May XX, 2021

The Honorable Patty Murray
Chair
Subcommittee on Labor-HHS-Education
Senate Appropriations Committee
Washington, DC 20510

The Honorable Roy Blunt
Ranking Member
Subcommittee on Labor-HHS-Education
Senate Appropriations Committee
Washington, DC 20510

Dear Chair Murray and Ranking Member Blunt:

As you begin consideration of Fiscal Year 2022 Labor, Health and Human Services, Education, and Related Agencies (LHHS) appropriations legislation, we ask that you increase support for a comprehensive federal response to antimicrobial resistance (AMR), commensurate with the threat AMR poses to patient care, public health and preparedness.

Antimicrobial resistance is rendering lifesaving medicines ineffective jeopardizing medical procedures that rely upon antibiotics, including cancer chemotherapy, transplantation, caesarian sections, other surgeries, treatment of serious wounds and burns, and care of complex patients — such as those with COVID-19 who develop secondary infections. Antibiotics are central to preparedness, as nearly any mass casualty event can be significantly complicated by secondary infections. Drug-resistant infections sicken at least 2.8 million and kill at least 35,000 people annually in the U.S. A January 2021 study by the Centers for Disease Control and Prevention (CDC) and the University of Utah estimates that the national healthcare costs associated with infections from six of the 18 most alarming antibiotic resistance threats to be more than $4.6 billion annually. Globally, over 700,000 people die each year accounting for a cost as high as $1.2 trillion. If we do not act now, by 2050 antibiotic resistant infections will be the leading cause of death - surpassing cancer - and could cost the world $100 trillion.

It is estimated that 30 to 50 percent of antibiotic prescriptions are inappropriate. Preserving the effectiveness of antibiotics, by reducing overuse and misuse, must be prioritized. The pipeline of new antibiotics in development is insufficient to meet patient needs. The imminent collapse of the antibiotic market is exacerbating this threat, and small companies that are responsible for nearly all current antibiotic innovation are facing bankruptcy because factors unique to antibiotics, including the need for judicious use, make it challenging for companies to earn a return on investments in antibiotic research and development.

As outlined in the 2020-2025 National Action Plan for Combating Antibiotic-Resistant Bacteria, from 2012 to 2017, the overall number of U.S. deaths from antibiotic-resistant infections fell by 18 percent, and the number of U.S. deaths from resistant infections in hospitals fell by nearly 30 percent as a result of efforts to prevent infections. The Action Plan calls for greater efforts to build on this progress. Congress must fully support the funding necessary to significantly reduce the burden of AMR, including:

Centers for Disease Control and Prevention

- **Antibiotic Resistance Solutions Initiative ($672 million):** Significant new resources are necessary to achieve the goals outlined in the 2020-2025 National Action Plan for Combating Antibiotic-Resistant Bacteria including a 20 percent decrease in health care-associated antibiotic-resistant infections and a 10 percent drop in community-acquired antibiotic-resistant infections by 2025. Full funding would strengthen antibiotic stewardship; expand the AR Laboratory Network to strengthen the identification, tracking and containment of deadly pathogens; support AMR research, and increase public and health care professional education and awareness activities.
- **National Healthcare Safety Network ($100 million):** Full funding would expand data collection in health care facilities to achieve the National Action Plan goal for 75 percent of acute care hospitals and 25 percent of critical access hospitals reporting antibiotic resistance data and 100 percent of acute care and 50 percent of critical access hospitals reporting antibiotic use data.
- **Advanced Molecular Detection Initiative ($60 million):** Full funding would strengthen CDC's epidemiologic and laboratory expertise to effectively detect and respond to the ever-expanding universe of emerging diseases and deadly pathogens. Funding at this level would 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. FY2022 funding would enhance laboratory capabilities and spur innovation, including through further integration of genomics into AMR surveillance. Funding would also help CDC apply the work of the national genomics consortium, Sequencing for Public Health Emergency Response, Epidemiology and Surveillance (SPHERES), led by AMD that coordinates large-scale, rapid SARS-CoV-2 sequencing across the US.
- **Division of Global Health Protection ($454.6 million):** Full funding is needed to improve global capacity to identify and stop threats before they reach U.S. soil as well as address growing drug resistance in low-income countries. Specifically, funding would enhance infectious disease surveillance, strengthen laboratory capacity, train health care workers and epidemiologists and support emergency operations centers. CDC experts provide technical assistance to 30 countries and work to detect resistant threats; prevent and contain resistance germs; and improve antibiotic use. Public health experts address more than 400 diseases and health threats in 60 countries.

<u>Assistant Secretary for Preparedness and Response (ASPR)</u>

- **Biomedical Advanced Research and Development Authority, Broad Spectrum Antimicrobials and CARB-X ($300 million):** The BARDA broad spectrum antimicrobials program and CARB-X leverage public/private partnerships to develop innovative products that prevent, detect and treat resistant infections. These efforts have led to new FDA approved antibiotics. Despite this progress, the pipeline of new antibiotics in development is insufficient to meet patient needs, and full funding is needed to prevent a post-antibiotic era.
- **Project BioShield Special Reserve Fund, Broad Spectrum Antimicrobials ($200 million):** The Project BioShield SRF 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. Full funding is needed to expand this approach to better support the antibiotics market.

National Institutes of Health (NIH)

- **National Institute of Allergy and Infectious Diseases ($6.520 billion/$600 million for AMR):** Full funding would support the training of new investigators to improve AMR research capacity; enhance basic, translational and clinical research on mechanisms of resistance, therapeutics, vaccines and diagnostics; and support the development of a clinical trials network to reduce barriers to research on difficult-to-treat infections as outlined in the 2020-2025 National Action Plan to Combat Antibiotic-Resistant Bacteria.

There is an urgent need for continued action on antibiotic resistance. We urge you place high priority on increased funding for antibiotic resistance as the FY2022 appropriations process moves forward. Thank you for your consideration of this request.