To: All individual horse owners
Breed Societies
Artificial Insemination and Breeding Centres
Press and Media
SAVA
SAVC
SAEVA
SANEF
SAHRA

RE: CONTAGIOUS EQUINE METRITIS ANNUAL SCREENING TO CONTINUE IN SOUTH AFRICA

Following the letter issued from this office titled “Update on Contagious Equine Metritis (CEM) in South Africa” on the 11 August 2014 we would like to advise you of progress as follows:

1. CEM 2011 OUTBREAK IN RETROSPECT:

CEM was identified in South Africa in 2011 and initial investigations identified an index stallion and mare as well as two additional stallions. Follow-up investigations, including the results from the national screening programme and the trace-back of all horses in contact with the positive horses, identified an additional 35 cases until 2013. All 39 cases (the first 4 plus 35) were successfully treated and have subsequently tested negative for CEM.
1.1 INTRODUCTION OF CEM INTO SOUTH AFRICA:

The information gathered thus far strongly suggests that the CEM bacterium was not introduced into South Africa in 2011, but has probably been in South Africa following the introduction of the Lipizzaner horses in 1948. Testing of diagnostic frozen semen samples collected from Lipizzaners in 1996 as part of another outbreak investigation, have recently tested positive for the CEM bacterium that had survived in this form for nearly 20 years. This demonstrates that the disease had been present in South Africa for a long time and had probably been introduced prior to both the recognition of CEM as a disease of international importance (initially in Europe in 1977) and before CEM was legislated as a Controlled Disease in South Africa on the 17 July 1981.

The 2011 strain identified in South Africa in all 39 cases is genetically exactly the same as the strain found in outbreaks in Lipizzaner populations abroad. Laboratory typing of the bacterium causing CEM (Taylorella equigenitalis) has demonstrated that there is strong evidence to suggest that there has only been a single introduction of CEM into the country.

1.2 DISSEMINATION OF CEM

The Lipizzaner population in South Africa was maintained as a closed herd from when they were first introduced into the country in 1948 up until 2000. From 2001 to 2006, Lipizzaner stallions visited an Artificial Insemination Centre, the index property identified in 2011, on several occasions for assisted breeding procedures such as semen collection for freezing or artificial insemination. It is highly likely that the CEM infection was maintained within the Lipizzaner herd and spread to other (non-Lipizzaner) stallions by exposure at the Insemination Centre via fomite transmission. Possible fomites identified include any facilities, equipment or personnel involved in semen collection and subsequent processing, which may have spread the CEM bacterium between horses.

The instruction by the Director Animal Health issues in May 2012 prescribed that a CEM clearance certificate was required for any stallion used for natural or artificial breeding. This included the use of frozen semen. In the absence of such a CEM clearance certificate, in July 2015 a conscientious veterinarian submitted a, frozen
A semen sample that had been collected in 2008 - this semen sample tested positive for the CEM bacterium. The semen was obviously not used for insemination and the donor stallion (now a gelding) was traced and tested and confirmed positive, i.e. he was positive when semen was collected from him in 2008 and was still positive 7 years later. He and his home property were placed under quarantine and he is undergoing treatment.

This highlights the potential risk if frozen semen from stallions with an unknown CEM status is used.

CEM in South Africa thus appears to have been maintained in the Lipizzaner herd since their introduction into South Africa. The spread of the disease to other horses seems to have been sporadic and mainly through indirect contact during practices involved with the collection of semen for artificial insemination. Stallions which are used for artificial breeding using fresh, chilled or frozen semen are to be considered as a higher risk for exposure to and transmission of CEM. All stallions, whether they are used for natural cover or as donor stallions for artificial insemination, must be tested annually prior to the breeding season.

2. THE WAY FORWARD

2.1 CONTINUATION OF REQUIREMENTS FOR CEM CLEARANCE CERTIFICATES

In order to protect all horse owners in South Africa, the current CEM testing requirements, i.e. for a single annual test by collection of three genital swabs (from the urethra, urethral fossa and lamina interna) will continue to apply to all stallions used for breeding, either by natural mating or artificial insemination. Should the stallion not be available for testing, arrangements should be made for the frozen semen to be tested instead. A CEM clearance certificate for the stallion or a collection day batch of semen will be issued by the Equine Research Centre subject to negative results.

Details for this screening procedure can be found in the CEM Screening Manual that is currently being updated. The 2012 version can be found on the DAFF website, go to Branches » Agricultural Production, Health & Food Safety » Animal Health » Information. You will be informed about the new version as soon as it is available.
The reason for continuing with the screening programme is three-fold. Firstly, the individual testing of stallions used for breeding is a practical way in which each horse owner can protect their animals from the disease. Secondly, although we do not expect a large number of infected horses or semen samples to still be out there, the ongoing screening is a feasible and cost-effective method by which they can be detected – and the results will thus be required in order to claim successful eradication of CEM from South Africa at a future date. Thirdly, even after eradication of CEM from South Africa, continued ongoing surveillance will be required if the country is to put forward a convincing case for claiming sustainable freedom from the disease.

2.2 PRECAUTIONS

In addition, given the above information and the potential risk for spreading CEM via fomites, the following precautions are to be taken by the industry:

2.2.1 Stallion owners:
   a) Must ensure that their stallions are tested annually and have obtained a CEM clearance certificate prior to the onset of each breeding season.
   b) The CEM bacterium can spread from horse to horse via fomites such as shared grooming equipment and personnel. Biosecurity at the home stable and especially at the collection/insemination centre in the case of donor stallions, is of the utmost importance.

2.2.2 Owners of horse semen:
   Must be aware of the potential risks associated with disease transmission from frozen semen and should ensure that the semen in their possession has either been collected from stallions that have a CEM clearance certificate valid for the year during which the semen was collected for freezing (i.e. from 2012 onwards) or that each batch (individual collection date) of frozen semen is tested by submitting at least two straws per collection to the Equine Research Centre (ERC). Please contact the ERC for more details regarding sending samples.
2.2.3 *Mare owners:* Must ensure that their mare is bred or inseminated with semen from stallions that have a **valid CEM clearance certificate for that breeding season.** Alternatively, if frozen semen collected before 2012 is to be used, at least two straws from each batch of semen to be used must be sent to the ERC for testing prior to use. Please contact the ERC for more details regarding sending samples.

2.2.4 **Veterinarians:** Must ensure that their clients (horse owners) are adequately informed regarding the risks posed by CEM and that they adhere to the above recommendations. It is their responsibility to ensure that any stallions and semen under their care have been tested appropriately and have the pertinent documentation as described above.

In the interest of the animal health status of South Africa, the continued co-operation of all members of the horse industry in applying and promoting the required screening and control measures for CEM is much appreciated.

Kind regards,

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DIRECTOR: ANIMAL HEALTH
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