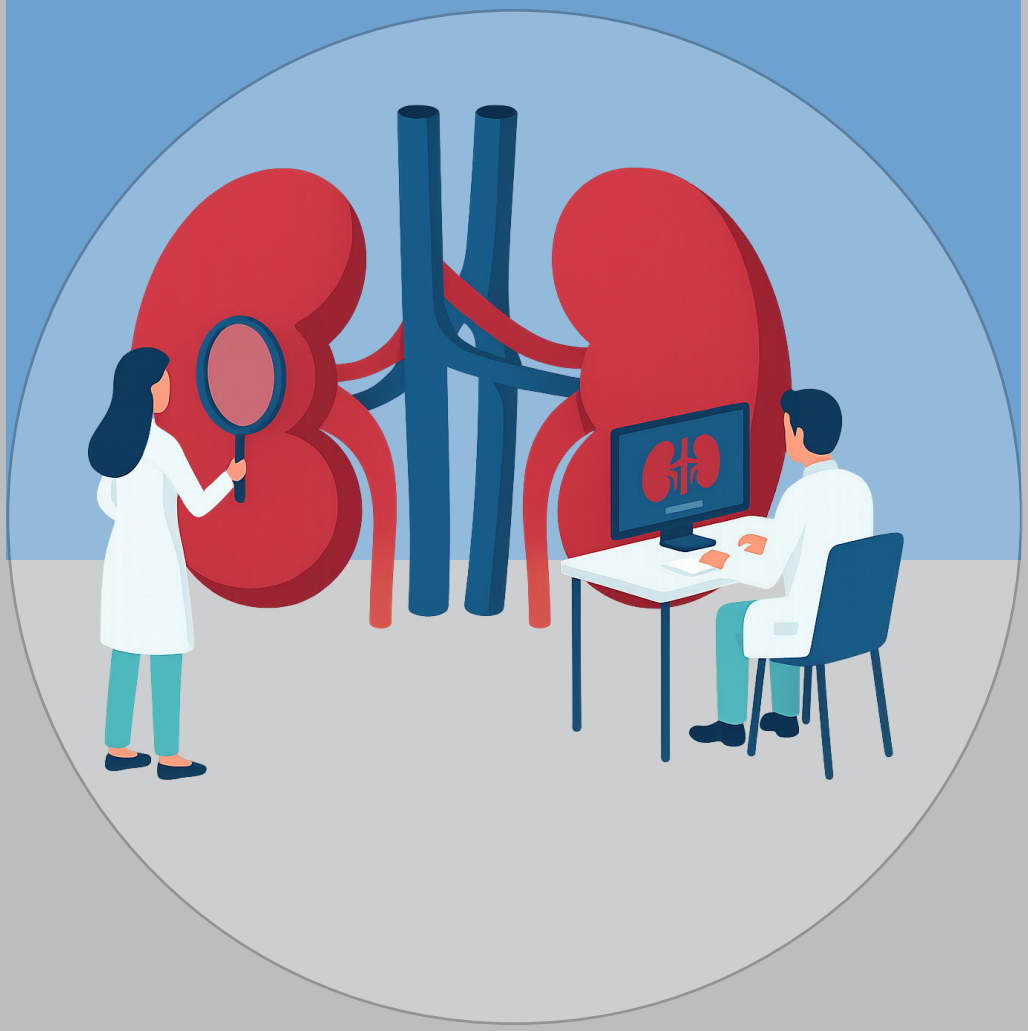
Take Care of Your Kidneys



2025 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. 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 damaged and cannot filter blood as well as they should. CKD affects 15% of US adults.Approximately 1 in 3 adults with diabetes and 1 in 5 adults with high blood pressure 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 risk factors for CKD.
Common risk factors for CKD are:

- Diabetes
- Heart Disease
- Hypertension (High Blood Pressure)
- 60 + Years of Age
- Family History

How does my health care team monitor and evaluate for 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.

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 do my Kidney Numbers mean?

There are 6 stages of CKD based on the level of kidney function or the estimated Glomerular Filtration Rate (eGFR).

Stages of CKD	
Stage	Description (eGFR)
G1	Kidney damage with normal or increased eGFR (eGFR ≥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/ 1.73m2)	

It is also important to know if there is albumin (protein) in the urine.

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

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
- Talk to your doctor about medicines that help the kidneys
- Eat more fruits and vegetables
- Meet with a dietitian to make a healthy eating plan
- Exercise and maintain an active lifestyle
- Quit smoking

Who can help me take care of my kidneys?

- **Primary Care Provider:** Your main healthcare provider (doctor, NP, or PA) for routine care, check-ups, and health concerns.
- **Nephrology Provider:** A kidney specialist (doctor, NP, or PA) who helps manage kidney disease and works with your Primary Care provider.
- **Social Worker (SW):** Helps you and your family manage CKD, adjust to treatment, and connect with support and community resources.
- **Case Manager:** A nurse or social worker who helps coordinate your care and guides you through the healthcare system.
- **Dietitian:** A nutrition expert who helps you adjust your diet to meet your health and kidney needs.
- **Urologist:** A doctor who treats urinary tract problems, often with surgery.
- **Vascular Surgeon:** Doctor who performs surgery to place vascular access for dialysis.
- **Interventional Radiologist:** A doctor who uses imaging to place dialysis catheters and fix access issues with minimally invasive procedures.

Medications To Prevent Progression of CKD and Prevent Cardiovascular Events

We now have a number of medications to prevent cardiovascular events (e.g., heart attacks) and slow the progression of kidney disease in people who have CKD. Discuss with your clinician regarding which medications are indicated in your individual circumstances.

Medication Class	Statins	Ace inhibitor or Angiotensin Receptor blocker	SGLT-2 inhibitors	GLP-1 RA	ns-MRA	Anti Hypertensives
Examples	Atorvastatin Rosuvastatin	Lisinopril Losartan	Empagliflozin	Semaglutide	Finerenone	Lisinopril, Losartan, Hydrochlorothiazide, Chlorthalidone, Metoprolol, Amlodipine
Purpose	Prevent cardiovascular events	Prevent progression of kidney disease	Prevent cardiovascular events and progression of kidney disease	Prevent cardiovascular events and progression of kidney disease	Prevent cardiovascular events and progression of kidney disease	Prevent cardiovascular events and progression of kidney disease
Comments	Crucial for reducing risk of heart attack	Often first-line treatment for CKD			Require close monitoring of potassium	Most people with CKD require more than one anti-hypertensive

Abbreviations: **ACE**-Angiotensin Converting Enzyme; **SGLT-2**-Sodium-Glucose Co-Transporter-2; **GLP-1 RA**-Glucagon-Like Peptide-1 Receptor Agonist; **ns-MRA**-Non-Steroidal Mineralocorticoid Receptor Antagonist

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
- **The Centers for Disease Control and Prevention (CDC):** https://www.cdc.gov/kidney-disease/about/index.html
- **The National Kidney Disease Education Program (NKDEP):** http://nkdep.nih.gov/

For further information, scan a QR code link below or go to the 2025 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