

# Ibuprofen and Naproxen Toxicosis

- Ibuprofen and naproxen can be toxic to dogs and cats, but cats are much more susceptible to this toxicosis than dogs are.
- A single 200-milligram ibuprofen tablet can be toxic to a cat or small- to medium-sized dog; toxic effects can occur rapidly and damage the kidneys and stomach.
- Ibuprofen and naproxen are drugs intended for humans that should not be given to pets.
- Never administer human medications to your pet unless instructed to do so by your veterinarian, and keep all medications in the home secured to help prevent accidental swallowing by pets.

## What Is Ibuprofen and Naproxen Toxicosis?

Ibuprofen is the active ingredient in medications like Advil and Nuprin. Naproxen is similar to ibuprofen but is longer-acting; it is the active ingredient in medications like Aleve and Naprosyn. Ibuprofen and naproxen are widely used to treat pain, fever, and inflammation in people. Unfortunately, these drugs can be extremely toxic (poisonous) to cats and dogs. Toxicosis occurs when a cat or dog eats enough of one of these drugs to cause damaging effects in the body.

The damaging effects of ibuprofen or naproxen in pets include inhibiting blood flow to the kidneys and interfering with the production of compounds that help protect the inner lining of the stomach. Therefore, toxic effects of ibuprofen and naproxen in dogs and cats include kidney damage that can lead to kidney failure and severe stomach irritation that can progress to stomach ulcers.

## How Does Toxicosis Occur?

Many cases of ibuprofen and naproxen toxicosis in dogs and cats are accidental. A pet may find and chew on a bottle of pills or eat a pill that has fallen on the floor. Because these drugs are so potent, a single 200-milligram ibuprofen tablet can be toxic to a cat or small- to medium-sized dog.

Sadly, some cases of toxicosis occur because pet owners give human medication to their pet without being instructed to do so by a veterinarian. Ibuprofen and naproxen are intended for human use and should not be given to pets.

## What Are the Clinical Signs of Ibuprofen and Naproxen Toxicosis?

Once swallowed, ibuprofen and naproxen are rapidly absorbed from the stomach and intestines. Depending on the amount of drug ingested, toxic effects can occur within an hour, but some signs can take a few days to appear. The most common side effect is stomach irritation. In mild cases, this may cause vomiting. In severe cases, it can cause the pet to vomit blood; the irritation can also be severe enough to cause stomach ulcers and stomach perforations (punctures in the

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stomach wall that allow stomach acid to leak into the abdomen). If stomach bleeding is severe, blood transfusions may be necessary to save the patient.

Ibuprofen and naproxen toxicosis can also inhibit blood flow to the kidneys, which can cause kidney failure. Extremely high toxic doses of these drugs can also affect the brain, causing altered mental status, seizures, and coma. Other clinical signs associated with toxicosis can include the following:

- Vomiting (sometimes with blood)
- Diarrhea (may be darker in color due to digested blood)

- Appetite loss
- Dehydration
- Abdominal pain
- Pale gums (secondary to blood loss)

### How Is Ibuprofen and Naproxen Toxicosis Diagnosed?

Diagnosis of ibuprofen and naproxen toxicosis is commonly based on a history of recent swallowing of one of these drugs. Your veterinarian may recommend diagnostic testing, such as blood work (a chemistry panel and complete blood cell count [CBC]) and urinalysis to assess the extent of the damage. If stomach perforation or kidney failure are suspected, additional diagnostic testing is warranted.

### What Are the Treatment and Outcome for Ibuprofen and Naproxen Toxicosis?

Ibuprofen and naproxen are absorbed by the body very rapidly. If swallowing is recognized right away, vomiting can be induced to remove the drug from the stomach before the body can absorb it. Another option may be to sedate the pet to flush out the

contents of the stomach. Your veterinarian may also administer a special preparation of liquid-activated charcoal to slow absorption of material from the stomach and intestines. This step may need to be repeated every few hours, as these medications have a long-lasting effect.

There is no specific antidote for ibuprofen or naproxen toxicosis. Treatment may include intravenous fluid therapy, blood transfusions, medications to help heal stomach damage, and other medications to help support and stabilize the patient. Hospitalization may be required so that blood values, urine output, and vital signs can be monitored.

Ibuprofen or naproxen toxicosis can be fatal. However, pets can survive if the condition is recognized, diagnosed, and treated quickly. The amount of drug involved also has a direct effect on recovery and long-term outcome.

Most cases of ibuprofen or naproxen toxicosis are preventable. Never administer human medications to your pet unless instructed to do so by your veterinarian, and keep all medications in the home secured to help prevent accidental swallowing.