Zoonotic Risks in Exotic Pets: Understanding the Hidden Dangers to Human Health

Jenifer Chatfield, DVM, DACZM, DACVPM

Overview of the Issue

The One Health approach to community healthcare is no longer a novel concept. In fact, many physicians and veterinarians have now become familiar with the philosophy that healthy animals in a healthy environment contribute to healthy people and vice-versa. However, the general pet-owning public does not seem as well-versed in the concept and its application to their daily lives and continued good health. Thus, the veterinary practitioner's role in public health continues to be vital. As our society becomes further and further removed from direct contact with animals and our environment, it is crucial that veterinarians remain vigilant in continuing to educate clients on how live safely, happily, and healthy with their pets.

Objectives of the Presentation

- Attendees will review the definition of zoonosis and the ubiquitous nature of biological pathogens.
- Attendees will become familiar with several common zoonotic pathogens and their typical animal reservoirs and etiology
- Attendees will be able to describe specific zoonoses and their prevention

Key Etiologic and Pathophysiologic Points

All animals have their own pathogens that can present a health threat to people. A veterinarian should make an effort to familiarize themselves and their staff with these pathogens and their typical modes of transmission and clinical manifestation in people. Recognizing how to best integrate local public health agencies in a routine veterinary practice setting is good practice for all veterinarians.

Key Prognostic Points

Approximately 75% of all emerging pathogens are zoonotic, and many of them are contagious and infectious. Greater recognition of the importance of safe animal handling is necessary for animals to continue to be a source of happiness and comfort for all of us.

Summary including 5 KEY "TAKE HOME" POINTS

- 1. All animals can transmit diseases to their human caretakers even apparently healthy animals.
- 2. Most people turn to and trust their veterinarian to guide them on safely living with their pet.

- 3. Familiarity can breed complacency just because an animal is commonly kept as a companion animal does not eliminate the zoonotic disease risk that animal presents.
- 4. Universal precautions and awareness of pathogen modes of transmission are key factors in public health and veterinary practice.
- 5. It is not recommended that owners kiss their hamsters!

References/Suggested Reading

- 1. Peter Rabinowitz, MD, MPH and Lisa Conti, DVM, MPH, DACVPM, CEHP. <u>Human-Animal Medicine: Clinical Approaches to Zoonoses, Toxicants and Other</u> <u>Shared Health Risks.</u> Saunders, 2009.
- 2. http://www.onehealthinitiative.com/
- 3. C. Patrick Ryan, DVM, MPH. Zoonoses likely to be used in Bioterrorism. Public Health Rep. 2008 May-Jun; 123(3): 276–281.
- 4. Infectious Disease Manual. American Association of Zoo Veterinarians. http://www.aazv.org/?page=754