

UNITED STATES ANIMAL HEALTH ASSOCIATION – 2006

RESOLUTION NUMBER: 12 APPROVED

SOURCE: COMMITTEE ON JOHNE'S DISEASE

SUBJECT MATTER: QUANTITATIVE BULK TANK MILK TESTS FOR
DETECTING JOHNE'S DISEASE

DATES: MINNEAPOLIS, MINNESOTA – OCTOBER 12-18, 2006

BACKGROUND INFORMATION:

The routine availability of quantitative bulk tank test levels of *Mycobacterium avium paratuberculosis* (MAP) would enable producers to know and understand how their level of MAP compared on a national basis and would encourage individual progress to reduce levels of MAP in their herd. Such quantitative results would also reduce the cost of routine testing, help in identifying Johne's positive herds and encourage greater producer participation in the National Johne's Control Program, particularly if buyers or marketers of milk could provide free or subsidized testing in return for producer participation in the national program.

RESOLUTION:

The United States Animal Health Association (USAHA) recommends that the United States Department of Agriculture (USDA), Agricultural Research Services (ARS) and the research community have a greater focus on development of quantitative based tests for detecting *Mycobacterium avium paratuberculosis* (MAP) in bulk tank milk.

RESPONSE:

United States Department of Agriculture (USDA), Agricultural Research Services (ARS)

ARS proactively initiated the development of a quantitative-based test for detecting MAP in bulk tank milk in 2006; this is a quantitative real-time PCR test for Johne's disease in milk and other tissues that uses the unique target sequences, ISMapO2, identified by ARS through the Johne's genome sequence project. ARS has developed a test format that includes a probe enabling the quantitation of the amount of MAP DNA present in a test sample. ARS is collaborating with Dr. Sandra Godden at University of Minnesota in using this test on colostrums samples obtained from noninfected and infected dairy herds, and to date has evaluated this experimental test on over 350 samples. When completed, the results will be submitted to the University of Minnesota, which will then conduct validation studies by comparing the results to fecal shedding of

the bacterium. ARS plans further research on this approach to enabling the quantitation of MAP in bulk tank milk .