

# Vaccine Hesitancy in Black & Latinx Communities

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Hesitancy and opposition toward vaccines appears to be at an all time high in the United States (U.S.), likely fomented by a rise in the anti-vaccination movement during the COVID-19 pandemic. Multiple surveys have shown that Black and Latinx people are among the most likely to express hesitancy toward the COVID-19 vaccine.<sup>1,2</sup> Survey data from November 2020 revealed that only 40% of Black people and 60% of Latinx people report they would get the vaccine when it is available, compared to 61% of their white counterparts.<sup>3,4</sup> However, hesitancy against vaccines is not unique to the COVID-19 vaccine. For example, in the 2019-2020 flu season, flu vaccination rates were significantly lower among those who are Black (46.6%) and Latinx (46.6%) compared to those who are white (51.8%).<sup>5</sup> Disparities in vaccination rates are also stark when comparing the recommended 7-vaccine series for children aged 19-35 months: 66.5% of Black children and 70.4% of Latinx children have completed the series, compared to 71.5% of White children.<sup>6</sup> These demonstrated disparities in vaccine uptake present a challenge to widespread vaccination efforts, especially as the U.S. begins rollout of the COVID-19 vaccine. It is critical to address multi-faceted vaccine hesitancy particularly within the Black and Latinx communities that have been disproportionately impacted by COVID-19.<sup>7</sup> It is also crucial to understand how vaccine opponents are influencing race and ethnic groups. This report uses data from Project VCTR to summarize key talking points used to foment skepticism toward vaccines within these two communities.

## VACCINE HESITANCY IN THE BLACK COMMUNITY

Vaccine hesitancy in the Black community has been a topic of conversation throughout 2020, particularly during the rise of the Black Lives Matter movement in summer 2020 and the COVID-19 pandemic. Project VCTR data show that in June 2020, there were 170,000 mentions of Black Lives Matter and vaccines across overall media conversations. Most mentions fell into two themes: 1) The need for Black participation in COVID-19 vaccine trials, particularly given that communities of color disproportionately bear the burden of COVID-19 morbidity and mortality, and 2) Ways in which the Black community has historically experienced racism in health policies and research, which continue to impact the Black community to this day.

The Tuskegee syphilis study is the most frequently referenced example of mistreatment in medical research. From December 2019 - December 2020, the Tuskegee study was mentioned 107K times in conversation about vaccines, reflecting its salience in the public's consciousness today. Conducted from 1932 to 1972, the Tuskegee study involved 600 black men, 67% of whom had syphilis at the time of enrollment. Researchers knowingly withheld treatment and information from the subjects with syphilis in order to study the progression of the disease. Though the study was initially intended to last for 6 months, it

ultimately spanned 40 years.<sup>8</sup> It has become widely known as one of the most egregious ethical failures of public health research and informed consent. However, this is just one example of racism within research. The legacy of Henrietta Lacks also persists, with 40K mentions within conversation about vaccines in the past year.<sup>9</sup> Henrietta Lacks was a Black woman whose immortal HeLa cell line has contributed to innumerable medical advancements, including the polio vaccine. While normal human cells are able to divide and replicate around 50 times, Mrs. Lacks' cells had the ability to do so indefinitely. Mrs. Lacks and her family were never asked to contribute to research, nor told about the cell line, and have never received compensation for cells that have changed the course of medicine.<sup>10</sup> The development of COVID-19 vaccines, which have benefited from decades of research using HeLa cells, have forced many scientists, the general public, and the Black community, to confront the medical successes derived from these past ethical failures. As a result of these ethical failures, more rigorous research protocols have been passed, requiring informed and voluntary consent from all research participants.<sup>11</sup> This also paved the way for continued efforts to promote the highest standards in biomedical research, creating what today is known as the Presidential Commission for the Study of Bioethical Issues.<sup>12</sup>

Vaccine hesitancy in the Black community is understandable given these previous examples of ethical failures in research - a pain point that continues to be exploited by groups who wish to sow further public doubt in vaccines. A 2019 story from ABC News reported that, "anti-vaccine leaders ...[are] infiltrating minority groups with existing skepticism of the medical establishment and exploiting the historically fraught relationships those groups have with doctors."<sup>13</sup> In fact, it has been established that vaccine misinformation campaigns aimed at the Somali community in Minnesota as early as 2010 led to the state's largest measles outbreak in 2017.<sup>14</sup> Other news stories have referenced leaders' alignment with Black politicians, church leaders, and NAACP members throughout the COVID-19 pandemic.<sup>15,16</sup> Racial targeting by the anti-vaccination movement continues to threaten the trust public health and medical professionals have been working to rebuild with the Black community.

## VACCINE HESITANCY IN THE LATINX COMMUNITY

While the legacy of medical exploitation has been less publicly debated for the Latinx community, there are still various reasons to explain lower rates of vaccine uptake and higher rates of vaccine hesitancy. For example, in the 1950s, women in Puerto Rico were given contraceptive pills without being informed that they were participants in a drug trial of a pill that had not been approved for use. Some participants were improperly monitored and died during the trials.<sup>17,18</sup> More recent research has also shown that, compared to their white counterparts, those in the Latinx community are less likely to believe that certain vaccines are effective, are more likely to fear vaccine side effects, and are more likely to believe that the vaccines are simply a way for physicians to make profit.<sup>19</sup><sup>20,21</sup> This hesitancy may stem from a variety of factors, including information not being made available in a language or literacy level that is accessible, concerns about documentation status, as well as a general lack of representation in clinical trials and research.<sup>22</sup> While the Pfizer and BioNTech vaccine trials contained representative samples of Asian and American

Indian participants, they contained only 13% Latinx participants despite Latinx people representing 19% of the U.S. population.<sup>23</sup> A recent survey by the COVID Collaborative studying COVID-19 vaccine hesitancy among Black and Latinx Americans only spoke with 258 Latinx individuals compared to 1,050 Black adults.<sup>24</sup> Despite this small sample size, it is one of the few examples of research looking at Latinx perceptions of COVID-19 and might contain information helpful to guide public health officials in reaching out to this community.

Within an examination of vaccine hesitancy among Latinx groups, it is also critical to consider the differences that exist within subgroups, for example by country of origin or documentation status. Mexican immigrants are more likely than their other Latinx counterparts to be underimmunized.<sup>25</sup> A report by the Migrant Clinician Network (MCN) has noted that “new immigrants from Mexico have cultural expectations of immunization needs that are distinct from common U.S. experiences.”<sup>26</sup> The MCN also found that “immigrant women were unaware of adult immunization needs and that they did not know how to access immunizations apart from WIC or Medicaid.” Privacy, possibly around immigration status, may also limit this group’s vaccine rates. If required to provide personal identifiers such as name, address and telephone number to be vaccinated, a quarter of Latinx people would be less likely to get the vaccine.<sup>27</sup> Within Project VCTR data, there have been 105K mentions of immigration and vaccines in the past year. Understanding the drivers to vaccine hesitancy between different Latinx subgroups is critical to improving access and vaccination rates in these communities.

## CONVERSATION THEMES WITHIN VACCINE OPPOSITION & THE BLACK AND LATINX COMMUNITIES

Using Project VCTR data, analysts examined mentions of vaccine opposition from 12/1/19 - 12/1/20, as well as vaccine opposition that also mentioned Black or Latinx communities. During this time period, there were over 40,000 mentions of the Black community within vaccine opposition, and 3,900 mentions of the Latinx community. The top 5 conversation themes within each group were examined to understand the proportion of conversations as well as top talking points within each theme (Table 1).

### THEME 1: NEGATIVE HEALTH IMPACTS

Across all three groups, references to negative health impacts due to vaccines were the top theme, accounting for 24% of general vaccine opposition, 25% of vaccine opposition mentioning the Black community, and over 40% of vaccine opposition mentioning the Latinx community. Among all groups, this theme largely encompassed mentions of vaccine injuries and death. In conversation specifically mentioning the Black community, one story was shared over 1,000 times that referenced a study from 2017 which examined the introduction of two vaccines - diphtheria-tetanus-pertussis (DTP) and the oral polio vaccine (OPV) - to Guinea-Bissau in the 1980s.<sup>28</sup> The study concluded that the DTAP vaccine kills five times more children than it saves, reflecting the rhetoric that Black people in Africa have been used as “guinea pigs” for medicine. From December 2019 to December 2020, Project

VCTR found 60,000 references that included mentions of the Black community, “guinea pigs” and vaccines, a demonstration of the stickiness of this type of labelling.

Among conversations about vaccines including mentions of the Latinx community, conversation about negative health impacts was less focused on experimentation and largely highlighted stories of adverse reactions and illnesses attributed to vaccines, similar to what was seen in the overall conversation within this theme. A 2015 NBC News story was commonly shared about a string of adverse reactions and deaths among infants in Mexico after receiving routine tuberculosis, rotavirus, and Hepatitis B vaccines.<sup>29</sup> Although Mexican health officials found that bacteria was responsible for the illnesses and deaths rather than vaccines, the close association between the deaths and hospitalizations after vaccination continues to be used to foment vaccine skepticism.<sup>30</sup>

## THEME 2: PHARMACEUTICAL INDUSTRY

Mentions of the pharmaceutical industry was the next leading theme among overall conversations demonstrating negative attitudes towards vaccines, accounting for 12% of all mentions. Among conversations that specifically mentioned Black and Latinx people, conversations mentioning the pharmaceutical industry were less prominent, coming in as the fifth most popular theme for both categories of conversations, attributing to 10% of conversations mentioning Black people and 12% of conversation mentioning Latinx people.

Within conversation and stories that also included mentions of the Black community, this theme largely encompassed the idea that pharmaceutical companies prioritize profits over people. In July 2020, a lengthy social media post that generated much discussion across platforms was centered around how the scientific and pharmaceutical industry are currently using the same incentives that were offered during the Tuskegee study to dupe Black people into joining clinical trials.<sup>31</sup> The post was in response to a televised call for Black participants in a COVID-19 vaccine clinical wherein incentives such as payment and free medical care were mentioned. More recently in December of 2020, a prominent Black actress shared on her social media platform a video that was questioning the vaccine.<sup>32</sup> What she later referred to as a mere instance of raising her concerns with no ill intentions caused backlash from her network and earned her praise from anti-vaccine leaders for her wariness of Big Pharma. They also leveraged her celebrity status to tout vaccine hesitancy within the Black community.

On the Latinx side of the conversations, top stories were centered around Cuba’s promising efforts to develop a vaccine that activates the body’s innate immune system.<sup>33</sup> Social media posts discussed how those efforts might never come to fruition due to the blockade from the U.S. and possible hindrance from Big Pharma.

## THEME 3: VACCINE INGREDIENTS

Vaccine ingredients were the third most prominent theme in overall conversations expressing negative attitudes towards vaccines, as well as those including mentions of Latinx people, respectively accounting for 12% and 14% of conversations. Mentions of the

Black community within this theme accounted for 15% of conversations; it was the fourth most prominent theme within this category of conversation.

Among conversations about Black and Latinx communities, religious leaders have perpetuated the idea that vaccines have been genetically modified to harm Black and Latino boys, and more recently have claimed that COVID-19 vaccines included toxic waste.<sup>34,35</sup> There is evidence that a prominent leader in the anti-vaccination movement has connected with leaders from Nation of Islam to reach Black families and encourage them to not vaccinate their children on the basis of the debunked claim that mercury in vaccines causes autism.<sup>36,37</sup> False information about the connection between autism and vaccines has targeted Black families through the connection between leaders of both movements, despite efforts of mainstream media sources to point out the fallacies in the talking points.<sup>38,39,40</sup>

Among messages including mentions of Latinx people, adverse events following vaccination in Spanish-speaking countries are used to provoke vaccine skepticism in the U.S. The same incidence of vaccines that caused sickness and death in infants in a small town in Mexico, used to highlight negative health outcomes, also spurred stories alleging that vaccines contain GMOs and particles from aborted fetuses (which may stoke religious opposition among the devoutly religious).<sup>41</sup> HPV vaccines were also mentioned as being dangerous after a study was published in May 2020 that found an increase in HPV types not prevented by vaccination among Mexican women who had received HPV vaccination.<sup>42</sup> Stories like this may appeal to religious and familial values typically associated with Latinx cultures, further stoking fears.

#### THEME 4: POLICIES & POLITICS

Policies and politics have been a dominant theme in conversations throughout 2020. While this theme was the fourth most prominent in overall conversations expressing negative attitudes towards vaccines, accounting for less than 10% of all conversations, it was the second most popular theme within conversations mentioning Black and Latinx people--nearly one-fifth of all conversations for both categories fell within this theme. The higher proportion of conversations about vaccines and race that were also about policies and politics may have been a reflection of the rise of the Black Lives Matter movement after the murder of George Floyd as well as the 2020 election, in which race and vaccines were prominent issues.

The convergence of all of these issues can be seen in tweets that call out George Floyd's death as an opportunity for the U.S. government to promote vaccines, which will also be used for population control. Bill Gates was also frequently referenced in these messages, with conspiracies that Gates is behind the COVID-19 pandemic and is working with the government to disseminate vaccines for population control, rather than public health.

Mentions of the vaccine opposition and Latinx people within the theme of policies and politics are included in messages mentioning other racial and ethnic groups. Messages are similar to what is seen among those specifically mentioning Black people. Tweets also

use more historical examples to promote vaccine opposition to rebut legislators' support of COVID-19 vaccine equity.

### **THEME 5: RESEARCH & CLINICAL TRIALS**

The final dominant theme in conversations were those that discussed research and clinical trials. Within this theme can be found 9% of all conversations expressing negative attitudes towards vaccines. It was the fourth most prominent theme within conversations that also mentioned the Black community (11% of conversations), and the third most prominent for those that also included mentions of the Latinx community (16% of conversations).

Within the conversation focused on the Black community, the idea of “experimentation” was rife throughout references made towards research - with most false references aimed at comparing the development of a COVID-19 vaccine to the Tuskegee experiment. Some go even further to refer to the COVID-19 vaccine trials as “Tuskegee 2.0”. Another historical hook that was frequently mentioned to associate negative health effects to clinical trials was the Oral Polio Vaccine introduced in the 1950s, with many crediting mass vaccination efforts for subsequent outbreaks of the disease predominantly observed in Black communities.<sup>43,44</sup> Some posts mentioning both Black and Latinx communities directly urged people to avoid involvement in vaccine trials, citing debunked claims that the MMR vaccine poses harm in Black and Latino boys.<sup>45</sup>

**TABLE 1: TOP 5 CONVERSATION THEMES**

Themes*	Overall Vaccine Opposition	Mentions of Black Community	Mentions of Latinx Community
Negative health impacts	23.9%	25.0%	40.7%
Pharmaceutical industry	12.1%	10.0%	11.8%
Vaccine ingredients	11.5%	13.9%	14.7%
Policies & politics	9.6%	19.3%	19.6%
Research & clinical trials	8.4%	10.6%	16.0%

\*Each theme was assigned its own list of keywords that identified a post as having met the criteria of that theme and distinguished that theme from the others. Posts could be coded across multiple themes, so there is overlap.

### **CONCLUSIONS AND NEXT STEPS**

Data from Project VCTR show that, compared to overall vaccine opposition, conversation themes within references to the Black and Latinx community more frequently focus on vaccine ingredients, policies and politics, and research and clinical trials. Top

talking points within references to both groups highlight the importance of historical context as a way of driving opposition toward vaccines today. Historical experiences of systemic racism in medical research and mistrust of the medical system are front and center throughout the data examined in this report. It is also noteworthy that mentions of vaccine opposition appeared far more common in relation to the Black community than the Latinx community. This may be due to a heightened emphasis on the Black community by vaccine opponents, and less public discourse about vaccine hesitancy in the Latinx community. Either way, it is critical that vaccine hesitancy among both Black and Latinx groups be addressed, keeping in mind the top conversations themes and talking points identified above. Public health experts and policy makers can assume strategic intent behind vaccine opposition messages that leverage justified hesitancy against the future health of Black and Latinx communities. Finally, when addressing vaccine hesitancy among Black and Latinx communities, it is critical to consider the differences within each of these groups that may impact perceptions toward vaccination. Messaging toward these groups should be specifically tailored, keeping in mind sociodemographic differences, such as country of origin, income, and insurance status.

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