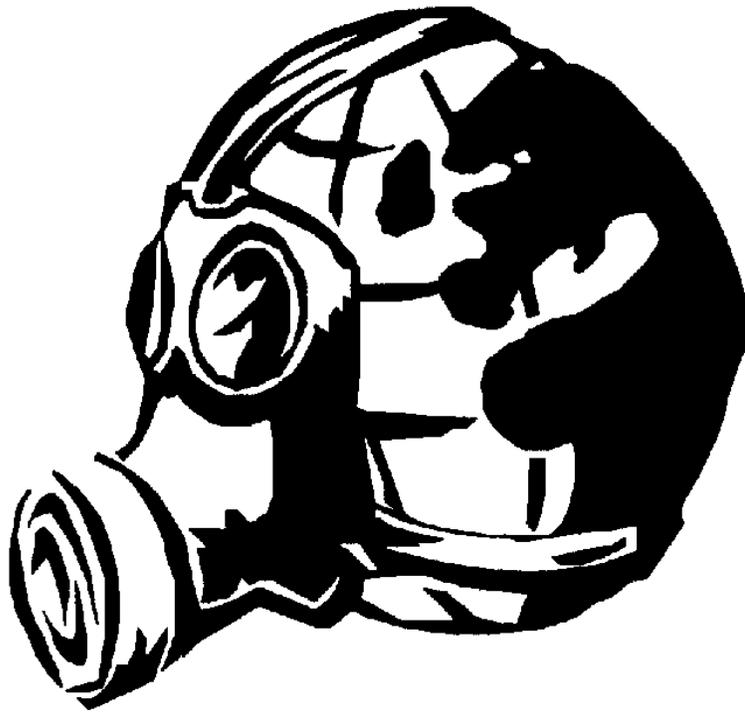


**MEDICAL STUDENTS
FOR EARTH:
Environmental Health
Activism for
Medical Students**



amsa[®]
American Medical
Student Association

MEDICAL STUDENTS FOR EARTH:
Environmental Health Activism
for Medical Students

by

AMSA Task Force on
Occupational and Environmental Health
Association of
Occupational and Environmental Clinics

Tamara Petrac, Editor
1995-96 National Coordinator
AMSA Task Force on
Occupational and Environmental Health

Copyright 1997, American Medical Student Association &
Association of Occupational and Environmental Clinics



American Medical Student Association
Reston, Virginia

Contents

	Page
1. Introduction	4
What is environmental health?	
Why is it important to you as a medical student?	
2. “Just Add Water” Projects	6
3. Contact Organizations	13
4. Rainbow of Knowledge	17
Books, Journals, Internet	
5. References	18

Introduction

Thinking of Us and the Earth

At an environmental conference, I heard a striking poem about how, although we think of ourselves as “separate,” we are intricately intertwined with the earth. We owe all we are to the earth. And now with the size of our population and our technology, we hold the future of the earth and our own future in our hands. Hopefully, with the understanding that we are part of the life cycle, we will be able to mold a future that will sustain the environment and ourselves. As medical students and as future health professionals, we can use our knowledge, interests and activism to improve the environmental health of our patients. I applaud all of you who are taking an active interest in learning about environmental health and are making strides to help make a difference. Join the environmental movement and “THINK GLOBALLY, ACT LOCALLY.” Even one drop of change can stir the whole water.

Know Your Environmental Health

Environmental health is about the way the environment affects our health and how we in turn affect the health of the environment. It includes the effects of the work place. “The public is increasingly concerned and knowledgeable about environmental health hazards and wants answers from their physicians. Unfortunately, physicians often lack adequate, appropriate information and training with respect to environmental risks and health.”¹ Therefore, it makes sense that all primary care physicians should at least be able to identify possible occupationally or environmentally induced conditions and make appropriate referrals.

As a medical student, you should be learning about the influence of the environment and environmental agents. You should be able to recognize the signs, symptoms and sources of environmental illness. You should be able to identify and access information for your patient and discuss risks.² How much have you learned about this area in your training so far? In 1992, only 66 percent of medical schools required six hours of study and fewer than 22 percent required in-residency training.³ However, as the

primary physician is the first doctor most people see and the problems concerning our environment continue to grow, we must all have a rudimentary knowledge of environmental health to be truly competent physicians in the future. We should also become active in making our own small changes to help affect our environment.

AMSA's Occupational and Environmental Health Group

AMSA's Occupational and Environmental Health group brings medical students to the forefront of the exciting changes and frustrating new issues that threaten the health of the human race every day. The goal of the task force is to educate medical students about environmental health, provide resources and encourage activism. It was founded in 1973 in response to a growing concern about the profound effects that the environment plays in world health, community health, our health, the health of our patients and the future health of humanity.

This booklet will hopefully serve medical students who ask, "What can I do?" and to educate those who have no clue as to what—and how important—environmental health is.

ENJOY!

Tamara Petrac, Editor

“JUST ADD WATER” PROJECTS

These projects follow the axiom KISS (Keep it simple, stupid!) for all you busy medical students out there. **Note:** The addresses and phone numbers for organizations mentioned in this section can be found in the “Contact Organizations” section on page 17.

1. PLANT A TREE

It will beautify the area, provide soil support, increase oxygenation of the atmosphere and it’s fun.

- a. **Contact** the American Forestry Association, a citizen’s conservation group. They sponsor a campaign called Global Releaf whose goal is to educate people about environmental improvement and the greenhouse effect. The greenhouse effect can be alleviated by increasing the number of trees and forests. Another resource is an organization called Tree People.⁴
- b. Determine a **location**, hopefully with help from the above organizations, or contact local community or local environmental agencies. Many of these organizations sponsor tree-planting activities and simply need volunteers.
- c. Contact local nurseries, garden centers, horticultural societies, etc. to see if they would **support** your efforts.
- d. Plant and have **fun**.

2. CELEBRATE EARTH DAY

Earth Day is held in April each year. Celebrations can include organizing a run, bringing in speakers, exhibits, films, or becoming involved with the events in your city.

3. LITTER WALK

Sponsor a walk through the local forest preserve, your campus or a

park, and have people pick up litter. You can make it educational by having informational posts along the way.

4. RECYCLING

Recycling is already implemented at most medical schools, and if it isn't, it surely should be.

- a. **Contact** local recycling centers and find out what is being recycled. Go see how it's done.
- b. Begin by **organizing** your own recycling group and delivery system, and talk to **medical center** administrators about beginning a recycling program.
- d. **Contact** the Environmental Defense Fund Recycling Hotline at 800-CALLEDF, the local EPA regional office, or the U.S. Environmental Protection Agency, Office of Solid Waste Management Programs.

5. TRIPS TO EXPAND YOUR HORIZONS

It is always better to learn by seeing and experiencing.

- a. Visit a dump site—Consider location, history (what's in there), environmental testing and who owns it.
- b. Visit an energy plant—Consider cost, waste, alternatives.
- c. Visit water treatment plants—Consider effectiveness, alternatives, problems.
- d. Explore nature—Contact the local Sierra Club, or just take a walk in a local park or nature preserve.
- e. Consider the effects of pesticides—Take a migrant farm worker health tour. Contact the National Advisory Council on Migrant Health.
- f. Visit a local industry—Contact the Association of Occupational and Environmental Clinics (AOEC).

6. POLITICAL

If you'd like to become active in the political arena, **groups** like the AMSA Occupational and Environmental Health Task Force, Physicians for Social Responsibility (PSR) and Greenpeace are up your alley. You could start a petition. Contact your local legislator. Create a community concern group.

- a. Before you begin, be sure you have the relevant information. Become informed about local, state and federal legislation. You can get help with this from the above organizations and the EPA.
- b. Write letters and organize letter campaigns to support the environment. Lobby your local, state or federal representatives.
- c. Support candidates who will vote to protect the environment. Contact National Environmental Scorecard or the League of Conservation Voters.

7. LOOK TO YOUR MEDICAL SCHOOL AND MEDICAL CENTER

- a. Conduct a campus-wide **environmental audit**. How is the campus contributing to environmental degradation through its own activities or through the support of companies that pollute?⁵
- b. Giving the results to the campus authorities will encourage them to change their activities.
- c. Hospital waste—Ask to see what the hospital does with its waste and how much it produces. Hospital waste incineration is the number one cause of the dioxins that are being blamed for decreased sperm counts worldwide and other endocrine changes seen in the news. At **Johns Hopkins Medical School**, students collect discarded but still usable supplies from operating rooms (e.g., gloves) and send them to other countries to use. Now we just have to get hospitals to decrease excess waste.

8. ENVIRONMENTAL HEALTH EDUCATION

- a. Demand incorporation of environmental health into the **curriculum**. The Institute of Medicine has a book called *Environmental Medicine* which has case studies that are made to be incorporated in a medical student's education. We should not miss this important element in our medical education, because we would then enter the medical force unaware of the effects the environment has on our patients.
- b. **Healthy Environment/Healthy Me**—Go out to the schools and teach **school children** about the environment, environmental health and what they can do about it. In this way, not only do the children learn and then teach their parents, but we as medical students become more aware of the environmental health issues and the role of the community. For **educational materials**, you can **contact** the AMSA Occupational and Environmental Health Task Force [via AMSA at (703) 620-6600] or the following organizations.⁶
 - a. Environmental and Occupational Health Sciences Institute—Has environmental education resources for grades 1-12 with videos.
 - b. Center for Marine Conservation—Has resources on the protection of whales, seals and sea turtles and offers a kit on cleaning up beaches and preventing “marine debris.”
 - c. Environmental Protection Agency—The Office of Community and Intergovernmental Relations (A-108 EA) provides education materials.
 - d. *Connected World: An Environmental Education and Resource Guide*. Available from Earth Share, 3400 International Drive, NW Suite 2K, Washington, D.C. 20068, (800) 875-3863.

9. PROTECT STORM DRAINS

The garbage on the street gets swept into storm drains when it rains and it all dumps directly into the waters without any filtering. It then pollutes the waters. You can help by joining the “**Million Points of**

Blight” campaign of the Center for Marine Conservation (CMC). Simply stencil “Don’t Dump; Drains to Waterway” near all the storm drains in your area. CMC will send you the stencils and an information packet free.⁷

10. HAZARDOUS WASTE

If you want to get active in this area, you pretty much have to join in with the activities of an established organization, such as the following:

- a. Citizen’s Clearinghouse for Hazardous Wastes
- b. Greenpeace
- c. Association of Occupational and Environmental Clinics (AOEC)
- d. Agency for Toxic Substances and Disease Registry
- e. Environmental Protection Agency

11. DIRTY WATER

Get involved helping clean the water or the beaches in your area. Organizations you might want to contact would include Greenpeace and Clean Water Action.

12. HELP THE RAINFOREST

You can educate people with films or the Adopt-an-Acre Program. The Adopt-an-Acre Program is run by the World Wildlife Foundation in Canada.

13. WORKING FOR ENVIRONMENTAL JUSTICE

- a. Learn how to take an occupational and environmental health history.
- b. Learn about community concerns, hazards and dumps in your area.
- c. Find information on the Internet.

- d. Participate in community health education, such as lead screenings.
- e. Get politically involved using the M.D. clout.
- f. Look to yourself and the medical center for change.

14. EXTERNSHIPS/ INTERNSHIPS

One of the best ways to become knowledgeable and active is to work in the area of occupational and environmental health.

- a. AMSA OEHTF has published a **clerkship directory**. Call the AMSA Resource Center at (703) 620-6600, ext. 217, or check your dean's office.
- b. OEHTF, with the Association of Occupational and Environmental Clinics (AOEC), offers **summer paid internships** in occupational and environmental medicine. The Agency for Toxic Substances and Disease Registry (ATSDR) and the National Institute for Occupational Safety and Health (NIOSH) also helped to develop this program. For more information and applications contact the AOE, 1010 Vermont Ave., NW #513, Washington, D.C. 20005, (202) 347-4976, Fax (202) 347-4950.

15. STUDENT ENVIRONMENTAL ACTION PROGRAMS

The University of North Carolina, Chapel Hill, has an organization that networks, shares information and support, and provides a monthly magazine on successful environmental projects. Contact Student Environmental Action Coalition.⁸

16. GET INVOLVED WITH THE AMSA OCCUPATIONAL AND ENVIRONMENTAL HEALTH TASK FORCE (OEHTF)

Contact AMSA Membership Services to join: (800) 767-2266.

17. YOURSELF

There are volumes of books written on how you can help the environment by making small changes in your life. Pick up one of the recommended books and learn what small things you can do to make a big impact.

CONTACT ORGANIZATIONS

American Forestry Association (AFA)

PO Box 2000
Washington, DC 20013
(202) 667-3300

American Medical Student Association (AMSA)

Occupational and Environmental Health
1902 Association Drive
Reston, VA 20191
(703) 620-6600
Resource Center: ext. 217
Membership Services: (800) 767-2266

American Public Health Association (APHA)

4015 15th St.
Washington D.C.
(202)789-5600

Association of Occupational and Environmental Clinics (AOEC)

1010 Vermont Ave., NW, #513
Washington, DC 20005
(202) 347-4976
FAX (202) 347-4950

Agency for Toxic Substances and Disease Registry

1600 Clifton Road, NE
Atlanta, GA 30333
(404) 639-0720

Center for Environmental Education

881 Alma Real Drive, Suite 300
Pacific Palisades, CA 90272

Environmental and Occupational Health Sciences Institute

681 Frelinghuysen Road
PO Box 1179
Piscataway, NJ 08855-1179
(908) 445-0110
FAX (908) 932-0125

Center for Marine Conservation

1725 DeSales Street, NW
Washington, DC 20036
(202) 429-5609

Citizen's Clearinghouse for Hazardous Wastes

PO Box 926
Arlington, VA 22216
(703) 237-2249

Clean Water Action

733 15th St. NW, Suite 1110
Washington, DC 20005
(202) 547-1196

Coastal States Organization

444 N. Capital St. NW, Suite 312
Washington, DC 20001

Environmental Action, Inc.

6930 Carroll Ave.
Takoma Park, MD 20912
(301) 891-1100

Environmental Defense Fund

257 Park Ave. South
New York, NY 10010
(212) 505-2100

Greenpeace

1436 U St., NW
Washington, DC 20009
(202)462-1177

National Association of Physicians for the Environment

6410 Rockledge Drive, Suite 412
Bethesda, Maryland 20817
(301) 571-9791
Fax (301) 530-8910

National Environmental Scorecard

League of Conservation Voters
1707 L. Street, NW, Suite 550
Washington D.C. 20036
(202) 785-VOTE

Physicians for Social Responsibility (PSR)

Jan Stout, Director of Environmental Programming
1101 Fourteenth St., NW
Suite 700
Washington, DC 20005
(202) 898-0150
FAX (202) 898-0172

Sierra Club

730 Polk St.
San Francisco, CA 94109
(415) 776-2211

Student Environmental Action Coalition (SEAC)

P.O Box 1168
Chapel Hill, NC 27514
(919) 967-4600
FAX (919) 967-4648

National Advisory Council on Migrant Health

Bureau of Primary Health Care
Parklawn Bldg., Room 7A-55
5600 Fischers Lane
Rockville, MD 20857
(301) 443-1153.

The Nature Conservancy

1815 N. Lynn St.
Arlington, VA 22209

The Oceanic Society

1536 16th St., NW
Washington, DC 20036

Tree People

12601 Mulholland Drive
Beverly Hills, CA 90210
(818) 769-2663

U.S. Environmental Protection Agency

401 M St., SW
Washington, DC 20460
(202) 382-4627

United Nations Environment Programme

North American Office
Room DC2-0803
United Nations
New York, NY 10017
(212) 963-8093

World Wildlife Fund

1250 24th St., NW
Washington, DC 20037,
(202) 293-4800

RAINBOW OF KNOWLEDGE

This is just a small sampling. There are many great occupational and environmental health books out there for you to find in bookstores and libraries.

Carson, Rachel. *Silent Spring*. This book started the environmental revolution.

Gore, Al. *Earth in Balance: Ecology and the Human Spirit*. A good book on environmental politics.

Rosenstock and Cullen. *Textbook of Occupational and Environmental Medicine*.

Steger, Will and Jon Bowermaster. *Saving the Earth: A Citizen's Guide to Environmental Action*. New York: Alfred A. Knopf, 1990.

New Solutions—A Journal of Environmental and Occupational Health Policy.

Journal of American Public Health Association (JAPHA).

Rachel's Newsletter—An on-line environmental newsletter. It is put out by the Environmental Research Foundation. Their fax number is (410) 263-8944, and their internet address is <erf@rachel.clark.net>.

Other Internet Sites:

Association of Occupational and Environmental Clinics (AOEC) and Duke University—Gopher: gopher.mc.duke.edu

Duke/AOEC, OEM List—World Wide Web Site:
<http://occ-env-med.mc.duke.edu/oem>

REFERENCES

1. *Environmental Medicine: Integrating a Missing Element into Medical Education*, ed. Andrew Pope, David P. Rall. Committee on Curriculum Development in Environmental Medicine, Division of Health Promotion and Disease Prevention, Institute of Medicine. National Academy Press, Washington, D.C., 1995, page 1.
2. *Environmental Medicine*, 3.
3. *Environmental Medicine*, 9.
4. *The Green Lifestyle Handbook: 1001 Ways You Can Heal the Earth*, ed. Jeremy Rifkin. Henry Holt & Company, New York, 1990, page 110.
5. MacEachern, Diane. *Save Our Planet*. Dell Publishing, New York, 1995, 136.
6. MacEachern, 138-139.
7. MacEachern, 163.
8. Hollender, Jeffery, with Linda Cathuer. *How to Make the World a Better Place: 116 Ways You Can Make a Difference*. W.W. Norton & Co, Inc., NY, 1995, page 152.