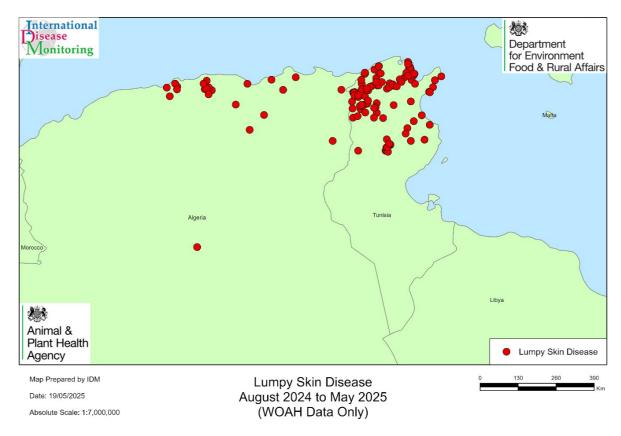
## Updated Outbreak Assessment #4

# Lumpy Skin Disease in North Africa

15 May 2025

## **Disease Report**

Our <u>last report</u> on lumpy skin disease (LSD) in North Africa in August 2024 detailed the detection of LSD in Tunisia for the first time. Since then, 22 additional outbreaks have been reported in Algeria and 132 outbreaks in Tunisia (Figure 1). Morocco remains the only North African country to have never reported the disease, though LSD is considered endemic in most African countries, including Egypt where it was first reported in 1988 (Bianchini *et al.*, 2023).



**Figure 1: Map of Northern Africa - Reports of Lumpy Skin Disease.** The map shows outbreaks of LSD from August 2024 through to May 2025 (based on date of reporting). (Adapted from WAHIS).

#### **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 1-5%) 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). Since 2012, LSD has spread through the Middle East, part of south-east Europe, the Balkans, Caucasus, Russia and Kazakhstan (WOAH, 2022). Since 2019, it has also been reported in southeast Asia, including Taiwan, China and Thailand (Eom, Lee and Yoo, 2023). 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 eradicate by stamping out of livestock alone and often requires vaccination to eradicate the disease from the national herd. In many countries in Africa the true prevalence of LSD is unknown or yet to be studied (Abebaw, 2024).

## **Algeria**

There have been 22 additional outbreaks of LSD affecting 72 cattle in Algeria reported to WOAH since our last assessment on 27 August 2024. Although these outbreaks were reported in October and November 2024, they started between June and August 2024. Vaccination of cattle in the country began in August 2024 (El Watan). Initial control strategies included isolating sick animals, restricting movement from infected farms and disinfection of premises and equipment. Forestry services also performed large-scale spraying of insecticides to eliminate vectors that could spread the disease (akhersaa.net).

### **Tunisia**

In addition to the initial outbreak case, Tunisia has reported 132 outbreaks affecting 203 cattle as of the last reporting date of 7 March 2025. This batch report of 70 outbreaks in March included outbreaks with start dates ranging from 12 October 2024 to 6 January 2025.

Several measures were introduced to detect and limit spread of the disease, including monitoring and surveillance for new cases. Farmers have been encouraged to practice good biosecurity measures, including cleaning of stables and use of insecticides (All Africa). Restrictions of animal movement have also been implemented. A mass vaccination campaign, targeting all cattle in the country, began on 7 December 2024 (WOAH). As of 30 January 2025, media outlets reported a vaccination rate of 94.2% of cattle in the country (L'Economiste Maghrebin).

## Conclusion

The spread of LSD within another country in the North African region highlights the transmissibility of this disease and the vulnerability of livestock in naïve and unvaccinated populations. The stability of the virus leading to survival on hides and in the environment also poses a potential risk for the virus to be transported to new destinations and provides a challenge in eliminating the virus.

The proximity of Tunisia and other north-west African countries to the Iberian Peninsula raises concerns around the potential for infected vectors to spread into southern Europe. The European Commission of the FAO for the fight against foot and mouth disease (EuFMD) issued an information alert on 11 July 2024 to inform member states of the spread of the disease in North Africa, which represents an increase in the level of risk of entry of the disease into the EU, particularly in countries close to these regions, such as Spain (MAPA, 2024)

Outbreaks of LSD occurred in Greece and Bulgaria in 2015 and 2016, respectively. Vaccination campaigns in both countries have been ongoing since then, along with passive and active surveillance, and the last outbreaks were reported in 2016 in Bulgaria and 2017 in Greece. For more information on the LSD situation in Bulgaria, see the April 2023 PAFF presentation. In 2024, a serological and virological surveillance programme has been implemented in the entire Greek territory to demonstrate the absence of LSD, during an 8-month recovery period of no vaccination. For more information on the LSD situation in Greece, see the April 2023 PAFF presentation.

The risk of introduction of LSD from Tunisia, Libya and Algeria into the United Kingdom (England, Wales, Scotland and Northern Ireland) at present is negligible, due to the distance from affected areas and the lack of trade in commodities which might act as potential entry pathways (live cattle, meat and milk products, germplasm, hides and skins and exotic animals). The United Kingdom has not received any consignments from Tunisia, Algeria or Libya in the last year of cattle or their products including hides and skins. In addition, personal imports are not allowed for third countries outside the EU.

These events highlight the importance of maintaining awareness of new introductions, updating contingency plans and considering vaccination as part of control programmes.

We will continue to monitor the situation.

#### **Authors**

Dr. Erica Kintz

Dr Lauren Perrin

Dr Georgina Limon-Vega

Dr Sonny Bacigalupo

### References:

Abebaw, B. (2024) 'Prevalence of Lumpy Skin Disease in Africa: A Systematic Review and Meta-Analysis from 2007 to 2023,' *Veterinary Medicine International*,

Bianchini, J. *et al.* (2023) 'Lumpy Skin Disease: A Systematic review of mode of transmission, risk of emergence and risk entry pathway,' *Viruses*, 15(8), p. 1622. https://doi.org/10.3390/v15081622.

Coetzer, J.A.W., 2004: Lumpy skin disease. In: Coetzer, J.A.W.and R.C. Tustin (eds), Infectious Diseases of Livestock, 2ndedn, pp. 1268–1276. University Press Southern Africa,Oxford.

Ministry Agriculture, Fishing and Feeding (MAPA) (2024) Expansion of Nodular Contagious Dermatosis in North Africa (11.07.2024). Available from: Nodular dermatosis contagiosum (mapa.gob.es) (Accessed 23 August 2024)

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



© Crown copyright 2025

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.2. To view this licence visit <a href="www.nationalarchives.gov.uk/doc/open-government-licence/version/2/">www.nationalarchives.gov.uk/doc/open-government-licence/version/2/</a> or email <a href="mailto:PSI@nationalarchives.gov.uk">PSI@nationalarchives.gov.uk</a>

This publication is available at <a href="https://www.gov.uk/government/collections/animal-diseases-international-monitoring">https://www.gov.uk/government/collections/animal-diseases-international-monitoring</a>

Any enquiries regarding this publication should be sent to us at <a href="mailto:iadm@apha.gov.uk">iadm@apha.gov.uk</a>