Pigeon Fever Update; Guidelines Released By AAEP

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A pectoral abscess with flies attracted to the exudate is a typical clinical sign of pigeon fever. The American Association of Equine Practitioners (AAEP) has released guidelines for better understanding, diagnosis, treatment and control of pigeon fever. Those can be found on the AAEP website.

Pigeon fever, also known as dryland distemper, is caused by the bacteria *Corynebacterium pseudotuberculosis*. This bacteria can live in soil for long periods and is thought to be transmitted through skin abrasions or wounds or through mucous membranes. Insects can act as mechanical transmitters of the bacteria. Horse-to-horse transmission is also possible through contact with insects, animal handlers, or other fomites (tack, contaminated bandages or brushes that have been contaminated with pus).

Pigeon fever gets its name from the way the disease presents itself in horses — external swelling and abscesses in the pectoral and ventral part of the abdomen. (This gives the horse a "puffy" chest that looks like a pigeon's breast; pigeons have nothing to do with transmission.) Exudate from the lesions can spread the bacteria, so good hygiene should be practiced when handling infected horses to prevent contamination of the environment, other animals, or handlers.

A wide variety of animals worldwide are affected by this bacteria, including equids. Small ruminants (i.e., sheep) and camels (i.e., llamas and camels) are affected by a slightly different form of the bacteria, meaning there is no cross-species transmission with horses. However, cattle can be infected by either biotype, which means they can transmit the disease to and from horses.

There have been rare reports of humans being infected by *Corynebacterium pseudotuberculosis* (of either biotype), so precautions need to be taken when handling horses or other animals that are affected. Most reports are of "sheep shearers" who have cuts on their hands and are opening abscesses with the blades while removing wool from infected sheep. *Corynebacterium pseudotuberculosis* also can cause ulcerative lymphangitis (limb infection) and internal abscesses in horses. Internal infection in horses is associated with a high fatality rate (30-40%).

Pigeon fever is known to thrive in arid areas such as California and other western states. In fact, according to information from the *Equine Disease Quarterly* by Sharon Spier, DVM, PhD, DACVIM, of the University of California, Davis, "It appears endemic on most California farms and ranches. The prevalence of disease is estimated at 10%, making the syndrome one of the most common infectious bacterial diseases of horses in the state. Persistence of the pathogen in the soil indicates that management techniques rather than eradication efforts will be the best first step toward reducing disease incidence."

In recent years there have been more occurrences of pigeon fever in wetter areas of the country, such as Kentucky and Colorado. According to the AAEP Pigeon Fever Guidelines, "The organism has been shown to survive for up to two months in hay and shavings, and more than eight months in soil samples at environmental temperatures. The incidence of disease fluctuates considerably from year to year presumably due to herd immunity and environmental factors such as rainfall and temperature. Disease incidence is seasonal, with highest number of cases occurring during the dry months of the year, which is summer and fall in the Southwestern U.S., although cases may be seen all year. Horses with internal infection are more frequently seen one to two months following the peak number of cases with external abscesses."

There currently is no vaccine for horses against the causative bacteria. Here are some recommendations from the AAEP Pigeon Fever Guidelines and Texas A&M University:

- Consult your veterinarian if you think you might have an animal with pigeon fever.
- Wear disposable gloves.
- Isolate sick horses.
- Disinfect the stalls and any equipment used with sick horses.
- Collect and dispose of all pus as biohazardous material.
- Try to prevent contamination of the environment.
- After handling infected animals wash your hands, clean and disinfect your boots, and change clothes.
- Use insect repellents to prevent spread.