

Caring for the Student With Asthma at School

What's Out There to Help the School Nurse?

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Asthma is a high impact health issue in the school setting. One in 10 children comes to school with asthma, and it is the leading cause for absenteeism causing 13.8 million missed school days each year. Where can the school nurse turn for help? The following article provides evidence-based resources to assist school nurses in caring for their students with asthma.

Keywords: asthma; resources; asthma action plan

When chronic health issues affect the public health community, those issues come to school. There has been an alarming increase in the prevalence of asthma, with the prevalence of asthma in children doubling between the years 1980 and 1995 and continuing to increase to over 9% in 2010 (Akinbami, Simon, & Rossen, 2015).

So where do you turn for evidence-based resources, and how do you know what resources to trust? The best place to start is at the source of most of our asthma care guidance—the National Heart, Lung and Blood Institute's Guidelines for the Diagnosis and Management of Asthma (EPR-3). The EPR-3 guidance is considered the

national "gold standard" in asthma care and management and attempts to improve pediatric asthma care by addressing the medical management of childhood asthma (George, Mucha, Gowri, & Weaver, 2015). This document has a diagnostic approach for physicians; but there is valuable information for the school nurse.

RESOURCE: Asthma Care Quick Reference—https://www.nhlbi.nih.gov/files/docs/guidelines/asthma_qrg.pdf

This resource provides information on patient education for self-management, control of environmental factors and comorbid conditions, and exercise-induced bronchospasm. While much of the information is geared toward the physician, it is still very valuable guidance for the school nurse and is the gold standard in asthma care.

Another trusted, evidence-based source of asthma information is the Centers for Disease Control and Prevention (CDC). The CDC addresses the issues of asthma with the vision that it is possible to live well with asthma (CDC, 2017). This document addresses the management of

asthma in the school setting as well as the provision of asthma education, linking students to medical care and improving the indoor air environment.

RESOURCE: *Strategies for Addressing Asthma in Schools*

https://www.cdc.gov/asthma/pdfs/strategies_for_addressing_asthma_in_schools_508.pdf

This publication provides a framework for engaging in a multipronged approach to asthma management in schools. It includes links to indoor air quality programs and asthma-related policy solutions for schools.

In the school health office, asthma is an important focus of daily school nursing care. With nearly 1 in 10 students in our schools with asthma, we need to work to help students understand what it means to have asthma in control and pursue teaching students to self-manage their asthma. Asthma is the leading cause of school absences (Cicutto, Gleason, & Szeffler, 2014) and requires the school nurse to implement evidence-based standards of practice into the daily care of students at school. The National

Association of School Nurses (NASN) has approached this need by developing an asthma care checklist based on the nursing process.

RESOURCE: School Nurse Asthma Care Checklist—NASN

https://higherlogicdownload.s3.amazonaws.com/NASN/3870c72d-fff9-4ed7-833f-215de278d256/UploadedImages/PDFs/Practice%20Topic%20Resources/2015_asthma_care_checklist.pdf

The checklist takes you through assessment, diagnosis, outcomes, planning, implementation, and evaluation of a student with a diagnosis of asthma, assessment of a student without a diagnosis of asthma, and asthma-friendly school actions.

An important tool in the care of asthma is the Asthma Action Plan. The plan is designed to outline how to treat asthma on a daily basis, action to take if symptoms worsen, and management of exercise or illness (Allergy & Asthma Network, 2016). There are many templates for Asthma Action Plans that are available, but the recommended plan is from the School-Based Asthma Management Program (SAMPRO), developed in a collaborative process, led by the American Academy of Allergy, Asthma & Immunology (AAAAI) and several organizations, including NASN and Allergy & Asthma Network. The SAMPRO Asthma Action Plan is one component of a toolkit.

RESOURCE: SAMPRO Asthma Action Plan

<https://www.hipxchange.org/sampro-toolkit>

This Asthma Action Plan is available in both English and Spanish, with or without the AAAAI logo. It highlights the green, yellow, and red zones to

differentiate the way the child feels and what actions are necessary to consider as a part of a comprehensive asthma management program.

Many families need guidance to understand that a child with asthma does not need to allow it to limit their activity. Studies have shown that poor asthma control may have long-term effects on school performance and lifestyle-associated diseases (Pedersen, 2016). Being that many families don't know how to define good asthma control, the question of "Is your child's asthma under control?" remains vital, but may be difficult for families to answer. Assessment tools are available for the school nurse or provider to use to assess asthma control.

RESOURCE: Rules of Two—Baylor Health Care System

<http://beatingasthma.com/rulesoftwo>

A simple set of questions to pose to families to determine if asthma is under control.

RESOURCE: Childhood Asthma Control Test for Children—American Lung Association

http://www.allergyasthmanetwork.org/cms/wp-content/uploads/2014/06/Childhood_ACT.pdf

Two assessments, one for children ages 4 to 11 and one for youth 12 and older, can assist families in talking to their health care provider about their child's asthma control.

RESOURCE: Parent Asthma Intake Form for School—Colorado Department of Education

http://www.cde.state.co.us/healthandwellness/SNH_Nursing-Asthma.htm

This assessment tool is specifically designed for the school nurse to capture current asthma control and risk for students with asthma. It can be used on an annual basis to track student-specific trends in asthma management, and to prioritize care coordination for students who are most at risk for asthma problems in the coming year.

Students with asthma come to school with differing levels of understanding of the disease process and management and the school nurse needs to discern the unique educational needs of individual students and families. There are many components to asthma, including the physical reasons for asthma symptoms, asthma triggers, medications, and delivery systems. All families need to understand how to best care for their student with asthma. There are resources available from many sources, and in this day and age of the Internet, it is a challenge to assist families in accessing evidence-based information. Additional resources that may assist families can be found below.

RESOURCE: Understanding Asthma

<http://www.allergyasthmanetwork.org/outreach/publications/special-publications/understanding-asthma/>

This guide is written at a sixth-grade reading level to reach the health literacy needs of many of our students' families. It includes these sections:

- What is Asthma?
- Diagnosis
- Treatment & Medications
- Managing Your Condition
- Resources

RESOURCE: Respiratory Treatments Poster

<https://aanma.site-ym.com/store/ViewProduct.aspx?id=9982674>

This poster illustrates the numerous kinds of inhalers that students use on a daily basis by category. Students often are unable to identify their inhalers by name, but can point to the one that they use.

RESOURCE: Asthma Storylines—Mobile App

<http://www.allergyasthmanetwork.org/asthma-storylines-self-care-tool-for-managing-asthma/>

This mobile application is a self-care tool for managing asthma. It presents an accurate, shareable record of the asthma experience between physician visits, and helps students and their care team collaborate on treatment strategies.

RESOURCE: Infographics

Allergic Asthma & What You Can Do About It

<http://www.allergyasthmanetwork.org/outreach/publications/infographics/allergic-asthma-what-you-can-about-infographic/>

Asthma and Smoking

<http://www.allergyasthmanetwork.org/outreach/publications/infographics/asthma-and-smoking-infographic-3/>

RESOURCE: CHAMPS Asthma Education Handouts

<http://www.asthmacommunitynetwork.org/node/16102>

These patient education materials were designed with pictures and

low literacy requirements to effectively deliver asthma education messages. There are several handouts that refer to specific asthma triggers and how to mitigate these in the home environment.

RESOURCE: Asthma Medication Delivery Device Demonstration Videos

<https://www.nationaljewish.org/health-insights/multimedia/asthma-inhalers>

These videos help reinforce accurate asthma medication administration technique and can be useful for the school health team, students and families.

RESOURCE: Iggy and the Inhalers

<https://iggyandtheinhalers.com/pages/free-downloads>

This resource includes free asthma education downloads that are designed like colorful comic books, adding to the attraction for children. ■

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