

## Why Does My Dog Get Ear Infections?



**Also Known As:** Otitis externa, otitis media, and otitis interna, inflammation of the external ear canal, middle ear infection, inner ear infection.

**Transmission or Cause:** Possible causes of otitis externa, which may lead to infections of the middle and inner ear, include allergies, hormonal diseases, excess moisture in the ears due to swimming or bathing; inappropriate treatment or cleaning of the ears such as may be caused by the use of cotton-tipped applicators; excess wax production in the ears; or a foreign body or tumor that is obstructing the ear canal. Additionally, otitis externa can be caused by parasites, (including ear mites or mange mites), and by autoimmune diseases. The most common cause of the development of otitis media and otitis interna is a bacterial infection resulting from otitis externa.

**Affected Animals:** Dogs and cats. Cocker spaniels and other long-eared or floppy-eared breeds may be more predisposed to developing infections.

**Overview:** An ear infection, or otitis, is an inflammation of the outer, middle, or inner ear canal. Most frequently, an animal will develop otitis in the outer ear that may worsen and spread into the middle ear. Once in the middle ear canal, the inflammation can move into the inner ear or, in cases in which the otitis has originated in the middle ear, the infection can instead progress outward to the external ear.

Otitis can be caused by a tremendous array of factors, including allergies, hormonal diseases, excess liquid in the ear from swimming, autoimmune diseases, skin parasites, and excess wax production. Generally, animals that develop ear infections have reddened ears that are painful to the touch and ooze a foul-smelling liquid. A punctured eardrum is not an uncommon result of a middle ear infection, and the more severe cases of otitis can lead to partial deafness, lack of balance, nausea and vomiting, and problems with the nerves of the eye.

Akron, OH  
330-238-1820

Albuquerque, NM  
505.881.7205

Aptos, CA  
831.531.0090

Avondale, AZ  
623.792.6310

Campbell, CA  
408.871.3800

El Paso, TX  
877.604.8366

Fremont, CA  
510.226.7477

Gilbert, AZ  
480.633.2277

Girard, OH  
330.752.6598

Lincoln, NE  
402.216.0940

Omaha, NE  
402.238.1240

Rochester, NY  
585.286.1050

Salt Lake City, UT  
801.942.3937

Santa Fe, NM  
505.474.4380

Scottsdale, AZ  
480.443.0679

Spokane, WA  
509.327.8220

Tucson, AZ  
520.477.0850

Valencia, CA  
661.855.4870

Walnut Creek, CA  
925.239.2929

Williston, VT  
802.321.2500



DERMATOLOGY FOR ANIMALS

1-877-604-8366  
www.dermatologyforanimals.com



**Clinical Signs:** Clinical signs can vary depending on the severity and location of the infection, but typical symptoms of otitis include pain and erythema of the pinna (earflap), head shaking and scratching of the ears, and pus and malodorous exudate coming from the ear canal. The animal may tilt the affected ear downwards and may roll or lean to the affected side. If both sides are affected, the animal may be deaf or wobbly. Some animals may be nauseated, vomit, and have Horner's syndrome (constricted pupil of the eye on the same side as the ear infection). Any neurological clinical signs indicate significant middle ear or inner ear disease.

**Symptoms:** Ears that are red, painful to the touch, and produce a foul-smelling discharge are symptomatic of otitis. Typically, a animal with an ear infection will scratch and shake the ears or may tilt the affected ear downwards. Animals that are affected more severely may show some neurological signs such as rolling or leaning to one side. If both ears are affected, the animal may be deaf or off balance and uncoordinated. Some animals may be nauseated and vomit. Also, some animals may get a condition called Horner's syndrome in which the pupils are sized differently and the nictitating membrane (third eyelid) is raised. This condition indicates that a nerve has been affected by the inflammation from the middle ear. Any neurological clinical signs indicate significant middle ear or inner ear disease.

**Description:** Typically, ear infections begin with otitis externa and then progress deeper into the canal to the middle ear. When the inflammation in this region of the ear is chronic, the eardrum may rupture and the infection may spread to the inner ear or, the infection may begin in the middle ear and progress outward to the external ear. Of the three types of otitis, infections in the inner ear are often the most severe and can lead to partial deafness and neurological problems.

In serious cases of otitis, the skin begins to form into folds in which the infection can become trapped, making cleaning and use of topical treatments very difficult. In addition, the skin will secrete more wax and debris that allows yeast and bacteria to overgrow, causing further disease. Severe inflammation leads to permanent skin thickening, mineralization, and narrowing of the ear canals. Once this occurs, the only viable treatment will be surgical removal of part or all of the ear canal.

Akron, OH  
330-238-1820

Albuquerque, NM  
505.881.7205

Aptos, CA  
831.531.0090

Avondale, AZ  
623.792.6310

Campbell, CA  
408.871.3800

El Paso, TX  
877.604.8366

Fremont, CA  
510.226.7477

Gilbert, AZ  
480.633.2277

Girard, OH  
330.752.6598

Lincoln, NE  
402.216.0940

Omaha, NE  
402.238.1240

Rochester, NY  
585.286.1050

Salt Lake City, UT  
801.942.3937

Santa Fe, NM  
505.474.4380

Scottsdale, AZ  
480.443.0679

Spokane, WA  
509.327.8220

Tucson, AZ  
520.477.0850

Valencia, CA  
661.855.4870

Walnut Creek, CA  
925.239.2929

Williston, VT  
802.321.2500



DERMATOLOGY FOR ANIMALS

1-877-604-8366  
www.dermatologyforanimals.com

**Diagnosis:** The veterinarian will make a diagnosis based on the clinical signs, physical exam findings, and through the use of several other diagnostic tools. One such tool is cytology, which involves taking a swab of the ears and looking at the material collected under a microscope for the presence of bacteria, yeast, mites, and other substances that might cause an infection. Bacteria and yeast are normally present in low numbers in all animals' ears, but a large presence will lead to an ear infection.

Allergy testing or a hypoallergenic diet trial may be needed to identify underlying allergies. Blood testing may help investigate hormonal abnormalities. Skin biopsies may be needed to determine any diseases such as an autoimmune disorder that could cause a skin abnormality affecting the ear. Skin scrapings may be needed to detect mites, tiny parasites that can infect the ears and cause skin diseases. X-rays of the skull or CT scan can be used to examine the middle and inner ear for signs of disease. In addition, cultures of an infected ear help determine the presence and type of bacteria, as well as antibiotics that are appropriate for treatment. The majority of animals with ear problems have such pain in their ears that they cannot withstand having them examined, cleaned, cultured, or x-rayed without the use of general anesthesia.

**Prognosis:** With proper treatment, otitis externa usually will resolve within three to four weeks, although it may recur in certain animals. Animals with otitis media or otitis interna may need 1-3 months of systemic antibiotics. The key for long-term success is correcting or treating the underlying problem that led to the development of the otitis.

**Treatment:** After the cause of the otitis has been diagnosed, the veterinarian usually will perform a thorough cleaning of the ear canals while the animal is under sedation or general anesthesia. The use of topical medications, which are placed into the ear canal, is often very beneficial in killing yeast, bacteria, and mites. Oral medications also may be used in conjunction with other treatments to help kill bacteria, yeast, and mites. The veterinarian will teach the animal's owner how to clean and medicate the ears properly to ensure successful treatment of otitis.

The surgical correction of the ear canals may be necessary in cases of severe infection. One type of surgery, called a lateral ear canal resection, allows the ear to drain more easily, decreases the amount of humidity in the ear, and makes topical treatments easier to apply. A total ear canal ablation, a complete removal of the ear canal, is performed on animals with severe, chronic ear disease that is nonresponsive to medical therapy.

**Prevention:** Prevention is best accomplished when the veterinarian is able to determine the underlying factors that can lead to development of otitis. Proper cleaning of the ears is also critical. A veterinarian can explain how to clean the ears, as well as how to apply any medications that have been prescribed to treat the otitis.

Akron, OH  
330.238-1820

Albuquerque, NM  
505.881.7205

Aptos, CA  
831.531.0090

Avondale, AZ  
623.792.6310

Campbell, CA  
408.871.3800

El Paso, TX  
877.604.8366

Fremont, CA  
510.226.7477

Gilbert, AZ  
480.633.2277

Girard, OH  
330.752.6598

Lincoln, NE  
402.216.0940

Omaha, NE  
402.238.1240

Rochester, NY  
585.286.1050

Salt Lake City, UT  
801.942.3937

Santa Fe, NM  
505.474.4380

Scottsdale, AZ  
480.443.0679

Spokane, WA  
509.327.8220

Tucson, AZ  
520.477.0850

Valencia, CA  
661.855.4870

Walnut Creek, CA  
925.239.2929

Williston, VT  
802.321.2500