

Collecting your results from the GP and referral to specialist care²

- If tests suggest that you have CKD, you may be referred to a nephrologist (kidney doctor)
- The nephrologist will continue to monitor your kidneys with blood and urine tests, and talk to you in more detail about the damage to your kidneys



Important information²

Make sure that you continue to attend your diabetes annual review so that any other complications can be prevented or detected and slowed down

Living with CKD and diabetes – how can I reduce my risk?

- The type of treatment you need will depend on the stage of CKD³
- If caught early, CKD can be slowed to prevent further damage to the kidney²
- Treatment of early CKD focuses on good control of blood pressure, cholesterol and diabetes²
- Lifestyle changes that help include stopping smoking and increased physical activity. You may also be referred to a dietitian, who can advise you on which foods are better for your kidneys³
- For more advanced CKD, you might be prescribed medication by your nephrologist²
- Treatment for late-stage CKD includes reducing fluid intake, dialysis and kidney transplant²



Where to find more information

1 Talk to your GP, PCN or diabetes team for more information

2 Diabetes UK: Diabetic nephropathy³

Scan the adjacent QR code to access



3 Kidney research UK⁶

Scan the adjacent QR code to access



4 Kidney Care UK⁷

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CKD, chronic kidney disease; GP, general practitioner; PCN, primary care nurse; UACR, urine albumin-creatinine ratio

1. Cook S et al. BMJ Open 2023;13(3):e065927; 2. NHS. University Hospitals Coventry and Warwickshire. Diabetic nephropathy. 2023. Available from: <https://www.uhcv.nhs.uk/download/clientfiles/files/Patient%20Information%20Leaflets/Medicine/Renal/Diabetic%20nephropathy.pdf> (accessed October 2024); 3. Diabetes UK. Diabetic nephropathy (kidney disease). Available from: https://www.diabetes.org.uk/guide-to-diabetes/complications/kidneys_nephropathy (accessed October 2024); 4. NHS (2023). Diagnosis - Chronic kidney disease. Available at: <https://www.nhs.uk/conditions/kidney-disease/diagnosis/> (accessed October 2024); 5. Diabetes UK. Diabetes health checks (annual review). 2024. Available from: <https://www.diabetes.org.uk/guide-to-diabetes/managing-your-diabetes/care-to-expect> (accessed October 2024); 6. Kidney Research UK. Diabetes and kidney disease. Available from: <https://www.kidneyresearchuk.org/conditions-symptoms/diabetes/> (accessed October 2024); 7. Kidney Care UK. Information about kidney disease. Available from: <https://kidneycareuk.org/kidney-disease-information/> (accessed October 2024)

What has diabetes got to do with my kidneys?



This leaflet has been produced, reviewed and funded by Boehringer Ingelheim. The content has been written in collaboration with Sanjay Mistry, an expert through experience who himself had diabetes, has chronic kidney disease and has received a transplant.

This leaflet is designed to give you important information about kidney problems associated with diabetes

How does diabetes affect my kidneys?



Chronic kidney disease, or CKD, is a progressive, irreversible loss of kidney function that usually happens gradually over years, and may lead to kidney failure¹



A combination of high blood pressure and poor control of diabetes (high blood glucose) can damage the small blood vessels and filters in the kidney, causing them to leak^{2,3}



This means your kidneys can't filter waste products and fluid from your blood into your urine properly, which results in protein entering your urine³



Almost one in five people with diabetes will need treatment for CKD³

The stages of kidney disease⁴

- One test for kidney disease is a blood test, called an estimated glomerular filtration rate (eGFR) test. eGFR tests provide a measurement of how well your kidneys are filtering waste from your blood, which gives healthcare professionals an insight into your current kidney health
- It is important for people with CKD to know their eGFR, as this indicates their stage of CKD

Stage	eGFR (mL/min)	Description
Stage 1	≥90	Normal or high function
Stage 2	60–89	Mildly decreased function
Stage 3A	45–59	Mild to moderately decreased function
Stage 3B	30–44	Mild to moderately decreased function
Stage 4	15–29	Severely decreased function
Stage 5	<15	Kidney failure

What are the signs of kidney problems in diabetes?³



- Foamy urine
- Itchiness
- Loss of appetite / weight loss
- Nausea / vomiting
- Swollen ankles, feet and hands
- Blood in your urine
- Tiredness
- Shortness of breath

Important information

You may not have visible symptoms in the early stages of CKD. This is why it's so important to have the tests for CKD every year, so that it can be spotted early and slowed down with treatment

How will my kidneys be monitored?

A **urine test**, known as a urine albumin creatinine ratio (UACR) test, will assess the amount of protein leaking from your blood into your urine.² Urine tests are **very** important for doctors to get an insight into your health

Protein leaking into your urine is one of the very earliest signs of kidney problems – this is why returning urine samples is so important, as it can act as an early-warning system²

AND

Blood tests, also known as eGFR tests, will assess the amount of waste, called creatinine, in your blood. The kidneys should filter creatinine from your blood into your urine, therefore high levels of creatinine in your blood may mean your kidneys are not filtering properly^{2,3}

It is important to get **both** of these tests done as part of your yearly review, to get a good idea of how your kidneys are doing³. Detecting CKD early means there is a better chance of preventing or slowing-down long-term complications²

Providing a urine sample to my GP⁵

- Some people don't provide urine samples because it isn't always easy
- You might have to provide a sample of urine at your GP on the day of your appointment, or you might be sent a bottle for taking a sample at home
- Both options can be quite messy and impractical, especially if you need to carry a bottle of urine around all day before your appointment

Tips to make providing a urine sample easier

- Drink plenty of fluids before completing the urine sample
- Ask your healthcare professional doing the check for flexibility in providing your sample
- Ask for a bigger bottle to urinate into if preferred
- Ask to take the bottle home if this is more comfortable than providing it in the GP practice or diabetes clinic
- If providing a urine sample from home, make sure the lid is screwed on safely to avoid any spillage, or place the sample bottle in a zip-locked bag

