

## Osmolality



<b>Alternate Name:</b>	None
<b>Performing Lab:</b>	New Hanover
<b>Specimen Container:</b>	Yellow serum separator tube or green top tube (lithium heparin)
<b>Serum or plasma:</b>	
<b>Urine:</b>	Urine specimen container
<b>Minimum Volume Required:</b>	1.0 mL
<b>Testing Availability</b>	<b>Routine:</b> 24 hours/day
	<b>Stat:</b> Yes
<b>Turnaround Time:</b>	Routine: 4 hours Stat: < 1 hour
<b>Special Handling:</b>	None
<b>Patient Preparation:</b>	None
<b>Specimen Stability:</b>	
<b>Reference Range:</b>	
	<b>Serum/plasma:</b> 275 – 295 mOsm/kg
	<b>Urine:</b>
	<b>24 hour</b> 300 – 900 mOsm/kg
	<b>Random</b> 50 – 1400 mOsm/kg
<b>Critical Value:</b>	N/A
<b>CPT Code:</b>	83930 (Blood) 83935 (Urine)
<b>Testing Methodology:</b>	“Freezing point” osmometry
<b>Causes for Specimen Rejection:</b>	Improper labeling
<b>Other Comments:</b>	
<b>Clinical Significance:</b>	Evaluate electrolyte and water balance, hyperosmolar status, and hydration status; evaluate dehydration, acid-base balance; evaluate seizures; clue to alcoholism,

methanol toxicity, ethylene glycol ingestion; evaluate antidiuretic hormone function, liver disease, hyperosmolar coma, evaluate hyponatremia. Osmolarity measures the concentration of particles in solution.