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## Study Shows Chronic Wasting Disease May Spread Through Saliva, Blood

A new study out of Colorado State University shows for the first time that chronic wasting disease (CWD) may spread through saliva and blood of infected deer. The study suggests that CWD may spread by blood-sucking insects, social contact, such as grooming among deer in nature, and environmental contact. The study also reinforces that no tissue from an infected animal can be considered free of prions, the disease-causing agent.

"Although no instance of CWD transmission to humans has been detected, these results prompt caution regarding exposure to body fluids in prion infections such as CWD," said lead researcher Edward A. Hoover, a Colorado State University Distinguished Professor in the Department of Microbiology, Immunology and Pathology.

The research tested the blood, saliva, feces and urine of deer infected with CWD to determine ways the disease may be transmitted from animal to animal, which has remained a mystery to scientists. Researchers biopsied tonsils to detect infectious CWD prions, showing that CWD infection could be detected as early as three months after exposure to saliva or blood from an infected deer.

"Interactions among deer and elk, especially in high density situations, intensifies cross-contact among animals. This contact includes salivary exchange, which provides potential for CWD transmission," Hoover said. "Such things as grooming, licking and nuzzling are important in the social interactions of deer."

The researchers recommend that all elk and deer be tested for CWD before being consumed. Recent research at the University of Wyoming led by Dr. Jean Jewell found CWD in the heart muscle of some infected animals, not just the brain and spinal column. Colorado state wildlife agencies have also recommended that hunters wear gloves when dressing animals as a precaution. However, the Alberta government does not feel the health risk to hunters is significant enough to warrant such precautions.

CWD now has been detected in deer in 14 states and two Canadian provinces, including Alberta. CWD is contagious to a higher degree among deer, elk and moose than other transmissible spongiform encephalopathies. To date, there have been 13 confirmed cases of CWD in wild deer in Alberta. The government is continuing its program to kill deer along the Alberta-Saskatchewan border in an attempt to reduce the numbers of infected deer. The Expert Scientific Panel on CWD concluded that CWD in wild deer is "spillover from infected game farms," and "there are no known barriers to stop it."

North America's remarkable system of wildlife conservation had, until the mid 1980s, prohibited commercial domestication of vulnerable wildlife. That policy not only rescued our wildlife from the brink of extinction, it precluded the emergence and spread of significant disease problems. Over the explicit protests of scientists, governments reversed that policy to allow and encourage game farming. As predicted, a massive TB epidemic emerged in less than five years, the CWD epidemic in less than ten years.

The Alliance for Public Wildlife and AWA are asking Tory leadership candidates if they will commit to (1) an immediate moratorium on all game farming activities pending a full public inquiry into every aspect of this vital issue; and (2) a complete dismantling of the industry, with fair compensation, as determined by the public inquiry, paid to game farmers.





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*The Colorado study results can be found in the Oct. 6, 2006 issue of Science.*

