

Case Study

Using Google's COVID-19 Vaccine Search Insights to Increase Vaccine Confidence and Demand Among BIPOC Communities

In communities across the United States, those who are Black, Indigenous, and People of Color (BIPOC) have been disproportionately impacted by the COVID-19 pandemic.¹

With vaccine hesitancy and opposition increasing since the beginning of the pandemic, it is more important than ever to deliver impactful and locally relevant vaccine messaging to communities. With funding from The Rockefeller Foundation, we have been working to increase vaccine confidence and demand among BIPOC communities in Oakland, Houston, Chicago, Newark, and Baltimore as part of the [Equity-First Vaccination Initiative \(EVI\)](#). This work is done in partnership with organizations [First Draft](#) and [Pink Cornrows](#), and is rigorously evaluated using novel methods by [Brown University](#), [Mathematica](#), and [RAND Corporation](#). PGP leads the communications workstream to support community-based organizations (CBOs) by providing culturally and locally relevant messages. The EVI supports approximately 100 CBOs with equity-first approaches through webinars, peer learning networks, advocacy, and analysis. Learnings from the initiative are helping to inform strategies that can increase vaccine confidence and demand across the country.

As part of the EVI program, we create health communications guidance used by CBOs when communicating to their priority audiences. Each week, we share media and messages that respond to real-time misinformation and gaps in information. This support is delivered through newsletters and coordinating calls. Newsletters include explanations, fact checking, and talking points pertaining to locally circulating COVID-19 and vaccine misinformation. Resources are provided in English and Spanish, require no attribution, and are stored in an online resource center. Since April 2021, PGP has produced 46 newsletters, 70 images, and 29 videos.

¹ Centers for Disease Control and Prevention. 2022. "Health Equity Considerations and Racial and Ethnic Minority Groups." Accessed January 25, 2022. www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html.

CBOs are on the front lines of pandemic response, and require rapid and accurate fact checks and talking points to counter inaccurate information circulating within their communities. PGP uses multiple methods to identify, track, and respond to misinformation, disinformation, and gaps in information. This case study highlights ways that we monitor numerous media sources. We focus particularly on Google’s publicly available [Vaccine Search Insights](#), which we use to inform our communications support.

Our Methods

Our public health analysts and journalists use multiple systems to analyze media data regarding COVID-19 and vaccines. Since 2019, we have collected and analyzed over 70 million public conversations related to vaccines and misinformation.^{2 3 4} Data collected consist of publicly available messages transmitted across multiple media channels, including social and digital media, online media such as news sites and blogs, print media such as magazines and newspapers, broadcast television, and online video. Data allow analysts to form a picture of the knowledge, attitudes and behaviors of communities in relation to vaccination, in addition to exposing misinformation and knowledge gaps. This information informs the communications support PGP provides CBOs.

PGP has access to an extraordinarily large volume of public media data, however as these data are examined at smaller and smaller geographic areas, they become less reliable. Much of the publicly available media data are not geotagged or linked to any particular location. This limitation is widely recognized within the fields of media monitoring and disease surveillance. Google’s COVID-19 Vaccine Search Insights provides a heretofore unavailable dataset that has potential to significantly improve public health analyst’s investigations into local misinformation and information gaps.

² Bonnevie, Erika, Jennifer Sittig, and Joe Smyser. "The case for tracking misinformation the way we track disease." *Big Data & Society* 8, no. 1 (2021): 20539517211013867.

³ Bonnevie, Erika, Jaclyn Goldberg, Allison K. Gallegos-Jeffrey, Sarah D. Rosenberg, Ellen Wartella, and Joe Smyser. "Content themes and influential voices within vaccine opposition on Twitter, 2019." *American Journal of Public Health* 110, no. S3 (2020): S326-S330.

⁴ Bonnevie, Erika, Allison Gallegos-Jeffrey, Jaclyn Goldberg, Brian Byrd, and Joseph Smyser. "Quantifying the rise of vaccine opposition on Twitter during the COVID-19 pandemic." *Journal of Communication in Healthcare* 14, no. 1 (2021): 12-19.

from Google's tool with data collected through our media monitoring systems. This allows us to better tailor our support.

Other Applications

Google's Vaccine Search Insights also have other applications to improve programs and understand potential impact. For example, data can be compared with the various publicly available COVID-19 vaccine trackers to identify areas where people may be more open to vaccination. Areas with a lower vaccination rate, high intent searches, and low side effect searches may be places where people are more receptive to vaccines, where easier gains could be made. While our efforts have focused on utilizing data for content creation, they can also serve as an evaluation tool. Depending on the goal of the program, impact could be estimated by examining increases in searches related to vaccine intent, or increases in searches related to specific messages/ topics that are highlighted in a program's content. Users can also compare data from areas that received content with areas that did not receive content, as a way of undertaking an intervention group vs. control group analysis. The historic feature provides data as far back as January 2020, and can also be useful to understand longer term trends in one area, or comparatively across areas.

Health Communications for BIPOC Communities Must be Local

Health communications campaigns should be as localized as possible, and can make use of publicly available tools to create real-time data-informed messaging and strategies. This is perhaps particularly true for BIPOC communities, which have good reason to be wary of healthcare and public health systems.^{6 7 8} Rockefeller's Equity-First Vaccination Initiative has demonstrated that a collective impact approach works in addressing vaccine confidence and demand. The CBO's supported by this initiative report that our work helps them stay

⁶ Centers for Disease Control and Prevention. 2021. "Minority Health" Accessed January 25, 2022. www.cdc.gov/minorityhealth/index.html

⁷ American Academy of Family Physicians. 2022. "Institutional Racism in the Health Care System" Accessed January 25, 2022. www.aafp.org/about/policies/all/institutional-racism.html

⁸ Bailey, Zinzi D., Justin M. Feldman, and Mary T. Bassett. "How structural racism works—racist policies as a root cause of US racial health inequities." *New England Journal of Medicine* 384, no. 8 (2021): 768-773.

up-to-date and knowledgeable about misinformation and misunderstanding circulating in their communities, and supports them in their role as trusted local messengers.

“Google’s search data help us create content that is hyperlocal and reflective of the frequently changing questions that people have about COVID-19 vaccination. By using Google’s data, we have a better understanding of community knowledge levels, which communities are highest priority for targeting efforts to increase vaccination, and the types of content needed within each area.”
Dr. Joe Smyser
CEO, The Public Good Projects

As immunization and public health programs shift from emergency operations to the sustained vigilance required in order to inform and empower their communities, Google’s Vaccine Search Insights appears to be a valuable tool. With health authorities stretched thin and standard data collection techniques requiring lengthy lag times between collection and insight, this tool can significantly contribute to the real-time intelligence the majority of experts now agree is necessary. Our hope is that Google continues to resource this and other tools, working in concert with organizations like ours to advance public health everywhere for everyone.

Erika Bonnevie, MA
Research Director, PGP

Stacey Meadows, MA
Program Manager, PGP

Joe Smyser, PhD, MSPH
CEO, PGP

info@publicgoodprojects.org

Downloadable creative assets:



Talking Points:



Keeping kids safe against Omicron: Suggested talking points

- **Hospitalization rates among kids reached record highs.**
 - Nearly [325,000 pediatric COVID-19 cases](#) were reported last week, a 64 percent increase from the week prior.
 - Pediatric COVID-19 hospitalizations increased by more than 50 percent—[double the rate](#) that adult COVID-19 hospitalizations rose during the same period.
 - A worrisome number of younger patients are experiencing [severe complications](#) from the virus.
 - Despite the concerning number of hospitalizations, preliminary data suggests that Omicron causes [milder illness](#) in children compared to Delta.
 - The vast majority of children hospitalized with COVID-19 are unvaccinated.
- **All kids ages 12 and above are now eligible to get a booster.**
 - Vaccines and boosters are the best protection for kids right now.
 - All kids 5 and older are eligible to get vaccinated, and the FDA authorized the Pfizer-BioNTech booster for 12- to 15-year-olds. The CDC is expected to make a [final recommendation](#) today.
 - The CDC now recommends getting a booster five months after the initial Pfizer series. This decision is based on research that suggests that a five-month booster timeline protects better against Omicron than the original six-month gap.
 - This change only applies to those who received the Pfizer vaccine for the initial two shots.
- **Mask wearing and regular testing are key to keeping kids safe at school.**
 - Some cities have switched to remote learning, but a vast majority of the country's public schools will continue [operating in person](#).
 - Schools are using the test-to-stay strategy to keep kids in school. The strategy uses regular testing to determine who needs to be sent home rather than quarantining everyone who's been in contact with an infected individual.
 - The CDC says the strategy is [effective](#) in limiting COVID-19 transmission in the school setting while minimizing the impact of quarantine and school absences.
 - Mask wearing and social distancing are also essential preventative measures.
 - Encourage parents to instruct their kids to wear masks in all indoor spaces and to test their kids if they are displaying symptoms.



COMMUNICATION SUPPORT

Happy New Year! COVID-19 cases continue to rise in the U.S., largely fueled by Omicron. With kids returning to school, parents are in need of guidance on how to keep them safe. This week's newsletter covers pediatric hospitalization rates, boosters for kids, and schools' test-to-stay strategy. — PGP Response Team

THE LATEST

In the first week of 2022, the Omicron variant is causing COVID-19 cases to surge, especially among kids. Students across the country are returning to classrooms, leaving many parents worried about the health and safety of their children. While some cities have opted to switch to remote learning for a period of time, a vast majority of the country's public schools will be [operating in person](#).

Keeping families informed about Omicron's risk is key to keeping them safe. We've answered some questions parents may have about the virus as their kids return to school. Below is an overview of Omicron's impact on kids, the expansion of booster eligibility, and the effectiveness of the test-to-stay strategy.

How has Omicron affected case counts and hospitalization rates among kids?

Pediatric COVID-19 cases have been rising since Omicron entered the picture. Last week, the U.S. reported nearly [325,000 child cases](#), a 64 percent increase from the week prior.

COVID-19 hospitalization rates among kids have also jumped significantly, reaching a record high since the pandemic began. In the past month, pediatric COVID-19 hospitalizations increased by more than 50 percent—[double the rate](#) that adult COVID-19 hospitalizations rose during the same period. Doctors are noting that the vast majority of hospitalized kids were unvaccinated.

The risk of severe illness from COVID-19 remains small for kids, and among the kids hospitalized, not all were hospitalized for COVID-19 symptoms—some were admitted for other reasons and only tested positive once at the hospital.

Still, doctors are warning that there have been a worrisome number of younger patients experiencing [severe complications](#) from the virus.

Why is this happening? Is Omicron more severe for kids?

This may seem counterintuitive, but despite the concerning number of hospitalizations, preliminary data suggests that Omicron causes [milder illness](#) in children compared to Delta.

Kids are being hospitalized with COVID-19 for two reasons: 1) The sheer number of people being infected means that kids will get sick, too, and 2) Most kids are unvaccinated. About half of 12- to 17-year-olds are [fully vaccinated](#) and less than one-quarter of 5- to 11-year-olds have received at least one dose. Kids under 5 are not yet eligible to get the vaccine.

The fact of the matter is that unvaccinated kids are still at risk from COVID-19.

What can we do to keep kids safe against Omicron?

Just like for adults, vaccines and boosters are the best protection for kids right now. All kids 5 and older are eligible to get vaccinated, and, as of this week, the FDA authorized the Pfizer-BioNTech booster for 12- to 15-year-olds. The CDC is expected to make a [final recommendation](#) today. The agency has also recommended that kids 5 and older who are moderately or severely immunocompromised should receive an [additional primary dose](#) 28 days after their second shot.

The FDA also [shortened](#) the timeline for getting a booster from six months to five months after your initial series. This decision is based on research that suggests that a five-month booster timeline better protects against Omicron than the original six-month gap. This change only applies to those who had the Pfizer shots.

Besides vaccines and boosters, wearing masks—particularly surgical masks and KN95 or KF94 masks—is key to minimizing risk at schools. Regular testing is also effective in limiting the virus's transmission. If the schools in your area do not have policies in place to enforce these protective measures, encourage parents to instruct their kids to wear masks in all indoor spaces and to test their kids if they are displaying symptoms.

How effective is the test-to-stay strategy?

Schools that are choosing to stay open may be using the test-to-stay strategy to keep kids in school. This strategy uses regular testing to determine who needs to be sent home rather than quarantining everyone who's been in contact with an infected individual. If contacts don't have symptoms and test negative at least twice in a seven-day period, they can continue in-person learning.

Parents can trust that the strategy works. The CDC evaluated test-to-stay programs in schools across the U.S. and found that they are [effective](#) in limiting COVID-19 transmission in the school setting while minimizing the impact of quarantine and school absences. However, the lack of available tests right now makes it challenging for schools to increase testing capacity. Either way, test-to-stay programs should be part of a layered approach that includes other preventative measures such as mask wearing and social distancing.

SUGGESTED TALKING POINTS

- Hospitalization rates among kids reached record highs.
- All kids ages 12 and above are now eligible to get a booster.
- Mask wearing and regular testing are key to keeping kids safe at school.

[READ TALKING POINTS IN ENGLISH AND SPANISH](#)

NEWS COVERAGE

- **CNN:** [CDC backs FDA's decision to reduce time between primary series and booster dose of Pfizer's Covid-19 vaccine](#)
- **New York Times:** [Omicron Upends Return to School in U.S](#)
- **NBC:** [Children are hospitalized with Covid at record numbers](#)
- **New York Times:** [Omicron Is Not More Severe for Children, Despite Rising Hospitalizations](#)

TRENDING MISINFORMATION

PGP tracks misinformation from a variety of sources, including Project VCTR and a network of fact-checking organizations like First Draft News. Here's the misinformation that's trending this week.

Data used to overstate vaccine myocarditis risk, discourage vaccination

A recent study, which has not yet been peer reviewed, describes myocarditis risks following COVID-19 vaccination. The study suggests that the risk of developing myocarditis is highest in the first four weeks after the second dose of an mRNA vaccine and that the risk is highest in men under 40. Data from the study have been shared by people attempting to discourage vaccination.

Counter-messaging: Myocarditis from COVID-19 vaccines is exceedingly rare, with fewer than 600 cases of post-vaccination myocarditis being reported in 42 million study participants. You are much more likely to get myocarditis from COVID-19 infection than from vaccines.

Misleading study falsely claims vaccine causes deadly autoimmune disease

A non-peer reviewed research summary claims without evidence that mRNA COVID-19 vaccines "cannot work" and that they cause deadly autoimmune-related organ failure and disease. The study assessed 15 people who died between a week and six months after vaccination and claims that the vaccine triggered their immune systems to attack their organs.

Counter-messaging: None of these deaths were linked to vaccination by coroners. Notably, the study incorrectly asserts that mRNA vaccines cannot prevent COVID-19 infection and can cause cells in different organs to produce spike proteins, which are then targeted by the immune system. Both of these false claims are often used to discourage vaccination.

QUICK RESPONSE MEDIA ASSET

Below, we've provided a social media asset in English and Spanish. Just click on the asset and it will pop up in a new window. Then right-click the asset to download.



SUGGESTED SOCIAL COPY

COVID-19 hospitalization rates among kids have jumped significantly since Omicron entered the picture, reaching a record high since the pandemic began. Vaccines and boosters are the best protection we have against Omicron. All kids 5 and older are eligible to get vaccinated, and, as of this week, the FDA authorized the Pfizer-BioNTech booster for all kids 12 and older.

Ejemplo de publicación

Las tasas de hospitalización por COVID-19 entre los niños han aumentado significativamente desde que ómicron entró en escena, alcanzando un récord desde que comenzó la pandemia. Las vacunas y la dosis de refuerzo son la mejor protección que tenemos contra ómicron. Todos los niños de 5 años o más son elegibles para vacunarse y, a partir de esta semana, la FDA autorizó la dosis de refuerzo de la vacuna

