b	**DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES** **DIRECTORATE ANIMAL HEALTH**
	PROCEDURE MANUAL **SCREENING OF STALLIONS FOR CONTAGIOUS EQUINE METRITIS**
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A. PURPOSE OF THIS PROCEDURE MANUAL

To lay down the procedures to be followed in screening stallions for Contagious Equine Metritis (CEM)

1. Determine the prevalence of CEM in stallions within South Africa
2. Prevent the disease from becoming endemic within South Africa
3. Eradicate the disease (South Africa was considered free of CEM prior to an outbreak diagnosed in three stallions and one mare in April 2011)

B. SCOPE

This Procedure Manual is applicable to all stallions used for breeding or semen collection in South Africa after 31 August 2011.

Of major concern is:

1. The risk of CEM becoming endemic within South Africa and its detrimental effect on equine breeding.
2. The potential negative impact on the equine industry.

CEM is considered to be of high significance due to the massive economic losses that can be associated with the disease as a result of its devastating effects on reproductive efficiency of affected equines. These losses are related to the mare's inability to conceive, embryonic loss, and costs related to repeat breeding and treatment. CEM is an OIE (World Organization for Animal Health) listed disease and has an impact on a country's ability to trade.

CEM was first confirmed in South Africa in April 2011 and reported to the OIE in May 2011. Prior to this, South Africa was considered free of CEM. At this stage there is no reason to believe that CEM is widespread in the country. If the disease can be detected before any further spread, CEM can be contained and eradicated in South Africa and the country will be able to regain its CEM free status.

This manual describes the procedures to be followed for the certification of stallions as free of CEM according to the instruction/order given by the Director Animal Health in the letter entitled "Screening of Stallions for Contagious Equine Metritis (CEM) – order in terms of Section 11 of the Animal Diseases Act and Animal Improvement Act" and dated 5 August 2011. (Attached as Annex A)

C. LEGISLATION

- CEM is a controlled animal disease in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984).
- Any suspect or confirmed CEM cases must be reported to the Director in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984):

  (i) Section 11(1)(b)(ii) of the Animal Diseases Act states: "Any owner or manager of land on which there are animals, and any owner in respect of animals, shall, whether or not such owner or manager has obtained advice regarding the health, or any certificate of fitness or health of the animals in terms of section 13(1)(c), from the director, whenever such animals have become or can reasonably be suspected of having become infected with any controlled animal disease, immediately report such incidence in the prescribed manner to the director."

  (ii) Section 11(2) of the Animal Diseases Act as amended states: "A veterinarian or any other person who finds the incidence or suspected incidence of any controlled animal disease in any animal or progeny or product thereof, shall immediately report such incidence to the director."

- In terms of Table 2 of the Animal Diseases Regulations the following control measures for CEM are described:

  1. In respect of susceptible animals: "Serving of infected mares or by infected stallions shall be prevented."

2. In respect of contact animals: "Contact animals shall be isolated and tested under the supervision of or by an officer or authorized person."
3. In respect of infected animals: "Infected animals shall be isolated, and in the case of (a) mares, destroyed under the supervision of or by an officer or authorized person; and (b) stallions, castrated or destroyed under the supervision of or by an officer or authorized person."

- The Director Animal Health will make a derogation (exemption) in terms of Regulation 11(2) (b) to be issued to each owner/manager by means of an official order to allow treatment of any infected equines under the condition that the measures as stipulated in the "Procedural Manual for Contagious Equine Metritis For The Suspect Outbreak Identified April 2011" will be complied with in full. The Procedural Manual is available from the Director Animal Health. (PA.DAH@daff.gov.za)

- In order to determine the extent of the infection and to protect the equine industry in South Africa, every stallion, irrespective of the breed, must be tested at least twice at an interval of no less than 7(seven) days and have negative results for both CEM tests prior to breeding or donating genetic material (semen collection).

  According to Section 11 (1) (a) of the Animal Diseases Act: "... any owner in respect of animals shall ... take ... all reasonable steps to prevent the infection of the animals with any animal disease or parasite and the spreading thereof from the relevant land or animals ..."

  In terms of this Section, the Director Animal Health has issued an instruction/order on 5 August 2011 by means of a letter sent to all Breed Societies, Artificial Insemination Centres, all registered veterinarians via the South African Veterinary Council (SAVC), South African Veterinary Association (SAVA), South African National Equestrian Federation (SANEF) and South African Horse Racing Authority (SAHRA). The letter was also circulated in the appropriate lay press and media.

  According to the instruction/order no stallion irrespective of breed may be used or allowed to be used to breed (natural mating or artificial insemination), unless an official CEM clearance certificate has been issued. An official CEM clearance certificate will be issued by the Faculty of Veterinary Science, Equine Research Centre, once two negative tests have been done.

- In terms of the Animal Improvement Act, 1998 (Act No. 62 of 1998), the Registrar of the Livestock Improvement Act has declared that an official CEM clearance certificate is a mandatory condition for any application made after 31 August 2011 for the registration of a donor stallion or a foal born as a result of a mating or artificial insemination after 31 August 2011.

- Any owner/manager of a mare who wants to check whether a stallion has tested negative for CEM and has been issued with an official CEM Clearance Certificate is invited to check the information on the following website: www.cemsa.co.za

D. CONTAGIOUS EQUINE METRITIS PRESENTATION IN EQUINES AND ZEBRAS

CEM is an acute, highly contagious venereal disease of equines and zebras caused by a gram negative bacterium, *Taylorella equigenitalis*. It is characterised by a mucopurulent vaginal discharge and early return to oestrus in most affected mares. Infected stallions and chronically infected mares may not show clinical signs.

E. TRANSMISSION OF CONTAGIOUS EQUINE METRITIS

Infection can be transmitted to equines and zebras in any of the following ways:

- direct transmission primarily during mating;
- direct or indirect transmission during teasing. Direct transmission when an infected teaser transmits disease to mares through contact with the teaser's genitalia. Indirect transmission by a teaser after contact with infected vulval discharge and subsequent contact with mares through genital or naso-genital contact;
- transmission to mares by means of the artificial insemination of semen obtained from a CEM infected stallion, or semen contaminated by CEM bacteria during semen collection or processing;
- indirect transmission via fomites, including hands, clothing, artificial vaginas, vaginal speculums, other instrumentation and breeding dummies or phantoms used for semen collection.

F. PROCEDURES TO BE FOLLOWED IN ALL CASES OF A SUSPECT OR CONFIRMED DIAGNOSIS OF CEM

1. Any owner, laboratory or veterinarian who is aware of a **suspect** or confirmed positive test result is obliged to report this immediately to the Provincial State Veterinarian. The Provincial State Veterinarian has to notify the Directorate Animal Health, Department of Agriculture, Forestry and Fisheries (DAFF), of the **suspect** or confirmed CEM infected animals by using the SR1 form for immediate notification to the Director: Animal Health for the attention of Dr Hannes Pienaar, as well as by reporting the occurrence using the normal monthly reporting system (List A, B and C):

   (a) Dr Hannes Pienaar
   Tel: 012 319 7606
   Fax: 012 319 7470
   Email: HannesP@daff.gov.za

Dr Mpho Maja, DAH _____ Date 2011 -08- 05

Carbon copy:

(b) Dr Sunelle Strydom
Tel: 012 319 7585
Fax: 012 319 7470
Email: SunelleS@daff.gov.za

(c) Dr Ayanda Mpehle
Tel: 012 319 7428
Fax: 012 329 0499
Email: AyandaMP@daff.gov.za

2. Thereafter the prescriptions of the "Procedural Manual for Contagious Equine Metritis" shall be followed.

G. SWABBING PROCEDURE FOR SCREENING STALLIONS FOR CEM

1. All swabs for CEM diagnostics shall be taken and submitted by a registered veterinarian only. (Please note that in the case of any suspicion of CEM any further diagnostic procedures may be undertaken **only** by a veterinarian specifically authorised by the Director Animal Health.)
2. Only standard cotton-tipped bacteriology dry swabs WITHOUT TRANSPORT MEDIUM may be used.
3. Separate sterile gloves must be used for each stallion.
4. The gloves shall be worn to open the swab packaging and during the entire course of swabbing each stallion.
5. All swabs must be taken in the prescribed manner as detailed below.
6. After swabbing, every individual swab must be placed in its empty tube or plastic sleeve and sealed WITHOUT TRANSPORT MEDIUM. Care should be taken to ensure that each swab is sealed in such a manner that it cannot open accidentally during transport.
7. Every individual swab must be clearly identified and labelled to show
   a. The name of the stallion
   b. The swabbing site
   c. The date of collection
8. The three swabs from each stallion should be placed in a separate clean plastic bag and sealed or knotted securely.
9. The penis must be fully extended from within the prepuce (exteriorised) for the collection of all swabs. To achieve this it is recommended that the stallion is exposed to a mare in oestrus or alternatively with the assistance of appropriate pharmacological agents e.g. medetomidine, xylazine. (Avoid phenothiazines!)
10. For each stallion, individual swabs must be taken from the following sites:
    (i) Urethra
    (ii) Urethral fossa including the urethral sinus. (Particular care should be taken to insert the swab into the sinus.)
    (iii) Penile sheath (Lamina interna)

H. SAMPLE SUBMISSION

1. Complete the **CEM Sample Submission Form** that is available from the website: www.cemsa.co.za. The submission form may only be completed by a registered veterinarian. Samples that are received without the prescribed, FULLY completed and legible sample submission form will not be processed.
2. All swabs must be submitted within 48 hours of collection and do not have to be cooled.
3. All samples must be either
   a) sent by speedpost to: Equine Research Centre, Private Bag X04, Onderstepoort, 0110; or
   b) sent by courier to: Equine Research Centre, Faculty of Veterinary Science, University of Pretoria, Old Soutpan Road, Onderstepoort, 0110.

   Tracking numbers can be emailed to info@cemsa.co.za
4. The veterinarian will be invoiced for all tests done by the Equine Research Centre. It is the veterinarian's responsibility to settle the account with the owner.

All enquiries about the sampling, submission procedure, payment and certification should be directed to: Equine Research Centre, Tel: 012 5298068 or info@cemsa.co.za

I. PROCEDURE REQUIRED TO OBTAIN A CEM CLEARANCE CERTIFICATE FOR A STALLION

1. A full set of the correct samples taken by a registered veterinarian on two occasions at least 7 days apart according to the procedure under G. above, and submitted correctly according to the procedure under H. above, must all test negative.
2. **A CEM Clearance Certificate** will be issued after the stallion shows no positive results on any of the swabs submitted on any occasion. Positive results have to be reported to the responsible state veterinarian for follow up and further investigation.
3. A current list of stallions that comply with the requirements for a clearance certificate for CEM will be posted on the website, www.cemsa.co.za. Owners of mares should check that a prospective stallion's name appears on the current list of stallions that comply with the requirements for a clearance certificate for CEM before the mare is covered or inseminated.
4. Clearance certificates for CEM will be available to stallion owners on the website www.cemsa.co.za using a username and password to gain access.