A glance to the ongoing 2025-2026 African swine fever outbreak in Spain

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Summary

African swine fever (ASF) is a lethal disease of domestic pigs and wild boar caused by African swine fever virus (ASFV). No effective treatment or widely available vaccine currently exists. Control measures rely on rapid detection, culling, reinforced biosecurity, and movement restrictions. Since 2018, Catalonia incorporated ASFV screening in all wild boars found dead, as part of the wildlife health passive surveillance program, which enabled the detection of two ASF positive carcasses and led to the declaration of Spain's first ASF outbreak in three decades on 28 November 2025. A 20 km infected zone (IZ) was established, where intensified passive and active surveillance were applied to both wild boar and domestic pig farms. Between November 2025 and May 2026, 3,823 wild boars were tested, of which 306 were ASFV PCR positive, all within the IZ. Most positives cases were detected through enhanced passive surveillance, and no infections were reported in domestic pigs. Temporal reconstruction of the outbreak with estimates of death dates suggests that ASFV circulation began months before the detection of the index cases, following a pattern consistent with other European outbreaks. The current outbreak in Spain highlights the role of human mediated long-distance introductions of ASFV and underscores the need for reinforced biosecurity and sustained surveillance to prevent further disease spread.

Keywords:
African swine fever. Spain. Wild boar. Surveillance.

Una mirada al actual brote de peste porcina africana en España (2025-2026)

Resumen

La peste porcina africana (PPA) es una enfermedad hemorrágica letal que afecta al cerdo doméstico y al jabalí y su agente etiológico es el virus de la peste porcina africana (VPPA). Dado que no existe un tratamiento eficaz ni una vacuna universalmente disponible, las medidas de control de la PPA se basan en la detección rápida y el vaciado sanitario, amén del refuerzo de las medidas de bioseguridad y restricciones de movimiento de los animales. En 2018, la Generalitat de Cataluña incorporó, dentro de su programa de vigilancia pasiva de la fauna salvaje, el análisis de PPA en todos los cadáveres de jabalíes encontrados. Siete años después, dicha medida permitió detectar dos carcasas de jabalí positivas a VPPA, lo que llevó, el 28 de noviembre de 2025, a la declaración del primer brote de PPA en España en tres décadas. A raíz de dicha declaración, se estableció una zona infectada (ZI) de 20 km, donde se aplicó una vigilancia pasiva y activa intensificada tanto en jabalíes como en explotaciones de cerdo doméstico. Entre noviembre de 2025 y mayo de 2026 se analizaron un total de 3.823 jabalíes, de los cuales 306 resultaron positivos a la PCR para VPPA, todos dentro de la ZI. La mayoría de dichos casos positivos se detectaron mediante vigilancia pasiva reforzada. No se detectó ningún animal con PPA en las granjas de cerdo doméstico. La reconstrucción temporal del brote, en base a las dataciones estimadas de las fechas de muerte de cada animal positivo analizado, revela que la circulación del VPPA comenzó meses antes de la detección de los primeros casos, concordando con lo sucedido en otros brotes europeos. El brote actual en España pone de relieve el papel humano en las introducciones del VPPA a larga distancia y subraya la necesidad de reforzar la bioseguridad y mantener una vigilancia sostenida para evitar una mayor propagación de la enfermedad.

Palabras clave:
Peste porcina africana. España. Jabalí. Vigilancia.

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Introduction

African swine fever (ASF) is a fatal hemorrhagic disease affecting domestic pigs and wild boars. The disease, of compulsory declaration to the World Organization for Animal Health (WHOA), is caused by ASF virus (ASFV), a large virus with a linear double-stranded DNA genome of 170-194Kb[1]. Currently, there is neither an effective treatment nor a widely available commercial vaccine against ASF, except for those licensed in Vietnam, Philippines and Indonesia, whose use remains under discussion. Thus, ASFV control relies on rapid diagnosis and stamping out policies, combined with reinforced biosecurity measures and restrictions on animal movements and trade[2].

ASFV circulates in Africa among its natural reservoirs, which do not develop disease: African wild *Suidae*, such as warthogs, and soft ticks from genus *Ornithodoros*. Occasionally, spillover from this sylvatic cycle leads to infection in domestic pigs, typically through tick bites, resulting in ASF outbreaks. In the 1960s, the use of swill feed for domestic pigs in Lisbon, originated from leftovers from a flight from Angola, caused a long-distance outbreak of ASF. Such outbreak spread out of control, affecting many European, South American, and Caribbean territories. ASF was eventually eradicated from all affected countries, and the Iberian Peninsula was declared ASF-free in 1995. In 2007, the second ASF pandemic, still ongoing nowadays, began with an outbreak in Georgia, due to the introduction of ASFV-contaminated feed in the port of Poti from a ship coming from East Africa. The disease rapidly spread from Georgia trough the Russian Federation and neighboring countries, reaching the European Union in 2014[2]. The year 2018 represented a turning point in the current ASF pandemic: (i) ASF was reported in China, spreading rapidly throughout Asia, and (ii) an unexpected outbreak in wild boar was reported in Belgium, approximately 1,000 km away from the nearest known ASF-infected area[3]. This latter fact clearly demonstrated that the distance from affected regions was no warranty of protection. Consequently, from 2018 onwards, the Catalan Autonomous Government implemented a contingency plan for ASF in wild boar, testing all animals found dead without an apparent cause, and within the framework of the wildlife health surveillance program. Through this program, the first two ASF-positive wild boars were detected, leading to the official declaration of ASF in Spain on 28 November 2025, after 30 years of disease-free status. This report summarizes the most recent update (May 7th, 2026) of the 2025 ASF outbreak in Spain.

Material and methods

Following the identification of the initial cases, an infected zone (IZ) with a 20 km radius was established. This zone was subdivided into a 6 km high risk core area and a surrounding 6 to 20 km lower risk area. A subsequent zoning based on municipality administrative borders was implemented to align with the Commission Implementing Regulation (EU), 2026/568 amending and correcting Annexes I and II of Implementing Regulation (EU) 2023/594[4], defining Zone II and Zone I and encompassing 117 municipalities. Within this zoning, the Official Veterinary Services implemented intensified surveillance measures, strengthening both passive and active surveillance activities. The enhanced passive surveillance included wild boar carcasses or their remains, diseased animals or animals displaying abnormal behavior and traffic collisions, and the active surveillance included wild boar captured and shot during transects. Accordingly, all wild boars were sampled and ASF diagnosis was carried out using the real-time PCR assay described by Fernández-Pinero *et al.*[5], recommended by the WOAH. When possible, the estimated date of death was determined for each ASF-positive carcass[6]. All domestic pig farms located within the affected area were tested for ASFV and placed under reinforced surveillance, following the WOAH guidelines for ASF.

Results

From November 28th to May 7th, a total of 3,823 wild boars were analyzed, of which 306 were ASFV PCR-positive and 3,517 tested negative (Table 1). All positive cases were found within the 20 km IZ, across 12 different municipalities: Cerdanyola del Vallès, Sant Cugat del Vallès, Sant Quirze del Vallès, Terrassa, Rubí, Molins

Table 1. Number of tested wild boars in the infected zone between Novembre 28th, 2025 and May 7th, 2026, together with its positive or negative ASFV-PCR test, and the characterization of the status of the finding of the wild boar cases.

Status of wild board finding	ASFV PCR -	ASFV PCR +	Total
Dead or remains	373	283	656
Shot down	1491	7	1498
Collision (car / train)	499	6	505
Sick or abnormal behavior (euthanasia)	37	6	43
Captured	1117	4	1121
Total	3517	306	3823

de Rei, Sant Feliu de Llobregat, Sant Just Desvern, Barcelona, Sabadell, El Papiol and Castellbisbal (Figure 1). No ASFV-infected animals were detected outside the IZ.

Figure 1. Map showing the localization of the tested wild boars in the current African swine fever (ASF) outbreak in Spain: In red, ASF-positive cases; in yellow, the two first ASF-positive cases of the outbreak and in green, the ASF-negative cases.

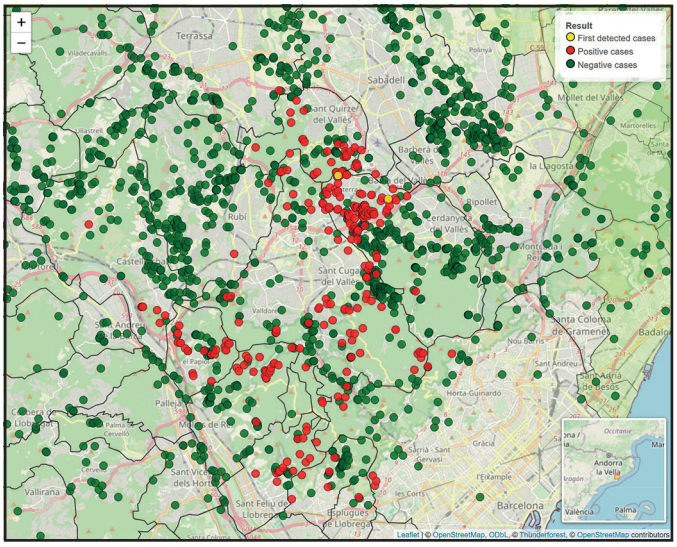

Figure 2. Temporal reconstruction of mortality and cases of African swine fever (ASF) in wild boar during the 2025 ASF-outbreak in Spain. The horizontal gray lines represent the estimated mortality intervals for each animal. The dots indicate the date on which the carcass or the sick animal was detected. The cross marks the first detected case. The red line represents the cumulative curve of mortality and ASF cases.

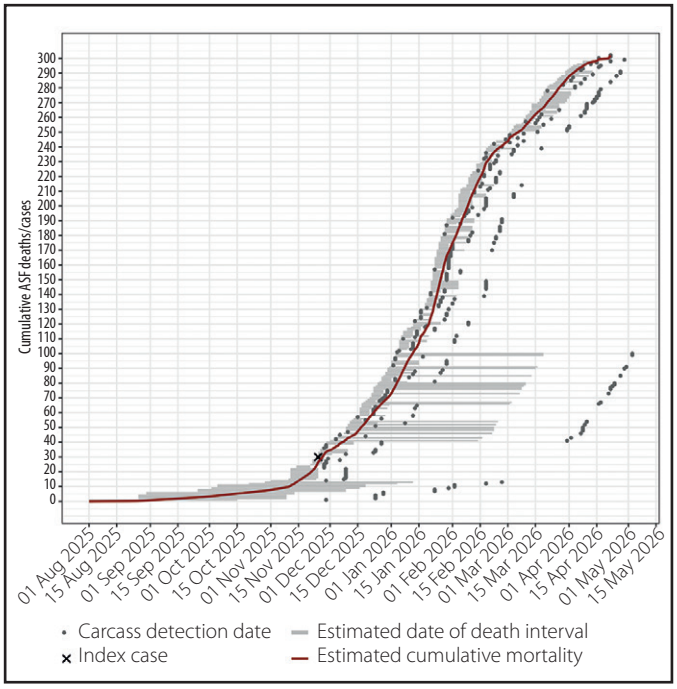

Figure 2 presents a temporal reconstruction of the ASF outbreak, highlighting that the date of detection rarely corresponds to the actual date of death. For each animal, a plausible time window for death was estimated based on carcass condition[6].

No ASFV infections were detected in any of the domestic pig farms located within the affected area, all of which tested PCR-negative.

Discussion

Most ASF-positive cases (Table 1) were detected though enhanced passive surveillance (96.4%), among which most of them were carcasses or their remains (95.9%), whereas active surveillance accounted for a minimal number of positive cases (3.6%).

Although the precise timing of the earliest deaths cannot be determined, the estimated intervals for the older carcasses suggest that outbreak-related mortality began months before the first official detection, likely around September 2025 (Figure 2). This finding indicates that ASFV circulated unnoticed for an initial period until it was eventually identified through the passive surveillance system. This early phase, characterized by slow progression of the outbreak, reflects the introduction and establishment of ASFV within the wild boar population. Such early phase was followed by an epidemic phase, marked by an increase in the slope of the cumulative mortality curve. Notably, the progression of this outbreak closely resembles patterns described in recent European long-distance ASF outbreaks[6].

Unravelling the origin of the ASFV strain introduced in Spain in 2025 is unlikely, as happened with other long-distance outbreaks during the current pandemic, including those of Belgium[3] and Sweden[6]. The most plausible hypothesis is that the outbreak resulted from the consumption by wild boars of ASFV-contaminated pork products introduced through unintentional human activities from ASFV-endemic territories[7]. The strain detected in the current outbreak (Spain2025), belonging to genotype II, exhibits a distinct genomic profile that supports its classification as the new genetic group 29. This group is characterized by 18 SNPs, 13 short INDELs (<5 nucleotides) distributed across the genome, and a large deletion in the left variable region, highlighting its divergence from the reference strain Georgia 2007/1[7]. The uniqueness of this genetic group, and the absence of close links with previously documented ASF-outbreaks in Europe or Asia, makes impossible to unravel the geographical and epidemiological origin of the Spain2025 strain.

It is important to underline the devastating economic consequences that an ASF outbreak implies, especially in a swine-producing country such as Catalonia[8]. The 2025 outbreak in Spain further demonstrates that ASF can appear far from previously affected areas, underscoring human mediated activities as the most plausible driver of long-distance spread. To date, only ASFV PCR positive wild boars have been detected within the 20 km infected zone, highlighting that strict biosecurity, intensified passive surveillance, and effective physical barriers remain essential to contain the virus.

Bibliography

1. Li ZB, Wang BB, Gao YY, Xian YH, Feng HS, Jin H, *et al.* Current state of knowledge about African swine fever: a review. *Anim Health Res Rev.* 2025;26:e4. doi: 10.1017/S1466252325100054.
2. Penrith ML, Stahl K, Summerfield A, Sánchez-Vizcaíno JM, Laddomada A, Arias M, *et al.* African swine fever virus. In: Zimmerman JJ, Burrough ER, Karriker LA, Schwartz KJ, Zhang J, (eds). *Diseases of Swine.* 12th ed. Wiley; 2025;499-512.
3. Licoppe A, De Waele V, Malengreaux C, Paternostre J, Van Goethem A, Desmecht D, *et al.* Management of a focal introduction of ASF virus in wild boar: the Belgian experience. *Pathogens*. 2023;12:152. doi: 10.3390/pathogens12020152.
4. European Union. Commission Implementing Regulation (EU) 2026/568 of 10 March 2026 amending and correcting Annexes I and II to Implementing Regulation (EU) 2023/594 laying down special disease control measures for African swine fever. 2026. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202600568
5. Fernández-Pinero J, Gallardo C, Elizalde M, Robles A, Gómez C, Bishop R, *et al.* Molecular diagnosis of African swine fever by a new real-time PCR using universal probe library. *Transbound Emerg Dis.* 2013;60(1):48–58. doi: 10.1111/j.1865-1682.2012.01317.x.
6. Chenais E, Ahlberg V, Andersson K, Banihashem F, Björk L, Cedersmyg M, *et al.* First outbreak of African swine fever in Sweden: local epidemiology, surveillance, and eradication strategies. *Transbound Emerg Dis.* 2024;6071781:1-15. doi: 10.1155/2024/6071781.
7. Ministerio de Agricultura, Pesca y Alimentación. Informe inicial en relación con el brote de peste porcina africana en España. 2026. Available at: https://www.mapa.gob.es/dam/mapa/contenido/ganaderia/temas/sanidad-animal-e-higiene-ganadera/sanidad-animal/enfermedades/porcino/ppa/informe_inicial_ccppa.pdf
8. Unió de pagesos. Informe del Sector Porcí: valoració 2025. 2026. Available at: https://uniopagesos.cat/wp-content/uploads/2026/01/20260113-DossierRPporci_2025_UNIOPAGESOS.pdf