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.



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Current and previous reports:

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







Swine Disease Global Surveillance Report

Tuesday, July 9, 2020 - Wednesday, August 5, 2020

Report Highlights

- First ASF reports in 2020: Latvia and Slovakia reported new cases in domestic pigs.
- ASF outbreak expands in Nigeria: nine states have reported disease cases.
- FMD in Rwanda: Authorities have reported the first outbreak since 2017.
- **OIE and FAO joint initiative**: ASF global control strategy launched; a GF-TADs initiative under the Framework for the Progressive Control of Transboundary Animal Diseases

R	Location	Date	Disease	Impact			
1	China - Guangxi Zhuang Autonomous Region, Guangdong Province, and Jiangxi Province	7/12/2020	ASF	Unknown case-count due to widespread flooding. <i>Summary below</i> .			
1	China	7/14/2020	FMD	39/131 pigs infected. Summary below.			
1	Philippines - Magpet, North Cotabato	7/31/2020	ASF	678 pigs depopulated from 159 local hog owners. <i>Summary below.</i>			
1	India - Assam and Arunachal Pradesh	7/27/2020	ASF	More than 17,000 pigs in Assam and 4,500 pigs in Arunachal Pradesh killed. <i>Summary below.</i>			
	Myanmar - Kayah state	7/9/2020	ASF	91 cases (7th ASF outbreak since August 2018)			
1	Rwanda - Gatsibo, Kayonza, and Kirehe	7/30/2020	FMD (SAT-2)	499 affected cattle			
2	Nigeria - 7 states	7/31/2020	ASF	More than 600,000 pigs had been killed so far (unofficial reports)			

JULY OUTBREAKS BRIEF

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.





African Swine Fever



Last June OIE published its third report on the global situation of African swine fever (ASF)

Figure 1. Current ASF distribution (Source: WAHIS, Analysis Department - OIE)

In this report, ASF outbreaks reported to the OIE through WAHIS from 2016 to 2020 (up to June 18) have been summarized. The global pattern of ASF distribution in this period suggests a substantial increase in the number of outbreaks across regions (Figure 2).

	Swine			Wild boar				Total	Total Cases	
Region	Outbreaks	Susceptible	Cases	Losses**	Outbreaks	Susceptible	Cases	Losses**	Outbreaks	Total Cases
Africa	128	213 795	61 459	85 539					128	61 459
Asia	9 928	8 107 951	115 309	6 733 791	631	NA	1 121		10 559	116 430
Europe	4 271	1 859 480	625 269	1 383 372	17 307	NA	29 513		21 578	654 809
Total	14 327	10 181 226	802 064	8 202 702	17 938	NA	30 634	0	32 265	832 698

Figure 2. Impact of ASF outbreaks by region (Source: African Swine Fever, Report N47: 2016 - 2020)

The report highlights the existence of *important regional differences* in the data presented.





For example:

- Europe accounted for 67% of the outbreaks reported through immediate notifications and follow-up reports.
- However, the highest impact in terms of animal losses was reported in Asia (6 733 791 animals lost, which is 82 % of the total global reported losses).

Those observations exemplify the challenges to make comparisons across regions. The diversity of production systems, the presence and density of wildlife hosts, and the varying levels of surveillance infrastructure account for these regional differences.

For further reading (Link)

EUROPE

This month, the first outbreaks of the year in domestic swine in Latvia and Slovakia were reported. Also, new outbreaks were reported in Poland, Romania, and Russia.

Latvia

ASF outbreak confirmed in domestic pigs of Kuldiga

According to the Latvian veterinary authorities, the first ASF outbreak of this year has been confirmed among domestic pigs of Kuldiga (western Latvia) (Figure 3). The previous outbreak among domestic pigs in the country was recorded in Durbe on July 5, 2019. A total of 165 cases of ASF have been recorded in Latvia's wild boar population this year.

So far 31 pigs have been culled as a preventive measure. The Food and Veterinary Office has launched an epidemiological investigation to determine how the disease entered the farm and announced a quarantine to establish a protection zone within a 3 km radius. Officials also strongly urged pig farmers to maintain biosecurity measures by



Figure 3. ASF outbreak in Latvia

preventing any direct and indirect contact with wild animals, avoiding feeding with leftovers, and cutting grass.

Poland

ASF is escalating in wild boars

By mid-July, the country had reported four more outbreaks of ASF in domestic pigs, three of which were in the west of the country and one of these was a large commercial holding of 10,000 pigs, 134 miles from the German border. The close proximity of other cases to the western Germany border, about 10.5 miles, continues to be concerning. The ASF virus is well established in Poland (since 2014) and is a constant threat for pig production elsewhere in northwestern Europe, predominantly for





Germany. By July 2020, the number of places where infected wild boar had been found had risen to 974, with 1,845 pigs testing positive. The government has been shooting as many wild boar as possible, preferably females, to prevent further spreading of the virus. The military, police, border control, and firefighters have been involved in hunting and carcass removal.

According to Krzysztof Jażdżewski, ASF expert within the General veterinary inspection, The Czech Republic has become free of the virus and so will Belgium most likely later this year.

Slovakia

Kosice region records ASF again

Slovak officials confirmed the first outbreak of ASF, after 11 months since the last outbreak, at a smallholding in the village of Cierna, Trebisov district (Kosice region). The infection was confirmed by the National Reference Laboratory in Zvolen.

The region is located 0.93 miles from the border with Ukraine and 1.5 miles from the border with Hungary, where ASF s among wild boars has been confirmed for a long time. To date, Slovakia has registered 216 cases of the disease in wild boars in four districts (Trebišov, Michalovce, Košice-okolie, and Košice-Mesto).

The Ministry of Agriculture is asking hunters to meet their quotas for wild boar hunting, or even to exceed them. The state reimburses the costs of samples from wild boars found dead and caught. The state has plans to deploy armed forces to hunt wild boar if quotas are not met.

AFRICA Nigeria



Figure 3. Nigerian states affected by the current ASF outbreak

The ASF outbreak, which began in February in Lagos and Ogun, continues across Nigeria, spreading to 7 states (Kaduna, Abia, Rivers, Plateau, Edo, Delta, and Benue) by July (Figure 3). Estimates of nearly one million pigs have been culled by mid-June. The largest cluster of ASF affected pigs have been culled at the country's largest pig co-operative, Oke Aro Farms in the state of Lagos. More than 600,000 breeding and matured pigs had been killed as of May: More than 85% if piglets have been left without their suckling sows.





The increase in morbidity and mortality with this outbreak has been unexpected according to Nigerian authorities and farmer reported case counts have been much higher than that reported to OIE.

ASIA Philippines

Piggeries in nine barangays (Tagbac, Bantac, Panglao-an, Poblacion, Noa, and Doles, and Binay) have been affected by ASF. Initially, only two piggeries in two barangays were affected - Magpaalam (68 pig deaths) and Ilian in Magpet town in North Cotabato. A total of 678 pigs have been depopulated from 159 local hog owners. Cash assistance has been provided to these farmers. Animal quarantine checkpoints, movement restrictions (live animals and their products), and vehicle disinfection are some of the preventive measures in place to prevent disease spread. Samples within 500 meters from infected hogs continue to be tested. Restaurants and *carinderias* (roadside eateries) have been urged to not sell leftover food to people - especially to those who raise pigs.

Chorizos (sausages) sold online, made in Mindanao, have tested positive for ASF. A public advisory warning consumers is in place and people are encouraged to purchase meat from local stores and licensed suppliers.

China

Pig farms in southern and eastern China (Guangxi Zhuang Autonomous Region, Guangdong Province, and Jiangxi Province) are being monitored for ASF after heavy rainfall caused widespread flooding since mid-June. Many piggeries were flooded, raising the concern for disease transmission through ASF contaminated flood water as live pigs were seen floating in floodwaters and through contaminated groundwater from previously culled and buried ASF infected pigs. Farmers have been advised to sanitize piggeries and disinfect water by the Ministry of Agriculture and Rural Affairs. According to analysts, as reported in Global Times, only local ASF infections - not widespread - are expected to occur. A survey of small pig farmers, corporate farmers, traders, and slaughterhouses across 20 provinces reported the emergence of "dozens" of cases, the actual number is not yet reported.



Figure 4. Chinese provinces affected by floods and surge of ASF cases





Foot-and-Mouth Disease

ASIA China

A new foot-and-mouth disease (FMD) outbreak was detected by the Guangdong Provincial Animal Disease Prevention and Control Center in a herd of 131 pigs in southern Guangdong province (Leizhou city). Thirtynine were infected, and one had died according to the Ministry of Agriculture and Rural Affairs. Local authorities are reportedly "dealing with the outbreak following disease control and prevention guidelines."

This is the first FMD outbreak reported by Chinese authorities this year. While 2019 only presented an outbreak in the Xinjiang province, producers that are still recovering from the ASF epidemic fear that the disease could spread as in 2018, when 12 provinces throughout the country reported 27 outbreaks.



Figure 5. FMD in China



AFRICA Rwanda

The first outbreak of FMD since 2017 has been reported by the Rwandan Ministry of Agriculture and Animal resources in several parts of Eastern Province, urging owners of livestock to take preventive measures. The most affected districts are Gatsibo, Kayonza, and Kirehe where the movement of any cattle from the affected herd is prohibited with immediate effect.

AMERICA US

The USDA's Animal and Plant Health Inspection Service announces the initial purchase for the National Animal Vaccine and Veterinary Countermeasures Bank. APHIS will invest \$27.1 million in FMD vaccine, which the agency would use in the event of an outbreak to protect animals and help stop the spread of disease.

Figure 6. FMD in Rwanda

The establishment of a robust FMD vaccine bank — a top, long-term priority for the National Pork Producers Council — came closer to reality today as the USDA announces its first significant vaccine purchase. NPPC was instrumental in advocating for establishment of the FMD vaccine bank as part of the 2018 farm bill. (<u>Link</u>)

The new U.S.-only vaccine bank — a concept APHIS officials have long discussed with stakeholders and industry — makes a much larger number of vaccine doses available than we currently have through the North American Foot and Mouth Disease Vaccine Bank.





Report review

Global control of ASF - a GF-TADs initiative

A timely call to control ASF

87th General Session of the World Assembly of Delegates of the World Organization for Animal Health (OIE) made an appeal for a global initiative to control ASF. The plea comes amid an escalation of ASF that has caused massive pig losses. The Resolution tasked the OIE with working in collaboration with FAO to launch an initiative. Accordingly, the FAO/OIE **Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs)** was established as an appropriate platform with the following key objectives:

- o Developing and promoting national, regional, and global partnerships
- Strengthening prevention and preparedness measures
- Facilitating business continuity ensuring safe production and trade to protect food systems.

<u>The new report</u> drafted by the OIE and FAO technical teams revealed the following points as basic strategic challenges to the global control of ASF:

- Difficulty of implementing already exist international standards
- Access to adequate and sustainable human, financial or technical resources
- Lack of an effective vaccine
- Knowledge gaps in several critical areas like the epidemiology in wild pigs, the role of ticks, understanding national and regional pig value chains, the effects of ASF in different pig production systems, the socio-economic impact of the disease and control measures

How GF-TADs works?

- According to the report, at the global level, the GF-TADs Global Steering Committee will provide guidance on the initiative for the global control of ASF and on related activities of global relevance to be implemented by the GF-TADs Global Secretariat through the joint FAO/OIE GF-TADs ASF Working Group and under the supervision and agreement of the GF-TADs Management Committee.
- The Regional and Sub-Regional FAO and OIE Representations will be launched for overseeing, coordinating, and advancing the implementation initiative.

Intermediate and final outcomes of the initiative

The joint initiative between the two organizations planned to have the following as an intermediate and final outcome:

- The capability of countries to control ASF will be improved: By improving the capability of countries to prevent, respond to, and eradicate the virus by adopting science-based standards and best practices
- Regional and global coordination and cooperation to control ASF will be improved
- National, regional, and international trade of pigs and their products, based on international standards and guidelines, will be facilitated

Various indicators at the output and outcome levels will be developed and used to measure progress and level of achievement and provide assurance to the developing partners and countries. Accordingly, monitoring of indicators at the output level will be continually ensured by FAO and OIE, with bi-annual monitoring and evaluation reports. Evaluations of the Global Initiative along the





Organization for Economic Co-operation and Development's (OECD) Development Assistance Committee (DAC) Evaluation Criteria will also be conducted on a triennial basis.

FAO Deputy Director-General Maria Helena Semedo said that, "In this globalized world, where diseases can spread rapidly across borders, timely sharing of latest scientific information, international collaboration, and notification of ASF are needed to prevent transboundary spread and minimize the impact."

FAO and OIE. 2020. Global control of African swine fever: A GF-TADs initiative. 2020–2025-Link

References:

FAO - ASF situation in Asia update -- OIE - WAHIS interface - Immediate notifications DEFRA - Animal diseases international monitoring reports https://www.gov.uk/government/collections/animaldiseases-international-monitoring#outbreak-assessments-2020 CEZD Weekly Intelligence Report - https://www.cahss.ca/groups/CEZD/ ASIA Phillippines https://mb.com.ph/2020/07/13/da-to-start-culling-pigs-in-north-cotabato-town-due-to-african-swine-fever/ https://www.philstar.com/nation/2020/07/15/2028014/asf-hits-north-cotabato-town India https://www.pna.gov.ph/articles/1110769 https://mb.com.ph/2020/07/30/davao-chorizos-being-sold-online-found-positive-for-asf/ China https://www.globaltimes.cn/content/1194276.shtml https://www.agriculture.com/markets/newswire/china-floods-blamed-for-fresh-african-swine-fever-outbreaks https://thepigsite.com/news/2020/07/floods-in-china-blamed-for-new-asf-outbreaks https://www.reuters.com/article/us-china-swinefever-floods/china-floods-blamed-for-fresh-african-swine-feveroutbreaks-idUSKBN24B0ZF https://www.sixthtone.com/news/1005929/foot-and-mouth-disease-found-in-south-china-pig-herd China -**AFRICA** Rwanda http://apanews.net/en/news/rwanda-reports-foot-and-mouth-disease-outbreak-in-cattle https://www.newtimes.co.rw/section/read/212663 Nigeria -FUROPE Latvia - https://www.pig333.com/latest_swine_news/latvia-confirms-its-first-asf-outbreak-in-domestic-pigs-thisyear 16399/https://bnn-news.com/first-african-swine-fever-infection-case-found-for-domestic-pigs-in-kuldiga-215034 http://www.xinhuanet.com/english/2020-07/07/c 139192886.htm Latvia https://www.agriland.co.uk/farming-news/4-more-cases-of-african-swine-fever-confirmed-in-poland/ Slovakia https://newsnow.tasr.sk/economy/first-domestic-breeding-african-swine-fever-case-in-11-months-reported/ https://www.agroberichtenbuitenland.nl/actueel/nieuws/2020/07/22/the-asf-epidemic-is-striking-again-in-slovakia **AMERICA** US -