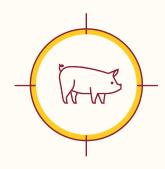


Swine Disease Global Surveillance Report

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 generated through a systematic process that involves screening various official data sources, including government and international organization websites, as well as softer sources such as blogs, newspapers, and unstructured electronic information from around the world. These data are then curated to create a raw repository.

Subsequently, a multi-criteria rubric is applied to evaluate each event. This rubric assesses factors like novelty and the potential direct and indirect financial impacts on the US market. The outcome of this rubric application is a final score assigned to each event.

These final scores, along with an epidemiological interpretation of the event's context, are published.

The interpretation encompasses details like the credibility of the information, the scale and speed of the outbreak, its connectedness to other factors, and the local capacity to respond.

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

Tuesday, March 5, 2024, to Monday, April 1, 2024

Report Highlights

- African Swine Fever in the Dominican Republic: Report on results of surveillance efforts in 2023 and the first quarter of this year.
- China Lifts Ban on Russian Pork: Russia has made its first pork shipment to China in 15 years, sending 27 tonnes of pork following China's lifting of ASF restrictions on Russia in September 2023.
- Streptococcus Suis: Fatal outbreak linked to raw pork consumption in Thailand.
- **Pseudorabies Virus**: Authorities in France have reported a resurgence of Aujeszky's disease, with the latest update indicating seven outbreaks since September 2023.

Surveillance at Points of Entry

- Padua, Italy: Local Carabinieri seized 2.5 tons of pork meat contaminated with ASF from China.
- **Muang district, Thailand:** Ground pork samples obtained during a government raid on unlicensed factories in Nakhon Pathom province tested positive for ASF.

APRIL 2024 - OUTBREAKS BRIEF

R	Location	Report Date	Dx	Impact
2	21 provinces affected, Vietnam	3/5	ASF	Since the start of the year, 87 outbreaks have been reported - a 35% increase compared to the same period from 2023.
2	Tarn-et-Garonne, Southern region, close to Toulouse, France	3/14	PRV	Outbreaks in domestic pigs - 26 cases in a farm with 93 pigs.
1	Saykhan District in Selegen Province, Mongolia	3/14	ASF	Backyard farm - seven cases.
1	Multiple locations in Central Papua Province, Indonesia	Multiple dates	ASF	Multiple outbreaks - over 6000 pigs dead - representing 54% of the local population.
1	Provinces of Asti and Spezia, Italy	3/12	ASF	First reported cases in the region (in wild boar).
1	Northern region of Liberec, Czech Republic	3/8	ASF	First eight cases in wild boar.

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

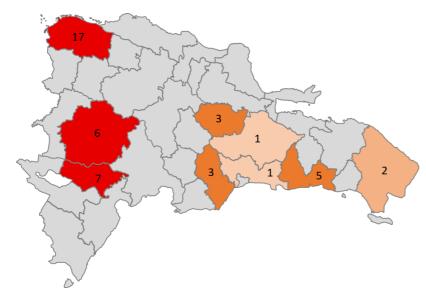
African Swine Fever

THE AMERICAS

Dominican Republic

The Epidemiology Division, Department of Animal Health (DAH), Directorate of Livestock, Ministry of Agriculture in the Dominican Republic implements the early alert reporting system, where all suspected cases are reported.

In 2023, the LAVECEN (official veterinary laboratory) processed 86,143 samples by molecular diagnosis, confirming 187 ASF outbreaks. Of those samples, 61,744 were from active surveillance.



Since the beginning of the year, 17,380 samples have been processed by Dominican veterinary services, from which 97 tested positive for ASF, confirming 45 outbreaks distributed across nine provinces (Figure 1).

It is important to note that the positive rate has changed from 29% in 2021/2022 to 13.3% in early 2023 to under 1% now (Figure 2), denoting the progressive efficacy of control efforts across the country. Still, the active circulation of the virus throughout the population is of great concern.

Figure 1. The distribution of reports of confirmed cases in the Dominican Republic since the start of 2024

Background

March 2023 | The Ministry of Agriculture published a new resolution, establishing mandatory sampling every 21 days in all farms with at least 25 pigs. Failure to comply will be penalized, and the animals will be confiscated.

According to this resolution, producers must also comply with:

- Mandatory report of any clinical sign compatible with the disease
- Prohibition of repopulation of farms previously affected by ASF



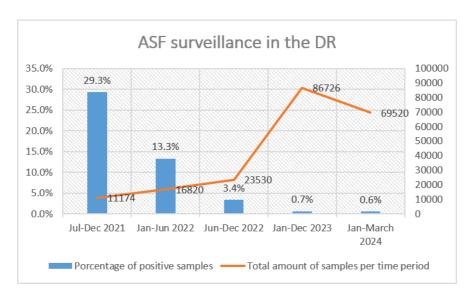


Figure 2. The distribution of results of processed samples for ASF in the Dominican Republic since the beginning of the epidemic (7/21 -3/24).

EUROPE

According to EU ADIS in March, (02/29/2024 - 03/20/2024), four European countries (Bosnia and Herzegovina, Moldova, Romania, and Serbia) reported 13 outbreaks in domestic pigs, illustrating the ongoing decline in the frequency of outbreaks within this demographic across Europe (n=18 and n=26 in February and in January respectively). The distribution of outbreaks in the region is presented in Figure 3.

Over the same time period, 16 European countries (Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Italy, Latvia, Lithuania, Moldova, North Macedonia, Poland, Romania, Serbia, Slovakia, and Ukraine) reported 492 outbreaks in wild boar. The highest number of outbreaks was observed in Poland (n=142) and Italy (n=113). Furthermore, Italy reported the initial occurrence of the disease in new provinces, namely Asti and Spezia.

Regional Highlights

- Czech Republic | March 8: Four confirmed ASF cases in wild boars in 2024 outside the
 designated infected zone in the northern region of Liberec. As a result, the infected zone
 will be extended, and adjustments to hunting regulations and increased shooting fees,
 including other measures, have been implemented to minimize the spread of ASF. The
 disease is still found only in wild boar and has never been confirmed in domestic pig farms in
 the country.
- Italy | March 12: Three sub-commissioners were appointed by the Ministry of Agriculture in response to the ongoing challenge posed by ASF to enhance collaboration between the state and regions. This strategic move aims to strengthen control measures and synergies in addressing the spread of ASF. The Ministry of Defense is actively involved in containing the wild boar population, employing technological advancements such as drones. However, it is acknowledged that addressing the ASF issue will require sustained efforts due to the significant surplus inherited. Coldiretti, an agricultural association, welcomes sub-commissioners' appointments but emphasizes the need for swift action, particularly in high-priority pig farming areas. They advocate for timely compensation for affected businesses and increased support for biosecurity investments. Additionally, Coldiretti supports the





establishment of an ASF restriction zone and calls for normalized marketing practices to prevent speculation by specific slaughterhouses.

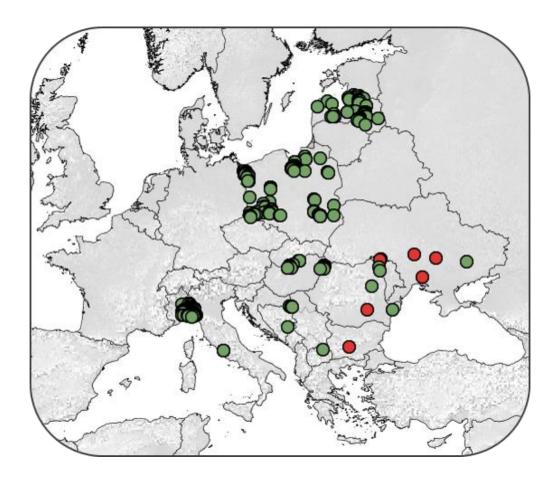


Figure 3. The distribution of African swine fever outbreaks in Europe (in red: domestic pigs; in green: wild boar) from March 5, 2024, to April 1, 2024. (Source: FAO EMPRES-i).

Meanwhile, in Piedmont, efforts to combat ASF have intensified, resulting in a significant increase in the slaughter of wild boars. Between 2019 and 2023, the number of wild boars killed more than tripled, reaching over 40,000 by 2023. This achievement reflects the region's commitment to containment activities. Furthermore, investments in biosecurity measures have led to a substantial portion of Piedmontese pigs being bred under controlled conditions, contributing to disease control. Reducing wildlife damage is also noteworthy, with compensation requests decreasing by approximately 30% in 2023. Overall, these efforts underscore the region's proactive approach and collaborative efforts to address the challenges posed by ASF.

As of March 24, 2024, Italy has recorded 1,391 ASF cases. Liguria accounts for 748 cases among the regions affected by ASF, while Piedmont follows closely with 643 cases. **The provinces of Asti**, the Piedmont region bordering Liguria, **and Spezia**, situated in Liguria along the Mediterranean coast, **have reported their first cases in the towns of Calamandrana and Varese Ligure**, **respectively**. Notably, other provinces in Liguria, such as Genoa and Savona, have previously identified ASF cases in wild boar. The tally of municipalities with at least one confirmed ASF case has now climbed to 144. Despite these developments, the number of ASF outbreaks among Italy's domestic pig population remains unchanged at 21, according to the veterinary authority.





In January 2022, the initial occurrences of ASF on the Italian mainland were observed in the country's northwest region.

Moldova | March 15: The first ASF case reported in domestic pigs this year. The disease
was detected in a domestic pig in the village of Codreni Noi, located in the Donduseni district
in the north of the country. Prompt quarantine measures have been implemented, and
protection and monitoring zones have been established accordingly. Since the onset of 2024,
Moldova has documented five ASF outbreaks, with four identified in wild boars and one in a
domestic pig.

ASIA

Three countries (India, Vietnam, and Indonesia) reported ASF outbreaks in domestic swine in March, while Mongolia officially reported an outbreak that occurred in late February. South Korea reported ASF cases in wild boars (Figure 4).

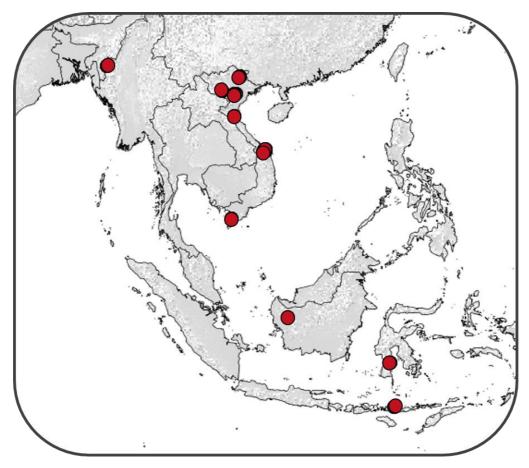


Figure 4. ASF outbreak distribution in domestic pigs in Asia (a 5, 2024). (in red: domestic pigs) (Source: FAO EMPRES-i - Data sources: Republic of Korea, Vietnam: WAHIS and media information, The Philippines: WAHIS and government websites, Indonesia: official database "isikhnas,")

Regional Highlights



- Mongolia | March 14: According to a follow-up report submitted to WOAH, Mongolia documented an outbreak of ASF on February 25 at a farm located in Saykhan, Selenge. The outbreak involved seven cases, resulting in three deaths, with seven susceptible animals identified. Subsequently, four pigs were culled and disposed of as part of containment measures. As of March 2024, this outbreak remains unresolved. A previous ASF outbreak occurred in Mongolia starting on July 29, 2023, and concluding on September 4, 2023. Another outbreak was reported on August 8, 2023, ending on September 7, 2023. Combined, these three outbreaks led to 69 deaths and 73 cases among 358 susceptible domestic pigs.
- Indonesia | March 5-19: National authorities have reported new outbreaks of ASF in three provinces: West Kalimantan, South Sulawesi, and Nusa Tenggara Timur. However, detailed information regarding these outbreaks has not yet been provided. Additionally, in Central Papua Province, ASF cases have been detected in Mimika Regency since January 2024. The number of pig deaths reported from the five districts is on the rise, with 2,938 deaths recorded by February 27, 3,500 by March 4, and 4,463 by March 13. Of the total pig population of around 11,000 in Mimika, approximately 6,000 pigs have died since January 2024.
- Vietnam | March 28: Local media reported that Lam Dong Province is responding urgently to an outbreak of ASF after detecting 24 dead pig-boar hybrids infected with the disease at a farm in Lac Duong District. The provincial authorities have issued directives for prompt action, including culling infected pigs and implementing containment measures. The farm, Van Truong Thanh Limited Company, reported initial signs of the disease in sows, leading to confirmatory tests and subsequent culling of infected pigs. Authorities are mobilizing resources to prevent further spread and have advised farmers not to sell, slaughter, or dispose of infected pigs. Additionally, vaccination campaigns are being prepared to safeguard livestock across the district.
- India | March 20: Vanzau village in Mizoram state declared an ASF infected area. Vanzau village in Champhai, Mizoram State, was officially declared an infected area for pig management following the confirmation of the ASF outbreak. Strict measures have been imposed, including a prohibition on the movement and sale of pigs or pig products, extensive disinfection using lime in affected areas, and mandatory culling and disposal of infected pigs. In February, a different village, Leithum was also declared an ASF infected area by the authorities. Details about the extent of the outbreaks in Mizoram state are however not available online. It is estimated that from 2020 to 2023, ASF has affected over 19,000 farmers in Mizoram, with about 47,000 domestic pigs dying due to ASF infection and a further 25,000 pigs culled to reduce disease spread. The economic loss due to ASF in this period of four years is estimated at US \$16 million.

AFRICA

In March, Angola and South Africa have both reported outbreaks of ASF to WOAH. In Angola, the ASF virus has been detected on a pig farm for the first time in nearly seven years, marking a concerning development. Meanwhile, South Africa has reported outbreaks of ASF in domestic swine across four provinces, which occurred in January and February. Four of the seven outbreaks were in farms, three located in Gauteng, and one in Free State, and each had a herd of between 45 and 1,000 domestic swine. The remaining outbreaks were confirmed in village herds, each comprising between 100 and 250 pigs in Eastern Cape and Western Cape

Regional Highlights

Angola | March 26: ASF virus has re-emerged in the Republic of Angola for the first time since
June 2017, with tests conducted in neighboring Namibia confirming its presence in domestic
pigs, as reported to WOAH. This latest outbreak, noted to have started on February 2, 2024,
affected a susceptible population of 7,406 pigs on a farm in Humpata, Huíla. To contain the





spread, 1,071 pigs were slaughtered for commercial use, while the remaining 6335 were culled and their carcasses disposed of. The exact source of the virus remains uncertain, although illegal animal movements or fomites are suspected sources of infection.

Classical Swine Fever: Promising Vaccine for Classical Swine Fever Nears Completion

India | March 26: Indian Institute of Technology Guwahati has achieved a significant milestone by successfully transferring technology for India's first recombinant vaccine for Swine Fever Virus to BioMed Pvt Ltd. This breakthrough addresses a crucial gap in India's vaccine landscape and marks a milestone in combating classical swine fever, a significant threat to the country's pig industry. The innovative vaccine, developed through collaborative efforts, utilizes a reverse genetic platform pioneered at IIT Guwahati. Researchers have devised a cost-effective method to induce immunity against the classical swine fever virus by harnessing the Newcastle disease virus as a carrier. The vaccine is currently undergoing testing and analysis for licensure.

Foot-and-Mouth Disease

Africa

In March 2024, three countries (Libya, South Africa, and Zimbabwe) reported new FMD outbreaks to WOAH. In Uganda, to control the current wave of FMD outbreaks, the government announced a strict ban on the sale of live animals and meat in the capital, Kampala.

Regional Highlights

- Libya | March 26: A follow-up report from WOAH indicates that Libya is still grappling with 66 unresolved outbreaks of FMD among cattle, sheep, and goats. In March alone, new outbreaks emerged in six cities: Al Marj, Al Marqab, Az Zawiyah, Tripoli, An Nuqat al Khams, and Al Jabal al Akhdar. These outbreaks resulted in four cases and two deaths among cattle, with a susceptible population of 12; six cases and three deaths among sheep, with 50 susceptible animals; and 10 cases and seven deaths among a mixed herd of sheep and goats, with 65 susceptible animals. Since the initial outbreak on December 5, 2023, a total of 1,050 deaths, 4,272 cases, and 14,873 susceptible sheep, cattle, and goats have been recorded. These outbreaks are attributed to the FMD serotype O.
- South Africa | March 18: As part of a disease event that started in January 2024, within South Africa's foot-and-mouth disease protection zone, three new outbreaks were reported in Mpumalanga state in March. These outbreaks occurred in three locations all in Ehlanzeni, City of Mbombela, with 18 cases reported among 1,646 susceptible domestic cattle. The FMD serotype responsible for these outbreaks was confirmed as SAT1 and vaccination is yet to be applied.
- Zimbabwe | March 24: FMD outbreaks affecting two neighboring districts, Manicaland and Mashonaland East. The virus serotype has not yet been identified. The cattle in these districts share grazing and watering points. The cause of the outbreaks is believed to be stray buffaloes that have been sighted in the affected communal areas. The disease spread due to interactions between the cattle at the grazing and watering points. In Manicaland two outbreaks occurred, one at Chiriga Dip Tank with 18 cases and 1105 susceptible cattle reported. The second outbreak occurred at Chapwanya Dip tank where one death, 13 cases, and 1206 susceptible cattle were reported. In Mashonaland East, a single outbreak occurred at Banza Dip Tank with 24 cases and 941 susceptible cattle reported. A total of 29,307 cattle have been





vaccinated in response to these outbreaks although the serotypes used in the vaccine have not been mentioned. In Zimbabwe FMD SAT serotypes are known to be present, although the country is at risk of FMD serotype O, which has spread to neighboring countries of Zambia and Mozambique.

• Uganda | March 08: In response to a concerning outbreak of FMD in Uganda, the government has swiftly banned the sale and movement of meat and livestock within Kampala, causing uncertainty for farmers, butchers, and related businesses. The ban, affecting cattle, goats, sheep, and pigs, aims to curb the spread of this highly contagious viral disease. Efforts to control the outbreak include mass vaccination campaigns, but concerns remain about counterfeit vaccines and the cost of vaccination. The closure of livestock markets and slaughterhouses has affected income, especially for small-scale farmers and traders. This underscores the need for comprehensive strategies that balance public health with economic stability.

Porcine Reproductive and Respiratory Syndrome

Cases of PRRS have resurfaced at a farm in eastern Estonia after an absence of over one and a half years. Out of 609 tested pigs, 27 were found positive for the virus during routine disease surveillance, although none displayed clinical symptoms. The infection was attributed to the introduction of new animals through legal pig movements. In response, all pigs at the affected farm will be slaughtered, and comprehensive cleaning and disinfection measures will be implemented, as reported to the WOAH.

According to WOAH notifications, Estonia remains the sole country reporting ongoing cases of PRRS. Since 2020, Nepal and Switzerland have each documented two outbreaks during disease waves that have since been officially declared resolved.

Fact box: WOAH's recommendation on PRRS control

- PRRS was first spotted in the United States back in 1987, becoming a major concern for intensively raised pig farming in North America and Europe and increasingly problematic in Asia.
- Symptoms include reproductive issues, pneumonia, and higher susceptibility to secondary infections.
- The virus comes in various strains, leading to different levels of severity in symptoms.
- PRRS costs the United States \$560 million each year due to breeding problems in adult sows and deadly lung infections in young pigs.
- The virus poses no threat to human health.
- Prevention is crucial for controlling PRRS, with a focus on stopping the virus from entering farms
- Farms in PRRS-affected areas should ensure that all replacement breeding stock has a verified health status and quarantine them for 45-60 days upon arrival.
- Commercial vaccines are accessible and efficient in managing PRRS outbreaks.
- In the event of an outbreak, WOAH advises depopulating the premises, safely disposing of carcasses and materials, and implementing rigorous cleaning and disinfection protocols.





Aujesky's Disease - Pseudorabies

France

Authorities have reported a resurgence of Aujeszky's disease, with the latest update indicating seven outbreaks since September 2023. The affected herds primarily consist of small farms and backyards, with over 400 animals impacted. These outbreaks have been dispersed across five regions, mainly in the southern half of mainland France, with one case identified in the northern region of Hauts-de-France. The source of infection remains unknown, according to official notifications to WOAH. Earlier this year, France reported the deaths of two hunting dogs due to Aujeszky's disease following their contact with an infected wild boar (see February report for details).

Assessing the Economic Impact of Japanese Encephalitis Virus on US Pork Production: Implications and Research Needs

An economic assessment funded by SHIC examined the potential impact of the Japanese encephalitis virus on the US pork industry, estimating that 32% of the US sow herd could be at risk for infection. The study predicted sow herd losses ranging from 1-2% of production, with potential economic losses between \$306 million and \$612 million, assuming no price increase due to reduced output. The investigation compared critical aspects of the US and Australian pork industries, highlighting differences in inventory size and ventilation types. Despite the potential for significant production losses, the study emphasizes the critical importance of continued prevention and preparedness efforts for JEV. It underscores key findings from the Australian outbreak, such as identifying reproductive failure and other clinical signs in swine. It emphasizes the lack of a veterinary vaccine for JEV in the US. Additionally, the report calls attention to gaps in understanding and urges further research to inform prevention and control strategies. Critical research is needed to comprehensively understand disease dynamics, develop effective response strategies, and ensure consumer pork safety.

Japanese Encephalitis Virus: Australian Experience

- In early 2022, the JEV outbreak affected over 80 pig farms in four Australian states within a week.
- Clinical signs in swine included reproductive failure, such as abortion, stillbirths, and mummified fetuses, as well as neurological symptoms in piglets.
- 26 presumptive equine cases across the impacted states and a fatal case in an alpaca in South Australia were reported.
- 42 human cases were reported with seven fatalities; only one of those cases had reported occupational exposure to pigs.
- The virus was nationally categorized as a Category 1 Emergency Animal Disease, prompting a coordinated response.
- Retrospective analysis traced the virus back to feral pigs in northern Australia in November 2020, with domestic pigs affected by April 2021.
- By mid-2022, more than 50 positive feral swine were identified, indicating a wide-ranging impact.
- The outbreak's duration and impact varied between farms, with reproductive rates returning to normal after the outbreak subsided in most cases.
- Overall, approximately 60% of the Australian pig industry was impacted, resulting in significant financial losses for affected farms.
- Wet weather conditions in 2023 facilitated the outbreak, indicating favorable conditions for arboviral diseases.
- While efforts were made to control mosquito populations, herd immunity to JEV in Australia





was lacking.

• The outbreak highlighted the importance of continued surveillance and prevention efforts to mitigate future outbreaks.

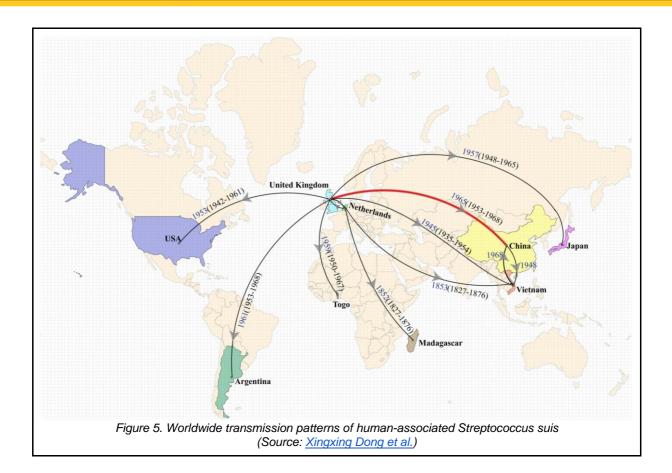
Streptococcus suis: Fatal Outbreak Linked to Raw Pork Consumption in Thailand

An outbreak of *Streptococcus suis* in Thailand has resulted in the deaths of five individuals and infected a total of 82 patients between January and March of this year. Most cases were reported in Nakhon Ratchasima province, with patients primarily aged 65 and above, followed by those aged 25-34 and 35-44. Medical officials attribute the outbreak to the consumption of raw pork and pig blood, popular in local dishes and trending on social media. Symptoms of infection include fever, headache, hearing loss, and respiratory difficulties. Taweechai Wisanuyothin, the director of the Office of Disease Prevention and Control, highlighted the risk of permanent hearing loss associated with *Streptococcus suis* infection. He emphasized the modes of transmission, including through wounds, abrasions, and the conjunctiva. Wisanuyothin advised precautionary measures such as consuming only thoroughly cooked pork, using separate utensils for cooking and eating pork, avoiding the consumption of raw pork with alcohol, purchasing pork from reputable sources, and practicing proper hygiene, including wearing protective clothing, covering wounds when in contact with sick pigs, and thorough hand washing after handling them.

In March 2023, an outbreak of meningitis attributed to *Streptococcus suis* occurred in Bali, Indonesia, with the Provincial Health Service reporting at least 38 human cases identified (See May report).

Streptococcus suis is an emerging bacterial pathogen primarily found in pigs but capable of causing severe human infections, mainly through contact with contaminated pork products. Despite its low prevalence in pigs (despite the carrier rate in pigs reaching close to 100%, the occurrence of Streptococcus suis infection fluctuates over time and typically remains below 5%), human infections, particularly in rural regions, have been increasing, indicating a potential public health concern globally and through genomic analysis of 366 S. suis clinical isolates, including 103 human isolates, a transdisciplinary group of scientists from China and the US identified a new clade, termed the human-associated clade, distinct from pig isolates. The human-associated clade's origin was traced back to Western Europe in the 19th century, with subsequent transcontinental dissemination leading to stable establishment in Asia, where major outbreaks occurred in China in the late 20th century. The analysis suggests that strains from the UK played a significant role in the initial emergence and spread of the human-associated clade (Figure 5).





Surveillance at Points of Entry

Padua, Italy | March 14: 2.5 tons of ASF-contaminated pork meat originating from China were seized by local NAS Carabinieri. Thus, the military division took action against a Chinese shopkeeper for selling meat infected with the ASF virus, imposing a fine and seizing two illegal cold rooms. This incident underscores the importance of strict enforcement measures to prevent the spread of contaminated foodstuffs and protect public health.

Earlier in February 2023, the discovery of ASFV in sausages at an ethnic shop in Udine and meat products in a warehouse in Bologna sparked concerns about illegal imports of animal products into Italy. Subsequent checks on ethnic food products revealed alarming results: out of 300 samples tested from shops across Italy, 81 contained ASF virus DNA, indicating widespread contamination. These products, often labeled inaccurately or falsely as vegan or plant-based, were traced back to Chinese origin, where the import of pork products is prohibited due to ASF outbreaks. The detection of ASF in these products raises concerns about an underground supply chain distributing infected meat across Italy. However, heat treatments applied to these products likely rendered the virus inactive, posing minimal risk to consumers. Despite this, Italy has issued notifications to the European Rapid Alert System for Food and Feed and conducted recalls to address the presence of undeclared meat in Chinese-origin foods. As the control plan initiated in response to the ASF discovery concludes, further investigations are planned to comprehensively assess the extent of ASF virus contamination in Italy.

Muang district, Thailand | March 22: ASF was discovered in ground pork samples obtained during a government raid on three unlicensed factories in Nakhon Pathom province following a complaint that operators had allegedly used the carcasses of pigs that had died from unknown causes to produce packaged ground pork. The Department of Health confirmed the presence of the





ASF virus, prompting the closure of the factories and initiation of testing procedures. Following the discovery, health authorities dispatched teams to inspect the region's pig farms and meat processing facilities to ensure compliance with health regulations. Operators were reminded of the importance of sourcing meat from reputable suppliers and maintaining proper hygiene standards. Additionally, consumers were advised to purchase meat products from reliable sources and ensure thorough cooking to prevent disease spread. In related news, charges were filed against additional companies for alleged involvement in pork smuggling and document falsification, bringing the total under investigation to 11.

Policy Briefs

Russia | March 7: Russia has made its first pork shipment to China in 15 years, sending 27 tonnes of pork following the lifting of ASF restrictions by China in September 2023. This marks a significant development as China remains the world's largest pork importer. Russia aims to secure 5% of the Chinese pork market, which Brazil, Spain, Canada, the United States, Denmark, and the Netherlands currently dominate. Russia's pork industry has transformed from a net importer to being self-sufficient, with exports exceeding 250,000 tonnes in 2023. Trade between Russia and China, minimally impacted by Western sanctions imposed on Moscow, has surged in recent years, reaching \$240 billion in 2023. Additionally, global pork production forecasts for 2024 have been revised down due to lower output in China, the EU, and Brazil, with global pork exports also reduced accordingly.

Canada | March 8: The Government of Canada has allocated \$1.7 million to Animal Health Canada to prevent and prepare for diseases like ASF and FMD. This funding will enhance coordination among stakeholders and agencies, improve animal health systems, and support training and response planning. Specifically, Animal Health Canada will receive funding from Agriculture and Agri-Food Canada and the Canadian Food Inspection Agency to sustain its efforts to prevent ASF outbreaks and strengthen preparedness for ASF and FMD. These include activities such as coordinating wild pig management, refining stakeholder roles, and developing response plans. The Canadian Food Inspection Agency will contribute \$697,950 to Animal Health Canada to support ongoing efforts in analyzing data, providing training, and refining response strategies for ASF and FMD over the next two years.

In July 2023, the Canadian government committed \$57.5 million over five years to establish an FMD vaccine bank and formulate response plans. Furthermore, an additional \$5.6 million in continued funding has been allocated to sustain the initiative beyond the initial five-year period. Additionally, in August, it invested approximately \$694,141 in the Manitoba Pork Council through the African Swine Fever Industry Preparedness Program to enhance preparedness for potential ASF entry into the country (see August and September reports).

USA | March 23: The United States Senate passed a Congressional Review Act resolution to reinstate a ban on beef imports from Paraguay due to concerns about foot-and-mouth disease. For 25 years, the US banned imports of Paraguayan beef due to fears of foot-and-mouth disease outbreaks. However, in November, the US Department of Agriculture lifted this ban. The resolution, led by Senators Tester and Rounds, garnered bipartisan support and highlighted the importance of maintaining high food safety standards. Justin Tupper, president of the US Cattlemen's Association, highlighted concerns about Paraguay's animal health and food safety protocols, citing a lack of US government site visits to Paraguayan meat processing facilities since 2014. Thus, in order for Paraguay to access the US market, approval was required from both the Food Safety and Inspection Service and the Animal and Plant Health Inspection Service. FSIS conducted recent audits throughout the postharvest production chain and determined that Paraguay meets safety standards and poses minimal risk to the US supply chain. However, APHIS conducted risk assessments based on site visits from 2008 and 2014. These assessments were conducted before strict protocols were established in 2017. According to Kent Bacus, National Cattlemen's Beef Association executive director of governmental affairs, it is unclear what specific protocols were followed during these visits or the scientific rigor of the audits conducted during those years.





The US Cattlemen's Association warned that a potential foot-and-mouth disease outbreak could result in up to \$99 billion in economic damages in the US. On the other hand, the Biden administration argues that the USDA conducted a thorough evaluation, indicating a low risk of importing beef from Paraguay. The administration warns that enacting the resolution would undermine established sciencebased decision-making processes and harm US farmers' access to export markets. They also emphasize potential repercussions on bilateral relations with Paraguay and the US's credibility in Latin America. Despite opposition from the White House, the resolution moved to the House for further consideration. The debate reflects broader concerns about US beef production, which faces challenges including drought conditions and rising costs, potentially leading to record-high beef prices.

Brazil | March 25: Expansion of Foot-and-Mouth Disease-Free without Vaccination States. Brazil's agriculture ministry has declared 16 states and the federal district as areas free of foot-andmouth disease without vaccination, aiming to achieve nationwide eradication by 2026. The ministry has also prohibited the storage, sale, and use of vaccines against foot-and-mouth disease in these states, with restrictions on animal and product movement from vaccinated states. The ban will be effective from May 2 until all Brazilian states receive the disease-free status without vaccination from the World Organization for Animal Health.

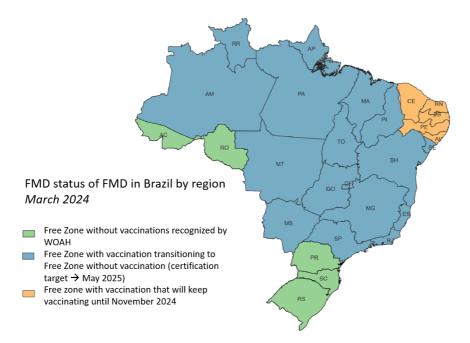


Figure 6. FMD Zoning in Brazil - Status of Each State within the Current National Strategy to Cease Vaccination Against FMD

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

EUROPE Italy

Coldiretti: "It's good to appoint subcommissioners to the PSA but we need to act

Swine fever, three sub-commissioners appointed to strengthen wild boar control Swine fever in Piedmont: slaughter of wild boars more than tripled

Padua, Carabinieri seize 2,5 tons of meat

contaminated by swine fever

THE STRANGE CASE OF SWINE FEVER IN "VEGAN" CHINESE PORK SAUSAGES

ASF spreads to new provinces





Estonia

Estonia, France confirm notifiable diseases in pigs

Czech Republic

African swine fever (ASF) - current information

Moldova

Two cases of swine fever detected in northern Moldova

Russia

Russia sends first pork shipment to China in 15 years

ASIA

Thailand

African Swine Fever found in gov't raid in Thailand's Nakhon Pathom factories

The global emergence of a novel Streptococcus suis clade associated with human infections

India

IIT Guwahati completes technology transfer to roll out the first recombinant vaccine for Swine Fever Virus

Thailand

Streptococcus suis outbreak claims five lives of 82 infected patients

NORTH AMERICA

USA

'Biden butchered this decision': Democrats split over U.S. lifting ban on Paraguay beef imports Montana, North Dakota senators vote to stop

beef imports from Paraguay

Are Paraguay's beef imports safe?

JEV outbreak could carry \$600M price tag for

U.S. pork industry

Potential Impacts of Introduction and

Establishment of Japanese Encephalitis Virus in the United States Swine Herd

Canada

Animal Health Canada receives \$1.7M for livestock disease prevention and preparedness

SOUTH AMERICA

Brazil

Brazil recognizes more states as free of footand-mouth disease without vaccination

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.

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