



# Air Quality Classroom Resources

## Compiled by DES Air Resources Division

### Curriculum Guides, Lessons & Activities

Air Pollution: What's the Solution? Explore ground-level ozone pollution through interactive online teaching unit for Grades 6-9 ([www.k12science.org/curriculum/airproj/](http://www.k12science.org/curriculum/airproj/) )

AIRNOW Student /Teachers Air Quality Resources (<http://www.airnow.gov/index.cfm?action=student.index> )

Air Quality Education Program, Delaware Department of Natural Resources and Environmental Control – Air Quality Management Section (2000) ([www.dnrec.state.de.us/DNREC2000/Divisions/AWM/aqm/education/educationprogram.htm](http://www.dnrec.state.de.us/DNREC2000/Divisions/AWM/aqm/education/educationprogram.htm))

Biodiesel Curriculum Guide, Grades 4-12 ([www.biodiesel.org/pdf\\_files/Biodiesel\\_Curriculum\\_Schools.pdf](http://www.biodiesel.org/pdf_files/Biodiesel_Curriculum_Schools.pdf))

Climate Change – What You Can Do, EPA's School Resource Page for Students, Educators and Administrators, ([www.epa.gov/climatechange/wycd/school.html](http://www.epa.gov/climatechange/wycd/school.html) )

Climate Literacy Network (<http://climateliteracynow.org/> )

Clean Air Lesson Plans, Grades 4-8 – Georgia's Clean Air Campaign ([www.cleanaircampaign.com/for\\_schools/clean\\_air\\_lesson\\_plans/](http://www.cleanaircampaign.com/for_schools/clean_air_lesson_plans/))

Energy Star – Educate Students ([www.energystar.gov/index.cfm?c=change\\_light.changealight\\_educate](http://www.energystar.gov/index.cfm?c=change_light.changealight_educate) )

Extraordinary Road Trip. Eco-driving tips and understanding the issues. ([www.extraordinaryroadtrip.org/](http://www.extraordinaryroadtrip.org/) )

Northeast Sustainable Energy Association (<http://www.nesea.org/k-12/> ) Educational materials about Energy and Transportation, including “Cars of Tomorrow and the American Community,” “Getting Around Clean and Green,” “Future Wheels for a Sustainable America,” and “Getting Around Without Gasoline.”

In the Air, Tools for Learning About Airborne Toxics Across the Curriculum. Missouri Botanical Gardens' EarthWays Center and EPA. ([www.intheair.org](http://www.intheair.org) )

Indoor Air Quality “Tools for Schools” ([www.epa.gov/iaq/schools/teachers.html](http://www.epa.gov/iaq/schools/teachers.html) )

Energy Education and Training, US Dept. of Energy, Energy Efficiency and Renewable Energy ([www1.eere.energy.gov/education/](http://www1.eere.energy.gov/education/) )

National Energy Foundation's Energy Education Links ([www.neff.org/educators.html](http://www.neff.org/educators.html) )

National Renewable Energy Laboratory education programs ([www.nrel.gov/education/](http://www.nrel.gov/education/) )

New Jersey's Air Quality Education page (<http://www.nj.gov/dep/seeds/airqed/index.htm> )

Planet Polluto. Interactive activity for elementary students. ([www.planetpolluto.com/](http://www.planetpolluto.com/) )

Project A.I.R.E. EPA Region 1 Student and Teacher air resources webpage ([www.epa.gov/region01/students/teacher/aire.html](http://www.epa.gov/region01/students/teacher/aire.html) )

## Videos

EPA Region 1 Video Lending Library (<http://yosemite.epa.gov/r1/videolen.nsf/MainForm> )

## Annual Environmental Events

January: National Radon Month ([www.epa.gov/radon/nram/index.html](http://www.epa.gov/radon/nram/index.html) )

April: National Car Care Month (<http://carcare.org/NCCM> )

April 22 – Earth Day (<http://earthday.gov/> )

May:

Bike/Walk to Work Week ([www.bwanh.org](http://www.bwanh.org))

Tour de Sol (visit Northeast Sustainable Energy Association, [www.nesea.org](http://www.nesea.org))

Air Quality Awareness Week (mid-May) ([www.epa.gov/airnow/airaware/airaware.html](http://www.epa.gov/airnow/airaware/airaware.html) )

Asthma Awareness Month (<http://www.epa.gov/asthma/awm/index.html> )

## Classroom Presentations Provided by DES

Air Quality Monitoring – Overview of the six criteria air pollutants that are monitored in NH in accordance with the Clean Air Act. Focus is on Ozone and Particle Pollution. (Grades: 5-12, Duration: 1-1.5 hours)

The Air Quality and Energy Connection – Explores relationship between energy and air quality. Focus is on how individuals can make every day behaviors to keep the air clean. (Grades: K-12, Duration: 1-1.5 hours)

Climate Change – Scientific evidence supports the theory that the climate is changing rapidly as a result of human activity. Explains why scientists are concerned for our future, and what governments, businesses, and individuals can do to try to reverse this change.  
(Grades: 5-12 Duration: 1-1.5 hours)

Acid Rain – Air and water are intricately connected. Focus is on where air pollution comes from, how “acid rain” was discovered, and how our communities are being affected. (Grades: 4-12, Duration: 1-1.5 hours)

Ground-Level Ozone – “Smog” (ground-level ozone) is perhaps our most challenging air pollution problem. Focus is on the health effects of ground-level ozone, what the government is doing to reduce it, what you can do to protect your health, and how you can help reduce pollutants that form ozone. (Grades: 2-12, Duration: 1-1.5 hours)

Toxic Air Pollutants – Clean Air Act requires monitoring of six criteria air pollutants, however NH is concerned with over 800 toxic air pollutants.

## Additional School and Extracurricular Activities

Clean Air Zones for Schools

([http://des.nh.gov/organization/divisions/air/tsb/tps/msp/irc/categories/education.htm#school\\_bus](http://des.nh.gov/organization/divisions/air/tsb/tps/msp/irc/categories/education.htm#school_bus) )

Pack Monadnock Air Monitoring Station Field Trip, Peterborough, NH (contact DES Air Resources Education and Outreach staff)

Air Quality Teacher's Toolkit (contact DES Air Resources Education and Outreach staff)

## **For More Information**

DES Air Resources – Main Web Site: <http://des.nh.gov/organization/divisions/air/index.htm>

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*New Hampshire's Educators – Doing Our Share For Clean Air!*

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