

# **Deer Hunter Participation and Chronic Wasting Disease in Illinois: An Assessment at Time Zero**

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The discovery of chronic wasting disease (CWD) in Illinois at the beginning of November 2002 preceded the firearm deer hunting season by two weeks. The single case was found in Boone County near the Wisconsin border. A mail survey of Illinois deer hunters was conducted during spring 2003 to examine the impact of CWD on their attitudes and behavior. The goal was to provide baseline information for future studies should the prevalence and distribution of the disease increase in the state. At the time of this writing, more than 60 deer had tested positive for CWD in 4 counties in north central Illinois.

The mail survey obtained data from a random sample of Illinois deer hunters. Participants were mailed a 15-page survey, cover letter, and stamped return envelope. Three survey mailings were conducted. Responses were stratified by the county in which each participant hunted and were categorized into one of four groups: (1) counties in which deer tested positive for CWD (i.e., CWD counties), (2) counties adjacent (i.e., shared border) to CWD counties, (3) two counties away from CWD counties, and (4) all other areas of the state.

In total, 2,683 surveys were completed and returned (79% response rate). Most hunters (89%) reported that they participated in the 2002 Illinois firearm deer season; 61% indicated that they hunted during the archery season and 20% hunted during the muzzleloader season. A slightly higher proportion (14%) of hunters in the CWD counties reported that they did not hunt during the 2002 firearm deer season. A majority of hunters (54%) believed that a degree of uncertainty exists in the possibility of humans contracting CWD. About one in five hunters felt that CWD was a risk to deer, but not to humans. Only 17% of hunters believed that CWD could potentially infect humans who consumed meat from infected animals and 10% felt that the threat of CWD had been exaggerated.

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The discovery of CWD in Illinois had little effect on hunter behavior during the 2002 Illinois firearm deer season. Most hunters (82%) reported that they hunted as usual, but a higher percentage of hunters in the CWD counties (7%) reported hunting less often due to CWD (Table 1). Most hunters (63%) did not anticipate any change in their hunting behavior during the upcoming 2003 deer seasons in Illinois. Of the changes that hunters did anticipate making, 21% reported that they would “check how the deer was acting,” 15% would “hunt in CWD-free areas,” and 2% would either not hunt or hunt in a different location. A higher proportion of hunters (7%) in the CWD counties indicated that they did not plan to hunt during the 2003 deer hunting season (compared to 2% of hunters statewide). If hunters were to change their behavior due to CWD, the most frequent response from all hunters was to move to a county that was currently free of CWD. Compared to those in other areas, however, fewer hunters (10%) from CWD counties would consider hunting in CWD-free counties. Of the other behavioral options listed in the survey, 18% of hunters reported that they would “skip deer hunting until CWD was eradicated in the county where I hunt,” 16% would “hunt other game,” and 13% would “skip hunting for that season only.” A larger percentage (8%) of hunters in CWD counties (compared to 4% statewide) would stop hunting due to CWD and would be more likely to stop hunting completely than to stop only until CWD is eradicated.

Most hunters did not foresee a change in their hunting behavior for the 2003 Illinois firearm deer season. Hunters showed an increased level of caution if CWD was found in deer in the county next to where they hunt. Increasing levels of CWD, however, may result in increased concerns and changes in behavior by Illinois hunters. Results presented here should be considered baseline measurements for Illinois, especially in light of the increased prevalence and distribution

**TABLE 1** Impacts of CWD on Hunters' Behavior During the 2002 Firearm Deer Season in Relation to CWD Counties in Illinois

“Did the discovery of CWD in Illinois change your hunting during the 2002 firearm season?”	Location of deer hunters' participation in 2002 <sup>1</sup>				
	CWD counties	Counties adjacent to CWD counties	2 counties from CWD counties	All other areas	Total
Hunted more often	4	10	11	9	9
Hunted the same amount	77	80	82	82	82
Hunted less often	7	0	4	2	3
Hunted only healthy deer	9	6	4	5	6
Hunted only large bucks	3	4	0	1	1

<sup>1</sup> Cell entries are percentages (%);  $\chi^2 = 62.08$ ,  $df = 12$ ,  $p < .001$ ,  $V = .09$ .

of CWD cases found in late 2002. As CWD expands beyond its present range in Illinois, hunters' attitudes and behaviors related to CWD should be monitored to detect changes such as: (1) decreased license sales; (2) displacement of deer hunting participation to other counties; and (3) discarding deer if hunters choose to hunt, but not eat the harvested meat. Attitudes expressed by hunters in this study could drastically change with changes in CWD prevalence and distribution, and hunters' behavior could be impacted by these possible changes.

