

TAKING CONTROL OF ASTHMA



SCHOOL WALKTHROUGH GUIDEBOOK

A healthier environment for students and staff.



WISCONSIN
ASTHMA
COALITION

★ Children's Health
Alliance of Wisconsin

WELCOME



The Wisconsin Asthma Coalition (WAC) invites your school to join us as we **take control of asthma**.

The purpose of the WAC school walkthrough program is to increase school attendance by reducing exposure to environmental asthma triggers found within schools.

This guidebook provides comprehensive do-it-yourself instructions to identify asthma triggers in the school environment and offers low- and no-cost solutions to make your school more asthma friendly.

A special thank you to Kristen Grimes, MCHES, MAOM and Wisconsin HealthCorps members, Allie Ceranske, Kristen Lunde and Meng Xiong for creating the *School Walkthrough Guidebook*.

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WHO IS THE WISCONSIN ASTHMA COALITION (WAC)?



ABOUT THE COALITION

The WAC is an initiative of Children's Health Alliance of Wisconsin, whose mission is to ensure children are healthy, safe and able to thrive. As Wisconsin's voice for children's health, the Alliance raises awareness, mobilizes leaders, impacts public health and implements programs proven to work. The WAC is working to take control of asthma by fostering partnerships to improve asthma management, enhancing the quality of life, reducing disparities and preventing asthma-related deaths.

The WAC guides implementation of the Wisconsin Asthma Plan, a blueprint for addressing asthma in Wisconsin. This plan acknowledges the importance of environmental trigger assessment and education programs for asthma management. The WAC school walkthrough program achieves both of these objectives to prevent asthma flare-ups, increase ability to learn and support academic success.

The WAC is a diverse group, comprised of more than 150 members spanning various professions statewide. **Join us to help Wisconsin take control of asthma.** Become a member of the WAC today for free by signing up at www.chawisconsin.org/wac.



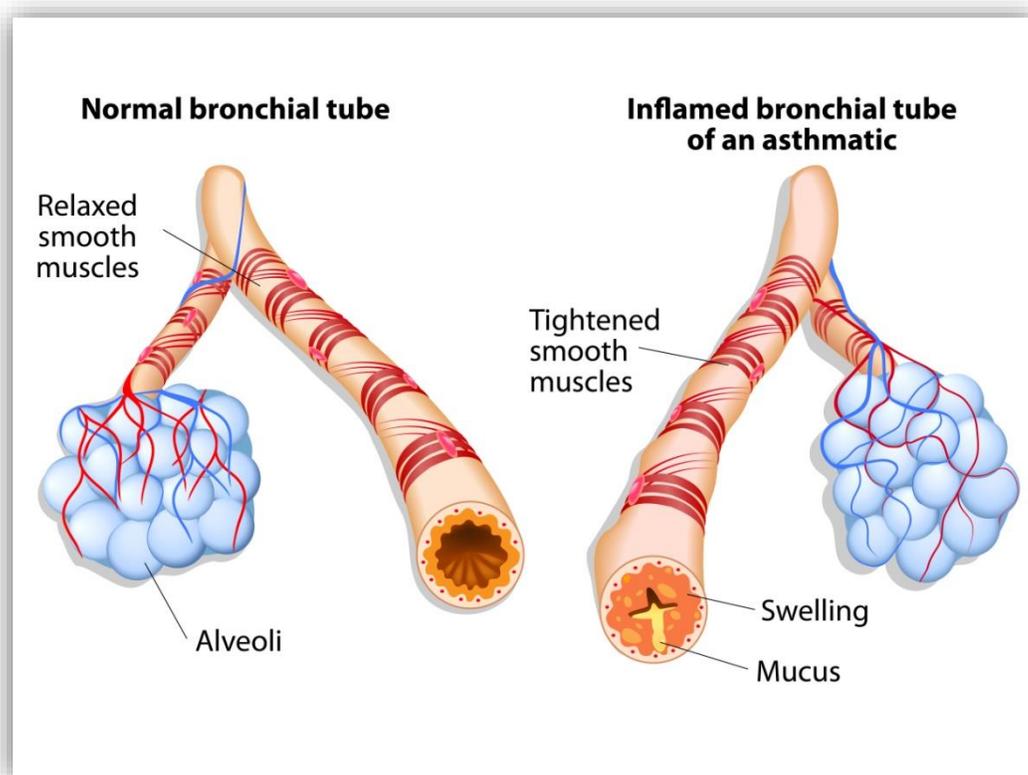
WHAT IS ASTHMA?



ASTHMA AT A GLANCE

Asthma is a chronic lung disease that cannot be cured, but can be controlled. While we do not know what causes each individual to have asthma, we do know there are four components to effective asthma care. These include routine health care visits, appropriate medication use, patient education and control of environmental triggers.

People with asthma have inflamed, tightened and mucus-filled airways. An asthma attack (asthma exacerbation) occurs when the airways are irritated by triggers such as irritants, allergens, stress, cold temperatures and exercise. Asthma symptoms include wheezing, chest tightness, shortness of breath and coughing. Asthmatics experiencing symptoms should follow their asthma action plans or talk to their doctor.



WHY IMPLEMENT A SCHOOL WALKTHROUGH?



CAUSE FOR CONCERN

Environmental asthma triggers may negatively affect students with asthma and significantly impact student performance. Poor indoor air quality, as well as the increase in absenteeism due to asthma, can be linked to a decrease in test scores and lower grades. The WAC school walkthrough program aims to increase student attendance by creating a healthier environment for students to learn and thrive.

Did you know?

- Asthma is one of the leading causes of school absenteeism.
- In Wisconsin, asthma affects 1 in 12 children; 1 in 3 children with asthma miss school each year.
- Uncontrolled asthma affects student performance.
- Children spend more than 1,000 hours a year in school, making asthma management in schools imperative to student health and success.



WHAT DOES A SCHOOL WALKTHROUGH ACCOMPLISH?



PROGRAM BASICS

The goal of the WAC school walkthrough program is to increase school attendance by reducing exposure to environmental asthma triggers found within school buildings. This is accomplished by:

- Identifying asthma triggers in the school environment.
- Providing low- and no-cost recommendations to eliminate and/or reduce environmental asthma triggers.
- Increasing knowledge and awareness regarding management of environmental asthma triggers.

The school walkthrough program focuses on five main asthma triggers typically found in schools, as defined by the U.S. Environmental Protection Agency (EPA).

- Classroom pets
- Pests and vermin
- Odors
- Dust and dust mites
- Mold, mildew and moisture

PROGRAM LOGISTICS

The WAC school walkthrough program is targeted to elementary schools as students spend the majority of their day in a single classroom, but the program can be used with any K-12 school. An on-site walkthrough takes one to two hours to complete. This time is spent assessing rooms and recording identified asthma triggers.

TESTIMONIES OF SUCCESS



“The school walkthrough program is easy and requires minimal time and resources.”

- Roxanne Hemmerling, School Nurse, Beloit-Turner School District

“Our partnership with the WAC has made a significant impact on the lives of children living with asthma in our community. Through the WAC’s support we have been able to implement the school walkthrough program in our schools.”

- Kathleen Kelly Shanovich, RN, American Family Children’s Hospital Asthma

“I completed the WAC school walkthrough program with the maintenance person in each of our elementary schools. The program resulted in an increased ability to identify asthma triggers and the strategies to decrease them.”

- Valerie Hon, District School Nurse, Portage School District



HOW DO I IMPLEMENT A SCHOOL WALKTHROUGH?



A walkthrough can be completed in three easy steps outlined below!

1) TAKE ACTION

Complete a school walkthrough

1. Become familiar with the five categories of asthma triggers in schools.
2. Use the school walkthrough checklist to inspect individual classrooms.

2) TELL OTHERS

Share the findings

1. Record findings on the trigger checklist.
2. Share the comprehensive findings report with school administrators and/or staff.
3. Send out an optional press release.

3) MAKE CHANGE

Create a healthier school environment

1. Prioritize and implement recommendations to remove or reduce environmental asthma triggers.
2. Set date for next walkthrough (walkthroughs should be completed annually).
3. Contact the WAC about awards and recognition.

1) TAKE ACTION

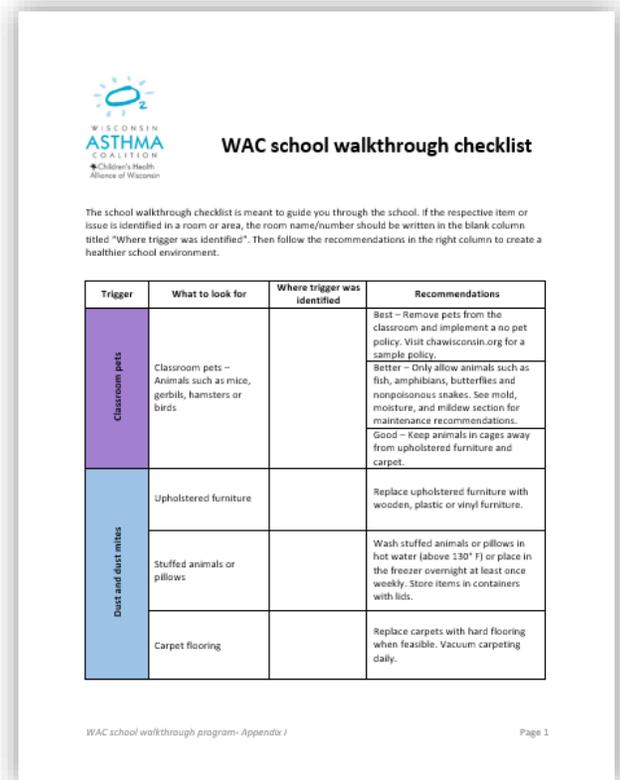
SCHOOL WALKTHROUGH CHECKLIST

INSTRUCTIONS:

The school walkthrough checklist is meant to guide you through the school. If the respective item or issue is identified in a room or area, the room number or room name should be written in the middle column.

CHECK IT OUT:

View Appendix I to see the complete walkthrough checklist or visit our website at chawisconsin.org/walkthrough



The school walkthrough checklist is meant to guide you through the school. If the respective item or issue is identified in a room or area, the room name/number should be written in the blank column titled "Where trigger was identified". Then follow the recommendations in the right column to create a healthier school environment.

Trigger	What to look for	Where trigger was identified	Recommendations
Classroom pets	Classroom pets – Animals such as mice, gerbils, hamsters or birds		Best – Remove pets from the classroom and implement a no pet policy. Visit chawisconsin.org for a sample policy.
			Better – Only allow animals such as fish, amphibians, butterflies and nonpoisonous snakes. See mold, moisture, and mildew section for maintenance recommendations.
			Good – Keep animals in cages away from upholstered furniture and carpet.
Dust and dust mites	Upholstered furniture		Replace upholstered furniture with wooden, plastic or vinyl furniture.
	Stuffed animals or pillows		Wash stuffed animals or pillows in hot water (above 130° F) or place in the freezer overnight at least once weekly. Store items in containers with lids.
	Carpet flooring		Replace carpets with hard flooring when feasible. Vacuum carpeting daily.

WAC school walkthrough program- Appendix I Page 1

2) TELL OTHERS

COMPREHENSIVE FINDINGS REPORT TEMPLATE



INSTRUCTIONS:

Follow these steps to accurately share your walkthrough findings with your leaders and administration.

To accurately reflect the areas needing to be addressed in your school:

1. Accurately record the classroom numbers where triggers were found on the walkthrough checklist.
2. Delete the recommendations that do not apply to your school.
3. Follow next steps at the end of the report to create an action plan to make positive changes to your school environment.

WISCONSIN ASTHMA COALITION
Children's Health Alliance of Wisconsin

School walkthrough report (INSERT SCHOOL NAME)

The Wisconsin Asthma Coalition (WAC) congratulates **SCHOOL NAME** for working to improve the quality of life for students with asthma and would like to continue to support your school's efforts. The following report details findings and recommendations resulting from the WAC school walkthrough completed on **DATE** by **NAME, WAC; NAME, TITLE**.

The following potential asthma triggers were identified in **SCHOOL NAME**.

- **TRIGGERS**

Trigger	Found	Rooms	Recommendations
Classroom pets	Classroom pets – Animals such as mice, gerbils, hamsters or birds		Best – Remove pets from the classroom and implement a no pet policy. Visit chawisconsin.org for a sample policy.
			Better – Only allow animals such as fish, amphibians, butterflies and nonpoisonous snakes. See mold, moisture, and mildew section for maintenance recommendations.
			Good – Keep animals in cages away from upholstered furniture and carpet.
Dust and dust mites	Upholstered furniture		Replace upholstered furniture with wooden, plastic or vinyl furniture.
	Stuffed animals or pillows		Wash stuffed animals or pillows in hot water (above 130° F) or place in the freezer overnight at least once weekly. Store items in containers with lids.
	Carpet flooring		Replace carpets with hard flooring when feasible. Vacuum carpeting daily.

Children's Health Alliance of Wisconsin www.chawisconsin.org

CONTACT US! Visit our website at chawisconsin.org/walkthrough to receive a free guided walkthrough and comprehensive findings report.

PRESS RELEASE TEMPLATE



INSTRUCTIONS:

Use the school walkthrough press release to promote the outcomes of your school walkthrough.

The WAC encourages schools that complete a school walkthrough program to share their efforts publicly.

Use our template to create a press release or article tailored to your school's story. Use this in a school newsletter, with local media or other appropriate audiences.

2) TELL OTHERS

FOR IMMEDIATE RELEASE

[INSERT SCHOOL DISTRICT] takes control of asthma in their schools

[INSERT CITY, WI - INSERT DATE] [INSERT NAME OF SCHOOL DISTRICT] has begun to take control of asthma in their school district by implementing the Wisconsin Asthma Coalition (WAC) school walkthrough program in [INSERT NAME OF SCHOOLS]. In Wisconsin, asthma affects one in twelve children. Since children spend more than 1,000 hours a year in school, asthma management in schools is imperative to student health and success. The WAC school walkthrough program is designed to increase school attendance by reducing environmental asthma triggers found within school buildings. [INSERT NAME & TITLE OF SCHOOL STAFF] completed the WAC school walkthrough program by assessing each school classroom for identifiable environmental asthma triggers and creating positive, low or no cost changes to their schools. [INSERT SCHOOL DISTRICT/SCHOOL NAME] is proud to continually strive to provide the healthiest learning environment for their students.

Contact [INSERT NAME & CONTACT INFO] for more information.

###

CHECK IT OUT! Visit our website at chawisconsin.org/walkthrough to download the Press Release Template.

ASTHMA TRIGGERS IN THE SCHOOL ENVIRONMENT



The following pages provide an overview of each asthma trigger, why it poses a problem for people with asthma and how the trigger may be addressed. According to the Environmental Protection Agency (EPA), the most common environmental asthma triggers found in school buildings are:

- Classroom pets
- Pests and vermin
- Odors
- Dust and dust mites
- Mold, mildew and moisture

Did you know?

- When people with asthma come in contact with a trigger it can cause a sudden worsening of symptoms which is often called an asthma attack, episode, flare-up or exacerbation.
- The American Lung Association defines an asthma trigger as a thing, activity or condition that makes asthma worse.



CLASSROOM PETS



CAUSE FOR CONCERN

Animals can be effective teaching tools in the classroom; however, pets can be an environmental asthma trigger. Asthma can be triggered by the skin flakes, urine, feces, saliva and hair shed by warm-blooded mammals.



WHAT TO LOOK FOR

Common classroom pets such as rodents, hamsters, guinea pigs and chicks can trigger asthma attacks.

SOLUTIONS

There are multiple ways to address classroom pets. Recommendations include:

- **GOOD:** Keep animals in localized cages and away from furniture and carpet.
- **BETTER:** Look to alternative pets such as fish and other cold-blooded animals.
 - If these pets are present, keep the tank or habitat well maintained to avoid moisture issues.
- **BEST:** Create a school or district policy restricting warm-blooded pets in school buildings.
 - Please note: pet allergens may remain in the school environment for a while, even after the animal is removed.

PESTS AND VERMIN



CAUSE FOR CONCERN

The waste and saliva of pests contains proteins, which can cause allergic reactions or trigger asthma symptoms in individuals sensitive to these allergens. Pest problems in a school can be caused by poor management of food preparation, food storage and moisture problems.

WHAT TO LOOK FOR

Pest droppings, urine, along with their decaying body parts, and skin are evidence of pests in classrooms. Cardboard boxes and old food that is not disposed of will attract pests.

SOLUTIONS

The best approach to managing pests in the school environment is to implement an integrated pest management (IPM) system. The key to an IPM is to remove the sources that attract pests instead of relying on pesticides. For more information on how to implement an IPM system visit www.epa.gov/ipm. Strategies include:

1. Watching for signs of pests.
2. Keeping food, water and garbage contained.
3. Removing areas for pests to move and take shelter.
4. Using control products such as traps, pesticides and baits only as needed and allowed by law.

Toxic chemicals used to manage pests can be harmful to people. Management methods that pose less risk to children and adults in the school environment should be implemented first.

ODORS



CAUSE FOR CONCERN

Strong odors and scents contain a surplus of concentrated molecules. When breathed in by people with asthma, the molecules can cause airways to close and trigger an asthma attack.

WHAT TO LOOK FOR

Strong odors and scents found in schools can come from sources such as chemicals, cleaning products, perfumes, cologne, air fresheners and second- or third-hand smoke.



SOLUTIONS

Reducing and eliminating odors requires a multifaceted approach in the school environment. Policies regulating sources of odors are often the most effective approach. Recommended policies include:

- Restrict and regulate items used in classrooms, such as air fresheners, candles or potpourri.
- Select fragrance-free consumer products, which release limited chemical odors.
- Choose the least toxic and most environmentally-friendly cleaning products. Consider the time it takes for fumes to dissipate after use.
- Prohibit staff and students from wearing strong scents at school.
- Prohibit staff from smelling of smoke when at school (third-hand smoke policy).
- Educate families about student hygiene.

DUST AND DUST MITES



CAUSE FOR CONCERN

Dust mites are microscopic bugs found in dust that feed on human skin flakes. Dust mite droppings and body parts can trigger asthma. Significant dust mite exposure also may cause asthma in children who have not had asthma symptoms in the past.

WHAT TO LOOK FOR

Dust mites can be found in fabric-covered items such as upholstered furniture, pillows, carpeting and stuffed animals. Dust also collects on hard surfaces such as bookshelves and bins.



DUST AND DUST MITES



SOLUTIONS

Dust and dust mites are the most common environmental asthma triggers found in schools. Recommendations for avoiding dust and dust mites include:

- Upholstered furniture:
 - Vacuum and regularly maintain upholstered furniture.
 - Consider switching from upholstered furniture to wooden or plastic furniture.
- Carpeting
 - Vacuum carpet and area rugs daily.
 - Replace rugs with foam, vinyl or plastic mats.
 - Consider switching to hard floorings when your school decides to change flooring.
- Stuffed animals, pillows, curtains, blankets and fabric cushions
 - Store stuffed animals in closed displays or bins with lids to minimize dust accumulation.
 - Once a month wash in hot water (above 130° F) or place in freezer overnight to kill dust mites.
- Open bookshelves
 - Dust bookshelves regularly with a damp cloth.
 - Utilize baskets to store items.
 - Plastic storage bins
 - Cabinets with doors
- Clutter
 - Encourage staff members to cut down on classroom clutter.
 - Keep classrooms neat and organized.

MOLD, MILDEW AND MOISTURE



CAUSE FOR CONCERN

Molds are fungi, which grow on moist surfaces. Mold exposure can lead to respiratory issues, allergic reactions and asthma attacks. All types of mold have the potential to be dangerous and moisture is the most important concern when addressing the growth or spread of mold in the school environment. To ensure the safety and health of building occupants, it may be necessary to contact a professional contractor who is qualified to respond to mold and moisture issues. The EPA provides resources relating to mold remediation, which can be found at www.epa.gov/mold.

WHAT TO LOOK FOR

Issues such as leaks in the roof or plumbing, humidity, condensation, and damp or cluttered areas near sinks, appliances and other water sources all can cause excess moisture. Potential areas in classrooms include e.g. appliances, personal refrigerators, plants, sinks, ceilings and walls. Bathrooms in schools should also be inspected for discoloration of pipes and walls near pipes for signs of water leakages or damage. Addressing potential problems before mold growth can occur is ideal.



MOLD, MILDEW AND MOISTURE



SOLUTIONS

Moisture sources in schools vary. Policies may be put in place to prevent and reduce potential moisture problems. Below are recommended solutions for each moisture source.

- Appliances
 - Require under bedding to catch any residual water.
 - Place appliances away from carpeting.
 - Create a policy prohibiting personal refrigerators and other cooking appliances in the classroom.
- Plants
 - Limit the number of plants.
 - Use water trays to collect excess water.
 - Require regular maintenance of plants.
 - Create a policy prohibiting plants from classroom.
- Sinks
 - Identify the source of moisture and fix the issue.
 - Replace carpeting by sink area with hard flooring.
- Ceilings and walls
 - Clean mold from surface and dry surface thoroughly.
 - Identify source of moisture and fix the issue.
- Bathroom facilities
 - Clean bathrooms regularly.
 - Eliminate standing water on sinks and floors.

AIR QUALITY



WHAT YOU NEED TO KNOW ABOUT AIR QUALITY

Proper ventilation throughout the school building is an important part of creating a healthier school environment for students with asthma. The EPA provides the following recommendations for ventilation maintenance.

Schools should have their ventilation systems (e.g., air handlers, univents, and air conditioners) inspected annually. Inspections should include intakes and other components.

- Blocked intakes and vents can result in inadequate ventilation. Outdoor univent intakes are usually located close to the ground, so plants and bushes should be cleared in these areas. In the classroom, do not block vents with items such as books, papers, plants or furniture.
- Supply and return air vent grilles should be inspected and cleaned if obstructed with dust.
- The EPA does not recommend cleaning ducts unless there is excessive dust that is compromising performance of the system or being blown onto surfaces. All of the above recommendations should be implemented first before considering cleaning ducts.

The EPA provides a detailed ventilation checklist, along with other resources, which can be downloaded free at www.epa.gov/iaq-schools/indoor-air-quality-tools-schools-action-kit.

RESOURCES



The following organizations and resources are helpful for schools looking to supplement their walkthrough with additional information or programs.

American Lung Association

www.lung.org/asthma-in-schools

The American Lung Association (ALA) has resources for teachers, school nurses and staff members to help keep kids with asthma healthy and in school. From general asthma education to specific policies your school can adopt, the ALA's resources will help your school create a healthier learning environment.

Children's Health Alliance of Wisconsin

www.chawisconsin.org

Visit the Alliance website for resources and additional information on WAC and other Alliance initiatives, including emergency care, grief and bereavement, injury prevention and death review, medical home, and oral health.

Environmental Protection Agency Indoor Air Quality (IAQ) - Tools for Schools

www.epa.gov/iaq-schools/indoor-air-quality-tools-schools-action-kit

This program provides guidance to schools and encourages voluntary adoption of IAQ management practices that reduce exposure to environmental contaminants.

RESOURCES



Wisconsin Asthma Program, Wisconsin Department of Health Services

www.dhs.wisconsin.gov/asthma

The Wisconsin Asthma Program conducts asthma surveillance, partners with the Wisconsin Asthma Coalition to implement the Wisconsin Asthma Plan, implements public health interventions, builds local capacity and implements [CDC's EXHALE strategies](#) to improve asthma control and reduce health care costs.

Green and Healthy Schools Wisconsin Program

GHSWisconsin.org

The Green and Healthy Schools program encourages schools to nurture healthy kids and sustainable communities. The movement spans the state to provide schools with resources to reach green and healthy goals. The WAC school walkthrough program can accumulate credit toward the Green and Healthy School certification levels.

Green Ribbon Schools, Wisconsin Department of Public Instruction

dpi.wi.gov/environmental-ed/green-ribbon-schools

The U.S. Department of Education's Green Ribbon Schools (ED-GRS) recognizes schools implementing innovative sustainability practices, including environmental learning and health improvement. The WAC school walkthrough program can be used to apply for Green Ribbon Schools awards.

Contents of the WAC school walkthrough program were based on the following resources.

- Mold Remediation in Schools and Commercial Buildings, United States Environmental Protection Agency, September 2008.
- Sensible Steps to Healthier School Environments, United States Environmental Protection Agency, September 2012.
- IAQ Tools for Schools, Reduce Environmental Asthma Triggers, United States Environmental Protection Agency, www.epa.gov/iaq-schools.

A small change can make a big difference.



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