

Zoonotic Surveillance Update
Season to date as of August 29th, 2008

For the week ending August 29th:

- One mosquito pool was positive for West Nile Virus in Sentinel Zone 2, Longmont. The Vector Index for the Longmont Zone for week ending August 29th is 0.18 for *Culex tarsalis* alone and 0.20 for all *Culex* species collected (includes *C. tarsalis* and *C. pipiens*).
- The week ending August 29th marks the end of the mosquito pool testing for the 2008 season.
- University of Colorado (CU) is no longer included in the 2008 season mosquito trap counts. For comparison purposes, please note last week's mosquito counts for CU were 3078 total mosquitoes and 738 *Culex* species.
- Three new human cases of West Nile Virus were reported. All 3 cases reside in Longmont. There were 2 female cases ages 34 and 59 and one male case age 51.
- Two bats tested positive for rabies in Longmont and Berthoud.

The Weekly Zoonotic Report will continue through the month of September to report human and animal cases. Mosquito trap counts will be reported through September 12th pending any significant changes in methodology, e.g. number of traps set.

Table 1: 2008 Boulder County Animal / Arthropod Zoonotic Surveillance				
Species	Tested 8/23-8/29	Positive 8/23-8/29	Total Tested 2008	Total Positive 2008
Rabies				
Bat, unspecified	0	0	1	0
Big brown bat, <i>Eptesicus fuscus</i>	4	2	57	7
Cat	1	0	7	0
Dog	2	0	8	0
Horse	0	0	1	0
Long-eared myotis, <i>M. evotis</i>	0	0	1	0
<i>Myotis</i> spp.	2	0	14	0
Raccoon	0	0	6	0
Silver-haired bat, <i>Lasionycteris noctivagans</i>	0	0	2	0
Skunk	1	0	4	0
Rabies Total	10	2	101	7
Plague				
Cat	0	0	1	0
Flea	0	0	10	2
Mountain lion	0	0	1	0
Prairie dog	0	0	3	0
Rabbit	0	0	1	0
Tree squirrel, <i>Sciurus niger</i>	0	0	4	0
Plague Total	0	0	20	2
Tularemia				
Cat	0	0	1	0
Flea	0	0	1	0
Rabbit	0	0	1	0
Tree squirrel, <i>Sciurus niger</i>	0	0	4	0
Tularemia Total	0	0	7	0
West Nile Virus				
<i>Culex</i> spp.	2	0	68	0
<i>C. erythrothorax</i>	0	0	5	0
<i>C. pipiens</i>	1	0	19	0
<i>C. salinarius</i>	0	0	1	0
<i>C. tarsalis</i>	5	2	256	3
Horse	0	0	1	0
American Crow	0	0	1	0
West Nile Virus Total	8	2	351	3

* Flea pools tested. One pool could equal 1-234 fleas.

**Mosquito pools tested. One pool could equal 1-60 mosquitoes.

Table 2: 2008 Boulder County Human Zoonoses Surveillance of Confirmed & Probable				
	Cases 8/23-8/29	Deaths 8/23-8/29	Total Cases 2008	Total Deaths 2008
Hantavirus	0	0	0	0
Bubonic Plague	0	0	0	0
Tularemia	0	0	0	0
West Nile Virus	3	0	8	0
Total	3	0	8	0

*By report date

Table 3: 2008 Boulder County Mosquito Trap Counts, Totals by Week

	Season Total	6-Jun	13-Jun	20-Jun	27-Jun	4-Jul*	11-Jul*
<i>C. pipiens</i>	6313	66	17	122	80	92	358
<i>C. tarsalis</i>	27904	96	56	88	309	566	1758
Other <i>Culex</i>	1087	0	0	18	46	42	43
Total <i>Culex</i>	35304	162	73	228	435	700	2159
Total Mosquito	122193	3799	5415	9950	9111	6694	9106

18-Jul*	25-Jul*	1-Aug*	8-Aug*	15-Aug	22-Aug	29-Aug**
835	1810	757	761	634	781	225
4093	5536	7773	4038	2520	1071	601
162	72	43	447	76	138	103
5090	7418	8573	5246	3230	1990	929
14883	14968	16289	12655	9927	9396	5483

*Sentinel traps (n=15) are set and collected 2 nights per week during this time (7/4/08-8/8/08). At all other times, sentinel traps are set and collected one night per week. Total number of traps on average per week = 94 for 2008 season.

**University of Colorado is no longer included in total mosquito counts. For comparison purposes, the CU totals for 8/22 were 738 *Culex* and 3078 total mosquitoes.

The Vector Index (VI) is the average number of infected *Culex tarsalis* mosquitoes collected per trap night per defined area. A value ≥ 0.75 indicates a high level human risk. Boulder sentinel zones have no reported positive mosquito pools. Vector indices for the Boulder zone are zero. Below is the VI for the Longmont and Louisville/Lafayette/Superior sentinel zones.

Table 4: 2008 Vector Index by Week, Longmont Sentinel Zone

6-Jun	13-Jun	20-Jun	27-Jun	4-Jul	11-Jul	18-Jul	25-Jul	1-Aug	8-Aug	15-Aug
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
22-Aug	29-Aug									
0.00	0.18									

Table 5: 2008 Vector Index by Week, Lafayette/Louisville/Superior Sentinel Zone

6-Jun	13-Jun	20-Jun	27-Jun	4-Jul	11-Jul	18-Jul	25-Jul	1-Aug	8-Aug	15-Aug
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
22-Aug	29-Aug									
0.19	0.00									

*Please note: Weeks 7/4-8/8 include two trap nights per week for sentinel traps.

