February 2, 2022

Senator Patty Murray
Chair
Senate Health, Education, Labor &
Pensions Committee

Senator Richard Burr
Ranking Member
Senate Health, Education, Labor &
Pensions Committee

AIHA Comments on Prepare for and Respond to Existing Viruses,
Emerging New Threats, and Pandemics Act (PREVENT Pandemics Act)

Dear Chairwoman Murray and Ranking Member Burr:

AIHA, the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety (OEHS), appreciates the opportunity to provide feedback on the discussion draft of the Prepare for and Respond to Existing Viruses, Emerging New Threats, and Pandemics Act. Below are our comments and recommendations, which we hope you find useful.

1. Currently, the bill lacks specific language addressing the needs and responsibilities of employers and employees. While the draft legislation does mention health workers, who are critically important, many more workers in other industries are also impacted by pandemics and should thus be added as focal points of this legislation. The distinct advantage of workplaces is that employers and workers, through safe work procedures, can help prevent and limit the spread of infectious diseases to workers, customers, patients, clients, and visitors.

2. The bill should require the U.S. Occupational Safety and Health Administration (OSHA) to issue its infectious disease standard within six months. We need a nationally-enforceable standard for workplaces to prepare for and respond to infectious disease outbreaks. One key learning from this pandemic is that a more coordinated, centralized approach is needed. In general, health departments lack the expertise, knowledge, and resources needed to address worker protection. OSHA, which was established to provide uniform national standards for worker protection, can help prevent and limit the spread of infectious diseases by issuing an infectious disease standard.

3. The bill should clearly acknowledge that all manners of biological agents in workplaces and communities are evaluated by employers using the services of qualified occupational health and safety professionals, including Certified Industrial Hygienists,
Professional Engineers, and Board Certified Occupational Physicians as part of a total exposure approach.¹

4. The bill should clearly communicate that pandemic threats, such as the SARS-CoV-2, need to be evaluated and controlled using a source (infected people), pathway, and receptor (uninfected people) paradigm that allows the full measures of scientific know-how and technology to mitigate these threats.²

5. The bill should state that for future pandemics involving viral respiratory pathogens, it should be assumed that aerosol inhalation is an important and primary mode of person-to-person transmission and requires source, pathway, and receptor controls appropriate to that mode of transmission (e.g., respirators, dilution ventilation, and local exhaust ventilation).

6. The bill should address the need for industry-specific environmental mitigation of pandemic threats. These have been characterized by OSHA and the National Institute for Occupational Safety and Health (NIOSH) and can be found in many recent AIHA publications. The revised (second edition) “The Role of the Industrial Hygienist in a Pandemic” has an appendix that addresses unique challenges in eight types of industries or settings.³ The PREVENT Pandemics Act should acknowledge the unique challenges of preventing and mitigating pandemic agents in these and other workplaces. Some of these high-risk settings include long-term care facilities and nursing homes, correctional institutions, chicken and meat processing plants, public transportation, and other settings where it is difficult to limit workers and the people they serve from congregating in enclosed indoor spaces.

7. The bill should emphasize the importance of “nonpharmaceutical intervention” in preventing and mitigating pandemics. These nonpharmaceutical interventions may include the sampling of pandemic sources through air, water, and other matrices, developing exposure and control banding,⁴ source, pathway, and receptor controls, communication and coordination in workplaces, and use of sensors.

8. The severe lack of understanding cited above is reflected in the recent (11/17/2021) National Academy of Medicine four reports on applying lessons learned from COVID-19

¹ https://www.aiha.org/get-involved/volunteer-groups/content-portfolio-advisory-group/total-exposure-health
² For additional information on this paradigm of infectious disease prevention, please see https://www.cidrap.umn.edu/covid-19/preparedness-and-response/protecting-essential-workers
⁴ https://www.cdc.gov/niosh/topics/ctrlbanding/default.html
to prepare for and respond to the next influenza pandemic.\(^5\) It is noteworthy that in these four reports, only two pages were devoted to the importance of ventilation and filtration, one-half page devoted to the use of ultraviolet and ionization of pandemic agents, and one-half page to surface cleaning.

9. A massive effort is needed now to research and study new workplace environmental approaches to preventing and mitigating pandemic and other biological agents in the workplace. NIOSH would appear to be the agency best set up to take on this responsibility while working with other government agencies and professional and worker organizations.

10. Most infectious disease surveillance systems don’t track cases by industry and occupation, which is a problem because the lack of such tracking makes it harder to identify outbreaks, track trends, and target interventions quickly. In order to correct this, the bill should be written to have a national standard and requirement to track cases by industry and occupation in surveillance systems. Many published reports and studies have downplayed the role of the workplace in the transmission of SARS-CoV-2. However, industry and occupation are critical to understanding the role of the workplace in the transmission of infectious diseases and developing appropriate infection prevention and control programs.

11. Public health departments have been cut drastically over the past several decades, severely impacting their ability to perform contact tracing and outbreak investigations and coordinate with employers, unions, and communities. This infrastructure must be rebuilt. Workplace and community outbreak investigations are key to containment.

12. Industrial hygienists, experts in particle physics, and heating, ventilating, and air conditioning (HVAC) engineers should be included in the development of infectious disease preparedness and response programs. The Centers for Disease Control and Prevention and the other Federal agencies should include experts from these professions from inside and outside of government in developing infectious disease guidelines and standards.

13. Federal funding should be authorized to support State, local, and professional efforts to develop workplace hazard-assessment and control programs that include the recognition and identification of aerosol and other biological exposures. Funding should be focused on the sampling of pandemic sources through air, water, surfaces, and other matrices, development of exposure and control banding, source, pathway, and receptor

controls, which may use air movement and air cleaning technologies, respirator design, training, and fit-testing for all essential industries that lack the necessary resources and expertise to establish effective respiratory-protection programs.

14. Additional funding should be authorized for NIOSH and other Federal health agencies to address research gaps.  

15. Testing has been a major problem in the COVID-19 pandemic, and we need to ensure that employers and workers have access to testing with the appropriate frequency and no long delays in getting results, which makes the tests less useful for containing workplace outbreaks.

16. Funding should be authorized to help States assist employers, unions, and building operators in conducting risk assessments, crafting and implementing written infection prevention and control programs, workplace training, and the development and implementation of personal protective equipment and respiratory protection programs, as well as improvements to building ventilation systems or use of portable air cleaners. Some of the hardest-hit industries typically have no industrial hygiene or HVAC expertise, such as nursing homes, long-term care, and correctional facilities.

Conclusion and next steps
AIHA thanks you for the opportunity to provide feedback on the discussion draft of the PREVENT Pandemics Act. If you have any questions on these comments or other matters, please contact Mark Ames at mames@aiha.org or (703) 846-0730.

Sincerely,

Lawrence Sloan, MBA, FASAE, CAE
Chief Executive Officer
AIHA

About AIHA
AIHA is the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety in the workplace and community. Founded in 1939, we support our members with our expertise, networks, comprehensive education programs, and other products and services that help them maintain the highest professional and competency standards. More than half of AIHA’s

nearly 8,500 members are Certified Industrial Hygienists, and many hold other professional designations. AIHA serves as a resource for those employed across the public and private sectors as well as to the communities in which they work. For more information, please visit www.aiha.org.