

BLUETONGUE

Factsheet



Bluetongue is a viral disease that affects ruminants, especially sheep. It can also affect cattle, goats, camels, deer and other wild ruminants. It has been named after one of the symptoms that can occur in the animal, which is a bluish coloration of the tongue. Sheep are particularly susceptible to more serious forms of the disease, whereas the infection is often less damaging in other ruminants such as cattle and goats.

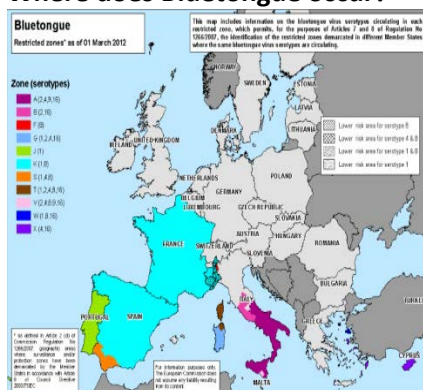
Characteristics

The disease is characterised by inflammation of the mucous membranes, congestion, swelling and haemorrhages. Sheep are generally the worst affected, while cattle and goats do not usually show any clinical signs of disease and can carry the virus for a certain period of time and transmit it to other ruminants.

Transmission can only take place via bites from certain species of *Culicoides* midges and is not transmitted by direct or indirect contact between animals.

24 serotypes of the virus are currently known to science, each of which can have differing virulence and mortality rates. The way it can be transmitted and the susceptible species are continually being investigated by scientists.

Where does Bluetongue occur?



Until recently bluetongue had only been recorded in southern regions of the EU including parts of Italy, Spain, France and Portugal. In August 2006 several Northern European countries reported the first ever outbreaks of Bluetongue, including in the Netherlands, Belgium, Germany and France. Further outbreaks were reported in 2007 and 2008 in the United Kingdom and Sweden. The bluetongue situation in the EU has changed considerably recently with incursions of the new serotypes 8 and 1 (See map with restriction zones - March 2012). Bluetongue can cause serious disease outbreaks and is an OIE listed disease.

Societal impact

Bluetongue causes direct economic loss through disease and mortality, loss of productivity, loss of milk yield, abortion and loss of fertility.

In 2008, a total of 45,000 outbreaks were reported across the EU. That number dropped to 1,118 in 2009, 176 in 2010 and to 39 in 2011 through prevention and control measures including the use of vaccines.

Vaccines and vaccination

Several animal health companies have developed and marketed **vaccines** against various virus types of the disease including **serotypes 1, 2, 4, 8 and 9**. Vaccines and vaccination programmes contribute to the prevention and control of bluetongue. Vaccination is also used to permit safe trade in live ruminants based on EU legislation and in accordance with OIE standards.

Useful links:

- European Commission Directorate General Health and Consumers (DG SANCO):
http://ec.europa.eu/food/animal/diseases/controlmeasures/bluetongue_en.htm
- European Food Safety Authority (EFSA):
<http://www.efsa.europa.eu/en/topics/topic/bluetongue.htm>
- World Organisation for Animal Health (OIE):
http://www.oie.int/fileadmin/Home/eng/Animal_Health_in_the_World/docs/pdf/BLUETONGUE_FINAL.pdf
- DISease CONtrol TOOLS (DISCONTTOOLS) database:
http://www.discontools.eu/home/disease_detail/disease_id/22