






Zoonotic Disease Report July 4th – July 10th, 2010 (WEEK 27)

EXECUTIVE SUMMARY:

Bi-weekly sentinel trapping has started for the Boulder County Mosquito Control District (BCMCD). The first positive WNV pool in the state occurred in Otero County on June 30th. The first Colorado human case of WNV was confirmed in Weld County on July 2nd. Nuisance mosquito counts have dropped. The vector index is still 0.00 with no positive WNV pools in Boulder. 71 traps reporting in this week. Trap composition is an average of 11% *Culex* spp. 7 animals tested for rabies this week, 1 testing positive.

PROFILE OF COMMON ZOOONOTIC DISEASES IN BOULDER COUNTY

Disease	Symptoms	Vector	Prevention
 <p>WEST NILE VIRUS</p>	Fever, extreme fatigue, head and body aches, skin rashes. More severe symptoms can be meningitis, encephalitis, tremors, vision loss, and paralysis	Mosquitoes, primarily <i>Culex tarsalis</i> and <i>Culex pipiens</i> mosquitoes in Colorado	Dress in long clothes, drain standing water, use DEET, avoid outdoors during dusk/dawn
 <p>HANTA VIRUS</p>	Fever, chills, headache, muscle pain in shoulders, lower back, and thighs, nausea, vomiting, diarrhea, dizziness	deer mouse, spread by inhalation of dried droppings,	Prevent rodent infestation, avoid aerosoling rodent droppings when cleaning, moisten rodent droppings with water and bleach, ventilate cleaning area,
 <p>PLAGUE</p>	Fever, chills, headache, rapidly progressive weakness, painful swollen regional lymph nodes (buboes)	flea bites, usually roosting on infected animals	Avoid fleas and areas with wild rodents, do not touch sick or dead wild animals, prevent home rodent infestations, treat known rodent areas with flea powder; see healthcare provider if you show symptoms
 <p>TULAREMIA</p>	abrupt onset of fever, chills, muscle aches, headache, painful lesion at infection site, swollen lymph nodes	wild mammals, primarily rabbits, muskrats,	wear gloves when handling wild rabbit carcasses, cook game meat thoroughly
 <p>RABIES</p>	Apprehension, headache, fever, anxiety, difficulty swallowing, seizures and possible paralysis	All mammals, Bats, raccoons, skunks, foxes, and coyotes most common	vaccinate pets, avoid wildlife, contact healthcare provider if bitten by an animal

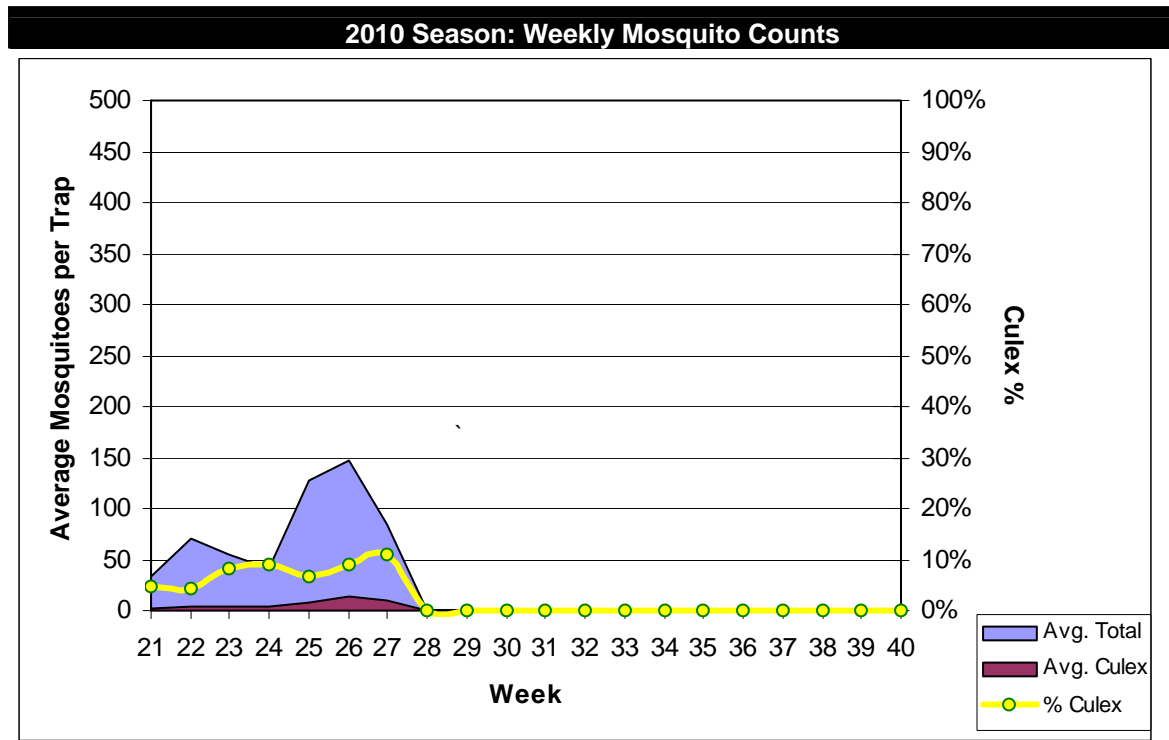
For more information, visit our website at www.bouldercountyvector.org





Mosquito Season Monitoring

This season, we at BCPH have attempted to standardize the reporting and monitoring of our past, present, and future mosquito monitoring seasons. To do so, season weeks will be reported as the epidemiological or 'CDCweek' of the current year. The first full week following January 1st coincides with Week 1, and so the mosquito monitoring season roughly spans weeks 21 to 40. Here are the indicators for this week:

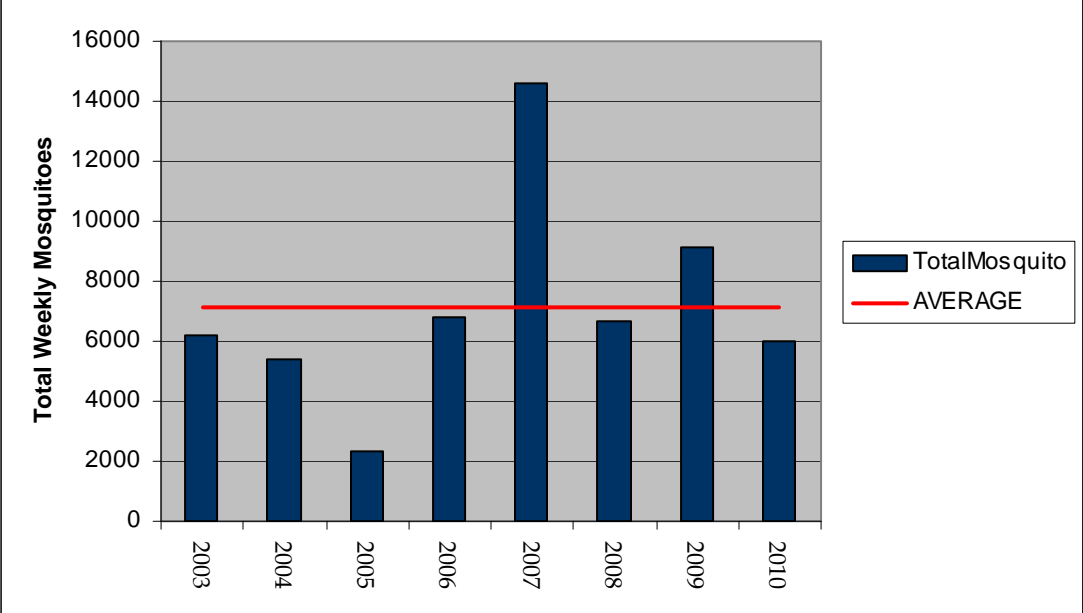


WEEKLY MOSQUITO STATS					
Select Week:	Trap Averages	ALL	Zone1	Zone2	Zone3
27	Mean Culex	6	6	5	8
	Median Culex	1	5	0	0
	Max. Culex	68	22	32	68
	Min. Culex	0	0	0	0

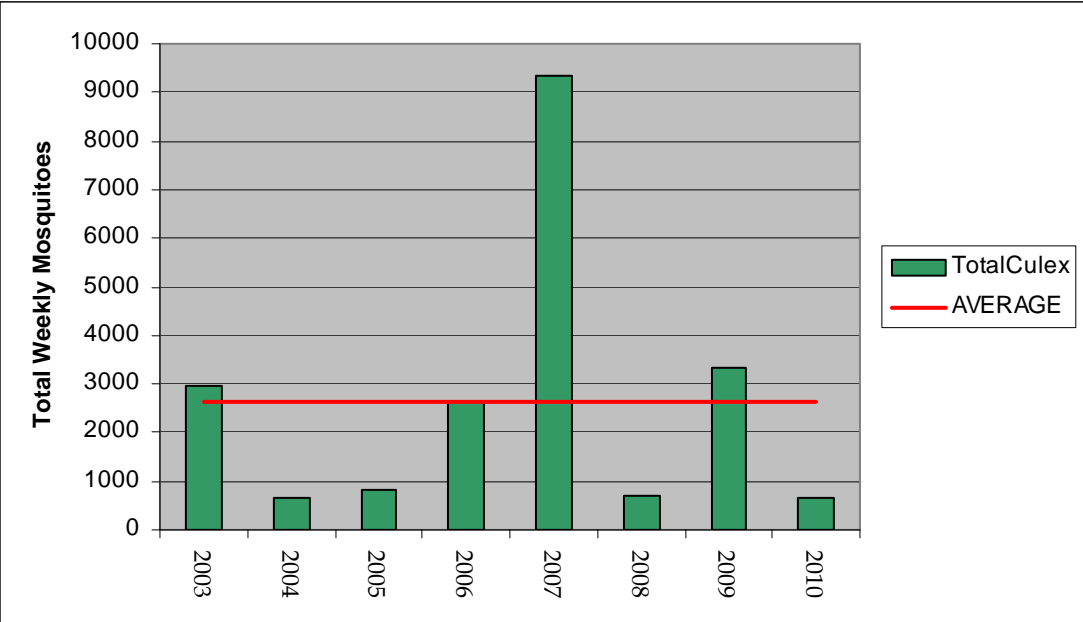


BOULDER COUNTY PUBLIC HEALTH
Environmental Health Division
3450 Broadway
Boulder, CO 80304
303.441.1564
<http://www.bouldercounty.org/health/environ>

Total Mosquitoes: Weekly Comparison By Year
Week 27 (July 4th- July 10th)



Total Culex: Weekly Comparison By Year
Week 27 (July 4th- July 10th)





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WNV Vector Index

The vector index is a weekly measure of infection rate, adjusted for *Culex* mosquito population size, within a given area. The value estimates the number of West Nile Virus infected mosquitoes collected at a given trap site on any given night. It is used to estimate human West Nile Virus transmission risk. The data on vector index as a predictor of human transmission is incomplete, but it suggests that a vector index of 0.75 or above is an indicator of high risk for West Nile Virus transmission to humans in Boulder County, and influences the Mosquito Control District’s adult mosquito emergency control measures.

VECTOR INDEX LOG	
Season	
Week	Vector Index
Week 21	0.00
Week 22	0.00
Week 23	0.00
Week 24	0.00
Week 25	0.00
Week 26	0.00
Week 27	0.00
Week 28	
Week 29	
Week 30	
Week 31	
Week 32	
Week 33	
Week 34	
Week 35	
Week 36	
Week 37	
Week 38	
Week 39	
Week 40	

Animal Zoonotic Disease Testing and Confirmations

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. Below is a summary of these testings:



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TESTED VECTORS							POSITIVE VECTORS					
	RABIES	PLAGUE	TULAREMIA	WNV POOLS	HANTA VIRUS	TOTAL	RABIES+	PLAGUE+	TULAREMIA+	WNV POOLS+	HANTA VIRUS+	TOTAL
Wk 1-20	13	0	0	0	0	13	0	0	0	0	0	0
Wk21	2	0	0	0	0	2	1	0	0	0	0	1
Wk22	5	0	0	0	0	5	1	0	0	0	0	1
Wk23	3	1	1	0	0	5	0	0	0	0	0	0
Wk24	4	0	0	5	0	9	0	0	0	0	0	0
Wk25	4	0	0	5	0	9	3	0	0	0	0	3
Wk26	8	0	0	9	0	17	1	0	0	0	0	1
Wk27	7	0	0	7	0	14	1	0	0	0	0	1
Wk28						0						0
Wk29						0						0
Wk30						0						0
Wk31						0						0
Wk32						0						0
Wk33						0						0
Wk34						0						0
Wk35						0						0
Wk36						0						0
Wk37						0						0
Wk38						0						0
Wk39						0						0
Wk40						0						0
TOTAL TO DATE	46	1	1	26	0	74	7	0	0	0	0	7

