

Swine Diseases Global Surveillance Report

Worldwide pork production is highly interconnected by trades between countries and markets, what could increase the risk of introduction of foreign pathogens into the US.

PROJECT

The aim of these reports is to have a support system for near real-time identification of hazards that will contribute to the mission of assessing risks to the industry and ultimately, early detect, identify, 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 is then published in the report.

***Disclaimer:** 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/

**Spontaneous reporting
TOOL**



Swine Diseases Global Surveillance Report SPIN OFF

Sunday, September 9th, 2018

Classical Swine fever reported in Japan 26 years after last outbreak

On Sunday September 9th, Japan reported the occurrence of Classical Swine fever, in a farm located at Gifu Prefecture, in the central area of the country. Last week, one pig died suddenly, followed by the mortality of 80 others. On Sunday, officials declared the animals as tested positive for Classical Swine fever (CSF), also known as Hog Cholera. Currently, China is facing an epidemic of African Swine Fever, which is totally unrelated to this event in Japan. To date, Japanese Veterinary Services have ruled out the occurrence of African Swine Fever (ASF) in this outbreak or in the country.

A task force was implemented, and the remaining 610 pigs were culled to contain the outbreak. By Monday morning (local time) depopulation of the farm was completed. At first, no clear origin of infection was identified as feed was commercial, nor there were known foreign labors or visits from countries endemic with CSF working in the farm. At this point, cause of the virus introduction is unknown and under investigation.

Exports of pork have been suspended until the Veterinary Services are capable of understand the extension of the outbreak and if the measures were sufficient to contain it, while investigations about possible routes of introduction are implemented as well. The Gifu Prefecture is not the major area of swine production, and it is located 500 miles (800 kilometers) from the south region, the highest pig-dense area.

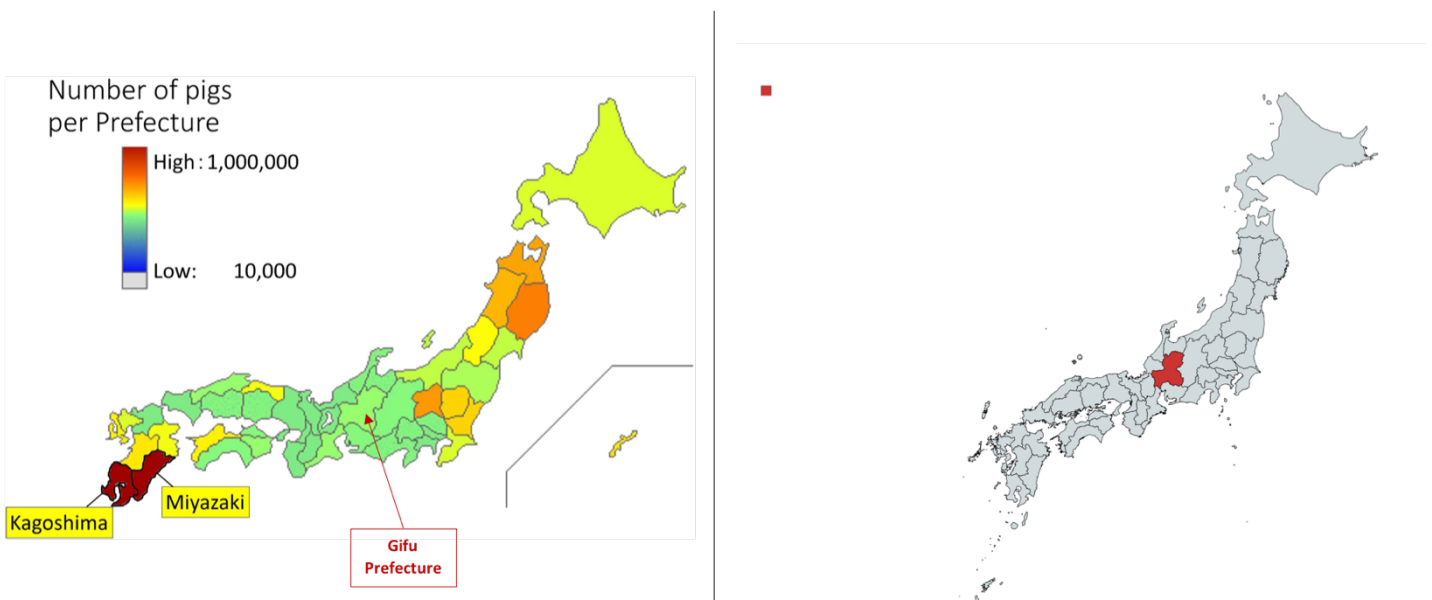


Figure 1: Map of Japan, and Prefectures. In red, location of the Gifu Prefecture, in Central Japan. The highest pig-dense area of Japan is located in the south region of the country (adapted from Sasaki et al., 2017), approximately 500 miles (800 km) from Gifu Prefecture by road.

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CSF is a notifiable disease and affects the international trade of pork, however, clinically it is usually considered less severe than ASF. Currently, it is considered endemic in many countries, including China, therefore it is a disease with potential direct and indirect effects to the US industry. Depending on the strain, extensions of outbreak, route of introduction and effectiveness of biosecurity measures to contain and prevent re-introductions, it could offer different levels of risk. Commercial vaccines are available for CSF control.

The last CSF outbreak in Japan was in 1992 in Kumamoto Prefecture, and in **2007 the use of vaccination was banned, and disease eradication was declared** in the country. The Japanese swine industry is still recovering from the 2013-2016 PED epidemic. On July 9th-2018, APHIS published the official notice of the **OIE recognition of Japan as free CSF**. Currently Japan exports pork, and it is in the top-10 pork producing countries in the world. FAS/Tokyo estimates Japanese swine slaughter held stable at 16.336 million head in 2017.

At this point, no other cases of CSF are suspected in Japan.

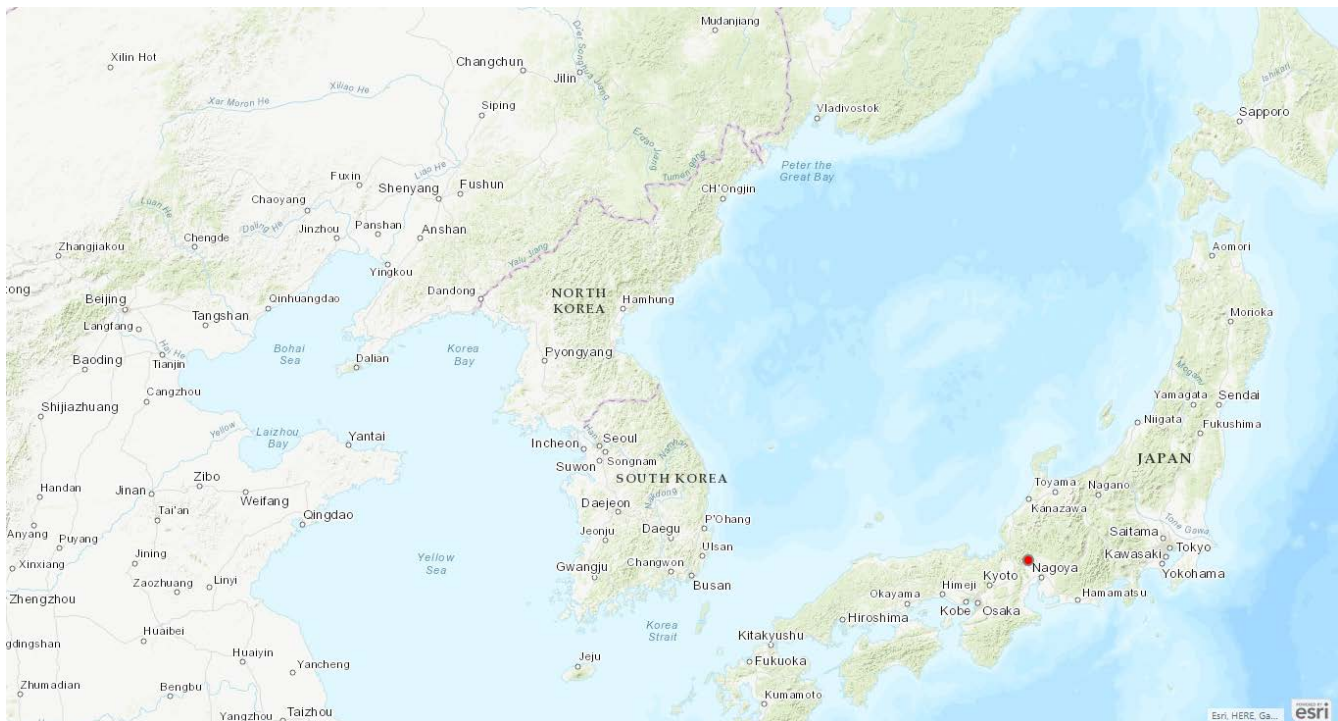


Figure 2: Report of classical Swine Fever in Japan. In red, Gifu Prefecture in Japan, located in the central area of the country. **Score 2.**

**SDGS - Significance score: A scoring system to assess the likelihood a disease event will impact the global swine industry. Scores range from 1-3 (low-high) based on the novelty of the disease, effect on the swine industry, and impact on trade.*

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References:

- <http://www.pref.gifu.lg.jp/sangyo/chikusan/kachiku-eisei/11437/CSF-hassei-taiou.html>
- http://www.maff.go.jp/j/press/syouan/douei/180909_31.html
- Weekly update Japanese Ministry of Agriculture, Forestry and Fisheries - Number 664 APRIL, 2007. www.maff.go.jp/e/maffud/2007/pdf/664.pdf
- www.mainichi.jp/english/articles/20180909/p2g/00m/0dm/006000c
- APHIS official communication. Federal Register 26410 Vol. 83, No. 110, June 7, 2018. www.gpo.gov/fdsys/pkg/FR-2018-06-07/pdf/2018-12186.pdf
- Gain Report JA8010, Feb 2018. [www.gain.fas.usda.gov/Recent%20GAIN%20Publications/Livestock%20and%20Products%20Semi-annual Tokyo Japan 2-14-2018.pdf](http://www.gain.fas.usda.gov/Recent%20GAIN%20Publications/Livestock%20and%20Products%20Semi-annual%20Tokyo%20Japan%202-14-2018.pdf)
- Sasaki Y, Toyomaki H, Sekiguchi S, Sueyoshi M, Makita K, Otake S, Perez A, Alvarez J. "Spatial dynamics of porcine epidemic diarrhea (PED) spread in the southern Kyushu, Japan". *Prev Vet Med.* 2017 Sep 1;144:81-88. www.sciencedirect.com/science/article/pii/S0167587716305748
- www.infoweb.newsbank.com/apps/news/openurl?ctx_ver=z39.88-2004&rft_id=info%3Aid/infoweb.newsbank.com&svc_dat=AWNB&req_dat=0D0CB57F7B6B6F80&rft_val_format=info%3Aofi/fmt%3Akev%3Amtx%3Actx&rft_dat=document_id%3Anews%252F16E53581C096FC58
- www.japantimes.co.jp/news/2018/09/09/national/science-health/japan-finds-first-swine-fever-case-26-years-rules-african-variety/#.W5UbtuhKiMo
- www.freemalaysiatoday.com/category/world/2018/09/09/japan-culls-livestock-after-hog-cholera-outbreak/