

# 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 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: [mperezag@umn.edu](mailto:mperezag@umn.edu)

<sup>2</sup>Principal investigator. E-mail: [aperez@umn.edu](mailto:aperez@umn.edu)  
[www.cahfs.umn.edu](http://www.cahfs.umn.edu)

Current and previous reports:

[www.swinehealth.org/global-disease-surveillance-reports/](http://www.swinehealth.org/global-disease-surveillance-reports/)

**Spontaneous  
reporting TOOL**



## Swine Disease Global Surveillance Report

Tuesday, July 4 to Monday, August 1, 2023

### Report Highlights

- **World's pioneering:** Vietnam grants commercial license for the first two domestic vaccines against African swine fever.
- **Canada to create FMD vaccine bank:** Canadian government pledged \$57.5 million CAD (approx \$43.29 million USD) over a five-year period to establish an FMD vaccine bank and develop FMD response
- **ASF keeps expanding in Europe:** Kosovo reported its first outbreak - becoming the 24th country in the region to report. The disease has also re-emerged in Bulgaria, Estonia, and Ukraine.

### Surveillance at Points of Entry

- **Philippines:** Spoiled frozen meat confiscated in Bulacan province - frozen agricultural products with an estimated value of approximately \$639,000.
- **Thailand:** Pork sausages seized at Suvarnabhumi airport - over 18 pounds of a popular Chinese-brand sausage were confiscated from a flight originating in Haikou County, China.

### OUTBREAKS BRIEF

R	Location	Date	Dx	Impact
2	Rouge Municipality, Estonia	7/26	ASF	Two farms affected. Over 9,000 pigs culled.
2	Kilokot, the southwestern part of the country, Kosovo	7/13	ASF	Backyard farm with 22 pigs.
2	Vukovar-Srem County, Croatia	July	ASF	115 outbreaks confirmed - 3,000 pigs culled.
2	Primorsk Krai, Russia	7/7	ASF	Over 100,000 pigs died or were culled in two farms of RusAgro
2	Vukovar-Srijem county (eastern region), Croatia	7/25	ASF	115 outbreaks confirmed, most of them in small backyard farms - over 2400 pigs affected.
1	Lang Son (north region, bordering China) and Hoa Binh (southwest of Hanoi), Vietnam	July	ASF	14 new outbreaks
1	Montana region (northwestern), Bulgaria	7/19	ASF	First outbreak of the year - 1 pig affected in a private farm
1	Gangwon-do, South Korea	7/20	ASF	Over 6,000 pigs 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.*

## African Swine Fever

---

### VACCINES

**July 24 | In a groundbreaking development, the Ministry of Agriculture and Rural Development in Vietnam has officially approved the domestic commercial use of two locally manufactured vaccines against ASF.** With this decision, NAVET-ASFVAC by Navetco Central Veterinary Medicine Company and AVAC ASF LIVE by AVAC Vietnam Joint Stock Company have become the world's first commercial vaccines against this devastating disease.

#### *Next Steps*

According to a government statement, Vietnam's agriculture ministry has requested the two vaccine-producing companies to devise production plans for both domestic sales and export. Given the estimated pig population in Vietnam of 2.2 million sows and a total pig population of approximately 28.6 million, rough estimates suggest that the potential domestic market for these vaccines could exceed 40 million doses per year, depending on the specific vaccine being considered. Indeed, the substantial demand for vaccines in Vietnam presents a significant opportunity for the two companies to play a pivotal role in mitigating the impact of the disease on the swine population. However, it's important to emphasize that this potential market goes beyond the country's borders. Considering the existing regional and international markets, the scope for these vaccines extends far beyond Vietnam.

According to confirmed sources at the Ministry of Agriculture and Rural Development, the vaccines against ASF will be available for purchase by farmers. The estimated price for these vaccines is approximately \$1.80 per dose.

As per the manufacturer's recommendations, the NAVET vaccine is suggested to be administered to piglets between 8 to 10 weeks of age. On the other hand, the AVAC vaccine is recommended to be given to piglets at a younger age, specifically over four weeks of age. It's essential for farmers to adhere to these guidelines to ensure the vaccines' optimal effectiveness and protection against ASF for their pig herds. It is important to note that the duration of immunity provided by each vaccine varies. NAVET vaccine specifies a duration of immunity lasting for six months, whereas AVAC vaccine offers immunity for four months. In both cases, the immunity has been determined by measuring the duration of antibodies through ELISA assay. Monitoring the levels of antibodies helps assess the effectiveness and persistence of the immune response elicited by the vaccines.

#### *Field Evaluation*

From July 2022 to June 2023, NAVETCO supplied and coordinated with specialized agencies to supervise the implementation of NAVET-ASFVAC vaccination in pig herds, ranging from 50 head per household to 2,000 head per farm, across 132 establishments in 23 provinces and cities. The total injection dose administered was 47,435 doses, of which 29,685 doses were closely supervised. Simultaneously, AVAC Vietnam Joint Stock Company successfully completed the vaccination plan in partnership with CP Vietnam (Charoen Pokphand Foods), administering 605,211 doses of their swine vaccine at 596 farms and facilities of varying sizes in 34 provinces and cities, playing a vital role in safeguarding the swine population against ASF.

Dr. Phan Quang Minh, Deputy Director General of the Department of Animal Health, said that up to this point, the pilot vaccination of 600,000 doses of ASF vaccine on a small scale of the two companies NAVETCO and AVAC JSC Vietnam has given positive results.

#### *Efficacy and Potency Trials*

At the National Center for Veterinary Drugs and Vaccines Control I, rigorous safety and potency trials were conducted for 10 batches of each vaccine to ensure the highest quality standards. Safety

assessments involved administering a 10X dosage of the recommended amount to test subjects, who were then observed for 21 days to identify any potential adverse effects. Regarding potency, controlled trials were carried out in laboratory facilities. In these trials, animals were vaccinated with a single dose, with five animals serving as controls and five animals being vaccinated. Following vaccination, the animals were exposed to the ASF viral strain currently circulating in Vietnam.

To consider batch approval, specific criteria were established. In each trial, four of five control animals needed to succumb to the disease, while four of five animals from the vaccinated group needed to show no clinical signs of the disease. Meeting these conditions was essential to ensure the efficacy and reliability of the vaccines under scrutiny.

Furthermore, field trials were conducted for both vaccines in experimental farms. Each trial involved groups of 50 animals, comprising 10 control animals, 10 animals for safety assessment, and 30 vaccinated animals. These animals were challenged with the virus 28 days after vaccination.

In these trials, the efficacy of the vaccines was defined as the percentage of animals presenting antibodies against ASF measured by ELISA at day 21. Prior to the start of the trials, all animals in these farms underwent testing to ensure they were free of classical swine fever, foot-and-mouth disease, porcine circovirus type 2, *Mycoplasma hyopneumoniae*, and ASF.

These field trials provided critical real-world data to gauge the effectiveness and safety of the vaccines.

### *Remaining challenges*

This news has generated considerable excitement within the global community. However, several significant challenges related to the successful implementation of the vaccination remain unresolved. These challenges include:

- Lack of a DIVA (differentiating infected from vaccinated animals) feature in both vaccines, making it difficult to distinguish vaccinated animals from infected ones,
- Absence of an effective molecular surveillance system to monitor the circulation of wild and vaccine variants in the pig population, which is crucial for understanding the virus's dynamics and the vaccine's efficacy,
- The need to establish a sustainable plan for documenting and assessing the vaccine's effectiveness in real-world scenarios. This requires robust reporting systems to gather accurate data on the vaccine's status and outbreak reports, helping to evaluate its impact on the target population thoroughly.

*Acknowledgement to Dr. Chuong Vo Dinh for his valuable time in the interview with the SDRM team.*

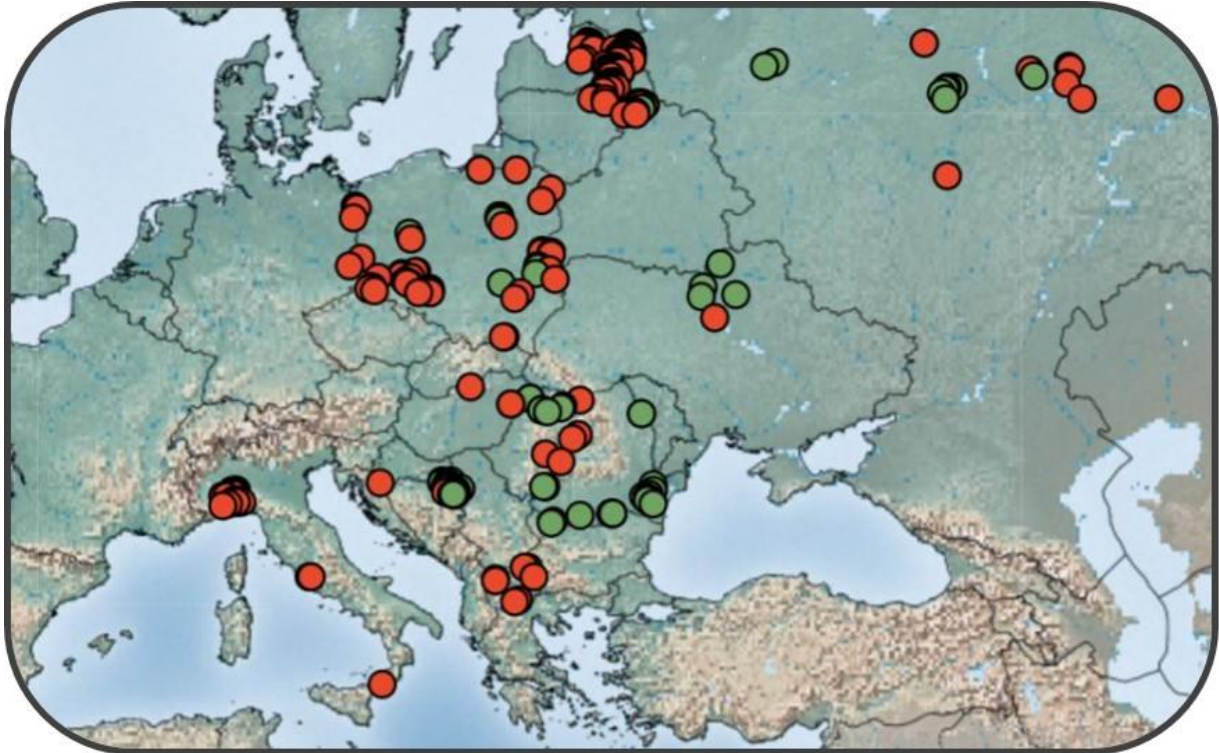
## EUROPE

In July (07/06/2023 - 07/26/2023), 13 European countries (Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Italy, Kosovo, Latvia, Lithuania, North Macedonia, Poland, Romania, Serbia, and Ukraine) reported 740 ASF outbreaks in domestic pigs through the EU Animal Information System, which demonstrates almost six times increase since the last month (n=125). Greece didn't report further outbreaks. However, the disease has re-emerged in Bulgaria, Estonia, and Ukraine, as well as for the first time, the virus was detected in the Republic of Kosovo. According to FAO Empres-i, Russia reported eight outbreaks.

According to ADIS, the number of countries reported ASF in wild boar population has increased to 17 countries (Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Germany, Hungary, Italy, Kosovo, Latvia, Lithuania, North Macedonia, Poland, Romania, Serbia, Slovakia, and Ukraine). However, the number of cases 1.6 times decreased from 565 last month to 358 in July. Among newly affected wild boar populations are territories of Bosnia and Herzegovina, Bulgaria, and Kosovo. The highest number of outbreaks in this category was registered in Latvia (n=120), Poland (n=84), followed

by Italy (n=40). For the same period (07/06/2023 - 07/26/2023), Russia reported three outbreaks to WOAHA WAHIS.

Since the beginning of the year, 902 outbreaks in domestic pigs and 5445 in wild boars were reported through EU ADIS (01/01/23 - 07/22/2023).



Map 1. The distribution of African swine fever outbreaks in Europe (in green: domestic pigs; in red: wild boars): July 4, 2023 - August 1, 2023) (Source: FAO [EMPRES-i](#))

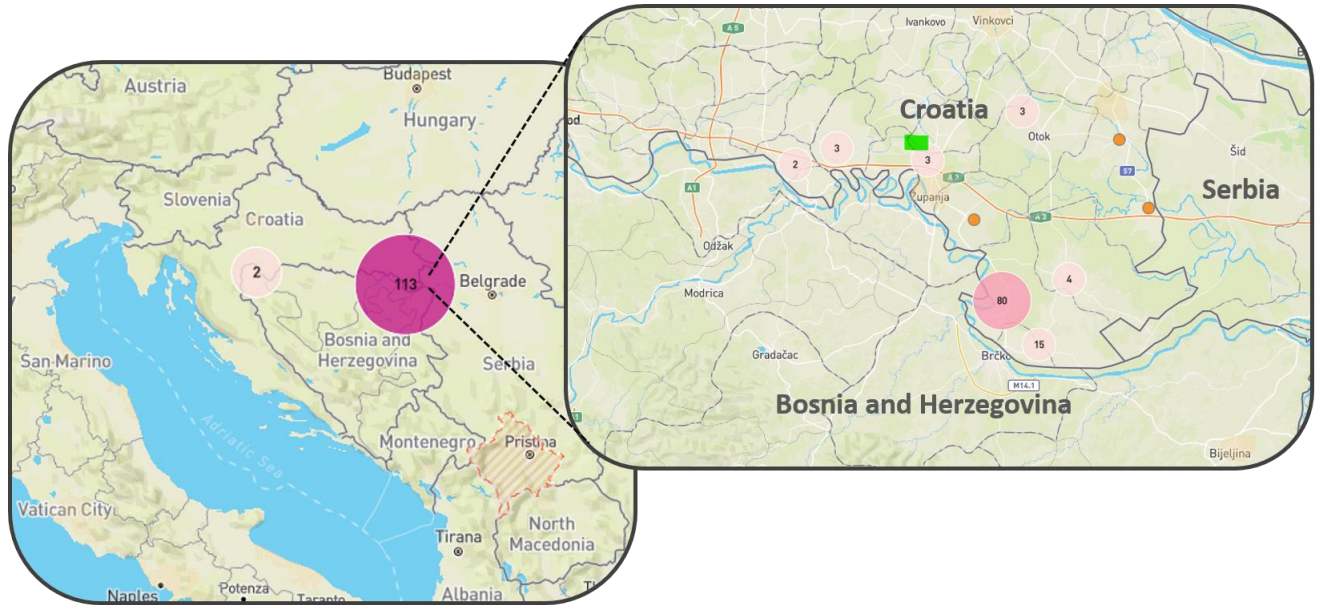
### Regional highlights:

- Kosovo | July 13:** Kosovo has reported its first case of ASF in the municipality of Kllokot, in a small backyard farm with 22 pigs. The Food and Veterinary Agency confirmed the presence of the disease after conducting diagnostic research on the affected farm. As a preventive measure, the infected female pigs were destroyed, and the farm and surrounding areas were thoroughly disinfected. Epidemiological research has begun in the 3 km perimeter of the affected farm. The authorities have established a crisis headquarters to manage the situation and have urged farmers and hunters to promptly report any signs of the disease to the competent authority.

Data from the Statistics Agency of Kosovo show a pig population of over 47,000 pigs live in the country distributed across 5,242 farms.

- Croatia | July 25:** At a meeting of the crisis headquarters for the control of the current ASF outbreak, it was revealed that the disease has been confirmed in 115 farms across 11 municipalities - over 3,000 have been culled. The highest number of cases is concentrated in three local communities within Vukovar-Srem County. To address the evolving epidemiological situation, authorities are determining restriction zones and infected areas due to the outbreak. The government has also pledged to provide compensation to affected farmers.





Map 2. The distribution of ASF outbreaks in Croatia - July 2023 (Source: FAO WOAH, WAHIS)

- Bosnia-Herzegovina | July 13:** The Republika Srpska government, one of the autonomous entities of post-war Bosnia-Herzegovina, took decisive action by declaring a state of emergency in the entire northeastern region to combat the spread of ASF - over 13,000 pigs have been culled in the last month. The affected area is the Semberija region, known as the country's grain hub, and a significant cattle farming region. The situation has become critical, with almost the entire Semberija impacted by ASF, prompting the urgent need to protect the remaining unaffected area. Local farmers' associations requested the government's intervention, leading to the state of emergency declaration. To control the disease's spread, several thousand pigs will be culled and buried at designated sites, while live pig transportation will be minimized to prevent further contamination. Local media outlets confirmed that by the end of July, the first compensation payments were made. Authorities approved funds, for over \$1.5 million USD, for this purpose.

Additionally, to aid in managing the outbreak, experts from GF TAD (Global Framework for progressive control of Transboundary Animal Diseases) were set to visit Bosnia-Herzegovina from July 12-14. Their visit was to collect crucial data and provide recommendations for disease management.

On July 28, the Chinese embassy in Bosnia and Herzegovina donated resources to the local government of the Republika Srpska to support the outbreak response in the region.

- Estonia | July 26: First two outbreaks in domestic pigs since 2021.** On July 20, Estonia's Agriculture and Food Board confirmed an outbreak of ASF at a farm with 116 pigs in Rõuge Municipality, Võru County. A week later, in Polva County, another outbreak was confirmed in Lutsu Farm, which belongs to Estonia's largest pig breeding company Rakvere Farmid AS. Over 9,000 pigs were culled.

The board was notified of the suspicion of ASF on July 19, and lab results confirming the virus arrived on a later date. This marks the latest outbreak in domestic pigs since July 2021, and the most recent case in a wild boar was detected in February. In Latvia, the neighboring southern country, there have been reports of ASF-positive wild boars in regions bordering Võru County, with the closest infected wild boar identified about seven miles away from the current outbreak.

- Latvia | July 17: authorities confirmed the fourth ASF outbreak in domestic pigs this year.** The virus was detected in a farm in Krāslava municipality in the country's southeast. The

Food and Veterinary Service has announced that all 48 pigs on the affected farm will be culled. The primary risk to domestic pigs comes from wild boars. In 2023, so far, ASF was confirmed in 301 wild boars across 23 municipalities in Latvia.

- **Bulgaria | July 19: Bulgaria's Food Safety Agency confirmed the first outbreak of ASF in 2023.** The outbreak was detected at a private farm in the village of Dolni Tsibar, located in the northwestern Montana region. One infected animal was identified and culled, and measures are in place for cleaning and repeated disinfection of the livestock facility.
- **Russia | July 24:** Russia is still facing one of its largest ASF outbreaks in the far east, which started in late May, resulting in the loss of nearly 105,000 pigs. While regional authorities in Primorsk Krai aim to protect the domestic market from feeling the impact, there has been a 25% drop in the pig population. The outbreak struck pig farms Leninsky-1 and Leninsky-2, both operated by agricultural holding RusAgro in the Russian far east. Leninsky-2 was affected first, and the entire pig population had to be destroyed to contain the virus's spread, leading to an estimated loss of around 12% of the pig herd in Primorsk Krai. Following this, an outbreak was confirmed at Leninsky-1, located just 500 meters away from Leninsky-2.

#### **Source of infection**

RusAgro stated that the main cause of this situation is the natural spread of ASF in the wild boar population and the lack of biosecurity in private farms. An investigation is underway. In the meantime, RusAgro refuted reports of ASF in their feed products, stating that their feed mill ensures pathogen inactivation by processing the crushed feed mixture with steam at a temperature of 338°F (170°C) and granulation at 185°F (85°C). However, trace amounts of ASF genetic material were found in a sample of meat and bone meal outside the outbreak area, although it was deemed non-viable and not a source of infection.

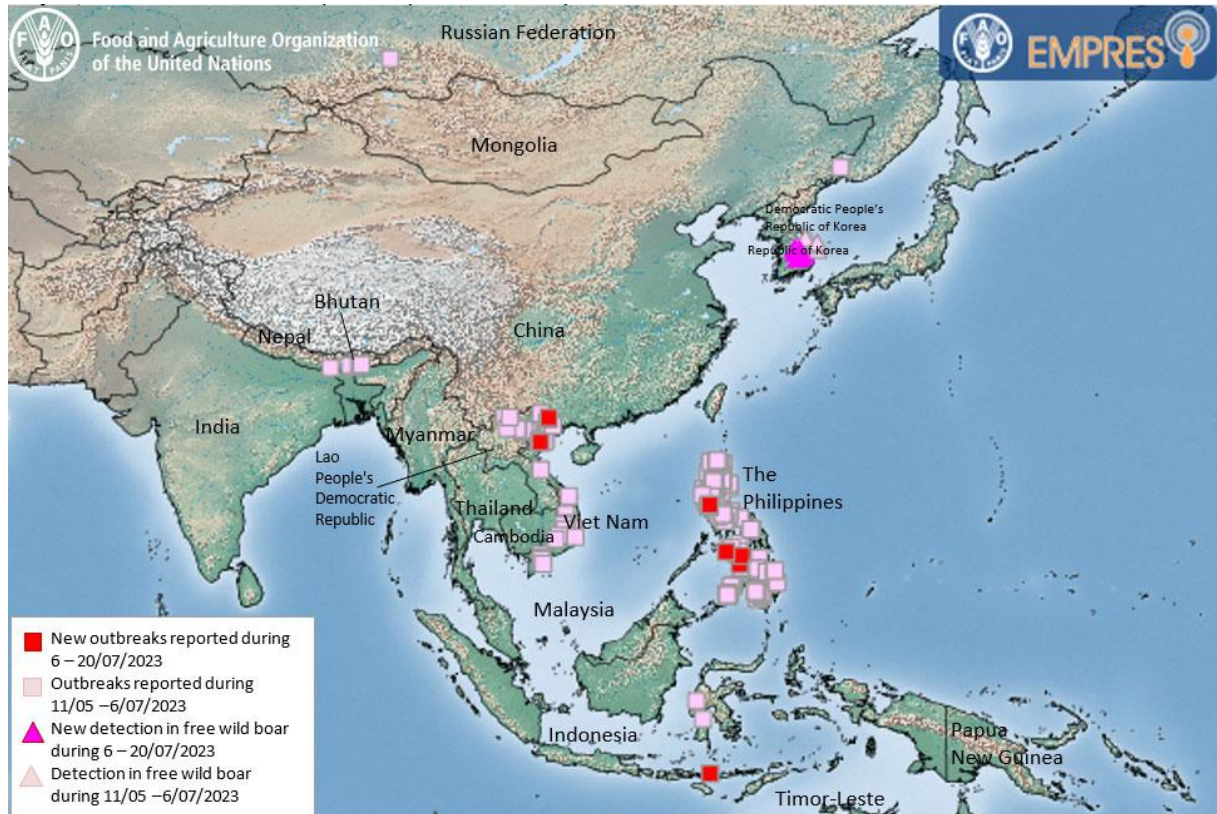
The ASF outbreak occurred in these farms despite having significant safety measures in place - fourth safety compartment. The Agricultural Minister of the Primorsk Krai said that investigations by several agencies are ongoing to determine the cause of the outbreak, with intentional introduction being one of the working theories.

#### **Impact**

Although the domestic market is expected to remain stable due to excessive supply, the outbreak poses challenges to expanding pork exports to Asian countries. In the long term, Russia seeks to open new markets for its pork, with ambitions to occupy a 5% to 10% market share in countries like China and the Philippines (source: Pig Progress).

## ASIA

In July, five countries (India, the Philippines, Vietnam, South Korea, and Indonesia) reported ASF outbreaks in domestic swine. South Korea additionally reported new cases in wild boars (Map 3).



Map 3. African swine fever outbreak distribution in domestic pigs and wild boars in Asia as of July 20, 2023. (Source: FAO [EMPRES-i](#) - Data sources: Republic of Korea, Viet Nam: WAHIS & media information, the Philippines: WAHIS & government websites, Indonesia: official database 'isikhnas', Other: WAHIS)

### Regional highlights:

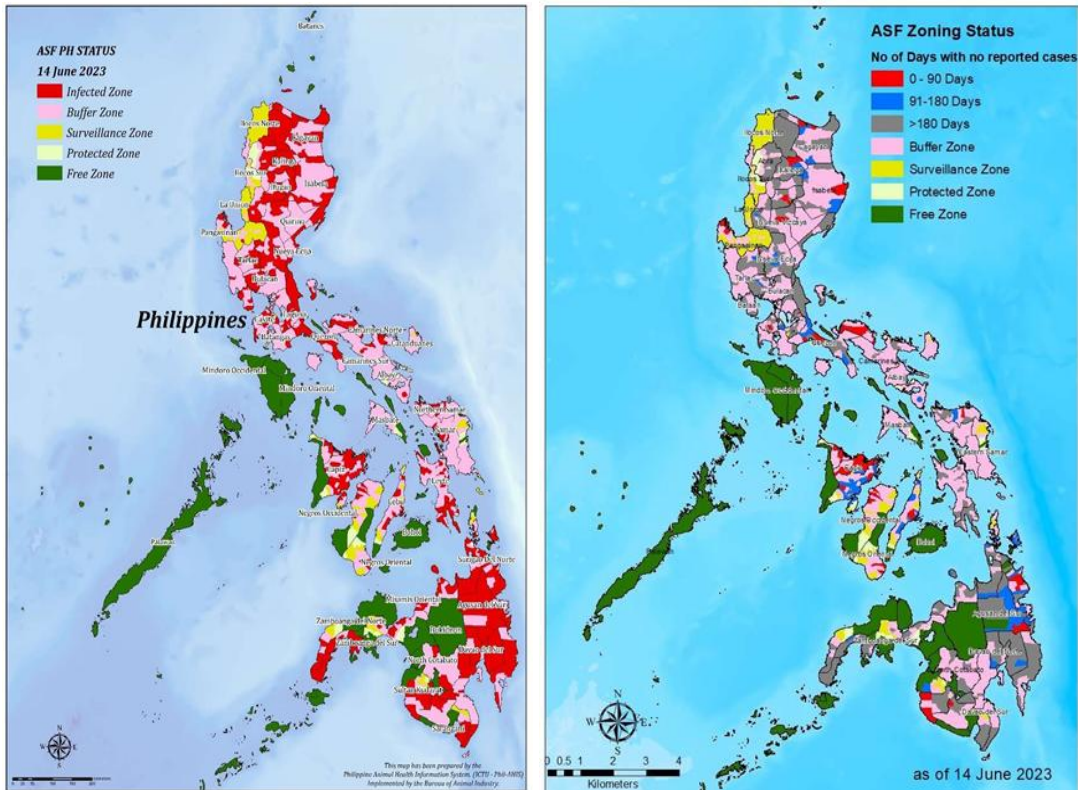
- Indonesia | July 15: East Nusa Tenggara province: national authorities reported ASF in Nusa Tenggara Timur, the southernmost province of Indonesia.** As of the latest update, a total of 455 cases of ASF have been reported in domestic pigs in this specific locality. These cases are part of a larger outbreak that has been impacting the country in 2023. According to the national animal disease situation website, in 2023 alone, Indonesia recorded 22,860 cases of ASF across five provinces. The province of Nusa Tenggara Timur has seen a substantial number of cases, with 764 reported cases. Additionally, Riau province reported 216 cases, Sulawesi Barat province reported 33 cases, Sulawesi Selatan province recorded the highest number of cases, 18,876, and Sulawesi Tengah province reported 2,971 cases of ASF.

ASF in Indonesia has emerged as a significant concern, impacting the country's pig population and the pork industry at large. Authorities and veterinary services are closely monitoring the situation, implementing control measures, and working to contain the spread of the disease.

- The Philippines | July 14: Sixteen provinces are currently reporting active ASF cases.** Since the first reported case of ASF in July 2019, the Philippines has confronted significant challenges in its pig farming industry due to the devastating impact of the disease. As of June 29, 2023, a substantial number of provinces, 67 out of 81, have experienced ASF outbreaks, with active cases reported in 187 barangays across 58 municipalities in 16 provinces.



Noteworthy among the affected areas is Bataan Province, where a quarter of pig farms are currently impacted. Specifically, as of July 4, ASF cases have been confirmed in five municipalities, namely Hermosa, Morong, Orion, Pilar, and Samal. Furthermore, as of July 9, the disease has been identified in 333 pigs from 17 registered backyard pig raisers in the province, while test results for an additional 287 pigs remain pending. Recently, authorities released a comprehensive ASF zoning status map on July 14 to facilitate monitoring and response efforts.



Map 4. Zoning status and regions affected by ASF outbreaks in the Philippines - by July 2023 (Source: Bureau of Animal Industry, Department of Agriculture, Philippines)

- South Korea | July 20: More ASF-susceptible domestic pigs were culled, while more cases were reported in wild boar.** On July 18, 2023, a [new outbreak](#) of ASF was reported in a farm in Galmal-up, Cheorwon-gun, Gangwon-do, South Korea, housing 6,077 susceptible pigs. All 6,077 pigs were culled and appropriately disposed of as part of the containment efforts. This incident marks the ninth ASF outbreak in domestic pigs reported in the country this year. In response to the outbreak, control measures were swiftly implemented, focusing on control of vectors and wildlife reservoirs in the surrounding area. South Korea's Ministry of Agriculture, Food and Rural Affairs has [mobilized resources](#), including 52 vehicles equipped with spray trucks and water sprinklers, to carry out comprehensive disinfection measures at pig farms and nearby roads to curb the virus's spread. Additionally, a 48-hour standstill order has been imposed in nine regions, including those neighboring Cheorwon, to restrict the movement of vehicles and personnel and prevent further transmission. According to the Ministry of Agriculture, It is vital for local farms to strictly adhere to disinfection measures, considering the increased vulnerability of pig farms to the disease due to potential damage caused by heavy rains.

During the same period, from July 1 to July 27, 2023, a total of 22 ASF cases were recorded in wild boars across several provinces, further highlighting the ongoing concern and challenges in managing the disease in the wildlife population

- **Vietnam | July: New ASF outbreaks in the north and south of the country.** In far northern Vietnam, bordering China, Lang Son province reported 10 ASF outbreaks, while the province of Hoa Binh, southwest of Hanoi, reported two outbreaks, and the southern coastal province of Khanh Hoa reported one outbreak. Although national authorities reported these disease events to [FAO EMPRES\*i\*](#), specific epidemiological details about the outbreaks were not provided. However, there is positive news as the [Vietnamese Department of Animal Health](#) reported a significant 80% decrease in ASF cases during the first half of 2023. This improvement is attributed to several disease control efforts, including the use of information technology through the online animal disease information system (VAHIS system), ensuring rapid and accurate reporting of animal diseases, including ASF.

## Surveillance at Points of Entry

---

### ASIA

**Philippines | July 12: Spoiled frozen meat confiscated in Bulacan province.** During an operation in Meycauayan City, Bulacan, the Department of Agriculture successfully seized smuggled frozen agricultural products with an estimated value of P35 million (approximately \$639,000). The seized items included spoiled meat products like pork feet, lamb, and chicken skin, which were stored in two makeshift cold storage facilities. The origin of these banned frozen meat products was traced back to Germany and India, and evidence of reboxing the spoiled meat was uncovered. The DA is currently conducting a comprehensive investigation into the reboxing operations. Both the DA's Inspectorate and Enforcement and the National Meat Inspection Service were actively present during the operation and confirmed that the seized meat was unsafe for human consumption.

**Thailand | July 16: Pork sausages seized at Suvarnabhumi airport.** In a recent incident at Suvarnabhumi Airport in Bangkok, the quarantine and inspection canine unit confiscated 18.7 pounds of a popular Chinese-brand sausage from a flight originating in Haikou County, China. The reason for the seizure was that the sausages came from a country affected by ASF, posing a potential risk for the spread of the disease. The Department of Livestock Development in Thailand took action to seize the sausages and sent them for laboratory testing under the supervision of the Thai Food and Drug Administration. Meanwhile, the importer of these unauthorized food products could face serious consequences, including up to three years of imprisonment or a fine of up to 30,000 baht (\$876), or both. To prevent further incidents, authorities are urging travelers to avoid bringing in pork products, as they present a high risk for the spread of ASF.

## Foot-and-mouth disease

---

### North America

#### Canada plans to create a vaccine bank for foot-and-mouth disease

During the annual conference of Federal, Provincial, and Territorial Ministers of Agriculture, the Canadian government pledged funds to establish a dedicated source of FMD vaccines, by setting up a vaccine bank. This initiative aims to support the Canadian Food Inspection Agency and the agricultural industry in the event of an outbreak. As reported in a news release by the CFIA, the Canadian government has pledged a total investment of \$57.5 million over a five-year period to establish an FMD vaccine bank and develop FMD response plans. Additionally, \$5.6 million continued funding has been specifically earmarked to sustain the initiative beyond the timeframe of five years. This strategic investment aims to enhance Canada's preparedness and response capabilities to combat potential FMD outbreaks effectively.

Additionally, the CFIA stated that "Canada's FMD vaccine bank will contain concentrated vaccines, ensuring rapid and cost-effective transformation into usable vaccines when needed." This investment

works hand in hand with Canada's current access to vaccines through the North American FMD Vaccine Bank, which is a shared vaccine repository amongst Canada, Mexico, and the United States.

It's important to note that Canada has been free from FMD since 1952, and strict measures are in place to prevent the disease from entering the country. It is estimated that an outbreak could have significant economic implications, potentially costing the economy between \$14.6 billion to \$49 billion and impacting Canada's ability to export animals to other markets.

---

## 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

#### Estonia

[First outbreak since 2021](#)

[First outbreaks since 2021 2](#)

#### Croatia

#### Russia

[Outbreak in RusAgro farms 1](#)

[Outbreak in RusAgro farms 2](#)

#### Bulgaria

[First outbreak in 2023](#)

#### Kosovo

[First outbreak](#)

[First outbreak 2](#)

#### Bosnia-Herzegovina

[Declare emergency over ASF](#)

[China donates supplies](#)

[Compensation funds](#)

[Impact in the region](#)

#### Latvia

[Fourth outbreak](#)

[Fourth outbreak 2](#)

### NORTH AMERICA

### CANADA

[Government announces plan to create FMD](#)

[vaccine bank](#)

[FMD vaccine bank](#)

### ASIA

#### Indonesia

[ASF in Nusa Tenggara](#)

#### The Philippines

[Areas with active ASF cases](#)

[ASF affected areas in Bataan province](#)

[Smuggled meat confiscated Bulacan](#)

[ASF zoning july 2023](#)

#### South Korea

[ASF in Gangwon-do, pigs culled](#)

[ASF control measures in Korea](#)

#### Thailand

[Illegal pork sausages prompt ASF alert](#)

[Pork sausages seized on Chinese flight](#)

#### Vietnam

[New ASF outbreaks in north and south](#)

[A significant decrease in ASF cases in 2023](#)

[Vaccines license 1](#)

[Vaccines licence 2](#)

[Vaccines license 3](#)

[Interview with Dr. Chuong Vo](#)

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](mailto:SwineGlobal@umn.edu)**