# 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.

University of Minnesota Technical Coordination

Sol Perez<sup>1</sup>, Auguste Brihn

Andres Perez<sup>2</sup>

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

<sup>1</sup>Project coordinator. E-mail: <u>mperezag@umn.edu</u>

<sup>2</sup>Principal investigator. E-mail: <u>aperez@umn.edu</u>

<u>www.cahfs.umn.edu</u>

### Current and previous reports:

 $\underline{www.swinehealth.org/global-disease-surveillance-reports/}$ 







# **Swine Disease Global Surveillance Report**

Tuesday, December 3, 2020 - Monday, January 4, 2021

# **Report Highlights**

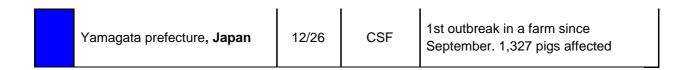
- **Western Poland:** African swine fever (ASF) spreads to a fourth province at the north border with Germany
- European Russia: Surge of ASF outbreaks in large commercial farms
- ASF outbreak in the Siberian region: First outbreak in three years near the Kazakhstan border
- Foot-and-mouth disease (FMD) in Namibia: New outbreaks keep moving westwards into the protection zone

### **OCTOBER OUTBREAKS BRIEF**

R	Location	Date	Disease	Impact	
1	Gangwon-Do and Gyeonggi-Do, South Korea	12/20	ASF	Over 49 outbreaks detected in wild boar (by December 17th)	
2	Kurk and Tver Oblast, <b>Russia</b>	Nov - Dec (multiple dates)	ASF	7 outbreaks in large commercial farms (holding over 350,000 pigs in total) have been reported.	
1	Omsk Oblast (Southwestern Siberia, Central Asia), Russia	12/14	ASF	First outbreak in a backyard farm since Nov 2017. Over 529 pigs were destroyed.	
1	Romania, multiple locations across the country	12/18	ASF	409 active outbreaks in 32 counties, including 4 commercial farms	
1	Western Pomeranian, <b>Poland</b>	12/17	ASF	In wild boar - At least 3 infected carcasses were found The official report still pending	
2	Oshikoto Region (Northern, closer to Angola's border), Namibia	12/28	FMD	5 regions have been declared as the disease management areas and FMD surveillance has been intensified.	
1	Greater Giyani, Limpopo (Northeast), <b>South Africa</b>	12/13	FMD (SAT 1)	3 outbreaks were reported affecting a population of over 1,600 (32 cases) susceptible animals - First reports since April 2019	
	Nakhon Ratchasima (Northeast province), <b>Thailand</b>	12/17	Unknown	Reports of higher mortality rates in pig farms	







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 5, showing the location of the outbreaks reported throughout December, is available at the end of this report.

### **African Swine Fever**

### **EUROPE**

### **Poland**

ASF keeps expanding in western Poland. On December 17, local media reported the finding of the first two infected carcasses in Western Pomerania province, which borders Lubusz province in the north, at just over 1km of the border with Germany (Map 1). By December 31, only a few kilometers away from the first site, near the village of Czelin, several carcasses were found by veterinary authorities.

This is the fourth province in western Poland that has reported the disease and borders Germany.

Map 1. Location of new ASF case in West Pomerania, western Poland.

### Germany

By January 4, the ASF cases in wild boars in eastern Germany surpassed 400 total cases. Half of them, 199 positive animals or carcasses, were reported in December. Surveillance and reporting efforts revealed a steady increase in cumulative cases each month.

September	40		
October	84		
November	119		
December	199		







Total	442
-------	-----

All cases have been found in four separated and demarcated zones along the border with Poland. Three of these zones are in Brandenburg state, the southern one is in Saxony state (Map 1). The cases are found in four districts (Spree-Neisse, Oder-Spree, Maerkisch-Oderland, and Goerlitz) Figure 1.

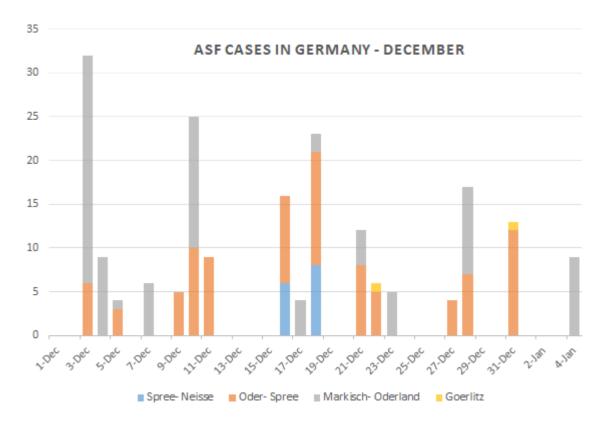


Figure 1. Distribution of ASF cases in wild boar reported in each District within each Zone

### **EUROPE & CENTRAL ASIA**

### **RUSSIA**

Cluster of outbreaks in commercial farms in Turks and Tver regions

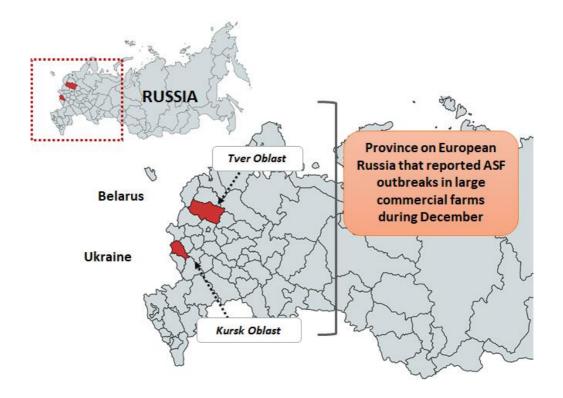
On December 6, a potential outbreak was identified in the first farm holding 49,500 pigs. On another farm of over 55,000 pigs, the suspicion of ASF was reported on December 10. A third large farm in the same region with roughly this pig stock also reported suspected ASF cases three days later. A smaller pig farm with 335 pigs was also infected in the same area. On December 17, it was officially announced that all four farms had tested positive for ASF. Days later, another farm of 72,000 pigs reported an outbreak (Figure 2).

Since late November, in the Kursk and Tver region (Map 2), eight outbreaks of ASF were recorded at large pig-breeding enterprises with III and IV biosecurity levels (referenced to the current Russian compartmentalization protocol). These farms hold more than 350,000 pigs in total.





By December 20, local authorities reported the destruction of 60,000 animals, and more than 657 tons of pig products were destroyed. The fate of the remaining pigs was not disclosed so far.



Map 2. Location of ASF outbreaks in commercial farms during December

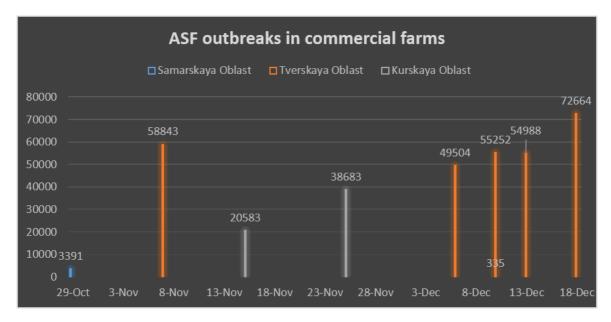


Figure 2. Timeline of ASF outbreaks in Kursk and Tver Oblast









### Drastic surge

Russia regularly reports new ASF outbreaks in wild boar and small pig farms. But reports that large pig farms are affected by the virus are not very common. Until November, Russian authorities had reported a scarce number of outbreaks in commercial farms, and the outbreaks were spread in multiple regions. Still, in retrospect, it is evident that an increasing number of cases in wild boars and backyard farms have been reported since July (Figure 3). This could represent an increase in the circulation of the virus in the region—increasing the risk of introduction to commercial facilities, even to the ones with high biosecurity standards.

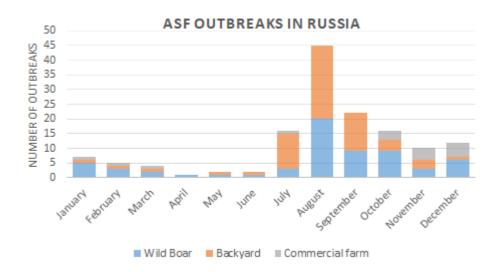


Figure 3. Summary of 2020 ASF reported outbreaks by specie and production system

	Outbreaks by species and production system						
Region	Wild boar	Backyard farming	Total affected animals	Commercial farm	Total affected animals		
European Region	63	64	1937	16	432,255		
Asian Region	45	76	1295	NR	-		
Totals	108	139	3232	16	432,255		

Figure 4. Distribution of ASF outbreaks throughout 2020 in Russia

# New outbreak in Omsk region

On December 14, the first outbreak of ASF since November 2017 was reported by Russian authorities in Omsk Oblast, Southwestern Siberia (Map 3). The outbreak affected a backyard farm with 188 animals. Local authorities reacted strongly to the outbreak in the village of Berezyanka, and neighboring villages establishing restrictive measures lasting until December 24.

Local news media reported the outbreak's potential origin to swill feeding with food wastes not appropriately treated. This was later confirmed by Olga Matyka, deputy head of the Russian National





Veterinary Service (Rossselkhoznadzor) office for the Omsk Region during a press conference: "It was more profitable for him to collect slop from kindergartens, the Kabanov COVID hospital, collect vegetable and fruit waste in garbage dumps, dump everything and feed the pigs with it."

Farmers in the region still recall the large 2017 outbreak, when more than 24 outbreaks were officially reported in the Omsk region, affecting 13 districts and involving the culling of over 20,000 pigs. According to rough estimates, the damage from the protracted outbreak amounted to 1 billion rubles (US \$13 million).



Map 3. Location of the ASF outbreak in Western Siberia

The 2017 ASF outbreak in Omsk oblast is considered one of the largest outbreaks in the Russian Federation documented.

### Kazakhstan on alert

In response to the reported outbreak, Kazakhstan authorities have introduced restrictions on the import and transit of relevant goods (live pigs, boar semen, pork, wild boar meat, and their genetic material, pig-breeding products, including slaughter products of wild boars, horned hoofs, leather, and intestinal raw materials, bristles, feed for pigs that have not undergone similar heat treatment in the manufacture of hunting trophies, as well as equipment used for keeping, slaughtering and cutting pigs from) from the Arkhangelsk, Omsk, Orenburg and Kursk regions of the Russian Federation.

In addition, efforts towards removing wild boars and taking samples for research diagnosis of ASF have been deployed in the north of the country.





### **Foot-and-Mouth Disease**

### **AFRICA**

### Namibia

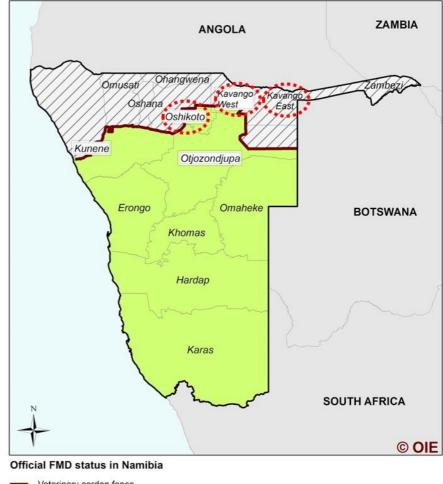
On December 28, the Ministry of Agriculture announced that an FMD outbreak was detected at the Omulunga village in the Oshikoto Region (Map 4). The Oshikoto region is part of the "protection zone" between the Free zone (in green below the Red Line) and the infected zone (eastern states bordering Botswana and Zambia).

According to a statement issued by the ministry, the outbreak was confirmed on December 29 after two cattle out of five cattle in a herd displayed FMD clinical signs during physical examinations by veterinary officials.

In line with the Animal Health Act, Act 1 of 2011, the district where the crush pen is situated, has been declared an infected area.

Map 4. FMD free zone in Namibia

# FMD FREE ZONE IN NAMIBIA



Veterinary cordon fence

FMD free zone where vaccination is not practised, located south to the veterinary cordon fence (February 1997)

The statement also detailed that another four regions (Ohangwena, Oshana, Omusati, and Kunene) have been declared as the disease management areas (DMAs) where FMD control measures have been instituted.

### These include:

- A complete restriction on the movement of all live susceptible animals such as cattle, sheep, goats, pigs, and wild animals within and out of the DMAs.
- The movement of other potentially infectious commodities such as hides, skins, game trophies, grass, and plant material out of DMAs has also been restricted until further notice.
- In-transit movement of live cloven-hoofed animals and their products through the five regions is also prohibited.





### Growing concerns of the US cattle industry

In early October, representatives of the US cattle industry (National Cattlemen's Beef Association) expressed their concern over the initial outbreaks in Kavango East (Reported on September 25), shortly after the approval of beef exports from the African nation to the US.

According to USDA's Food Safety and Inspection Service, the first shipment of fresh beef was received in October 2018, and from January 1, 2020, through October 1, 2020, the US imported 1.1 million pounds of fresh beef from Namibia.

The shipment from February 2020 was the first large commercial shipment.

While the spokesperson - NCBA's Vice President of Government Affairs - acknowledged that Namibia took prompt actions to control the outbreak by establishing a cordon fence and buffer zone, this westward expansion—from Kavango East/West to Oshikoto—highlights the difficulties inherent to the control of the disease within the protection zone.

The last FMD outbreak in the disease-free area south of the fence occurred in 1964.

To enforce movement restriction, roadblocks have been set up at strategic points and patrol teams have been deployed within DMAs. Furthermore, FMD surveillance aimed at establishing the extent of the outbreak in all five regions has been intensified. The tracing of all livestock movement from and into declared infected areas will be done using the Namibian Livestock Identification and Traceability System (NamLITS).

The ministry also announced that the FMD outbreaks detected earlier in Kavango East and Kavango West (Map 4) are ongoing and all control measures instituted are still applicable.

### Urgency to strengthen the north fence

In 2015, Namibia experienced one of the worst FMD outbreaks in history, taking nearly a year and \$13 million to eradicate. Afterward, Namibia was declared FMD-free in January 2016.

Another widespread outbreak of FMD in Namibia could potentially wipe out the entire livestock production industry in that country. Therefore, the condition of Namibia's veterinary cordon fence was a serious cause for concern. This fence divided the country into a veterinary buffer zone (north) and a veterinary surveillance zone (south). It started at Palgrave Point on the west coast of Namibia and ran in a generally eastern direction to a point on the common border between Namibia and Botswana at a  $20^{\circ}$  latitude.

"This fence effectively cordons off Angola and the areas of Botswana where the disease is endemic. No cloven-hoofed livestock are under any circumstances allowed to move southwards through the veterinary cordon fence to prevent the spread of diseases such as FMD and contagious bovine pleuropneumonia," explained the chairperson of the Namibian Livestock Producers' Organisation (LPO) to <a href="Farmer's Weekly">Farmer's Weekly</a>, following outbreaks of the disease in Kavango East and Kavango West in October. Proper management and upkeep of the fence in the north of the country are extremely critical.

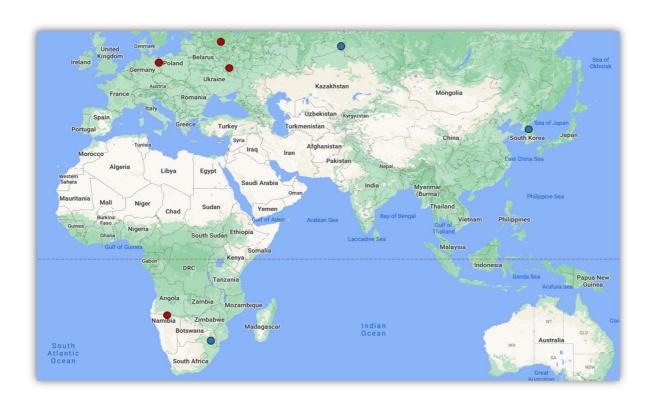
In October, at an emergency meeting, the Namibian Meat Board requested the LPO to take responsibility for the repair of the fence following the outbreaks in Kavango. The board and the government provided the materials, while producers were requested to supply time and labor. LPO immediately started with the repair work.





However, the LPO spokesperson shared that there is some concern about the general upkeep of the fence and its management. The poor management of the control checkpoints is especially worrying.

Should this health status of the free zone be compromised by outbreaks of FMD, Namibia stands to immediately lose its red meat export markets, including exports to Scandinavian countries, the US, and China, as well as the export of beef weaners to South Africa.



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

EFSA -

**AFRICA** 

South Africa -

### Namibia -

https://www.nbc.na/news/foot-and-mouth-disease-outbreak-detected-oshikoto-region.39179 https://www.dtnpf.com/agriculture/web/ag/news/article/2020/10/08/ncba-expresses-concern-foot-mouth#:~:text=Namibia%20experienced%20one%20of%20the,nation%20has%20a%20traceability%20system.https://www.northernag.net/cattle-industry-concerned-about-fmd-outbreak-in-namibia/





https://www.farmtech-africa.com/grave-concern-for-condition-of-namibias-fmd-protectionfence/?fbclid=IwAR1EniaTqK8D4q6cYLPuUHIwKc5uzwzbH6sF4oQjNmHe02Mf6BA2UPH3Ud8

### **EUROPE**

### Poland -

https://radioszczecin.pl/1,417241,kolejne-dziki-z-asf-w-naszym-regionie

https://www.pigprogress.net/Health/Articles/2020/12/ASF-Poland-Virus-moves-north-into-West-Pomeraniaprovince-689717E/

### Germany -

https://www.pigprogress.net/Health/Articles/2020/12/ASF-Germany-Number-of-cases-in-wild-boar-tops-300-

https://tsis.fli.de/Reports/Info\_SO.aspx?ts=011&guid=c9f8f34c-9c98-4e00-a8fa-56c522c9d37b

### Romania -

https://www.stiripesurse.ro/ansvsa-romania-registers-409-active-outbreaks-of-african-swine-fever-in-32-counties 1556485.html

### **ASIA**

### Russia -

http://ursn72.ru/news/4844.html

https://omsk.aif.ru/society/afrikanskaya chuma vernulas v region omskie fermery snova teryayut hozyaystvo https://superomsk.ru/news/95504-v\_omskoy\_oblasti\_vveli\_karantin\_iz\_za\_afrikanskoy\_/

Map source: By Lokal\_Profil, CC BY-SA 2.5, https://commons.wikimedia.org/w/index.php?curid=73796534

https://rus.azattyg-ruhy.kz/society/18284-kazakhstan-predupredil-rossiiu-iz-za-afrikanskoi-chumy-svinei https://rus.azattyq-ruhy.kz/society/18284-kazakhstan-predupredil-rossiiu-iz-za-afrikanskoi-chumy-svinei

#### South Korea -

http://www.hani.co.kr/arti/area/capital/973627.html

https://kenews.co.kr/news/article.html?no=79508

https://www.korea.kr/news/pressReleaseView.do?newsId=156430291&call\_from=rsslink