Zoonoses Fact Sheet: Dog Scabies

What is Scabies?



Scabies is a skin disease caused by the mite Sarcoptes scabiei

- Sarcoptes mites are too small to see with the naked eye, but you can see them using a microscope.
- Scabies is endemic in many Indigenous communities in northern Australia.
- The mites live in the top surface layer of the skin. They crawl around making "tunnels" by eating skin cells.
- Dog scabies and human scabies are genetically different. Dog scabies will still affect people's skin but the mites do not go through their full life cycle.



How can dog scabies affect people?



- Dog scabies causes Transient Scabies in humans an allergic skin reaction with vesicles (blisters), itchiness, and even pustules or skin sores if infected (for example with Streptococci). It looks the same as human scabies.
- Transient Scabies can last for hours or several days. The rash is usually worse on areas
 of skin that were in contact with the dog.
- The rash causes people to scratch, breaking the skin and opening the skin surface to
 infection by bacteria such as Staphylococcus and Streptococcus. Streptococcus
 pyogenes Group A is the main causative agent for Rheumatic heart disease and Poststreptococcal acute glomerulonephritis (autoimmune kidney disease).
- The itchiness happens every time the person touches an infected dog or bedding. The rash from Transient Scabies will disappear spontaneously in most humans when the dog and environment is successfully treated.

How do we stop scabies?



- *Ivermectin* is particularly successful in the treatment of canine scabies. Regular *Ivermectin* programs can be part of Dog Health Programs in communities.
- Some chronic scabies cases are resistant to treatments. Considering welfare concerns and source of continuing infection for the whole community, it may be worth discussing euthanasia of the dog with the owners.
- Airing and washing bedding, fumigating houses and cleaning yards to remove old mattresses will reduce environmental contamination.



Source: Dr Sam Phelan, Dog Health Programs in Indigenous communities, an Environmental Health Practitioner's Guide, AMRRIC, 2010.

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

Ted Donelan (dog photos) 2008

