VHAN: What is it?

The Veterinary Health Alert Network (VHAN) is a notification system designed to keep the veterinary community informed about local animal disease outbreaks and rabies cases, important reportable diseases, and other animal related health issues through the rapid distribution of alerts, advisories, updates, and information sharing e-blasts. The VHAN is also used to distribute relevant and current emergency information, related to severe weather and other threats, to those who may be impacted by the emergency. Depending on the participant’s preference, information can be distributed via e-mail, text message, or fax.

Anyone interested in receiving VHAN notifications may join the Veterinary Health Alert Network by any of the following methods:

♦ Complete and submit the form online at http://www.hcphes.org/vph/Veterinary_Health_Network/index.html.
♦ Print the online form, then complete and fax it to 281-847-1911.
♦ Call Dr. White or Tiffany to provide your contact information.

Zoonotic Disease Conference

Our 4th Annual Zoonotic Disease Conference was held Saturday, September 18, 2011 at the Houston Zoo. This conference was our largest attended thus far, with 178 participants! We were able to provide free continuing education to veterinarians, registered veterinary technicians, certified veterinary assistants and animal control officers! This year’s topics included ehrlichia, tick transmitted zoonotic infections in dogs and cats, West Nile virus, leptospirosis, the National Animal Health Emergency Reserve Corps, the Medical Reserve Corps and considering human health when treating animals. A big thanks to HCVMA, Idexx, Merial & the Jacob & Terese Hershey foundation for their support!

Mark your calendars! Next year’s conference is tentatively scheduled for Sunday, September 16, 2012.
The Texas Oral Rabies Vaccination Program (ORVP) is an exceedingly successful program that utilizes an oral rabies vaccine to control rabies in wildlife. The program was developed to control and eliminate two rabies epizootics that became established in the 1980's. The canine rabies epizootic became established in South Texas during 1988 and rapidly expanded northward. Gray fox rabies, which was endemic in the Edwards Plateau area of Texas, also became an epizootic in 1988 and began to move in multiple directions. With both epizootics encroaching upon heavily populated areas, the potential for human deaths and the cost of rabies post-exposure treatments prompted the development and implementation of the ORVP.

The goal of the ORVP was to produce a zone of vaccinated coyotes along the edge of the South Texas canine rabies epizootic and a zone of vaccinated gray foxes along the periphery of the West-Central Texas gray fox rabies epizootic. It was planned that over a period of several years, the areas involved in the epizootics would be reduced and, ultimately, the rabies problem in coyotes and foxes eliminated.

The program utilizes fixed wing aircraft for aerial distribution of oral vaccine/bait units in the rural areas. The baits are distributed by hand or helicopter in urban and suburban areas to reduce the risk of damaging property or injuring people. The oral vaccine/bait unit contains a single dose of the recombinant vaccine, Raboral V-RG. The vaccine uses only noninfectious portions of the rabies virus and, therefore, cannot induce rabies. Raboral V-RG is currently the only effective oral vaccine licensed for use in free-ranging raccoons, gray foxes, and coyotes in the United States. In the original vaccine baits, a dose of the vaccine was placed in a plastic sachet and inserted in the hollow center of a bait composed of dog food or fish meal that had been mixed with a bonding agent and sealed with wax. The baits were rectangular in shape and measured 1 1/4” x 1 1/4” x 3/4” or smaller. The vaccine bait currently in use is comprised of a plastic sachet of vaccine covered with a thin layer of attractant, such as fishmeal.

The vaccine/bait drop occurs at the beginning of each year. The winter season allows maximum effectiveness of the program because less natural food sources are available which makes the coyote and fox more likely to eat the vaccine/bait units. There are also fewer fire ants to eat the baits at that time of year.
In February of 1995, the first vaccine/baits were dropped in Texas for coyotes. The drop zone comprised a 40-mile-wide band that formed a west to east arc along the leading northern edge of the canine rabies epizootic and included 18 counties. At that time, it was the largest single vaccine/bait drop conducted worldwide. The ORVP for coyotes has continued annually and has steadily reduced the epizootic area and the number of canine rabies cases in South Texas from 142 in 1995 to 0 in 2000. The drop zone has been reduced to a maintenance barrier along the southern boundary of the original epizootic zone along the Texas – Mexico border.

The first ORVP for gray foxes in Texas was conducted in 1996. The drop zone included a 25-mile-wide arch that encircled the epizootic area in West Central Texas. The area of distribution was reduced and pulled inward over several years until control of this rabies epizootic was accomplished. The gray fox program showed similar success as the coyote program with a reduction of rabies cases from 244 reported in 1995 to 0 in 2010.

The use of the oral rabies vaccine is an extremely safe method of rabies control in wildlife. All components of the vaccine bait are non-toxic. If the sachet is ruptured and vaccine is released, it will not become established in the environment and the vaccine has been proven safe when given to almost 60 species of mammals and birds. If a human or domestic animal contacts the vaccine, adverse effects are not anticipated. Although the vaccine is not harmful if ingested, it is not approved for use in domestic animals. Parenteral rabies vaccination is still recommended for domestic animals and can be safely administered even if it recently ingested a dose of oral rabies vaccine.

According to the Texas Department of State Health Services, “the ORVP provides long-range economic savings by reducing costs to the health care system (including fewer humans receiving post-exposure rabies treatment and

emergency room treatment). It also will reduce destruction of livestock and wildlife, laboratory testing of rabies suspect animals, post-exposure rabies treatment in domestic animals, domestic animal deaths, and, most importantly, human deaths attributable to rabies.”

Texas is not the only state that is involved in an ORV program. In the late 1970’s, an epizootic involving the raccoon strain of rabies began in the Virginia area and has expanded to include most of the mid-Atlantic and northeastern United States, forming the most intensive rabies outbreak in the United States. This epizootic is the direct consequence of translocation and spread of infected raccoons from Georgia and Florida to Virginia and has been associated with tremendous costs related to treating exposed and potentially exposed humans, pets and livestock.

Since 1997, a coalition of federal and state agencies have teamed together to prevent the westward spread of the epizootic through an ORV program. With the raccoon rabies epizootic limited generally to states east of the Appalachian Mountain ridge, the program was established to initially prevent the westward expansion of raccoon rabies. This was accomplished by creating a “vaccine barrier” that ran from eastern Ohio (beginning at the border with Lake Erie) down the Appalachian ridge to Mobile County, Alabama, and ended at the Gulf of Mexico. Through the annual distribution of oral vaccine baits, the goal is to continue shifting the zone eastward until raccoon rabies has been eliminated all the way to the east coast.

Sources:
- www.dhs.state.tx.us/idcu/disease/rabies/orvp/
- www.dhs.state.tx.us/idcu/disease/rabies/orvp/information/maps/
- www.epi.state.nc.us/epi/rabies/orv1.html
- www.aphis.usda.gov/wildlife_damage/nwrc/symposia/economics_symposium/kemereHR.pdf
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- http://state.tn.us/twra/rabies.html