# Nursing Process Focus: Patients Receiving Sodium Bicarbonate

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Potential Nursing Diagnoses</th>
</tr>
</thead>
</table>
| Prior to administration:  
  - Obtain complete health history including allergies, drug history and possible drug interactions.  
  - Assess for presence/history of metabolic acidosis or alkalosis, cardiovascular disease, decreased renal function, peptic ulcer disease.  
  - Obtain vital signs.  
  - Monitor ABGs. |  
  - Impaired Gas Exchange, related to acidosis or alkalosis  
  - Excess Fluid Volume, related to bicarbonate  
  - Deficient Knowledge, related to proper use of sodium bicarbonate |

## Planning: Patient Goals and Expected Outcomes

Patient will:  
- Demonstrate reversal of symptoms of acidosis or alkalosis.  
- Demonstrate pH between 3.5-5.3, and sodium level between 135-145.  
- Demonstrate understanding of proper uses/application of sodium bicarbonate products.

## Implementation

<table>
<thead>
<tr>
<th>Interventions and (Rationales)</th>
<th>Patient Teaching/Discharge Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Monitor for alkalosis. (Indicates drug effectiveness.)</td>
<td>*Advise patient and caregiver regarding symptoms of alkalosis: irritability, confusion, cyanosis, slow respirations, irregular pulse, muscle twitching.</td>
</tr>
<tr>
<td>*Monitor for metabolic acidosis. (Sodium bicarbonate is used to neutralize acidosis.)</td>
<td>*Advise patient and caregiver regarding symptoms of acidosis: sleepiness, coma, disorientation, dizziness, headache, seizures, hypoventilation.</td>
</tr>
<tr>
<td>*Monitor respirations, pulse, lung sounds, fluid balance, pH, ABGs.</td>
<td>*Advise patient that frequent vital signs checks and lab studies will be performed.</td>
</tr>
<tr>
<td>*Monitor for decreased renal function. (Drug will not be excreted, leading to metabolic alkalosis.)</td>
<td>*Advise patient that intake and output balance, pH of urine, daily weight will be done.</td>
</tr>
</tbody>
</table>
| *Monitor for hyponatremia: elevated blood pressure, cold, clammy skin, anorexia, vomiting, diarrhea, abdominal cramps lethargy, fatigue, confusion, headache, seizures, coma, tremors. | Advise patient:  
  - regarding symptoms of hyponatremia.  
  - to notify health care provider if he/she notes any of symptoms listed in previous column. |
| *Monitor for hypokalemia. | Advise patient:  
  - regarding symptoms of hypokalemia including muscle cramps, nausea, irregular heart rhythm.  
  - to report symptoms to health care provider. |

## Evaluation of Outcome Criteria

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).