

Ear Infection (Otitis)

An ear infection is an inflammation of the outer ear canal, middle ear or the inner ear drum and bone caused primarily by bacterial infections. An outer ear infection (otitis externa) is generally the most common and benign.

Physical symptoms of an outer ear infection can be:

- Shaking of the head
- Smell noted from the ears
- Ears appear red and inflamed
- Tilting of the head
- Pain and sensitivity around the ear

Middle and inner ear infections (otitis media or otitis interna) can be more serious as the infection can begin to affect the centre of balance or facial muscle control within the inner ear drum. Physical signs of inner ear infection are:

- Shaking of the head
- Smell noted from the ears
- Ears appear red and inflamed
- Tilting of the head
- Pain and sensitivity around the ear
- Vomiting / Nausea
- Problems walking / Incoordination
- Inability to eat properly
- Drooling
- Inability to blink
- Rapid movement of the eyes back and forth (Nystagmus)
- Elevation of the third eyelid

Cause of Disease: The disease is caused by a buildup of waxy debris and bacteria that cause a progressive inflammation within the ear canal. The ear canal's cartilage can become chronically infected; it swells shut and may calcify into bone. As the ear canal begins to close shut, inflammation continues, infecting the inner ear and inner bony labyrinth that controls hearing and balance. Infection can also occur secondary to masses and polyps within the inner ear or from a blood born infection. Ear infections can affect both cats and dogs of any age. However, dogs with long earflaps, which cover the ear canal well, are more predisposed. Some species with this type of ear anatomy are Cocker Spaniels, Springer Spaniels, Golden Retrievers, Terriers and Poodles.

Diagnosis: Your veterinarian will suggest diagnostic tests dependent on how your pet presents, the appearance of the ear canals based on preliminary examination, and past history of ear infections. Some tests that your veterinarian may suggest:

- **Ear cytology:** Taking a swab of the ears allows your veterinarian to image the prevalent type of infectious agent (mites, bacteria, yeast) present.
- **Diagnostic Blood work:** A complete blood count and chemistry will help your veterinarian to determine if there is infection, disease of the kidney, liver, pancreas or if a metabolic disease present. A thyroid level will help your veterinarian check if your pet is producing adequate thyroid hormone. This hormone helps the body tell its cells how quickly to burn energy. The lack of this hormone decreases the skin's natural defenses and the body's ability to fight off infection.
- **Culture and Sensitivity:** Especially with chronic ear infections, it is important to find out the primary bacterial agent and which antibiotic that bacteria is sensitive to.
- **X-rays:** Skull x-ray will help your veterinarian determine if there is evidence of infection within the inner ear drum or if there are any changes in bones of the skull that may suggest a cancerous disease may be present.

Treatment: Treatment is focused on overcoming the infection present in the ear and returning the ear to proper health. ***It is extremely important to continue treating the ear infection until all signs of infection have been gone for 2-3 weeks. Stopping treatment too early can set up bacterial resistance to antibiotics and produce a severe chronic ear infection.***

- **Medications:** With mild ear infections, your veterinarian may suggest ear cleaning liquid and topical medication. Systemic antibiotics are also possible given the evidence of severe infection.
- **Surgical Ear Flush / Otoscopy:** With chronic infection or evidence of deeper infection, ear flushing and inner ear examination under anesthesia can be extremely beneficial. This will allow your veterinarian to examine the deeper ear canal for foreign material, polyps or masses or possible punctures to the inner ear drum, while also allowing them to clean the ears with large quantities of antiseptic solutions.
- **Surgical Repair to the ear canal and opening of the inner ear drum:** Surgical resection of the ear canal and opening of the inner ear to allow drainage and removal of infected material may be the only way to resolve a severe chronic infection.

Please contact us immediately if:

- ***There is any swelling, oozing or pain associated with the ear***
- ***Your pet does not want to eat, drink, or is painful around the ear.***
- ***There is any vomiting, diarrhoea, or depression.***
- ***There is any overall change in the health of your pet.***