Testimony of the Infectious Diseases Society of America (IDSA) on the Fiscal Year 2021 Department of Health and Human Services (HHS) Budget Prepared for the U.S. Senate Subcommittee on Labor-HHS-Education Appropriations Submitted by Thomas File, MD, FIDSA, IDSA President on May 21, 2020

On behalf of the Infectious Diseases Society of America (IDSA), which represents more than 12,000 physicians, scientists, public health practitioners and other providers involved in infectious diseases prevention, care, research and education, I urge the Subcommittee to provide full FY2021 funding for public health and biomedical research activities that save lives, contain health care costs and promote economic growth. **IDSA asks the Subcommittee to provide \$8.3 billion for the Centers for Disease Control and Prevention (CDC), \$44.7 billion for the National Institutes of Health (NIH), \$230 million for the Biomedical Advanced Research and Development Authority (BARDA) Broad Spectrum Antimicrobials and CARB-X programs, and \$140 million for the Strategic National Stockpile Special Reserve Fund program.**

CENTERS FOR DISEASE CONTROL AND PREVENTION Antibiotic Resistance Solutions Initiative

We urge at least \$200 million in funding for the Initiative in FY2021. IDSA members see the impact daily that antimicrobial resistance (AMR) has on patients. Antibiotic resistance is one of the greatest public health threats of our time. Drug-resistant infections sicken at least 2.8 million each year and kill at least 35,000 people annually in the United States. Antibiotic resistance accounts for direct health care costs of at least \$20 billion. If we do not act now, by 2050 antibioticresistant infections are predicted to be the leading cause of death. Secondary bacterial infections caused by resistant bacteria and fungi are complicating care for seriously ill patients including those with COVID-19. Antibiotic resistance threatens the safety of major medical advances, including cancer chemotherapy, organ and bone marrow transplants, caesarean sections, and other surgeries—all of which carry risk of infection. The federal response to AMR must be increased to prevent and detect multi-drug resistant infections. The requested funding would allow the expansion of efforts at state, local and territorial health departments to prevent, detect, contain and respond to multi-drug resistant infections. Funding would also support implementation of antimicrobial stewardship programs (newly required by CMS at hospitals) to reduce inappropriate antibiotic use and improve patient outcomes. Since FY2016, CDC has provided \$300 million to 59 state and local health departments to increase capacity for faster response to outbreaks and emerging infections. Additionally, this funding improved antibiotic use, increased state and regional laboratory capacity to rapidly detect resistant infections, and enhanced tracking of healthcare-associated infections. These substantial payoffs mean a clear net positive for the federal budget to recoup the direct costs of the program, but a deeper investment in FY2021 is needed to effectively address current and newly emerging threats and prepare for future challenges.

Advanced Molecular Detection (AMD)

AMD strengthens CDC's epidemiologic and laboratory expertise to effectively detect and respond to the ever-expanding universe of emerging diseases and deadly pathogens. Requested FY2021 funding of at least \$37.5 million is required to ensure AMD has updated cutting-edge technology to allow CDC to more rapidly determine where emerging diseases come from, whether microbes are resistant to antibiotics, and how microbes are moving through a population. Additional funding would help ensure state and local health departments have enhanced expertise to harness DNA sequencing of pathogens to ramp up early detection and response to surging disease outbreaks. AMD is integrating next-generation sequencing in the COVID-19 response, which provides a clearer picture of how the outbreak is evolving and how cases are connected, allowing more effective targeting of response efforts. AMD promotes more effective antimicrobial use when used by antimicrobial stewardship programs.

National Healthcare Safety Network

FY2021 funding of at least \$25 million for the National Healthcare Safety Network (NHSN) will enable CDC to expand tracking of healthcare-associated infections (HAIs), antibiotic use, and antibiotic resistance. The NHSN is the most widely used HAI tracking system in the country and provides facilities, states, regions, and the nation with data needed to identify problem areas and best practices, and to measure and drive the progress of prevention and stewardship efforts. NHSN is playing a central role in the COVID-19 response. Nursing homes are required by the Centers for Medicare and Medicaid Services to report cases of COVID-19 directly to NHSN, and are strongly encouraged to share information about confirmed COVID-19 cases with patients, residents, families, and loved ones. The responses will be uploaded into NHSN and will complement existing state-level reporting requirements, helping the federal government collect nationwide data to assist in COVID-19 response activities.

This new NHSN capability for nursing homes follows the launch of CDC's NHSN Hospital Capacity and Patient Impact COVID-19 module. Given the breadth of reporting capability of NHSN, CDC was able to quickly adapt the system to easily collect nursing home data and report it to state health departments and other parts of the federal government emergency response for action.

Additionally, as of April 1, 2018, 776 out of the over 5,500 U.S. hospitals have voluntarily reported antibiotic use data, and 317 hospitals have reported antibiotic resistance data to the CDC NHSN Antibiotic Use and Resistance (AUR) module. While this represents progress, it falls strikingly short of the stated goal in the National Action Plan for Combating Antibiotic Resistant Bacteria for 95% of hospitals to report these data by 2020. Comprehensive and real-time data on antibiotic use and resistance are essential to inform and evaluate antibiotic stewardship activities and other efforts to address AMR.

CDC Center for Global Health

IDSA urges the Subcommittee to **provide at least \$624 million in FY2021 funding, including \$225 million for CDC's Division of Global Health Protection** to prevent, detect and respond to infectious disease threats in the places they originate before they reach American soil. As the response to the devastating global COVID-19 pandemic continues, global health security efforts are critical for ensuring America's health security, including strengthening laboratory capacities, disease surveillance and field epidemiology activities in resource-limited countries. Sustained funding for the Division of HIV and TB, a key implementer of PEPFAR, is needed to facilitate access to life-saving antiretroviral treatment for millions, including to pregnant women living with HIV to prevent transmission to their children. The Center works to find, cure and prevent TB, eliminate the global burden of malaria, stop poliovirus transmission, and reduce mortality from

vaccine-preventable diseases like measles. The CDC Center for Global Health addresses more than 400 diseases and health threats in 60 countries.

Immunization Program

IDSA supports funding of \$710 million for the Section 317 Immunization Grant Program that would allow healthcare providers to obtain necessary vaccines. The program helps decrease the number of children and adults who die each year from vaccine-preventable illnesses and helps prevent outbreaks of diseases due to inadequate vaccination rates. We must strengthen our nation's vaccine infrastructure to prepare to drive access and uptake of a COVID-19 vaccine once one is developed.

Since COVID-19 distancing restrictions and business closures were implemented, childhood immunization rates have <u>dropped considerably</u> due to fears of contracting the virus. During the week of April 5, the administration of MMR vaccines dropped 50 percent; diphtheria and pertussis vaccines dropped 42 percent; and HPV vaccines dropped 73 percent. Even before this pandemic, vaccine hesitancy began fueling a resurgence of vaccine-preventable diseases such as measles, making this a critically important time to invest in a comprehensive response. Many communities have been deemed "at risk" for outbreaks of measles and other vaccine-preventable illnesses due to insufficient vaccination rates. During January 1–October 1, 2019, a total of 1,249 measles cases and 22 measles outbreaks were reported in the United States. This is the greatest number of cases reported in a single year since 1992.

Infectious Diseases Rapid Response Fund

The quick spread of emerging infectious diseases makes clear the need for the Response Fund in regular FY2021 appropriations. At the beginning of the COVID-19 emergency, the Response Fund allowed HHS to begin initial activities without waiting for congressional action. An investment of at least \$85 million is needed to ensure agencies, led by the CDC can move forward with initial response activities to contain the spread of infection; treat infected individuals and launch research for vaccines, diagnostics and therapeutics.

Infectious Diseases and Opioids

IDSA urges \$58 million in funding in FY2021 to address opioid addiction, HIV/AIDS, and hepatitis. We are increasingly concerned about how the opioid crisis is driving higher rates of infectious diseases including hepatitis C, endocarditis, HIV, pneumonia, and skin, soft tissues, bone and joint infections. Before COVD-19, some of our members were reporting that 25 to 50 percent of their inpatient hospital consultations are for infections in patients who inject drugs, and this problem has not gone away.

Vector-Borne Diseases

We advise funding of \$66 million for vector-borne diseases efforts to help define disease extent and to reduce the impact of infections such as the Zika virus and tick-borne illnesses including Lyme disease. CDC found that the number of disease cases in the US due to mosquito, tick or flea bites tripled from 2004 to 2016, demonstrating the need for increased funding to support evidencebased surveillance and prevention efforts.

ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE (ASPR) Biomedical Advanced Research and Development Authority

At least \$230 million in FY2021 for the BARDA broad spectrum antimicrobials program and CARB-X is needed to leverage public/private partnerships to develop products that directly support the government-wide National Action Plan for Combating Antibiotic-Resistant Bacteria. These programs have been successful in developing new FDA-approved antibiotics. Despite this progress, the pipeline of new antibiotics in development is insufficient to meet patient needs, and \$230 million in funding is needed to help prevent a post-antibiotic era in which we lose many modern medical advances that depend upon the availability of antibiotics, such as cancer chemotherapy, organ transplants and other surgeries. There is early evidence of secondary bacterial infections among COVID-19 patients. It is, as yet, unclear exactly how significant secondary bacterial and fungal infections will be in this pandemic, but serious viral respiratory infections typically pose some risk of these secondary infections that increases when patients need to be hospitalized or placed on a ventilator. This <u>report</u> on 191 patients found that 50% of patients who died had a secondary infection.

Project BioShield

We request at least \$140 million in FY2021 for the Project BioShield Special Reserve Fund (SRF) which is positioned to support the response to public health threats, including AMR. BARDA and NIAID efforts have been successful in helping companies bring new antibiotics to market, but those companies now struggle to stay in business and two filed for bankruptcy in 2019. In December 2019, SRF funds supported a contract for a company following approval of its antibiotic—a phase in which small biotechs that develop new antibiotics are particularly vulnerable. Additional funding is needed to expand this approach to better support the antibiotics market.

NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases (NIAID)

Within NIH, NIAID should be funded at \$6.345 billion, with \$600 million for AMR research to support the continued response to COVID-19, and research for new rapid diagnostics, vaccines, and therapeutics for all ID threats. With increased investment to combat AMR, NIAID is poised to ramp up valuable research into how to counter the ever-evolving threat posed by resistant microbes. There are significant research needs with regard to COVID-19, including vaccines and therapeutics, better diagnostics, and epidemiologic and pathogenesis studies. NIAID is also planning to expand efforts to support the next generation of researchers, but this will be challenging without additional resources. Funding at the requested level would enable NIAID to increase funding and success rates for early and mid-career research awards, and pilot a new innovator award to promote bold new ideas from early stage investigators. This kind of thinking is precisely what is needed to address growing ID threats.

CONCLUSION

Thank you for the opportunity to submit this statement. The nation's ID physicians and scientists rely on strong federal partnerships to keep Americans healthy and urge you to support these efforts. Please forward any questions to Lisa Cox at lcox@idsociety.org or (703) 299-0202.