

When to refer to a nephrologist?

- 26 million estimated people in the US have chronic kidney disease (“CKD”)
- Many more are at risk from diabetes, hypertension, family history of kidney disease, and age > 60 years
- Kidney disease kills more people than breast or prostate cancer
- Early referral to nephrology slows or prevents CKD progression. *It halves mortality in some studies!*
- Reasons to refer for patient safety, adapted from the National Kidney Foundation:

- Refer by CKD criteria:
 - a. Marker of kidney damage (one or more)
 - b. Estimated glomerular filtration rate (eGFR) <60 mL/min (*mandatory < 30mL/min*)
 - c. Radiographic or symptomatic abnormality of kidney structure
 - d. Dysfunction persisting >3 mos
- Refer by CKD risk factors:
 - a. Diabetes > 5 years
 - b. Hypertension > 5 years or difficult to control
 - c. Family history of kidney disease
 - d. Age > 60 years (kidney function declines with age)
 - e. Frequent usage of NSAIDs or nephrotoxic medications/drugs
 - f. History of AKI (acute kidney injury)



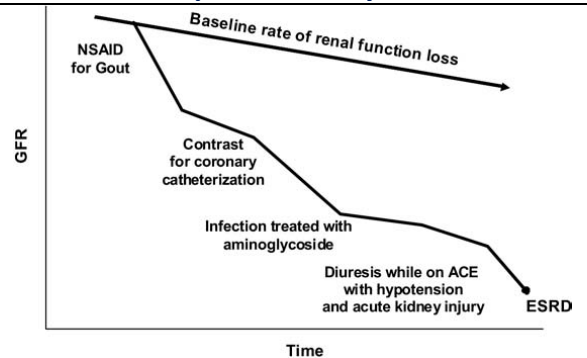
Prognosis of CKD by GFR and Albuminuria Categories				Albuminuria categories		
				Description and range		
				A1	A2	A3
				Normal to mildly increased	Moderately increased	Severely increased
				<30 mg/g <3 mg/mmol	30-299 mg/g 3-29 mg/mmol	≥300 mg/g ≥30 mg/mmol
GFR categories (mL/min/1.73 m ²) Description and range	G1	Normal or high	≥90			
	G2	Mildly decreased	60-90			
	G3a	Mildly to moderately decreased	45-59			
	G3b	Moderately to severely decreased	30-44			
	G4	Severely decreased	15-29			
	G5	Kidney failure	<15			

Green: low risk (if no other markers of kidney disease, no CKD); Yellow: moderately increased risk; Orange: high risk; Red, very high risk. KDIGO 2012

Patient safety issues in CKD

1. Medication errors (toxicity, improper dosing, inadequate monitoring)
2. Electrolyte disturbances
3. Diagnostic tests (contrast studies, bowel preps, etc)
4. Fluid management (hypotension, volume excess, complex heart failure patients)
5. Augmenting patient awareness of risks (ie, NSAIDs, supplements)
6. Vessel preservation (for future dialysis access)

Impact of early primary care CKD detection for patient safety



Altitude Kidney Health is a nephrology practice founded in 2018 with a goal to decrease the barriers to kidney care for all residents of the greater Rocky Mountain region. AKH has offices in Denver and Frisco, CO, and is available Monday-Friday for consult via in-person and telehealth video visit—for providers & patients.

We are happy to co-manage or provide a second opinion. Please reach us using our contact info below or on-demand video consult at www.altkidney.com