

## How is CKD diagnosed?

Diagnosis is usually made from a blood and a urine sample:

- **Blood**—urea and creatinine, by-products of metabolism that are normally excreted by the kidneys, will be increased. However, this might also be the case for some other conditions so a urine sample is usually analysed at the same time.
- **Urine**— poorly concentrated urine. The “*specific gravity*” is measure to assess its concentration. In most cats with renal failure, this is less than 1.035.

Blood tests might also show other important complications that may have developed as a result of CKD and as high blood pressure is also a common complication of CKD, taking your cat’s blood pressure is a useful regular health monitoring process to undertake. Routine screening of all mature and older cats is vital to help with the early diagnosis so that early management of the condition supports a long and quality life for your cat.

## How is CKD managed?

If a specific cause can be identified then treatment may be possible. In most cases, treatment is symptomatic and supportive and can be through fluid therapy initially to correct any dehydration or electrolyte abnormalities.

In the long term, dietary management is critical in cats with CKD. As a cat with CKD is more likely to become dehydrated, maintaining good fluid intake is very important. Using wet instead of dry food can help increase water intake for example. Restricting protein and phosphate is also an important part of managing the condition so prescription foods which help support kidney function is usually key in keeping cats with CKD as healthy as possible for as long as possible.

Cats with CKD are at risk of developing high blood pressure so regular monitoring of this is important to avoid a number of damaging effects as a result, such as blindness.

Book in for a complimentary senior cat clinic consultation for free health screening of your senior cat.

## Consulting Times

### Hillock Lane Surgery

Monday to Friday  
8.30am to 7pm

Saturday  
8.30am to 1pm



### Blackpool Surgery

Monday to Friday  
8.30am to 6pm

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# Chronic Kidney Disease

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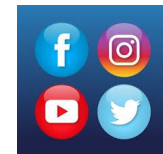
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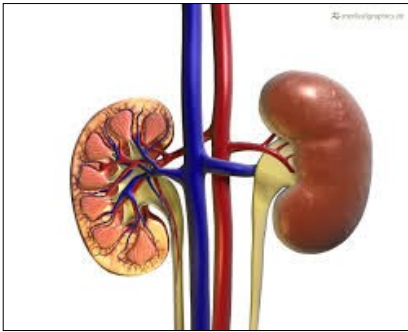
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## What is chronic kidney disease (CKD)?

The kidneys are responsible for helping maintain fluid balance in the body, producing certain hormones, regulating many electrolytes in the body and excreting waste products via their urine.



With chronic kidney disease (CKD), all these regulatory processes can be interfered with causing your cat a wide range of different symptoms.

CKD occurs when there is long-standing, irreversible

damage to the kidneys that impairs their ability to function and remove waste products from the blood.

Chronic kidney disease (CKD) is one of the most common conditions that affect older cats. In most cases it is progressive and over time there is a gradual decline and worsening of the disease. The rate of decline varies considerably between cats.

CKD is not curable or reversible but with appropriate support and treatment, your cat's length and quality of life will be improved by helping to slow down the progression of the disease.

## What causes kidney disease (CKD)?

In most cases the exact underlying cause of CKD is unknown (idiopathic) but in some cases, there are some well recognised causes:

- **Polycystic kidney disease (PKD)** - this is an inherited disease usually in Persian and related cats. The normal kidney tissue is gradually replaced by multiple fluid filled cysts.
- **Kidney tumours**—an example of this is lymphoma which is a solid tumour of white blood cells that can affect the kidneys.
- **Infections**—bacterial infection may lead to sufficient damage to cause CKD.

- **Toxins**—certain toxins and drugs can damage the kidneys.
- **Glomerulonephritis**—this is an inflammation of the glomeruli which are individual units within the kidneys that filter the blood. They may become inflamed for various reasons and if prolonged, can lead to CKD.

There are other conditions such as birth defects, trauma, hypokalaemia (low blood potassium) and hypercalcaemia (high blood calcium) which may also cause CKD. However, work is still going on to discover the underlying cause(s) of most cases of this disease.

If an underlying cause of CKD can be identified then in some cases this may be treatable which will in turn might slow or even halt the progression of CKD. In most cases though, treatment is designed to manage the disease and the complications that arise from it rather than curing it.

## Is kidney disease common?

CKD can be seen in cats of any age but is most commonly seen in middle to old-aged cats (over 7 years old). It is estimated that 20-50% of cats over the age of 15 will have some degree of CKD and the disease is seen about three times more often in cats than in dogs.

## What do the kidneys do?

Just like us humans, cats have two kidneys which perform a wide variety of important functions.

- Removing toxins from the blood.
- Maintaining water balance.
- Maintaining salt balance and other electrolytes).
- Maintaining the acid balance of the body.
- Maintaining normal blood pressure.
- Producing hormones.

The kidneys constantly filter our blood to remove the toxic waste products of the body's metabolism. Urine is produced in this process, part of which is concentrated by the kidneys to return water to the body to prevent dehydration.

Just like in a healthy human, cats are able to function with just one kidney without any adverse consequences. In fact it required around two thirds to three quarters of the total functioning kidney tissue of both kidneys to be lost before signs of CKD will develop!

## What are the signs of CKD?

As CKD is generally a progressive disease the clinical signs initially are very often subtle and mild and will gradually get worse over time. Many of the signs are vague or arise as a complication of the body trying to adapt to the disease, so it can be difficult so realise that there is a problem. Some of the more common signs are:



- Weight loss
- Poor appetite (inappetence).
- Lethargy.
- Increased thirst (polydipsia).
- Increased urination (polyuria).

The increase production of urine occurs because cats begin to lose the ability to concentrate their urine with CKD so begin to drink more to compensate for this.

Other signs may include:

- Poor coat.
- High blood pressure (hypertension).
- Vomiting.
- Bad-smelling breath (halitosis).
- Weakenss.
- Anaemia.