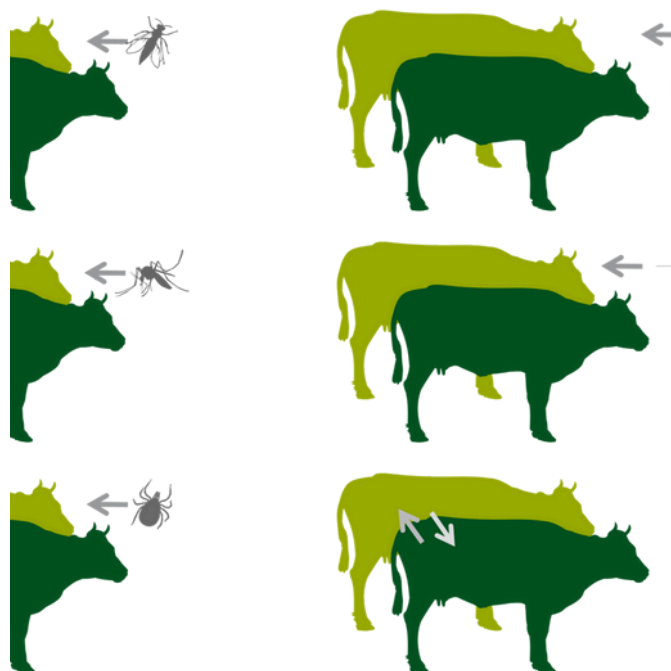

How is LSDV transmitted?

<https://www.pirbright.ac.uk/lumpyskin>

Disease transmission:

The method of transmission of LSDV from animal to animal and herd to herd is incompletely understood. There is strong evidence that the virus is spread by biting insects (vectors) such as biting flies (e.g. *Stomoxys calcitrans* and *Biomyia fasciata*) and mosquitoes (e.g. *Culex mirificens* and *Aedes natrionus*). Direct transmission between animals is believed to occur but the relative importance of this method of spread compared to vector transmission is unknown.



Scientists at The Pirbright Institute have measured the risk of different insect species transmitting [lumpy skin disease virus](#) (LSDV) for the first time. LSDV causes severe disease in cattle and is rapidly emerging into new regions. It has recently spread from Africa and the Middle East into cattle populations in Europe and Asia.

Pirbright's research shows that **insects are unlikely to acquire the virus if they bite infected cattle that are not displaying clinical signs, meaning these animals pose a limited risk of transmitting disease.**

This information fills a critical knowledge gap and could change the design of control programmes aimed at managing LSD outbreaks.

Animals infected with LSDV can show clinical signs of disease in the form of fever, weight loss and large nodules on the skin, but some animals are subclinically infected and display no symptoms of the disease. Until now it was not clear if insects feeding on these subclinical animals were able to acquire the virus and spread disease. Some control programmes had therefore adopted a cautious approach to outbreaks, culling all animals in an affected herd to prevent LSD spread.

<https://www.eurl-capripox.be/lumpy-skin-disease>

<https://www.pirbright.ac.uk/news/2021/04/lan-dmark-study-pirbright-uncovers-crucial-details-lumpy-skin-disease-virus-transmission>