

Swine Disease Global Surveillance Report

Worldwide pork production is highly interconnected by trade between countries and markets which could increase the risk of introduction of foreign pathogens into the US.

PROJECT

The aim of these reports is to have a system for near real-time identification of hazards that will contribute to the mission of assessing risks to the industry and ultimately, facilitate early detection and identification, or prevent occurrence of events, in partnership with official agencies, and with our international network of collaborators.

Monthly reports are created based on the systematic screening of multiple official data sources, such as government and international organization websites, and soft data sources like blogs, newspapers, and unstructured electronic information from around the world, that then are curated to build a raw repository. Afterward, a group of experts uses a multi-criteria rubric to score each event, based on novelty, potential direct and indirect financial impacts on the US market, credibility, scale and speed of the outbreak, connectedness, and local capacity to respond average is calculated. The output of the rubric is a final single score for each event which then it is published including an epidemiological interpretation of the context of the event.

These communications and the information contained therein are for general informational and educational purposes only and are not to be construed as recommending or advocating a specific course of action.



UNIVERSITY OF MINNESOTA



University of Minnesota Technical Coordination

Sol Perez¹, Auguste Brihn

Andres Perez²

Expert Focus group

Jerry Torrison, Montserrat Torremorell,

Cesar Corzo, Paul Sundberg, John Deen

¹Project coordinator. E-mail: mperezag@umn.edu

²Principal investigator. E-mail: aperez@umn.edu

www.cahfs.umn.edu

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Swine Disease Global Surveillance Report

Tuesday, November 5, 2019 – Monday, December 1, 2019

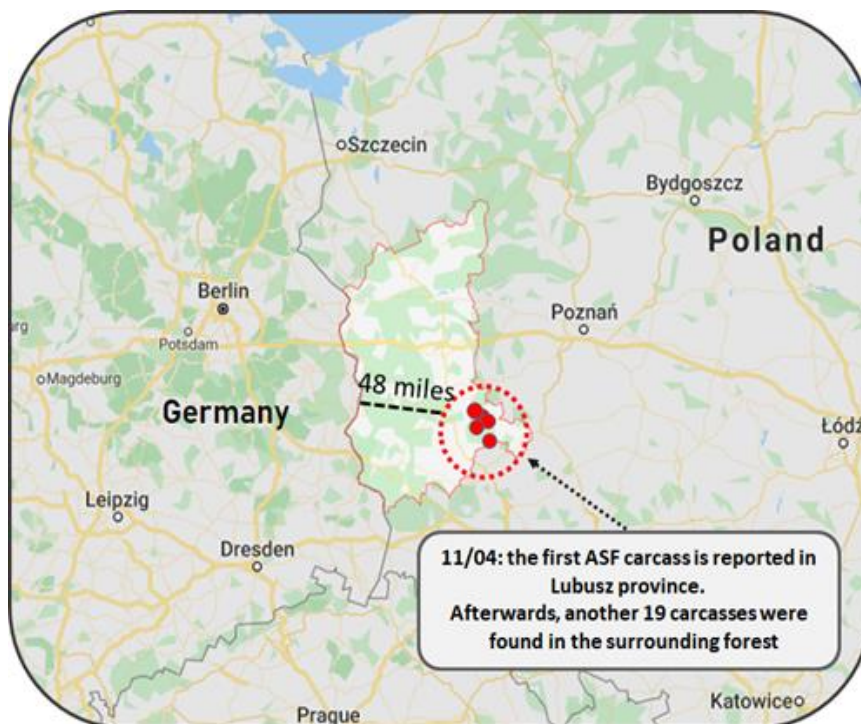
Report Highlights

- **New African swine fever (ASF) outbreak reported in wild boar in the Polish province of Lubusz:** 85km from the border with Germany
- **ASF in South Korea:** 34th wild boar infected with ASF was reported last Sunday
- **EFSA ASF risk assessment:** says that there is a “very high risk” of ASF to spreading to nine countries in south-eastern Europe that are currently disease-free
- **FMD in South Africa:** Outbreak in Limpopo province suspends SA’s FMD free zone

African Swine Fever EUROPE

Poland

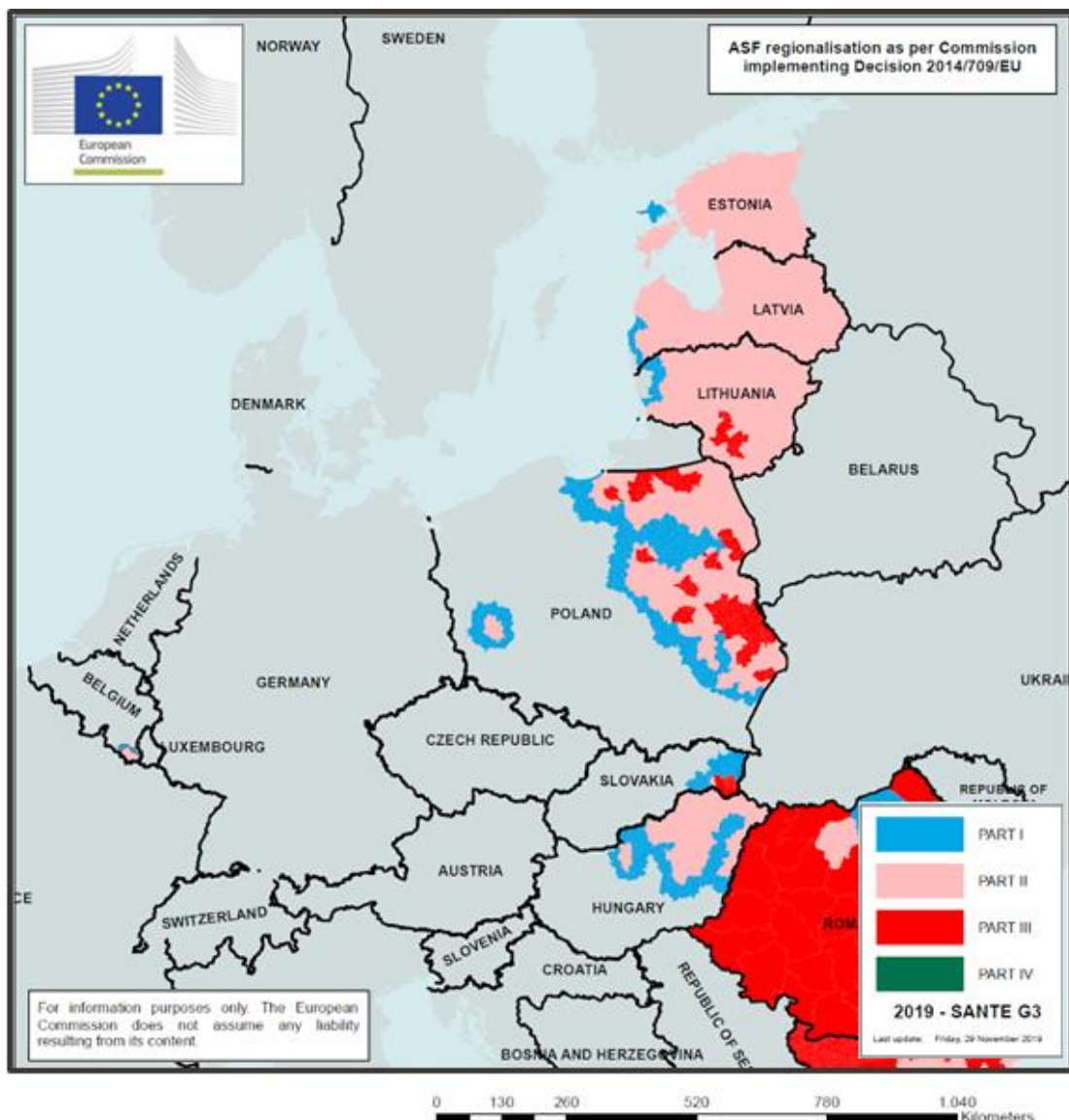
Twenty-two ASF cases have been identified in wild boar in Wschowa and Nowa Sól counties of Lubusz province in November, affecting western Poland for the first time (Map 1). Since 2014, all ASF infected pig farms and wild boar remained on the eastern side of the country within the same regions.



Moving 300 km westward to Wischowa county in the Lubusz province, the first confirmed case of ASF in a wild boar was identified after being killed in a road accident. This case was identified after routine testing. The Polish National Association of Pig Producers said, “If it weren’t for the road accident, we

would have found out much later that ASF appeared in Lubusz province.” The Association further insists all dead boars should be tested for ASF.

The Lubusz province borders Germany and the westward movement is suspected to be due to human travel. In the same province, just six kilometers to the northwest in Nowa Sól county, the second case of ASF was identified in a wild boar on November 17. The next day, a 36 kilometer metal fence was placed within a five kilometer radius around the found carcasses. An additional 18 wild boars dead from ASF were found in the surrounding forest, about 80 kilometers from the German border. In total, the 20 carcasses were found in nien different locations. Intensive searches for additional cases in surrounding areas are underway, and plans are in development for the installation of a second fence. The Polish army is assisting with search efforts in the area. Locals have been strictly forbidden to enter the forest.



Map 2. Current ASF regionalization in Europe

Map 2 shows the updated ASF regionalization in Europe when ASF hit Poland for the first time. Authorities, in cooperation with the European Commission, set up three different zones that are each enforced by a different set of regulations, depending on the risk of ASF in that area. Zone 1 is a buffer zone that is disease-free (blue), zone 2 has the disease present in the wild boar population (pink), and

zone 3 has ASF present in both the commercial pig population and the wild boar population (red). Polish authorities say disease control measures will be enforced in zones 2 and 3, otherwise known as protection zones, conforming to EU regulations. There will be trade restrictions on all zones and additional culling measures taken in other areas of Poland.

Various orders controlling the movements of pigs into and out of zones is also in force. Regulations controlling movements within and out of zone 1 include clinical testing of pigs by official veterinarians not earlier than 24 hours before movement.

Germany's reaction

The German Association of Pig Farmers is urging pig farmers not to panic and to maintain consistent biosecurity measures to prevent disease introduction into the country. If the virus is detected in a domestic pig at a farm, the entire farm will be culled. In this case, the Tierseuchenkasse (Animal Disease Fund) will replace the net value of the animals to the farmer. Follow-up costs such as loss of earnings due to the temporary absence of animals in the stables could be covered by insurance. According to the Association, in Brandenburg, the closest province to the border with Poland, about 750,000 pigs are currently kept in 170 farms. From Brandenburg, piglets are exported to other federal states and EU states.

The Friedrich-Loeffler-Institut in Greifswald states that the introduction of ASF into Germany by infected wildlife remains "high," unchanged from last year. The Federal Institute also sees a "**high risk**" in raw contaminated pork or uncooked products made from it, such as salami, which is brought to Germany via vehicles or persons. The risk assessment was last adjusted in May 2019 after cases of ASF had occurred in Belgium.

In the event of an outbreak among wild boars, the Friedrich-Löffler-Institut has published a catalog of measures together with the German Hunting Association. If ASF is discovered in a boar in Germany, it would set - as in other EU countries - a so-called restriction area. For this area then, trade restrictions would be applied to meat products. A crisis team is to organize the establishment of a fenced core zone around the site, an endangered area around the core zone and a broad buffer zone. The closer the place of discovery, the more intensive the measures for the reduction of the stock; the goal is to absolutely avoid the possibility of a diseased animal emigrating from the core zone. While no official statement has been released detailing further control measures, some news reports have mentioned measures such as: close off an area to be designated by the competent authority, e.g., by fencing; restricting the movement of persons or vehicles; restrictions on the use of agricultural lands, such as a harvest ban with the aim of avoiding the migration of wild boar; the arrangement of an increased hunting season to minimize the risk of infection of healthy wild boar, among others. Authorities have highlighted that in the Czech Republic, after the outbreak in Zlin in June 2017, controlling the dispersion of the disease through this methodology worked well.

The Saxony state, on the south border with Poland, is also preparing a large-scale animal disease exercise for a possible outbreak. From December 2-5, different scenarios will be played through in several places. Among other things, the search for cadavers in the forest is being tested with drones and thermal imaging cameras, the setting up of fences and the simulation of a disease outbreak in a population of domestic pigs.

USDA: Risk Assessment of imports

On October 18, 2018, APHIS suspended the entry of imports of fresh and frozen pork and pork products from Poland while it completed a review of that country's export protocols. Due to cases of ASF in farm pigs, Poland had established control or restricted zones and only facilities located in certain zones were allowed to export fresh and frozen pork to the US. The preliminary assessment was that there was minimal animal health risk posed by any pork products imported recently into the US from Poland, lifting the restriction on October 25.

The goal of that review was to ensure consistency with the stringent, longstanding safeguards in place that protect US animal health from ASF. While the outbreaks reported in west Poland don't change its exporter status, the US pork industry has asked USDA for their assessment of the adequacy of the Polish domestic pig surveillance program for the timely manner detection of ongoing infection in a commercial farm.

EFSA: Risk assessment of African swine fever in the south-eastern countries of Europe - Summary

On November 5, the European Food Safety Authority released a risk assessment ([Link](#)) prepared upon request of the European Commission, regarding the risk of spread of ASF and to identify potential risk factors, given introduction in the south-eastern countries of Europe (region of concern, ROC), namely Albania, Bosnia and Herzegovina, Croatia, Greece, Kosovo, Montenegro, North Macedonia, Serbia and Slovenia. Three EU Member States (MS) – Croatia, Greece and Slovenia – were included in the ROC due to their

geographical location and ASF-free status. The estimated probability of the spread of ASF within the ROC within one year after introduction into the ROC was assessed to be very high (from 66% to 100%). This estimate was determined after considering the high number of indicators present in most of the countries in the ROC and the known effect that these indicators can have on ASF spread, especially those related to the structure of the domestic pig sector, the presence of wild boar and social factors.



In addition, the probability of ASF spread from the ROC to EU Member states outside the ROC within one year after the introduction of ASF in the ROC was estimated to be very low to low (from 0% to 15%).

This estimate was based on the comparison of the indicators present in the ROC and the already affected countries in south-eastern Europe, such as Bulgaria and Romania, where there was no evidence of ASF spread to other EU Member states within one year.

ASIA South Korea

On November 13, dramatic images emerged of a South Korean river red with the blood of thousands of slaughtered pigs, drawing attention to the ASF crisis plaguing the region. According to the Korean news agency, officials had killed 47,000 pigs in a bid to curb the spread of the disease. Heavy rains caused blood to flow from a border burial site into a tributary of the Imjin River. The worry was that the bloody waters could carry the virus widely, and lay waste to efforts made in controlling the disease's spread.

On December 1, the Ministry of Environment announced the 34th wild boar infected with ASF, in Yeoncheon, northwest of Seoul. The location was within the fences which have been installed around the areas (between Paju and Cheorwon) where outbreaks were detected in wild pigs.

Since the Ministry of Agriculture, Food and Rural Affairs confirmed the first ASF outbreak on September 17, 2019, ASF was detected in domestic pigs in 14 farms (Gyeonggi-do 9, Incheon City 5); and in 34 wild pigs from Gangwon-do (20) and Gyeonggi-do (14), according to FAO. Authorities have slaughtered about 380,000 pigs to contain the disease, all in a northern region bordering North Korea. That was about 3% of the country's pig herd.

Active Surveillance at points of entry

On November 6 and 9, ASF virus was detected in pork products confiscated at Incheon Airport brought by passengers from Shenyang City, China. As of November 21, the virus gene was detected in a total of 26 confiscated pork products at the port of entry, four in 2018 and 22 in 2019.

In this regard, in the US, the USDA is in the process of ramping up their canine presence, adding 60 beagle teams for a total of 179 to expand screenings of incoming international flights, commercial ports, seaports, and cargo planes.

China

Authorities are closing small slaughterhouses

The Ministry of Agriculture and Rural Affairs announced that they will proceed to shut down some small slaughterhouses throughout the country in an effort to better prevent and control the virus sweeping through the region. There are too many small slaughterhouses in some places in China, equipped with old facilities and backward production techniques, and checks on the pork quality are not done properly, they emphasized. The ministry is supposed to begin reviewing slaughterhouses in some parts of China from November and shut down slaughterhouses that do not meet the requirements.

Unauthorized ASF vaccine use in China – an overview of the current situation

Experimental vaccines against ASF were being used on some pig farms in China, creating concern because of their varying levels of efficacy, safety, and difficulty to distinguish between vaccinated and unvaccinated pigs. Although no vaccine has been proven effective and safe against this deadly virus that affects both domestic and wild pigs, at least three illegally procured products have been used to immunize millions of hogs.

The vaccines were administered after pig farmers signed confidentiality agreements with suppliers. Some immunized pigs later developed a condition that caused their skin tissue to die, some females aborted, some had no side effects but died from the ASF virus. Veterinarians and producers are desperate for a solution. This malpractice could backfire and complicate the situation in Asia further. The Ministry of Agriculture and Rural Affairs has previously warned against the use of such products, after reports of both imported and homemade products being used in China.

On November 18, the ministry announced to launch an investigation into the illegal production, sale and use of ASF vaccines in the country, citing online reports of their use by some farmers. Pigs immunized with illegal vaccines are considered infected once tested positive and are to be culled without compensation.

Foot and Mouth Disease

South Africa

The World Organization for Animal Health has suspended South Africa's FMD-free status prohibiting cloven-hoofed animals and their products from export. The Department of Agriculture, Forestry, and

Fisheries have reported a positive case of FMD in a cattle herd in the Molemole district of the Limpopo Province November 1, after the clinical signs suspicious for the disease were reported. The affected farm has been placed under quarantine and further identification of the strain is being conducted to help determine a point of origin. As of November 27, Limpopo, Gauteng, North West, and Mpumalanga provinces are banned from selling animals in markets. **China is the most affected market as is the destination of 45% of South African bovine meat exports.**

Farmers have been urged to observe biosecurity measures and to not allow any new animals into their herds. Additionally, any suspected cases of disease must be immediately reported to the local state veterinarian. Since the first report on November 6, 10 outbreaks have been reported, affecting more than 14,000 animals.

Classical Swine Fever Indonesia

By November 25, more than 9,000 pigs have died after an outbreak of classical swine fever in the Indonesian province of North Sumatra, the head of the area's food security and livestock agency informed. Carcasses have reportedly been found in rivers and on streets as owners discarded them out of fear of contagion.

North Sumatra Governor Edy Rahmayadi, in an interview with The Jakarta Post, said that hopefully, the vaccines would be soon shipped to the island. Otherwise, they will be facing the need to cull all animals to impede the spread of the virus.

Classical swine fever (CSF) virus, was first detected in September in the province's Dairi district. According to preliminary estimates by Indonesia's statistical bureau, Indonesia produced 327,215 tons of pork last year, with the Hindu enclave of Bali producing the most. North Sumatra produced 43,308 tons last year.

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