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 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:

 $\underline{www.swinehealth.org/global-disease-surveillance-reports/}$







Swine Disease Global Surveillance Report

Tuesday, June 1, 2021 - Tuesday, July 6, 2021

Report Highlights

- African swine fever (ASF) zoning agreement: Canada and Singapore have agreed to an ASF zoning arrangement to allow for the safe trade of swine products
- 16th country in Asia reports first ASF outbreak: in early June Bhutan reported the first case of the disease to the OIE
- ASF spread through outdoor pig farms: European Food Safety Authority (EFSA) released panel's risk assessment

MAY OUTBREAKS BRIEF

R	Location	Date	Disease	Impact
1	Chhukha District (porous border with West Bengal, India), Bhutan	5/29	ASF	Uncontrolled movement of scavenging stray pigs across the border.
1	Miedzychod District (110 km from the border with Germany), Western Poland	6/1	ASF	Second commercial farm affected in 2021. 3,373 pigs on site.
1	Piaui state (outside the CSF free zone), Brazil	6/2	CSF	Case identified through passive surveillance. Last occurrence, 11/2019.
1	Keng Tung, Myanmar	6/9	ASF	Over 150 pigs died. First report since September 2020.
1	Locations not specified, Hungary	6/10	PrV	4 outbreaks reported to ADIS system
1	Sabah, Malaysia	6/15	ASF	70 pigs died/were destroyed.
1	South Africa	6/16	FMD (SAT 3)	184 cases in cattle. Susceptible population over 13,000 animals.
1	Thimphu City, Bhutan	6/22	CSF	Two wild boar carcasses tested positive for CSF. Last occurrence 06/2018.
1	Five provinces, South Africa	6/15	ASF	Five new outbreaks. Over 236 pigs destroyed.
1	Zambezi, Namibia	7/2	FMD (pending)	Over 100 cases in Kasuno village

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 affect 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. Map with the location of the events reported is available at the end of this report.





African Swine Fever

PREPAREDNESS

Canada

Trade agreements

The Canadian Food Inspection Agency (CFIA) and the Singapore Food Agency have agreed to an ASF zoning arrangement to allow for the safe trade of swine products from disease-free zones in Canada in the event of an ASF outbreak.

After its evaluation of CFIA's zoning proposal, Singapore agreed to a regionalization arrangement with Canada. This means restrictions on the import of Canadian pork and pork products into Singapore, valued at \$8.09 million USD per year, would only be limited to the areas within the primary control zone(s), once established, if a case of ASF were to be found in Canada. This arrangement would serve to minimize trade impacts to the Canadian swine sector while protecting the swine populations in both countries.

Zoning

Zoning is an internationally recognized tool used to help manage diseases and facilitate international trade. If a case of ASF is identified, geographic boundaries are defined to contain the outbreak. The area within these geographic boundaries forms the primary control zone(s) established in accordance with the World Organisation for Animal Health (OIE) guidelines. The areas outside of these primary control zone(s) are considered disease-free zones.

Canada has also established zoning arrangements with:

• The EU → in July 2019 LINK

While there are zoning principles already in place with the EU that apply to ASF under the Canada-EU Comprehensive Economic and Trade Agreement (CETA), the arrangement is an additional step forward in international collaboration in mitigating the risk of ASF while maintaining safe trade.

 The U.S. → In March 2021, both countries signed a protocol to guide bilateral trade if ASF is detected in wild pigs, without cases in domestic swine - <u>LINK</u>

Last March, Canada and United States authorities also stated that they would continue to modify their export certificates to allow trade of live animals, swine semen, pet food, and animal by-products and meat from approved disease-free zones in the event of an ASF outbreak in domestic pigs.

Revised Framework for the Prevention & Control of ASF

Australia

Livestock traceability

Australia's chief veterinarian said there's a 42% chance of a major animal disease outbreak in Australia in the next five years, which could devastate Australia's \$17 billion livestock sector. This estimation includes a one in five chance of an ASF outbreak and an almost one in 10 chance of an FMD one.





In response to this risk assessment, a major review of Australia's meat industries has recommended significant changes to livestock traceability systems. Among the recommendations are:

- To establish and fund a new national regulator to oversee traceability, which is currently the responsibility of states.
- All livestock will be fitted with individual electronic identification (EID) tags by 2025.

Farmer groups are split on the need to implement mandatory EID tags across species. On one side, some groups that have shown hesitation highlight the need to have equitable funding arrangements before considering implementing a system where growers absorb most of the associated costs.

On the other hand, supporters state that it should be seen as "an insurance policy because it gives us biosecurity, the ability to trace animals quickly should there be a disease outbreak or an incursion."

ASIA

In June, five countries - Bhutan, Indonesia, Malaysia, the Philippines, and India - reported new ASF outbreaks.

Bhutan

On May 13, an ASF outbreak was detected for the first time in Bhutan around the sewerage plant area of Phuentsholing town, Chhukha district, and confirmed by RT-PCR at the National Veterinary Laboratory.

The disease was identified in 34 scavenging stray pigs within a population of over 2,000 pigs. These animals move across the porous border between Phuentsholing Town (Bhutan) and West Bengal, India. (Map 1).

India

The Indian state of West Bengal has not yet officially reported any ASF cases. Still, ASF is spreading inside India based on local news media. By the end of June, ASF was confirmed in many villages in nine districts in Mizoram state. This state borders Myanmar.

According to local media, the virus caused 4,650 pigs to die between March and May 2021.



Map 1. Location of ASF outbreaks in Bhutan and Myanmar

The virus had been officially confirmed in two other states of India, also in the far east of the country, i.e., Arunachal Pradesh and Assam. Both outbreaks were reported to the OIE in the first months of 2020, after which no official updates came from India.





Myanmar

On June 9, Myanmar reported the recurrence of ASF in the country. The source of infection is still inconclusive. The epidemiological investigation has confirmed the co-infection with PCV2 on the affected animals.

Indonesia

Since last May, more than 120 dead pigs have been found in the Nunukan, Malinau, and Bulungan Regencies of North Kalimantan Province on Borneo Island (Map 2). Authorities suspect that the virus entered Indonesia from Sabah and Sarawak (Malaysian provinces).



Map 2. Location of new ASF outbreaks in Indonesia (Island of Borneo)

EUROPE

In June, four countries - Poland, Romania, Russia, and Slovakia - reported new ASF outbreaks in domestic pigs. Meanwhile, nine countries, including Poland, Germany, Bulgaria, Estonia, Hungary, Romania, Russia, Slovakia, Lithuania, and Latvia, have reported cases of ASF on wild boar (ADIS system).

The latest update from the European Commission Animal Disease System (ADIS) puts the total for outbreaks of ASF among European wild boar so far this year at 7,501 across 12 countries (as of June 27). Compared with the previous update on May 23, this is an increase of 842. Since the beginning of 2021, European countries have registered 564 outbreaks in domestic pigs across Poland, Romania, Serbia, Slovakia, and Ukraine. (27/6_EC ADNS disease outbreaks report/).

AFRICA

South Africa

The ongoing ASF situation in South Africa continues as the disease spreads. The latest official reports to the OIE cover five new outbreaks — all in different provinces of the country (Gauteng, North West, Free State, Mpumalanga, Western Cape) — that started last May.





First to be confirmed were seven cases in a backyard herd of 250 pigs in Cape Town (Western Cape). These bring to 1,373 the number of pigs affected by 20 confirmed outbreaks in the Western Cape province.

Further north and east in the country, another wave is ongoing. It started three years ago in Mpumalanga and has since spread to other provinces.
Since then, 57 outbreaks have been confirmed, directly impacting almost 39,000 pigs.

The latest outbreaks registered in this series were at a small farm in Mpumalanga and in one backyard herd in each of the Free State, Gauteng, and North West.



Map 3. Location of ongoing outbreaks in South Africa (note: each point may represent more than 1 outbreak)

Research highlights

Scientific Opinion: ASF spread through outdoor pig farms

EFSA has assessed the risk of ASF spreading through outdoor pig farms and has proposed biosecurity and control measures for outdoor farms in ASF-affected areas of the EU.

In this report, the Panel on Animal Health and Welfare concluded that outdoor pig farms carry a substantial risk of introducing and spreading ASF, but that installing single solid or double fences on all outdoor pig farms in areas of the EU where ASF is present could reduce this risk by at least 50%.

To develop this assessment, evidence was collected from the Member States veterinary authorities, farmers' associations, literature, and legislative documents. In parallel, with the input of regional experts, outdoor pig farms were grouped according to their risk of introduction and spread of ASF, and biosecurity measures were ranked regarding their effectiveness. The panel also captured potential improvements of biosecurity for outdoor pig farming and accompanying control measures.

The authors highlighted that given outdoor pig farming is common, there are different farm types present throughout the EU, and there is no legislation at the European level for categorizing outdoor pig farms in the EU, information is limited, not harmonized, and needs to be interpreted with care.





Key findings:

- The baseline risk of outdoor pig farms for ASFV introduction and its spread is high but with considerable uncertainty.
- The Panel is 66–90% certain that, if single solid or double fences were fully and properly implemented on all outdoor pig farms in areas of the EU where ASF is present in wild boar and in domestic pigs in indoor farms and outdoor farms (worst case scenario not considering different restriction zones or particular situations), without requiring any other outdoor-specific biosecurity measures or control measures, this would reduce the number of new ASF outbreaks occurring in these farms within a year by more than 50% compared to the baseline risk.
- The Panel concludes that the regular implementation of independent and objective on-farm biosecurity assessments using comprehensive standard protocols and approving outdoor pig farms on the basis of their biosecurity risk in an official system managed by competent authorities will further reduce the risk of ASF introduction and spread related to outdoor pig farms.

EFSA recommends that derogations from the current restrictions on outdoor pig farming in ASF-affected areas could be considered on a case-by-case basis if these and other specified biosecurity measures have been implemented.



To access the full report follow this LINK

Map 4. Location of the outbreaks reported throughout December. 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





References:

Recurrent reports reviewed and included

OIE - WAHIS interface - Immediate notifications

OIE - OIE Asia Regional office

DEFRA - Animal diseases international monitoring reports

CAHSS - CEZD Weekly Intelligence Report
European commission - ADNS disease overview

AMERICA

Canada -

https://www.canada.ca/en/food-inspection-agency/news/2021/03/canada-united-states-agree-on-protocol-to-guide-bilateral-trade-if-african-swine-fever-is-detected-in-wild-pigs.html

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Bhutan -

https://ncah.gov.bt/Downloads/File_377.pdf

http://www.bafra.gov.bt/wp-content/uploads/2021/06/Public-notification-on-outbreaks-of-African-Swine-Fever-.pdf

India -

https://www.indiatoday.in/india/story/african-swine-fever-continues-to-wreak-havoc-in-mizoram-1823848-2021-07-05

Malaysia -

https://www.niaga.asia/diduga-tertular-virus-asf-dari-malaysia-ratusan-babi-di-kaltara-ditemukan-mati/ https://kaltim.tribunnews.com/2021/06/21/hasil-uji-sampel-babi-yang-mati-di-krayan-nunukan-positif-kena-penyakit-african-swine-fever?page=2

AFRICA

South Africa -

https://www.foodformzansi.co.za/sappo-reports-largest-asf-outbreak-on-record/

OCEANIA

Australia -

https://www.abc.net.au/news/2021-07-04/increasing-isk-of-major-animal-disease-outbreak-chief-vet-warns/100262994

The GSDMR team compiles information drawn from multiple national (Ministries of Agriculture or Livestock, Local governments and international sources (FAO, OIE, DEFRA, EC, etc.), as well as peer-reviewed scientific articles. The team makes every effort to ensure but does not guarantee, accuracy, completeness, or authenticity of the information. The designation employed and the presentation of material on maps and graphics do not imply the expression of any opinion whatsoever on the part of the GSDMR team concerning the legal or constitutional status of any country, territory, or sea area, or concerning the delimitation of frontiers.

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