One Health Disease Outbreak Response Tool

Infectious Disease Preparedness Across Multi-Sectors

The One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART) is an interactive process that fosters working across organizational and disciplinary lines when preparing or responding to disease outbreaks or addressing other complex One Health challenges. Although this mapping tool was initially developed to assist agencies in coordinating effective outbreak response planning, the process has also been used for:

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Category
Software & IT/Education & Training
Software & IT/Simulation & Modeling

Learn more

- "After Action" outbreak response:
    - Multi-sectoral team analyze past outbreak response to maximize efficiencies and develop next steps for enhanced systems operations. (United States)
- Multi-sectoral preparedness and response planning:
    - Development of National AMR Action Plans (Laos, Cambodia, Thailand, Myanmar)
    - National Rabies Response Planning (Indonesia)
    - Marine Mammal die-off Action Plans (Arctic countries)
    - Avian Influenza Emergency Response Plans and Exercises (Indonesia and United States)
    - Natural Disaster Response Planning for tornadoes and forest fires (United States and Arctic Countries)
    - Multi-sectoral Workforce Planning: Review and prioritize national and provincial workforce needs to inform education and training. (Uganda, Rwanda, Tanzania, Ethiopia, Kenya, Cameroon, and Senegal)
- Developing One Health Teams:
    - Inclusion in One Health training programs (United States and Indonesia)

One Health Tool Coordinates and Optimizes Resources

Dynamic changes and destabilization at the interface of humans, livestock and wildlife are driving increased risk of emerging disease threats across the globe. Countries need to coordinate and optimize resources across human health, veterinary and environmental sectors for prevention, detection and control of infectious disease outbreaks. OH-SMART gives people from different disciplines a practical way to apply business process improvement and participatory leadership methods to their multi-sectoral system. Through OH-SMART they create a visual representation, or map, of the system of communication and coordination across their organizations that captures the different levels of governance – local, regional, National – as well as the different perspectives or domain of each sector. Using this interactive mapping process, partners can build consensus on best practices and create mutually-agreed upon protocols for current and future cross-sectoral work and collaboration. OH-SMART promotes positive, action- based conversations focused on finding solutions to address shared challenges such as information sharing between agencies, lack of joint protocols, and the need to move from a relationship-based system to a more institutionalized approach that maximizes resources and effort and provides mutual benefit.

OH-SMART at the State, National and Global level

The University of Minnesota and USDA have facilitated OH-SMART workshops to support One Health systems strengthening in over 30 US states and 12 countries, and we have partnered with several country-level governments to tailor OH-SMART for their use.

Learn more about the tool and scheduling training at the OH-SMART website.

BENEFITS AND FEATURES:

- Assists countries or states in analyzing their existing ability to work across agencies to incorporate One Health in effective disease surveillance and response planning
- Leads stakeholders through a clear, step-wise process with accompanying tools and detailed approaches to create multi-sectoral system maps used to identify opportunities and strengthen system operations
- Helps stakeholders review existing cross-sectoral interactions, identify areas of

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improvement and institutionalization and strengthen workforce development

APPLICATIONS:

- Proactive: Building new surveillance plans, investigation and response plans, or understanding existing One Health systems
- Retroactive: Evaluating an actual response to a One Health challenge and developing an action plan to improve multi-agency collaborations
- Just in time: Analyzing and improving responses during an outbreak or crisis

Phase of Development - Product Available

Researchers

Katherine Pelican

Associate Professor, Veterinary Medicine, College of Veterinary Population Medicine

External Link (www.vetmed.umn.edu)

Tracey Dutcher

USDA: APHIS: VS One Health Coordination Center

Publications

Piloting the One Health Systems Mapping and Analysis Resource Toolkit in Indonesia

Ecohealth, 2017 Mar;14(1):178-181. doi: 10.1007/s10393-017-1207-3. Epub 2017 Feb 8