

# 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 structure for near real-time identification of hazards that will contribute to the mission of assessing risks to the industry and ultimately, early detection, identification, or prevention of occurrence, 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 then curated to build a raw repository. Afterward, a group of experts use 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 from which an 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/](http://www.swinehealth.org/global-disease-surveillance-reports/)

**Spontaneous reporting  
TOOL**



## Swine Disease Global Surveillance Report

Monday, February 4, 2019 – Monday, March 4, 2019

### Report highlights:

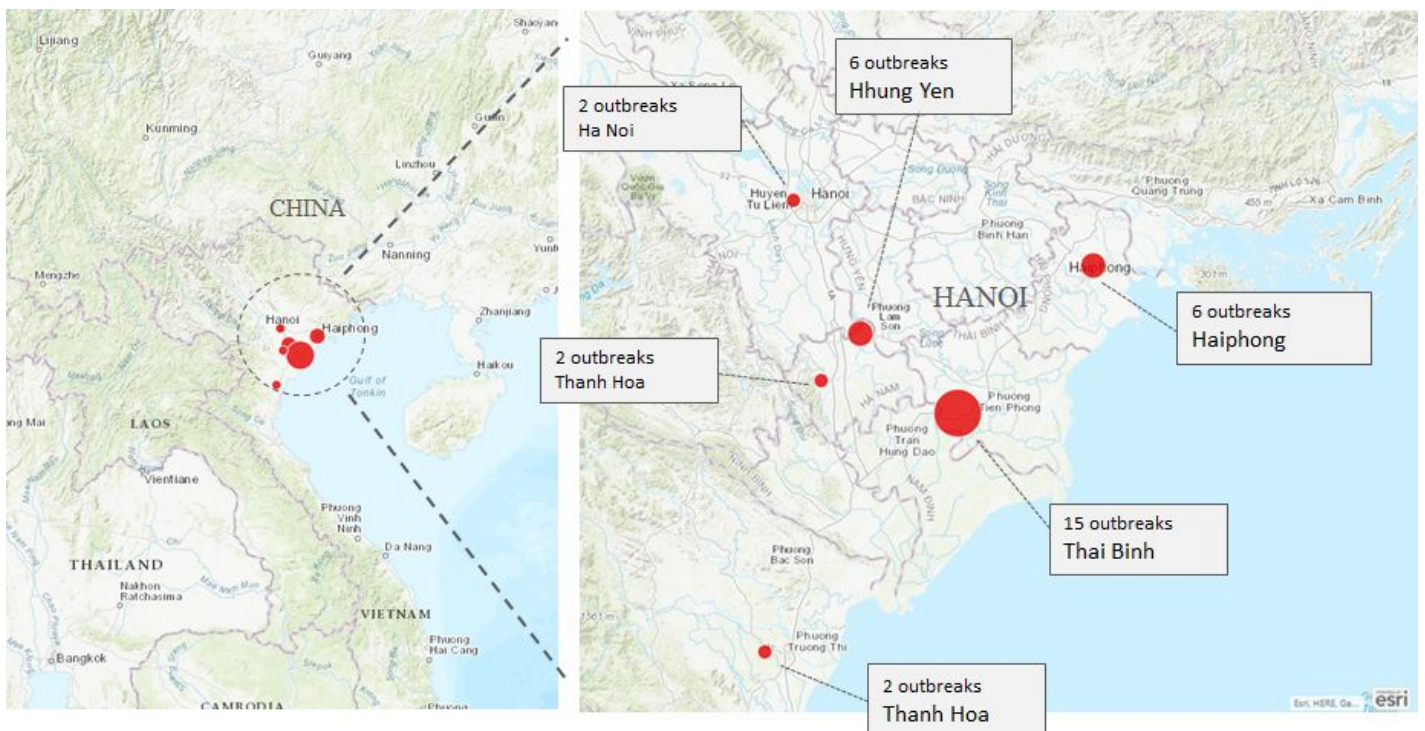
- First ASF outbreak in Vietnam
- First ASF outbreak in the Chinese provinces of Shandong, Guangxi and Hebei
- Australia detected ASF and FMD in seized pork products at airports

### AFRICAN SWINE FEVER

- *Southeast Asia and Australia*

#### ASF Vietnam

On February 20, the Vietnamese Animal Health Department officially announced African swine fever was detected on **two provinces in northern Vietnam**, about 120km southeast of the capital Hanoi. These were the first reported cases of ASF in the country. Since then, a total of six provinces have reported more than 33 outbreaks: Hung Yen, Thai Binh, Hai Phong, Thanh Hoa, Hanoi and Ha Nam. The Ministry of Agriculture and Rural Development instructed authorities to cull all pigs on these premises along with general cleansing, plus establishing a quarantine of the outbreak area. The quarantine includes movement restrictions and testing neighboring farms.



Map 1: ASF outbreaks in Vietnam provinces. In red: Provinces that reported ASF outbreaks during February, circles size are proportional to the total of outbreaks reported.

Pork accounts for roughly three quarters of the total meat consumption in Vietnam, with most of its 30 million farm-raised pigs consumed domestically. Taiwan, which already imposes checks of all luggage carried by passengers from China, has now expanded to do the same with luggage carried by people arriving from Vietnam. On February 15, **Taiwanese authorities found a pork sandwich brought into Taiwan by a traveler from Ho Chi Minh City in Vietnam** that subsequently tested **positive for ASF**. **Illegal importation of meat products across borders continue to pose a real risk of transmitting ASF, and so far, over 120 meat products have been seized from passengers coming from China and Vietnam.**

### **FMD and ASF - Australia**

Since the spread of ASF into Asia, Australian authorities are on high alert on the role played by humans to introduce the disease in the country. The Australian Animal Health Laboratory confirmed two findings of **FMD in meat product seized at airports** with a third sample declared inconclusive. In total more than 280 products have been tested for FMD. Seized material include: pork jerky, sausages, and other pork products. **Along with FMD, fragments of ASFv were detected in six samples in December and in 40 samples so far in 2019.** The Minister of Agriculture has warned that FMD was considered the largest threat to Australia's agriculture and **travelers with material not declared would be fined** and possibly prosecuted. Some projections by the University of Melbourne suggest a FMD outbreak would cost the Australian livestock industry \$40-60 billion over 10 years.

As seen with other countries, if Australia were to confirm an outbreak of FMD or ASF trade would become restricted, preventing trade with countries who do not have FMD or ASF. The Victorian Farmers Federation issued a press release calling for more investment in federal and state biosecurity control with harsher penalties for those that deliberately breach import standards. The proposed five regions have been designed to produce and consume pork relatively autonomously. Restrictions on the transport of pigs, pork and, to a great extent, ASF virus, has proven to be challenging due to imbalances in pig production, slaughter and consumption resulting in significant price imbalances. This definition of the industry is designed to reduce those price gradients by managing the disease by designed regions rather than provincial boundaries that are unrelated to the pork production structure.

### **Spread through China**

ASF continued to spread in China, reaching Shandong, Guangxi and Hebei provinces, and **making a total of 28 provinces officially reported as ASF-infected.**

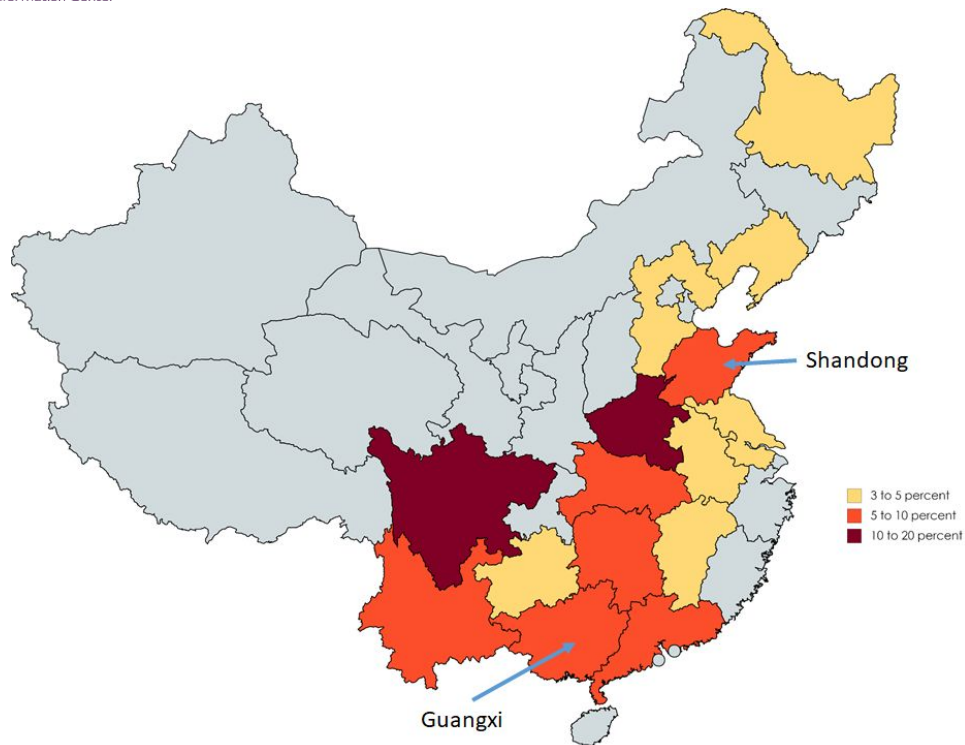
At this point, **all Chinese provinces with significant pork population (Map 3) have reported the disease** since last August 2018. This is evidence of the accelerated rate of dissemination of the disease throughout the country, even though the Chinese authorities have made efforts to control the disease, with an average of three new provinces reporting ASF outbreaks per month.

	Province	First outbreak	Number of Outbreaks	Animals destroyed
1	Liaoning	8/1/2018	22	73808
2	Henan	8/14/2018	2	3893
3	Jiangsu	8/15/2018	3	83752
4	Zhejiang	8/17/2018	1	1864
5	Anhui	8/17/2018	9	12965
6	Heilongjiang	9/1/2018	6	74487
7	Inner Mongolia	9/12/2018	5	1010
8	Jilin	9/17/2018	4	1459
9	Tianjin	10/10/2018	2	1000
10	Shanxi	10/16/2018	6	45493
11	Yunnan	10/19/2018	2	1157
12	Hunan	9/28/2018	6	13756
13	Guizhou	10/14/2018	4	405
14	Chongqing	11/2/2018	2	332
15	Jiangxi	11/7/2018	3	463
16	Fujian	11/6/2018	3	22247
17	Hubei	11/5/2018	4	1800
18	Sichuan	11/16/2018	4	26710
19	Shanghai	11/15/2018	1	314
20	Beijing	11/20/2018	5	69507
21	Shaanxi	11/27/2018	3	4864
22	Qinghai	12/10/2018	1	365
23	Guangdong	12/17/2018	3	6167
24	Guansu	01/12/2019	2	299
25	Ningxia	01/20/2019	1	57
26	Guangxi	2/11/2019	1	9420
27	Shandong	2/18/2019	1	4501
28	Hebei	2/22/2019	1	5493



Map 2: Chinese provinces that have reported ASF outbreaks since last August. In red: new cases during February.

Lately, Chinese authorities have loosened movement restrictions between regions, particularly breeder pigs and piglets, to facilitate restocking of herds affected by ASF, ensuring pork supply and buffering price volatility created by earlier implemented control measures. Reuters has reported that Chinese authorities are circulating a plan to **restructure the national hog industry in five zones** to facilitate its control. There has not yet been official communication from the Ministry of Agriculture and Rural Affairs regarding this matter.



*Map 3: Concentration of pig production by province: Brown = 10 to 20 percent (Sichuan, HeNan); Orange = 5 to 10 percent (Shandong, Hubei, HuNan, Guangdong, Guangxi, YunNan); Yellow = 3 to 5 percent (HeiLongJiang, LiaoNing, JiangSu, AnHui, JiangXi, GuiZhou). Source: Gain report 8/15/18.*

## **CLASSICAL SWINE FEVER**

### **Japan** Expansion of CSF in Japan

Japan has not managed to contain the current CSF epidemic. What started as an outbreak in wild boars in the prefecture of Gifu in September 2018, now as of **February 2019 five prefectures have reported the disease in both wild boars and swine farms, and approximately 40,000 animals have been destroyed** so far. Authorities announced they are starting the vaccination only in wild boars despite all the efforts of swine producers to vaccinate farm animals too. Agriculture minister claim vaccination will affect exports to countries free of CSF and also will jeopardize regaining the (expected) free-status. Pork imports from Japan are already being halted, like the Philippines announced recently. The Japanese veterinary services are being careful to declare that the country **remains free of African Swine Fever**, to avoid sanctions from other countries.



**March Report Map:** The locations mentioned in this report are colored in the maps below according to **significance score**, which are based on the identified hazards (list of worldwide events below) and potential risks to the US swine industry: **1: Blue** – no change in status this month, **2: red** - needs extra attention as the situation is dynamic; **3: black** - the change this month requires consideration of change in practices to reduce exposure by the US industry.

<b>Event #</b>	<b>1</b>			
Date of the event:	1/21/19			
Date of publication:	1/16/19			
Location:	Manicaland			Recurrence of a listed disease. First outbreak of ASF (since 12/2015) confirmed in Manicaland, affecting smallholders animals. Diagnostic confirm by Central Veterinary Laboratory. Control measures applied.
	<b>Zimbabwe</b>			
Disease type:	FMD			
Species affected:	Pork products			
	<b>Porcine</b>			
				Morbidity: -      Mortality: -
Significance score	<b>1.00</b> *			Reporting source: OIE
<b>Event #</b>	<b>2</b>			
Date of the event:	1/28/19			
Date of publication:	2/8/19			
Location:	Luangprabang			Recurrence of a listed disease. First outbreak of PRRS (since 10/2010) confirmed in Luangprabang, affecting farm animals. Diagnostic confirm by National Animal Health Laboratory. Control measures applied. Source of the outbreak(s) or origin of infection Introduction of new live animals
	<b>Laos</b>			
Disease type:	PRRS			
Species affected:	Farm animals			
	<b>Porcine</b>			
				Morbidity: -      Mortality: -
Significance score	<b>1.00</b> *			Reporting source: OIE
<b>Event #</b>	<b>3</b>			
Date of the event:	-			
Date of publication:	2/20/19			
Location:	Hung Yen and Thai Bihn province			First outbreaks of ASF confirmed in Vietnam, affecting farm animals. National Center for Veterinary Diagnostics (National laboratory) confirmed the diagnostic by real-time PCR and the Regional Animal Health Office no. 6 (RAHO6) (National laboratory) sequenced the virus.
	<b>Vietnam</b>			
Disease type:	ASF			
Species affected:	Farm animals			
	<b>Porcine</b>			
				Morbidity: -      Mortality: -
Significance score	<b>3.00</b> *			Reporting source: OIE
<b>Event #</b>	<b>4</b>			
Date of the event:	2/11/19			
Date of publication:	2/25/19			
Location:	Guangxi province			First outbreak of ASF confirmed in Guangxi province, affecting commercial farm animals. Diagnostic confirm by China Animal Health and Epidemiology Center (National laboratory). Control measures applied.
	<b>China</b>			
Disease type:	ASF			
Species affected:	Farm animals			
	<b>Porcine</b>			
				Morbidity: -      Mortality: -
Significance score	<b>2.00</b> *			Reporting source: OIE

<b>Event #</b>	<b>5</b>			<p>Declared and seized pork jerky, sausages and pork products were collected over two periods – 3 December to 16 December 2018 and 21 January to 3 February 2019 and sent to the Australian Animal Health Laboratory for testing.</p> <p>During both periods, ASF virus fragments were detected in seized product. Testing confirmed six samples out of 152 contained ASF virus fragments in the first period, and that a further 40 samples out of 283 were contaminated with ASF virus fragments from the second period.</p> <p>Further testing was carried out on the products collected during the second period to assess the risk of FMD. Two samples out of 283 have been found to be contaminated with FMD virus fragments with one further sample being inconclusive.</p> <p>The two positive FMD samples and one inconclusive sample were from products declared by passengers.</p>
Date of the event:	2/14/19			
Date of publication:	2/25/19			
Location:	Airports - points of entry			
	<b>Australia</b>			
Disease type:	ASF			
Species affected:	Pork products			
	Porcine			
Morbidity:	-		Mortality: -	
Significance score	<b>2.00</b> *		Reporting source: <a href="#">Link 1</a>	
<b>Event #</b>	<b>6</b>			<p>First outbreak of ASF confirmed in Shandong province, affecting commercial farm animals. Diagnostic confirm by China Animal Health and Epidemiology Center (National laboratory). Control measures applied.</p>
Date of the event:	2/18/19			
Date of publication:	2/22/19			
Location:	Shandong province			
	<b>China</b>			
Disease type:	ASF			
Species affected:	Farm animals			
	Porcine			
Morbidity:	-		Mortality: -	
Significance score	<b>1.00</b> *		Reporting source: OIE	
<b>Event #</b>	<b>7</b>			<p>First outbreak of ASF confirmed in Hebei province, affecting commercial farm animals. Diagnostic confirm by China Animal Health and Epidemiology Center (National laboratory). Control measures applied.</p>
Date of the event:	2/22/19			
Date of publication:	2/25/19			
Location:	Hebei province			
	<b>China</b>			
Disease type:	ASF			
Species affected:	Farm animals			
	Porcine			
Morbidity:	No		Mortality: -	
Significance score	<b>1.00</b> *		Reporting source: OIE	
<b>Event #</b>	<b>8</b>			<p>This is a report of the continuation of the cases of CSF in Japan. Since last September, a spread among five prefectures were observed and it shows how the situation is still dynamic. Biosecurity measures adopted in the epidemic have not yet been able to contain the disease. Veterinary Services are considering vaccinating wild animals only, and not farm animals (aiming to not affect swine byproducts exports).</p>
Date of the event:	2/6/19			
Date of publication:	2/6/19			
Location:	5 prefectures			
	<b>Japan</b>			
Disease type:	CSF			
Species affected:	Farm animals/Wild			
	Porcine			
Morbidity:	-		Mortality: -	
Significance score	<b>2.00</b> *		Reporting source: <a href="#">Link 2</a>	

[Link 1](#) - [Link 2](#)



<b>Event #</b>	<b>9</b>			
Date of the event:	2/22/19			Three more outbreaks were reported in Alberta in the last month. Strict biosecurity measures are being conducted to contain the outbreak. It is not clear yet the route of introduction, and if this farm is in any level connected to the previous one that reported the first outbreak. Health services are investigating. provincial veterinary epidemiologist confirmed the second case is not geographically close to the first one.
Date of publication:	2/26/19			
Location:	Alberta			
	<b>Canada</b>			
Disease type:	PED			
Species affected:	Farm animals			
	Porcine			
				Morbidity: -      Mortality: -
Significance score	<b>1.00</b> *			Reporting source: <a href="#">Link 3</a>
<b>Event #</b>	<b>10</b>			
Date of the event:	2/18/19			Since January, over 50 news cases were observed, and the most recent one was observed in a northern region, and also close to the border with France. Government is to expand the three protected areas – the buffer zone, observation zone and surveillance zone, to contain the spread of the disease. Currently, it does not affect swine farms in the region. Since the first detection in september, approximately 619 wild boars have been identified as being positive for the disease.
Date of publication:	Yes			
Location:	Belgium			
	<b>Belgium</b>			
Disease type:	ASF			
Species affected:	Wild Boars			
	Porcine			
				Morbidity: -      Mortality: -
Significance score	<b>2.00</b> *			Reporting source: OIE - Link 4

[Link 3](#) - [Link 4](#)

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