

Foot and mouth disease (FMD) SAT1 and SAT2 in Eswatini: Situation update as of 04 Mar 2026

Key findings

- Two different foot-and-mouth disease (FMD) serotypes, SAT1 and SAT2, are circulating simultaneously in Eswatini, with the SAT2 outbreak occurring before the emergence of SAT1. The SAT2 outbreak started on 12 May 2025. As of 26 Feb 2026, a total of 64 SAT2 outbreaks have been reported, affecting a susceptible population of 51 178 cattle and swine. Cumulatively, 2944 cases have been confirmed, with seven cattle deaths reported. Vaccination efforts have covered 43 675 cattle. The most recent SAT2 outbreak was confirmed on 20 Feb 2026, in Matimatima, Shiselweni Region.
- The SAT1 event began later, on 19 Sep 2025, and has shown a wider geographic spread. Between 19 and 23 Feb 2026, 10 new SAT1 outbreaks were reported in the Hhohho Region (Bulandzeni, Gunwane, Mngolotsi, Mpatsha, Esifutfweni, Magoga, and Mpotshini) and the Manzini Region (Mkhwakhweni, Njelu, and Lwandle). As of 26 Feb 2026, SAT1 has resulted in 91 outbreaks. These outbreaks involve a susceptible population of 111 757 cattle and swine, with 8346 confirmed cases and 14 deaths reported in domestic swine. Vaccination has been administered to 40 627 cattle.
- Laboratory confirmation of both serotypes was carried out using real-time polymerase chain reaction (PCR) and gene sequencing at the Onderstepoort Veterinary Institute, and non-structural protein (NSP) ELISA (enzyme-linked immunosorbent assay) testing at the Central Veterinary Laboratory. Routine diagnosis combines clinical examination with NSP ELISA for antibody detection and real-time PCR for viral RNA detection.
- On 03 Mar 2026, [four additional outbreaks were reported in the Manzini Region](#), affecting 3632 susceptible cattle and resulting in 106 clinically confirmed cases. Serotype identification for these outbreaks is still pending. The source of infection was linked to illegal animal movement.

- Transmission is primarily driven by direct contact between infected and susceptible animals at shared grazing and watering points. Free-range livestock management and communal diptank systems have helped spread the disease across multiple areas. In response, control measures include movement restrictions, quarantine of affected zones, increased surveillance in buffer zones, and vaccination with inactivated purified vaccines covering all three SAT serotypes. Supportive care is given to affected animals.
- Continued illegal cattle movement from FMD guard zones has expanded the infected areas. To address this, the government has allocated Euro 15 million (about USD 900 000) for border fence repairs and Euro 57 million (around USD 3.4 million) for nationwide vaccination efforts.

Epidemiological analysis and public health impact

- The FMD outbreak in Eswatini, first reported in May 2025, has expanded to affect cattle and pigs across most of the country, leaving only one region free of the virus. The simultaneous circulation of two different serotypes, SAT1 and SAT2, presents a significant challenge for disease control, as it requires serotype-specific vaccination strategies and complicates containment efforts. The spread across four administrative regions—Hhohho, Manzini, Shiselweni, and Lubombo—indicates extensive transmission facilitated by traditional livestock management practices, including communal grazing and shared water sources.
- Molecular analysis indicates that the circulating SAT2 strain is closely related to the virus responsible for the November 2024 outbreak in Godlwayo, KwaZulu-Natal, South Africa, suggesting cross-border introduction. Illegal livestock movements have significantly contributed to further spread, especially through damaged cordon fences along the Eswatini–South Africa border, which has allowed uncontrolled animal movement into previously unaffected areas and hampered containment efforts.
- The economic impact has been significant, extending beyond livestock losses to include halting meat exports and disrupting domestic markets, directly affecting farmers' livelihoods and the country's trade competitiveness. Government investment in vaccination efforts and fence repairs highlights the seriousness of the

outbreak, with agriculture recognized as a crucial sector for short-term economic recovery.

- Vaccination campaigns using trivalent vaccines that cover all three SAT serotypes have achieved broad coverage; however, the detection of new outbreaks in February 2026 indicates that herd immunity has not yet been reached, especially in high-density, high-mobility livestock regions. At the regional level, ongoing outbreaks in [South Africa](#), [Zimbabwe](#), [Botswana](#), and [Lesotho](#) underscore persistent transboundary risks associated with porous borders, informal trade, and wildlife reservoirs, emphasizing the need for coordinated regional control efforts.

Comparative analysis and future outlook

- The current outbreak marks a significant departure from Eswatini's 24-year FMD-free status (2001–2025) and greatly surpasses the scale and geographic extent of the limited outbreak in 2000–2001. It is the most serious FMD episode in the country's recent history, with two serotypes circulating simultaneously across multiple regions.
- Concurrent outbreaks or response activities in the region show a clear transboundary pattern, with South Africa serving as the main regional source and driver of spread. Genetic evidence reveals cross-border links among SAT1, SAT2, and SAT3 strains circulating in Eswatini, Zimbabwe, Botswana, and South Africa, consistent with wildlife-associated transmission cycles.
- Eswatini's dual-serotype situation significantly raises the risk of ongoing internal spread or repeated reintroductions from neighboring countries unless high vaccination coverage is quickly achieved and border cordon measures stay effective. While containment is possible through targeted emergency vaccination and strict movement controls, the presence of multiple serotypes complicates vaccine matching and deployment.
- The future course of the outbreak will depend on three key factors: effective rehabilitation and maintenance of border fencing to prevent illegal livestock movement, achieving sufficient vaccination coverage in all affected and at-risk dip-tank areas, and ongoing enforcement of movement restrictions.