

Zoonoses Fact Sheet – Zoonoses

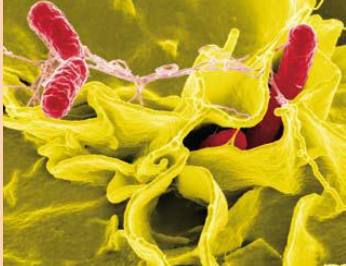
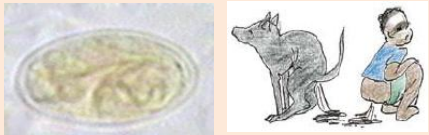



A zoonosis is a disease transmitted from animals to humans.

Australia has at least 89 zoonotic agents. Zoonotic disease can be spread directly or indirectly. For example:

Direct: Animal to human

Indirect: Animal to inanimate item / soil to human
Animal to food to human
Animal to insect vector to human

Potential zoonotic pathogens from dogs in Indigenous communities:

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| <p>Bacteria</p> <p>Bacteria are tiny living things, too small to see with the naked eye. Hundreds of them would fit on the head of a pin. You can only see them with a microscope. Bacteria live in many places, including the soil, skin and gut. There are a lot of types of bacteria that live around us, but only a few can cause disease, such as diarrhea, skin sores, kidney infections and blood diseases.</p> | <ul style="list-style-type: none"> • <i>Salmonella enterica</i> • <i>Campylobacter</i> spp. • <i>Yersinia</i> spp. • <i>Streptococcus</i> spp. • <i>Staphylococcus aureus</i> • <i>Leptospira interrogans</i> • <i>Ehrlichia</i> spp. (unknown) • Q fever (<i>Coxiella burnetii</i>) |  |
| <p>Protozoa</p> <p>Protozoa are a family of organisms larger than bacteria, but are still microscopic. They need to get inside another animal before they can breed. These cause diarrhoea.</p> | <ul style="list-style-type: none"> • <i>Giardia duodenalis</i> • <i>Cryptosporidium parvum</i> |  |
| <p>Fungi</p> <p>Fungi are a group of simple parasite organisms that include mushrooms and mould. The fungi that can infect humans and dogs cause the skin disease ringworm. These fungi are too small to be seen with the naked eye, but bigger than bacteria.</p> | <p>Dermatophytes (Ringworm)</p> <ul style="list-style-type: none"> • <i>Microsporum canis</i> • <i>Trichophyton mentagrophytes</i> |  |
| <p>Parasite Worms</p> <p>Parasite worms have to live inside the body of an animal like a human or a dog. The eggs and the baby worms can be too small to see, but some of the adults worms can be seen in poos. They can cause problems such as stomach upsets, itchy skin rashes, and cysts inside the body.</p> | <p>Nematodes</p> <ul style="list-style-type: none"> • <i>Ancylostoma caninum</i> (dog hookworm) • <i>Ancylostoma ceylanicum</i> • <i>Toxocara canis</i> (dog roundworm) • <i>Trichuris vulpis</i> (dog whipworm) • <i>Strongyloides stercoralis</i> <p>Cestodes</p> <ul style="list-style-type: none"> • <i>Echinococcus granulosus</i> • <i>Dipylidium caninum</i> • <i>Spirametra erinacei</i> |  |
| <p>Ectoparasites</p> <p>These are small insects that live on animals like dogs and depend on them for their food. Mites are usually too small to be seen themselves, ticks and fleas are bigger. They can make skin itchy and sometimes transmit other diseases.</p> | <ul style="list-style-type: none"> • <i>Sarcoptes scabiei</i> var <i>canis</i> (scabies mite) • <i>Ctenocephalides felis</i> (cat flea) • <i>Rhipicephalus sanguineus</i> (brown dog tick) which can carry Q fever and Ehrlichial diseases. |  |

Source: Professor Richard Speare, Human Doctor and Veterinarian, James Cook University, Zoonoses training at QLD Health/AMRRIC Workshops, Yarrabah, 2008