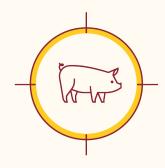


Swine Disease Global Surveillance Report

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, Megan Niederwerder, Lisa Becton, Andres Perez

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

www.cahfs.umn.edu

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Swine Disease Global Surveillance Report

Tuesday, October 1, 2024, to Monday, November 4, 2024

Report Highlights

- **ASF Vaccines in the Philippines**: The Philippines rolls out an ASF vaccine, focusing on support for backyard pig farmers, who supply 70-80% of the country's pork. Legislators and industry groups are proposing free vaccines to assist these farmers.
- **ASF vaccines in Ukraine**: The Ukrainian Meat Association urges swift approval of the AVAC ASF live vaccine, while the Ukrainian Pig Breeders Association advises caution until it gains international validation.
- ASF in Italy: Lombardy intensifies wild boar culling and biosecurity measures against ASF. Over 13,000 wild boars have been culled to date.
- **ASF in India**: Mizoram state declared the ASF outbreak a state disaster and submitted a proposal to increase the central government's cost-share of the outbreak response from 50% to 90%.

Surveillance at Point of Entry

- **The UK**: Dartford Council seized 375 lb (170 kg) of illegally imported meat due to ASF risk concerns following an earlier seizure of 3.4 tonnes at Dover farmers urge more robust post-Brexit border controls.
- **The Philippines**: The Department of Agriculture imposed a temporary import ban on FMD-susceptible animals, products, and by-products from Türkiye due to an FMD outbreak in Kirsehir.

NOVEMBER 2024 - OUTBREAKS BRIEF

R	Location	Report Date	Dx	Impact
2	Oregon, US	10/30	H5N1	One pig affected on a backyard farm
1	Dobele municipality, Latvia	10/9	ASF	Seventh outbreak in domestic pigs
1	Gangwon Province, South Korea	10/13	ASF	4,277 pigs culled
1	Multiple locations (Doyang, Tseminyu), India	10/16- 19	ASF	Details of affected farms not available
1	Inner Mongolia province, China	10/14	FMD Ser O	106 cattle affected
1	Multiple locations, Thailand	10/5	Strep suis	12 people died due to the outbreak

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

In October (09/26/2024 - 10/30/2024), **seven European countries** (Bosnia and Herzegovina, Italy, Latvia, Lithuania, Romania, Serbia, and Ukraine) **reported 51 outbreaks in domestic pigs** through EU ADIS, indicating a relatively stable situation compared to the previous month (n=47). The distribution of ASF outbreaks is shown in Figure 1.

In the same period, **11 European countries** (Bulgaria, Estonia, Germany, Hungary, Italy, Latvia, Lithuania, North Macedonia, Poland, Romania, and Slovakia) **reported a total of 539 outbreaks in wild boar populations**, marking a 1.6-fold increase compared to the previous month (n=342). The majority of these outbreaks occurred in Germany (n=147), Poland (n=146), and Bulgaria (n=94).

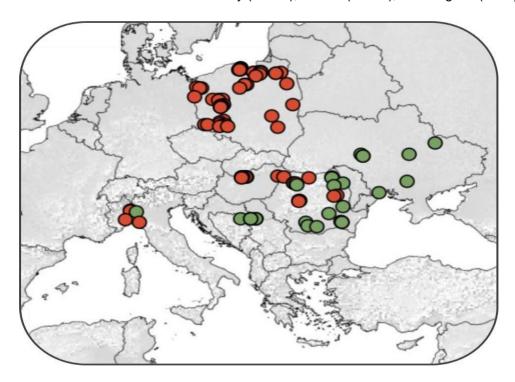


Figure 1. The distribution of African swine fever outbreaks in Europe (in green: domestic pigs; in red: wild boar) from September 26, 2024, to October 30, 2024. (Source: FAO <u>EMPRES-i</u>).

Regional Highlights

• Latvia | October 9: seventh ASF outbreak in domestic pigs spurs biosecurity measures and quarantine efforts. The Food and Veterinary Service (PVD) reported Latvia's seventh ASF outbreak of the year, affecting a holding of 14 pigs in Dobele municipality. Eradication, containment, and epidemiological measures are underway, including slaughtering all pigs in the affected holding and establishing a quarantine zone with movement restrictions. Intensified biosecurity checks are conducted within the quarantine zone to prevent further spread. ASF continues to pose a high risk to domestic pigs, with infected wild boar populations driving virus





circulation in Latvia's forests and fields. This year, so far, 1,021 wild boars have been diagnosed with ASF, surpassing last year's total of 1,002 cases.

• Italy | October 10: Lombardy intensifies wild boar culling and biosecurity measures against ASF. Over 13,000 wild boars have been culled in Lombardy over nine months to curb ASF, with the highest numbers in Como (3,324), Brescia (2,691), and Varese (2,429). To intensify containment efforts, the hunting season was extended until January 31, 2024. The Agriculture Commission emphasized the critical role of hunters in ASF prevention and the importance of protecting Lombardy's pig farming sector. New containment tools include enhanced highway barriers, carcass searches, biosecurity upgrades, and a €7 million funding initiative for farm biosecurity. Additional state and regional funds aim to mitigate the economic impact on affected farms.

Italy has been battling ASF since January 2022, with over 120,000 pigs culled and economic losses of €20 million per month due to export restrictions, severely impacting the €20 billion ham industry. Key ASF clusters remain active in northwest Italy, including Lombardy, Piedmont, and Emilia Romagna, with wild boar as the primary disease vector. Enhanced surveillance, biosecurity, and wild boar population control efforts are underway, tailored to local environments. Climate conditions may influence ASF persistence, as high temperatures have shown some potential in reducing virus survival. However, the EU has called for stronger containment actions to prevent further spread and economic impact.

- Ukraine | October 18: Ukrainian Meat Association urges immediate action on ASF vaccine amid industry crisis. The Ukrainian Meat Association has issued a stark warning on the imminent threat of ASF to Ukraine's pig industry, with up to 50% of the pig population at risk and potential financial losses reaching €1 billion this year. The Association calls for the urgent approval of the AVAC ASF Live vaccine to prevent industry collapse, citing delays and disagreements with the Ukrainian Pig Breeders Association, which remains cautious about the vaccine without international validation. Efforts to seek feedback from Vietnam on its vaccine use have been unsuccessful. Despite a free offer of 400,000 vaccine doses in 2023, distribution was blocked due to ongoing industry skepticism. The Association emphasizes the need for swift domestic action to protect Ukraine's pig sector.
- Germany | October 23: Hesse expands Control Zones and implements new measures as ASF outbreak worsens. The disease continues to impact the wild boar population, particularly in the Bergstraße district, where 74 cases have been recorded since July. Recent searches discovered 44 carcasses, with ASF confirmed in 25, prompting authorities to extend core zones and reinforce fencing along the B47 road. The updated containment strategy includes redefined buffer and infected zones, with new control measures to curb further spread. Currently, nine domestic pig farms—eight in Hesse and one in Rhineland-Palatinate—are affected, with herd sizes ranging from three to 2,419 pigs. Figure 2 presents the location of affected pig farms in the region.



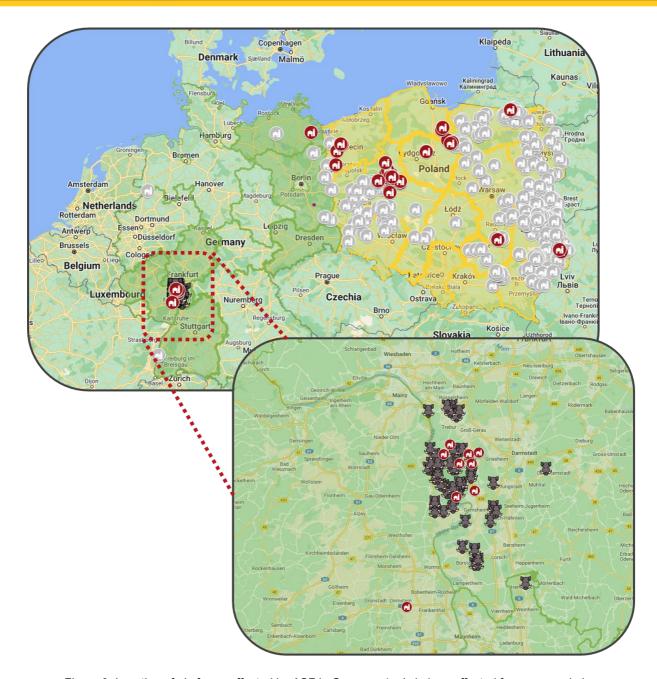


Figure 2. Location of pig farms affected by ASF in Germany (red circles - affected farms; gray circles - affected farm between 2021-2023; boar head - ASF cases in wild boar) (Source: <u>ASF infected pig farms Germany/Poland, 2014-2024</u>)

ASIA

In October, six countries (India, Indonesia, the Philippines, South Korea, Sri Lanka, and Vietnam) reported ASF outbreaks in domestic pigs. Figure 3 presents the distribution of new outbreaks in the region.



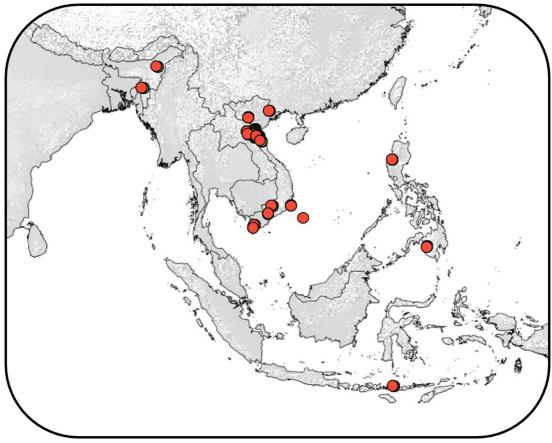


Figure 3. ASF outbreak distribution in domestic pigs in Asia (October 1 to November 4, 2024). (In red: domestic pigs) (Source: FAO EMPRES-i—Data sources: Republic of Korea, Vietnam: WAHIS and media information, The Philippines: WAHIS and government websites, Indonesia: official database isikhnas.)

Regional Highlights

Vietnam | September 29-October 26: Outbreaks in nine administrative divisions. Administrative divisions Lang Son, Son La, Binh Phuoc, and Long An reported one outbreak; Ha Tinh, Gia Lai, Ninh Thuan, and Ca Mau reported two outbreaks; and Nghe An reported 22 outbreaks. Case numbers, deaths, and culled pigs were not reported. **As of September 27, Vietnam had culled over 63,600 pigs.** Vietnam has adopted selective culling policies to reduce ASF's economic and environmental impacts.

Philippines | October 1: Outbreak reported in the Autonomous Region in Muslim Mindanao (ARMM). The report did not include the number of cases, deaths, or culled pigs.

- October 2: Proposal to provide free ASF vaccines to backyard pig farmers. Luis
 Raymund Villafuerte, Jr., the representative of Camarines Sur, backed an industry proposal to
 provide vaccines free to backyard farmers, which provide up to 70-80% of the pork supply in
 the country. The move was proposed to support backyard farmers, who Villafuerte stated
 would have difficulty affording vaccines.
- October 3: The Department of Agriculture will review a request for Emergency Use Authorization (EUA) for ASF vaccines. Currently, ASF vaccines from a Vietnamese manufacturer are being used in controlled trials in the country; approval of an EUA would allow





greater access to the vaccine, especially by backyard farmers. Farmers and industry groups have urged President Marcos to declare ASF a national emergency to further support vaccine rollout.

- October 4: 53 La Union villages under red zone due to ASF. Villages in Balaoan, Luna, Bangar, Bacnotan, Santol, San Juan, Rosario, and San Fernando City have been placed under quarantine. 2,460 pigs had been culled as of October 3, affecting 344 pig farmers. Under new policies of the Department of Agriculture, pigs that test negative may be sold to slaughterhouses to reduce the burden on farmers. Farmers can claim indemnity on a maximum of 20 pigs.
- October 5: The Bureau of Animal Industry reports promising results 28 days post-ASF vaccination in Lobo pigs. The report states that 34 out of 41 pigs vaccinated in Batangas demonstrated an ELISA-blocking rate of 90%, suggesting the development of immunity against ASF. Dr. Palabrica, the Assistant Secretary for Swine and Poultry, reported that the pigs' "...overall condition appears healthy."
- October 7: The Department of Agriculture adds more villages to Batangas ASF
 vaccination. Dr. Palabrica stated that the International Training Center on Pig Husbandry in
 Lipa would begin the vaccination of around 350 pigs; the purpose of this addition to the
 vaccination effort was to increase confidence in the ASF vaccines.
- October 18: The Department of Agriculture chief orders the Board of Animal Industry to
 refine the ASF vaccination protocol to fast-track the rollout. Details on the refinement
 have not been released, but many backyard farmers are hesitant to join the vaccine rollout due
 to negative publicity and worry that their pigs will be culled if they test positive. As of October
 2, active ASF cases were present in 30 provinces.
- October 22: Red tape blamed for low hog vaccination rates. Pig farmers claim low
 participation rates in the limited rollout of the ASF vaccine is due to burdensome
 documentation required by the government, which is particularly difficult for backyard farmers
 to handle. Participation in the vaccine initiative also requires constant monitoring and frequent
 blood tests of the pigs to be vaccinated, which may disincentivize commercial pig farms. The
 swine industry is also concerned about a mutated strain of ASF developing from recombination
 with the vaccine strain.

India | October 9: State officials in Mizoram working to declare ASF outbreak a state disaster. The state government also requested assistance from the central government in obtaining vaccines to combat the outbreak and submitted a proposal to increase the central government's cost-share of the outbreak response from 50% to 90%. This proposal is expected to be supported by the other Northeast states. A total of 245 Mizoram villages are infected with ASF.

October 16: Cases of ASF reported at Doyang. The infected area, located within the Wokha district, was placed under containment measures, including: restriction of pigs in the infected zone (1 km radius around the village), prohibition of slaughter or sale of pigs or pork in the infected zone; monitoring in the surveillance zone (9 km surrounding infected zone); disposal of dead pigs by deep burial or incineration in the infected zone; and all village councils are advised to report any suspected cases of ASF to the nearest Veterinary Office.



October 19: ASF outbreak at Tseminyu's Kithagha village. The Deputy Commissioner
implemented quarantine restrictions to limit the spread of ASF, including restriction of pigs in
the infected zone (1 km radius around the village); prohibition of slaughter or sale of pigs or
pork in the infected zone; monitoring in the surveillance zone (9 km surrounding infected
zone); and disposal of dead pigs by deep burial or incineration in the infected zone.

South Korea | October 13: Ninth case of ASF confirmed in South Korea. The case was discovered in Hwacheon, in Gangwon Province. Emergency quarantine measures were put in place in Hwacheon and five neighboring cities and counties to protect nearby pig farms. In Hwacheon, 233 pig farms will undergo disinfection operations. According to EMPRES-i, seven cases and two deaths were reported, and 4,277 pigs were culled.

Indonesia | October 15: Outbreak reported in Nusatenggara Timur administrative region. The number of cases, deaths, and culled pigs were not reported on EMPRES-i.

Sri Lanka | October 24: Outbreaks in four administrative regions. According to EMPRES-i, outbreaks were reported in the following administrative regions: Northern, Northwestern, Uva, and Western. The number of cases, deaths, and culled pigs were not reported. These reports follow a month of speculation and presumed diagnosis of PRRS and are the first instance of ASF in the country. The government has issued a directive under the Animal Diseases Act prohibiting the movement of pigs and pork products within, into, or out of infected areas; banning the slaughter of susceptible animals in affected areas; suspension of artificial insemination in pigs; suspension of all markets and events including pigs; and regulation of carcass disposal. Reports suggest vaccination has been implemented, but the origin of the vaccines is not reported. The public are urged not to eat meat from infected animals.

Taiwan | November 1: officially recognized by the WOAH as ASF-free, marking it as the second country in East Asia, alongside Japan, to achieve this status. The Ministry of Agriculture highlighted that the ASF-free designation will enhance Taiwan's pork industry by expanding export opportunities. Taiwan previously achieved freedom from FMD in 2020 and has applied for CSF-free status, with a decision anticipated in May 2025. Taiwan successfully prevented ASF outbreaks through stringent border controls and biosecurity measures, promoting sustainable growth in its livestock sector.

WOAH Guidelines for Disease-Free Status and ASF Self-Declaration

The WOAH, authorized by the WTO since 1998, officially recognizes disease-free areas for six major animal diseases: FMD, CSF, African horse sickness, contagious bovine pleuropneumonia, peste des petits ruminants, and bovine spongiform encephalopathy. Member countries can voluntarily apply for an official disease-free status for these diseases to support international trade.

For ASF, which is not included in the official recognition list, WOAH allows Members to issue a self-declaration of disease-free status in line with the Terrestrial Animal Health Code. This requires submitting a comprehensive report to WOAH demonstrating adherence to required biosecurity, surveillance, and control protocols. Upon review, WOAH may publish the self-declaration, supporting trade opportunities for the declaring country.





Surveillance at Point of Entry

The Philippines | October 8: import ban on FMD-susceptible animals from Türkiye amid outbreak concerns. The Philippine Department of Agriculture has imposed a temporary ban on importing FMD-susceptible animals, products, and by-products from Türkiye following an FMD outbreak in cattle reported in Kirsehir on September 9. The ban includes the immediate suspension of sanitary and phytosanitary import clearance for these items.

The UK | October 31: Dartford seizes Illegally imported meat. Dartford Council's Environmental Health team recently seized 375 lb (170 kg) of illegally imported meat, preventing it from reaching consumers due to ASF risk concerns. The seized meat, which may pose a threat to UK livestock, will be destroyed, and the incident has been reported to Defra, the National Food Crime Unit, and the Food Standards Agency. This follows an earlier seizure of 3.4 tonnes of illegal meat at Dover, raising biosecurity concerns. Farmers and MPs are urging stronger post-Brexit border controls to mitigate the threat of ASF and other diseases, highlighting potential gaps since the UK's EU exit.

Foot-and-Mouth Disease

Türkiye | October 25: FMD Serotype A outbreak successfully resolved. The outbreak was detected on September 9 during routine screenings by veterinarians in Cugun, who found clinical signs in cattle and confirmed the virus in samples from three farms. Only three cases were identified among 589 susceptible cattle. No signs of disease were found in nearby villages, and the last animal entry to the affected village was two months prior. It is believed that local starlings, attracted by nearby crops, may have transmitted the virus due to inadequate farm biosecurity. Although there was no inter-farm animal movement, shared pastures may have facilitated local spread. To control the outbreak, a 3 km protection zone and a 10 km surveillance zone were established with restrictions on animal movement. Vaccination efforts have been implemented in the surveillance zone, resulting in 14,875 vaccinated cattle in surrounding villages.

China | October 14: FMD Serotype O reported in domestic cattle in Inner Mongolia. Authorities reported the outbreak of FMD to WOAH, which occurred on a farm in Chifeng, Nei Mongol (Inner Mongolia), on September 23. Seven cases and 106 susceptible animals were reported, and all 106 cattle were culled as a measure to control disease spread. Additional control measures that were implemented include screening and disinfection. The outbreak remains unresolved.

Streptococcus suis

Thailand: October 5: Streptococcus suis outbreak claims lives of 12 infected patients. The outbreak began in January and continued through September, affecting a total of 149 people. The patients ranged in age from 45 years to older than 65, with the majority of patients being over 65 years. The outbreak was attributed to consuming raw pork and pig's blood. The Director of the Office of Disease Prevention and Control Region 9 recommended practicing safe food handling and cooking practices, and clarified that applying lime juice to raw pork does not adequately prepare the meat for consumption.





First U.S. H5N1 Detection in Pigs Highlights Longstanding Asian Experience with Cross-Species Transmission

On October 30, 2024, H5N1 influenza was detected in a US pig for the first time on a small farm in Oregon, where pigs and infected poultry shared outdoor space, likely exposing the pigs through environmental contamination. Although the farm is a non-commercial operation and the pig was not intended for the commercial food supply, this detection spurs concern for potential risk of introduction into US commercial swine herds.

This case follows nearly two decades of sporadic H5N1 infections in pigs across Asia, first reported in 2004 in China. These initial cases prompted WHO warnings due to potential human health risks. Similar incidents occurred in Vietnam, Thailand, and Indonesia, where H5N1 could replicate in pigs, typically causing mild symptoms but underscoring the risk of cross-species transmission in mixed livestock settings.

Further research in Indonesia from 2005 to 2009 revealed occasional H5N1 transmission from poultry to pigs, with some strains adapting to human-type receptors, raising zoonotic concerns. The Oregon case, still under investigation, highlights the critical need for stringent biosecurity and monitoring in mixed livestock environments to mitigate cross-species influenza transmission and protect human and animal health.

References:

Recurrent reports reviewed

WOAH - WAHIS interface - Immediate notifications

WOAH - WOAH Asia Regional office

FAO - ASF situation update in Asia & Pacific

DEFRA - <u>Animal conditions international</u>

monitoring reports

CAHSS - CEZD Weekly Intelligence Report

European Commission - ADIS disease overview

EUROPE

Latvia

Another swine fever outbreak detected in Latvia

Swine fever: 13 wild boars killed in Lombardy Italy's war with African swine fever takes out 120,000 pigs

Ukraine

<u>Ukrainian Meat Association sounds the alarm about ASF spread</u>

Germany

ASF Germany: Many dead wild boar in Hesse state

UK

<u>Illegally imported meat stopped from reaching</u>

<u>Dartford consumers amid African swine fever</u>

<u>concerns</u>

ASIA

Philippines

<u>Proposal to provide free ASF vaccines to backyard pig farmers</u>

Department of Agriculture to review request for Emergency Use Authorization (EUA) of ASF

53 La Union villages under red zone due to ASF The Bureau of Animal Industry reports

promising results 28 days post-ASF vaccination in Lobo pigs

<u>Department of Agriculture adds more villages to Batangas ASF vaccination.</u>

DA chief orders BAI to refine ASF vaccination

protocol to fast-track rollout

DA: Refine protocols to expedite ASF vaccination

Red tape blamed for low hog vaccination rates
Red Tape Hampers Hog Vaccination Rates,

Raising Concerns in the Industry

<u>DA bans FMD-susceptible animals from Türkiye</u> <u>Thailand</u>

DA issues ban on Turkiye animals amid FMD scare

<u>Streptococcus suis outbreak claims lives of 12 infected patients.</u>





India

State officials in Mizoram working to declare
ASF outbreak a state disaster

<u>Mizoram plans to declare ASF outbreak as state</u> disaster

Cases of ASF Reported at Doyang
ASF outbreak at Tseminyu's Kithagha Village
New ASF outbreaks in India, S Korea, Vietnam,
and 3 European states

South Korea

9th case of ASF confirmed in S. Korea this year 9th case of ASF confirmed in South Korea S. Korea Reports Year's Ninth Case of ASF

Sri Lanka

Sri Lanka govt takes proactive measures to prevent spread of porcine diseases

ASF declared in Sri Lanka

Sri Lanka halts transport of pigs amid first outbreak of ASF

Taiwan

<u>Taiwan declared free of African swine fever</u> <u>Vietnam</u>

Selective culling as containment strategy for ASF

Studies of H5N1 Influenza Virus Infection of Pigs by Using Viruses Isolated in Vietnam and Thailand in 2004

2004 - China

Low Susceptibility of Pigs against Experimental Infection with HPAI Virus H5N1 Clade 2.3.4.4b Influenza A (H5N1) Viruses from Pigs, Indonesia AFRICA

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