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JUNE 2021

Intentions and Views around COVID-19 Vaccination Among K-12 Populations

Findings from Parents, Teachers and School Leadership: February - April 2021

MONITORING SCHOOL COVID-19 PREVENTION STRATEGIES PROJECT: TRIANGULATED REPORT

INTRODUCTION

Project Background

To make informed decisions, public health, schools and elected officials need timely, actionable and school-specific data to help successfully prevent the spread of the COVID-19 virus in K-12 settings—and to make sure schools can open for in-person learning and stay open safely.

The CDC Foundation, in partnership with Deloitte and technical assistance from the Centers for Disease Control and Prevention (CDC), launched the Monitoring School COVID-19 Prevention Strategies project to collect data on the impact of COVID-19 on the social, emotional, academic and mental health of the K-12 community. Through multiple data collection methods, the aim of the project is to collect, analyze and disseminate near real-time data to:

- Help school districts and community members (e.g., superintendents, principals, teachers, parents, students) make **actionable, informed, data-driven decisions** to prevent the spread of the COVID-19 virus in K-12 settings.
- Characterize **policies, practices and interventions** to support implementation of school COVID-19 prevention strategies.
- Build awareness around **successes and challenges** related to COVID-19 in K-12 settings.
- Improve understanding of **social, emotional, academic and mental health** impacts on school communities.

Parent helping a child get ready for school

Report Overview

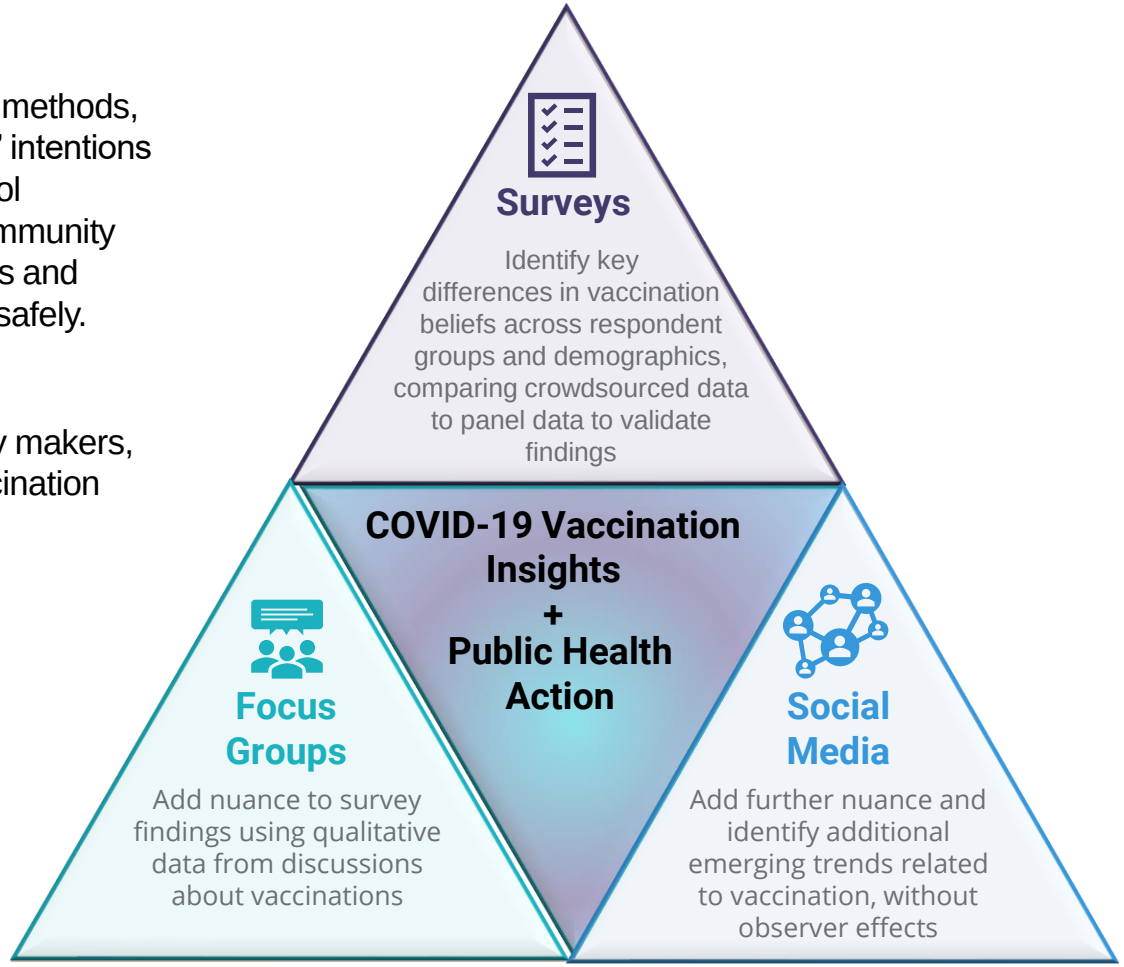
Purpose

The purpose of this report is to triangulate data across several data collection methods, from different perspectives to better understand the K-12 school communities' intentions and sentiments towards COVID-19 vaccinations and impacts to general school vaccinations during the 2020/2021 school year. Findings represent school community perspectives between February and April 2021. The goal is to inform decisions and improve support to help schools reopen for in-person learning and stay open safely.

Audience

This report is intended to be used by public health professionals, school policy makers, and the school community to better understand differences in COVID-19 vaccination intentions and plans among various groups within K-12 school communities.

Contents



Triangulation approach

Report Focus and Guiding Questions

This report aims to inform three guiding questions:

1. **COVID-19 VACCINATION INTENTIONS**
   What are the plans and sentiments around COVID-19 vaccination from each respondent group (parents, teachers, and principals)?

2. **DISPARITIES & ASSOCIATIONS**
   For each group, do COVID-19 vaccination intentions differ across demographic or school characteristics? What other factors are associated with vaccination intentions?

3. **SCHOOL PLANS AND POLICIES**
   What are the attitudes of principals towards mobile vaccination clinics and enforcement of other, non-COVID-19 vaccination requirements? How have school vaccination policies changed to adapt to the COVID-19 environment?

Data Sources

The project includes data from multiple collection methods to identify key findings and provide additional context to these findings. Please refer to the appendix for additional details on data sources and weighting methods.

Cross-sectional online surveys

Web Panels [Weighted]
Parents and teachers reported on a variety of topics related to COVID-19 and reopening schools safely.
- n = 4,039 | N = 70,372,798 parents of K-12 students (3/2/21 – 3/10/21)
- n = 1,842 | N = 3,734,000 teachers of K-12 students (3/3/21 – 3/31/21)

Sector Surveys [Weighted]
Principals reported on a variety of topics related to COVID-19 and reopening schools safely.
- n = 576 | N = 117,110 principals and vice-principals (4/8 – 4/15/21)

Crowdsourcing Surveys [Unweighted]
Teachers and school staff reported on their vaccination plans and beliefs.
- n = 566 teachers (2/17/21 – 2/24/21)
- n = 600 teachers (3/19/21 – 3/27/21)
- n = 530 school staff (2/17/21 – 2/24/21)
- n = 494 school staff (3/19/21 – 3/27/21)

Virtual focus groups

Parents of Students with Special Education Needs
Parents shared their thoughts and experiences related to navigating school with their children with special education needs during the pandemic.
- n = 5 (3/27/21)

Teachers from Rural Areas
Teachers shared their thoughts and experiences related to teaching and schools during the pandemic, with a focus on teaching in rural areas.
- n = 7 (3/15/21)

Superintendents
Superintendents shared their experiences reopening and/or closing school districts during the pandemic.
- n = 5 (3/16/21)

Students of Color
Students shared their thoughts and experiences related to attending school during the pandemic.
- n = 8 (4/5/21 - 4/6/21)

Social media listening

Public Online Conversations
Public social media posts from Twitter, Facebook, Instagram, YouTube, Reddit, forums, blogs, reviews, Quora and WordPress were collected using COVID-19 vaccination and K-12 schools keyword queries*.
- n = 1.82 million publicly available posts (1/1/21 – 4/25/21)

Sentiment Analyses
Sentiment analyses were conducted using a Natural Language Processing algorithm provided by the Sprinklr social media listening platform. Sprinklr's sentiment analysis algorithm categorizes posts as positive, negative, or neutral with approximately 80% accuracy.

**Queries were used to identify posts from a specific perspective (key phrases such as "I am a teacher" or "as a parent") and from a specific demographic (keywords such as Hispanic, urban, rural, etc).*

The results included in this report focus on data from the web panel and sector surveys; however, findings shown were also elaborated on with crowdsourced , where available. For the remainder of the report, "**Survey Findings**" refers to web panels or sector survey data. Crowdsourced, focus groups, or social media findings will be noted separately.

Process for Identifying Key Findings

The process below was used to identify insights and triangulate across data collection methods.

CONDUCT STATISTICAL ANALYSIS

Using the weighted cross-sectional web panel survey data, a variety of statistical approaches, such as Chi-square and logistic regression analyses to estimate unadjusted odds ratio, were conducted to test for associations (significance level $p<.05$) between key vaccination outcome variables within each survey data set.

VISUALIZE

Findings ($p<.05$) identified in the cross-sectional web panel surveys were compared to crowdsourced survey responses to provide a deeper understanding of results Data from the cross-sectional surveys were then visualized.

ADD QUALITATIVE NUANCE

Qualitative analyses of focus group transcripts and social media posts were used to identify key statements to further illustrate underlying attitudes and findings from surveys.

NOTES AND LIMITATIONS

The research team acknowledges several important caveats to this data affecting interpretation, including:

LIMITATIONS

- Due to the cross-sectional design, analysis cannot determine causal relationships due to temporality bias.
- Panel participants may not be representative of the populations of interest (all parents or teachers) which affects the generalizability of results.
- As all surveys were collected through a web-based platform, results from individuals with limited or no internet access may be under-represented.
- As results are based on self-reported data, biases such as self-selection, social desirability, and misclassification may impact findings and limits the generalizability of results.

NOTES

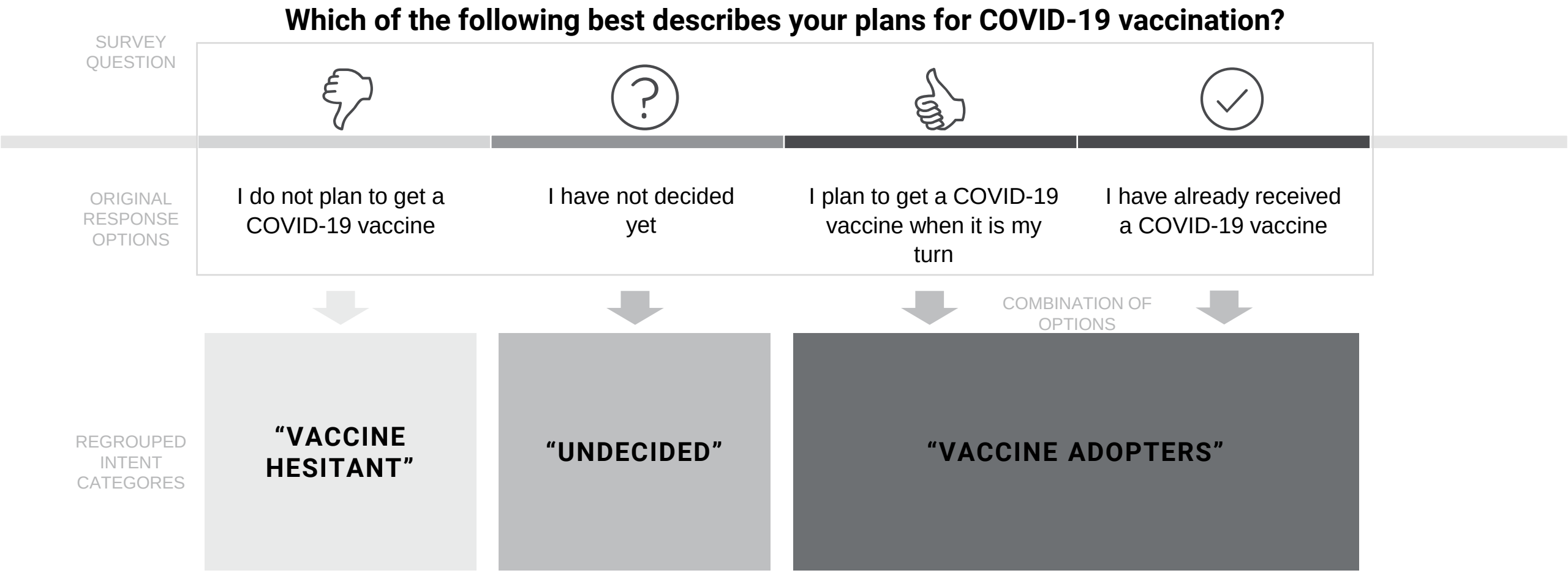
- Post-collection data processing, cleaning (to ensure responses are in line with skip and logic patterns), and imputation (to correct for incomplete item responses) were conducted on the cross-sectional web panel survey data.
- Multinomial logistic regression was used to obtain odds ratio estimates.

See Appendix for details on weighting approach

METHODOLOGY

Defining Vaccination Intentions

Respondents were asked to indicate their plans for COVID-19 vaccination, which were then grouped into three main categories for this report.



Summary of findings and public health implications

Summary of Findings by School Respondent Group*

At the time of the surveys (3/2/21 – 4/15/21), parents' COVID-19 vaccination intentions varied more widely than those of teachers and principals, and they reported more vaccine hesitancy (or were undecided).

PARENTS

- Although most reported being vaccinated, **20% of parents are vaccine hesitant and 19% are undecided** about COVID-19 vaccination.
- While most parents agreed that a COVID-19 vaccine reduces the "risk of getting sick" and is important for "people at higher-risk", **some questioned its effectiveness.**
- Almost **50% of parents** reported that they **would be more comfortable** with their child attending in-person school once **teachers and staff are vaccinated.**
- Among parents of school-age children, the following characteristics were independently associated with being vaccine hesitant: **non-Hispanic Black or African American, under the age of 40, household income < $50k.**
- Parents unwilling to have their child tested regularly for COVID-19 at school for in-person learning had **8 times greater odds of being vaccine hesitant** than those in favor or testing.

TEACHERS

- **Most teachers (82%)** reported that they have **already received a COVID-19 vaccine or planned to** get it when it is their turn.
- Nearly **half of teachers** believed that COVID-19 vaccination **does not prevent them from potentially spreading the virus to others.**[1]
- Almost **75% of teachers would feel comfortable** returning to teach in-person once vaccinated.
- **Female teachers** and teachers living in the **Southern** region of the U.S. had **2-3 times greater odds of being vaccine hesitant** than their peers.

SCHOOL LEADERSHIP

- **Nearly all principals** (89%) reported that they had **already received a COVID-19 vaccine or planned to** when it was their turn.
- **Over 50% of principals reported they would be comfortable** with children attending in-person school when many of the school district's teachers and staff are vaccinated.
- Some principals reported that they **didn't feel COVID-19 vaccination prevents them from potentially spreading the virus** to others.[1]
- Nearly 75% of principals reported they would likely permit **mobile vaccination units on school grounds**, and 73% would permit the health departments or another community organizations to **regularly test staff and students.**

[1]Research still underway at time of survey distribution to better understand how well COVID-19 vaccines keep people from spreading the virus
*The findings on this summary slide reflect data from the cross-sectional web panels only. The following sections of this report presents triangulated findings across all data sources.

Crosscutting Themes and Opportunities Moving Forward

This report provides new insights that can be used to improve COVID-19 vaccination in K-12 settings and ultimately create safer in-person learning environments that can protect the overall health and educational outcomes of students.

Vaccine Intentions

While most teachers and principals reported getting vaccinated (or plan to be), more work is needed to improve vaccine uptake for sub-populations (e.g., female teachers, teachers in the South). Data also indicated higher vaccination rates among teachers compared to other school staff. Moreover, 39% of parents were vaccine hesitant or undecided about COVID-19 vaccination, especially those in lower income groups and younger parents (under 40 years).

There are opportunities to better tailor communication and education to parents as well as specific groups of teachers and school staff, taking local context and socio-demographic factors into consideration.

Comfort with In-Person Learning

About 50% of parents and principals reported they would feel more comfortable with in-person learning for students once K-12 teachers and staff are vaccinated and 75% of teachers would feel comfortable returning to teach in-person once vaccinated.

Continued efforts to get all teachers and staff vaccinated will be critically important heading into the 2021-2022 school year.

Beliefs and Barriers

Across all groups, misinformation and uncertainty about the safety and effectiveness of COVID-19 vaccination persists, indicating a need for more education. Many still report barriers to vaccine access as well (e.g., transportation, childcare, etc.). Solutions such as mobile vaccination units on school grounds, which was largely supported by surveyed principals, may help overcome some of these challenges.

Teachers and schools can help promote evidence-based information and overcome perceived barriers to getting vaccinated, including providing mobile vaccination units on school grounds.

Changing Environment and Vaccine Rates

The COVID-19 policy landscape is dynamic, especially as it relates to vaccination guidance and in turn vaccine uptake. As the state of COVID-19 vaccination transforms, prevention strategies should similarly evolve to reflect the changing environment.

Conduct modeling of prevention strategies among student populations to address that some teachers and staff may not be vaccinated, and that some students are not age-eligible for a COVID-19 vaccine or may not be vaccinated.

Implications for Public Health Action

Based on vaccine related findings in this report, there are several ways that schools and their partners can act and improve vaccine confidence and uptake.

Communication and Education

- Schools and trusted people (e.g., vaccinated teachers) can provide evidence-based information and messages tailored to their unique school population and local context (to help overcome misinformation and barriers).
- Provide clearer rationale and benefits of vaccination in school-based settings and for student outcomes overall, especially as guidance changes.
- Coordinate and reinforce messages coming from schools with other sources such as school districts, Department of Education, CDC and other local, state and national organizations.
- Reemphasize that vaccines are offered at no cost (and that proof of insurance is not required) as this was a major perceived barrier.

Vaccine Delivery and Resources

- Continue exploring schools and other community sites (e.g., churches, community centers) for pop-up vaccination sites to reduce barriers around access and mistrust.
- Promote existing resources already tailored to school settings, such as CDC vaccine toolkit.
- Continue to prioritize vaccinations for teachers and staff, and consider more tailored efforts to remove perceived barriers for groups experiencing higher likelihood of vaccine hesitancy (female teachers, teachers in the South)

Further Research

- Conduct and promote additional research on populations experiencing higher rates of vaccine hesitancy (e.g., under 40, lower income) to understand specific motivators, myths, and misinformation influencing vaccinate hesitancy.

Parents of K-12 students

Findings in this section reflect weighted web panel data and unweighted crowdsourcing and focus group data.

Parent data were collected between March – April 2021 (except for social media data collected January – April 2021).

Many parents are still undecided about COVID-19 vaccination or do not plan to receive a COVID-19 vaccine

SURVEY FINDINGS

While most parents were vaccine adopters, **39% reported that they were either undecided or hesitant to getting a vaccine themselves**. Highly statistically significant ($p<0.001$) associations were observed between vaccination intentions and key demographics including age, race, income and location. Gender and region were also associated with vaccination intentions ($p<0.05$).

COVID-19 Vaccination Intentions of K-12 Parents

n = 4,039 | N = 70,372,798 (weighted)

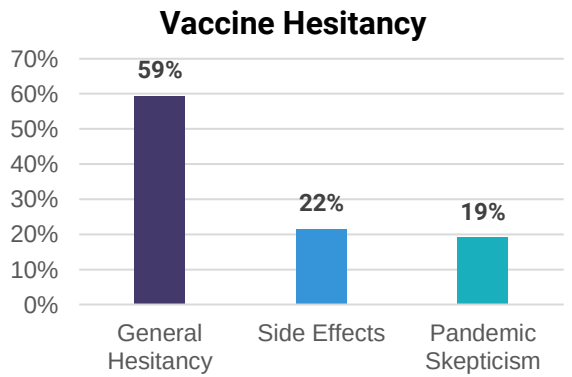
Almost 20% of parents are still **undecided** about whether to get a COVID-19 vaccine.

A fifth of surveyed parents reported that they **do not plan to get a COVID-19 vaccine.**

SOCIAL MEDIA LISTENING

Among parents expressing vaccine hesitancy on social media, **22% (or 2,521 posts) mentioned vaccine side effects** and **19% (or 2,246) mention skepticism towards the pandemic**.

Data are from the vaccine hesitancy query, filtered for posts containing parent-identifying keywords (n=11,724), and containing side effect and pandemic skepticism keywords.



FOCUS GROUP INSIGHTS

"*I'm a split district, meaning that I have half the people that want to follow the Department of Health guidelines…and some who just are not believing in the science…I would say, 'Follow the science, not social media,' and that's something that we have a tendency not to do in my current district."*

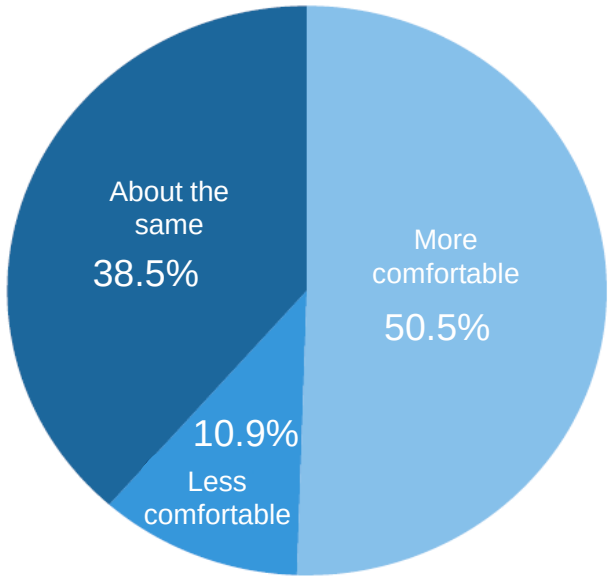
–Superintendent on how their school community has polarized opinions on COVID-19

Many parents anticipated feeling more comfortable with their child returning to school after all teachers and staff are vaccinated

SURVEY FINDINGS

Would you be more, less, or just as comfortable with your child attending in-person school when the school's teachers and staff are vaccinated?

n = 4,039 | N = 70,372,798 (weighted)



FOCUS GROUP INSIGHTS

*"They had positive COVID cases in the classroom and then [my son] had to stay back home, and all of us had to quarantine and go for testing, so that kind of put me off...**I'm not too much for going back to school because I'm afraid...Because of staff and students who are infected.** I would prefer to be more virtual for another couple of months until this COVID situation is completed."*

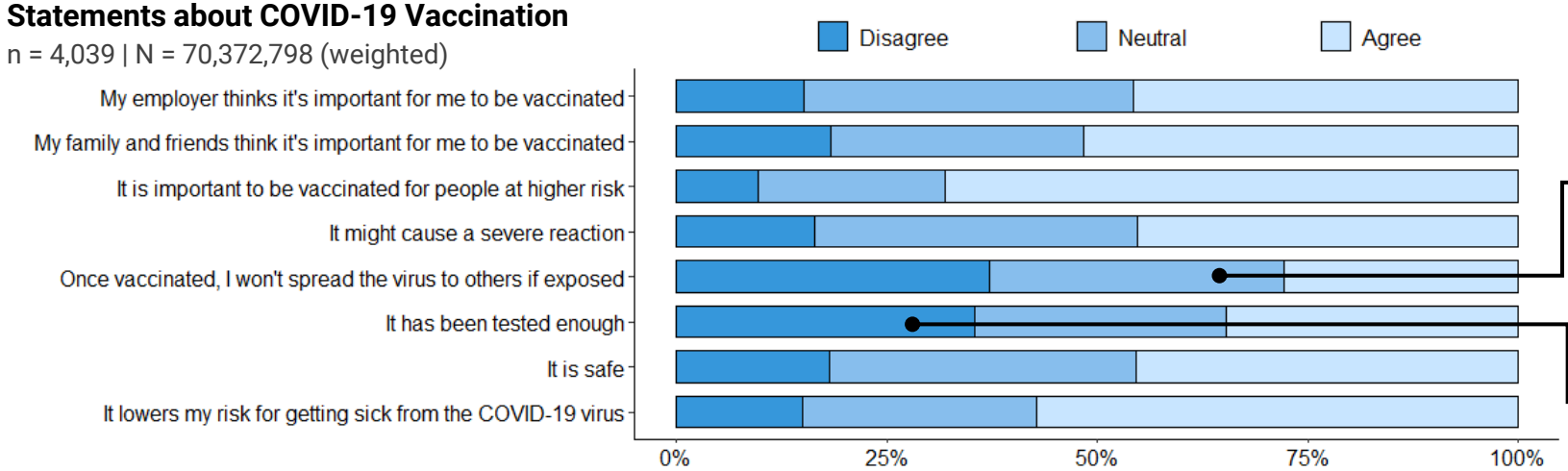
-Parent of student with special education needs on returning to school before teachers and staff are vaccinated

While most parents agreed that a COVID-19 vaccine reduces the risk of getting sick and is important for people at higher risk, some questioned its effectiveness*

SURVEY FINDINGS

Proportion of K-12 Parents in Agreement with Various Statements about COVID-19 Vaccination

n = 4,039 | N = 70,372,798 (weighted)



Nearly three quarters of parents reported uncertainty about **spreading the virus after being vaccinated.**

About a third of parents reported that they **do not think the vaccines have been tested enough.**

SOCIAL MEDIA LISTENING

Top Hashtags Used by Parents in Social Media Posts Related to COVID-19 Vaccination

Analysis of the most frequently used hashtags in parents' social media posts related to COVID-19 vaccination shows a sense of urgency toward, and support for, vaccination efforts.

Note: Hashtags shown are from the vaccine query, filtered for posts containing parent-identifying keywords

1. #covid19
2. #vaccine
3. #covid
4. #covidvaccine
5. #vaccineswork
6. #vaccinated
7. #getvaccinated
8. #vaccinessavelives
9. #thisisourshot
10. #maskup

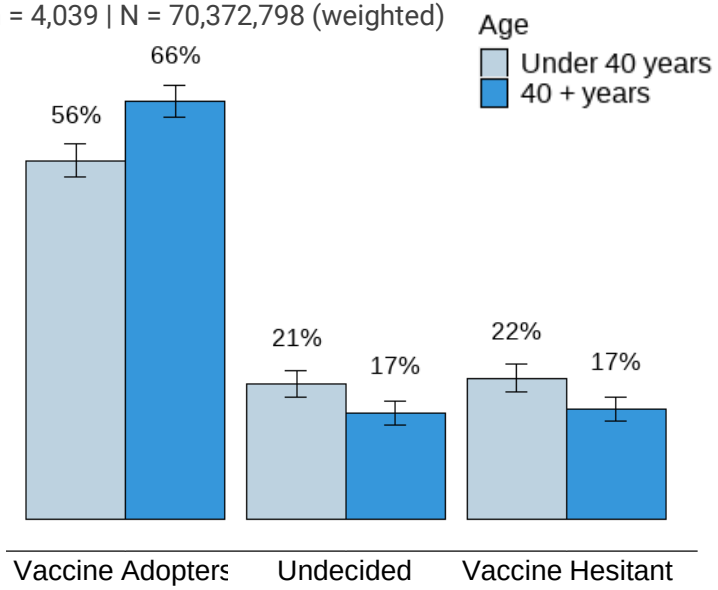
*Research still underway at time of survey distribution to better understand how well COVID-19 vaccines keep people from spreading the virus

Younger parents were more likely to report being vaccine hesitant or undecided compared to older parents

SURVEY FINDINGS

COVID-19 Vaccination Intentions of K-12 Parents by Age

n = 4,039 | N = 70,372,798 (weighted)



Compared to vaccine adopters, younger K-12 parents were **~1.5 times the odds of being hesitant** (OR= 1.49), or **undecided** (OR=1.48) about being vaccinated compared to older parents.

Age (Indep.)	COVID-19 Vaccination Intention (Dep.)*	Odds Ratio (Conf. Interval)
Under 40 years vs. 40 + years	Vaccine Hesitant vs. Vaccine Adopters	1.49 [1.23, 1.79]**
Under 40 years vs. 40 + years	Undecided vs. Vaccine Adopters	1.48 [1.22, 1.79]**

* reference group: "I have already received the COVID-19 vaccine" or "I plan to get a COVID-19 vaccine when it is my turn"
** p<0.01

FOCUS GROUP INSIGHTS

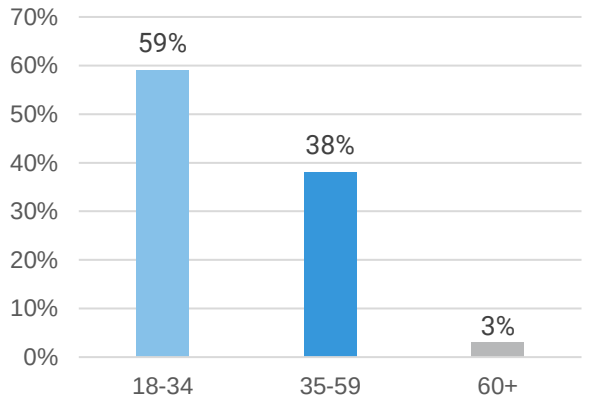
"My mom is wanting me to [get a COVID-19 vaccine] because I was planning to go back to school. ***My mom's conscience is like, 'you have to take it'****."*

- Student on their parent's sentiment towards COVID-19 vaccination and returning to in-person learning

SOCIAL MEDIA LISTENING

Age Breakdown* of Parents Expressing Resistance to COVID-19 Vaccination on Twitter and Quora

n = 112



Among posts from parents expressing hesitancy to COVID-19 vaccinations, the majority came from **younger parents**

*Note: Age Category derived from analysis of users' English-language Twitter bios. Small sample size due to limited availability of age data.

Parents with lower household incomes were more likely to be undecided or vaccine hesitant than those with higher incomes

SURVEY FINDINGS

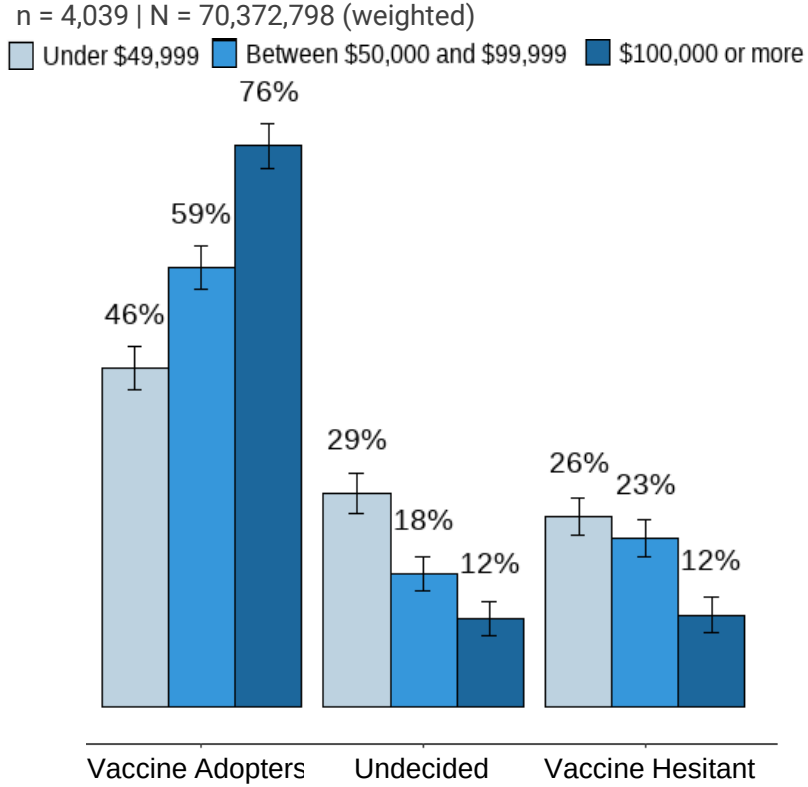
Compared to vaccine adopters, parents with **lower household incomes** had **over 3 times greater odds of reporting vaccine hesitancy**, and almost **4 times greater odds of feeling undecided**. A higher proportion of parents with $100K+ incomes were vaccine adopters, compared to other income levels.

Similarly, compared to vaccine adopters, parents with **household incomes between $50-100K had about 2 times greater odds of being hesitant or undecided** about getting a COVID-19 vaccine compared to those making $100K+.

Household Income (Indep.)	Parent COVID-19 Vaccination Intentions (Dep.)*	Odds Ratio (Conf. Interval)
Under $49,999 vs. $100,000+	Vaccine Hesitant vs. Vaccine Adopters	3.41 [2.63, 4.41]**
Under $49,999 vs. $100,000+	Undecided vs. Vaccine Adopters	3.96 [3.05, 5.14]**
Between $50,000 and $99,999 vs. $100,000+	Vaccine Hesitant vs. Vaccine Adopters	2.33 [1.79, 3.03]**
Between $50,000 and $99,999 vs. $100,000+	Undecided vs. Vaccine Adopters	1.91 [1.46, 2.50]**

* reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

COVID-19 Vaccination Intentions of K-12 Parents by Income



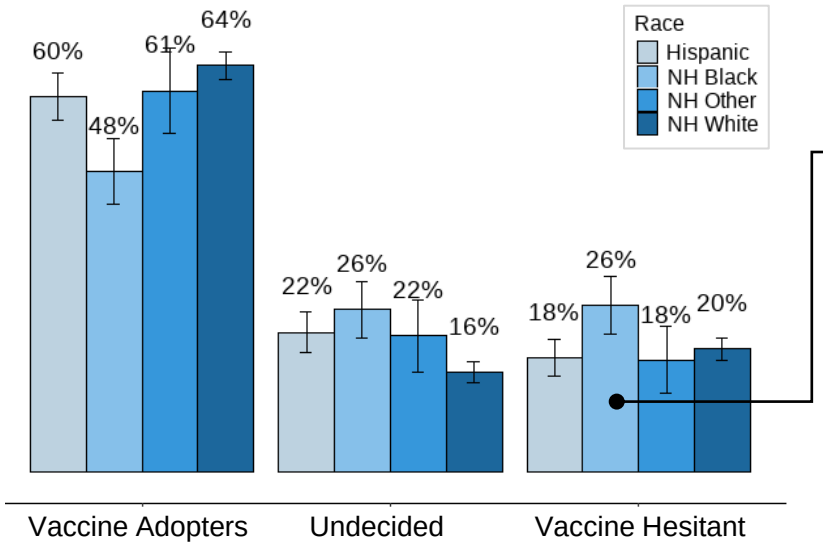
A positive association between income and likelihood of COVID-19 vaccine adoption was observed, whereby parents in the highest-income group were significantly more likely to be vaccine adopters than those in both the middle- and lowest-income groups.

Non-Hispanic Black or African American parents are more likely to be vaccine hesitant or undecided than non-Hispanic White parents

SURVEY FINDINGS

Vaccination Intentions of K-12 Parents by Race

n = 4,039 | N = 70,372,798 (weighted)



Compared to vaccine adopters, **non-Hispanic Black or African American parents had about 2 times greater odds of being** undecided, and **80% increased odds** of being hesitant to getting a COVID-19 vaccine compared to White respondents.

No significant differences between White respondents and other racial ethnic groups were identified.

Compared to vaccine adopters, **non-Hispanic Black or African American parents** were also **80% more likely** to be hesitant (OR=1.81) to getting a COVID-19 vaccine compared to Hispanic or Latino persons.

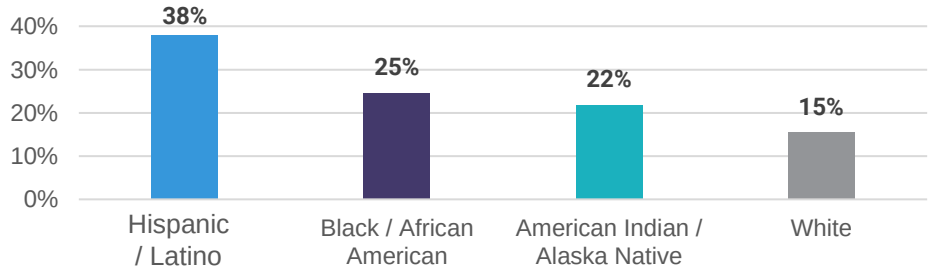
Race (Indep.)	COVID-19 Vaccination Intentions (Dep.)*	Odds Ratio (Conf. Interval)
NH Black vs. NH White	Vaccine Hesitant vs. Vaccine Adopters	1.82 [1.38, 2.41]**
NH Black vs. NH White	Undecided vs. Vaccine Adopters	2.18 [1.64, 2.91]**
NH Black vs. Hispanic	Vaccine Hesitant vs. Vaccine Adopters	1.81 [1.31, 2.51]**
NH Black vs. Hispanic	Undecided vs. Vaccine Adopters	1.45 [1.05, 1.99]**

* reference group: * reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

SOCIAL MEDIA LISTENING

Within mentions of vaccine hesitancy, a cumulative total of 51,075 posts, Black or African American keywords appeared 4,287 times, Hispanic or Latino keywords appeared 6,629 times, American Indian or Alaska Native keywords appeared 3,810, and White keywords appeared 2,698 times.

Race Keywords Mentioned with Vaccine Hesitancy Query

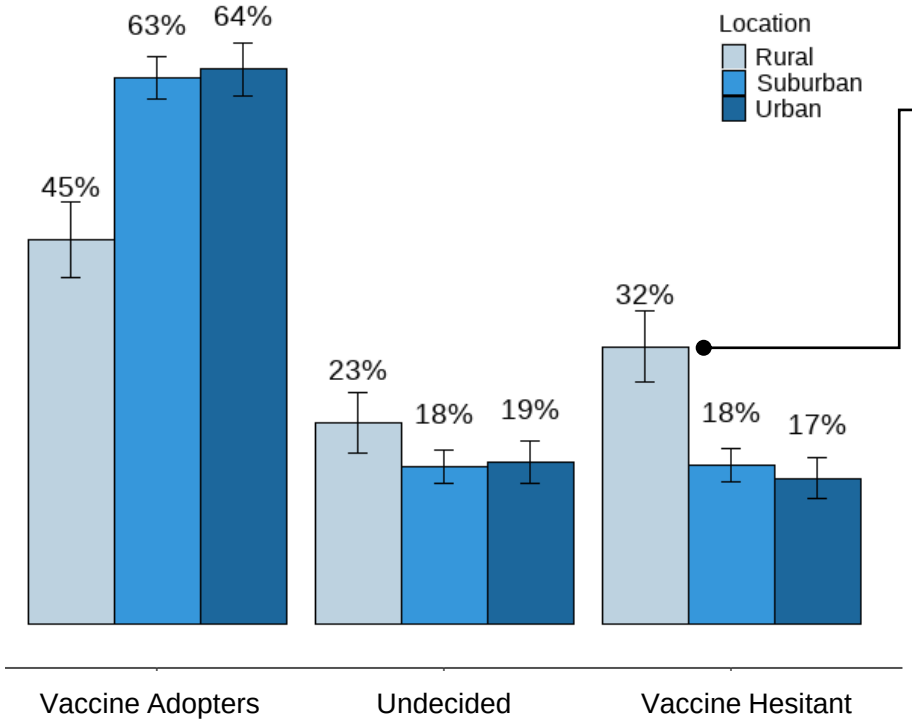


Parents in rural areas reported less favorable vaccination intentions than parents in suburban or urban areas

SURVEY FINDINGS

Vaccination Plans of K-12 Parents by Location

n = 4,039 | N = 70,372,798 (weighted)



Nearly a third of parents living in rural communities were hesitant to receiving a COVID-19 vaccine, while lower percentages of suburban and urban parents reported hesitancy (18% and 17%, respectively).

No statistically significant differences between **urban and suburban** communities were observed.

Compared to vaccine adopters, rural parents had about **two and a half times greater odds of being hesitant to getting vaccinated** for COVID-19, and about **80% increased odds of being undecided** compared to suburban parents.

Location (Indep.)	Vaccination Intention Plan (Dep.)*	Odds Ratio (Conf. Interval)
Rural vs. Suburban	Vaccine Hesitant vs. Adopters	2.48 [1.94, 3.16]**
Rural vs. Suburban	Undecided vs. Vaccine Adopters	1.82 [1.41, 2.35]**

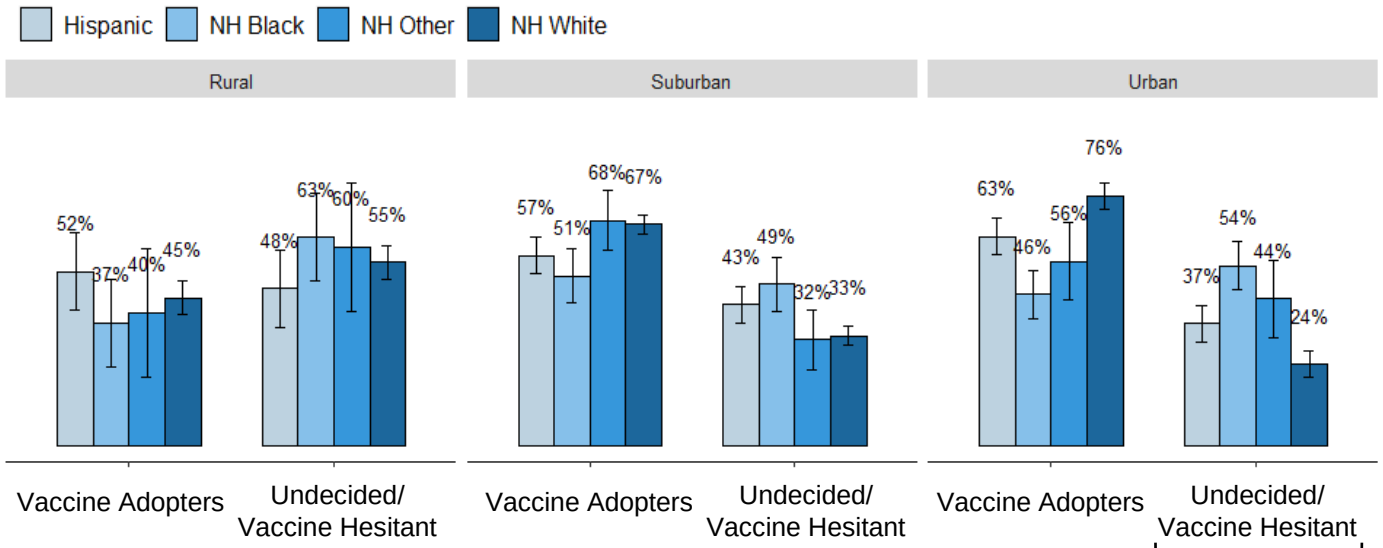
* reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

Observed racial disparities in COVID-19 vaccination intentions differ across communities, which may have implications for targeted efforts to reduce vaccine hesitancy

SURVEY FINDINGS

COVID-19 Vaccination Intentions of K-12 Parents by Race & Location

n = 4,039 | N = 70,372,798 (weighted)



Within **urban areas**, a larger proportion of **racial and ethnic minority groups** (54% Black or African American, 37% Hispanic or Latino, 44% Other) **remain undecided or hesitant** toward COVID-19 vaccination, compared to just 24% of White parents. These racial disparities are both statistically significant and larger in magnitude than those observed among parents in rural or suburban communities.

SOCIAL MEDIA LISTENING

Top Hashtags Used by Parents of Color in Social Media Posts Related to COVID-19 Vaccination, Based on Number of Mentions

Analysis of the most frequently used hashtags in parents of color's social media posts about COVID-19 vaccination indicates a split in attitudes toward the vaccines.

1. #covid19
2. #covid
3. #blacklivesmatter
4. #blackandvaccinated
5. #vaccine
6. #onlywhenitssafe
7. #healthcare
8. #wearamask
9. #openonlywhensafe
10. #smartdissent

Hashtags shown are aggregated from the communities of color queries (separate queries for African American, Latino, and Native American populations, containing unique identifying keywords for each group), filtered to include only posts containing vaccine and parent-identifying keywords.

Parents with children attending school in-person were more hesitant to or undecided about COVID-19 vaccination compared to parents of children in schools utilizing 100% virtual or hybrid learning models

SURVEY FINDINGS

Compared to vaccine adopters, parents of students at schools utilizing a **100% in-person** instruction model are had **78% increased odds of being vaccine hesitant** and **44% increased odds of being undecided** about getting vaccinated against COVID-19 compared to parents whose children are at schools utilizing a fully or partially virtual instruction model.

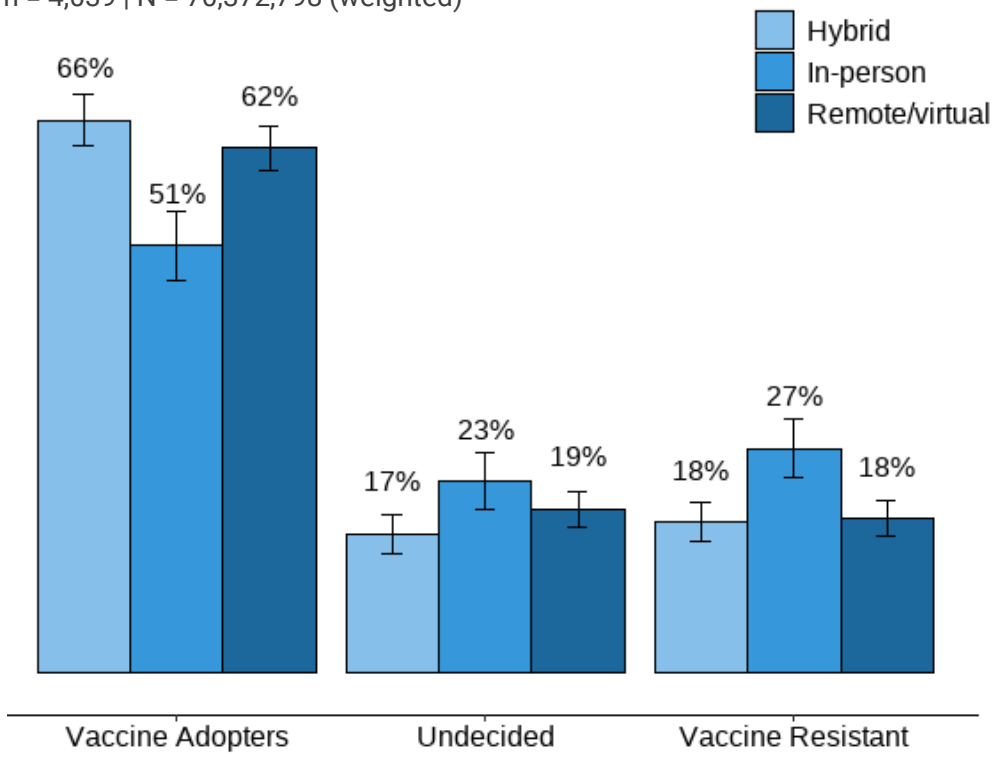
No differences between 100% remote/virtual and hybrid instruction models were observed.

Learning Model (Independent)	Parent COVID-19 Vaccination Intentions (Dependent)*	Odds Ratio (Confidence Interval)
In-person vs. Remote/virtual	Vaccine Hesitant vs. Vaccine Adopters	1.78 [1.40, 2.26]**
In-person vs. Remote/virtual	Undecided vs. Vaccine Adopters	1.44 [1.12, 1.84]**

* reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

COVID-19 Vaccination Intentions of K-12 Parents by Child Learning Model

n = 4,039 | N = 70,372,798 (weighted)



There are key demographic differences in parents who reported being vaccine hesitant or undecided about COVID-19 vaccination

SURVEY FINDINGS

Key characteristics of parents in each vaccination intention category are listed below. Each characteristic listed beneath the categories below was found to have a **highly statistically significant** ($p<.001$) association with a respondent's likelihood of belonging to that category.

Vaccine Adopters (57%)	Undecided (21%)	Vaccine Hesitant (23%)
White race/ethnicity	Black or African American race/ethnicity	Black or African American race/ethnicity
Over Age 40	Under Age 40	Under Age 40
Suburban communities	Rural or urban communities	Rural or urban communities
Over $50k household income	Under $50k household income	Under $50k household income
Remote/virtual or hybrid learning model	In-person or hybrid learning model	In-person learning model
Parents of high socioeconomic status are more likely to be vaccine adopters.	Parents of low socioeconomic status are more likely to be undecided as well, including those who have students attending in-person or a hybrid learning model.	Parents of low socioeconomic status are more likely to be vaccine-hesitant, as were younger parents and Black or African American parents.

Weighted and unadjusted multinomial logistic regression was performed with the independent variables, interactions excluded, against vaccine intention plan as the dependent variable to provide this analysis. Reference groups are race = NH White, age = 40+, location = Suburban, income = $100k+ and school model = remote/virtual.

BUILDING TRUST

Non-profit organization Trust for America's Health released a policy brief in December of 2020 entitled **Building Trust in and Access to a COVID-19 Vaccine Among People of Color and Tribal Nations***, which highlights the importance of earning trust within communities of color and tribal communities to ensure COVID-19 vaccine receptivity. The brief states:

"A woeful history of maltreatment of communities of color and tribal nations by government and the healthcare sector is at the root of higher levels of vaccine distrust within those groups."

Key recommendations from the brief include:

- Working with trusted community organizations and networks within communities of color and tribal communities.
- Providing information through trusted sources.
- Ensuring vaccination is free and as convenient as possible. Brief available here.

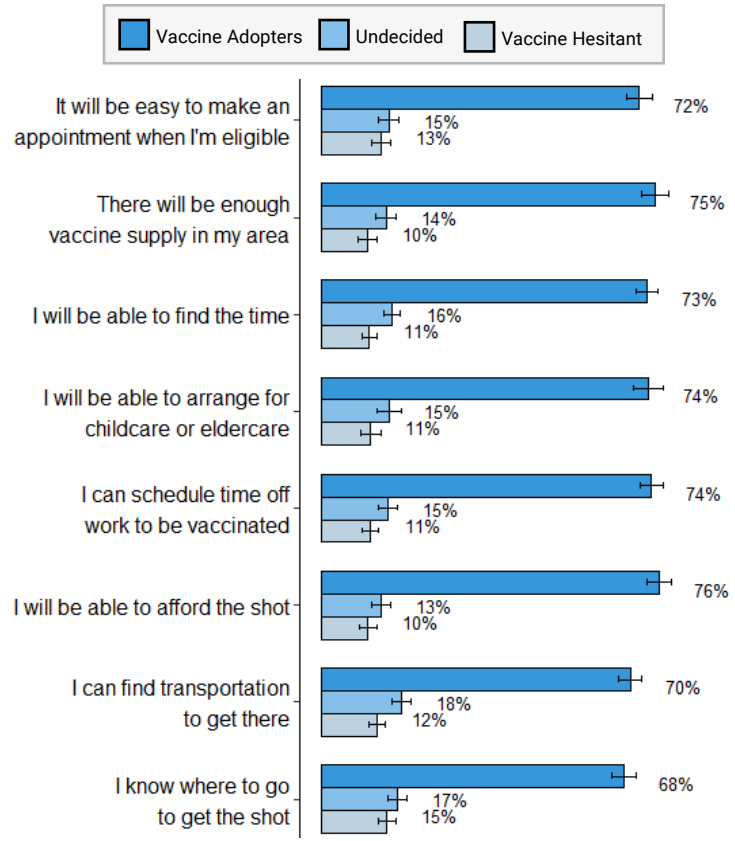
*This document is for reference only and is not part of this CDC Foundation project

Vaccine hesitant and undecided parents are more likely to express doubts about their ability to get a COVID-19 vaccine

SURVEY FINDINGS

Proportion of K-12 Parents in Agreement with Various Statements, by Vaccination Intention

n = 4,039 | N = 70,372,798 (weighted)



Perceived Ability to Find Vaccination Location and Transportation

Among surveyed vaccine hesitant and undecided parents, over a quarter believed that they would **know where to go to get a COVID-19 vaccination (32%)** and be able to **find transportation to get there (30%).**

Perceived Availability and Affordability

The largest differences in perception of vaccine accessibility between parents with different vaccination intentions is observed with respect to supply and affordability. Compared to parents who were already vaccinated or intended to be, **vaccine hesitant and undecided parents were less likely to believe that they would be able to find vaccine supply in their area or that they would be able to afford the shot.**

Misperceptions about COVID-19 Vaccine Cost

Only 10% of vaccine hesitant parents and 13% of undecided parents believe that they would be able to afford to get a COVID-19 vaccine. Among vaccine adopters, 76% believed that they would be able to afford to get vaccinated. This finding demonstrates **significant gaps in information around the cost of a COVID-19 vaccine**, which has been made available at no cost to all individuals regardless of insurance coverage or immigration status.

Sources of information on vaccination include parents' healthcare provider, CDC and the state and county health departments

SURVEY FINDINGS

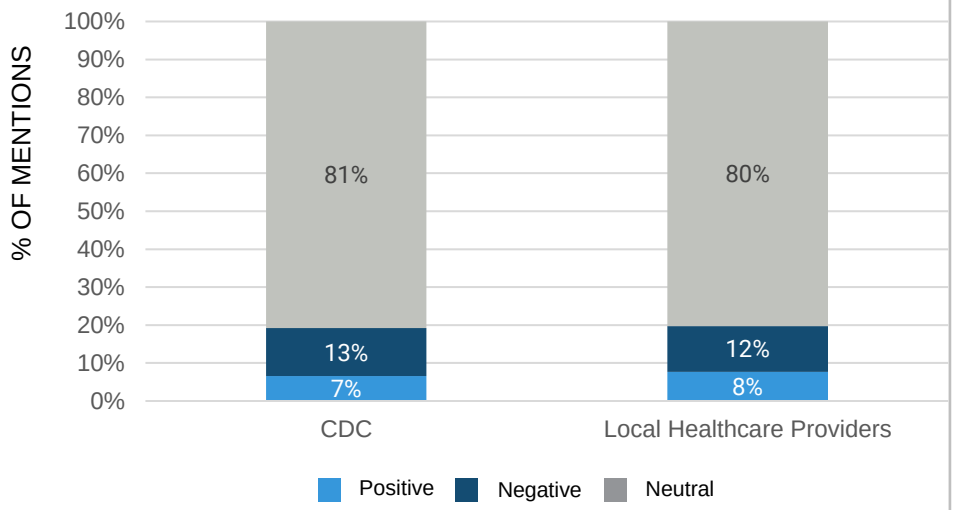
The **top vaccine sources** that parents and teachers rely on the most for accurate information about COVID-19 vaccination are their **healthcare providers, CDC and state or county health departments**.

Sources Relied Upon for Information on COVID-19 Vaccination	Percentage of Parents
My healthcare provider	61%
Centers for Disease Control and Prevention (CDC)	60%
State or county health department	56%
News sources (e.g., online or print newspapers, radio, television, apps)	26%
Family and friends	25%
My employer	16%
Social media (such as Facebook, Twitter, Instagram, LinkedIn, or TikTok)	11%
Religious leader(s)	7%

SOCIAL MEDIA INSIGHTS

Sentiment Analysis of Parents' Social Media Posts indicates a relatively even proportion of Trust between CDC and Healthcare Providers around COVID-19 Vaccination Information

n = 3,649



Sentiment data are from the vaccine trust query, filtered for posts that contain the parent-identifying, trust, CDC and local community healthcare provider keywords

A quarter of parents reported unwillingness to have their child tested regularly at school for COVID-19 as a requirement for in-person learning

SURVEY FINDINGS

While most parents (59%) reported that they would be willing to have their child tested for COVID-19 at school, **nearly a quarter expressed hesitancy to in-school COVID-19 testing**.

Willingness of K-12 Parents to have Child Tested for COVID-19 at School

n = 4,039 | N = 70,372,798 (weighted)

SOCIAL MEDIA INSIGHTS

Top Hashtags Used in Parents' Social Media Posts Related to COVID-19 Testing, Based on Number of Mentions

Posts containing #mnleg shared opinions on COVID-19 testing in schools, intended for the Minnesota legislature. This followed stories about parents deliberately avoiding testing their kids to keep school sports going.

1. #mnleg
2. #covid19
3. #covid
4. #covid_19
5. #backtoschool
6. #momlife
7. #covidtesting
8. #school
9. #blacklivesmatter
10. #blm

Note: Hashtags shown are from the COVID testing query, filtered for posts containing parent-identifying keywords

Parents who are not open to in-school testing for COVID-19 tend to also be vaccine-hesitant

SURVEY FINDINGS

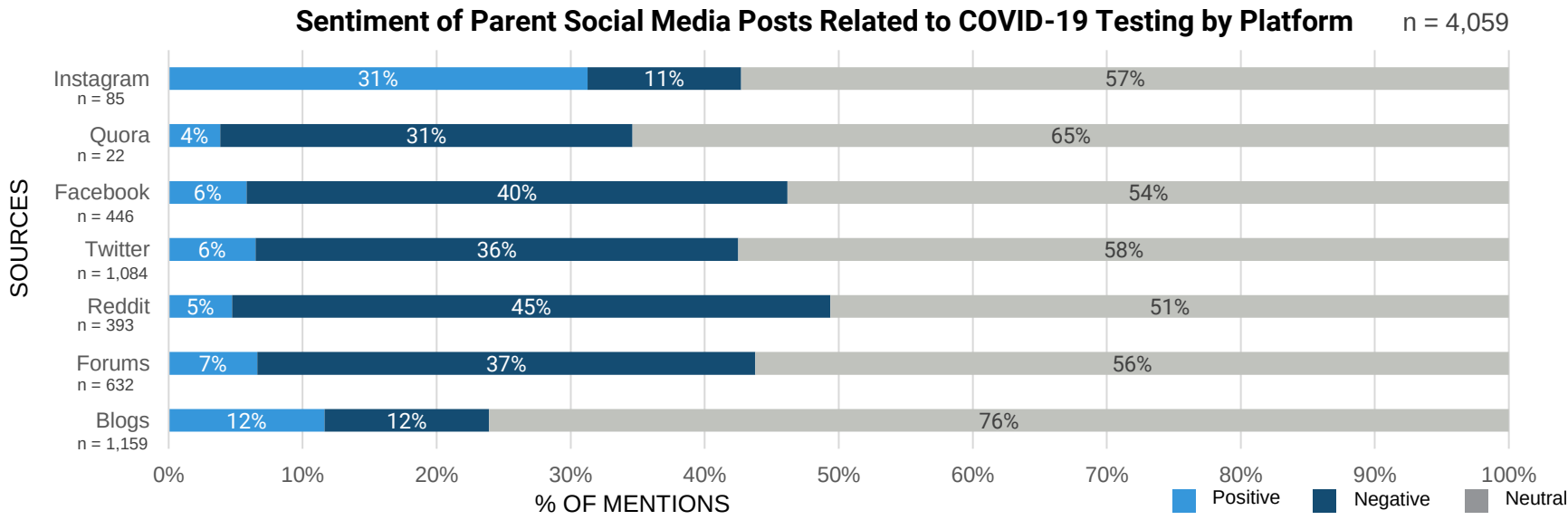
Compared to vaccine adopters, parents unwilling to have their child tested regularly at school for COVID-19 as part of a requirement for in-person learning were **8 times the odds of being vaccine hesitant** (not planning to receive a COVID-19 vaccine) compared to other parents.

Willingness to have child tested at school (Indep.)	Parent COVID-19 Vaccination Intention (Dep.)	Odds Ratio [Conf. Interval]
No vs. Yes	Vaccine hesitant vs. vaccine adopters	8.29 [6.58, 10.44]**
No vs. Yes	Undecided vs. vaccine adopters	3.25 [2.55, 4.13]**

* reference group: "I have already received the COVID-19 vaccine" or "I plan to get a COVID-19 vaccine when it is my turn"
** p<0.01

SOCIAL MEDIA LISTENING

Parents hesitant to COVID-19 testing and vaccination also expressed **strong opposition to any mandate** that would require their children to follow recommended prevention strategies at school.



Sentiment data are from the COVID testing query, filtered for posts containing parent-identifying keywords

Teachers of K-12 students

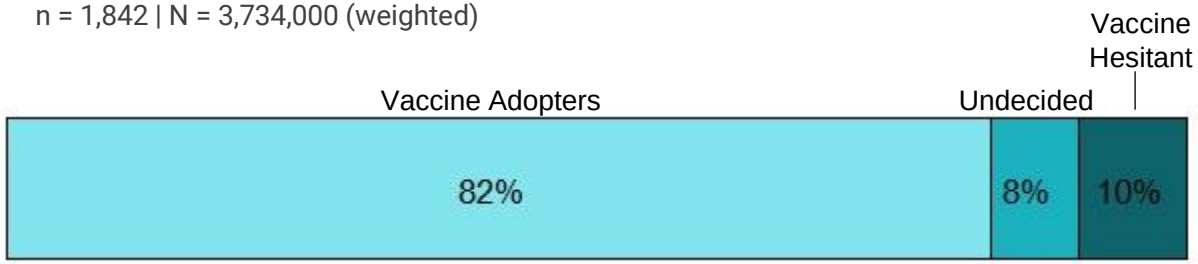
Findings in this section reflect weighted web panel data and unweighted crowdsourcing and focus group data.

Teacher data were collected between February – April 2021 (except for social media data collected January – April 2021).

Most teachers reported they already received a COVID-19 vaccine or were planning to get it as of March 2021

SURVEY FINDINGS

Vaccination Intentions of K-12 Teachers, March 2021
n = 1,842 | N = 3,734,000 (weighted)



CROWDSOURCED DATA

Teachers
n=566 (February) | n=600 (March)
School staff
n=530 (February) | n=494 (March)

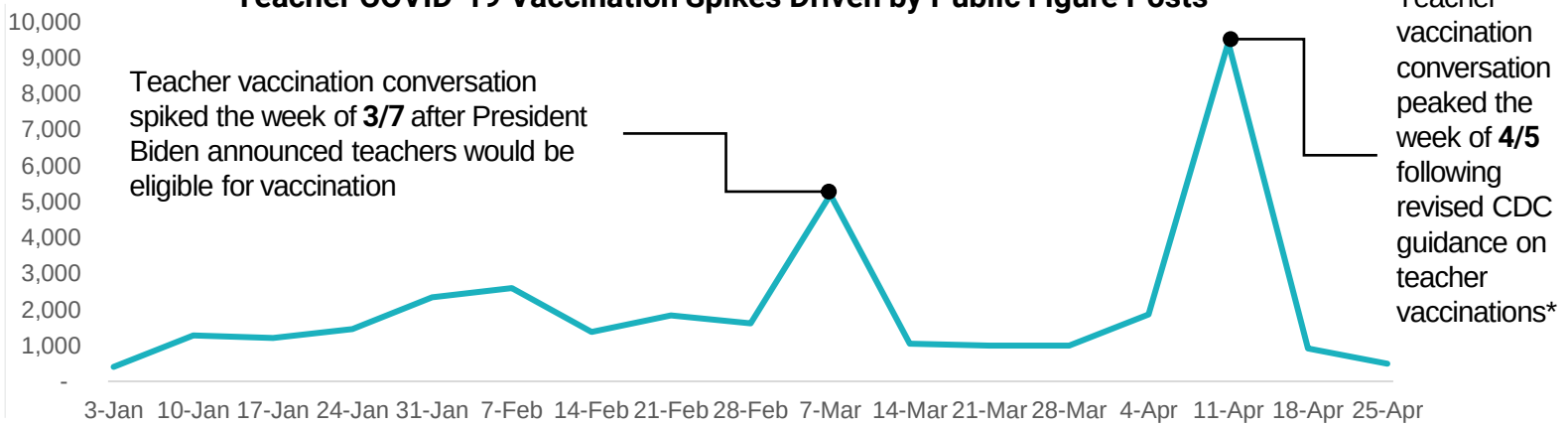
Between February and March, there was a 10 percentage-point increase in teachers who reported they have been vaccinated, scheduled an appointment, or tried to book an appointment (82% in March vs. 72% in February). There was no change in school staff vaccinations (65% in March vs. 69% in February).

SOCIAL MEDIA LISTENING

Trends in teachers' social media posts about COVID-19 vaccination in early 2021 reveal that online discussions spiked immediately following key turning points such as President Biden's announcement about eligibility for teachers, indicating strong interest and attention around the topic.

*An additional driver appears to have been a coordinated effort to push a story of a person posing as a substitute teacher to receive a vaccine on social media, notably Twitter.

Teacher COVID-19 Vaccination Spikes Driven by Public Figure Posts

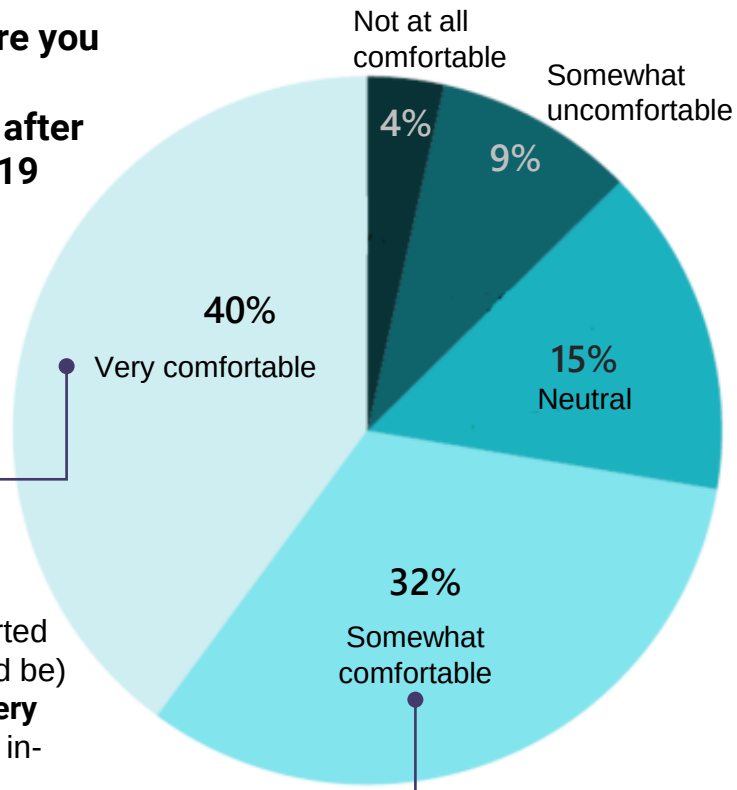


For most teachers, receipt of a COVID-19 vaccine will allow (or has already allowed) for a comfortable return to in-person instruction

SURVEY FINDINGS

How comfortable are you (or would you be) teaching in-person after receiving a COVID-19 vaccine?

n = 1,842
N = 3,734,000 (weighted)



72% of teachers reported that they are (or would be) either **somewhat or very comfortable** teaching in-person after getting a COVID-19 vaccine.

SOCIAL MEDIA LISTENING

Analysis of the most frequently used hashtags in teachers' social media posts about COVID-19 vaccination show a sense of urgency toward vaccination in order to return to school safely.

Top Hashtags Used by Teachers on Social Media Posts Related to COVID-19 vaccination, Based on Number of Mentions

1. #vaccinateteachers
2. #covidvaccine
3. #vaccinateschoolstaff
4. #teachers
5. #vaccinateallteteachers
6. #vaccinateeducatorsnow
7. #stopthespread
8. #teachersfirst
9. #teachersvoicesmatter
10. #openonlywhensafe

Note: Hashtags shown are from the vaccine query, filtered for posts containing teacher-identifying keywords

CROWDSOURCED DATA

In March 2021, **76%** of teachers participating in crowdsourced surveys reported that they would feel **more comfortable** teaching or working with students in school after receiving a COVID-19 vaccine, compared to only **62%** of school staff. This gap in attitudes between teachers and staff had **increased** compared to data collected the month prior.

Teachers Surveyed
n=566 (February)
n=600 (March)

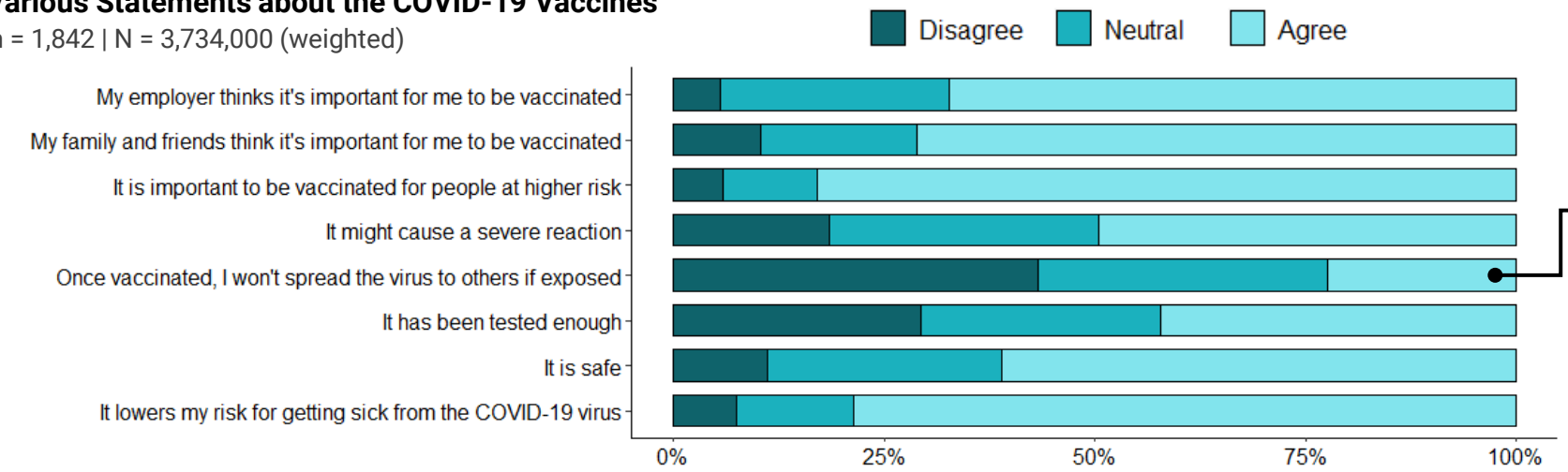
School Staff Surveyed
n=530 (February)
n=494 (March)

Teachers' responses to a series of questions about COVID-19 vaccinations indicated close attention to CDC information and guidelines

SURVEY FINDINGS

Proportion of K-12 Teachers in Agreement with Various Statements about the COVID-19 Vaccines

n = 1,842 | N = 3,734,000 (weighted)



Teachers expressed lower levels of agreement around **COVID-19 vaccines' ability to prevent vaccinated individuals from spreading the virus**. At the time of survey distribution (March 2021), CDC's official post-vaccination guidance stated that the agency was "still learning how well COVID-19 vaccines keep people from spreading the disease."[1]

FOCUS GROUP INSIGHTS

"I have to say that our district [and] my school superintendent…have all been there and done the best that they can for us. ***I think one of the greatest things that our superintendent arranged... probably through the local health department…was [for us] to get our COVID shots*** *and I think they've gone out of their way to really help us."*

-Teacher in rural area on process for returning to school in-person

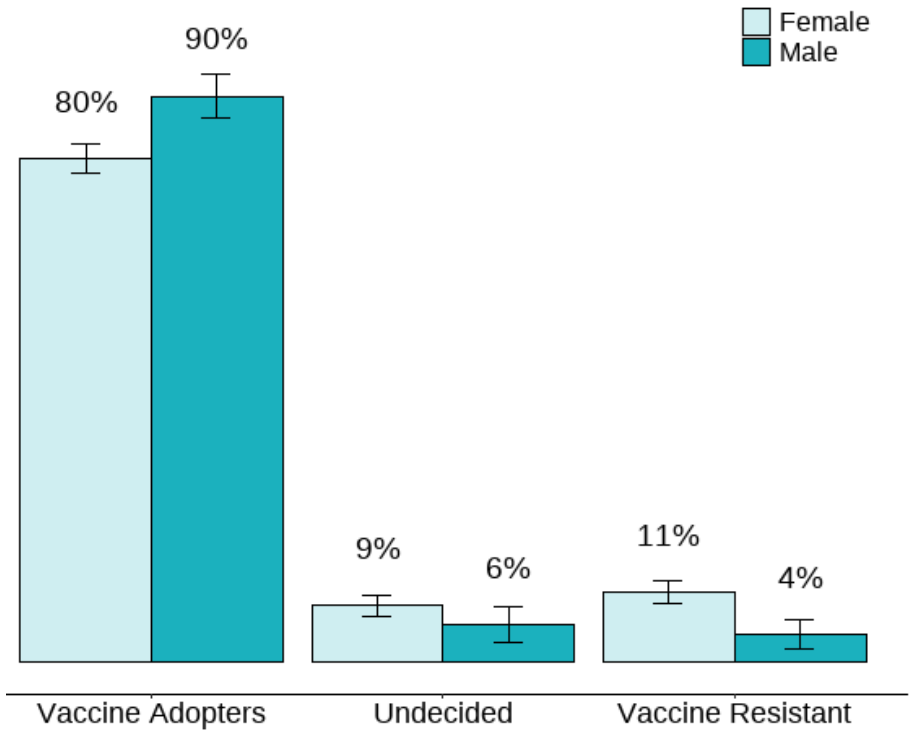
[1] National Center for Immunization and Respiratory Diseases (NCIRD), "When You've Been Fully Vaccinated," Updated April 2. 2021. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html

Female teachers reported vaccine-hesitancy more often than their male peers

SURVEY FINDINGS

COVID-19 Vaccination Intentions of K-12 Teachers by Gender

n = 1,842 | N = 3,734,000 (weighted)



Compared to vaccine adopters, **female teachers have 2.75 greater odds of being hesitant** to getting a COVID-19 vaccine than their male peers.

Gender (Indep.)	Vaccination Intention Plan (Dep.)*	Odds Ratio (Conf. Interval)
Female vs. Male	Vaccine Hesitant vs. Vaccine Adopters	2.75 [1.53, 4.94]**
Female vs. Male	Undecided vs. Vaccine Adopters	1.64 [0.94, 2.87]**

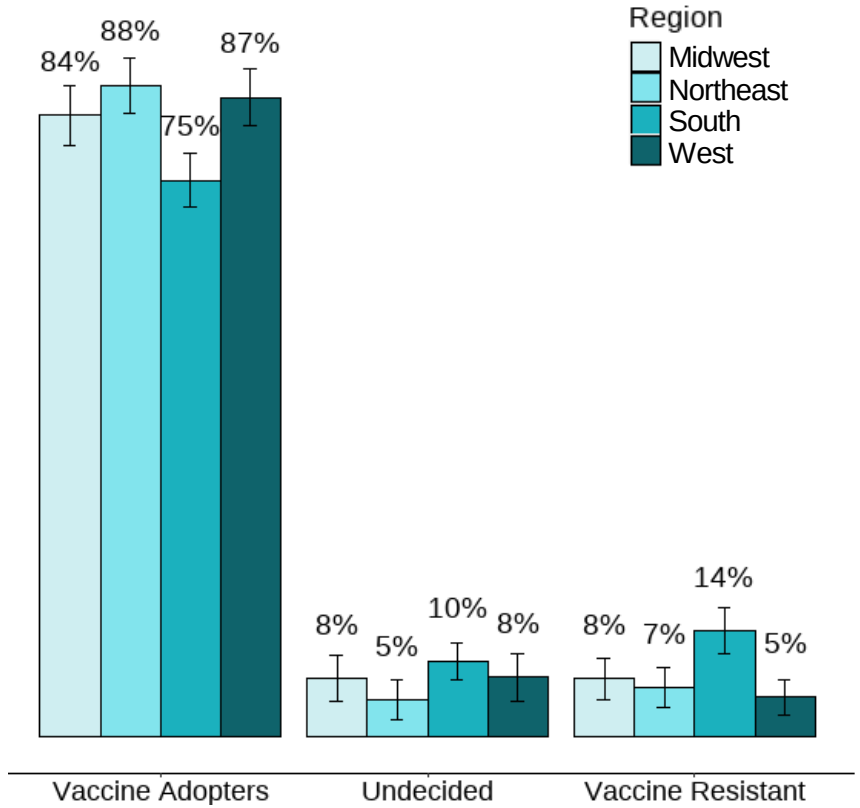
* reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

Teachers living in the Southern region of the United States are more vaccine hesitant than their peers in other regions

SURVEY FINDINGS

Vaccination Intentions of K-12 Teachers by Region

n = 1,842 | N = 3,734,000 (weighted)



Compared to vaccine adopters, **teachers living in the Southern region of the U.S. had 2-3 times greater odds of being vaccine hesitant** than teachers in other regions. No significant differences between other regions were observed.

Region (Indep.)	Vaccination Intention Plan (Dep.)*	Odds Ratio (Conf. Interval)
South vs. West	Vaccine Hesitant vs. Vaccine Adopters	3.01 [1.69, 5.38]**
South vs. Midwest	Vaccine Hesitant vs. Vaccine Adopters	2.01 [1.26, 3.22]**
South vs. Northeast	Vaccine Hesitant vs. Vaccine Adopters	2.48 [1.49, 4.13]**

* reference group: “I have already received the COVID-19 vaccine” or “I plan to get a COVID-19 vaccine when it is my turn”
** p<0.01

K-12 School Leadership

Findings in this section reflect weighted web panel data and unweighted crowdsourcing and focus group data.

Principal data were collected between March – May 2021.

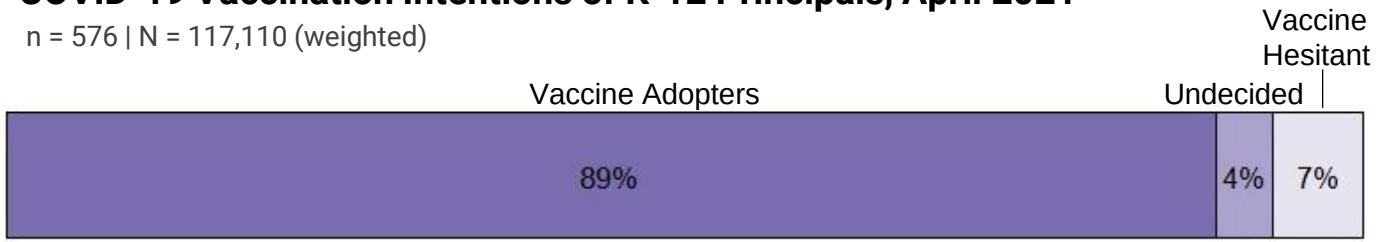
Most K-12 principals surveyed reported that they had either already received a COVID-19 vaccine or intended to “when it was their turn”

SURVEY FINDINGS

89% of principals reported themselves as vaccine adopters, while just 7% are vaccine hesitant and 4% remain undecided.

COVID-19 Vaccination Intentions of K-12 Principals, April 2021

n = 576 | N = 117,110 (weighted)



FOCUS GROUP INSIGHTS

"The teachers are in the process of getting their vaccinations. ***We've really worked very, very hand-in-glove with our health department*** *to make sure that we had closed clinics for our staff to be able to get their vaccinations."*

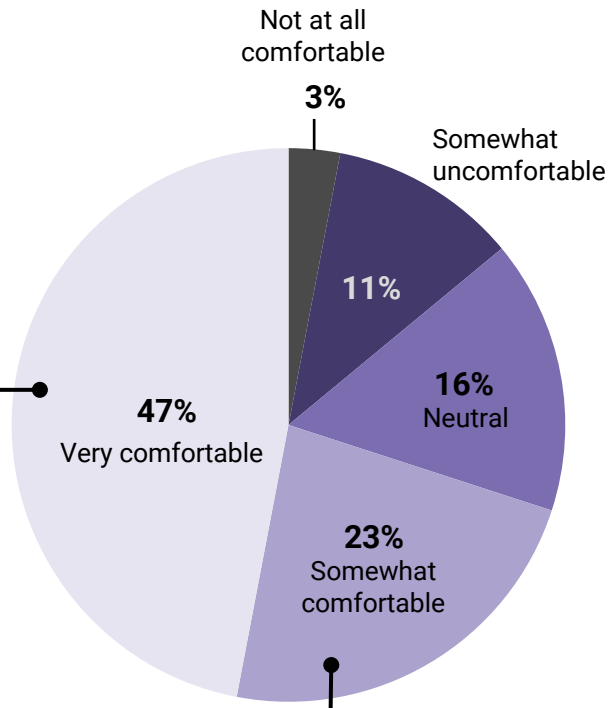
-Superintendent on vaccinating their schools' staff

Most principals reported that they would be comfortable with children attending school in-person after teachers and staff are fully vaccinated

SURVEY FINDINGS

How comfortable will you be with children attending in-person school when many of the school district's teachers and staff are vaccinated?

n = 576 | N = 117,110 (weighted)



70% of principals reported they would be somewhat or very comfortable with children attending in-person school when many of the school district's teachers are staff are vaccinated.

FOCUS GROUP INSIGHTS

***"I had to consider the vaccination access and then of course the access to COVID testing**, so all of that came into play as we made the decision in August to go virtual, as we made the decision in December and January to remain virtual, and then, as we made the decision in March to begin reopening...those are the factors that we have considered when making our decision, each time."*

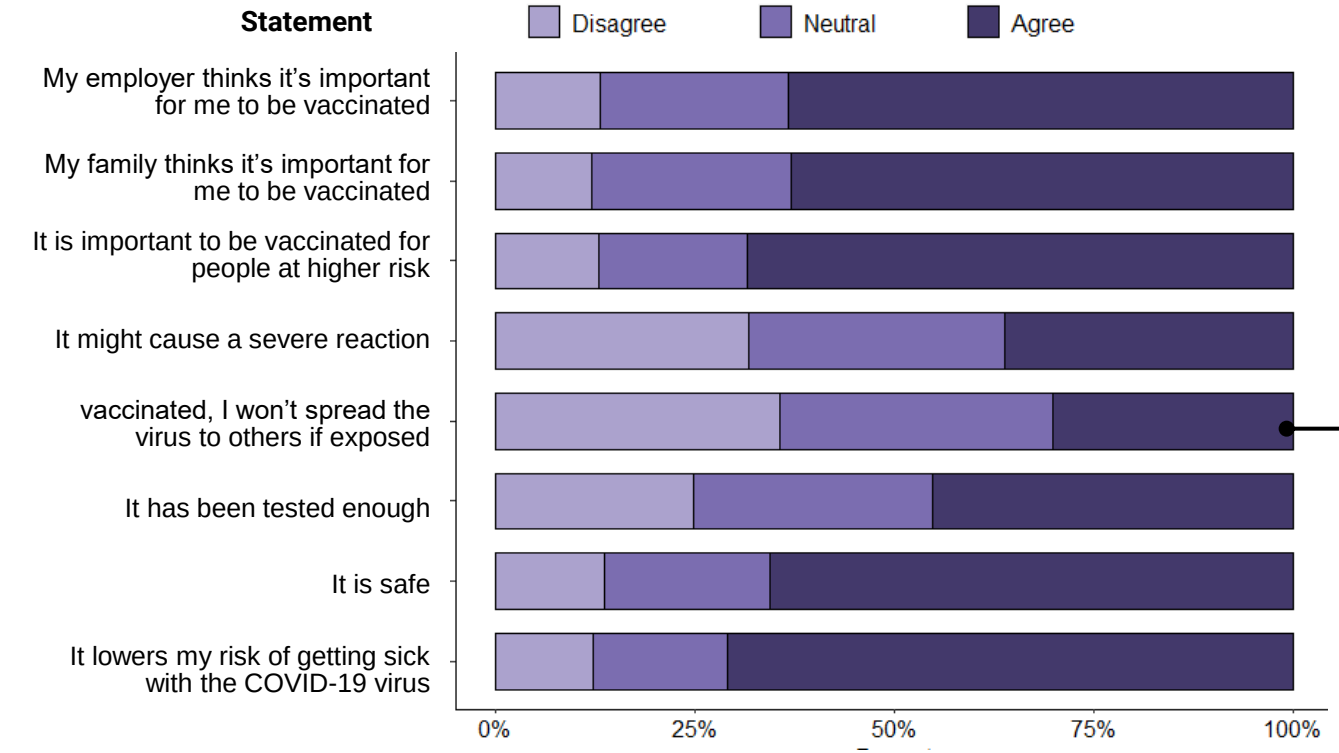
-Superintendent on how vaccinations played a role in the decision-making process for reopening schools

Like parents and teachers, principals also expressed concern about the vaccines' ability to prevent spreading the virus

SURVEY FINDINGS

Proportion of K-12 Principals in Agreement with Various Statements about COVID-19 Vaccination

n = 576 | N = 117,110 (weighted)



Principals expressed lower levels of agreement around the **COVID-19 vaccines' ability to prevent vaccinated individuals from spreading the virus**. At the time of survey distribution (March 2021), CDC's official post-vaccination guidance stated that the agency was "still learning how well COVID-19 vaccines keep people from spreading the disease."[1]

1 National Center for Immunization and Respiratory Diseases (NCIRD), "When You've Been Fully Vaccinated," Updated April 2. 2021. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html

Most principals reported that they were supportive of regular COVID-19 testing at school and would be likely to support mobile vaccination units on school grounds in the future

SURVEY FINDINGS

73% of principals reported that they would be likely to permit mobile COVID-19 vaccination units on school grounds.

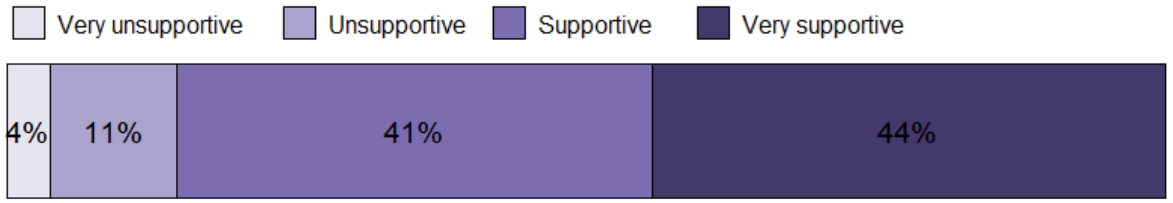
Principals' Likelihood of Permitting Mobile COVID-19 Vaccination Units on School Grounds

n = 576 | N = 117,110 (weighted)

85% of principals reported they would be supportive of the health department or another community organization conducting COVID-19 testing for all students and staff on a regular basis.

Principal Support for Regular COVID-19 Testing for Students and Staff

n = 576 | N = 117,110 (weighted)



FOCUS GROUP INSIGHTS

"I'm looking forward to the summer, more than I am the school year because I'm hopeful that we're going to see kids engaged. ***We're currently getting the vaccine among the staff****, so I don't think that that will be an issue."*

-Superintendent on COVID-19 vaccination and how it relates to his schools' summer plans

According to principals, some non-COVID-19 vaccination requirements have been relaxed or dropped completely during the 2020-2021 school year

SURVEY FINDINGS

Nearly half of principals reported no changes to the normal vaccination requirements for the 2020-2021 school year.

When asked about their school's vaccination policy for the 2020-2021 school year, **17% of principals reported that some or all regular vaccination requirements were dropped for all students**, regardless of learning model.

Changes to General Student Vaccination Requirements for the 2020-2021 School Year, as Reported by K-12 Principals

n = 576 | N = 117,110 (weighted)

Policy	Count	Percentage of Principals*
No changes compared to the previous school year	**199**	**49.9%**
A provisional enrollment or grace period was established, but only for students attending virtually	197	23.3%
The existing provisional enrollment or grace period was extended, regardless of virtual or in-person attendance	149	23.0%
A provisional enrollment or grace period was established, regardless of virtual or in-person attendance	141	19.2%
The existing provisional enrollment or grace period was extended, but only for students attending virtually	163	19.2%
Students were allowed to attend school either in person or virtually if vaccination requirements were not met	110	16.9%
Some or all vaccination requirements were dropped for all students, regardless of virtual or in-person attendance	**128**	**16.6%**
Some or all vaccination requirements were dropped, but only for students attending school virtually	92	12.4%
Students were allowed to attend school if vaccination requirements were not met, but only if they attended school virtually	57	8.3%

*Note: Point estimates do not sum to 100% due to respondents' ability to select multiple options.

As reported by principals, general vaccination requirements were largely upheld compared to previous years

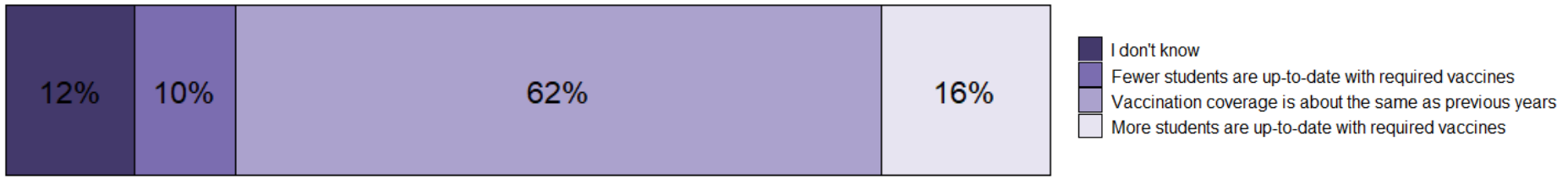
SURVEY FINDINGS

55% of principals reported that **general vaccination requirements** at their schools **remained the same** as in previous years.

2020-2021 Enforcement of Vaccination Requirements, as Compared to Previous Years
n = 576 | N = 117,110 (weighted)

62% of principals reported their **general vaccination coverage** for students during the 2020-2021 school year has **remained the same** as it has been in previous years.

2020-2021 General School Vaccine Coverage, as Compared to Previous Years
n = 576 | N = 117,110 (weighted)



Conclusion

CONCLUSION

Opportunities Moving Forward

Based on the findings in this report around vaccination intentions, comfort with in-person learning, and vaccine related barriers and beliefs, there are several opportunities that can be used to improve COVID-19 vaccinations in K-12 settings and ultimately create safer in-person learning environments that can protect the overall health and educational outcomes of students.

Better tailored communication and education to parents as well as specific groups of teachers and school staff, taking local context and socio-demographic factors into consideration.

Schools and teachers can help promote evidence-based information and overcome perceived barriers to getting vaccinated, including providing mobile vaccination units on school grounds.

Continued efforts to get all teachers and staff vaccinated will be critically important heading into the 2021-2022 school year.

Conduct modeling of prevention strategies among student populations to address that some teachers, staff, and students may not be vaccinated, and that some students are not age-eligible for a COVID-19 vaccine.

The COVID-19 landscape is dynamic and rapidly evolving, especially as it relates to polices and practices related to vaccines and K-12 school settings. Since the data presented in this report were collected, there have been additional guidance and policy changes related to COVID-19 vaccines, including the emergency use authorization (EUA) for the Pfizer-BioNTech COVID-19 Vaccine that expanded access to adolescents aged 12 through 15 years.

The *CDC Foundation's Monitoring School COVID-19 Prevention Strategies* project currently has several other data collection efforts underway to continue to examine vaccine intentions, beliefs, and barriers as school communities plan for the summer and fall. Additional data and findings will be released as available.

Appendix

Weighting Methodology

The sample data was weighted, meaning assigned a heavier or lighter importance, using demographic variables, such as age, gender, region, location, race and income, in order to be representative of the national US population.

A multipurpose Iterative Proportional Fitting (IPF) procedure was used to calibrate individual-level weights. This procedure simultaneously adjusted for:

1. Population estimates from the 2019 National Health Interview Survey (student and parent data) and the 2017-2018 National Teachers and Principals Survey (principal and teacher survey data).
2. Bloc-level non-response adjustment based on calibration in the quintiles of estimated propensity to respond to surveys.
3. Weight trimming procedures (removed 5% of extreme high/low estimates) to create generalizable nationally-representative population estimates.

Demographic Characteristics: Parent Cross-sectional Data (3/2/21 – 3/10/21)

Parent data was collected via a Qualtrics web panel. Parents sample data has been weighted using these demographic characteristics for the purpose of analysis.

Geography		Location		Race		School Type		Grade level	
Midwest	858 (21%)	Urban	1,278 (32%)	NH White	2,496 (62%)	Private school	408 (10%)	Kindergarten	416 (10%)
Northeast	694 (17%)	Suburban	1,955 (48%)	NH Black	500 (12%)	Public school	3,364 (83%)	Elementary school	1,465 (36%)
South	1,551 (38%)	Rural	806 (20%)	Hispanic	808 (20%)	Charter/magnet	229 (6%)	Middle school	904 (22%)
West	936 (23%)			NH Other	235 (6%)	Boarding school	11 (0.3%)	High school	1254 (31%)
						Other	27 (0.7%)		

Age		Income		Gender		Learning Model	
Under 40 yrs	2,048 (51%)	Under $49,999	1,696 (42%)	Male	1,974 (49%)	In-person	866 (21%)
40+ years	1,991 (49%)	Between $50,000 and $99,999	1,395 (35%)	Female	2,038 (50%)	Hybrid	1,342 (33%)
		$100,000 or more	948 (23%)	Transgender/ non-binary/ gender non-conforming	27 (1%)	Remote/virtual	1,831 (45%)

Demographic Characteristics: Teacher Cross-Sectional Data (3/3/21 – 3/31/21)

Teacher data was collected via a Qualtrics web panel. Teacher sample data has been weighted using these demographic characteristics for the purpose of analysis.

Geography		Location		Race		School Type		Grade level	
Midwest	389 (21%)	Urban	593 (32%)	NH White	1,431 (78%)	Private school	138 (7%)	Kindergarten and elementary school	888 (48%)
Northeast	314 (17%)	Suburban	831 (45%)	NH Black	124 (7%)	Public school	1,598 (87%)	Middle school	456 (25%)
South	703 (38%)	Rural	418 (23%)	Hispanic	209 (11%)	Charter/magnet	93 (5%)	High school	498 (27%)
West	436 (23%)			NH Other	78 (4%)	Boarding school	4 (0.2%)		
						Other	9 (0.5%)		

Age		Income		Gender		Learning Model	
Under 40 yrs	510 (28%)	Under $49,999	236 (13%)	Male	422 (23%)	In-person	422 (23%)
40+ years	1,332 (72%)	Between $50,000 and $99,999	962 (52%)	Female	1,414 (77%)	Hybrid	884 (48%)
		$100,000 or more	644 (35%)	Transgender/ non-binary/gender non-conforming	6 (0.3%)	Remote/virtual	536 (29%)

Demographic Characteristics: Principal Cross Sectional Data (4/8/21 – 4/15/21)

Principal data was collected through partner dissemination channels. Sample data has been weighted using these demographic characteristics for the purpose of analysis.

Geography		Location		Race		School Type	
Midwest	81 (14%)	Urban	344 (60%)	NH White	408 (71%)	Private school	122 (21%)
Northeast	107 (19%)	Suburban	144 (25%)	NH Black	66 (11%)	Public school	433 (75%)
South	119 (21%)	Rural	88 (15%)	Hispanic	28 (5%)	Charter/magnet	6 (1%)
West	269 (47%)			NH Other	74 (13%)	Boarding school	12 (2%)
						Other	3 (0.1%)

Age		Gender		Learning Model	
Under 40 yrs	119 (21%)	Male	387 (67%)	In-person	136 (24%)
40+ years	457 (79%)	Female	189 (33%)	Hybrid	304 (53%)
				Remote/virtual	136 (24%)

Demographic Characteristics: Teacher Crowdsourced Data (2/17/21 – 2/24/21)

Teacher data was collected through Pollfish (n = 566). These data were not weighted in the analysis.

Geography		Race		School Type		Grade Level	
Midwest	133 (23%)	American Indian or Alaska native	22 (3.9%)	Public School	435 (77%)	Elementary school	231 (41%)
Northeast	122 (22%)	Asian or Asian American	35 (6.2%)	Private School	63 (11%)	Middle school	138 (24%)
South	184 (33%)	Black or African American	43 (7.6%)	Charter/Magnet	46 (8.1%)	High school	197 (35%)
West	85 (15%)	Latino/a, Hispanic, or Latinx	58 (10%)	Boarding School	11 (1.9%)		
Unknown	42 (7.4%)	Native Hawaiian or other Pacific Islander	17 (3.0%)	Other	11 (1.9%)		
		White	455 (80%)				
		Some other race or origin	24 (4.2%)				

Learning Model		Gender		Age	
Hybrid	133 (23%)	Male	193 (34%)	20 – 29	87 (15%)
In-person	122 (22%)	Female	373 (66%)	30 – 39	201 (36%)
Remote/virtual	184 (33%)			40 – 49	119 (21%)
				50 – 54	42 (7.4%)
				55 – 64	77 (14%)
				65 – 74	32 (5.7%)
				75 – 99	8 (1.4%)

Demographic Characteristics: Teacher Crowdsourced Data (3/19/21 – 3/27/21)

Teacher data was collected through Pollfish (n = 600). These data were not weighted in the analysis.

Geography		Race		School Type		Grade Level	
Midwest	149 (25%)	Non-Hispanic White	449 (75%)	Public School	466 (78%)	Elementary school	243 (40%)
Northeast	136 (23%)	Non-Hispanic Black	17 (2.8%)	Private School	73 (12%)	Middle school	176 (29%)
South	200 (33%)	Hispanic	61 (10%)	Charter/Magnet	36 (6.0%)	High school	181 (30%)
West	85 (14%)	Other*	61 (10%)	Boarding School	10 (1.7%)		
Unknown	30 (5.0%)	Prefer not to respond	12 (2.0%)	Other	15 (2.5%)		

Learning Model		Gender		Age	
Hybrid	281 (47%)	Male	246 (41%)	20 – 29	91 (15%)
In-person	197 (33%)	Female	354 (59%)	30 – 39	201 (34%)
Remote/virtual	122 (20%)			40 – 49	142 (24%)
				50 – 54	54 (9.0%)
				55 – 64	65 (11%)
				65 – 74	40 (6.7%)
				75 – 99	7 (1.2%)

Demographic Characteristics: Staff Crowdsourced Data (2/17/21 – 2/24/21)

School Staff data was collected through Pollfish (n = 530). School staff are paraprofessionals, classroom aides or assistants, custodial staff, secretarial staff, food services staff, and bus drivers. These data were not weighted in the analysis.

Geography		Race		School Type		Grade Level	
Midwest	101 (19%)	American Indian or Alaska native	44 (8.3%)	Public School	360 (68%)	Elementary school	202 (38%)
Northeast	100 (19%)	Asian or Asian American	75 (14%)	Private School	55 (10%)	Middle school	126 (24%)
South	144 (27%)	Black or African American	87 (16%)	Charter/Magnet	45 (8.5%)	High school	202 (38%)
West	106 (20%)	Latino/a, Hispanic, or Latinx	92 (17%)	Boarding School	33 (6.2%)		
Unknown	79 (15%)	Native Hawaiian or other Pacific Islander	36 (6.8%)	Other	37 (7.0%)		
		White	295 (56%)				
		Some other race or origin	47 (8.9%)				

Learning Model		Gender		Age	
Hybrid	186 (35%)	Male	163 (31%)	20 – 29	183 (35%)
In-person	177 (33%)	Female	367 (69%)	30 – 39	135 (25%)
Remote/virtual	167 (32%)			40 – 49	90 (17%)
				50 – 54	27 (5.1%)
				55 – 64	56 (11%)
				65 – 74	35 (6.6%)
				75 – 99	4 (0.8%)

Demographic Characteristics: Staff Crowdsourced Data (3/19/21 – 3/27/21)

School staff data was collected through Pollfish (n = 494). School staff are paraprofessionals, classroom aides or assistants, custodial staff, secretarial staff, food services staff, and bus drivers These data were not weighted in the analysis.

Geography		Race		School Type		Grade Level	
Midwest	88 (18%)	Non-Hispanic White	215 (44%)	Public School	329 (67%)	Elementary school	157 (32%)
Northeast	75 (15%)	Non-Hispanic Black	52 (11%)	Private School	59 (12%)	Middle school	132 (27%)
South	139 (28%)	Hispanic	97 (20%)	Charter/Magnet	48 (9.7%)	High school	205 (41%)
West	110 (22%)	Other*	107 (22%)	Boarding School	26 (5.3%)		
Unknown	82 (17%)	Prefer not to respond	23 (4.7%)	Other	32 (6.5%)		

Learning Model		Gender		Age	
Hybrid	171 (35%)	Male	280 (57%)	20 – 29	186 (38%)
In-person	182 (37%)	Female	214 (43%)	30 – 39	121 (24%)
Remote/virtual	141 (29%)			40 – 49	75 (15%)
				50 – 54	27 (5.5%)
				55 – 64	58 (12%)
				65 – 74	21 (4.3%)
				75 – 99	6 (1.2%)