



CLEAN AIR SCHOOL

SUSQUEHANNA VALLEY

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AIR QUALITY
PARTNERSHIP
OF THE SUSQUEHANNA VALLEY

PROGRAM GUIDE

Sponsored by: Air Quality Partnership of The Susquehanna Valley



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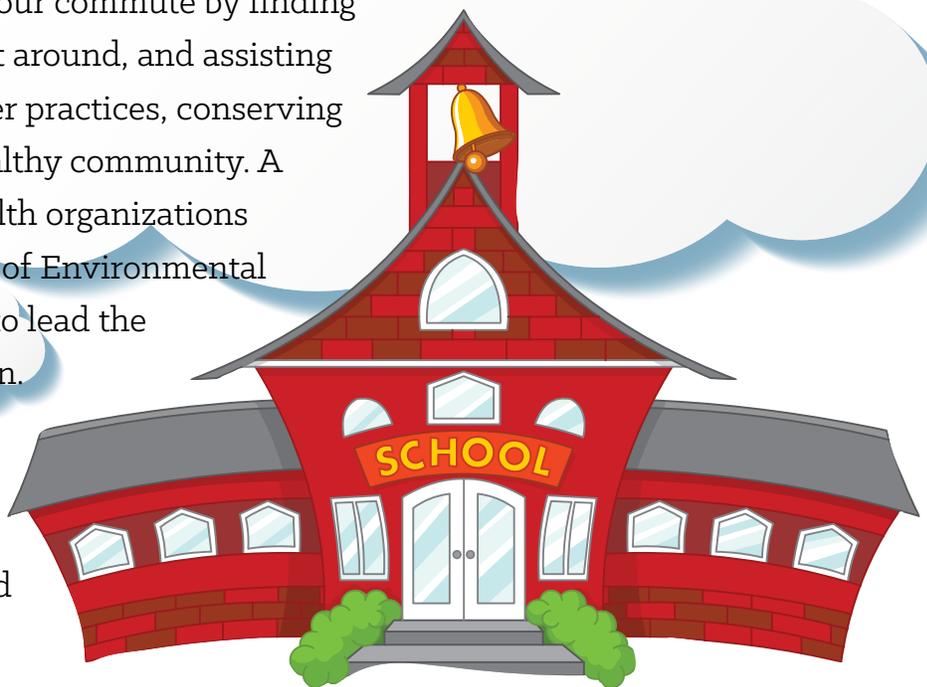
www.airqualitypartners.org

Overview

The Clean Air School program is a recognition program for elementary and secondary schools. The program aims to raise awareness on local air quality and educate school-aged children and members of the school community on air-friendly practices. The program also seeks to decrease health risks among children, such as asthma and other respiratory problems caused by air pollution. After completion of the three easy steps involved in becoming a Clean Air School, your school will be recognized with a window decal for your school entrance that showcases your commitment to helping improve local air quality. You will also be recognized on the Air Quality Partnership's website and social media avenues and we encourage Clean Air Schools to alert the local media of their recognition.

The Air Quality Partnership of The Susquehanna Valley (AQPSV) is funded by the Pennsylvania Environmental Protection Agency (EPA) to improve air quality by raising community awareness and support. We are committed to air quality education through local area schools, improving your commute by finding better and healthier ways to get around, and assisting businesses in establishing better practices, conserving resources, and promoting a healthy community. A variety of local businesses, health organizations and Pennsylvania Department of Environmental Protection staff work together to lead the Partnership efforts in our region.

Together, our goal is to reach out to every community across the region to promote environmental stewardship and teach air-friendly practices.



Why Is It Important to Become a Clean Air School?

Becoming a Clean Air School provides your school with the opportunity to create a healthier environment for your students and promote environmental values for the next generation and among the local community. According to the recent State of the Air report by the American Lung Association, the Susquehanna Valley region has earned failing grades for its air quality, ranking among the worst in the country.¹

High levels of particle pollution, such as soot from fuel combustion as well as acids, metals and dust in our air not only damage our environment, but also pose serious health risks for sensitive groups such as children, the elderly, and those at-risk for respiratory and cardiovascular disease. Days of high levels of ground-level ozone or “smog,” the result of chemical reactions on hot, sunny days involving unburned fuel, volatile compounds, and nitrogen oxides from combustion, are far too frequent and result in asthma attacks that keep children home from school or even send them to the emergency room. Air pollution episodes clearly have an impact on children, adversely affecting school performance and attendance. Children are more vulnerable to air pollution because their lungs are still in the development phase and because they breathe, on average, 50 percent more air per pound of body weight than adults.²

Additionally, schools are ideal environments to promote air quality because

- 1)** the population is susceptible to health risks caused by air pollution
- 2)** schools require daily commutes by automobiles and/or buses which provides an opportunity for reducing emissions
- 3)** they teach the future generation how to make a positive difference
- 4)** they are leaders for the local community. That is why the AQPSV is dedicated to engaging schools on the issue of air quality. We provide free educational materials, resources and program support for your school to help you teach your students and make a concrete impact in your community.

Program Goals

The overall goal of the Clean Air School program is to create healthier school environments in targeted areas of Pennsylvania. A healthier school environment is one in which health risks are minimized through education and practice. By educating students and raising awareness in the community, your school will benefit from cleaner air in your local area while also impacting the environment on a larger scale.

The goals specific to the Clean Air Schools program are as follows:

- 1) To educate children about air quality and actions that reduce air pollution and instill environmental values
- 2) Raise awareness of our local air quality issue and its related health risks
- 3) Encourage practices that promote cleaner air on the individual and community level



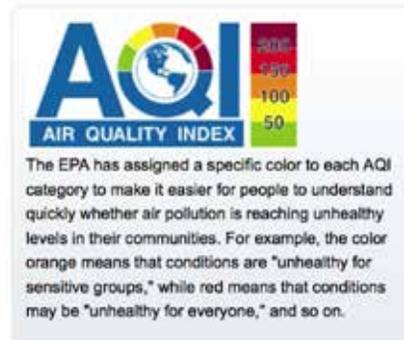
3 Easy Steps to Becoming a Clean Air School

STEP 1

Sign Up For Local Air Quality Index Alerts

The EPA measures and reports local air quality on a color-coded index (see below). Using the email of an administrator, school nurse, or your school's clean air champion, sign up to receive alerts when your local air quality is predicted to be unhealthy. Being aware of the local air quality on any given day empowers you with the ability to protect your students by limiting the amount of time they are exposed to unhealthy levels of air pollution. On days of high air quality index (AQI) levels, it may benefit students to reduce recess time outdoors or hold gym class inside as they are more likely to inhale more particulate pollution when they are breathing heavily, such as during periods of physical activity and play.

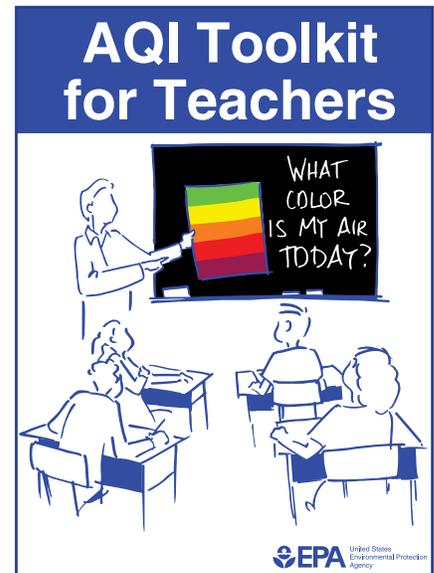
AQI Levels of Health Concern	Numerical Value	Meaning
Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Moderate	51-100	Air quality is acceptable, but there may be a moderate health concern for people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151-200	Everyone may begin to experience health effects; sensitive groups may experience more serious health effects.
Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.



STEP 2

Utilize Lesson Plans From The EPA Air Quality Index Toolkit For Teachers

The U. S. Environmental Protection Agency (EPA) has created a toolkit of lesson plans designed to teach students of grades K-8 about the air quality and air pollution and its connection to health, weather and our Earth. All lessons meet specific Pennsylvania state educational standards for environment, earth sciences and math. We ask that you share this toolkit with your teachers or science teacher and incorporate at least one lesson or activity from the toolkit into your classes annually. You may request a hard copy of the toolkit through your local Air Quality Partnership team or access an electronic version at: http://www.epa.gov/airnow/teachers/toolkit/teachers_full_toolkit.pdf



STEP 3

Choose and Implement One Of The Following Awareness-Raising Activities Or Events:

Part of the fun in becoming a Clean Air School is engaging both students and staff around a common theme. In order to put your new knowledge on air quality into action and to celebrate your school's efforts in becoming more air-friendly, the final step to the Clean Air School program is a culminating activity or event that takes place at your

school. We have developed a variety of activities to be scalable (for classroom or school-wide), educational, and simple to implement (we provide educational materials and promotional templates for each)! All of the activities are appropriate ways to celebrate Air Quality Awareness Week (end of April), Bike Month (May) or may complement activities that already exist at your school such as National Walk-to-School Day.

Through your participation in the Clean Air School Program, you have access to your local Air Quality Partnership for technical assistance and support in developing an activity that is just right for your school. We encourage you to work with us to help make your activity the best it can be!

Please choose at least one activity to implement during the school year and confirm the details of your activity or event with your local Air Quality Partnership. You may choose from the following or create your own:

Walk or Bike to School Day

If your school is located in an urban area, one of the easiest ways to advocate for cleaner air is to encourage students and staff to walk or bike to school. National Walk-to-School Day and programs such as Safe Routes to School all focus on the benefits of walking to school and decreasing air pollution is just one of them! To implement this activity, begin by educating students, parents and staff about the benefits of walking or biking to school with materials provided by your Air Quality Partnership. Designate a special date to encourage parents and students to walk or bike to school. Students that do will receive “I Care About the Air” stickers to be recognized for their participation or the school may choose to hold a contest with prizes. For students who are unable to walk or bike to school, offer an alternative option for them to earn their sticker. If a portion of your students already walks to school, recognize them for doing their share for cleaner air at the next school assembly or event!



Share The Ride Challenge

Fuel emissions account for approximately 50% of air pollution in the United States.² An easy way to do your share for cleaner air is to carpool or ride the bus to and from school. For this activity, use the materials provided by your Air Quality Partnership to educate students, parents and staff about the benefits of carpooling or riding the bus and make them aware of the Share the Ride Challenge (flyers, email blasts and newsletter articles).

To implement the challenge, participants will get a card to be punched or stamped for each day that they ride or carpool to school. The challenge must last for one week but may continue for as long as you'd like. Children that participate will be recognized with "I Care About the Air" stickers at the end of the challenge, and your school may choose to solicit prizes or hold a celebration at lunch to end the week.

Earth Day Celebration

Earth Day is the ideal time to celebrate our Earth and promote actions to keep it healthy. Reduced air pollution is a result of many earth-friendly actions such as recycling and conserving energy. An Earth Day celebration provides an opportunity to raise awareness and educate students of all ages on the importance of taking care of the Earth. An Earth Day celebration looks different for everyone; it may involve a few of the ideas:



An Earth Day fair
A special speaker or movie
Wear green and blue day
Door decorating contest
Plant-a-tree day

Your Air Quality Partnership will help you plan a fun day to get students engaged and will provide you with materials to help spread the word. The importance behind this activity is raising awareness among students, parents and staff of the large role air quality plays in taking care of the Earth.

No-Idling Campaign/Policy

You may sometimes see “No Idling” signs posted at your local convenience store or in the carryout parking space at restaurants. The same concept should apply to dropping off or picking up children at schools in an effort to help reduce harmful emissions.

As adults, we may not realize that children are most susceptible to vehicle emissions because:

- a) their lungs are still developing
- b) they breathe, on average, 50% more air per body pound than adults
- c) their height puts them closer to tailpipes and related smog.²

To implement a no-idling campaign, your school may choose to use materials that are already developed or have children craft their own. They can use flyers or picket signs and the school must choose a day to have students post their signs or flyers in the school parking lot or on the lawn.

Another method by which you can be recognized as a Clean Air School is to adopt a “Clean Air Policy.” We encourage school staff or wellness councils to adopt a formal No-Idling Policy at the completion of a No-Idling event, but Clean Air Policies can take many forms (please see the attached template), such as refraining from outdoor activities or recess on Air Quality Action Days.



“Do Your Share For Cleaner Air” Art Contest

Students may learn more about air quality by having to express the concept using their creativity. What is air quality? Where does air pollution come from? How can you do your share for cleaner air? These are the types of questions that can be answered through drawings, door-decorating or any form of art (computer art is great for older students) in a school-wide contest or as an Earth Day activity for your classrooms. If you choose to hold a contest of any form, the Air Quality Partnership will collaborate with you and local sponsors to provide fun prizes for the appropriate grade levels.

Bicycle Education Day

Bicycling is a healthy activity because it requires physical activity and it is air-friendly! Students and staff may benefit from a fun day of learning about bicycles including parts of the bike, bike safety and how bicycling reduces air pollution. Through local partnerships, the Air Quality Partnership has access to bicycling education sessions and other bicycling activities designed for school-aged children. May is Bike Month, a perfect time for bicycling activities including Bike-to-Work Week (for staff) and Bike-to-School Day. This is an exciting time of year for parents to ride to school with their kids or to teach children to ride so they can enjoy the many trails throughout the region during the summer months.



Materials and Planning

We have developed customizable materials for each program to help you along and reach the overall goals of awareness raising and education. For each program we encourage the following plan of action²:

☐ Awareness Raising & Education

- ✓ Introduce the school activity or event by using the adaptable fliers, email blurbs and educational fact sheets or newsletter articles (see examples attached).
- ✓ Identify a teach or staff member who is willing to become your school's Clean Air Champion and work with your Air Quality Partnership as needed.
- ✓ Pick an activity from the examples below or create your own and select a date/time to implement.
- ✓ Educate students, parents and teachers using the materials and resources available to you through the AQP.

☐ Implementation

- ✓ Notify parents and staff of the chosen activity or event at meetings and through the formal letter/email template provided (see examples attached). Publish information on the school website and encourage parent involvement and/or volunteerism as needed.
- ✓ Engage students with daily reminders leading up to the activity or event.
- ✓ Collaborate with the Air Quality Partnership to obtain incentives or prizes as needed.
- ✓ Alert local news.

To become recognized, please confirm your participation by contacting the project coordinator at your local Air Quality Partnership:

coordinator@airqualitypartners.org

Please view the following examples of materials available to help you promote

your school's efforts. These materials are specific to the No-Idling Project and have been adapted from the Clean Air Campaign's No Idling Toolkit found at:

http://files.earthday.net/ednnoidle/EDN_No_Idling_-_School_Toolkit.pdf

Footnotes:

1) <http://www.stateoftheair.org/2013/states/pennsylvania/>

2) http://files.earthday.net/ednnoidle/EDN_No_Idling_-_School_Toolkit.pdf

Sample Newsletter Article

PROTECTING YOUNG LUNGS

This (fall/spring), (insert school name) is launching a No-Idling Campaign to protect the health of our students and the health of our environment. In addition to restricting idling on school grounds by school buses, we are also asking parents to turn off their engines in personal vehicles.

On (date), cars that are in carpool lanes for morning drop-off and afternoon pick-up will be greeted by No Idling signage. This project is part of the Clean Air Schools program of the Air Quality Partnership of The Susquehanna Valley.

Why should you support the no-idling effort?

- Idling harms our health
 - > Vehicle exhaust is harmful to everyone's health, but it especially affects children who breathe more and at a faster rate than adults. By turning off your car, our students, teachers and parents won't breathe in unhealthy fumes around the school.
- Idling pollutes the air we breathe
 - > Vehicle idling creates unnecessary pollution. By not idling, you prevent up to 3 pounds of pollution per month from going into the air.
- Idling costs you money
 - > A popular misconception is that idling your car uses less gas than turning it off and restarting. The truth is, if you are going to be sitting more than 30 seconds, it is more fuel efficient to turn your engine off.

Thank you for your support!

Adapted from: http://files.earthday.net/ednnoidle/EDN_No_Idling_-_School_Toolkit.pdf

Sample Fact Sheet

No Idling: Young Lunge at Work

Through our involvement with the Air Quality Partnership of The Susquehanna Valley, our school is establishing a no-idle zone to improve air quality and create a healthier environment for our students.

How It Works

1. Sign a no-idling pledge card available from your child's school.
2. Turn off your engine while waiting in the school parking lot.

Why We Care

1. Children are more vulnerable to the health impacts of vehicle emissions than other populations.
2. Children breathe 50% more air per pound than adults.
3. Children are closer to the ground, therefore closer to vehicles tailpipes.
4. Asthma symptoms in children increase as a result of exposure to car exhaust.
5. Asthma is the most common chronic illness in children and the cause of most school absences.

Benefits to You, Your Children, and Your School

1. By not idling, you keep 3 pounds of pollution per month from going into the air.
2. You save money! One hour of idling burns up to a gallon of fuel.
3. Not idling reduces car exhaust and decreases your child's exposure to unhealthy vehicle emissions.

Thanks for turning off your engine!

Clean Air Policy Template

Whereas: _____ (school name) is concerned about the health of its students and community;

Whereas: Buses, cars and SUVs that idle in the school parking lot increase unhealthy emissions;

Whereas: Children are more vulnerable to air pollution;

Whereas: Poor air quality contributes to asthma, respiratory problems and aggravates cardiovascular disease;

Therefore: Effective _____(date), it is the policy of _____ (school name) that the following efforts be put forth in order to reduce the number of vehicles that idle near the school:

- No Idling signage shall be posted where appropriate
- An appointed staff person or school aide shall regulate the school parking lot during drop off and pick-up times
- Bus drivers, parents and staff shall be encouraged to turn off their engines through reminders by letter, email or newsletter

Signature

Title

Date

Air Quality Facts

- ❑ **The air quality in our region is among the worst in the country.**¹
- ❑ **Air pollution has been directly linked to the following health problems:**
 - ✓ Asthma attacks and respiratory issues
 - ✓ Heart attacks
 - ✓ Autism and other mental health disorders
 - ✓ Premature death
- ❑ **Even relatively low levels of pollution can cause health effects. People with lung disease, children, older adults, and people who are active outdoors may be particularly sensitive.**
- ❑ **Children are at greatest risk from the harmful effects of air pollution because their lungs are still developing, they inhale 50% more air per pound of body weight than adults, and they are more likely to be active outside.**
- ❑ **Air pollution can:**
 - ✓ Make it more difficult to breathe deeply and vigorously.
 - ✓ Cause shortness of breath and pain when taking a deep breath.
 - ✓ Cause coughing and sore or scratchy throat.
 - ✓ Inflammate and damage the airways.
 - ✓ Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.
 - ✓ Increase the frequency of asthma attacks.
 - ✓ Make the lungs more susceptible to infection.
 - ✓ Continue to damage the lungs even when the symptoms have disappeared.
- ❑ **Vehicle exhaust contributes to roughly 60% of all air pollution nationwide.**
- ❑ **Buses and other diesel-powered engines release more harmful emissions than regular gasoline engines.**
- ❑ **An idling engine releases about 20 pounds of emissions into the air every 30 minutes.**
- ❑ **School buses and cars idling in school zones can be harmful to children during drop-off and pick-up hours.**

1. <http://www.stateoftheair.org/2013/states/pennsylvania/>





Help Us Protect Your Students From Exposure To Air Pollution!

Dear Educator,

Did you know your students are at risk from the harmful effects of air pollution? It's true, from idling buses in the school parking lot to ozone on the playground; air quality at your school can be a health hazard to children because their lungs are still developing. Protecting your students from air pollution is critical to their health and performance in school.

That's why the Air Quality Partnership of The Susquehanna Valley (AQPSV) has created the Clean Air School program to help reduce children's exposure to air pollution. Through this program we help support and recognize schools that teach their students about air quality. There are three, easy steps you can take to become a Clean Air School:

- 1) **Sign up for Air Quality Email Alerts** – The EPA tracks local air quality and sends alerts when levels are expected to be unhealthy. Have your school nurse sign up today so you can help limit children's exposure on Air Quality Action Days.
- 2) **Utilize lesson plans from the Air Quality Index Toolkit for Teachers** – Lesson plans from the AQI Toolkit for Teachers are all-inclusive and meet PA Educational Standards including math, weather and science.
- 3) **Implement a Clean Air policy, event or activity at your school** – The AQPSV will assist you in designing and planning a fun and engaging activity for your school or classroom. We will provide policy templates, newsletters/emails for parents, fact sheets and additional materials as needed.

Would you consider a "No Idling" campaign for the school parking lot or a bicycle education day? The Partnership is offering free assistance to participating schools and incentives for the new school year. For more information about the Air Quality Partnership and how you can earn recognition as a **Clean Air School**, please visit our website at www.airqualitypartners.org

Thank you for doing your share for cleaner air.

Sincerely,

Mike Ridgeway

Mike Ridgeway

Project Coordinator, Air Quality Partnership of The Susquehanna Valley

Email: coordinator@airqualitypartners.org