

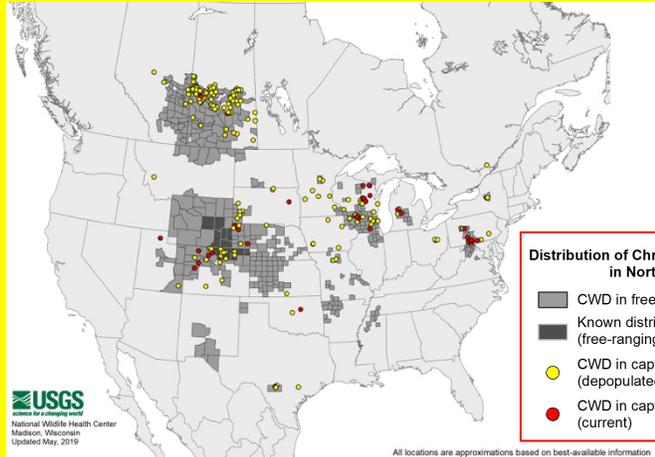
The Threat of Chronic Wasting Disease (CWD) – At a glance

- **CWD is a new type of threat**

- CWD is a newly emerged, highly contagious, invariably fatal disease currently afflicting members of the deer family (white-tailed deer, mule deer, elk, and moose; caribou are susceptible and at risk).
- CWD is a sister disease of bovine spongiform encephalopathy (BSE), or ‘mad cow’ disease, but more virulent because it is highly contagious between living animals.
- Rating virulence of transmissible spongiform encephalopathies (TSEs), a leading expert with the Canadian Food Inspection Agency put BSE as the mildest, least virulent, and easiest to contain. At the opposite end she placed CWD as the most severe.

Chronic Wasting Disease (CWD)

The largest, most contagious, most persistent biomass of infectious prions in global history



Experts urge immediate action to contain the epidemic, fund independent, interdisciplinary task force to reduce impacts, prevent threats, and protect Canadian interests

- First detected in Colorado in 1967, CWD has been spread widely across North America through commercial game farming initiatives. It is now confirmed in 26 states and 3 Canadian provinces, most recently Quebec.
- CWD has no adequate live animal tests, no preventative vaccine, and no cure for infected animals.
- CWD transmission occurs via prions (misfolded prions) that are amplified, shed, and present in saliva, feces, urine, blood, lymphoid, and muscle tissue.
- Prions are not living organisms and are extremely resilient, can persist in the environment indefinitely, and spread via soil, plants, agricultural products, and from contaminated surfaces or equipment.

- **CWD threatens Canada’s wildlife and environment, and the Canadians who depend on them**

- CWD is fatal to deer, moose, elk, and caribou and studies have shown it has led to severe population impacts including potential extinction models.
- CWD threatens biodiversity, species at risk such as caribou, and the income, cultural identity, and food security of many Canadians.
- Wildlife-based economies (hunting, tourism, photography, and viewing), depend on healthy deer species, and contribute greatly to the economic, social, and cultural well-being of many Canadians.
- Where CWD is detected, drastic measures, like the depopulation of wild herds, are needed to even attempt to eradicate it. In response to a 2016 detection in wild reindeer—consistent with recommendation from leading North American scientists—the Norwegian government culled an entire herd of over 2,000 animals.
- Containment is vital, as response measures are not always sufficient, yet significantly drain the already limited resources and budgets of fish and wildlife agencies. New York State spent over \$1,000,000 in their successful 2005 CWD response to seven positive cases (and only 3.5 weeks of work).

- **CWD threatens Canada’s fiduciary obligation to Indigenous peoples**
 - The food security and cultural sustainability of Indigenous peoples is directly tied to deer, elk, moose, and caribou. In some cases, economic prosperity related to guiding and tourism is also at stake.
- **CWD threatens Canada’s agricultural and agri-food economies:**
 - In 2003, even without infection of people, a single cow infected with BSE in Alberta triggered devastating trade restrictions with multi-billion dollar consequences in Canada.
 - In 2018, Norway banned imports of hay or straw from any state or province with CWD. Economists fear this has the potential to expand to other agricultural products, and spread to other economic regions, seeking, not just to protect wildlife, ecosystems, economies, and public health, but to secure tens of billions of dollars in market share gains annually.
- **CWD threatens Canada’s public health:**
 - No human cases of CWD have been confirmed, primate studies including macaques—the closest non-human primates allowed in research—confirm efficient transfer through the consumption of CWD-positive meat. This led Health Canada to advise that: “CWD has the potential to infect humans.”
 - Global health officials and agencies—including Canada’s—recommend against consumption of any TSE material, including meat or other products from CWD-positive animals.
 - There is no current field test, and existing hunter harvest testing programs take months (far too long) to receive results.
 - Despite regulatory measures, products from CWD-positive game farm animals have repeatedly entered the human food and feed chains (including velvet antler, venison, and pet food). Urine-based scents are a substantial risk and should be banned.
 - The Canadian blood system would be severely challenged if CWD presented in humans, as prions cannot be completely fractionated out or rendered benign; BSE cost the UK access to their domestic plasma supply.
- **We know what to do. We just need to do it.** These actions include:
 - Containing the geographic spread
 - Phasing out so-called ‘captive wildlife’ industry
 - Stopping the movement of live animals, potentially infected tissues, and carcasses
 - Being ready for a fast and aggressive response wherever CWD is detected
 - Preventing human exposure
 - Taking steps to keep CWD-tainted meat out of the human food chain
 - Strengthen human prion disease surveillance, and preparedness for human CWD
- **Inaction is not an option**
 - Successive governments have failed to take simple actions to protect Canadians from the threat of CWD.
 - Evidence documenting the severity of CWD and necessity of vital responses is clear, compelling, and uncontested.
 - Consensus extends across disciplines, sectors, jurisdictions, agencies, and virtually all vital stakeholders.
 - **Our most effective and least costly option is to halt the spread of CWD and keep it out of areas that don’t have it.**
 - **If it turns out that humans can be infected, then inaction by successive government will be responsible.**

For more information on Chronic Wasting Disease, please visit: www.ofah.org/cwd