Course curriculum – Virtual learning course on One Health

Course title:
Virtual learning course on One Health

Course date:
12 November – 13 December 2024

Target audience(s):
People working in different institutions and with different backgrounds:

- Government officials working in the animal health sector
- Government officials working in the public health sector
- Government officials working in the wildlife and environment sectors
- Government officials working in the food safety sector

Individuals selected will be expected to use what they learn in the course to contribute to the implementation of the One Health approach in the way their organization works. Participants are expected to speak English and to have the availability to dedicate to the course the estimated number of hours. No previous knowledge on One Health related topics is expected.

Summary learning outcomes (LOs):
By the end of this course, participants will be able to:

- explain essential One Health concepts that enable different sectors to collaborate and communicate effectively with one another,
- initiate and encourage streamlined One Health networking and collaboration,
- describe the ecology and drivers of diseases at the human, livestock, wildlife, & environmental interfaces,
- give examples of zoonotic diseases and their impacts on health, food safety and food security,
- explain the sources and routes of transmission of zoonotic diseases,
- describe how One Health approaches can be applied to risk communication, risk mitigation and risk management at the human-environment-wildlife-livestock interfaces
- explain the principles and benefits of Joint Risk Assessment
- explain how the impact and likelihood of the same event can be different for different sectors (e.g. animal health, public health), and how this may impact risk management measures

Modality:
The course will involve a combination of:

- self-paced, **interactive online modules** which will cover the theoretical part of the course,
- **a webinar** held with international experts of the topic,
- a **case study exercise** where participants can practice what they learnt in the modules.

Duration:
The course will take 10 hours of study time, spread over a four-week period.

Course structure:

Week	Modality	Learning Outcomes / Topics covered	Key Content
1	Opening webinar 1 hour	• Introduction from the agencies • 1-2 country example (from the region or elsewhere) about good One Health joint work • Course details/orientation	Presentations
	Module 1: One Health: An overview 40 minutes	By the end of this module, participants will be able to: • Explain the definition of 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	Interactive online module
	Module 2: Sources of pathogens 45 minutes	By the end of this module, participants will be able to: • Explain the term "human-environment-wildlife-livestock interface" • Explain basic concepts related to pathogens transmission at the interface • Give examples of diseases that have emerged due to interactions at the interface • Describe the role of food systems in pathogens transmission	Interactive online module
2	Module 3: Understanding anthropogenic drivers of disease emergence 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	Interactive online module

		• 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 for disease to understanding and mitigating disease emergence at the interface	
	Module 4: Impact of infectious diseases 35 minutes	By the end of this module, participants will be able to: • List the types of impacts caused by infectious diseases • 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	Interactive online module
3	Module 5: Introduction to Risk Analysis and the Join Risk Assessment Tool 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 and its different components including risk assessment, risk management and risk communication • 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	Interactive online module
	Case study exercise	• Joint Risk Assessment with a focus on avian influenza	Practical task via the discussion forum
4	Case study exercise	• Joint Risk Assessment with a focus on avian influenza	Practical task via the discussion forum
	Final assessment	40 multiple-choice questions to assess what participants learnt during the course	