• Increased temperature • Increased humidity • Hyperventilation • Diabetes insipidus • Hyperglycemia	Oliguria Nausea and vomiting Possible progression to disorientation, seizures, muscle twitching, nuchal rigidity, lethargy at rest, hyperirritability when aroused Laboratory findings: • Serum sodium concentration ≥150 mEq/L • High plasma volume • Alkalosis	Monitor neurologic status. Ensure adequate intake of breast milk and provide lactation assistance with new mother/baby pair before hospital discharge.
Potassium Depletion (Hypokalemia)		
Starvation Clinical conditions associated with poor food intake Malabsorption IV fluid without added potassium GI losses—diarrhea, vomiting, fistulas, NG suction Diuresis Administration of diuretics Administration of corticosteroids Diuretic phase of nephrotic syndrome Healing stage of burns Potassium-losing nephritis Hyperglycemic diuresis (e.g., diabetes mellitus) Familial periodic paralysis IV administration of insulin in DKA Alkalosis	Muscle weakness, cramping, stiffness, paralysis, hyporeflexia Hypotension Cardiac arrhythmias, gallop rhythm Tachycardia or bradycardia Ileus Apathy, drowsiness Irritability Fatigue Laboratory findings: • Decreased serum potassium concentration ≤3.5 mEq/L • Abnormal ECG—notched or flattened T waves, decreased ST segment, premature ventricular contractions	Determine and treat cause of potassium deficit. Monitor vital signs, and ECG. Administer supplemental potassium. Assess for adequate renal output before administration. For IV replacement, administer potassium slowly. Always monitor ECG for IV bolus potassium replacement. For oral intake, offer high-potassium fluids and foods. Evaluate acid-base status.
Potassium Excess (Hyperkalemia)		
Renal disease Renal failure Adrenal insufficiency (Addison disease) Associated with metabolic acidosis Too rapid administration of IV potassium chloride Transfusion with old donor blood Severe dehydration Crushing injuries Burns Hemolysis Dehydration Potassium-sparing diuretics Increased intake of potassium (e.g., salt substitutes)	Muscle weakness, flaccid paralysis Twitching Hyperreflexia Bradycardia Ventricular fibrillation and cardiac arrest Oliguria Apnea—respiratory arrest Laboratory findings: • High serum potassium concentration ≥5.5 mEq/L • Variable urine volume • Flat P wave on ECG, peaked T waves, widened QRS complex, increased PR interval	Determine and treat cause of potassium excess. Monitor vital signs, including ECG. Administer exchange resin, if prescribed. Administer IV fluids as prescribed. Administer IV insulin (if ordered) to facilitate movement of potassium into cells. Monitor potassium levels. Evaluate acid-base status.

ADH, Antidiuretic hormone; *BMR,* basal metabolic rate; *BUN,* blood urea nitrogen; *CNS,* central nervous system; *DKA,* diabetic ketoacidosis; *ECG,* electrocardiogram;