

	<p align="center">DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES DIRECTORATE ANIMAL HEALTH</p>
	<p align="center">PROCEDURE MANUAL SCREENING OF STALLIONS FOR CONTAGIOUS EQUINE METRITIS WITH EFFECT FROM THE 2012/2013 BREEDING SEASON COMMENCING 1 JULY 2012</p>
<p>COMPILED BY:</p>	<p>Professor Alan Guthrie, Professor Martin Schulman(University of Pretoria); Dr Ayanda Mpehle, Dr Romona Naidoo (Disease Control Sub-Directorate), Dr Cornelia Gerstenberg (Professional Disease Control), Dr Beverley Zietsman</p>
<p>FIRST DOCUMENT</p>	<p>3 AUGUST 2011 updated 17 May 2012</p>
<p>APPROVED BY</p>	<p>Director: Animal Health</p>
<p>APPROVAL DATE:</p>	<p>17 May 2012</p>
<p>EFFECTIVE DATE:</p>	<p>1 July 2012</p>
<p>NO OF PAGES:</p>	<p>7</p>

A. PURPOSE OF THIS PROCEDURE MANUAL

To lay down the procedures to be followed to screen stallions for Contagious Equine Metritis (CEM) with effect from the 2012/2013 Breeding Season.

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 April 2011)

B. SCOPE

This updated Procedure Manual is applicable to all stallions used for breeding or semen collection in South Africa with effect from 1 July 2012 until further notice.

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 significant due to the economic losses that are associated with the disease as a result of its effects on reproductive efficiency of affected equines. These losses are related to the mare's compromised ability 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. Nationwide screening of breeding stallions started in August 2011. Due to compliance from South African breed societies, owners and veterinarians, the extent of the outbreak was established. The outbreak was shown to involve a relatively small population of South African horses. By 14 May 2012, a total of 38 infected horses were identified through this process and they have been successfully quarantined and treated.

A continuation of this screening process on an annual basis from the 2012/2013 breeding season (2012/2013 breeding season is defined as 1 July 2012-30 June 2013) will increase the likelihood of South Africa reclaiming CEM free status within a relatively short period of time.

This manual describes the procedures to be followed for the certification of stallions as free of CEM from the 2012/2013 breeding season according to the instruction/order given by the Director Animal Health in the letter entitled "CONTINUED SCREENING OF STALLIONS FOR CONTAGIOUS EQUINE METRITIS (CEM) WITH EFFECT FROM THE 2012/2013 BREEDING SEASON STARTING 1 JULY 2012 – ORDER IN TERMS OF SECTION 11 OF THE ANIMAL DISEASES ACT AND ANIMAL IMPROVEMENT ACT" dated 16 May 2012. (Annex A)

C. LEGISLATION

- CEM is a controlled animal disease in terms of the Animal Diseases Act, 1984 (Act No. 35 of 1984).
- All 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 issue a derogation (exemption) in terms of Regulation 11(2) (b) to each owner/manager by means of an official order to allow treatment of any infected equines on condition that the measures as stipulated in the "Procedure Manual For The Confirmation of Diagnosis and Treatment Of Positive Cases Of Contagious Equine Metritis" will be complied with in full. The Procedure Manual is available from the Director Animal Health. (SandraDAC@daff.gov.za)
 - In order to confirm the extent of the outbreak in South Africa is limited, it is necessary to repeat stallion screening annually from the 2012/2013 breeding season. Commencing on 1 July 2012, every stallion, irrespective of the breed, must be retested/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). This must be repeated for each breeding season (1 July – 30 June)
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 ..." Testing stallions for CEM will be at the expense of individual owners.

In terms of this Section, the Director: Animal Health issued an instruction/order on 5 August 2011 and again on 17 May 2012 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) from the 2012/2013 breeding season until further notice, unless an official CEM clearance certificate for the relevant breeding season has been issued. An official CEM clearance certificate for the 2012/2013 breeding season will be valid for 1 July 2012 – 30 June 2013 and will only be issued by the Faculty of Veterinary Science, Equine Research Centre, once two negative tests have been done on or after 1 July 2012.

- 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 that is valid for the relevant breeding season 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.
- All owners/managers of mares should ascertain whether or not a stallion has tested negative for CEM and has been issued with an official CEM Clearance Certificate that is valid for the relevant breeding season prior to mating or using the semen on their mares. This information is available 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 and may become carriers.

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 or storage;
- 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 relevant 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. Suspect or confirmed cases must also be reported 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

Carbon copy:

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

(c) Dr Romona Naidoo
Tel: 012 319 7630
Fax: 012 329 0499
Email: RomonaN@daff.gov.za

2. Thereafter the prescriptions of the "Procedure Manual for The Confirmation of Diagnosis and Treatment of Positive Cases of Contagious Equine Metritis" shall be followed.

G. SWABBING PROCEDURE FOR SCREENING STALLIONS FOR CEM

1. All swabs for CEM diagnostic purposes 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 must 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 replaced in the 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. **N.B.** Every individual swab must be clearly identified and labelled to show
 - a. The name of the stallion
 - b. The swabbing site (see 10 (i) –(iii) below)
 - 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, swabs must be obtained with the aid of sedation, using the appropriate pharmacological agents e.g. medetomidine, xylazine. (Avoid phenothiazines!)
10. For each stallion, individual swabs must be taken from the following sites:
 - (i) Urethra (Labelled A + name of stallion + date of collection)
 - (ii) Urethral fossa including the urethral sinus. (Particular care should be taken to insert the swab into the sinus.) (Labelled B + name of stallion + date of collection)
 - (iii) Penile sheath (*Lamina interna*) (Labelled C + name of stallion + date of collection)

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. The registered veterinarian must certify that samples have been taken in accordance with procedures laid down in this manual. 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 either be
 - 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 must 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 FROM THE 2012/2013 BREEDING SEASON

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** valid for the **2012/2013** breeding season, will be issued after the stallion shows no positive results on any of the swabs submitted on any occasion. **Swabs must be taken on or after 1 July 2012**. Positive results have to be reported to the responsible state veterinarian for follow-up and further investigation. The same procedure will be followed for subsequent breeding seasons.
3. A current list of stallions that comply with the requirements for a clearance certificate for CEM for the 2012/2013 breeding season will be posted on the website, www.cemsa.co.za. This list will be updated for each breeding season. Owners of mares should check that a prospective stallion's name appears on the list of stallions that comply with the requirements for a clearance certificate for CEM for the relevant breeding season before the mare is covered or inseminated.
4. Clearance certificates for CEM for the 2012/2013 breeding season will be available to stallion owners on the website www.cemsa.co.za using a username and password to gain access. The same procedure will be followed for subsequent breeding seasons.