



## From Doc's Desk

By James Alexander, DVM, MPVM

This year has gotten off to a strong start in the rabies realm. The last case reported for the state in 2009 was from Randall County. It was the third skunk and the fourth rabies case reported in the county since October 8, 2009, and the sixth case for the year in the county. Given the trend, I expected 2010's first case in HSR would be in Randall County. But it was in Ochiltree County, while Randall claimed the region's fourth case on March 10.

For 2010 Randall County has accumulated 4 cases, making 8 in the past 7 months. Gray County is in second place with 3 cases, all reported within an 8 day period in May. Two of the cases were related. The rabid horse was reported as positive 1 week after symptoms developed. The initial symptoms did not suggest rabies, thereby delaying the diagnosis and subsequent prophylaxis for the 7 exposed people. Four days later, on a Saturday, a barn cat on the property adjacent to the horse's pasture attacked the property owner. Due to the weekend and lack of bus service, we did not get a positive result until Wednesday, resulting in another delay in initiating prophylaxis. The delays were nerve wracking but all the people evidently are doing fine.

The total estimated cost of the biologics alone required for these 8 people is about \$12,800. If 2 of the exposed people in these incidents had not previously been immunized

against rabies, the cost would have been substantially more since additional vaccine and human rabies immune-globulin would have been required.

In the middle of the aforementioned excitement, another animal in Gray County was reported as positive. In that incident, only 1 person was exposed. The animal, a steer imported from Mexico, was diagnosed with a vampire-bat variant of rabies. The animal had to have been incubating the disease for at least 160 days or more based on its date of importation. This is the third known case of a vampire-bat variant in a bovine imported from Mexico in the past 8 years.

At this point we have 16 reported cases of animal rabies in HSR for 2010. That compares to 12 by the end of May, 2009. Case 16 showed up on July 28th last year. One of our most recent cases was a steer imported from Oklahoma. Therefore, our total for endemic cases is only 14, but the imported cases still add to the workload involved in being sure no one dies from this disease.

Our current statistics are: Childress (1 skunk), Donley (1 bovine), Gray (1 bovine, 1 cat, 1 horse), Hartley (2 skunks), Hemphill (2 skunks), Lubbock (1 cat), Ochiltree (1 skunk), Randall (1 bovine, 3 skunks), and Wheeler (1 horse). The 5 livestock species cases from the U.S. is a good reminder that livestock and skunks share the same environment and owners

might wish to protect their valuable animals. Therefore, please continue to promote livestock rabies vaccinations in addition to that of pets. Also, I recommend that dogs be vaccinated against distemper. It is not a zoonosis but it does create confusion with rabies due to the similarity of the central nervous system symptoms of both diseases.

Other zoonoses are quiet at the moment. However, we are on the cusp of the West Nile virus (WNV)/St. Louis encephalitis (SLE) season. People need to be reminded to eliminate mosquito breeding sites, avoid being out at dusk and dawn, and when that is not possible, to use insect repellent and wear long sleeves and long pants. In the equine world, young stock will be the most susceptible population for WNV illness. While some owners have begun to forego WNV vaccination for their older animals due to natural immunity from being exposed for several seasons, they should seriously consider it for the younger animals.

Two other concerns this time of year are plague and tularemia. If anyone notices a prairie dog town die-off, please let me know. Be sure to remind pet owners to keep their pets and themselves well protected against fleas and ticks this summer.

We on the Zoonosis Team hope everyone has a productive, safe and enjoyable summer.

## June is Adopt-A-Shelter-Cat Month

Inside this issue:

<i>Outdoor Safety</i>	2
<i>Rabies in Animals, 2009</i>	3
<i>Rabies Test Results are Time Sensitive</i>	4
<i>Watching for Dengue in Relief Workers</i>	4
<i>Adopt-A-Pet: A Success Story</i>	5
<i>CEU Deadline</i>	5
<i>Adopt-A-Shelter-Cat Month</i>	5
<i>How to Give a Cat a Pill; Ode to a Shedding Cat</i>	6

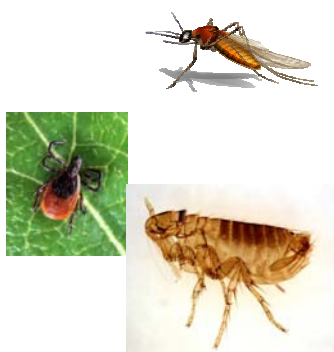
### HSR 1 ZOOONOSIS STAFF

James Alexander, DVM, MPVM  
Regional Veterinarian  
[james.alexander@dshs.state.tx.us](mailto:james.alexander@dshs.state.tx.us)  
Suzan Norwood, Public Health Tech I  
[suzan.norwood@dshs.state.tx.us](mailto:suzan.norwood@dshs.state.tx.us)  
300 Victory Drive  
WTAMU Box 60968  
Canyon, TX 79016-0968  
806-655-7151  
806-655-7159(Fax)

Karen McDonald  
Zoonosis Specialist  
[karen.mcdonald@dshs.state.tx.us](mailto:karen.mcdonald@dshs.state.tx.us)  
6302 Iola Avenue  
Lubbock, TX 79424  
806-783-6422  
806-783-6424 (Fax)

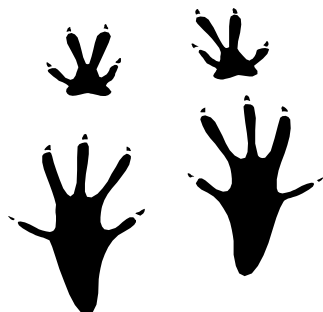
## Outdoor Safety

Condensed from the Centers for Disease Control and Prevention web site (<http://www.cdc.gov>)



Bugs aren't just annoying pests, they also carry diseases.

*"An ounce of prevention is worth a pound of cure." Use insect repellent any time you're out of doors, especially between dusk and dawn. A can of bug spray is cheaper than a trip to the doctor!*



Cleaning out the garage, or a storage building, or a summer cabin? Watch for signs of rodents and take precautions to avoid hantavirus!

The return of warmer temperatures brings thoughts of freedom, relaxation, exploration, and being closer to nature. Whether you're relaxing in the backyard or exploring the great outdoors, here are some ways to help keep you and your family healthy this spring and summer.

**Beware of bugs.** Warmer temperatures aren't just attractive to people. Mosquitoes, ticks, fleas, and other insects thrive in warmer weather, and they can transmit West Nile virus, Lyme disease, and other illnesses. Using an appropriate insect repellent and applying it properly allows you to continue to play and work outdoors with a reduced risk of mosquito and tick bites. Prime mosquito-biting hours are usually dusk to dawn. Pay special attention to protection during these hours, or avoid being outdoors. To protect yourself from tick bites, avoid tick-infested areas (especially places with leaf-litter and high grasses), wear light-colored clothing so you can see ticks crawling on you, and use repellent containing DEET. You can also treat clothing with permethrin, which protects through several washings. **Always follow the directions on repellent packaging!** After you have been outside, check your body, your clothing, your children, and your pets for ticks. To find out how to check for ticks and remove them, see the CDC web site. Consult your healthcare provider if you become ill in the 1-3 weeks following a bite. It could be any number of illnesses. Pesticides, vegetation-free play areas, and landscaping techniques for tick-free zones can also help limit

your exposure to ticks and other insects.

**Healthy pets, healthy people.** While you're outside enjoying the weather, remember to protect your pets, too. Keeping your pets healthy helps to keep you and your family healthy. Children can get roundworm and hookworm from soil contaminated by pet feces (stool), so make sure that puppies and kittens are seen by a veterinarian and dewormed. Protect family pets from ticks and fleas by keeping them on a flea and tick control program and talk to your veterinarian for advice on the appropriate mosquito repellent for use on your pet.

**Around the yard.** Now's the time to seal up, trap up, and clean up to prevent rodent infestation. As you're clearing out clutter, fill any gaps or holes inside and outside your home. Eliminate or seal rodent food sources such as pet food, bird feeders, and garbage cans. Elevate hay, woodpiles, and garbage cans at least 1 foot off the ground, and trim grass and shrubbery within 100 feet of your home.

In the yard, remove any items that may collect standing water, such as buckets, old tires, and toys. Mosquitoes can breed in them in just days. You can reduce the number of ticks around your home by removing leaf litter and brush— and woodpiles around your house and at the edge of your yard. By clearing trees and brush in your yard, you can reduce the likelihood that deer, rodents, and ticks will live there. Replace or repair torn window screens to keep bugs out of the house.

A sandbox is a fun place for you and young children to play, but know that a cat sees that sandbox as a litterbox. So, keep the sandbox covered to protect young children from toxoplasmosis, a parasite that people can get from contaminated cat feces (stool).

**In the great outdoors.** When you're out on the trail, whether hiking, camping, or hunting, protect yourself from mosquitoes and other bugs by using insect repellent. Wear long sleeves, long pants, and long socks when practical. Always check your clothes and body for ticks. If you find any ticks, carefully remove them with tweezers. The ticks that transmit Lyme disease are most active in May, June, and July, so be especially careful during those months. However, you need to look for ticks in all months of the year to protect yourself against other tickborne diseases. Bats are fun to watch as they flutter around at dusk. In many camp situations, the mere presence or sighting of bats is common and normal. Sometimes, bats may be infected with rabies and may pose a risk for exposure to humans. Remind children to never touch a bat. If you are bitten by a bat, wash the affected area thoroughly and get medical advice immediately. Whenever possible, the bat should be captured and sent to a laboratory for rabies testing. Follow instructions for capturing bats and reducing exposure while camping.

Again, for more details on any of these topics, go to <http://www.cdc.gov/> and use the search feature.

## Rabies in Animals, 2009

By Pam Wilson, RVT, MEd, CHES, Zoonosis Control, Austin

Rabies is a viral zoonosis affecting the central nervous system of warm-blooded animals. Transmission occurs when saliva containing rabies virus is introduced into an opening in the skin, usually via the bite (or possibly scratch) of a rabid animal. Though rare, transmission can also occur through contamination of mucous membranes. Animals considered to be high risk for transmitting rabies in Texas include bats, skunks, foxes, coyotes, and raccoons; the first four of these wildlife species serve as reservoirs for specific rabies variants (types) in Texas. Rabies infection in a species other than the reservoir species for the variant is considered a "spillover." An example of spillover would be a cat infected with a skunk variant of rabies virus.

In 2009, 830 (6%) of 13,220 animal specimens in Texas were tested (confirmed as positive or negative) were positive for rabies. This was a 19% decrease in cases from the 1,019 cases confirmed in 2008. In 2009, there were 63 positive rabies cases per 1,000 specimens tested, which was down from 71 positive cases per 1,000 specimens tested in 2008.

During 2009, the highest monthly number of laboratory-confirmed rabies cases (123) occurred in September, with bats (99) being the predominant rabid species reported; April had the second highest number of cases (99) with skunks (61) being the predominant rabid species. Cases of rabies were confirmed in 127 of

the 254 Texas counties, compared with 143 counties with reported cases in 2008. Travis County had the highest number of reported rabies cases per county statewide with 103 cases in 2009, 102 of which were bats. In 2008, Travis County also had the highest number of reported cases with 197 (194 of which were bats).

Rabid wildlife accounted for 785 (95%) of the confirmed cases throughout the state in 2009; in 2008, rabid wildlife accounted for 975 (96%) of the confirmed cases. Bats were the primary source of positive cases reported in 2009 (53% of all positive cases). During 2009, 443 bats were positive for rabies, compared with 548 (54% of all positive cases) in 2008. Of all bats tested for rabies, 11% were positive in 2009 and 13% were positive in 2008. Rabies in bats is enzootic in Texas; there are numerous bat variants of rabies virus throughout the state. In 2009, there were 2 cases (1 cat and 1 cow) in which there was spillover of a bat rabies virus variant to terrestrial animals.

Skunks had the second highest number of confirmed rabies cases, with 313 (38% of all positive cases) in 2009 compared with 31% in 2008. The south-central skunk variant of rabies virus is the most prevalent skunk variant in Texas. Rabies cases in 2009 in which the south-central skunk variant could be confirmed included 313 skunks, 20 raccoons, 14 cats, 13 dogs, 8 cows, 7 horses, 3 bobcats, 2 coyotes, 2 foxes, and 1 squirrel.

There were 45 reported cases

in domestic animals (5% of all positive cases). Rabies in domestic animals continues to be a concern because they are more likely to have contact with humans than are rabid wildlife. Cats and dogs each represented 2% (15 cats and 14 dogs) of all positive cases in 2009. In 2008, there were 44 reported rabies cases in domestic animals (4% of all positive cases); of these rabies cases, 15 were cats and 15 were dogs.

Twenty-one counties have been involved in the South Texas canine rabies epizootic since it began in 1988. Statewide there were no reported cases with the domestic dog/coyote (DDC) variant of the rabies virus in 2009 as well as in 2008.

Fifty-three counties have been involved in the West-Central Texas gray fox rabies epizootic since it began in 1988. Two of these 53 counties recorded cases of the Texas fox (TF) variant of the rabies virus in 2009; 2 counties reported cases in 2008. Of all positive cases statewide in 2009, 2 (0.2%) were infected with the TF variant of the rabies virus, compared with 11 (1%) in 2008. The two rabies cases with the TF variant in 2009 included 1 coyote and 1 dog.

In response to the canine and gray fox rabies epizootics, the Oral Rabies Vaccination Program (ORVP) for coyotes in South Texas was initiated in February 1995, and the ORVP for gray foxes in West-Central Texas was initiated in January 1996; the programs have continued annually. These pro-



grams target reservoir species for the DDC and TF variants of the rabies virus, specifically coyotes and gray foxes, respectively. The coyote-to-coyote propagation of the TF variant seemingly occurring in 2007 and 2008 continues to be suspected, as the only two cases documented in 2009 were in a dog that had been observed in a fight with a coyote and in a coyote. Immunization is accomplished by aerial distribution of an edible bait containing oral rabies vaccine. The goal of the ORVP has been to create zones of vaccinated coyotes and gray foxes across the epizootic areas or, at a minimum, along the leading edges of the areas where these rabies variants are located in order to eventually eliminate the epizootics. With the elimination of the DDC variant from Texas, the ORVP in South Texas now serves as an ongoing barrier to prevent reintroduction from Mexico.

During the 5-year period from 1995 through 1999, the average number of skunks that were confirmed positive for rabies was 110 cases per year with a range of 69 to 192; for 2000 through 2009, the average number of confirmed cases of rabies in skunks per year was 503 with a range of 313 to 778. Currently, there are no oral or parenteral rabies vaccines approved for use in skunks to address the ongoing skunk rabies epizootic, which began in 2000.

## Rabies Test Results Are Time Sensitive

By James Wright, DVM, MPVM, Regional Zoonosis Control Veterinarian for HSR 4/5N



Test results are important to pass along to the bite victim as soon as possible, whether the results are positive or negative. Consider how you would feel, waiting to find out if the animal that bit you was rabid or not! Do you want to wait until the next work day?

*Ship specimens to the Austin lab as quickly as possible; keep a record of shipment tracking numbers; and contact the lab to let them know that the shipment is on its way, and by what carrier.*

Recently we encountered an animal bite victim and the victim's doctor, both of whom were concerned because they were awaiting a rabies test result. The test result would determine whether or not the bite victim would need to start the rabies post-exposure shot series.

Quite honestly, both our Zoonosis staff and the animal control staff who shipped the animal felt very confident that the animal did not have rabies. However, the only way to be sure the animal was not rabid and that the patient did not need the rabies shot series was to see the laboratory test result. Without that result, the doctor was poised and ready to give the shots.

If a test result is positive, both the submitting agency and our office are notified. Either of us can coordinate with the other and with the bite victim and the doctor. However, in the case of a negative test (the animal is not rabid) only the submitter is notified. Thus, only the submitter has the information that can stop the patient and the doctor from worrying and giving the

shots. Until they learn of the negative test result, they continue to worry.

For this reason, whenever there is a human bite or other exposure and the animal's head is sent for testing, a negative test result is as important as a positive test result. Therefore, it is important for the submitting agency to obtain the result (whether positive or negative) as rapidly as possible and to convey that information to the bite victim.

How can animal control agencies, shelters, and veterinarians help get the result to the bite victim and the doctor?

1. Ship the specimen as quickly as possible.
2. Use a reliable mode of transportation. NOTE: We have always encouraged using the bus for transporting rabies specimens, if you have bus service. However, we have encountered a few problems with the reliability of the bus. Therefore, we encourage you to save the receipt you get from the bus depot. It will make tracing the shipment much easier if

the specimen does not arrive in Austin the next morning.

3. In the case of the Austin Laboratory, always call the 800 number and leave the information to tell the lab staff that the head is on the way. If the head does not arrive, the Austin lab staff can let you know and you can start looking for it.
4. Have a mechanism in the office so that when a rabies lab result arrives, you quickly learn about the result and you quickly notify the victim. If our Zoonosis staff have been involved in the case, we would appreciate being notified, too. Even if the result is negative, it is important to let the victim know quickly so the victim and the doctor can quit worrying about it.

We really appreciate working with you as we function as a team to protect the health of our citizens and try to minimize the time a bite victim spends worrying about post-exposure treatment.

## Relief Workers Returning from Haiti with Dengue?

From a CDC Health Advisory of April 27, 2010



Relief workers returning from Haiti who report a febrile illness should be evaluated for dengue and other tropical illnesses.

The 7.0 magnitude earthquake that struck just outside Port-au-Prince, Haiti, on January 12, 2010, caused extensive damage to homes and utilities and left many residents without proper shelter or access to important services such as electricity and water. Exposure to the elements and increased opportunities for mosquito

breeding site proliferation have likely increased the risk of contact with vectors that may spread diseases such as dengue. Since dengue is endemic in Haiti and relief workers responding to previous disasters there have reported high rates of dengue infection, the CDC Dengue Branch advises that physicians evaluate travelers

returning with a febrile illness (or a recent history of febrile illness) from Haiti and report cases of suspected dengue to either their local health department or CDC.

## Adopt-A-Pet: A Success Story

By Michelle Mahaffee, Spearman Animal Control

Hello to all my fellow ACOs out there.

Just wanted to drop a short note to let everyone know what I have been doing here in Spearman and how well it seems to be working so far. I have been working together with one of our local retail stores and once a month, sometimes twice, depending on the amount of animals I have up for adoption, I go to that store on a Saturday morning and they have been providing me with one of the large kennels that they have out front on display. I bring all my animals

that I have up for adoption to the store and spend several hours answering questions and just getting to know the community a little better. There are so many people out there that may not make it by the shelter, or even know where the shelter may be located, that get to see these animals—and hopefully fall in love with them—that wouldn't have otherwise.

It just takes a few hours out of your day, and can be well worth it to save some lives and make some people very happy! I have had several people that have not even thought or de-

sired to own a dog that fell in love with one of mine and adopted them, and are now very happy with their new companion. My first Adopt-A-Pet of the season was held on May 1, 2010. I was able to adopt out a total of seven dogs, and I can't be happier!

I urge each and every one of you to try to get a program like this going in your community. It's a great way to save some lives and get to know the needs and concerns of your community!



Local businesses may work with you to help adopt animals from your shelter.

## ACOs: Will You Have Enough CEUs?

By Karen McDonald, Zoonosis Specialist

The 3-year deadline for ACOs grandfathered in on July 1, 2008, for the training requirements set in Chapter 829 comes up on June 30, 2011. The law states that you must complete 30 hours of continuing education every three years (1) after July 1, 2008, if you successfully completed a basic course before that date; or (2) after the last day of a class you successfully completed since then.

The course dates for our annual rabies review will be announced soon via e-mail. Other seminars are being prepared that will range from 3-6 hours covering topics on bat handling, head removal, and shelter management. We will notify all ACOs, LRCAs, and sheriff and police departments for whom we have e-mail addresses as soon as these courses are scheduled. Don't forget to check online for other approved continuing edu-

cation courses around the state.

Be sure to maintain documentation of all CE courses completed. It is your responsibility to track of the hours you earn each three years, and to be able to provide proof that you are compliant with the Chapter when asked. **Note:** Hours earned during euthanasia training can be used toward the 30, but officers will not be allowed to repeat basic in lieu of earning CEs.

*Animal Control Officers MUST complete 30 hours of continuing education classes each three years, whether at a class or online. Don't let your deadline pass you by!*

## June is Adopt-A-Shelter-Cat Month

The American Society for the Prevention of Cruelty to Animals (ASPCA) holds an annual "Adopt-A-Shelter-Cat Month" each June.

Traditionally, dogs are more readily adopted from shelters, but cats can be ideal pets. In conjunction with the Adopt-A-Shelter-Cat program, consider holding an adopt-a-thon to find

homes for some of the kitties in your shelter.

Cats are especially good in households where the people are not able to get out much, as cats do not require the daily exercise dogs do. They can also be left alone for a couple of days at a time, as long as they have ready access to food, water, and a litter box.

Dogs, on the other hand, either have to be taken with the owner or be left in a kennel, a cost that some people cannot handle in this depressed economy.

Please consider some special activities during June to promote adoption of shelter cats of all ages.



Cats and dogs alike should be neutered and vaccinated, preferably before they leave your facility. If the new owner is allowed to take care of the vaccinations and neutering after the adoption, be sure to have adequate means of follow-up to ensure that they follow through.



300 Victory Drive  
 WTAMU Box 60968  
 Canyon, TX 79016-0968  
 Phone: 806-655-7151  
 Fax: 806-655-7159

E-mail: [james.alexander@dshs.state.tx.us](mailto:james.alexander@dshs.state.tx.us)

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

### ODE TO A SHEDDING CAT

I think that I shall never see  
 A cat that sheds as much as thee  
 Thy fur that sticks is all around  
 On chairs, on mats in little mounds  
 I sweep the floor, you shed some more  
 I wash the rug and you just shrug  
 You should give thanks I tolerate that  
 Or you would be a crew-cut cat.

— Author Unknown



### HOW TO GIVE A CAT A PILL



1. Pick up cat and cradle it in the crook of your left arm as if holding a baby. Position right forefinger and thumb on either side of cat's mouth and gently apply pressure to cheeks while holding pill in right hand. As cat opens mouth, pop pill into mouth. Allow cat to close mouth and swallow.
2. Retrieve pill from floor and cat from behind sofa. Cradle cat in left arm and repeat process.
3. Retrieve cat from bedroom and throw soggy pill away.
4. Take new pill from foil wrap, cradle cat in left arm, holding rear paws tightly with left hand. Force jaws open and push pill to back of mouth with right forefinger. Hold mouth shut for a count of ten.
5. Retrieve pill from goldfish bowl and cat from top of wardrobe. Call spouse in from the garden.
6. Kneel on floor with cat wedged firmly between knees, hold front and rear paws. Ignore low growls emitted by cat. Get spouse to hold head firmly with one hand while forcing wooden ruler into mouth. Drop pill down ruler and rub cat's throat vigorously.
7. Retrieve cat from curtain rail. Get another pill from foil wrap. Make note to buy new ruler and repair curtains. Carefully sweep shattered figurines from hearth and set to one side for gluing later.
8. Wrap cat in large towel and get spouse to lie on cat with head just visible from below armpit. Put pill in end of drinking straw, force mouth open with pencil and blow down drinking straw.
9. Check label to make sure pill not harmful to humans and drink one glass water to take taste away. Apply bandage to spouse's forearm and remove blood from carpet with cold water and soap.
10. Retrieve cat from neighbor's shed. Get another pill. Place cat in cupboard and close door onto neck to leave head showing. Force mouth open with dessert spoon. Flick pill down throat with elastic band.
11. Fetch screwdriver from garage and put cupboard door back on hinges. Apply cold compress to cheek and check records for date of last tetanus shot. Throw tee-shirt away and fetch new one from bedroom.
12. Call fire department to retrieve cat from top of tree across the road. Apologize to neighbor who crashed into fence while swerving to avoid cat. Take last pill from foil wrap.
13. Using heavy-duty pruning gloves from shed, tie the little \*&#%^'s front paws to rear paws with garden twin and bind tightly to leg of dining table. Push pill into mouth, followed by large piece of filet steak. Hold head vertically and pour two pints of water down throat to wash pill down.
14. Get spouse to drive you to the emergency room. Sit quietly while doctor stitches fingers and forearm and removes pill fragments from right eye. Call at furniture shop on way home to order new table.
15. Arrange for SPCA to collect mutant cat from h\*\*\* and call local pet shop to see if they have any hamsters.

### HOW TO GIVE A DOG A PILL

1. Wrap it in bacon.
2. Toss it in the air.

