On behalf of the Infectious Diseases Society of America (IDSA), thank you for the opportunity to provide testimony in support of the U.S. Department of Health and Human Services (HHS) agencies and programs that contribute to the prevention, detection and treatment of infectious diseases (ID). IDSA represents more than 10,000 ID physicians and scientists devoted to patient care, prevention, public health, education, and research. IDSA recommends increased Fiscal Year (FY) 2016 federal investments in public health and biomedical research to save lives, contain health care costs, and promote economic growth. More specifically, IDSA encourages the Subcommittee to provide a program level of $7.8 billion for the Centers for Disease Control and Prevention (CDC) as well as at least $32 billion for the National Institutes of Health (NIH).

IDSA is particularly supportive of initiatives contained in the President’s Budget Request (PBR) for FY 2016 to address the growing public health crisis of antibiotic resistance. These proposals enable implementation of the recently released National Action Plan for Combating Antibiotic-Resistant Bacteria (CARB). The Action Plan reflects recommendations put forward by the President’s Council of Advisors on Science and Technology (PCAST) in their September 2014 Report to the President on Combating Antibiotic Resistance. In particular, IDSA urges the Subcommittee to fund the proposed CDC Antibiotic Resistance Solutions Initiative. We ask that the final FY 2016 Labor-HHS-Education appropriations bill also support the role of the National Institutes of Health (NIH) and the Biomedical Advanced Research and Development Authority.
(BARDA) in stimulating research and development (R&D) for rapid ID diagnostics and antibiotics.

CENTERS FOR DISEASE CONTROL AND PREVENTION

The recent outbreak of Ebola virus disease (EVD) in West Africa and subsequent cases in the United States demonstrate that infectious diseases respect no national borders and that the CDC must be appropriately funded to maintain readiness ahead of new crises. IDSA members are partnering with the CDC and other federal agencies to respond to the EVD crisis. We ask that the Subcommittee support collaborations between government, industry, academia and other non-governmental organizations to address the full range of infectious diseases confronting the public. Our country requires a fully engaged and stably supported CDC to address public health needs such as slowing the rise of antibiotic resistance, preventing and treating neglected tropical diseases (NTDs), increasing immunization rates and stopping the spread of HIV.

Conservative estimates indicate that more than two million Americans suffer from antibiotic-resistant infections each year and that approximately 23,000 will die. Additionally, there were half a million Clostridium difficile (C. difficile) infections in the United States in 2011, and 29,000 died within 30 days of the initial diagnosis. C. difficile is a unique bacterial infection that, although not significantly resistant to the drugs used to treat it, is directly related to antibiotic use and resistance. Carbapenem-resistant Enterobacteriaceae (CRE) has been labeled a “nightmare bacteria.” Nearly half of individuals who develop a bloodstream infection from CRE will die. Each year, antibiotic resistance results in an additional 8 million hospital days and costs in excess of $20 billion to the U.S. health care system. The actual human and financial costs are likely far higher, as our surveillance and data collection capabilities cannot yet
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capture the full disease burden. The death and financial tolls rise with each day that we fail to act.

PCAST and the CDC have recommended actions in four core areas to address the problem, including prevention, tracking, antibiotic stewardship, and development of new antibiotics and rapid ID diagnostics. The CDC has proposed FY 2016 activities in each of these areas for which new funding is needed.

**National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)**

The NCEZID leads CDC efforts to address antibiotic resistance. As such, we ask that it be provided at least the $699 million requested by the Administration, including at least $264 million for the Antibiotic Resistance Solutions Initiative. This initiative would build prevention programs in all 50 states and 10 large cities, utilizing evidence-based approaches to stop the spread of drug-resistant bacteria and preserve the effectiveness of existing antibiotics. The initiative also supports a new network of regional labs to improve tracking of and response to outbreaks of serious and potentially deadly bacteria. The CDC projects that over five years, the initiative will lead to a 60% decline in health-care associated CRE, 50% reduction in *C. difficile*, 50% decline in bloodstream methicillin-resistant *Staphylococcus aureus* (MRSA), 35% decline in health-care associated multidrug-resistant *Pseudomonas* spp., and 25% reduction in multidrug-resistant *Salmonella* infections, more than covering the costs of investing in these programs now.

IDSA also supports the proposed $14 million increase for the National Healthcare Safety Network (NHSN) to expand the number of participating healthcare facilities to 17,000 and increase the number of sites reporting antibiotic use and antibiotic resistance data. Information provided via NHSN is critical for evaluating the success of interventions designed to reduce
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inappropriate antibiotic use and limit the development of resistance and is therefore an integral component to broader efforts to address resistance.

IDSA thanks Congress for funding the Advanced Molecular Detection (AMD) initiative in FY 2015 and recommends that at least $30 million be allocated for it in FY 2016. AMD strengthens CDC’s molecular sequencing tools and bioinformatics capacity to more rapidly and accurately detect infectious diseases and resistance. During the most recent Ebola virus disease outbreak, AMD methods were utilized to determine whether the virus was changing as it spread through different populations, which facilitated appropriate responses.

NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases (NIAID)

Within NIH, we believe that the National Institute of Allergy and Infectious Diseases should be funded at least at $4.62 billion as requested by the Administration in the FY 2016 PBR. Decreases in the purchasing power of NIAID have limited investment in new research and provided a disincentive for the pursuit of ID research careers so critical to the discovery of new vaccines, antimicrobials, diagnostics, and prevention strategies.

The NIAID is central to pursuits of new rapid ID diagnostics and antibiotics. A recent IDSA report, Better Tests, Better Care: The Promise of Next Generation Diagnostics explains that advances in biomedical research over the last few decades create the potential for increasingly simple, fast and reliable diagnostic tests for infectious diseases. By allowing physicians to quickly distinguish between bacterial and viral infections, better diagnostics can lead to faster and more appropriate treatments for patients, help preserve the utility of our existing drugs, and aid in identifying individuals to participate in clinical trials. Last year, NIAID stated its intention to place special emphasis on rapid diagnostics. Several initiatives
have been announced, such as funding for diagnostics to quickly detect bacteria responsible for drug-resistant infections acquired in hospital settings and tests to identify reservoirs of latent HIV infection.

The NIAID supports the Antibacterial Resistance Leadership Group (ARLG), led by researchers at Duke University and the University of California San Francisco. With sufficient funding, the research network/infrastructure will continue studies to address antibiotic resistance. Severe economic disincentives continue to cause private companies to leave the antibiotics market, making federally funded research in this area more critical than ever.

**ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE (ASPR)**

**Biomedical Advanced Research and Development Authority (BARDA)**

BARDA is a critical initiator of public-private collaborations for antibiotic, diagnostic and vaccine R&D. PCAST has identified BARDA as best positioned to elicit private investments necessary to address antibiotic resistance. However, the BARDA budget has been flat for several years, with inflation leading to loss of purchasing power. Increased funding would allow BARDA to work with industry as a counter to current market failures. IDSA recommends that the Subcommittee provide at least the $522 million requested for BARDA in the president’s budget for FY 2016. Such funding is necessary to allow BARDA to pursue additional work on antibiotic development while maintaining its strong focus on other medical countermeasures to address biothreats.

Once again, thank you for the opportunity to submit this statement on behalf of the nation’s ID physicians and scientists. We rely on strong federal partnerships to keep Americans healthy and urge you to support these efforts. Please forward any questions to Jonathan Nurse at jnurse@idsociety.org or (703) 299-0202.