## **Zoonoses in the Bedroom**

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[Tanya Johnson] Hello. I'm Tanya Johnson. With me today is Dr. Heather Bair-Brake, a public health veterinarian at the Centers for Disease Control and Prevention. We're talking about a paper in the February 2011 issue of CDC's journal, Emerging Infectious Diseases. The article looks at some of the diseases pet owners can acquire from their pets. In this podcast, we are going to focus on the connection between disease and pets sleeping in their owner's beds.

Welcome Dr. Bair-Brake.

[Heather Bair-Brake] Thank you. I'm happy to be here.

[Tanya Johnson] Dr. Bair-Brake, this article is about diseases transmitted to people all over the world from their pets. But, what are some of the types of diseases and infections people in the U.S. can get from sleeping with their pets?

[Heather Bair-Brake] In this country, the risk of acquiring a disease from sleeping with your pet is generally low. The most common risks to pet owners who sleep with their pets include flea and tick bites, ringworm, and skin infections due to mites. Pets that lick their owners a lot may also spread some bacterial infections – particularly if the owner has open wounds.

[Tanya Johnson] How serious are the health risks of sleeping with your pets?

[Heather Bair-Brake] Pets pose less of a risk to their owners if they receive routine veterinary care, are kept free from fleas and ticks, and are routinely dewormed. However, in some cases when the pet is ill or infested with fleas or ticks, the practice can be quite risky. Ringworm, fleas, ticks, and some bacteria can all be passed to owners just by snuggling with infected pets.

I would like to highlight two situations where sleeping with pets is particularly dangerous. The first situation involves young children and persons with a weakened immune system who are often not able to fight off germs carried by pets. Although families with small children and persons with altered immune systems are still encouraged to keep pets, there are strict guidelines they should follow to keep pet-related germs at bay. Readers will find that many of the pet-related infections outlined in this article happened when small children or persons with weakened immune systems allowed pets to lick them in the face or lick their open wounds. Another dangerous situation is sleeping with dogs or cats that are carrying infected fleas or ticks. For example, this paper reports a few cases where flea-infested dogs were allowed to sleep with their owners. The fleas were infected with a deadly disease called plague, which was then spread to the owners.

[Tanya Johnson] Can you describe some of the diseases associated with pets found in other areas of the world?

[Heather Bair-Brake] Sure. In this article, the authors report several instances in which infections were transmitted from dogs and cats that slept in the same bed as their owners. Some of the most notable examples are Pasteurellosis in the United Kingdom and Japan, cat-scratch disease in Taiwan, and Cheyletiella dermatitis in France. Pasteurellosis is a disease caused by bacteria that can live in the nose and mouth of our pets. In this paper, the authors write about human cases of wound abscesses, sinus infections, and meningitis caused by Pasteurella transmitted in dog and cat saliva. Cat scratch disease is usually transmitted to humans when they are scratched or bitten by a cat that harbors infected fleas. The authors describe a serious case of cat scratch disease in a young Taiwanese girl who slept with a cat at night. Cheyletiella dermatitis is a skin disease caused by mites that live in the top layer of our skin. These mites cause an itchy rash in both human and animal patients. The authors report that an elderly woman developed Cheyletiella dermatitis on her arms and torso after sleeping with a cat.

[Tanya Johnson] I'm curious, are there any other ways that pets can spread disease to their owners?

[Heather Bair-Brake] Dogs and cats can spread disease to people by biting, licking, and scratching them. People can also become indirectly infected with pet diseases by forgetting to wash their hands after touching or cleaning up after their pets or by accidentally swallowing fleas or their pet's stool.

[Tanya Johnson] Are there any other dangers people are exposed to by sleeping with their pets?

[Heather Bair-Brake] The greatest danger besides zoonotic disease is injury. Every year, hundreds of thousands of people, especially children, are bitten by dogs in the United States. Keeping dominant or aggressive dogs in a family member's bedroom has been shown to be a significant risk for dog bites, some of which have been fatal.

[Tanya Johnson] Dr. Bair-Brake, what can people do to help avoid getting sick from sleeping with their pets?

[Heather Bair-Brake] If pet owners do decide to sleep with their dogs or cats, they should take them to a veterinarian regularly, use preventive flea and tick treatments on pets, and routinely deworm them. Remember, pets should never sleep with or be allowed to lick young children or people with weakened immune systems. These people are most at risk for becoming sick from pet-related disease.

[Tanya Johnson] Thanks Dr. Bair-Brake. I've been talking with CDC's Dr. Heather Bair-Brake about a paper that appears in the February 2011 issue of CDC's journal, Emerging Infectious Diseases. You can see the entire article online at <a href="www.cdc.gov/eid">www.cdc.gov/eid</a>. If you'd like to comment on this podcast, send an email to eideditor@cdc.gov. That's e-i-d-editor – one word - at c-d-c-dot-gov. I'm Tanya Johnson, for Emerging Infectious Diseases.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.