

To manage chronic wasting disease, some animals die so more can live

March 28 2024, by Kaylee Byers and Sarah Robinson



The infographic is divided into three horizontal sections. The top section has a dark green background with the text 'CHRONIC WASTING DISEASE SURVEILLANCE' in white, and the BCWF logo (BC Wildlife Federation) in the top right corner. The middle section has a green background and features a silhouette of a deer's head with a tag on its neck. The text 'CUT AND TAG' is written in white, followed by a paragraph in white text: 'Hunters are encouraged to provide samples for CWD testing after harvesting a deer, moose, elk, or caribou anywhere in B.C.'. The bottom section has a dark green background and features a white bag icon. The text 'BAG' is written in white, followed by the text 'Remove antlers from head and remove the head from the body with'.

CHRONIC WASTING DISEASE SURVEILLANCE

BCWF
BC WILDLIFE FEDERATION

CUT AND TAG

Hunters are encouraged to provide samples for CWD testing after harvesting a deer, moose, elk, or caribou anywhere in B.C.

BAG

Remove antlers from head and remove the head from the body with

Hunters are requested to provide samples in an effort to monitor for chronic wasting disease. Credit: [\(BC Wildlife Federation\)](#), [CC BY](#)

Things are moving quickly, and they need to. On March 13, the Government of British Columbia [announced that it would be harvesting 25 deer in the Kootenays](#). This announcement came six weeks after chronic wasting disease (CWD)—[a 100% fatal disease of cervids](#) (deer, elk, moose, caribou)—was first detected in the province.

Unfortunately, for a disease like this, in efforts to protect many animals, some will die.

CWD is incredibly difficult to manage and nearly impossible to eradicate. Infected animals don't [show symptoms for about 18 months](#), which means that an animal's appearance or behavior doesn't necessarily reflect whether it has CWD or not.

An infected animal continuously sheds the [infectious agent—a protein called a prion](#)—into the environment in their [saliva, feces and urine, and through their bodies when they die and decompose](#).

These [prions stay infectious for years](#), although researchers still don't know for how long. To make matters worse, there is no way to [disinfect or burn these prions away](#). And so, reducing disease spread is still the best approach to minimizing impacts on cervids and the people who rely on them.

Removing animals

Preventing CWD spread often involves removing animals from the environment, among other regulatory measures such as [restricting the transport and disposal of road-killed cervids in affected areas](#). This is partly because the samples tested for CWD (tonsils, lymph nodes) cannot be collected from live animals.

Managing the spread means removing the animals most likely to be infected. The B.C. [provincial government](#) is planning to remove 20 [mule deer](#) (mostly male) and five male [white-tailed deer](#), which have been found to be more likely to be infected in [other provinces](#) and [U.S. states](#).

While removing infected animals decreases potential spread, even removing and testing uninfected animals can provide valuable information about who is most likely to be affected (cervid species, sex and their location) which in turn can inform [management](#).

Even in instances where there is [agreement about removing animals to mitigate CWD](#), how many, where, when and how they are removed is contentious.

That's because the number of animals removed depends on management goals, as well as ecological and ethical considerations. For example, determining the percentage of animals infected with CWD [would require sampling many animals \(in the hundreds\)](#) to ensure infected individuals are captured [while prevalence is low, such as when only one percent of animals are infected](#).

However, large-scale removals understandably cause concern for the future of cervid populations. These approaches are also challenging to sustain, and can be ineffective in the long term when they [lose community support](#).

Management programs might sample fewer animals in efforts to gain more information surrounding where infected animals are found. This is the case in B.C., where [only 25 animals are being harvested](#).

Planning and preparation

Deciding where to [remove animals requires careful planning](#) based on

where CWD has been found, how likely it is to spread, and the cultural, ecological and economic importance of cervids for local communities. Managers focus on areas close to confirmed cases—in the case of B.C., a 10-kilometer radius—and areas where there are large or dense populations of cervids like in cities.

Given that an infected deer was found [just south of Cranbrook, B.C.](#), there is growing concern about [the potential spread of CWD to the city.](#)

According to our research, [community involvement is essential for effective CWD management.](#) Management plans can involve government removal through [sharpshooting, hunter-harvest and special hunts](#) which allow for limited harvest outside of the hunting season.

In B.C., members of Yaq̓it ʔa·knuq̓i'it (Tobacco Plains Indian Band) are leading the removal of deer, and [all animals that test negative for CWD will be used by the community or donated to food banks.](#)

Sustainable management

Hunter-harvest is a critical component of sustainable CWD management. Beyond removing infected animals and providing samples for testing, [local hunters](#), trappers, and [community members](#) bring valuable knowledge and support, helping to implement sustainable strategies that reflect communities' values and needs.

CWD management programs that prioritize listening to those most affected help to [build trust and make better decisions](#) about where to focus efforts.

In wildlife management, there will be disagreements. Management is complex and contains uncertainties: what works in one region [might not work in another.](#)

We must acknowledge these uncertainties, while recognizing the need to act quickly. The experiences of other jurisdictions in managing CWD contain valuable lessons about the potential impacts of CWD on [conservation](#), [economic stability](#) and [food security](#). Early action is the best chance we have to minimize the impacts of this disease on cervids, the people who rely on them and the ecosystem.

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