Department for Environment, Food and Rural Affairs

Preliminary Outbreak Assessment

Lumpy skin disease (LSD) in Europe

3 July 2025

Disease report

LSD has been reported for the first time in Italy, with an outbreak detected on the island of Sardinia. Following tracings, an animal moved from this premises to Lombardy was identified as positive a few days later. France has also reported its first outbreak of LSD, in the southeast of the country.

These are the first detections in Europe since outbreaks in the Balkans in 2018 (according to WOAH reports). There has been spread of the disease in North Africa since July 2024, in Algeria and Tunisia. Read our preliminary outbreak assessments for other regions.

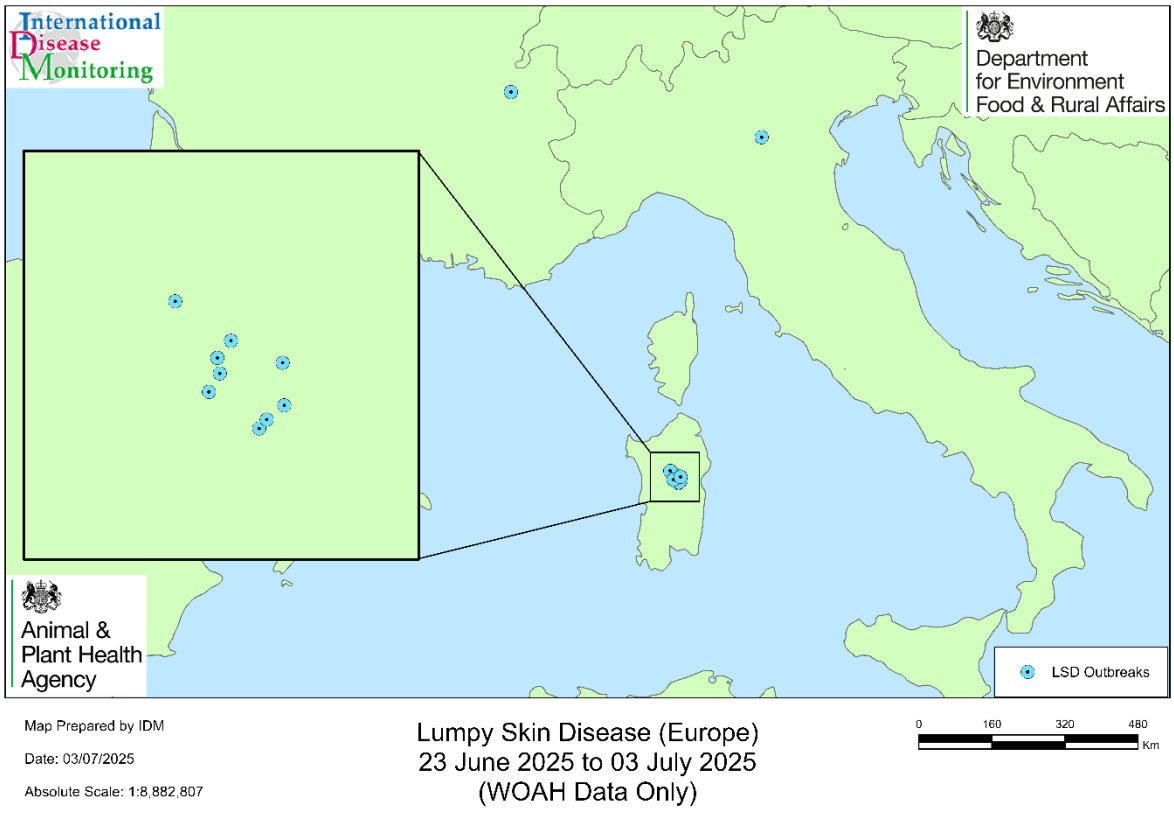

Figure 1: Reports of Lumpy Skin Disease in Italy and France. The map shows outbreaks of LSD reported to WOAH in Europe from 23 June to 3 July.

Situation assessment

LSD is a pox virus mainly affecting cattle and water buffalo, which is notifiable to the WOAH (Eom, Lee and Yoo, 2023). The virus is mainly transmitted by mechanical transmission by biting insect vectors.

The mortality rate is relatively low (typically 1 to 5%) but may reach up to 40% in naïve and young animals (Coetzer, 2004). Infection damages the hides and affects beef and milk production (WOAH, 2022) and affects export trade.

LSD is endemic within most African countries, with Morocco now being the only country where cases have not been reported (Eom, Lee and Yoo, 2023). In many countries in Africa the true prevalence of LSD is unknown or yet to be studied (Abebaw, 2024). From 2012, LSD spread through the Middle East, part of south-east Europe, the Balkans, Caucasus, Russia and Kazakhstan (WOAH, 2022). According to WOAH reports, the last reported cases in the Middle East and the Balkans were from 2019, while Russia continued reporting cases through March 2024. Turkey reported outbreaks through 2023 (ADIS animal disease reports from previous years). Since 2019, it has also been reported in southeast Asia, including Taiwan, China, India, Nepal Bhutan, Indonesia, Japan, South Korea and Thailand (Eom, Lee and Yoo, 2023 and WAHIS data).

There has not been a case of LSD reported within the United Kingdom (England, Scotland, Wales and Northern Ireland). Lumpy skin disease is difficult to control and eradicate by stamping out of livestock alone and often requires vaccination to eradicate the disease from the national herd.

Italy

On 23 June 2025, Italy reported its first case of LSD on the island of Sardinia to WOAH. The outbreak was confirmed following clinical suspicion and PCR testing. In total, 7 animals on a farm of 131 cattle tested positive. The bovine sector on Sardinia is roughly 290,000 heads of cattle and a small number of water buffalo. Cattle are mostly free ranging and movement within Sardinia is very common. The import of cattle to Sardinia is considered to be uncommon, though calves are routinely exported to mainland Italy for fattening. (WAHIS event 6568).

According to Italy's National Veterinary Epidemiological Bulletin (BENV), after the first outbreak in Sardinia, which was confirmed on 21 June, 8 additional outbreaks have been confirmed between the 25 June and 1 July. Of these, 2 occurred in the same commune as the first reported outbreak (in Orani), while the Orotelli commune has reported 3 outbreaks, the Sarule commune 2 outbreaks, and the Bottidda commune 1 outbreak. All of these reports are clustered within about 24 km, suggesting local vector transmission.

Tracing activities from the initial outbreak identified an LSD positive cow in the Lombardy region on 25 June in a herd of 285 cattle. The positive case died from the disease and the rest of the herd (284 animals) were killed and disposed of to prevent spread. According to a PAFF presentation on lumpy skin disease in Italy, 32 cattle from Sardinia were moved to

two different provinces within Lombardy. The traced cattle were tested and only the one tested positive. The same control measures implemented in Sardinia have been implemented in Lombardy as well.

Total numbers from the affected farms equals 1,207 cattle. Of these, 52 had clinical signs and 8 died. As of 3 July, 324 animals have been destroyed. An EU Veterinary Emergency Team (EUVET) mission investigating the Sardinia outbreaks identified cattle with healing lesions, suggesting LSD virus may have been introduced into the area up to three months ago. Therefore it is difficult to rule out further, as of yet undetected, spread. Currently the infection dynamics, date and origin of incursion are unknown. There are currently 2 hypotheses, including infected vectors being carried over from North-Africa in a storm, and an international fire exercise held at the beginning of April (no further detail of the exercise are provided in the current PAFF presentation from the EUVET mission).

Control measures implemented include an export ban from Sardinia for 10 days (from 21 June), with the EUVET mission recommending that this is prolonged to 45 days, and ongoing clinical surveillance of farms. Additionally, Protection and surveillance zones of 20km and 50km respectively have been implemented. Cattle are not permitted to move outside of these zones, unless to slaughter where a derogation is in place. To comply with the derogation, there must be a clinical inspection before travel, biosecurity measures must be implemented during transport and at slaughter, and slaughter must take place within 24 hours of arrival.

Vaccination has been recommended across the whole of Sardinia.

France

On 30 June, France reported its first outbreak of LSD in the Savoy region in the southeast of France. Of the 58 cattle on the affected premises, 15 of them displayed clinical signs and 3 tested positive for LSD. All animals have been killed and disposed of. According to the recent PAFF presentation from France, a 50km regulated zone around the outbreak has been established to prevent further spread of the disease, with approximately 2,750 bovine premises, housing 280,000 animals. Within this zone, there will be increased veterinary surveillance and restrictions on cattle movement.

A request has been made to the European Commission to access the vaccine bank, and vaccination in the regulated zone is ongoing.

Impact for Great Britain

Incursion of LSD into Great Britain could occur either by importing infected live cattle or mosquitos or biting flies carrying the virus entering the country and infecting animals present in the area.

Though no live cattle imports have been identified, tracings investigations for Italy and France are ongoing. Trade in live bovine animals and bovine germinal products is already

restricted from France due to the presence of bluetongue and epizootic haemorrhagic disease viruses in the country.

As Italy has lost its LSD free status, the UK has suspended the import of several bovine commodities, including live animals, germplasm, raw milk and raw milk products, offal, hides and skin (unless treated), and animal by products (unless undergoing specific heat treatment). More details can be found on the page for 25 June 2025: Outbreak of lumpy skin disease in Italy. Similar restrictions were brough in for France on 1 July after they lost their LSD-free status. Details can be found on the page for 1 July 2025: Outbreak of lumpy skin disease in France..

Additionally, from 12 April 2025 (due to the outbreaks of foot and mouth disease in Europe earlier in the year) it has been illegal for travellers to bring cattle, sheep, goat, and pig meat, as well as dairy products, from EU countries into Great Britain for personal use (personal imports) with very limited exemptions (outlined on Bringing food into Great Britain: Overview. Live animals, germinal products and untreated wool, hair, skins and hides are not permitted for personal import under separate rules.

Biting flies carrying LSD into the UK is another potential route of incursion. Midges from the continent are capable of crossing the Channel and introducing bluetongue virus into the UK. Stable flies, a primary vector for LSD, are capable of being blown distances greater than 13 km (Showler, 2015). The location of the current outbreaks is too far away for flies to reach UK borders from natural dispersal. There is the possibility of flies being carried on vehicles from Italy or France, but the risk of this is difficult to estimate.

Given the lack of recent trade in bovine animals or germplasm from Italy, the current trade restrictions, and the distance between the outbreak and the UK, the current risk to the UK of importing LSD is considered very low (event is rare, but cannot be excluded). This is increased from negligible in the recent LSD in North Africa preliminary outbreak assessments.

Conclusion

LSD has been detected for the first time in Italy and France, with nine outbreaks reported on the island of Sardinia. The disease has also been reported in the Lombardy region of Italy after tracing animal movements from the original outbreak premises, with France reporting its first outbreak a week after Italy.

The incursion of LSD into Italy follows spread in recent years in the North Africa region.

Since 1 June 2024 there has been no trade in live bovine animals or bovine germplasm collected in Italy or France. Tracing is ongoing for the 56 days (twice the upper limit for incubation period as per WOAH terrestrial animal health code) prior to the respective outbreaks for bovine meat and dairy products. Restrictions are being placed on specific bovine products from Italy and France in light of the LSD outbreaks mentioned above.

Biting flies are capable of transmitting the disease, although the location of the outbreaks makes this risk pathway less likely.

The current risk level to the UK from the LSD outbreaks in Italy and France is very low. This reflects the distance of these outbreaks from the UK border and the restricted trade in cattle and bovine germplasm from these countries.

We will continue to monitor the situation.

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Technical disease card WOAH Updated: 22/04/2002 (woah.org) (Accessed 01 July 2024)

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

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