BACKGROUND INFORMATION:

Brucella ovis (B. ovis) has continued to be a source of infertility and thereby of economic significance to the United States sheep industry. Currently available diagnostic methods have not been adequate to accurately determine the disease status of rams. Questions regarding cross-reactivity with other organisms, residual colostral antibody interference, and disparate results between laboratories complicate interpretation of the true disease status.

Additionally questions remain about the role of the ewe in the perpetuation of the disease within a flock. Many times flocks have been found to be infected following years of negative ram tests and with no ewe additions. The role of the female in B. ovis transmission has not been thoroughly studied.

Resolution:

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Animal Disease Research Unit (ADRU) and Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS), National Veterinary Services Laboratory (NVSL) work together to develop better diagnostic tests. Also USAHA requests USDA-ARS and other institutions to do research on the pathogenesis and transmissibility of Brucella ovis in both rams and ewes.

INTERIM RESPONSE:

The Animal and Plant Health Inspection Service, National Veterinary Services Laboratories (NVSL) supports collaborating with Agricultural Research Service (ARS) along with universities and institutions regarding research on improved diagnostic tests for ovine brucellosis. The NVSL continues discussions with the ARS Animal Disease Research Unit (ADRU) in Pullman, Washington, to develop a more specific and repeatable serological test using the competitive enzyme-linked immunosorbent assay format. NVSL can provide Brucella ovis cells/antigen and antisera to the ADRU for assay development and testing support. The NVSL recommends the Consortium for the Advancement of Brucellosis Science (CABS) be contacted regarding the sheep industry’s need for research in B. ovis to request that CABS include the sheep industry’s research needs as part of its mission.