

When we talk about the urinary tract, we're referring to the system that starts with the kidneys, moves on to the connective ureters, then the bladder, urethra and relevant parts of the penis or vagina. We'll walk you through some of the most common urinary tract diseases in cats and dogs. Many of these conditions, when left untreated, can be painful and even life-threatening.

### ***Urinary Calculi, or 'Stones'***

#### *Symptoms*

Any dog or cat can develop urinary stones. The stones can cause inflammation and may eventually become lodged in part of the urinary tract, preventing urine flow. Signs of urinary stones include:

- Increased urination
- Straining to urinate
- Signs of pain while urinating
- Blood in urine

#### *Diagnosis & Treatment*

Urinary stones can affect different parts of the urinary tract. A urinalysis can help determine signs of inflammation or infection, the presence of crystals and whether there have been changes to kidney functioning. An x-ray or abdominal ultrasound may be necessary to identify the calculi. Surgery is recommended to locate and remove the stones and to improve the pet's quality of life.

### ***Individual Breed & Species Risks***

*Cystic & Urethral Calculi* are more common in dogs, though cats can also develop them.

*Struvite Calculi* commonly lead to urinary tract infections and are most commonly seen in younger female dogs, especially Beagles, Miniature Schnauzers, and English Cocker Spaniels.

*Calcium Oxalate* is a genetic issue and occurs middle aged male dogs, particularly Miniature Schnauzers, Lhasa Apsos, Yorkshire Terriers, Miniature Poodles, Shih Tzus, and Bichon Frises. Cats also form calcium oxalate, though theirs are largely diet-related. Burmese, Persian, and Himalayan cats are genetically predisposed to these stones.

### ***Feline Urethral Obstruction***

#### *Symptoms*

Blockage of the urethra is fairly common in younger and middle-aged cats. The obstruction causes a buildup of materials normally eliminated through urination and can quickly cause toxic buildup in the bloodstream. Signs include:

- Trying & straining or failing to urinate
- Painful urination
- Vomiting
- Loss of appetite
- Lethargy
- Dehydration
- Accidents
- Blood in urine

#### *Diagnosis & Treatment*

Blood tests and an exam can help determine a urethral obstruction. An emergency temporary urinary catheter can be used to remove the obstruction. A perineal urethrostomy surgery to widen the urethra may be required if this does not dislodge the plug.

### ***Kidney & Ureteral Calculi***

While uncommon stones in the kidneys ureters can happen. They're seen in cats more often than dogs and can similarly block the flow of urine, leading to infections and eventual kidney failure. After stones are removed, they can be analyzed and suggestions may be made to alter the diet.

### ***Urinary Tract Cancer***

Urinary tract cancer most commonly affects the kidneys and bladder. Staging will be performed to determine the spread of the cancer and then surgery may be recommended to remove the cancerous mass.