

Promoting One Health Collaboration

Issue Background

The ability to prevent, prepare for, and respond to outbreaks of infectious diseases such as COVID-19, Ebola, Zika, avian influenza (HPAI) and MERS depends on an improved understanding of the interconnectedness of human, animal and environmental health. Ensuring that all areas of government are coordinated and working together to foster and advance innovation is critical in our efforts to protect against diseases and malnutrition.

Policy Position

BIO supports the bipartisan “**Advancing Emergency Preparedness Through One Health Act of 2019**” (S. 1903/H.R. 3771) introduced by Senators Tina Smith (D-MN) and Todd Young (R-IN) and Representatives Kurt Schrader (D-OR) and Ted Yoho (R-FL). This legislation establishes an interagency One Health Program to better safeguard human, animal and environmental health as follows:

- **Develop a National One Health Framework:** The Secretaries of Health and Human Services and Agriculture, in coordination with other departments and agencies as appropriate, shall develop, publish, and submit to Congress within one year a national One Health Framework for coordinated Federal Activities under the One Health Program.
- **Ensure Adequate Representation:** The framework shall describe existing efforts and contain recommendations for building upon and complementing the activities of U.S. government departments under the One Health Program and consider whether all relevant agencies are adequately represented.
- **Establish Specific Federal Goals and Priorities** that most effectively advance:
 - scientific understanding;
 - prioritization of diseases and areas of study; and
 - coordination and collaboration between agencies in information-sharing, fieldwork and lab studies, surveillance, prevention, response and recovery from disease outbreaks in animals and humans;
- **Identify and Expand Partnerships** among Federal agencies, States, Indian tribes, academic institutions, nongovernmental organizations, and private entities to strengthen understanding of the value of an integrated approach.
- **Identify Best Practices** related to State and local-level research coordination, field activities, and disease outbreak preparedness, response, and recovery related to One Health.

BIO encourages Congress and the agencies to consider innovative, technology-driven solutions as it works to establish the One Health program framework called for by this important legislation.

Key Points

- ✓ Six out of every 10 infectious diseases found in humans are spread by animals.
- ✓ When zoonotic diseases impact the human population, there are often enormous health and economic costs:
 - The World Bank estimates the global costs from six zoonotic outbreaks exceeded \$80 billion (1997 – 2009).
 - The Centers for Disease Control and Prevention estimates that there are annually 2,500,000,000 cases of zoonotic infections globally, resulting in 2,700,000 deaths.
- ✓ There are also immense effects on the agriculture sector:
 - In 2014 and 2015, a high pathogenic avian influenza (HPAI) outbreak in the United States led to the cull of nearly 50,000,000 birds and imposed up to approximately \$3,300,000,000 in losses for poultry and egg farmers, animal feed producers, baked good production, and other related industries.
- ✓ Public health preparedness depends on agriculture in a variety of ways:
 - A wide range of vaccines, including those for influenza, yellow fever, rabies, and measles-mumps-rubella, are primarily cultivated in poultry eggs.
 - Egg shortages resulting from zoonotic disease outbreaks could impose serious risks to vaccine manufacturing efforts.
- ✓ Biosecurity is also at stake:
 - It is estimated that approximately 80 percent of potential pathogens likely to be used in bioterrorism or biowarfare are common zoonotic pathogens.