

Draft Issue Summaries

Background Document

Chronic wasting disease (CWD) is a transmissible spongiform encephalopathy (TSE) of both captive and free-ranging deer and elk. The disease is typically characterized in affected animals by behavior changes, emaciation, excessive salivation, ulcers, pneumonia and weakness. The potential for transmission of this TSE to humans or domestic animals is currently unknown but there have been no documented cases of transmission to date. Nevertheless, the devastating consequences of bovine spongiform encephalopathy (BSE) and transmission of variant Creutzfeldt-Jakob disease (vCJD) in Europe have prompted U.S. regulatory agencies to seriously consider the potential transmission of TSE's in this country.

Although no cases of TSE disease have associated with consumption of elk or deer, the existence of CWD in elk and deer together with certain industry practices make this possibility worthy of consideration. Elk and deer are increasingly being raised in captivity as commercial ventures for several purposes. Velvet antler (uncalcified antler tissue) is a primary source of income from captive elk and deer and is harvested for use in dietary supplements and folk medicines. Elk and deer are also slaughtered for their meat, which is sold directly to consumers or to restaurants specializing in game and exotic meats. Hence, meats, meat by-products or nutritional products made from elk or deer could serve as a source for infected materials if consumed.

The United States Department of Agriculture (USDA) regulates most meats and meat products produced in the United States under the authority of the Federal Meat Inspection Act. This law is very specific as to the types of meat products that are to be regulated by USDA and includes cattle, sheep, swine, goats, horses, mules, and reindeer. In contrast, all other animals not listed in the Federal Meat Inspection Act, such as game animals, are regulated by FDA under the authority of the Federal Food, Drug, and Cosmetic Act. Under this law, FDA is charged with assuring that all foods for which it has regulatory responsibility are safe and wholesome to consume. FDA uses existing scientific data, expert opinion, and risk assessment in developing science-based food safety policies. Because CWD could constitute a potential food or cosmetic safety hazard, FDA seeks the input of the TSE Advisory Committee in determining the risk, if any.

CWD Background References

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- *Transmissible Spongiform Encephalopathies in the United States* Published by the Council for Agricultural Science and Technology, 4420 West Lincoln Way, Ames, IA 50014-3447, USA. Document available via internet at:
 - <http://www.cast-science.org/pdf/tse.pdf>
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