



Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

APHIS Report on European Union Zoning Measures for African Swine Fever

Veterinary Services
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Executive Summary

African swine fever (ASF) has been detected in a number of European Union (EU) Member States since 2014. In 2019, the Animal and Plant Health Inspection Service (APHIS) evaluated African swine fever (ASF) zoning measures in the EU. APHIS conducted this evaluation out of concern for the risk of ASF introduction into the United States through importation of swine commodities from the EU.¹

APHIS selected thirteen EU Member States to review for several swine diseases. APHIS considers these EU Member States to be representative of the twenty-five EU Member States which are eligible to export breeding swine, pork, or pork products to the United States.² The thirteen included seven EU Member States in which ASF has been detected in the last six years and six which have not experienced ASF outbreaks.³ APHIS, jointly with CFIA, collected and reviewed information from all thirteen selected EU Member States and, in September 2019, visited four that were ASF-affected and three that were ASF-free. The purpose of the site visit was to collect, verify, and clarify information considered in this evaluation. Based on this information, APHIS reached conclusions about the swine health status of each EU Member State for several swine diseases. APHIS' findings and conclusions for each EU Member State are available in individual reports.

This overarching report summarizes APHIS' findings and conclusions regarding ASF zoning measures in the seven EU Member States in which ASF was detected, including each EU Member State's ability to detect and control ASF outbreaks via zoning and to identify, trace, and certify swine products for export. From this information, APHIS extrapolates overall conclusions about ASF zoning measures in the EU.

APHIS assumed the thirteen EU Member States selected for review are representative of the other EU Member States and the seven that are ASF-affected are representative of other ASF-affected EU Member States, except for Bulgaria and Romania. Although Bulgaria and Romania are EU Member States and apply EU ASF zoning measures for ASF, APHIS does not currently recognize the foot-and-mouth disease (FMD), classical swine fever (CSF), or swine vesicular disease (SVD) status of these two EU Member States. As such, APHIS prohibits the import of live swine, pork, pork products, and swine casings from Bulgaria and Romania. Until such time APHIS determines that the FMD, CSF, and SVD statuses of these two EU Member States are equivalent to those of the other twenty-five EU Member States⁴, imports are restricted

¹ APHIS invited the Canadian Food Inspection Agency (CFIA) to participate in this review due to shared interests in safe trade of live breeding swine, pork, and pork products. Joint observations and conclusions are described in separate individual EU Member State reports. Since APHIS and CFIA follow different approaches to zoning Europe for ASF, this report describes only the conclusions of the review of the APHIS approach.

² APHIS currently allows importation of breeding swine, pork or pork products from all EU Member States except Bulgaria and Romania. APHIS has not completed evaluations of Romania and Bulgaria for swine diseases (foot-and-mouth-disease, classical swine fever, and swine vesicular disease) and therefore those two EU Member States are not eligible to export swine, fresh pork, or pork products to the United States regardless of their ASF status as identified by the EU. Likewise, certain regions of Italy have not been evaluated by APHIS for SVD and therefore are prohibited from exporting swine, pork, or pork products to the United States except under certain mitigating conditions. APHIS also recognizes the Region of Sardinia, Italy as ASF-affected, as does the EU, and therefore prohibits importation of swine, pork, or pork products from that region into the United States.

³ At the time of the site visits, Greece had not yet experienced an ASF outbreak. Greece detected a single ASF outbreak on February 5, 2020 as this report was being prepared.

⁴ On February 1, 2020, the United Kingdom withdrew from the EU, leaving twenty-seven EU Member States remaining.

based on the status of these three diseases regardless of ASF zoning, thus negating the need for APHIS to consider Romania and Bulgaria in this ASF evaluation.

APHIS found that the ASF-affected EU Member States under review quickly implemented the EU ASF response framework upon detection of ASF. The EU ASF framework appeared flexible enough to allow the EU and each ASF-affected EU Member State to design and apply response measures appropriate for their situation. Each EU Member State has the obligation to apply ASF control measures described in Council Directive 2002/60 and ASF zoning described in either Directive 2002/60 or Implementing Decision 2014/709. Individual Member States may apply additional measures to those required by either EC ASF legislation to control ASF outbreaks within their country; however, individual Member States cannot impose requirements that exceed EC restrictions for intracommunity trade. The Czech Republic successfully eradicated ASF; Greece detected and stamped out an outbreak in a single backyard pig holding; and Belgium implemented control measures to contain ASF outbreaks to feral swine in a limited area of the country.⁵ Additionally, each of the ASF-affected EU Member States reviewed by APHIS maintain robust traceability practices for live swine, pork and pork products in accordance with EU standards in the commercial swine production sector. APHIS found the EU Member States to be capable of differentiating the origin of live swine, pork, and pork products between non-ASF affected and ASF-affected areas. This capacity is necessary in order to comply with APHIS' certification requirements for EU Member States exporting breeding swine, pork and pork products to the United States.

APHIS concludes that the EU's ASF framework, including zoning measures, for the areas represented by this review, slows and limits the spread of ASF within the EU. As a result, APHIS concludes the likelihood remains very low of ASF transmission to the United States through legal trade of breeding swine, pork and pork products from areas of the EU that were part of this review and that are not under restriction by the EU due to ASF detection. APHIS will continue to be diligent in monitoring the ASF situation in the EU and elsewhere, verifying that EU guidelines are implemented and accurately applied by EU Member States.

⁵ In this document, the terms "feral swine" and "feral pigs" are synonymous with the term "wild boar."

Background

APHIS regulates the importation of animals and animal products into the United States to guard against the introduction and spread of foreign animal diseases. APHIS assesses import risk and conducts animal health status evaluations of foreign regions for several foreign animal diseases in accordance with a process codified in Title 9, Code of Federal Regulations, Part 92 (9 CFR 92) [1]. APHIS maintains a list of APHIS-recognized animal health statuses of foreign regions regarding specific animal diseases or pests on its [website](#), and implements various approaches for recognizing those statuses [2].

For ASF, APHIS recognizes regions where ASF exists or the Administrator has reason to believe that ASF exists. In the EU, APHIS considers “any restricted zone in the European Union (EU) established by the EU or any EU Member State because of detection of African swine fever in domestic or feral swine”⁶ as a region where ASF exists or is believed to exist. APHIS prohibits or otherwise restricts the importation of live swine, pork, and pork products from any region where ASF exists or is believed to exist, including any ASF-restricted zone in the EU, except as allowed under 9 CFR 94.8, 94.17 and 96.2 [3, 4, 5].

ASF has been frequently [detected in EU Member States since 2014](#). APHIS continues to monitor the ASF epidemiological situation in Europe and is aware that the potential exists for further spread of ASF to other EU Member States. EU Member States that detect ASF are required to apply the [EU’s ASF framework](#) for controlling and eradicating ASF, including zoning areas that are impacted by ASF and restricting the movement of swine commodities from designated zones. APHIS also monitors the emergency response actions taken by the EU and EU Member States to address ASF.

Accordingly, in 2019 APHIS evaluated EU zoning measures for ASF to address concerns about the risk of ASF introduction into the United States through importation of swine commodities from the EU. APHIS selected thirteen EU Member States to review for several swine diseases. APHIS considers these EU Member States to be representative of the twenty-five EU Member States which are eligible to export breeding swine, pork, or pork products to the United States.⁷ Seven of the reviewed EU Member States were selected because they had experienced outbreaks of ASF in the last six years. These were Belgium, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, and Poland. An additional six EU Member States that had not experienced recent ASF outbreaks were also selected, which were Denmark, France, Germany, Greece⁸, Ireland and Spain. APHIS collected and reviewed information from the selected EU Member States and, in September 2019, conducted a site visit to seven Member States to collect additional information and to verify and clarify information. Belgium, the Czech Republic, Lithuania, and Poland provide a cross-section of ASF epidemiological situations and control measures: Belgium

⁶ In this document, the terms “feral swine” and “feral pigs” are synonymous with the term “wild boar”.

⁷ APHIS currently allows importation of breeding swine, pork or pork products from all EU Member States except Bulgaria and Romania. APHIS has not completed evaluations of Romania and Bulgaria for swine diseases (foot-and-mouth-disease, classical swine fever, and swine vesicular disease) and therefore those two EU Member States are not eligible to export swine, fresh pork, or pork products to the United States regardless of their ASF status as identified by the EU. Likewise, certain regions of Italy have not been evaluated by APHIS for SVD and therefore are prohibited from exporting swine, pork, or pork products to the United States except under certain mitigating conditions. APHIS also recognizes the Region of Sardinia, Italy as ASF-affected, as does the EU, and therefore prohibits importation of swine, pork, or pork products from that region into the United States.

⁸ Greece subsequently established an area for increased ASF surveillance in November 2019 and reported an ASF outbreak in February 2020 as APHIS was concluding this review process.

is geographically separate from other ASF-affected areas; Poland applied an unconventional ASF zoning technique and requested the United States accept swine products from such regions; Lithuania has experienced long-term ASF infection; and the Czech Republic eradicated ASF.

Member State specific findings and conclusions for ASF are available in the respective individual EU Member State reports. The findings and conclusions regarding ASF zoning measures in the ASF-affected EU Member States, including each EU Member State's ability to detect ASF, contain ASF outbreaks via zoning and other control strategies, and to identify, trace, and certify swine products for export, are summarized in this report and extrapolated to overarching conclusions about EU ASF zoning measures.

APHIS Regulatory Approach for ASF in the EU

In February 2016, APHIS published a notice advising the public that APHIS “will recognize as affected with ASF any region of the EU that the EU or any EU Member State has placed under restriction because of detection of ASF” [6]. APHIS added the EU to the list of regions where ASF exists or the Administrator has reason to believe that ASF exists via a list component “European Union - any restricted zone in the European Union (EU) established by the EU or any EU Member State because of detection of African swine fever in domestic or feral swine” [2]. In regards to trade, importation of live swine, pork, pork products, and swine casings into the United States is prohibited or otherwise restricted from regions where ASF exists or the Administrator has reason to believe that ASF exists as provided for in 9 CFR sections 93.505, 94.8, 94.17, and 96.2 [3, 4, 5, 7].

APHIS took this action based in large part on knowledge and experience derived from previous favorable animal health status evaluations of twenty-six EU Member States⁹ (for other animal diseases such as FMD, CSF and SVD), and an assessment of the ASF situation in Europe following a site visit in 2015 to three ASF-affected EU Member States, Latvia, Lithuania and Poland [8]. In that review, APHIS acknowledged that ASF is a challenging disease to address and that the infected wild boar both in the EU and from neighboring countries represented a continued threat for disease introduction and spread. APHIS concluded that this situation would continue to present challenges and would require heightened biosecurity and controls in all domestic swine operations and that ongoing research, analysis and cooperation will be necessary to stop the spread of disease in the feral swine population. APHIS determined that the countries visited had implemented control measures in accordance with EU legislation that targeted prevention of the disease in domestic swine and decreased the presence of the disease in feral swine. APHIS concluded that the risk of transmission of ASF from these countries to other EU countries or to the United States was very low, citing the lack of evidence of disease transmission from the movement of domestic swine or their products. The spread of disease appeared to APHIS to be linked to the movement of wild boar, and the contact of backyard pigs with wild boar or their excretions. APHIS noted that the EU and the veterinary services in these EU Member States were investing significant time and resources to control the disease and were committed to success in these measures.

Under this policy, APHIS automatically recognizes the establishment and release of ASF zones anywhere in the EU. This includes ASF zoning decisions made in EU Member States that

⁹ In February 2016 when APHIS took this action, the United Kingdom was one of twenty-eight EU Member States. As of February 1, 2020, the United Kingdom is no longer a Member State of the European Union.

APHIS has not recognized the status for other livestock and poultry diseases, as is the current situation with Romania and Bulgaria and may be the situation with future new EU Member States. However, APHIS prohibits or otherwise restricts importation of live swine, pork, pork products, and swine casings into the United States from regions of the EU that are not recognized by APHIS as free of FMD or SVD, or are excluded from the APHIS-defined European CSF region. Specifically, APHIS prohibits the import of these commodities from Bulgaria and Romania until such time APHIS determines that the FMD, CSF, and SVD statuses of these two EU Member States are equivalent to those of the other twenty-five EU Member States [2]. Because these diseases affect the same species and commodities that are affected by ASF, by extension this restriction results in the same prohibition that the EU imposes on commodities originating in ASF-affected areas in Romania and Bulgaria.

ASF Epidemiological Situation in the EU

ASF has been detected in a number of EU Member States since 2014: Belgium, Bulgaria, Czech Republic, Estonia, Italy (Island of Sardinia only), Greece, Hungary, Latvia, Lithuania, Poland, Romania, and Slovakia. Only eleven Member States currently have zones that are ASF-affected, as the Czech Republic successfully eradicated the disease. Although Greece successfully stamped out a single ASF outbreak in a backyard pig holding, APHIS continues to consider a zone of increased ASF surveillance established in northern Greece (a Part I area established in accordance with EU ASF zoning framework) to be ASF-affected.¹⁰

The EU publishes animal disease outbreak information via the Animal Disease Notification System (ADNS). Tables 1 and 2 contain ASF outbreak information for domestic swine and wild boar in EU Member States for 2019 and 2020, respectively.

Table 1: ASF outbreak information in EU Member States for 2019

Disease	Country	Number of outbreaks
ASF/domestic swine	Bulgaria	44
	Italy	1
	Latvia	1
	Lithuania	19
	Poland	48
	Romania	1,724
	Slovakia	11
	Total:	1,848
ASF/wild boar	Belgium	482
	Bulgaria	165
	Estonia	80
	Hungary	1,598
	Italy	60
	Latvia	369
	Lithuania	464
	Poland	2,468
	Romania	683
	Slovakia	27
Source: [9]		Total: 6,396

¹⁰ APHIS considers any Part I area, established by the EU or any EU Member State because of detection of ASF in domestic or feral swine, to be ASF-affected in accordance with Title 9, United States Code of Federal Regulations, Section 94.8 (9 CFR 94.8), paragraph (a)(1)(iii).

Table 2. ASF outbreak information in EU Member States for 2020

Disease	Country	Date of last outbreak	Number of outbreaks
ASF/domestic swine	Bulgaria	10/01/2020	19
	Greece	02/05/2020	1
	Latvia	07/17/2020	3
	Lithuania	08/10/2020	3
	Poland	10/28/2020	103
	Romania	12/30/2020	1,053
	Slovakia	09/22/2020	17
			Total: 1,199
ASF/wild boar	Belgium	03/10/2020	3
	Bulgaria	12/30/2020	533
	Estonia	12/28/2020	68
	Germany	12/31/2020	403
	Hungary	12/25/2020	4,001
	Italy	12/22/2020	41
	Latvia	12/30/2020	320
	Lithuania	12/30/2020	230
	Poland	12/30/2020	4,070
	Romania	12/30/2020	885
			Total: 10,929

Source: [10]

The European Union's ASF Framework

The EU promulgates its ASF policies primarily through two pieces of legislation. Council Directive 2002/60/EC is the overarching legislation for the prevention and control of ASF in domestic swine or feral pigs [11]. This legislation outlines the requirements that all suspected or confirmed cases of ASF must be reported to competent authorities, and the basic measures to be taken if ASF is suspected or confirmed. These requirements include: quarantine and surveillance requirements for affected holdings; movement controls on live animals, products, and fomites; depopulation, cleaning, and disinfection of affected premises; establishing protection and surveillance zones, and the disease control measures therein; disease control measures taken at slaughterhouses, and by animal transporters; disease control measures when ASF is suspected in wild boar; and other emergency response activities, including epidemiological investigations to confirm or exclude additional cases and repopulating premises after an ASF outbreak.

Commission Implementing Decision 2014/709/EU outlines specific zoning measures for ASF in the Member States in which the disease has been detected [12]. The legislation dictates ASF control measures to be taken in specified areas, including prohibition of or restrictions on moving live swine and certain swine commodities from ASF-affected areas to other EU Member States via intra-Union trade or as exports to third countries. The legislation lists the conditions under which the movement of live swine and certain swine commodities from ASF-affected areas can occur and specifies control measures for feral pigs and fresh meat, meat preparations, and meat products containing meat from feral pigs. Last, the Annex of this legislation captures the geographical descriptions of areas of EU Member States that are subject to the various provisions of the legislation.

General and specific information describing the EU's zoning delineations for ASF is contained in the EU's *Working Document on the Principles and criteria for geographically defining ASF regionalization* [13]. This document describes the EU's criteria for applying and removing ASF restrictions to areas that are in proximity to or affected with ASF. The EU zoning framework defines four such areas: areas in proximity to and established as a buffer zone around ASF detection in either feral pigs (wild boar) or domestic swine, which are listed in part I of the annex of 2014/709/EU; areas where ASF has been detected only in feral pigs (wild boar), which are listed in part II of the annex to 2014/709/EU; and areas where ASF has been detected in domestic swine, which are listed in part III of the annex of 2014/709/EU if the epidemiological situation is dynamic and disease evolution is uncertain or in part IV of that annex where ASF is entrenched in domestic swine and the disease is considered endemic.

The EU also publishes a *Working Document on the Strategic approach to the management of African Swine Fever for the EU* outlining the EU's broad strategies to limit the spread of ASF in the EU [14]. The two items of ASF legislation and the two ASF working documents are available through links on the EU's ASF web page [15]. The EU also publishes on their ASF web page a link to an [ASF zoning map](#) that depicts the areas listed in the various parts of the annex of 2014/709/EU. The EU also publishes an [online interactive ASF mapping tool](#).

APHIS finds the EU ASF framework to be commensurate with and adaptable to the ASF epidemiological situation in the EU Member States. The EU Member States that have been affected with ASF have implemented the EU ASF framework in accordance with EU legislation, including biosecurity in commercial and backyard domestic pigs, prohibiting movement of pigs and their products from restricted areas, and decreasing presence of ASF in feral swine. Through its review of thirteen EU Member States, APHIS found the overall veterinary infrastructure, legislative authority and resources of the EU Member States to be generally adequate to maintain swine disease surveillance and control. At the time of the review, APHIS found no evidence that ASF transmission occurred through commercial marketing of pork or pork products and found evidence of only a single outbreak resulting from movement of domestic swine [16].¹¹

Member State Implementation of the EU's ASF Framework

Successful implementation of the EU ASF framework depends on the national competent authority for animal health of each EU Member State. Through its review of thirteen EU Member States, APHIS found that EU Member States had competent veterinary infrastructures that implemented the EU's swine disease prevention and control measures. APHIS found evidence of well-organized national competent authorities whose central level staff disseminated national swine health strategies to regional offices. These policies appeared to be successfully implemented at the local level by robust field veterinary services including local veterinarians either working directly for or authorized to conduct work on behalf of the national competent authority. Except for Greece, APHIS found staffing levels and budgets were sufficient to effectively implement swine health programs.

APHIS found that Greece's veterinary infrastructure has been constrained by resource limitations resulting in staffing shortages on the national, regional and local levels. However,

¹¹ In March 2020, Poland reported two new outbreaks of ASF in domestic swine, of which one resulted from exposure through the direct movement of pigs from the other holding.

APHIS concluded that Greece leverages its available resources to ensure critical animal disease control activities remain functioning while the country moves towards filling critical vacancies in its veterinary services as it recovers from its recent financial crisis. It is also important to note that the EU stepped in and provided necessary financial resources to assist Greece during this time, especially to enhance Greece's capacity to respond to ASF. To that point, APHIS acknowledges that Greece was able to quickly detect an introduction of ASF into the country and successfully contain and eradicate the disease in a relatively short period of time.¹²

Overall, APHIS observed knowledgeable swine producers, processors, and other swine industry officials effectively implementing Union-wide and Member State-specific requirements and standards for swine husbandry, production and processing, including biosecurity measures and traceability components. Each Member State had a national registry and database to capture movements of live swine on to and off farms, including movements from farm to farm and from farm to slaughter. APHIS observed the EU Member States maintain robust traceability practices for live breeding swine, pork and pork products in accordance with EU standards. APHIS observed knowledgeable forestry and hunting officials overseeing wild boar hunting and management programs and collaborating with animal health officials regarding swine health, including collaborating on disease sampling of hunter-harvested wild boar and wild boar found dead. Animal health and forestry and hunting officials collaborated on control measures, including zoning, to limit the spread of disease in domestic swine and wild boar.

For the ASF-affected EU Member States included in this review, APHIS evaluated their implementation of ASF control measures. APHIS found that competent authorities for animal health in each of these Member States detect and quickly respond to ASF outbreaks in domestic swine. The EU ASF framework appears flexible enough to allow the EU and each ASF-affected EU Member State to apply response measures appropriate for that EU Member State. Each EU Member State has the obligation to apply ASF control measures described in Council Directive 2002/60 and ASF zoning described in either Directive 2002/60 or Implementing Decision 2014/709. Individual Member States may apply additional measures to those required by either EC ASF legislation to control ASF outbreaks within their country; however, individual Member States cannot impose requirements that exceed EC restrictions for intracommunity trade [17].

Several of the reviewed EU Member States in which ASF has not been detected provided information demonstrating their ASF prevention and preparation efforts. ASF is a reportable disease and passive surveillance for ASF is conducted throughout the EU. Several of the EU Member States under review also conduct active ASF surveillance programs in domestic and feral swine populations. Many of the EU Member States provided their legislation for ASF that provides the legal authority to implement ASF control in accordance with the EU ASF framework. Some also provided information on their ASF emergency response strategies. Denmark, France and Germany have installed fencing along their borders, especially in close proximity to ASF-affected zones in neighboring countries. Most indicated they were conducting education programs to increase ASF awareness, enhance on-farm biosecurity and adapt wild boar hunting strategies to reduce wild boar populations and their movement. In general, APHIS found the ASF preparedness

¹² Although Greece successfully stamped out its single outbreak of ASF, at the time of this report Greece continues to maintain an area of increased ASF surveillance as a precautionary measure (designated as a Part I area in accordance with EU ASF zoning standards). APHIS considers Greece to be ASF-affected due to the establishment of this ASF zone.

and monitoring to be sufficient to ensure prompt detection of potential incursion of ASF into these EU Member States.

APHIS Conclusions for ASF in the EU

Implementing the EU ASF emergency response framework is heavily dependent upon the national competent authorities and the veterinary infrastructure of the individual EU Member States. APHIS found that the ASF-affected EU Member States under review quickly implemented the EU ASF response framework upon detection of ASF. The EU ASF framework appeared flexible enough to allow the EU and each ASF-affected EU Member State to design and apply response measures appropriate for their situation. Each EU Member State has the obligation to apply ASF control measures described in Council Directive 2002/60 and ASF zoning described in either Directive 2002/60 or Implementing Decision 2014/709. Individual Member States may apply additional measures to those required by either EC ASF legislation to control ASF outbreaks within their country; however, individual Member States cannot impose requirements that exceed EC restrictions for intracommunity trade. This included ASF surveillance, control measures, and zoning for both wild boar and domestic swine. The ASF-affected EU Member States reviewed by APHIS appeared to have quickly implemented the EU ASF response framework, from basic and initial control measures like surveillance and protection zones up to formal zoning under Commission Implementing Decision 2014/709/EU. The Czech Republic successfully eradicated ASF; Greece detected and stamped out an outbreak in a single backyard pig holding; and Belgium implemented control measures to contain ASF outbreaks to feral swine in a limited area of the country.

Additionally, each of the ASF-affected EU Member States reviewed by APHIS maintained robust traceability practices for live swine, pork and pork products in accordance with EU standards in the commercial swine production sector. APHIS found the EU Member States to be capable of differentiating the origin of live swine, pork, and pork products between non-ASF affected and ASF-affected areas. This capacity is necessary in order to comply with APHIS' certification requirements for EU Member States exporting breeding swine, pork and pork products to the United States.

APHIS concludes that the EU's ASF framework, including zoning measures, slows and limits the spread of ASF within the EU. As a result, APHIS concludes the likelihood remains very low of ASF transmission to the United States through legal trade of breeding swine, pork and pork products from areas of the EU that are not under restriction by the EU due to ASF detection.

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