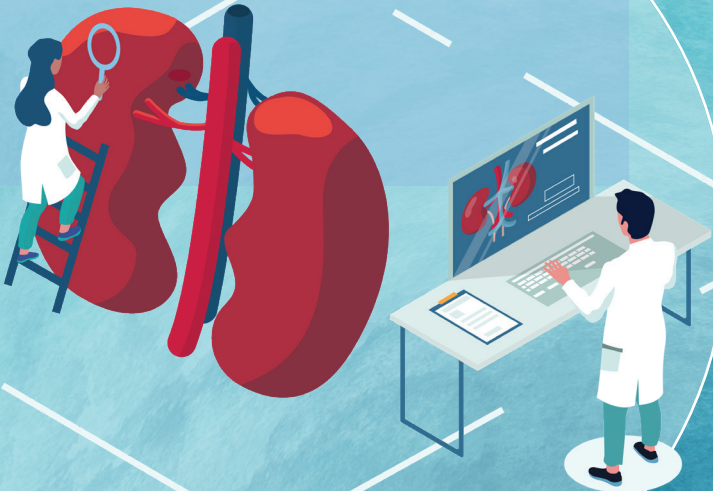


Take Care of Your Kidneys

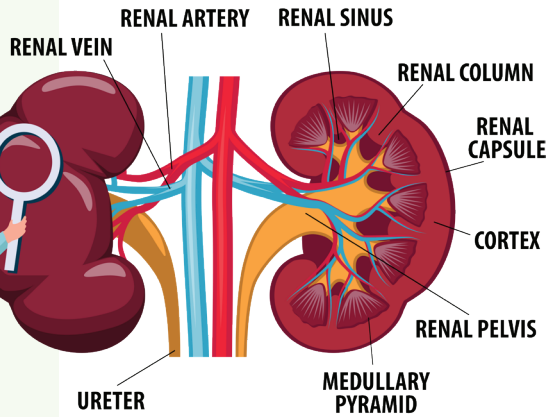


**2019 VA/DoD Clinical Practice Guideline
for the Management of
Chronic Kidney Disease (CKD)**



What do my kidneys do?

The kidneys contain filters, called glomeruli, that remove waste and extra fluid to form urine. Urine travels from the kidney through tubes, called ureters, to empty into your bladder, where it is stored until you go to the bathroom. Then the urine passes through the urethra when you urinate. The kidneys also help regulate blood pressure, red blood cell production, and the levels of electrolytes and minerals in the body.



Why do I have kidney disease?

Chronic kidney disease (CKD) is a condition in which your kidneys are irreversibly damaged or are not working normally. There are many causes of kidney disease. The reasons you have kidney disease may not be the same as the reason someone else has kidney disease.

The most common causes for CKD in the U.S. are diabetes, high blood pressure, glomerulonephritis (inflammation of the kidney), and some antibiotics and pain medications. In fact, per the Centers for Disease Control and Prevention, approximately 1 to 3 adults with diabetes and 1 of 5 adults with high blood pressure may have CKD. Speak with your health care team to learn what may have caused your kidney disease and how to slow down continued damage to your kidneys.



How will I know if I have kidney problems?

Individuals frequently do not have symptoms until their kidneys have failed and they need dialysis. Often, the only way to know if you are having kidney problems is by having blood and urine tests checked.

Get tested every year or more often if:

- You have been told you have CKD or that your kidneys are not working normally.
- You have been told you have protein/albumin in your urine.
- You have diabetes or high blood pressure.



How does my health care team monitor and evaluate CKD?

Your health care team will monitor your kidney function by checking the amount of creatinine (muscle protein) in your blood then calculating your level of kidney function, which is referred to as the estimated Glomerular Filtration Rate (eGFR). Your health care team will also look for other evidence of kidney damage by checking for protein and blood in the urine. Additionally, they will look for abnormalities of the kidneys detected by imaging tests like ultrasound.



How many stages are there for CKD?

There are 6 stages of CKD based on the level of kidney function or the estimated Glomerular Filtration Rate (eGFR), and it is also important to know if there is albumin (protein) in the urine.

Stages of CKD	
Stage	Description (eGFR)
G1	Kidney damage with normal or increased eGFR (eGFR $\geq 90^*$)
G2	Kidney damage with mildly decreased eGFR (eGFR 60-89*)
G3a	Mildly to moderately decreased eGFR (eGFR 45-59*)
G3b	Moderately to severely decreased eGFR (eGFR 30-44*)
G4	Severely decreased eGFR (eGFR 15-29*)
G5	Kidney failure < 15 or dialysis*
*eGFR (mL/min/ 1.73m ²)	

Albuminuria	
Cat.	Description (UACR)
A1	Normal to mildly increased (UACR < 30)
A2	Moderately increased (UACR 30-300)
A3	Severely increased (UACR > 300)
UACR: urinary albumin to creatinine ratio	



What happens if I have kidney failure?

Due to kidney damage, your kidney's ability to filter your blood is not as good as healthy kidneys so fluid and waste can build up in the blood and may cause symptoms. If your kidneys cannot effectively clean your blood, it will need to be filtered using dialysis treatments several times a week or you may need to have a kidney transplant.



What is the best way to stay healthy and prevent kidney failure?

Get tested for CKD regularly if you are at risk so you can work with your health care team to slow ongoing kidney damage.

- Take your medications as directed.
- Talk to your health care team about medicines that might harm your kidneys.
- Lose weight, if you are overweight.
- Manage your cholesterol.
- Eat foods lower in salt.
- Eat more fruits and vegetables.
- Meet with a dietitian to make a healthy eating plan.
- Exercise and maintain an active lifestyle.
- Quit smoking.



If you have high blood pressure, take these steps

- Keep your blood pressure below 140/90 or ask your health care team what the best blood pressure target is for you.
- Monitor your blood pressure routinely at home.
- Restrict salt (sodium) intake.



If you have diabetes, take these steps

- Monitor blood sugars as directed by your health care team.

Who can help me take care of my kidneys?

- **Primary Care Provider:** Physician, Nurse Practitioner (NP), or Physician Assistant (PA) who typically serves as the primary point of contact for any medical need.
- **Nephrologist:** The “Kidney Doctor” who specializes in treating kidney disease and kidney failure and works closely with your Primary Care provider to manage CKD.
- **Urologist:** Doctor who surgically corrects diseases of the urinary system.
- **Vascular Surgeon:** Doctor who performs surgery to place vascular access for dialysis.
- **Interventional Radiologist:** Doctor who uses minimally invasive, image-guided procedures to place dialysis catheters and correct malfunctioning vascular access for dialysis.
- **Social Worker (SW):** A counselor who helps patients and their families cope with CKD, find ways to fit recommended treatment regimen to a patient’s lifestyle and identify sources of emotional support and government and community services to meet a patient’s needs.
- **Case Manager:** Registered nurse (RN) or SW who helps coordinate treatment and assists patients in navigating the health care system and facilitating interactions with medical providers, administrative staff members, and insurance companies.
- **Dietician:** Health care professional who makes recommendations about dietary modifications that are needed to meet nutritional needs.



Where can I find more information?

- VA Kidney Program website: <https://www.va.gov/health/services/renal/learn.asp>
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), part of the National Institutes of Health (NIH): <https://www.niddk.nih.gov/>
- The National Kidney Foundation (NKF): <http://www.kidney.org/patients>
- The Centers for Disease Control and Prevention (CDC): https://www.cdc.gov/kidneydisease/pdf/2019_National-Chronic-Kidney-Disease-Fact-Sheet.pdf
- The National Kidney Disease Education Program (NKDEP): <http://nkdep.nih.gov/>

Reference: [1] TAKE CARE OF YOUR KIDNEYS AND THEY WILL TAKE CARE OF YOU, Centers for Disease Control and Prevention: https://www.cdc.gov/kidneydisease/pdf/CKD_TakeCare.pdf

For further information, scan a QR code link below or go to the 2019 VA/DoD Clinical Practice Guideline for the Management of Chronic Kidney Disease at <https://www.healthquality.va.gov/guidelines/>

Chronic Kidney Disease
Clinical Practice Guideline



Hypertension (High Blood Pressure)
Clinical Practice Guideline



Diabetes Mellitus
Clinical Practice Guideline

