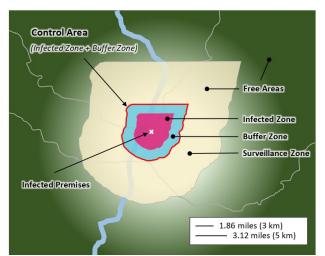
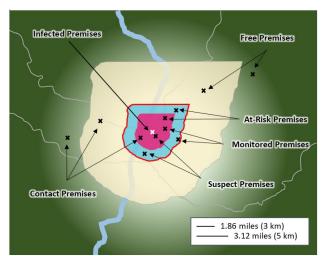
Zones and Areas



Domestic Swine Premises



Note: Stamping-out is not pictured in these figures. The Surveillance Zone is part of the Free Area.

Summary of ASF Zone and Area Designations

Zone/Area	Definition	
Infected Zone (IZ)	Zone that immediately surrounds an Infected Premises or Infected Pig(s)	
Buffer Zone (BZ)	Zone that immediately surrounds an Infected Zone or a Contact Premises	
Control Area (CA)	Consists of an Infected Zone and a Buffer Zone	
Surveillance Zone (SZ)	Zone outside and along the border of a Control Area. The Surveillance Zone is part of the	
	Free Area.	
Free Area (FA)	Area not included in any Control Area. Includes the Surveillance Zone.	

Summary of Key Response Actions

Swine Population Infected	State – Tribal Quarantine of Infected Premises	Control Area Plus Network Based Controls	USDA Extraordinary Emergency Declaration	72 hour National Movement Standstill
Domestic Swine	Yes	Control Area	Yes	Yes
Only		+		
		Network Based Controls		

Zone, Areas, and Premises Designations

Minimum Size of Zones and Areas

Zone or Area	Minimum Size and Details
Infected Zone (IZ)	Perimeter should be at least 3 km (~1.86 miles) beyond perimeters of presumptive or confirmed Infected Premises or Infected Pigs based on epidemiological circumstances. This zone may be redefined as the outbreak continues.
Buffer Zone (BZ)	Perimeter should be at least 2 km (~1.24 miles) beyond the perimeter of the IZ. Width is generally not less than the minimum radius of the associated IZ, but may be much larger. This zone may be redefined as the outbreak continues.
Control Area (CA)	Perimeter should be at least 5 km (~3.12 miles) beyond the perimeter of the closest Infected Premises or Infected Pig. Please see Table 4-6 for factors that influence the size of the Control Area. This area may be redefined as the outbreak continues.
Surveillance Zone (SZ)	Width should be at least 5–10 km (~3.12 miles to ~6.21 miles) beyond the Control Area.

Summary of ASF Premises Designations

Premises	Definition	Zone
Infected Premises/ Infected Pig(s) (IP)	Premises or pig location where a presumptive positive case or confirmed positive case exists based on laboratory results, compatible clinical signs, ASF case definition, and international standards.	Infected Zone
Contact Premises (CP)	Premises with swine that have been epidemiologically linked to an IP through exposure to animals, animal products, fomites, or people. CPs would be subject to Network Based Controls.	Infected Zone, Buffer Zone, Free Area
Suspect Premises (SP)	Premises under investigation due to the presence of swine reported to have clinical signs compatible with ASF. This is intended to be a short-term premises designation.	Infected Zone, Buffer Zone, Surveillance Zone
At-Risk Premises (ARP)	Premises with swine, but none of those swine have clinical signs compatible with ASF. ARPs are not IPs, CPs, or SPs. ARPs may seek to move susceptible animals or products within the Control Area by permit. Only ARPs are eligible to become MPs.	Infected Zone, Buffer Zone
Monitored Premises (MP)	Premises objectively demonstrates that it is not an IP, CP, or SP. Only ARPs are eligible to become MPs. MPs meet a set of defined criteria in seeking to move susceptible animals or products out of the Control Area by permit.	Infected Zone, Buffer Zone
Free Premises (FP)	Premises outside of a Control Area and not a CP or SP.	Surveillance Zone, Free Area

Recommended Sampling Scheme for an ASF outbreak response

Zone/ Premises designation ¹	Number of Premises to Sample within a Zone	Within Herd Prevalence to Detect	Frequency of Sampling	Sampling Duration
Infected Zone IP, CP, ARP, MP	All	10%	Every 3 days for 2 samplings, then every 6 days	Duration of Quarantine
Buffer Zone CP, ARP, MP	All	10%	Every 6 days ²	Duration of Quarantine
Surveillance Zone FP	1% Zone-Level Prevalence	10%	Within 15 days of first ASF detection, then every 15 days or as new zones are designated ³	Duration of Quarantine
Network CP	All	10%	Every 6 days	Duration of Quarantine

Factors to Consider in Determining Control Area Size for ASF

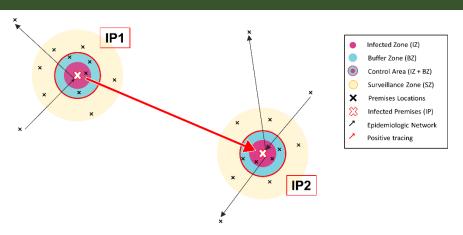
Factors	Additional Details		
Jurisdictional areas	Effectiveness and efficiency of administration Multi-jurisdictional considerations: local, State, Tribal, and multistate		
Physical boundaries	Areas defined by geographic features Areas defined by manmade structures Areas defined by distance between premises		
ASF epidemiology	Reproductive rate Incubation period Ease of transmission Infectious dose Modes of transmission (contact with secretions, excretions, fomites, vectors) Survivability in the environment Ease of diagnosis (for example, no pathognomonic signs; requires diagnostic laboratory testing)		
Infected Premises characteristics	Number of contacts Transmission pathways and transmission risk Extent of animal movement Number of animals Species of animals Production stage Movement of traffic and personnel to and from premises (fomite spread) Biosecurity measures in place at time of outbreak		
Contact Premises characteristics	Number and types of premises Susceptible animal populations and population density Animal movements Critical movements (e.g., feed) Movement of traffic (fomites) and personnel to and from premises (fomite spread) Biosecurity measures in place prior to outbreak		
Environment	Types of premises in area or region Land use in area or region		
General area, region, or agricultural sector biosecurity	Biosecurity practices in place prior to outbreak Biosecurity practices implemented once outbreak detected		
Number of backyard premises	 Types of premises, animal movements, and network of animal and fomite movements 		
Feral Swine	 Presence/absence of populations Population density Estimates of home range size Number of ASF positive carcasses Presence of feral swine markets or slaughter facilities 		

¹Premises designation: Infected Premises (IP), Contact Premises (CP), At-Risk Premises (ARP), Monitored Premises (MP), Free Premises (FP).

²Frequency of sampling is subject to change and can be adjusted based on observed incubation periods, likely route of disease introduction, feasibility of sampling and disease introduction risk.

³If feral swine are present, more frequent sampling throughout the quarantine period is recommended.

Zones and Network Based Control



The first Infected Premises (IP1) identified an epidemiologically-linked Contact Premises outside of the initial Control Area. NBCs requiring testing were placed on that Contact Premises, which resulted in a positive detection. This additional Infected Premises (IP2) triggered a new Control Area that led to additional Contact Premises.

All premises that are traced/linked to an Infected Premises are subject to Control Area restrictions and diagnostic testing.

IP1	First Infected Premises
IP2	Additional Infected Premises



For more information, please go to: <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/african-swine-fever/afric

For more details on zones and premises designations, please see the <u>APHIS FAD</u>

Framework: Response Strategies (Manual 2-0)

For the ASF Response Plan: The Red Book, click here

