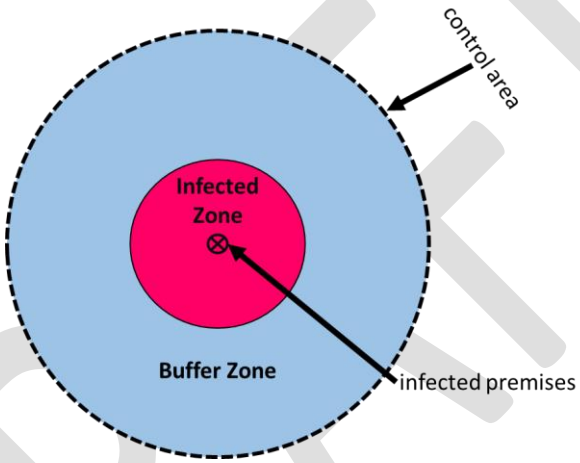
General Control and Monitoring Zones Protocol

This is a draft plan and is subject to change

October 28, 2019

Introduction:

If a foreign animal disease (FAD) is diagnosed or suspected in the United States and/or Iowa it may become necessary for the Iowa Department of Agriculture and Land Stewardship (IDALS) to establish various control and monitoring zones. At a minimum the following two zones comprising the Control Area will be established during a FAD event: infected zone and buffer zone.



The area of each zone and the need to create additional zones or areas will be determined based on the pathogenicity and epidemiology of the given FAD. If multiple premises are infected throughout Iowa, separate zones will be created around each premises that may or may not overlap based on the distance between the premises. If a zone is created in Iowa on the state line with a neighboring state, IDALS will work with USDA and that state's animal health officials to determine the extent of the zone outside of Iowa. The following lists the minimum perimeters of each zone but may be larger based on the epidemiology of the outbreak:

- **Infected Zone:** Perimeter should be at least 3 km (~1.86 miles) beyond perimeters of presumptive or confirmed Infected Premises.
- **Buffer Zone:** Perimeter should be at least 7 km (~4.35 miles) beyond the perimeter of the Infected Zone or any Contact Premises. Width is generally not less than the minimum area of the associated Infected Zone, but may be much larger
- **Control Area:** Perimeter should be at least 10 km (~6.21 miles) beyond the perimeter of the closest Infected Premises.

- **Surveillance Zone:** Perimeter should be at least 10 km (~6.21 miles) beyond the perimeter of the Control Area, but may be much larger.

Descriptions of Control Area and Zones:

Control Area

A Control Area surrounding the Infected Premises, consisting of an Infected Zone and a Buffer Surveillance Zone, may be established to ensure the rapid and effective containment of a FAD. All animal movement of animals susceptible to the disease may be impacted for a period as described in the *IDALS General Standstill Protocol*. Potential modes of transmission will be considered when determining the minimum size and shape of a Control Area. Furthermore, any premises that is touched by the outer boundary of the Control Area will be included as part of the Control Area (i.e. the entire premises will be considered in the Control Area). Any premises with animals susceptible to the disease within the Control Area that is not deemed an Infected Premises, Suspect Premises, or Contact Premises will be designated a Monitored Premises.

Infected Zone

During a FAD outbreak, the Infected Zone initially will encompass the perimeter of all Infected Premises and may include as many of the Suspect Premises and Contact Premises as the situation requires logistically or scientifically. The boundaries may be modified (either expanded or reduced) as new information becomes available. The actual distance in any one direction may be determined by factors such as known characteristics of the disease, environmental conditions (terrain, weather, wind), the pattern of animal density and movements, the distribution and movements of susceptible wild and feral animals, processing activities (animals and products), and the effect on non-risk commodities. Boundaries of the Infected Zone can be modified when tracing and surveillance results become available and other factors become better defined.

Activities in the Infected Zone include:

a) Conducting epidemiological investigations.
b) Identifying trace-ins and trace-outs.
c) Determining source(s) of infection.
d) Enforcing quarantines and/or movement restrictions.
e) Preventing movement of vehicles, equipment, and non-susceptible animals out of the Infected Zone unless appropriate biosecurity procedures (as determined by risk assessment) are followed.
f) Conducting a public awareness campaign to increase compliance with movement restrictions.

Buffer Zone

The Buffer Zone is the area immediately surrounding the Infected Zone and all Contact Premises. The Buffer Zone and the Infected Zone comprises the Control Area. The Buffer Zone can be reduced in size as more epidemiological information becomes available.

Activities in the Buffer Zone:

a) Surveillance on these At-Risk Premises may consist of a minimum of two inspections of susceptible animals during twice the maximum incubation period of the FAD.

Surveillance Zone

A Surveillance Zone may be established within and along the border of the Control Area. Surveillance within the Surveillance Zone will focus on premises determined to be at the highest risk of infection.

Activities in the Surveillance Zone:

a) Activities in the Surveillance Zone include conducting case finding activities (surveillance) and conducting a public awareness campaign to increase compliance.

Free Area

A Free Area is an area in which the absence of a FAD has been demonstrated by meeting requirements for disease-free status as specified by USDA.

Activities in the Free Area:

a) Within a Free Area, and at its borders, appropriate official veterinary controls are applied for susceptible animals, their products, as well as for their transportation.

Vaccination Zone

Under specific conditions, and if a vaccine is available, a vaccination strategy may be implemented to suppress the spread of a FAD or protect targeted high-risk susceptible animals. Depending on the strategy, a Vaccination Zone may be classified as either a Containment Vaccination Zone (typically inside a Control Area) or a Protection Vaccination Zone (typically outside a Control Area). This may be a secondary zone designation. Any premises housing susceptible animals vaccinated during a FAD vaccination strategy will be designated a Vaccinated Premises.

Vaccination for FAD may be considered based on the following conditions:

a) If allowed by the State Veterinarian **AND** USDA APHIS Veterinary Services.

b) If an appropriate, approved vaccine is available to provide immunological protection against the FAD involved in the outbreak.

c) If sufficient quantities of vaccine can be delivered to implement the vaccination strategy proposed.

d) If the vaccine has a DIVA (differentiate vaccinated from infected animal) attribute.

e) Protocols for distribution of vaccine and delivery to non-infected, susceptible animals are in place.

f) Vaccinated animals are permanently identified and tracked to the end of their life.

The following displays an example of all potential zones and which premises would fall within them: