



## Zoonotic Disease Report August 18 – August 24, 2019 (Week 34)

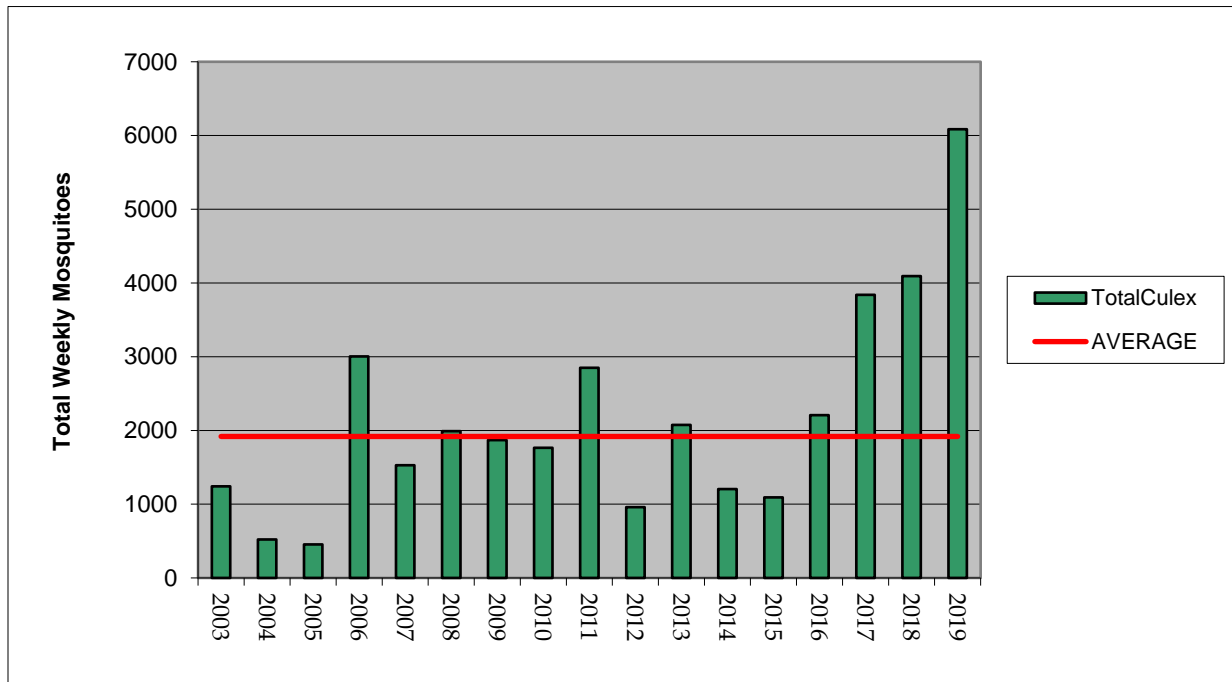
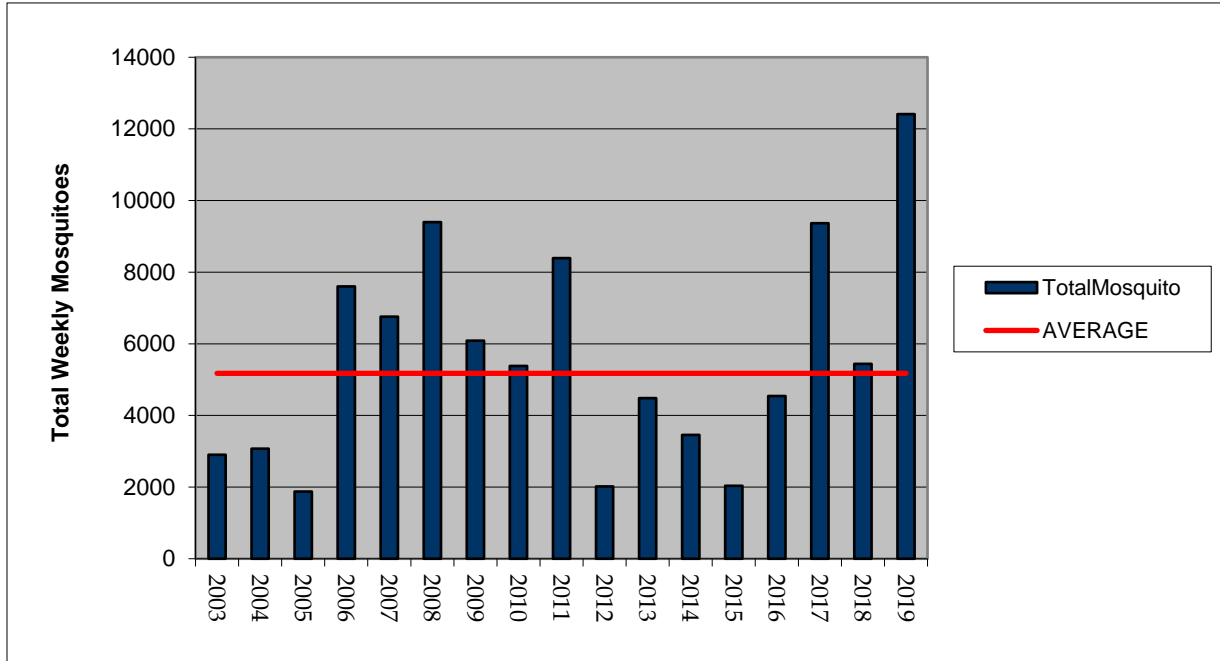
### Executive Summary

- Eighteen mosquito pools were submitted for WNV testing; two pools tested positive. Sentinel Zone 1 (Boulder) had one positive with a calculated Vector Index of 0.24. Sentinel Zone 3 (Lafayette) had one positive with a calculated Vector Index of 0.27. While the Vector Index (VI) in both zones are below the “high-risk” threshold of 0.75, increasing West Nile virus activity indicates continuing risk of transmission in all areas of Boulder County. Residents should be encouraged to use personal protective measures.
- Fifty-three mosquito pools have tested positive for WNV in Colorado this season: Larimer (19), Weld (14), Boulder (6), La Plata (4), Mesa (3), Pueblo (1), Adams (2), Delta (4).
- Mosquito traps this week were significantly higher than average with nuisance and vector species. Of the 12,415 recorded mosquitoes, 49% were *Culex*.
- Statewide, 134 specimens have tested positive for rabies in 2019.
- 2019 Colorado rabies positive specimens: Skunk (90), Bat (36), Raccoon (2), Dog (2), Fox (1), Bovine (1), Cat (1), Camelid (1)
- Boulder County has three positive rabies specimens to date, all are bats.
- One bat was submitted for rabies testing from Boulder County this week; it tested negative.

### West Nile virus (WNV) Activity

SEASON-TO-DATE (Aug. 6) HUMAN WEST NILE VIRUS (WNV) ACTIVITY			
Location	Non-Neuroinvasive Disease Cases	Neuroinvasive Disease Cases	Deaths
<b>Boulder County</b>	1	0	0
<b>Colorado</b>	1	0	0
<b>United States</b>	63	143	11

# Mosquito Activity



## West Nile virus (WNV) Vector Index

The vector index is a function of calculated infection rate, adjusted for *Culex* mosquito population size, within a given area. It is used to estimate human West Nile virus (WNV) transmission risk. A vector index of **0.75** or above in Boulder County is an indicator of high risk for WNV transmission to humans, and influences the Mosquito Control District’s adult mosquito emergency control measures. A vector index is calculated for [three monitoring zones in Boulder County](#).

VECTOR INDEX			
	ZONE 1	ZONE 2	ZONE 3
Season Week	Vector Index	Vector Index	Vector Index
Week 21	----	----	----
Week 22	----	----	----
Week 23	----	----	----
Week 24	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 25	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 26	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 27	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 28	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 29	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 30	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 31	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Week 32	<b>0.00</b>	<b>0.32</b>	<b>0.00</b>
Week 33	<b>0.23</b>	<b>0.71</b>	<b>0.00</b>
Week 34	<b>0.24</b>	<b>0.00</b>	<b>0.27</b>

## Animal Disease Activity

Each week, Boulder County and municipal Animal Control Units responds to animal complaints throughout the county. When deemed necessary, these specimens are sent to state laboratories for zoonotic disease testing.

### Caveats

- Data are provided from the Colorado Department of Public Health and Environment (CDPHE) Zoonotic database and may not include samples submitted for testing prior to publishing of this report.
- Data reflect all samples submitted by Boulder County Public Health by other agencies or private veterinary practices.
- ‘Positive Vectors’ include only samples that have tested positive. Some samples submitted may be deemed untestable.
- ‘Submitted Vectors’ denoted with (\*) indicate that at least one sample was untestable. Untestable samples may be treated as positive for follow-up protocol.

## Submissions and Results by Disease

	TESTED VECTORS						POSITIVE VECTORS					
	RABIES	PLAGUE	TULAREMIA	WNV POOLS	HANTA VIRUS	TOTAL	RABIES+	PLAGUE+	TULAREMIA+	WNV POOLS+	HANTA VIRUS+	TOTAL
Wk 1-20	18	2	2	0	0	22	1	0	0	0	0	1
Wk21	1	0	0	0	0	1	0	0	0	0	0	0
Wk22	2	0	0	0	0	2	1	0	0	0	0	1
Wk23	5	0	0	0	0	5	0	0	0	0	0	0
Wk24	4	0	0	3	0	7	0	0	0	0	0	0
Wk25	4	0	0	3	0	7	0	0	0	0	0	0
Wk26	3	0	0	3	0	6	0	0	0	0	0	0
Wk27	4	0	0	5	0	9	0	0	0	0	0	0
Wk28	9	0	0	19	0	28	0	0	0	0	0	0
Wk29	8	2	2	27	0	39	1	0	0	0	0	1
Wk30	8	1	0	31	0	40	0	0	0	0	0	0
Wk31	8	0	0	36	0	44	0	0	0	0	0	0
Wk32	4	0	0	32	0	36	0	0	0	1	0	1
Wk33	1	0	0	16	0	17	0	0	0	3	0	3
Wk34	1	0	0	18	0	19	0	0	0	2	0	2
Wk35												
Wk36												
Wk37												
Wk38												
Wk39												
Wk40												
<b>TOTAL TO DATE</b>	<b>80</b>	<b>5</b>	<b>4</b>	<b>193</b>	<b>0</b>	<b>282</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>9</b>

## Submissions and Results by Species

<b>SEASON-TO-DATE DISEASE TESTING BY SPECIES</b>				
<i>Species</i>	Rabies	Plague	Tularemia	Hanta
Bat	58	0	0	0
Skunk	2	0	0	0
Raccoon	8	0	0	0
Squirrel	0	0	0	0
Cat	4	2	1	0
Flea	0	0	0	0
Dog	5	2	2	0
Fox	0	0	0	0
Prairie Dog	0	0	0	0
Rabbit	0	0	1	0
Other	3	1	0	0
<b>TOTALS</b>	<b>80</b>	<b>5</b>	<b>4</b>	<b>0</b>

<b>SEASON-TO-DATE DISEASE POSITIVES BY SPECIES</b>				
<i>Species</i>	Rabies	Plague	Tularemia	Hanta
Bat	3	0	0	0
Skunk	0	0	0	0
Raccoon	0	0	0	0
Squirrel	0	0	0	0
Cat	0	0	0	0
Flea	0	0	0	0
Dog	0	0	0	0
Fox	0	0	0	0
Prairie Dog	0	0	0	0
Rabbit	0	0	0	0
Other	0	0	0	0
<b>TOTALS</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Testing by Disease

