

African Swine Fever Preparedness Course for Canada

February 13 – March 31, 2024

Details and register: animalhealth.ca/training/

SUMMARY OF COURSE LEARNING OUTCOMES

After studying this course participants will be able to:

- Understand the global significance of ASF
- Recognize the clinical signs of ASF
- Explain sampling and laboratory diagnosis of ASF
- Describe an outbreak investigation in context of ASF
- Implement on-farm biosecurity to minimize risk of ASF introduction
- Describe critical control measures to implement in an outbreak of ASF in domestic pigs
- Explain the impact of wild boar on ASF transmission in Europe.

The expected duration of the course is 15 hours.

Week 1: Pathogenesis and Clinical Diagnosis

Week 2: Laboratory Diagnosis and Outbreak Investigation

Week 3: Prevention and Control

Week 4: Wild boar

WEEK ONE: Pathogenesis and Clinical Diagnosis

INTRODUCTORY WEBINAR

Time required: 1 hour

General orientation and ASF basics provided by course trainers and international experts.

Type of content: webinar with interactive questions.

MODULE ONE: Essentials

Time required: 30 minutes

Summary: This introductory module describes the importance and global distribution of ASF and introduces some key facts about the aetiology and epidemiology of the disease.

Learning outcomes:

- Describe the global significance of ASF
- Outline the current global distribution of ASF
- Outline the most important routes of transmission of ASF
- List the most important features of ASF prevention, detection and control.

Type of content: Interactive online module. Content also available as a handout.

MODULE TWO: Clinical diagnosis

Time required: 45 minutes

Summary: The module details the clinical diagnosis of ASF. It explains the pathogenesis of the disease and demonstrates the clinical features of ASF in domestic pigs and wild boar.

Learning outcomes:

- Describe the pathogenesis of ASF
- Recognize the clinical signs of ASF in domestic pigs and wild boar
- Explain how to perform an appropriate clinical examination for ASF
- Describe the typical post-mortem lesions seen in cases of ASF
- List the main differential diagnoses for ASF.

Type of content: Interactive online module. Content also available as a handout.

Introduction of the participants on the forum page and one question provided by the tutors or experts on this week's topic. Questions from participants are answered continuously. At the end of the week, a weekly digest summarizes the forum discussions.

WEEK TWO: Laboratory Diagnosis and Outbreak Investigation

MODULE THREE: Sampling and Laboratory Diagnosis

Time required: 30 minutes

Summary: This module covers which sample types should be collected in order to confirm or rule out a suspicion of ASF. It also outlines the diagnostic testing tools available for detection of ASF virus or antibodies.

Learning outcomes:

- Explain how to collect appropriate samples for laboratory diagnosis of ASF
- List the main diagnostic tests that can be used to confirm ASF
- Explain how to interpret laboratory results.

Type of content: Interactive online module. Content also available as a handout.

MODULE FOUR: Outbreak Investigation

Time required: 60 minutes

Summary: This module introduces the theory behind outbreak investigation, starting with some important epidemiological terminology, followed by a step-by-step approach to investigating a suspect case using a short scenario.

Learning outcomes:

- Explain common epidemiological terms including case, outbreak and epidemiological unit
- Describe how to carry out an epidemiological investigation in case of a suspicion and/or outbreak of ASF in domestic pigs
- Describe how data from outbreak investigations can be collated and used to inform disease control programs.

Type of content: Interactive online module. Content also available as a handout.

Two forum questions from the tutors and experts to the audience on this week's topic. Questions from participants are answered continuously. At the end of the week a weekly digest summarizes the discussions.

WEEK THREE: Control Measures and Biosecurity

MODULE FIVE: Response and Control Measures

Time required: 60 minutes

Summary: This module outlines the control measures to be applied in the event of an ASF outbreak. It focuses on measures to control and eradicate ASF in domestic pigs.

Learning outcomes:

- Explain the key elements of control measures used during an ASF outbreak in domestic pigs including surveillance, stamping out and movement restrictions
- Explain the importance of an appropriate compensation strategy when a stamping out policy is used.

Type of content: Interactive online module. Content also available as a handout.

MODULE SIX: Biosecurity

Time required: 60 minutes

Summary: This module covers how biosecurity measures can be successfully implemented on holdings.

Learning outcomes:

- List the main risk factors for introduction and spread of ASF
- Explain the key principles of biosecurity
- Introduce or adapt biosecurity measures on a holding
- Evaluate the effectiveness of biosecurity on a premises
- Outline the personal biosecurity measures that should be implemented when visiting a suspect premises.

Type of content: Interactive online module. Content also available as a handout.

Two forum questions from the tutors and experts to the audience on this week's topic. Questions from participant are answered continuously. At the end of the week a weekly digest summarizes the discussions.

WEEK FOUR: Wild boar

CLOSING WEBINAR

Time required: 60 minutes

Introduction to ASF in wild boar in Europe and revisiting the most challenging topics as raised by participants during the previous three weeks.

Type of content: webinar

MODULE SEVEN: ASF in wild boar in Europe

Time required: 60 minutes

Summary: This module introduces the history and transmission dynamics behind the recent spread of African swine fever (ASF) in wild boar, specifically in a European setting. It covers the key control measures which may be used when the wild boar/pig population is infected with ASF.

Learning outcomes:

- Describe the role of wild boar in the spread of ASF in Europe
- Outline transmission mechanics in wild boar populations
- Explain the advantages and disadvantages of passive and active surveillance for ASF in wild boar
- Describe appropriate measures which can be used to limit the spread of ASF in wild boar
- Explain the importance of hunting biosecurity
- Outline Canada's plan for managing ASF in wild pigs.

Type of content: Interactive online module. Content also available as a handout.

Final Course Assessment

Final course assessment consisting of 40 questions in on-line quiz (multiple choice). Each module is covered in equal proportion and all questions are related to the learning objectives.

Certificate

Participants who achieve a satisfactory mark in the assessment (above 70%) are awarded a certificate that is eligible for CE credits with most Canadian veterinary medical associations.

Feedback survey

After the course, participants are asked to complete a survey to regarding:

- Whether they believe their knowledge has improved
- Whether the course has met their expectations
- Recommended improvements to the course

Resources

A list of resources, job aids and further reading is provided for participants who wish to explore specific topics in more detail.