

Testimony of Dr. Tom Frieden, President and Chief Executive Officer of Resolve to Save Lives, an initiative of Vital Strategies

Good morning. I thank Chairman Pallone, Ranking Member Rodgers, and distinguished members of the Committee for the opportunity to testify today. I'm Dr. Tom Frieden. I was CDC Director from 2009 to 2017 and New York City Health Commissioner from 2002 until my appointment to lead the CDC. I received my MD and MPH degrees from Columbia University, with advanced training in internal medicine, infectious disease, public health, and epidemiology. I am President and CEO of Resolve to Save Lives, an initiative of global public health organization Vital Strategies, and Senior Fellow for Global Health at the Council on Foreign Relations. Resolve to Save Lives partners with countries to prevent 100 million deaths from heart disease and stroke and to make the world safer from epidemics.

It has been more than a century since there has been a pandemic this disruptive. The toll on human lives and livelihoods has been shocking. Families and communities have experienced tremendous loss. Health care workers and public health professionals have died in the line of duty. Parents have had to make the tough decision of whether to work or assist in their child's remote education for much of the year. Every statistic we see, whether a case, hospitalization, or one of the more than 535,000 reported deaths from COVID-19 in the U.S. represents a mother, father, neighbor, colleague, or friend. We must work together to reduce the toll of this pandemic and do everything in our power to make sure nothing like this ever happens again.

In January 2020, Resolve to Save Lives pivoted to working on COVID-19. We offered to assist any government in any part of the world fighting the pandemic. We advise organizations, governments, health systems, doctors, nurses, and other health care workers. We partner with more than 60 countries, learning from and with them and sharing lessons from the front lines of this pandemic. Among other efforts, we support:

- Rapid response funds;
- Protection of health care workers; and
- Tracking and improving systems to improve the ability of communities, health care systems, and countries to base actions on data, including laboratory networks, disease monitoring programs, survey, mobility, and mortality data; and
- Global initiatives, including partnerships with development banks and international organizations.

We have published more than 100 articles, as well as detailed, practical guidance on the pandemic. We post a weekly summary of important new and emerging scientific evidence, and we advance core concepts: Adaptive Response, recognizing that there will be different approaches to reducing COVID-19 infections that fit best at different times and in different areas; the Box-It-In approach—to test, isolate infected people, warn, and quarantine people who have come in contact with infected people, thereby reducing spread so we can resume activities

as soon and safely as possible; Advancing Equity—providing disproportionately high levels of services and resources to communities disproportionately affected; and Finding the Balance—recognizing that the way forward is to control the virus and protect livelihoods.

This has been an unprecedented pandemic, but there is room for cautious optimism. After a slow and somewhat confusing start, the United States is now vaccinating more than 2 million people a day with safe and highly effective vaccines. We have already seen steep reductions in deaths in the long-term care population, where vaccinations were initially prioritized. Targeted vaccination is driving down deaths, even though it is still not making a major impact on case rates, especially in the context of more dangerous variants spreading. The situation around the country is looking significantly better than it was a few weeks ago, but we are not yet where we need to be, declines have stalled or even begun to reverse in many parts of the country, and variants are a major risk. Better does not mean good—even at the reduced case numbers we’re seeing today, we’re still seeing a higher caseload than the low point before the third surge of cases started in early fall.

Emergence and spread of variants is the wild card and single greatest concern for the future of this pandemic. We don’t yet know how bad variants will be, but accelerating vaccinations and other control measures as quickly as possible both in the United States and globally will help. I’m optimistic about our future, but even once we’ve defeated this virus and this pandemic, we must work to prevent the next one—and to do that we have to understand how we got here.

To prevent the next pandemic, it’s necessary to address some hard facts and plain truths about our country’s public health infrastructure. As COVID-19 spread through the country a year ago, we saw the devastating result of decades of underinvestment. Our nation had a patchwork of underfunded, understaffed, poorly coordinated health departments and decades out-of-date data systems—none of which were equipped to handle a modern-day public health crisis.

As a nation we have not adequately invested in public health. The United States spent more than \$11,000 per person on health care in 2018, but 40, that’s Four-Zero times less, just \$286—for public health. Our local public health departments, those on the front lines of this pandemic, often providing support for rural and vulnerable populations, lost 50,000 jobs between 2008 and 2017 due to funding cuts.

In 2015, after the Ebola outbreak in West Africa, Congress wisely made an initial investment in Global Health Security efforts to strengthen the world’s ability to prevent, detect, and respond to infectious disease threats. CDC positioned new staff in more than 49 different countries to strengthen health systems so that they would be better prepared to prevent, detect, and respond to health threats. However, by the end of 2018, the original supplemental funding ran dry, and CDC was forced to abandon its investment and assistance in more than 30 countries. By not providing sustained funding, the CDC lost eyes and ears on the ground to watch for the next emerging infectious disease. In fact, it was reported that because of these cuts and other factors, CDC reduced its footprint in China CDC from 47 to 14 staff, including reducing key

epidemiologists.¹ We won't ever know for sure if a stronger U.S. CDC presence in China would have changed the trajectory of the COVID-19 pandemic or given us a clearer and more accurate early warning of what was to come, but that is certainly possible.

What we do know is that the combination of a lack of federal leadership and chronically underfunded public health infrastructure both domestically and globally led to the catastrophic failure of our public health systems at all levels. This contributed to the United States experiencing one of the highest per-capita mortality rates in the world, nearly double that of Germany, nearly triple that of Canada, and more than ten times that of Norway and Finland, to give just a few examples.

We can't bring back the lives lost. What we can do is make sure a preventable catastrophe on this scale cannot happen again. Now is the time to build the sustainable public health infrastructure we need to prevent, detect, and respond to the next pandemic – a pandemic that could happen 10 years from now, or 10 days from now – the microbes won't wait. How do we do this?

First, make long-term investments. Congress has already taken significant steps to build the public health infrastructure we need by making investments in the previous COVID-19 relief bills. Investments for public health workforce, laboratory capacity, genomic sequencing, data modernization and forecasting, and global health are a great start. However, to build a sustainable system we cannot rely on supplemental or one-time funding. We can only ensure our national health security and avoid squandering the strategic supplemental funding once we pair our public health investments with sufficient and sustained annual funding to maintain these programs. Put simply, public health cannot build a reliable and resilient infrastructure, hire quality staff, and make effective contracts with short-term one-time funding.

Second, build the infrastructure our country needs with a cross-cutting approach, at all levels: community, city, state, federal, and global. CDC has more than 160 different budget lines. While I was NYC Health Commissioner, I had access to 20 times the amount flexible funding I had while I was CDC director. The solution is not to cut or merge these more than 160 lines, but to leave them in place and create additional lines that are cross-cutting and support local, city, state, and global action to protect health. This is funding that is crucial to address urgent and cross-cutting health needs.

Third, build our national public health data infrastructure. I want to be frank and direct: this will be a long, difficult, and expensive process. Anyone who tells you there are quick fixes, even with modern technology tools, doesn't understand the complexity of the challenge. These investments are decades overdue. The U.S. public health informatics infrastructure must be dramatically strengthened to make real-time, accurate, consistently presented information available from national, state, and local public health departments, with inputs from laboratories and health care providers. Lack of accurate, real-time information was one of the greatest failures of the U.S. response to the COVID-19 pandemic.

¹ <https://www.reuters.com/article/us-health-coronavirus-china-cdc-exclusiv/exclusive-u-s-slashed-cdc-staff-inside-china-prior-to-coronavirus-outbreak-idUSKBN21C3N5>

The elements are in place for a transformational, nationwide approach to public health informatics with data from all providers and reporting and public dissemination at local, state, and national levels. This will require full protection of privacy within the authorities granted to public health. To achieve this goal, it will be necessary to attract data-driven and tech-savvy public health workers, something which will also create good jobs. This investment—unlike past efforts—must be implemented with modern, agile informatics approaches. Federal funding for state and local public health must be predictable and sustained and should offer local and state health departments a common platform and the flexibility to strengthen the information infrastructure for evidence-based improvements in programs and policies.

What would a modern public health informatics infrastructure do for us? We would have access to electronic lab reporting and electronic case reporting (eCR). eCRs would need to include case investigation data, contact tracing, and follow up, and health information exchange (HIE) for enrichment of contact information—all while strictly maintaining confidentiality and protecting privacy. This new architecture would incorporate syndromic surveillance from health care providers and hospital networks to detect unusual spikes in provider or health care utilization and provide an early warning of outbreaks. A modern system will require the inclusion of standardized national electronic death reporting system. Furthermore, non-identifiable data will need to be accessible via an easy-to-use dashboard for analytics and reporting.

The bridge between a health care provider and all this data will often be a laboratory, and in many cases, a public health lab. As a nation we must have a strong public health laboratory infrastructure able to rapidly detect a range of biothreats from COVID-19 to anthrax. Combined with a modern data infrastructure, critical lab results will be accessible to health care providers and patients in minutes instead of days.

Fourth, strengthen the ability of state and local health agencies to quickly detect and respond to infectious disease outbreaks. This will require a strong infrastructure in place *before* the outbreak happens. Local health departments were decimated by budget cuts prior to the pandemic and the uneven response from state to state was the result. These professionals, many of whom faced a barrage of criticism and even some death threats, have been fighting this pandemic in the community. Our health departments, the front lines of our health defense, must be able to respond quickly to all outbreaks and the vast number of other public health issues that face our communities, including COVID-19, influenza, antibiotic-resistant bacteria, and more. To accomplish this, they require increased resources for flexible needs, but resources should be paired with technical support and capacity building from the CDC. Saying this will not make me popular with my friends in public health, but all too often, funds disbursed to state health departments are not distributed efficiently and effectively, and not sufficiently targeted to the areas most in need of assistance, particularly vulnerable populations, and rural communities. Accountability mechanisms, but not bureaucratic red tape, will be important to ensure new resources are spent in a timely and equitable manner. One good model is the Public Health Emergency Preparedness program, which requires concurrence from local governments to the state application. Direct CDC funding to cities is another excellent way to get resources to where they are likely to be used more effectively.

Fifth, we must address the chasms between federal and state and, in most states, between state and local public health agencies. A greatly expanded CDC program to embed thousands of epidemiologists and public health implementation specialists in state, city, and local public health departments, with regular rotation of staff back to the Atlanta, Georgia, headquarters after two to five years would help build a common culture and forge a way forward to take practical action to confront the full range of health threats facing the country. These embedded specialists and experts should focus on reducing preventable illness, injury, and death, especially in underserved and Black, Latinx, and Native American/American Indian communities.

Sixth, strengthen global health security, because it is essential to protecting the United States from health threats. The simple truth is that in our increasingly interconnected world, disease spread anywhere is a risk everywhere. If the world is safer, we will be safer here at home. Throughout this pandemic and other infectious disease events, we have seen unfortunate examples of failures of global cooperation which hasten the spread of infectious diseases. By working together—sharing data, knowledge, and resources—we can increase our safety and security. Furthermore, advances in biological science have made it increasingly easy to create dangerous pathogens. The intentional or unintentional release of a biological agent could be as deadly as a nuclear war, and we need a similarly vigorous systems of standards and inspections to reduce that horrifying risk. Ensuring that more countries have the basic capacities to prevent, detect, and respond to outbreaks, as CDC had been doing prior to its retreat because it lacked a sustained funding source, will be essential to improve domestic health security.

Seventh, commit to making sure this never happens again. It is inevitable that there will be future outbreaks. What's not inevitable is that we continue to be so underprepared. I'm encouraged that Congress and the Administration quickly worked to pass several comprehensive COVID-19 relief bills as well as the recent American Relief Plan, all of which provide billions of dollars in supplemental funding for COVID-19 response efforts, and some new one-time investments in public health genomics, data, and global health. These are vital for now and a start in building some of the systems we will need for the future. However, one-time supplemental funding is a temporary fix. Without sustained support, our health will be avoidably at risk. Without stable funding, it is impossible to hire and retain top staff, hold funded organizations and contractors to full accountability, and be effective partners with countries and organizations. As our experience with this pandemic has shown, being prepared is far cheaper and costs our economy far less than when we are unprepared. Good public health is good business and good governance.

You have a unique opportunity to protect Americans from future pandemics by ensuring that the investments made in public health infrastructure do not get built only to crumble a few years later. If you take strategic action now, you can protect our country from the next microbial sneak attack. If we as a society fail to do this, we will remain unprepared both domestically and abroad, shortchanging our health and economic security and costing American lives.

Last year, I testified before many of your colleagues and said it was time to consider new ways to ensure sustained public health financing to protect our health security once these supplemental funds dry up. After watching the Prevention and Public Health Fund be cut by both Republicans and Democrats – money, after all, is fungible – it was clear to me that a steady base appropriation had to be achieved. However, programs in public health, primarily those in CDC,

ASPR, and HRSA, must compete for funding with thousands of laudable and important priorities in the Labor Health and Human Services Appropriations bill. How can we build a sustainable public health infrastructure base if CDC, our health defense agency, is competing with Head Start or NIH for scarce resources?

Future health and economic security can best be protected by changing the way we allocate funds that protect us from health threats. We have seen the limitations that annual spending caps and sequestrations have caused for discretionary funding. And we have seen, with the Prevention and Public Health Fund for example, that even mandatory funding does not ensure stable support. We propose a new funding mechanism for programs essential to our public health infrastructure: Those that prevent, detect, and respond to health threats. We call this the Health Defense Operations (HDO) budget designation, and it would exempt specific, Congressionally designated health security infrastructure funding from the annual 302(a) spending caps and any future sequestration so that our public health infrastructure will be sustained once the initial funding expires. The HDO would create an off-ramp to sustainable, sufficient funding so we do not find ourselves back in the cycle of panic and neglect, panic.

As you may know, the Overseas Contingency Operations (OCO) designation was created as an off-ramp for our armed forces after Congress passed large supplemental appropriations in response to the 9/11 attacks. It became clear that the Department of Defense would require sustained resources to maintain our national security. Similarly, a Health Defense Operations designation would ensure that our nation's health security is defended through sustained and adequate funding for our public health defense. However, learning from experience with the OCO, the HDO will provide strong safeguards and accountability to ensure appropriate oversight for appropriators, including funding for specific budget lines rather than whole agencies, with Congressional oversight of the spending and progress.

Throughout multiple administrations, political and budget pressures have dictated funding reductions or stagnation of core public health programs. This must end. HDO programs should be required to submit a bypass professional judgment budget to Congress annually so that Congress has an unvarnished view of what is really needed to protect Americans. The NIH submits three bypass budgets to Congress every year that explain the true resource needs for cancer, HIV/AIDS, and Alzheimer's research. Likewise, Congress and the American people must understand exactly what is needed for our public health defense so that Congress can then provide the resources required to sustain the public health infrastructure we need to keep us safe and healthy. This way, we can ensure that the public health investments contemplated today will be sustained so we are prepared for the next pandemic. This proposal has strong bipartisan support, and 49 different leading public health groups have signed on to it.

No matter how divided we may be politically, we share a common enemy—dangerous microbes. We lost more lives in this pandemic than in WWII, Korea, Vietnam, and 9/11 combined. We need a sustainable public health infrastructure that our nation can depend on to defend us from health threats, as we depend on our military to defend us from threats foreign and domestic. We can prevent the next pandemic. This is the moment. Thank you.