	<p align="center">DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES DIRECTORATE: ANIMAL HEALTH</p>
	<p align="center">VETERINARY PROCEDURAL NOTICE: SURVEILLANCE FOR CONTAGIOUS EQUINE METRITIS IN SOUTH AFRICA</p>
<p>APPROVED BY:</p>	<p>Dr Mpho Maja, Director Animal Health</p>
<p>APPROVAL DATE:</p>	<p>2019-04-15</p>
<p>EFFECTIVE DATE:</p>	<p>2019-05-01</p>
<p>NO OF PAGES:</p>	<p>10</p>

1. Purpose, Scope and Introduction

1.1. Purpose of this Veterinary Procedural Notice (VPN)

1.1.1. The purpose of this Veterinary Procedural Notice (VPN) is to describe the procedures to be followed for Contagious Equine Metritis (CEM) surveillance.

1.2. Scope of this Veterinary Procedural Notice

1.2.1. This VPN is applicable to all stallions used for natural or assisted reproduction and standard operating procedures are described for all semen collected or used for assisted equine reproduction in South Africa.

1.2.2. The VPN describes an ongoing CEM surveillance programme to support and maintain a self-declaration of country freedom from CEM.

1.2.3. The national stallion CEM surveillance protocol is considered an essential ongoing tool used by DAFF and the equine industry to safeguard, maintain and substantiate the reproductive health status of the South African equine population. Other venereally transmitted diseases may be added to this protocol at a later stage.

1.3. Abbreviations used in this VPN

Abbreviation	Meaning
Act	Animal Diseases Act, 1984 (Act No 35 of 1984), and regulations as amended.
CEM	Contagious Equine Metritis
DAFF	Department of Agriculture, Forestry and Fisheries
DAH	National Director of Animal Health at DAFF
ERC	Equine Research Centre
OIE	World Organisation for Animal Health (Office International des Epizooties)
RSA/SA	Republic of South Africa
SV	State Veterinarian

1.4. Application of this VPN

- 1.4.1. The application of this VPN is mandated by the Animal Diseases Act, 1984 (Act no. 35 of 1984) and the Animal Diseases Regulations (R. 2026 of 1986) as amended, promulgated in terms thereof.
- 1.4.2. This VPN makes provision for surveillance for CEM in South Africa.
- 1.4.3. This VPN does not include any “outbreak contingency plan” or standard operating procedures for outbreak control. In case of an outbreak or suspected outbreak of CEM, consult the latest official version of the *Veterinary Procedural Notice for the Confirmation of Diagnosis and Treatment of Contagious Equine Metritis*.
- 1.4.4. This VPN applies to all role players who are involved with breeding horses or involved in relevant activities in the equine/equid industry in South Africa.
- 1.4.5. This VPN must be read, interpreted and applied as a whole.

1.5. Responsibility

- 1.5.1. It is the responsibility of every owner or manager of breeding horses, all veterinarians working with horses as well as other role-players involved in the equine industry in South Africa, to be aware of and to comply with the requirements of this VPN.
- 1.5.2. Any ambiguity, contradiction, omission, or problem in the text of this VPN; or any problem which may arise with the application of this VPN, must be reported to the responsible state veterinarian and Director of Provincial Veterinary Services immediately. This must be reported to the DAH as soon as possible.

1.6. Definitions and procedures

1.6.1. Definitions in the Act, Regulations and the OIE Terrestrial Animal Health Code, are also applicable to this VPN.

1.6.2. The meaning of certain words and phrases used in this VPN are defined below:

- a. **Assisted reproduction/breeding:** applies to breeding methods including semen collection and processing, artificial insemination (AI), embryo transfer (ET) and in vitro fertilization (IVF).
- b. **“Registering authority”** means a breed registering authority as defined in terms of the Animal Improvement Act 62 of 1998, or or international competition registering authority, or any other authority that registers and maintains a database of horses.
- c. **CEM Clearance Certificate** means the certificate issued by a laboratory specifically appointed by the DAH to issue such certificates for CEM negative horses screened using specific agent identification tests approved for this purpose by the DAH.
- d. **Equines:** means horses, mules and donkeys.
- e. **Equids:** means all members of the genus *Equus* and includes horses, donkeys, zebra, onagers and kiangs as well as their hybrids.
- f. **Horse** means and includes all domestic and feral equines of the species *Equus ferus ferus* (Prezwalski’s horse), *Equus ferus tarpan* (Tarpan) and *Equus ferus caballus* (Domestic Horse).
- g. **Quarantine** (regulation 13 of the Regulations): Quarantine is the isolation of susceptible animals in a quarantine camp/facility, which has been approved by the responsible state veterinarian, or an experienced official authorised by the responsible state veterinarian for a specified period to prevent exposure to, or spread of infection.
- h. **Susceptible animal** in relation to a controlled animal disease specified in column 1 of Table 2, means an animal of a kind specified in column 3 of the said Table opposite the controlled animal disease in question;
- i. **The Act** means the Animal Diseases Act, 1984 (Act 35 of 1984).

- j. **Veterinarian** means a qualified veterinarian according to the Veterinary and Para-Veterinary Professions Act 1982 (Act no 19 of 82) and registered with the South African Veterinary Council.

1.7 Exemptions/Deviations

- 1.7.1. Deviation or exemption from this VPN shall only be permitted with written approval from the DAH of DAFF. Application for written exemption from any part of this VPN may be made to the DAH via the responsible state veterinarian and Director of Provincial Veterinary Services or relevant registering authority.
- 1.7.2. An application that has not been delivered through the pathway described above will not be considered for an exemption.

2. Legal Basis

2.1. Animal Diseases Act 1984 (Act no 35 of 1984)

- 2.1.1. CEM is a controlled animal disease as defined in section 1 of the Animal Diseases Act, 1984 (Act no. 35 of 1984) in that control measures have been prescribed in terms of section 9 of the Act (Animal Diseases Regulations, No. R. 2026 of 26 September 1986, Table 2, as amended from time to time). Therefore, all statutory requirements applicable to controlled diseases are applicable to CEM.
- 2.1.2. 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). Section 11(1)(b)(ii) of the Animal Diseases Act, 1984 (Act No. 35 of 1984) 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.”* Section 11(2) of the Animal Diseases Act, 1984 (Act No. 35 of 1984) 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.”*

2.1.3. In terms of Table 2 of the Animal Diseases Regulations (R. 2026 of 1986) the following control measures for CEM are described:

Animal Disease	Susceptible Animals	Contact Animals	Infected Animals
Contagious equine metritis	Serving of infected mares or serving or artificial insemination by infected stallions shall be prevented.	Contact animals shall be isolated and tested under the supervision of or by an officer or authorised person	Infected animals shall be destroyed or dealt with as determined by the director

2.1.4. Section 11 (1) (a) of the Animal Diseases Act states that ‘ *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- (a) take, with due observance of the provisions of this Act, 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, or which are necessary for the eradication of animal diseases and parasites on the land or in respect of the animals*’ Therefore the testing of stallions for CEM will be at the expense of individual owners.

3. Surveillance in Stallions

3.1. In order to protect the South African equine breeding industry, the CEM testing requirements described below will apply to all stallions used for breeding, either by natural breeding or assisted reproduction.

3.2. Stallions used exclusively for natural breeding

3.2.1. From 17 September 2018, all stallions used exclusively for natural breeding must be tested for CEM and obtain a CEM Clearance Certificate once every five years. This means that all CEM Clearance Certificates for stallions used exclusively for natural breeding issued after 17 September 2018 are valid for five years from date of issue.

3.2.2. The validity of CEM Clearance Certificates issued for stallions used exclusively for natural breeding that were still valid on 17 September 2018, is extended to five years from the date of issue.

3.2.3. Stallions to be used for any reproductive activity for the first time must be tested and

be issued with a CEM Clearance Certificate prior to the commencement of reproductive activity and thereafter every five years, if the stallion is used exclusively for natural breeding.

- 3.2.4. It is recommended that sporting bodies only allow entire male horses older than 730 days that are used for any reproductive activity to compete in horse shows, competitions or events, if they have a valid CEM Clearance Certificate.
- 3.2.5. Stallions may not be used for natural breeding unless they have a valid CEM Clearance Certificate at the time of breeding.
- 3.2.6. Foals may not be registered with the relevant registering authorities if their sire had not been issued with a CEM Clearance Certificate valid at the time of breeding.
- 3.2.7. Formal written exemption granted by the DAH and full compliance with any testing and other requirements stipulated therein, is required for the registration of any foal if the sire did not have a valid CEM Clearance Certificate at the time of breeding.
- 3.2.8. Horses legally imported from countries not recognized by South Africa as free from CEM are tested for CEM during the importation process. Evidence of negative CEM tests performed in post importation quarantine in South Africa may be used to obtain a CEM Clearance Certificate which will be valid to register foals until the stallion is due to be tested again according to South African CEM surveillance requirements.
- 3.2.9. Horses legally imported from countries recognized by South Africa as free from CEM are not tested during the importation process. Foals from these stallions may be registered from the date of importation of the stallion until the stallion is due to be tested again according to South African CEM surveillance requirements. (Retesting is due after five years for stallions used exclusively for natural breeding, and after one year for stallions used for assisted reproduction or a mixture of natural breeding and assisted reproduction.)

3.3. Stallions used for assisted reproduction, including semen collection or a mixture of natural breeding and assisted reproduction;

- 3.3.1. From 17 September 2018, all stallions used for assisted reproduction must be tested for CEM and obtain a CEM Clearance Certificate each year. This means that all CEM Clearance Certificates issued for stallions used for assisted reproduction, including semen donation, are valid for a period of one year from date of issue.

- 3.3.2. Stallions to be used for any reproductive activity for the first time must be tested and be issued with a CEM Clearance Certificate prior to the commencement of reproductive activity and thereafter every year if the stallion is used for assisted reproduction.
- 3.3.3. It is recommended that sporting bodies only allow entire male horses older than 730 days that are used for any reproductive activity to compete in horse shows, competitions or events, if they have a valid CEM Clearance Certificate.
- 3.3.4. Semen must not be collected from any stallion that does not have a valid CEM Clearance Certificate.
- 3.3.5. Foals may not be registered with the relevant registering authorities if the semen donor had not been issued with a CEM Clearance Certificate valid at the time of semen collection.
- 3.3.6. Formal written exemption granted by the DAH and full compliance with any testing and other requirements stipulated therein, is required for the registration of any foal if the donor stallion did not have a valid CEM Clearance Certificate at the time of semen collection.
- 3.3.7. Horses legally imported from countries not recognized by South Africa as free from CEM are tested for CEM during the importation process. Evidence of negative CEM tests performed in post importation quarantine in South Africa may be used to obtain a CEM Clearance Certificate which will be valid to register foals until the stallion is due to be tested again according to South African CEM surveillance requirements.
- 3.3.8. Horses legally imported from countries recognized by South Africa as free from CEM are not tested during the importation process. Foals from these stallions may be registered from the date of importation of the stallion until the stallion is due to be tested again according to South African CEM surveillance requirements. (Retesting is due after five years for stallions used exclusively for natural breeding, and after one year for stallions used for assisted reproduction or a mixture of natural breeding and assisted reproduction.)

4. Surveillance in Semen

- 4.1. Semen must not be collected from any stallion that does not have a valid CEM Clearance Certificate.

- 4.2. Semen, irrespective of when or where it was collected, should never be used unless the donor stallion had been issued with a CEM Clearance Certificate valid at the time of semen collection and a copy thereof is available to the inseminator. Formal written exemption issued by the DAH and full compliance with testing and any other requirements stipulated therein is required for any semen for which a valid CEM Clearance Certificate issued for the donor stallion is not available.
- 4.3. If semen is imported, it may not be used unless there is proof that the semen was imported into South Africa legally and the semen complied with the import conditions for CEM. Proof of legal importation and compliance with import conditions for CEM, or a copy of a valid CEM Clearance Certificate must be available and verified by the inseminator prior to insemination.

5. Swabbing Procedure for the Surveillance of Stallions for CEM

- 5.1. All swabs for CEM diagnostics shall be taken and submitted by a veterinarian only. (Please note that in the case of any suspicion of CEM any further diagnostic procedures may be undertaken only by an authorized veterinarian under the supervision of the responsible state veterinarian or authorized para-veterinary professional.)
- 5.2. Only standard cotton-tipped dry swabs without transport medium may be used and submitted to a DAFF authorised laboratory for real-time CEM PCR testing.
- 5.3. Separate sterile gloves must be used for each stallion. The gloves must be worn to open the swab packaging and during the entire procedure.
- 5.4. All swabs must be taken in the prescribed manner as detailed in points 5.5. to 5.8. below.
- 5.5. The penis must be fully extended from within the prepuce (exteriorised) for the collection of all swabs. To achieve this, it is advised that the stallion is sedated using appropriate pharmacological agents e.g. medetomidine & butorphanol (Avoid phenothiazines!).
- 5.6. For each stallion, individual swabs must be taken from the following sites:
 - a. Urethra (Labelled A + name of stallion + date of collection)

- b. 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)
 - c. Penile sheath (*Jamina interna*) (Labelled C + name of stallion + date of collection)
- 5.7. 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.
- 5.8. The three swabs from each stallion should be placed in a separate clean plastic bag and sealed securely.

6. Procedure To Follow For All Fresh, Chilled Or Frozen Semen

- 6.1. Fresh, chilled or frozen semen to be used for artificial insemination may only be used if there is a CEM Clearance Certificate for the donor stallion, which was valid at time of semen collection. Formal written exemption issued by the DAH and full compliance with testing and any other requirements stipulated therein is required for the use of any semen if a valid CEM Clearance Certificate is not available for the donor stallion.
- 6.2. Semen collected from stallions prior to the introduction of CEM surveillance in 2011 (i.e. without a valid CEM certificate for the donor stallion) will require written exemption from the DAH.

7. CEM Sample Submission


- 7.1. CEM Sample Submission forms are available from the Equine Research Centre (erc@up.ac.za). The submission form may only be completed by a veterinarian. The 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.
- 7.2. All samples must couriered to the address specified on the submission form.
- 7.3. All enquiries about the sampling, submission procedure, payment and certification should be directed to: **Equine Research Centre, Tel: 0125298068 or erc@up.ac.za**

8. Procedure Required to Obtain a CEM Clearance Certificate

- 8.1. A full set of the correct samples taken by a veterinarian and submitted correctly according to the procedures described in this manual, must all test negative whereupon a CEM Clearance Certificate will be issued.
- 8.2. A CEM Clearance Certificate issued for a stallion used for natural breeding is valid for 5 years from the date of issue.
- 8.3. A CEM Clearance Certificate issued for a stallion that may be used for any assisted reproduction is valid for 1 year from the date of issue.

9. Procedures to be Followed in all Suspect Cases of CEM

- 9.1. Any owner, laboratory or veterinarian who is aware of a suspect or confirmed positive test result is obliged to report this immediately to the responsible state veterinarian or Director of Provincial Veterinary Services in terms of Section 11 of the Animal Diseases Act 1984 (Act no 35 of 84). The Provincial Veterinary Services must notify the Directorate Animal Health at DAFF of the suspect or confirmed CEM infected animals via an immediate notification (SR1 report) and also include the details in monthly animal disease reporting. SR1 reports and monthly reports must be sent to epidemiology@daff.gov.za. Queries may be addressed to the Sub-directorate: Epidemiology or Sub-directorate: Disease Control at DAFF.
- 9.2. Thereafter the prescriptions of the "*Veterinary Procedure Manual for The Confirmation of Diagnosis and Treatment of Contagious Equine Metritis*" shall be followed.

Signature	
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Designation	Director: Animal Health
Date	2019-04-15