THE HUMANE SOCIETY OF THE UNITED STATES

Community Cats and Public Health

Many animals, both wild and domesticated, can pass diseases to people. These are known as zoonotic diseases. Although we should be concerned about such diseases, there are some common myths about the public health risks associated with community cats. In most cases, a compassionate coexistence between cats and humans can be established—and knowing how to prevent zoonotic disease is the best medicine.

Rabies

Rabies is an extremely rare disease in humans and in cats. According to the Center for Disease Control, there were only 4 reported cases of rabies in humans in 2011, and 49 cases since 1995.[1] None of the cases were attributed to cat bites.[1] Considering that only 303 rabid cats were identified in 2010 in the US[2] where the population of cats is estimated at between 25 million and 90 million, the likelihood that a particular cat is rabid is extremely low (0.3 to 1.2 per 100,000 cats), as is the likelihood of coming into contact with a rabid cat. Even so, rabies is a serious concern of a cat bite. Therefore, bites should be treated immediately and appropriately. For more information, see our fact sheet, "Community Cats and Rabies."

Cat Scratch Disease

Cat scratch disease (CSD) is caused by a bacteria, *Bartonella henselae*. Most people get CSD from cat bites and scratches.[3] Cats that carry *B. henselae* do not show any signs of illness; therefore, it is difficult to know if a cat is infected. Kittens are more likely to be infected with *B. henselae*, although cats, fleas and to a lesser extent, ticks, can also pass *B. henselae* to people. Individuals, such as those undergoing immunosuppressive treatments for cancer, organ transplant patients, and people with HIV/AIDS, are more likely than others to have complications of CSD. You can minimize the chance of getting CSD from cats by taking the following precautions:

- Avoiding rough play and other activities that may lead to scratches and bites, especially with kittens.
- Washing cat bites and scratches immediately and thoroughly with running water and soap.
- Preventing cats from licking open wounds that you may have.
- Controlling fleas and ticks.
- Contacting your physician if you start developing symptoms, such as infection (pus and swelling) at the scratch or bite site, fever, headache, swollen lymph nodes and/or fatigue, after a cat scratch or bite.

Toxoplasmosis

Toxoplasmosis is caused by a parasite, *Toxoplasma gondii*. Although infection with the parasite is relatively common in people, actual disease is rare. About half of the adult human population has been exposed to *T. gondii*, developed protective antibodies and are probably immune to *Toxoplasma* infection. However, infection could cause serious health problems for the infant of pregnant women who have never been exposed and developed immunity, as well as immune-compromised individuals. Nonetheless, it's not necessary to get rid of your cat to avoid this parasite since cats are unlikely to directly transmit toxoplasmosis to people.

It's important to understand that once a cat has been infected with toxoplasmosis, he or she acquires immunity and can rarely be reinfected or pass potentially infectious feces. Other animals, including people, get toxoplasmosis by accidentally ingesting cat feces or by eating animals already infected with toxoplasmosis. You're more likely to be infected with *T. gondii* from eating raw or undercooked meat or gardening in contaminated soil than from your cat.

The most obvious preventive measures should focus on food and hygiene –cooking meat thoroughly; washing uncooked vegetables and fruit; wearing gloves when working in soil and scooping litter boxes; and washing hands thoroughly following soil and litter box contact – and have little to do with cats. You can minimize the chance of getting toxoplasmosis by taking the following precautions:

- Cooking meat, eaten by people or cats, thoroughly (for appropriate temperatures, go to www.cdc.gov/toxoplasmosis/prevent).
- Washing uncooked vegetables and fruit before eating.
- Avoiding raw milk or other unpasteurized dairy products.
- Thoroughly cleaning surfaces/utensils that come into contact with uncooked meat, vegetables and fruit.
- Washing hands thoroughly with soap and water immediately following contact with raw or undercooked meat, uncooked vegetables and fruit, soil, unpasteurized dairy products and litter boxes.
- Boiling water from ponds and streams when camping/hiking.
- Wearing gloves when working in soil and scooping litter boxes.
- Keeping pet cats indoors or confined to their property so they can't roam, hunt infected animals and defecate outdoors.
- Covering all outside sand boxes when not in use to prevent cats from using them as litter boxes.
- Avoiding the litter box, if possible, if you're pregnant or immune-compromised (e.g., ask your spouse, roommate, etc. to scoop and clean the litter box) or scooping it daily, using rubber gloves when doing so, and washing your hands thoroughly afterwards.

Roundworms

Roundworms can cause a disease in people called visceral larva migrans. This disease is caused by *Toxocara canis* from dogs and, less commonly, *Toxocara cati* from cats. In most cases, *Toxocara* infections are not serious, and many people, especially adults infected by a small number of immature worms may not notice any symptoms and severe cases are rare.

While direct contact with infected dogs and cats increases a person's risk for roundworm infection, most infections come from accidentally eating the worm larvae or from larvae that enter through the skin. For example, children are at risk for infection if they play in areas that may contain infected feces (such as dirt piles and sandboxes), where they pick up the larvae on their hands. You can minimize the chance of getting roundworms by:

- Having your dogs and cats, especially young animals, treated for worms by your veterinarian.
- Washing hands with soap and warm water after playing with your pets or other animals, after outdoor activities and before handling food.
- Teaching children that it can be dangerous to eat dirt or soil.
- Covering outdoor sandboxes when not in use.
- Avoiding areas that are soiled with pet or other animal feces.
- Cleaning your pet's living area at least once a week.
- Bagging and disposing cat and dog feces in the trash.

Ringworm

Ringworm isn't actually a worm; it's a fungal disease. People get ringworm from direct contact with an infected animal's skin or hair; carpets, brushes, combs, toys and furniture and other objects which have come into contact with an infected animal; or from contact with fungal spores in the soil. Cows, goats, pigs, horses, people, and dogs and cats, especially kittens or puppies, may have ringworm that can be passed to people. Children, who are more likely to catch ringworm, shouldn't handle any animal with ringworm. Adults, except for elderly and immune-compromised individuals, seem relatively resistant.

The fungus that causes ringworm thrives in warm, moist areas. You can minimize the chance of getting ringworm by:

- Keeping your skin and feet clean and dry.
- Shampooing regularly, especially after haircuts.

- Not sharing items such as clothing, towels, hairbrushes, combs and headgear.
- Wearing sandals or shoes at gyms, lockers, and pools.
- Not touching pets with bald spots.

Plague

For many people, the mention of plague (bubonic plague) conjures up images of the infamous Black Death of the Middle Ages, a pandemic that killed a third of Europe's population in the 14th and 15th centuries. Fortunately now, the incident of this disease is almost nonexistent—between 5 and 15 human plague cases are reported each year in the United States.[4]

Plague is caused by a bacterium, *Yersinia pestis*, and the majority of human cases occur in New Mexico, Arizona, Colorado and California. People usually get plague from the bite of an infected flea, although humans can also acquire it as a result of contact with secretions or tissues from infected animals. Infected fleas are more commonly carried by wild animals, such as rabbits and rodents, but a number of other mammalian species, including the cat, can as well. You can minimize the chance of getting plague by taking the following precautions:

- Not picking up or touching dead animals.
- Reporting any sick or dead animals to the local health department or law enforcement officials if plague has recently been found in your area.
- Eliminating potential food sources for rodents, such as pet and wild animal food, around homes, work places and recreation areas.
- Removing nesting places for rodents, such as brush, rock piles and junk cluttered firewood, around homes, work places and recreation areas.
- Applying insect repellents to clothing and skin to prevent flea bites.
- Wearing gloves when handling potentially infected animals.
- Treating pet dogs and cats for flea control regularly if you live in areas where rodent plague occurs and not allowing them to roam and hunt.

This information adapted from Centers for Disease Control. More information is available at http://www.cdc.gov.

Contact The Humane Society of the United States at cats@humanesociety.org for additional information and resources.

[1] Center for Disease Control. Human Rabies, May 3, 2012, http://www.cdc.gov/rabies/location/usa/surveillance/human_rabies.html.
[2] Blanton JD, Palmer D, Dyer J, Rupprecht CE. Public Veterinary Medicine: Public Health - Rabies surveillance in the United States during 2010. *Journal of the American Veterinary Medical Association* 2011;239(6):773-783.
[3] Chomel BB, Boulouis HJ, Breitschwerdt EB. Vet Med Today: Zoonosis Update - Cat scratch disease and other zoonotic Bartonella infections. *Journal of the American Veterinary Medical Association* 2004;224(8):1270-1279.
[4] Orloski KA, Lathrop SL. Vet Med Today: Zoonosis Update - Plague: a veterinary perspective. *Journal of the American Veterinary Medical Association* 2003;222(4):444-448.