- Vaccine hesitant persons actively search for information, are generally a critical group
- Skeptical groups: teachers, anthroposophic groups (R. Steiner)
- Comprehensive information important, but often lack of time, lack of information among doctors and midwives, medical education needs to be improved
- Vaccine critical groups are better organized

What do these examples show us?

- The „social life“ of medical interventions, of vaccinations
- Importance of local history and political economy
- Experiences of exclusion and mistrust are relevant

Take-home messages

- Health care workers are the most important and **trusted resource** of information on vaccinations
- Understand **local determinants of vaccine hesitancy** (social, political, structural, „explanatory models“)
- Adequate **communication** is essential: patients often want more and detailed information, communicate in a non-patronizing way, use positive messaging
- More **information/education** on risk and the impact of infectious diseases on the immune system
- Argument of **“herd immunity”** often does not work
- Improve **medical education**: prepare health workers to better understand risks, to respond to “narratives”, to answer questions of parents