ASSESSING ASTHMA CONTROL IN STUDENTS

EPR-3 Recommendation: Every patient with asthma should be taught to recognize symptom patterns and monitor airflow to identify poor asthma control and the need for additional therapy. Control should be routinely monitored to assess whether impairment and risk are reduced.

Message for Schools
School nurses should routinely assess control. Monitor and report: 1) frequency of need for quick relief medications, 2) impairment related to breathing problems, 3) missed school days, and 4) diminished air-flow measures (FEV1 or PEF). Communicate regularly with parents and asthma care clinicians, especially when asthma is not well controlled.

Source: *Creating Asthma-Friendly Schools: EPR-3 Recommendations and Priority Messages.* (2010), National Asthma Control Initiative and American School Health Association.

When asthma is well controlled, students with asthma should have MINIMAL OR NO asthma symptoms and can safely participate in all school activities. However, uncontrolled asthma can affect a student's school attendance, participation, and progress in school.

A student's asthma is **WELL CONTROLLED if ALL OF THE FOLLOWING ARE TRUE**:

- Daytime symptoms **no more than 2 days a week** (AND symptoms not more than once on the same day for a student 5-11 yrs old)
- **(5-11 yrs)** Nighttime awakenings occur due to asthma symptoms **no more than ONCE A MONTH**
  (12 to Adult) Nighttime awakenings occur due to asthma symptoms **no more than 2 NIGHTS A MONTH**
- Symptoms **no more than 2 days a week** that require quick-relief medicine (SABA –short acting beta agonists, i.e. albuterol)
- The student can participate fully in regular school activities, including play, sports, and exercise **(NO interference with normal activity due to asthma symptoms)**
- **Normal FEV1 or peak flow (>80% of personal best or predicted value)**
- The student has had **ZERO or only ONE exacerbation** in the past 12 months that required oral steroids

A student's asthma is **NOT WELL CONTROLLED if ONE OR MORE** of the following are true:

- Daytime symptoms occur **more than 2 days a week but NOT EVERYDAY**, and for 5-11 years, if symptoms occur many times on ≤ 2 days a week
- **(5-11 yrs)** Nighttime awakenings occur due to symptoms **more than 1 night a month but < 2 nights a week**
  (12 – Adult) Nighttime awakenings occur due to symptoms **1–3 nights a week**
- Symptoms occur **MORE THAN 2 DAYS A WEEK but NOT several times daily** that require quick-relief medicine (SABA –short acting beta agonists, i.e. albuterol)
- There is **SOME** interference with normal activity due to asthma symptoms
- **FEV1 or peak flow values are 60% to 80%**
- The student has had **TWO or more** exacerbations in the past 12 months which required oral steroids

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ASSESSING ASTHMA CONTROL IN STUDENTS

A student's asthma is **VERY POORLY CONTROLLED if ONE OR MORE** of the following are true:

- Daytime symptoms occur **THROUGHOUT THE DAY**
- (5-11 yrs) Nighttime awakenings occur due to symptoms **2 or more nights a week**
  (12 – Adult) Nighttime awakenings occur due to symptoms **4 or more nights a week**
- Symptoms occur **SEVERAL TIMES DAILY** that require quick-relief medicine (SABA –short acting beta agonists, i.e. albuterol)
- NORMAL ACTIVITY is **EXTREMELY LIMITED** due to asthma symptoms
- **FEV1 or peak flow values are below 60%**
- The student has had **TWO or more** exacerbations in the past 12 months which required oral steroids

The above information is from Expert Panel Report 3 (EPR3): Guidelines for the Diagnosis and Management of Asthma (2007). See MSAM page G-13 (5-11 yrs) and MSAM page G-17 (Youths 12 – Adult) for EPR3 charts on assessing asthma control.

Other signs of Uncontrolled Asthma

- Lingering cough after a cold.
- Persistent cough during the day.
- Coughing during the night or early in the morning.
- Coughing or wheezing, chest tightness, or shortness of breath after vigorous physical activity or activity in cold or windy weather.
- Low level of stamina during physical activity or reluctance to participate.
- Coughing, wheezing, chest tightness, or shortness of breath even though the child is taking medicine for asthma.
- Increased use of asthma medicine to relieve coughing, wheezing, chest tightness, or shortness of breath.

Remember: The level of control is based on the most severe impairment or risk category (EPR3). If your student has one assessment which falls in the VERY POORLY CONTROLLED category, then your student has VERY POORLY CONTROLLED asthma. **If you suspect not well controlled or undiagnosed asthma in a student, document your findings and share these in writing with the parent(s) or guardian(s). Suggest referral to their healthcare provider.**

See MSAM page D-5 "Is Asthma under Control?" to complete with the student and parent/guardian(s). Other helpful tools: The Asthma Control Test - see MSAM pages D-6 (for children 4-11 years old) and D-7 (for teens 12 years and older) and Asthma Symptom Diary (E-4).

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