

Key Messages for Chronic Kidney Disease (CKD)

Screen annually in people with diabetes and no history of kidney disease.

Screen with random urine albumin-to-creatinine ratio (ACR) and serum creatinine to calculate estimated glomerular filtration rate (eGFR) and kidney failure risk equation (KFRE).

FOR TYPE 1 diabetes, begin 5 years after onset or, if at an early age, start after puberty.

FOR TYPE 2 diabetes, start at diagnosis and repeat annually thereafter.

- If urine ACR is positive but <20 mg/mmol, repeat for 2 of 3 positive readings over at least 3 months.
- If urine ACR ≥20 mg/mmol, diagnose diabetic nephropathy.

CHRONIC KIDNEY DISEASE = eGFR ≤60 mL/min/m² ± ACR ≥2.0 mg/mmol
DIABETIC NEPHROPATHY = ACR ≥2.0 mg/mmol ± eGFR ≤60 mL/min/m²

Medication guidelines

CKD is classified based on GFR (G) and albuminuria (A)				Albuminuria categories Description and range			
				A1	A2	A3	A3
				Normal	Microalbuminuria	Macroalbuminuria	Macroalbuminuria
				<2 mg/mmol	2–19 mg/mmol	≥20 mg/mmol	≥60 mg/mmol
GFR categories (mL/min/1.73 m²) Description and range	G1	Normal or high	≥90	Screen 1	Treat 1	Treat 3	Treat and refer 3
	G2	Mildly decreased	60–89	Screen 1	Treat 1	Treat 3	Treat and refer 3
	G3	Moderately decreased	30–59	Treat 1	Treat 2	Treat 3	Treat and refer 3
	G4	Severely decreased	15–29	Treat and refer 3	Treat and refer 3	Treat and refer 4+	Treat and refer 4+
	G5	Kidney failure	<15	Treat and refer 4+	Treat and refer 4+	Treat and refer 4+	Treat and refer 4+

Low risk (if no other markers of kidney disease, no CKD)
 Moderately increased risk High risk Very high risk

Screen = uACR + eGFR only

Treat = start guideline-based therapy

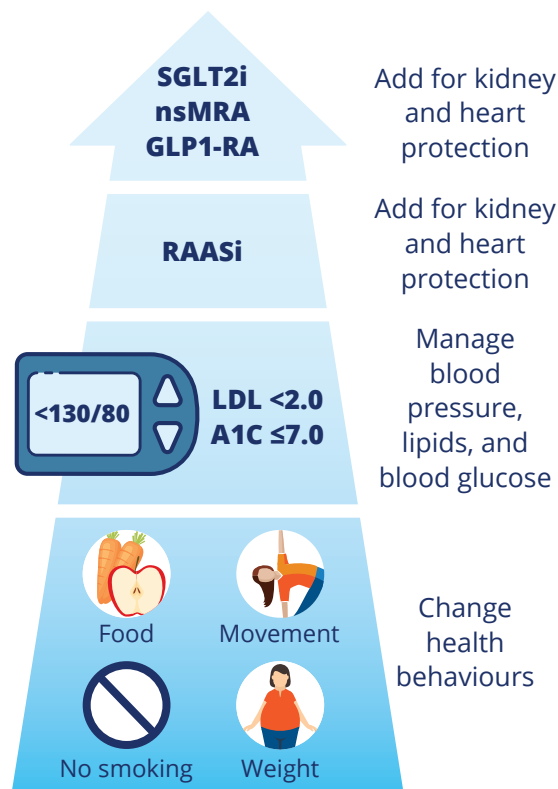
Treat & refer = start therapy + refer to nephrology

Follow-up frequency:

1 = yearly 2 = twice yearly 3 = every 4 months 4+ = every 3 months

Risk of CKD progression, frequency of visits, and referral to nephrology according to estimated GFR and albuminuria. The numbers in the boxes are a consensus guide to the frequency of screening or monitoring annually, the need for treatment for kidney heart protection (e.g., blood pressure, diabetes, dyslipidemia, proteinuria), and when to refer to nephrology. Adapted from the Kidney Disease: Improving Global Outcomes (KDIGO) heatmap.

Medication management



Diabetes with CKD