One Health Zoonotic Disease Prioritization for the United States

The U.S. Centers for Disease Control and Prevention (CDC), U.S. Department of the Interior (DOI), and the U.S. Department of Agriculture (USDA) jointly hosted a One Health Zoonotic Disease Prioritization Workshop for the United States in December 2017. Participants from each of these agencies voted on a list of eight priority zoonotic diseases to be jointly addressed by human, animal, and environmental health sectors in relevant U.S. federal agency programs using a multisectoral, One Health approach.

A multisectoral, One Health approach is necessary to effectively address zoonotic diseases and other shared health threats at the human-animal-environment interface.

TIME MULTIPLE U.S. AGENCIES WORKED TOGETHER TO PRIORITIZE ZOONOTIC DISEASES OF NATIONAL CONCERN

This represents a critical step towards strengthening One Health in the United States. A One Health approach encompasses transdisciplinary and multisectoral partnerships, and requires contributions from all sectors to identify common priorities for collaboration. This approach helps ensure all stakeholders have a shared vision and plan for implementing One Health in their current and future areas of focus.

PRIORITY ZOONOTIC DISEASES FOR THE UNITED STATES

> Zoonotic influenza viruses
> Salmonellosis
> West Nile virus
> Plague
> Emerging coronaviruses (e.g., MIDDLE EAST RESPIRATORY VIRUS [MERS], SEVERE ACUTE RESPIRATORY SYNDROME [SARS])
> Rabies
> Brucellosis
> Lyme disease

AREAS IDENTIFIED FOR IMPROVED MULTISECTORAL, ONE HEALTH COLLABORATION IN THE UNITED STATES

> Increase and effectively leverage leadership engagement
> Create a formalized One Health coordination mechanism at the federal level
> Develop a National One Health Strategic Plan for the United States
> Improve knowledge and data sharing for laboratory, surveillance, and response activities
> Improve coordination during an outbreak response
> Strengthen joint investment for One Health and prioritized zoonotic diseases
> Increase education and awareness through coordinated messaging on disease prevention
> Identify research gaps and needs using a One Health approach
ABOUT THE PROCESS

CDC, DOI, and USDA co-hosted the U.S. One Health Zoonotic Disease Prioritization Workshop. Experts from each of these agencies—the lead federal agencies responsible for zoonotic disease programs for people, animals, and the environment—served as voting members who determined the final prioritized list of diseases. Advisors from multiple sectors provided relevant subject matter expertise to inform the zoonotic disease prioritization process and worked with voting members to develop plans to strengthen One Health zoonotic disease prevention, detection, and response in the United States. Advisors represented relevant federal and state government officials working in the area of zoonotic diseases.

Participants used the CDC-developed One Health Zoonotic Disease Prioritization tool to prioritize endemic and emerging zoonotic diseases of greatest national concern using equal input from key One Health sectors. Once the diseases were identified, facilitators used elements of the One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART™, co-developed by USDA and the University of Minnesota) to develop specific implementation plans and processes to strengthen One Health collaboration in the United States.

ABOUT THE DISEASES

The voting members of the workshop chose several criteria to use in ranking the zoonotic diseases. **The diseases were ranked based on:**
> Their pandemic/epidemic potential;
> The severity of each disease in humans, domestic animals, and wildlife;
> The potential economic impact of each disease in the United States;
> The potential for introduction or increased transmission of the disease in the United States; and
> And the potential of the disease to be used for bioterrorism.

OUTCOMES

Since the workshop, CDC, DOI, and USDA have established the One Health Federal Interagency Network (OH-FIN), which brings together representatives from federal agencies and departments on a regular basis to exchange information, updates, and opportunities for collaboration in support of One Health activities.

A core group from CDC, DOI, and USDA is also developing a One Health Strategic Plan for the United States. This plan includes goals, objectivities, and activities to further multisectoral, One Health coordination and communication, zoonotic disease prevention, preparedness, joint outbreak response and recovery, surveillance, laboratory capacity, antimicrobial resistance, and workforce development.

*One Health means a collaborative, multisectoral, and transdisciplinary approach—working at the local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.*

www.cdc.gov/onehealth