

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.



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

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Swine Disease Global Surveillance Report

Tuesday, March 2, 2021 – Friday, April 5, 2021

Report Highlights

- **USDA and CFIA preparedness efforts:** in the event of African swine fever (ASF) detection in feral swine in Canada or the US
- **New WAHIS interface:** The OIE launched an updated platform for animal disease and veterinary capacities reporting and visualization.
- **Poland reports the first ASF outbreak in 2021:** It took place on a farm in western Poland, with more than 2,000 sows on site.
- **China ASF situation 2021 update:** Chinese delegates shared an update on the ASF situation and epi investigation of outbreaks in mainland China.
- **Unlicensed ASF vaccines in Asia:** An alert from the FAO/OIE regional offices for Asia and the Pacific was sent out to Chief Veterinary Officers.

MARCH OUTBREAKS BRIEF

R	Location	Date	Disease	Impact
1	Mizoram state, India	4/4	ASF (S)	87 pigs die in Lungsen village. PRRS and CSF were ruled out.
2	Lubuskie province, Western region, Poland	3/17	ASF	The first outbreak in 2021 in a commercial farm, housing 2000 sows.
1	Sichuan, Hubei, Yunnan, and Hunan Provinces, China	3/1	ASF	Multiple outbreaks were reported throughout March. Mostly, seizure of illegally transported animals.
1	Xinjiang (border with Mongolia and Russia), China	3/24	ASF	The outbreak occurred on a farm in Yili prefecture with 466 pigs, and 280 pigs died.
1	Shinyanga and Mwanza provinces (several villages), Tanzania	3/2	ASF Gen X	Multiple ongoing outbreaks affecting a population of almost 20,000 pigs. 1,735 dead animals so far.
1	St Gabriel, Mauritius	3/26	FMD Gen O	Recurrence - last reported outbreak in 2016. Farm - 56 animals affected.
1	Vieure (Auvergne-Rhône-Alpes in central France), France	3/31	AD	Two wild boar tested positive to a serological test.

The outbreaks described in the table above are colored according to an assigned significance score. The score is based on the identified hazard and potential it has to 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. Map with the location of the events reported is available at the end of this report. (S): suspicious case.

USDA and CFIA Partner to Minimize Trade Disruptions

New preparedness efforts in the event of an ASF detection in feral swine

The US Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) and the Canadian Food Inspection Agency (CFIA) have developed a protocol to help ensure bilateral trade will continue if ASF is detected in feral swine in either country while still absent from domestic swine.

The protocol intends to protect swine populations in both countries during an outbreak of ASF in feral swine while minimizing impacts on the trade of live swine, swine products, and other swine commodities.

How would things work?

Upon an ASF feral swine detection, **all trade between both countries would initially stop**. Then, according to the protocol, **trade would resume in three progressive phases** with increasingly reduced restrictions on live swine, swine germplasm, and untreated swine commodities.

How quickly the US and Canada establish initial control areas, initiate surveillance/case findings and removal in feral swine, and start surveillance in captive swine, will determine when they enter phase two of the protocol. **During the third and final phase, trade restrictions are reduced to the boundaries of the established control area.**

"This collaborative effort uses a science-based approach to ensure trade between both countries resumes as quickly as possible," USDA Chief Veterinarian Dr. Burke Healey said.

APHIS and CFIA are continuing to work with industry and other stakeholders to ensure that both countries have the processes and procedures in place to fully implement the protocol.

As new details on this protocol are released, they will be captured in this report's following issues.

For more information, APHIS ASF webpage, [LINK](#).

Launch of New OIE:WAHIS Platform

On March 18, the OIE launched the new World Animal Health Information System (WAHIS) platform. This redesigned and upgraded interface offers a technologically advanced and user-friendly platform with many previously unavailable features. The core of the system will be completed by the end of 2021. It will continue to evolve, making it easier for users to collect and report information – and upload data from their own databases.



THE NEW
OIE-WAHIS
World Animal Health Information System

The new interface will also allow for data to be viewed, analyzed, and extracted more rapidly and in different formats. Other features will include the following:

- OIE-WAHIS will provide high-quality and **reliable geospatial data, which will enable OIE Member Countries to undertake comprehensive risk analyses**. Maps will be interactive, allowing for a dynamic display of information on animal diseases.
- Data from OIE-WAHIS will be usable in a variety of analytic programs.

- OIE-WAHIS will provide straightforward and standardized ways to interconnect with other international or regional information systems and integrate other valuable data sources so that users can share and mutually enrich data in collaboration with OIE stakeholders.
- **The genomic data linked to epidemiological data in WAHIS+ will strengthen disease traceability and contribute to analyses on genetic epidemiology.**
- The WAHIS Alerts mobile application will be updated to provide faster dissemination of disease alerts and instant access to disease notifications.

For more information, [LINK](#).

African Swine Fever

EUROPE

In March, four countries - **Poland (see below), the Republic of Serbia (11 cases), Romania (see below), and Ukraine (two cases)** - reported new ASF outbreaks in pigs. Since the beginning of 2021, these countries have registered 350 outbreaks in farms -- outstandingly, Romania reported 329 of those.

Moreover, since the start of 2021, across 10 countries, the region has registered 4158 in wild boar (31/3_EC ADNS disease outbreaks report; Figure 1), compared with 2,502 cases reported during the same period of 2020.

This represented an increase of over 65%, according to the official statistics submitted to OIE by member countries ([LINK](#)).

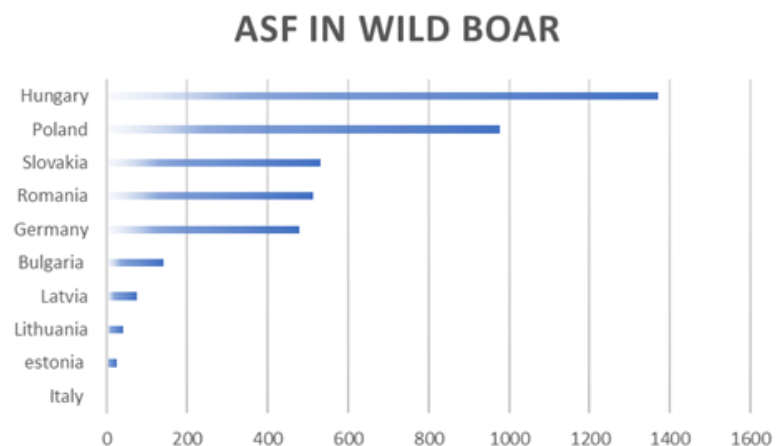


Figure 1. ASF outbreaks in Europe

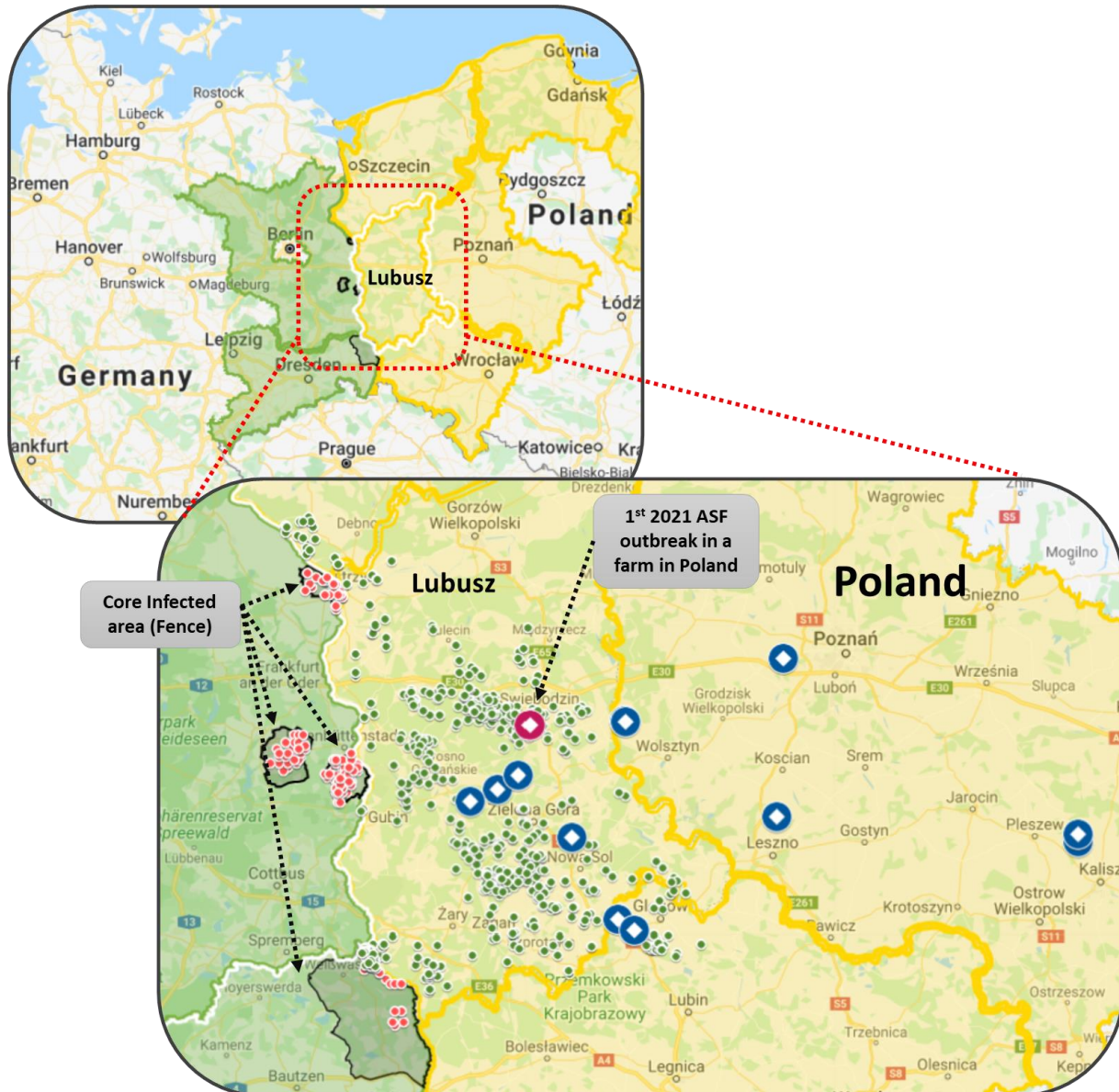
Poland

13th farm ASF positive in western Poland

On March 17, Poland confirmed the first ASF outbreak in 2021 on a commercial farm in western Poland, housing more than 2,000 sows and producing over 70,000 piglets per year.

The previous outbreak reported in domestic pigs in the country was at the end of last October.

This outbreak was detected near Niedźwiady in Lubusz province (Map 1), according to a report by Poland's General Veterinary Inspectorate (GVI). This province, which borders the German state of Brandenburg, has been the most heavily affected in western Poland, reporting most of the wild boar cases in the region (over 3,300 since 2019).



Map 1. Distribution of ASF outbreaks in the border region between Germany and Poland. Small red dots: wild boar cases within core infected areas in Germany; Small blue dots: wild boar cases in western Poland; Large blue dots: ASF cases in commercial farms in western Poland; Large red dot: first ASF case in a commercial farm in 2021.

The entire farm will be depopulated (15,938 pigs), becoming the **second largest outbreak in Poland since the start of the epidemic in 2014**. The largest outbreak so far was detected in March 2020 on another farm in the same province with almost 24,000 pigs on site.

The number of ASF cases in wild boar in Poland and Germany's border region has risen to 4,978 (combined count: West-Poland 4,114; Germany 864) infected animals since November 2019.

Germany

The count of ASF positive wild boar is growing steadily in all districts in eastern Germany. On March 31, there were a total of 864 cases. Most of them had been detected in Brandenburg state, with 789 cases, and in Saxony, with 75 reports. These numbers surpass the total count of ASF cases (833) that

Belgium reported before being declared free of [ASF in October 2020](#) (first report: September 2018; The last positive case confirmed on a fresh carcass: August 2019; all cases detected after August 2019 have been confirmed on the remains (only bones) of wild boar that died several months before the discovery of the bones, last case found: March 2020).

Setting two white zones already completed

White zones are 5km wide corridors around infected zones, in which hunters are supposed to depopulate the wild boar populations. This is to prevent the virus from spreading to other animals from the infected inner zone.

Germany has just recently completed the fence around two infected zones (Map 2):

1. In the districts Oder-Spree and Spree-Neisse.
2. In the districts Oder-Spree and Dahme-Spreewald.
 - *This white zone is surrounding the infected zone that was most strongly infected. **In total, 84.5miles of fence was constructed to fence off an area of 248.5 miles.***

Due to the increasing number of detected cases within the current restricted area in the Saxony state, the infected area that measured 124 square miles will soon be expanded to measure 381 square miles.

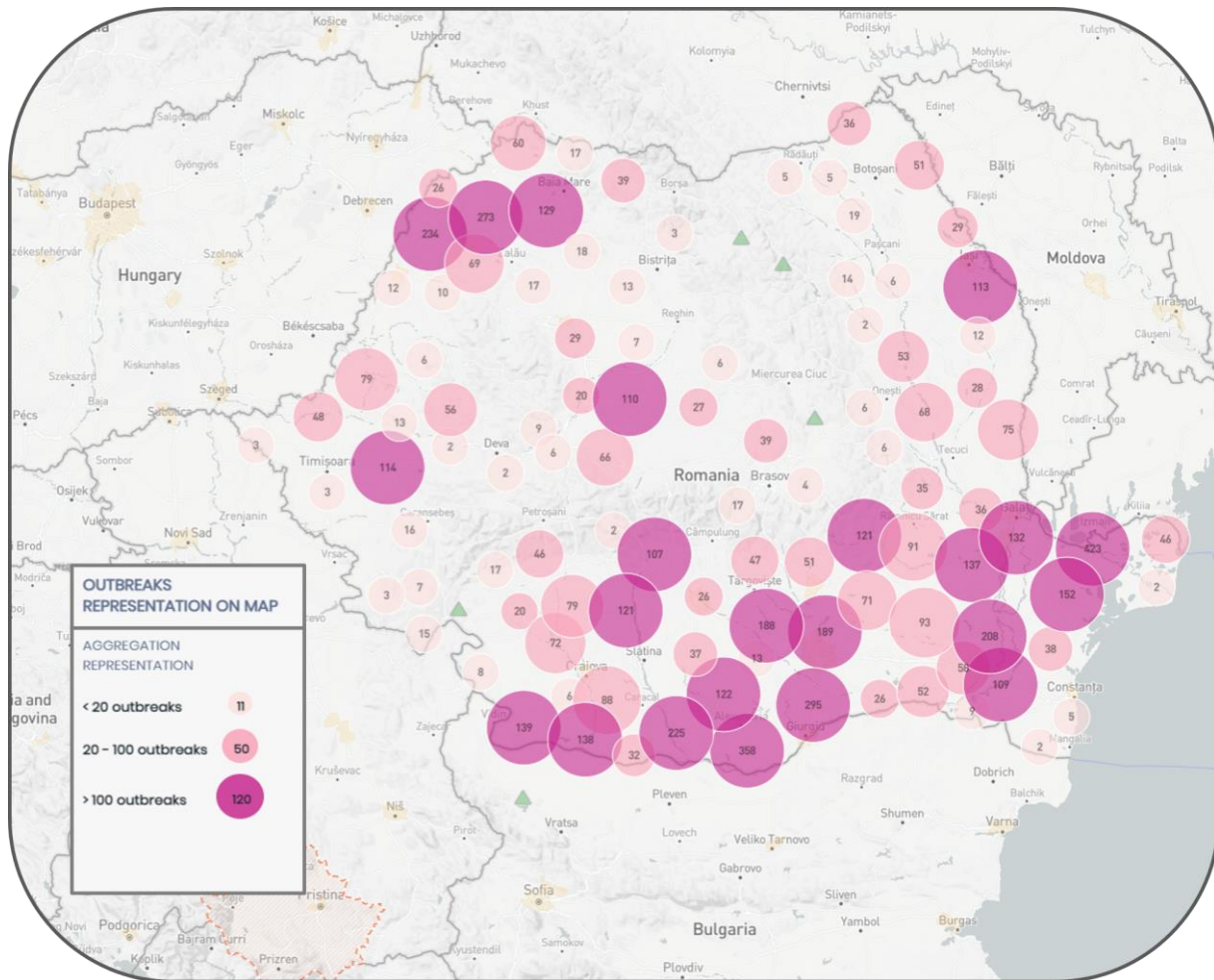
Romania

On April 1, the Romanian National Sanitary Veterinary and Food Safety Authority (ANSVSA) released a new statement updating the current situation of ASF. According to this report, there are currently **409 active outbreaks in the country, affecting over 100,000 animals.**

From the 409 outbreaks, **seven are in commercial holdings, and six outbreaks in type A commercial.**

Four years after the appearance of ASF in domestic pigs in the European Union, only Romania still registers this number of cases. More than 200 outbreaks have been reported on farms since then, leading to thousands of animals' culling. To understand the magnitude of the contrast between scenarios, by March 3, Romania had 231 new ASF cases in domestic pigs. Simultaneously, the number of cases of ASF in all European states was zero.

In contrast, most European countries are battling ASF among wild boar. But even then, Romania occupies a leading place with 512 cases, after Hungary (1371), Poland (977), and Slovakia (531), according to the same source.



Map 2. Global distribution of reported ASF outbreaks in Romania.

The actual impact

The president of the Association of Romanian Pork Producers (APCPR), Ioan Ladoși, said last week to a local news media that local farms do not supply more than 30% of the demand for pork in Romania, compared to 60% in 2017, before the appearance of swine fever.

He also mentioned that in 2020 **3.7 million pigs were slaughtered**, down 12% compared to 2019, when 4.2 million pigs arrived at slaughterhouses.

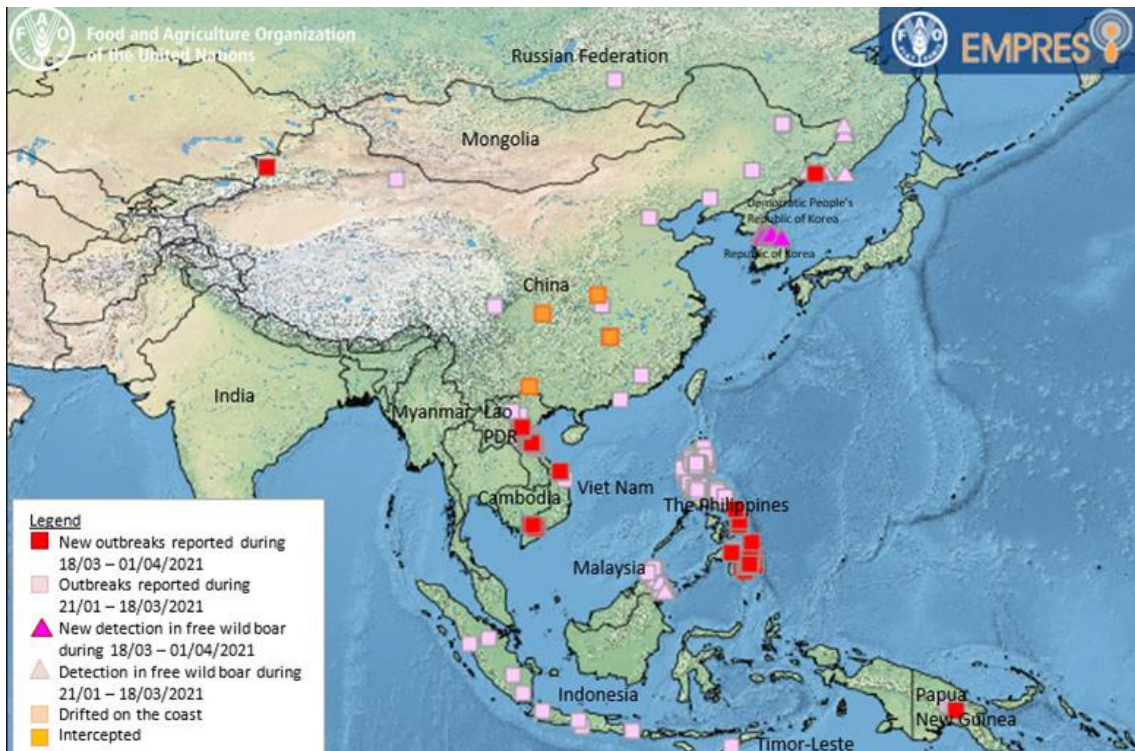
Recently, Minister of Agriculture Adrian Oros stated that ASF had caused an annual deficit of more than 600 million euros (US\$708 million). Out of the 3.6 million accommodation places for fattening pigs, not more than 900,000 are currently occupied. The rest are in empty bankrupt farms. Moreover, each year, the government has paid hundreds of millions in compensation.

ASIA

In March, nine countries - **China, Vietnam, Indonesia, South Korea, the Philippines, Timor-Lester, India, and Malaysia** - reported new ASF outbreaks.

Since 2018, the region has registered over 12,000 outbreaks with 7 million pig losses. The losses reported by the OIE are calculated based on the sum of dead and culled animals in the infected farm or backyard premises notified within the outbreaks. It doesn't include the impact of additional control measures applied in response to the outbreaks, such as preventative culling in a zone around an outbreak.

Currently, there are over 1,400 ongoing official outbreaks across 14 countries.



Map 3. Notified outbreaks in Asia until April 1st (Source: [FAO](#))

The Philippines

On March 29, ASF was confirmed for the first time in Samar Island, neighboring Layte Island. The disease was confirmed on backyard farms in Lope de Vega, Northern Samar Province, a visitor, is suspected as the route of introduction into the farm.

In March, the Philippine authorities reported that since the first outbreak detected in July 2019, ASF has spread to 12 regions, 40 provinces, 466 cities and municipalities, and 2,425 communities in the Philippines to date, **causing a loss of over 3 million pigs**, taking the country to declare the national emergency.

China

In March, Chinese authorities reported new ASF cases in Sichuan, Hubei, Yunnan, Hunan Provinces, and Xinjiang Uygur Autonomous Region (Map 4).

- Earlier in March, ASF cases were detected in Sichuan, Hubei, and Yunnan Provinces.

- On 3/2, Yunnan authorities seized 36 infected animals illegally transported
- On 3/6, authorities reported outbreaks in both Sichuan (farm of 127 heads, 38 animals died) and Hubei (vehicle seized transporting 165 infected piglets) provinces
- On 3/9, Sichuan authorities seized 10 pigs (two died) illegally transported.
- In Xinjiang, an outbreak occurred on March 24 in Yili prefecture on a domestic farm.
- In Hunan, ASF was detected in Changsa County, Changsa City, on March 27 on a truck of pigs being transported into Hunan illegally.



Map 4. ASF in China

Transmission routes updates

In February, the Standing Group of Experts on ASF for Asia met virtually. Regional representatives shared updates on the current ASF situation and progress with control.

Here a summary with the highlights of the presentation done by the Chinese delegate is presented:

Note: It needs to be highlighted that many experts agree that the real number of cases in China may be significantly over the officially reported number of outbreaks in China of 182 total cases (farms: 148; slaughterhouse: 7; transportation: 21, wildboar: 6).

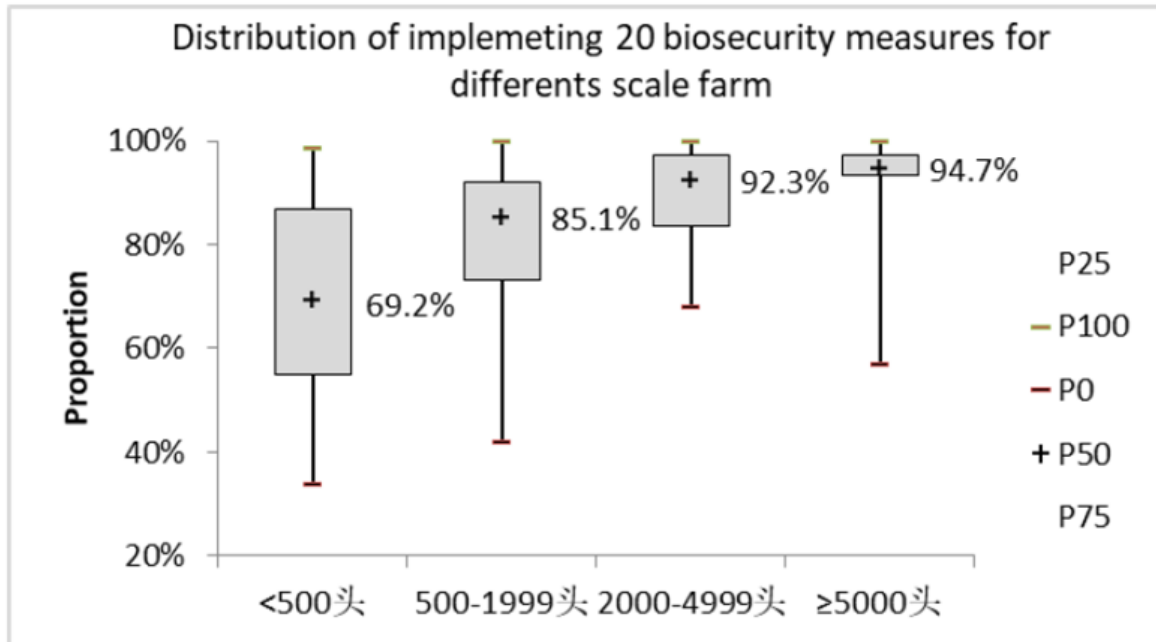
- The proportion of transmission routes change significantly depending on the phase of the epidemic:

Phase	Spread by		
	Swill feeding	Mechanical disseminations by vehicles/personnel	Movement of pigs and pig products
Phase I Aug-Oct 2018	40%	32%	28%
Phase II Oct 2018 - Oct 2019	38.7%	43.5%	17.7%
Phase III Oct 2018 - Dec 2020	0%	11.1%	88.9%

Figure 2. Transmission routes in China

- Biosecurity improvements, 83.2 % farms implementing 20 biosecurity measures, large scale farms with the highest levels of compliance:

Figure 3. Level of biosecurity compliance across different farm scale



Monitoring ASF Variant Strains in Chinese Pig Farms

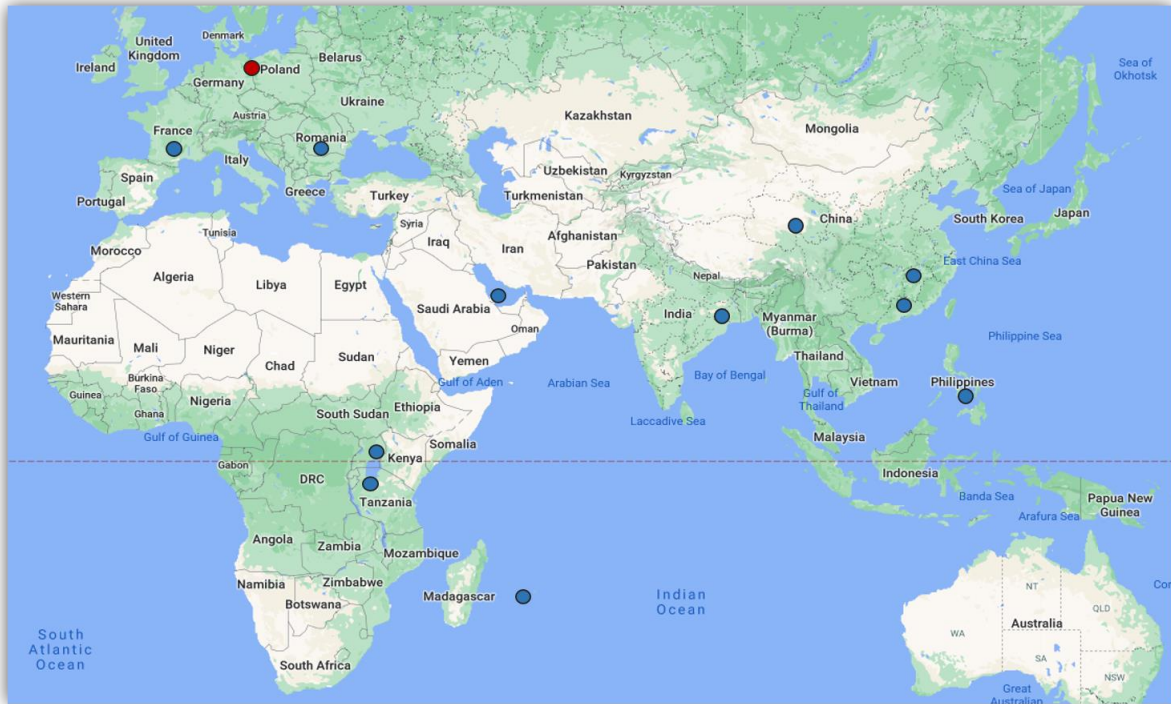
On March 22, the Animal Husbandry and Veterinary Bureau released Technical Guidelines for Monitoring African Swine Fever Variant Strains in Pig Farms developed by the National ASF Reference Laboratory.

Illegal Vaccines

On March 29, an alert letter on unlicensed ASF vaccine use in the region was sent out to Chief Veterinary Officers (CVOs) by the regional secretariat for FAO/OIE GF-TADs for Asia and the Pacific.

The FAO and OIE in Asia and the Pacific, together with OIE Reference Laboratory for ASF at the Australian Centre for Disease Preparedness and other ASF experts, are working to gather more information. Still, it is essential to emphasize the following:

- There is currently no authorized ASF vaccine with proven effectiveness and safety available in the world.
- Biosecurity is still the most important and most effective measure for the prevention and control of ASF.
- The use of ASF vaccines with unproven safety or efficacy will neither prevent nor control ASF outbreaks and represents a serious threat to the whole pig industry, including smallholders within a country and beyond.



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 and included

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

OIE - [OIE Asia Regional office](#)

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

CAHSS - [CEZD Weekly Intelligence Report](#)

European commission - [ADNS disease overview](#)

EUROPE

Poland -

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ASIA

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The Philippines -

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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 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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