



# agriculture, forestry & fisheries

Department  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA

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## Fax cover

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SUBJECT:	<b>CONTINGENCY PROTOCOL FOR DEALING WITH BUFFALOES TESTING POSITIVE FOR FMD, BRUCELLOSIS, TUBERCULOSIS AND CORRIDOR DISEASE</b>		

Dear Chief Directors / Directors,

We are pleased to inform you that, subsequent to the termination of the Disease-Free Buffalo Breeding Projects (DFBBPs) at the end of 2011, there is a drastic decrease in the number of new outbreaks of Foot and mouth Disease (FMD), Bovine brucellosis, Bovine tuberculosis and Corridor disease (CD) on buffalo farms in South Africa. Given the current scientific evidence and information available, it has become necessary to redefine the contingency protocol guiding state veterinary officials on how to deal with buffaloes that test positive for FMD, brucellosis, tuberculosis and CD.

The contingency protocol provisions that are contained in the current "Buffalo Protocol" (Section 3.2.4 of the Draft Number 20 of the Disease Risk Management Directive for Buffalo in South Africa, dated 19 September 2002, and any similar provisions in other versions of the "Buffalo Protocol") are thus suspended and replaced with the following instructions:

Please, note that FMD infected buffalo inside the FMD infected zone and CD infected buffalo inside the CD controlled areas, as defined in the Animal Diseases Regulations, are obviously excluded from the instructions below

## **1. Reporting**

1.1 All incidences of buffaloes testing positive for FMD, brucellosis, tuberculosis and CD, outside the controlled areas, as mentioned above, irrespective of the reason for the testing, and irrespective of whether an infection has been confirmed or not, have to be reported to the national Director: Animal Health (DAH) immediately. This includes occurrences that commenced prior to the date of this letter but that is ongoing and have not been resolved by eradicating the outbreak.

1.2 The reports by the responsible state veterinarian must be sent via the office of the Provincial Director / Chief Director to DAH at the following e-mail addresses: [SandraDAC@daff.gov.za](mailto:SandraDAC@daff.gov.za) and [JohanD@daff.gov.za](mailto:JohanD@daff.gov.za) and / or faxed to 012 – 329 7218 / 012 – 329 0499.

1.3 The full report must at least include the following:

- a copy of test results (and previous test results as applicable);
- a full account of the history of the herd and animals that tested positive;
- details of any epidemiological investigation conducted and actions taken and the outcome thereof;
- copies of all relevant documentation, including correspondence with the owners, quarantine notices etc.
- the action plans for further investigations and / or control and eradication measures for approval by the DAH

1.4 The initial report has to be followed by regular quarterly (three-monthly) follow-up reports, detailing any new occurrences and the progress made with regards to eradication of the disease. The requirement for such follow-up reports may be reduced by the DAH in writing to yearly reports, on the basis of a substantiated request made by the provincial director, in cases in which brucellosis or tuberculosis are considered endemic on a buffalo farm.

## **2. Quarantine and forward / backward tracing**

2.1 As soon as the initial suspect or positive test results are received for any of the above diseases, the whole farm must be put under full quarantine and there must be no further movement of buffaloes or any other susceptible species onto, off or through the property.

- 2.2 The quarantine notice must include a provision that any morbidity, mortality or planned capture / immobilization of any animal of a susceptible species on the property must be reported immediately to the responsible state veterinarian for a full investigation, irrespective of the purported reason for such morbidity, mortality or planned capture / immobilization.
- 2.3 The quarantine instructions must include an attempt to get a full register of all animals of all susceptible species as well as their origin.
- 2.4 A full backward and forward tracing exercise must be conducted for all susceptible species, going back to the most likely date of first introduction of the infection.
- 3. Action plan for further investigations / testing and / or control and eradication of the outbreak**
- 3.1 All action plans for further investigations to be conducted and / or the control and eradication measures have to be approved by the DAH in writing prior to being put into effect.
- 3.2 All action plans should start with the actions that will be taken to confirm the outbreak of the relevant disease(s).
- 3.3 Presence of FMD and CD in buffalo threaten the legislated and internationally recognized zoonary disease-free status of South Africa and may thus be a threat to the whole of the livestock industry. Thus, the actions plans for incidences or outbreaks of FMD and CD have to be aimed at eradicating these outbreaks in the shortest possible period by prompt removal of all infected animals and all direct contact animals - followed by the appropriate testing and re-testing of all susceptible animals in the immediate vicinity, as well as those that may have been exposed in other ways.
- 3.4 The action plans for incidences of brucellosis and tuberculosis may be more flexible in cases in which eradication is not feasible but should at the very least include a comprehensive surveillance strategy for all susceptible species as well as a well-documented disease control or management plan. In such cases, the owners need to understand that no buffaloes may be moved off these properties – and that the movement stop extends to any other susceptible species that becomes infected.
- 3.5 All surveillance testing during and after any such disease outbreaks must include all susceptible species as appropriate for each disease. Furthermore, the provincial surveillance strategy must include all neighbouring properties as well as all properties identified during the forward and backward tracing.

3.6 The action plans that are proposed for approval by the DAH must include full details of any costs that may be incurred on behalf of DAFF. DAFF will not be responsible for any costs incurred prior to written approval of an action plan by the DAH. This includes all potential costs for any surveillance testing. The principle that applies is that buffalo and game owners are always responsible for all capture and immobilization costs. The costs for laboratory testing will be covered by DAFF only subject to prior written approval - based on a well-substantiated motivation by the provincial director on why such testing is in the national interest, rather than in the interest of the owner who may want to salvage some of the animals on the infected property.

3.7 Once the action plans are approved, they must be enforced on the affected properties by means of state veterinary orders in terms of the Animal Diseases Act that determine specific time lines for the actions to be taken. All non-compliances must be followed-up promptly with the appropriate law enforcement measures.

#### **4. Specific measures for Corridor disease**

4.1 The instructions below pertain to the handling of positive test results for Corridor disease in any buffalo outside the Corridor disease controlled areas of South Africa. The general instructions above as well as those below must be followed. Please, note that all properties with ongoing outbreaks of CD in buffalo that have not been resolved completely are included in this instruction (refer to Point 1.1).

4.2 The Corridor disease tests have to be regarded as herd tests; this implies that if one or more animals in a group or herd show a positive test reaction, the whole herd (i.e. all buffaloes on the whole property) must be regarded as infected and / or potentially infected with the disease.


4.3 As the disease is transmitted by ticks that can be carried by a variety of animal species and may infest pastures for up to 18 months, the whole property on which the infected herd resides, has to be quarantined as a Corridor disease infected property, with all animal species being included in the quarantine notice.

4.4 On an infected property, there is currently no scientifically validated method for reliably detecting all the individual animals that are infected. Animals from a Corridor disease infected herd that test negative with the follow-up testing could still be carriers/infected and only showing a positive test reaction many years later. This is due to many factors in the tick vector and susceptible host animal (for example the number of the causative organism in the blood stream of the host, the time since infection occurred, the mechanism of infection, levels of infection in the tick vector, transmissibility of the tick vector and tick load) that can lead to a false negative test result.

- 4.5 Extensive experience from the terminated DFBBPs have demonstrated that Corridor disease cannot be effectively controlled by a policy of removing/destroying positive reactors, isolating and re-testing of the remainder of the group/herd.
- 4.6 Climate change and movement of animals have led to a spread of brown ear tick occurrence in South Africa over time and some of the historically vector-free areas have become infested. There is no scientifically validated technique to prove that a property has been "vector-free", i.e. free of brown ear ticks that may transmit the parasite, because the ticks may be on a property only transiently, may be introduced or have been introduced repeatedly although the property is a historically vector-free area, may be living only in special micro-environments on the property that is suitable for their survival but neglected during a survey etc. It thus has to be assumed that natural transmission of the infection can happen or could have happened on every property on which Corridor disease infected buffalo are found. Culling of positive buffalo on presumed "vector-free" properties can thus also not be considered an option for control and eradication of the disease.
- 4.7 From the above it follows that all buffalo on the property must be destroyed under state veterinary supervision or sold to a farm(s) in one of the Corridor disease controlled areas. Care should be taken to ensure that every animal is accounted for.
- 4.8 No compensation will be payable by government if the option to destroy the animals is chosen. DAFF will also not pay for any testing of buffaloes on a property that is considered infected with Corridor disease.
- 4.9 After all buffalo have been removed from the property, the infected farm must still be considered to be infected and must remain under quarantine and free of any buffalo and cattle for a period of two years.

Your assistance is greatly appreciated. Do not hesitate to contact us (on the e-mail addresses under Point 1.2 above), should you require further clarification or assistance. Please, would you ensure that all your state veterinary personnel is familiar with the above instructions and also inform all role players and stake holders accordingly.

With kind regards

  
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**Dr Mpho Maja**  
**DIRECTOR: ANIMAL HEALTH**  
**Date: 2013 -03- 19**