

Farmed Cervidae Chronic Wasting Disease (CWD) Surveillance Standards

(Draft 2/5/2021)

Complete and thorough surveillance for CWD in Minnesota farmed Cervidae herds is critical to detect CWD infection in herds as early as possible. Currently, the only approved testing methods available for routine CWD surveillance in farmed Cervidae is testing tissues collected from farmed Cervidae carcasses. For this reason, the state of Minnesota requires that all animals over 12 months of age that die or are killed be tested for CWD (Minn. Rule 1721.0420, Subp. 1C.). Farmed Cervidae that die, escape, or are lost to the herd and no tissues are collected from these animals for CWD testing, or samples collected from a farmed Cervidae carcass that are of such poor quality that testing does not result in a successful test result where the CWD status of the animal can be determined, impact the Board of Animal Health's confidence to assess the CWD status of a herd. USDA-APHIS-VS CWD Program Standards recommend risk-based assessments to implement consequences for missed or poor-quality samples.

Below are the consequences that will be considered by farmed Cervidae program managers when evaluating missed CWD surveillance in a herd. These are the consequences outlined in the USDA-APHIS-VS CWD Program Standards (Part A.5.4). Herd CWD status will be reviewed annually when the herd inventory is reconciled by farmed Cervidae program staff or more frequently if needed. This document also outlines the application of these consequences and the impact to a herd's CWD Status level when test-eligible animals (animals 12 months of age and older) in a herd that die, escape, are lost, or are killed during a 12-month surveillance period are not successfully tested for CWD, resulting in no determination of their CWD status.

Consequences include:

- 1) Consideration of an animal substitute to replace missed or poor-quality samples that must be an animal of the same species and from the same location within the herd that has resided in the herd at least as long as the untested animal(s).
- 2) A reduction in herd status (ex. from CWD Level 6 to Level 5 or from Level 6 to Level 4) requires a minimum of a year to regain one level in status.
- 3) A direct suspension of herd status for a designated period. (At the end of the designated period, the suspension will be lifted, and the status returned to the level before the suspension).

For all herd sizes, impacts to CWD Status level are outlined as below:

a. Status is not impacted when:

- when one animal is not successfully tested in the surveillance period and all animals were successfully tested for CWD in the previous 36 months.

- or, the number of animals not successfully tested is $\leq 10\%$ of the total animals that died or were harvested during the surveillance period,
(ex. 1 animal in 10 or more; 2 animals in 20 or more, etc. that died or were harvested)
- b. Status is suspended for 6 months when the number of animals not successfully tested for CWD is $>10\%$ but $\leq 35\%$ of the total number of animals that died or were harvested during the surveillance period.
(ex. 1 animal in 3 - 9, 2 animals in 6 - 19, 3 animals in 9 - 29 animals that died or were harvested)
 - c. Status is suspended for 12 months when the number of animals not successfully tested for CWD is $>35\%$ but $\leq 50\%$ of the total number of animals that died or were harvested during the surveillance period.
(ex. 1 animal in 2, 2 animals in 4 - 5, 3 animals in 6 - 8 animals that died or were harvested)
 - d. Status is suspended until additional surveillance is completed when the number of animals not successfully tested for CWD is $>50\%$ of the total number of animals that died or were harvested during the surveillance period.
(ex. the only animal, 2 animals in 3, 3 animals in 4 - 5 animals that died or were harvested)

*If a sample is submitted as a substitution for an unsuccessful test, the substitute sample must be from a test-eligible animal of the same species that has resided in the same location in the herd, for at least as long as the unsuccessfully tested animal.

If a herd's status was suspended in the previous 12-month period, then in the next 12-month period, herds with animals that are not successfully tested for CWD, with no substitute testing done, will be impacted as follows.

- a. Status is not impacted when the number of animals not successfully tested for CWD is $\leq 10\%$ of the total animals that died or were harvested during the surveillance period.
(ex. 1 animal in 10 or more, 2 animals in 20 or more animals that died or were harvested)
- b. Status is suspended for 12 months when the number of animals not successfully tested for CWD is $>10\%$ but $\leq 35\%$ of the total number of animals that died or were harvested during the surveillance period.
(ex. 1 animal in 3 - 9, 2 animals in 6 - 19, 3 animals in 9 - 29 animals that died or were harvested)
- c. Status is suspended until additional surveillance is completed when the number of animals not successfully tested for CWD is $>35\%$ of the total number of animals that died or were harvested during the surveillance period.
(ex. 1 animal in 2, 2 animals in 4 - 5, 3 animals in 6 - 8 animals that died or were harvested)

* If a sample is submitted as a substitution for an unsuccessful test, the substitute sample must be from a test-eligible animal of the same species that has resided in the same location in the herd, for at least as long as the unsuccessfully tested animal.

Examples:

1. Two animals died or harvested in any size, any status level herd. One animal not successfully tested. (If this herd had no missed surveillance in the last 36 months, then there would be no impact to herd status.)

- Herd Status suspended for 12 months

2. Five animals died or harvested in any size, any status level herd. One animal not successfully tested. (If this herd had no missed surveillance in the last 36 months, then there would be no impact to herd status.)
 - Herd Status suspended for 6 months

3. Five animals died or harvested in any size, any status level herd. Two animals not successfully tested.
 - Herd Status suspended for 12 months

4. Ten animals died or harvested in any size, any status level herd. One animal not successfully tested.
 - Herd size is 10 animals – NA – all animals gone
 - Herd size >10 animals – Status not impacted

5. Five animals died or harvested in any size, any status herd; one animal not successfully tested the first year. Five animals tested the second year with one animal not successfully tested.
 - Herd status suspended for 6 months and then returns to a Level 6 until the second-year surveillance evaluated. (If this herd had no missed surveillance in the last 36 months, then there would be no impact to herd status.)
 - Herd status suspended for 12 months with the second-year surveillance