

reopened. During influenza outbreaks, reopening has been associated with the risk of epidemic resurgence. The best solution for the COVID-19 pandemic is not known. It has been suggested that children who test positive on serologic tests that identify IgG against SARS-CoV-2 could be admitted to school. It is supposed that positivity could allow the identification of children who have already been infected, can be considered protected, and can attend school without posing risks per se to other children. However, the use of this procedure can be strongly criticized. The sensitivity of the presently available antibody tests is suboptimal. Most children have an asymptomatic infection, and as the immune response to SARS-CoV-2 infection has been found to be greater the more serious the disease is, it seems likely that most children will have a low

antibody titer that is inadequate for obtaining positivity on tests with relatively low sensitivity.¹⁰ Moreover, even when IgG levels are measured, it is not possible to state whether children are protected or how long the protection may last. The antibody protective level and secondary immune response to SARS-CoV-2 are not known. Taken together, these factors seem to indicate that most children with IgG positivity cannot be identified and, even if identified, cannot be considered protected for the long term. Other criteria, such as a systematic adoption of face masks with some lessons on this issue and on all hygiene measures for COVID-19 prevention, screening with temperature measurements, or closing classrooms with infected students, must be followed when school is resumed.

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VIEWPOINT

Low-Income Children and Coronavirus Disease 2019 (COVID-19) in the US

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Viewpoint page 921 and Editorial page 928

For general pediatricians who have worked in busy practices delivering well-child care, administering immunizations, and supporting children and families with social needs, the empty clinic hallways and examination rooms are a stark reminder of who is missing from the daily news feed about the coronavirus disease 2019 (COVID-19) pandemic: children, particularly those who live in poverty. The rate of serious illness among young children from the novel coronavirus is very low.¹ Yet to slow the spread of the virus, all states have closed schools, disrupting routines critical to learning, nutrition, and social development. Directly and indirectly, low-income children have been forced to subordinate their own well-being for the greater good. To recognize and respect this sacrifice, the US should make a commitment to provide them with the opportunities they have long deserved.

In the pre-COVID-19 era, the US was not known for its generosity toward children. Nearly 1 in 5 children in the US live in poverty, a substantially greater proportion than for adults. Poverty disproportionately affects African American, Hispanic, and American Indian/Alaska Native children.² The effects of poverty, espe-

cially childhood poverty, are pervasive. Childhood poverty is associated with injuries, chronic illness, and mental health difficulties, with consequences lasting not only throughout childhood but also the life course and well into adulthood.

Rather than ameliorate these inequities, the US educational system has often reinforced them through insufficient and inequitable funding systems. School districts serving low-income children have more run-down school facilities, fewer curricular offerings, and less experienced teachers.³

Restrictions imposed because of the coronavirus make these challenges more formidable. While school districts are engaging in distance learning, reports indicate wide variability in access to quality educational instruction, digital technology, and internet access. Students in rural and urban school districts are faced with challenges accessing the internet. In some urban areas, as many as one-third of students are not participating in online classes.⁴

Chronic absenteeism, or missing 10% or more of the school year, affects educational outcomes, including reading levels, grade retention, graduation rates, and

high school dropout rates. Chronic absenteeism already disproportionately affects children living in poverty.⁵ The consequences of missing months of school will be even more marked.

Compounding the loss of educational time is the challenge of accessing school resources. More than 30 million children rely on school nutrition programs. With schools closed, emergency food assistance is reaching only a fraction of the children previously served.⁶ Schools also provide access to consistent and caring adults who can help build resiliency and offer holistic support. School-based health centers, nursing services, and mental health programs help alleviate disparities in access to health care services.

To date, the US pandemic response has focused on the health and economic effects facing adults. Children will experience some downstream benefits from this response. However, these measures are insufficient to address their substantial needs and no relief packages have targeted children directly and holistically. The first bill, the US Coronavirus Preparedness and Response Supplemental Appropriations Act, provides \$8 billion of support for health care institutions and their workers through funding and personal protective equipment. The second bill, the US Families First Coronavirus Response Act, provides more than \$3 billion to support access to free coronavirus testing, paid sick leave, unemployment benefits, and nutrition assistance programs. The third bill, the US Coronavirus Aid, Relief, and Economic Security Act, is a \$2 trillion piece of legislation that provides relief for unemployed individuals, including nutrition assistance, small businesses, large corporations, and state and local governments. The fourth bill, the US Paycheck Protection Program and Health Care Enhancement Act, allocates \$484 billion for paycheck support, small businesses, hospitals and health care clinicians, and coronavirus testing.

This legislation has understandably aimed to contain the pandemic and its economic fallout. While many adults will experience months of challenges, low-income children are at risk of experiencing consequences for a lifetime. To prevent these harms, the US should commit to fully addressing the needs of children as part of its national response.

Future COVID-19 legislation should target child health and well-being. Congress should expand critical programs for low-income children, including additional funding for Medicaid to cover rising de-

mand. The Supplemental Nutrition Assistance Program and the Special Supplemental Nutrition Program for Women, Infants, and Children need an expansion of benefits to reach the rising number of families experiencing food insecurity and income loss. Congress should increase the size of the Earned Income Tax Credit and phase it in more rapidly. The child tax credit should be fully refundable to maximally benefit children in low-income families. Evidence-based programs, such as home visiting and Head Start (US Department of Health & Human Services), need investments to build strong foundations for child development and resilience.

Other immediate needs include funds to address the digital learning divide, including access to high-speed internet and versatile electronic devices so all children can participate in distance learning. State social service agencies should receive additional funds to support outreach to families during and after the pandemic. To address mental health needs, funds should support telemedicine access for children and their caregivers. Monies should also be allocated for research that elevates community voices and explores the needs of communities that have been marginalized by the pandemic. Finally, investments are needed in innovative delivery mechanisms of health, education, and social services, particularly in a new paradigm in which social interaction is limited.

As the economy recovers, the federal government must embark on a massive school infrastructure initiative to fund physical plant improvements to ensure that all children have healthy and welcoming places to learn. Congress should also ensure that all school districts have resources for high-quality instruction, activities, and school health services.

Finally, the US should commit, as other nations have, to reducing childhood poverty and following the roadmap set forth by the National Academies of Science, Engineering, and Medicine. The total cost of these efforts is estimated at \$90 to \$110 billion per year, far less than the nation has already spent to keep the economy afloat during the pandemic.⁷

The fact that low-income children have had no choice but to give up educational, nutritional, and social supports does not make them any less deserving of attention. It is not enough for children to survive the pandemic. Their sacrifice should spur efforts to help them thrive, now and in the future.

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