

# HOW TO USE BIOSECURITY TO PROTECT YOUR CERVID OPERATION AGAINST CWD

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The spread of an infectious disease like CWD requires: 1) an infectious agent (for CWD, infectious prion material shed from an infected cervid), 2) a transmission method, and 3) a susceptible cervid. Improved biosecurity can help you reduce or eliminate the various transmission routes threatening the health of your herd. While research is underway to evaluate the role of breeding to reduce genetic susceptibility to CWD, improving biosecurity is something cervid farmers can do today to reduce risk.

Completing our [biosecurity assessment worksheet](#) can help you identify the gaps in your farm's defenses against a CWD infection.

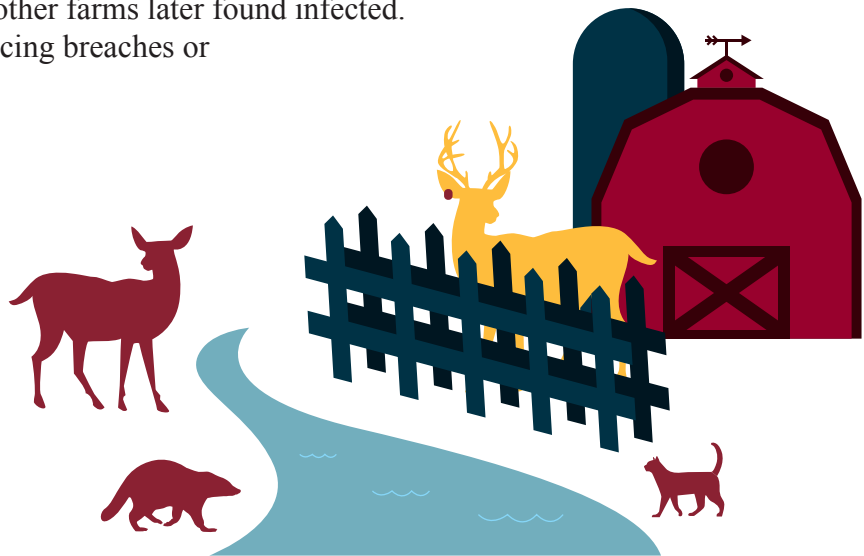
## How are farmed cervids infected with CWD?

### Direct transmission

- Through purchases of cervids from other farms later found infected.
- From infected wild deer through fencing breaches or through-the-fence contact.

### Indirect transmission

- Sharing of contaminated equipment, feed or water from farms later found infected.
- From carcasses of infected deer brought into the farm from hunting or taxidermy.
- Contacts with infected wild deer through contaminated feed or water, mammalian and avian scavengers, and other vectors (potentially including ticks or insects) in areas near infected wild deer.



While any of these pathways are possible routes of infection, recent evidence from a study of white-tailed deer operations in MN, WI, and PA indicated two common sources of CWD infection are most frequent: 1) introduction of cervids from herds later detected as CWD-positive, and 2) indirect exposures through the environment from infected wild deer.

## What can you do to prevent CWD on your cervid operation?

The University of Minnesota CWD [Biosecurity Assessment Worksheet](#) provides a systematic way for you to evaluate and prioritize the risks of introduction of CWD to your operation through different transmission pathways. This voluntary tool presents a series of questions about your operation and the biosecurity measures you currently use. Your answers create a customized roadmap for making your operation more secure. You can complete this assessment yourself or ask your veterinarian to complete this assessment with you, confidentially, for your operation.

## Take action to reduce or eliminate CWD transmission routes

After you have identified the transmission pathways with the highest risk of CWD introduction for your operation, you can take steps to reduce your risk.



For more information, and to try out this assessment yourself, scan the QR code or go to [z.umn.edu/CWDbiosecurity](https://z.umn.edu/CWDbiosecurity)

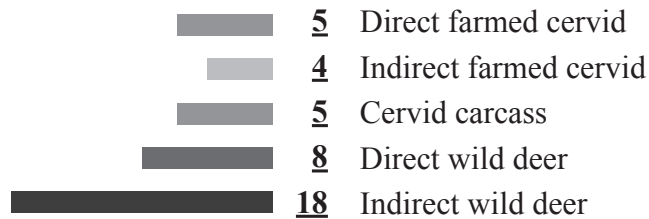
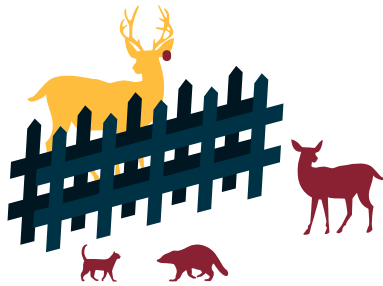
### EXAMPLES CERVID OPERATIONS

After taking the CWD Biosecurity Assessment, Farm 1 and Farm 2 noted different potential risks to their cervid operations. The farm on the right was at highest risk from purchases of cervids from other operations, while the farm on the left was at highest risk from contacts with infected wild deer through indirect exposures.

### Transmission pathway risk levels

#### Farm 1

Highest risk  
Indirect wild cervid



#### Farm 2

Highest risk  
Direct farmed cervid

