

CHRONIC KIDNEY DISEASE: IDENTIFICATION AND ACTION PLAN



*Improving Management & Care
of Advanced Chronic Kidney Disease Patients*

CHRONIC KIDNEY DISEASE: IDENTIFICATION AND ACTION PLAN

Stage	Description	GFR (mL/min)*	Action	Management Responsibility
	Increased risk for CKD	90	<ul style="list-style-type: none"> Screen for CKD risk factors[†] 	<p>Many can be managed primarily by PCP; nephrology consult helpful for diagnosis of cause of CKD and treatment plan</p> <p>Consider periodic consultation or co-management with nephrologist, especially in patients with complications or progression</p> <p>Regular follow-up by nephrologist recommended</p>
1	Kidney damage [‡] with normal or increased GFR	90	<ul style="list-style-type: none"> Diagnose cause of CKD & treat Screen and treat progression risk factors[§] Treat comorbid conditions Screen and treat cardiovascular risk factors 	
2	Kidney damage with mildly decreased GFR	60–89	<ul style="list-style-type: none"> Adjust medication doses Minimum yearly assess rate of GFR decline 	
3	Moderately decreased GFR	30–59	<ul style="list-style-type: none"> Minimum bi-yearly GFR assessment Screen for complications[#] every 3 months and treat if present 	
4	Severely decreased GFR	15–29	<ul style="list-style-type: none"> Refer for preparation for renal replacement therapy See RPA Guidelines at www.renalmd.org 	
5	Kidney failure	<15	<ul style="list-style-type: none"> Begin replacement if uremic 	

Adapted from Am J Kidney Dis, V39 (2 supp 1), National Kidney Foundation, K/DOQI Clinical Practice Guidelines for Chronic Kidney Disease: Evaluation, Classification and Stratification, S17-S31, ©2002, with permission from National Kidney Foundation.

*GFR is preferred over creatinine alone for assessing kidney function.

CKD DEFINITION

The persistent (≥ 3 months) and usually progressive reduction in glomerular filtration rate (GFR less than 60 mL/min/1.73 m²), and/or albuminuria (more than 30mg of urinary albumin per gram of urinary creatinine) or other indicator of kidney damage.

[†] CKD RISK FACTORS

Hypertension	Cardiovascular disease
Diabetes	History of acute renal failure
Age >60	Autoimmune disease
Family history of CKD	Urologic disorders
Nephrotoxic drug exposure including NSAIDs	Systemic infection
	Ethnic minority

[‡] INDICATORS OF KIDNEY DAMAGE

Proteinuria
Hematuria
Other urine sediment abnormalities
Structural (imaging) abnormalities
GFR <60 ^{††}
Other abnormal blood tests ^{‡‡}

^{††}GFR is preferred over creatinine alone for assessing kidney function
^{‡‡}See "Potential Complications"

[§] PROGRESSION RISK FACTORS

CKD Risk Factors ^{§§}	Hyperphosphatemia
Anemia	Renal allograft
Obesity	Atherosclerosis
Proteinuria	Congenital renal disease
Hyperlipidemia	Decreased kidney mass
Renal calculi	Type and extent of kidney disease—GN, vasculitis, etc.
Pro-coagulants	Hypokalemia
Tobacco use	Excess angiotensin activity
Renal cystic disease	Male gender
Hyperparathyroidism	

^{§§}See "CKD Risk Factors"

[#] POTENTIAL COMPLICATIONS

Hypocalcemia – Ca <8.5 mg/dL
Anemia – Hb <12 g/dL
Hyperphosphatemia – PO ₄ >4.5 mg/dL
Malnutrition – albumin <4 g/dL
Metabolic bone disease
Neuropathy
Functional status/QOL decline
Hypertension – BP >130/80 mmHg
Metabolic acidosis – HCO ₃ <22 mmol/L
Cardiovascular disease