

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

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



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Swine Disease Global Surveillance Report

Tuesday, January 4, 2022 – Monday, January 31, 2022

Report Highlights

- **ASF in the Dominican Republic:** First outbreak in one of the genetic multipliers in the country (*not yet reported to the OIE*). Authorities keep registering new disease reports; over 782 reports have been confirmed since the start of the epidemic.
- **ASF in Thailand:** First ever officially reported outbreak of ASF in the country, in Nakhon Pathom, a province adjacent to Bangkok.
- **Hong Kong:** Reported an outbreak in wild boar. No other abnormal deaths had been observed in other areas so far.
- **ASF in Italy:** Outbreak in wild boar spreads as more cases are reported in northern Italy.
- **ASF in North Macedonia:** First ever reported outbreak of ASF in the country.
- **PED in Canada:** Manitoba reports another 27 outbreaks in January.

OUTBREAKS BRIEF

R	Location	Date	Dx	Impact
2	TBD, The Dominican Republic	1/31	ASF	Outbreak at one of the genetic nuclei in the country
2	Alessandria, Piedmont region (north of the country), Italy	1/5	ASF	1st case confirmed in a wild boar carcass
2	Piedmont and Liguria region (north of the country), Italy	1/28	ASF	Throughout January 26 outbreaks reported in wild boars.
2	Bangkok, Thailand	1/9	ASF	3 pet pigs dead.
2	Multiple locations, Thailand	1/28	ASF	So far 8 outbreaks have been reported in villages, besides the initial report in pet pigs.
1	Northern part of the territory, Hong Kong	1/17	ASF	6 wild boars were found dead.
1	Delcevo, North Macedonia	1/12	ASF	Outbreak in a small backyard herd of 18 pigs.
1	Tainan Chenggong Post Office, Taiwan	12/22	ASF	Detection of ASF in seized sausages from Thailand.
1	Briceni (North of the country, close to the Ukrainian border), Moldova	1/24	ASF	Outbreak in a farm with 72 pigs. 1st recurrence in the district since last August 2019.
1	Samara region, Russia	1/14	ASF	In a backyard farm.
1	Cape Town and Gauteng, South Africa	1/6	ASF	4 outbreaks in farms, involving 428 pigs.

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

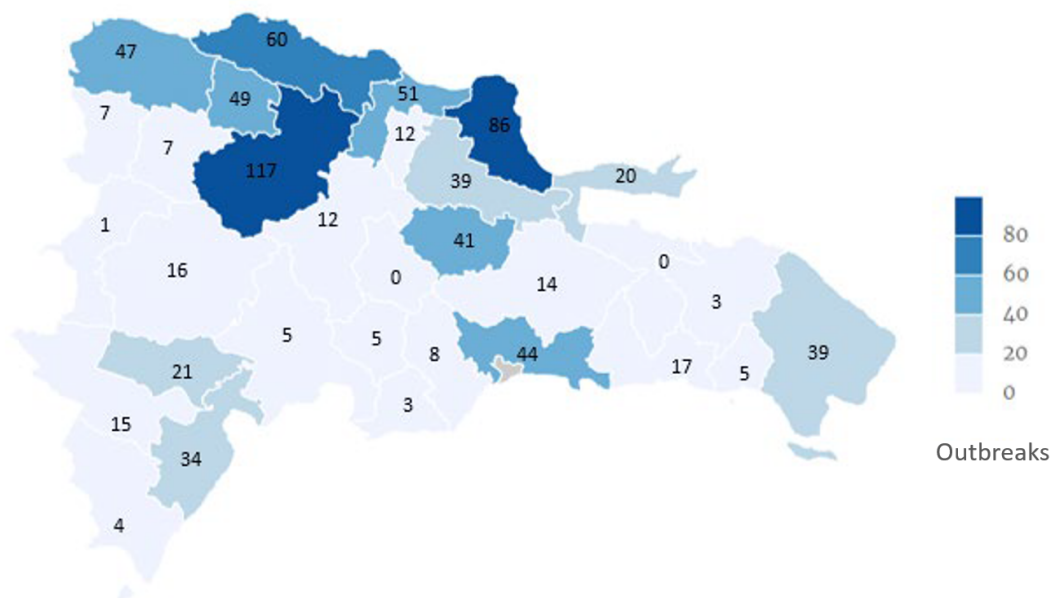
The Dominican Republic

As of December 31 (epidemiological week 52), **only 199 of the 782 confirmed outbreaks have been reported to the OIE** (last follow-up report - 1/5/22). The total loss of animals throughout these 199 outbreaks is over 15,500. Most of these reports are in backyard premises with fewer than 100 pigs, although three involve community-type backyard operations with around 1,000 pigs.

The Epidemiology Division, Department of Animal Health (DAH), Directorate of Livestock, Ministry of Agriculture in the Dominican Republic, is implementing the early alert reporting system, where all suspected cases are reported. There are some backlogs in their submission to OIE, inherent to the burden and challenges associated with investigating each suspected case that is reported.

Until December 31, authorities had confirmed by molecular diagnosis over 782 outbreaks in 29 provinces, 695 of those outbreaks have been resolved (Map 1).

Over 9,900 samples from 1,879 producers have been processed by Dominican veterinary services, 41.6% (782) of these samples tested positive.



Map 1. Distribution of confirmed cases of ASF in the Dominican Republic since the first case in July

Last Minute

An ASF outbreak was detected in one of the three genetic nuclei/multipliers on the island, representing the first incursion of the disease in a highly technified - *with high biosecurity protocols* - farm on the island.

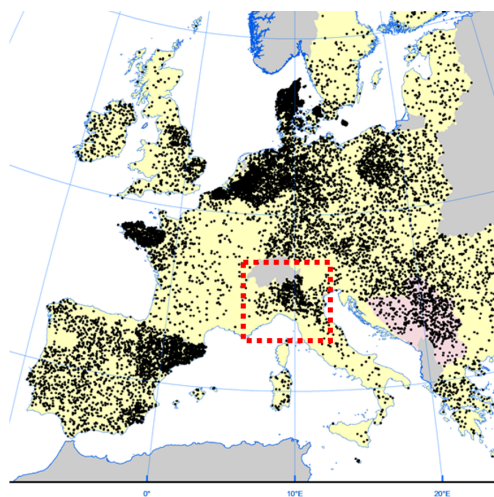
EUROPE

In January (01/01/22 - 01/22/22), six countries, including Bulgaria, North Macedonia, Moldova, Russia, Romania, and Slovakia, reported new ASF outbreaks in domestic pigs, while 10 countries, namely Bulgaria, Estonia, Germany, Hungary, Italy, Latvia, Lithuania, Poland, Romania, and Slovakia, reported cases of ASF in wild boars (European Commission Animal Disease Information System (ADIS), OIE-WAHIS).

Since the beginning of 2022, European countries have registered 35 outbreaks in domestic pigs in January (a significant drop of 2.4 times compared to the total reported in December (n= 83)). (22/01_EC ADIS disease outbreaks report).

The latest update from ADIS includes the total number of ASF outbreaks among European wild boar in January, which as of January 22 lies at 776 across 10 countries. Compared with the previous update on December 19, this figure represents 776 new outbreaks, which is a 1.4 times decrease compared to the reports of December.

Italy



Map 2: Number of sows by region
(Source: Eurostat, 2013)

The first cases of ASF in wild boar were confirmed by Italian authorities in the northwestern region of Piedmont (Map 1) in early January. Since then, the number of positive wild boar has increased, as new cases have been found in different locations in the regions of Piedmont and Liguria (Map 2). Italian authorities have confirmed the strain of the virus circulating in wild boar to be genotype II which is similar to what is circulating in Eastern and middle Europe but is different from genotype I, which has been predominant in the region of Sardinia since 1978. Authorities in Italy are increasing control measures to prevent the further spread of ASF.

On January 7, a dead wild boar found in Ovada, in the province of Alessandria, was found to have ASF, per the Italian news wire service ANSA, and subsequently confirmed by the official report to the OIE. Since this first ASF diagnosis was reported, another 25 carcasses have been found (Map 3).

As of January 29, the number of municipalities in the infected area reached 205 overall: 153 in Piedmont (Provinces of Alessandria, Asti, and Cuneo), 36 in Liguria (Province of Genoa), and 16 in the region of Lombardi (Province of Pavia). These were all included by the Ministry of Health in the ASF control zone as required by European Commission protocol.



Map Legend

In blue: provinces from Piemonte and Liguria region;
in red the most affected provinces;
in yellow: neighboring provinces from Emilia-Romagna region in high alert.

Map 3. Provinces affected by the ongoing ASF outbreak in Northern Italy

This diagnosis of ASF is significant due to the geographical distance from areas in Germany and Poland where wild boar with ASF have been an ongoing issue. The cases are approximately 680 miles from the nearest case in wild boar, in Germany and over 620 miles from the nearest wild boar case in Hungary and Slovakia. **Human mediated spread is currently considered to be the most likely source.**

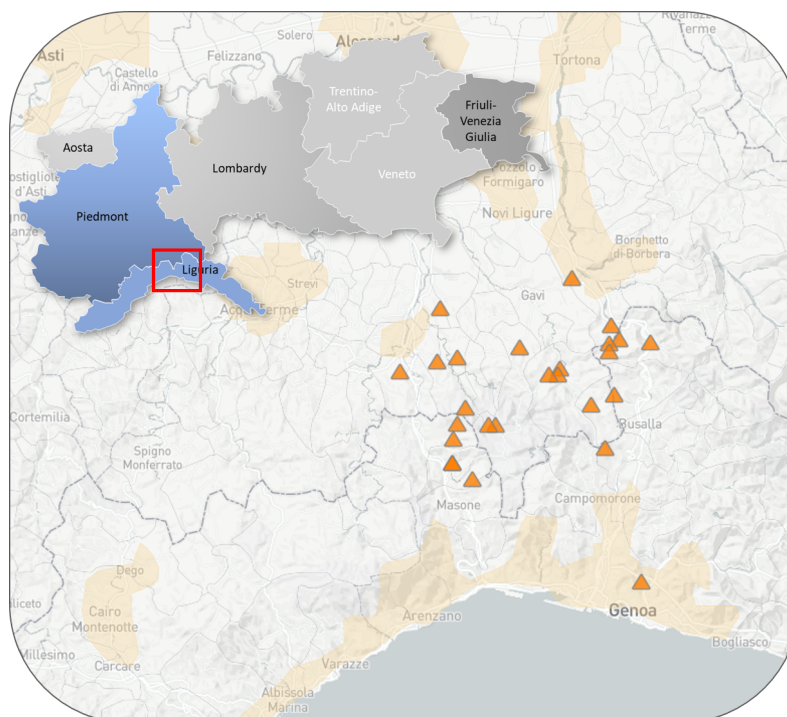
Immediate emergency health measures aimed at limiting the spread of the disease are being implemented by the Piedmont Region authorities. Identification of Infected Zone and Surveillance Zone, suspension of hunting activities, excursions, and all outdoor activities, the maximum level of alert and supervision on biosecurity actions in the pig farming sector, in particular as regards transport and handling operations of animals, feed, meat processing waste products and personnel.

The Lombardy Region has also decided to suspend collective and roaming hunting in the province of Pavia as a precaution to prevent the movement of wild boars.

Furthermore, on January 19, central authorities announced new measures to be implemented immediately in the Piedmont and Liguria areas to limit the epidemic, including:

- the immediate slaughter of pigs
- and a six-month restocking ban

the national news agency ANSA reported.



Map 4. Distributions of ASF positive wild boar carcasses found in Northern Italy

Other Regional Highlights:

- **North Macedonia:** The first outbreak of ASF in domestic pigs was registered in a small backyard farm (18 pigs) located in the east part of the country in Dramce, close to the Bulgarian border. Per OIE's report, clinical signs were noticed by the farmer on December 29 and dead cases were reported on January 1, in a small backyard farm. Samples were sent to the Laboratory of Faculty of Veterinary Medicine, Skopje, where the diagnosis was confirmed. The affected holding was considered at medium risk regarding ASF due to the biosecurity measures in place at the premises. Initial epidemiological investigations suspect contact with infected wild boars as the most likely source of infection. Measures taken: a 3km (1.8 miles) protection zone and 10km (6.2 miles) surveillance zone were established followed by stamping out policy among all pig holdings in the 3 km area on January 10 (Disease report of Department for Environment, Food and Rural Affairs, Animal and Plant Health Agency).
- **Romania:** The whole country is considered under Zone III restrictions and unable to export pork products. Numerous outbreaks (12) were reported during the month of January. Again, almost exclusively smallholdings were affected. Still, the movement restrictions connected with two of the new outbreaks affect the largest pig farm in the county. The Suceava veterinary authority confirmed that the control zone of two new cases being detected in late January (in Pleșești and Corocăiești) intersect with the one in Dolhasca, also recently discovered, and the area of surveillance of the outbreaks also includes the largest in the county, which has 23,800 pig heads. The farm has its activity blocked for the next 30 days. The restriction period may be extended if outbreaks occur or if the current ones cannot be closed.

- **Bulgaria:** While Bulgaria has not reported to the OIE since mid November, ADIS summary tables (ADIS, 2021; ADIS, 2022), show that Bulgaria have reported a further 197 cases of ASF in wild boar between November 18, 2021, and January 2022.

ASIA

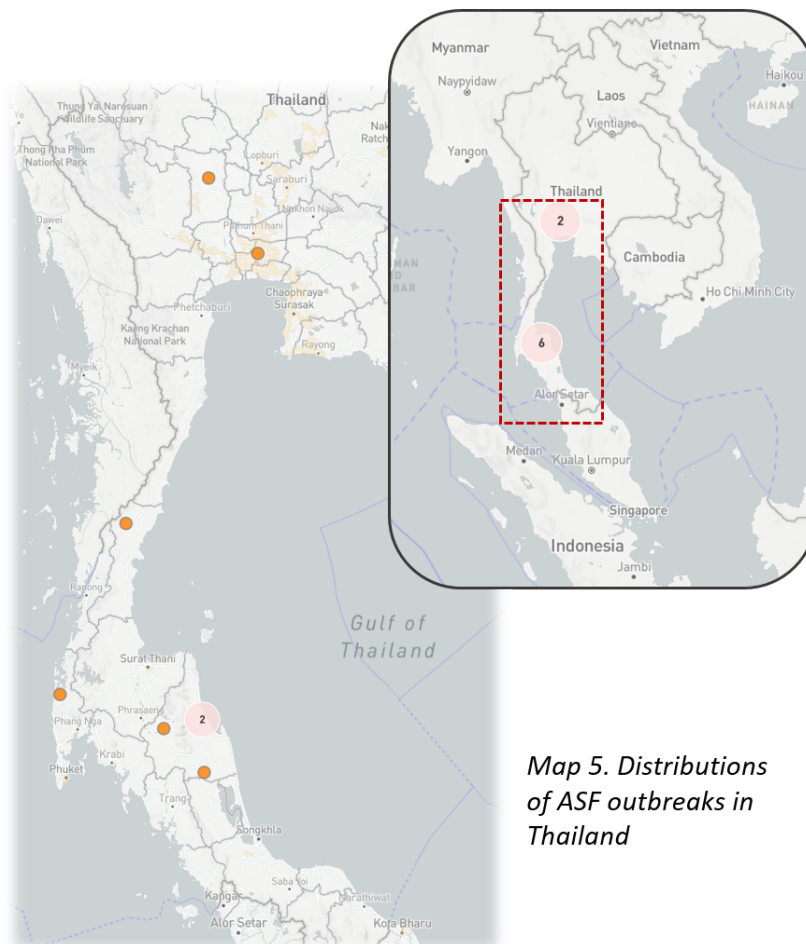
In January, five countries - The Philippines, Malaysia, Vietnam, Thailand, and India - reported new ASF outbreaks in pig farms. While China and South Korea reported positive cases in wild boar.

Thailand

On January 11, officials from the Department of Livestock Development in Thailand confirmed the presence of ASF in the Muang Nakhon Pathom district which lies west of Bangkok.

309 total samples were taken including 305 blood samples from 10 farms and four surface swab samples from two slaughterhouses in the Ratchaburi and Nakhon Pathom provinces. Of these 309 samples, one tested positive for ASF.

This confirmed presence followed an autopsy report from Kasetsart University laboratory that discovered ASF in a dead pet pig on January 8. Authorities declared a disease outbreak zone within a 5 km radius of where the positive sample was found, limiting pig movement and culling animals suspected of being infected.



Map 5. Distributions of ASF outbreaks in Thailand

By January 28, another four outbreaks in small farms were reported to the OIE affecting a total population of 374 pigs. Unfortunately, multiple local media sources show that the spread of the disease could be already significantly larger:

- **January 21:** 33 farms detected positive in Ratchaburi province
- **January 26:** the Minister of Agriculture revealed that 13 provinces (out of 76) have notified outbreaks - Nakhon Pathom (slaughterhouse), Bangkok, Suphan Buri, Phang Nga, Nakhon Si Thammarat, Chumphon, Maha Sarakham, Mae Hong Son, Si Sa Ket, Khon Kaen, Prachuap Khiri Khan, Buriram and Nong Bua Lamphu.

Other Regional Highlights:

- **Malaysia:** Sarawak State reported its first detection of ASF in three backyard farms in Durin, Sibü. The disease was also confirmed in 16 commercial farms in Malacca State, 1,864 pigs have been destroyed. Clinical monitoring and sampling are taking place in all 35 pig farms in the area.
- **China:** According to MAFRA, recent ASF positive wild boar cases were spreading towards the southwest part of the country through the Sobaek Mountains. Since pig farms are concentrated in areas adjacent to these areas where ASF-infected wild boars were newly detected, MAFRA and ME plan to reduce the wild boar population by March to suppress the spread of the virus. MAFRA emphasized that biosecurity at the farm level is the most important to prevent virus introduction; also asked people not to visit farms during Lunar New Year holiday seasons
 - **Taiwan:** On December 23, Central Emergency Operation Center (CEOC) revealed that sausages present in an intercepted package from Thailand were confirmed to be positive for ASF. Authorities said that a post office in Tainan first flagged a package from Thailand on December 15 after it was detected as containing sausages. A lab test conducted on the package on December 17 revealed that the items had the ASF virus. Once again, the Thai sausages tested positive for the virus at the state lab on December 22, confirming the initial result. According to the Taiwanese authorities' statement, this marks the first time the ASF virus has been detected in pork products from Thailand. The intercepted package from Thailand will be returned, with the case reported to the Thai authorities.
- **South Korea:** After receiving a report that the carcass of a wild boar was damaged, and after conducting an on-site investigation, the Wild Boar Damage Prevention Group confirmed that the gallbladder was removed in the process of transporting the carcass for processing. Wild boar gallbladders are used for traditional medicinal purposes. Still, since the incursion of ASF, when wild boars are captured, carcasses cannot be damaged except by designated sample collectors to prevent the spread of the disease, and self-consumption is prohibited. Authorities request the public's cooperation to actively monitor and report any illegal activities of hunters. In the same communication, they also said that:
 - In Taebaek-si city, a reward of 370,000 won (approximately US \$309) will be paid to those who have caught wild boars and properly handled them.
 - Also, to prevent the artificial spread of ASF, special crackdowns on poaching and smuggling will be intensively carried out from November to March next year.
- **Malaysia:** On December 25, local authorities from Malacca province confirmed the presence of ASF in Paya Megkuang city. In response, from 35 farms with over 40,000 pigs in the city, the culling of 6,000 pigs from seven farms that turned out positive was carried out. In addition, in early December, the presence of ASF in wild boar carcasses found in Perak and Pahang State was confirmed by the Veterinary Research Institute in Ipoh.

Porcine Epidemic Diarrhea

AMERICAS

Canada

As of January 25, another 27 outbreaks of PED were reported by the Canadian authorities (80% and 20% increase compared to the cumulative number of outbreaks in November and December,

respectively), making a total of 64 outbreaks since the start of this epidemic in late October 2021. This is also a drastic increase from the records of 2020, when only three outbreaks were reported (last report July 2021).

	2021			2022	Total
	Oct	Nov	Dec	Jan	
Finisher	1	4	11	12	28
Nursery		2	4	6	12
Sow	1	6	7	8	22
Farrow to Finish		1		1	2
	2	13	22	27	64

Table 1. Number of PED outbreaks in Manitoba classified by type of farm.

As of January 25, 2022, 188 of the 252 total cases in Manitoba previously confirmed to have PED are now determined to be PED Presumptive Negative following a negative status protocol developed by the Chief Veterinary Office (CVO) and Manitoba's swine veterinarians.

The Manager of Swine Health with Manitoba Pork said that the pattern in this latest outbreak is very similar to those of 2017 and 2019, predominantly the majority of cases remain in the typical high-risk areas in southeastern Manitoba however a few cases have popped up in this area.

A PED Presumptive Negative Status

This status is assigned to premises where the affected producer has implemented strict measures to eliminate PED from all pigs and pig contact areas and has confirmed the virus has been eliminated through repeated animal and environmental testing. However, a potential PED risk still remains within the manure storage system. Depending on the herd type and production stage, a PED infected premise can take four to six months to reach Presumptive Negative status.



Map 5. Location of the outbreaks reported throughout December. 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

References:

Recurrent reports reviewed

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FAO - OIE - [WAHIS interface - Immediate notifications](#)

DEFRA - [Animal conditions international monitoring reports](#)

CAHSS - [CEZD Weekly Intelligence Report](#)

European commission - [ADIS disease overview](#)

EUROPE

Italy

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AMERICA

Dominican Republic

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Canada

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Taiwan

Malaysia

Indonesia

China

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The GSDMR team compiles information drawn from multiple national (Ministries of Agriculture or Livestock, Local governments, and international sources (FAO, OIE, DEFRA, EC, etc.), as well as peer-reviewed scientific articles. The team makes every effort to ensure but does not guarantee accuracy, completeness, or authenticity of the information. The designation employed and the presentation of material on maps and graphics do not imply the

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