



Food and Agriculture
Organization of the
United Nations

Introduction to One Health – A FAO Virtual Learning Center (VLC) course

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Training for WOAHP Focal Points for Wildlife

27 June 2023

**FAO
Virtual
Learning
Centers**

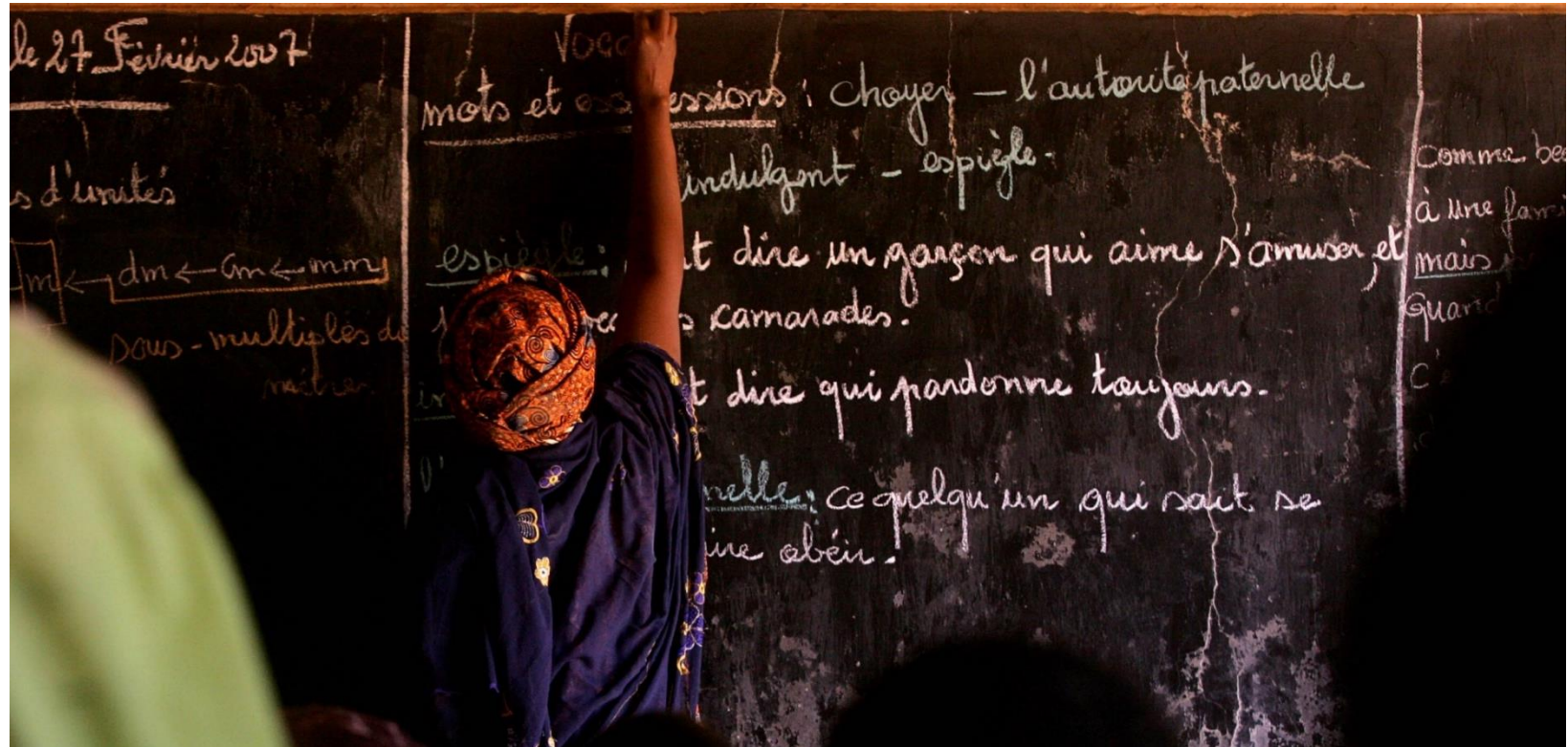


What are the FAO Virtual Learning Centers?

THE VLCs ARE VIRTUAL LEARNING HUBS WITH THE MISSION TO PROVIDE INCLUSIVE, ENGAGING AND HIGH-QUALITY TRAININGS FOR PROFESSIONALS AROUND THE WORLD, USING A VARIETY OF METHODOLOGIES.

Main advantages

- Reach out to large, geographically disparate audiences
- Cost-effectiveness
- Reduced environmental footprint
- Promotion and strengthening networks, sharing experiences





The VLC Model

COORDINATION UNIT IN FAO HQ

VLC EUROPE AND CENTRAL ASIA (REU)



VLC LATIN AMERICA AND THE CARIBBEAN (RLC)



VLC ASIA AND THE PACIFIC (RAP-SAP)



VLC SOUTHERN AFRICA (SFS)



VLC NEAR EAST AND NORTH AFRICA (RNE)



VLC EASTERN AFRICA (EA)





Use of the VLC in practice

The platform

- Moodle based
- Log-in: account for each user

Content on course pages

- Interactive modules
- Videos or Zoom webinar recordings embedded
- Resources, further readings
- Discussion forum
- Surveys
- Final course assessment and certificate

Different modalities, but mainly **tutored courses**

Food and Agriculture Organization of the United Nations

English (en) 🔍

FAO Virtual Learning Centers

About VLCs Regional VLCs Courses Support

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Virtual Learning Centers (VLCs)
Click here to find out more about the VLC Project:
[View More](#)

Our VLCs
Six Virtual Learning Centers (VLCs) have been established with FAO regional and sub-regional offices.
[Find out more](#)

Courses
The VLCs offer a range of tutored and self-directed online courses and interactive virtual workshops.
[Find out more](#)

Related Links
[FAO eLearning Academy](#)
[EuFMD Virtual Learning](#)
[FAO Capacitación para América Latina y el Caribe \(VLC RLC\)](#)

Contact
vlc_global@fao.org

The VLC Project
The VLC project supports and co-ordinates regional roll-out of innovative virtual learning solutions.
[Find out more](#)

Get involved
Study one of our courses, or work with us to develop innovative new online training resources.
[Find out more](#)

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Previous courses on VLC REU

VLC REU: developing and delivering courses since 2021

Before VLCs: online courses with EuFMD since 2019

Topics covered:

- African Swine Fever
- Avian Influenza
- Lumpy Skin Disease
- Stamping out
- *Under development*
 - biosecurity for ruminants
 - sheep and goat pox
 - food loss and waste



African Swine Fever Preparedness Course for Europe



Курс по обеспечению готовности к заразному узелковому дерматиту (ЗУД) крупного рогатого скота



OH course – general information

Introduction to One Health course

- Aim: to develop national capacity for the **implementation of the One Health approach** and to encourage **interaction between people** working in different areas
 - Focus on risk analysis & Joint Risk Assessment
- Developed by FAO (RAP), delivered together with WOAHA and WHO
- ~350 participants from 40 countries in Europe
- Participants with different background from each country
 - Animal Health (FAO REU)
 - Food Safety (FAO REU)
 - Wildlife (WOAH)
 - Public Health (WHO)
- Planned date: mid-September – mid-October (2023)





OH course – draft curriculum

Course type: tutored course

Course duration: 10 hours of study time, spread over a four-week period

Week	Content
1	Opening webinar
	Module 1: One Health: An overview
2	Module 2: Sources of pathogens
	Module 3: Understanding anthropogenic drivers of disease emergence
3	Module 4: Impact of infectious diseases
	Module 5: Principles of risk analysis: A One Health perspective
4	Case study exercise: Joint Risk Assessment with a focus on avian influenza
	Final assessment (multiple-choice questions)

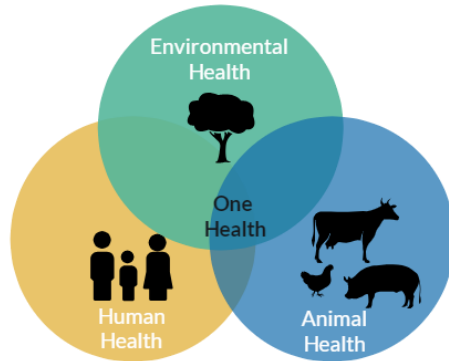
Module 1: One Health: An overview

Definition and history

What is One Health?

One Health is a term that has evolved over many years. In 1984, Dr. Calvin Schwabe, the 'father of veterinary epidemiology' used the term **One Medicine**, recognizing the close interaction between health and disease in animals and humans.

Over the years, the **One Medicine** concept evolved to **One Health** to incorporate the environment in the equation. In particular, in 2004 the Wildlife Conservation Society promoted the phrase **One World One Health** which shows that the concept has become much broader.



9/45

Duration: 40 minutes


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

- **Explain the definition** of the term One Health
- List the main disease events that shaped One Health
- **Describe the importance** of One Health
- Provide an example on how One Health approach could be applied in practice
- **Identify the benefits and challenges** of One Health approach

Module 2: Sources of pathogens


The human-environment-wildlife-livestock interface

Interactions at the interface

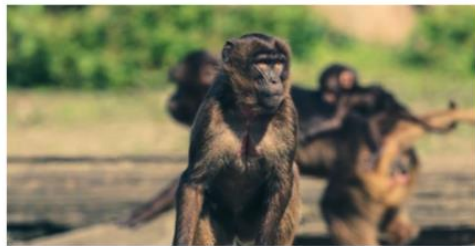


Let's see two examples that illustrate how interactions between animals and humans are becoming closer and more frequent.

Click each photo to read more:



Population growth and increasing use of land for agriculture is causing forest encroachment in many parts of the world.



In some countries, urbanization has increased the demand for consumption of wildlife products.

13/56

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

- Explain the term “**Human-Environment-Wildlife-Livestock Interface (HEWILI)**”
- Explain basic concepts related to **pathogens transmission at the interface**
- Describe the **role of food systems** in pathogens transmission
- Give examples of diseases that have emerged due to interactions at the interface

Duration: 45 minutes


Module 3: Understanding anthropogenic drivers of disease emergence

Human population expansion and a globalized world

Wildlife overexploitation

Exploitation of wildlife species increases contact between humans or livestock and wildlife.

Click each blue icon to learn more.



How does wildlife overexploitation drive disease emergence?

Hunting, poaching and farming of wildlife increases contacts between wildlife and humans or livestock, and these increased contacts can lead to disease transmission.

13/50

Duration: 40 minutes


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

- List the different types of **disease emergence drivers at the Human-Environment-Wildlife-Livestock (HEWILI) interface**
- Discuss how human population growth and globalization have driven disease emergence at HEWILI interface
- Explain the concepts of biodiversity, ecosystem health and planetary health and how these are linked to disease emergence
- Describe how climate change can drive emergence of disease and affect human health
- Discuss the **benefit of a One Health approach in understanding and mitigating disease emergence at the interface**

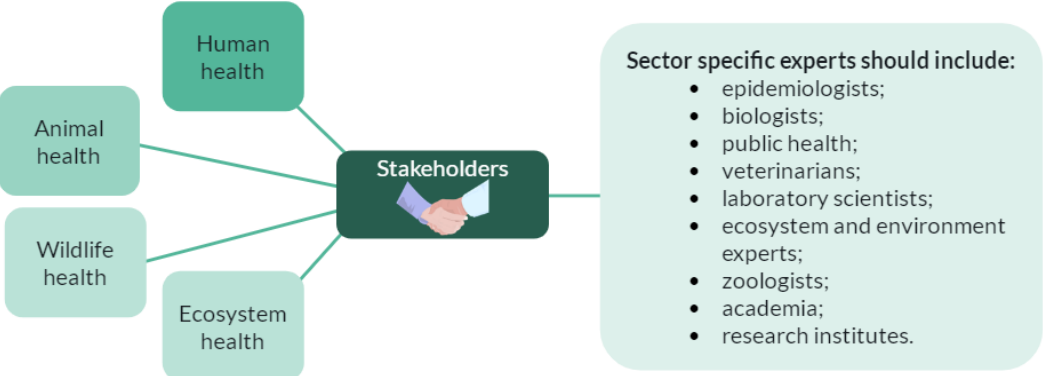
Module 4: Impact of infectious diseases

Taking action: prioritization of zoonotic diseases

Zoonotic disease prioritization: One Health stakeholders



The prioritization process aims to strengthen multisectoral collaborations by connecting representatives from human, animal, and environmental health sectors and other relevant partners.



Stakeholders

Sector specific experts should include:

- epidemiologists;
- biologists;
- public health;
- veterinarians;
- laboratory scientists;
- ecosystem and environment experts;
- zoologists;
- academia;
- research institutes.

31/46

Duration: 35 minutes

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

- List the **types of impacts** caused
- Outline the methods that can be used to **estimate the impacts of infectious diseases**
- Explain the importance of information on the global burden of infectious diseases
- Explain why some zoonotic diseases are considered neglected
- Explain the importance of **zoonotic disease prioritization**

Module 5: Principles of risk analysis: A One Health perspective

One Health and risk analysis

Why take a One Health approach to risk analysis?

Lessons learnt from past outbreaks of zoonotic diseases such as Ebola and avian influenza have highlighted the need for a more integrated and holistic approach that bridges multiple sectors in order to tackle such threats.

One Health risk analysis focusses on zoonotic disease threats and requires collaboration between relevant sectors such as public health, veterinary health, food safety, and environmental health, among others.

When all relevant sectors are at the table, they can:

- collectively evaluate where and why risk exists through expertise and data gathered from each sector;
- minimize unintended impacts by;
 - ✓ understanding and addressing the perspectives and needs from each sector;
 - ✓ achieving a better, more situation adequate impact, that takes all sectors into account.

Duration: 40 minutes

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

- Explain the purpose and the benefits of risk analysis
- Describe the **process of risk analysis**
- Explain fundamental concepts and terminology associated with risk analysis (likelihood, consequences, uncertainty, qualitative, quantitative)
- Explain the importance of a **One Health approach in risk assessment**
- Provide examples of risk mitigation measures, considering a One Health perspective



OH course – way forward

Collecting nominations: July – August 2023

Participants are expected to:

- be able to use what they learn in the course to contribute to the implementation of the One Health approach in the way their organization works
- speak English
- have the availability to dedicate to the course the estimated number of hours

One Health course - <date to be added>						
Please send nominations by <date> to <email>						
	Country	Firstname	Surname (Family Name)	Email Address (one per nominee)	Position	Background (e.g. animal health, public health..)
1						
2						
3						
Waiting list						
1						
2						
3						



Thank you!



You can visit
the **VLCs platform** here:
<https://virtual-learning-center.fao.org/>

Please feel free to reach out:
REU-VLC@fao.org
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