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.



University of Minnesota Technical Coordination Sol Perez¹, Auguste Brihn Andres Perez²

> Expert Focus group Jerry Torrison, Montserrat Torremorell, Cesar Corzo, Paul Sundberg, John Deen

¹Project coordinator. E-mail: <u>mperezag@umn.edu</u> ²Principal investigator. E-mail: <u>aperez@umn.edu</u> <u>www.cahfs.umn.edu</u>

Current and previous reports:

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







Swine Disease Global Surveillance Report

Wednesday, November 4, 2020 - Tuesday, December 2, 2020

Report Highlights

- **Belgium recovers African swine fever (ASF)-free status:** The European Commission lifted all restrictions, including the pork trade ban.
- **Germany starts the next eradication phase:** Depopulation within the first white zone will start soon, as fencing is almost complete.
- Detection of a human case of swine influenza in Canada: a rare variant of Influenza A (H1N2)v has been detected in a resident of central Alberta.

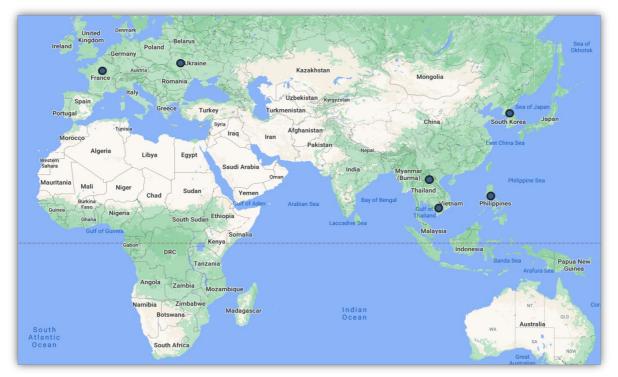
| R | Location | Date | Disease | Impact |
|---|--|------------------|-----------------------------|---|
| 1 | Region XI (Davao Region), Philippines | 11/23 | ASF | 180 pigs culled. |
| 1 | Xayabury, Laos (Northeast province, near the border with Thailand) | 11/9 | ASF | First report in the province. Over 10 outbreaks detected. Total of 1170 pigs affected. |
| 1 | Ukraine (multiple regions across the country) | Several dates | ASF | Over 5 outbreaks in backyard farms were reported. 174 pigs affected. |
| 1 | Tuyen Quang, Vietnam (Northern province) | 11/11 | ASF | First outbreaks of ASF after over a year. Over 100 pigs affected. |
| 1 | Binh Phouc, Vietnam (Southern province) | 11/8 | ASF | First outbreaks of ASF after over a year. Over 100 pigs affected. |
| 1 | Humbecourt, France | 11/30 | Aujeszky's disease virus | 2 breeding adults tested positive in the framework of the prophylaxis. Both animals and the three piglets were kept outdoors. Contamination by wild boar is strongly suspected. |

OCTOBER 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.







Map 1. Location of the outbreaks reported throughout October. 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

EUROPE

Belgium

On November 20, the European Commission declared Belgium free from ASF, one year after the last finding of an ASF positive carcass. Belgium becomes only the second EU Member State (MS), after the Czech Republic, to eradicate the disease and regain export eligibility.

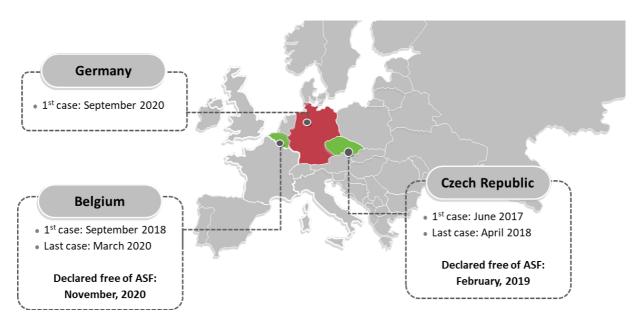
According to Belgian authorities, **5,415 wild boar had been tested for the virus by October 26, 2020; 833 of these were positive.** The six ASF detections after August 11, 2019, were bone findings from animals that had died months before. **No domestic pigs were ASF-infected.**

This EU decision opens the door for Belgian pork exporters to seek export approval to overseas markets, especially China and other Asian countries. The Philippines have already lifted the import ban on Belgian pork.

When ASF was found in Germany in September 2020, Belgian pork exporters also lost their major Intra EU export market, as Germany was facing export bans for its pork.







Map 2. ASF in wild boar in western Europe (Czech Republic was the first European country to be declared free of ASF since the latest introduction of the virus in the continent in 2008).

Background

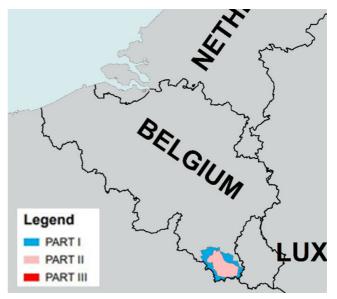
Since September 2018, when the first ASF cases were discovered in wild boar in southern Belgium, the **regulated zones I and II**, which were put in place as one of the ASF containment measures, have been adapted several times.

Following the discovery of the first ASF cases in wild boar, an initial infected zone was set. In November 2018, the European regulated zones were put in place.

As shown in Map 2, the zones of concern for the ASF outbreak occupy a small territory in southern Belgium.

The Federal Agency for Safety in the Food Chain (AFSCA) applied to the EU Commission at the end of October to lift the officially designated restricted areas, after more than a year with no record of ASF cases in wild boar. According to AFSCA, a corresponding application has also been submitted to the World Organization for Animal Health (OIE); its final review is still ongoing.

The favorable decision by the Commission would also mean that pig producers in the restricted zones can rebuild their stocks. A formal decision on this is expected from the Belgian government by the end of the year.



Map 3. ASF Zoning in Belgium until November 20, 2020





Next steps

AFSCA also announced that strict surveillance and control measures will continue to be maintained in the former outbreak area for the time being, and it will not be gradually reduced throughout 2021.

Until April 2021, the division into infected zones, enhanced observation, and surveillance zones will be simplified: the infected zone becomes a surveillance zone and the other two zones are merged to become an observation zone. The former "infected zone" is to become the "surveillance zone" and the other two zones will be designated as "observation zone." For further information regarding the zoning strategy defined by the Belgian authorities following the European Legislation, follow this LINK,

In all areas (1,106 km²):

- Fences will remain until March 31, 2022, when their dismantlement will be evaluated;
- Maintenance of survey and search for wild boar carcasses until August 31, 2021;
- Until March 2021, the elimination of wild boar will continue in accordance with the decree from the Belgian Government (dated July 16, 2020); after that, an adapted plan for hunting wild boar will be implemented;
- Eliminated wild boar, wild boar found dead, or wild boar shot by hunters will continue to be tested to check for positive cases.

Maintaining of these measures after regaining free status is necessary because there is still a possibility that ASF will recur, even if the probability is low.

The European Commission decision was published on 11/23/2020. (Commission implementing decision (EU) 2020/1741).

Germany

By December 1, 193 cases of ASF have been reported in Germany since September. Of those, 182 and 11 were found in the states of Brandenburg and Saxony, respectively.

Authorities confirmed the launch of the next phase to eradicate ASF from the wild boar population. The depopulation within the first white zone - double fenced zone around the first core area where ASF has been detected - in Brandenburg will start as the fencing is almost complete.

Local media reported that during a visit to the white zone near Neuzelle, the head of the ASF state crisis team and State Secretary for Agriculture was impressed by the work that had been done in the past few weeks: around 125 kilometers of fence were built and more than 120 live traps were set up. With the technical relief organization's support and many helpers on-site, the whole area (around 250 square kilometers) around the first core area was searched several times for fallen game.

The head of the ASF state crisis team, Anna Heyer-Stuffer, stated, "The preparations were thorough, now we can take the next important step in combating animal disease. The aim of these measures is the swift and as complete as possible removal of the wild boar in the white zone so that the chains of infection can be effectively broken and the ASF does not spread further west if possible."





What is happening next door?

Poland detected the first ASF case right on the border with the second German core zone. This has expanded the German-Polish cluster significantly, covering an area of approximately 98 by 80 miles. By October 22, there were over 2,000 ASF records in wild boars in western Poland in 2020 and 12 outbreaks in pig farms.

The current European Union ASF regionalization map can be accessed following this LINK

Influenza A (H1N2)v

Canada

On November 4, Alberta's authorities reported the detection of the first confirmed case of **variant influenza A (H1N2)v** in a resident of central Alberta. The patient presented mild influenza-like symptoms and recovered quickly. So far, this appears to be an isolated case, and there is no evidence of further spread.

In an official statement, health officials, in conjunction with Alberta Agriculture and Forestry, noted that they launched a public health investigation to determine the source of the virus and to verify that no spread occurred. By November 17, no other positive cases were identified, officials said.

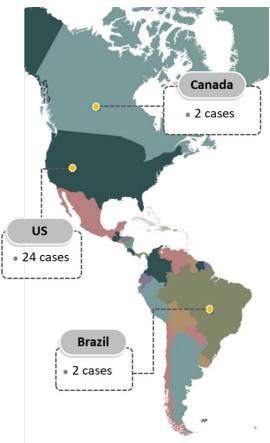
"Preliminary genetic comparison of the virus from the patient with historical samples from pigs suggests the case was acquired indirectly from pigs," said the province's chief medical officer of health.

This is the first report of influenza variants in Canada since 2005 when reporting became mandatory — and one of only 28 cases globally (Map 4).

H1N2v is rare. To date, there's no evidence of sustained person-to-person spread.

Worldwide, only 28 cases of H1N2v have been reported in humans since 2005.

There has only been 1 case of H1N2v ever in Canada, reported in 2020. Based on current evidence in Canada, the risk to human health is low.



Map 4. Global distribution of H1N2v cases





Fact box: Influenza in swine

Certain variants of type A influenza viruses have been identified both in pigs and humans The main variant of flu viruses circulating in US pigs in recent years are referred to as swine triple reassortant (tr) H1N1, trH3N2, and trH1N2. With the exception of the 2009 H1N1 virus, influenza viruses that circulate in swine are very different from influenza viruses that commonly circulate in people.

For more information regarding human infections with variants of influenza viruses, visit the CDC website

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