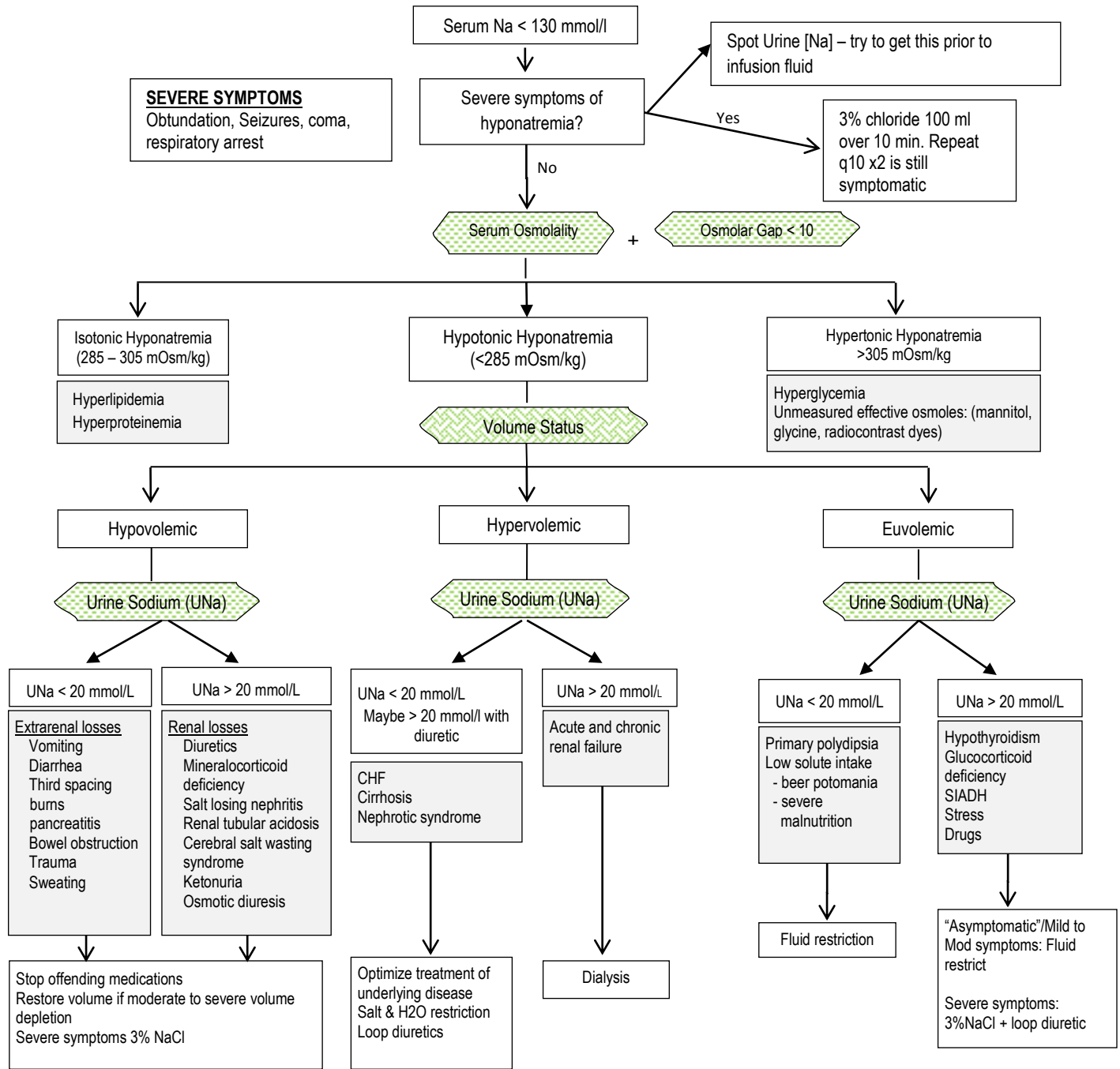


<input type="checkbox"/> Hyponatremia With Mild To Moderate Symptoms And Hypovolemic Hyponatremia – see Important Points to Consider of the Hyponatremia Treatment Guideline – Adult CLI.5110.SG.003	
<input checked="" type="checkbox"/> Standard Order	<input type="checkbox"/> Requires ✓ for activation
Treatment / Medication Orders	General Orders
<p><i>Physician to review drugs and consider holding/stopping those that may cause Syndrome of inappropriate diuretic hormone (SIADH)</i></p> <p><u>Moderate to Severe Hypovolemia and Normokalemia</u></p> <p><input type="checkbox"/> 3% saline at _____ ml/hour. Reassess every 3 hrs with serum sodium level results</p> <p><input type="checkbox"/> 0.9% saline IV at _____ ml/hour. Reassess every 3 hours with serum sodium level results</p> <p><u>Moderate to Severe Hypovolemic and Hypokalemic</u></p> <p><input type="checkbox"/> 0.9% saline with 20 mmol/L of KCl infuse at _____ ml/hour. Reassess every 3 hours with serum sodium level results</p> <p><u>Mild Hypovolemia / Appears Clinically Euvolemic</u></p> <p><input type="checkbox"/> Stop IV saline infusion and place saline loc</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Admit to ICU if serum sodium < 120 mmol/L <input checked="" type="checkbox"/> Urinary catheter and monitor urine output hourly <input checked="" type="checkbox"/> Urine: spot sodium <input checked="" type="checkbox"/> Urine osmolality <input checked="" type="checkbox"/> Serum uric acid <input checked="" type="checkbox"/> Serum osmolality <input checked="" type="checkbox"/> Serum glucose <input checked="" type="checkbox"/> Serum Sodium every 3 hours <input checked="" type="checkbox"/> <u>The goal is to increase the serum sodium by 6 to 8 mmol/L per 24 hour period</u>, with lower rates for patients with liver disease/menstruating females/elderly. <input checked="" type="checkbox"/> Notify physician if sudden increase in urine output to greater than 100 ml/hour for 1 hour. <input checked="" type="checkbox"/> Notify physician if serum sodium increases more than daily goal in any 24 hour period. <input checked="" type="checkbox"/> Notify physician if serum sodium trajectory is likely to exceed the daily goal. <input checked="" type="checkbox"/> Stop IV infusion if serum sodium ≥ 120 mmol/L <input type="checkbox"/> Consult endocrinology at 204-787-2071
<p>Each 100ml of 3% saline is expected to cause an approximate 2 mmol/L rise in serum sodium. Each 1000 ml of 0.9% saline is expected to cause an approximate 1 mmol/L rise in serum sodium It is important to monitor the serum sodium concentration and urine output for diuresis.</p>	
<p><input type="checkbox"/> Order Faxed / Copy Sent To Pharmacy: Initial: _____</p> <p>Date: _____ Time: _____ Physician's Signature: _____</p>	

<input type="checkbox"/> Hyponatremia With Mild To Moderate Symptoms And Hypervolemic Hyponatremia – see Important Points to Consider of the Hyponatremia Treatment Guideline – Adult CLI.5110.SG.003	
<input checked="" type="checkbox"/> Standard Orders	<input type="checkbox"/> Requires ✓ for activation
Treatment / Medication Orders	General Orders
<input type="checkbox"/> Restrict sodium intake <input type="checkbox"/> Restrict fluid intake to less than 800 ml/day <u>Physician to optimize treatment of underlying disease</u>	<input checked="" type="checkbox"/> Admit to ICU if serum sodium < 120 mmol/L <input checked="" type="checkbox"/> Urinary catheter and monitor urine output hourly <input checked="" type="checkbox"/> Urine: spot sodium <input checked="" type="checkbox"/> Urine osmolality <input checked="" type="checkbox"/> Serum uric acid <input checked="" type="checkbox"/> Serum osmolality <input checked="" type="checkbox"/> Serum glucose <input checked="" type="checkbox"/> Serum Sodium every 3 hours <input checked="" type="checkbox"/> <u>The goal is to increase the serum sodium by 6 to 8 mmol/L per 24 hour period</u> , with lower rates for patients with liver disease/menstruating females/elderly. <input checked="" type="checkbox"/> Notify physician if sudden increase in urine output to greater than 100 ml/hour for 1 hour. <input checked="" type="checkbox"/> Notify physician if serum sodium increases more than daily goal in any 24 hour period. <input checked="" type="checkbox"/> Notify physician if serum sodium trajectory is likely to exceed the daily goal. <input checked="" type="checkbox"/> Dietitian consult <input checked="" type="checkbox"/> Stop IV infusion if serum sodium ≥ 120 mmol/L <input type="checkbox"/> Consult endocrinology at 204-787-2071
<input type="checkbox"/> Order Faxed / Copy Sent To Pharmacy: Initial: _____	
Date: _____ Time: _____ Physician's Signature: _____	

<input type="checkbox"/> Hyponatremia With Mild To Moderate Symptoms And Euvolemic Hyponatremia – see Important Points to Consider of the Hyponatremia Treatment Guideline – Adult CLI.5110.SG.003	
<input checked="" type="checkbox"/> Standard Orders	<input type="checkbox"/> Requires ✓ for activation
Treatment / Medication Orders	General Orders
<input type="checkbox"/> <u>Euvolemic Due to Excess Hypotonic Fluid Intake</u> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Restrict water intake to less than 800 ml/day <input checked="" type="checkbox"/> Desmopressin contraindicated <input type="checkbox"/> <u>Euvolemic Due to SIADH (non-drug related)</u> <ul style="list-style-type: none"> <input type="checkbox"/> Restrict fluid intake 800 mL per day <p><u>If Serum Sodium not Increasing with Fluid Restriction Alone</u></p> <input type="checkbox"/> 0.9% Saline @ 200 ml/hour IV. Reassess every 3 hrs with serum sodium results	<input checked="" type="checkbox"/> Admit to ICU if serum sodium < 120 mmol/L <input checked="" type="checkbox"/> Urinary catheter and monitor urine output hourly <input checked="" type="checkbox"/> Urine: spot sodium <input checked="" type="checkbox"/> Urine osmolality <input checked="" type="checkbox"/> Serum uric acid <input checked="" type="checkbox"/> Serum osmolality <input checked="" type="checkbox"/> Serum glucose <input checked="" type="checkbox"/> Serum Sodium every 3 hours <input checked="" type="checkbox"/> <u>The goal is to increase the serum sodium by 6 to 8 mmol/L per 24 hour period, with lower rates for patients with liver disease/menstruating females/elderly.</u> <input checked="" type="checkbox"/> Notify physician if sudden increase in urine output to greater than 100 ml/hour for 1 hour. <input checked="" type="checkbox"/> Notify physician if serum sodium increases more than daily goal in any 24 hour period. <input checked="" type="checkbox"/> Notify physician if serum sodium trajectory is likely to exceed the daily goal. <input checked="" type="checkbox"/> Dietitian consult <input checked="" type="checkbox"/> Stop IV infusion if serum sodium ≥120 mmol/L <input type="checkbox"/> <i>Consult endocrinology at 204-787-2071</i>
<input type="checkbox"/> <u>Hypothyroidism</u> <ul style="list-style-type: none"> <input type="checkbox"/> Levothyroxine _____ mcg orally daily 	
<input type="checkbox"/> <u>Glucocorticoid Deficiency</u> <ul style="list-style-type: none"> <input type="checkbox"/> Prednisone 5 mg orally daily <p style="text-align: center;">OR</p> <input type="checkbox"/> Hydrocortisone orally 10 mg in am, 5 mg in early pm, 2.5 mg in early evening	
<input type="checkbox"/> Order Faxed / Copy Sent To Pharmacy: Initial: _____	
Date: _____ Time: _____ Physician's Signature: _____	

Hyponatremia Algorithm Aid to Determining Cause and Treatment



PLEASE NOTE
3% sodium chloride is only to be used in the patient with SEVERE SYMPTOMS of hyponatremia

Patients with mild to moderate symptoms of hyponatremia, follow the algorithm to determine the probable cause. The treatment for these patients usually involves treating the cause (e.g. stop thiazides, corticosteroids) or restricting fluids. Salt tablets or Normal Saline is only to be used to correct hypovolemia and is not recommended in those with CHF unless hypovolemic

When infusing Potassium count it as equivalent to sodium - therefore halve your rate of infusion - **Monitor sodium levels more closely in both cases**