

UNITED STATES ANIMAL HEALTH ASSOCIATION - 2006

RESOLUTION: 16 APPROVED

SOURCE: COMMITTEE ON INFECTIOUS DISEASES OF CATTLE, BISON AND CAMELIDS

SUBJECT MATTER: VACCINE DEVELOPMENT FOR MALIGNANT CATARRHAL FEVER IN BISON

DATES: MINNEAPOLIS, MINNESOTA, OCTOBER 12-18 2006

BACKGROUND INFORMATION:

Malignant catarrhal fever (MCF) continues to be a problem in bison. A previous resolution five years ago asked for eventual control of the disease which has not yet been accomplished. While education is improving, it will take more than education to halt the spread of MCF. A vaccine is needed.

RESOLUTION:

The United States Animal Health Association (USAHA) urges and requests the United States Department of Agriculture (USDA), Agricultural Research Service (ARS) to continue financial support for developing a malignant catarrhal fever (MCF) vaccine for bison.

RESPONSE:

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

For the past 15 years, ARS scientists at Pullman, Washington, have collaborated with faculty at Washington State University and the University of Wyoming on MCF research and have made significant progress in learning more about MCF and identifying potential approaches to its control. Despite the lack of an *in vitro* propagation system for the virus, ARS scientists have successfully characterized viral shedding patterns in domestic sheep, established infectious virus pools from sheep nasal secretions, and sequenced and annotated the ovine herpesvirus 2 (OvHV-2) genome. Using infectious OvHV-2 from sheep nasal secretions as inoculum, ARS scientists have developed an experimental animal model (bison) that can be reliably used to induce infection and clinical MCF. Development of a vaccine against OvHV-2-induced MCF in bison is an ARS research priority, and ARS will continue the MCF research project in the next cycle of the Animal Health National Program as resources permit.