

# Frostbite on Cats

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Frostbite is a condition that can occur in both cats and dogs as a result of exposure to freezing or subfreezing temperatures. It most commonly affects the tips of the ears, the tail, the scrotum, and the feet (especially the toes).

How does frostbite occur?

Blood flowing through the vessels not only supplies oxygen nutrients to tissues, it also provides heat. If a portion of the body, such as an ear, becomes very cold, the blood vessels in that area constrict (become smaller) to help the body conserve heat. The tissues of the ear then have even less blood supply and can eventually become as cold as the surrounding temperatures. If the tissue actually freezes, it will die.



Some medications (e.g., beta-blockers) and medical conditions (e.g., diabetes) may increase the risk of frostbite. The risk is also increased in conditions that are very cold and windy, or if the animal was wet.

What are the signs of frostbite?

Initially frostbitten tissue may appear pale or gray in color. The area will be cold to the touch, and hard. As the area thaws it may become red. In severe frostbite, within several days the tissue will start to appear black in color and will eventually slough over the course of several weeks. The tissue at this point will generally not be painful. However, as the tissue warms, frostbite becomes very painful.

What should I do if I suspect my pet is frostbitten?

- Warm the affected area rapidly with warm (NEVER HOT) water. The recommended water temperature is 104 -108° F. Use warm compresses or soak the affected area, e.g., foot, in a bowl of warm water. Do NOT use direct dry heat such as a heating pad or hair dryer.
- After you have warmed the area, dry it gently and thoroughly.
- Do not rub or massage the affected area.
- Contact your veterinarian or emergency clinic and have your pet examined immediately. Keep your pet warm during the travel to the veterinarian. For instance, wrap your pet in a dry towel or blanket that has been cycled in a warm clothes dryer for several minutes.
- Do NOT warm a frostbitten area if it cannot be kept warm. Refreezing will greatly injure the tissues.
- Do not give any medication for pain unless instructed to do so by your veterinarian. Many human pain relievers, including acetaminophen and aspirin (for cats) can be toxic to pets.

How will the veterinarian treat my pet?

- The tissue will be examined to determine the extent of the injury, although it may take several days to determine how much of the tissue actually died.
- Pain relief medication will be given.
- Antibiotics may be started to prevent secondary infection.
- Animals suffering from frostbite often have [hypothermia](#) as well. This will also be assessed and treated.
- In severe cases in which a large amount of tissue has died, it may be necessary to amputate the affected area.