

Strengthening field epidemiology with the One Health approach

The Competencies for One Health field epidemiology (COHFE) framework and training guidance

What is One Health?

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals, and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.¹

The Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH) have worked together for many years to address health risks at the human-animal-environment interface. An alliance between the three organizations (formerly called the Tripartite) has facilitated putting the One Health vision into practice by promoting collaboration, communication and coordination across sectors. As the need to address the environmental dimension of One Health has become more essential, the United Nations Environment Programme (UNEP) joined the alliance as part of a new Quadripartite agreement in 2022.

What is field epidemiology training?

Field epidemiology is the application of epidemiological knowledge, skills and competencies in surveillance of and response to urgent health challenges. Field Epidemiology Training Programs (FETP) have been critical to developing these capacities since the first programme was established in 1951 by the US Centers for Disease Control and Prevention. As of May 2023, there were 98 active FETPs supporting over 165 countries.

With support from FAO, Field Epidemiology Training Programmes for Veterinarians (FETPV) have been established, enabling veterinary services to tackle transboundary animal diseases and support disease surveillance. In addition, other programmes such as the Field Training Programme for Wildlife, Ecosystems, Biodiversity, and Environment (FTP-WEBE) and Nature for Health (N4H) have been developed to train environmental experts to address ecosystem health and its relationship with human and animal health.

The Competencies for One Health field epidemiology (COHFE) framework

FAO, WHO, and WOAH developed the Competencies for One Health Field Epidemiology (COHFE) framework and training guidance to support programmes to incorporate One Health. The framework defines the knowledge, skills, and competencies needed for field epidemiologists to implement the One Health approach. The COHFE framework aligns with the objectives outlined in the Quadripartite's One Health Joint Plan of Action (2022-2028), supporting the implementation of the International Health Regulations (IHR) of 2005 and the Performance of Veterinary Services (PVS) Pathway. This strategic alignment reinforces the global commitment to addressing health challenges through a comprehensive One Health perspective.



¹ One Health High-Level Expert Panel (OHHLEP), Adisasmito WB, Almuhairi S, Behravesh CB, Bilivogui P, Bukachi SA, et al. (2022) One Health: A new definition for a sustainable and healthy future. PLoS Pathog 18(6): e1010537. <https://doi.org/10.1371/journal.ppat.1010537>



Food and Agriculture
Organization of the
United Nations



World Health
Organization



World Organisation
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The framework consists of 14 domains defining the knowledge, skills, and competencies required at the frontline, intermediate, and advanced training levels. These are further classified as core One Health, optional One Health, or sector-specific for human health, animal health, or the environment.

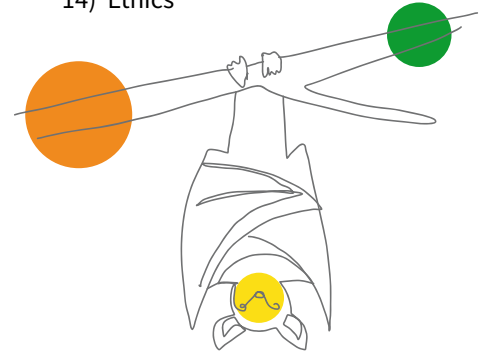


Technical domains

- 1) Foundational knowledge & skills
- 2) Surveillance systems
- 3) Field investigations
- 4) Disease management
- 5) Laboratory capacity
- 6) Infection prevention & control, biosafety & biosecurity
- 7) Preparedness & response
- 8) Epidemiological studies
- 9) Data management, biostatistics, & informatics
- 10) Ecosystem Health

Functional domains

- 11) Leadership & management
- 12) Communication & community engagement
- 13) Training
- 14) Ethics



The COHFE framework training guidance

The training guidance provides direction for programmes wishing to implement or strengthen One Health field epidemiology capacities.

One Health field epidemiology workforce



Provides programmes with proposed training topics and learning objectives to ensure participants reach the minimum core competencies outlined in the competency framework.



Describes best practices for mentorship within the training programme, defines competencies for mentors and provides a tool for evaluating the mentorship programme.



Offers recommendations for evaluating and certifying that training programme participants meet the minimum required competencies at the time of programme completion.



Lays out a framework to develop and track high-quality learning activities for continuing education programmes in OH field epidemiology.

For additional information, please visit: <https://www.who.int/initiatives/COHFE-framework>

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