

The Silent Threat in Your Pet's Bladder (and Why It Can Go Undetected)

If your pet shows symptoms of this common disorder, you must act urgently to avoid a serious complication. While prevention is the best strategy, the good news is that there are ways to treat it.

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STORY AT-A-GLANCE

- Bladder stones can silently form inside your dog's bladder, often without obvious signs, making early detection a challenge
- These stones develop when certain minerals in your dog's become overly concentrated and then crystallize. This can be due to bladder or kidney infections, poor hydration, inherited problems with metabolism of certain compounds such as uric acid or cystine, or an imbalanced diet
- Warning signs include increased frequency of urination, straining to urinate, blood in the urine, or urinary accidents in the house; however, many dogs show no symptoms until the problem is advanced
- Diagnosis involves urine testing, radiographs (X-rays), ultrasound imaging, and urine cultures to diagnose infection, inflammation, and the presence of stones. With this information, your veterinarian can recommend targeted treatment for your pet
- You can help prevent bladder stone formation by ensuring proper hydration, feeding a veterinarian-recommended diet, treating bladder and kidney infections early, and scheduling regular checkups — especially for high-risk breeds

As a loving dog parent, it's natural to be always looking out for your furry friend's health. But sometimes, trouble can be brewing in places you can't see — such as your pet's bladder. One potential hidden threat is bladder stones, which can cause pain and serious health problems if not caught in time.

What Are Bladder Stones?

Bladder stones (also called uroliths, cystic calculi, or urinary stones) are hard, rock-like clumps that can accumulate inside your dog's bladder. These stones can be as small as grains of sand or as big as river rocks. Sometimes there's just one, and other times there are too many to count. They come in all shapes and sizes.¹

These stones form when certain minerals like magnesium, phosphate, and calcium in your dog's urine bind together, forming crystals that build up in your pet's urinary bladder over time.² For various reasons including bladder infection and underhydration, your pet's urine can become oversaturated with these minerals, causing these stones to form more easily. There are different types of stones, such as:³

- **Struvite stones** — These are almost always associated with bladder infections. They account for approximately one-half of all urinary tract stones in dogs and cats.⁴
- **Calcium oxalate stones** — These are also commonly found in dogs and cats, making up 35% to 40% of urinary tract stones reported. These stones form due to high levels of calcium and oxalates being excreted in the urine; this can happen for various reasons including diet, breed/genetics, and underlying chronic illness.
- **Urate stones and cystine stones** — These are less common, and they often occur in dogs with certain genetic or metabolic issues. English Bulldogs and Dalmatians are more prone to developing these stones.

Why Are Bladder Stones a Problem?

Some dogs with bladder stones do not show any symptoms initially. Other pets, though, may experience pain, discomfort, or even a dangerous urinary blockage. If the stones block your dog's ability to urinate, that's an emergency, and can be life-threatening if not treated quickly.⁵ This may look like your pet posturing and straining to urinate, but only a small amount of urine or no urine at all being produced. This may also present as pacing, restlessness, loss of appetite, crying, and vomiting.

Even if there is no urinary obstruction, the stones can rub against the bladder wall and cause bleeding, irritation, and infections.⁶ Your dog may feel like they always need to urinate, and they may have accidents in the house.

If left untreated, stones can also lead to kidney problems, damage to the bladder, or a ruptured bladder in severe cases.⁷ That is why quick action and proper treatment are so important.

Signs Your Pet Might Have Bladder Stones

The difficult part of recognizing bladder stones is that they are so frequently asymptomatic. However, there are common signs you can watch for, such as:⁸

- Urinating more frequently than usual
- Trouble producing urine and straining to urinate
- Urinating only a little at a time (dribbles or drops rather than a stream)
- Blood in the urine
- Accidents in the house
- Licking the genitals
- Seeming in pain or uncomfortable; this can manifest in various ways such as pacing, crying, trying to bite when touched, or withdrawing from company
- Passing small stones in their urine
- Not urinating at all (which is a life-threatening emergency)

Some dogs may also seem tired, lose weight, or drink more water than usual. These signs are nonspecific, though, so it is best to consult your veterinarian if you are noticing changes in your pet's activity or behavior.

What Causes Bladder Stones?

Several factors can cause bladder stones to form in dogs. One common cause is urinary tract infection, which alters the pH balance of your dog's urine, making it easier for crystals and stones to form. Struvite stones, one of the most common types, often develop concurrent with infections. Other common causes of bladder stones include:⁹

- **Diet** — A diet high in magnesium, phosphorus, or protein, or low in water content, can increase the chance of stones forming in certain patients. It can also change the pH of your pet's urine, making them prone to crystal formation.¹⁰ Your dog may need a special diet to help balance their urine and prevent stones.
- **Insufficient water intake** — When dogs do not consume enough pure water, their urine becomes concentrated. This means the minerals excreted in the urine are also more concentrated, and those minerals can crystallize and form stones. Try adding water to your dog's food, offering ice cubes as treats, or using a pet fountain to encourage drinking.
- **Underlying health problems** — Conditions like Cushing's disease, diabetes, or liver problems can raise the risk of bladder stones. If your dog has a chronic illness, they may need extra care to keep their bladder healthy.
- **Genetics** — Some breeds are more likely to form bladder stones. These include Dalmatians, Miniature Schnauzers, English Bulldogs, Yorkshire Terriers, Lhasa Apsos and Bichon Frises. While dogs of certain breeds, certain genders, or certain ages may be predisposed to stone formation, any dog can develop bladder stones.

Bladder stones can develop in just a few weeks or take months to grow. The speed depends on the various factors contributing to stone formation in each individual pet. Some dogs form stones quickly and repeatedly and may need extra monitoring even after treatment.

Diagnosing Bladder Stones

If you notice the symptoms described above, it is best to take your pet to your veterinarian for an examination and diagnostic testing. Diagnostic testing will help to confirm the diagnosis and may include the following:

- **Urinalysis** — Checks for abnormalities such as unbalanced pH, red blood cells, white blood cells, crystals, and presence of bacteria in the urine.
- **Blood tests** — Helps to assess for underlying health issues and other causes of illness; this will also help to evaluate the kidney functions.
- **Radiographs (commonly known as X-rays)** — Oxalate and struvite stones, the most common types, will show up as bright white spots on the image.
- **Ultrasound** — Helps to identify stones that are not easily visible on radiographs.
- **Urine culture** — Identifies bacteria that might be causing an infection.

In some cases, your veterinarian may find bladder stones incidentally when looking into another issue.

How Are Bladder Stones Treated?

The good news is that bladder stones can be treated. The type of treatment your veterinarian chooses will depend on the size, number, and type of stones, as well as your dog's overall health.^{11,12}

- **Healthy diet** — The first thing to do for a pet with bladder stones is to create a healthy urine pH that is appropriate for prevention of the specific stone type present. A pH of 7 is neutral. Everything above 7 is alkaline, and everything below 7 is acidic. Struvite stones, for instance, form best at a pH of 8.0 or above, so neutralizing or acidifying the urine can be helpful.

If you are feeding your pet an exclusively kibble diet, now may be the time to switch to a whole-food minimally processed diet. Talk to your veterinarian about feeding your pet a fresh, minimally processed diet, or at least a canned food diet for the increased moisture content. Your veterinarian can also help decide if the carbohydrate and protein content of the diet is right for your pet. Dogs eating a high carbohydrate diet can have a higher (more basic) urine pH due to the alkalinizing effect of starches. This could be a potential factor as discussed above in struvite stone formation.

- **Cystotomy** — If the stones are too large, too numerous, or are causing an obstruction, this surgical procedure is often the fastest and safest option to removing the stones. The veterinarian will open the bladder surgically, remove the stones, and surgically close the incisions. Most dogs recover well with some rest and care.
- **Flushing (Urohydropulsion)** — For small stones, a vet may flush them out by filling the bladder with fluid and forcing them out through the urethra. This method is less invasive, however, it may not work for all dogs and carries risk of bladder rupture — especially in males, whose urethras are longer and narrower.
- **Lithotripsy (shockwave or laser treatment to break up stones)** — In some cases, a veterinary specialist can insert a cystoscope, a specialized piece of equipment with a tiny camera, into the bladder. Then, a specialized laser can be used to break the stones inside the bladder into tiny pieces, which are then flushed or pulled out. This treatment avoids surgery but is not widely available, and may not be appropriate for small dogs.

Can Bladder Stones Recur?

Unfortunately, bladder stones can recur. Some dogs are prone to forming stones repeatedly, especially if the underlying cause is not treated or is not curable. That is why it is important to:

- Talk to your integrative veterinarian about feeding a healthy, moisture-rich, species-appropriate diet
- Keep fresh water available at all times
- Take your dog in for regular checkups and urine testing
- Treat infections quickly
- Monitor for signs of trouble

If your dog has had stones before, your vet might suggest performing radiographs or ultrasounds at regular intervals to check for new stones before symptoms start.

What Can You Do to Prevent Bladder Stones?

You may not be able to prevent all bladder stones, but you can greatly lower your dog's risk of forming them. Here are a few tips to keep in mind:

- **Keep your pet well-hydrated** — Always make sure your dog has access to clean, fresh water. Consider placing extra water bowls around the house and cleaning them daily.

- **Feed a balanced diet** — Ask your veterinarian about the best food for your dog.
- **Watch for early signs** — Act quickly if you notice changes in your dog’s bathroom habits. The sooner the problem is detected, the easier it is to treat.
- **Schedule regular veterinary visits** — Routine checkups and lab tests can catch bladder issues early. This is especially important if your dog has had stones before or is a breed that is more at risk.
- **Treat infections promptly** — Urinary tract infections can lead to stone formation. If your dog has a urinary tract infection, make sure to work with your veterinarian to ensure the infection is completely treated.
- **Get stones tested** — If your dog passes a stone or has it removed, ask your veterinarian to send it to a lab for stone analysis. Knowing the stone type will help you and your veterinarian plan for the future and reduce the risk of recurrence.

Stay Informed, Stay Ahead

Bladder stones in dogs can be serious, but with the right care, they are treatable and sometimes preventable. If you learn what to look for and work closely with your veterinarian, you can help protect your pup from pain, discomfort, and even emergency surgery.

Your dog counts on you to keep them safe and healthy. Ensuring their bladder is in optimal condition is one more way you can show your love. So, if your dog exhibits the symptoms mentioned above, seek veterinary care quickly. When it comes to bladder stones, early action can make all the difference.

Sources and References

^{1,6,10,11} [VCA Animal Hospitals, Bladder Stones in Dogs](#)

² [Paws and Claws Animal Hospital](#)

^{3,5,8,9,12} [PetMD, March 12, 2025](#)

⁴ [Arab J Urol. 2012 Aug 15;10\(3\):230–239.](#)

⁷ [Maraboon Vet Surgery, July 18, 2023.](#)
