

# African Swine Fever Preparedness Course for Canada

September 21 – October 19, 2021

Details and register: [www.animalhealth.ca/ahem/training](http://www.animalhealth.ca/ahem/training)

## Summary of course learning outcomes:

After studying this course participants will be able to:

- Describe the global significance of ASF
- Recognize the clinical signs of ASF
- Explain which samples should be taken to enable laboratory diagnosis of ASF
- Explain how to conduct an outbreak investigation in case of ASF
- Explain how to adapt on-farm biosecurity on holdings to minimize risk of introduction of ASF
- Describe the most important control measures that would be implemented in case of an outbreak of ASF in domestic
- Explain the role of wild boar in transmission of ASF in Europe.

The overall length 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 given by course trainers and international experts.

Type of content: webinar with interactive questions.

### Module One: Essentials

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.

Time required: 30 minutes

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 downloadable 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 then 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 carry out an appropriate clinical examination in order to diagnose ASF
- Describe the typical post mortem lesions seen in cases of ASF
- Explain the main differential diagnoses for ASF.

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

Introduction of the participants over the forum page and one question from 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 discussions.

## **WEEK TWO: Laboratory Diagnosis and Outbreak Investigation**

### **Module three:** Sampling and Laboratory Diagnosis

Summary: This module covers which samples 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 to ASF virus.

Time required: 30 minutes

Learning outcomes:

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

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

### **Module four:** Outbreak Investigation

Summary: This module introduces the theory behind outbreak investigation, starting with some important epidemiological terminology and moving on to a step by step approach to investigating an ASF suspect case in a short scenario.

Time required: 60 minutes.

Learning outcomes:

- Explain common epidemiological terms including case, outbreak and epidemiological unit
- Explain 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 downloadable 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

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

Time required: 60 minutes

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 for the control of ASF.

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

#### **Module six:** Biosecurity

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

Time required: 60 minutes

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 to minimize risk of introduction of ASF
- Evaluate the effectiveness of the biosecurity practises used on a premises for preventing introduction and spread of ASF virus
- Outline the personal biosecurity procedures that should be carried out when visiting a holding suspected of being infected with ASF.

Type of content: Interactive online module. Content also downloadable 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 covering topics most difficult for participants during the previous three weeks.

Type of content: webinar

### Module seven: ASF in wild boar in Europe

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

Time required: 60 minutes

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 methods for 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 downloadable as a handout.

## Final Course Assessment

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

### **Certificate**

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

### **Feedback survey**

After the course a post course survey is asked to be filled in by participants to determine:

- If they believe their knowledge has improved
  - If the course has met their expectations
- Further Improvements to the course

### **Resources**

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