

Contagious Equine Metritis Past, Present, and Future

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**United States Animal Health Association
Committee on Equine**

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What We Know

- When followed, current protocols and procedures are scientifically proven to prevent disease introduction.
- As evidenced by previous US incursions of disease, failure to follow protocols leads to the introduction and spread of disease.

CEM Incursions

- 1978: 2 TB stallions imported into Kentucky
- 1979: Trakehner stallion imported into Missouri
- 2006: Lipizzaner stallion imported into Wisconsin in 2004
- 2008: Multistate outbreak
- 2013: Lusitano stallion imported into California

Taylorella equigenitalis

- The ANATOMY and BIOLOGY is UNCHANGED
- Improvements in the CEM program have evolved as our understanding of the science and disease has grown.

Program History

- 1994 First Program Review
 - Imported Mares: Removed requirement for sinusectomy and replaced with swabbing and flushing the clitoral sinuses. Discontinued the required CF testing.
 - Imported Stallions: Discontinued treatment PRIOR to culture/breeding, added requirement of single post breeding CF test at Day 15 post breeding, amended test mare cultures to days 3,6, and 9.
- 2003 CEM Focus Group Formed
 - Assembled to review proposals and recommendations USDA had received from various individuals and/or organizations
 - Imported Mares: Add cervix/uterine to sampling protocol, re-established collecting serum for CF testing
 - Imported Stallions: Add distal urethra to sites to be sampled
 - Test mares: Three sets of swabs and CF sample collected 21 days post breeding

2007 CEM Review

- Areas of review
 - Pre-Import Testing
 - USDA Approved Import Quarantine Stations
 - State Approved CEM Facilities and Procedures - Minimum Standards
 - Regulations and Policies
 - Laboratory Testing
 - Training
 - VS Support and Oversight
 - Liability
 - Research/New Ideas
 - Communications

Recommendations - Completed or Partial Complete

- Continue post-entry testing in the United States for equids from known CEM affected countries
 - Possible Action: Establish Criteria for determining CEM affected country and re-evaluating countries currently listed.
- Develop a centralized database and collect data.
- Finalize and publish the recommended minimum standards. (Currently in VS Guidance Document)
- Update list of approved laboratories, require training at NVSL for laboratory personnel and institute proficiency tests for laboratory personnel.
- Develop and conduct regular training courses for state and federal oversight personnel.
- Establish a full time position as CEM coordinator and program manager at HQ. (Partial completion as it is not a full time dedicated position).
- Increase communication on protocols and processes. (Monthly CEM coordinators calls)

Recommendations – Requiring Attention

- Conduct further research on the risk of importing equine semen from CEM affected countries.
- Further investigate whether minimum standards for state facilities, laboratories, accredited veterinarians, etc. should include a minimum level of activity to maintain approval status.
- Review, update, consolidate and re-issue all pertinent regulations and policies.
- Complete evaluation and validation of PCR procedures.
- Develop formal training and special designation for accredited veterinarians
- Designate regional positions as technical experts to oversee CEM activities in the state.
- Specifically include CEM evaluations in the regular VS station reviews.

Current Federal Authority - Stallion Testing

9 CFR 93.301 (e)

- Stallion:
 - 4 swabs then after negative result - test breed 2 mares
 - NOTE: **No requirement for observation/monitoring of test breeding by state or federal official**
 - Treat for 5 days - treatment performed by accredited veterinarian and monitored by state or federal official.
 - Each test mare shall be cultured - 3 sets of specimens between 3rd and 14th day with negative results. 3 sets within a 12 day period with no less than 72 hours between each set. CF test must be done with negative results between day 21 and 28 post breeding.
 - Stallion released - all cultures and tests of specimens from mare are negative and stallion culture is negative

Current Federal Authority- Imported Mare Testing

9 CFR 93.301 (e)

- Compliment fixation test in the approved state
- 3 specimens collected on 3 separate occasions within a 12 day period with no less than 72 hours between each set
 - Accredited veterinarian to collect samples
 - Submit samples to NVSL or approved laboratory
- After 3 sets collected, accredited veterinarian shall manually remove debris and flush sinuses with ceruminolytic agent
 - 5 consecutive days wash external genitalia with solution of not less than 2 percent chlorhexidine in a detergent base
 - Coat with antibiotic ointment.
- Quarantine release: all cultures negative
 - Note: **No requirement for negative CF test**

Considerations for Future Advances in the CEM Import Quarantine Program

- Strengthen USDA oversight and monitoring
 - Request USDA conduct CEM approved state reviews
 - Purpose of reviews to assess:
 - States infrastructure and ability to oversee CEM quarantine
 - Assess protocols and procedures employed by the state
 - Assess the training needs for state facilities, accredited veterinarians, and coordinators
 - Identify weaknesses in national CEM import quarantine program.

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Questions?

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