

# Anticipate. Recognize. Assess. Refer.

## KIDNEY DECLINE: Sounding the Alarm on the Silent Killer

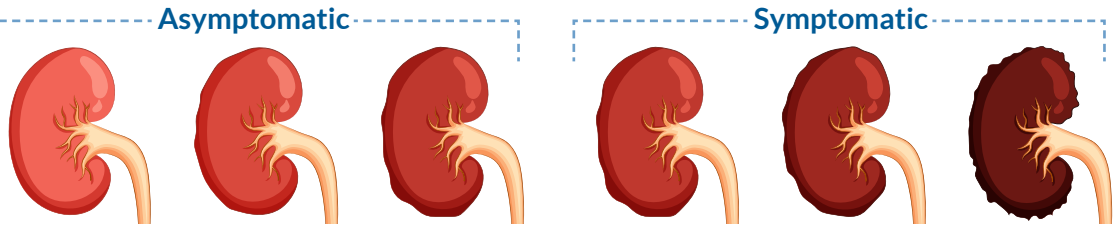
An estimated **35.5 million Americans** have chronic kidney disease (CKD), defined as abnormal kidney structure or function that is present for at least three months and has health implications. Despite substantial morbidity and mortality burdens, the **vast majority of people are in advanced stages** before CKD is recognized and diagnosed, which further contributes to poor outcomes.

### Anticipate.

**91%** of people with CKD don't know they have it.

**2 in 5** people with advanced CKD don't know they have CKD.

Kidney Decline by Glomerular Filtration Rate (GFR)



Stage	GFR (mL/min/1.73 m <sup>2</sup> )	Description
Stage 1	≥90	Normal or High
Stage 2	60-89	Mild ↓
Stage 3a	45-59	Mild to Mod ↓
Stage 3b	30-44	Mod to Severe ↓
Stage 4	15-29	Severe ↓
Stage 5	<15	Kidney Failure (End-Stage Renal Disease [ESRD])

Worsening Clinical and Economic Burdens

Kidney Decline by Albuminuria (Albumin-to-Creatinine Ratio [ACR])

Category	ACR (mg/g or mmol)	Description
A1	<30 mg/g <3 mg/mmol	Normal to Mild ↑
A2	30-300 mg/g 3-30 mg/mmol	Moderate ↑
A3	>300 mg/g >30 mg/mmol	Severe ↑

Note: Patients can have severe albuminuria with little to no impact on GFR, and vice versa. GFR, albuminuria and the cause must be considered when determining risk.

### Recognize.

**CKD often begins silently**, particularly in patients with common cardiometabolic or systemic conditions that increase kidney vulnerability. **Early recognition relies on identifying at risk individuals and remaining alert to subtle clinical changes**, rather than waiting for overt symptoms of kidney failure.

#### Comorbidities and Conditions That Increase CKD Risk



Older Age



Diabetes



Hypertension



Cardiovascular Disease



Gestational Conditions



Autoimmune or Systemic Inflammatory Disease



History of Acute Kidney Injury or Polycystic Kidney



Environmental and Occupational Exposures



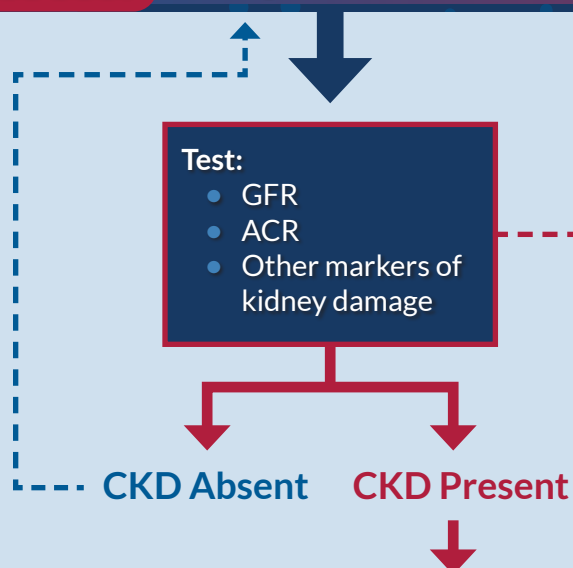
Longterm NSAID or Nephrotoxic Medication Use

#### Early Signs and Symptoms of CKD

- Fatigue or decreased energy.
- Nocturia or changes in urine volume.
- Peripheral edema.
- Worsening blood pressure control.
- Nonspecific cognitive or concentration changes.

# Assess.

## Recognize Adults at Risk for CKD



**Criteria for CKD:** Either of the following present for a minimum of 3 months:

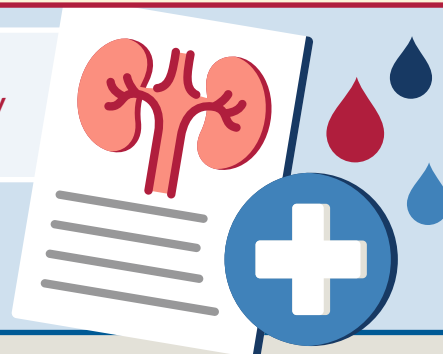
### 1. Markers of Kidney Injury (1 or More)

- ▶ Albuminuria (ACR  $\geq 30$  mg/g [ $\geq 3$  mg/mmol]).
- ▶ Urine sediment abnormalities.
- ▶ Electrolyte and other abnormalities due to tubular disorders.
- ▶ Abnormalities detected by histology.
- ▶ Structural abnormalities detected by imaging.
- ▶ History of kidney transplantation.

### 2. Decreased GFR

- ▶ GFR  $< 60$  mL/min per  $1.73$  m<sup>2</sup> (GFR Stages 3a-5).

1. Stage according to GFR and ACR
2. Establish underlying cause
3. Estimate risk of progression
4. Initiate treatment
5. Consider **referral to kidney specialist** (below)



# Refer.

Timely referral to kidney specialty care is a critical step in managing progressive CKD and helps ensure appropriate evaluation, risk stratification, and advance planning as kidney function declines.

As kidney disease progresses, referral should extend beyond specialty management to include early transplant education and referral, supporting timely evaluation and improved access to transplantation.

**Patient With CKD**

**The patient does not need to be on dialysis to begin evaluation for kidney transplant.**

**GFR  $\leq 20$**   
(or getting close)

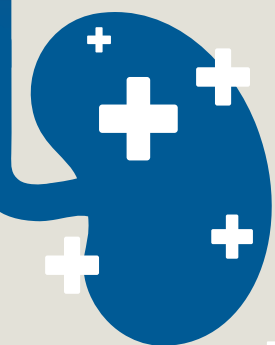
**Provider Referral or Patient Self-Referral to Transplant Center**

## Evaluation for Transplant

Starting evaluation early:

- Allows for earlier placement on the national waitlist.
- Provides more time to identify and evaluate potential living donors.
- Creates space to address medical or lifestyle factors needed for transplant eligibility.

only  
**1 in 3**  
patients are referred for transplant within 1 year of reaching **ESRD.**



Sources: Dept of Veterans Affairs. Clinical Practice Guideline for the Management of CKD. Version 5.0. 2025. Evans M, Lewis RD, Morgan AR, et al. Adv Ther. 2022 Jan;39(1):33-43; KDIGO CKD Work Group. Kidney Int. 2024 Apr;105(4S):S117-S314; Patzer RE, McPherson L, Wang Z, et al. Am J Transplant. 2020 August ; 20(8): 2113-2125; National Kidney Foundation. Evaluation for Kidney Transplant. 2025. Available at: <https://www.kidney.org/kidney-topics/evaluation-kidney-transplant>.