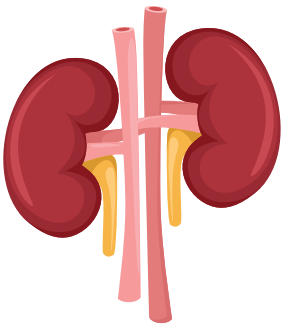


Type 2 Diabetes and Your Kidneys

Diabetes affects every part of your body

You can feel many of these effects, but some are “silent.” Your kidneys, for example, may not let you know they are damaged right away. Symptoms may not show until at least 75% of kidney function is lost.



Why are kidneys important?

- They filter waste products and excess salt and water from your blood. Good stuff stays in the blood; the waste is removed into the urine.
- If your kidneys are damaged, waste products can build up in your body.



What raises my risk for kidney disease?

- High blood glucose for many years
- High blood pressure
- Being overweight or obese
- Smoking



How can I find out if my kidneys are healthy?

When your kidneys are damaged, proteins leak into your urine. Your provider can test your urine for excess proteins, which is an early sign of kidney damage. Another possible sign is swelling in the feet and ankles, although many people have no obvious symptoms of kidney damage.

Test for kidney disease

Yearly urine tests are recommended for people with Type 2 diabetes. The tests are looking for a type of protein called albumin.

- Large amounts of albumin in your urine means you have kidney disease.
- Smaller amounts of albumin in your urine means you are at risk for developing kidney disease.



? DID YOU KNOW

Even with advanced kidney disease, most people still make a normal or close-to-normal amount of urine.



Stages of kidney disease

The estimated glomerular filtration rate (eGFR) blood test is used to determine the stage of kidney disease.

Higher rates of eGFR are better than lower. Stage 1 is mild kidney disease and stage 5 indicates kidney failure. Kidney failure cannot be cured. The only option is a kidney transplant or dialysis, a process of regularly filtering waste from the blood.

Stage	Description	Estimated Glomerular Filtration Rate (eGFR)
1	Kidney damage with normal eGFR	90 or above
2	Kidney damage with mildly decreased eGFR	60 to 89
3a	Mildly to moderately decreased eGFR	45 to 59
3b	Moderately to severely decreased eGFR	30 to 44
4	Severely decreased eGFR	15 to 29
5	Kidney failure	Less than 15 or dialysis



How can I prevent kidney failure?



Make healthy lifestyle choices

- Quit smoking, exercise daily, eat healthy foods, avoid excess alcohol, and use less salt.



Keep blood glucose in target range

- High glucose levels can damage kidneys over time.
- Use metformin first-line if you have stage 1 and 2 kidney disease to help lower glucose levels. Consider a sodium-glucose co-transporter 2 (SGLT-2) in stage 3 kidney disease. It can prevent worsening of kidney disease.



Keep blood pressure below 130/90 or as advised by your provider

- High blood pressure can damage kidneys over time.
- ACE inhibitors (angiotensin converting enzymes) or ARBs (angiotensin receptor blockers) are recommended to lower blood pressure and protect the kidneys.



NSAIDs

Avoid agents that can damage kidneys

- Nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen and naproxen
- Some dyes that are used for imaging studies



See a dietitian for medical nutritional therapy

- A nutrition expert can help by giving recommendations for carbohydrate and protein intake, sodium restriction, and weight loss.

Talk to your provider or healthcare team about how you can protect your kidneys.

Please call _____ with any questions or concerns.



Veterans Crisis Line: 1-800-273-TALK (8255) or Text 838255