

GUEST ESSAY

We Advised Biden on the Pandemic. Much Work Remains to Face the Next Crisis.

Oct. 19, 2022

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The authors were members of President Biden's advisory board on Covid-19, which counseled him during the presidential transition period on how to respond to the pandemic.

We are nearly three years into the Covid-19 pandemic, a health crisis so long, disruptive and deadly, it should have transformed the country's preparation for the next public health emergency. Sadly, it has not.

We say this as members of President Biden's Covid advisory board in the weeks before he took office. We have since followed and been part of the public health response to the pandemic. We are deeply dismayed by what has been left undone.

Improvements have emerged, of course. Foremost among them, the rapid development of vaccines, the widespread use of at-home testing and the adoption of environmental surveillance such as sampling of wastewater systems to predict community surges.

But these few successes only underscore how much more should and could have been done — and still needs to be done. There were many opportunities that would have permanently improved American health and the public health system. They have not yet been pursued. There is no question other health crises lie ahead. We need to assess the opportunities squandered or missed in the Covid pandemic and seize them now.

Even among the successes, there is much room for improvement.

Rapid, low-cost at-home testing could be deployed to detect multiple infectious agents at once. There is still no comprehensive reporting system for individuals to easily submit their at-home test results to public health agencies, rendering a broad swath of infections across the country invisible to officials trying to slow their spread. Likewise, the national reporting system for collecting and testing samples from wastewater treatment systems for Covid remains limited, uncoordinated and insufficiently standardized for a robust national surveillance system. If public health officials can't track the data to mobilize a response to a crisis, the information that has been collected doesn't do much good.

Congress's unwillingness to appropriate federal money deserves much of the blame. But the failures are not all attributable to financial limitations. There has been a retreat from pandemic preparedness.

Perhaps the most important missed opportunity was the failure to prioritize systematic improvement of indoor air quality. All sorts of respiratory infections, including flu and common colds, as well as asthma and other medical conditions, arise because of airborne pathogens and particulate matter.

Early research from Italy suggested that six air replacements per hour in classrooms could reduce Covid infection risk by 80 percent. A study in California in 2013 found a significant reduction in student absences with improved ventilation. Other studies suggest improved cognitive functioning for adults and children with better indoor air. Air quality has been improved in some buildings and restaurants, but the effort has been haphazard. Most buildings left out, not surprisingly, include those where lower-income children and adults live, work or attend school, breathing air that is unhealthy.

To improve this situation, national indoor air quality standards should be set, and buildings should be required to post whether they meet those standards. The initial focus should be on schools, nursing homes, assisted-living facilities, jails and prisons and other high-risk congregate settings.

The United States also needs to enhance its data collection and analysis. Throughout the pandemic, the country relied on data from Israel, Britain and South Africa to track the appearance of new variants and to measure the effectiveness of vaccination. Recognizing this, the Centers for Disease Control and Prevention created an analytic branch to develop those capabilities. But analysis is only as good as the underlying data, and little has been done to bring the collection and integration of public health information into the digital age.

The C.D.C., the country's principal public health agency, has acknowledged that it lacks a data infrastructure with clear standards that can accept and integrate information crucial to monitoring and fighting public health threats. This includes information from local and state health agencies and health systems tracking in near real time the actual number of cases, hospitalizations and deaths, stratified by vaccination status, age, community and race. Public health officials will find themselves flying blind in the next emergency if this system is not fixed.

Improving worker safety has been another missed opportunity. Everyone in a workplace benefits if colleagues feeling flulike symptoms remain home. But this will happen only with a change in culture around sickness and, more important, the provision of paid sick leave to workers, especially for those in low-income jobs and the gig economy. Paid sick leave is particularly important in the health care, hospitality, public transportation and retail industries, where infections can most easily spread. But many employers still do not provide paid sick and family medical leave, and Congress has refused to pass legislation requiring it, despite the mountain of data on workplace spread from coronavirus and other respiratory infections.

Strategies also are still badly needed to connect public health agencies with high-risk but hard-to-reach populations. During the early days of Covid, much of the engagement with the public by health agencies was passive. Americans had to stand in line or sign up online for vaccines or masks or to order tests and sometimes request reimbursement from their insurers. This approach works for those with free time, broadband access and computer skills. But it is much more challenging for disabled people, older people living alone, individuals with low health literacy, non-English speakers and rural residents.

Instituting proactive outreach will be valuable in future emergencies — whether pandemics, hurricanes, wildfires or other disasters. Otherwise, these underserved groups will again be left out, widening disparities in care and outcomes.

The government has yet to ensure a stable domestic production capacity and raw material supply chains for personal protective equipment, including N95 and KN95 face coverings, gloves and disposable gowns, much less pharmaceuticals.

Nor has it fixed the system of clinical research, which proved slow in generating useful results on a range of concerns, such as optimal vaccine schedules and the evaluation of drugs to lessen Covid symptoms and prevent hospitalizations. The reliable clinical results proving the benefits of steroids and the problems with hydroxychloroquine tended to come from Britain and other countries. Yet the National Institutes of Health have not revamped how they organize, fund and reward scientists for participating in large, pragmatic clinical trials, especially but not only in public health emergencies.

The list could go on and on, including the poor response to long Covid.

The Covid pandemic laid bare the nation's vulnerabilities to new and deadly pathogens that can spread quickly across the globe and kill people in vast numbers in awful ways. By living through the trauma of the past few years, scientists and public health experts have a much better understanding of how to prepare for the next health crisis,

wherever it emerges. And it will emerge. Now that knowledge must be put to use. It will require determination, ambition and coordination at all levels of government. And money. We must act before the moment passes and the next crisis is upon us, leaving people to wonder why we did not do a better job of preparing.

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