

# Practical Guidance For Schools & School Districts:

**Enhancing School Wellness Policies To Protect Student Lung Health** 



# **Table of Contents**

l.	Introduction to Managing Asthma Among School-aged Children	3
II.	Purpose of this Guide	5
III.	How to Use This Guide	5
IV.	School Health and Safety Policies and Environment	6
V.	Physical Education & Physical Activity	6
VI.	School Health Services	7
VII.	Physical Environment	8
VIII	Family Engagement	9
IX.	Closing	10
Ар	pendix: School Health Index and the Asthma-Friendly Schools Initiative	11
Δcl	vnowledgements	1/1

# I. Introduction to Managing Asthma Among School-aged Children

Asthma is one of the most common chronic health conditions among children, currently affecting an estimated 6.1 million children under 18 years of age.¹ Of those children, more than half (53.7%) reported having one or more asthma attacks, an indicator of poor asthma control.² As a lifelong disease with debilitating symptoms when not well-controlled, asthma has been directly linked to chronic absenteeism and poor academic performance. When a child's ability to breathe is compromised because of asthma, there are several contributing factors to their ability to perform during the school day, such as: lack of adequate sleep at night, poor focus or concentration in class, and inability to participate in physical activity or play at recess.

By adopting proven effective policies and practices to manage asthma, schools can greatly affect a child's ability to be healthy, in school, and ready to learn.

#### Consider these statistics:

- Asthma is one of the leading causes of school absenteeism causing an estimated 13.8 million lost school days in children ages 5-17.
- Since students with asthma miss more school than their peers without asthma, this may negatively
  impact their academic achievement.<sup>4</sup>

Students with asthma can experience a worsening of symptoms when exposed to indoor and outdoor air pollutants at school. Schools can minimize absences and impact on academic performance by putting together an asthma management plan. An asthma management plan that addresses the medical needs of students with asthma and improves the physical environment of the school building can greatly impact students' overall health.

The Student Support and Academic Enrichment Grant program in the U.S. Department of Education Every Student Succeeds Act (ESSA) allows school districts to use federal block grant funding under the School Asthma Management Plan Provision to develop, implement, and evaluate school asthma management plans. States can use funding to provide school districts with evidence-based resources to develop and implement school asthma management plans.

+ American Lung Association

1-800-LUNGUSA | Lung.org

<sup>&</sup>lt;sup>1</sup> Centers For Disease Control And Prevention. National Health Interview Survey, 2016. Analysis by the American Lung Association Epidemiology and Statistics Unit Using SPSS Software.

<sup>&</sup>lt;sup>2</sup> Centers For Disease Control And Prevention. National Health Interview Survey, 2016.

Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey, 2015.
Analysis by the American Lung Association Epidemiology and Statistics Unit using SPSS software.

Moonie S, Sterling DA, Figgs LW, Castro M. The relationship between school absence, academic performance, and asthma status. J Sch Health. 2008 Mar;78(3):140-8.

The American Lung Association has been working with schools since 2001 to adopt asthma-friendly policies and practices to improve the overall health and well-being of children with asthma through the organization's Asthma-Friendly Schools Initiative® (AFSI). There are several key strategies that are known to work and have been compiled in the AFSI Toolkit. The Toolkit is a planning tool based on real-life activities that have been used in schools throughout the U.S. to create comprehensive asthma management plans. The AFSI approach includes evidence-based policies and practices included in four areas of the Whole School, Whole Community, Whole Child (WSCC) model – **Physical Education and Physical Activity, Health Services, Physical Environment, and Family Engagement.** 



WSCC is an expansion of the CDC's Coordinated School Health Model. It is a collaborative approach designed to improve learning and health in schools across the country. Like the WSCC model, AFSI puts the child at the center, emphasizes a school-wide approach and acknowledges that schools can help to facilitate the larger community coming together to improve the health and well-being of our nation's children. Commonly, schools use the School Health Index as a tool to assess school health and safety policies and programs for strengths and weaknesses and develop a school health improvement plan by prioritizing recommended action steps.

# II. Purpose of this Guide

Since the establishment of local school wellness policies in 2006<sup>5</sup>, there has been tremendous effort in schools to address physical activity and nutrition. Current school wellness policies tend to have a narrow focus on addressing these two issues because they are required under federal law.

While these components are very important, they are not the only things that affect the health and well-being of a student. The American Lung Association encourages schools to enhance school wellness policies to address the needs of students living with chronic health conditions, including asthma.

The purpose of this document is to provide guidance to schools and school districts on ways to enhance school wellness policies to include protections for students with asthma. The most likely school

#### **About School Wellness Policies**

Federal law requires each Local
Education Agency (LEA) that
participates in the National School
Lunch Program or other federal Child
Nutrition programs to establish a local
school wellness policy for all schools
under its jurisdiction.

personnel to use this document would include: school administrators, school health services staff, facility management, and school health advisory committees or wellness teams.

#### III. How to Use This Guide

This guidance document lists asthma-related strategies that schools and school districts can adopt in four areas of the WSCC model to create a sustainable asthma management program and lung- friendly school. The Lung Association used the structure of the School Health Index, an online assessment and planning tool that schools can use to improve their health and safety policies and program, to outline the AFSI recommended policies and practices. By using the School Health Index, schools and school districts can assess and plan, and look for opportunities to enhance their school wellness policy. A crosswalk of the School Health Index and the Asthma-Friendly Schools Initiative is available in the Appendix.

Outlined in this document are key environmental and medical management strategies that will have the greatest impact on students with asthma and the larger school community. The Lung Association provided links to key resources for more information to develop model policies, and when possible, provided sample language to help. The sample language should be tailored to meet the needs of your school or school district (e.g., School / School District / School Officials) as appropriate. The American Lung Association recommends adopting these practices to ensure that students with asthma stay healthy, in school, and ready to learn.



<sup>&</sup>lt;sup>5.</sup> United States Department of Agriculture. Food and Nutrition Services. Local School Wellness Policy. Available at: https://www.fns.usda.gov/tn/local-school-wellness-policy. Last published 11/6/2017. Accessed 3/23/2018.

# IV. School Health, Safety Policies & Environment

The school environment can negatively impact a child's asthma. Schools and school districts can consider adopting policies and practices that prepare school personnel to respond to a child in respiratory distress, prevent asthma emergencies by allowing eligible students to carry their medication, and implement a comprehensive asthma management plan that includes addressing the school building and grounds.

## [School / School District / School Officials] can:

- Provide professional development opportunities on asthma basics and responding to a breathing emergency at least every two years.
- Develop a clearly written policy allowing students with asthma to carry and self-administer prescribed quick-relief medication and share with parents and guardians.

# Sample Language – Asthma Medication Policy

School /School District / School Officials shall adopt an asthma medication policy that includes:

- Obtaining approval from an authorized prescriber (e.g., MD, DO, PNP, etc.)
- Obtaining approval from parent/guardian
- Obtaining approval from school nurse
- · Requesting back-up medication to be kept in the school health office
- Student contract with clear rules and consequences for violations
- Notifying parent/guardian immediately if permission is withdrawn
- Establish a Tobacco-free School Campus policy to ensure tobacco-free buildings and grounds
  by prohibiting tobacco use by students, school staff members and visitors, enforcing tobacco use
  policies, and prohibiting tobacco advertising. Secondhand smoke is a common asthma trigger.
  When enforced, a tobacco-free campus policy can benefit the larger school community.

# V. Physical Education & Physical Activity

Staying active helps students stay physically and mentally fit. Many students with asthma have exercise-induced asthma, which is brought on by vigorous activity. With the right education, activity modifications, and proper asthma management, children with well-controlled asthma should be encouraged to participate in physical education and activity. Make sure to clearly communicate how exercise benefits the lungs of all students, even students with asthma. Schools and school districts can consider adopting policies and practices that allow students immediate access to quick-relief asthma medicine, allow students to modify activity depending on their health status, and create a plan for modified activity on high outdoor air pollution days.

### [School / School District / School Officials] can:

Develop a modified physical activity plan for students with special health care needs. Most



students with asthma can fully participate in physical activity when their asthma is well controlled and may need to pre-medicate according to their asthma action plan.

# Sample Language: Modified Physical Activity Plans For Students With Asthma

School /School District / School Officials shall adopt a modified physical activity plan for students with asthma that includes:

- Using medication as directed by the student's asthma action plan
- · Planning for warm up and cool down periods
- Using rest periods and lower intensity when the student is in the yellow zone or stopping activity if the student is in the red zone
- Identifying activities that can be done in a warm moist environment, implementing an emergency care plan if the child is in the red zone
- Train physical education staff or coaches to monitor signs and symptoms of worsening asthma
  and modify physical activity for students who are not well. Staff shall verify modified activity plan as
  indicated in the student's asthma action plan.
- Develop a protocol that allows students to carry and use their quick-relief inhaler. A self-carry
  protocol provides immediate access to quick-relief medicine before physical activity (as indicated
  in the student's asthma action plan) and immediate access to medication in the gym and on
  playing fields. Trained physical education staff or coaches shall assist students who do not selfcarry.
- Develop a protocol for modified activity on days when outdoor air pollution is high.

#### Sample Language: Modified Activity Plan On High Outdoor Air Pollution Days

School /School District / School Officials shall adopt procedures for modified activity on high outdoor air pollution days that includes:

- Monitoring air quality daily by visiting airnow.gov
- Adopting the Environmental Protection Agency's Air Quality Flag Program
- Creating a communication plan and materials for staff that lead physical education classes, sports, recess, and after-school outdoor activities

#### VI. School Health Services

Managing asthma in school starts with informed and prepared school health services staff. A school health office should provide students with help managing their asthma, support to prevent asthma emergencies and the ability to handle a breathing emergency. Schools and school districts can consider adopting policies and practices that enable school health services to address asthma management in

schools by assessing and monitoring students with asthma and including linkages to the child's asthma care provider and parents.

# [School / School District / School Officials] can:

- Provide health services through a full-time registered school nurse all day, every day for each school
- · Collect student health information at the
- beginning of each school year. For students with asthma, establish a policy or protocol requiring an Asthma Action Plan completed by their healthcare provider.

# Sample School Policies For Asthma Medication

- Model Policy: Asthma Action Plans
- Standardized Emergency Protocol
- Model Policy: Self-Carry and Self-Administer Asthma Medications
- Model Policy: Stock Bronchodilator
- Establish a procedure to have access to a consulting physician/healthcare provider for each school to help with your school health program. For students with asthma, this is especially helpful in providing access to stock quick-relief medication.
- Implement a standardized emergency protocol for assessing, managing and referring students and staff members suffering from asthma symptoms to the appropriate level of care.
- Develop a system for the school nurse or other health services provider to identify and track students with chronic health conditions including asthma.
- Ensure students with chronic health conditions, such as asthma, have immediate and reliable
  access to quick-relief medication in school. Schools and school districts shall have a clearly
  written policy allowing students with asthma to carry and use quick-relief medication for those
  that are able and share the policy with parents and guardians. In addition, by establishing a Stock
  Bronchodilator Policy, schools can ensure that back-up medication is readily available.
- Establish individualized health plans (e.g., Emergency Care Plan, Individualized Education Plan, nIndividualized Health Care Plan) or intensive case management for students with uncontrolled asthma.
- Facilitate linkages for students with poorly uncontrolled asthma to their healthcare provider or
  refer to a medical provider (e.g., linking families to affordable health insurance, referring students to
  healthcare providers, providing care navigation).
- Establish a districtwide policy to offer asthma education to all students with asthma. Schools
  and school districts shall provide asthma education that is recognized and proven effective in
  improving asthma-related knowledge, confidence, skills or behavior. Examples may include, but
  are not limited to, American Lung Association programs such as Open Airways For Schools® and
  Kickin' Asthma®.

# VII. Physical Environment

Children spend a majority of their day on school grounds and in school buildings. Indoor and outdoor pollutants can be potential asthma triggers that bring on asthma symptoms for a student. Establishing a healthy school environment can keep students healthy, reduce absences, and decrease the chances

of an asthma emergency. A few examples include participation in the Environmental Protection Agency's (EPA) Indoor Air Quality (IAQ) Tools for Schools program, adopting a fragrance-free policy, and an integrated pest management (IPM) program.

#### [School / School District / School Officials] can:

- Proactively maintain healthy indoor air quality (IAQ) practices by using EPA's IAQ Tools for Schools program.
- Use IPM techniques to control pests using the safest and lowest risk approach.

# Sample Language: Integrated Pest Management Policy

School / School District / School Officials shall adopt an IPM policy that includes:

- Monitoring for potential pest infestations with regular and detailed inspections
- Using adequate sanitation practices (e.g., cover trash cans, place dumpsters away from buildings and entryways) and structural modifications (sealing holes and openings & repair screening, door sweeps) to minimize pests
- Using proper food handling, preparation, and storage techniques
- Using pest removal strategies first before using pesticides, such as sticky traps, pheromone traps, vacuuming and insect light traps
- Using low risk pesticides (herbicides, fungicides, insecticides) after all non-pesticide removal strategies have been tried and when no alternative measures are practical
- Ensuring that no students and staff members are in the area when pesticides are applied
- Refraining from calendar-based pesticide applications; use baits when possible
- · Notifying parents, employees, and students of all pesticide applications

# VIII. Family Engagement

A partnership between the school and parents contributes to the academic success and overall well-being of students with asthma. Educating parents of students with asthma to better support the disease management of their child is a key strategy in developing a comprehensive asthma management program. Schools and school districts can partner with families to improve the learning, development, and health of their child.

#### [School / School District / School Officials] can:

- Develop a communication plan, timeline and materials to communicate asthma medication policies and procedures with families.
- Send a memo or provide information at a "Back to School" night before the school year begins
- to explain the policies and procedures for students with asthma, inviting parents to meet with



school health staff, and making available the required paperwork required for the school year.

- · Communicate with families on issues related to all aspects of students' health.
- Provide asthma education to students and families with asthma.



# Asthma Basics

The American Lung Association's Asthma Basics course is a free one-hour interactive online learning module designed to help people learn more about asthma. This course is ideal for frontline healthcare professionals, such as school nurses or community health workers, as well as individuals with asthma, parents of children with asthma, and co-workers, friends and family who want to learn more about asthma.

# IX. Closing

The American Lung Association hopes the guidance provided in this document helps schools and school districts to enhance school wellness policies by including language and strategies that will protect students with asthma. Visit Lung.org/asthma-in-schools to access a number of downloadable resources to create a comprehensive asthma management program.

# Appendix: School Health Index and the Asthma-Friendly Schools Initiative

Key: tobacco (T), chronic health conditions (CHC), safety (S), and cross-cutting (CC)

# School Health and Safety Policies and Environment

SHI Code	Topic Area	AFSI Guidance
CHC. 2	Professional development on chronic health conditions	Provide asthma education to staff
CHC.1	Written policies for carry and self- administration of quick-relief medications	Assure immediate access to asthma medication as prescribed
T.1	Prohibit tobacco use among students	Assure tobacco free building and grounds
T.2	Prohibit tobacco use among school staff members and visitors	Assure tobacco free building and grounds
T.3	Enforce alcohol, tobacco, and other drug use policies	Assure tobacco free building and grounds
T.4	Prohibit alcohol and tobacco advertising	Assure tobacco free building and grounds

# **Physical Education & Physical Activity**

SHI Code	Topic Area	AFSI Guidance
CHC.1	Address special health care needs	Manage physical activity for students with asthma CHC
CHC.2	Physical education safety practices	Manage students' exposure to the outdoors on high outdoor air pollution days (On high outdoor air pollution days, does your school have a plan in place to reduce students' exposure to outdoor air pollution?) (I.e. indoor recess, etc.)

# **School Health Services**

SHI Code	Topic Area	AFSI Guidance
CC.1	Health services provided by a full-time school nurse	Health services provided by a full-time registered school nurse all day, every day for each school
CC. 3	Health and safety promotion for students and families	<ul> <li>Preventing tobacco use or e-cigarette use</li> <li>Quitting tobacco use</li> <li>Managing chronic health conditions</li> </ul>

SHI Code	Topic Area	AFSI Guidance
CC.4	Collaborate with other school staff members	<ul> <li>Developing plans to address student health problems (e.g., individual health care plans, individual education plans, 504 plans, school team plans)</li> <li>Providing professional development</li> <li>Developing health-related policy</li> <li>Developing School Improvement Plans</li> <li>Establishing communication systems with other school staff</li> </ul>
CC.5	Implement a referral system	<ul> <li>Contact parents of students identified as potentially needing additional health services and recommend that the students be evaluated by their primary health care provider or specialist.</li> <li>Contact parents of students without a primary health care provider and give information about child health insurance programs and primary care providers.</li> </ul>
CC.6	Student health information, including insurance	Use of an Asthma Action Plan for all students with asthma* (Does your school currently have a policy requiring an Asthma Action Plan for students with Asthma?)
CC.7	Consulting school health physician	Access to a consulting physician/healthcare provider for each school
S.2/ CHC.1	Health emergency response plans	Standardization of emergency protocols for asthma
CHC.2	Identify and track students with chronic health conditions	Identify and track students with asthma
CHC.3	Care coordination for students with poorly controlled chronic health conditions	Facilitation of connecting students to medical providers (i.e. referrals to community clinics or school-based health clinics)
CHC.4	Ensure immediate and reliable access to quick-relief medications for students, if appropriate	Immediate access to medications as prescribed*
CHC.5	Offer disease-specific education to all students with identified chronic health conditions	Education for all students (Have you educated your students on how to effectively manage their asthma?)

# Physical Environment

SHI Code	Topic Area	AFSI Guidance
S.1	Safe physical environment	School buses do not idle while loading or unloading students, to reduce emission of diesel exhaust and fine particles
CC.1	School environmental health programes	Proactively maintain healthy indoor air quality (IAQ)
CC.2	Effective management of an environmental health and safety program	Proactively maintain healthy indoor air quality (IAQ)
CC.3	Professional development for school environmental health	Proactively maintain healthy indoor air quality (IAQ)
CC.5	Cleaning and maintenance practices	Proactively maintain healthy indoor air quality (IAQ)
CC.6	Implement indoor air quality practices	Proactively maintain healthy indoor air quality (IAQ)
CC.7	Implement integrated pest management practices	Use integrated pest management (IPM) techniques to control pests

# Family Engagement

SHI Code	Topic Area	AFSI Guidance
CC.1	Communication with families	Educate parents of students with asthma

# **Acknowledgements**

Practical Guidance for Schools & School Districts: Enhancing School Wellness Policies to Protect Lung Health was done in collaboration and we gratefully acknowledge the many contributors who made it possible.

At the American Lung Association: **Barbara Kaplan**, who directed the project and was the primary author; **Katherine Pruitt, Thomas Carr, Catherine Chandler,** and **Venus Brady** who participated in the project leadership team and reviewed the report.

The American Lung Association greatly appreciates the collaboration of the Alliance for a Healthier Generation to help us develop this guide. Healthier Generation empowers kids to develop lifelong healthy habits by ensuring the environments that surround them provide and promote good health. More than 25 million children have been helped by Healthier Generation's work with schools, communities and businesses across the country. Make a difference at HealthierGeneration.org and join us on Facebook and Twitter.

The American Lung Association especially thanks the following people who generously shared their expertise and experience on asthma and school health during Asthma in Schools Stakeholders Meeting:

**Lauren Puzen and Donna Crawford** – Alliance for a Healthier Generation

Elliott Attisha, DO – American Academy of Pediatrics

Geneica R. Jones and Cindy Trubisky, MSEd, AE-C – American Lung Association

Deidre Washington, PhD - Asthma & Allergy Foundation of America

Sally Schoessler, MSEd, BSN, RN – Allergy & Asthma Network

Pamela Collins, MPA, MSA; Paul Garbe, DVM, MPH; Paige Welch and Emily Gardner, MPH -

Centers for Disease Control and Prevention, Asthma and Community Health Branch

Zanie Leroy, MD, MPH - Centers for Disease Control and Prevention, School Health Branch

Marjorie Cole, MSN, RN and Eric Armbrecht, PhD - Missouri Asthma Prevention and Control Program

Nichole Bobo, MSN, RN - National Association of School Nurses

Vernessa Perry, MSPH, PMP - National Environmental Education Foundation

Diane Rhodes, BBA, RRT, AE-C - Northeast Independent School District, San Antonio, TX

This document was supported by Grant Number U38OT000224 funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and so not necessarily represent the official views of the CDC or the Department of Health and Human Services.

Copyright ©2018 by the American Lung Association | American Lung Association is a registered trademark



# **About The American Lung Association**

The American Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease, through research, education and advocacy. The work of the American Lung Association is focused on four strategic imperatives: to defeat lung cancer; to improve the air we breathe; to reduce the burden of lung disease on individuals and their families; and to eliminate tobacco use and tobacco-related diseases. For more information about the American Lung Association, a holder of the Better Business Bureau Wise Giving Guide Seal, or to support the work it does, call 1-800-LUNGUSA (1-800-586-4872) or visit: Lung.org.

