

Introduction

With over 70% of emerging infectious diseases originating from an animal source, zoonotic diseases present major challenges to population health planning and maintenance. Recent zoonotic outbreaks such as Ebola in West Africa and avian influenza in China highlight the need for communities around the world to prepare to respond to potentially devastating emerging infectious diseases. LMI has developed expertise in emerging zoonotic, and, specifically, foreign animal disease (FAD) preparedness and response by helping prepare the USDA Animal and Plant Inspection Service's National Preparedness and Incident Coordination (NPIC) and National Veterinary Stockpile (NVS) for the next zoonotic challenge. The elements of this process may be applicable to different country and resource contexts.

Training and Exercises

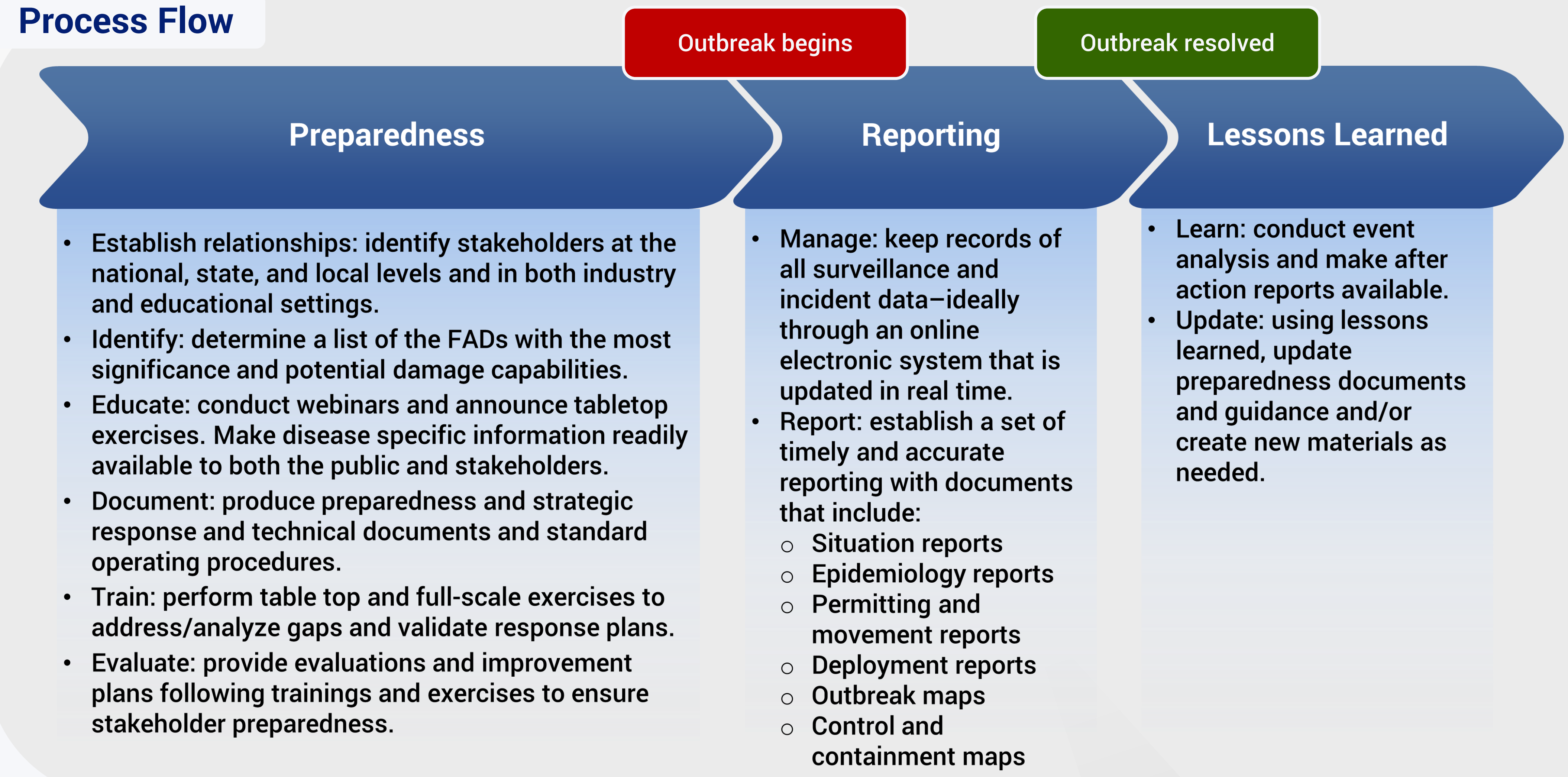
Tasks	Frequency
Update five year training and exercise strategy and plan	Every 12 months
Review sub-national (state or district) agency plans	
Convene state- or district-level stakeholders for tabletop exercises	
Conduct disease-specific countermeasures tabletop exercise	
Develop tabletop exercise after-action reports for state/district and national governmental review	
Plan and conduct deployment drills in coordination with states/districts	
Provide webinars to train national-level disease-response logistics management team	
Develop a plan for surge personnel for deployment to the site of an emergency	

Recognize Challenges Zoonotic outbreaks are highly context-specific and present responders with logistical, technical, and strategic challenges. Inconsistent resource and experience levels, complex veterinary requirements, competing stakeholder interests, host diversity, geography, and climate all interact to amplify outbreak impacts and increase the complexity of response processes.

Successful Planning Must

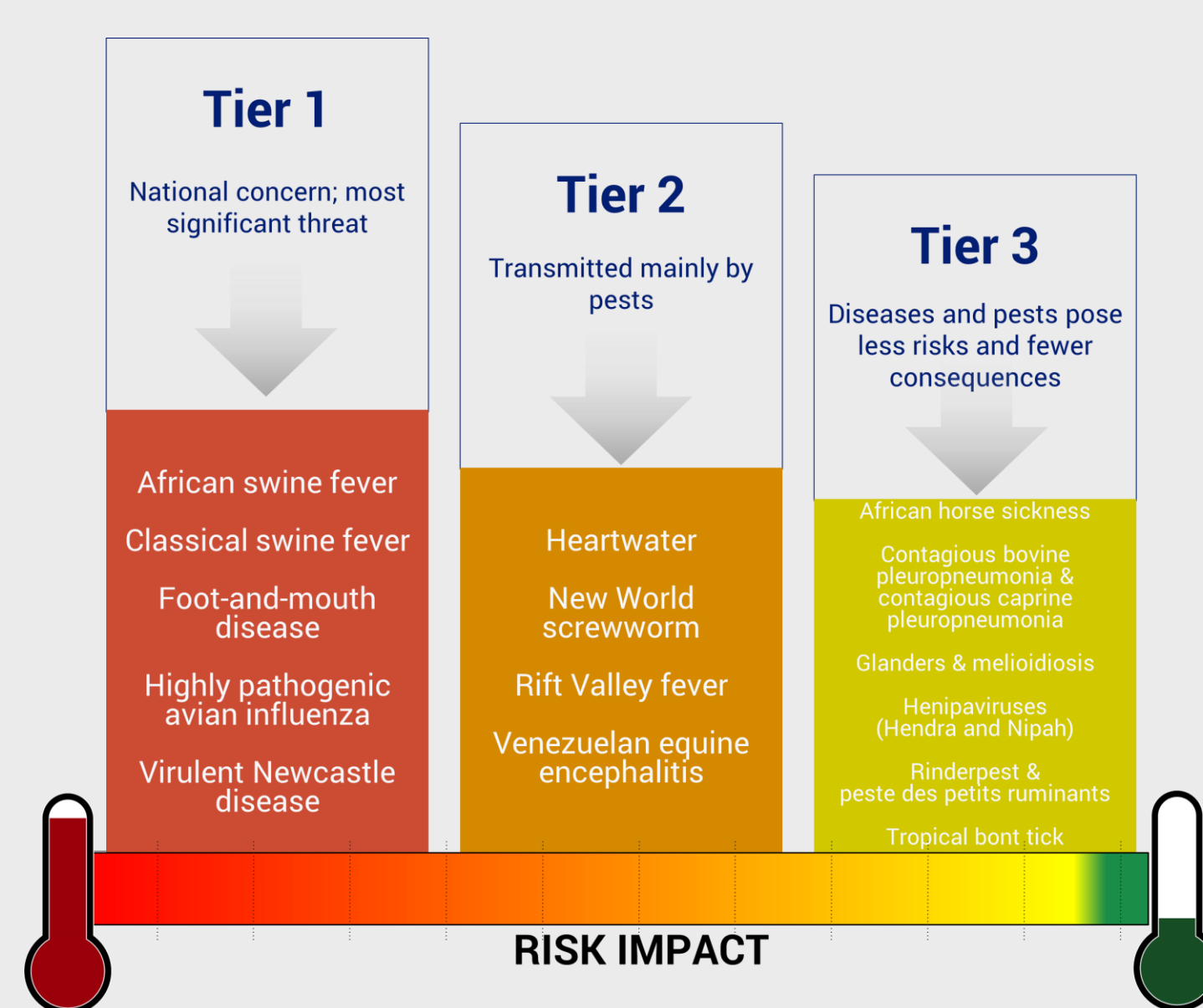
- Integrate national, state/district, indigenous group, and industry stakeholders into FAD planning;
- Consist of a unified response network at both the national and state/district level;
- Incorporate local knowledge and practices;
- Utilize evidence-based practices;
- Employ clear, direct language in response and outreach materials;
- Establish resources and qualified personnel before a FAD event;
- Employ evidence-based, reliable methods for disease detection, tracing, and diagnosis;
- Develop a continuity-of-business plan for both infected premises and areas proximate to infected premises;
- Outline mass depopulation, vaccination, cleaning and disinfection, and disposal procedures and standard operating procedures;
- Plan for financial costs of animal loss outcomes, e.g., reimbursement.

Process Flow

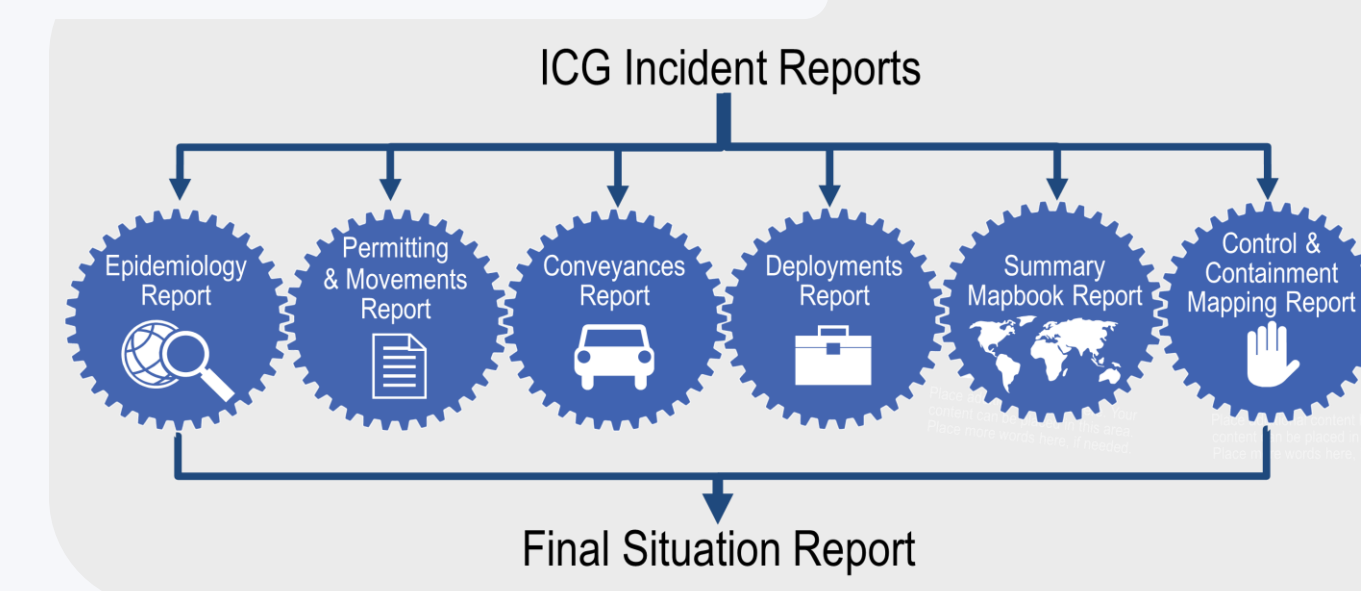


Example of Potentially Influential FADs (United States)

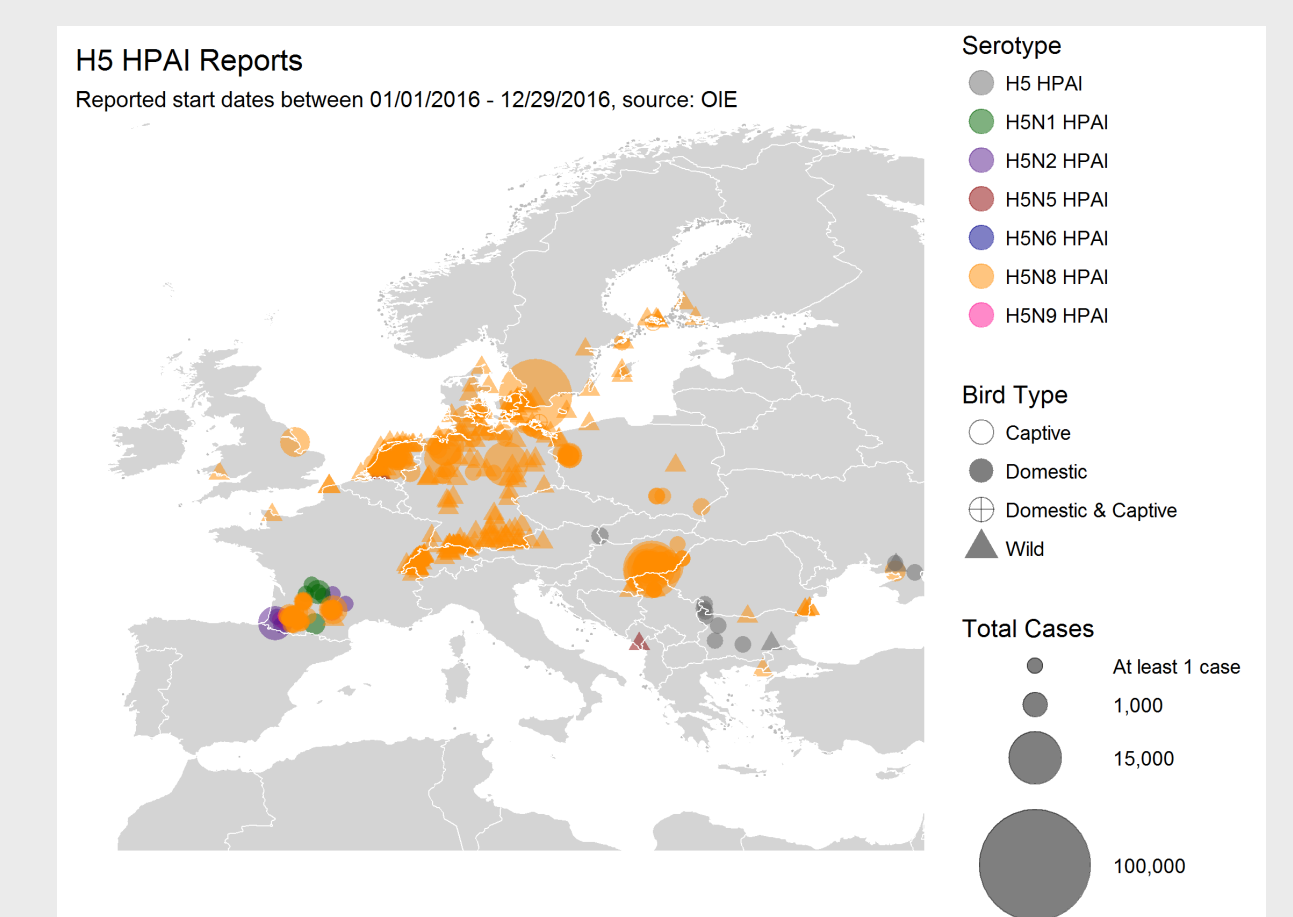
FADs arranged by potential for national-level impact.



Reporting Process



Outbreak Map



Ultimate Goals

1. Integrate and initiate processes that deepen relationships between stakeholders and expand access to resources.
2. Execute processes to rapidly detect, control, contain, and stabilize the disease.
3. Monitor and control processes that stabilize agricultural economies while protecting food supplies and eradicating the disease from populations proximate to key sectors.
4. Continuously improve preparatory and responsive processes at international, national, and sub-national levels.