

Mange (Scabies, Acariasis)

DISEASE IN ANIMALS

Acariasis is caused by a large class of mites that are ecologically diverse. Some mites are host specific some are not. A few species are known to be zoonotic. The more common variants are listed below.

MANGE MITE	HOST	ZOOSES	COMMENTS
<i>Chorioptes bovis, equi</i>	cattle	no	
<i>Psoroptes ovis</i> (Sheep scab)	Cattle, sheep, goats, llamas, alpacas	no	Reportable to ODA
<i>Demodex bovis, ovis, caprae, canis, equi, cati</i>	Cattle, pigs	no	
<i>Sarcoptes scabiei var ovis, equi, canis, suis</i>	Dogs cattle goats swine horse	yes	Can
<i>Sarcoptes scabiei var hominis</i>	humans		
<i>Notoedric cati</i> (feline scabies)	cats	yes	
<i>Otodectes cynotis</i> (ear mite)	cats, dogs	no	
<i>Cheyletiella</i> ssp (Walking Dandruff)	Cats, dogs, rabbits	yes	
Trombiculidiasis (Chiggers, Harvest Mite)	Most animals, birds, reptiles, humans	Shared infection	Mite is free living in environment
<i>Dermanyssus gallinae</i>	Poultry, birds	yes	dogs & Cats accidental hosts

Reporting: Only *Psoroptes ovis* is a reportable animal disease in Ohio. All suspected cases must be reported to the Ohio Department of Agriculture (ODA), Division of Animal Industry at (614) 728-6220 or (800) 300-9755 or the USDA APHIS Veterinary Services at (614) 856-4735 or (800) 536-7593. Voluntary reporting of animal cases to the [local health department](#) is encouraged if the animal was recently acquired from a commercial source, comes from a public venue or is linked to a human case.

Transmission: Mites are transmitted by contact between animals or through fomites, although most mites do not persist long in the environment. Infestations between hosts occur but the mites do not survive for long on hosts other than those to which they are adapted.

Clinical signs: In all hosts, mites damage the epidermis and produce an intensely pruritic dermatitis with hyperkeratosis and hair loss. Body areas most affected vary with the species of mite and host. Papules and vesicles form crusts and hyperpigmentations. Chronically infected animals become unthrifty and can develop secondary bacterial infection.

Diagnoses: identification of the mite in a skin scraping or biopsy

Case classification:

- Suspected: a clinical case with signs consistent with Acariasis.
- Probable: a clinically suspect case where mites have been seen on a field skin scraping.
- Confirmed: a case that where mites have been positively identified by an entomologist or state or federal diagnostic laboratory.

DISEASE IN HUMANS

Reporting: While scabies is not an individually reportable disease in Ohio, outbreaks are required to be reported. In addition, there are specific isolation requirements for individuals with scabies.

Human illness: Zoonotic scabies or acariasis cause a transient highly pruritic dermatitis that is less severe than what is seen with scabies caused by *S. scabiei var hominis*. Zoonotic mites do not reproduce well on humans because human are an aberrant host. Therefore, zoonotic infections are more superficial and transient, rarely lasts more than three weeks. The only morbidity is the temporary pruritus and discomfort, and infestations are not fatal.

Prevention: Isolate and treat infected animals with acaricides. Gloves, boots and protective clothing can decrease the risk of transmission when handling affected animals. Insect repellants and protective clothing may be helpful in infested environments.

FOR MORE INFORMATION

Reportable Diseases in Ohio

[ODA Division of Animal Industry](#)

[OAC Chapter 901:1-21 Dangerously Contagious or Infectious and Reportable Diseases](#)

[USDA Animal and Plant Health Inspection Service](#)

Disease in Animals

[Ohio Animal Disease Diagnostic Laboratory](#)

[Merck Veterinary Manual](#)

[CAPC Parasite Recommendations \(Ectoparasites\)](#)

Disease in Humans

[ODH Infectious Disease Control Manual](#) (See Scabies)

[CDC - Scabies in Humans](#)