

Trich Testing Regulations

Expert panel defines the need to harmonize trichomoniasis regulation and testing procedures.

Life Technologies Corp. assembled a cross-section of industry stakeholder experts to discuss with state veterinarians the need for consensus on standardization of regulations and diagnostic laboratory testing methodology for trichomoniasis (trich) at the 2013 U.S. Animal Health Association (USAHA) Annual Meeting in San Diego.

Trichomoniasis is a sexually transmitted disease in cattle that has significant economic consequences resulting from infertility and embryonic loss in cows and heifers. Bulls carry this disease but show no outward signs of infection. There's no treatment for infected bulls, so diagnostic testing of bulls before exposure to females plays a crucial role in managing trich.

To control trich within and across state lines, states have regulations to help producers and veterinarians comply with health requirements. Unfortunately, there's wide variation in defined regulations and testing procedures among states, which causes confusion, additional handling of animals, and varying diagnostic test results, says Jeff Baxter, senior product manager, Life Technologies.

"Finding common ground on the harmonization of trich regulations and testing procedures would help beef producers economically by eliminating repeated or unnecessary testing and reducing the danger

to animals and handlers," said Baxter. "The primary goal of our conversations with state veterinarians is to build confidence with all stakeholders that the best diagnostic testing technology is being used to accurately identify trich-positive bulls. Defining the need for regulation harmonization and testing is the first point of clarity in this conversation accomplished in hosting this event.

The next step is to find common ground with those states open to building consensus on points of agreement. Working closely with state veterinarians, cattlemen's associations, and their respective state diagnostic labs can help us arrive at solutions based on sound science that economically benefit beef producers."

Kathy Simmons, chief veterinarian of the National Cattlemen's Beef Association (NCBA), said the association's membership has directed leadership to help facilitate the harmonization of trich regulations between states. She said NCBA recently compiled information on the various state trich regulations and determined 50% (25 states) have regulations.

Simmons said these varying and ever-changing rules between states make compliance difficult for veterinarians and producers, who often plan cattle testing and movement in advance.

"Harmonized state trich regulations for the interstate movement of cattle would facilitate cattle movement at the speed of commerce," Simmons said. According to Baxter, individual state trich regulations often define which testing procedures are accepted. Most states accept culture or polymerase chain reaction (PCR) test results. Typically testing is done either by collecting up to three cultures during a three-week period or by providing a single culture for real-time PCR testing.

"Certainly, conducting one real-time PCR test as opposed to collecting three cultures is easier, less invasive and less dangerous for the animal and handler," added Baxter. All 25 states with trich regulations have validated the use of PCR as an officially accepted diagnostic test. Because of better technology improvements in the overall laboratory workflow, some states have taken the next step in defining PCR as the only official test allowed for compliance.

New Kansas trich regulations require PCR testing

Bill Brown, Kansas animal health commissioner, spoke about the state's recent enactment of new, more comprehensive trich regulations for the intrastate change of ownership and interstate movement and diagnostic testing of cattle. Brown appointed

a trich working group composed of four veterinarians and four beef producers to spearhead the evaluation in improving the management of trich in the state of Kansas. The group, charged with developing science-based regulations, has gathered information and opinions from more than 2,200 livestock producers and industry professionals attending 30 meetings throughout the state.

Some of the most notable changes require veterinarians to be certified to test for trich, require 14 days of sexual rest for bulls, require all positive bulls to be slaughtered, and recognize real-time PCR as the only official diagnostic test accepted in the state.

“There was a lot of talk about cultures vs. PCR testing,” said Brown. “Our working group wondered why producers and veterinarians were getting bulls in once a week for three weeks, when one PCR test will take care of it.”

For more information about the new Kansas trich regulations, please visit the Kansas Department of Agriculture website at <http://agriculture.ks.gov/>.

From a hands-on perspective, practicing veterinarian Jeremy VanBoening, of Republican Valley Animal Center in Alma, Neb., shared his insight being from the front lines of dealing with trich. Beginning in 2008, trich cases in Nebraska noticeably

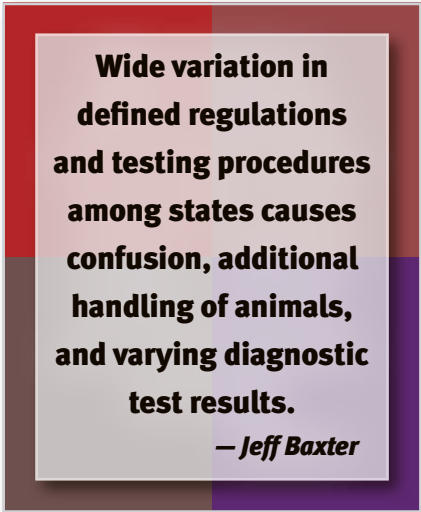
increased for about two years, prompting the Nebraska Cattlemen’s to discuss how best to protect its members’ herds. The result was the implementation of state regulations for trich.

VanBoening has discovered great variability in recommended sample-handling protocols among state diagnostic laboratories. Labs varied on whether or not samples needed to be incubated, whether they should be put on ice, how the samples are shipped and the labs’ preferred collection media. VanBoening says standardizing lab recommendations for sample collection and handling would greatly improve the quality of samples submitted for testing.

“States also need to come to agreement on adopting only the best diagnostic testing technology available, which I believe is quantitative PCR using chemical lysis and

internal controls,” said VanBoening. “We need our diagnostic labs to use these workflow procedures to ensure we’re getting back the very best [test] results possible, and, most importantly, we need to keep increasing veterinarian and producer awareness about the economic impact of trich with the goal of keeping everyone vigilant in managing this disease.”

Concluded Baxter, “It’s clear from these conversations there is a movement to find common ground for developing consistent trich regulations, sample handling and testing procedures across states with the goal of building confidence in the testing process among veterinarians and producers.”



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Editor’s Note: This article is adapted from a news release by Life Technologies Animal Health.