

Human Health in Relation to Pets in Urban and Indigenous Communities

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Adverse effects on human health

Throughout the centuries pets have been kept for companionship, security and working or hunting (especially dogs, birds e.g. hawks, and ferrets for hunting). Pets have continued to be kept for their usefulness to humans and to fulfill personal needs in spite of any adverse effects on their health.

The incidences of pet-related zoonoses transmitted from pets to humans depends on a number of factors (Stehr-Green and Schantz, 1987), including:

- The number of animals in the home environment
- The route and efficiency of disease transmission from pets to humans
- The behavioral characteristics of owners such as the extent of human-pet interactions
- Existing measures to prevent transmission

These factors will differ with each pathogen, location, family and pet, with children and other groups that have closer physical contact with animals, (see discussion on pets of Indigenous people) tending to be at higher risk of infection.

Stehr-Green and Schantz (1987) summarize transmission modes and the incidences and costs of zoonotic diseases associated with pets. Organisms are grouped according to their identification as helminthes (worms), protozoa, bacteria, fungi, viruses and arthropods.

Diseases most prevalent and therefore well known to the public are:

- Toxoplasmosis, a protozoan that can cause birth defects in non-immune pregnant women (Harwood and James 1979 in Stehr-Green & Schantz, 1987) and to which immuno-deficient people are also susceptible. Most women are exposed to it and immune before reaching childbearing age, and the risk of infection comes from cat feces, contaminated uncooked meat and vegetables, and soil contamination.
- Infectious diarrhea may be caused by the bacterial diseases Leptospirosis (transmitted through water contaminated by dog excreta), Campylobacteriosis (a common intestinal flora of man and animals with a small proportion of human infections being pet related) and Salmonellosis, which may be transmitted by infected dogs, cats or turtles.
- Dermatophytes (ringworm) a cause of skin infection transmitted by direct contact with dogs and cats, especially to children.