# 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.



University of Minnesota Technical Coordination Sol Perez<sup>1</sup>, Auguste Brihn Andres Perez<sup>2</sup>

> Expert Focus group Jerry Torrison, Montserrat Torremorell, Cesar Corzo, Paul Sundberg, John Deen

<sup>1</sup>Project coordinator. E-mail: <u>mperezag@umn.edu</u> <sup>2</sup>Principal investigator. E-mail: <u>aperez@umn.edu</u> <u>www.cahfs.umn.edu</u>

#### Current and previous reports:

www.swinehealth.org/global-disease-surveillance-reports/







# Swine Disease Global Surveillance Report

Monday, September 5, 2022 – Monday, October 3, 2022

# **Report Highlights**

- **Brazil's preparedness at points of entry:** Prohibited pork products from Russia were seized at Rio de Janeiro International Airport.
- **Presumable false alarm in Ecuador**: Ecuadorian authorities have ruled out CSF and ASF in samples from a suspicious case reported in Esmeraldas province. Additional testing is scheduled.
- ASF in South Korea: New outbreaks in domestic pigs over 15,000 pigs culled.

R	Location	Date	Dx	Impact
1	Multiple locations, <b>India</b>	Sept	ASF	Active outbreaks reported in four states across the country Authorities reported over 69,000 pigs culled to control the spread.
1	Kaliningrad region, <b>Russia</b>	9/6	ASF	24,786 pigs culled in response to the current outbreak.
1	Kinmen County, <b>Taiwan</b>	9/13	ASF	An ASF-positive pig carcass found on the shoreline.
1	Mindanao region, <b>The Philippines</b>	9/13	ASF	ASF is still present in 31 barangays (districts) - over 4,000 pigs dead.
1	Gangwon and Gyeonggi province, <b>South Korea</b>	9/19	ASF	Four new outbreaks over 28,500 pigs culled.
1	Northern Perak, <b>Malaysia</b>	9/19	ASF	Two commercial farms affected.

# **OUTBREAKS BRIEF**





Ukmerge district, Lithuania	9/15	ASF	First ASF outbreak in the region - small farm 12 pigs affected.
-----------------------------	------	-----	---

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.





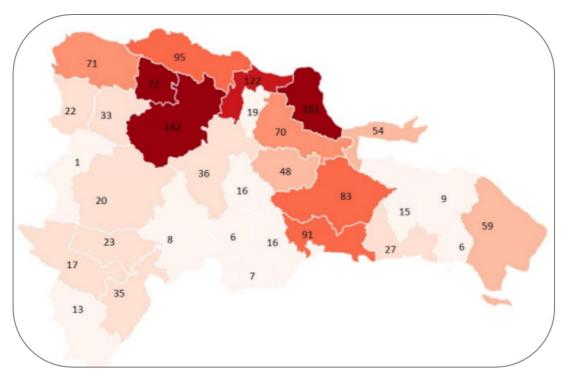
# African Swine Fever

### AMERICA

### The Dominican Republic

On September 16, a local news outlet released a note stating that Dominican authorities have culled 45,212 pigs to control the outbreak of ASF, which since May 2021 has spread throughout the 31 provinces of the country. According to data provided to Diario Libre by the Ministry of Agriculture, DOP 1.27 billion (USD \$24.8 million) has been delivered as compensation to 4,414 producers who own the slaughtered animals.

The document provided by the Ministry of Agriculture to Diario Libre indicates that the quarantine system at the port and airport level has been strengthened with the placement of canine duos, as well as incinerators and autoclaves to destroy any seized agricultural products. Travelers' luggage is being scanned at entry and when exiting the country.



Map 1. The distribution of ASF outbreaks in the Dominican Republic since May 2021

Since the beginning of the outbreak, samples from over 4,899 production sites have been taken and processed by Dominican veterinary services. Over 1,627 outbreaks have been confirmed throughout the country. It is important to note that the positive rate has changed since November 2021 (from around 40% to 17%), denoting the progressive efficacy of control efforts across the country. Still, the active spread of the virus throughout the population is of great concern.

In the Dominican Republic, the pig sector generates more than 58,000 direct and indirect jobs and has an infrastructure that exceeds USD \$561 million.

# Regional highlights:





- Ecuador | September 23: Ecuadorian authorities released an official communication on ProMED regarding the earlier report on the case of an undiagnosed disease on a domestic pig.
  - "On 7 Sep 2022, an alert was received by local media related to a suspicion of 0 classical swine fever (CSF) in the province of Esmeraldas, canton San Lorenzo. Mataje parish, which after the epidemiological investigation [it] was learned that 10 animals died 8 months ago with respiratory signs [AGROCALIDAD\* was not notified at the time]. AGROCALIDAD responded to this alert through the animal health inspectors of the province. They immediately mobilized to the area, where it was found the susceptible population was 51 pigs, which did not show clinical signs of any officially controlled diseases. According to the testing protocol, 24 pigs were sampled for the diagnosis of classical swine fever (CSF). According to the diagnostic algorithm in the country, any sample suspected of CSF is also analyzed for African swine fever (ASF) as part of the routine surveillance established for this disease in the country. According to the results of the molecular biology laboratory of the directorate of AGROCALIDAD Animal Diagnosis, all samples analyzed were negative for CSF and ASF under the RT-PCR technique. AGROCALIDAD maintains [CSF control] using identification and vaccination of susceptible herds."

#### Communicated by:

Wilson Patricio Almeida Granja, Executive Director - AGROCALIDAD, and Dr. Alexandra Burbano Enriquez, Directora Vigilancia Zoosanitaria, Ecuadorian Agricultural Health Service.

References:

\*Agrocalidad is the Phytosanitary and Zoosanitary Regulation and Control Agency

The "Global Program – Transboundary Animal Diseases" (GF-TADs) is a joint initiative of the WOAH and FAO to help in the fight against the most significant transboundary animal diseases around the world. Because of USDA's continued offer for diagnostic assistance through the Caribbean as well as Central and South America, the GF-TADS is aware of the outbreak and has offered additional diagnostic support from laboratories recognized by WOAH for their ability to confidently process diagnostic samples and test for ASF.

Brazil | September 6: Federal agricultural tax auditors of the International Agricultural Surveillance Service (Vigiagro), at the Rio de Janeiro International Airport (Galeão), <u>seized 5.6 kg of pork products from Russia</u>, a country that currently has outbreaks of ASF. Salamis, sausages, and other pork products were found in passenger luggage arriving from Russia. Since the alert for the risk of re-introduction of the disease was issued in July last year, when the first outbreaks were identified in the Dominican Republic, Brazil has been taking extra precautions at its points of entry. The Union of Federal Agricultural Tax Auditors (ANFFA Sindical) reinforces that passengers coming from countries with outbreaks of diseases and pests of agricultural interest should always be seen as a target of agricultural surveillance. "Investments in intelligence and tools to improve the selection of targets are essential for the protection of Brazilian agricultural production," highlights Janus Pablo, president of ANFFA. In addition, he warns of the need to expand the number of federal agricultural tax auditors throughout the country, which will also ensure greater efficiency in these agricultural protection and defense actions. According to the Union, today, there is a shortage of almost 2,000 officers in Brazil.

ASIA





In September, five countries - India, Malaysia, The Philippines, South Korea, and Vietnam - reported ASF outbreaks in domestic swine, while only South Korea reported positive cases in wild boars.



Map 2. African swine fever situation in Asia: September 28, 2022 (Source: FAO EMPRES-i)

# Regional highlights

• **Taiwan | September 13:** a washed-up pig carcass was found by the Coast Guard Patrol on the shoreline near Jinning Township's Housha Village, Kinmen County. Disease control officials collected samples from the carcass, incinerated and buried it on site. However, testing showed ASF positive results. The initiated veterinary inspection of eight pig farms in a 3-kilometers radius did not find any trace of the disease in the swine population. Nevertheless, a one-week transportation ban of live pigs, as well as fresh and processed pork or pork products from Kinmen to other parts of Taiwan has been imposed as a precaution.

According to the county government, it is not unusual to find pig carcasses among garbage that occasionally washes ashore in Kinmen, due to its close proximity to China. Kinmen County is very close to Fujian Province (China) and Xiamen City in mainland China, and is close to the Jiulong River and other outlets to the sea. Occasionally dead pigs have been found floating along the coast of Kinmen County with garbage. In May 2021, another ASF-infected pig carcass was washed up on the coast in Kinmen County.

- South Korea | September 19: After only two outbreaks were reported in the country this year until August, four new outbreaks were reported this month, requiring immediate ASF containment measures.
  - 1st outbreak | May 26: On a farm in South Korea's northeastern county of Hongcheon in Gangwon Province. After confirmation, all 1,500 animals were slaughtered in order to contain the spread of the pathogen.





- 2nd outbreak | August 18: The second outbreak took place in Yanggu, a county located about 110 miles (175 kilometers) northeast of Seoul in the east of the same Gangwon Province, affecting a farm of 5,610 pigs.
- 3rd and 4th outbreaks | September 19 20: Roughly a month after the second outbreak, ASF hit a farm with 7,000 pigs in Chuncheon, 53 miles (85 kilometers) northeast of Seoul. The investigation was prompted by the farmer's report, and the Gangwon Veterinary Service Laboratory confirmed the results. To prevent the further spread of the disease, in addition to the on-farm measures (disinfection and slaughter of all susceptible animals), the government issued a 24-hour standstill order on pig farms and related facilities in Gangwon Province and planned to carry out an in-depth inspection into 43 adjacent farms and clinical tests on all of around 200 pig farms in the province. On September 20, another ASF outbreak was reported on a farm in the same city. According to the Ministry of Food, Agriculture, Forestry, and Fisheries, the virus was detected on a farm (6,5000 pigs) located within a 10-kilometer radius from the farm, where the outbreak was detected on September 19.
- 5th and 6th outbreaks | September 28 29: The last two outbreaks were reported at two pig farms in Gimpo and Paju, Gyeonggi Province, marking the first outbreaks in the province since October 2019. On a pig farm in Gimpo, located 15 miles (24 kilometers) west of Seoul, 3,000 pigs were raised, whereas on a pig farm in Paju, located 19 miles (30 kilometers) north of Seoul 700. Prime Minister Han instructed the agriculture ministry to swiftly implement containment measures, including the culling of some 15,000 pigs and restriction of movement. He also urged tight vigilance in areas where ASF cases have recently been reported or adjacent to affected farms. As he mentioned, the situation in Gyeonggi Province is more stringent than ever because of the high concentration of pig farms.

<u>Authorities highlighted</u> that the current ASF situation is not likely to affect the country's pork supply, as the number of pigs to be culled this time accounts for about 0.06 percent of the total pigs currently being raised in the country.

• **Malaysia | September 19:** two commercial pig farms report ASF outbreaks in the Kerian district, northern Perak. The Department of veterinary services ordered immediate culling of all of the remaining pig population at both farms, isolation of farms and transportation ban of any pigs, and movement of vehicles. Surveillance, clinical inspections, and sampling at other pig farms in the vicinity were carried out as well.

Earlier this year, three commercial farms with over 3,000 pigs tested positive for ASF. Later, on March 27, the disease was confirmed in a commercial pig farm in Hilir Perak, and on April 4 - on two more commercial farms in Batang Padang.

- India | ASF hits new districts while spreading across the country
  - Mizoram | Since March 2022 ASF has killed around 25,260 pigs in all the 11 districts of the northeastern state Mizoram. According to the officials from the state Animal Husbandry and Veterinary Department, the ASF outbreak has been reported in at least 239 villages in all the 11 districts across the state, out of which Aizawl is the worst-hit with around 10,780 pigs dead, followed by Lunglei (4,135), Serchhip (3,500) and Mamit (2,880). As noted by the experts, the outbreak may have been caused by pigs or pork imported from neighboring Myanmar, Bangladesh and the adjoining state of Meghalaya. (Map 3; Ref 1).
  - Punjab | On September 1, the disease was registered for the first time in Nawanshahr district of Punjab state, where three pigs were found dead and tested positive for ASF. The state government has declared a colony of Nawanshahr district as ASF-affected zone and notified the area as an "infected zone". According to the action plan of the government, the pigs within a 1-kilometer radius from the affected colony have to be slaughtered. (Map 3; Ref 2)

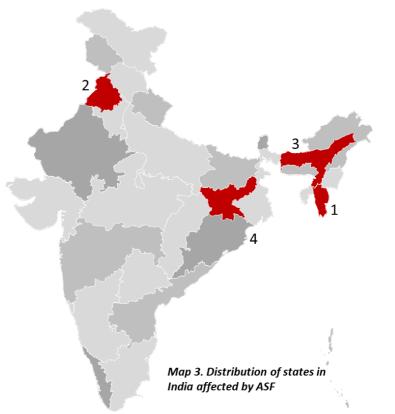




On September 7 another district in Punjab state reported its first outbreak. Thus, ASF was confirmed in the Talwandi Aklia of Mansa district. Local authorities have strictly enforced restrictions and declared 0- to 1-kilometer area of the epicenter as an "infected zone" and 1- to 10-kilometer (9-kilometer) area as a "surveillance zone" to prevent the spread of the disease in the district. The departmental officials have also been instructed to ensure movement restrictions for live/dead pig (including feral or wild pigs), unprocessed pig meat, feed or any material/goods from the pig farms or backyard farms into the infected zone and trade of any pig or pig products which is known to be infected with ASF on the market. To prevent the disease in the state, as many as 735 swine have been culled in four ASF affected districts i.e. Patiala (471), Fatehgarh Sahib (68), SBS Nagar (176) and Fazilka (20) as of September 7. Another ASF-hit zone was declared in the Faridkot city (Faridkot district, Punjab state) on September 9. This time Faridkot city market Arra was declared an ASF-affected zone after confirmation of ASF in samples collected from the pigs found dead in the area. On September 10, ASF-affected zone was declared in Lalewal village of SBS Nagar (Nawanshahr) district. Restrictions under the provisions of The Prevention and

Control of Infectious and Contagious Diseases in Animals Act, 2009 and the National Action Plan for Control, Containment and Eradication of African Swine Fever (June 2020) have been strictly imposed, infected zones and surveillance zones were notified. On September 15. ASF was confirmed for the first time in a swine sample sent from village Dhanaula of Barnala district.

According to the Animal Husbandry Minister as of **September 15**, after completing swine culling in declared infected zones to prevent further spread of the disease in the districts of Patiala, Fatehgarh Sahib, SBS Nagar, Fazilka, Faridkot and Mansa, all the



samples sent again from these areas have been found negative.

Assam (3) | On <u>September 2</u>, ASF hit the bio-secure environment of the Assam government's pig-breeding farm and the ICAR-National Research Center on Pig (NRCP), both in Guwahati. This has resulted in the death of three pigs and culling of approximately 292. It is unclear how the virus entered the facility but this points to lapses in biosecurity measures.

On **September 21**, two new epicenters of ASF were detected in the Lakhimpur and Hailakandi districts. The <u>Directorate of Animal Husbandry and Veterinary</u> detected six ASF epicenters in August this year, leading to the death of 163 pigs, besides the culling of 793. The total number of ASF epicenters detected in the state since 2020 is 84. While ASF claimed 41,164 pigs, the directorate culled 2,507 since 2020. The disease affected 14,179 pig farming families. (Map 3; Ref 3)





- Jharkhand (Map 4) | Since July 27, deaths of pigs began to surface at Birsa Agriculture University (BAU) run-pig breeding center in Ranchi followed by mass deaths in different districts. As ASF has wiped out a majority of pigs in Ranchi city, the local government experiences difficulties with carcass disposal mainly due to the lack of carcass pickers. The carcasses left on public roads have become a matter of concern for the people. Recently, around 20 dead pigs were found decomposing in the open Harmu River. According to the guidelines released by the Department of Agriculture, Animal Husbandry & Co-operative on August 18, 2022, all pigs which died of ASF should be buried at least 1-1.5 meters below the land surface. Moreover, before burying, a good amount of limestone powder and sand must be poured on the carcass and then must be buried with mud. To take the situation under control, on September 10, the civic body announced the setting up of a control room and issued two helpline numbers for animal owners and the general public to report casualties for safe disposal of the carcass. The state animal husbandry director mentioned that since the outbreak of the disease, over 1000 pig carcasses have been disposed of by the state animal husbandry department. (Map 3; Ref 4).
- Thailand | September 27: The Livestock Development Department destroyed 24 tons of frozen pork smuggled from Brazil. Whereas neighboring countries report outbreaks of ASF, Thailand's officials take measures to prevent the spread of the disease. Thus, they buried about 24 tons of frozen pork, which originated in Brazil and was smuggled into Thailand from a neighboring country, like Laos or Cambodia, at a landfill in Phayuha Khiri district of Nakhon Sawan province. Since there is no agreement with Brazil for the export of pork to Thailand and no documentation to verify the legal importation of the pork, the Livestock Development Department is authorized to destroy it. Overall, Thailand's customs officials seized about 44.2 tons of smuggled frozen pork in September, including eight tonnes in Maha Sarakham on September 8, 24 tonnes in Samut Prakan on September 11, and 12.2 tonnes in Songkhla on September 14. Pork smuggling has been an issue repeatedly in Thailand since the pork shortage at the beginning of the year.

# EUROPE

In September (09/05/2022 - 09/28/2022) seven countries (Poland, Romania, Serbia, North Macedonia, Lithuania, Italy, and Russia) reported 51 outbreaks in domestic pigs. According to the WOAH WAHIS, European Commission Animal Disease Information System (ADIS), WOAH-WAHIS, and EMPRES-i FAO, no further reports were received from Latvia, Moldova, and Ukraine). However, Serbia (n=19) and Italy (n=1) were added to the list. Compared to the previous month, the number of outbreaks reduced 1.4 times (n=71 in August).

ASF in wild boars reported 11 countries (Germany, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Slovakia, Bulgaria, Italy, and Russia), bringing the total number of outbreaks to 297. Estonia and Moldova did not report further outbreaks. Instead, the list was added by Bulgaria (n=2) and Serbia (n=18). Overall, the number of outbreaks decreased 1.5 times (n=433 in August). The largest number of outbreaks of wild boars was registered in Latvia (n=89), Poland (n=72), and Germany (n=58).

According to EU ADIS, 5393 outbreaks in wild boars and 407 in domestic pigs, affecting 14 and 12 countries, respectively, were registered this year (September 25).

**Regional Highlights:** 





- Lithuania | September 15: the first ASF outbreak in domestic pigs in the Ukmerge district. The disease was registered on a private farm in the village of Gružiai; three pigs and 12 piglets were slaughtered. So far, the ASFV has been detected in the area only in wild boars. According to officials, the disease most likely came from the forest: on the territory of Siesikai and Taujenai parishes, where most of the wild boars infected with ASF were found.
- Russia | September 28: 61 ongoing outbreaks: 36 in domestic pigs and 25 in wild boars.
  - $\cap$ Kaliningrad region (Map 4). Since the first outbreak on July 27, 2022, in one of the farms in the village of Krasnolesye, Nesterovsky district, ASF has quickly spread across the region's territory. Thus, in August, the virus infected 20 pigs at a meat processing company in the village of Pokrovskoye, Chernyakhovsky district, and by the end of the month, the veterinary services confirmed the diagnosis in 179 domestic pigs across three districts and 10 wild boars across four districts. As a response to the outbreak, Ltd, Baltic Meat Company Three, was forced to slaughter 24,786 pigs, and another 22 animals were culled in backyard farms. As of September 6, nine diseased wild boars were reported in Nesterovsky, Ozersky, and Krasnoznamensky districts. Among domestic animals, eight cases were registered in the Nesterovsky district, one each in the Krasnoznamensky and Chernyakhovsky districts. According to the regional Ministry of Agriculture, the outbreak was caused by the contact of domestic animals with infected wild boars, as the region borders Poland and Lithuania, in which the disease was registered. It is impossible to determine where exactly the virus entered the wild fauna of the region as the migration of wild boar, especially during the rut period, can reach distances of up to 300 km. Cases of infection of domestic pigs through indirect contact - infected corn - as wild boars are attracted to corn fields were also reported. Another contributing factor to the spread of the disease was the illegal burial of 66 infected pigs near the farm in the Nesterovsky district. As reported on September 21, during the summer, a mass death of pigs caused by ASF occurred on a farm. However, the owner deliberately did not inform the veterinary service about the emergency and did not close the entrance to the farm for outsiders. Instead, he arranged a burial ground for dead pigs in the farm's neighborhood, which led to new outbreaks of ASF in the region.



Map 4. Kaliningrad region, Russia

• **Kaluga oblast.** First outbreak in 2022 was registered on a farm in the Fotyanovo village, Iznoskovsky district on September 3. According to veterinary specialists, the





owner of the farm grossly violated the veterinary requirements. Overall, 55 pigs, as well as 350 sheep and 80 cattle were raised on the farm. Although pigs have been kept on the farm for more than a year, the animals were not listed in the household book of the administration of the rural settlement.

# **References:**

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

# AMERICA

The Dominican Republic

SITUACIÓN ACTUAL DE FIEBRE PORCINA AFRICANA - Informe Técnico - Semanas Epidemiológicas 37-22 https://promedmail.org/promed-post/?id=20220917.8705638

Brazil

https://anffasindical.org.br/index.php/noticias/noticias/3997-apreensao-de-carne-suina-em-aeroporto-dorj-acende-alerta-contra-peste-suina-africana

Ecuador

https://promedmail.org/promed-post/?id=8705816

ASIA & OCEANIA

#### Taiwan

Pig carcass found in Kinmen tests positive for African swine fever

Another ASF-positive pig washes ashore in Taiwan

# South Korea

Korea reports new African swine fever case in about month

ASF Case Confirmed in Pig Farm in Gangwon Province

African swine fever case found on South Korea pig farm

Korea issues 48-hour standstill over African swine fever case

PM orders tight vigilance against African swine fever

PM calls for swift containment measures against African swine fever

<u>ASF outbreak</u>(Paju)

ASF outbreak (Pyeongtaek)

South Korea reports outbreak of African swine fever

# Malaysia

African Swine Fever Outbreak Reported At 2 M'sia Farms, Authorities Order Culling Of Pigs African swine fever detected in over 3,000 pigs in Perak

#### India

ASF kills 25,260 pigs in Mizoram; causes Rs 121 cr loss Nawanshahr colony declared African swine fever-hit zone

ASF hits ICAR centre in Assam, state govt's farm; 292 pigs culled

African Swine fever confirmed in samples from village Talwandi Akila of District Mansa

Faridkot's Aara market, Nawanshahr's Lalewal village declared ASF affected

Amid pigs' death in Ranchi, civic body lacks carcass pickers

Civic body on alert after mass pig deaths in city

African Swine Fever confirmed in swine sample from Dhanaula in Barnala district

# Thailand

24 tonnes of pork smuggled from Brazil destroyed to prevent spread of swine flu in Thailand Amid flu fears, Thailand destroys 24 tonnes of smuggled pork EUROPE

As of September 25, 2022, the following changes in the epizootic situation have occurred on the territory of the Russian Federation.

ASF epidemiological situation in the Russian Federation as of September 28, 2022





Royal UVL brings information about the epizootic situation in the Russian Federation as of September 18, 2022.

Where it was detected and how many were infected: the situation with ASF in the Kaliningrad region Nearly 25,000 pigs were slaughtered due to ASF in the Kaliningrad region

In Kaliningrad, due to the outbreak of ASF, they began to destroy the number of pigs

First outbreak of African swine fever discovered near Kaluga in 2022

Lithuania

African swine fever - already on a private farm

The GSDMR team compiles information drawn from multiple national (Ministries of Agriculture or Livestock, Local governments, and international sources (WOAH, FAO, DEFRA, EC, etc.), as well as peer-reviewed scientific articles. The team makes every effort to ensure but does not guarantee the accuracy, completeness, or authenticity of the information. The designation employed and the presentation of material on maps and graphics do not imply the expression of any opinion whatsoever on the part of the GSDMR team concerning the legal or constitutional status of any country, territory, or sea area or concerning the delimitation of frontiers.

Any inquiries regarding this publication should be sent to us at SwineGlobal@umn.edu