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.



UNIVERSITY OF MINNESOTA



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 Perez¹, Auguste Brihn Andres Perez²

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

¹Project coordinator. E-mail: <u>mperezag@umn.edu</u> ²Principal investigator. E-mail: <u>aperez@umn.edu</u> <u>www.cahfs.umn.edu</u>

Current and previous reports:

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







Swine Disease Global Surveillance Report

Tuesday, January 6, 2020 - Monday, February 3, 2020

Report Highlights

- Serbia confirms new cases of African swine fever (ASF) near its border with Bulgaria and Romania: this is the first time ASF is reported in wild boars in the country.
- Illegal Chinese pork seized in Italy: 9.5 tons of illegally imported pig meat was hidden under a shipment of vegetables in Padoa.
- Expansion of classical swine fever (CSF) in Japan: on January 7, the island of Okinawa reported its first outbreak since 1986, experts said that the disease may have entered through leftover food scraps.
- Russia new foot-and-mouth disease (FMD) outbreak confirmed: close to the Chinese and Mongolian border
- High Level International Conference, "The future of global pork production under the threat of African swine fever": the European Commission organized this conference in Berlin, Germany, on January 17, with the aim of fostering coordinated global actions to reduce the impact of ASF on pork production and international trade.

African Swine Fever

EUROPE

Germany

Despite domestic hog production occurring indoors, Germany has been on high alert for months implementing ASF prevention campaigns and increasing measures to prevent ASF from entering the country. Near the German border, ASF was identified in wild boar carcasses in Poland and Belgium. Since 2014, ASF cases were identified in wild boar in Eastern Poland and cases have since been creeping westward, arriving especially close to the German border over recent months – the last report was within 7.4 miles. According to OIE, Western Poland reported 55 ASF outbreaks in wild boar in December.

To control an increasing ASF susceptible wild boar population near the affected borders, Germany lifted hunting restrictions, increasing kill quotas, and legalizing nontraditional hunting equipment including night vision gun attachments. Programs in place for locating wild boar carcasses, particularly in areas near roads, had intensified and remuneration had increased. Education campaigns for tourists and farmers are being implemented.

For the EU Commission Border Fences Hardly Help

Germany then Denmark, France, and Poland erected fencing 75 miles long along the border areas, despite a high cost and controversy. This fence is a mobile electric fence and has experienced damage by hikers and thieves.

The EU Commission warns against wrong methods in the fight against the deadly animal disease. For example, hunting wild boars could accelerate the spread of ASF because the animals move further and faster.

Even long fences along the borders of the EU member states would not offer any protection, said Bernard van Goethem, Director in the Directorate General for Health of the EU Commission. Over time, wild boars would overcome such fences.





Influencing the direction of migration of the wild boar

The German Federal Ministry of Agriculture replied to the EU Commission, explaining that experience has shown that such fences can have an impact on the direction of migration of wild boar. Fences have been set up in other Member States to prevent the spread of the ASF from an infected area. The mobile wild boar barriers erected by Brandenburg and Saxony in the German-Polish border area are also fences that are intended to specifically prevent the spread from a known infected area.

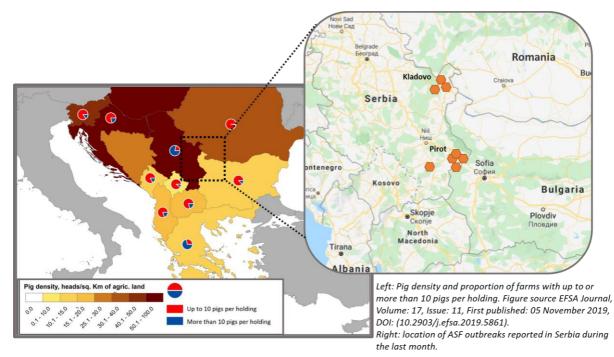
The aim is to create a wild boar-free zone as a buffer with fences and by reducing the wild boar population. This free zone is located in an ASF-free area between a known infected area in a Member State and an unaffected Member State. Hunting management takes place in an ASF-free area under very controlled conditions. The exact design is currently being discussed.

Even in the event of an outbreak of epidemic, the Friedrich-Loeffler-Institut (FLI) sees a sensible control measure in game fences, as the Czech Republic has shown. Game fences are not an absolute barrier and would not release you from intensive surveillance measures behind the fence.

Serbia

Re-emergence of ASF: new outbreaks confirmed in wild boars

On January 15, Serbia confirmed ASF in wild boars in the eastern portion of the country, close to the country's borders with Bulgaria and Romania, state Tanjug news agency reported. The disease was discovered in two hunting grounds in the eastern Serbian areas of Pirot and Kladovo (Map 1), Tanjug reported, quoting Sasa Ostojic, the head of the national veterinary Crisis Centre.



Subsequently, on January 24, Belarus temporarily restricted the import of live pigs, zoo and circus animals, processed pork products, leather, horns and hoofs, raw casings, hog hair, the meat of wild boars, hunter's trophies, etc. from these districts of Serbia.





This happened less than a month after the Veterinary Directorate, on December 20, issued a decision to cease the implementation of restrictive measures in the areas infected and threatened by ASF in the municipalities of Mladenovac, Smederevska Palanka, and Zitisa. Measures were implemented after the outbreaks reported last August. According to the Ministry of Agriculture, the decision was made taking into account the results of surveillance and diagnostic testing throughout the country as well as measures and results of control of pigs in infected and endangered areas, all in accordance with national and European regulations.

Authorities commended shooting of boars to contain the disease. Neighboring countries, such as Hungary, Romania, and Bulgaria have already reported outbreaks of the disease, mainly spread by boars which are also a popular game among hunters in the region.

Global Preparedness -- Control at Points of Entry

9.5 tons of illegal Chinese pork seized in Padoa

On January 22, Italy's tax police seized and destroyed 9.5 tons of pork imported from China. The illegally imported pig meat was hidden under a shipment of vegetables from China in a storage facility near Padoa, managed by a Chinese citizen, according to police in the northeastern city. Italian authorities said the tainted meat arrived in Europe via the Dutch port of Rotterdam before making its way to Padua. The load of pork was destroyed and the man was charged with smuggling, trade in harmful foodstuffs, and spreading of animal diseases, police added.

Beagle detected pork in the luggage of passenger from China arriving in the US

On January 16, a detector dog for US Customs and Border Protection marked the luggage of a woman arriving from China at Chicago's O'Hare International Airport. The dog's handler then discovered and confiscated a ham sandwich in the purse of a passenger who had flown on a China Eastern Airlines flight from Shanghai.

ASIA The Philippines

Philippine authorities have reported more ASF outbreaks, with culled pigs nearing 200,000 as of January 30. The Department of Agriculture said 130 new outbreaks and 2,891 cases have been recorded since August last year. On the latest outbreaks, Baliuag in Bulacan has the highest number of culled pigs with 14,551 followed by San Luis and Candaba in Pampanga with 10,202 and 7,622, respectively. The backyard producers are the most affected by these outbreaks.

Director Ronnie Domingo of the Bureau of Animal Industry maintained that the swine disease was being contained amid stricter quarantine measures. Surveillance continued in the country. Only a small percentage of the culled pigs were affected by ASF, the director added.

South Korea

South Korean quarantine authorities said on January 27 that they have found 11 more wild boars infected with ASF virus in areas near the border with North Korea, bringing the number of such cases to 117. Because of an increase in the number of tourists during the lunar New Year, the Ministry of Agriculture, Food and Rural Affairs (MAFRA) tightened customs control over the portable goods from tourists in the ports of entry until the end of January and planned to conduct the public awareness campaigns for travelers leaving the country. Since MAFRA confirmed the first ASF outbreak on September 17, 2019, local authorities have culled nearly 400,000 domestic pigs as a preventive measure.





Classical Swine Fever

Japan

First CSF outbreak in Okinawa

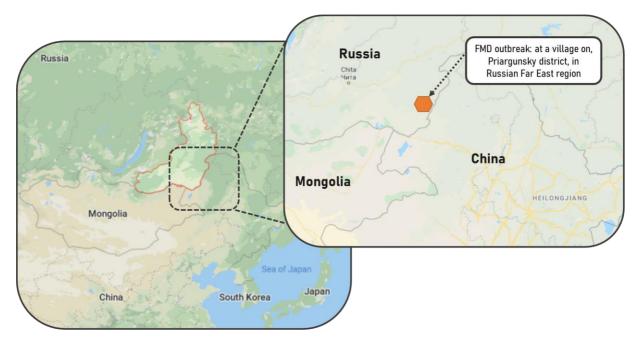
On January 7, the island of Okinawa, the southernmost prefecture in Japan, reported its first outbreak since 1986. Experts said that the disease may have entered through leftover food scraps. An expert panel was commissioned to investigate the source of the infection. Initial results suggest that leftovers, including pork infected with CSF in Honshu, may have been the caused the outbreak earlier this month. The panel conducted a genetic analysis showing genetic similarity between the virus isolated in Okinawa and the isolates from Gifu Prefecture (central Honshu). It was not an infection that originated overseas, the article said.

Foot and Mouth Disease

Russia

New FMD outbreak confirmed in Zabaikalsk

Russia has reported a new FMD outbreak (Serotype O) on a farm in the far eastern Zabaikalsk region, where cattle and pigs cohabitate. The last outbreak of FMD in this region was reported in March 2019. The suspected source of infection is a communal cattle watering point on the Argun River along which the national boundary between the Russian Federation and China runs, according to the OIE report.







South Africa

FMD confirmed in 16 locations of Limpopo



The FMD outbreak is proving difficult to contain in Limpopo after four new cases were reported in commercial farms in the last month. The total number of confirmed FMD affected locations in Limpopo (South African province bordering Botswana, Map 4) has increased to 16 since the outbreak started in the province late last year.

Last week, local news reported a man was accused of spreading the virus. It is alleged the suspect knowingly received cloven hoofed animals that were moved out of the FMD controlled area and subsequently sold and moved the animals at various auctions and to

various individuals. Adding to this worrying state of affairs in the livestock industry is a new strain of FMD which was reported by one of these farms.

All premises with links to known positive locations and specific auctions were followed up and tested. More than 130 points were identified and precautionary quarantine had been lifted on 57 properties that had proven negative for FMD after clinical examination and testing.

FMD broader impact

The country exports about 49% of its agricultural products in value terms. China, which imports on average 71% of the country's wool, imposed a ban for months, which has weighed heavily on the industry. The wool sector's exports are worth twice that of beef in value terms, averaging \$308m over the past five years. It has been also estimated that the country could lose up to \$140m in 2020 as countries in the region and elsewhere hold back on importing its beef due to the outbreak.

Chair's Conclusions from the High Level International Conference, "The Future of global pork production under the threat of African swine fever"

The aim of the event held on January 17, 2020, in Berlin, German, was to foster coordinated global actions to reduce the impact of ASF on pork production and international trade. The conference was opened by Stella Kyriakides, Commissioner for Health and Food Safety, Julia Klöckner, Federal Minister of Food and Agriculture of Germany, and Marija Vučković, Minister of Agriculture of Croatia. EU and other country ministers, international organizations, as well as numerous important global stakeholders were also in attendance at the conference which also saw dedicated panel discussions organized.

Global allocation of the necessary resources is needed (VIDEO, Link):

- Enhanced coordination and cooperation between all relevant stakeholders in the agricultural and environmental side (including veterinary services, commercial and backyard farmers, forestry management bodies, and hunters) to effectively control and prevent the spreading of ASF both in domestic and feral pigs, in particular by applying appropriate biosecurity measures.
- Enhanced coordination and cooperation on regionalization/zoning between trading partners allowing building of trust and confidence in regionalization policy and related decisions ensuring safe trade and business continuity.



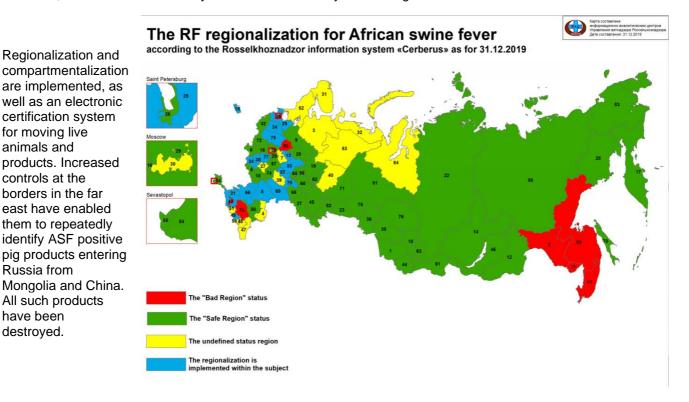


- Significantly **raising the level of awareness** on ASF through the development of well targeted awareness campaigns and risk communication strategies.
- Scientific and technical collaboration in the research area at global level, as well as adequate funding, to further progress research on ASF and to develop a vaccine effective for both domestic and feral pigs.
- Enhanced transparency, trust, and sharing of information on ASF between countries including sharing of data and best practices on illegal trade and personal luggage controls and ASF detections to enhance targeted effective controls. Cooperation with relevant authorities is also important to prevent prohibited items to exit or enter countries.
- **Mutual assistance** when dealing with ASF crises through sharing expert teams and the organization of international seminars and workshops.

Russian Federation lessons learned on compartmentalization and zoning

Summary of the presentation of Dr. Sergey Dankvert, federal service for veterinary and phytosanitary surveillance, Berlin 2020 (Resources: <u>Link 1</u>; Link 2).

The epizootic situation of ASF in Russia remains rather complicated. There has been a significant decrease in the number of ASF outbreaks during the last year, associated with a reduced incidence of illegal movement of pigs in connection with the **introduction of electronic veterinary certification in 2018.** Still, the number of cases in wild boar tends to increase. The overall pig population is increasing in Russia, while the share of backyard farms is constantly decreasing.



Regionalization and Compartmentalization

Both tools have a common objective – the differentiation of animal subpopulations of different health statuses in order to separate the relatively safe circulation of animals/animal products from the potentially dangerous circulation of animals/animal products.

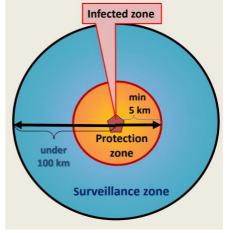




The principle of regionalization – **the territorial differentiation** of subpopulations in order to separate the circulation of animals and animal products in infected administrative territories or administrative territories suspected of being infected from the circulation of such goods in administrative territories which are disease-free.

ASF zoning in Russia:

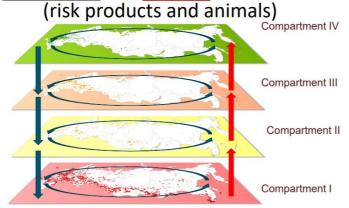
- Protection zone -- minimum radio of 5 km
- Surveillance zone -- minimum radio of 100 km



The principle of compartmentalization – **the technological differentiation** of subpopulations in order to separate the circulation of animals and animal products at livestock/processing facilities with low biosecurity, from facilities where a complex of technological and management pro

facilities where a complex of technological and management practices aimed at preventing the introduction of causative agents is in place.

Authorized and banned movements



In 2010 the Russian Federation started applying rules for determination of compartment for pig farms. According to these regulations, pig farms could get one of four levels of compartment, based on four main elements:

• Biosecurity (high level protection)

• Regulation of trade and movements between farms (live pigs, feed etc.)

- Enhanced surveillance inside farms
- Animal free zone around farms

Currently, there are 1697 commercial farms registered as compartment III and 1120 registered as compartment IV.

References:

FAO - <u>ASF situation in Asia update</u> -- OIE - <u>WAHIS interface - Immediate notifications</u> EUROPE Serbia -

https://www.reuters.com/article/us-serbia-swineflu/serbia-reports-outbreak-of-african-swine-fever-in-boarsidUSKBN1ZE1VQ

https://www.agriculture.com/markets/newswire/serbia-reports-outbreak-of-african-swine-fever-in-boars

https://eng.belta.by/economics/view/belarus-restricts-pork-import-from-serbia-due-to-african-swine-fever-127528-2020/

NewsOnline -- <u>Link</u>

Germany -

https://kticradio.com/agricultural/asf-grows-in-poland-drives-german-action/

https://www.pigprogress.net/Health/Articles/2020/1/ASF-Poland-Outbreaks-in-the-west-far-from-over-527971E/ ASIA

Japan -

https://www.japantimes.co.jp/news/2020/01/24/national/tainted-pork-swine-fever-okinawa/#.XjilCWhKjcv Russia -

https://uk.reuters.com/article/uk-russia-cattle-disease/russia-logs-foot-and-mouth-disease-on-farm-in-far-eastidUKKBN1ZT0PG

https://www.oie.int/wahis_2/public/wahid.php/Reviewreport/Review?page_refer=MapFullEventReport&reportid=33
101

https://web.oie.int/RR-Europe/eng/Regprog/docs/docs/SGE%20ASF13/SGE_ASF13_report.pdf





https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/animals and animal products/documents/20200117 asf panel-1 8 rf.pdf

AFRICA South Africa -

https://www.iol.co.za/news/south-africa/limpopo/foot-and-mouth-disease-confirmed-in-15-locations-in-limpoposince-start-of-outbreak-40573076

https://www.iol.co.za/news/south-africa/limpopo/foot-and-mouth-disease-affected-locations-in-limpopo-nowstands-at-16-41333555

https://www.yahoo.com/news/south-african-auctioneer-arrested-selling-100156123.html