



Addressing Disproportionate Childhood Vaccination

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Vaccines for children should be available and accessible to all.

And yet, despite decades of effort, significant disparities in childhood vaccination rates persist. In 2017, American Indian/Alaska Native children were 10% less likely to be fully immunized with CDC-recommended vaccines than non-Hispanic white children.¹ Just 66.5% of Black children aged 19 to 35 months were fully immunized, compared to 71.5% of white children.² Immunization rates for Asian-American, Hispanic, and non-Hispanic white children were similar, at 72.4%, 70.4%, and 71.5% respectively.³⁻⁴

More recently published data suggests that socioeconomic status heavily influences vaccination status. An article published in *Health Equity* in January 2021 notes that in 2018, infants from families with incomes below the poverty threshold were approximately 30% less likely to receive the seven vaccines recommended for children ages 19 to 35

months.⁵ Income-related disparities have increased in recent years: in 2009, children from poor families were 9% less likely to be fully immunized than children in families with an annual income of at least \$75,000; in 2018, children living in poverty were calculated to be 37% less likely to be up to date on their immunizations.⁶

Black infants remain less likely, overall, to be fully vaccinated than white infants, which suggests a complicated connection between race, income and vaccination, as research shows that vaccination rates for high-income Black, white, Asian-American, and Hispanic children are similar.⁷⁻⁸

Closing the gap in disparities in childhood vaccination must be a focus for all in healthcare. Good health is foundational to the pursuit of happiness—and childhood vaccinations are part of the path to good health. Equity in childhood vaccination rates is critical for the health and well-being of our families, communities, countries, and world.

Accurately Identifying Barriers to Vaccination

In 1994, the United States launched the Vaccines for Children program, an intervention intended to increase vaccination uptake by removing financial barriers to immunization.⁹⁻¹⁰ The program was a response to a resurgence of measles that was “caused largely by widespread failure to vaccinate uninsured children at the recommended age of 12-15 months,” according to Centers for Disease Control and Prevention (CDC) report.¹¹ Government investment in the program—which provides free vaccines for children who might not otherwise be vaccinated due to inability to pay—has resulted in improved health for many children and significant savings: A 2014 review of Benefits from Immunization During the Vaccines for Children Era – United States, 1994-2013 states that the net savings “of routine childhood immunization from the payers’ and societal perspectives were \$295 billion and \$1.38 trillion, respectively.”¹²

The stubborn persistence of vaccine disparities despite programs specifically designed to address financial barriers suggests that a lack of money may not be the primary barrier to vaccination for many families. Inadequate access to healthcare (including inconvenient and limited clinic hours), lack of reliable transportation and childcare, inability to get time off from work to have children immunized, language barriers, and the absence of a reminder system for missed vaccinations all contribute to disparities in childhood vaccination.¹³⁻¹⁴

During the COVID-19 pandemic, childhood vaccination rates fell as parents and providers canceled or postponed well-child visits.¹⁵ Research from Southern California shows that

vaccination rates are picking up as communities relax COVID-19-related stay-at-home orders and restrictions; however, recovery is lower in non-Hispanic Black individuals than in other racial and ethnic groups.¹⁶

To effectively address disproportionate vaccination rates, we must identify, acknowledge, and address all barriers to vaccination.

Addressing the Information Gap

Disparities in vaccination rates can be traced in part to parental points of view. Some parents' experiences, directly or through word of mouth, have resulted in mistrust in health care system. As noted in a January 2021 article from The Commonwealth Fund, "The medical establishment has a long history of mistreating Black Americans — from gruesome experiments on enslaved people to the forced sterilizations of Black women and the infamous Tuskegee syphilis study that withheld treatment from hundreds of Black men ..." ¹⁷ The article notes that empathy and acknowledgement of the historical basis for individuals' skepticism can build trust, an essential avenue to health equity.¹⁸

Vaccine manufacturers must partner with trusted voices in community-based organizations consistently to learn what works in the various communities and to create educational materials that are culturally relevant and linguistically appropriate. These materials should outline the risks and benefits of vaccinations and be distributed in various formats, such as post cards and text messages, instead of simply being posted on a website, waiting to be discovered. Members of local communities can be trained to disseminate scientifically-sound information.

Implementing Community-Based Solutions

Community outreach should be designed to meet the needs of the community, rather than the needs of medical professionals or vaccine manufacturers. Manufacturers and health systems must make long-term, multi-year commitments to supporting underserved communities in ways that have nothing to do with medicines and vaccines. Pharmaceutical employees and healthcare providers should listen to and learn from community members, partnering across sectors to provide support.

Re-prioritizing well-child visits and ensuring that vaccinations are available at convenient locations and times, can also boost community vaccination rates. Healthcare providers and community leaders can direct caregivers to [BabyCheckupsCount.com](https://www.babycheckupscount.com), a website that

provides health information and access to a CDC-recommended vaccination schedule that can be personalized based on date of birth.

Healthcare providers should educate all parents, caregivers, and community leaders about the Vaccines for Children (VFC) program.

Together, we can work toward ensuring vaccine access for all children.

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Niesha Foster is the Vice President, Product Access, Global Health & Social Impact and Co-chair, Multicultural Health Equity Collective for Pfizer.

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