

# Chronic Wasting Disease (CWD) Update

CWD continues to be a major concern of AFGA as it increases in prevalence and presence. In prevalence, it has increased from 0.04 in 2005 when testing first started to 0.40 in 2010 and for 2014 the prevalence has increased to 2.10. As far as CWD's presence, there have been positives found in WMU's 144 and 142 for the first time as this disease spreads further west from CFB Suffield towards the Brooks area. In Alberta, known CWD cases number 297 and stretch from Lloydminster in the north to very close to the U.S. border in the south and have now stretched west past Highway 36 around the Hanna area in WMU 160. Debate continues as to how this is going to be managed and AFGA will continue to press for more than just the current surveillance program. For now, Margo Pybus from ESRD has put together the following report and there is a link to further data at the bottom should you want to learn more.

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AFGA President

## Chronic Wasting Disease (CWD) Surveillance Update: April 10, 2015

We have completed all of the 2014 fall CWD surveillance samples received to date. In 2014 we tested 4,163 heads and detected 86 cases of CWD (2.1%). CWD was confirmed in 74 mule deer (59 males, 15 females; 72 adults, 2 yearlings) and 12 white-tails (all males; 10 adults, 2 yearlings).

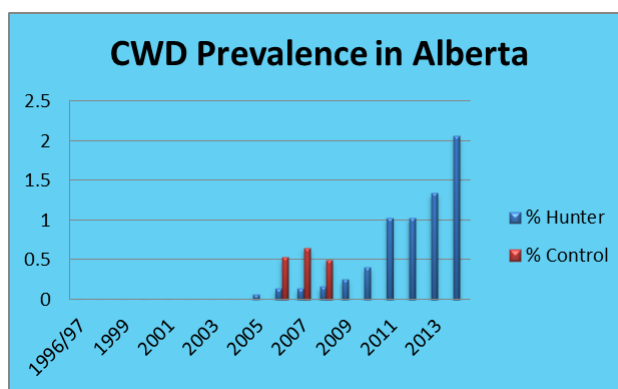
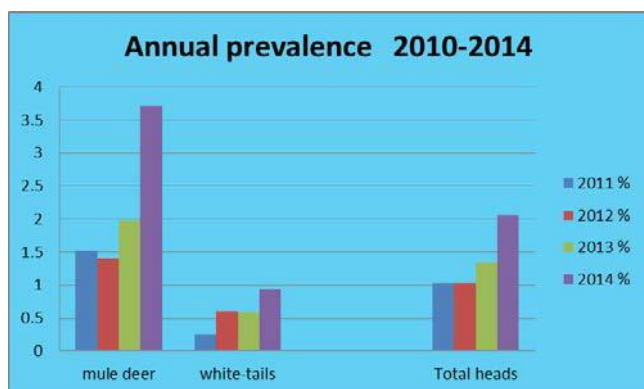
However in the 2014 data the extraordinarily large number of elk heads tested (n= 909, all negative) many of which were harvested in conjunction with hunting opportunities at Canadian Forces Base Suffield in January and February 2015, provides a confounding factor in comparison to previous years. Thus, to allow valid comparisons among years, the proportion of infected animals is presented in the context of the number of heads tested for each species.

In breaking down the identified 2014 sample, CWD was detected in:

- 3.61% of 2048 mule deer
- 1.13% of 1062 white-tailed deer
- 0 of 131 moose
- 0 of 909 elk

An overview of the 2014 results reveals both expected and unexpected patterns in the data. As in previous years, mule deer remain the species at greatest risk of CWD (74 of 86 (86.0%) cases detected in 2014). However the ratio of infected males to females wherever CWD occurs generally is ~2:1; but in 2014 the ratio in the Alberta sample was ~5:1 (71 males, 15 females). The reason for the unexpected increase in the proportion of infected males is unknown, particularly since almost equal numbers of male and female mule deer, the species at greatest risk, were tested in 2014 (n = 1040 and 1065, respectively).

Overall number (86 cases) and rate (2.1%) of CWD positive deer in 2014 are significantly higher than in previous years.



Similarly the geographic distribution of CWD in eastern Alberta continues to expand. The disease now occurs in local areas from the Battle River watershed in the north to the Milk River in the south. We detected the first evidence of CWD in the Hand Hills area northeast of Drumheller in WMU 160, first evidence of the disease in the Bow River watershed (east of

Lake Newell), and further evidence of the disease in the vicinity of Canadian Forces Base (CFB) Suffield and the Cypress Hills. However no CWD was found in elk harvested from CFB Suffield, despite testing over 870 elk heads from WMU 732.

The disease remains well established in areas directly adjacent to the Saskatchewan border and continues to expand into WMUs further up the affected watersheds, primarily the Battle, Red Deer, and South Saskatchewan rivers.

CWD in Alberta by WMU 2005-2014																							
year	150	151	163	234	236	256	728	119	200	232	202	152	203	730	162	164	118	160	148	144	142	TOTAL	
2005	1	3																					4
2006	7	3		3																			13
2007	2	2	2	11	1	1																	19
2008	2	1	11	5	4		2																25
2009		2	1	2	2		2	1	1	1	1												13
2010	1	1		1	6	1	3		2		1	4											20
2011	9	3	2	2			2	1	2		6		3	1	1	1							33
2012	5	4		2			2		3	1	9	2	3	2	2								35
2013	5	3	2	5	3		2		3	1	11	5	1	1	1		3	2	1				49
2014	11	6	3	6	7		9	1	3	1	10	6	2	1	2	2	7	3	4	1	1		86
<b>TOTAL</b>	<b>43</b>	<b>28</b>	<b>21</b>	<b>37</b>	<b>23</b>	<b>2</b>	<b>22</b>	<b>3</b>	<b>14</b>	<b>4</b>	<b>38</b>	<b>17</b>	<b>9</b>	<b>5</b>	<b>6</b>	<b>3</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>297</b>	

**The total number of CWD cases detected in wild deer in Alberta since September 2005 is 297.**

Hunters continue to support the program and are providing a solid foundation on which we can monitor CWD as it becomes further established in eastern deer populations.

To learn more about CWD Surveillance in Alberta, see: <http://esrd.alberta.ca/fish-wildlife/wildlife-diseases/chronic-wasting-disease/>