

**Jefferson County Public Health  
Zoonosis and West Nile Virus (WNV)  
Newsletter # 1  
June 22, 2012  
ZONOSIS**

**RABIES IN COLORADO**

January 1 – June 18, 2012  
Lab Confirmed Rabies Positive Animals

County	Bat	Skunk	Fox	Other	Total
Archuleta	1				1
Bent		2			2
Boulder	5				5
Denver	2				2
Jefferson	3				3
Kiowa		1	1		2
Kit Carson		1			1
Larimer	5	16			21
Las Animas	1				1
Morgan		2			2
Otero		1			1
Pueblo	3	15	2		20
Weld	2	7	1		10
Totals	22	45	4		71

**RABIES IN JEFFERSON COUNTY**

JCPH has had 51 animals tested for rabies so far this year that include 13 bats, 9 skunks, and 5 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.

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.

**Plague in Jefferson County**

A squirrel from the Idledale, Colorado area tested positive for bubonic plague on June 11. Citizens are reminded to take simple precautions to avoid exposure. Plague is a highly infectious bacterial disease maintained by various types of wild rodents and is transmitted primarily by flea bites. Squirrels, rodents, prairie dogs and other mammals, such as rabbits and cats are susceptible to plague because they get fleas, and this is the beginning of the 2012 plague season.

The best way to prevent plague is to control the presence of rodents and fleas in and around the home. In addition, people should avoid contact with any species of wild rodents, especially sick or dead rodents. Dogs and cats should be confined so they cannot prey on infected rodents and then bring the disease home with them. Pet owners who live close to rodent populations should use flea control products recommended by their veterinarian. Controlling fleas on pets will prevent the transfer of fleas to humans. If these reasonable precautions are taken, the probability of contracting plague is extremely low.

People should not directly handle any dead rodents they find and should keep their pets away from them. If a dead rodent is found, do not handle the animal directly. Use gloves and place in a plastic bag.

## **HANTAVIRUS PULMONARY SYNDROME (HPS)**

As the weather warms and people spend more time outdoors and begin their annual spring cleaning projects everyone should keep in mind the following:

HPS is a serious respiratory disease caused by a virus (hantavirus). Hantavirus is carried by wild rodents, particularly deer mice, and is present in their droppings (feces), urine and saliva. These dried droppings or urine can be stirred up in dust and breathed in by people. People may get hantavirus when they breathe in air contaminated by the virus. Hantavirus has not been shown to infect other kinds of animals, such as dogs, cats or farm animals. The disease is not contagious and does not spread from human to human.

Symptoms: The incubation period (time between exposure and appearance of symptoms) varies widely, but ranges from 1 to 6 weeks, with an average of 2-3 weeks. First symptoms of HPS include fever, headache, and muscle pain, severe abdominal, joint and lower back pain, nausea and vomiting. A cough and shortness of breath usually develops 1 to 5 days after the onset of symptoms. The primary symptom of HPS is difficulty in breathing due to fluid build-up in the lungs. This can quickly progress to respiratory failure.

Preventing Hantavirus: The best way to prevent the risk of hantavirus infection is to control the presence of rodents in and around the home. This includes sealing up rodent entry holes or gaps; trapping mice and rats; and, being careful not to create food sources for the rodents, i.e. keeping yard clean and putting away pet food. Hantavirus is often encountered when cleaning vacated sheds, cabins or other enclosed areas, so it is especially important that areas where rodents have been are cleaned cautiously and carefully. Areas should not be swept or vacuumed as this can stir up dust. Instead, use gloves and thoroughly wet contaminated areas with a bleach and water solution or household disinfectant. Once wet, contaminated materials can be taken up with damp towel and then mopped or sponged with bleach solution or household disinfectant. Contaminated gloves should be cleaned and disinfected before taking them off. After taking off the clean gloves, wash hands with soap and warm water.

## **WNV**

### **WNV NATIONAL**

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

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**

First West Nile Virus Positive Findings for 2012

CDPHE Laboratory and Colorado State University have reported that mosquito samples from 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 three counties and CDPHE have issued press releases to remind the public to take precautions against WNV.

CDPHE has noted a decline in the amount of WNV testing performed during recent years. In the absence of human laboratory results it is very difficult for public health officials to direct resources to the highest risk areas for WNV transmissions and to assess the impact of WNV on the health of Colorado residents. Healthcare providers are encouraged to test their patients for WNV via serology if the symptoms are consistent with either the WNV fever presentation or the neuroinvasive presentation (aseptic meningitis, acute flaccid paralysis, or encephalitis). In addition, CDPHE is working to provide resources for WNV testing in high-incidence areas

<http://www.cdphe.state.co.us/dc/Zoonosis/wnv/index.html>

### **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. This will reduce the chance of mosquitoes and bats gaining entry 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