

Giardia and Wildlife

Every living organism has parasites and wildlife, pets and people are no exception. Parasites are small organisms that live in or on another organism, known as the host, which provides the parasite with food and shelter. Some parasites, such as *Giardia*, are zoonotic, which means they can be transmitted from animals to humans and vice versa.

Increasing interactions between wildlife, pets, and people are occurring due to urban expansion and land clearing. These interactions can spread zoonotic parasites. The impact of parasites spread to wildlife by people is an emerging threat to wildlife that is not well understood, yet is likely to increase in the future.

While many people enjoy interacting with wildlife, we may be inadvertently affecting the health of unique native animals by spreading parasites such as *Giardia*.

What is *Giardia*?

Giardia is a common zoonotic parasite of mammals, including people, as well as birds and other vertebrates. It lives and multiplies in the intestine and causes acute diarrhoea (think gastro or 'Bali Belly') or chronic nutritional disorders resulting in weight loss and tiredness. Like *Toxoplasma*, *Giardia* exists as a variety of different strains. Some strains are only found in certain species of hosts like dogs, cats and quendas. Strains that affect humans have a wider host range including pets and wildlife.

Giardia Profile



Photo: Centers for Disease Control and Prevention

Giardia is a single-celled organism that lives in the small intestine and is found worldwide. The parasite produces resistant cysts that are responsible for disease transmission. The cysts release trophozoites, which are the active feeding stage of the parasite. These multiply and can be free in the bowel or attached by a sucking disc. The cysts are then passed out by infected animals, like dogs and cats, in the faeces.

How is *Giardia* spread?

Giardia cysts and are found on surfaces, or in soil, food, or water that has been contaminated with faeces. Cysts can survive in water for several months. Infection occurs when the cysts are accidentally swallowed.



Is this a problem for wildlife?

Giardia can be spread from humans, pets and livestock to unique native animals, making them sick. In Australia, studies have found that urban wildlife such as bandicoots (quenda) are commonly infected with *Giardia* and sometimes with the human strain. The human strain of *Giardia* has also been found in native freshwater and estuarine fishes.

Did you know:

- Many people infected with *Giardia* parasites will not have any symptoms, but can still pass on the parasite.
- *Giardia* is more common in quenda in urban areas than quenda in non-urban areas.
- *Giardia* is the most common parasite in the gut of domestic dogs.

Find out more:

<http://www.cdc.gov/parasites/giardia/index.html>

About Healthy Wildlife

The 'Healthy Wildlife Healthy Lives' – A One Health project aims to educate the public about people's interaction with wildlife in urban areas, particularly how people and domestic animals spread diseases to wildlife, such as birds, quenda (bandicoots), native fish, bobtails and kangaroos. The project informs people about how to avoid harm to wildlife, create positive interactions and protect and conserve the environment. The aim is to keep wildlife healthy for a healthier world.

The project is a partnership between Eastern Metropolitan Regional Council and Murdoch University, supported by Lotterywest.

VISIT: www.healthywildlife.com.au