



Pigeon fever: Confirmed cases in Texas horses have soared in six years, TVMDL data shows



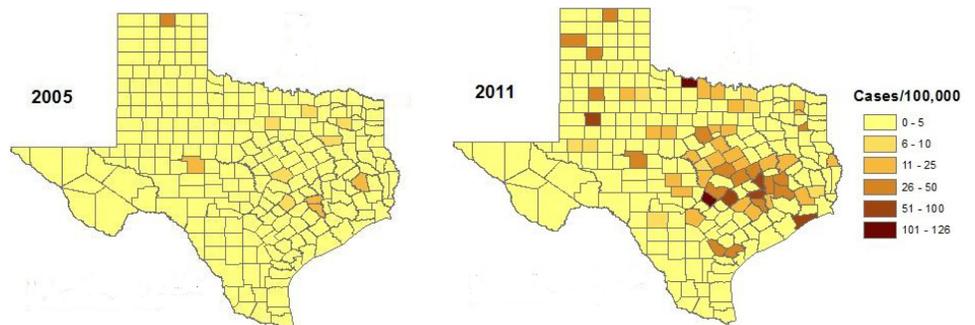
Confirmed cases of pigeon fever among Texas horses increased more than tenfold between 2005 and 2011 in specimens submitted to TVMDL during the six-year period. According to an analysis of TVMDL data performed by our agency epidemiologist, Barbara Szonyi, DVM, Ph.D., confirmed cases rose by 1065 percent during that period – an average annual increase of 177 percent. The line graph below illustrates the increase in cases confirmed by TVMDL diagnosticians during that time frame:

Protecting Animal and Human Health through Diagnostics

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The maps below compare the geographic distribution of confirmed cases in 2005 with those in 2011:



The 2011 map shows a relatively high concentration of confirmed cases in Central Texas. Earlier maps indicate a relatively heavy concentration of TVMDL-confirmed cases in the Texas Panhandle. It is possible that the disease has since abated in the Panhandle; it is also possible that the disease has become so comparatively common in the Panhandle that veterinarians there are diagnosing the disease based on symptoms without sending samples to TVMDL for

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About TVMDL: The Texas A&M Veterinary Medical Diagnostic Laboratory protects animal and human health through diagnostics.

An agency of the Texas A&M University System, TVMDL comprises two full-service laboratories, in College Station and Amarillo, and two poultry laboratories, in Center and Gonzales.

TVMDL is among 12 core laboratories in the National Animal Health Laboratory Network, a group of state and regional laboratories designed to provide a nationwide surge testing, response, and recovery capacity in the event of an animal disease outbreak.

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testing.

Pigeon fever is caused by the bacterial organism *Corynebacterium pseudotuberculosis*, which is considered endemic to California and to some other western U.S. states. Recent news reports indicate pigeon fever has spread to Oklahoma and Arkansas. The disease is also commonly known as pigeon breast, breastbone fever, dryland distemper, dryland strangles, false strangles and false distemper.

A veterinarian who suspects a case of pigeon fever should request a bacterial culture, says our microbiology branch chief, Amy Swinford, DVM, M.S. The typical specimen for pigeon fever is a culturette or sterile tube containing pus or abscess fluid. The sample should be submitted on ice packs and shipped for delivery to the lab as soon as possible.

Please include a complete clinical history of the horse with your submission, and mention that you suspect pigeon fever in the history or as one of the differential diagnoses.

As a reminder, the use of antibiotics may delay the development of external abscesses, making it difficult to identify abscesses to culture. The use of antibiotics can also potentially hinder the ability to isolate the organism.

Horse owners urged to guard against pigeon fever

By Blair Fannin, AgriLife Today

Experts are cautioning horse owners to be on the lookout for pigeon fever, a bacterial illness that causes abscesses typically in the pectoral region of horses, but in other anatomical sites as well.

Pigeon fever is an infection caused by the bacterial organism *Corynebacterium pseudotuberculosis*. It is considered endemic in California and some other western U.S. states.

Dr. Amy Swinford, head of diagnostic bacteriology for the Texas A&M Veterinary Medical Diagnostic Laboratory, said the organism can live for months to years in the soil and it may infect the horse through a wound or broken skin. Flies can serve as mechanical vectors to transmit the organism from the environment to horses.

There is currently no commercial vaccine against the organism.

Cases in Texas submitted to the diagnostic lab increased 1,065 percent from 2005 to 2011, according to the agency's data.

Swinford said one of her own geldings had pigeon fever, but because he only had tremendous swelling of the sheath region and ventral midline without obvious abscesses, the diagnosis was a bit more complicated than in horses that present "the classic pectoral abscess 'pigeon breast' lesions."

"There are different forms of the disease," she said. "The external abscess form is the most common, but internal abscesses and a condition called ulcerative lymphangitis, while less common, are generally more serious."

Swinford said most veterinarians find the most effective method of treatment for the ex-

ternal abscess form is to drain the abscesses rather than treating these horses with antibiotics.

"The more serious forms of the disease require the use of antibiotics, and fortunately the bacterial organism is sensitive to all of the commonly used antibiotics."

Swinford said recent news reports confirmed the disease has been found in horses as far east as Oklahoma, Arkansas and Florida.

The organism may incubate within the horse for several weeks before symptoms appear.

"Clinical signs may include fever, edema (swelling), lethargy, lameness and depression or weight loss, but these vary from horse to horse, and also depend on the form of disease a horse has. My own horse was not febrile (feverish) and never acted sick," Swinford said. "This is often true of horses that have only external abscesses."

"External abscesses can become quite large and extend deep into tissue, often accompanied by swelling, and may develop along the chest, midline, groin area and various other sites. Internal abscesses may also develop and can often be very difficult to treat."

Swinford said horse owners who detect any of these symptoms are advised to contact their veterinarian as soon as possible.

"It's something that should be diagnosed and treated appropriately," she said. "Unfortunately there's currently no way to prevent it, but fly control around stables and other types of horse premises may help."