Testimony submitted by
Cynthia Bearer, M.D., Ph.D., FAAP
Board Chair
The Children's Environmental Health Network
Washington, DC 20002

Dr. Bearer is Mary Gray Cobey Professor and Division Chief of Neonatology at the University of Maryland but she is appearing today on behalf of the Children's Environmental Health Network.

Subcommittee on Labor, Health & Human Services, Education and Related Agencies
House Committee on Appropriations
Appropriations for Fiscal Year 2011
May 12, 2010, 2 pm

Summary: Dr. Bearer will testify in support of the activities and programs in the Departments of Health & Human Services and Education that protect children from environmental hazards:

- **Global Climate Change and Public Health:** $50 million to HHS to help the public prepare for and adapt to the health effects of global climate change
- **Centers for Disease Control and Prevention (CDC):** $8.8 billion for CDC's core programs
- **National Center for Environmental Health (NCEH):** Support for all programs, especially its biomonitoring program and its national report card on exposure information
- **The Environmental Health Laboratory**: A $19.6 million increase
- **National Environmental Public Health Tracking Program:** $50 million
- **National Institute of Environmental Health Sciences (NIEHS):** $779.4 million
- **Children's Environmental Health Research Centers of Excellence:** Reinstate last year's funding increase and direct NIEHS to sustain this effort.
- **National Children's Study (NCS):** Provide full funding, and assure that the NCS remains a collaborative study that retains on its original environmental focus and require that protocols are in place for measuring exposures in child care and school settings.
- **Pediatric Environmental Health Specialty Units (PEHSUs)**: $1.8 million as ATSDR's portion of this program
- **Environmental Health in Schools:** Full funding for the Clean, Green and Healthy Schools Initiative and resources for the newly re-vitalized Interagency Task Force on Children's Environmental Health.
- **Environmental Health in Child Care Settings:** Require that the child care environment is included in the Clean, Green and Healthy Schools Initiative and provide additional resources to support this. Direct the HHS Assistant Secretary for Children and Families to report on the Administration for Children and Families (ACF) activities that protect children from environmental hazards in child care settings, especially in the Office of Head Start.

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Testimony of Cynthia Bearer, M.D., Ph.D., FAAP
CEHN Board Chair
May 12, 2010

Thank you for the opportunity to testify before you today. I am the Mary Gray Cobey Professor and Division Chief of Neonatology at the University of Maryland; however my testimony today is not on behalf of the University. I am here today in my role as Board Chair of the Children's Environmental Health Network

The Network appreciates the wide range of needs that you must consider for funding. We urge you to give priority to those programs that directly protect and promote children's environmental health. In so doing, you will improve not only our children's health, but also their educational outcomes and their future.

The Network is a national organization whose mission is to promote a healthy environment and to protect the fetus and the child from environmental health hazards. The world in which today's children live has changed tremendously from that of previous generations, including a phenomenal increase in the substances to which children are exposed. Every day, children are exposed to a mix of chemicals, most of them untested for their effects on developing systems. In general, children have unique vulnerabilities and susceptibilities to toxic chemicals. In some cases, an exposure which may cause little or no harm to an adult may lead to irreparable damage to a child.

Thus it is vital that the Federal programs and activities that protect children from environmental hazards receive adequate resources. The key programs in your jurisdiction are listed below.

Global Climate Change and Public Health

We strongly urge the Committee to designate $50 million for HHS to help the public prepare for and adapt to the potential health effects of **global climate change** in FY2011.

Global climate change presents major challenges to public health. **Children, as a vulnerable subpopulation, will be the first and worst hit by climate change.** Young children are almost 85% of the estimated 150,000+ climate change-related deaths/year that are already occurring in low income nations, according to the World Health Organization. Children in communities that are already disadvantaged will be the most harmed. Recent studies have detailed the multiple ways in which climate change may harm children.

It is imperative that the Federal government undertake efforts to mitigate and adapt to climate change. Providing funding to the relevant HHS agencies to prepare for the potential health effects of global climate change is an important step.

Centers for Disease Control and Prevention (CDC) and the National Center for Environmental Health (NCEH)

The CDC is the nation's leader in health promotion and disease prevention, and should receive top priority in federal funding. CDC continues to be faced with unprecedented challenges and responsibilities. The Network is grateful for your support in the past and urges you to support a funding level of $8.8 billion for CDC's core programs in FY 11.

The Network is supportive of all NCEH programs and especially its efforts to continue and expand its biomonitoring program and to continue its national report card on exposure information. A vital CDC responsibility in pediatric environmental health is to assist in filling the major information gaps that exist about children's exposures. The Network believes it is especially critical for the NCEH to gather and publish expanded information in the report card on children's exposures.

CEHN strongly supports increased funding for CDC's Environmental Health Laboratory, which allows us to measure with great precision the actual levels of more than 450 chemicals and nutritional indicators in people's bodies. This information helps public health officials to determine which population groups are at high risk for exposure and adverse health effects, assess public health interventions, and monitor exposure trends over time.

In just this past year, CDC has worked with state health departments, academic partners and others to provide exposure information for more than 50 public health investigations and studies. It has also published the *Fourth National Report on Human Exposure to Environmental Chemicals,* which presents exposure information for 212 environmental chemicals. CDC has also been able to fund three states for state biomonitoring activities. We enthusiastically support these state biomonitoring efforts, but were disappointed that another 21 quality state proposals were turned down due to lack of funding.

Unfortunately, the President's FY 11 budget would cut this program by $1.3 million. The Network supports a $19.6 million increase for CDC's Environmental Health Laboratory in FY 11: $10 million to fund 7-10 grantees to conduct biomonitoring; $7.6 million for intramural activities, including increasing the number of chemicals CDC measures and improving quality assurance at the state laboratories awarded biomonitoring funds; and $2 million for the *National Report on Biochemical Indicators of Diet and Nutrition in the U.S. Population.*

National Environmental Public Health Tracking Program

The CDC's public health tracking program helps to track environmental hazards and the diseases they may cause, coordinating and integrating local, state and Federal health agencies' collection of critical health and environmental data. The web-based National Environmental Public Health Tracking Network launched this past summer. CEHN strongly supports this program.

Data on children's "real world" exposure and disease are critically needed. Since children spend hours every day in school and child care, we urge you to direct the Tracking Program to include grants for pilot methods for tracking children's health in schools and child care settings.

To date, 24 grantees have received funds from the CDC for health tracking networks that will feed into the national network. Health officials in *all* states need integrated health and environmental data so that they can protect the public's health. We urge the Committee to provide $50 million for the Health Tracking Program in FY 11, enabling CDC to fund up to 13 new grantees.

National Institute of Environmental Health Sciences (NIEHS)

The NIEHS is the leading institute conducting research to understand how the environment influences the development and progression of human disease. Thus it is a vital institution in our efforts to understand how to protect children, whether it is identifying and understanding the impact of substances that are endocrine disruptors or understanding childhood exposures that may not affect health until decades later. The NIEHS is poised to generate many new exciting discoveries about the impact of environmental factors on human health.

NIEHS's National Toxicology Program is the leading federal program studying the toxicity of environmental agents in our environment; a major focus of this program is endocrine disrupting chemicals, substances that mimic or suppress hormones which have been implicated in numerous adverse health effects.

NIEHS is studying the health effects of global climate change. The Institute has taken the lead among Federal agencies to develop a comprehensive research plan to respond to the significant consequences that climate change is expected to have on human health.

The Network asks you to provide $779.4 million for NIEHS in FY11.

Children's Environmental Health Research Centers of Excellence

The Children's Environmental Health Research Centers, jointly funded by the U.S. EPA and NIEHS, play a key role in providing the scientific basis for protecting children from environmental hazards. With their modest budgets (unchanged over more than 10 years), these centers generate valuable research. A unique aspect of these Centers is the requirement that each Center actively involves its local community in a collaborative partnership, leading both to community-based participatory research projects and to the translation of research findings into child-protective programs and policies.

The scientific output of these centers has been outstanding. For example, findings from four Centers clearly showed that prenatal exposure to a widely-used pesticide affected developmental outcomes at birth and early childhood. This was important information to EPA's policy makers in their consideration of this pesticide.

The Congress recognized this last year, when it supported increased funding, resulting in the upcoming addition of a child care component and additional research. These goals call for a continued effort, yet the Administration's FY11 budget proposal did not continue this funding. We strongly urge that the Committee reinstate these funds and direct NIEHS to sustain this effort.

Unfortunately, almost all of the existing 12 centers are currently operating on no-cost extensions and only five of the existing centers are to be renewed. If centers are shuttered, we will lose access to valuable populations such as children with asthma or children growing up with pesticide exposure in farm communities. We will lose the ability to learn about issues like early puberty concerns, exposures in school settings, and pre-adolescent and adolescent outcomes.

National Children's Study (NCS)

The National Children's Study is examining the effects of environmental influences on the health and development of more than 100,000 children across the United States, following them from before birth until age 21. This landmark longitudinal cohort study -- involving a consortium of agencies – will form the basis of child health guidance, interventions, and policy for generations to come.

We urge the Committee to assure stable support for this study, recognizing that the necessary components of the study are resource intensive. It is vital, however, that this study proceed and also guarantee that scientists, clinicians, and policy makers will have a complete archive of the study's exposure measurements. This study may be the only means that we will have to understand the links between exposures and the health and development of children and to identify the antecedents for a healthy adulthood.

A study of this scope is calls for the participation of multiple agencies. We urge the Committee to assure that the NCS remains a collaborative study that retains on its original environmental focus. While the NCS is housed at NIH, it must be a multi-agency study and it must be responsive to its mission and to the lead agencies, in and out of NIH.

The Network also asks the Committee to direct that protocols are in place for measuring exposures in child care and school settings. It is critically important to understand how school and child care exposures differ from home exposures very early in the NCS.

Pediatric Environmental Health Specialty Units (PEHSU)

Funded by the Agency for Toxic Substances and Disease Registry and the U.S. EPA, the PEHSUs form a valuable resource network, with a center in each of the U.S. Federal regions. PEHSU professionals provide medical consultation to health care professionals on a wide range of environmental health issues. PEHSUs also provide information and resources to school, child care, health and medical, and community groups. PEHSUs assist policymakers by providing data and background on local or regional environmental health issues and implications for specific populations or areas. These centers, all based in universities, have done tremendous

work on very limited budgets. We urge the Committee to fully fund ATSDR's portion of this program's FY 11 budget of $1.8 million.

Environmental Health in Schools

Each school day, about 54 million children and nearly 7 million adults —20% of the total U.S. population—spend a full week inside schools. Unfortunately, many of the nation's school facilities are shoddy or even "sick" buildings whose environmental conditions harm children's health and undermine attendance, achievement, and productivity.

No agency is authorized to intervene to protect children from environmental hazards in schools. Thus, every day we require our children to spend hours in an environment where they and their parents have no options, alternatives or recourse if the environment is not healthy.

Thus, the Network urges the Committee to provide full funding for the aspects of the Clean, Green and Healthy Schools Initiative in its jurisdiction. Agencies need adequate resources to assure their participation in the vital cross-agency work of this initiative.

A formal partnership between HHS, DoEd, and EPA to coordinate their pediatric environmental health efforts would leverage resources and be beneficial for children's health and research. Providing resources for the newly re-vitalized Interagency Task Force on Children's Environmental Health would support such a partnership.

Environmental Health in Child Care Settings

60% of preschoolers — 13 million children —are in child care. This youngest and most vulnerable population can enter care as early as six weeks of age and be in care for more than 40 hours per week. Yet little is known about the environmental health status of these centers. The Network is working to correct these gaps.

We urge the Committee to bring the child care environment into the Clean, Green and Healthy Schools Initiative by providing additional resources and direction focused on this important environment.

We ask the Committee to direct the HHS Assistant Secretary for Children and Families to report on the Administration for Children and Families (ACF) activities that protect children from environmental hazards in child care settings, especially in the Office of Head Start.

In conclusion, investments in programs that protect and promote children's health will be repaid by healthier children with brighter futures, an outcome we can all support. That is why the Network asks you to give priority to these programs.

Thank you for the opportunity to testify on these critical issues.

Cynthia F. Bearer, M.D., Ph.D. – Curriculum Vitae

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Smith College, MA	B.A.	1972	Mathematics
Case Western Reserve University, OH	Ph.D.	1977	Smith College, MA
Johns Hopkins University, MD	M.D.	1982	Medicine
Baylor College of Medicine, TX	Postdoc	1977-78	Cell Biology
University of Texas, Houston, TX	Postdoc	1978-79	Pharmacology

1982-1984 Resident, Pediatrics, The Johns Hopkins Hospital, Baltimore, MD
1984-1986 Fellow, Joint Program of Neonatology, Harvard Medical School, MA
1986-1987 Fellow, Division of Newborn Medicine, Washington University School of Medicine, MO; Instructor in Pediatrics, Washington University School of Medicine, MO
1990-1991 Postgraduate training, Occupational and Environmental Health, UCSF, CA
1990-1992 Assistant Clinical Professor, Department of Growth and Development, UCSF, CA
1992-1994 Associate Professor, Department of Pediatrics, NEOUCOM, OH
1994-2001 Assistant Professor, Departments of Pediatrics and Neurosciences, CWRU, OH
2000-2002 Co-Director, Neonatology Fellowship Training Program, CWRU, OH
2001-2008 Associate Professor, Depts of Pediatrics, Neurosciences and EHS, CWRU, OH
2002-2008 Director, Neonatology Fellowship Training Program, CWRU, OH
2003 Award of tenure, CWRU, OH
2006-2008 Associate Director, Medical Scientist Training Program, CWRU, OH
2008 Professor, Depts of Pediatrics, Neurosciences and EHS, CWRU, OH
2008-Present Mary Gray Cobey Professor of Neonatology with tenure, University of Maryland
2008-Present Chief, Division of Neonatology, University of Maryland School of Medicine.

Other Experience and Professional Memberships including Federal Advisory Committees:

1990-Present American Academy of Pediatrics; 1993-Present Research Society on Alcoholism and Fetal Alcohol Syndrome Disorder Study Group; 1993-Present Board member, Children's Environmental Health Network; 1995-1999 American Academy of Pediatrics, Committee on Environmental Health; 1995-Present Society for Pediatric Research; 1996-Present Children's Health Initiative Workgroup, ATSDR; 1996-Present American Academy of Pediatrics, Section on Perinatal Pediatrics; 1996-Present Food Quality Protection Act/Science Review Board, U.S. EPA; 1997 External Scientific Advisory Board: Fetal Alcohol Syndrome, NIAAA/NIH; 1998 NIAAA Special Emphasis Panel; 1999 NIH Special Emphasis Panel ZAA1 BB(3); 1998-2001 Science Advisory Board, Environmental Health Subcommittee, U.S. EPA; 1999-2003 Consultant, Advisory Group to the Director, NCEH, CDC; 1999-Present Perinatal Research Society; 2000-Present Society for Neuroscience; 2001-Present Editorial Board, Neurotoxicology; 2001-2003 Review Panel, NTP for the Evaluation of Risks to Human Reproduction, NIEHS; 2001-2006 Committee on Evaluation of Children's Health, NAS/NRC/IOM; 2002 Grant Peer Review Panel, Children's Vulnerability to Toxic Substances in the Environment (2-D1), U.S. EPA; 2002-2003 Temporary member, ALTX-3 Study Section; 2003-2006 Permanent member, NAL Study Section; 2003-2005 Board of Directors, Physicians for Social Responsibility; 2004 Ad hoc reviewer, scientific review group EHS (T32 & T35), EHS-LKB-TG; 2004-Present Ad hoc reviewer, AA-1 Study section; 2007 Ad hoc expert, NIAAA/NIH Extramural Advisory Board; 2007 NIAAA/NIH Special Emphasis Panel ZAA1 CC(11); 2008 Chair, National Children's Study Biological and Environmental Sample Repository Meeting, review of proposals, NIH/NICHD; 2008 Neuroscience Review Subcommittee, AA-4, NIH/NIAAA (K08);2008 Chair, Biorepository Meeting, review of proposals, NIH/NICHD; 2009 Ad hoc reviewer, ZRG1 IFCN-A (58) R Challenge Grants; 2009 Ad hoc Reviewer, ZAA1 CC (03) R Effect of Alcohol on Glia; 2009 Ad hoc Reviewer, Children's Environmental Health Center grants; 2009 Adhoc Reviewer, Developmental Brain Disorders Study Section; 2009 Chair of the Board, Children's Environmental Health Network; 2010 ZRG1-ETTN A (14) SBIR/STTR Study Section.

Peer reviewed articles (44), patents (1), book chapters (11).

Subcommittee on Labor, HHS, Education
& Related Agencies
Witness Disclosure Form

Clause 2(g) of rule XI of the Rules of the House of Representatives requires non-governmental witnesses to disclose to the Committee the following information. A non-governmental witness is any witness appearing on behalf of himself/herself or on behalf of an organization other than a federal agency, or a state, local or tribal government.

Your Name, Business Address, and Telephone Number:

Cynthia F. Bearer, M.D., Ph.D.
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1. Are you appearing on behalf of yourself or a non-governmental organization? Please list organization(s) you are representing.

   The Children's Environmental Health Network, a 501 (c) 3 organization

2. Have you or any organization you are representing received any Federal grants or contracts (including any subgrants or subcontracts) since October 1, 2007?

   X Yes No

3. If your response to question #2 is "Yes", please list the amount and source (by agency and program) of each grant or contract, and indicate whether the recipient of such grant or contract was you or the organization(s) you are representing.

U.S. EPA Office of Air & Radiation: CEHN recipient, $90,000, 2006-2008
Program: GA Child Care Training Program

ATSDR: CEHN subcontract (Association of Occupational & Environmental Health Clinics recipient), $125,000, 2007-2009
Program: GA Child Care Training Program

CDC: CEHN recipient, $366,000, 2007-2010
Program: DC Child Care Training and Environmental Assessment Program

U.S. EPA Region VI: CEHN recipient, $50,000, 2008-2009
Program: TX Child Care Training Program

U.S.EPA Office of Environmental Justice: CEHN subcontract (Coalition for Environmentally Safe Communities recipient), $10,000, 2008-2009
Program: DC Environmental Health Collaborative

NIH/NIAAA: Cynthia Bearer, Principal Investigator, University of Maryland recipient, $1,000,000, 2007-2012, AA016398
Program: The Role of Lipid Rafts in Fetal Alcohol Spectrum Disorder

Signature: Date: May 10, 2010

Cynthia F. Bearer

Please attach a copy of this form, along with your curriculum vitae (resume) to your written testimony.