

DOC'S DESK

Thus far 2014 has been very quiet on the rabies front. We have recorded one bat in Donley County this year. That bat was reported almost six months after the last case in 2013. We are now approaching four months without another case and have no complaints. The prospects for having low numbers in the coming months/years are beginning to dim based on reports we are receiving of a resurgence in the skunk population. The rains the Region has received over the summer will produce more food sources for the resident skunk population, which in turn most likely will lead to more skunks and more rabies cases over time.

The rains also have brought about a robust mosquito population. We are beginning to receive reports of people with test results indicative of exposure to West Nile virus (WNV). Once those investigations are complete, we will know if we have any confirmed cases. By clicking on "2013 Summary" the final report for arboviral activity in HSR 1 may be viewed at: <http://www.dshs.state.tx.us/idcu/disease/arboviral/westnile/summaries/> Weekly summaries for 2014 may be accessed at: <http://www.dshs.state.tx.us/idcu/disease/arboviral/westNile/reports/weekly/>

Now that West Nile has become a normal part of our flora, a new virus has made its way into the state. The chikungunya (chick un-gun-ya) virus (CHIKV) has been found in mosquito pools in Florida and was recently reported in a mosquito pool in Harris County (Houston). Spraying for mosquito

control is underway in that area, but the odds are high the virus is going to become endemic in Texas. Based on historical sampling, Terry and Lubbock Counties are the only areas in HSR 1 where the two vector species, *Aedes aegypti* and *A. albopictus*, have been found. We are limited in our knowledge of the prevalence of these species partly because of when they are most active – the daylight hours. Trapping for the *Culex tarsalis* mosquito, which is the vector for WNV, occurs from dusk through the nighttime hours. In addition to a different trapping time frame, the *Aedes* mosquitos require a different type of trap for good results, than is used for WNV vectors. Therefore, just because we have not found the two CHIKV vectors does not mean they are not present.

Florida has already reported a diagnosis of CHIKV in a person who had not traveled to the endemic areas of the Caribbean, Central and northern South America. Evidently, someone who returned from a country where the virus is endemic brought it back to Florida, and infected the local mosquitos. That is most likely the route by which the mosquitos in the Houston-area were infected. Anyone traveling to a country where the virus is endemic, such as people doing mission work, should utilize mosquito repellent at all times and for at least seven days after returning state-side. If a person is ill within seven days of arrival, it is imperative that repellent be used and a physician consulted. This will help reduce the risk of infecting the local mosquito populations.

CHIKV does not cause a high mortality rate, but unlike WNV, where about 80% of infected people are asymptomatic, CHIKV causes a very high rate of morbidity with almost all infected people being ill. The name means "that which bends up" because it causes

painful joint contortion along with fever, muscle pain, headaches, rash and nausea.

The disease that has occupied most of our time this year has been hantavirus pulmonary syndrome (HPS). In March, a resident of the Panhandle was diagnosed with the syndrome. Exposure was believed to have occurred when a tarp covering furniture in a rodent-infested barn was rapidly removed, filling the air with contaminated dust. In May, another Panhandle resident and a resident of the South Plains became cases two and three. One had been moving boxes out of a garage where they had been stored for a couple of years. The other pulled an old ceiling down in an outbuilding that was being remodeled. The fourth case occurred in June in a Panhandle resident that had cleaned dust and debris off of a saddle in a rodent infested tack room. All were blessed with having survived their syndromes. The state total, 1993 to present, now stands at 42 cases with 14 deaths (33% CFR). In HSR 1, our total is 22 cases (52% of state total), with 8 (57%) of the fatal cases and a 36% CFR. Please remind people that the hantavirus most closely associated with HPS is endemic in our Region and care needs to be exercised when cleaning a rodent infected area. The first step is to air out the area for a period to reduce virus concentrations in the air. Then spray the area with a 10% bleach solution, or some other viricide labeled for killing hantaviruses. Allow it to sit for 30 minutes. Spray the viricide again and clean up the debris while damp to avoid creating dust. Hands should be protected by gloves (rubber, latex, vinyl, etc.) and if there is any risk of creating dust, goggles and a well fitted N-95 or HEPA mask are recommended.

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Currently, the news is full of information about the Ebola virus outbreak in western Africa. It is inflicting a horrible death toll in the areas where it is active and some traveler-associated spread has occurred. A new treatment has been developed experimentally that may prove to be a valuable tool in this and future outbreaks. The disease is highly associated in Africa with the eating of "bushmeat". These are animals such as bats, primates and rodents that are harvested from the jungle in an effort to provide a meat protein supplement to vegetable-based diets. At this time no cases of Ebola have occurred in the US, but two medical personnel infected in Africa were air-transported to Atlanta for the experimental treatment. We hope the outbreak will be reined in soon in Africa and further international spread will cease.

The world is experiencing significant adverse events now with various wars, diseases and severe weather. We hope your life is a relatively calm existence at present.

§169.25. Reports of Human Exposure to Rabies.

(a) Any person having knowledge of a potential rabies exposure to a human will report the incident to the local rabies control authority as soon as possible after the incident. This requirement does not apply to contacts with low-risk animals as defined in §169.22 of this title (relating to Definitions).

(b) The custodian of an animal that has potentially exposed a person to rabies will place that animal in quarantine or submit it for testing as prescribed in §169.27 of this title (relating to Quarantine Method and Testing).

(c) The local rabies control authority will investigate each potential rabies exposure and assure appropriate resolution, in accordance with §169.27 of this title.

The provisions of this §169.25 adopted to be effective April 1, 1980, 5 TexReg 812; amended to be effective March 5, 1982, 7 TexReg 744; amended to be effective March 29, 1988, 13 TexReg 1337; amended to be effective February 21, 1996, 21 TexReg 963; amended to be effective December 20, 2007, 32 TexReg 9341; amended to be effective March 31, 2013, 38 TexReg 1994

Overview of Dog Bites

Scientists tell us that dogs have shared their lives with humans for more than 12,000 years and that coexistence has contributed substantially to humans' quality of life. In the United States, there are more than 53 million dogs sharing the human-canine bond, more dogs per capita than in any other country in the world. Unfortunately, a few dogs do not live up to their image as mankind's best friend. According to the American Veterinary Medical Association, an estimated 4.7 million people are bitten by dogs each year, with an estimated 800,000 requiring medical attention. Children account for approximately half of all dog bite victims with the elderly being the second most common group of victims.

Direct costs of dog bite injuries are high, including the cost of medical care, insurance costs, workmen's compensation claims, lost wages, and sick-leave associated business costs, among others.

Almost half of all dog bites are provoked, regardless of whether the victim is a child or an adult. What constitutes provocation for a dog can be very different from what a human would consider provocation.

Basic safety tips to avoid dog bites:

Always supervise a young child around any dog, no matter how well known, friendly, or small that dog may be. A parent sleeping in the same room does not constitute supervision.

Never approach an unfamiliar dog.

Never run from a dog and scream.

Stay still when an unfamiliar dog comes up to you.

If knocked over by a dog, roll into a ball and lie still.

Do not stare a dog in the eyes because it may be viewed as threatening.

Do not disturb a dog that is sleeping, eating or caring for puppies.

Do not pet a dog without letting it see and sniff you first.

Do not ride your bicycle or run past a dog.

Do not tease a dog, pull its ears or tail or squeeze it too hard.

Lavish extra attention on a dog when a new baby is brought home.

It's important for new dog owners to understand...

that canines are pack animals, and puppies should be trained to look to humans for leadership and to avoid competition with humans;

the need to socialize the puppy to many different types of people; the importance of puppy obedience class;

that wrestling, tug-of-war, and "sicking" instills bad habits in a dog; the importance of spaying or castrating the dog (studies show that neutered animals are less likely to be aggressive); and

the significance of teaching children how to properly behave around animals.

For additional information about dog bites and bite prevention, please see the American Veterinary Medical Association's website at http://www.avma.org/public_health/dogbite/default.asp and the National Center for Injury Prevention and Control's website at <http://www.cdc.gov/HomeandRecreationalSafety/Dog-Bites/biteprevention.html>.



**Amarillo Animal Management and Welfare Shelter
will host the next**

**Texas Department of State Health Services HSR 1
Animal Control Officer Basic Training Course**

September 16 and 17, 2014

at the

Facilities Administration Building

823 S. Johnson Street

Amarillo, Texas

This two-day class will consist of 12 hours of lecture, video and guest speaker presentations that will assist attendees in their comprehension of the study material for the state exam on the second day. The cost to register is \$75.

Questions for the exam will come from the DSHS [Animal Control Officer Training Manual](#), so it is advised that attendees purchase one, though it is not required. An order form is attached if needed, along with the class registration form. To register, fax the completed form to **Ms. Tonya Finch** in the Canyon office and call to verify that it was received. The deadline to register is **Monday, August 18, 2014**, but we will still take registrations until the class is full. Acceptance packets should be mailed out within a week of the deadline. **Do not** send payment for the course until you receive the registration packet. Manual requests, however, should be mailed in with the \$40 fee enclosed.

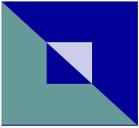
For more information on the course, go to <http://www.dshs.state.tx.us/idcu/health/zoonosis/education/training/aco/>. The manual can also be found online here.

Chapter 829 of the Texas Health and Safety Code requires all ACOs to successfully complete a basic training course within one year of their date of hire. 30 hours of continuing education (CE) credit must be attained within the subsequent three year period. Those ACOs who were grandfathered in when Chapter 829 took effect on July 1, 2008, had their first three-year deadline on June 30, 2011 and their second deadline on June 30, 2014. If you failed to meet either of the deadlines, you must retake the full course and exam. It is our hope that officers will attend not just because of the legal requirement, but because it will enhance their level of professionalism, their knowledge base, and safety in the field.

If you have questions, please call Dr. James Alexander or me in the Canyon office at 806/655-7151 x. 1104.

We look forward to seeing you there.

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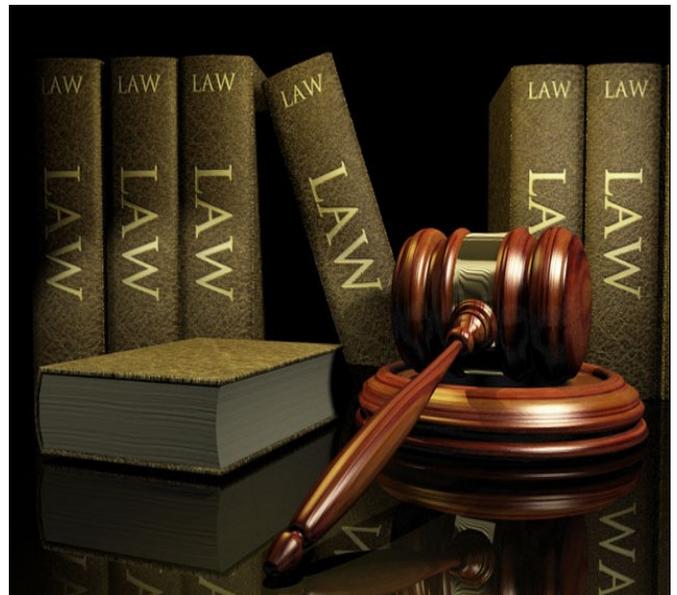
Who's Your Local Rabies Control Authority ?

The Rabies Control Act, Chapter 826 of the Texas Health and Safety Code, requires each county and municipality to designate a Local Rabies control Authority (LRCA). Persons that may be designated as the LRCA include the county health officer, a municipal health officer, an animal control officer, a peace officer, or any entity that the governing body considers appropriate. The LRCA is responsible for enforcing laws pertaining to rabies control, which include Chapter 826, the rules for Rabies Control and Eradication in Chapter 169 of the Texas Administrative Code, and any rules established by the local municipality or county.

All bites and scratches to people from animals capable of transmitting rabies must be reported to the LRCA, who, in turn, must investigate these potential exposures and suspected rabid animals. The LRCA must be familiar with laws pertaining to rabies, as well as the requirements for animal rabies testing and quarantine. The LRCA makes sure that any high-risk species that may have exposed someone to rabies is sent to the state laboratory for rabies testing. If a domestic dog, cat or ferret is responsible for the bite or scratch, then the LRCA must ensure that the animal is captured and either properly quarantined for the required amount of

time or euthanized and tested for rabies. The LRCA determines whether home confinement is allowed for dogs, cats, or ferrets when certain conditions are met, and may also require that an animal that has inflicted multiple bite wounds be tested immediately. The LRCA has the final word regarding the disposition of a biting animal.

Find out who your LRCA is, and make sure that all animal bites and scratches get reported to this person. If no one has been appointed, talk to your local officials about finding someone who can do the job.



National Center for Emerging and Zoonotic Infectious Diseases Division of Vector-Borne Diseases

West Nile Virus (WNV) Fact Sheet

What Is West Nile Virus?

West Nile virus infection can cause serious disease. WNV is established as a seasonal epidemic in North America that flares up in the summer and continues into the fall. This fact sheet contains important information that can help you recognize and prevent West Nile virus.

What Can I Do to Prevent WNV?

The easiest and best way to avoid WNV is to prevent mosquito bites.

- When outdoors, use repellents containing DEET, picaridin, IR3535, some oil of lemon eucalyptus or para-menthane-diol. Follow the directions on the package.
- Many mosquitoes are most active from dusk to dawn. Be sure to use insect repellent and wear long sleeves and pants at these times or consider staying indoors during these hours.
- Make sure you have good screens on your windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from flower pots, buckets and barrels. Change the water in pet dishes and replace the water in bird baths weekly. Drill holes in tire swings so water drains out. Keep children's wading pools empty and on their sides when they aren't being used.

What Are the Symptoms of WNV?

- **Serious Symptoms in a Few People.** About 1 in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. These symptoms may last several weeks, and neurological effects may be permanent.
- **Milder Symptoms in Some People.** Up to 20 percent of the people who become infected will have symptoms which can include fever, headache, body aches, nausea, vomiting, and some-

times swollen lymph glands or a skin rash on the chest, stomach and back. Symptoms can last for as short as a few days to as long as several weeks.

- **No Symptoms in Most People.** Approximately 80 percent of people who are infected with WNV will not show any symptoms at all, but there is no way to know in advance if you will develop an illness or not.

How Does West Nile Virus Spread?

- **Infected Mosquitoes.** WNV is spread by the bite of an infected mosquito. Mosquitoes become infected when they feed on infected birds. Infected mosquitoes can then spread WNV to humans and other animals when they bite.
- **Transfusions, Transplants, and Mother-to-Child.** In a very small number of cases, WNV also has been spread directly from an infected person through blood transfusions, organ transplants, breastfeeding and during pregnancy from mother to baby.
- **Not through touching.** WNV is not spread through casual contact such as touching or kissing a person with the virus.

How Soon Do Infected People Get Sick?

People typically develop symptoms between 3 and 14 days after they are bitten by the infected mosquito.

How Is WNV Infection Treated?

There is no specific treatment for WNV infection. In cases with milder symptoms, people experience symptoms such as fever and aches that pass on their own, although illness may last weeks to months. In more severe cases, people usually need to go to the hospital where they can receive supportive treatment including intravenous fluids, help with breathing, and nursing care.

What Should I Do if I Think I Have WNV?

Milder WNV illness improves on its own, and people do not need to seek medical attention for this infection though they may choose to do so. If you develop symptoms of severe WNV illness, such as unusually severe headaches or confusion, seek medical attention immediately. Severe WNV illness usually requires hospitalization. Pregnant women and nursing mothers are encouraged to talk to their doctor if they develop symptoms that could be WNV.

West Nile Continued

What Is the Risk of Getting Sick from WNV?

- **People over 50 at higher risk to get severe illness.** People over the age of 50 are more likely to develop serious symptoms of WNV if they do get sick and should take special care to avoid mosquito bites.
- **Being outside means you're at risk.** The more time you're outdoors, the more time you could be bitten by an infected mosquito. Pay attention to avoiding mosquito bites if you spend time outside, either working or playing.
- **Risk through medical procedures is very low.** All donated blood is checked for WNV before being used. The risk of getting WNV through blood transfusions and organ transplants is very small, and should not prevent people who need surgery from having it. If you have concerns, talk to your doctor.

What Is CDC Doing About WNV?

CDC is working with state and local health departments, the Food and Drug Administration and other government agencies, as well as private industry, to prepare for and prevent new cases of WNV.

Some things CDC is doing include:

- Coordinating a nation-wide electronic database where states share information about WNV
- Helping states develop and carry out improved mosquito prevention and control programs
- Developing better, faster tests to detect and diagnose WNV
- Creating new educational tools and programs for the media, the public, and health professionals
- Working with partners to develop vaccines.





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Dallam	Sherman	Hansford	Ochiltree	Lipscomb	
Hartley	Moore	Hutchinson	Roberts	Hemphill	
Oldham	Patterson	Carson	Gray	Wheeler	
Deaf Smith	Randall	Armstrong	Danley	Collingsworth	
Parmer	Castro	Swisher	Briscoe	Hall	Childress
Bailey	Lamb	Hale	Floyd	Motley	
Cochran	Beckley	Lubbock	Crosby	Dickens	King
Vanhook	Terry	Lynn	Garza		

What Else Should I Know?

West Nile virus infects birds. In nature, West Nile virus cycles between mosquitoes and birds. Some infected birds can develop high levels of the virus in their bloodstream and mosquitoes can become infected by biting these infected birds. Some, but not all infected birds get sick and die of disease. One way health officials conduct surveillance for West Nile virus is by testing local birds. Finding dead birds may be a sign that West Nile virus is circulating between birds and the mosquitoes in an area. *By reporting dead birds to state and local health departments, you can play an important role in monitoring West Nile virus. State and local agencies have different policies for collecting and testing birds, so check with your county or state health department to find information about reporting dead birds in your area.

If you find a dead bird: Don't handle the body with your bare hands. Contact your local health department for instructions on reporting and disposing of the body. They may tell you to dispose of the bird after they log your report.

For more information, visit www.cdc.gov/westnile, or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).

*DSHS is no longer testing dead birds for West Nile since it is endemic in Texas.

DSHS FREE PUBLICATIONS

Those who have access to the internet can order DSHS publications online. The Zoonosis Control Branch has pamphlets on a variety of topics, such as mosquito control, rabies, animal bites, plague, encephalitis, Rocky Mountain spotted fever, and tick borne diseases. You can search for publications by title, subject, keyword, language, format or publications number, and pamphlets will be shipped to you at no cost. To order pamphlets online, visit the website:

<http://webds.dshs.state.tx.us/mamd/litcat/default.asp>

If you have any questions, please call Tonya at (806) 655-7151 ext. 1104.

[Navigating to the Zoonosis Branch website](#)

Have a hard time remembering www.dshs.state.tx.us/idcu/health/zoonosis/ every time you search for information on the Zoonosis website? Well, we do too. Domain names for various areas on our site have been around for a long time and are often provided when directing individuals to specific pages. They're quick, easy-to-remember links that get you to where you want to be faster. Dr. Laura Robinson in the Austin office was kind enough to remind us of five that we use frequently. They are not case-sensitive, but some parts are capitalized to make them easier to remember:

Zoonosis Control home page: www.TexasZoonosis.org

ZC rabies home page: www.TexasRabies.org

ZC oral rabies vaccination program home page: www.TexasORVP.org

ZC animal control home page: www.TexasACO.org

ZC West Nile virus home page: www.TxWestNile.org