

Policy Pennings by Dr. Daryll E. Ray

BSE Testing Update

In early August, 2004, Animal and Plant Health Inspection Service (APHIS) Chief Veterinarian, John Clifford, announced a new protocol for announcing inconclusive test results for the Bovine Spongiform Encephalopathy (BSE or Mad Cow Disease as it is commonly called) rapid testing procedure. Under the protocol that had been in effect since the enhanced BSE surveillance program began on June 1, 2004, if an animal tested positive on the rapid test, it was immediately reported as an inconclusive and confirmatory tests using the immunohistochemistry (IHC) test were performed to determine whether or not the animal had the disease. The IHC test is the "gold standard" test for BSE and is conducted at the National Veterinary Services Laboratories in Ames, Iowa.

Since the beginning of the enhanced surveillance program two animals initially tested positive using the rapid test. In both cases, the IHC confirmatory test showed that the animal did not have the disease. Such events are called false positives and are to be expected given the strict tolerances that are built into the testing procedure.

The change in procedure that Clifford announced will reduce the number of false positives that are reported by rerunning the rapid test a second and third time. If either of the additional tests also give a positive result, then the animal will be reported as inconclusive and the IHC will be run on that animal. The animal will be publicly reported as positive only if the confirmatory IHC test indicates that the animal has BSE. It is interesting to note that with the two earlier animals reported as inconclusive the second and third rapid tests were conducted and the results were negative.

The newly announced testing protocol is the procedure that is recommended by the developer and manu-

facturer of the BSE rapid test. As the USDA was ramping up the enhanced procedure, they decided to operate out of an abundance of caution and report an inconclusive test result on the first rapid test, even if the second and third rapid tests were negative as was the case with the first two announcements. With more than 30,000 testing procedures under their belt by early August, APHIS officials felt comfortable enough with the testing procedures to adopt the manufacturer's protocol.

The goal of the BSE surveillance effort is to be able, with a 99% confidence level, to detect BSE in the U.S. cattle population even if there were only five positive animals.

At this point in the surveillance effort, USDA is confining their efforts to high risk cattle. At a later date they will expand the procedure to test 20,000 clinically clean animals in addition to 248,000 high risk animals. In an effort to identify high risk animals USDA has posted a toll free telephone number, 1-866-536-7593, for people to call and make a report. People who are interested in tracking the surveillance program can monitor the results on the internet. The web address is http://www.aphis.usda.gov/lpa/issues/bse_testing/test_results.html.

Daryll E. Ray holds the Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee, and is the Director of the UT's Agricultural Policy Analysis Center. (865) 974-7407; Fax: (865) 974-7298; dray@utk.edu; <http://agpolicy.org>. Daryll Ray's column is written with the research and assistance of Harwood D. Schaffer, Research Associate with APAC.

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