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## List Names Priority Health Conditions at Hazardous Waste Sites

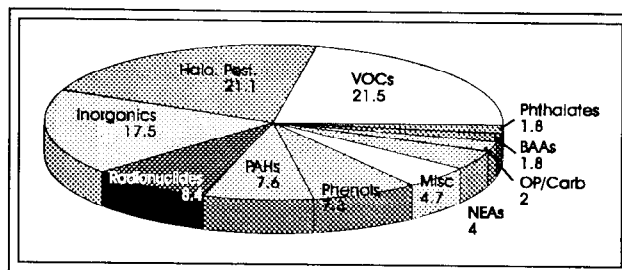
The possibility that their health may be affected by the proximity of hazardous waste sites is a concern of many Americans. The Environmental Protection Agency (EPA) reports that approximately 40 million persons in the United States live within 4-mile radii and about 4 million within 1-mile radii of the nearly 1,300 hazardous waste sites on the National Priorities List (NPL).<sup>1</sup> According to the Agency for Toxic Substances and Disease Registry (ATSDR), an estimated 4.1 million people live within a 1-mile radius of 725 NPL sites where population data were available—about 5,700 persons per site.

Because of potential health problems associated with these sites, ATSDR—as part of its Superfund mandate—has developed a list of the health effects most likely to result from exposure to hazardous substances, particularly as the result of releases from waste sites and chemical spills. ATSDR will use the list to assess whether adverse health effects have occurred and to study the relation between effects and specific exposures to hazardous substances.

Identification of the seven “priority health conditions” should also aid public health officials in setting priorities for epidemiologic research efforts. “By pointing out areas where more research is needed, we hope to improve the ability of the public health community to evaluate health risks for exposed populations,” says Dr. Jeffrey Lybarger, director of ATSDR’s Division of Health Studies. Recommended research approaches were announced in conjunction with the list (see box, page 2).

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**Classes of Priority Hazardous Substances.** The priority health conditions are health effects associated with exposure to priority hazardous substances. Major chemical classes into which the chemicals fall are shown above.

Key: VOC = Volatile Organic Compound, BAA = Benzidenes/aromatic amines, OP/Carb = Organophosphates/carbamates, NEA = Nitrosamines/Ethers/Alcohols, Misc. = Miscellaneous, PAH = Polycyclic Aromatic Hydrocarbon, Halo. Pest. = Halogenated Pesticides and related compounds

Development of the priority health conditions is linked to many prior ATSDR efforts. Since 1986, ATSDR has conducted public health assessments for more than 1,200 of the nearly 1,300 NPL sites and has conducted more than 85 health study activities. In addition, the Agency has evaluated the substances that pose the greatest human health hazards at NPL sites. To determine which substances would be the subjects of ATSDR’s *Toxicological Profiles*, the Agency and EPA jointly developed a priority list of 275 hazardous substances, based on 1) the frequency with which a substance was found at NPL sites, 2) the substance’s toxicity, and 3) the likelihood of human exposure to the substance (*Federal Register*, 56 FR 52166, October 17, 1991). One criterion for identifying priority health conditions was an association with exposure to these substances. The proportions of major chemical classes into which the 275 priority substances fall is shown above. Information from each of these activities was essential to identifying the health conditions that appear on the list of priority health conditions.

“We had to consider what the public health assessments tell us about which substances are found at NPL sites and which ones are most frequently associated with human contact. Then we needed information [from the *Toxicological Profiles*] about the probable health effects of such



contact. Finally, the priority health conditions will provide a plan for the actual health studies of humans," explains Dr. Lybarger.

The seven priority health conditions named are birth defects and reproductive disorders, cancers (selected anatomical sites), immune function disorders, kidney dysfunction, liver dysfunction, lung and respiratory diseases, and neurotoxic disorders. Where health outcomes from substances are unknown, it is believed that these are the health effects most likely to result.

ATSDR encourages public health workers and medical, and university-based researchers to address these priority health conditions; the results of such research should enable health professionals to provide health information to persons exposed to hazardous substances or who experience adverse health effects from such exposures. Further studies should provide critical information that can be used to reduce the burden of adverse health effects resulting from exposures to hazardous substances.

Additional information about the priority health conditions is available from Jeffrey Lybarger, MD, Director, Division of Health Studies, ATSDR, Mailstop E31, 1600 Clifton Road, NE, Atlanta, Georgia 30333; telephone (404) 639-6200.

<sup>1</sup> Cited in: National Research Council. Environmental epidemiology. Vol 1: Public health and hazardous wastes. Washington, DC: National Academy Press, 1991:2.

**Priority Health Conditions**  
(In alphabetical order)

**Birth defects and reproductive disorders**

**Cancers (selected anatomical sites)**

**Immune function disorders**

**Kidney dysfunction**

**Liver dysfunction**


**Lung and respiratory diseases**

**Neurotoxic disorders**

*ATSDR determined that the following research approaches should be used to examine priority health conditions:*

- Evaluation of the occurrence of adverse health effects in specific populations. *This includes ecologic epidemiology studies and evaluation of the incidence or prevalence of disease; disease symptoms; self-reported health concerns; and biological markers of disease, susceptibility, or exposure.*
- Identification of risk factors for adverse health effects from exposure to hazardous waste sites. *This includes hypothesis-generated cohort or case-control studies of potentially affected populations to identify 1) links between exposures and adverse health effects and 2) risk factors that may be mitigated by prevention actions.*
- Development of methods to diagnose adverse health effects. *This includes medical research to identify and validate new biological tests to be used to evaluate disease occurrence in potentially affected populations.*
- Diagnosis of adverse health effects in persons. *This includes clinical-based research to identify and evaluate diagnostic and treatment regimens that may benefit persons who develop adverse health effects resulting from exposure to hazardous substances.*

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lesson program includes a video, a teacher's guide with comprehensive lesson plans, student readings, and additional teacher preparation materials. The education program is designed to enable students to develop skills for addressing environmental problems in their communities.

The goal of the programs is to increase students' awareness that health is affected by more than individual practices and lifestyle. Personal and community health depends on the decisions and activities of businesses, governments, and other citizens.

The Resource Center also publishes *INFOletter: Environmental and Occupational Health Briefs*, a scientific newsletter written for the lay public that spotlights such key environmental health issues as the greenhouse effect, drinking water quality, and the health effects of lead. *INFOletter*, which is available by subscription, is distributed to industry, schools, physicians, employees, and the general public.

For more information or to order materials, please contact the Resource Center of the Environmental and Occupational Health Sciences Institute (EOHSI), Public Education and Risk Communication Division, 45 Knightsbridge Road, Piscataway, New Jersey 08854-3923; telephone (908) 463-5353; fax (908) 463-5133.

## Wisconsin

Primary care physicians practicing in the vicinity of Superfund sites are the target audience of an effort by the Wisconsin Department of Health and Social Services. To raise health professionals' interest in site-specific education programs, the Department mailed out general information about environmental health education opportunities available from the state. Approximately 300 physicians who received direct mailings requested information from the program and asked to be placed on the state's mailing list of "interested physicians." In addition, Wisconsin offered site-specific medical education sessions to hospitals and medical centers near Superfund sites.



During 1991, through a cooperative agreement with ATSDR, Wisconsin was able to offer the following grand rounds and seminars to 225 health professionals (including 90 community nursing students):

- "Environmental Contaminants of the Better Brite Site";
- "Identifying Sources of Environmental Contamination";

- "Communicating Chemical Exposure: Risk Communication";
- "Superfund Issues"; and
- "Environmental Health Issues in Wisconsin."

The Wisconsin project has developed numerous educational materials including chemical fact sheets, quick-reference fact sheets, site information sheets, and resource booklets. Approximately 2,500 Wisconsin physicians were reached by mailings during the last half of 1991.

Some examples of the materials distributed are a "Medical History Form," which guides physicians in taking a history of family environmental exposure; a "Risk Communication Checklist"; a "Land and Gas Reclamation Fact Sheet"; a "Kohler Site Fact Sheet"; and a "Muskego Site Information Sheet."

In 1992, Wisconsin plans to prepare six site information sheets for public meetings; to develop six chemical fact sheets; to conduct a general session on environmental exposure to toxic chemicals for the continuing medical education department at the University of Wisconsin; and to present five medical education sessions at medical centers located near Superfund sites.

For more information, please contact Mary Young, MSED, State of Wisconsin, Department of Health and Social Services, 1414 E. Washington, Room 96, Madison, Wisconsin 53703; telephone (608) 267-6844; fax (608) 267-3696.

## Calendar

### July

**Jul. 11-15: 1992 Canadian Institute of Public Health Inspectors/National Environmental Health Association (NEHA) International Environmental Health Conference and Exhibition, Winnipeg, Manitoba, Canada. Contact:** NEHA, 720 S. Colorado Blvd., South Tower, #970, Denver, CO 80222; telephone (303) 756-9090; fax (303) 691-9490.

### August

**Aug. 24-28: Dioxin '92: Twelfth International Symposium of Chlorinated Dioxins and Related Compounds, Tampere, Finland. Contact:** Virpi Castren, Institute of Occupational Health, Topeliuksenkatu 41a A, SF-00250, Helsinki, FINLAND; telephone (358 0) 474 7551; fax (358 0) 474 7548.

## From the States...

### Connecticut

Connecticut's Department of Health Services recently prepared public health assessments for two hazardous waste sites in Southington, Connecticut, on the National Priorities List (NPL). ATSDR's Health Activities Recommendation Panel (HARP) recommended health professional education for both sites. Connecticut plans a major education effort in Southington, using a number of education tools produced in the first year of its cooperative agreement with ATSDR. State health educators plan to conduct the following activities:



- Prepare site-specific fact sheets on both NPL sites. Distribute multiple copies of the fact sheets to local physicians and clinics for assistance in advising patients.
- Distribute to all local physicians copies of ATSDR's *Case Studies in Environmental Medicine* on primary contaminants of concern and Connecticut's *Environmental and Occupational Health Reference Guide*.
- Organize grand rounds at a local hospital to discuss site-related compounds and health assessment conclusions.
- Place copies of Connecticut's video, *The Exposure History: A Key to Better Care of Your Patients*, at the local health department, local library, and nearest hospital or clinic. Advertise the availability of the video through cover letters sent to all physicians and fliers placed in local hospital.
- Pilot-test CADA (Computer-Assisted Diagnostic Aid), a computer program designed to assist health professionals in evaluating health effects of exposures to toxins around Connecticut's NPL waste sites.
- Follow-up with a survey to measure increased physician awareness and response to the education efforts.

For more information, please contact Brian Toal, MSPH, Environmental Epidemiology and Occupational Health, State of Connecticut Department of Health Services, 150 Wash-

ington Street, Hartford, Connecticut 06106; telephone (203) 566-8167; fax (203) 566-1656.

### New Jersey

Teachers and students are discovering new ways to learn about environmental health and safety through innovative teaching tools



available from the Resource Center of the Environmental and Occupational Health Sciences Institute (EOHSI). EOHSI is sponsored by the University of Medicine and Dentistry of New Jersey (UMDNJ)-Robert Wood Johnson Medical School and Rutgers, the State University of New Jersey. The Resource Center is a joint endeavor of EOHSI and the New Jersey Department of Health.

"Today, with growing concern about such issues as the greenhouse effect, acid rain, radon, and hazardous waste, students must be prepared for a lifetime of learning about the environment," according to Dr. Audrey Gotsch, director of EOHSI's Public Education and Risk Communication Division, which includes the Resource Center.

The Resource Center, in Piscataway, New Jersey, distributes a wide range of materials including lessons for elementary and high schools, resource guides, videos on health and environmental issues, and fact sheets on such topics as radon, water quality, occupational health, recycling, and video display terminals. The Resource Center also provides training and consultation in the use of the curricular materials.

The Center's written material is prepared by faculty and staff of the UMDNJ-Robert Wood Johnson Medical School, Rutgers University, and the New Jersey Department of Health, with extensive input from groups that will be using the materials.

Two programs available from the Center are *Healthy Environment—Healthy Me*, created for elementary schools, and *The Environment and the Community*, designed for high schools. *Healthy Environment—Healthy Me* is a series of lessons on environmental health and safety for kindergarten through 6th grade, which includes eight videotapes geared toward each grade level. One video on recycling, "Alu-Man the Can," is aimed at students in grades K-3, while another on water pollution is targeted for grades 4-6.

*The Environment and the Community: Environmental Health Lessons for Grades 10-12* is aimed at increasing students' understanding of the many factors that affect the health and well-being of individuals and their community. This five-

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## September

**Sept. 22-24: Minimization and Recycling of Industrial and Hazardous Waste '92 Conference and Exhibition**, Arlington, Virginia. *Contact:* Hazardous Materials Control Resources Institute, 7237 Hanover Parkway, Greenbelt, MD 20770-3602; telephone (301) 982-9500; fax (301) 220-3870.

**Sept. 23-25: Ninth International Symposium on Epidemiology in Occupational Health**, Cincinnati, Ohio. *Contact:* Carlin C. Mills, Public Health Advisor, National Institute for Occupational Safety and Health, Robert A. Taft Laboratories, 4676 Columbia Parkway, Mailstop R16, Cincinnati, OH 45226; telephone (513) 841-4481; fax (513) 841-4540.

### Announcements

#### MEETINGS

##### Symposium on Data Methods

The Centers for Disease Control (CDC) and ATSDR Symposium on Quantitative Methods for Utilization of Multi-Source Data in Public Health will be held January 26-27, 1993, at the Hotel Nikko, Atlanta, Georgia.

For information regarding scientific content of the Symposium and short course, please contact G. David Williamson, PhD, Chair, 1993 CDC and ATSDR Symposium on Statistical Methods, Epidemiology Program Office (Mailstop C08), Centers for Disease Control, 1600 Clifton Rd, NE, Atlanta, Georgia 30333.

##### Symposium on Health and Environment

The U.S. Department of Energy; Batelle, Pacific Northwest Laboratories; and the Department of Environmental Health, University of Washington are sponsoring the 31st Hanford Symposium on Health and Environment. The symposium, which will be held October 20-23, 1992, in Richland, Washington, is entitled "The Laboratory and Epidemiology: The Development and Application of Biomarkers to the Study of Human Health Effects." For more information, please contact Dr. Ray W. Baalman, Life Sciences Center, MS K1-50, Batelle, Pacific Northwest Laboratories, Richland, WA 99352; telephone (509) 375-3665.

##### Conference on Chronic Disease Prevention and Control

The Centers for Disease Control (CDC), the Association of State and Territorial Health Officials, and the Association of State and Territorial Chronic Disease Program Directors will cosponsor the Seventh National Conference on Chronic

Disease Prevention and Control on October 21-23, 1992, in Salt Lake City, Utah. The Utah Department of Health will host the conference, which is open to the public. The conference will emphasize interactions among federal, state, and local health departments; voluntary health agencies; and professional organizations. Additional information is available from the National Center for Chronic Disease Prevention and Health Promotion, Mailstop K43, CDC, 1600 Clifton Rd., NE, Atlanta, GA 30333; telephone (404) 488-5390; fax (404) 488-5962.

##### Environmental Health Exchange in Warsaw, Poland

The United States-Central and Eastern Europe Exchange for Environmental and Occupational Health plans to hold its Third Annual Symposium in Warsaw, Poland, in late June or early July 1992. The working title for the conference is "Protecting Workers, the Environment, and Health in a Market Economy: Translating Science into Policy and Action."

The meeting will involve more than 100 scientists and policymakers from Central and Eastern Europe, as well as representatives from Western Europe and the United States. There will be plenary presentations, working group sessions, site visits, a poster session, and social activities. In addition, the meeting will be preceded by a week-long study tour to Krakow and Lodz for American participants.

For more information about the symposium, please contact Dr. Barry S. Levy, Director, Program for Environment and Health, Management Sciences for Health, 400 Centre St., Newton, MA 02158; telephone (617) 527-9202; fax (617) 965-2208.

##### NIOSH Occupational Health Symposium

The Ninth International Symposium on Epidemiology in Occupational Health will be held in Cincinnati, Ohio, on September 23-25, 1992. The program will include presentations on epidemiological methods, occupational surveillance, cancer, reproductive effects, respiratory diseases, musculoskeletal disorders, occupational injuries, and exposure assessment. Workshops on the following topics will be held the day before the symposium: 1) biomarkers and occupational epidemiology; 2) reproductive and developmental epidemiology; 3) health studies in the aluminum industry; 4) retrospective assessment of occupational exposure; and 5) methods in occupational epidemiology.

For further information, please contact Carlin C. Mills, Public Health Advisor, National Institute for Occupational Safety and Health (NIOSH), Robert A. Taft Laboratories, 4676 Columbia Parkway, Mailstop R16, Cincinnati, Ohio 45226; telephone (513) 841-4481; fax (513) 841-4540.

## **COURSES**

### **Deep South Center**

The Deep South Center for Occupational Health & Safety, sponsored by the National Institute for Occupational Safety and Health (NIOSH) at Auburn University and at the University of Alabama at Birmingham, offers graduate and postgraduate training in occupational health nursing, industrial hygiene, safety engineering, and occupational medicine. The Center also provides continuing educational programs to upgrade the skills of professionals working in these disciplines. One upcoming program is described below:

*Training for the emergency responder/hazardous materials specialist, June 15-19, 1992, in Birmingham, Alabama.* This is an intensive 5-day, 45-hour course. Candidates are hazardous materials technicians or those who have expertise in an area of response to a hazardous materials incident. Topics include Regulatory Review, Incident Management and Planning, Toxicology, Risk Assessment, and Termination Procedures. Tuition: \$425.

For more information, please contact Cherie Hunt, Deep South Center for Occupational Health & Safety, University of Alabama at Birmingham, 501 Tidwell Hall, 720 South 20th St., UAB Station, Birmingham, AL 35294-0008; telephone (205) 934-7178; fax (205) 975-6341.

### **Johns Hopkins Hazard Control Training**

The Department of Environmental Health Sciences of the School of Hygiene and Public Health at Johns Hopkins University is presenting *Control of Biohazards in the Research Laboratory, July 13-17, 1992.* The training is designed to provide instruction on the recognition and control of hazards in research involving infectious agents, oncogenic viruses, recombinant DNA, chemical carcinogens, and other toxic agents. The course will provide lectures and demonstrations on the practices and procedures of hazard control. The class is sponsored by Johns Hopkins Medical Institutions' Office of Safety and Environmental Health.

For further information and registration procedures, please contact Dr. Jacqueline K. Corn, Director, Continuing Education Center, Department of Environmental Health Sciences, Johns Hopkins University School of Hygiene and Public Health, 615 N. Wolfe St., Rm. 6001, Baltimore, MD 21205; telephone (410) 955-2609; fax (410) 955-9334.

### **Harvard Short Courses**

The Harvard School of Public Health Office of Continuing Education is offering the following short courses for health

care professionals in the areas of occupational health and safety, medical sciences and management, nuclear safety and radiation protection, and environmental management.

*Testing & Certification of Biological Safety Cabinets, August 17-21, 1992.* This course provides biological safety officers, industrial hygienists, and other laboratory professionals with instruction in the basic practices of the operation, calibration, and testing of biological safety cabinets. Topics include properties of aerosols, hazardous waste disposal, air measurement and ventilation, and electrical safety. The program will emphasize work with full-scale equipment in simulated field situations. Enrollment limited to 30. Fee: \$1300.

*Emergency Planning for Chemical Accidents, August 3-7, 1992.* This course covers basic emergency planning requirements, including Superfund Amendments and Reauthorization Act of 1986 (SARA) and Title III; toxicological evaluation of chemicals associated with industrial processes; design of an emergency plan; data acquisition; environmental damage control and medical treatment; models for dose projections and assessments; emergency notification procedures, including public relations; and computer-aided accident and response modeling. Expected attendance: 50. Fee: \$1025.

*Occupational & Environmental Radiation Protection, August 17-21, 1992.* This course provides radiation safety officers and occupational health professionals with the fundamentals for working safely with radiation. Topics include atomic structure and radioactivity, sources and types of ionizing radiation, biological effects of exposures, external and internal radiation hazards, radiation monitoring and instrumentation, protection standards and dosimetry, and inspection and radiation guidelines. Expected attendance: 60. Fee: \$1075.

For further information on these and other programs, please contact: Mary F. McPeak, Office of Continuing Education, Harvard School of Public Health, 677 Huntington Ave., Boston, MA 02115; telephone (617) 432-1171; fax (617) 432-1969.

### **University of North Carolina Training**

The North Carolina Occupational Safety and Health Educational Resource Center in Chapel Hill, North Carolina, is offering the following training opportunities during 1992.

*Building Inspection and Management Planning for Asbestos, July 20-24, 1992.* This is comprehensive training required for conducting inspections for asbestos-containing materials and preparation of management plans addressing asbestos in public and private schools.

## Publications

### Directory of Environmental Sources

A directory of national environmental sources being offered by INFOTERRA brings the global environmental community closer together. INFOTERRA, the international environmental information exchange network coordinated by the United Nations Environment Programme, was established in 1975 following recommendations from the Stockholm Conference. The INFOTERRA network currently comprises a partnership of 140 countries that have designated national focus points to promote the exchange of environmental information. (In the United States, the Environmental Protection Agency has been designated the national focal point.)

Each national focal point prepares a "Who's Who" of environmental information sources in its country and selects the best sources for inclusion in the INFOTERRA International Directory of Environmental Sources. Several countries, including Bangladesh, Canada, China, Guyana, Nepal, Thailand, and the United States, publish their own national directories. Together with the international directory, these national directories serve as a primary reference tool for the INFOTERRA network in its mission to provide reliable, comprehensive, and timely environmental information to requestors.

The INFOTERRA/USA Directory of Environmental Sources lists 445 national information sources that have agreed to provide environmental information free or at a minimal fee to international requestors. Each entry contains contact information, fields of environment expertise, and a description of services. The sources are grouped by the type of organization originating the information: federal, state, or local government; academic; or nongovernmental interest groups. For ease of access, both alphabetical and subject indexes are provided.

A limited number of copies of the U.S. directory are available from INFOTERRA/USA, U.S. Environmental Protection Agency, PM-211A, 401 M St., SW, Washington, DC 20460; telephone (202) 260-5917; fax (202) 260-3923. Copies may also be ordered from the National Technical Information Service (NTIS), U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161; telephone (703) 487-4650; fax (703) 321-8647; NTIS document number: PB 92-102433.

*15th Annual Occupational Safety and Health Summer Institute, Williamsburg, Virginia, August 10-14, 1992.* Some of the courses offered include the following: Fundamentals of Industrial Hygiene, Nonionizing Radiation and Fields, Fundamentals of Occupational Safety, Industrial Ventilation, Biosafety, Workplace Ergonomics, and Federal Workers' Compensation Programs. Each course will be 2 to 5 days in duration.

*Emergency Response to Hazardous Chemicals, September 9-11, 1992.* This course will address various aspects of emergency response to hazardous chemical incidents.

*Comprehensive Industrial Hygiene Review, September 13-18, 1992.* This course is designed for practicing industrial hygienists seeking a review of the field or preparing to take the American Board of Industrial Hygiene (ABIH) core/comprehensive examination.

*Exposure Assessment with LOGAN, September 28-30, 1992.* This course will address the role of LOGAN (lognormal analysis) in exposure assessment. Basic skills in using the LOGAN computer will be taught. Statistics will be emphasized.

For more information, please contact Larry D. Hyde, Director, Continuing Education and Technical Assistance, Occupational Safety and Health Educational Resource Center, University of North Carolina, 109 Conner Dr., Suite 1101, Chapel Hill, NC 27514; telephone (919) 962-2101; fax (919) 966-7579.

### Midwest Consortium

The Midwest Consortium for Hazardous Waste Worker Training is one of 11 training programs funded in 1986 by the National Institute of Environmental Health Sciences. The Consortium was created to offer training programs for hazardous waste site workers, employees at treatment and disposal facilities, and emergency responders employed in either the public or private sector in Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin. In 1990, the program was expanded to include two national unions—the United Brotherhood of Carpenters and Joiners and the American Federation of State, County, and Municipal Employees—and to establish training centers in Minnesota and Tennessee.

For more information and training schedules, please contact Penny Schmitgen, Assistant Director, University of Cincinnati, Department of Environmental Health, 3223 Eden Ave., Cincinnati, OH 45267-0056; telephone (513) 558-0528; fax (513) 558-1756.

## Symposium Proceedings Available

The volume of proceedings for the 1991 symposium, "Air Pollution in Central and Eastern Europe: Health and Public Policy," held June 14-19 in Frydek-Mistek, Czechoslovakia, is now available to the public. The 258-page book contains more than 30 presentations by distinguished scientists and policymakers from the region, as well as the reports of 17 working groups, and appendices on conference participants and organizations active in environmental and occupational health.

The proceedings are available for \$24 in the United States (\$19 plus \$5 for postage and handling) and \$29 outside the United States from "MSH," Marsha D. Spitzer, Senior Program Assistant, Program for Environment and Health, Management Sciences for Health, 400 Centre St., Newton, MA 02158; telephone (617) 527-9202; fax (617) 965-2208.

## New Guidebook Available from NEHA

The National Environmental Health Association (NEHA) has produced *A Learning Guide for State/Local Drinking Water Agreements* that focuses on the cooperative efforts between state and local governments regarding responsibilities for compliance with the Safe Drinking Water Act (SDWA). The guidebook offers an extensive review of the best aspects of various state/local drinking water arrangements and contains comprehensive checklists for drafting and implementing agreements.

Copies of *A Learning Guide* are available to NEHA members for \$18, nonmembers, \$21, from NEHA, 720 S. Colorado Blvd., #970, Denver, CO 80222-1925; telephone (303) 756-9090; fax (303) 691-9490. (Shipping and handling is \$3 for one item, \$1 for each additional item.)

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