

ASSEMBLY OF ASSEMBLÉE DES FIRST NATIONS PREMIÈRES NATIONS

Chronic Wasting Disease

The Assembly of First Nations' Environment Sector Webinar Series

Friday, March 28, 2024, 1-3 pm ET



What is Chronic Wasting Disease?

Chronic wasting disease (CWD) is an always-fatal degenerative disease of the central nervous system (the brain and the spinal cord) that affects and spreads in wild and farmed cervids — members of the deer family, such as deer, moose, elk and reindeer or caribou. There are currently no adequate live-animal tests, effective treatments or vaccines.

While there has been no known transmission of CWD to humans, scientific uncertainty remains for zoonotic (animal to human) transmission.



Prion Disease

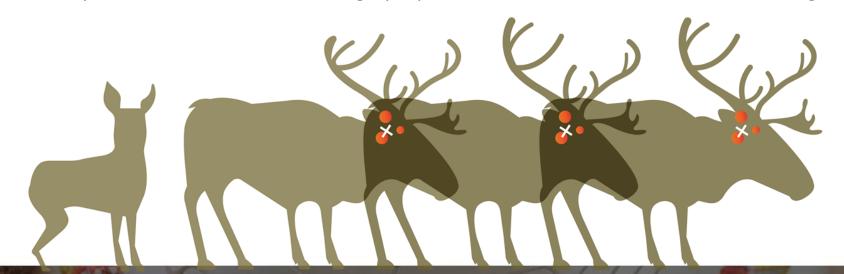
- CWD is a transmissible spongiform encephalopathy (TSE)
- These diseases are caused by misfolded prion proteins.
- Prion proteins (PrP or PrP^c) are naturally occurring proteins, that have a role in the mammalian Central Nervous System.
- When prion proteins misfold, they become prions (PrP^{CWD} in CWD) which resist being broken down by the body.
- When these prions are introduced into a healthy cervid, they multiply and begin damaging the animal's nervous system and resulting in the animal's death in 100% of cases.





Symptoms

- Physical manifestations of CWD usually appear during the disease's terminal stage, 16 to 36 months after the animal has contracted the disease.
- Signs of CWD can range from abnormal behavior to deterioration of physical condition.
- Animals are usually 3 to 4 years old before clinical signs appear.
- It is unlikely to see animals exhibiting symptoms of CWD until the terminal stage.



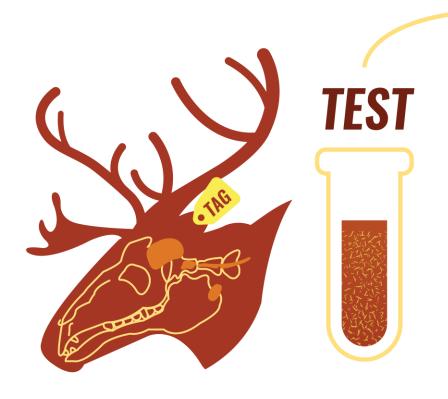


Transmission

- CWD can be transmitted directly, through animal-toanimal contact.
- CWD can also be transmitted indirectly from a contaminated environment to an animal.
- Prions are highly resistant and can remain infectious in the environment for several years.
- Human-facilitated movements can contribute to the geographic spread of the disease.







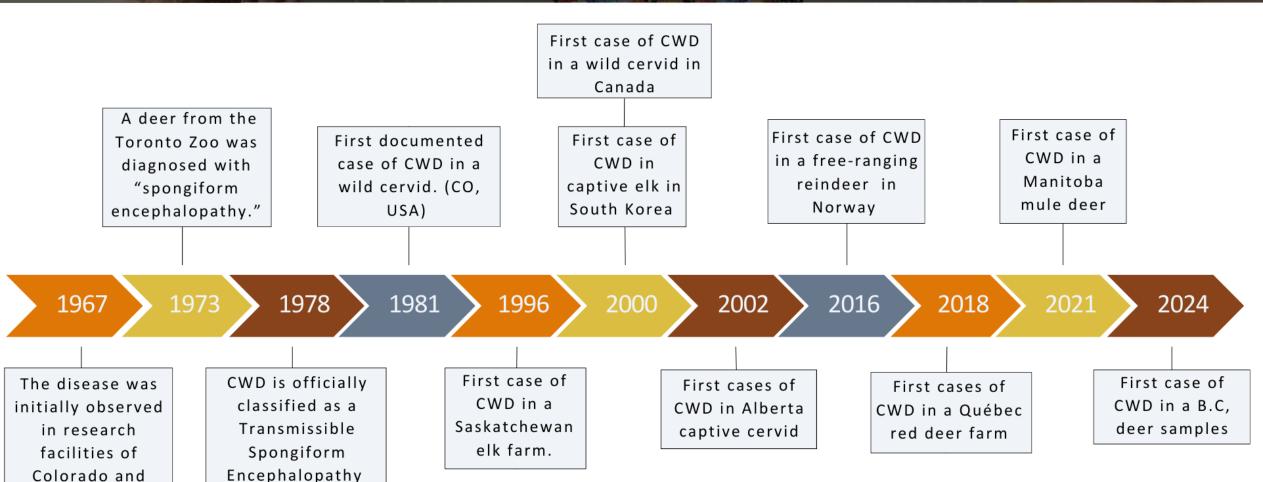
Diagnosis

- In Canada, the official screening test for CWD used by the Canadian Food Inspection Agency (CFIA) is enzyme-linked immunosorbent assay (ELISA).
- Requires testing of either the retropharyngeal lymph nodes or the obex area of a deceased animal's brain stem.
- This method can detect CWD in individuals infected for more than 12 months.
- There is no test available to certify that food or other consumable products (e.g. antler velvet) are completely free from CWD prions.



Wyoming.

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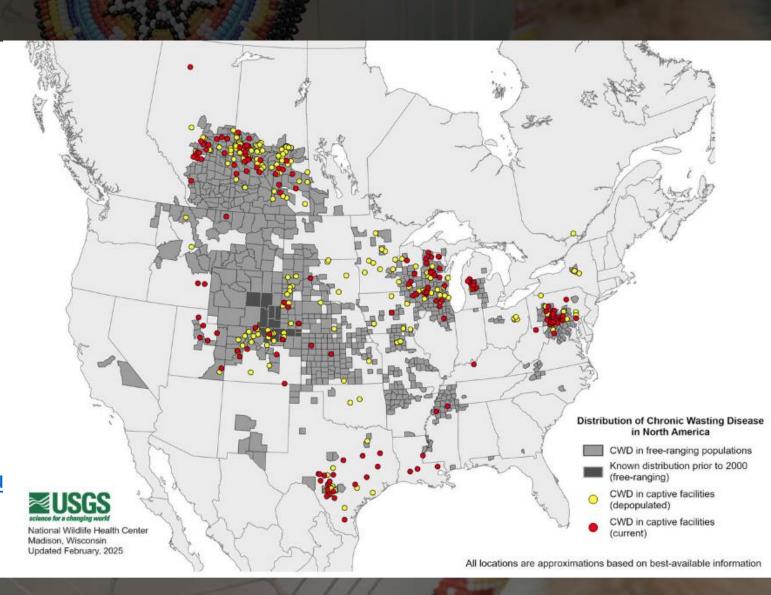


Distribution of CWD in North America

USGS: Science for a changing world

https://www.usgs.gov/media/images/distribun-chronic-wasting-disease-north-america-0

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Prevention & Best Practices

- Avoid use of attractants or lures made from cervids (e.g urine).
- Debone the animal at the kill site and leave all non-edible parts at the kill site or dispose safely in designated disposal sites.
- Wear Personal Protective Equipment (PPE).
- Use different knives and tools for hunting, field dressing, and butchering.
- Clean, wash and sanitize all used equipment and utensils in a 40-50% bleach solution.

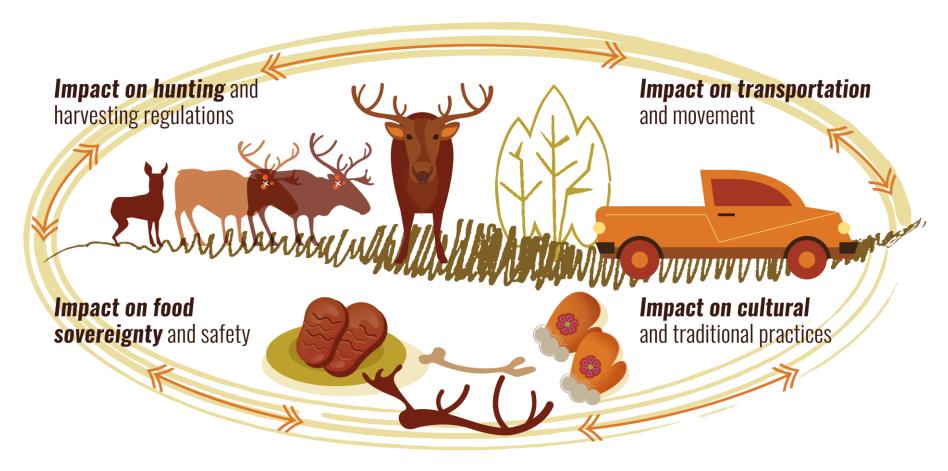


Prevention & Best Practices

- Get your animal tested.
- Restrict movement of carcasses across boundaries.
- Don't stop hunting.







Impacts on First Nations



Impacts on First Nations

Impact on hunting and adjusted harvesting regulations

Impacts on transportation and movement

Impact on cultural and traditional practices

Impact on food sovereignty and safety



What are we doing at the AFN?

- We are working towards developing communication tools and resources.
- Advancing renewal of the AFN CWD Working Group.
- Advocating for the recognition of the direct impact of CWD on First Nations and calling on federal Government representatives to ensure the full and effective participation of First Nations in efforts to manage and respond to CWD.
- Advancing research on possible legal tools that exist for First Nations to address CWD.



