

EARTHDAY.ORG PRESENTS

ADVOCACY PACKETS

CLEAN AIR

INVESTIGATING AIR POLLUTION IN YOUR COMMUNITY

As young individuals, we see environmental issues in our community and on the news and want to take action to protect our future. It can be difficult to know where to start or how to enact lasting change when it comes to air pollution, but students around the globe are working to transform the world one step at a time - and so can you.

This series of advocacy packets, created with K-12 students in mind, provides introductory knowledge on these ideas and concepts and walks you through steps on how to begin invoking change from your classroom, home, or community group.

This specific packet on air pollution is intended to provide information on the various types of man-made air pollutants, where they come from, why they are dangerous (especially for school-age children), and the laws and regulations that work to reduce them. Furthermore, this packet discusses how students can investigate air pollution in their school and in their community at large, and gives suggestions on how students can take action to address this problem.

Additional resources can be found [here](#).



IMPORTANCE

Clean air is one of the most fundamental requirements for human health. However, a wide range of both man-made and naturally occurring substances can pollute the air we breathe. Scientists have found a link between prolonged exposure to high concentrations of air pollution and several serious health issues. In most places, the most significant sources of air pollution are emissions from burning fossil fuels in vehicles and industrial operations, as well as aerosols containing harmful chemicals that are used in both manufacturing and consumer goods.



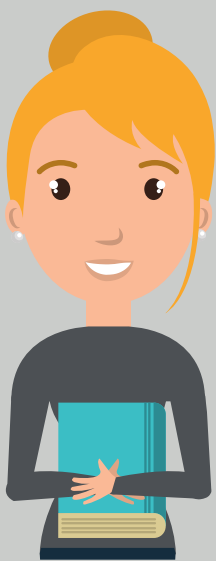
While air pollution is a seemingly daunting problem, we should remember that previous generations' activism has already won massive successes. Americans today breathe much cleaner air than possibly at any point since the start of the Industrial Revolution in the mid-1800s, and certainly much cleaner than 20 or 50 years ago. The U.S. Clean Air Act of 1970, which came about as a result of the first Earth Day, dramatically reduced emissions of pollutants like sulfur dioxide and nitrogen oxides, and subsequent government action phased out lead from paint and other products. However, there is still a lot of work to do. Many countries still rely on polluting industries to grow their economies and need new strategies and resources if they are to balance raising material living standards with the health of future generations. Wealthy nations continue to see far too many children affected by air pollutants like ozone and particulate matter; especially in communities that are close to highways, fossil fuel infrastructure, or large-scale industrial operations – communities whose residents are more likely to be low-income and people of color.

For students looking to take action on air pollution in their school and community, it should be recognized that every place has its own unique problems, and those who live there will always be the ones who best understand those problems and how they can be addressed. Therefore, this packet hopes to offer more of a general strategic framework that can guide students in tackling their community's distinct situation.



STAKEHOLDERS

Teachers and Staff Members



Your school's faculty and staff have a commitment and responsibility to foster a safe and healthy learning environment for all students. If they don't do so already, students can ask the relevant teachers (especially science teachers) to hold a discussion on air pollution and its effects in their classes, or to post notices in their classrooms in support of students' efforts. Suggestions for a letter to your teacher asking for their support can be found [here](#).

Local Residents and Businesses

Local residents and small businesses have a strong stake in air pollution in the community, due to pollution's severe economic and public health burdens. They can post notices in support of students' efforts, sign petitions, speak at community meetings, offer input on solutions, or provide financial support. To identify potential supporters within this group, you could start by reaching out to local groups like small business associations, faith groups, and neighborhood charities. Suggestions for a letter to financial stakeholders/businesses in your community can be found [here](#).



Medical Professionals



Many doctors and nurses have extensive experience treating respiratory issues and other health problems related to air pollution. Testimony from these professionals, especially pediatricians or others who regularly treat young people, can provide powerful scientific backing for proposed policy changes to mitigate pollution.

Environmental Groups

Environmental organizations can bring their considerable experience in organizing, interacting with elected officials, and devising policy solutions. Students should look for groups, possibly local chapters of nationwide organizations, that are active in their neighborhood (or even their school).



IMPLEMENTATION

Investigation

Many schools and neighborhoods have set up air quality monitors to conduct their own testing. If your school does not have one, there are many consumer-grade monitors that you can buy. It might help to ask your science teacher about letting you measure air quality within the school (indoors and outdoors) as a class project.

To get data for your neighborhood or your city at large, you can likewise collect your own data, or follow real-time data through the [Air Quality Index](#).



Research

Once you have data on pollution levels in your school/community, do some research to understand the context of your findings. What kind of pollution have you found, and how significant is it in terms of what the science says about air pollution at the concentration you measured? Try to ascertain how your measurements compare to pollution levels in other areas, and what health effects are associated with these pollution levels. The [World Health Organization](#), the [Center for Disease Control](#), the [Environmental Protection Agency](#), and the [American Lung Association](#) are especially good sources for this. Are the pollution levels you measured in excess of any limits set by clean air laws and regulations that apply where you live?

At the U.S. federal level, the most important regulation is the [National Ambient Air Quality Standards](#), set by the EPA under the Clean Air Act, which establish limits for sulfur oxides, nitrogen oxides, particulate matter (PM10 and PM2.5), lead, carbon monoxide, and ozone.

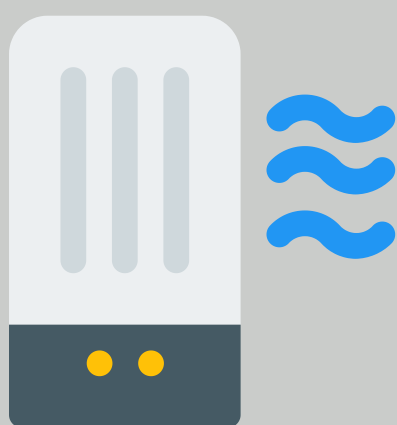
Action

If you find dangerous levels of air pollution and decide you want to do something about it, there are several possibilities for further action.

To address pollution within your school, the most immediate action that can be taken is for the school to purchase air purifiers and place them in classrooms and other indoor locations where students spend extended periods of time, if they haven't done so already. More information on options for air purifier vendors and models, and how to pick the best one for your school, can be found online.



To persuade your school to invest in an air purifier, you should arrange a meeting with your school administration and present your data and subsequent research. Further tactics, if necessary, could include writing a petition and collecting signatures from your classmates and teachers, speaking at a school board or similar meeting, and enlisting the support of some of the stakeholders described above.



Taking action on air pollution that you may have identified in your broader community is more complicated. Air pollution in any given neighborhood can have multiple potential sources, and there is no one-size-fits-all approach. If there is any general rule, it is that it is best to have as broad a coalition as possible, to increase your collective power and enable you to hear a diverse range of opinions and develop solutions that all interested parties can support. The support of the stakeholders listed above is crucial.

In the United States, many of the relevant policy decisions are made at the local level.

A good place to start is with the city council or (in some jurisdictions) a local agency responsible for air quality regulation. The latter can be a city-level or county-level agency; the State of California is divided into 35 air districts with the power to regulate air pollution.

Ultimately, you should remember that you know your community better than anyone from outside can, and you and those who work with you should think about the best way forward to meet your community's specific needs.



In the words of Margaret Mead, “Never doubt a small group of thoughtful, committed citizens can change the world – indeed, it is the only thing that ever has.”