

Know the Signs of Chronic Kidney Disease in Cats

Guelph, ON

Chronic Kidney Disease (CKD) is the most common metabolic disease affecting senior pet cats, especially those over 9 years of age. CKD results from the gradual loss of kidney function and resulting inflammation. Just like humans, cats have two kidneys. They are bean-shaped organs that contain hundreds of microscopic filtering units called nephrons. When the kidneys are working properly, they filter waste from the blood, which is excreted in the cat's urine. In CKD, the kidneys are not effectively filtering out the blood's waste products; this results in a build-up in the cat's body.



What clinical signs do we see in cats with CKD?

Signs of CKD can be vague and can mimic signs of other diseases. Detecting signs early will help your veterinarian to diagnose and start treatment earlier. Clinical signs of CKD will vary as disease progresses from Stage 1 to 4:

Early signs of CKDw	Progression to Kidney Failure
Weight loss	Loss of muscle condition
Reduced appetite	Anorexia
Increased thirst/urination	Decreased thirst/urination
Lethargy	Pronounced lethargy and withdrawal from family
Intermittent vomiting	Nausea and frequent vomiting
Weakness	Severe weakness and incoordination
	Dehydration

How is CKD diagnosed?

CKD is diagnosed by the presence of clinical signs in addition to laboratory tests including complete blood count, biochemical profile, urinalysis, and Symmetric Dimethylarginine (SDMA), which helps to detect early stages of CKD. Your veterinary team may also recommend abdominal radiographs, ultrasound and blood pressure monitoring of your cat.

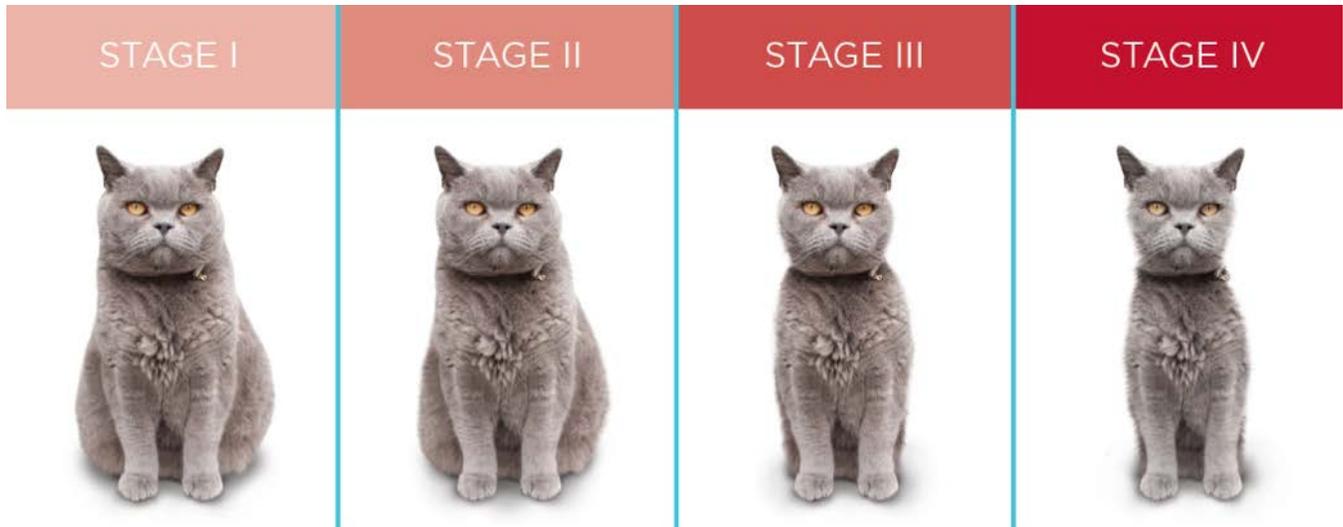
Can CKD be treated?

There is no cure for CKD, but treatment can prolong and improve your cat's quality of life. Your veterinary team will work with you to come up with a management plan that will aim to: reduce the buildup of toxic waste products in the bloodstream; reduce protein loss in urine; maintain adequate hydration; correct electrolyte imbalances; provide optimal nutrition; normalize blood pressure; and slow down the progression of disease. Your veterinarian will monitor your cat's response to treatment by performing regular examinations and laboratory tests.

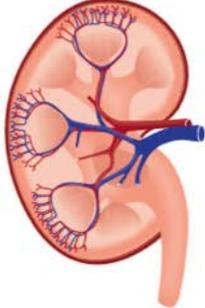
What is the Prognosis?

By working with your veterinary team, you can ensure your cat with CKD has a good quality of life. There is evidence suggesting that the earlier CKD is diagnosed and treated, the better the outcome can be with respect to quality of life and survival time.

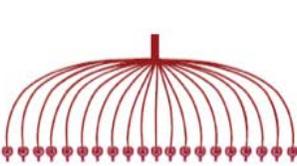
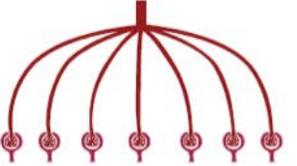
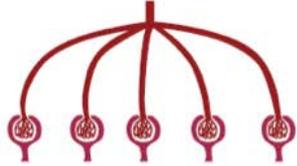
The stages of chronic kidney disease



Changes in the kidney

 <p>The filtration performance of the kidney begins to decline, the destruction of individual nephrons sets in. The kidney function is still barely affected at this stage.</p>	 <p>The kidney tries to compensate for the loss of nephrons by making the remaining nephrons work harder. This leads to overexertion and thus further destruction of the remaining nephrons.</p>	 <p>At least 75 % of the nephrons are irreversibly destroyed. Blood tests may find abnormal kidney function and metabolic values (primarily related to creatinine).</p>	 <p>Kidney function is only minimally present, so toxic waste products can no longer be removed from the body. This leads to a fatal toxic process in the body.</p>
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Number of nephrons (filter units)

<p>Filtration performance 100% - 33%</p> 	<p>Filtration performance 33% - 25%</p> 	<p>Filtration performance 25% - 10%</p> 	<p>Filtration performance < 10%</p> 
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For more information:

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