Assessing severity and initiating therapy in children who are not currently taking long-term control medication

### Components of Severity

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Intermittent</th>
<th>Mild</th>
<th>Persistent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>≤2 days/week</td>
<td>&gt;2 days/week but not daily</td>
<td>Daily</td>
</tr>
<tr>
<td>Nighttime awakenings</td>
<td>0</td>
<td>1–2×/month</td>
<td>≥1×/week</td>
</tr>
<tr>
<td>Short-acting $\beta_2$-agonist use for symptom</td>
<td>≤2 days/week</td>
<td>&gt;2 days/week but not daily</td>
<td>Several times per day</td>
</tr>
<tr>
<td>control (not prevention of EIB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interference with normal activity</td>
<td>None</td>
<td>Minor limitation</td>
<td>Extremely limited</td>
</tr>
</tbody>
</table>

| Risk                                             |                             | 0–1/year                      | ≥2 exacerbations in 6 months requiring oral systemic corticosteroids, OR ≥4 wheezing episodes/1 year lasting >1 day AND risk factors for persistent asthma |
| Exacerbations requiring oral systemic corticosteroids |                             |                               |                                      |
| • Consider severity and interval since last exacerbation |
| • Frequency and severity may fluctuate over time |
| • Exacerbations of any severity may occur in patients in any severity category |

### Recommended Step for Initiating Treatment

- **Step 1**
  - Preferred: SABA PRN*
- **Step 2**
  - Preferred: Low-dose ICS
  - Alternative: Cromolyn or Montelukast
- **Step 3**
  - Preferred: Medium-dose ICS
- **Step 4**
  - Preferred: High-dose ICS + either LABA or Montelukast
- **Step 5**
  - Preferred: High-dose ICS + either LABA or Montelukast
  - Oral systemic corticosteroids
- **Step 6**
  - Preferred: Medium-dose ICS + either LABA or Montelukast
  - Oral systemic corticosteroids

### Quick-Relief Medication for All Patients

- SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms
- With viral respiratory infection: SABA every 4–6hrs up to 24hrs (longer with physician consult). Consider short course of oral systemic corticosteroids if exacerbation is severe or patient has history of previous severe exacerbations
- Caution: Frequent use of SABA may indicate the need to step up treatment. See text for recommendations on initiating daily long-term-control therapy

### Stepwise Approach for Managing Asthma

**Step 1**
- Preferred: Low-dose ICS
- Alternative: Cromolyn or Montelukast

**Step 2**
- Preferred: Medium-dose ICS

**Step 3**
- Preferred: High-dose ICS + either LABA or Montelukast

**Step 4**
- Preferred: Medium-dose ICS + either LABA or Montelukast

**Step 5**
- Preferred: High-dose ICS + either LABA or Montelukast
- Oral systemic corticosteroids

**Step 6**
- Preferred: Medium-dose ICS + either LABA or Montelukast

### Patient Education and Environmental Control at Each Step

- SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms
- With viral respiratory infection: SABA every 4–6hrs up to 24hrs (longer with physician consult). Consider short course of oral systemic corticosteroids if exacerbation is severe or patient has history of previous severe exacerbations
- Caution: Frequent use of SABA may indicate the need to step up treatment. See text for recommendations on initiating daily long-term-control therapy
## Assessing Asthma Control and Adjusting Therapy

### Components of Control

<table>
<thead>
<tr>
<th>Impairment</th>
<th>Well Controlled</th>
<th>Not Well Controlled</th>
<th>Very Poorly Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>&lt;2 days/week</td>
<td>&gt;2 days/week</td>
<td>Throughout the day</td>
</tr>
<tr>
<td></td>
<td>≤1×/month</td>
<td>&gt;1×/month</td>
<td>&gt;1×/week</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>Some limitation</td>
<td>Extremely limited</td>
</tr>
<tr>
<td>Nighttime awakenings</td>
<td>≤2 days/week</td>
<td>&gt;2 days/week</td>
<td>Several times per day</td>
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<td>Interference with normal activity</td>
<td>None</td>
<td>Some limitation</td>
<td>Extremely limited</td>
</tr>
<tr>
<td>Short-acting β&lt;sub&gt;2&lt;/sub&gt;-agonist use for symptom control (not prevention of EIB)</td>
<td>≤2 days/week</td>
<td>&gt;2 days/week</td>
<td>Several times per day</td>
</tr>
</tbody>
</table>

### Risk

<table>
<thead>
<tr>
<th>Exacerbations requiring oral systemic corticosteroids</th>
<th>0–1/year</th>
<th>2–3/year</th>
<th>&gt;3/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment-related adverse effects</td>
<td>Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Recommended Action for Treatment

- **Well Controlled**
  - Maintain current step
  - Regular follow-up every 1–6 months
  - Consider step down if well controlled for at least 3 months

- **Not Well Controlled**
  - Step up—1 step—and reevaluate in 2–6 weeks
  - If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy
  - For side effects, consider alternative treatment options

- **Very Poorly Controlled**
  - Consider short course of oral systemic corticosteroids
  - Step up—1–2 steps—and reevaluate in 2 weeks
  - If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy
  - For side effects, consider alternative treatment options

### NOTES

**Key:** EIB = exercise-induced bronchospasm; ICS = inhaled corticosteroid; LABA = inhaled long-acting β<sub>2</sub>-agonist; SABA = inhaled short-acting β<sub>2</sub>-agonist.


### REFERENCES