

Research Report

Youth COVID-19 Vaccine Engagement in Cleveland, Ohio, United States

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and Santiago Ripoll (IDS)**

June 2022

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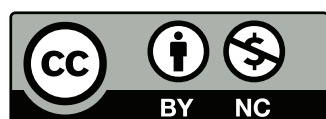
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Executive Summary

Despite overall progress in COVID-19 vaccination rates in Cleveland, vaccine inequity persists as young people from minority communities are often less likely to be vaccinated. COVID-19 vaccine hesitancy is not just an issue of misinformation or lack of information. Vaccine hesitancy among young people is reflective of wider issues such as mistrust in the state or the medical establishment and negative experiences during the pandemic.

This report is based on case study research conducted among minority youth (ages 12–18) in Cleveland, Ohio. While public discourse may label young people as “vaccine hesitant,” we found that there were hesitation differences based on social location and place. We found the greatest vaccine hesitancy among older youth (15+ years old), particularly those from minoritized communities.

Unvaccinated youth were also more likely to be from families and friend groups that were unvaccinated. While some expressed distrust of the vaccines, others reported that COVID-19 prevention was not a priority in their lives. Instead, concerns over food security, livelihood, and education take precedence. Minority youth were more likely to report negative experiences with authorities, including teachers at their schools and police in their communities.

Our findings demonstrate that COVID-19 vaccine hesitancy is embedded in a context that drives relationships of mistrust between minority communities and authorities, with implications for COVID-19 vaccine uptake. Young people’s attitudes toward vaccines are further patterned by experiences within their community, school, family, and friend groups.



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Key Findings

- Not all young people share the same views regarding COVID-19 vaccination and COVID-19 related health choices, but instead vaccination uptake is patterned by age, community experiences of disadvantage, self-efficacy, and family and peer influence.
- Discourses on “vaccine hesitancy” may not capture the full range of youth attitudes but may inadvertently label youth as ignorant and uneducated. Some youth did ask for more clear information, but some youth in this study engaged critically in their choice around whether to receive the COVID-19 vaccine.
- Youth, particularly from disadvantaged areas, face numerous challenges, many of which were exacerbated by the pandemic including limited access to safe and healthy spaces, an inequitable education system, and food and income insecurity.
- Young people reported experiences of racism and negative interactions with police. This may contribute to a sense of mistrust also in the “system,” which may include medical providers..
- Young people across contexts reported symptoms of depression and anxiety during the pandemic, which contributed to a lower sense of well-being.
- Youth report having access to a lot of mixed information on COVID-19 vaccines, especially through social media, though it was difficult for youth to decipher between accurate and trustworthy information and ‘misinformation.’
- Younger youth were more likely to be vaccinated and have family members and friends who were vaccinated.
- Many youth in this study felt unsupported in their lives. Many relied on recreation centers and other youth-friendly spaces as “safe spaces,” though these closed during the pandemic.

“Vaccine hesitancy” is embedded in social and political-economic context

Recent studies have shown how minoritized communities often have a deeper mistrust of the medical establishment and government, due to long histories of medical experimentation, neglect, and systemic racism.

This history can shape young people’s attitudes toward vaccination in differing ways, often depending on their socioeconomic status. Emerging literature found that medical mistrust was associated with social isolation, financial insecurity, socioeconomic status, and level of social support. ⁽¹⁾

Research on youth vaccination attitudes also has shown that youth vaccine confidence may be linked to youth willingness to get vaccinated in light of peer and parental views ⁽²⁾ and social media. ⁽³⁾ This report will describe how contextual factors influence attitudes toward COVID-19 vaccination, including age, economic stability, access to social media, and community experiences of racism and experiences during the pandemic. We provide a more comprehensive model for understanding youths' health choices in relation to the COVID-19 vaccine.

To identify the context of youth COVID-19 vaccine choices, we conducted case study research in Cleveland, Ohio using traditional and participatory methods. We led in-depth interviews and focus group discussions with 61 young people (ages 12-18) largely from minority backgrounds, while a youth advisory board provided oversight and input into the research. We also conducted a political-economic analysis to understand how structural inequalities might underpin vaccine attitudes and to answer our guiding research questions.

Research Questions:

1 How does context specific to social location (ethnic minority youth) and physical place (disadvantaged neighbourhoods), including experiences of systemic racism, structural inequalities, and historical injustice, shape responses to COVID-19 vaccines?

2 How do youth conceptualize trust and what might be the role of (mis)trust in youth responses to COVID-19 vaccines?

This short report shares findings from the research with an aim to inform youth COVID-19 vaccine engagement.

“Younger youth were more likely to be vaccinated and have family members and friends who were vaccinated.”

Key concepts, terms, and definitions

Political economy of health considers the historical, political, and economic contexts in which disease and illness arise, and examines the ways in which societal structures interact with place conditions that lead to good or ill health.

Systemic racism is a socially constructed scaffolding that supports and maintains racial discrimination and while racism may shift over time, the scaffolding continues to hold it in place.

Structural inequalities result from and intersect with various -isms (e.g. racism, sexism etc.) and are deeply embedded in our societies.

Structural inequalities include two key components:

Persistence, where inequalities are reinforced and compounded over time and **intersectionality**, where relationships between inequalities shape different experiences for individuals facing multiple forms of oppression.

“Structural inequalities result from and intersect with various -isms.”

“
**Vaccine
hesitancy refers
to a delay in
acceptance or
total refusal
of vaccines
despite the
availability of
vaccination
services.”**

Place conditions refer to a community's historical, social, and political-economic context.

Trust, specifically medical mistrust, refers to a tendency to distrust medical systems and personnel believed to represent the dominant culture in a given society. Distrust in the broader COVID-19 response, a lack of trust in political authorities, and/or distrust in broader institutions have been cited in a broad range of ethnic minority responses to COVID-19 vaccines and other measures.

Vaccine hesitancy refers to a delay in acceptance or total refusal of vaccines despite the availability of vaccination services.

Vaccine equity refers to fair and just access to vaccines, prioritizing historically marginalized and disadvantaged communities. The most effective way to achieve equity is by involving communities in the planning, execution, and decision-making process of COVID-19 vaccination programs and by addressing histories of racism, injustice, and oppression.



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Place Matters: COVID-19 and Health Equity

Cleveland is divided, as residents face deeply unequal health outcomes.

A resident's health is shaped by where they live and what kinds of opportunities they may have based on their economic and racial background.

- **As demonstrated in the 2019 Access to Care report, African American and Hispanic residents are 2-3 times more likely to experience poverty.** ⁽⁴⁾
- **African American babies are 3 times more likely to die compared to whites.** ⁽⁴⁾
- **Black communities have higher rates of chronic disease, including those known to be co-morbid with COVID-19.**
- **Hypertension affects 40% of African American residents in Ohio, compared to 35% of whites, 28% of Hispanic, and 14% of Asian residents.** ⁽⁵⁾

These health inequities are a product of historic redlining, structural and systemic racism, and generations of disinvestment in African American neighborhoods, housing, and built infrastructure. The City of Cleveland and Cuyahoga County have recognized this, declaring structural racism a public health crisis.

These patterns of inequity underpin how the COVID-19 pandemic disproportionately affected African American communities in Cleveland, which make up **49%** of the city's population. ⁽⁶⁾

In the 18 months of the COVID-19 pandemic, **42%** of cases, **67%** of hospitalizations, and **56%** of deaths were among Black residents.

Black residents are overrepresented among essential workers in the state, increasing their risk of COVID-19 exposure. ⁽⁷⁾ Additionally, reports from the Cleveland Office of Minority Health show that histories of redlining and disinvestment have contributed to mistrust from African American residents in the health system. ⁽⁸⁾

“

Black residents are overrepresented among essential workers in the state, increasing their risk of COVID-19 exposure.”

African American babies are

3

times more likely to die compared to whites.



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Young People's Views on COVID-19 Vaccination is Embedded in Context

Despite being over-represented in COVID-19 case counts and fatalities, Black residents were under-represented in COVID-19 vaccination during the first year and half of the pandemic.⁽⁶⁾ In Ohio, while roughly 60% of Cuyahoga County residents are fully vaccinated, just 45% of Cleveland residents are fully vaccinated.⁽⁹⁾ Lower-income, majority Black, east side neighborhoods have markedly lower vaccination rates compared to higher-income, mostly white neighborhoods.

Young people ages 16-40 became eligible for the COVID-19 vaccine on March 29th, 2021, and individuals aged 12 and above were able to get vaccinated from May 2021 onward. However, large disparities exist based age, race, and zip code. In *Figure 1*, we can see lower vaccination in central Cleveland and east side neighborhoods.

Number of Vaccine Recipients in Cuyahoga County

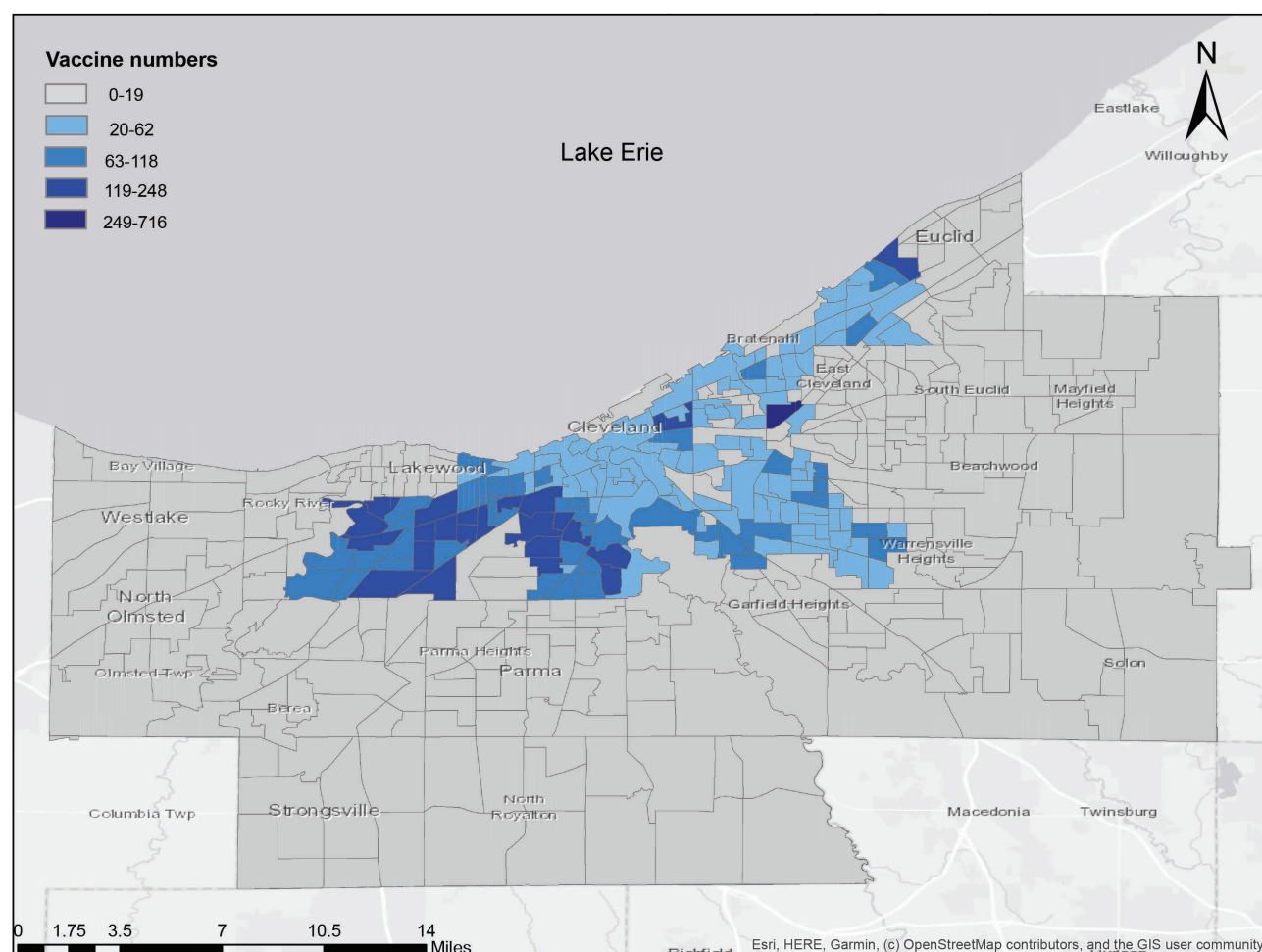


Figure 1. Told numbers of vaccinated 12-18 year old youth in Cuyahoga County (ranging from light blue – lower vaccination – to dark blue, or higher vaccination), map made by the study team, data from Cleveland Department of Public Health, January 2022

Despite evidence that COVID-19 vaccines are safe and effective, there is some evidence of COVID-19 vaccine refusal among children and youth.⁽¹⁰⁾ However, The World Health Organization (WHO) has given interim guidance on vaccinating young people, saying that healthy youth should not be a priority for vaccination.



The WHO defines vaccine hesitancy as a delay in acceptance, or refusal, of vaccines despite the availability of vaccination services."

The WHO defines vaccine hesitancy as a delay in acceptance, or refusal, of vaccines despite the availability of vaccination services.⁽¹¹⁾ It is not a dichotomy of being "hesitant or not," but rather a continuum ranging from complete acceptance to complete refusal.^(12–14) Public discourse around vaccine hesitancy has often misrepresented minority youth as ignorant, uneducated, and selfish when it comes to their COVID-19 vaccine choices.

To counter this misconception, the conceptual framework that guided our research is a *political economy* of vaccine hesitancy, which recognizes how histories of inequity can shape minority community attitudes toward the medical establishment and newer technologies such as the COVID-19 vaccines.

This report will demonstrate how young people's views on COVID-19 vaccination are linked to more than exposure to social media misinformation, but how they are underpinned by longstanding histories of mistrust between governments and minoritized communities. Some youths' choices regarding the COVID-19 vaccine were accompanied with on-going critical reflection and education around the vaccines risks and benefits to themselves and those around them.



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Political Economy of Health: Systemic Racism and Structural Inequalities

Redlining in Cuyahoga County

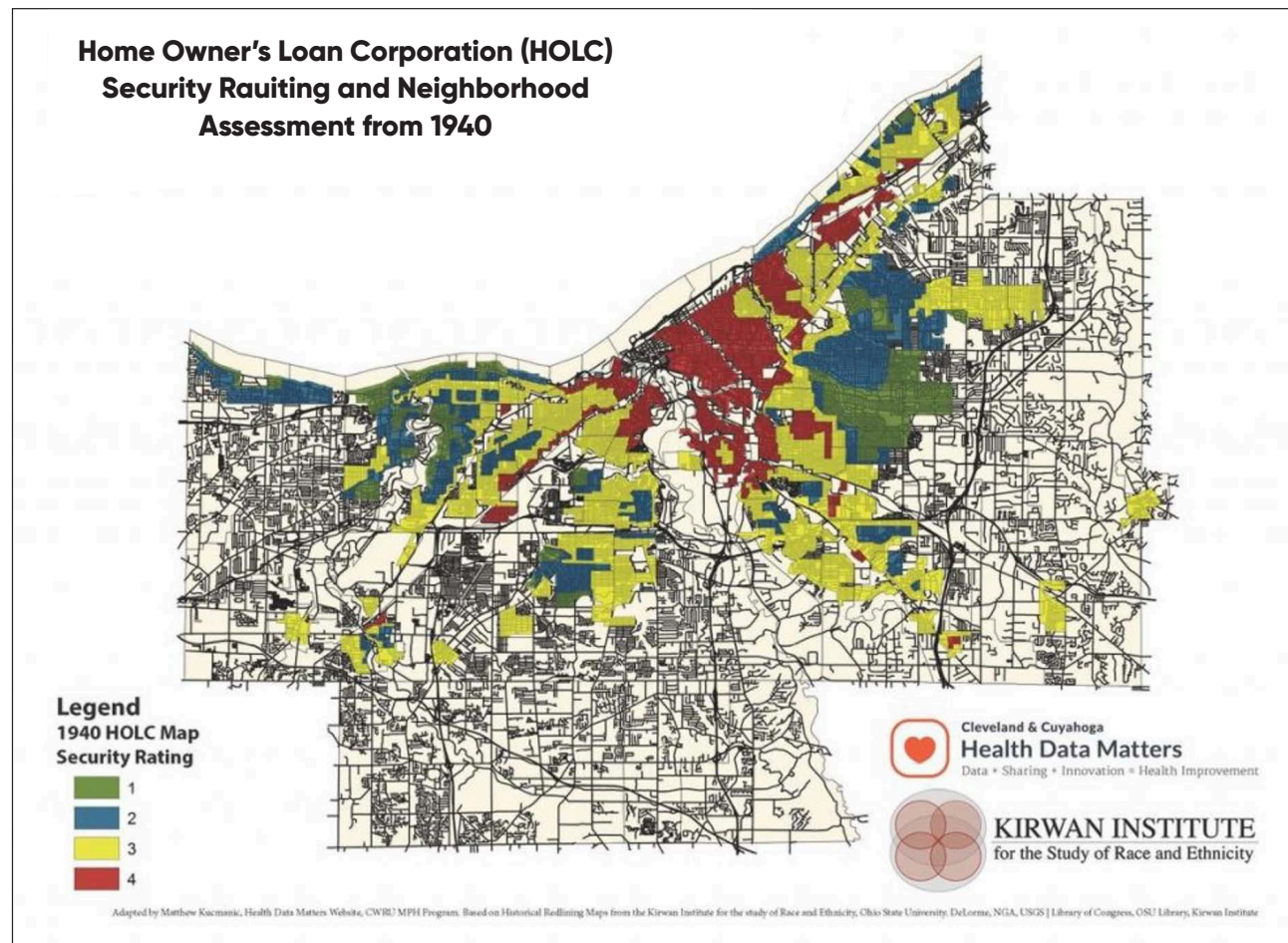


Figure 2. Map of redlining where areas highlighted in red were rated as "hazardous" (Source: Kirwan Institute)

Histories of redlining.

Housing discrimination and redlining practices led to the institutionalization of systems of racism and inequality that negatively shaped minoritized communities' experiences in Cleveland, as well as other northern cities in the US. Redlining is a practice in which financial and other services are deliberately withheld from ethnic minorities who are classified as "hazardous" to financial investment. ⁽¹⁵⁾

Many of the redlined communities (Figure 2) in Cleveland now face the city's highest rates of poverty. While redlining was officially banned over 50 years ago, the effects of redlining continue today. Researchers have found a strong relationship between a history of redlining in Cleveland the steady decline of neighborhoods, evident in present-day maps of poverty rates, infant mortality, and other indicators. ⁽¹⁵⁾

The effects of redlining include that neighborhoods are still functionally segregated, with Black families concentrated in low-income areas with poor quality housing. ⁽¹⁵⁾ The legacy of redlining still impacts home values, inequitable access to mortgages and other lending services. For example, predatory lenders with astronomically high interest rates target low-income neighborhoods and communities of color, which contributes to persistent wealth gaps between white households and households of color. ⁽¹⁶⁾

Systemic racism in youth experiences.

Experiences of minority youth in Cleveland mirror many faultlines in the United States. In Cleveland, African American youth are disproportionately represented in the justice system. While disparities have improved in recent years, there is still significant inequality in the justice system. ⁽¹⁷⁾ In 2018, Black youth accounted for 56% of incarcerated youth in Ohio, despite accounting for 16% of the population. ⁽¹⁷⁾

A 2014 police shooting of 12-year old Tamir Rice on the near west side of Cleveland underscored experiences of systemic racism. Shortly after the Tamir Rice shooting, in 2014, the US Justice Department published a report finding that Cleveland police officers engage in a pattern or practice of using “excessive force and violating people’s civil rights.” ⁽¹⁸⁾ These events led to the creation of the Community Police Commission which was established to strengthen relationships between police officers and the communities they serve. ⁽¹⁹⁾

There has also been a long history of community organizing in Cleveland around issues of racial injustice (Black Lives Matter Cleveland, Khnemu Lighthouse Center), health inequity (Northeast Ohio Black Health Coalition), and other social justice issues (Urban League of Greater Cleveland). There are growing numbers of youth-serving organizations as well, that focus on educational and career opportunities.

Structural inequalities.

While Cleveland has longstanding racial inequities, the city has undergone a period of growth and “revitalization,” but this has not been equitably distributed. The city has seen both urban regeneration plans and community development schemes, but this has not sufficiently fixed persistent socio-spatial inequalities. ⁽²⁰⁾

For example, local political coalitions have promoted demolition of abandoned or foreclosed homes, as a part of this revitalization, though in reality this clears the way for reinvestment and luxury apartment buildings, many of which remain out of reach for Cleveland’s more disadvantaged residents.

**In 2018,
Black youth
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Findings

From November 2021 to March 2022, our team conducted Youth Participatory Action Research (YPAR) in Greater Cleveland and spoke to over 61 young people (ages 12-18) from the city, largely from minoritized backgrounds. YPAR is a form of Participatory Action Research specifically aimed to increase youth participation in research and social change. We conducted in-depth interviews ($n = 18$), focus group discussions (6 discussions with 43 youth), and convened a Youth Advisory Board (15 youth) which provided oversight for the research and dissemination activities.

We will report on findings from these data, including youth experiences during the COVID-19 pandemic and how their experiences were shaped by structural inequalities, and how young people view and respond to COVID-19 vaccines.

Youth Experiences of the COVID-19 Pandemic

Remote schooling and disruptions to education created feelings of uncertainty among youth

Youth reported a high level of uncertainty and anxiety that arose as a result of months of remote learning, hybrid school, and rapid changes from in-person to online classes. In Cleveland, schools shutdown in the spring of 2020 effectively for a number of months. While the reopening of private and charter schools varied, the public school district, Cleveland Metropolitan School District, stayed closed until September 2020, when they were able to secure tablets, laptops, and broadband and Wi-Fi hotspot access for youth. This did dramatically improve access to the internet and enabled participation in online classes. The school district remained in a remote learning format until March 2021.

While the public school district had a unified approach to COVID-19 precautions, other private and public schools outside of the district's control had different and often confusing approaches. Some institutions went to online classes for months, while others adopted a mix of online and in person classes that were frequently scheduled at a moment's notice. This contributed to the overall sense of stress among students. Some students ($n = 10$) were able to find support within their family. Others had the socioeconomic means to switch schools if their environment was too stressful, but this meant a change of residence to access a different public school.

"Mine was horrible for me. I couldn't comprehend a thing and I felt so stupid. I felt like I was just like the dumbest thing in the world. I was like, I just don't understand why so many people are thriving online and I like I can't do it, I was a straight A student, 4.0 GPA, never anything less. And when the pandemic hit, I got my first D. And I freaked out like I think I was like 'Mom, I need to transfer now.'"

– Female, Mixed (Black and white), 18 years old, Slavic Village

"Like, just time in general, like, you have to think about how everything could change and time is very valuable, because it's like everything now is so extreme and definitely different for us. And like, I definitely do miss those experience. So it kind of like, you're just living in the moment, just have to be present you know, and that is stressful."

– Female, Latina, 12 years old, Ohio City

Questions were raised by many youth participants over the effectiveness of online schooling, as a majority of participants ($n = 13$) reported negative experiences with remote classes. A few students ($n = 3$) did thrive online and were able to focus more on school without the distraction of their peers.

"I've been struggling in school, but this pandemic, it helped me because I'm just in the house. I've been allowing no people, no distractions; I've been getting a lot of work done. And this, it made me focus on a lot of stuff and maybe better myself."

– Male, Black, 18 years old, Richmond Heights

Being forced to stay in the house was a positive experience for some youth. One participant went on to describe how his mother was a big source of support. He initially struggled to wake up on time and join classes on his laptop. His mother would wake him up and call him throughout the day to make sure that he was "in school" on Zoom. However, far more students struggled with online school.

“Academically, I got lower grades. But I like to get As. Instead, I got like B’s. You know, it felt a little bit harder to do because there’s no face-to-face interaction with your peers or teachers. So it felt a little bit confusing. And, it felt hard to just reach out to the teacher themselves.” – Male, South Asian, 12 years old, Mayfield Heights

Many of the participants are still scrambling to catch up academically after months of struggling to learn in online classes. Some have taken on extra jobs so that they can earn more money. While many classes are back in person, there is still a profound sense of isolation, loneliness, and anxiety over the future. Many students feel that the school system has failed them, while others feel that the schools and teachers, are not doing what they can to keep students safe during the recent omicron variant surge.

“We have some teachers who don’t even put their masks on correctly. Really, they pull their masks down sometimes. Yeah, it’s like one of my math teachers. I understand that it gets hot under the mask sometimes. So it’s okay, if you put a mask down for a second, like to get some air, or like, you just put your mask down. But can’t they do that in the restroom or outside the class? Drink water, pull it back up. But what like, pull your mask down the class full of students?”

– Female, Black, 16 years old, Cleveland Heights

Youth faced numerous mental health challenges during the pandemic

Our findings additionally indicate that there is an under-reported crisis of mental health among young people, as many reported symptoms of anxiety and depression during the pandemic that continue to affect their behavior and school performance. While some found space and support during the pandemic to improve their mental health, others reported a worsening of symptoms. It was indicated that additional and targeted support may be needed, with a universal need for increased support for wellness in our schools and communities.

Many participants’ COVID-19 experience was characterized by stress, uncertainty, instability, and a lack of clarity over what might happen in the near future. Youth also described perceived anxieties over getting COVID-19 and passing it to vulnerable family members. Others had pre-existing mental health challenges that worsened during the pandemic. In three cases, they actually improved quite a lot. Older teens in the study reported more experiences with depression and anxiety than younger teens, and females reported more mental health challenges than our male participants.

Several participants ($n = 10$ from the interview group) described mental health issues throughout the pandemic, particularly in the early days. These descriptions varied, from generic descriptions of “mental health issues,” to feelings of helplessness, post-traumatic stress, sadness, and hopelessness.

“Yeah, I was somebody who dealt with like, mental health issues, like it was is hard. I got too much going on. I feel like it was a lot of pressure for real. I always gave up. So many times, like I would have mental breakdowns, stuff like that. But I have people around me that help, like football, my friends and my family and for real, my girl.”

– Male, Black, 18 years old, Lee Miles & South Euclid

For those youth participants who could cope with mental health challenges, the availability of support in their social environment was critical. For some teens who described mental health challenges, two cases were perceived to be severe, and both fortunately received treatment, improving during the pandemic after finding support from psychiatrists and therapists. One participant describes her experience suffering with depression since middle school, and how this was exacerbated by the pandemic.

"And this was like, way before the pandemic, because it was just like, I was deemed as being lazy, and I'm not lazy, I was just like, very sad. And so like, it's really hard to like, focus on schoolwork, and focus on everything else, when like, there's these like, negative thoughts just going on in your brain that you kind of feel like, you can't really do that stuff, or what does it matter if you do that stuff or not? Like, who cares, you know.

During the pandemic, it was a little bit difficult because I just sometimes, like, I just wouldn't show up to my online classes. Like, I didn't have to show up to my online classes. On top of that, during this period of time, for most of the pandemic, I wasn't medicated. I didn't have an antidepressant or anything.

I tried holistic methods like ashwagandha and St. John's warts, but I felt like it didn't really help that much. So eventually, when I turned 18, I got to talk to an adult psychiatrist, and she put me on Lexapro [an anti-depressant], and we're, we're good. We're great. And that's it, it feels better. But before, like, it just felt like, anxiety and depression, like made so many things just so difficult. It just felt like, everything was like so irrationally difficult in my head."

– Non-binary, 18 years old, Native American and Black, Buckeye-Shaker

In addition to this participant, four additional participants described long-term challenges with mental health. For example, one participant talked about the ongoing struggle with mental health and post-traumatic stress disorder. Another participant found support from her mother, who encouraged her to see a therapist. Like the participant above, when they improved their mental health, other aspects of their life improved as well, from school to social interaction. One younger teen who talked about mental health challenges described finding space online to socially connect to his peers.

"At first, I felt like really depressed and like, bored, you know what to do, what to do. But then, eventually, I started finding new things online. Like, I started a YouTube channel to just like, cope with it. And like, yeah, we started, like, started doing stuff that I've never thought we'd do in the past. But now, we just like, post vlogs unbox videos, and post vlogs of our trips. Sometimes we play like a game among us, sometimes one or two times a week." – Male, South Asian, 12 years old, Mayfield Heights

These participants were largely able to cope with mental health challenges, due to the support of family, sports coaches, friends and partners, and finding an online community. Nevertheless, additional sources of support are needed for youth, particularly those who did not find the support they needed.



Policing practices shape young men's experiences in their neighborhood

Several young people in this study, particularly young Black men, spoke about the impact of policing practices on their everyday experiences. These narratives would often emerge earlier in the interview, when discussing how they fared during the pandemic and lockdown. Rather than focus on school as a major challenge, as other youth did, for some young men a major area of concern is policing practices in their neighborhood.

One young man of color (18 years old, Euclid) spoke about traumatic experiences that he had with local police. The first time, he was young, maybe 12 or 13 years old. He describes stopping on the sidewalk on his way home and looking at someone's house. While he was standing there, someone must have called the police, because an off-duty police officer shows up moments later as he is walking away from the house. He was arrested for "trespassing." His mother was called, and had to come speak to the police. He recalls feeling humiliated. He recalls having to go to court and taking a plea deal, whereby he plead guilty to something that he did not do, just to avoid any jail time. This was not the last incident he would face.

"I was home, chilling in the garage with some of my friends. I think a police officer went past our house, and then came back. As he came back, he came up into the garage and he freaks out. He said, 'everybody,' – he pulled out his gun and said – 'put your fucking hands in the air, put your fucking hands up.' We were like terrified. Like two more officers showed up and then like basically yeah, it was a lot of stuff that you know... my mom wanted to go and report it at the station, but the police convinced her not to." – Male, Black, 18 years old, Euclid

He described this as another traumatic experience. He went on to describe how he mostly stays in the house, going only to work or other places where he needs to be, but while limiting his movements. For him, isolation during COVID-19 was not particularly new, as he would already limit his movements out of the house.

Family and social networks are a critical source of support for youth

Having several different sources of support, whether within a participant's family or friend group, made a difference in how participants experienced the pandemic's many challenges. Several participants ($n = 25$ from interviews and FGDs) described their support systems, which primarily centered around their parent ($n = 10$), most often the mother, or around their friends. However, these relationships of support were often tenuous as parents and friends were also described as facing challenges during the pandemic, from working in vulnerable environments to struggling with their own mental health challenges. Participants mentioned how the pandemic showed them who their true friends were and who they could really trust, because those were the ones who continued to reach out when it was not possible to be socializing in person.

In a focus group discussion at one school, younger youth (ages 12-14) talked about "putting up a wall." One student felt that adults, particularly their mother, would ask them something, and when the student responded, asking their mother to do something in a particular way, they felt that they were not heard. They went on to describe how they did not understand why their mother asks their opinion, when it was not perceived to be valued. Other students in the group agreed that they had similar experiences with various adults in their lives. This contributed to their sense that their voices did not matter or that adults were generally dismissive toward them.

Many participants live in vulnerable households, with parents working in essential jobs like health care, some live in single-parent households, and others described working to support their families. Some live with extended family due to a variety of reasons, such as wanting to live in a "safer" neighborhood, to living with an aunt because they did not get along with their parent. Within these complicated environments, sports coaches also became an important source of support and stability. Some coaches would step in and use creative means to hold practice, even when schools were closed. One participant describes:

"With putting school online, that's one thing you tend to take away: a sport. Sports keep people out of trouble. It's where I can take out my anger without like doing something dumb. The pandemic took that away. I was also showing up to football practice, our coach made sure we had a place to practice and that kept me out of trouble." – Male, Black, 18 years old, Lee Miles & South Euclid

Two themes are represented in this participant's narrative. First, transitioning to remote school meant that he could not participate in sports and sports were an opportunity to stay out of trouble. Prior to this quote, the participant spoke about his home neighborhood of Lee Miles where there was multi-dimensional poverty and he regularly witnessed theft and drug sales. He wanted to leave that area and his family moved to South Euclid to a better social environment. Second, at his new school in South Euclid, sports were a major source of support for him and his friends. However, several friends quit football during the pandemic. Most would stay at home, but he chose to start working to support himself and his family. At times, he wanted to quit football, but he cited the support of his girlfriend as a reason for staying involved.

Youth views on COVID-19 vaccines varied by age and social context

Youth discussed a range of views on vaccination, ranging from total refusal to acceptance of three doses of the vaccine, which includes the booster shot. Out of 18 interview participants, 10 were vaccinated and 8 were unvaccinated. Our YPAR group (consisting of 10–13 year olds) was largely vaccinated. Few youths were totally accepting or totally refusing of a COVID-19 vaccine. Most participants constituted a middle ground, which ranged from uncertainty about information on the vaccine, to identifying peer pressure as a reason to not get vaccinated, to needing the vaccine so that they could travel. For the older youth in the study, the decision around vaccination was largely accompanied by on-going critical reflection and education around the vaccine's safety, their level of risk, and the risks of those close to them.

Many youths did not prioritize vaccination as a relevant or important aspect of their lives. Several reported low risk perceptions of COVID-19. However, even some of these youth perceived those around them to be of high risk, which was one of the motivations for receiving the vaccine. In this section, we describe the range of youth responses to COVID-19 vaccination, focusing on perspectives based on social differences (gender, age, geographic location, social location). We then describe how vaccine attitudes are embedded in a wider ecosystem of parental and peer influence. Then, we discuss the role of social media and mixed information or '(mis)information' in informing their views.

Youth views on COVID-19 vaccines varied by age and social context

Many youths reported an unwillingness to get vaccinated. While some expressed an outright refusal of the vaccine, their decision-making was often complicated.

"I really didn't want to get vaccinated because some people at the beginning of the vaccination, people would say you know, that they do stuff to people or don't take it, it might feel funny after. Stuff like that, people just saying stuff making me not want to take the vaccine. But yeah, that trying to convince me not to take it. You know. I was like, I'm still scared. I don't want to take it. I know it's probably the right decision."

– Male, Black, 18 years old, Richmond Heights

This participant described how his mother had taken the vaccine after initial hesitancy. She changed her mind when her sister died from COVID-19 and began to take the virus more seriously. He also takes the virus seriously and described different prevention strategies like wearing masks or avoiding crowds. However, he did not know whether the vaccine prevents you from getting COVID-19 or prevents you from dying from COVID-19, and combined with other information that it was not safe, led him to decide that he did not want to get vaccinated. He did not want the vaccine because he did not want to "end life early" from any potential bad effects of the vaccine.

Others cited low risk perception as a reason to not get vaccinated. This was a sense among youth participants that they are not at high risk of severe COVID-19 or death from the virus. Because of that, they did not feel as though COVID-19 was a threat to their long-term health or well-being. Many participants contracted COVID-19 throughout the pandemic and described it as a mild cold. Even those who had family members who were ill or died, described the difference between family members and themselves. Some relatives were younger with no co-morbidities, and this impacted how they perceived risk in relation to the virus. One participant talked about this and also discussed the idea that people can still get COVID-19 even once they're vaccinated.

"I am not vaccinated. I don't really see any change, as I see people getting COVID who had the vaccine, so it's like, oh, no... I don't, really want it. COVID is always everywhere, all around the place. So it's like, I don't really think that the COVID vaccine would help me, personally, I don't see the point. I just stay safe with masking and all."

– Male, Black, 18 years old, South Euclid

This idea of "not seeing the point" was raised by this participant. He did go on to say that his mother is vaccinated and has told him to get vaccinated. She talked to him about the vaccination, but he replied that he was "not a big fan." They disagreed and the issue was not fully resolved, but since he is 18 years old he felt that he could make a decision for himself.

Only one participant cited religious reasons in his vaccine refusal. While he did not identify with any particular religion, he did describe vaccination as being "the mark of the beast." When probed on what that meant, he described this further:

"I believe in like, the rapture, or like, one day God will come. Everybody who did good and life was already good will go to heaven. Everybody else will be left down here. That's what I believe, I believe. And I believe like, if you get the vaccine, it will be one of the people who are left down." – Male, Black, 18 years old, Lee Miles & South Euclid

Earlier in the interview he had not identified with any religion, but when probed about his views on the "mark," he described reading this in the Bible a couple of months prior to the vaccine becoming available in the US. Once it did become available, he associated that reading with the vaccine. When asked whether he's spoken to anyone else about this, he said his brother feels the same way.

Youth uncertainty in relation to the COVID-19 vaccines

Regardless of vaccination status, several young people in this study ($n = 14$ of 18 interviewed, 3 FGD participants), whether or not they had taken the COVID-19 vaccine, expressed doubt. These uncertainties ranged from concerns over safety to questions over how quickly the vaccines were developed and the lack of data over time to monitor any long-term health outcomes. When asked where they received information, some said that they do their "own research," which ranged from looking on Google or social media, to reading scientific studies. Many others reported that they did not have a person whom they could direct their questions to, while others were not interested in additional information.

"I think about the intentions and also the time period of the vaccination development, of the vaccine coming, after we found out about COVID. And also, the information that our media is portraying, that we knew about COVID and knew about the entire possible pandemic, and we did nothing about it. So, they [her unvaccinated friends] feel like, oh, well, they're not telling us information, but now they're telling us information. They're telling us to get it but they're not giving us all the information and so they feel like they're being blindsided in a way, by not fully knowing all the facts and all the figures and you just feel like it didn't go through the correct testing and the correct procedures to be given to the public."

– Female, Black, 18 years old, Lee Miles

Although the participant above is vaccinated (her university requires it), she highlights many of the concerns that her peers shared when making decisions about vaccination. Young people in this study are inundated with information, from social media and other sources.

This plurality of information makes it difficult to know what to decide in relation to the vaccine.

"So, people were saying, like, you know, people that got the vaccine are dropping faster than the people that don't get the vaccine. And I'm not doing any research on this? I don't know if that's true, but this is what I'm hearing."

– Female, Black, 17 years old, Buckeye-Shaker

She is currently unvaccinated but is considering vaccination and went on to explain that she needed to do research on this. In the meantime, she takes COVID-19 prevention seriously and makes sure to stay away from crowded spaces, wear a mask, and use sanitizer regularly. Her father is vaccinated, but she lives with her mother who is not vaccinated.

Another participant expressed similar uncertainties. She is not able to get vaccinated because she has an autoimmune disease and has not reacted well to vaccines in the past. Despite this, she is still not sure about the safety of the vaccine.

"I just wish I don't know I wish I had an answer. I wish I had one opinion, there's so many points of views and perspectives and angles to look at this, there's so many different parts of it that you have to think about, and consider before even trying to formulate a sentence about it that, I don't know, I really, I do. I just wish that it was over." – Female, Mixed (White & Black), 18 years old, Slavic Village

Separately, she spoke about friends' vaccination concerns that "they're just pushing the vaccine out to anybody," which seemed to make her friends wary about getting it. Though, in her friend group, very few people are talking about the vaccine at all. She feels that it's just not a priority or topic of discussion in her group.

During a focus group discussion, one participant (Female, Black, 15 years old, Maple Heights) mentioned that her mother encouraged the vaccine and so the participant got it. She trusted her mother because she worked for one of the large hospitals in Cleveland. She was scared at first to get it because others said it hurt or got sick after, but her experience getting it at the clinic was good, she did not feel anything (like pain) or have any pain or illness after. She also mentioned that her dad had a respiratory issue, and so she was very worried about getting him or her grandmother with Alzheimer's (who lived with them) sick. That was another motivation to wear masks and get vaccinated. She mentioned that she did get COVID at one point during the pandemic and was not worried about herself but socially isolated in her room to protect her father and grandmother.

A second participant (Male, Black, 15 years old, Maple Heights) in the same focus group mentioned that he did not usually get vaccines, mostly because he had allergies, but he did get the COVID one. He did not want to at first, because he was not sure if he would have an allergic reaction or if it was safe because of the mixed information he was hearing about its safety. Then, over time, he knew so many people who got it and were fine. He noted that he got it at a walk-in pharmacy location and had no adverse reaction.

A third participant in the focus group mentioned that she got the first dose of the vaccine with her mom but neither of them received the second dose. When asked if there was a reason, she said not really, they just never went back. Over time she started reading up on it and was worried that there was not enough research monitoring it over time and noted that sometimes adverse side effects can occur years later. She then stated that she did not think she would get the second one. She said her mother is spontaneous, so she thinks she spontaneously decided to get it then changed her mind. She spoke about her mother's comments around the need for other forms of prevention such as taking probiotics, vitamins



and eating healthy. The participant seemed to agree. She also mentioned that they both recently had COVID, with uncomfortable but minor symptoms.

A final area of confusion was why vaccinated people were still getting COVID-19 after having the vaccine, which played into youth's narratives that the vaccines may not actually work. One participant, who is vaccinated, explains the views of her friends:

"And they act like okay, well, why do we need vaccines, and I'm like, a vaccination is not a cure. They think that if you get the vaccination, you won't get COVID. And so, when they see vaccinated people getting COVID, they get confused, or they feel like they've won an argument or something." – Female, Black, 16 years old, Buckeye Shaker

Youth uncertainty in relation to the COVID-19 vaccines

Vaccinated youth in our study tend to be younger (12–14 years old) rather than older (15–18 years old). In the school-based YPAR group, youth are almost all vaccinated. Getting vaccinated also linked into participants' narratives over "safety." Getting the vaccine allowed them to feel safe and to protect others around them. It also allowed their parents to feel that they were safe engaging in social settings, such as going to the mall or a birthday party. Many spoke about the vaccine being a mutual choice between them and their parents and that it made them feel safer. They were now able to go out more and re-start their lives. Their parents also allowed them to go out more because they were vaccinated. Being vaccinated was an important marker in their lives between the pandemic as a major limiting factor in their social interactions and being able to re-join the world.

Participants who spoke about being vaccinated also usually had parents who were vaccinated and friends who were largely vaccinated as well.

"I got to two doses, and I got the booster like, like few days ago...Yeah, everyone [in my family is] vaccinated. My brother's only got the two doses though, because the boosters are available to him, but everyone in the family is vaccinated...all my friends also vaccinated, I don't know when they're going to get the booster but they said they're gonna get it." – Male, South Asian (Indian), 12 years old, Solon

This young participant spoke about his sources of information, which were either the CDC website or The New York Times. When we asked how he decides which information to follow, he spoke about needing to understand the scientific studies underlying a news report or policy guideline. If the news report was not backed by scientific evidence, he felt that he could not trust it. This decision-making led him to get vaccinated as soon as he was eligible.

Similarly, another participant spoke about getting the vaccine, though he did know some friends who were unvaccinated.

"I strongly advise the vaccine, I'm definitely not against it. That is 100%, I am not against it. I have a few friends whose families are against vaccination, and I have some friends who just you know, they, they don't have enough time to go and get it because they have so many sports, and they have so many things going on that they don't have enough time to, you know, get the vaccine, or they don't... just some people just don't bother getting the vaccine."
– Male, South Asian (Indian), 13 years old, Westlake

Family and friend dynamics played a role in participants' responses in varying ways. From the YPAR group, two participants said that their mothers chose for them to get vaccinated, while another's older sister took her along to get vaccinated, even though their mother did not want them to get vaccinated. This was important because in the US youth would need an adult to sign the consent form for you to get vaccinated.

"Well, I got the vaccine, on Friday, I'm waiting two more weeks to get the other second dose. My mom didn't want me to get the vaccine but my sister was like, arguing with my parents telling her to get it because her school requires it and she doesn't want to take like the COVID tests like every single day."
– Urban Community School FGD, Clark-Fulton

Lastly, only one participant described getting vaccinated to be able to travel.

"I had to get the vaccine. But I got it a couple of weeks before that I was supposed to, because I had to go to Puerto Rico. I got it two weeks before my birthday. But they said that it was fine. It was." – Female, Latina, 12 years old, Clark-Fulton

Sources of information: Social media and online information

Young people in this study described the plurality of sources that they are regularly exposed to, almost all online news websites or social media. Overhearing their parents listening to the news on the television was additionally mentioned as a source of information. For young people who spent much of the pandemic in social isolation, spending time on social media became a point of connection with the outside world. However, this experience differed by age. Older youth (15–18 years old) were more likely to have smart phones and know others with smart phones compared to younger youth in this study. For older participants (15–18 years), social media sites like Instagram and TikTok were most popular and was where they would get most COVID-19 information, unless their parents were speaking to them about it. Only one person mentioned a specific account where they received information:

"Oh, you know, this page was called the Shake Down. And like, some people just repost things. It's not necessarily, I don't follow the anti-vax cause. But like, some people, I follow, just repost some stuff and take the time to watch the video. And I don't watch it, like I want to care about it as much. It's just that's what I'm hearing is what they're seeing." – Male, Black, 17 years old, Cleveland Heights

For older teens who referenced social media, it is not a conscientious choice to seek out COVID-19 vaccination information there. Instead, they describe seeing information that their friends re-post or used to share when the vaccines first came out. They are not, per se, following accounts that traffic exclusively in vaccine misinformation, nor are they likely to know about specific people in the anti-vaccination movement. The information is more diffuse and pervasive as narratives have spread across a wider network of people. Now, friends' shared posts are less frequent. However, that previously shared information stood out in several participants' minds. One participant spoke about her experiences on TikTok:

"Like I've been seeing online, I don't know if it's true or not, which is scary...I'm not sure about the information. It could have probably been clearer, like vaccines affect your genes or something, or just stuff like that. Because we've heard that it does something like once you get it in, it affects your pregnancy or something. I don't know. But there's just like, little stuff like that. Like if I see that then, what else could happen?"

– Female, Black, 16 years old, Buckeye Shaker

This participant's narrative is emblematic of the kind of uncertainties that we heard from young people in this study. They were most exposed to a variety of vaccine information last year (2021), when vaccines were becoming more widely available, but this exposure has decreased in recent months. As the participant describes, she has heard just enough stories of vaccine safety issues, which contributed to her decision to not get vaccinated. She went on to conclude that:

"I probably think they're not telling the whole truth about COVID."

– Female, Black, 16 years old, Buckeye Shaker

Parental Influence on Vaccine Attitudes

There were age differences in terms of the level of parental influence on young people's decisions to get the COVID-19 vaccine. Younger participants in this study reported that their parents were a major influence in their decision to get vaccinated. In contrast, older participants (16–18 years old) spoke about one-off conversations that they had with their parents. For those who did speak about vaccination with their parents, it was often a parent telling them to get vaccinated, and their response was to either decline or say that they were not sure yet.

One participant's mother and girlfriend told him to get vaccinated, though he said he was not sure about the safety of the vaccine.

"I personally haven't gotten it myself, but my mother is telling me I should get it and my girlfriend has hers. I haven't got it yet. But with her [my girlfriend's] experience, it hurts basically, her arm hurts at first, but honestly it doesn't really affect you so much." – Male, Black, 18 years old, Euclid

He went on to describe how the vaccine was not a priority for him, but instead getting into college, playing sports, and finishing school were more important priorities. Another older teen did not know whether his mom was vaccinated, and he was not vaccinated, though he described the precautions his mom still took to prevent COVID-19.

"Yeah, she doesn't talk about it. But she, like she was actually like, don't like quite go out with the mask and stuff. She made sure she had a mask on. Like, and I also heard people say that, like masks don't help and stuff like that. But yeah, my mom was actually doing quite good with the management research and staying safe if she walked out the house sanitizing stuff." – Male, Black, 17 years old, Cleveland Heights

For younger participants (ages 12–15), parents were described as influential in decisions to get vaccinated. Younger participants reported on family decision-making about the COVID-19 vaccine. Their parents and, if applicable, older siblings received the vaccine, and they supported the participant to get vaccinated when they were eligible. This came up during our YPAR sessions with younger participants on the near west side, in Clark-Fulton. Younger participants made these decisions with their parents and described feeling that they were keeping their family safe by getting the vaccine.

Histories of injustice and youth views on vaccination

While there are common experiences among communities of color in Cleveland, racism and inequality is experienced differently by different communities and people. While narratives related to histories of medical experimentation were mentioned by Black youth in this study, Latinx/Latine young people did not discuss this. Instead, there are other more salient aspects of their experience that may apply.

The well-known Tuskegee Syphilis Study was mentioned by one vaccine hesitant participant and three vaccinated individuals. One other participant felt that the study had been misconstrued, that while of course it was medical experimentation on Black communities, it does not necessarily apply to the COVID-19 vaccines. One vaccinated young person speaks about this history of experimentation.

"I am in African American woman who has like many health issues, a lot of my friends are African American, African American women. Um, there's a lot of like, things that go on in like, the public health system that discriminates against us that we have, like no control over. And we talked about how in hospitals and things like that, there's a higher percentage of African American woman dying during childbirth, because they refuse to believe that African American women don't feel pain as much as other ethnicities women do. And there have been like, many like different like studies that African Americans, men and women have been used as kind of medical crash dummies for things.

And so, there have also been, like studies done on that. And also being a Native American part Native American, there have been studies and things where, when Christopher Columbus came over here, they brought sicknesses and Western medicine, stuff like that, and injected us with it. And we've died, like, Native Americans who've died because of the Western medicine that's been given to us."
– Non-binary, Native American and African American, 18 years old, Buckeye-Shaker

As they say, this is not just about one event in history, but it is about longstanding health inequities, about maternal mortality and not being taken seriously by medical providers, and it is about their history as a Native American in the United States.

The participant who has not been vaccinated speaks about her views on Tuskegee and other histories of injustice. She describes herself as being "50-50%" on whether to get vaccinated, but these histories make her doubt whether she should.

"I know, you probably hear this as an example, the Tuskegee experiment. Has that experiment really had, like an impact on my decision? I'm not saying that, like, you know, they're trying to do it again, or anything like that. But like, you can see how people are a little iffy on, you know, taking stuff from the government. A lot of people forget that history. And it's crazy how they're like, I didn't even learn this in school. I learnt it on TikTok. I don't understand why they don't teach this. But that's all I really just know about that. I'm already 50-50 on whether I should get it [the vaccine] or not." – Female, Black, 17 years old, Buckeye-Shaker

She links this to current "controversies" in US public discourse about Critical Race Theory.

"My English teacher, she had us write a letter to I think it was somebody on like a government or something for herself. And it was about teaching critical race theory, in school. And like a lot of people, he was telling us, like, you know, a lot of people don't want that, because they're scared of like, you know, what the black people will basically do, like retaliate or something, we'll be so upset that you know, we'll tell you something, but my thing is, like, y'all know, it's wrong. I will just tell you; our schools teach us the same thing over and over again. We've learned about the same black people every year. Everybody knows who Martin Luther King is, Rosa Parks." –Female, Black, 17 years old, Buckeye-Shaker

She goes onto explain that she would like to learn about other historical Black figures who have advocated for civil rights and justice. She is concerned that the curriculum in her school is still white-centric, teaching about well-known people who have not been too controversial, unlike Malcom X or others in the Black Panther Movement. For her, she is not learning what she needs to learn in school to find out the full story about Black history in the US.

Youth Understanding of Trust

Understanding how young people view, operationalize, and deploy trust requires an emic or insider definition. This allows young people to say what “trust” means to them, in their own experience. Participants reported various definitions of trust in relation to COVID-19 vaccination. While it was difficult to define as an abstract or hypothetical construct, young people operationalized trust as something that is relational.

Young people operationalized trust as knowing that someone was not going to steal from you (having honest intentions), knowing that someone cares about you, and knowing that someone is honest. It is more of a “vibe” or an intuition than something that requires a lot of thought. In Cleveland, young people were most likely to trust their parent, specifically their mother, and a significant other.

As alluded to in previous sections, young people’s experiences during (and before) the pandemic color their views and relationships with people in power, from government leaders to medical providers. Young people in Cleveland have extremely small circles of trust, particularly young men in this study, who spoke about trusting their mother and their girlfriend. In terms of authorities, youth described trust differently based on age. For younger youth, their circles of trust were wider, they expressed higher trust in government and medical providers. For older youth, they expressed low trust both in the government and in medical providers, including the CDC which they perceived to be secretive or providing confusing guidance.

For older unvaccinated youth, it was hard to trust people, and many described being wary of others. This may be rooted in experiences in neighborhoods where you cannot trust others, as some youth linked this to their narratives of living around “untrustworthy” people such as those engaged in selling drugs or petty crime.

“Firstly, just I’m not really big on trust. Like, honestly, listen – I’ve been taught, taught to not easily trust so and so. It’ll be like just the vibe I get from just being around them with like, I feel like you’re trustworthy. I’ll give you a shot at me last, just, but I can obviously tell.” – Male, Black, 18 years old, Euclid

Of note, for older youth, trust did not necessarily map onto taking up guidance, where vaccination was concerned. Several older youth described being told by their parents to get vaccinated, but the conversations were stopped when the young person declined to get vaccinated. In fact, several of the older youth have parents who work in the health care system, as nurses, doctors, or administrative staff. Despite being told by those vaccinated, health worker parents to get vaccinated, several youth remain unvaccinated.

Similarly, young people, particularly those who play sports and therefore need to see a doctor more regularly for check-ups or physicals, reported trusting their doctor and receiving vaccination advice from their doctor. As one young man described it, his doctor was nice, and telling him to get the vaccine, but he did not want to. However, interestingly, her guidance did not factor into his decision making.

In this case, it may be important to separate out medical (mis)trust from trust in the vaccine. While we may assume these are linked, unvaccinated youth, including those who “trust their doctor” reported low trust in the vaccine. One person vaccinated with two doses explains this thinking:

"So I got both of them. And I was fine. I just caught COVID. Gosh, it was like February 24. And I caught it. So I'm like, okay, well, I know like, it's not gonna - it's not going to stop you from getting it. You just gonna get COVID with the vaccine. But I still had like bad symptoms. I thought it would like, make my symptoms better. Not worse. I can't taste or smell. It was hard for me to breathe. It was just a lot of problems when I was sick. I don't trust them or I don't think I'll get the booster." – Female, Black and Latinx, 18 years old, Collinwood

For older vaccinated youth, trust in medical providers does map onto vaccination uptake. Those who were vaccinated reported trust in their doctor, public medical figures like Dr. Anthony Fauci, and others who provide guidance or advice on COVID-19.

I'm gonna trust you to take care of me if I got COVID or, you know, I trust the CDC to tell me what to take. I'm gonna trust them to tell me. I feel like it would hurt them more than help them. If doctors thought that the vaccines were bad or that COVID was fake, we would know by now, many more doctors will be speaking out about it. I feel like the few that we have seen have not really, their reasoning has not been good, in videos I've watched."

– Female, Mixed (white and Black), 18 years old, Slavic Village



Recommendations for Engaging Young People in Vaccination

As we enter a more protracted phase of the COVID-19 pandemic, it is important to focus on people who are less engaged, or have been “left behind,” to ensure that they are equipped with information and access to services. Vaccine equity in Cleveland is critical as it will ensure that COVID-19 vulnerable communities have a high level of protection against COVID-19 disease and death. Vaccine equity points to the need for additional, tailored strategies that are responsive to, or embedded in, young people’s wider needs. This means addressing the “social determinants of health,” which include root causes of social exclusion. There is an urgent need to create space to discuss and tackle experiences of racism and inequalities as well as mental health.

Improving COVID-19 vaccination among young people would necessitate strategies at various levels, centered around greater youth engagement within communities. Based on the available evidence, promising areas for intervention include:

- 1 Recognize that vaccination decision making is a complex and ongoing process** rooted in young people’s political-economic and social experiences. It is not necessarily linear, in that someone will receive good vaccination information and act on it. For young people experiencing poverty, vaccination may not be a priority in their lives. Instead, engage with narratives that place vaccination within this context – of keeping young people safe in their risky work environments or at school, and how vaccination can help to ensure that they will not miss work due to lengthy illness.
- 2 Prioritize the mitigation of long-standing health inequities.** These inequities have created increased vulnerabilities especially for Black youth and their families in Cleveland in relation to severe illness and death from COVID-19.
- 3 Engage in listening sessions with youth to understand** how young people have been affected by the various COVID-19 pandemic mitigation strategies (e.g., social distancing, remote schooling, rec center closures) and how they relate to adult policy makers, including in public health. Young people were affected more by COVID-19 lockdowns or remote school than by the virus itself. Consider mitigating the effects of public health policies on youth, particularly around the issues prioritized by the youth. Validate their vaccine related concerns and provide a space for dialogue and information sharing.
- 4 Support social media campaigns and engage peer leaders,** building on the work of the Guardians of Cleveland initiative. These individuals should be young people from the communities that they would serve and should create platforms which are supportive of COVID-19 vaccine related dialogue. Disseminate information through social media accounts like Instagram and Tik Tok, through locally well-known individuals.
- 5 Consider shifting discourse around young people and vaccination.** Telling most young people to get vaccinated for their own health may not resonate with their experience of having a mild case of COVID-19, or their understanding of natural immunity in comparison to vaccination. Create a dialogue so that young people can make informed decisions about whether or not they should get vaccinated. Reasons may include getting vaccinated for their own health, to prevent symptoms associated with Long COVID, or to protect vulnerable family members. Listening sessions where the concerns of young people are understood, validated, and discussed, can help to improve engagement and wider relationships of trust.

- 6 Partner up with or start cross-sector mental health initiatives to respond to** what may be an emerging crisis of anxiety, depression, and other mental health issues amongst youth. While many youth found critical help and their mental health improved during the pandemic, others express a lack of support. Working within schools and with community partners could be a critical aspect of supporting mental health.
- 7 Work with other sectors, including the Mayor's office, to create positive spaces for youth.** While recreation centers and youth centers play a vital role in young people's lives, there is a need for more youth-friendly spaces and for opportunities for young people to share their concerns and their voices. This may include space for young people to discuss a related crisis of policing and police surveillance in Cleveland.
- 8 Provide support to trusted mentors, teachers, and parents,** to engage in positive conversations with young people about vaccination. This information could be tailored toward older teenagers, which we have found to potentially be more vaccine hesitant compared to younger peers. This could also include template lesson plans for teachers to teach news and media literacy skills, so that young people are equipped to discern between credible information and misinformation.
- 9 In the long-term, build relationships of trust with young people,** and not just with youth-serving organizations which may only reach some youth in Cleveland.

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