One Health (OH) - TREADS

Advancing Integrated Biosurveillance Across Federal Missions

Building on Department of Homeland Security (DHS) investments to connect human, animal, agricultural, and environmental health data for early warning, risk assessment, and decision support.

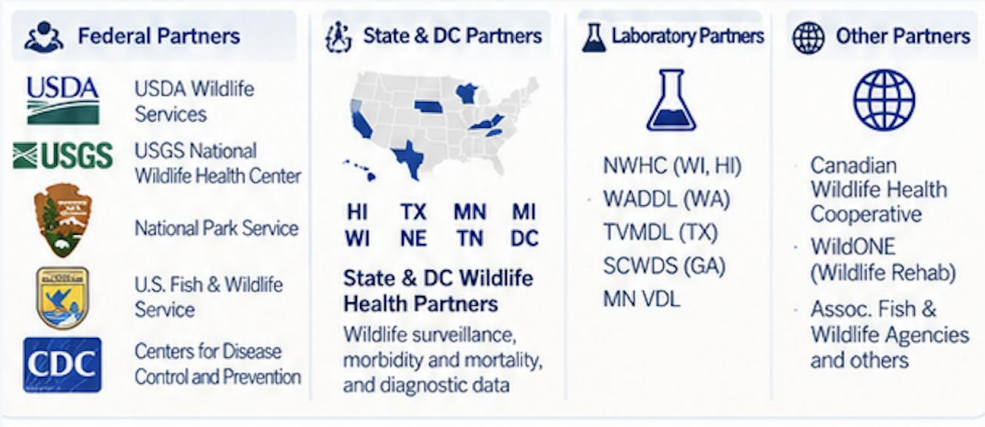
Pacific Northwest NATIONAL LABORATORY

1 DHS INVESTMENT: ESTABLISHING THE FOUNDATION

DHS Office of Health Security investment established OH Threat Risk and Event Analysis, Detection, and Surveillance (OH-TREADS) as the founding deployment of the shared TREADS platform. Developed by Pacific Northwest National Laboratory, a U.S. Department of Energy national laboratory, this investment advanced reusable capabilities for integrating, analyzing, and securely sharing human, animal, agricultural, and environmental health data.

2 AN ESTABLISHED AND GROWING DATA PROVIDER ECOSYSTEM

OH-TREADS leverages existing data sharing agreements and trusted relationships across federal, state, and international organizations.



3 ONE SHARED PLATFORM. MULTIPLE MISSIONS. GOVERNED DATA SHARING.

OH-TREADS is built on a shared, secure multi-tenant platform supporting multiple organizations and users with configurable, role-based access and data-sharing permissions. Data providers retain control over who can access their information and at what level of detail.



CORE SI & ANALYTIC CAPABILTIES



4 EXPANDING INTERAGENCY COLLABORATION

Current collaboration is extending TREADS platform capabilities to additional public health and biosurveillance missions.

CDC – PH-TREADS

- Developing PH-TREADS through a new interagency agreement with Biothreat Radar and AMD
- Initial public health use cases to demonstrate data sharing between CDC and 1) their programs, 2) other federal agencies, and 3) state, local, tribal, and territorial partners.

Department of War

- Exploring shared capabilities and interoperability
- Aligning with the Biosurveillance Integration Portal
- Collaborating on governed data sharing and analytics

Federal and State Providers

- Expanding data sharing relationships
- Increasing coverage across wildlife, agricultural, human, and environmental health
- Building on existing NWDD agreements that extend to TREADS
- Supporting OH analytics and situational awareness

THE OPPORTUNITY

DHS's foundational investment in OH-TREADS provides a pathway toward integrated federal biosurveillance through a shared multi-tenant platform, trusted data-provider partnerships, SI-enabled analytics, and governed information sharing across agencies.