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.



UNIVERSITY OF MINNESOTA



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 systematically 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.



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Swine Disease Global Surveillance Report

Monday, January 3 to Monday, February 6, 2023

Reports Highlights

- **First report of Aujesky's disease in Brazil in 20 years**: The disease was detected in a smallholder farm in Rio Grande do Sul, the third largest pig producer state.
- **Confirmation of Seneca Valley Virus outbreak in the UK**: DEFRA confirmed that the five incidences of vesicular illness in pigs identified in England between June and September 2022 were caused by the Seneca Valley Virus (SVV).
- First report of ASF in Greece since 2020: Two dead wild boars were discovered near the Bulgarian and North Macedonian borders. The region was already in Restriction Zone I, given the ongoing ASF situation in the neighboring countries.

| R | Location | Date | Dx | Impact |
|---|--|------|-----|--|
| 1 | Serres region (6 miles from the border with Bulgaria and 21 miles from the border with North Macedonia), Greece | 1/26 | ASF | Two dead wild boars |
| 1 | Liberecky region (close to the border with Poland), Czech Republic | 1/5 | ASF | Confirmed cases in wild boar |
| 1 | State of Penang, Malaysia | 2/3 | ASF | Over 27 farms with a population of 62,197 pigs affected |
| 1 | Liguria and Piedmont regions, Italy | Jan | ASF | Over 81 new cases confirmed in wild boars in Liguria and Piemont. |
| 1 | Gyeonggi-do and Gangwon-do provinces, South Korea | Jan | ASF | Two outbreaks in farms - Almost 5,000 were destroyed in both outbreaks. |
| 1 | Western Visayas, The Philippines | 2/6 | ASF | 6 outbreaks reported - details of the affected farms are not yet available. |
| 1 | Multiple locations in Penang and Perak states, Malaysia | Jan | ASF | 23 commercial farms affected - 8,488 and 7,998 pigs were culled so far in each state - over 53,000 pigs exposed. |
| 1 | Multiple locations in Gauteng and Eastern Cape provinces, South Africa | Jan | ASF | Four new outbreaks confirmed - 557 cases and over 9,000 pigs at risk. |

OUTBREAKS BRIEF





| ¹ State of Rio Grande do Sul, Brazil | Dec | AD (PRV) | Confirmation of AD in a pig farm - 46 animals culled |
|--|-----|-------------|---|
|--|-----|-------------|---|

Outbreaks described in the table above are colored according to an assigned significance score. The score is based on the identified hazard and potential to affect the US swine industry. Rank (R) Blue: 1 - no change in status; Red: 2 - needs extra attention as the situation is dynamic; Black: 3 - requires consideration or change in practices to reduce exposure to the US swine industry. A map with the location of the events reported is available at the end of this report.





Aujesky's Disease - Pseudorabies (PRV)

THE AMERICAS

Brazil

After almost 20 years without detecting Aujeszky's Disease, the first case has been registered in Rio Grande do Sul. The outbreak was identified in a smallholders pig farm, located in São Gabriel. On December 23, the National Laboratory for Agricultural Defense, in Minas Gerais (LDDV-MG) found the disease in one of the 46 samples from that herd.

After receiving the report, teams from the Department of Animal Health Surveillance and Defense (DDA) and the Federal Superintendence of Agriculture in Rio Grande do Sul isolated the property and culled all animals in the premises. Currently, the work is focused on epidemiological tracking in properties that sent or received pigs from the property up to 30 days before the manifestation of clinical signs. They also carry out a task force to visit all the farms located within a radius of 5 km from the focus to collect blood from other pigs.

While the source of the outbreak has not yet been identified, the Director of the DDA, explained that it is important to make it clear that it was one one case, in a piglet, and there is not concern regarding the virus spreading -- still, they have released a new regulation, suspending the transportation of carcasses of wild boar slaughtered for population control purposes, coming from Sao Gabriel.

The president of the Animal Sanitary Development and Defense Fund of the State of Rio Grande do Sul (Fundesa), explained that this has no impact on the state's exports given that the only country with restrictions on this specific disease is Russia, which no longer buys pork from Rio Grande do Sul.

The last outbreak of Aujeszky's Disease recorded in Rio Grande do Sul, in 2003, caused the culling of 27,000 pigs in the state.

Seneca Valley Virus

UK government confirms Seneca Valley Virus in pigs | The Department for Environment Food and Rural Affairs confirmed that the five incidences of vesicular illness in pigs identified in England between June and September 2022 were caused by the Seneca Valley Virus (SVV). This vesicular disease presents clinical signs similar to foot-and-mouth disease, a major disease which affects trade in live animals and their products. This confirmation came after an extensive investigation by the Animal Plant Health Agency (APHA). SVV is not a notifiable or reportable illness in the United Kingdom, nor is it listed by the World Organization for Animal Health (WOAH). Nonetheless, pig farmers and veterinarians have been asked to report any clinical evidence of vesicular disease in pigs so that APHA can investigate. SVV only affects pigs for a short time, with infected pigs fully recovering, and there is no risk to human health.

African Swine Fever

EUROPE

According to an EU ADIS report, from January 3 to February 1, 38 outbreaks in domestic pigs were reported by three countries, namely Moldova, Romania, and Serbia. The number of reporting countries reduced from six to three compared to the previous report; however, the number of outbreaks corresponds with the same period of the previous year (n=35).

During the same period, 1,213 ASF outbreaks were reported in wild boars by 15 European countries (Bulgaria, Czech Republic, Estonia, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Moldova,





North Macedonia, Poland, Romania, Serbia, and Slovakia). Most cases were reported in Poland (n=388) and Germany (n=227). Following the outbreak in December, the Czech Republic reported two more cases. Moreover, an ASF outbreak in wild boars was reported in Greece for the first time. Last year 10 countries reported 776 outbreaks since the beginning of the year.



Map 1. African swine fever situation in Europe: January 3, 2023 - February 6, 2023 (Source: FAO EMPRES-i)

Regional highlights:

- Czech Republic | Two more cases of ASF in wild boars reported. Dead wild boars were found by hunters near where previously, last December, a dead infected wild boar piglet was discovered. Both cases were in Liberecký, close to the Poland border and within the established Restriction Zone, where surveillance is currently taking place as part of disease control measures. Since the initial positive occurrence, the current findings in the zone of infection are the first dead wild boars that have been traced there since the beginning of December, when the first ASF outbreak was reported in April 2018.
- Greece | the first outbreak in wild boar reported in the region of Serres. Thus, the virus was detected in a dead female wild boar at a breeding farm in the north of the country, in the municipal unit of Petritsi, less than 6 miles from the Bulgarian border and 21 miles from the border with North Macedonia (Map 2). This was not unexpected and most likely represents





natural spread through the movement of infected wild boar south of the border with Bulgaria. This is the first outbreak on wild boar in Greece since ASF was detected in a backyard herd in February 2020 in the same region, 25 miles south of the new finding. The 2020 outbreak was an isolated case, with only one pig from 32 pigs on the farm testing positive. Greece is a pork-importing country and produces roughly one-third of its domestic pork consumption.



Map 2. ASF in Greece (Source: WOAH-WAHIS)

- Russia | ASF confirmed at a backyard farm of 48 pigs in the Samara region. In the past 12 months, 12 outbreaks were reported in the region. In the wild boar population, new outbreaks were confirmed again in the Kursk region, where 14 animals found dead tested positive.
- **Moldova** | first occurrence in a zone in the Drochia administrative division. In January, the country reported three outbreaks in domestic pigs. These were all backyard premises, with between two and 140 pigs.
- Latvia | A new case of ASF in wild boar indicates the second wave of the disease in Vidzeme. After a relatively calm couple of years, Latvia saw a spike in the number of outbreaks, which tripled in 2022 compared to 2021. Local authorities link the spread of ASF to the increase in the wild boar population. Thus, when ASF first appeared in Vidzeme in 2014, it reduced the wild boar population relatively rapidly; pigs died from the disease and, in some places, even disappeared altogether. However, the number of wild boars has grown again quite large. One of the most important conditions for eliminating this disease is to reduce the number of susceptible animals (wild boars) and keep such a low number for a long enough period, at least several years. During the current hunting season, which will end on March 31, as of January 4, official records show that over 20,500 wild boar have been hunted. Following current guidelines, hunters must submit a blood sample and the tail tip from all wild boars they hunt for testing. If ASF is detected, the carcass of the infected wild boar is destroyed, but the hunters are entitled to a compensation of 50 euros. Last year, 1,274 ASF cases in wild boars were detected in Latvia. ASF has also been reported in domestic pigs, affecting six farms. As a result, 1500 pigs were slaughtered.
- Italy: since December 15, another 81 cases on wild boar have been in the country's northwest region. All of which have been within the Restriction Zones. All found dead wild boar in this region are being tested, with 610 and 253 samples taken in Liguria and Piedmont, respectively. There have been ASF reports outside of constructed fences in Italy (Map 3). The next steps have been identified as widening the west and east line of fences and enlargement of Restriction Zones I and II in the west. Current critical aspects of the response activities are:





- Lack of funds to install new fences and to support the monitoring and maintenance efforts of the already installed fences
- Opposition received from the local communities (e.g., hunters, farmers, citizens) to the extension and strengthening of measures.

Meanwhile, in the Lazio region. active search of carcasses is ongoing, and the number of positive cases is stable as of the beginning of September



Map 3. ASF current situation in the northwest region of the country (PAFF January 2023 Italy)

• UK | The risk of entry of ASF virus in live animals and products of animal origin (POAO) from affected countries remains medium. However, the potential high risk for noncommercial imports of pork products from ASF-affected areas remains of high concern. According to the DEFRA report on outbreak assessment (1/25), inspection evidence at Great Britain ports suggests that several vehicles illegally bring pork meat into Great Britain from some regions of the EU affected by ASF. Some of these instances involved large quantities of pork products, some of which appear to be home-slaughtered and arrive in Great Britain from an undisclosed origin as a non-commercial import, with poor levels of biosecurity and food hygiene. Therefore, the risk of ASF entering Great Britain from the human-mediated pathway and moving undeclared pork products is considered to remain high, though there is considerable uncertainty around this until data is fully collated and analyzed and reassessed as further information becomes available.

ASIA

Outbreaks of African swine fever in domestic swine were reported in seven countries (Bhutan, India, Indonesia, Malaysia, The Philippines, the Republic of Korea, and Vietnam) between January 3 and February 6, 2023. During this period, The Republic of Korea also confirmed new cases of ASF in wild





boars, while <u>local news reports</u> in India suspect two cases of ASF in wild boars. In Malaysia, samples from a decomposed wild boar carcass tested positive for ASF by PCR.



Map 4. African swine fever situation in Asia 2023: (Source: FAO ASF situation report February 02, 2023)

Regional highlights:

- Republic of Korea | Reported its first cases of ASF in domestic pigs in almost two months on January 5. These <u>cases</u> (six ASFV positive pigs) were detected in the locality of Pocheon, Gyeonggi-do (Kyonggi-do) province. Authorities <u>reported another outbreak</u> on January 10 in Cheorwon-gun, Gangwon-do, where 2369 pigs were destroyed. On January 21, an <u>outbreak</u> was reported on a farm of 2500 pigs in Gimpo, Gyeonggi-do province, following the death of nine pigs. The remaining 2491 were destroyed as a measure to control further disease spread. Following the most recent ASF outbreaks, teams of quarantine and epidemiological investigations were formed to undertake movement control, disinfection, and epidemiological research. Furthermore, nationwide awareness was increased, and all farms in affected areas were asked to have all vehicles arriving and exiting the farm pass through a disinfection facility, with supplementary disinfection of the wheels and lower sections with high-pressure sprayers. The Republic of Korea has continued to report cases of ASF in wild boar. Since the beginning of 2023, about <u>60 cases have been reported</u>, bringing the total number of ASF-positive wild boars detected since the first outbreak in September 2019 to 2821.
- The Philippines | As of February 6, new ASF outbreaks have been reported in Iloilo and Guimaras Provinces of Region VI (Western Visayas). In Guimaras province, two towns, Buenavista and Jordan, have reported ASF cases in domestic swine, while in Iloilo, 19 municipalities are currently affected. Epidemiological details of the affected farms in the Visayas are not yet available to the public, nor is the official report to the WAHIS system. There is, however, a new update on the zoning status for ASF as of January 25.







Map 5. Maps of the Philippines showing the Zoning Status per City or Municipality

- Malaysia | Local news outlets reported ASF in domestic pigs in two states: Perak and Penang. Furthermore, in Negeri Sembilan State, <u>ASF was reported in a decomposing wild boar carcass</u>. In <u>Perak</u>, four cases of ASF were reported between December 2022 and January 13, 2023. These ASF cases, according to local authorities, occurred in commercial pig farms in the Batang Padang and Kuala Kangsar districts. About 11 of the 91 pig farms in Perak have been affected by ASF, and 8,488 pigs have been culled on these farms. In <u>Penang</u>, since reports of the first ASF cases in early January 2023, a total of 23 commercial pig farms have reported cases of ASF. This has resulted in a total of 53,275 pigs being exposed or at risk across the Seberang Prai Selatan, Seberang Prai Tengah, and Seberang Prai Utara districts. The process of culling these pigs has begun, with 7,998 already culled.
- **Bhutan** | <u>On January 15, 2023</u>, an outbreak of ASF was reported in the town of Chhoekhorling, Sarpang. The outbreak affected a total of 1159 pigs, with 34 cases and 24 deaths. To contain the spread of the disease, 104 pigs were culled.

AFRICA







Map 6. African swine fever events in South Africa January 2023: (Source: FAO EMPRES-i)

• South Africa | Four new ASF outbreaks were reported in South Africa's Gauteng and Eastern Cape provinces in January. These outbreaks are located outside South Africa's ASF control zone. The first outbreak in Gauteng was detected on January 4, 2023, in a farm where 193 pigs died, and 273 pigs were at risk; the <u>second outbreak</u> in Gauteng was observed on January 16, involving 244 cases, 238 deaths, and 8628 at-risk pigs. Following the confirmation of these outbreaks, the Department of Agriculture, Land Reform, and Rural Development placed farms in Gauteng, the North West, and the Free State under precautionary quarantine. Two further outbreaks were recorded in Makana, Eastern Cape province, on January 8 and 9, 2023. There were 61 cases and 59 deaths reported in these two outbreaks. Pig producers have been urged to be cautious and report any suspected cases of ASF to their local veterinary services.

Foot-and-mouth disease

There have been reports of new outbreaks of foot-and-mouth disease in the middle east, affecting the countries of Jordan and Iraq. A total of 11 outbreaks have been reported in these two countries affecting buffalo, cattle, and sheep herds.

MIDDLE EAST

Jordan | On January 4, 2023, <u>an outbreak of FMD</u> was reported in a village in Dhlail, Zarqa, after 470 cases and two deaths were observed. This village has about 5600 susceptible cattle, and they have since all been vaccinated. A second FMD outbreak was reported on a farm in Jadayyda, Karak, where 20 cases were observed and 20 deaths were recorded. 1250 at-risk cattle have been vaccinated following this outbreak. These two new outbreaks are part of an ongoing epidemiological event that started on December 8, 2022, and have affected herds of cattle and sheep in a susceptible population of about 42,850. The FMD serotype responsible for these outbreaks was confirmed as serotype O.

Iraq | <u>Nine outbreaks have been reported since January 03, 2023</u>. These outbreaks are in the North, East, and Southern parts of the country and have been confirmed to be caused by FMD serotype SAT2. The veterinary authority believes that the surge in cases suggests either the introduction of a new





sublineage or the activation of a local sublineage due to a lack of immunological coverage. Active surveillance is in place to monitor for new disease foci, and the source and phylogeny of the causative lineage/sublineage is being investigated. No vaccination zoning or mass vaccination campaigns are being implemented due to delays in purchasing vaccines, and animal movement restriction is in place. According to the most recent <u>follow-up report</u> to WOAH, 25,508 clinical cases have been observed in Buffaloes(573), cattle (1194), and sheep (23741), and a total of 21 deaths have been reported across the three species.



Map 7. FMD outbreaks in the middle east: red dots represent coordinates of outbreak locations with only cattle, green dots with buffalo, blue dots with cattle and sheep, and purple dots with buffalo and cattle.





References:

Recurrent reports reviewed WOAH - <u>WAHIS interface - Immediate notifications</u> WOAH - <u>WOAH Asia Regional office</u> FAO - <u>ASF situation update in Asia & Pacific</u> DEFRA - <u>Animal conditions international monitoring reports</u> CAHSS - <u>CEZD Weekly Intelligence Report</u> European commission - <u>ADIS disease overview</u>

EUROPE

Latvia The cases of African swine fever detected in Vidzeme indicate the second wave of the disease ASF Latvia: New outbreaks hurt pig companies Greece Greece detects African swine fever in wild boar in Serres Greece reports first case of African swine fever in wild boar UK **DEFRA report: African swine fever in Europe** Russia Europe records sharp fall in ASF outbreaks in 2022

ASIA <u>ASF in Republic of Korea</u> <u>ASF in Republic of Korea-ASF outbreak on a</u> <u>farm</u> <u>Malaysia-ASF in wild boar carcass</u> <u>Malaysia-ASF in Penang</u> <u>Malaysia-ASF in Penang</u> <u>Malaysia-ASF in Perak</u> <u>FMD in Jordan</u> <u>FMD in Irag</u> <u>AFRICA</u> <u>ASF in Gauteng</u> <u>ASF in Eastern Cape</u>

THE AMERICA Brazil AD in Rio Grande do Sul Outbreak response in RGDS Brazil last major AD outbreak

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