

Preliminary Outbreak Assessment

Lumpy Skin Disease in Bulgaria and Greece

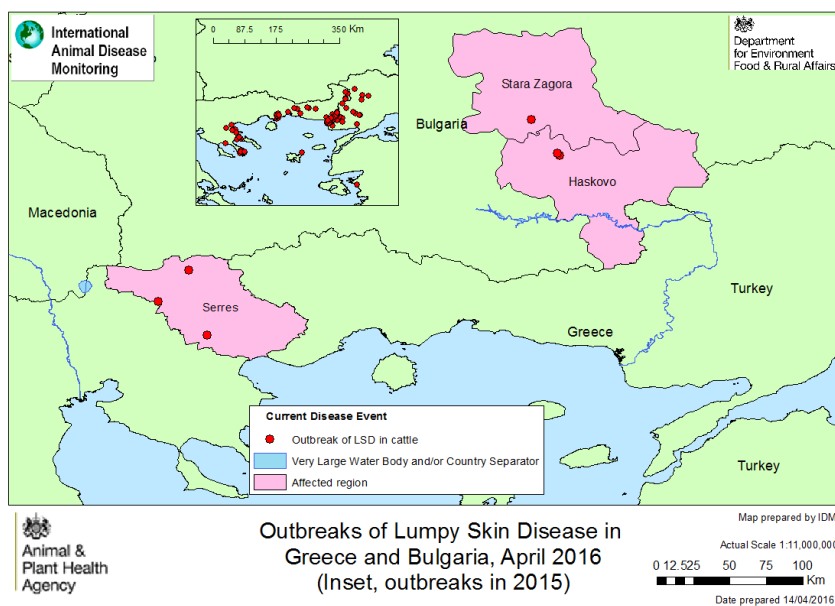
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Ref: VITT/1200 LSD in Greece & Bulgaria

Disease Report

Bulgaria has reported three outbreaks of Lumpy Skin Disease (LSD) in unvaccinated cattle, two in Haskovo region and one in Stara Zagora region. These are the first cases of LSD in

Bulgaria and indicative of spread relatively early in the season. The source of disease is not known at present. The outbreaks were identified as part of the Bulgarian surveillance for LSD, in light of the increased risk from incursion from affected areas in Greece and Turkey. Disease control measures are in place including movement controls and culling infected animals (see map for current outbreaks



with inset of outbreaks in previous years; OIE, 2016).

Two of the affected premises are backyard farms, just 5km from each other, while the third is also a backyard farm with no other co-located livestock in the village. Clinical signs of skin nodules (no scabs) were observed in the animals. In Greece, three outbreaks have been reported in the Serres region, in Northern Greece in unvaccinated cattle. These are the first outbreaks this year in Greece and are in an area which had not previously reported disease.

Situation Assessment

LSD is a pox virus of cattle and buffalo which is transmitted through direct contact with infected animals, contaminated products, such as unprocessed skins and by iatrogenic transmission or biting insect vectors. *Stomoxys* spp. (stable flies), *Culex* spp. or *Aedes* spp. (mosquitoes), Tabanidae (horse flies) and *Glossina* spp. (Tsetse flies) as well as certain tick species have all been implicated in transmission, but as mechanical not biological vectors, although there is still some debate over the possibility of vertical transmission within tick species (EFSA, 2015). Outbreaks therefore occur when vector density is high, in warmer seasons and following heavy rainfall or along river systems, but it is generally a slow spreading disease and it should be possible to control using culling, movement restrictions

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and biosecurity. At present, while epidemiological investigations are carried out, it is difficult to comment on how disease has spread in Bulgaria. The outbreaks do not appear to be connected along a common waterway.

Whilst the mortality rate is usually low (<1-3%), it is a significant production disease in cattle; the infection damages the hides and affects beef and milk production. The role of semen in transmission is still not fully understood. The virus can persist for months in untreated cattle skins, and dried or partially treated hides and skins may still harbour virus. However the hide from an infected animal (with correspondingly high viral contamination) would be poor quality because of the nature of the infection. Treated hides pose negligible risk.

LSD is considered endemic in most parts of Africa but in 2013-14 the disease spread widely in several Middle Eastern countries (Israel, Palestine, Jordan, Lebanon and Egypt). LSD was reported in the EU in Greece in 2015 for the first time, as a result of increased vigilance along the border with Turkey. The source could have been the movement of wild or pastoral animals across the Evros river delta into Greece or infective vectors around infected animals in Turkey being blown across the river. Emergency vaccination has been approved in certain regions of Northern Greece, under Directive EC/92/119 Article 19 and Directive EC/2001/82 Article 5 with additional conditions, covered by Implementing Decision EU/2015/2055. To date, over 170,000 animals have been vaccinated under this programme.

According to EU trade notification system (TRACES) there have been no trade of live cattle from Greece or Bulgaria to the UK. According to the HMRC Overseas Trade Statistics (OTS) ~£30,000 worth of raw (untreated) bovine hides were consigned to the UK from Bulgaria during January of this year, which accounts for 0.37% of total raw imports from the EU. These hides would be transported directly to a processing plant where treatment would render the hides safe. In addition, the likely contact between such products and cattle herds in the UK is highly unlikely and would be mitigated by sensible biosecurity arrangements.

Conclusion

Although the risk of introduction of LSD into the UK remains very low and has not significantly increased as a result of these outbreaks in Bulgaria and Greece, it highlights the general concerns for the region with respect to transboundary diseases and ability to control vector borne diseases.

No approved vaccine is available in the EU for prevention of LSD, but under emergency procedures, a South African vaccine may be used; in this case, Intervet's "Lumpyvax". However, rapid detection, movement restrictions and culling infected herds should control disease. Raising awareness with livestock keepers and veterinarians in regions at risk is also paramount.

We will continue to monitor the situation.

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All EU Legislation is available at the EUR-LEX website <http://eur-lex.europa.eu/homepage.html>



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