



The Honorable Eric Lander, PhD
Assistant to the President for Science and Technology

The Honorable Jacob Sullivan
Assistant to the President for National Security Affairs

September 16, 2021

Dear Dr. Lander and Mr. Sullivan,

On behalf of the Infectious Diseases Society of America (IDSA) and its HIV Medicine Association (HIVMA), thank you for developing a plan to transform U.S. capabilities to respond to future pandemics. As frontline responders to COVID-19, we share your commitment to learning lessons from the current pandemic and making strategic investments to strengthen our preparedness for future epidemics and pandemics. IDSA represents more than 12,000 infectious diseases physicians, scientists and other public health and health care professionals. Our members are leading COVID-19 responses at their institutions and in their communities; caring for patients; designing and updating infection prevention, diagnostic testing and patient management protocols; collaborating with state and local health departments on communications and mitigation efforts; and conducting research to develop new tools for the prevention, diagnosis and treatment of COVID-19. IDSA's affiliated HIVMA represents more than 5,000 physicians and other health care professionals providing HIV prevention and care and conducting research and leading efforts to end HIV as an epidemic.

IDSA and HIVMA strongly support the contents of your plan, which addresses many of the key challenges we have experienced throughout the COVID-19 pandemic. **We write to offer recommendations that we believe are essential to meet the goals you have outlined. We request an opportunity to meet to discuss how we can inform and support your efforts.**

Recommendations for New Policies

Infectious Diseases Health Care Workforce

Background and Rationale: Many of the goals throughout your plan require a strong expert workforce that includes infectious diseases physicians and other clinicians, infectious diseases pharmacists, clinical laboratory personnel, infection preventionists and others. We applaud ongoing essential efforts to strengthen our public health workforce in state and local health departments, but that must be matched with a health care workforce that is an equally critical partner and leader in pandemic preparedness and response.

As a key example, infectious diseases physicians are critical to manage hospital responses, care for infected patients, allow other health care procedures to be safely conducted during a pandemic, and

lead, conduct and enroll patients in clinical trials. Frontline physicians are among our nation's most trusted messengers on critical issues like vaccination and other mitigation strategies to prevent transmission. The collaboration between public health, biomedical research and health care — all fields in which infectious diseases physicians practice — is the cornerstone of successful pandemic preparedness and should be better reflected in this plan.

The health care workforce, particularly those specializing in infectious diseases (ID), is in urgent need of support, as burnout threatens our existing clinicians and financial challenges hamper our ability to recruit new physicians to the field. The ID physician workforce was under serious strain even before the pandemic, with a [study published in October 2020](#) finding that 80% of counties in the U.S. did not have an infectious diseases specialist. The number of applicants to ID fellowship training programs declined by 21.6% from 2011-2016. The following years saw only modest improvements that quickly plateaued. In 2020, only 75% of infectious diseases training programs were able to fill all their slots, while many other internal medicine subspecialties (cardiology, rheumatology, gastroenterology, hematology, oncology, pulmonology and critical care) were able to fill from 96% to 100% of their training programs.

Financial concerns are a chief barrier to pursuing a career in ID. Data published by Medscape in 2021 indicate that average annual salaries for ID physicians are below nearly all other medical specialties, and even below the average salary for general internal medicine, although ID training and certification require an additional two to three years of training. Given that the average medical student debt is \$200,000, the ID specialty is a financially infeasible choice for many.

Solutions: We encourage you to include the following proposals in the Administration's pandemic preparedness plan to support infectious diseases physicians and the broader frontline health care workforce.

- **Reimbursement:** We appreciate that the Centers for Medicare and Medicaid Services (CMS) is seeking comments on how it can more appropriately reimburse for significant work undertaken by clinicians during a pandemic, much of which has gone uncompensated during the current public health emergency. We are recommending that CMS create a new modifier that infectious diseases physicians and other providers could append to current evaluation and management (E/M) codes to help ensure resources are available for care delivered during circumstances of heightened work associated with an outbreak.
- **Loan repayment:** We are also working with Congress to develop a new legislative proposal to provide loan repayment to health care professionals who work in biopreparedness or who provide infectious diseases care in underserved settings.
- **Wellness:** Significant increased workload, trauma, fear for personal safety and well-being of loved ones are contributing to significant increased stress, burnout, mental illness and suicide among health care professionals. Pandemic preparedness plans should include proactive strategies to support the mental health of our health care workforce, including expanded access to mental health services.

Antimicrobial Resistance and the Pipeline of Antimicrobial Drugs

Background and Rationale: Antimicrobial resistance (AMR) is directly compromising our response to the COVID-19 pandemic. At the same time, the COVID-19 response is diverting efforts from AMR and likely worsening resistance. This set of challenges can be expected for any future public health emergency involving widespread hospitalizations and especially use of ventilators. A [study](#) published in August 2021 of 148 hospitals across 17 states that found that COVID-19 surges negatively impacted rates of antibiotic-resistant infections. Specifically, from March-September 2020, the study found 24% more hospital-onset multidrug-resistant infections than expected, including a 30% increase in hospital-onset MRSA, 44% in hospital-onset vancomycin-resistant enterococci (VRE) and 27% in hospital-onset multidrug-resistant Gram-negative pathogens that were associated with COVID-19 surges.

While the National Action Plan to Combat Antibiotic-Resistant Bacteria, launched during the Obama Administration, has made critical investments in our nation's approach to AMR, persistent gaps remain, and COVID-19 has eroded progress. Antimicrobial stewardship programs, now required in our hospitals and long-term care facilities, have had to divert their staff and resources away from AMR to support the broader pandemic response, particularly leading administration of COVID-19 therapeutics. Even prior to COVID-19, studies have indicated persistent gaps in adequate staffing for stewardship programs.

In addition, the antibiotic pipeline remains sorely inadequate to meet current and future threats. While investments through the Biomedical Advanced Research and Development Authority (BARDA) and the National Institute of Allergy and Infectious Diseases (NIAID) have succeeded in bringing some new antibiotics to market, the small companies responsible for those antibiotics are struggling to stay in business while private investment in novel antibiotic R&D dries up. The need to use antibiotics judiciously to preserve their effectiveness makes it extremely difficult for antibiotic innovators to earn a reasonable return on their investments.

Solutions: A novel approach is needed to finance antibiotic innovation and stewardship. We strongly support the bipartisan Pioneering Antibiotic Solutions to End Upsurging Resistance (PASTEUR) Act, which would change the way the U.S. government pays for truly novel antibiotics by de-linking payment from use. This approach would provide the predictable return on investment needed to revitalize the antibiotic pipeline and aligns with stewardship. PASTEUR further provides grants to hospitals to strengthen their stewardship programs and facilitate reporting antibiotic use and resistance data to the CDC National Healthcare Safety Network (NHSN).

- **Antibiotic innovation:** We encourage you to include antibiotic innovation as part of the therapeutics goal in the pandemic preparedness plan.
- **Antibiotic stewardship:** We further urge you to include a goal of strengthening antibiotic stewardship and providing financial support to stewardship programs in health care facilities, perhaps as part of a broader new goal to strengthen our medical system capacity and health care workforce, as discussed above.

Recommendations to Strengthen Current Plan Components

Vaccines and Therapeutics: We recommend that ease of distribution and administration be prioritized when developing new vaccines and therapeutics, including oral agents that can be provided in outpatient settings and shelf stable vaccines, to help facilitate rapid, equitable access

domestically and globally. In addition to the plan's focus on neutralizing antibodies, T cell and NK cell responses are critical components of transmission and treatment and should be prioritized for additional research.

Early Warning Systems: We support the current goals and recommend an emphasis on upstream techniques and earlier surveillance systems that can provide the timeliest notification of emerging threats, such as pharmacy syndromic surveillance and big data mining. Once patients are presenting for clinical care, we have already missed opportunities to identify and respond to emerging pathogens.

The current plan focuses primarily on human viruses; however, most human viruses are zoonotic in origin. This means the links between veterinary medicine, research and surveillance should be included in any effort in pandemic preparedness as part of a One Health approach. Further resources should be dedicated to non-viral infectious agents such as bacteria, protozoa and Category A agents such as ricin, as these pathogens and products also have the capacity to trigger widespread outbreaks. A single, simple, unified reporting platform for all entities should be established to easily and quickly report events to mission control from all communities.

Finally, more BSL-4 capability is needed across U.S. public health laboratories to detect and work with pathogens with pandemic potential — most such laboratories are currently BSL-3, which means the ability to work with these agents is limited.

Public Health Communication: We strongly support the plan's inclusion of public health communication and recommend increased efforts to combat health misinformation and science denialism. These pervasive problems have fueled vaccine hesitancy, which has in turn fueled surges in COVID-19 cases, hospitalizations and deaths. We urge you to increase funding requested for public health communications and expand this effort to include clinicians as well. Additional resources are needed to invest in education and counteract anti-science messaging. Those of us who provide direct patient care can be highly effective and trusted public health messengers, and we seek to build upon our partnerships with public health to successfully communicate with the public.

Prioritize Vulnerable Communities: We greatly appreciate the plan's inclusion of a goal to prioritize vulnerable communities in a pandemic response. The intersection of racial inequities and health disparities has been brutally exposed by the COVID-19 pandemic, but the ID community has long recognized and worked to address these issues on the front lines of the HIV epidemic. We applaud the Administration's commitment to health equity and urge that the harsh lessons learned during the COVID-19 pandemic be prominently featured in preparing for future pandemics. We recommend that strategies for promoting health equity, including to reduce geographic disparities experienced by rural populations, be woven in throughout the plan. Such strategies are integral to all components, from improving public health communications to the development and availability of diagnostics, therapeutics and vaccines.

Global Health Security: We support the global health security goals in the plan, as well as the inclusion of global health objectives throughout other plan goals. As COVID-19 has demonstrated, pathogens do not respect national borders, and global coordination is critical to the prevention and successful response to pandemics. An infection anywhere in the world is only a plane ride away from the U.S.

We recommend that the U.S. strengthen its partnership with the World Health Organization (WHO) on global pandemic preparedness efforts, particularly by leading in the development of a global genomic sequencing network that would track and monitor the emergence of variants during outbreaks. Currently, countries with limited resources do not have the capacity to detect viral variants which, as we've seen with COVID-19, could spread globally before detection. The U.S. should work with WHO and other global partners in developing a robust network of laboratories with the capacity to conduct genomic sequencing, particularly in low-resource countries. We also recommend that global health considerations be further incorporated into the plan to ensure equitable access to vaccines, diagnostic tests and therapeutics (in addition to efforts on manufacturing and distribution).

Clinical Trial Networks: We strongly support the goal to develop clinical trial networks, and particularly to include rural and community hospitals. To further expand the reach of clinical trials, we recommend including outpatient facilities. Federally supported infrastructure should provide an integrated framework to link individuals diagnosed with COVID-19 to appropriate trials and encourage large-scale collaboration across many different types of facilities. Co-locating sites that can perform rapid diagnostic testing with treatment sites to facilitate enrollment into clinical trials is an important strategy to reduce inequities related to access (such as transportation) that occur when testing and treatment are separated.

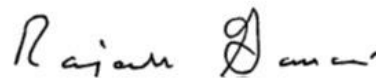
U.S. Mission Control: We greatly appreciate the inclusion of a specific goal focused on management, coordination and accountability for all aspects of a response. In particular, we strongly support the focus on convening independent scientific panels, and we emphasize the importance of including infectious diseases physicians in these efforts. We welcome the opportunity to partner with federal leaders to bring our medical expertise and frontline perspectives to inform preparedness plans and responses.

Again, we thank you for your leadership in developing this pandemic preparedness plan, and we look forward to an opportunity to discuss these issues with you. To coordinate a meeting or if there is anything we can do to support your efforts, please contact Amanda Jezek, IDSA Senior VP of Public Policy and Government Relations, at ajezek@idsociety.org or Andrea Weddle, Executive Director of HIVMA, at aweddle@hivma.org.

Sincerely,



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