Asthma
Care Guide

November 2021

Information contained in the Care Guide is not a substitute for a health care professional’s clinical judgment. Evaluation and treatment should be tailored to the individual patient and the circumstances. Furthermore, using this information will not guarantee a specific outcome for each patient.
SUMMARY

GOALS

✓ Classify patients by asthma severity
✓ Enter specific asthma diagnosis on Problem List
✓ Manage treatment using NAEPP EPR-3STEPWISE APPROACH
✓ Engage patients in their care with use of Asthma Action Plan and Asthma Control Test (ACT) as indicated
✓ Prevent exacerbations and minimize adverse effects of therapy

ALERTS

• Poor control: Increases symptoms, Increases SABA use, Decreases PEF*, etc.
• SaO2 < 92 %
• Can’t speak more than one to two words per breath
• PEF < 50% predicted or personal best
• Silent chest, cyanosis, confusion

DIAGNOSTIC CRITERIA/EVALUATION

Asthma is a chronic disease that causes narrowing of the airways from inflammation leading to airway obstruction (bronchospasm) and airway hyper-responsiveness. Classifying the severity of a patient’s asthma is the first requirement in determining the appropriate treatment.

SEVERITY CLASSIFICATION

1. SYMPTOM FREQUENCY
   • INTERMITTENT
     ✗ ≤ 2 days/week
   • PERSISTENT MILD
     ✗ 2 days/week but not daily
   • PERSISTENT MODERATE
     ✗ Daily
   • PERSISTENT SEVERE
     ✗ Throughout day

2. NIGHTTIME AWAKENINGS
   • INTERMITTENT
     ✗ ≤ 2 times/month
   • PERSISTENT MILD
     ✗ 3-4 times/month
   • PERSISTENT MODERATE
     ✗ > 1 day/week but not nightly
   • PERSISTENT SEVERE
     ✗ Often 7 days/week

3. SABA* USE FOR SYMPTOM CONTROL (NOT PREVENTION OF EIB+)
   • INTERMITTENT
     ✗ ≤ 2 days/week
   • PERSISTENT MILD
     ✗ > 2 days/week but not > 1 time/day
   • PERSISTENT MODERATE
     ✗ Daily
   • PERSISTENT SEVERE
     ✗ Several times per day
4. INTERFERENCE WITH NORMAL ACTIVITY

- **INTERMITTENT**
  - None
- **PERSISTENT MILD**
  - Minor limitation
- **PERSISTENT MODERATE**
  - Some limitation
- **PERSISTENT SEVERE**
  - Extremely limited

5. SPIROMETRY LUNG FUNCTION

- **INTERMITTENT**
  - Normal FEV1 between exacerbations
  - FEV1 > 80% predicted
  - FEV1 / FVC* normal
- **PERSISTENT MILD**
  - FEV1 ≥ 80% predicted
  - FEV1 / FVC normal
- **PERSISTENT MODERATE**
  - FEV1 > 60% predicted but < 80% predicted
  - FEV1 / FVC reduced ≤ 5%
- **PERSISTENT SEVERE**
  - FEV1 < 60% predicted
  - FEV1 / FVC reduced > 5%

+Exercise-Induced Bronchoconstriction (EIB): formerly known as exercise-induced asthma, symptoms occur 5-15 minutes after start of exercise, and can continue for 10-15 minutes after stop of exercise. The symptoms interfere with performance and EIB usually resolve with 30–60 minutes of rest. EIB may flare when the air is cold. (See page 5)

**History/Examination including (See page 5):**

- Medications, smoking history, hospitalizations/intubations due to asthma; known triggers; seasonal variability; vaccination history
- Spirometry if diagnosis in question (Pre and post bronchodilator—should see ≥ 12% [and 200 ml] increase in FEV1)
- Exam including heart and lung, complete vitals (BP, P, RR, SaO2, T, Ht/Wt). Obtain baseline peak flow (See Attachment A for Peak Flow Predicted Values) and follow-up if signs or symptoms of increased severity of asthma are noted; and as needed
- Differential diagnosis: other pulmonary diseases, cardiac disease, infectious disease, airway obstruction, etc.
- Enter Diagnosis on Problem List (i.e., intermittent asthma, mild persistent asthma, moderate persistent asthma, etc.)

**TREATMENT OPTIONS**

- A basic principle of asthma therapy is that the intensity of treatment should match the severity of asthmatic symptoms
- Asthma control focuses on **reducing impairment** (frequency & intensity of symptoms and functional limitations); and **reducing risk** (the likelihood of future asthma attacks, progressive decline in lung function, or medication side effects)
- National Asthma Education and Prevention Program, Third Expert Panel (NAEPP EPR3)1 recommends **first classifying asthma severity, then initiating therapy using the STEPWISE treatment approach** (See page 8)
- Step up therapy if not well controlled. Review adherence to medications, inhaler technique, and comorbid conditions
• Step down therapy if well controlled > 3 months on current therapy
• **Patient education**: help patients identify their triggers and how to avoid them, smoking cessation, proper inhaler use (if indicated), Asthma Action Plan (See Patient Education PE-4) and Asthma Control Test form (See CDCR 7320, ACT Form)
• **Intermittent Asthma**: STEP 1 = SABA as needed
• **Persistent Asthma**: Daily medication (Consider pulmonary consult if > Step 3 care is required) (See detailed steps on page 8)

*Definition of Terms*: SABA - Short Acting Beta Agonist; LABA - Long Acting Beta Agonist; ICS - Inhaled Corticosteroids; EIB - Exercise Induced Bronchoconstriction; PEF - Peak Expiratory Flow; FEV$_1$ - Forced Expiratory Volume in One Second; FVC - Forced Vital Capacity

**MONITORING (SEE ALGORITHMS ON PAGES 2 & 3 AND 9)**

Follow-up visits: as clinically indicated, but at least every 365 days
• Assess asthma control and adjust therapy. (See table on page 9)
• Review medication technique and adherence; assess side effects; review environmental control
• Consider Asthma Control Test at asthma-related visits
• Generally, PEFs should be done at every asthma-related visit to document control
• Review Asthma Action Plan with patient, revise as needed
• If recent exacerbation, follow closely until patient is clinically improved, and at their baseline