

UNITED STATES ANIMAL HEALTH ASSOCIATION – 2007

RESOLUTION NUMBER: 70 APPROVED

SOURCE: COMMITTEE ON SHEEP AND GOATS

SUBJECT MATTER: BULK MILK TEST TO DETECT *BRUCELLA*
MELITENSIS IN GOAT FLOCKS

DATE: RENO, NEVADA, OCTOBER 18 – 24, 2007

BACKGROUND INFORMATION:

Brucella melitensis infection in goats causes severe systemic disease in humans, who are often infected by consumption of raw goat milk products. It is responsible for more clinical cases of brucellosis and more human suffering worldwide than all other *brucellae*. A bulk milk test for goat brucellosis is needed in the diagnostic battery of brucellosis tests in small ruminants. The Pasteurized Milk Ordinance (PMO) requires annual testing of dairy goat flocks, however, no flock level test is available for screening; and goats have to be tested individually by serology. This is time consuming, costly, and stressful for the animals.

National Veterinary Services Laboratory (NVSL) and other research partners developed an indirect enzyme linked immunosorbent assay (ELISA) (using *Brucella melitensis* strain 16M antigen) to detect brucella antibodies in goat milk. Initial research on this test using individual milk samples from experimentally-infected goats and laboratory simulated mock-bulk milk suggest this test may be a good bulk milk test for goats, especially in herds segmented in groups of 50 animals or less (N.D. Funk, L.B. Tabatai, P.H. Elzer, S.D. Hagius, B.M. Martin, and L.J. Hoffman. Indirect Enzyme-Linked Immunosorbent Assay for Detection of *Brucella melitensis*-Specific Antibodies in Goat Milk. J Clin Micro 2005; 43(2):721-5.).

RESOLUTION:

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) support and facilitate the development and validation of the *Brucella melitensis* indirect enzyme linked immunosorbent assay (ELISA) for screening bulk tank goat milk so that it may be considered for use as an official test to fulfill the requirements of the Pasteurized Milk Ordinance (PMO).

RESPONSE:

USDA, APHIS, Veterinary Services

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Veterinary Services recognizes the United States Animal Health Association's concerns and appreciates the opportunity to respond. The NVSL can facilitate the development and validation of the *Brucella melitensis* indirect ELISA through the production and standardization of a *B. melitensis* ELISA antigen. The NVSL could possibly offer additional support with sample testing utilizing the ELISA.