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.

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:

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







Swine Disease Global Surveillance Report

Monday, June 6, 2022 - Monday, July 4, 2022

Report Highlights

- ASF in Italy: Lazio region's authorities reported the first outbreak in domestic pigs in the country.
- **ASF in Germany**: First outbreak confirmed in domestic pigs in Lower Saxony, the most important production region in the country with about 30% stock of pigs.
- **UK authorities rule out suspected case of FMD**: a temporary FMD control zone was lifted after testing confirmed the absence of the disease.

OUTBREAKS BRIEF

R	Location	Date	Dx	Impact
2	Emsland, Lower Saxony, Germany	7/2	ASF	286 pigs and 1,500 piglets slaughtered.
2	Uckermark district in Brandenburg state, Germany	7/4	ASF	Outbreak on a fattening unit with 1,300 pigs. This is the 4th outbreak in domestic pigs in this German state.
2	Lazio region, Italy	6/10	ASF	First outbreak in mainland Italy. 1,000 culled.
2	Greater Poland, Poland	6/1-6/16	ASF	First four outbreaks in domestic pigs in 2022, affecting 2,158 pigs.
1	Kavrepalanchowk district, Nepal	6/29	ASF	2 outbreaks affecting 524 pigs.
1	Kakching district, India	6/25	ASF	Outbreak in a government pig breeding farm.
1	Wuzhou city - Guangxi Zhuang Autonomous Region , China	5/27	FMD	21 pigs tested positive and 454 were considered at risk. All were slaughtered.
1	Multiple locations, Algeria	March	FMD	7 FMD outbreaks have been reported since March 28, affecting cattle, goats, and sheep.





Outbreaks described in the table above are colored according to an assigned significance score. The score is based on the identified hazard and potential 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. A map with the location of the events reported is available at the end of this report.





African Swine Fever

EUROPE

In June (06/02/2022 - 06/29/2022), five countries (Italy, Moldova, Poland, Romania, and Ukraine) reported 23 ASF outbreaks in domestic pigs.

According to the latest reports (European Commission Animal Disease Information System (ADIS), OIE-WAHIS, EMPRES-i FAO), 10 countries (Germany, Hungary, Italy, Latvia, Lithuania, Poland, Romania, Slovakia, Russia, and North Macedonia) notified authorities of 397 new ASF outbreaks in wild boars. In contrast to the previous month, Bulgaria didn't report new cases. However, Russia and North Macedonia were added to the list.

Since January, the number of ASF outbreaks in wild boars has reached 4106 (as of June 24). Overall, the number of new cases in wild boars increased (n=397) compared to the previous month (n=331). As before, Germany and Poland lead the list of countries with the most significant number of outbreaks (n=115 and n=96, respectively).

Regional Highlights:

• **Germany | July 2:** According to Reuters, 1,786 pigs on a farm in Emsland in Lower Saxony (Map 1) were due to be slaughtered on Sunday, July 3, after ASF was confirmed on the unit, located ~10 miles from the Dutch border. This was the first outbreak in domestic pigs in Lower Saxony, which is one of Germany's most important pig farming regions, with about 6.4 million pigs and piglets (Germany's national statistics office).



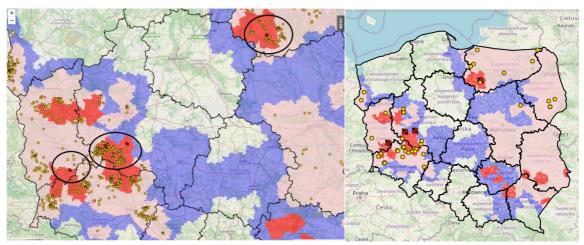
Map 1. Location of the ASF outbreak reported in Lower Saxony, ~10 miles from the Dutch border

- According to Pig Progress, there are 296 farms within a 10km radius around the farm, with a total of around 195,000 pigs, according to the Lower Saxony authorities. In this core zone, pig transport is forbidden. Until now, the source of the virus remains unknown.
- Another outbreak has been confirmed in domestic pigs on a fattening unit with 1,300 pigs in the eastern state of Brandenburg, where ASF was first confirmed in wild boar in September 2020, close to the Polish border, Reuters reported.





- These are the fifth and sixth outbreaks of ASF on a German farm since the virus entered the country in September 2020.
- Italy | June 10: ASF found on a domestic pig farm for the first time on mainland Italy. The spread of ASF from wild boars to domestic pigs was declared for the first time in a small herd in Lazio, prompting the cull of 1,000 pigs locally. Earlier in May 2022, ASF was reported in a wild boar in the municipality of Rome. This is the first ASF case in domestic pigs outside the island of Sardinia, where the disease is considered endemic and present in wild boars and without cases in domestic pigs since 2019. According to the European Commission's latest updates, three ASF outbreaks were registered in domestic pigs since the start of the outbreak. Local authorities decided to kill 50,000 wild boars to stop the spread of the virus. Simultaneously, Liguria Region claims the depopulation of the wild boar colony present in the Bisagno stream in Genoa following the international protocols for ASF eradication.
- Poland | June 3: First ASF outbreak in domestic pigs in 2022. An ASF outbreak was confirmed on a farm with 1,994 pigs in Greater Poland (Wielkopolskie), the largest pigproducing region in the country. Within a week, 88 domestic pigs tested positive at a farm in a neighboring county. According to the <u>USDA report</u>, four new outbreaks in hog farms were detected in ASF-restricted areas with a high concentration of ASF infections in wild boars. Additional outbreaks on farms are expected as the disease is more prevalent in the summer. With no new areas in Poland presenting ASF outbreaks, the pork industry situation remains stable.



Map. 2. Location of ASF outbreaks in pigs and ASF outbreaks in wild boars confirmed in 2022, as of June 22, 2022: red dots – ASF outbreaks in pigs; yellow dots – ASF outbreaks in wild boars (Source: General Veterinary Inspectorate website)

• Ukraine | June: ASF outbreaks in domestic pigs on backyard farms in northeastern and central Ukraine. Despite the Russian invasion of Ukraine, the state veterinary service continues to carry out its functions and take measures to stop the spread of the disease. After confirming the ASF outbreak on two small backyard farms with four animals in Kirovohrad and five in Sumy oblasts in June, all sick and suspected animals were destroyed, and quarantine measures were implemented. Meanwhile, since the beginning of the war, the industrial sector has already lost more than 300,000 pigs (around 10%). According to the Association of Pig Producers of Ukraine, the largest number of commercial farms are concentrated in Kyiv, Donetsk, and Lviv oblasts. While Kyiv and Lviv oblasts have maintained and consolidated their positions, Donetsk oblast is giving up its position due to hostilities taking place there. The





region's largest enterprise, PJSC "APK-Invest," which had more than 25,000 sows, was forced to reduce production volumes. At the same time, pig farms in Zhytomyr, Dnipropetrovsk, Donetsk, and Luhansk regions were the most affected by military aggression.

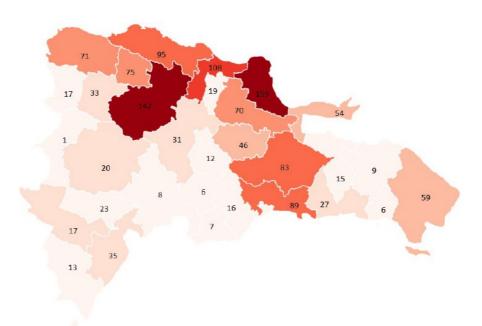
AMERICA

The Dominican Republic

Since the start of the epidemic (**period between July 25, 2021 - July 1, 2022**), only 221 of the **1,367 confirmed outbreaks** (by the Dominican authorities) have been reported to the OIE (last follow-up report - 2/16/22). The total loss of animals throughout these 221 outbreaks is over 18,000. Most of these reports are from backyard premises with less than 100 pigs, although some feature community-style backyard operations with up to 1,000 pigs.

The Epidemiology Division, Department of Animal Health (DAH), Directorate of Livestock, Ministry of Agriculture in the Dominican Republic, implements the early alert reporting system, where all suspected cases are reported. There are some backlogs in their submission to OIE, inherent to the burden and challenges associated with investigating each reported suspected case.

In June, authorities confirmed by molecular diagnosis 57 new outbreaks, bringing the total of accumulated confirmed cases to 1,367 distributed in 31 provinces; 1,015 of those outbreaks have been resolved (Map 3).



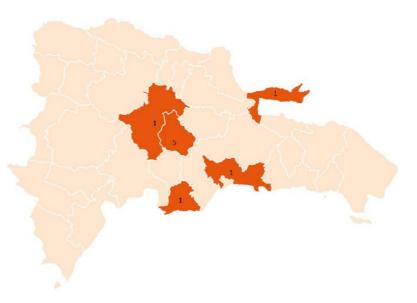
Map 3. Distribution of confirmed accumulated cases of ASF in the Dominican Republic since the first case in July 2021.





Since the beginning of the outbreak, samples from over 4,152 production sites have been taken and processed by Dominican veterinary services; 1,017 of them during the last month (the period between 4/22 and 5/21), from which 57 tested positive for ASF.

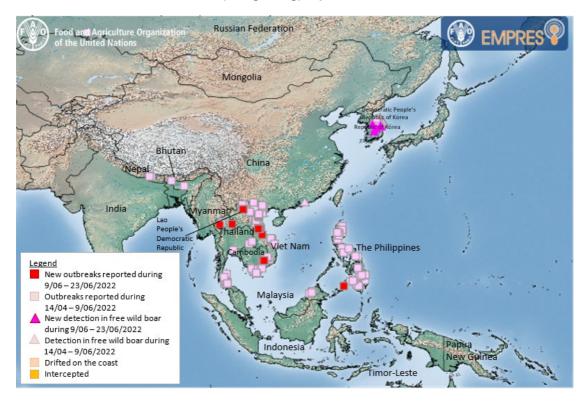
It is important to note that the positive rate has changed since November (from over 40% to 16%), denoting the progressive efficacy of control efforts across the country. Still, the active spread of the virus throughout the population is of great concern.



Map 4. Distribution of reports of suspected cases in the last week (6/26 - 7/1) in the Dominican Republic.

ASIA

In June, six countries - India, The Philippines, Thailand, Nepal, and Vietnam - reported ASF outbreaks in domestic swine. China (Hong Kong) reported an outbreak of ASF in wild boar.



Map 5. African swine fever situation in Asia April-June 2022 (Source: FAO)

Regional highlights





- India | June 25: ASF cases were detected at a government pig breeding farm in Hiyanglam Makha Leikai, Kakching district. Kakching is a town in the southeastern part of the Indian state of Manipur, which borders Myanmar on its east. As a result, district authorities promptly prohibited the sale of pigs, pork, feed, and related items in and out of the Hiyanglam region. According to the FAO's situation update in Asia and Pacific, recent reports of ASF outbreaks in India include Assam State (Biswanath, Golaghat, Darrang districts), Nagaland State (Longleng, Mokokchung, and Phek districts), Manipur State (in Kamjong District and Ukhrul District), and in Mizoram State.
- China | June 1: Authorities in Hong Kong reported a positive case of ASF in a wild boar. ASFV was detected in samples taken from a wild pig carcass under the government's ASF surveillance program. According to a statement from China's Agriculture Fisheries and Conservation Department, a debilitated wild pig was found in the area near Tai Lam Wu, Sai Kung, while following up on a wild pig sighting report from a member of the public recently. Results were positive for the ASF virus. Local authorities are maintaining surveillance for ASF in wild pigs in Hong Kong.
- Nepal | June 29: Authorities reported two ASF outbreaks at farms in Dhulikhel-5 municipality of Kavrepalanchowk district, putting about 307 pigs at risk. According to data submitted to <u>FAO's</u> <u>EMPRESi</u>, these two outbreaks resulted in 263 cases and 261 pig deaths.

Foot and Mouth Disease (FMD)

ASIA China

On June 10, China reported an outbreak of foot-and-mouth disease to the World Organization for Animal Health (WOAH). This outbreak occurred at a farm belonging to Fengming Food Corporation for Meat Processing Factory, Changzhou District, Wuzhou. According to the WOAH report, the outbreak began on May 23 and was confirmed on May 27. A total of 21 pigs tested positive for foot-and-mouth disease virus, and 454 pigs were considered at risk of catching FMD. All exposed pigs were slaughtered. China's last foot-and-mouth disease outbreak was on August 20, 2018.

AFRICA

Algeria

FMD has been spreading at an alarming rate in northern Algeria. Since March 28, <u>seven outbreaks</u> of serotype O FMD have been reported, affecting cattle, goats, and sheep. Before the current outbreaks, Algeria last had FMD outbreaks in 2019. A <u>local news outlet</u> reported that the recent outbreaks in cattle happened following the completion of a mass vaccination exercise in the country's Eastern Province, raising worries about the efficacy of the currently used FMD vaccines. If FMD is not controlled in North Africa, it has the potential to move farther north into Eurasia, impacting numerous species of clovenhoofed *ungulates* in the region.

EUROPE

UK

A potential FMD case in Norfolk was ruled out by official testing at the UK national reference laboratory, as well as swine vesicular disease. The 10km temporary control zone preventing the movement of any susceptible animal into or out of the area has been revoked. Further tests have been carried out on the farm to establish the cause of the disease. The farm remains under movement restriction. The last FMD outbreak in the UK occurred in 2007. However, the most devastating





outbreak happened in 2001 and culminated in the slaughter of more than 6 million animals. The last case of swine vesicular disease in the UK was registered in 1982.



Map 6. 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

OIE - WAHIS interface - Immediate notifications

OIE - OIE Asia Regional office

FAO - ASF situation update in Asia & Pacific

DEFRA - Animal conditions international monitoring reports

CAHSS - <u>CEZD Weekly Intelligence Report</u> European commission - <u>ADIS disease overview</u>

AMERICA

The Dominican Republic

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ASIA

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Any inquiries regarding this publication should be sent to us at SwineGlobal@umn.edu