

## **Elk Industry Perspective on Chronic Wasting Disease**

- 1) **North American Elk Breeder's Association has taken a leading role in developing and implementing an effective CWD eradication program.**
  - a) The program includes a certification of the herd 's CWD negative status.
  - b) To allay consumer concerns we recommend a federal ban on the sale of products from infected elk, a measure the elk industry has already implemented voluntarily.
  - c) Like brucellosis and tuberculosis, we are confident that CWD will likewise be eradicated.
  
- 2) **Scientific evidence at this time indicates that CWD is not a threat to humans or cattle.**
  - a) **There is evidence of a species barrier.** Raymond and Caughey, in a study conducted at the Rocky Mountain Laboratories, an NIH Center, reported "evidence of a molecular barrier limiting susceptibility of humans, cattle and sheep to chronic wasting disease." (EMBO Journal, vol. 19, no. 17, pp. 4425-4430).
  - b) **Oral transmissibility studies are negative.** Dr. Beth Williams of the Wyoming State Veterinary Laboratory provided an interim report of a study where 12 cattle were orally fed CWD. All 12 cattle are CWD free after three years.
  - c) **There is no evidence of cross species transmission.** Dr. Gould of Colorado State University, conducted a geographically-targeted survey of adult cattle in 1998 studied 22 ranches where cattle co-mingled with free-roaming deer in the endemic area. 262 cattle brains analyzed; none had any indications of chronic wasting disease. In addition, tissue from each

animal was subjected to immunohistochemical staining in order to detect the presence of the prion protein. Evidence was not present.

**d) Analyzed antler did not demonstrate infective prion.**

Dr. Richard Rubenstein at the Institute for Basic Research in Developmental Disabilities in New York City performed an immunoblotting technique on eleven elk antlers. Antlers were selected from a pool of CWD positive and negative elk. None of the 11 samples processed had any detectable PrPsc. The limits of the detectability is approximately three logs of infectivity.

**3) In real-life experience, CWD has not crossed species.**

- a) Free ranging elk and deer have been documented in the endemic areas of Colorado and Wyoming since 1981 with no evidence of cross species transmission.
- b) Hunters have been exposed to and have consumed animals from CWD endemic areas for at least 20 years with no variant CJD occurring.

**4) NAEBA is proactive in CWD eradication:**

- a) Develop proposed regulations.
- b) Provided financial support of ongoing scientific research.
- c) Supported the search for better diagnostic tools.
- d) Developed quality processing and manufacturing standards of elk products.
- e) Voluntarily eradicated herds. When CWD was first discovered in 1997 at a farmed facility in South Dakota, the elk breeders of that state unanimously voted to support emergency legislation to address CWD aggressively. Ranchers of infected herds in South Dakota, out of respect of consumers' concerns, did not sell antler from CWD present herds and instead, voluntarily eradicating their herds.

5) **NAEBA's model helped shape the USDA and CFIA eradication programs.**

- a) Our model program developed in 1998 was taken to United States Animal Health Association for recommendation to the states.
- b) As of this date states have programs that cover 80% of the farmed elk in the U.S.  
(See Attachment A: CWD Surveillance Programs and CWD Import Requirements.)

6) **The main components of the CWD eradication program are:**

- a) **Verified inventory:** The elk industry is already one of the most regulated farmed animal industries in the U.S. This means we already have excellent inventory records on herds and animals.
- b) **Required examination of the brains** of all animals over 16 months, regardless of their cause of death.
- c) **Certification of herds CWD negative status:** As of today, all of the herds in Colorado and North and South Dakota are at 30 months certified negative status. Herds from an additional 15 states are at varying levels of certified status. These programs are approaching or exceeding generally accepted CWD incubation period.
- d) **Federal ban of sales of elk products out of infected herds.**
  - i) Some states ban sales of elk products from CWD infected herd.
  - ii) Elk breeders have voluntarily imposed a ban on velvet sales from infected herds. Meat has not been sold without confirmation that the animal is CWD negative.

**7) Industry supports ongoing research and dialogue on research.** The Elk Research Council is cooperating in the funding of research in developing a live-animal test and maintained a research herd for three years. This program is supporting:

- a) The ante-mortem third eyelid test being developed by Dr. Katherine O'Rourke, ARS, Pullman, Washington.
- b) Research into the possible genetic resistance of LL strain elk. Industry supports ARS, USDA/APHIS, NVSL and the South Dakota Board of Animal Industry in a challenge study on LL elk being conducted at NADL, Ames, Iowa.
- c) Work on PrP genotypes of captive and free-ranging Rocky Mountain elk.  
(Journal of General Virology, 1999, 80, 2765-2679.)
- d) The environmental contamination study on a previously infected premise in South Dakota.

**8) NAEBA supports indemnity to accelerate eradication.**

- a) Indemnity of a fair market value will provide incentive for participation in the program.
- b) Indemnity will also increase market value for certified CWD free elk products. Market value is a critical incentive for breeders to comply with the program.
- c) Value for breeding stock also gives meaning to federal requirements for monitoring interstate movement of elk.
- d) Indemnity will also enable more states to implement mandatory participation and immediate depopulation of any positive herds.

**9) Elk Industry is highly regulated and beneficial industry**

- a) Industry has registry system with pedigree information, animal identification and DNA verification. It tracks movement through transfers of registration.

- b) Many states have controlled, licensing, inventory and intra and interstate movement requirements.
  - c) Elk and deer ranches provide a viable option for the family farm, which has been affected by reduced income from grain crops, cattle, hogs and chickens.
    - i) The value of livestock, facilities and fencing is estimated at \$1 billions.
    - ii) Gross sales of elk farming and velvet antler is estimated at \$150 million annually.
- 10) Elk Industry has a track record of success in working with the federal and state government in eradicating other diseases.**
- a) A model program to eradicate brucellosis and tuberculosis was developed and adopted by several states.
  - b) Federal uniform methods and rules were then adopted, which included indemnity currently at fair market value.
  - c) Program resulted in an increased market value for TB-free animals, which increased participation into the program.
  - d) Most positive herds were identified and eliminated in the first few years.
  - e) Program resulted in the eradication of TB in record time (nine years after outbreak and six years after federal program.)
  - f) Today, there are no farmed cervids with brucellosis or tuberculosis.
- 11) The CWD eradication program is similar to the TB program.**
- a) The industry has taken a proactive approach to CWD eradication.

- b) NAEBA supports the USDA APHIS VS in the implementation of the CWD as a program disease with the goal of eradication.
- c) The CWD program determines the level of the herds' certified CWD negative status.
- d) The industry supports depopulation of infected herds with indemnity as the way to keep products out of the food chain.
- e) We're confident that the implementation of this eradication program will be successful and will ensure consumer safety, the welfare of these animals and the quality of elk products.

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Attachments: NAEBA Position Statement on Chronic Wasting Disease

## **Attachment A: CWD Surveillance Programs and CWD Import Requirements**

Import restrictions intended to prevent introduction of the disease into the state.

Colorado	Mandatory
Connecticut	Import requirements
Iowa	Voluntary and import requirements
Idaho	Mandatory
Indiana	Mandatory and import requirements
Maine	Import requirements
Minnesota	Voluntary
Montana	Mandatory and import requirements
Nebraska	Mandatory reporting of deaths/voluntary CWD monitoring/import requirements
North Dakota	Mandatory (12 months and older) and import requirements (since 2/5/98)
Oklahoma	Voluntary
Oregon	Mandatory
South Dakota	Mandatory (since 2/15/98) and import requirements
Texas	Import requirements
Utah	Mandatory and import requirements
Vermont	Voluntary and import requirements