DEPARTMENT OF NATURAL RESOURCES

Surveillance and Management Plan for Chronic Wasting Disease in Free-ranging Cervids in Minnesota



2019 Minnesota DNR CWD Response Plan

Overview

The surveillance and management plan for chronic wasting disease (CWD) in free-ranging deer, moose, and elk describes the DNR response when disease is found. It addresses both emerging infections and scenarios where the disease may not be eliminated from wild populations. It describes the prescriptive steps the Agency will take upon initial disease discovery, along with more collaborative alternatives for cervid management options. The DNR recognizes the importance of healthy wildlife populations and the goals and strategies contained in this plan strive to achieve that objective.

Background

Chronic wasting disease is neurological disease of cervids (deer, elk, and moose) that has no cure and is 100% fatal. It is transmissible disease, which means it is spread by direct (nose-to-nose) and indirect (such as sharing a food source) contact. The disease was first described in Colorado in 1967 and is currently known to occur in 26 states and 3 Canadian Provinces in North America. Studies in the Western US, where the disease is well-established, are starting to show disease-related population declines. An on-going CWD study in Wisconsin is showing that CWD-infected deer have a 3x lower survival rate than deer without the disease. The CWD problem in wild cervid populations has been described as a "crisis" and increasing attention is being paid to the disease as more states become infected and the long-term implications become more clear.

The original CWD response plan was written by subject matter experts in the DNR's Wildlife Health Program in 2010; the current update was developed in 2018 and incorporates more recent research from the scientific literature, CWD plans from other states and provinces, and discussion with CWD experts around the country. This updated plan, titled "Surveillance and Management Plan for Chronic Wasting Disease in Free-ranging Cervids in Minnesota," now includes information specific to CWD infections that may persist on the landscape.

There are important elements in the plan, including program/regulatory alternatives, season lengths, bag limits, and incentives that are the focus of this engagement process. Consequently, engagement is conducted with partners and stakeholders at multiple levels. This necessitates an approach that, 1) informs people about CWD and the response plan in general and gathers general comments and questions, and 2) fosters relationships with partners and stakeholders when and if the plan must be implemented at the local level.

Public Engagement

Comprehensive public engagement on both the prescriptive and collaborative elements of the plan are vital. The DNR is working to build understanding of the importance of an aggressive disease response. The phases of plan engagement are:

- Discussions with Legislative, Tribal, Agency, and Stakeholder group leaders
- Discussions with County and Local leadership and key members of the public
- DNR-hosted public meetings across Minnesota to explain the plan and collect input on specific elements of the plan.

Plan Elements

Initial Detection (when CWD is first found)

When CWD is first detected, the DNR's initial management response are to, 1) act aggressively to eliminate the disease, if possible, 2) prevent or minimize disease spread, 3) collect adequate samples to monitor disease prevalence and spread, and (4) engage stakeholders and provide accurate and current information about CWD.

Transition to a Persistent Infection (when CWD may not be eliminated)

Where diseases exist at a significant prevalence or over a wide-spread area, they may be impossible to eliminate from wild animal populations and the environment. This is true for all diseases, not just CWD. Since CWD has a long incubation period and can be transmitted several ways, the ability to fully eliminate the disease may not be possible in all situations; thus, management actions are needed to minimize impacts and limit spread to new areas of the state.

Management of a Persistent CWD Infection

If CWD is determined to be persistent in wild cervids, the DNR will implement additional steps to manage the disease and prevent spread. The goals for managing persistent CWD infection in wild cervids will include, 1) contain CWD infections within the CWD Management Zone, 2) minimize the impact of the disease statewide, 3) reduce the prevalence in affected areas, 4) collect adequate samples to monitor disease prevalence and spread, 5) provide accurate and current information about CWD to the public, agency personnel, and stakeholder groups, and 6) engage in applied research to better understand the epidemiology, transmission, and management of CWD.

Management of Endemic Disease

If CWD is determined to be endemic (established and self-maintaining) in wild cervids, the DNR will reduce efforts to aggressively manage this disease within the CWD Management Zone and shift focus and resources to preventing spread to new areas of the state. The goals for managing an endemic CWD infection in wild cervids will include, 1) minimize the impact of the disease statewide, 2) collect adequate samples to monitor disease prevalence and spread, 3) utilize liberal harvest regulations to reduce the prevalence in the endemic area, 4) aggressively respond to new detections of disease outside of the endemic area, 5) provide accurate and current information about CWD to the public, agency personnel, and stakeholder groups, and 6) apply adaptive management to adjust efforts as new information on successful CWD mitigation strategies emerge.