



# CHRONIC RENAL (KIDNEY) FAILURE

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Chronic renal (kidney) failure (CRF) is a common problem in all dog and cat breeds. The digestion of food produces waste products, which are carried by blood to the kidneys to be filtered and excreted in the form of urine. When the kidneys fail, they are no longer able to remove these waste products, and toxins build up in the blood producing clinical signs of kidney disease.

All breeds of any age can be affected. However, older pets are commonly affected as the prevalence increases with age. CRF affects almost every body system causing many changes throughout the body and usually results in the following:

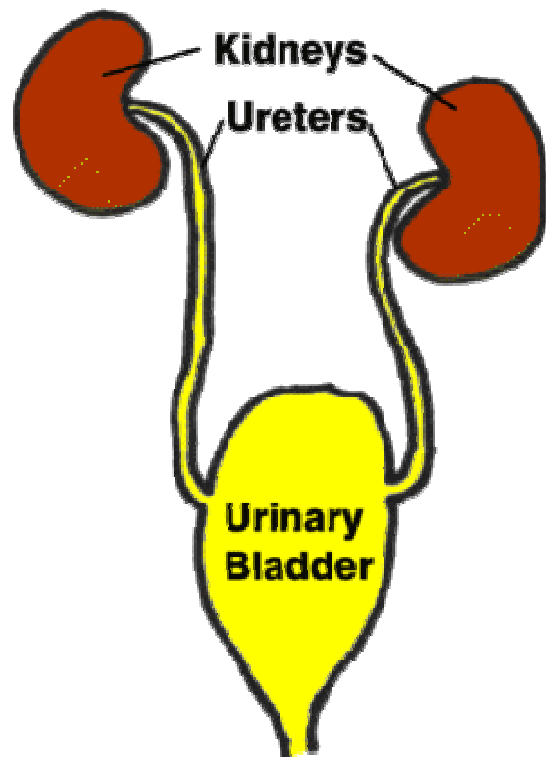
- Abnormal filtration of blood and retention of waste materials
- Failure of hormone production (including substances that stimulates the production of red blood cells {erythropoietin})
- Disturbance of fluid, electrolyte and acid-base balance

CRF can be caused by several different processes. These may include diseases, some of which can be secondary to other disease processes or trauma, that may have caused acute kidney failure such as:

- Toxins
- Poor blood flow and lack of oxygen (ischemia)
- Inflammatory disease
- Infections
- Cancer (neoplasia)
- Immune system abnormalities

## What to Watch For

- Excessive drinking
- Increased urination
- Lethargy
- Vomiting
- Bad breath
- Anorexia
- Weakness
- Lack of coordination when walking
- Depression
- Weight Loss



Drawing from [www.marvistavet.com](http://www.marvistavet.com)

## Diagnosis

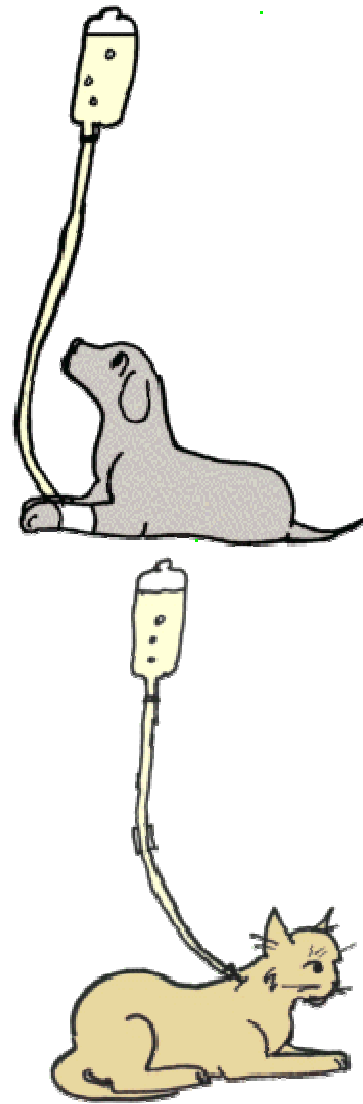
Diagnostic tests are needed to recognize CRF and exclude other diseases. Tests may include:

- Complete medical history
- Complete physical examination
- Blood tests
- Urinalysis
- X-rays

## Treatment

Although there is no cure, early detection and treatment can slow the progression of the disease. CRF can be a life threatening condition that requires hospitalization and treatment for stabilization in extremely ill pets. Treatments may include:

- Fluid therapy for dehydrated pets
- Management of blood abnormalities such as hyperkalemia or hypokalemia (abnormal potassium blood levels), metabolic acidosis and hyperphosphatemia (high phosphorus)
- Dietary therapy with protein and phosphorus restriction
- Free access to water
- Supportive care and careful monitoring of urine output
- Control of vomiting with diet and drug therapy as needed
- Appetite Stimulants



## Home Care

- Chronic renal failure is life-threatening, and if you suspect your pet has this condition, you should see your veterinarian as soon as possible. Follow-up with your veterinarian for examinations, laboratory work and urinalysis. Blood and urine analysis should be repeated as suggested by your veterinarian.
- Feed your pet the diet recommended by your veterinarian. Provide free access to fresh clean water at all times. Some owners can administer subcutaneous (under the skin) fluid to their pets at home, if necessary. Your veterinarian can provide instructions when indicated.
- Administer any prescribed medications as directed by your veterinarian. Drug therapy may include: phosphate binders; potassium supplementation; or drugs for gastritis (such as cimetidine or famotidine); or anabolic steroids for some patients.

## Preventive Care

There are no specific recommendations for prevention of chronic renal failure. However, general suggestions include:

- Providing frequent opportunities to urinate and free access to fresh clean water.
- Avoiding exposure to ethylene glycol (antifreeze) that can cause rapid and severe kidney damage.