

# IOWA FOREIGN ANIMAL DISEASE DEFENSE (IFADefense)

Giving veterinarians the tools they need to protect their clients and Iowa

## OVERVIEW

The goal of the Iowa Foreign Animal Disease Defense (IFADefense) program, first piloted during 2020, is to educate veterinarians licensed in Iowa on how to prepare for, and respond to, foreign animal disease (FAD) events. IFADefense lays the foundation for USDA Category II Accredited Veterinarians to assist their clients during FAD outbreaks of any size, by providing certification pathways on various response activities.

Current topics include the following:

- diagnosis of select foreign animal diseases (African swine fever, avian influenza, classical swine fever, foot-and-mouth disease, and virulent Newcastle disease),
- strengthening on-farm biosecurity practices, and
- on-farm FAD investigation and outbreak response.

There are core modules that all enrolled veterinarians must complete before they can access the certificate pathways. All content is housed in an online platform that veterinarians can access at any time from any device. This makes resources available in the field and allows all program content to serve as a digital investigation and response guide.

## CORE COURSE

The core course consists of educational talks:

### FAD causes, pathogenesis, epidemiology, and diagnosis

- African swine fever,
- avian influenza,
- classical swine fever,
- foot-and-mouth disease, and
- virulent Newcastle disease.

### Prevention basics

- biosecurity,
- monitoring health patterns, and
- foreign animal disease investigation and reporting.

In addition to the educational talks, the core course also requires veterinarians to complete one interactive exercise from each of these lists:

### Virtual foreign animal disease investigation

(veterinarians complete one of the following):

- deaths on a poultry farm, or
- vesicles at a sale barn.

**Interactive case study** (veterinarians complete one of the following):

- cow-calf pair with vesicles,
- dog with potential screwworm infestation,
- sudden deaths in a poultry flock,
- dairy cow with vesicles,
- horse with vesicles,
- sheep with vesicles, or
- hogs with vesicles.

### Impressions of historic outbreaks

(veterinarians watch and reflect on archival news footage from one of the following outbreaks):

- foot-and-mouth disease in the UK,
- African swine fever in Asia, or
- highly pathogenic avian influenza in Iowa.

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## CERTIFICATE PATHWAYS

Once the core course is completed, the various certificate pathways open. Current offerings include:

### **On-farm FAD diagnosis**

This pathway lays the foundation for veterinarians to both assist with routine investigations by collecting samples themselves as well as training certified sample collectors to assist during outbreaks.

### **Premises-specific biosecurity planning**

The biosecurity pathways give veterinarians the skills needed to work directly with their clients to create biosecurity plans not only to respond to outbreaks, but protect animal health on a daily basis.

### **On-farm FAD investigation and response**

With private veterinarians understanding their clients' operations best, this pathway provides the basis for these veterinarians to help facilitate rapid trace-in and trace-out investigations, as well as gain a basic understanding of the Iowa Department of Agriculture's incident command structure, should the need arise.

## FUTURE EXPANSION

Moving forward, IFADefense will expand with four new certificate pathways and enhancements to the *Premises-specific biosecurity planning* pathway. New pathways will include:

### **Depopulation methods for eradicating disease**

Educates veterinarians on the AVMA-approved methods to depopulate animals during emergencies, how to connect with subject matter experts in Iowa, and methods to work with their clients to achieve disease eradication.

### **Disposal methods to limit disease spread**

This pathway is not intended to make veterinarians subject matter experts on disposal, but instead outline how they can find experts in Iowa, assist their clients in developing an on-farm disposal plan, and locate local resources to carry out the plan.

### **The cause and diagnosis of rabbit hemorrhagic disease**

With the spread of rabbit hemorrhagic disease in wild rabbit populations in the western U.S., Iowa may face this virus in the future. This pathway will provide veterinarians in Iowa with the skills needed to quickly identify and report cases.

### **The cause and diagnosis of vesicular stomatitis**

While vesicular stomatitis has not been detected in Iowa in recent history, it actively spreads throughout the western U.S. every year. Cases may someday reach Iowa and this pathway will provide veterinarians in Iowa with the skills needed to quickly identify and report cases.

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