The National Institute of Environmental Health Sciences Worker Training Program (NIEHS WTP), a component of the National Institutes of Health (NIH) in the Department of Health and Human Services (HHS), has over 25 years of experience in providing health and safety training to high-risk worker populations including health care workers. Working through cooperative agreement grants with 20 non-profit consortia representing over 100 training organizations including unions, universities, and community colleges, NIEHS WTP focuses on workers who deal with hazardous materials, including biohazards, and emergency response. This includes healthcare and hospital workers at all levels, emergency responders, hazardous material truck drivers and transportation workers, hazardous and solid waste disposal workers, heavy equipment operators, and site decontamination workers.

Annually, over 160,000 workers are trained through the NIEHS WTP. In addition, the NIEHS WTP network has been activated during numerous national and regional disasters to provide site specific training. NIEHS WTP training emphasizes the observation of worker comprehension and proficiencies and the use of instructor led, hands-on training utilizing small group and personal protective equipment (PPE) dress-out activities.

Since September 2014, by re-programming existing funds, NIEHS WTP grantees have provided Ebola preparedness training to almost 7,000 workers in 18 states. This initiative includes worker-based training to prevent and reduce exposure of hospital employees, emergency first responders, and other workers who are at risk of exposure to Ebola through their work duties.

NIEHS WTP grantees have been involved in providing biosafety health and safety training to workers during the 2001 Anthrax attacks, H5N1 outbreak, H1N1 Avian Influenza threat of 2009, mold remediation from Hurricanes Katrina and Sandy, and Ebola. Their audiences have spanned the worker population from healthcare workers to volunteers.

This training program also addresses components of NIEHS Strategic Goals 5 and 8.

Through the interagency working group led by the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR), a matrix of potentially exposed populations requiring Ebola response training and protection has been constructed. The proposed NIEHS WTP Ebola Bio-Safety Training initiative will focus on reaching the at-risk populations which have been identified by this interagency working group including both health care and non-health care areas. The link to the Ebola PPE matrix is: https://www.osha.gov/Publications/OSHA3761.pdf.

In addition, the proposed training plan would build upon the initial preparedness work of federal, state, local and private sector agencies by conducting a rapid training assessment with these partners to determine priorities for developing curricula, creating a train-the-trainer process and building local training programs.

At the request of ASPR, the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Institute of Medicine (IOM), in collaboration with the National Research Council (NRC), an Ebola response workshop was convened on November 3, 2014, with key stakeholders and experts to discuss the research priorities that could guide medical and public health practice. Discussions included the degree of transmission and bio-persistence of the Ebola virus under a range of conditions and on a variety of materials, as well as issues of handling potentially infected materials, decontamination, and the training and PPE usage of traditional and nontraditional workers involved in the full spectrum of this response.

Based on the priorities laid out in the workshop and in consultation with HHS, CDC, The National Institute for Occupational Safety and Health (NIOSH) and OSHA, NIEHS WTP would establish a public/private sector working group to lay out national
training priorities. Specifically this collaborative will develop and target safety and health training for those workers supporting the national Ebola response. Using our hazmat trainers’ understanding of worker safety and health protection issues, knowledge of personal protective equipment (PPE) usage, and experience in training disaster workers, WTP will coordinate with CDC and other federal partners, to provide grantees with material to develop an evidence-based curriculum that addresses the science of Ebola (clinical symptoms, mode of transmission, persistence in the environment, and treatment); infection control and worker protection (isolation/quarantine and PPE); working in the contaminated environment (sampling and decontamination); and behavioral health resiliency.

NIEHS WTP developed an Awareness and Operations level Ebola training that will be utilized and adapted for this training. Additional competency-based curricula will include a training-of-trainers component that would permit the creation of a large cadre of trainers who could then provide local/regional training to impacted populations in the eight target states as needed. Locations for bio-safety training will be targeted in consultation with HHS, CDC and other state and local bio-safety response organizations. Thus, the proposed training initiative will build substantial capacity for pandemic preparedness and response for a broad spectrum of infectious disease conditions.

**Mechanism and Justification**

The newly proposed budget allocation of $10 million would be utilized to expand and continue these Ebola response training efforts. A training needs assessment as well as initial support may be provided by NIEHS WTP through supplemental awards to existing grantees using the U45 cooperative agreement mechanism during late spring 2015. This would allow training to continue while a comprehensive Funding Opportunity Announcement (FOA) is developed and released in partnership with other HHS public health preparedness training programs to support targeted bio-safety training programs in designated high priority communities. Awards made under this FOA are expected to be made in October 2015 with funding targeting $3M a year for FY 16, 17, and 18.