Public Health Decision Making during Covid-19 — Fulfilling the CDC Pledge to the American People

Sonja A. Rasmussen, M.D., and Denise J. Jamieson, M.D., M.P.H.

In May 2020, the Centers for ▲ Disease Control and Prevention (CDC) released considerations for the opening of elementary and high schools in the fall in light of the Covid-19 pandemic. The agency also developed a decision tool to guide school systems in deciding when schools should be opened and a 9-page checklist for school administrators with policies and procedures, facilities and supplies, and education and training needed for safe reopening of schools. The day after a July 7 meeting at the White House to discuss school reopening with school system administrators, teachers, and students, President Donald Trump expressed concern about the practicality of the guidelines and the expenses associated with following them; later that day, Vice President Mike Pence announced that the CDC would be revising the guidelines. The next day, the CDC director clarified that the guidelines would not be revised, but that additional reference documents would be provided to aid communities as they worked to implement the guidelines. On July 23, the CDC released additional documents emphasizing the critical role of schools and the importance of opening them for in-person instruction. This interchange among federal leaders raises concern that during the response to the most critical public health emergency of our lifetimes, guidelines regarding the safety of schoolchildren in the United States could

be based not on the best scientific data available, but on political considerations.

It is hard to imagine a more important issue than the safety of our country's schoolchildren during a pandemic. As is often the case with an emerging infection, the data needed to make policy decisions about school reopening are incomplete. The many benefits of in-person learning for children are clear and include not only academic progress, but also positive effects on social and emotional skills and mental health and the provision of nutritional services. In addition, in-person learning for children allows parents to return to their work activities.

However, data on the risks that school reopening poses for children, teachers, and their communities remain limited. Children appear to be less likely to become infected with SARS-CoV-2, the virus that causes Covid-19; of 149,082 U.S. cases reported between February 12 and April 2, 2020, only 2572 (1.7%) were in children younger than 18,1 although the possibility that some children are infected but asymptomatic, and therefore not tested, cannot be excluded. Available data suggest that children are at low risk for severe disease or death,1 but children with underlying conditions, including immune suppression, cancer, obesity, or diabetes, have been shown to be at increased risk for severe disease necessitating admission to an intensive care unit.² The recent emergence of the multisystem inflammatory syndrome in children (MIS-C), a severe and life-threatening illness, raises additional concerns. MIS-C appears to be a rare event following infection with SARS-CoV-2; however, in a recent study, three quarters of children with MIS-C had no documented underlying conditions, so predicting which children might develop this complication is not currently possible.³

Although most children infected with SARS-CoV-2 are mildly affected, the same cannot be said for the teachers, parents, grandparents, and others who will be exposed to potentially infected children. At this time, data on transmission of SARS-CoV-2 from infected children are limited. A recent report on contact tracing from South Korea, however, sheds light on this issue: household contacts of children 10 to 19 years of age had the highest rate of Covid-19 (18.6% tested positive, as compared with 11.8% of contacts of infected persons of all ages), while contacts of children 0 to 9 years of age had the lowest rate (5.3% tested positive).4 Rates of infection among nonhousehold contacts were low, but the study was done at a time when schools were closed, which limited the opportunity for transmission from children to people outside their households. The effects of school reopening on transmission of Covid-19 in communities are also

not well understood. The value of school closures in reducing the spread of seasonal and pandemic influenza has been demonstrated, but whether these findings apply to Covid-19 is unknown.⁵

When faced with a decision of such gravity, it is essential that experts in epidemiology, public health, pediatrics, and infectious disease, in consultation with eduneed to be made. Maintaining Americans' confidence in public health leaders is essential to an effective response not only to Covid-19, but to other public health emergencies that the country may face in the future.

During the Covid-19 response, the greatest challenge to public health in more than 100 years, science must guide public health

Maintaining Americans' confidence in public health leaders is essential to an effective response not only to Covid-19, but to other public health emergencies that the country may face in the future.

cators and members of affected communities and institutions, lead the efforts to develop guidelines that are based on the best scientific data available. As the American Academy of Pediatrics, the American Federation of Teachers, and other national organizations noted in a press release on July 10, "Returning to school is important for the healthy development and well-being of children, but we must pursue reopening in a way that is safe for all students, teachers and staff. Science should drive decision making on safely reopening schools."

Longer-term concerns about undermining public confidence in public health decision makers also need to be considered. Although the current pandemic disrupted the daily lives of Americans in ways not seen since the 1918 influenza pandemic, one can imagine future emergencies (e.g., a bioterrorist attack or radiation emergency) in which even more rapid and drastic decisions may

decision making. As former CDC employees with more than 40 years' combined experience, which included playing leadership roles in the CDC responses to the 2009 H1N1 influenza epidemic and the Ebola and Zika emergencies, we recognize that these decisions made in the midst of a public health emergency are fraught with challenges and require careful consideration of the risks and benefits of various options. Available data must be rapidly analyzed and interpreted, even when key data necessary to guide decision making are incomplete or unavailable. Existing evidence as well as critical gaps in knowledge need to be carefully documented. These decisions are often guided by modeling efforts and by individual input from professional organizations and community members. As additional information becomes available, guidance needs to be adapted to incorporate the new knowledge.

CDC scientists have the exper-

tise, knowledge, and experience to guide these public health decisions, as evidenced by the multiple sets of guidelines produced during responses to past emergencies. Decisions made during the H1N1, Ebola, and Zika epidemics were highly visible, often leading the news, and the CDC's responses were subject to substantial scrutiny. Yet the agency maintained its scientific rigor and integrity in developing guidelines.

As we consider these recent events, we are reminded of the CDC's Pledge to the American People. This pledge, available on the CDC website, appeared on a large wall that we passed daily while working on emergencyresponse activities. The pledge states that CDC employees should "base all public health decisions on the highest quality scientific data that is derived openly and objectively." Current CDC employees must be allowed to fulfill their pledge: our country's ability to succeed in the fight against the Covid-19 pandemic depends on it.

The views expressed in this article are those of the authors and do not necessarily represent those of any institutions they are or previously have been affiliated with.

Disclosure forms provided by the authors are available at NEJM.org.

From the Department of Pediatrics, University of Florida College of Medicine, and the Department of Epidemiology, University of Florida College of Public Health and Health Professions and College of Medicine, Gainesville (S.A.R.); and the Department of Gynecology and Obstetrics, Emory University School of Medicine, Atlanta (D.J.J.). Both authors were employed by the U.S. federal government until 2017 (D.J.J.) and 2018 (S.A.R.); both are currently unpaid guest researchers at the CDC.

This article was published on July 29, 2020, at NEJM.org.

- 1. CDC COVID-19 Response Team. Coronavirus disease 2019 in Children United States, February 12–April 2, 2020. MMWR Morb Mortal Wkly Rep 2020;69:422-6.
- 2. Shekerdemian LS, Mahmood NR, Wolfe

KK, et al. Characteristics and outcomes of children with coronavirus disease 2019 (COVID-19) infection admitted to US and Canadian pediatric intensive care units. JAMA Pediatr 2020 May 11 (Epub ahead of print).

3. Feldstein LR, Rose EB, Horwitz SM, et al.

Multisystem inflammatory syndrome in U.S. children and adolescents. N Engl J Med 2020; 383:334-46.

4. Park YJ, Choe YJ, Park O, et al. Contact tracing during coronavirus disease outbreak, South Korea, 2020. Emerging Infect Dis 2020 July 16 (Epub ahead of print).

5. Esposito S, Principi N. School closure during the coronavirus disease 2019 (COVID-19) pandemic: an effective intervention at the global level? JAMA Pediatr 2020 May 13 (Epub ahead of print).

DOI: 10.1056/NEJMp2026045
Copyright © 2020 Massachusetts Medical Society.

Long-Term Care Policy after Covid-19 — Solving the Nursing Home Crisis

Rachel M. Werner, M.D., Ph.D., Allison K. Hoffman, J.D., and Norma B. Coe, Ph.D.

Nursing homes have been caught in the crosshairs of the coronavirus pandemic. As of early May 2020, Covid-19 had claimed the lives of more than 28,000 nursing home residents and staff in the United States.¹ But U.S. nursing homes were unstable even before Covid-19 hit. They were like tinderboxes, ready to go up in flames with just a spark. The tragedy unfolding in nursing homes is the result of decades of neglect of long-term care policy.

Since the U.S. coronavirus outbreak began in a nursing home in Kirkland, Washington, more than 153,000 residents and employees of 7700 U.S. nursing homes have contracted Covid-19, accounting for 35% of the country's deaths.1 Here, as in many other countries, nursing homes have been ill equipped to stop the spread of the virus. They lacked the resources necessary to contain the outbreak, including tests and personal protective equipment, and their staff are routinely underpaid and undertrained. Furthermore, nursing homes were sitting ducks for Covid-19, housing people who are particularly vulnerable to poor outcomes of the virus, often in shared living quarters and communal spaces, making social distancing or isolation difficult, if not impossible.

But this crisis in nursing homes is not a new problem. Long-term care in the United States has been marginalized for decades, leaving aging adults who can no longer care for themselves at home reliant on poorly funded and insufficiently monitored institutions. Although major regulatory policies, including the Federal Nursing Home Reform Act of 1987, have attempted to address deficiencies in the quality of care, Covid-19 has highlighted the fact that better monitoring is not enough. The coronavirus has exposed and amplified a longstanding and larger problem: our failure to value and invest in a safe and effective long-term care system.

Indeed, long-term care has been sidelined in our federal social welfare policies since the 1960s, when Medicare and Medicaid created narrow and incomplete social insurance programs for such care. These programs adopted a medicalized model of care, prioritizing the use of licensed providers and institutions. This model made nursing homes the default provider of long-term care and made the

care provided by families and others outside these licensed facilities invisible, leaving it unsupported.

Furthermore, Medicare and Medicaid were never intended to pay for the lion's share of long-term care. Medicare funds long-term care only temporarily and tangentially by covering nursing home-based rehabilitation after a hospital discharge. Medicaid finances more than half of all long-term care for people who need help with daily activities, such as bathing, dressing, or eating, but it's available only to people who have spent down their own assets, and it has coverage gaps.

And financing of nursing home care by both Medicare and Medicaid has been declining. Nursing homes have seen decreasing occupancy for decades, despite the aging of the U.S. population. The number of patients discharged from the hospital to a nursing home for rehabilitation has also declined.2 In an effort to constrain health care spending, these patients are being sent directly home, which puts the squeeze on a critical part of nursing homes' revenue. Since the pandemic began, short stays have all but vanished, as nursing homes turn away patients after hospital