

Contagious Bovine Pleuropneumonia (CBPP) situation in South Africa

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Department:
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Introduction:

Contagious bovine pleuropneumonia (CBPP) is a disease of cattle and water buffalo caused by *Mycoplasma mycoides subsp. Mycoides (M. mycoides)*. As the name suggests, it attacks the lungs and the membranes that line the thoracic cavity (the pleura) causing fever and respiratory signs such as laboured or rapid respiration, cough and nasal discharges. Because it is highly contagious with a mortality rate of up to 50%, it causes significant economic losses.

CBPP status of South Africa

CBPP is a prominent cattle disease in Africa, but South Africa is currently free of CBPP, with an officially recognised OIE free status. As a controlled disease, all suspicions of CBPP have to be reported to the Director of Animal Health. In addition, South Africa conducts active serological surveillance for CBPP in all of the Provinces with international borders, as well as Gauteng.

Clinical and Pathological Signs

CBPP is manifested by loss of appetite, fever and respiratory signs, such as rapid respiratory rate, cough and nasal discharges and painful, difficult breathing. In many cases, the disease progresses rapidly, animals lose condition, and breathing becomes very laboured, with a grunt at expiration. The animals become recumbent (lie down) and in severe cases die after 1-3 wk. The mortality rate may be as high as 50% in the absence of antibiotic treatment. However, clinical signs are not always evident. Chronic cases are emaciated and coughing often occurs when the animal rises.

On post mortem, CBPP is characterized by a severe, fibrinous pleuropneumonia, with pronounced marbling. In the acute stage, there is often a uni- or bi-lateral pleural effusion that may exceed 10 litres. In chronic cases, one or more sequestra (10 – 300mm in diameter) usually occur.

What to do if you suspect a case of CBPP

If a suspicious case is identified, please notify the local State Veterinarian immediately. State Veterinarians should notify their Provincial Directors, who should notify the Director of Animal Health at the Department of Agriculture, Land Reform and Rural Development.

In live animals, blood samples can be collected for serology. Pathological samples that can be collected in live animals for PCR, include nasal swabs or discharge, broncho-alveolar lavage samples or aseptically collected transtracheal washing and pleural fluid. In dead animals, lung lesions, lymph nodes and pleural fluid can be collected for PCR testing.

For further details on CBPP, including the identification of suspicious cases and the collection of samples, please refer to the awareness materials on the DALRRD website at:

<https://www.dalrrd.gov.za/Branches/Agricultural-Production-Health-Food-Safety/Animal-Health/Awareness-material>

