eLearning course on Rift Valley Fever

LEARNING PROJECT

INTRODUCTION

This asynchronous preliminary self-learning process will provide the participants with the basic-level knowledge about Rift Valley Fever (RVF) disease, together with other relevant documents and it will be followed by a three-days session of in-depth studies and simulation exercises.

Through the eLearning course, a brief history of Rift Valley Fever (RVF) will be presented together with the health and economic implications it has in the areas in which it is present. The main morphological and structural features of the virus will be described as well as its pathogenesis and its resistance to physical and chemical agents. The epidemiology of the disease will be discussed in the third section: the aspects relating specifically to geographic distribution, transmission, receptive hosts, reservoirs, vectors, and the factors that favour its spread will all be addressed. Following on from this, there will be a detailed review of the signs and the anatomohistopathological lesions that the RVF causes in sheep and goats, cattle, camels and in humans. The fifth section will cover the main diagnostic tools, the illnesses requiring differential diagnosis and the matrices to be sampled in order to make a clinical, anatomohistopathological and laboratory diagnosis. Lastly, the focus will be on prevention and control, with reference to the monitoring methods and control strategies to be adopted in order to limit the spread of RVF.

PARTICIPANT PROFILE

The whole training path is addressed to National Veterinary and Public Health authorities of EU Member States.

LEARNING OBJECTIVES

This training activity aims at improving incident response collaboration between animal and public health authorities from multiple countries, using a One Health approach. Specifically, the participants at the end of the eLearning course will improve their basic-level knowledge about Rift Valley Fever (RVF) disease.

METHODOLOGIES

At methodological level, the eLearning module is designed for maximizing the interactivity, through videos, photos, pictures, animations, and self-assessment exercises.

In line with ECVET system, it is structured in learning outcomes (Units) facilitating the assessment, validation and recognition of the acquired skills.

The course is designed using Articulate for Moodle, an open source and collaborative platform, responsive to all kind of devices (including mobile).

The eLearning course aims to guarantee student dynamic interaction within the platform and with the multimedia tools as well as the active participation in the learning process.

The different resources introduced for supporting the effective learning are:

- Animated elements (graphics, images, pictures, pop-up etc.)
- Interactive content (Drag and drop, Multiple choice, Multiple response, True-false, etc.) requiring active learner involvement
- Papers, chapters of books, guidelines, pop-up, hyperlinks, printable version

DURATION

The estimated time for the eLearning course completion is about **three hours**.

Please note that the effective duration of the learning process is influenced by some different factors:

- the initial background in this field
- the study method
- the attention dedicated to more readings such as in depth contents, useful links, etc.

CONTENT TREE

Section 1: Rift Valley Fever – Presentation and History

1.1 *Introduction*

1.2 *Objective and themes*

1.3 Definition and origin

1.4 Human health and economic impact

1.5 *Test*

1.6 *Summary*

1.7 *Printable version*

Section 2: Rift Valley Fever – Aetiology and Pathogenesis

2.1 *Objective and themes*

2.2 Classification of the virus

2.3 Morphology

2.4 Morphology, Viral stability to temperature and chemicals

2.5 Pathogenesis

2.6 *Summary*

2.7 Printable version

Section 3: Rift Valley Fever – Epidemiology

3.1 *Objective and themes*

3.2 Geographic distribution

3.3 Hosts

3.4 Methods of transmission

3.5 Vectors

3.6 Factors favouring spread

3.7 *Summary*

3.8 *Printable version*

Section 4: Rift Valley Fever – Clinical signs and pathology

4.1 *Objective and themes*

4.2 Clinical signs in small ruminants

4.3 Clinical signs in cattle and camels

4.4 Clinical signs in humans

4.5 Pathological findings

4.6 *Summary*

4.7 *Printable version*

Section 5: Rift Valley Fever – Diagnosis

5.1 *Objective and themes*

5.2 Clinical and histopathological diagnosis

5.3 Collecting samples

5.4 Direct laboratory diagnosis

5.5 Indirect laboratory diagnosis

5.6 Differential diagnosis

5.7 *Summary*

5.8 *Printable version*

Section 6: Rift Valley Fever – Prevention and control

6.1 *Objective and themes*

6.2 Disease control measures

6.3 Vaccination

6.4 Reference experts and laboratories

6.5 *Summary*

6.6 *Printable version*