# 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 Perez<sup>1</sup>, Auguste Brihn

Andres Perez<sup>2</sup>

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

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

<sup>2</sup>Principal 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**

Tuesday, March 7 to Monday, April 3, 2023

# **Reports Highlights**

- **New ASF surveillance strategy in DR**: Authorities in the Dominican Republic released a new regulation that sets mandatory sampling every 21 days.
- **ASF in meat products in Russia**: About 16 tonnes of meat products were confiscated and destroyed in a meat processing plant after detecting ASF in a routine inspection.
- **New ASF surge in China**: A spike of positive detections after the new year is set to reduce hog output and push up market prices.
- Colombia FMD updated status: National authorities communicated that the entire Colombian territory is certified as free of foot-and-mouth disease by the World Organization for Animal Health (WOAH).

# Surveillance at Points of Entry

• UK surveillance efforts: One tonne of smuggled pork seized in Suffolk since November 2022.

# **OUTBREAKS BRIEF**

R	Location	Date	Dx	Impact
2	Several cities affected in Cebu province - Central Visaya, <b>The Philippines</b>	3/1	ASF	First detection of the disease - over 800 hogs were culled.
2	Northern production areas, <b>China</b>	3/16	ASF	Spike of infections after the new year - independent analyst suggested the disease could be affecting 50% of the region.
1	Soroca Raion (northeast of the country), <b>Moldova</b>	3/21	ASF	Commercial farm 147 pigs affected.
1	Village of Gorodok (Siberia region), Russia	3/22	ASF	Entire village affected 200 pigs culled
1	Multiple regions, Singapore	3/10	ASF	Another 17 cases in wild boars
1	Two new towns affected, lloilo province, The Philippines	3/13	ASF	Since the first outbreak in the region in last October, 125,507 head of swine – 45% total inventory, were culled
1	Turkey	3/3	FMD SAT2	New strain in the country - seven outbreaks have been reported so far





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.





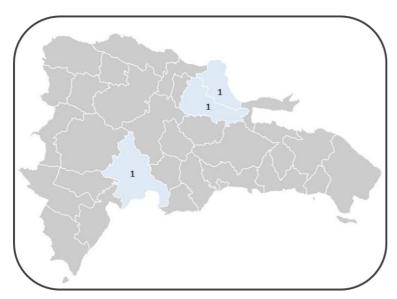
#### **African Swine Fever**

#### **AMERICA**

#### **Dominican Republic**

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.

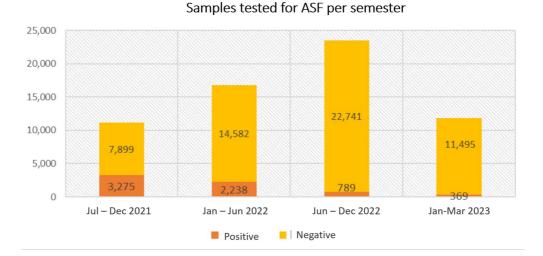
Since January 1, authorities confirmed by molecular diagnosis 44 new outbreaks (three of them in the last week, Map 1) from 1,429 suspect cases, bringing the total of accumulated confirmed cases to 1,559 distributed in 31 provinces.



Since the beginning of the outbreak, 56,717 samples have been processed by Dominican veterinary services, from which 6,671 tested positive for ASF.

It is important to note that the positive rate has changed over time from 40% to 10.5% (Graphic 1), 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 1. The distribution of reports of confirmed cases in the Dominican Republic in the last week (3/27 -4/3)



Graphic 1. The distribution of results of processed samples for ASF in the Dominican Republic since the beginning of the epidemic (7/21 -4/23)





## **New Regulation**

**March 31** | The Ministry of Agriculture published a new resolution 0024/2022, establishing the mandatory sampling every 21 days in all farms that have a quantity of at least 25 pigs. Failure to comply will be penalized, and the animals will be confiscated.

According to this resolution, producers must also comply with:

- Mandatory report of any clinical sign compatible with the disease
- Prohibition of repopulation of farms previously affected by ASF

Authorities also stated that the General Directorate of Livestock will have the support and collaboration of the corresponding civil, police and military authorities to carry out the active surveillance action. The fines for each infraction will range from 862.90 (USD \$50) to 86,290.10 Dominican pesos (USD \$1,500).

#### **EUROPE**

In March (03/02/2023-03/29/2023), ASF was reported in domestic pigs by three European countries, namely Moldova, Romania, and Serbia. In addition, the recurrence of the disease was reported by Russia in Siberia. Germany and Ukraine did not reveal other cases.

In wild boars, the disease was reported by 14 European countries (Bulgaria, Czech Republic, Estonia, Germany, Hungary, Italy, Latvia, Lithuania, Moldova, North Macedonia, Poland, Romania, Serbia, Slovakia), and Russia. In turn, after a month's absence, the disease returned to Bulgaria, Moldova, and North Macedonia.

According to the EU ADIS report, a total of 91 and 2787 outbreaks in European countries were registered in domestic pigs and wild boars, respectively, within the period of January 1 - March 24, 2023.

# Regional highlights:

UK | March 3: one tonne of smuggled pork seized in Suffolk since November 2022.
 According to a team leader of the Suffolk Coastal Port Health Authority (SCPHA), a tonne of pork that was being smuggled into the ports at Felixstowe and Harwich was confiscated since DEFRA introduced new restrictions on the movement of pork last year. The meat has been discovered by officials in several containers over the past few months and didn't meet new import rules.

Meanwhile, in East Yorkshire ports - Hull and Goole - Health Authority seized 80 kg of imported meat since measures to prevent ASF introduction were introduced. It included four consignments of meat from different EU countries.

 Moldova | March 21: ASF reported on a private commercial farm in the country's northeast. An outbreak was confirmed in the village of Oclanda (Soroca Raion), affecting 147 pigs. An epidemiological investigation is being carried out, and movement restrictions of pigs from households to slaughterhouses, animal fairs, and the placing of Oclanda meat on the market are established.





Map 2. African swine fever outbreaks distribution in Europe: March 1, 2023 - April 3, 2023 (Source: FAO EMPRES-i)

• Russia | March 22: new outbreak reported in Siberia. The first outbreak was confirmed in a pig in Gorodok, Krasnoyarsk Krai village. In response, the veterinary authorities culled the village's entire pig population of 200 pigs. A few days earlier, in a meat processing plant in the Karatuzsky district of the Krasnoyarsk Krai, a routine inspection detected the presence of the ASF genome. About 16 tonnes of meat products were confiscated and destroyed, along with the carcasses of several animals. Krasnoyarsk Krai is a reliable manufacturer in terms of industrial pig production. However, the ASF emergence in backyard farms is a signal for businesses to strengthen their biosecurity. Siberia is a vast, poorly populated part of Russia that was relatively safe in terms of ASF in the past few years.

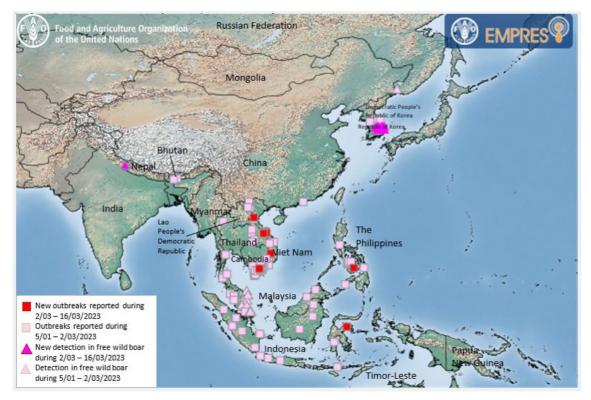
Furthermore, according to WAHIS, the recurrence of the disease was confirmed on a backyard farm of 12 pigs in Privolzhskoe village of Volgograd region on March 4. The last outbreak was reported in October 2022.

# **ASIA**

In March, four countries (India, The Philippines, Vietnam, and China (unofficial reports)) reported ASF outbreaks in domestic swine, and another three (Nepal, Singapore, and South Korea) reported new cases in wild boars (Map 3).







Map 3. African swine fever outbreaks distribution in domestic pigs in Asia as of March 16, 2023 (Source: FAO <a href="EMPRES-i">EMPRES-i</a> - Data sources: Viet Nam: WAHIS & media information, Republic of Korea, the Philippines, Indonesia, Timor-Leste: WAHIS and government websites, Other: WAHIS)

#### Regional highlights:

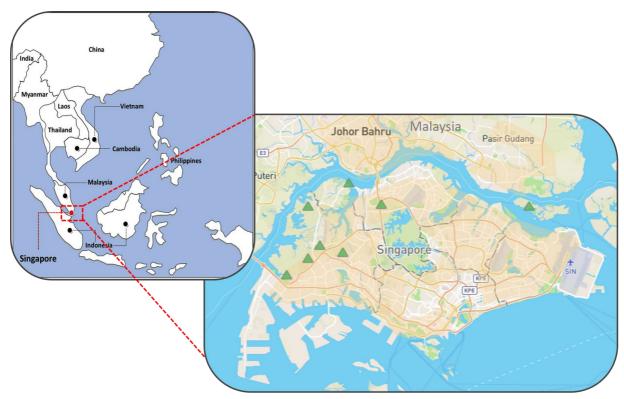
#### **SOUTH EAST ASIA**

- Singapore | March 10: ASF cases in wild boars reported in new locations, including forested areas in the west and on Pulau Ubin. Since February 7, when the first outbreak was confirmed, another 17 cases have been reported in wild boars. Of the 18 cases, 15 were detected in wild boar carcasses, while the remaining three were trapped wild boars, consequently killed and disposed of by authorities. Six of the carcasses were discovered on Pulau Ubin in the northeast of Singapore, the highest in the Republic to date. Another four carcasses were found in a forested area in Tengah. The other cases came from forested areas and nature parks in the west and north of Singapore, including Sungei Buloh Wetland Reserve.
- India | March 13: an outbreak was reported on a farm in the Pathanamthitta district of Kerala state. The disease was confirmed after a mass death of pigs. Measures have been taken to prevent the spread of the disease, and an area within a one-kilometer radius of the farm has been declared an affected area.

Meanwhile, veterinary officials suspect an ASF outbreak on a government pig farm in Dalu in West Garo Hills state of Meghalaya, where many pigs have died over the week. As of March 28, veterinary officials are securing the farm and dashing off samples for testing to government laboratories.







Map 4. African swine fever outbreaks distribution in wild boars cases in Singapore - reported to WOAH as of April 3, 2023 (Source: WOAH - WAHIS)

## The Philippines Central Visavas

Cebu | March 1: First ASF detection in the province. In Carcar City, 58 out of 149 blood samples collected in surveillance activities conducted by the City Veterinary Office of Carcar tested positive for ASF. According to the authorities, the pigs that tested positive were kept at the barangay stockyards, along with pigs from Negros Island, and were slaughtered along with local pigs. To prevent the further spread of the disease, over 800 hogs in the city's three affected barangays were culled. The city has more than 1,000 backyard raisers, close to 50 of which are registered as livestock farmer associations. The area has no commercial-size piggery farms. On March 15, the Department of Agriculture in Central Visayas confirmed that following the detection of ASF in Carcar City, the disease was found in other areas in Cebu province. The agency closely monitored affected local government units. However, on March 20, the Bureau of Animal Industry (BAI) of the Department of Agriculture (DA) confirmed that ASF had been detected in Cebu City and four towns - Sibonga town in the south, Liloan and Tuburan towns and Bogo City in Cebu's north. The respective local government units (LGUs) conducted the sample collection in backyard farms as part of the disease investigation and surveillance. On March 30, the Bureau of Animal Industry (BAI) of the Department of Agriculture (DA) reported the further spread of the disease to at least 10 cities and towns in Cebu province (Bogo, Lapu-Lapu, Mandaue, Talisay, and the towns of Cordova, Liloan, Minglanilla, San Fernando, Sibonga, and Tuburan), which brings the total number of ASFafflicted areas in Cebu to 18.

Cebu was an ASF-free province for the past three years, protecting one of the largest hog industries in the Visayas region, totaling P11 billion (over USD \$200 million) in economic value.

## Western Visayas





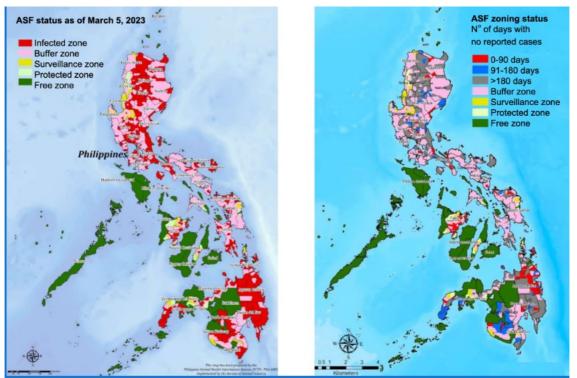
- Negros Occidental and Bacolod City | March 7: banned the entry of pork products from the
  neighboring Cebu province, including Bantayan Island and Camotes Island, after blood
  samples from Carcar City showed positive results for ASF. Moreover, the total ban on
  importing pigs and pork products to Negros Occidental and Bacolod City includes the entire
  Luzon, Mindanao, Eastern Visayas, Panay Island, and Guimaras Island.
  - Negros Occidental, which has a P6-billion (USD 110 million) hog industry, is listed as a dark green zone or ASF-free by the Department of Agriculture. This status was reaffirmed after 500 blood samples from different owners in San Carlos City tested negative for ASF. San Carlos City is strategically located as it is a gateway to Cebu through the San Carlos City port and Negros Oriental with its border with the town of Vallehermoso and Canlaon City, all in Negros Oriental
- Iloilo | March 13: ASF spreads to new territories. Two other towns in the province reported ASF outbreaks 4th District's San Enrique and 5th District's Ajuy. This brings the total number of ASF-affected towns in Iloilo to 23: 17 towns are red zones, and six are under pink zones. The region continues to bear significant economic losses. Thus, since the first outbreak detected in the region last October and as of February, 125,507 swine heads 45 % of the 277,421 total inventory, were culled to contain the disease.

#### Luzon

• Camarines Norte | March 25: a sow tested positive for ASF in Santa Elena. About 24 pigs within a 500-meter radius of the affected pen were slaughtered. Santa Elena would have been ASF-free for one year on April 18, after being declared in 2022.

#### Mindanao

Zamboanga City | March 7: awaiting a formal declaration after obtaining negative results
for ASF testing. Veterinary authorities conducted active surveillance and got negative results
in early 2023 and are awaiting a formal declaration. According to the City Government of
Zamboanga, as of March 7, the cumulative pig mortality was 4,655, with 1,122 culled; a total of
1,098 pig farmers in 34 out of 98 barangays in Zamboanga City were affected.



Map 5. The zoning status per city/municipality and number of days since a reported case in the Philippines (Source: Pig333)

#### **EAST ASIA**





- China | March 16: the number of positive ASF detections exploded after the new year holiday. According to the analysts at Huachuang Securities, a spike in infections, usually in winter, came comparatively late in the season. The order of magnitude in a single month has reached the level of the whole year of 2022. They assume that the current area of swine fever infection in the northern production areas may reach 50%. Rabobank estimates say the latest wave has hit 10 percent of the nation's sow herd, which controls hog production. In turn, it will potentially push prices higher for the most popular protein in that country.
- South Korea | March 20: The fifth outbreak in 2023 was reported in the country. Thus, ASF was confirmed on a commercial farm in Pocheon, 40 km northeast of Seoul. After a one-month hiatus, the disease hit the farm of 12,842 pigs, where 50 pigs died. According to the Ministry of Agriculture, Food and Rural Affairs, there are 80 pig farms within a 10-km radius of the affected farm, raising more than 170,000 pigs combined. The authorities are carrying out control measures, such as the culling of pigs at the farm in Pocheon and thorough inspection of farms within a 10-km radius of the affected farm as well as other relevant farms and facilities.

#### Challenges in the implementation of ASF control strategies

Even though <u>since January 2021</u> the disease has been present in five different world regions in 41 countries, affecting more than 880,000 pigs and more than 25,000 wild boars, with more than 1,100,000 animal losses and devastating economic effect, control strategies remain challenging.

In this context, conflicts may arise between governing officials, national agencies responsible for controlling infectious diseases, and pork producers when implementing control measures.

Since the development and evaluation of the effectiveness of vaccines is still in progress, the depopulation policy is recognized worldwide as the most logical and tested means to contain the virus in the affected area. However, it has a devastating effect on the livelihood of backyard farmers and the hog industry. In turn, farmers often do not report ASF outbreaks to the government, which directly impacts how effectively the disease is managed.

In a battle with the disease, a balance should be found between preventing the spread of the virus and protecting the interests of vulnerable stakeholders.

However, sometimes disagreements arise between the veterinary authorities acting according to the protocols and the governmental agencies trying to protect the stakeholders' interests.

- Recently, such a situation took place in the Philippines when the governor of one of the
  affected provinces intervened in the work of the veterinary service by suspending the
  slaughter of pigs in the infected zone and vowed to proceed with formulating their own
  protocol to combat the disease in pigs. Meanwhile, the disease has spread to five more
  towns.
- On the contrary, chasing the interests of backyard farmers may cause significant problems for large producers. Thus, in Poland, a group of business unions urged the government to reject a controversial draft decree under which veterinary rules concerning ASF in Poland were planned to be eased for backyard farms keeping up to 10 pigs. Supposedly, backyard farms would get a waiver to lay disinfectant mats at the entrance and exit to pig houses, to draw up an inventory of their pigs, and keep a record of transport and personnel entering the farm, which farmers have been asking for for a long time. The main argument from the industry side is that abandoning full veterinary control of small herds will make epizootic investigations more difficult and significantly complicate the efforts to prevent new ASF outbreaks.

So, for control measures to be effective, it is crucial to find the balance between the interests of all stakeholders while following international science-based guidelines.





#### Foot-and-mouth disease

#### **AMERICA**

Colombia | March 16: The Colombian government reported that the World Organization for Animal Health (WOAH) declared 29 municipalities in the department of Norte de Santander, on the border with Venezuela, free of FMD with vaccination, with which Colombia is certified as free of this disease. The certification allows farmers to move their animals and by-products throughout the country. These 29 municipalities were part of a protection zone and were declared FMD with vaccination after a request submitted by the Colombian Agricultural Institute (ICA) to the international organization. Colombia will receive the certification during the 90th General Session of the organization, which will take place in May of this year in Paris.

The manager of the ICA, Fernando Roa, explained that this recognition is given after carrying out "actions aimed at demonstrating that FMD is not present in that region of the country." The official explained that the ICA carried out controls on the mobilization and worked with the producers to obtain high vaccination coverage in the so-called "Protection Zone I."

In addition, he said that the Colombian health authority would continue to carry out actions to strengthen the National Program for the Eradication of FMD and will emphasize the control of the movement of species susceptible to this disease, illegality, and smuggling, among other measures.

#### **ASIA**

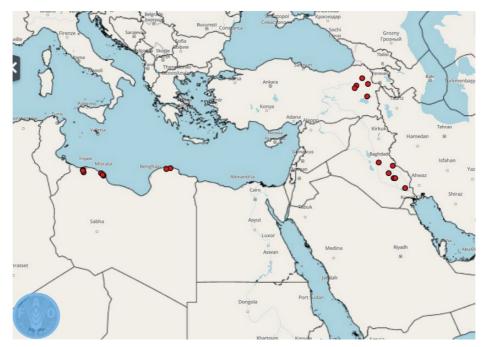
**Turkey | March 3: New FMD strain reported in the country.** FMD serotype SAT 2 was reported on a farm in Turkey on March 3, when an animal keeper in the village of Asagimahalle, Iğdır, observed suspected FMD clinical signs in cattle that had been newly introduced into the farm. On March 8, the official veterinarian confirmed that it was FMD, and the serotype was confirmed to be SAT 2. By March 31, six new outbreaks had been reported in cattle and sheep, with a cumulative number of 58 cases (53 cattle, 5 sheep) and 25,067 susceptible animals. To reduce the further spread of the disease, 3500 animals have been vaccinated in a 10km radius around outbreak areas. Other control measures being implemented are quarantine, movement control, disinfection, and surveillance outside restricted areas. Iraq and Jordan have detected the presence of FMDV SAT-2 since January 2023. Monitoring the timeline of the FMD SAT 2 Iraqi outbreaks could be beneficial in assessing the probability and source of the outbreaks in Turkey.

**Libya** March 7: FMD serotype O was reported in the north. Since the beginning of March, several outbreaks of FMD have been reported in localities within the administrative divisions of Al Jifarah and Misratah, affecting cattle, goats, and sheep. To date, 527 cases and 122 deaths have been reported. The authorities have implemented surveillance activities and other control measures, but vaccination has not been done in the population of over 12,000 susceptible animals.

**Iraq | March 19:** New FMD outbreaks reported this month. Since reports of the first outbreaks in January 2023, the disease has continued spreading. In March, outbreaks were reported in the administrative regions of Baghdad, Dhi-Qar, Al-Basrah, and Wasit, bringing the total number of FMD cases in all susceptible species to 27,932. The total number of reported deaths across susceptible animals is 231. It should be noted that by the end of March, the competent authorities in Iraq are yet to conduct mass vaccination in the affected areas due to logistical challenges.







Map 6: Foot-and-mouth disease outbreak locations in Libya, Iraq, and Turkey as of March 31 (Source: <u>FAO-EMPRESi</u>)

#### 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

One tonne of smuggled pork seized at ports of Felixstowe and Harwich

Pork seized by Hull inspectors in fight against African swine fever

Moldova

OUTBREAK OF AFRICAN SWINE FEVER REGISTERED IN SOROCA RAION

Poland

ASF Poland: alarm bells about relaxing veterinary rules

Russia

ASF Russia: new outbreaks hit Siberia

ASIA

China

African swine fever surges in China
African Swine Fever Surging Again in China

India

African Swine Fever Reported In Kerala's Pathanamthitta

Suspected Swine Flu as pigs die in Garo Hills pig farm

South Korea

S. Korea reports African swine fever case
Korea reports additional African swine fever
case in one month

Singapore

Wild boar carcasses in more parts of Singapore test positive for African swine fever

17 more cases of African swine fever found in wild boars in Singapore

Wild boar carcasses in more parts of Singapore test positive for African Swine Fever

The Philippines

African Swine Flu outbreak in Cebu

ASF in Carcar City: Cebu, Negros
Occidental, Bacolod ban pork products

Cebu detects first ASF infection in lechonfamous Carcar City

Negros Occidental, Bacolod ban pigs, pork items from Cebu

San Enrique, Ajuy record ASF cases

Carcar City, Cebu culls 800 hogs to curb ASF spread

Carcar City declares state of calamity amid ASF infection





ASF found in other parts of Cebu, but 'no outbreak' 500 blood samples in San Carlos negative for

**ASF** virus

African swine fever found in 5 more Cebu towns,

Santa Elena, Camarines Norte, may bagong kaso ng ASF

Philippines: Update on the ASF situation

African swine fever found in 5 more Cebu towns, cities DA confirms cases of African swine fever in

parts of Cebu

ASF detected in Cebu City, 4 other towns

Colombia

**New FMD status** 

DR

**New surveillance regulation** 

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 <a href="mailto:SwineGlobal@umn.edu">SwineGlobal@umn.edu</a>