RESOLUTION NUMBER: 13 - APPROVED

SOURCE: COMMITTEE ON INFECTIOUS DISEASES OF HORSES

SUBJECT MATTER: CONTAGIOUS EQUINE METRITIS - POLYMERASE CHAIN REACTION TESTING

BACKGROUND INFORMATION:

Contagious Equine Metritis (CEM) is classified as a foreign animal disease. Since 2009, there have been several costly CEM incidents in the United States. The 2013 California incident reaffirmed the interest in and need for a rapid, validated, and economical diagnostic test for detection of the *Taylorella equigenitalis* (*T. equigenitalis*) organism in swab specimens from stallions and mares as well as in semen and vaginal exudates from mares. Current CEM investigation protocols require bacteriologic culture, isolation, and identification of the organism for diagnostic confirmation of the disease organism. This can be a slow process that on occasion is complicated by bacterial overgrowth on culture plates and also by the fastidious growth characteristics of the organism.

Although *T. equigenitalis* colonies are typically visible 72 hours after plating of a positive sample, in some cases it may take up to a week for colonies to appear. A rapid, robust confirmatory test, such as the PCR test, that does not have as stringent sample transport requirements as when submitting swabs for culture, would be highly beneficial to state animal health officials and diagnosticians. A validated PCR test would be a more economical, quicker means of screening stallions for the carrier state than conventional culture and test breeding. The PCR assay for *T. equigenitalis* requires additional research to ensure that it is fully validated for the determination of the status of stallions, mares and geldings based on screening swabs and perhaps other clinical specimens (i.e., vaginal exudate or semen) in the course of a CEM investigation.

RESOLUTION:

The United States Animal Health Association urges the United States Department of Agriculture, Animal and Plant Health Inspection Services, Veterinary Services to prioritize research that is required to validate and subsequently secure World Organization for Animal Health (OIE) approval of a polymerase chain reaction assay for the detection of *Taylorella equigenitalis*. 
INTERIM RESPONSE:

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (VS) recognizes the concerns of the U.S. Animal Health Association and appreciates the opportunity to respond. VS understands the need and value of a specific and rapid method to detect *Taylorella equigenitalis* in equine specimens. The National Veterinary Services Laboratories (NVSL) has initiated a project to optimize a polymerase chain reaction (PCR) assay and evaluate its use to detect *Taylorella spp.* in swabs and semen. Initial testing will focus on archived samples from recent U.S. outbreaks and import horses, as well as negative samples from routine diagnostic testing. The ongoing work includes evaluation of DNA extraction methods, followed by PCR development and comparison to currently available PCRs. The NVSL will continue discussions and collaborations on this topic with other national and international experts, including the newly formed contagious equine metritis subcommittee.