



# TOWN OF BERTHOUD

## AUGUST 2017 MONTHLY REPORT

SEPTEMBER 4TH, 2017

### West Nile Virus Risk

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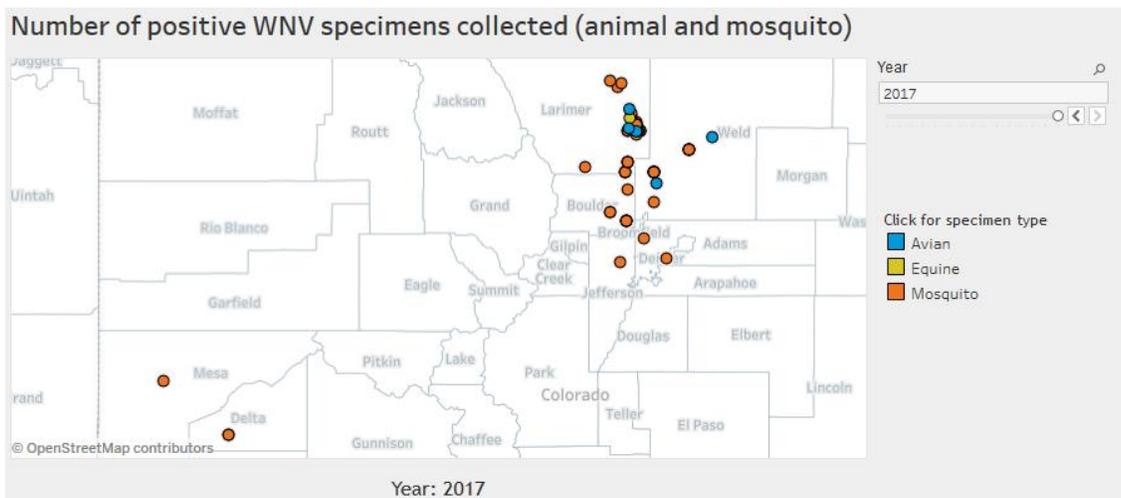
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As of August 29, 2017, a total of 45 states and the District of Columbia have reported West Nile virus infections in people, birds, or mosquitoes in 2017. Overall, 450 cases of West Nile virus disease in people have been reported to CDC. Of these, 269 (60%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 181 (40%) were classified as non-neuroinvasive disease. Last month, CDC showed that 33 states had reported West Nile virus infections in people, birds, or mosquitoes.

Larimer County Department of Health and Environment is among counties in the nation with the largest number of human West Nile cases. Three confirmed cases of West Nile virus in humans have been documented thus far by LCDHE. There was also one case in an asymptomatic blood donor and two cases are currently under review.

Human cases of West Nile virus infection have also been reported from individuals in Boulder, Weld, Jefferson, Adams, Morgan and Phillips Counties. These numbers are guaranteed to increase according to the CDPHE, as the majority of West Nile virus cases in humans are identified in August and September, during the season's peak.

During the month of August Colorado State University tested 444 sample pools of mosquitoes collected from traps set in Larimer County. 28 of these samples tested positive for West Nile virus with 24 of those samples being collected from Fort Collins, 3 from Berthoud and 1 from Loveland. Please note that this is the first year that Berthoud is participating in West Nile virus monitoring of mosquitoes collected within Town Limits.

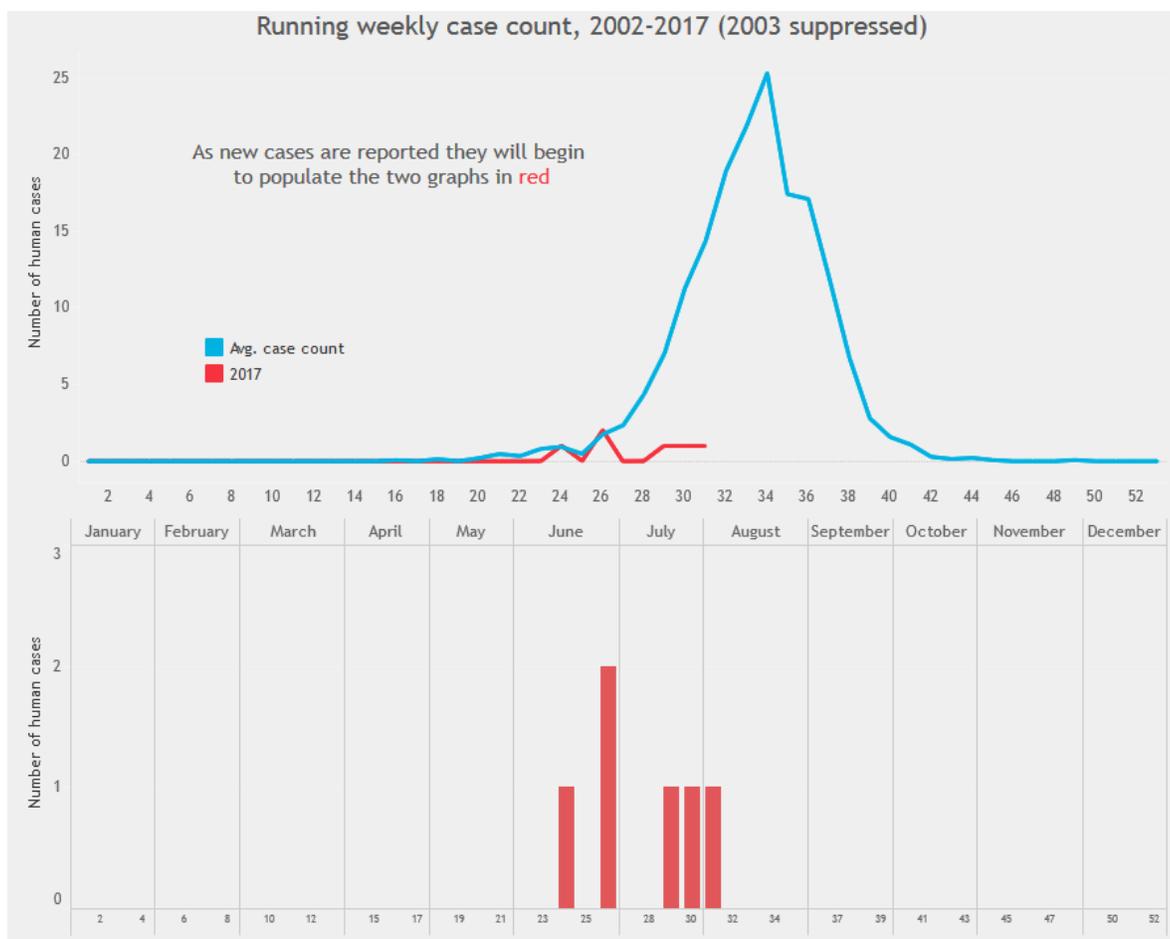


## Wear Your Repellent!

Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

DEET products generally provide the longest protection. The other repellents work but must be applied more frequently.

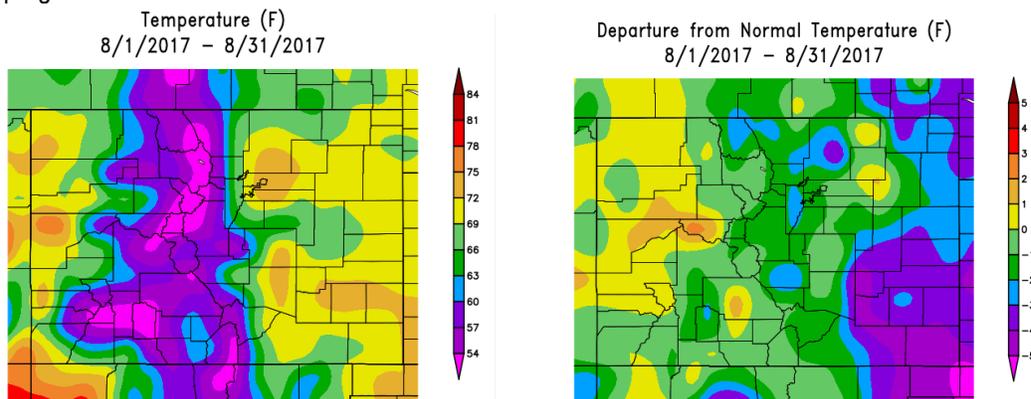
Follow the product label for correct use. Products with 10 percent or less DEET are recommended for children.



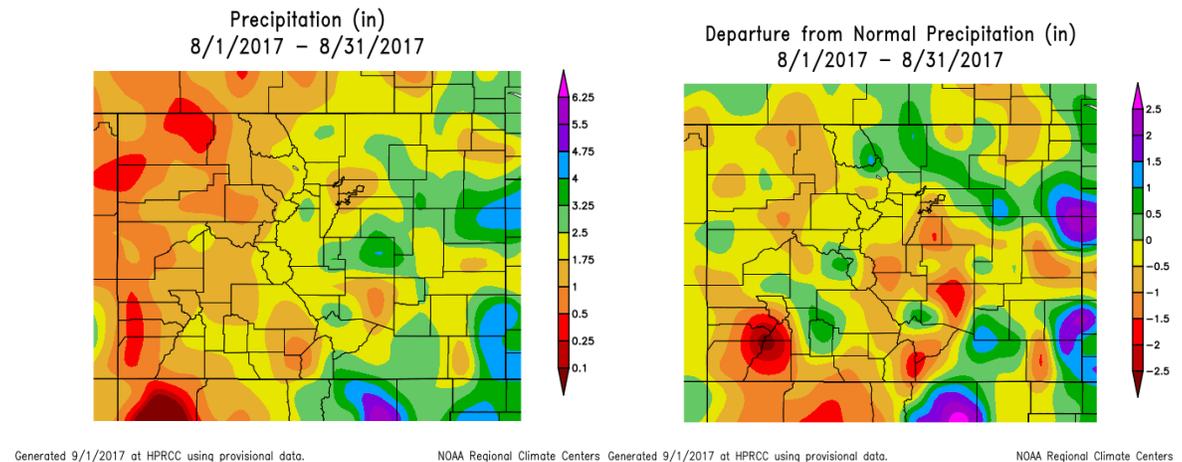
(CDPHE image taken from <https://www.colorado.gov/pacific/cdphe/west-nile-virus-data>)

## Weather

August 2017 was slightly cooler than average with a 1 to 3 degrees departure from normal in Larimer County. Average temperature during the month of August for both Loveland and the City of Fort Collins was 70F. Overall larval counts and product application totals remain comparable to average seasons. The species composition of *Culex tarsalis* larvae were high at the beginning of the month but decreased steadily as the month progressed.



Larimer County experienced slightly higher than average precipitation during the month of August as seen in the graphics depicted below.



## Larval Control Operations

VDCI field technicians performed 130 site inspections in the month of August 2017 as part of the Town of Berthoud inspection and larviciding program. Of those 130 site inspections, 119 sites (91.5%) were wet and 82 sites were producing mosquito larvae. A total of 43.4 acres were treated with 259.2 lbs. of Vectobac (*Bti*), 71.3 lbs Vectolex (*Bs*) and 2.2 gallons of BVA larviciding oil.

CMC field technicians performed 48 site inspections in the month of August 2016 as part of the Town of Berthoud inspection and larviciding program. Of those 48 site inspections, 38 sites (79.2%) were wet and 31 sites were producing mosquito larvae. A total of 9.7 acres were treated with 68.4 lbs. of Vectobac (*Bti*) and 0.4 gallons of BVA larviciding oil.

CMC field technicians performed 39 site inspections in the month of August 2015 as part of the Town of Berthoud inspection and larviciding program. Of those 39 site inspections, 33 sites (84.6%) were wet and 19 sites were producing mosquito larvae (57.6% of the wet sites). A total of 9.7 acres were treated with 40.6 lbs of Vectobac (*Bti*) to reduce an estimated 20.7 million mosquito larvae before emerging.

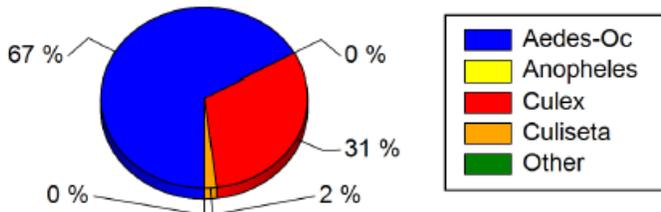
## Mosquito Population Surveillance

CMC set mosquito traps weekly in Berthoud Park (LC-001), Berthoud North on Bunyan Ave (LC-049), Berthoud Point (LC-054) and in Berthoud West (LC-053) to monitor mosquito abundance within Berthoud during August 2017. In 2017 there were 16 traps set, which collected a total 1,498 mosquitoes. The species composition of mosquitoes collected included 1,001 (67%) *Aedes* spp. and 468 (31%) *Culex* spp. and 29 (2%) *Culiseta* spp. mosquitoes. There were an average of 93 mosquitoes collected per trap night and 29 *Culex* spp. mosquitoes per trap night collected in Berthoud during August 2017.

Vector Disease Control International

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	
LC-001	LIGHT	Larimer	08/02/2017	Berthoud	33	0	25	0	0
LC-001	LIGHT	Larimer	08/09/2017	Berthoud	53	0	12	0	0
LC-001	LIGHT	Larimer	08/16/2017	Berthoud	12	0	2	0	0
LC-001	LIGHT	Larimer	08/23/2017	Berthoud	53	0	14	0	0
LC-049	LIGHT	Larimer	08/02/2017	Berthoud North of Bunyan	16	0	24	0	0
LC-049	LIGHT	Larimer	08/09/2017	Berthoud North of Bunyan	21	0	25	0	0
LC-049	LIGHT	Larimer	08/16/2017	Berthoud North of Bunyan	14	0	4	0	0
LC-049	LIGHT	Larimer	08/23/2017	Berthoud North of Bunyan	117	0	12	1	0
LC-053	LIGHT	Larimer	08/02/2017	Berthoud West	14	0	21	0	0
LC-053	LIGHT	Larimer	08/09/2017	Berthoud West	16	0	46	1	0
LC-053	LIGHT	Larimer	08/16/2017	Berthoud West	11	0	4	0	0
LC-053	LIGHT	Larimer	08/23/2017	Berthoud West	293	0	42	5	0
LC-054	LIGHT	Larimer	08/02/2017	Berthoud Point	49	0	95	5	0
LC-054	LIGHT	Larimer	08/09/2017	Berthoud Point	32	0	26	0	0
LC-054	LIGHT	Larimer	08/16/2017	Berthoud Point	46	0	61	6	0
LC-054	LIGHT	Larimer	08/23/2017	Berthoud Point	221	0	55	11	0
					1,001	0	468	29	0



**Adult Mosquito Control Operations**

Per the Larimer County Department of Health’s recommendation and Town Policy, adult mosquito control operations were performed with the Town of Berthoud on August 30<sup>th</sup> and 31<sup>st</sup> of 2017. A total of 101 miles of streets were fogged via Ultra Low Volume truck fogging units utilizing AquaKontrol3030 (Permethrin).

Vector Disease Control International

Adulicide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
Berthoud					
	<b>Truck</b>				
	08/30/2017 5	Aqua Kontrol 30 30	22:30:00	23:10:00	9.0
	08/30/2017 4	Aqua Kontrol 30 30	22:05:00	22:24:00	4.0
	08/30/2017 3	Aqua Kontrol 30 30	22:08:00	22:52:00	9.0
	08/30/2017 2	Aqua Kontrol 30 30	22:56:00	23:46:00	11.0
	08/30/2017 1	Aqua Kontrol 30 30	22:05:00	23:22:00	17.0
	08/31/2017 5	Aqua Kontrol 30 30	23:58:00	00:39:00	10.0
	08/31/2017 4	Aqua Kontrol 30 30	23:34:00	23:53:00	4.0
	08/31/2017 3	Aqua Kontrol 30 30	22:46:00	23:27:00	9.0
	08/31/2017 2	Aqua Kontrol 30 30	23:27:00	00:20:00	11.0
	08/31/2017 1	Aqua Kontrol 30 30	22:05:00	23:20:00	17.0
		<b>Truck</b>		<b>Sum</b>	<b>101.0</b>
				<b>Avg</b>	<b>10.1</b>
				<b>Min</b>	<b>4.0</b>
				<b>Max</b>	<b>17.0</b>
				<b>Grand Total</b>	<b>101.0</b>

## **Public Relations**

VDCI received three phone calls from a resident of Berthoud requesting information about adult mosquito control applications during the month of August 2017.