

Acceptable Tube Types

Creatinine Clearance



Alternate Name:		None
Performing Lab:		New Hanover and Cape Fear
Specimen Container:		Blood – Red, yellow, or green (lithium heparin) tube Peds – Red, yellow, or green microtainer 24 Hour Urine – 24 Hour Urine Collection Container
Minimum Volume Required:		Blood – 2 mL whole blood Microtainer – 500 uL whole blood 24 Hour Urine – Not Applicable
Testing Availability	Routine:	24 hours/day
	Stat:	No
Turnaround Time:		Routine: 4 hours
Special Handling:		Requisition must state patient's weight and height. Requisition must state date and time collection started and date and time collection finished. Urine should be refrigerated during collection. Do not use preservatives.
Patient Preparation:		None
Specimen Stability:		
Reference Range:		61 – 166 mL/min
Critical Value:		N/A
CPT Code:		82575
Testing Methodology:		Two-point Rate
Causes for Specimen Rejection:		Improper labeling
Other Comments:		
Clinical Significance:		Creatinine is the endproduct of creatine metabolism. creatine is present primarily in muscle and the amount of creatinine produced is related to total skeletal muscle

mass. Daily creatinine production is fairly constant except when there is massive injury to muscle. The kidneys excrete creatinine very efficiently and blood levels and daily urinary excretion of creatinine fluctuates very little in healthy normal people. Since blood and daily urine excretion of creatinine shows minimal fluctuation, creatinine excretion is useful in determining whether 24 hour urine specimens for other analytes (e.g., protein) have been completely and accurately collected.

Serum creatinine is useful in the evaluation of kidney function and in monitoring renal dialysis. A serum creatinine result within the reference range does not rule out renal function impairment: serum creatinine is not sensitive to early renal damage since it varies with age, gender and ethnic background. The impact of these variables can be reduced by an estimation of the glomerular filtration rate using an equation that includes serum creatinine, age and gender.