

World Organisation for Animal Health

Training Workshop on Animal Disease surveillance

What practical resources would help you apply what you learned after returning to your country?

12-13 November 2026
Manila, The Philippines

Proposed consultations

- Session 1 - Provide an opportunity for participants to discuss what should be the scope of practical technical resources for Veterinary Services

- Session 2 - Present the structure and key components of the proposed surveillance guidelines (draft)

First session objective

We are interested in understanding what types of practical resources, tools, references, or knowledge products would be most useful to support the implementation of risk-based surveillance in ASEAN Member States, in particular to support planning and design of surveillance for demonstrating freedom.

These resources may include, but are not limited to, formal guidelines.

Steps

Items
1. Hazard
2. Purpose of surveillance
3. Objective(s) of surveillance
4. Geographical area covered by surveillance
5. Susceptible population
6. Case definitions of disease under surveillance
7. Institutional level(s) involved
8. Surveillance methods and protocols
9. Risk based sampling strategy
10. Time frame and frequency
11. Laboratory Analysis
12. Data Collection, management and storage
13. Communication and Reporting
14. Monitoring and Evaluation

- Epidemiology and risk Assessment
- Sampling design – sample size, sampling frame, stratification etc
- Laboratory testing and interpretation of surveillance data
- Evidence gathering and dossier preparation

What type of technical support/ technical resources and tools required?

A. Technical reference materials
- Surveillance manuals
- Guidance notes
- Sampling calculators
- Disease-specific examples
- Decision trees
- Templates

B. Knowledge sharing and learning
- ASEAN case studies
- Country examples
- Communities of practice
- Webinars
- Study visits
- Expert helpdesk

C. Practical implementation support
- Training packages
- Risk assessment tools
- Data analysis tools
- Surveillance evaluation tools
- Planning templates

Steps

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Step 2. Small group discussion (10 min)

Step 3. Prioritization (10 min)

The most useful, the most feasible, the one that would benefit the largest number of ASEAN Members

Step 4. Plenary synthesis (10 min)

A. Technical reference materials

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- Decision trees
- Templates

B. Knowledge sharing and learning

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C. Practical implementation support

- Training packages
- Risk assessment tools
- Data analysis tools
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- Epidemiology and risk Assessment
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- What type of technical support required?

Second session objective

Briefly introduce participants with available technical guidance to support planning and design of surveillance outline of the surveillance guideline, and discuss

The premise

- Many relevant standards & operational guidance are available

Are they used? Fit for your context?

- In preparation of this training, our own *minireview* identified
  - 16+ guidelines
  - 10+ original articles
  - 3+ review articles
  - 3 SOPs
  - eLearning opportunities …

TABLE A1.1
List of surveillance tools and resources, including purpose, online access and areas of application in surveillance

Tool name	Purpose	Location	Application area in surveillance			
			Planning	Design	Analysis	Evaluation
Surveillance Evaluation Tool (SET)	Developed by FAO to provide countries with a comprehensive and standardized way to evaluate animal disease surveillance system capacities	http://www.fao.org/3/i9143en/i9143EN.pdf	x			x
Risk-based strategic plan for control of foot-and-mouth disease	Template for development of the risk-based strategic plan required for progression from PCP-FMD stage 1 to stage 2	https://www.fao.org/3/cb1866en/cb1866en.pdf	x	x		
Epitools	Practical utilities to assist in survey design and analysis (including calculators) in developing and developed countries	https://epitools.ausvet.com.au		x		
SurvTools (previously called RiskSur)	Provides developers with science-based frameworks guiding them through the process of design and evaluation of surveillance systems (including risk-based). Includes three tools: a design tool, an evaluation tool, and a statistical tool. Reflects the sequence of steps involved in the development of a surveillance system and its associated components, including defining the target hazard and surveillance objective, target population, surveillance enhancements, testing protocol, study design, sampling strategy, data generation (sample collection), datasample transfer, data translation (sample analyses), epidemiological analyses, dissemination of results and surveillance review.	https://survtools.org/ https://www.fp7-risksur.eu/	x	x		
ECoSur	A semi-quantitative tool to evaluate the organization and functioning of collaboration in a multisectoral surveillance system. Includes evaluation of the key function of collaboration for an effective and sustainable multisectoral surveillance system.	https://survtools.org/wiki/surveillance_evaluation?dokuwiki-fetch.php?media=files:guidance_v2.pdf#:~:text=ECoSur%20is%20a%20semi-quantitative%20tool%20that%20aims%20to,system%20and%20to%20analyse%20its%20strengths%20and%20weaknesses				
Risk-based disease surveillance	Manual for planning and analysing risk-based surveillance for the purpose of demonstrating freedom from disease	http://www.fao.org/3/i4205e/i4205e.pdf	x	x		

Tool name	Purpose	Location	Application area in surveillance			
			Planning	Design	Analysis	Evaluation
FAO guidelines for surveillance of pandemic H1N1/2009 and other influenza viruses in swine populations	Guidelines for surveillance planning for H1N1/2009 for detection, supporting disease absence and general surveillance	http://www.fao.org/3/ak738e/ak738e.pdf	x	x		
Guide to terrestrial animal health surveillance	Facilitates the design, implementation and evaluation of animal health surveillance systems for disease, infections and residues	https://www.woah.org/en/a-new-ole-guide-to-better-surveillance-and-detection-of-health-risks-related-to-animals/ (Not available free to public online)	x	x	x	
Manual of basic animal disease surveillance	Assists in the development of animal disease surveillance by establishing a framework for deciding on the best approach to surveillance and by examining the strengths and weaknesses of key surveillance tools. Provides a step-by-step guide to implementation of basic animal disease surveillance.	Nairobi, AU-IBAR. ISBN 978-9966-1659	x	x	x	x
Guidelines for designing animal health surveillance plans	Supports national veterinary services in designing comprehensive animal disease surveillance plans by highlighting important components	http://www.fao.org/fileadmin/user_upload/ramesa/library/FAO%20Guidelines%20for%20designing%20animal%20disease%20surveillance%20plan.pdf	x	x		
Training manual on surveillance and international reporting of diseases in wild animals	Training material including a theoretical overview and practical exercises on wildlife disease surveillance and reporting	https://www.oie.int/fileadmin/Home/eng/International_Standard_Setting/docs/pdf/WGWildlife/A_Training_Manual_Wildlife_2.pdf	x	x		
Wild bird highly pathogenic avian influenza surveillance: Sample collection from healthy, sick and dead birds	Provides brief guidelines on the sampling methods to use when conducting wildlife surveillance or a morbidity/mortality investigation	http://www.fao.org/3/a0960e/a0960e00.htm		x		
Surveillance and Information Sharing Operational Tool (SIS-OT)	The tool's core capacity-building guide provides a stepwise approach for users to assess national capacity and identify activities, requirements and necessary resources to develop a coordinated zoonotic disease surveillance system.	https://www.woah.org/en/document/surveillance-and-information-sharing-operational-tool/	x			
Manual 5: Surveillance and epidemiology	General information on types of surveillance, strengths and weaknesses of different surveillance tools, activities, and epidemiological analysis	https://itr-asia.oie.int/wp-content/uploads/2020/02/seacfmd_manual-5.pdf		x		

Tool name	Purpose	Location	Application area in surveillance			
			Planning	Design	Analysis	Evaluation
Challenges of animal health systems and surveillance for animal diseases and zoonoses	Overview of operation, characteristics, objectives, conceptual design, needs and future directions for national, regional and global animal health surveillance and information systems. Examples of surveillance and information systems are discussed.	https://www.fao.org/3/i2415e/i2415e00.htm	x	x		
Surveillance Evaluation Framework (Surf)	Surveillance evaluation in the animal, plant, environment and marine sectors, including case studies. Four major components are conducted: motivation, scope, design and implementation, and reporting and communication.	https://www.mpi.govt.nz/dmsdocument/18091/direct				x
Open Epi	Free and open-source software for epidemiological statistics	https://www.openepi.com/Menu/OE_Menu.htm		x	x	
Event Mobile Application (EMA-I)	Facilitates data collection, real-time reporting and data analysis and visualization for high-impact animal diseases and zoonoses. Includes Emergency Prevention System (EMPRES).	https://www.fao.org/3/CA10781EN/ca10781en.pdf			x	
Epicollect	Allows users to create projects and forms, collect data online or offline, and view, analyse and export data	https://five.epicollect.net/			x	
Epi R	The manual provides R basics and information on data management, descriptive analyses, univariate and multivariable analyses, data visualization, reports, and dashboards.	https://epirhandbook.com/en/download-handbook-and-data.html#download-handbook-and-data			x	

Metwally, S., Drewe, J.A., Ferrari, G., Gonzales, J.L., Mclaws, M., Salman, M. & Wagner, B. 2024. Practical surveillance guidelines for the progressive control of foot-and-mouth disease and other transboundary animal diseases. FAO Animal Production and Health Guidelines 36. Rome, FAO. https://doi.org/10.4060/cd2138en

The assumption

To support application of **risk-based** surveillance for **demonstration of freedom** by national Veterinary Services in Asia-Pacific,

as per the provisions of the Code,

With emphasis on PPR, LSD and FMD examples

A user-friendly,

Regional,

Animal health surveillance guidelines might be useful

Current outline

Chapters	Details
Chapter 1. Purpose, Scope and Audience	
Chapter 2. Why use a risk-based approach for Animal Health surveillance?	ASEAN context Relation with International Standards Principles, strengths and limitations of RBS
Chapter 3. Defining the surveillance objective	**Provide evidence that the disease/infection is not present** (self declaration, official recognition, maintenance of freedom and recovery of freedom post outbreak) **Early detection**
Chapter 4. Applying risk assessment and risk stratification	Introduction to RA Identifying relevant risk factors Source of information Risk stratification approaches From RA to RB sampling, managing bias and limitations
Chapter 5. Selecting and designing surveillance components	Combining multiple source of information - Passive surveillance - (Active) clinical surveillance - Serological / virological surveys - Value chain nodes surveillance (Market-based, abattoir based) - Sentinel herd surveillance - Syndromic Surveillance - Retrospective Surveillance - Wildlife surveillance

ASEAN case studies

ASEAN case studies

Current outline

Chapters	Details
Chapter 6. Building Confidence in Disease Detection and Freedom	What constitute evidence of freedom Design prevalence Confidence levels Surv. Component sensitivity Combining Surv. Components Confidence accumulation over time Intro to scenario tree concepts Interpreting surveillance resilts
Chapter 7. Implementing, Monitoring and Improving Surveillance	Pilot implementation and scaling up of RBS Monitoring surv. Performance Evaluation and continuous improvement Regional and cross-border coordination Documentation and record keeping Preparing evidence for self declaration and official recognition Preparing for external review and validation (when appropriate)
Appendices	Surv. Design framework Common risk factors for TADs in ASEAN Decision trees (disease status – objective – components; riks factors – sampling approach etc.) Case definitions Sampling frame templates Sample size calculators Surv. Performance indicators (monitoring) …. Curated ref. list

PPR, LSD case studies

Thank you

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