From the Chair

I am really pleased that the Council on Environmental Health (COEH) is re-launching its newsletter. I want to recognize the efforts of Dr. Robert Truckner to get the newsletter out.

The Executive Committee of the COEH generally meets twice a year. The fall meeting is at the AAP Headquarters Office in Elk Grove Village, Illinois. The spring meeting is in Washington DC so that members of the Executive Committee can meet with and provide education about children’s environmental health issues to members of the House, Senate, and Executive Branch agencies.

At our November 2012 meeting, we discussed our recently released and upcoming policy statements, clinical reports, and technical reports. I am very proud of the work that Executive Committee members and others have done to get the documents on Organic Foods (Joel Forman and Janet Silverstein) and on Pesticide Exposure (James Roberts and Catherine Karr) out to the membership of the AAP. We have similar documents in process on Iodine Deficiency, Ambient Air Pollution, and Radiation Disasters, among other topics.

At the meeting, we also spent a great deal of time discussing the new CDC recommendations on the approach to lead poisoning. We expect to produce some documents on this topic in the future.

Another activity that your Executive Committee has been working on is to increase the environmental health content on the AAP’s parent-directed web site, HealthyChildren.org.

The COEH invites and encourages your participation in the work of the Council. There are a number of opportunities for your involvement.

1. You could participate in writing any of the documents that the council prepares.
   - You could take the lead in proposing, and if approved, writing a policy statement or other document that the council prepares.
   - The AAP needs material for its parent-focused website HealthyChildren.org. You could write about environmental health topics and have the material considered for HealthyChildren.org

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- AAP Washington Report
- Introductions and Interviews with:
  - Clara Filice, MD
    Pediatric Environmental Health and Food Policy Fellow
  - Abby Nerlinger, MD
    Liaison, Section on Medical Students, Residents, & Fellowship Trainees
- Plus, 5 members of the COEH Executive Committee
2. Please come to the meeting of the Council on Environmental Health that occurs every year at the AAP National Convention and Exhibition (NCE).
   • There is an opportunity to participate in CME activities.
   • You could even propose, and if accepted, deliver a CME program at the NCE.

3. Help recruit new members to the COEH. Any Fellow of the AAP with an interest in any aspect of environmental health should be referred to the AAP website www.aap.org. After signing in, they may go to About the AAP > Committees, Councils & Sections > Councils > and click on Join Now under the Councils heading.

4. Stand for election to the Executive Committee of the COEH. As current members fill out their terms and rotate off the COEH, it will need new people with energy and great ideas. When you are notified of a vacancy, raise your hand (i.e., respond to the e-mail) and indicate your interest.

Thank you for your support of children’s environmental health issues and for your membership in the Council on Environmental Health. Please feel free to contact me or any member of our Executive Committee with any questions, comments, or ideas.

Jerome A. Paulson, MD
Chairperson, Council on Environmental Health

2012/2013 Council on Environmental Health Executive Committee

Jerome Paulson, MD (Chairperson)
Washington, DC
jpaulson@cnmc.org

Alice C. Brock-Utne, MD
Lafayette, California
abrockutne@gmail.com

Heather L. Brumberg, MD, MPH
Valhalla, New York
heather_brumberg@nymc.edu

Carla C. Campbell, MD, MS
Philadelphia, Pennsylvania
ccc57@drexel.edu

Bruce P. Lanphear, MD, MPH
Vancouver, British Columbia, Canada
blanphear@sfu.ca

Jennifer A. Lowry, MD
Platte City, Missouri
jlowry@emb.edu

Kevin C. Osterhoudt, MD, MSCE
Philadelphia, Pennsylvania
osterhoudtk@email.chop.edu

Megan T. Sandel, MD
Boston, Massachusetts
megan.sandel@gmail.com

Adam Spanier, MD, MPH
Harrisburg, Pennsylvania
aspanier@hmc.psu.edu

Leonardo Trasande, MD, MPP
New York, New York
leonardo.trasande@nyumc.org

Robert Wright, MD
Boston, Massachusetts
robert.wright@mssm.edu

Liaisons

Mary Ellen Mortensen, MD, MS
Centers for Disease Control and Prevention
zeo4@cdc.gov

Jacqueline E. Mosby, MPH
US Environmental Protection Agency
mosby.jackie@epa.gov

Abby Nerlinger, MD
AAP Section on Residents
abby.nerlinger@ckd.org

Walter Rogan, MD
National Institute of Environmental Health Sciences
rogan@niehs.nih.gov

Sharon A. Savage, MD
National Cancer Institute
savagesh@mail.nih.gov

AAP Staff

Paul Spire (Primary Staffperson) pspire@aap.org
Sonya Clay (DC Office) sclay@aap.org
Clara Filice, MD, MPH (DC Office) cfilice@aap.org
From The Editor

Greetings and welcome to the newest incarnation of the COEH Newsletter! I have a goal to make the newsletter an interesting and vital communication tool for the members of the COEH.

I’m excited to use the newsletter to explore the broad range of issues that define Pediatric Environmental Health. From lead and mercury poisoning, to air and water pollution, to emerging infectious disease, to reintroducing beavers into native habitat to protect watersheds - all these define pediatric environmental health.

In future issues, I will share interviews with some of the wide range of individuals who are working to protect the health of our children by creating a healthier environment.

But we need to help to spread the message. The COEH currently has less than 90 members; the AAP has over 60,000 members. We are just 0.15% of the total membership of the AAP.

So share your passion - tell a friend or better yet, sponsor a fellow pediatrician or resident - it only costs $30.

If we each get a fellow pediatrician to join the COEH and each of them gets a friend to join, our membership will triple. There is much work to be done and we need help to do that work.

In this issue, we will meet some of the current members of the COEH executive committee, the new AAP Environmental Fellow, and the liaisons from the CDC and the Resident Section. Clara Filice, the AAP Environmental Fellow, will share some of what she is working on in Washington DC.

In future issues, we are introducing “Questions for the Executive Committee” and bringing back the Journal Club.

Finally, I would like to congratulate the two newest members of the Executive Committee, Jennifer Lowry MD and Adam Spanier MD PhD MPH.

Please feel free to send me comments or criticisms on how to make the newsletter inspire your passion.

Thanks for reading!

Robert T. Truckner, MD, MPH
Newsletter Editor

“The Green Book”
Pediatric Environmental Health, 3rd Ed

From playground to classroom, at home and across town, environmental hazards are all around us – an unfortunate fact of modern life. And no one is more vulnerable to the adverse health effects these hazards can cause than our children. It’s no wonder that environmental hazards are among parents’ top health concerns for their children. Yet little time is spent training physicians and other caregivers to recognize, prevent, and treat ailments resulting from exposure to harmful substances and environments.

This comprehensive guide puts critical children’s health information and answers to parents’ questions at your fingertips. From asbestos to radiation, ultraviolet rays, pesticides, asthma, lead, tobacco, childcare and school environments – plus new chapters on global climate change, plasticizers, developmental disabilities, environmental disasters, and more – current information on an exhaustive range of environmental health issues is included.

The 3rd edition includes:

• Major modifications to all chapters from the 2nd edition.
• A total of 59 chapters - over 900 pages in length - including 22 new chapters.

The book can be purchased in hard-copy or electronic format via the AAP bookstore at: aap.org/bookstore. Alternatively, copies may be ordered by calling toll-free: 1-888-227-1770.

We would appreciate any assistance you can offer in helping to spread the word about the availability of this important and valuable resource.
Clara Filice, MD, MPH, MHS
Pediatric Environmental Health and Food Policy Fellow

When did you start?
I began as a Pediatric Environmental Health and Food Policy Fellow at the AAP in June, 2012 and will be with the office through June, 2014.

What are your responsibilities?
I work with a team of people in the AAP Department of Federal Affairs to advocate for optimal federal policies related to environmental health and food and nutrition policy.

What is your background?
I completed my undergraduate degree in History at Rice University. After college, I worked on health and social policy issues in the U.S. Senate for Senator Byron Dorgan. I then attended medical school at Northwestern's Feinberg School of Medicine where I concurrently earned my MD and Master of Public Health degrees, focusing my MPH research on physician advocacy. I stayed in Chicago to complete my pediatric residency at Children's Memorial Hospital (now Lurie Children's Hospital of Chicago). I then completed a two-year health services research fellowship as a Robert Wood Johnson Foundation Clinical Scholar at the Yale School of Medicine, where I studied environmental and public health policy and earned a Master of Health Science degree.

Why did you apply for the Fellowship?
Ever since my time in the Senate, I've been interested in contributing to the development of sound child health policy. During my clinical training, I realized the many ways in which children's environments impacted their health, and my MPH and health services research training taught me how research could inform policy development. This Fellowship presents an opportunity to call upon my policy, clinical, and research experiences to advocate for better federal policy in two areas that I am passionate about, children's environmental health, and food and nutrition policy.

What in your opinion is the most pressing issue facing Children’s Environmental Health?
There are so many! The time is ripe for addressing children's environmental health issues - at the federal level, there is growing interest in issues related to clean air and water, toxic exposures to substances like lead, chemical management reform, the built environment, and many, many others. Emphasizing the unique susceptibilities of children in these realms will always be important.

What is your impression of the interest of Congress in children’s environmental issues?
I think there are a number of strong champions for children's environmental health in Congress and the Administration. However, in my brief tenure as a congressional staffer (my first job after college), I realized that Congressional offices are flooded with information about a wide range of issues - my job is to help raise children's environmental health issues to the forefront whenever possible.

What can the general membership of the AAP and specifically the COEH do to help and support you?
I hope to serve as a resource to the COEH and other AAP members seeking to improve federal environmental health and food and nutrition policy, and to draw upon your experiences and expertise to inform federal policy making. I would welcome anyone to please feel free to contact me at any time if I can be of assistance!
My name is Abby Nerlinger and I am the Section on Medical Students, Residents, and Fellowship Trainees (SOMSRFT) Liaison to the Council on Environmental Health.

I am currently a third year pediatrics resident at Children’s Hospital of The King’s Daughters in Norfolk, Virginia.

My interest in environmental health began as an undergraduate at the University of Notre Dame, studying biology and public policy. I completed my thesis in the toxicology of polycyclic aromatic hydrocarbons (PAHs), examining the public health implications of consuming PAH-contaminated fish in waters surrounding Norfolk. My interest grew in medical school at Yale University School of Medicine where I co-founded the Yale Environmental Health Group with the goal of increasing the study of environmental health in medical education. During residency, I have assisted with the implementation of a residency-wide public health curriculum, giving lectures on advocacy and environmental health to pediatric residents. My current areas of interest within environmental health include asthma triggers, home remediation, and reform of the Toxic Substances Control Act. The biggest challenge currently facing environmental health is the need for preventive medicine to address environmental factors before they cause health damage. Pediatricians have a responsibility to provide such education at various levels, including patients and lawmakers.

Questions for Abby

What is your belief of the level of interest in Pediatric Environmental Health (PEH) among residents and students?

Residents and students tend to be interested in PEH but may be unsure as to how it relates to their daily practice. I feel that pediatricians as a whole have a responsibility not only to treat the patient, but also to treat the patient in the context of the community. This includes not only psychosocial factors but also directly involves remediation of environmental factors detrimental to children’s health. As physicians we can treat many diseases, but sometimes it is the child’s environment that is triggering disease, in which case we have the responsibility to address such environmental factors as well.

How well do you think current medical education addresses the issue of PEH and more globally, human health effects from modifications and changes to our environment and ecosystems?

Residency education is having a growing emphasis on public health, creating pediatricians who are able to view patients in the context of the environment; consider it almost a paradigm shift within pediatrics training to focus on population level disease. Electives like the AAP Department of Federal Affairs Internship Program and advocacy electives implemented in many residency programs are wonderful opportunities to involve PEH in pediatrics study. Residents are additionally required to complete a scholarly project, and it may be possible to find institutional support to complete a project in public health/PEH. My residency program at Children’s Hospital of the King’s Daughters in Virginia has implemented a pilot public health curriculum during residency which has provided the perfect context to pursue such projects.

What do you need to succeed in following your interest in environmental health?

Since environmental health is a newer but growing field within pediatrics, residents interested in EH definitely need a sense of innovation and self-motivation. It is important to seek out mentors who can guide you through the process. If you are interested in the field as a resident you should consider yourself a trailblazer! From a technical standpoint, a background in public health and epidemiology is very useful, in addition to training in public policy, since environmental issues are always highly debated at the local and national legislative levels.
AAP Washington Update

The AAP Department of Federal Affairs, located in Washington DC, has been our link to federal legislative and regulatory activities for over 40 years. It exists to ensure that the Administration and Congress are working on behalf of pediatricians and their patients. The following article summarizes some of the latest happenings in Washington involving environmental health issues.

FDA Proposal to Limit Overuse of Antibiotics in Animal Agriculture

In April, the FDA Center for Veterinary Medicine released two voluntary guidance documents for industry addressing antimicrobial use in food animals. Guidance For Industry #209, “The Judicious Use of Medically Important Antimicrobial Drugs in Food Producing Animals” asks industry to voluntarily decrease injudicious use of antibiotics in farm animals by limiting antibiotics important to human health to 1) uses considered necessary for ensuring animal health, and 2) uses including veterinary oversight or consultation. The companion implementation document, Guidance For Industry #213, “New Animal Drugs and New Animal Drug Combination Products Administered in or on Medicated Feed or Drinking Water of Food Producing Animals” provides practical advice for drug sponsors to implement the changes outlined in #209. Together, these two voluntary guidance documents have the potential to reduce overuse of antibiotics in animal agriculture, but each includes loopholes and weaknesses that need to be remedied.

The AAP submitted comments and joined a group comment letter on the FDA proposed Draft Guidance for Industry highlighting several ways the FDA might more effectively reduce unnecessary antibiotic uses in agriculture. The AAP expressed support for the FDA’s proposal to institute veterinary oversight or consultation for medically important antibiotics used in animal agriculture. In addition, the AAP supports the proposed limitation on antibiotic uses that are not necessary to ensure animal health (such as use of sub-therapeutic levels of antibiotics for long periods of time in order to enhance growth and feed efficiency). Unfortunately, the FDA proposal did not extend limits to other uses the AAP considers to be injudicious and unnecessary to ensure animal health, such as antibiotic uses to prevent disease (as opposed to control or treat disease). The AAP will continue to encourage the FDA to remove prevention as an approved indication for antibiotics in animals. The AAP further urged the FDA to pursue legally binding limits on antibiotic use in addition to voluntary principles and encouraged the FDA to more effectively collect and disseminate information about antibiotic use in animals so that progress can be monitored.

Working Group on the Overuse of Antibiotics in Animal Agriculture

The AAP, the Pew Health Group, and Keep Antibiotics Working continue to lead a working group of more than 40 medicine, public health, and consumer organizations committed to addressing overuse of antibiotics in animal agriculture and antimicrobial resistance. The group has been holding quarterly meetings to organize and plan advocacy and education efforts to advance antimicrobial resistance policies that support public health. To that end, the AAP has participated in numerous meetings with Congress and the FDA to promote better data collection and a strong and transparent monitoring process as the voluntary guidance is implemented. In the upcoming year, the group will continue to be active in promoting effective implementation of the FDA Guidance Documents and to pursue additional policy avenues to reduce unnecessary use of antibiotics in animal agriculture.

Bisphenol-A (BPA)

In July, the US Food and Drug Administration (FDA) released a Final Rule in response to a petition from the American Chemistry Council amending the food additive regulations to no longer allow the use of polycarbonate resins (such as bisphenol-A (BPA)) in infant feeding bottles and children’s spill-proof drinking cups. The designated uses banned by the FDA in this rule had already been abandoned by industry, so it served to codify a voluntary industry withdrawal from use. The FDA simultaneously released a Proposed Rule announcing that Representative Edward J. Markey had filed a petition proposing that the food additive regulations be amended to no longer provide for the use of bisphenol-A (BPA)-based epoxy resins as coatings in packaging for infant formula. The basis for the petition was similarly that these uses of BPA packaging materials for infant formula had already been abandoned by industry. If the rule is implemented, it would formalize this restriction on BPA use in infant formula packaging.
In September, the AAP sent a letter to the FDA in support of formally limiting abandoned uses of BPA in infant formula packaging. While more evidence is needed, BPA exposure in the prenatal period, infancy, and childhood has been linked to potentially harmful health effects. The AAP further encouraged the federal government to prioritize research to evaluate the effects of childhood exposures to chemicals including BPA.

**Children’s Health Taskforce Act**

In July, the AAP endorsed the Children’s Health Taskforce Act (H.R. 6207) that will establish a multi-agency Taskforce on Environmental Health Risks and Safety Risk to Children Act. Sponsored by Rep. Louise Slaughter, the legislation will take important steps toward ensuring the federal government addresses the environmental exposures that impact children’s health, safety and development. All aspects of the environment have especially profound effects on the health and development of fetuses, infants, children, and adolescents. Children are disproportionately vulnerable to all environmental exposures: they breathe faster than adults, spend more time outside, consume proportionately greater amounts of food and water, and have proportionately greater skin surface exposed to the environment. A given dose of a pollutant will have a greater impact on a child than on an adult not only due to their smaller size, but because of the nature of their growing bodies and minds. At sensitive points in child development, environmental exposures can have especially harmful effects.

**EPA Climate Change Hearing**

In March, the Environmental Protection Agency (EPA) proposed the first Clean Air Act standard for carbon pollution from future power plants. This standard would only apply to power plants built after the standard is finalized and would be the EPA’s first attempt to regulate carbon dioxide emissions. Carbon dioxide contributes to global climate change, which is expected to disproportionately impact children’s health, as outlined in the AAP’s 2007 policy statement, “Global Climate Change and Children’s Health.” Global climate change is expected to contribute to an increase in weather disasters, climate-sensitive infectious diseases, air pollution-related illnesses, and heat-related illnesses.

In May, the U.S. Environmental Protection Agency (EPA) held a public hearing in Washington, DC on to receive input from the public on its proposed carbon regulation. Samantha Adhoot, MD FAAP is a DC-area pediatrician represented the AAP at the public hearing. Dr. Adhoot expressed support for limiting carbon dioxide pollution in order to prevent the adverse child health impacts of climate change.

**AAP Opposed the GASP Act**

In May, the AAP signed a letter with health and environmental advocates opposing the Gasoline Regulations Act (H.R. 4471), or “GASP Act,” a bill introduced Reps Edward Whitfield (R-KY) and John Barrow (D-GA) that would undermine the Clean Air Act’s health protections and delay necessary clean air standards. H.R. 4471 would delay overdue standards for ozone pollution, commonly known as smog, a powerful respiratory tract irritant in adults and children. Ozone causes increased respiratory tract symptoms, asthma exacerbations, shortness of breath, chest pain, wheezing, and coughing. Increases in ozone have been associated with increases in hospitalizations, emergency room visits, and absences from school and work. The bill would also repeal the health-based standard for ozone and require that economics determine pollution standards, not the health of our nation’s infants and children. The bill approved by the House Energy and Commerce Committee on May 17 but has yet to come to the floor for debate. The AAP will continue to monitor H.R. 4471 as well as other challenges to the Clean Air Act.

**Senate Defends the Mercury Air Toxic Standards (MATS) Regulation**

In June, the Senate defeated a resolution introduced by Sen. James Inhofe (R-Okla.), S.J.Res. 37, that would have halted EPA’s efforts to reduce mercury pollution, by a vote of 46-53. Sen. Inhofe's resolution would have overturned and permanently prevented the EPA from implementing the Mercury and Air Toxic Standards (MATS) regulation for coal- and oil-fueled power plants, and would have prohibited the EPA from proposing any "substantially similar" safeguards in the future.

The AAP was active in encouraging the EPA to finalize the MATS regulation in 2011, which will dramatically reduce mercury emissions and children's exposure to methylmercury.

Earlier, the AAP joined more than a dozen health care organizations in sending a letter to the Senate expressing strong opposition to this resolution and encouraging the Senate to allow the EPA to move forward with this important child health protection. The AAP's support for reducing mercury pollution was mentioned by numerous Senators during the resolution's debate and was crucial in ensuring the resolution failed.
AAP Opposed the Sale of OTC Inhalers

In July, the House Energy and Commerce Committee approved the Asthma Inhalers Relief Act (H.R. 6190), which would direct the Environmental Protection Agency (EPA) to allow the distribution, sale, and consumption of the remaining inventories of over-the-counter asthma inhalers that contain chlorofluorocarbons (CFCs) through August 1, 2013. Sales of this type of inhaler have been phased out under the Clean Air Act and the Montreal Protocol, an international treaty to reduce ozone-depleting substances, such as CFCs. The inhalers are sold under the brand name, Primatene® Mist. The manufacturer, Amphastar Pharmaceuticals, indicates that there are 1.5 million units in warehouses available for sale.

At the end of 2011, Primatene® Mist, the only over-the-counter asthma inhaler, was removed from the market as part of a phase-out of epinephrine inhalers containing chlorofluorocarbons (CFCs) and other ozone-depleting substances. The Food and Drug Administration finalized the phase-out date for these inhalers in November 2008. Since that time, all other asthma inhalers replaced CFCs with propellants that do not affect the ozone layer. The AAP, along with 13 other health organizations, signed a letter indicating that reintroduction of the product would not be in the best interest of patients with asthma or public health.

Clean Air Act Standards for Particulate Matter

The Clean Air Act requires the Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for toxins considered harmful to public health and the environment that target six principal pollutants: carbon monoxide, ozone, lead, nitrogen dioxide, particle pollution and sulfur dioxide.

In June, the EPA published regulations enacting standards and monitoring requirements for particle pollution, or particulate matter made up of microscopic specks of soot, metals, acids, dirt, pollen, molds, and aerosols that are tiny enough to inhale and lodge deep in the lungs where they can do serious damage. In September, the AAP submitted a letter to EPA supporting up-to-date standards that are much more protective and based on the current science.

FCC Cell Phone Radiation Standards

In June, the Federal Communications Commission (FCC) Chairman Julius Genachowski issued a proposal for a formal inquiry into radiation standards for cell phones and other wireless products. The FCC has not reviewed its cell phone radiation standard for 15 years. In this time, the types of wireless products and the amounts of time individuals use them have changed substantially. The proposal for formal inquiry does not state whether the radiation standard should be increased or lowered, but expresses the need to review the research on this issue and recommends the FCC consider whether wireless devices primarily used by children should have a higher standard. The proposal requires approval by a majority of the FCC’s five commissioners before the agency can move forward.

The AAP wrote a letter to the FCC Commissioner expressing support for the proposal to review the cell phone radiation standard and determine whether the standard should be more protective of human health. In addition, the letter expresses the AAP’s strong support for ensuring any new standard acknowledges the disproportionate impact of all environmental exposures on the health and development of children and adolescents.

Lead Poisoning Prevention

Lead poisoning remains a significant environmental public health threat. Despite our best efforts, today more than 12.3 million children have blood lead levels higher than the national average of 1 µg/dL. These exposures will cost the nation more than $59 billion in lost lifetime productivity.

CDC Advisory Committee on Childhood Lead Poisoning Prevention

In January, the CDC’s Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) approved a recommendation to the CDC to eliminate the term "blood lead level of concern" for childhood lead exposure, in recognition of the subtle, but serious, impacts of lead exposure at levels far below the current “level of concern” of 10µg/dL. Instead, the ACCLPP recommended the CDC adopt a reference value based on the 97.5th percentile of the NHANES-generated blood lead level distribution in children age 1-5 years old, which currently stands at 5 µg/dL. The Advisory Committee recommended children with blood lead levels above 5 µg/dL undergo ongoing monitoring of blood lead levels, and be assessed for iron deficiency and general nutrition, as recommended by the AAP. There are approximately 450,000 children in the U.S. today with blood lead levels above this threshold.

In May, the CDC adopted the Advisory Committee’s recommendation to eliminate its use of the term "blood lead level of concern" when identifying and treating lead exposure in children, and to reduce the blood lead level
requiring remediation, treatment or further assessment from 10 mcg/dL to about 5 mcg/dL. This change reinforces the importance of primary prevention of lead exposure, rather than responding to exposure after it takes place. In addition, the new recommendation recognizes the impacts of low level lead exposure on children's development, behavior, cognition and other aspects of physical and mental health. The AAP wrote a letter to CDC supporting the ACCLPP recommendation, issued a press statement commending the agency for adopting the change and called on Congress to support the CDC Lead Poisoning Prevention Program.

**CDC Lead Poison Prevention Funding**

For decades, CDC has been the national voice for the primary prevention of lead poisoning and is the only agency that conducts surveillance on where, how, and when children are poisoned. The CDC Lead Poisoning Prevention Program has served 12.3 million children with harmful lead levels. The 35 state programs that have been funded by the program screen children for lead poisoning, track the incidence of the disease, inspect homes for environmental hazards, and conduct community lead poisoning prevention initiatives.

From 1997-2008, CDC’s lead program served 850,000 children with dangerous blood lead levels (greater than or equal to 10 µg/dL) that put them at higher risk of behavioral and developmental disabilities requiring costly special education services.

Unfortunately, the program was reduced from $23.9 million to $2 million during the FY2012 budget process. In May, members of the AAP Council on Environmental Health urged policymakers to restore funding for the CDC Lead Poisoning Prevention Program. In addition, the AAP submitted a letter to the Senate Environment and Public Works (EPW) Committee in advance of its hearing titled, The Latest Science on Leads Impacts on Children’s Development and Public Health. The letter explained the child developmental impacts of lead exposure and urged policy makers to fund the CDC lead program with the FY2013 budget. During the Senate Appropriations Committee debate of the FY2012 labor, health and human services and education bill, Senator Jack Reed (D-Rhode Island) offered an amendment to increase funding for the CDC Lead Poisoning Prevention Program by $4 million. Currently, the federal government is operating under a resolution that funds the government according to the FY2012 budget until March 2013. The AAP will continue advocating for this important program during the upcoming budget process.

**Senate Hearing on Lead Exposure**

In July, the Senate Environment and Public Works Committee held a hearing titled, “Impact of Lead on Child Health and Development: The latest Science on Lead’s Impact on Children’s Development and Public Health.” Witnesses included two officials from the CDC and the Environmental Protection Agency.

Committee Chair Sen. Barbara Boxer (D-Calif.) focused the hearing on the recent CDC change in the reference level for lead exposure, the health impacts of childhood lead poisoning and the fact that the damage can be irreversible, and specifically echoed the Academy’s message that for children, there is no safe level of lead. The AAP wrote a letter expressing the Academy’s ongoing concern about childhood lead exposure and the need for adequate resources for prevention programs, which was submitted into the hearing record.

**Safe Drinking Water Act**

Plumbing systems have long been a source of lead exposure in the United States. The Reduction of Lead in Drinking Water Act (Public Law 111-380), signed into law in 2011, modifies the Safe Drinking Water Act (SDWA) to reduce allowable lead in plumbing faucets and fixtures. Under the new law, allowable lead will be limited to no more than 0.2% lead in solder and flux and no more than a weighted average of 0.25% lead (down from the previously allowable 8%) in the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures. The Act further defines a specific formula for calculating lead content of wetted surfaces to ensure consistent assessment.

In August, the Environmental Protection Agency (EPA) held a public meeting entitled “Potential Regulatory Implications of the Reduction of Lead in Drinking Water Act of 2011” to solicit stakeholder input on the regulatory implications of the Act as it is implemented in 2014 and as necessary revisions to the Lead and Copper Rule are considered. The AAP submitted comments applauding these important modifications to the SDWA, which have the potential to significantly reduce childhood lead exposure from drinking water, and urged the EPA to strongly consider the significant, pernicious impacts of even low levels of lead exposure on the health and development of our nation’s infants, children, and pregnant women.
Meet the COEH Executive Committee

I asked each of the members of the Council on Environmental Health Executive Committee to answer a series of questions. Included in this issue are answers from Jerome Paulson, Heather Brumberg, Carla Campbell, Kevin Osterhoudt and Mary Ellen Mortensen, the CDC Liaison. I hope to share the answers from the remaining committee members, including the two new members, Jennifer Lowry and Adam Spanier in forthcoming issues.

- Robert Truckner, Newsletter Editor

Jerome Paulson MD - Chairperson, COEH

Education
Undergraduate Degree: University of Maryland, College Park
Medical Degree: Duke University; PL-1 and PL-2: Johns Hopkins Hospitals; PL-3 and PL-4 (Fellowship in Ambulatory Pediatrics): Sinai Hospital of Baltimore

Current location of practice
Children’s National Medical Center, Washington, DC

Areas of interest in Pediatric Environmental Health (PEH)
Lead, climate change, unconventional gas extraction, etc., etc., etc.

Current projects
Director, Mid-Atlantic Center for Children’s Health & the Environment, one of 10 Pediatric Environmental Health Specialty Units (PEHSUs) in the US. Provide technical assistance and education on children's environmental health issues.

Amount of current practice dedicated to PEH?
Do not see patients except rarely through MACCHE. The bulk of my work (policy, advocacy, education, technical assistance) focuses on children's environmental health.

What do you think are the biggest challenges facing PEH?
The biggest challenge facing PEH is a challenge that faces society as a whole; i.e., how does one get people taking into account long-term consequences when making today's decisions? A second issue is science denial, which is most felt in the climate change discussions, but impacts many other EH discussions.

How do we overcome these challenges?
I don’t know.

Advice for those interested in making PEH a focus of their career?
EH requires a divers set of knowledge. There is no one path. In medical school and house staff training get as much education about public health, community health, general pediatrics, and other broad areas as you can. PEH from clinical and advocacy perspectives requires someone comfortable with being an inch deep and a mile wide. Doing research in EH, as doing research in any other field, requires focus on a narrow set of issues.

Favorite PEH resources?
The Green Book
Heather Brumberg, MD, MPH

Education
7/99 - 6/02 Yale New Haven Medical Center New Haven, CT Neonatology Fellowship
8/00 - 5/02 Yale School of Public Health New Haven, CT MPH Chronic Disease Epidemiology
6/96 - 6/99 New England Medical Ctr/Floating Hospital Boston, MA Pediatric Residency
8/92 - 5/96 Tufts University School of Medicine Boston, MA MD
1993 Stamford Hospital Stamford, CT Externship in Pediatrics and Pathology
9/88 - 6/92 Harvard University Cambridge, MA AB cum laude in Biology

Current location of practice
NICU at Maria Fareri Children’s Hospital at Westchester Medical Center, Valhalla, NY

Areas of interest in Pediatric Environmental Health (PEH)
Epidemiology, perinatal and lifecourse effects, congenital anomaly prevalence

Current projects
Interests include neonatal nutrition, the regional epidemiology of congenital anomalies and prematurity, and promoting preconception health through social health marketing. Also co-chair of APA environmental health SIG.

Amount of current practice dedicated to PEH?
Neonatology is linked with reproductive health and environmental exposures in the broadest sense, from toxicants to how the delivery mode impacts perinatal outcomes.

What do you think are the biggest challenges facing PEH?
I think integrating environmental health into the reproductive health agenda/preconception health agenda is important but challenging. Furthermore, getting practitioners in OB/GYN, pediatrics, and neonatology aware and engaged in environmental health issues is challenging as most of the actionable items are not medical therapies, but rather advocacy.

How do we overcome these challenges?
1) Better reimbursement for counseling patients on environmental health issues, 2) Incorporating environmental health into practitioners competencies, 3) Collaborations across fields, 4) Raising consumer awareness to help grassroots involvement.

Advice for those interested in making PEH a focus of their career?
Get involved, the COEH has some wonderful potential mentors and opportunities to see how some of the luminaries in the field have gotten to where they are now (discussed at the session at PAS).

Favorite PEH resources?
Green Book, PEHSU's

Carla C. Campbell, MD, MS

Education
I received a BS from Rutgers University, New Brunswick, NJ; a MD degree from the University Of Kentucky College Of Medicine, Lexington, KY; and a MS in Community Medicine from Mount Sinai School of Medicine, New York, NY. I received pediatric training at the University of Kentucky College of Medicine and training in environmental, occupational and preventive medicine at the Mount Sinai School of Medicine.
**Current Location of Practice**
Associate Teaching Professor, Department of Environmental and Occupational Health (DEOH), Drexel School of Public Health, Philadelphia, PA. I recently left The Children’s Hospital of Philadelphia, where I saw patients in the Lead Evaluation Clinic and for general pediatrics, and taught residents and students.

**Areas of interest in PEH**
Childhood lead poisoning prevention and treatment, international lead exposure, cell phone safety, indoor air pollution from use of solid fuel cook stoves (in developing countries).

**Current projects**
Teaching MPH students about lead poisoning, children’s environmental health, other EOH topics; teaching undergraduates about global health; finishing study of effect of creation of a specialized Lead Court in Philadelphia on remediation of homes with identified lead hazards.

**Amount of current practice dedicated to PEH?**
60-70%

**Biggest challenges to PEH?**
Difficult to compete with other areas of specialization that have more acute medical conditions or which in general, tend to lead to higher salaries.

**How do we overcome these challenges?**
Making PEH topics more visible at conferences and CME courses and through the AAP activities.

**Advice for those interested in PEH?**
Get more training after pediatric residency, such as a PEH fellowship or residency in environmental and occupational medicine. Working with a faculty mentor already working in PEH would also be helpful.

**Favorite PEH resources?**
The Green Book.
Resources from the National Center for Environmental Health (CDC) for lead toxicity issues and other topics. WHO and UNICEF resources for international health issues.

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**Kevin C. Osterhoudt MD MSCE**

**Education**
I learned to appreciate nature and respect the environment during childhood hiking and camping trips in the serenity of the Chautauqua Gorge of Upstate New York with my father. Years later I went to medical school and trained further in Pediatrics, Pediatric Emergency Medicine, Medical Toxicology, and Clinical Epidemiology. Still, when I look for wisdom or clarity of thought, I seek the lectern of the mountain peak, forest green, or perfect wave.

Medical School: State University of New York at Buffalo School of Medicine and Biomedical Sciences
Residency: The Children’s Hospital of Philadelphia (Pediatrics)
Fellowship: The Children’s Hospital of Philadelphia (Pediatric Emergency Medicine, Medical Toxicology)
M.S. in Clinical Epidemiology, The University of Pennsylvania School of Medicine

**Current location of practice**
The Children’s Hospital of Philadelphia
Areas of interest in Pediatric Environmental Health (PEH)
Pediatric Environmental Toxicology and the importance of nature in child development.

Current projects
• Medical Director, The Poison Control Center at The Children’s Hospital of Philadelphia
• Faculty, The Global Health Program at The Children’s Hospital of Philadelphia
• Community Outreach and Education Core, The Center for Excellence in Environmental Toxicology at the University of Pennsylvania
• Consulting Pediatrician, The Mid-Atlantic Center for Children’s Health and the Environment

Amount of current practice dedicated to PEH?
I also see patients clinically in the emergency department at The Children’s Hospital of Philadelphia and provide administrative direction to a regional poison control center. However, the environment in which we live is such an important contributor to our perspectives, personalities, and health, I like to think that everything I do is relevant to environmental health.

What do you think are the biggest challenges facing PEH?
Compiling quality scientific knowledge clarifying the important dynamic between environmental health and human health. Developing effective risk communication messages to translate scientific environmental messages to the public and to policy makers. Balancing current economic needs with future earth needs.

How do we overcome these challenges?
Investigation, communication, education and preservation. Is it frustrating, or a cause for hope, that Max Planck philosophized that, “A new scientific truth does not triumph by convincing its opponents and making them see the light but rather because its opponents eventually die, and a new generation grows up that is familiar with it.”?

Advice for those interested in making PEH a focus of their career?
Follow Yogi Berra’s advice: “If you come to a fork in the road – take it.”

Favorite PEH resources?
• The AAP “Green Book” (Pediatric Environmental Health, 3rd ed.), especially the guidance on taking an environmental history.
• I like to eat sausage, but I generally am happy to close my eyes to what is in it – learning the breadth of chemicals present in our bodies through the CDC’s National Report on Human Exposure to Environmental Chemicals is eye opening.
• The book, The Lorax, by Dr. Seuss… it’s a story that gets repeated over and over again in our world, and the book is a good reminder that we all share a responsibility to “speak for the trees.”
Mary Ellen Mortensen, MD, MS - CDC Liaison to the COEH

Education
MD Emory Medical School, Atlanta Fellowship in Clinical Pharmacology and Toxicology MS in Clinical Pharmacology—Univ. of Arizona

Current location of practice
Centers for Disease Control & Prevention, National Center for Environmental Health, Division of Laboratory Sciences, Atlanta GA

Areas of interest in Pediatric Environmental Health (PEH)
Metals; non-persistent chemical exposures; biomarkers of exposure and biomonitoring

Current projects
Pilot study to measure multiple exposure biomarkers in a sample of National Children’s Study participants (collaboration between NCS and CDC)

Amount of current practice dedicated to PEH?
About 50%

What do you think are the biggest challenges facing PEH?
Increased training of clinicians; reimbursement for patient/parent counseling

How do we overcome these challenges?
Ensure PEH as part of core curriculum for residents; fellowship funding

Advice for those interested in making PEH a focus of their career?
Consider public health opportunities, such as CDC’s Epidemiology Intelligence Service for training that can include environmental health; get to know your regional poison center and if possible, do an elective month (if a resident) or take advantage of training and education opportunities (talk to the medical director of the center).