NC School Nursing and Asthma
Impacting the Student’s Educational World

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We will review:
*current NC School Health Data on asthma in school
*staying at school/asthma management environment
*school nurse case management for students with asthma
From the school health perspective, the environmental challenges for asthma at school include disease management factors:

- Is the student known to the nurse?
- Is the nurse on site?
- Is a plan and medication in place?
- Is the student knowledgeable?
- Is the staff educated?
Current view of asthma from school nurses

- 105,542 students known to school nurses
- 7.5 % of total public school population
Percent of Total Student Population with Chronic Disease

Nurse:Students Ratios for Selected Years

- 1996/1997: 2781
- 2000/2001: 2075
- 2004/2005: 1593
- 2008/2009: 1207
- 2011/2012: 1179
Self Carry of Asthma Medications

- **G.S. 115C – 375.2**: Possession and self-administration of asthma medication by students with asthma or students subject to anaphylactic reactions, or both (2005)

- **Parameters**
  - Parental authorization/release of liability
  - Health care practitioner statement, authorization, order
  - School Nurse assessment of student skill
School Nurse Assessment of Student Prior to Self-Carry

The request is reviewed by the school nurse, who provides the student with health counseling to include:

1. Review of health condition, medications, triggers, precautions.

2. Assessment of student’s knowledge and developmental ability to be independent with medication.

3. Role play of procedure to be used when necessary and how to obtain help when needed.
School Nurse Assessment of Student Prior to Self-Carry (cont)

The request is reviewed by the school nurse, who provides the student with health counseling to include:

4. Review of school medication policy/procedures, disciplinary actions for sharing medication or failure to safeguard it.

5. Assure the student understands and signs a self-medication agreement.

6. Instruct the student’s teacher(s), as appropriate, on the student’s condition and authorization to self-carry and self-administer. This instruction may include cautions on usage and dosage of the medication.
Asthma Self-Carry Medications

2010-11

• Number reported: 22701
• 22% of identified students

2011-12

• Number reported: 20645
• 20% of identified students
Asthma at School

- 1,920 nebulizer treatments were completed
- 47,379 individual student counseling/education sessions were provided
- 52% of identified students had a health care plan in place
- 0.7% had a section 504 plan in place
“Asthma is a leading chronic illness among children and adolescents in the United States. It is also one of the leading causes of school absenteeism.”

CDC Asthma & Schools
In 2008, asthma accounted for an estimated 14.4 million lost school days in children with an asthma attack in the previous year.

American Lung Association
Managed Asthma and Absence

• April 2013, Journal of School Nursing

• School based case nursing case management intervention for students with asthma

• Managed students demonstrated reduced absenteeism (almost 2 school days) in the post intervention period
School nurse interventions seek to foster management of asthma at school, allowing a child to remain at school.
A nurse-managed program for students with chronic/complex asthma involves more than occasional contacts with the student, family, teacher, and/or care provider. It also includes a written plan of care for each student managed that follows the nursing process.
The school nurse plan of care includes:

**Assessment**

In order to demonstrate improvement, baseline and evaluation data must be measured. In an education setting baseline data should include both health information and education information.

**Planning**

Specific interventions with achievable goals, measurable outcomes and regular evaluations
School Nurse Case Management

The school nurse plan of care includes:

Interventions

Results oriented actions based on specific needs of the student and evaluated based on their impact on the student.

Evaluation

Periodic measurement of student progress and measurement at the end of care, or of the school year, allows the nurse to compare the current conditions to the goal or outcome desired.
Asthma Case Management Outcomes

1. Consistently verbalized accurate knowledge of the pathophysiology of their condition
2. Consistently demonstrated correct use of asthma inhaler and/or spacer
3. Accurately listed his/her asthma triggers
4. Remained within peak flow/pulse oximeter plan goals
5. Improved amount and/or quality of regular physical activity
6. Improved grades
7. Decreased number of absences
Management of a student’s asthma at school involves everyone associated with the student.

Management of a student’s asthma at school is a critical part of the student’s environment for educational success.
QUESTIONS?

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