Preliminary Outbreak Assessment

Foot and Mouth Disease (FMD) SAT1 in the Middle East and North Africa

27 August 2025

Disease report

Following the outbreaks of foot-and-mouth disease (FMD) in Bahrain, Iraq, Kuwait, and Türkiye earlier this year caused by serotype SAT1, this serotype has now been detected in Egypt, where it has not been reported previously. Within Türkiye there has also been further spread, and a high number of outbreaks, from where it was first detected close to border with Iraq, to Çorum, northern Türkiye.

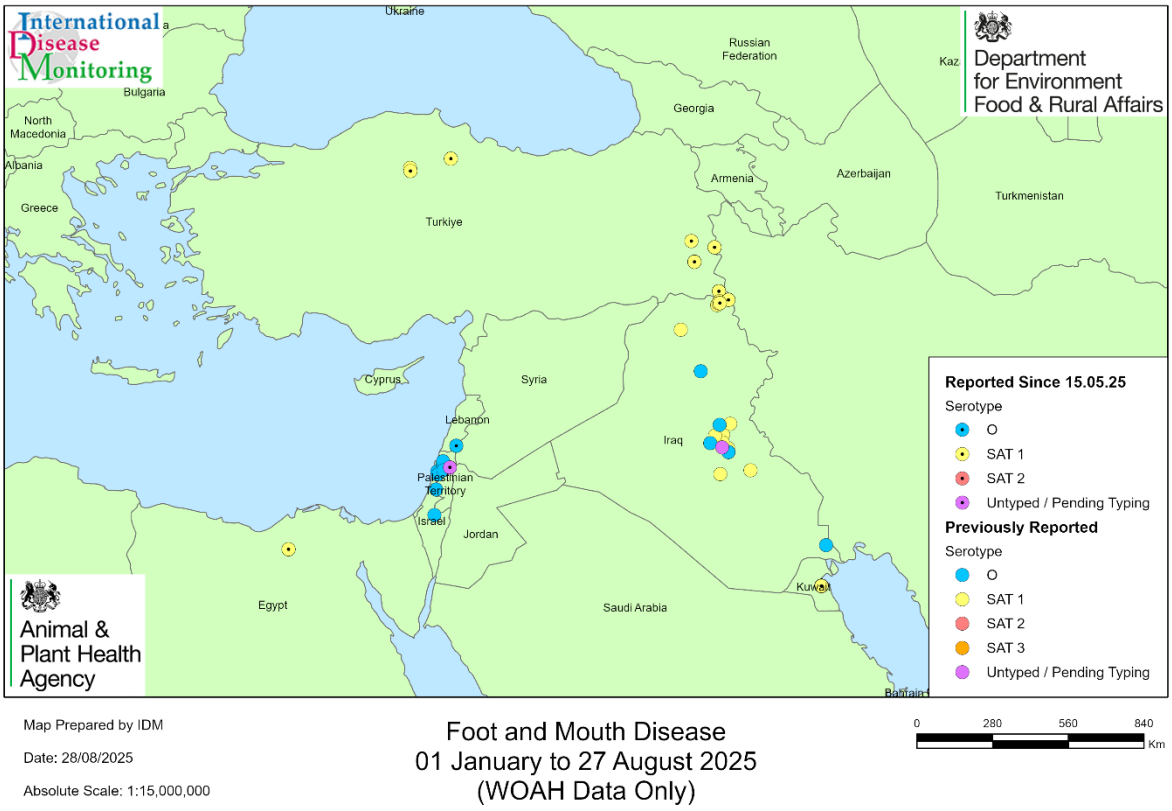

Figure 1: Map of The Middle East and North Africa displaying FMD outbreaks (WOAH data only).

Situation assessment

Egypt

On 20 August 2025, Egypt reported a detection of FMD SAT1 for the first time. The outbreak occurred in a village in Al Buhayrah, northern Egypt, housing both cattle and buffalo. The source of introduction is currently unknown. Control measures implemented include quarantine, movement control and biosecurity measures. Active and passive surveillance is being undertaken in the surveillance zone, along with emergency vaccination within 10km of the outbreak. The FMD serotypes A, O and SAT2 are endemic in Egypt, and frequent reintroductions of new viral strains from other regions make it increasingly difficult to select effective vaccine antigens.

Türkiye

Since the first detection of SAT1 on 12 May, Türkiye has reported further spread of viruses from this serotype in Amasya and Çorum, northern Türkiye, further west than previous reports. From ADIS summaries, 214 outbreaks of SAT1 FMD have been reported in cattle, sheep and goats across the country. According to epidemiological comments, Türkiye is investigating the introduction of the SAT1 serotype via the Hacıbey Stream, which originates in Iraq, and runs close to the Turkish border (WOAH 2025). The subsequent spread across Türkiye is believed to be primarily people-movement meditated via fomites, particularly following Eid al-Adha, and through contact between animals at shared grazing and watering points (WOAH 2025).

FMD serotype O is endemic in the country and outbreaks due to SAT2 that entered Türkiye in 2022 and 2023 continue to be reported (ADIS summaries). Prior to the cases in 2025, the last occurrence of SAT1 FMDV in Türkiye was in 1965 (WRLFMD). As predicted in our previous report in May, the introduction of the new serotype in a livestock population with no pre-existing immunity has led to rapid dissemination of the virus in the area. Control measures that have been introduced include disinfection, movement control, quarantine, screening, traceability and surveillance within the restricted zone. From media reports, 8.5 million doses of SAT-1 vaccine including a new locally produced homologous vaccine have been distributed across Türkiye. The government are hoping to reach 85% vaccination coverage before lifting restrictions on movements and animal markets.

Kuwait

On 6 April 2025, Kuwait reported a detection of FMD SAT1 for the first time. The outbreak occurred on a commercial dairy farm in Sulaybiya, Al Jahrah Governate, involving cattle. The source of introduction is currently unknown. However, clinical signs consistent with FMD were observed in multiple herds, laboratory confirmation was obtained from the national reference laboratory, and viral sequence data exchanged with the WRLFMD, Pirbright. Since then, a further 22 outbreaks have been reported within a very close proximity to the initial outbreak (according to WOAH data). Control measures implemented include quarantine, movement control

and enhanced biosecurity protocols. Active and passive surveillance is ongoing across the affected zone.

Impact for Great Britain

FMD is a highly contagious viral disease of cattle, sheep, pigs and other cloven-hoofed animals. It causes very significant economic losses, due to production losses in the affected animals and due to the loss of access to foreign markets for animals, meat and milk for affected countries. FMD does not infect humans and does not pose a food safety risk. While death rates in susceptible species are typically low, the disease can make animals ill with fever, decreased appetite, excessive drooling, blisters, decreased production, and other signs.

The virus spreads easily through contact and airborne transmission and can quickly infect entire herds. People can facilitate the spread of the virus through fomites via farming equipment, bedding, shoes, clothing and vehicle tyres that have come into contact with the virus.

Conclusion

For the first time, SAT1 FMD has been reported in Egypt, along with further spread of this serotype in Türkiye and Kuwait. These transboundary movements illustrate the high transmissibility and destructive potential of FMD, reinforcing the urgent need for control and prevention strategies to curb its spread. The FAO have alerted countries in the Near East and Western Eurasia regions to be on high alert as the SAT1 serotype is not usually present in these regions. Due to the absence of natural or vaccine-induced immunity in these animals, the disease has potential to spread quickly across borders and regions, causing significant damage to agriculture and the economy.

While these detections of FMDV SAT1 represent a continual spread of new serotypes of FMDV to new regions within the Middle East and North Africa, it presents a low risk to Great Britain. There is no trade to Great Britain in live animals or animal products from countries in the region. The risk from illegal imports is difficult to quantify but travellers from the Middle East and North Africa and other third country areas who bring meat or dairy products can face prosecution and a large fine.

The risk of introduction of FMD to Great Britain remains at **low.** We will continue to monitor the situation and remind livestock keepers of the importance of maintaining strict on-farm biosecurity, compliance with the swill feeding ban, and the reporting of all suspicions of notifiable disease promptly. Swill feeding any animal, whether pigs, poultry, ruminants, or wildlife is illegal and has the potential to cause substantial harm. We would like to emphasise to all keepers of livestock, including smallholders, and the general public to ensure that livestock are not fed catering waste, kitchen

scraps or products of animal origin, thereby observing the swill feeding ban. All keepers of livestock, whether commercial holdings or not, should remain vigilant, as with all biosecurity, these measures are only as effective as the people using them, so proper training should be provided.

For more information on the situation in Europe, see our most recent update:

https://www.gov.uk/government/collections/animal-diseases-international-monitoring#outbreak-assessments

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References

World Reference Laboratory for Food-and-Mouth Disease (WRLFMD). https://www.wrlfmd.org/western-and-central-asia/turkiye (Accessed 15 May 2025).

WOAH. https://wahis.woah.org/#/in-review/6470?reportId=174208&fromPage=event-dashboard-url (Accessed 15 May 2025).

Food and Agriculture Organization of the United Nations (FAO) (2025). https://www.fao.org/animal-health/news-events/events/detail/fmd-serotype-sat1-alert/en (Accessed 15 May 2025).

This publication is available at https://www.gov.uk/government/collections/animal-diseases-international-monitoring

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