Asthma Basics for School Nurses Summary Handout

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Asthma Basics for School Nurses is based on a slide set developed by the National Asthma Education and Prevention Program (NAEPP) with additional material from the Pediatric/Adult Asthma Coalition of New Jersey and the NAEPP Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma

Presentation Overview
- The problem of asthma among school-age youth
- Causes, signs & symptoms
- Impact on learning
- Asthma triggers
- Control of asthma
- How asthma-friendly is your school?
- How to handle an asthma episode

Asthma is a Major Health Problem in the U.S.
- 5 million school-aged children have asthma
- Students miss almost 13 million school days each year due to asthma
- Asthma is the 3rd-ranking cause of hospitalization among children under 15
- On average, 3 children in a classroom of 30 are likely to have asthma

What is Asthma?
A condition that:
- is chronic (Inflammation)
- produces recurring episodes of breathing problems
- is potentially life-threatening
- can occur at any age

4 Epidemiology and Statistics Unit. Trends in Asthma Morbidity and Mortality. NYC: ALA, July 2006
• is not contagious
• cannot be cured, but can be controlled

What are the Symptoms of Asthma?
• Shortness of breath
• Wheezing
• Tightness in the chest
• Coughing
• Waking at night with any of the above symptoms*
  * a key marker of uncontrolled asthma

How Does Asthma that is not Well-Controlled Impact Student Learning?
• Fatigue – students up at night with coughing, wheezing and other symptoms are tired in the morning
• Absenteeism related to asthma episodes, health care appointments, and hospitalizations
• Missed class time due to frequent school health office visits

What Happens During an Episode of Asthma?
• The lining of the airways become narrow and easily irritated due to inflammation
• The airways produce a thick mucus
• The muscles around the airways tighten and make airways narrower

What Can Make Asthma Worse?
Not all factors affect all people. It’s important to identify what affects a particular student’s asthma.
• Infections in the upper airways, such as colds
• Changes in weather and temperature
• Exercise
• Physical expressions of strong feelings (crying or laughing hard, yelling)

Allergens such as:
• Furred and feathered animals
• Dust mites
• Cockroaches
• Pollens from trees, grass and weeds
• Molds (indoors and outdoors)

Irritants such as:
• Environmental tobacco smoke
• Outdoor air pollution
• Scented products including air fresheners and reed diffusers
• Strong fumes or odors

To get more information on controlling triggers, call PACNJ at 908-685-8040 or visit the website at www.pacnj.org
Is There A Cure For Asthma?
Asthma cannot be cured, but it can be controlled.
Most young people with asthma should be able to live healthy, active lives with minimal symptoms.

What Should Most People with Asthma Be Able To Do
• Be active without having asthma symptoms; this includes participating in physical activity and sports
• Sleep through the night without having asthma symptoms
• Prevent asthma episodes
• Have the best possible lung function (e.g., good peak flow number)

How Is Asthma Controlled?
• Follow an individualized, written asthma action plan
• Reduce or eliminate exposure to things that can cause asthma symptoms
• Encourage and support use of medication as prescribed
  - Quick-relief medicine for all students with asthma
  - Long-term control medicine for students with persistent asthma

PACNJ Asthma Treatment Plan – Refer to the handout as Dr. Torre describes this tool if the video screen is too small to follow. The PACNJ Asthma Treatment Plan is downloadable from the PACNJ website: www.pacnj.org
Always download the most current form.

Classification of Asthma Severity in Youths 12 Years of Age and Adults
Refer to the handout to follow along as Dr. Torre describes this chart and the charts listed below
  Classification of Asthma Severity in Children 5-11 Years of Age
  Stepwise Approach for Managing Asthma in Youths 12 Years of Age and Adults
  Stepwise Approach for Managing Asthma in Children 5-11 Years of Age
  Assessing Asthma Control in Youths 12 Years of Age and Adults
  Assessing Asthma Control in Children 5-11 Years of Age

How Is Asthma Controlled?
• Monitor response to treatment and level of asthma control
• Encourage regular follow-up care
• Ensure good communication among school, the student’s health care provider, and home

Medication Administration
• Check the PACNJ Asthma Treatment Plan for the correct medication as prescribed by the health care provider
• Follow nursing protocols for administering medications in school
• Assess the student before and after administering the medication
• Be prepared to take further action if necessary
Asthma Education for the Student
For students with asthma, the school nurse should:
• Teach and monitor correct inhaler techniques
• Teach students how to monitor their asthma
• Teach students how to identify and avoid triggers
• Teach when and how to get help
• Communicate with the parent about medication use as per PACNJ asthma treatment plan

How to Take Your Medication
• Demonstrations on using a metered dose inhaler (MDI), with and without a spacer are provided on the PACNJ Website: www.pacnj.org
• Additional tools for delivering prescribed asthma medications are also demonstrated.

How Asthma- Friendly is Your School?
• Is your school in compliance with the NJ Law on asthma management in the school?
• Is your school in compliance with the NJ Indoor Air Quality Law?
• Does your school qualify for the PACNJ Asthma Friendly School Award?

New Jersey Law & Asthma
New Jersey is one of the leading states in the nation with laws that support an asthma friendly school environment. Be sure that your school is in compliance with the laws listed below
• NJSA 18A: 40-12.9 requires annual asthma education opportunities for all teaching staff
• NJSA 18A: 40-12.3 of the state law allows for self-administration of medication by a pupil with asthma under specific conditions
• NJSA 18A: 40-12.8 calls for a written asthma treatment plan for pupils requiring asthma medication at school

PACNJ Asthma Friendly School Award
There are Six Steps to Qualify for the Award:
1. Every school nurse in your district takes this “Asthma Basics for School Nurses” training
2. Every school nurse in your district takes the “Asthma Treatment Plan: NJ School Nurses Leading the Way” training on the PACNJ website and takes the quiz
3. Every school nurse conducts the PACNJ Faculty In-service program “Asthma Management in the Classroom: What Teachers Need to Know” with their school staff
4. Every school nurse has a nebulizer in the nurse’s office
5. Every school district sends their facilities person and a school nurse to the NJ PEOSH Indoor Air Quality Designated Persons Training and forms an IAQ team in each school
6. Every school district takes the NJDEP “No Idling” Pledge

So How Asthma Friendly is Your School?
Children with asthma need proper support at school to keep their asthma under control and be fully active. How well does your school assist children with asthma?
• Is your school **free of tobacco smoke** all of the time, including during school-sponsored events?
• Are students permitted to take **medicines** at school as recommended by their health care provider and parents?
• May students carry their own asthma medicines?
• If some students do not carry it, can they quickly find and use their medicines?

**Written Emergency Plan**
• Does your school have a written emergency plan for teachers and staff to follow, to take care of a student with an asthma episode?
• Does your written emergency plan make clear what to do? Who to call? When to call?
• In an emergency, such as a fire, weather emergency, or lockdown, or if a student forgets his/her medicine, does your school have quick-relief medicines for students to use?

**How to Handle an Asthma Episode**
• Quickly evaluate the situation.
• Assess the student’s recent use of his/her quick-relief medicine if s/he self-carries.
• Follow the PACNJ asthma treatment plan for the student. Call 911 if severe and contact parent/guardian.

**When a Student Presents with Breathing Difficulties**
• Assess the student immediately, pay close attention to the presenting symptoms
• If the student has a quick reliever inhaler encourage him/her to use it promptly and properly
• Re-evaluate the student for signs of improvement
• Be prepared to take further action if necessary

**Recommendations developed by the National Asthma Education Prevention Program Guidelines Implementation Panel (GIP) Report**
The GIP report suggests that the following key messages be delivered to everyone who “touches” asthma: Physicians, patients, nurses, schools, school nurses, athletic trainers, etc.
The GIP report distilled the asthma guidelines into six messages:
1. The importance of the use of inhaled steroids for persistent asthma
2. The importance of asthma control from the patient and physician perspective and the importance of monitoring asthma control on a regular basis
3. All asthma patients should have a written asthma action plan
4. All asthma patients should have asthma check-up visits to monitor disease severity and assess medication changes
5. At the initial visit, asthma severity should be assessed and treatment prescribed based on that severity
6. Allergen & irritant control is a very important part of asthma care
Conclusion
Students manage their asthma better when: School nurses, school personnel, families, health care providers, and the community all work together to help.

Asthma Resources for School Health

**Pediatric/Adult Asthma Coalition of NJ**
www.pacnj.org

**Asthma Control Test**
www.asthmacontrol.com

**National Asthma Education and Prevention Program (NAEPP) Website and Materials**
www.nhlbi.nih.gov/about/naepp/index.htm
www.nhlbi.nih.gov/health/public/lung/index.htm#asthma

**CDC School Asthma Website and Materials**
www.cdc.gov/HealthyYouth/asthma
www.cdc.gov/HealthyYouth/asthma/publications
www.cdc.gov/HealthyYouth/SHI

**Environmental Protection Agency Indoor Air Quality Tools for Schools Website and Materials**
www.epa.gov/iaq/schools
www.epa.gov/iaq/schools/bulletins.html

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Some video clips included in this production were taken from the American Lung Association in New Jersey video, “Asthma and Your Family.” The people featured include:
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Arrangement and Performance by Ted Clancy – 12 String Guitar; Greg Mathison – Synthesis and
Drum Loop Programming

Performed by Overbrook Senior High School Concert Choir, Pine Hill, NJ, Led by Elizabeth Kent

Additional vocals by:
Jane Hutchinson
Steve Woodruff
Patrick Ryan
Tom Clancy

Lyrics for the Jingle: “Asthma Can Be Controlled, Expect Nothing Less” taken from U.S.
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