



Zoonotic Disease Report September 15 – September 21, 2019 (Week 38)

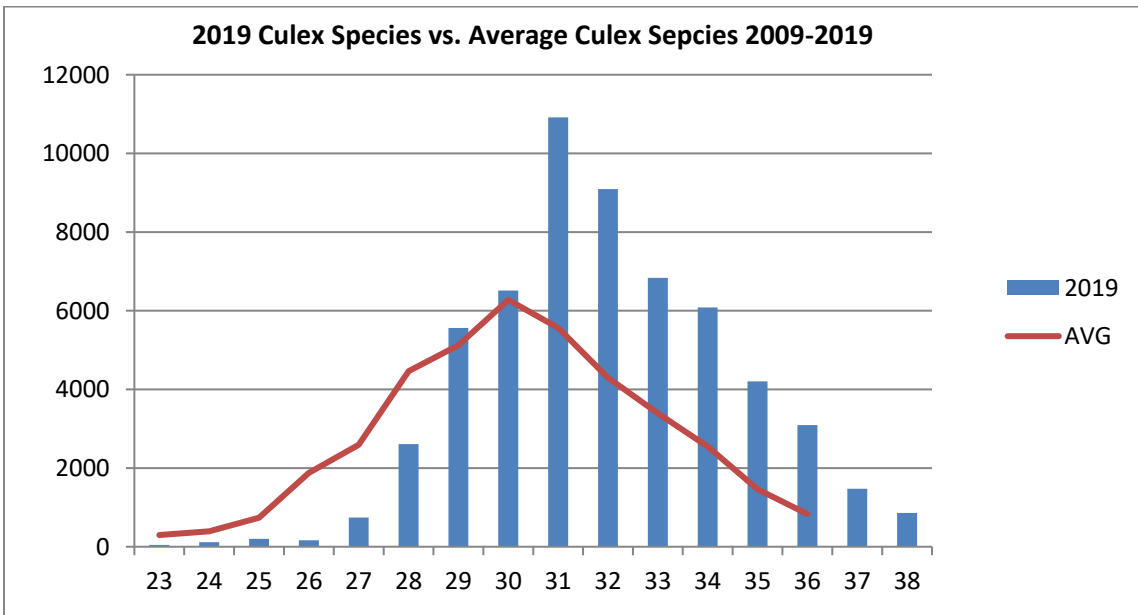
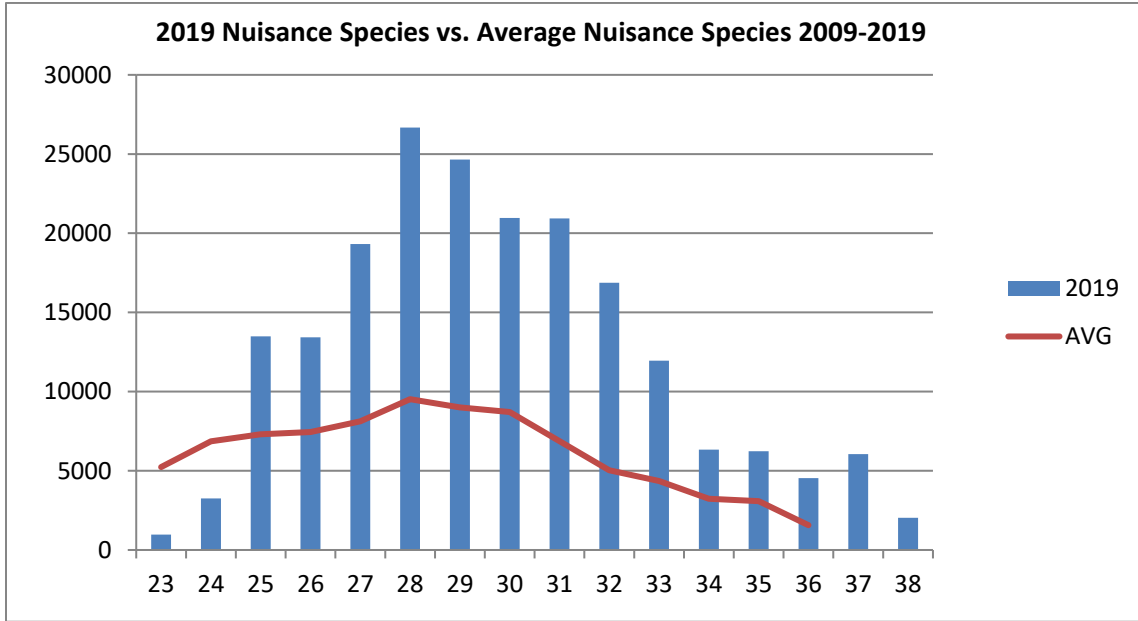
Executive Summary

- No mosquito pools were submitted from Zones 1, 2, or 3 this week for WNV testing.
- Two human cases of WNV have been reported since last week; one case lives near Baseline and 119th in Lafayette, the other lives near Baseline and Foothills in Boulder. This brings the year-to-date total to seven cases. An additional case is pending.
- One hundred fourteen mosquito pools have tested positive for WNV in Colorado this season: Larimer (53), Weld (33), Boulder (8), La Plata (6), Mesa (7), Pueblo (5), Adams (5), Delta (7).
- Mosquito trapping was limited this week; of the 2,613 recorded mosquitoes, 22% were *Culex*.
- Statewide, 149 specimens have tested positive for rabies in 2019.
- 2019 Colorado rabies positive specimens: Skunk (93), Bat (48), 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 cat was submitted for plague testing; it was negative.
- Unless there is a significant jump in disease activity next week, this will likely be the final Weekly Report for the season.

West Nile virus (WNV) Activity

SEASON-TO-DATE (Sept. 17) HUMAN WEST NILE VIRUS (WNV) ACTIVITY			
Location	Non-Neuroinvasive Disease Cases	Neuroinvasive Disease Cases	Deaths
Boulder County	5	2	0
Colorado	15	7	0
United States	166	302	21

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	0.00	0.00	0.00
Week 25	0.00	0.00	0.00
Week 26	0.00	0.00	0.00
Week 27	0.00	0.00	0.00
Week 28	0.00	0.00	0.00
Week 29	0.00	0.00	0.00
Week 30	0.00	0.00	0.00
Week 31	0.00	0.00	0.00
Week 32	0.00	0.32	0.00
Week 33	0.23	0.71	0.00
Week 34	0.24	0.00	0.27
Week 35	0.00	0.30	0.20
Week 36	----	----	----
Week 37	----	----	----
Week 38	----	----	----

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	6	0	0	0	0	6	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	6	0	0	5	0	11	0	0	0	0	0	0
Wk28	12	0	0	19	0	31	0	0	0	0	0	0
Wk29	8	2	2	27	0	39	1	0	0	0	0	1
Wk30	9	1	0	31	0	41	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	4	0	0	16	0	20	0	0	0	3	0	3
Wk34	6	0	0	18	0	24	0	0	0	2	0	2
Wk35	4	0	0	13	0	17	0	0	0	2	0	2
Wk36	8	0	0	0	0	8	0	0	1	0	0	0
Wk37	4	0	1	0	0	5	0	0	0	0	0	0
Wk38	0	1	0	0	0	1	0	0	0	0	0	0
Wk39												
Wk40												
TOTAL TO DATE	111	6	5	206	0	328	3	0	1	8	0	12

Submissions and Results by Species

SEASON-TO-DATE DISEASE TESTING BY SPECIES				
<i>Species</i>	Rabies	Plague	Tularemia	Hanta
Bat	78	0	0	0
Skunk	2	0	0	0
Raccoon	10	0	0	0
Squirrel	0	0	0	0
Cat	7	3	1	0
Flea	0	1	0	0
Dog	8	2	2	0
Fox	0	0	0	0
Prairie Dog	0	0	0	0
Rabbit	0	0	2	0
Other	6	0	0	0
TOTALS	111	6	5	0

SEASON-TO-DATE DISEASE POSITIVES BY SPECIES				
<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	1	0
Other	0	0	0	0
TOTALS	3	0	1	0