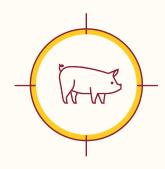


Swine Disease Global Surveillance Report

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 generated through a systematic process that involves screening various official data sources, including government and international organization websites, as well as softer sources such as blogs, newspapers, and unstructured electronic information from around the world. These data are then curated to create a raw repository.

Subsequently, a multi-criteria rubric is applied to evaluate each event. This rubric assesses factors like novelty and the potential direct and indirect financial impacts on the US market. The outcome of this rubric application is a final score assigned to each event.

These final scores, along with an epidemiological interpretation of the event's context, are published.

The interpretation encompasses details like the credibility of the information, the scale and speed of the outbreak, its connectedness to other factors, and the local capacity to respond.

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.



CENTER FOR ANIMAL HEALTH AND FOOD SAFETY

University of Minnesota

University of Minnesota Technical Coordination

Valeriia Yustyniuk, Sylvester Ochwo, Sol Perez¹

Expert Focus group

Jerry Torrison, Montserrat Torremorell, Cesar Corzo, Paul Sundberg, John Deen, Andres Perez

¹ Project coordinator. E-mail: <u>mperezag@umn.edu</u>

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Swine Disease Global Surveillance Report

Tuesday, August 6, 2024, to Monday, September 2, 2024

Report Highlights

- African Swine Fever in Germany: The country witnessed ASF affecting its first farm in Rhineland-Palatinate, highlighting the ongoing risk in the region.
- **Risk to the UK:** A government report revealed a high risk of ASF reaching the UK due to illegal pork imports.
- **ASF in Poland:** Internal Security Agency has warned farmers of possible sabotage following mysterious ASF outbreaks in the Kujawsko-Pomorskie province.
- ASF in the Philippines: ASF-infected hogs were intercepted at checkpoints in Metro Manila.
 Two trucks, with over 100 hogs in total, were flagged on Mindanao Avenue. Similarly, 30 ASF-infected pigs were intercepted in Quezon City.

SEPTEMBER 2024 - OUTBREAKS BRIEF

R	Location	Report Date	Dx	Impact
2	Baden-Württemberg state, Germany	8/9	ASF	First outbreak in the district since May 2022 - confirmed in wild boar
2	Rhineland-Palatinate state, Germany	8/15	ASF	First case in domestic pigs (13 affected animals)
1	Mizoram state, India	August	ASF	Active outbreak in over 170 villages across six districts
1	Yeongcheon-si, Gyeongsangbuk-do, South Korea	8/16	ASF	Almost 2,000 pigs culled
1	Da Nang, Vietnam	8/8	ASF	First report in this province since the initial outbreak in 2019
1	East provinces, Indonesia	8/6-20	ASF	Three confirmed outbreaks
1	Western Cape province, South Africa	August	ASF	Outbreak in a small farm - 50 pigs affected
1	Saskatchewan, Canada	July	H3N2v	Single human case - the only human case of swine origin influenza A(H3N2)v reported so far in 2024 worldwide

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.



African Swine Fever

EUROPE

According to EU ADIS, in August (08/01/2024 - 08/28/2024), 12 European countries (Bosnia and Herzegovina, Croatia, Germany, Italy, Latvia, Moldova, North Macedonia, Poland, Romania, Serbia, Slovakia, and Ukraine) **reported 219 outbreaks in domestic pigs**, 1.3 times more compared to the previous month (n=160). Serbia was a significant contributor to the escalation, accounting for more than half of the total number of outbreaks (n=135). In Germany, ASF affected the first farm in Rhineland-Palatinate, where previous outbreaks were reported in wild boars. Meanwhile, Russia reported one outbreak on a backyard farm through WAHIS. The distribution of ASF outbreaks is shown in Figure 1.

In the same period, 14 European countries (Czech Republic, Estonia, Germany, Hungary, Italy, Latvia, Lithuania, North Macedonia, Poland, Romania, Serbia, Slovakia, Sweden, and Ukraine) reported 512 outbreaks in the wild boar population. This represents a 1.3-fold decrease compared to July (n=678). The majority of outbreaks were reported in Poland (n=168), Germany (n=118), and Latvia (n=92).

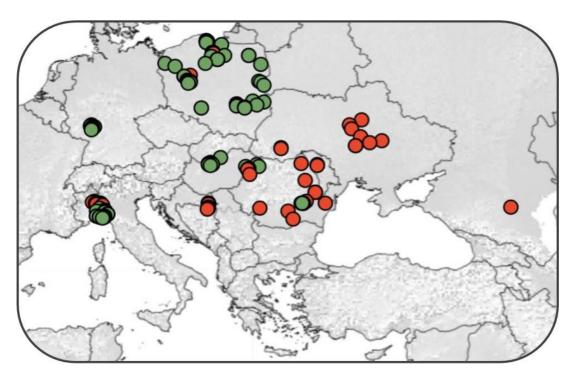


Figure 1. The distribution of African swine fever outbreaks in Europe (in red: domestic pigs; in green: wild boar) from August 1, 2024, to August 28, 2024. (Source: FAO <u>EMPRES-i</u>).

Regional Highlights

 United Kingdom | August 5: A leaked UK government report warns of a high probability that ASF could reach the UK within months, primarily due to illegal pork imports.
 Despite new sanitary and phytosanitary checks, border officials at Dover, facing limited resources, struggle to control illegal meat entry (Since September 2022, when border checks were first introduced, sixty tonnes of illicit meat pork have been seized). The disease's arrival could devastate the UK's pig industry, leading to mass culls and export bans. A coalition of UK





livestock associations has expressed serious concerns over current border controls, citing gaps in checks and inadequate funding, and calling for an urgent review to prevent a potential ASF outbreak.

Meanwhile, a recent ASF simulation exercise conducted by the National Pig Association (NPA) and the Agriculture and Horticulture Development Board (AHDB) underscored the critical importance of meticulous on-farm record keeping. The exercise, involving 30 participants from various organizations and government bodies, focused on a hypothetical ASF outbreak in the UK. It highlighted that comprehensive records of pig movements, deadstock, and personnel are crucial for effectively assessing risk and managing disease spread. The NPA emphasized that detailed, legible, and up-to-date records would expedite government response. The exercise also discussed the need for clear communication between industry and government and proposed appointing designated contacts within larger companies to streamline this process.

• Italy | August 9: The EU Commission's Veterinary Emergency Team (EUVET) has brought up some concern regarding Italy's current measures to control ASF, marking them as insufficient, following an assessment in Lombardy and Emilia-Romagna. The EUVET mission to Lombardy and Emilia-Romagna took place from July 2-4, 2024, to evaluate the effectiveness of ASF control strategies in northern Italy. The assessment aimed to determine if the existing measures are adequate to prevent the further spread of the virus, particularly east of the A15 motorway and south towards Tuscany. The mission also evaluated risk reduction strategies, including hunting practices, surveillance efforts, fencing, and biosecurity protocols to protect domestic pig holdings within restriction zones.

The mission's <u>report</u> highlights the need for a more comprehensive and coordinated ASF control strategy across northern Italy. It calls for urgently developing an alternative plan for ASF control and eradication. Experts expressed concerns that the current measures are not keeping pace with the epidemic, posing a significant risk of the disease spreading further eastwards and southwards into Tuscany.

Germany | August 9: ASF has been detected in Baden-Württemberg, with a confirmed
case found in a wild boar near Hemsbach in the Rhein-Neckar district. This marks a
significant development following earlier outbreaks in neighboring states of Hesse and
Rhineland-Palatinate. The initial—and, until recently, only—outbreak of ASF in BadenWürttemberg was reported at a farm in Forchheim, located in the Emmendingen district, at the
end of May 2022.

On August 15, ASF was detected on a pig farm in Rhineland-Palatinate for the first time. The virus was confirmed at a small farm with 13 pigs near Bad Dürkheim. *This case marks the ninth farm infected in Western Germany this summer.* The virus, which initially spread among wild boars in the Frankfurt area, has now affected 151 wild boars and nine farms, predominantly in Hesse, which reported a large outbreak with one farm housing over 2,000 pigs. The current situation in Western Germany is presented in Figures 2-3.



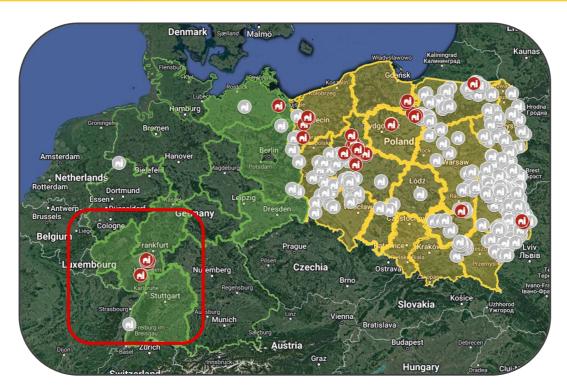


Figure 2. ASF outbreak distribution in pig farms (red circles with white houses - recent outbreaks, gray circle - outbreaks prior to 2024) in Germany (Source: <u>ASF infected pig farms Germany/Poland 2014-2024</u>)

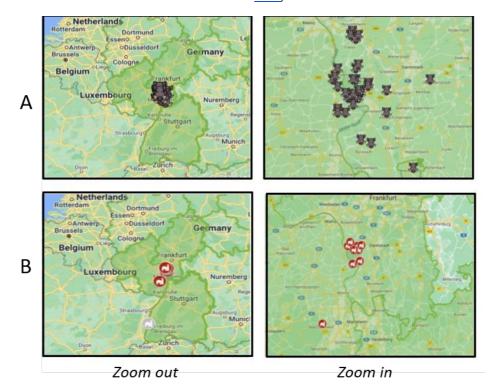


Figure 3. Zoom on ASF outbreaks distribution in wild boar (boar heads) and pig farms (red circles with white houses - recent outbreaks, gray circle - outbreaks prior to 2024) in Western Germany in 2024 (georeference: red quadrant figure 2) (Source: ASF infected pig farms Germany/Poland 2014-2024)





Proactive and responsive measures taken by authorities to prevent ASF spread in southwestern Germany:

- **June 2024:** The first case of ASF is detected in Hesse within a wild boar in the Groß-Gerau district. This leads to initial containment measures, including restricted zones and enhanced biosecurity protocols.
- **Mid-June 2024:** ASF spreads within Hesse, prompting the installation of electric fences, the deployment of cadaver detection dogs, and the use of drones to monitor wild boar populations.
- August 5, 2024: Additional ASF cases are confirmed near the borders of Baden-Württemberg and Rhineland-Palatinate. The Rhine failed to serve as an insurmountable barrier for wild boars. Hesse expands its protective zones, impacting surrounding areas.
- August 9, 2024: The virus is confirmed in Baden-Württemberg after infected wild boar
 is discovered in the Rhein-Neckar district, close to the Hesse border. This leads to
 further preventive measures, including the extension of electric fences and the use of
 cadaver search dogs and drones.
- **Later, August 2024:** Authorities in Rhineland-Palatinate and Baden-Württemberg implemented stricter measures, including new restricted zones, hunting prohibitions, and movement restrictions for pigs to prevent the spread of ASF.
- August 13, 2024: The ASF containment measures are expanded further in the Bergstraße district in southern Hesse following additional positive cases. The restricted zones are adjusted to include more municipalities as part of ongoing efforts to control the outbreak.
- **August 15, 2024:** The detection in Rhineland-Palatinate farm prompts stringent restrictions in the affected zone to control the spread.
- August 16, 2024: In the district of Groß-Gerau, nearly 500 healthy pigs from two
 unaffected farms have been slaughtered to alleviate space constraints caused by ASF
 restrictions. These farms, located in a protection zone, were unable to sell animals but
 continued to produce offspring, necessitating the culling to make room for the
 remaining herd.
- Poland | August 13: Poland's Internal Security Agency has warned farmers to be vigilant for possible sabotage following mysterious outbreaks of ASF in the Kujawsko-Pomorskie province, a major pig breeding area. The situation escalated after a wild boar, found dead in June, tested positive for ASF and appeared to have been transported from another province. Subsequent ASF outbreaks in pig farms near Chełmno, affecting 37 pigs in Kałdus and 127 in Starogród, located about 1.2 miles (2 km) apart, have led to the culling of animals and heightened concerns about the potential deliberate spread of the virus. Authorities have designated affected areas as restricted zones, banned fairs and outdoor events, and urged farmers to follow strict biosecurity measures. More dead wild boars have been found near roads, prompting further testing for ASF. Local officials emphasize that all necessary control measures are in place to prevent further spread of the disease, which could have severe economic consequences for farmers in the region.
- Ukraine | August 19: The Meat Industry Association of Ukraine has requested the UK government's help in providing ASF testing kits amid fears of the disease's rapid and uncontrolled spread in the country. The association's chief executive expressed concerns that ASF could spread beyond Ukraine's current enzootic centers, posing a risk to meat processing plants. The association notes a rapid increase in ASF cases in small-scale and industrial pig farms, likely linked to efforts to support troops and the population. As a result, many pig farms, fearing bankruptcy, are urgently sending pigs to meat processing facilities, often with questionable veterinary certificates. This situation highlights the urgent need for enhanced pre-slaughter ASF testing to control the virus's spread. The request, supported by the UK's Association of Independent Meat Suppliers (AIMS), highlights the need for 10,000 rapid ASF test kits to enhance pre-slaughter control measures. AIMS has approached the UK's biosecurity minister to consider funding the testing kits, which cost \$94,197 (£71,100),





emphasizing that ASF outbreaks in Ukraine could impact the UK and European pig industries. The UK government has already provided substantial aid to Ukraine, and additional support for ASF control could help prevent further economic and biosecurity risks.

Czech Republic | August 29: In response to an ASF outbreak among wild boars in the
Liberec region, Czech authorities are taking emergency measures, including culling
operations assisted by police using specialized night-hunting weapons. The Agriculture
Minister announced additional strategies, such as drone monitoring in collaboration with the
Czech University of Life Sciences and installing odor barriers to prevent the disease's
southward spread. So far, 27 cases have been confirmed this year. Veterinary authorities have
expanded protective zones to contain the outbreak.

ASIA

In August, five countries (India, Indonesia, The Philippines, South Korea, and Vietnam) reported ASF outbreaks in domestic pigs. In addition, South Korea reported ASF cases in wild boars.

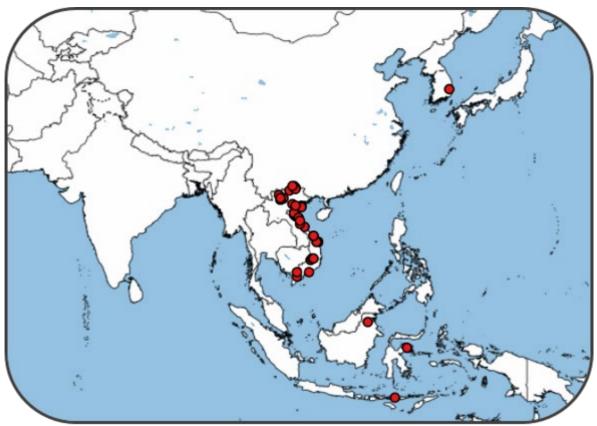


Figure 4. ASF outbreak distribution in domestic pigs in Asia (August 5 to September 2, 2024). (In red: domestic pigs) (Source: FAO EMPRES-i—Data sources: Republic of Korea, Vietnam: WAHIS and media information, The Philippines: WAHIS and government websites, Indonesia: official database isikhnas.)

Regional Highlights

 India | August 8-19: Pigs culled in Kerala and Mizoram states to control ASF spread. On August 8, local news reported the culling of 50 pigs at a private farm in Kerala's Kannur district



following an ASF outbreak. In response, district authorities declared a 1-km infected zone and a 10-km surveillance zone around the farm, alongside a three-month ban on pork distribution and pig transportation, with strict checks at district entry points to prevent illegal smuggling. Meanwhile, in Mizoram, despite a recent reduction in pig deaths and culling, the ASF outbreak continues to devastate over 170 villages across six districts. Since February, more than 10,050 pigs have died, and 18,300 have been culled, causing farmers financial losses of \$2.7 to \$2.9 million. The Animal Husbandry and Veterinary Department has declared infected areas and imposed restrictions on the supply of pigs and pork from these zones.

- South Korea | August 16: New ASF outbreak in domestic swine. National authorities reported to WOAH a new ASF outbreak in domestic pigs which occurred on a farm in Yeongcheon-si, Gyeongsangbuk-do. Six deaths and 30 cases were reported, while 1,921 pigs were culled and disposed of. Last month (July), two additional outbreaks occurred in the same region, leading to the culling of 1,298 pigs across affected farms.
- Vietnam | August 8: First ASF cases reported in Da Nang amid ongoing nationwide outbreaks. At least five pigs died from ASF at farms in two communes in a suburban district of Da Nang, a coastal city in central Vietnam. In late July, 10 out of 36 pigs at a farm in one of the communes showed symptoms of illness, including subcutaneous bleeding and loss of appetite; two of these pigs died on July 30, with the virus detected in their meat. Additionally, three pigs in a separate commune died between August 5-8, also testing positive for the virus. In response, 40 pigs were culled and buried according to strict health and veterinary regulations. The district has isolated the affected communes, banned pig slaughter, and restricted pig movement to contain the ASF outbreak. Chemical disinfection has been applied in affected pig farms across 11 communes in the district. These are the first ASF cases reported in Da Nang. Since the initial outbreak in 2019 in Hung Yen province, ASF has affected 48 out of 63 provinces and cities in Vietnam, impacting approximately two million pigs, or 6.5% of the country's pig population.
- Indonesia | August 6-20: Outbreaks in three administrative regions. According to Empresi, Indonesia reported three outbreaks of ASF in domestic pigs in August, occurring in East Kalimantan, Central Sulawesi, and East Nusa Tenggara. However, specific details regarding the number of cases and affected farms in these outbreaks have not been provided. Since the start of 2024, over 5,600 ASF cases have been confirmed across several provinces, with East Nusa Tenggara reporting the highest number, nearly 5,000 cases. Other affected regions include Central Java, West Kalimantan, North Kalimantan, Papua, South Sulawesi, and Central Sulawesi.

AFRICA

In August, South Africa was the only country in Africa to report an ASF outbreak to WOAH. The outbreak began on August 1 in Bitou, Western Cape province, on a domestic pig farm. It involved 35 cases and resulted in 35 deaths out of 50 susceptible pigs. Control measures, including quarantine, zoning, and disinfection, have been implemented. This outbreak brings the total number of ongoing ASF outbreaks in the Western Cape to 15. These outbreaks are part of a larger disease event that began on February 10, 2021, with a total of 57 outbreaks, 42 of which have been resolved.

Foot-and-Mouth Disease

In August, South Africa did not report any new FMD outbreaks. However, there are still ongoing outbreaks. The Department of Agriculture, Land Reform, and Rural Development updated the situation





on August 8. The situation in the Eastern Cape, in the Kouga and Kou-Kamma Municipalities outbreak areas, is showing signs of improvement, with a decline in new FMD cases and the last clinical case reported in mid-July. Currently, 30 farms with affected cattle are under quarantine, and vaccination efforts are underway. Pre-emptive vaccination has also been carried out on 37 high-risk farms, resulting in over 92,000 cattle and nearly 600 sheep being vaccinated across 67 farms. Meetings with affected farmers have created three working groups to improve cooperation between the Department, provincial authorities, and industry stakeholders.

USDA APHIS Releases Updated 2024 Japanese Encephalitis Virus Response Strategy

The USDA Animal Health and Plant Health Inspection Service (APHIS) has released an updated 2013 Version, incorporating current science, shifting focus from eradication to control and vaccination, and emphasizing a One Health approach. The update reflects increased collaboration with public health authorities and enhanced communication plans to better prepare for potential JEV outbreaks in the U.S. The Swine Health Information Cente has supported this effort with a \$1-million research program in collaboration with the Foundation for Food & Agriculture Research (FFAR) as well as Pork Checkoff to address knowledge gaps in JEV management.

Influenza H3N2 in Canada

In July, Saskatchewan reported its first human case of Influenza A(H3N2)v. The patient, who lives on a farm with pigs but reported no direct contact with them or any sick animals or people, was not hospitalized and has fully recovered. The risk of spreading the disease within the community or internationally is considered low. Canada has recorded three other cases since the variant became a reportable disease in 2005 (two in Ontario, in 2005 and 2016; one in Manitoba, 2021). Globally, 447 swine origin influenza A(H3N2)v cases have been reported since 2005, with a <1% Case Fatality Ratio (CFR).

Fact sheet

When influenza viruses that normally circulate in pigs infect humans, they are called "variant" viruses, and are designated by a lowercase "v" (H3N2v); these viruses are genetically different from the seasonal H1N1 and H3N2 viruses that circulate in humans.

- Human infections with variant influenza viruses usually cause mild symptoms and do not spread from person to person.
- Most commonly, humans are infected through close contact with pigs by living or working on a farm, or by visiting an agricultural fair and coming into contact with infected pigs.
- The human flu vaccine does not protect against variant influenza viruses.

USDA's NBAF Named WOAH Collaborating Centre for Genomic Monitoring of Swine Viral Diseases

The World Organisation for Animal Health (WOAH) has designated the USDA's National Bio and Agro-Defense Facility (NBAF) as the Collaborating Centre for Genomic Monitoring of Viral Swine Diseases. Led by Dr. Manuel Borca, Dr. Lisa Hensley, and Dr. Chad Mire, the center will focus on genomic research to combat viral diseases affecting swine, including ASF, classical swine fever, Japanese





encephalitis, and Nipah virus. The center aims to support WOAH member labs through next-generation virus genome sequencing, training, protocol development, bioinformatics, and the establishment of a biorepository. These efforts will help monitor outbreaks, enhance biosecurity, and aid in vaccine development.

Surveillance at Point of Entry

The Philippines | August 15: ASF containment efforts in the Philippines are ongoing. In Bacolod City, Negros Occidental, 41 live hogs were intercepted due to the absence of proper documentation, suspected to have originated from Cebu. Another 12 pigs were also stopped in Calatrava town, believed to be related to the earlier interception in Escalante City. The Provincial Veterinary Office has implemented strict border controls to prevent the entry of hogs from ASF-affected areas.

Later in August, ASF-infected hogs were intercepted at checkpoints in Metro Manila. Two trucks, one carrying 87 hogs and the other with 14, were flagged on Mindanao Avenue. The hogs from one truck tested positive for ASF, prompting condemnation and disposal. Similarly, 30 ASF-infected pigs were intercepted in Quezon City and buried at a designated site. To contain the spread, stricter surveillance and quarantine measures have been enforced, and checkpoints have been established across various regions.

References:

Recurrent reports reviewed

WOAH - WAHIS interface - Immediate notifications

WOAH - WOAH Asia Regional office

FAO - ASF situation update in Asia & Pacific DEFRA - Animal conditions international

monitoring reports

CAHSS - CEZD Weekly Intelligence Report
European Commission - ADIS disease overview
EUROPE

UK

Deadly African swine fever heading for UK, leaked government report fears as officials warn of 'devastation'

UK livestock bodies warn ministers Dover border control failings are a 'disaster waiting to happen'

African swine fever simulation raises importance of record keeping

African swine fever simulation shows importance of record keeping – NPA

Italy

EU says insufficient measures by Rome against swine fever

Poland

ASF outbreaks in northern Poland prompt urgent response and biosecurity measures ASF Reports in Northern Poland Prompt Increased Scrutiny

Spy agency warns of possible sabotage after mysterious outbreak of deadly pig virus

Ukraine

Ukraine meat industry issues ASF test request to Defra amid fears of 'rapid and uncontrolled' spread

<u>Uncontrolled spread of ASF in Ukraine poses</u> threat to UK

Germany

Fences, dogs and drones for swine fever
Swine fever in Hesse creates further restricted
zone

The prohibition zone for swine fever is extended again

First infection in Baden-Württemberg state
Swine fever in feral pigs detected in the southwest

First case on a farm Rhineland-Palatinate state
Swine fever: Healthy animals killed for lack of space

Czech Republic

Police to assist with emergency culling of infected wild boars in Liberec Region

ASIA

India

50 pigs culled in Kerala ASF in Mizoram

DA-BAI: 11 hogs in intercepted trucks test positive for ASF

Seized hogs in QC checkpoint positive for ASF Entry of live hogs into Negros Occidental intercepted

AFRICA

Update on FMD in South Africa NORTH AMERICA

USA

WOAH picks NBAF as the center for genomic monitoring of viral swine diseases

Canada

Saskatchewan saw first ever case of H3N2v swine flu in July

Human - Influenza A(H3N2)v -

Canada(Saskatchewan) - Aug 21, 2024





Abbreviations:

ASF - African swine fever

CSF - Classical swine fever

FMD - Foot-and-mouth disease

PRRS - Porcine reproductive and respiratory

syndrome

SVV - Seneca Valley Virus

CCHF - Crimean-Congo hemorrhagic fever

PPV - Porcine parvoviral infection

WOAH - The World Organisation for Animal

EFSA - The European Food Safety Authority

PDCoV - Porcine Deltacoronavirus

The GSDMR team compiles information drawn from multiple national (Ministries of Agriculture or Livestock, Local governments, and international sources (WOAH, FAO, DEFRA, EC, etc.), as well as peer-reviewed scientific articles. The team makes every effort to ensure but does not guarantee the 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.

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