

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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Swine Disease Global Surveillance Report

Tuesday, April 6, 2020 – Monday, May 4, 2020

Report Highlights

- **Poland:** 450 farms in the province of Greater Poland have been placed into lockdown involving over 30,000 pigs in total
- **China:** Five provinces reported new African swine fever (ASF) outbreaks since last year - authorities said the risk of ASF has increased significantly as farmers rush to rebuild their herds
- **India:** First outbreak of ASF in India has been reported in the state of Assam, northeastern India - over 2,500 pigs have died across 306 villages. State authorities have stated that they won't proceed with the culling of exposed animals and choose alternative options.
- **Papua New Guinea:** authorities confirmed the first ASF outbreak in Southern Highlands province - Australian swine industry on high alert

African Swine Fever

ASIA

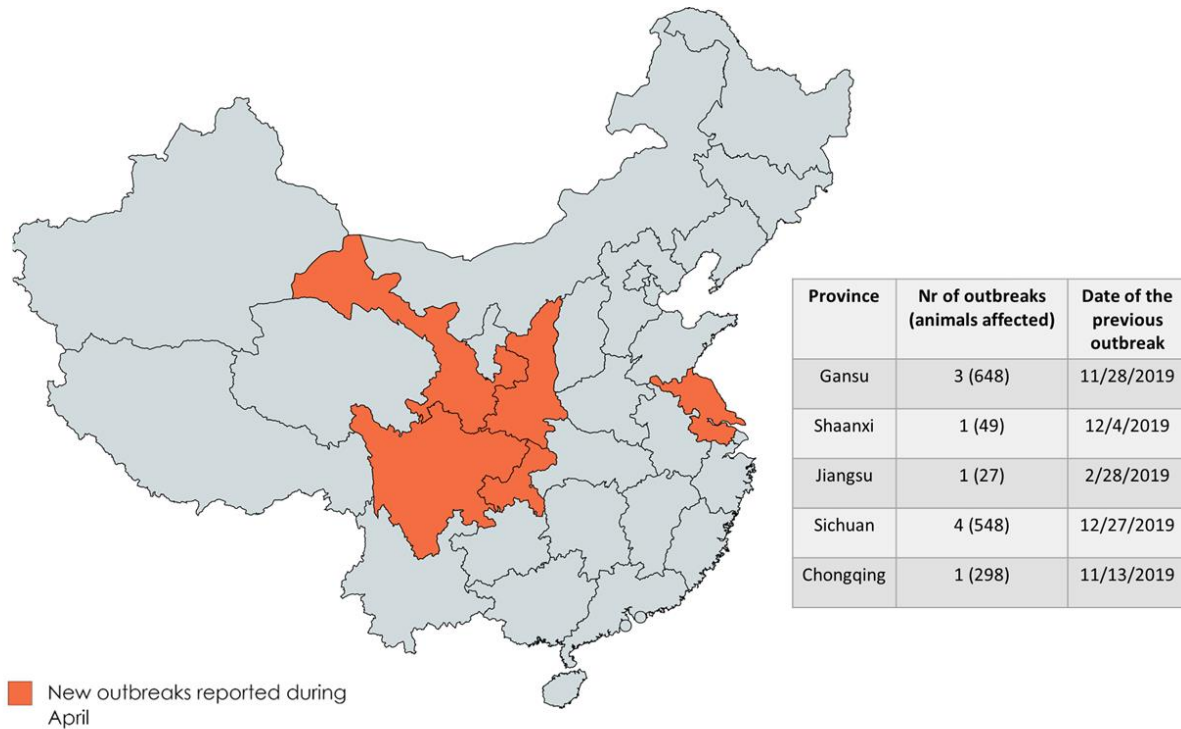
China

Replenishing the hog herd during the pandemic

China has slaughtered over 120 million hogs during the first several months of 2020, a 30% decline from the previous year. In 2019, annual pork output dropped by 21% and was forecasted to drop again this year. Facing a severe sow shortage, as much as 60%, producers are currently breeding animals originally destined for slaughter acknowledging smaller litters will be produced compared to those bred to be "productive mothers." Intending to replenish hog herds, China has begun importing animals, and farmers have been offered import subsidies in response to governmental pressure to meet pork targets - about 2,000 yuan per pig.

The quantity of breeding pigs imported into China, from France alone, is expected to exceed all pig imports from other countries combined which occurred in 2017. It is estimated China may need more than 150 plane loads of animals to replenish its herd. Complicating the ease of pig imports is the limited number of cargo flights into China as a result of the COVID-19 pandemic coupled with lengthy animal health quarantine requirements.

Additional complications compromising restocking farms include continual new outbreaks of ASF - occurring mostly through the illegal transportation of piglets.



Map 1. Chinese provinces that reported new ASF outbreaks during April.

Several provinces that hadn't reported any outbreaks since last year, including those of Gansu, Shaanxi, Jiangsu, and Sichuan and Chongqing Municipality, have seen new cases of ASF during April. In Gansu, two trucks transporting 320 piglets to Minqin county from another province were found to be affected by ASF after three piglets were found dead. In Chongqing, ASF killed 64 pigs after 298 pigs were determined to be illegally transported from another location. In Shaanxi, a farm with 49 pigs was affected after piglets were brought in from other provinces, killing 39 pigs. In Jiangsu, three out of 17 illegally transported outside the province died of ASF. Lastly, ASF was detected in two out of 100 pigs on their way to the western province of Sichuan, as the truck was stopped for inspection near Bazhong city.

Yu Kangzhen, Vice Agriculture Minister, **said the risk of ASF has increased significantly as farmers rush to rebuild their herds by moving young pigs into farms**

South Korea

Vehicles banned from entry into pig farms in border areas

On April 20, the country revealed that it would ban the entry of all vehicles involved in the livestock industry to pig farms in the border areas amid the soaring number of ASF infections detected from the remains of wild boars. The decision was made with the assumption that the entire border area might have already been contaminated.

It has also been planned to deploy six crewless helicopters to carry out disinfection operations near the border. The new measures will affect around 395 pig farms in the northern areas of Gyeonggi and Gangwon Provinces, according to the Ministry of Agriculture, Food and Rural Affairs.

As of April 20, S. Korea has detected at least 545 ASF cases from wild boars caught or found dead from the border areas, and local authorities have culled about 400,000 domestic pigs as part of preventive measures.

India

By May 4, more than 2,500 pigs have died of ASF across five districts of northeastern Assam (Sivasagar, Jorhat, Lakhimpur, Dhemaji, and Nagaon) at a time when pig farmers have been hit by the COVID-19 lockdown, according to the Animal Husbandry and Veterinary Minister.

The deaths, initially attributed to classical swine fever (CSF), were then confirmed to be due to ASF by the National Institute of High-Security Animal Diseases (NIHSAD). Before receiving the laboratory results, local authorities had explained to the press that while CSF commonly attacks pigs at this season in the district, the current outbreak is more severe and has resulted in the death of a large number of pigs and mounting losses for farmers than previous ones. CSF is endemic in the country, having a huge impact causing high mortality with an annual loss of over Rs 400 crore (\$53,073,280.00).



Map 2. Location of reported ASF outbreaks in Northeastern India.

Assam has the most farmed pigs in the country according to the 20th livestock census from 2012-2019. Data show that the eight north-eastern States with Assam at its core consume more than 65% of the pork produced in the country. The pork market in the region is more than \$1 billion.

Transportation of live pigs or pork outside the state was prohibited with immediate effect. Farmers were also advised to either bury the carcasses of the pigs three to four feet underground or burn them. Still, local early reports of people throwing dead pigs in rivers and other water bodies that could lead to contamination.

State authorities ask the Veterinary and Animal Husbandry Department to do "threat-mapping" and undertake containment measures across the state. In parallel, an assessment of the total number of entrepreneurs engaged in the piggery sector and their financial liability so the government can take pragmatic steps to announce a bailout package for the region is underway.

As of May 4, other neighboring states of Arunachal Pradesh and Nagaland have reported high mortality of pigs. Samples were sent from two districts in Arunachal Pradesh to the Bhopal institute for tests. Eleven out of 62 samples from Arunachal Pradesh were ASF PCR positive, according to the NIHSAD test results. OIE had not yet issued a notification of the Indian outbreak.

Other bordering states such as Manipur, banned the import of pigs and piglets from the affected states and neighboring countries, especially Myanmar, to prevent the spread of the diseases.

EUROPE

Germany/Poland

Background

In March, a commercial pig farm was affected by ASF leading to the culling of nearly 24,000 pigs in western Poland - a first for this region where previously only wild boar had been affected. This farm has become the source for the second outbreak in a commercial pig farm located 20 km west of Poznan (less than 150 km from the Germany border) in Więckowice after pre-clinical ASF positive piglets were unknowingly purchased in mid-March. The Więckowice farm fattens pigs up to 30kg and 10,000 piglets will be culled. To date, these two farms are the largest swine facilities affected by ASF in Poland.

Surrounding the Więckowice farm within 3 km are 61 pig farms and another 391 farms within 10 km for a total of 30,000 pigs within the surveillance area. All 450 farms are in lockdown; pigs will not be removed from these farms for at least one month.

ASF has been present in wild boar in eastern Poland since 2014 and only recently (November 2019) was detected in wild boar in the western part of the country, reportedly to 720 sites, with the most recent case in wild boar just 10 km away from the German border. The Polish government plans to cull 90% of the wild boar population enlisting the help of hunters. Hunters provide a “passive ASF surveillance” service through wild boar carcass discovery and carcass removal in addition to killing live boars reducing their population. However, as a consequence of recent regulation prohibiting both hikers and hunters from entering national parks in Poland due to social distancing measures taken to prevent the spread of SARS-CoV-2, these services have been hampered. Surveillance was also curtailed in Germany as select wooded areas were closed as a result of preventing human COVID-19 transmission. This regulation has since been lifted in Poland.

Lockdown for 450 pig farms

Four hundred fifty pig farms, that have over 30,000 pigs in total, in the province of Greater Poland have been placed into lockdown (movement limited at least one month for all farms located in the surveillance area) due to the occurrence of ASF in the west of the country. All farms are located around the finisher farm, where ASF was recently found. There are 391 farms in the 10 km surveillance area. There are another 61 pig farms in a 3 km radius (infected area) for which the movement limitations could be for longer.

Polish pig producers are complaining that the authorities are not putting enough effort in the battle against the expansion of ASF. Greater Poland province is the country's most important pig province.

COVID-19 potential impact on ASF early detection

Despite this potential setback in ASF detection, Germany continues to keep a close eye on the Polish wild boars near its border. Prof Thomas Mettenleiter, president of the veterinary Friedrich - Loeffler - Institut in Germany, has appealed to animal owners to strictly comply with German pig hygiene legislation and continual quick recognition and consistent reaction to dead wild boar remains pivotal. In the German state of Saxony, hunters must report every wild boar found dead or killed with location and cooperate with sample collection for ASF testing and disposal of carcasses.

The states of Brandenburg and Saxony expand preparedness and monitoring activities

Germans across the border are increasingly concerned. The immediately neighboring states of Brandenburg and Saxony have both built fences along the border with Poland to prevent wild boars from entering.

Saxony also recently stepped up its measures for hunters:

- Hunters must report every wild boar that has been found dead and any wild boar that has been killed, stating the place where they were found or shot at the relevant local food inspection and veterinary office in the districts and independent cities.
- Hunters must cooperate with the implementation of these measures as far as possible in labeling, taking samples for ASF testing, and salvage and disposal of the carcasses according to the instructions. An expense allowance of € 30 per wild boar is granted for that.

OCEANIA
Papua New Guinea

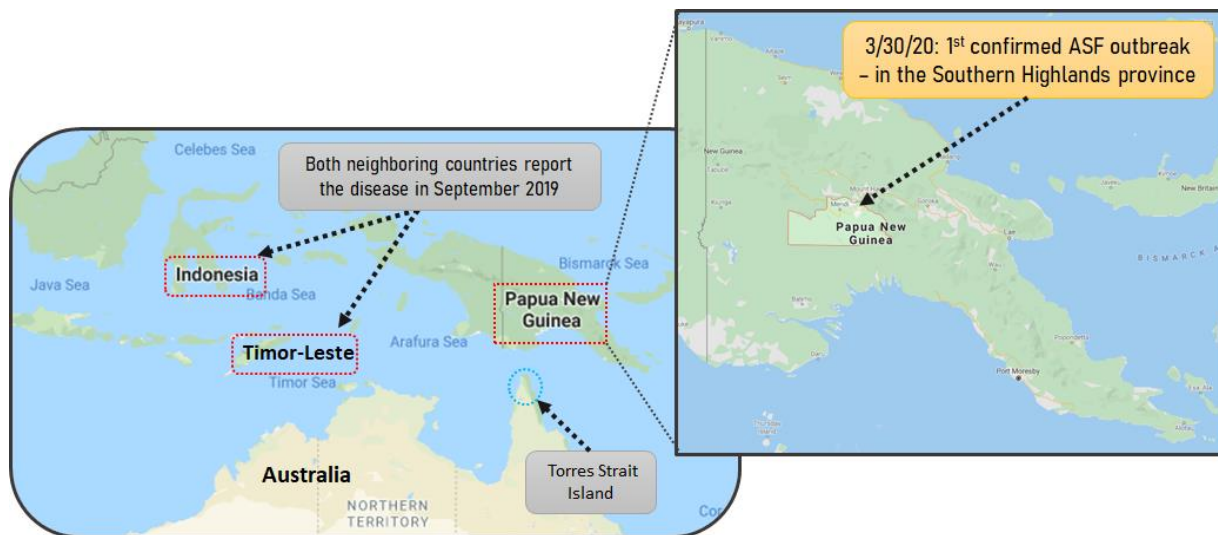
ASF rapidly spreading

The disease already killed thousands of pigs in Papua New Guinea (PNG) and continues to spread rapidly in the country. There have been significant outbreaks in the Southern, Hela, and Enga provinces, according to officials. Pigs are a valuable commodity, particularly in PNG's highland provinces, and the concurrent incidence of the outbreak with new COVID-19 cases worsened the communities' problem. The National Agriculture Quarantine and Inspection Authority has already banned the movement of pigs and pork products into and across the three provinces.

Increased biosecurity concern in Queensland

Australian Pork Ltd chief executive officer said that the detection of ASF in PNG reinforced the importance of the ongoing mitigation work between the pork industry, government, and other stakeholders.

Even with current travel restrictions, there's no room for complacency in terms of ASF, especially given international postal services remain operational. Consequently, the country installed two new 3D x-ray machines at the Sydney and Melbourne mail centers as part of the defense mechanism.



Map 3. Location of ASF outbreak in Papua New Guinea. In dotted red boxes, ASF positive countries in the region.

Biosecurity measures in the Torres Strait have also been strengthened as a result of COVID-19 and the government is further reviewing those measures to reflect the risk ASF in PNG poses to Australia. Minister Payne said on April 28 that the support is whole-of-government, with the Australian Defense Force and Australian Federal Police working closely with PNG counterparts including to establish

checkpoints to reduce the spread of the disease, while the Department of Home Affairs is also working with the PNG Government in relation to import controls.

Furthermore, the country is collaborating closely with New Zealand and the UN Food and Agriculture Organization to support the preparedness and mitigation strategies in the region.

Aujeszky's disease

EUROPE

France

Aujeszky's disease has been detected in three wild boar farms

In recent weeks, the disease has been detected in three wild boar farms in the Allier (Auvergne-Rhône-Alpes), a neighboring department of Creuse. This increase in the number of cases in the same department worries the breeders since the regulation states that after the lab confirmation, all the herd needs to be culled. Then, a crawl space must then be respected before resuming activity, which constitutes a blow for the sector.

These cases are not the first since France was declared free from the disease on farms. A case of Aujeszky's disease was confirmed last December in Haute-Garonne. Before that, in April 2019, the confirmation of another two cases had led to the slaughter of a farm in the Alpes de Haute-Provence and another in Vaucluse. Proof that the disease, although rare, continues to circulate.

References:

FAO - [ASF situation in Asia update](#) -- OIE - [WAHIS interface - Immediate notifications](#)

ASIA

South Korea -

<https://en.yna.co.kr/view/AEN20200420004600320>

https://www.koreatimes.co.kr/www/nation/2020/04/119_288167.html

India -

<https://economictimes.indiatimes.com/news/politics-and-nation/african-swine-fever-detected-in-india-for-1st-time-2500-pigs-die-in-assam/articleshow/75534524.cms>

<https://www.telegraphindia.com/states/north-east/ban-on-pig-transport-in-six-assam-districts/cid/1768263>

<https://www.hindustantimes.com/india-news/swine-fever-kills-1-300-pigs-in-assam-farmers-hit-hard/story-FJ86KEwd3fTKrYURrxe1O.html>

<https://www.ndtv.com/india-news/african-swine-fever-pigs-assam-becomes-epicentre-of-african-swine-fever-in-india-as-2-800-pigs-die-2223294>

<https://www.eastmojo.com/manipur/2020/05/01/swine-fever-manipur-bans-pig-import-from-outside-state-myanmar>

Papua New Guinea -

<https://www.farmweekly.com.au/story/6717112/vigilance-needed-to-control-swine-fever/>

http://www.xinhuanet.com/english/2020-04/24/c_139004294.htm

<https://www.miragenews.com/australian-help-for-png-s-african-swine-fever-fight/>

<https://www.rnz.co.nz/international/pacific-news/415011/african-swine-fever-spreading-rapidly-in-papua-new-guinea>

China -

<https://www.reuters.com/article/us-china-swinefever/china-reports-new-african-swine-fever-cases-in-gansu-province-idUSKBN21K1P0>

<https://news.cgtn.com/news/2020-04-05/China-reports-new-African-swine-fever-outbreak-in-Chongqing-PrSRVZtWdG/index.html>

<https://www.reuters.com/article/us-china-swinefever-pigs-imports/pigs-fly-in-as-china-replenishes-worlds-biggest-hog-herd-idUSKBN21K14T>

<https://www.reuters.com/article/china-swinefever/china-reports-african-swine-fever-cases-in-gansu-shaanxi-provinces-idUSL3N2C10R0>

<https://www.nasdaq.com/articles/china-reports-african-swine-fever-in-pigs-transported-to-jiangsu-province-2020-04-17>

<https://www.reuters.com/article/us-china-economy-output-pork/still-reeling-from-pig-disease-china-pork-output-drops-for-6th-quarter-idUSKBN21Z0CK>

<https://thepigsite.com/news/2020/04/chinese-officials-warn-of-impending-global-food-crisis-due-to-covid-19-and-swine-fever>

<https://www.physiciansweekly.com/china-detects-african-swine-4/>

EUROPE

Poland - Germany

<https://www.pigprogress.net/Health/Articles/2020/4/ASF-Poland-2nd-farm-confirmed-infected-in-the-west-566988>

<https://www.theguardian.com/environment/2020/apr/08/african-swine-fever-outbreak-reported-in-western-poland>

<https://www.pigprogress.net/Health/Articles/2020/4/ASF-Poland-Lockdown-for-450-pig-farms-575095E/>

<https://www.topagrar.com/schwein/news/fli-asp-risiko-bleibt-unvermindert-hoch-12040585.html>

<https://www.topagrar.com/schwein/news/asp-sachsen-verstaerkt-seine-praeventions-massnahmen-12040747.html>