



## **Position Statement Health Professionals and Environmental Health Education**

With the widespread presence of environmental health hazards in our communities and in our world, health professionals must be prepared to diagnose, treat and prevent health conditions related to environmental exposures in their patients and communities. The public expects their health care providers to be prepared to deal with health problems related to environmental health hazards, but all too often providers are not equipped to respond effectively.

Environmental health is defined as "freedom from illness or injury related to exposure to toxic agents and other environmental conditions that are potentially detrimental to human health."<sup>1</sup> Poor environmental quality is estimated to be directly responsible for approximately 25% of all preventable ill health in the world.<sup>2</sup> In 1998 and 1999, 80% of crop farms and 74% of households used pesticides.<sup>3</sup> In 2001 nearly 40% of American children lived in counties that exceeded the eight-hour ozone standard at least one day.<sup>4</sup> In the U.S., the rates of asthma increased 73.9% during 1980-1996.<sup>5</sup> The total costs of environmentally-attributable diseases in American children are estimated at \$54.9 billion annually.<sup>6</sup> To address the broad range of environmental health issues, such as outdoor and indoor air quality, water quality, hazardous waste and toxics, Healthy People 2010 includes several environmental health objectives and highlights the critical role of health care providers in health education and health promotion.<sup>7</sup>

The need for improvements in health professionals' environmental health knowledge has been expressed by leading health institutions. The Institute of Medicine recommends the integration of environmental health concepts into all levels of medical and nursing education.<sup>1,8</sup> The American Medical Association encourages physician educators in medical schools, residency programs, and continuing medical education sessions to devote more attention to environmental health issues and encourages physicians to educate themselves about pesticide-related illnesses.<sup>9, 10</sup> The American Academy of Pediatrics encourages pediatricians to become informed about air pollution problems in the community and published a book on the identification, prevention, and treatment of childhood environmental health problems.<sup>11,12</sup> The American College of Preventive Medicine has urged funding and support for the Agency for Toxic Substances and Disease Registry in their efforts to educate health care providers on toxic substances and how to prevent exposure to these substances.<sup>13</sup> The Ambulatory Pediatric Association has established the National Fellowship Program in Pediatric Environmental Health and proposed competencies for pediatric environmental health specialists.<sup>14</sup> The U.S. Department of Health and Human Services Division of Nursing has included the ability to recognize environmental health problems affecting patients and provide health protection interventions as one of the essential primary care nurse practitioner competencies.<sup>15</sup> Finally, the American Nurses Association has resolved to broaden its work in occupational and environmental health and apply the precautionary approach when an activity raises threats of harm to human health or the environment.<sup>16</sup> A survey of environmental medicine content in U.S. medical schools found that 75% of medical schools require about seven hours of study in environmental medicine over four years, and a survey of

Migrant Clinician Network clinicians found that approximately half had not had any training or courses related to environmental and/or occupational health.<sup>17, 18</sup> A survey of chief residents of U.S. pediatric residency programs found that fewer than half of pediatric programs routinely include pediatric environmental health issues in their curriculum, other than lead poisoning and environmental exacerbation of asthma.<sup>19</sup> A majority of nurse practitioner program directors stated there should be greater emphasis on environmental health in their programs; and a majority of medical school deans and family practice residency directors believed moderate emphasis on environmental health in their programs would be ideal.<sup>20-22</sup> Finally, after physicians attended an interactive asthma seminar, children seen by these physicians experienced fewer hospitalizations and fewer subsequent emergency department visits.<sup>23</sup>

Health professionals and other stakeholders participating in the National Forum for the *National Strategies for Health Care Providers: Pesticides Initiative*, organized by The National Environmental Education & Training Foundation, agreed that addressing environmental health conditions should be part of routine primary care and recommended the creation of a position statement on the need for environmental education for health care providers, especially for physicians, nurse practitioners, physician assistants, nurses, nurse midwives, and community health workers, who work at the frontline of the health care system.<sup>24</sup>

Therefore, The National Environmental Education & Training Foundation recommends that professional associations, decision-making bodies, academic institutions, and practice settings of health care providers endorse the need to address health conditions associated with environmental exposures, and:

- adopt environmental health education and practice skills standards so that health care providers learn and integrate information about environmental exposures in clinical, educational, and preventive health care activities
- incorporate clearly defined environmental exposure educational competencies and practice skills, including the ability to elicit an environmental exposure history, into health care provider education and practice
- use validated tools and resources available through an array of mechanisms, such as professional journals, newsletters, central internet sites, and professional meetings to recognize, manage, and prevent health effects from environmental exposures
- appoint an environmental health “faculty champion” at each medical and nursing school to ensure long-term integration of environmental health content into medical and nursing school curricula
- update requirements to include the recognition, management, and prevention of health effects related to environmental exposures in medical, nursing, and other health care provider education
- promote incentives for faculty to teach core competencies, including financial incentives in the form of grants for faculty development, curriculum development, research, instructional teaching and training aids, and expert consultants; clinical access; release time for faculty development, curricula development, and establishing appropriate clinical sites and teaching venues
- facilitate access to environmental health continuing education programs

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**The following organizations endorse The National Environmental Education & Training Foundation's Position Statement, Health Professionals and Environmental Health Education (as of May 14, 2007):**

Ambulatory Pediatric Association  
American Academy of Pediatrics  
American Association of Colleges of Nursing  
American Association of Occupational Health Nurses  
American Association of Pesticide Safety Educators  
American College of Occupational and Environmental Medicine  
American College of Preventive Medicine  
American Medical Student Association  
American Nurses Association  
American Public Health Association  
Association of Academic Health Centers  
Association of Clinicians for the Underserved  
Association of Faculties of Pediatric Nurse Practitioners  
Association of Occupational and Environmental Clinics  
Center for Children's Health and the Environment at the Mount Sinai School of Medicine  
Children's Environmental Health Network  
Greater Boston Physicians for Social Responsibility  
Institute for Children's Environmental Health  
Learning Disabilities Association of America  
Migrant Clinicians Network  
National Association of Pediatric Nurse Practitioners  
National Medical Association  
National Nursing Centers Consortium  
National Student Nurses Association  
Physicians for Social Responsibility  
Physician Assistant Education Association  
University of Medicine & Dentistry of New Jersey School of Public Health

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