



Advanced Zoonotic and Vector-Borne Disease Control Training Course

18 – 22 April 2027
Muscat

Advanced Zoonotic and Vector-Borne Disease Control Training Course

Ref: 1548_214316 **Date:** 18 – 22 April 2027 **Location:** Muscat **Fees:** 5700 Euro

Overview

Advanced Zoonotic and Vector-Borne Disease Control Training Course is a one-week course for public-health physicians, infection-control professionals, epidemiologists, surveillance officers, and healthcare leaders who leave with a One Health Disease Control File. Participants integrate One Health coordination, zoonotic disease surveillance, joint risk assessment, integrated vector management, outbreak response, and programme evaluation across healthcare, veterinary, environmental, and community systems. Agile Leaders Training Center presents zoonotic and vector-borne disease control through applied operational tools.

Who Should Attend

- Public-health teams responsible for communicable-disease surveillance and response
- Healthcare teams responsible for infection prevention, notification, and escalation
- Epidemiology teams responsible for field investigation and risk assessment
- Laboratory and diagnostic teams responsible for specimen pathways and information exchange
- Environmental and vector-control teams responsible for intervention planning
- Health leaders responsible for multisector coordination and programme assurance

The course assumes participants already support surveillance, infection control, public health, laboratory, environmental health, or emergency response and leaves clinical treatment protocols and entomological laboratory certification outside scope.

Departments and Industries

The course supports departments and industries working across human, animal, and environmental health systems.

- Public-health surveillance and communicable-disease departments
- Hospitals, laboratories, and infection-control services
- Veterinary health and animal-production organizations
- Municipal environmental health and vector-control services
- Emergency management and humanitarian health operations
- Academic, research, and community health organizations

Learning Objectives

By the end of this course, participants will be able to:



- Analyze human-animal-environment transmission pathways
- Build multisector surveillance and information-sharing arrangements
- Apply joint risk assessment and investigation methods
- Prioritize integrated vector management interventions
- Use outbreak communication and community-engagement tools
- Evaluate control performance and improvement priorities

Course Agenda

Day 1: One Health Risk Context

- One Health System and Stakeholder Map
- Zoonotic Transmission Pathway Analysis
- Vector-Pathogen-Host Interaction Model
- Environmental and Social Driver Profile
- Multisector Coordination Responsibility Matrix

Day 2: Surveillance and Detection

- Integrated Surveillance Architecture Map
- Event-Based and Indicator-Based Detection Matrix
- Case Signal and Diagnostic Pathway
- Cross-Sector Information-Sharing Protocol
- Surveillance Data Quality Review Tool

Day 3: Risk and Investigation

- Joint Risk Assessment Method
- Field Investigation Question Framework
- Exposure and Contact Mapping Tool
- Specimen Referral and Laboratory Interface
- Outbreak Scenario and Decision Log

Day 4: Control and Communication

- Integrated Vector Management Decision Cycle
- Intervention Selection and Resistance Risk Matrix
- Healthcare and Community Control Barrier Map
- Risk Communication and Community Engagement Plan
- Programme Monitoring and Evaluation Dashboard



Day 5: Disease Control Practice

- Suggested Exercise: One Health Coordination Mapping
- Suggested Exercise: Surveillance Signal Triage
- Suggested Exercise: Joint Risk Assessment
- Suggested Exercise: Vector Intervention Prioritization
- Capstone Exercise: One Health Disease Control File

Practical Exercises

The course uses suggested activities drawn from healthcare, public-health, veterinary, environmental, and community settings.

- Suggested activity: map a zoonotic event across human, animal, vector, and environmental interfaces.
- Suggested activity: assess surveillance signals and define cross-sector escalation and information sharing.
- Suggested activity: compare vector interventions using epidemiological, operational, environmental, and community criteria.
- Suggested activity: assemble investigation, communication, monitoring, and improvement tools into a control file.

FAQs

Who is zoonotic and vector-borne disease control training designed for, and what does it assume?

Zoonotic and vector-borne disease control training suits professionals who already contribute to surveillance, infection control, epidemiology, laboratory, environmental health, or emergency response and need to coordinate decisions across sectors.

How does zoonotic and vector-borne disease control differ from clinical infectious-disease training?

Zoonotic and vector-borne disease control focuses on surveillance, joint risk assessment, vector interventions, coordination, communication, and programme assurance; clinical infectious-disease training focuses on individual diagnosis and treatment.

What is One Health coordination in zoonotic disease control?

One Health coordination connects human, animal, and environmental health functions through defined responsibilities, shared surveillance, joint risk assessment, coordinated investigation, and agreed response decisions.



How does integrated vector management support disease control?

Integrated vector management uses local evidence to select complementary, sustainable interventions, coordinate responsible sectors, engage communities, and monitor effects on vectors and disease transmission.

How is a zoonotic and vector-borne disease control programme evaluated?

A disease control programme is evaluated through indicators for surveillance timeliness, information sharing, investigation quality, intervention coverage, community engagement, vector outcomes, disease patterns, and corrective action.

Conclusion

Participants take back a One Health Disease Control File containing coordination, surveillance, risk, investigation, vector-control, communication, and evaluation tools. The file creates a shared operating structure across participating sectors. It helps teams turn signals and joint assessments into controlled actions and measurable improvement priorities.