

**Jefferson County Public Health  
Zoonosis and West Nile Virus (WNV)  
Newsletter # 2  
July 6, 2012  
ZONOSIS**

**RABIES IN COLORADO**

January 1 – June 25, 2012  
Lab Confirmed Rabies Positive Animals

County	Bat	Skunk	Fox	Other	Total
Archuleta	1				1
Bent		2		1-cow	3
Boulder	6				6
Cheyenne				1-cat	1
Denver	2				2
Jefferson	3				3
Kiowa		1	1		2
Kit Carson		1			1
Larimer	5	16		1-bison	22
Las Animas	1				1
Morgan		2			2
Otero		1			1
Pueblo	4	15	2		21
Weld	2	9	1		12
Totals	24	47	4	3	78

Through investigation by local public health and animal control officials, 15 humans and 85 domestic animals were considered exposed to these laboratory-confirmed rabid animals.

The cow was confirmed to be infected with rabies by Colorado State University (CSU) Veterinary Diagnostic Laboratory on June 19, 2012, and originated from a small ranch near the town of Las Animas in Bent County, in close proximity to recently lab confirmed rabid skunks. The cow presented with acute neurologic symptoms on June 17<sup>th</sup> and was euthanized. Four people have started rabies post-exposure prophylaxis (PEP) due to contact with saliva or central nervous system tissue from this cow. The CDPHE Laboratory submitted specimens from this cow to CDC, which has reported that the cow was infected with the south central skunk variant of rabies virus.

The domestic cat was confirmed with rabies infection on June 20, 2012, by CSU and was from the Kit Carson area in Cheyenne County. The cat was seen fighting with a skunk three weeks prior to onset of acute neurologic symptoms on June 15<sup>th</sup> and died on the owner's property on June 16<sup>th</sup>. Five other unvaccinated cats on the property were euthanized due to contact with the rabid cat. There were no known human exposures to this rabid cat.

A bison was also confirmed with rabies infection on June 25, 2012, by CSU and originated from the CSU Foothills Campus in Fort Collins, Larimer County. This bison and two other bison died suddenly within a week of each other starting on June 18<sup>th</sup>. Larimer County and CDPHE public health officials are assessing whether there were any human exposures to these three bison that would warrant rabies PEP.

**RABIES IN JEFFERSON COUNTY**

JCPH has had 64 animals tested for rabies so far this year that include 20 bats, 11 skunks, and 6 raccoons. Three bats have tested positive for rabies. Historically bats have been the common carrier of rabies in Colorado but because of the approaching skunk rabies JCPH encourages everyone to have their domestic pets (dogs, cats, and ferrets) and livestock vaccinated for rabies. Any unvaccinated domestic pets or livestock that come in contact with a known or suspected animal infected with rabies will need to be euthanized or placed under a 180 day quarantine in a secure facility such as a veterinary clinic. Save yourself financial and emotional stress by always keeping your domestic pets (dogs, cats, and ferrets) and livestock vaccinated for rabies.

In addition to rabies vaccinations for pets and livestock, there are additional precautions to prevent possible exposure to rabies:

- Do not feed, touch, or handle wild animals.
- Teach children to leave wildlife alone.
- Do not leave pet food or livestock feed in areas accessible to wildlife.
- Maintain control of your pets by keeping cats indoors and keeping dogs under direct supervision.
- Spay or neuter your pets to reduce the number of unwanted or stray animals in your community.
- Call your local animal control office to remove stray animals from your neighborhood or Jefferson County Animal Control at 303-271-5070
- Call the Colorado Division of Wildlife at (303)297-1192 if you have problems with wild animals.

### **TULAREMIA IN JEFFERSON COUNTY**

A rabbit from the foothills near I-70 and Denver West Blvd in Lakewood, Colorado tested positive for Tularemia on June 29, 2012. Tularemia is a zoonotic bacterial disease maintained by various types of wild rodents and animals and is transmitted primarily by flea and tick bites. Squirrels, rodents, prairie dogs and other mammals, such as rabbits and cats are susceptible because they get fleas and ticks.

Tularemia is an infection common in wild rodents caused by the organism *Francisella tularensis* and transmitted to humans by contact with animal tissues or ticks. Humans can be infected with the bacteria, which is treatable with appropriate antibiotics. The onset of the disease in humans is sudden flu-like symptoms with high fever, chills, fatigue, general body aches, headache, and nausea. Most often the tularemia presents as a skin ulcer at the site of introduction such as a cut. Symptoms appear between 2 and 10 days after exposure, but usually after 3 days.

Controlling fleas and ticks on pets will prevent the transfer of disease to humans. If reasonable precautions are taken, the probability of contracting Tularemia is extremely low. People should keep their pets away from and should not handle any sick or dead animals. If a dead animal is found, do not handle the animal directly. Use gloves and a shovel and place the animal in a plastic bag. When hiking or doing work outdoors use the same "4 Ds" recommended for WNV listed below.

### **WNV**

#### **WNV NATIONAL**

Outside of Colorado, the Centers for Disease Control (CDC) and United States Geological Survey (USGS) have posted 7 human cases of WNV fever Arizona (2), California (1), and Texas 4:

For updates during the WNV season visit the CDC and USGS websites at

<http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>

[http://diseasemaps.usgs.gov/wnv\\_us\\_human.html](http://diseasemaps.usgs.gov/wnv_us_human.html)

#### **WNV COLORADO**

CDPHE Laboratory and Colorado State University have reported that mosquito samples from Boulder, Delta, Larimer, and Weld counties have tested positive via polymerase chain reaction (PCR) for West Nile virus (WNV). No human WNV cases have been reported so far in 2012. Local health departments in these counties and CDPHE have issued press releases to remind the public to take precautions against WNV.

#### **WNV JEFFERSON COUNTY**

In past years, standing water on properties throughout the County has been evaluated by the Jefferson County WNV contractor for the presence of mosquito larvae and treated if mosquito larvae were found. However, beginning in 2011, any standing water that has the potential to breed mosquitoes is the responsibility of the property owner, meaning they must provide all WNV monitoring and control activities on their property. This applies to all cities, parks, special districts, and private property in the county.

Eliminating standing water is the most effective way to stop mosquito breeding. If the water can not be eliminated, the installation of an aerator to keep the water flowing is the next best step. If this is not possible, clean the edges of your pond of grass, moss, and bushes to eliminate the breeding sites for mosquito larvae.

The last and final step that should be considered is biological control using an environmental friendly larvicide, such as BT (*Bacillus thuringiensis*) throughout the summer. This will kill the mosquitoes before they have a chance to hatch and fly. These types of larvicides can be purchased over the internet, from a local home improvement sites or you may contact contractors listed in the yellow pages under "pests."

Because there will not be any mosquito larval surveillance or control during the 2012 season JCPH strongly encourages everyone to follow the 4 "Ds" listed below:

- Use **DEET** insect repellent for **ALL** outdoor activities (even out to get the mail). Additional insect repellents available are **Picaridin and Oil of Lemon Eucalyptus**, (Always follow Label Directions Carefully).
- **At Dawn and Dusk** - outdoor activities should be limited, because it is at these times that mosquitoes most active.
- **Dress** in long sleeves and pants when outdoors and be sure to cover feet and ankles if you have outdoor activities.
- **DRAIN** and **EMPTY** all containers (toys, kiddie pools, flowerpots, buckets) in your yards because mosquitoes carrying WNV can bite at anytime and anywhere, even in your own yards. Make sure your gutters and downspouts are clean and running freely.
- Check your home to make sure all windows and doors have screens and are in good condition and keep your doors closed to prevent mosquitoes and bats from coming into your home.
- For additional information from repellents to how to protect you and your family around home go to <http://health.jeffco.us> and go to WNV under animal borne diseases.

**For More Information** on Zoonosis and WNV visit our web site at <http://health.jeffco.us>

You may also contact the Jefferson County Public Health Zoonoses Program:

David Volkel: [dvolkel@jeffco.us](mailto:dvolkel@jeffco.us) 303-271-5730