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Children's Environmental Health International Initiatives

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dedicated to promoting healthy environments for children

June 2010

Launch of UNEP-WHO Alliance to Eliminate Lead in Paints

The [Global Alliance to Eliminate Lead in Paints](#) met for the first time in Geneva from 26-28 May 2010.

The alliance is aiming to prevent children's exposure to lead via paints and minimize occupational exposure to lead in paint by phasing out the manufacture and sale of paints containing lead.

The United Nations Environment Programme (UNEP) and the World Health Organization jointly serve as the secretariat of the voluntary global partnership.

Among the main outcomes of the meeting were an agreed draft framework setting out the overall goal, objective and organizational structure of the Global Alliance, and draft work plans for different areas of focus including human health and the environment, outreach to industry, legislation and regulations, and workers' health.

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or visit: www.chem.unep.ch/Lead_in_paint

CHILDREN'S ENVIRONMENTAL HEALTH NEWS

Press Releases

[Intergovernmental Negotiating Committee on Mercury](#) From June 7-11, 2010, governments from around the world met in Stockholm, Sweden to begin the process of negotiating a global, legally-binding instrument to control mercury pollution. Negotiations are taking place through an Intergovernmental Negotiating Committee (INC) process, which will develop a set of approaches to strengthen global action on mercury. In addition to the June session, four more negotiating sessions are planned, concluding in 2013.

The first session of the Intergovernmental Negotiating Committee (INC1) covered a broad set of negotiating topics, designed to narrow discussion topics for the second negotiating session. Topics included: reducing mercury emissions to the air, reducing mercury use in products, industrial processes, and small-scale mining, mercury supply, storage, and waste management, and delivering technical assistance and finance, *UNEP*

[Small Particle, Big Problem: the Emerging Link Between Black Carbon and Climate Change](#)
Remarks by Nick Nuttall, UNEP Spokesperson to a Meeting and Panel Discussion at the European Parliament on Black Carbon, *UNEP*

JOURNAL ARTICLES

Air Pollution

[Residential Traffic Exposure, Pulse Pressure, and C-reactive Protein: Consistency and Contrast among Exposure Characterization Methods](#) In this study residential traffic exposure was investigated with C-reactive protein (CRP), a measure of inflammation, and pulse pressure in 1,017 U.S. Puerto Ricans 45–75 years of age with a relatively high incidence of comorbidities associated with elevated inflammation. Traffic exposure at roadway volumes as low as 20,000–40,000 vehicles/day was associated with CRP. The authors conclude that individuals with elevated inflammation profiles could be more susceptible to cardiovascular effects of traffic exposure, *Environmental Health Perspectives*

Chemicals

[Relationships between Polybrominated Diphenyl Ether Concentrations in House Dust and Serum](#) Diet is the primary route of people's exposure to most persistent, bioaccumulative, and toxic compounds. This study finds that levels of polybrominated diphenyl ether (PBDE) flame retardants in dust from U. S. homes correlate strongly with the concentrations in residents' blood, *Environmental Science and Technology*

[Low-Level Arsenic Impairs Glucose-Stimulated Insulin Secretion in Pancreatic Beta Cells: Involvement of Cellular Adaptive Response to Oxidative Stress](#) Chronic exposure to high levels of inorganic arsenic is associated with a wide range of human ailments, including type 2 diabetes. The authors found that low levels of arsenic provoke a cellular adaptive oxidative stress response, which increases antioxidant levels, dampens ROS signaling involved in GSIS,

[The resilience of water supply and sanitation in the face of climate change](#) Climate change is expected to affect the capacity and operations of existing water and sanitation infrastructure and services. These services have to prepare for the widely anticipated consequences of floods and droughts, or risk compromising access to safe drinking water and adequate sanitation for substantial numbers of people in developing and developed countries, with cascading effects on human health and development, *WHO*

In the Media

[Toxic Mercury Is More at Home in Seawater](#) New study suggests that humans need to be more wary of saltwater fish like tuna, mackerel and sharks than of freshwater fish. Although seawater has lower concentrations of mercury than freshwater, mercury in seawater is more likely to stay in its toxic form, *The New York Times* (28/06/2010)

[UN starts \\$5M Agent Orange cleanup at Vietnam base](#) The United Nations has launched a \$5 million project to clean up Agent Orange contamination at a former U.S military air base in Vietnam, *Associated Press* (28/06/2010)

[Arsenic water killing 1 in 5 exposed in Bangladesh](#) As arsenic continues to kill in Bangladesh, many argue that the international community must help to fix the problem created by the wells they first dug, *Associated Press* (27/06/2010)

[Study: Lead found in children's drinks and fruit products](#) Lead found in many children's drinks and foods, as well as baby foods, *St Petersburg Times* (26/06/2010)

and disturbs β -cell function, *Environmental Health Perspectives*

[Acute and Chronic Effects of Oral Genistein Administration in Neonatal Mice](#) Newborn mice fed genistein-enriched soy formula during the first five days of life developed abnormalities of the ovary, uterus and thymus gland that were estrogen related and persisted into adulthood, *Biology of Reproduction*

[Childhood Lead Exposure After the Phaseout of Leaded Gasoline](#) The authors measured blood lead distributions among schoolchildren in Uganda. The mean blood lead level (BLL) was 7.15 $\mu\text{g}/\text{dL}$, and > 20% of the children had BLLs $\geq 10 \mu\text{g}/\text{dL}$. Dust and soil lead were not significant predictors of BLL. The authors conclude that exposure to high levels of lead remains prevalent among school-aged children in Kampala in spite of the removal of lead from gasoline, *Environmental Health Perspectives*

[Significantly Higher Polybrominated Diphenyl Ether Levels in Young U.S. Children than in Their Mothers](#) In the first study to compare children's uptake with that of their mothers, researchers found that children's PBDE levels are around 2.8 times higher children bear high burdens of polybrominated diphenyl ether (PBDE) flame retardants in their bodies, *Environmental Science and Technology*

[Neurobehavioral Deficits and Increased Blood Pressure in School-Age Children Prenatally Exposed to Pesticides](#) The long-term neurotoxicity risks caused by prenatal exposures to pesticides are unclear. This study examined school children whose current pesticide exposure was assessed from the urinary excretion of organophosphate metabolites and erythrocyte acetylcholine esterase activity. Exposure-related

[How Will The Gulf Oil Spill Affect Human Health?](#) Medical researchers are meeting this week in New Orleans to discuss the health effects of the ongoing oil spill in the Gulf of Mexico, NPR (23/06/2010)

[Health risks for those living within 500m of main roads](#) Children living within 500 metres of a major road or freeway are at greater risk of developing asthma, *The Age* (20/06/2010)

[Ensure better water services, enjoy better health](#) Water has now become the limiting factor for sustainable economic growth within the Asia Pacific, *The New Nation* (20/06/2010)

[Lead Poisoning Death Toll Continues to Rise in Nigeria](#) Nigerian authorities are decontaminating large areas of the northwestern state of Zamfara, after lead poisoning from illegal gold mining has killed dozens of women and children, *VOA News* (18/06/2010)

[EU urged to act on toxic waste dumping](#) Greenpeace is calling on the European Union to implement its own toxic waste prevention measures and wants the United Nations to investigate suspected dumping of toxic and radioactive materials in Somalia, see [Green Peace Report](#), *Financial Times* (18/06/2010)

[Dogs plus pollutants may raise asthma risk in kids](#) Kids who grow up with a dog in the house may be at higher risk of developing asthma if they're also exposed to secondhand smoke or nitrogen dioxide, *Reuters* (17/06/2010)

[Lead poisoning sickens 16 children in central China](#) About 30 people in central China's Hubei province, including 16 children, have been diagnosed with excessive lead levels in their blood, *China Daily* (12/06/2010)

deficits were the strongest for motor speed and coordination, visuospatial performance and visual memory. These associations correspond to a developmental delay of 1.5–2 years, *Environmental Health Perspectives*

[Early Postnatal Blood Manganese Levels and Children's Neurodevelopment](#) Babies with either relatively high or relatively low levels of manganese in their blood may be slower to hit certain developmental milestones in their first year than other infants, *Epidemiology*

Water And Sanitation

[Arsenic exposure from drinking water, and all-cause and chronic-disease mortalities in Bangladesh \(HEALS\): a prospective cohort study](#) Chronic arsenic exposure through drinking water was associated with an increase in the mortality rate. Follow-up data from this cohort will be used to assess the long-term effects of arsenic exposure and how they might be affected by changes in exposure. However, solutions and resources are urgently needed to mitigate the resulting health effects of arsenic exposure, *The Lancet*

Reproductive Health

[Long-term Cognition, Achievement, Socioemotional, and Behavioral Development of Healthy Late-Preterm Infants](#) If babies are born a couple of weeks early, but are healthy, they're not at greater risk of developmental or behavior problems later on, *Archives of Pediatric and Adolescent Medicine*

[Coal and autism link study](#)

Emissions from Hunter Valley power stations will be central to a study proposed by Melbourne researchers who are investigating the relationship between mercury and autism, *Newcastle Herald* (12/06/2010)

[Endgame for Endosulfan](#)

Today Pesticide Action Network North America (PANNA) and partners around the world are rejoicing over U.S. EPA's announcement of the end of endosulfan, an antiquated, highly toxic insecticide. The pesticide has been linked to autism, birth defects, and delayed puberty in humans, *PAN North America* (9/06/2010)

[BP Oil Spill Dangerous For Children's Lungs](#)

The Centers for Disease Control and Prevention (CDC) recommends that people avoid close contact with the oil spill and the fumes that arise from the burning oil, especially if you or your children have asthma or any other respiratory or lung condition, *Emax health* (9/06/2010)

[Experts visit villages near Fazilka, find signs of water toxicity](#) Poor health of inhabitants, such as stunted growth and skin problems, indicate possible water toxicity in villages near Fazilka, *Express India* (8/06/2010)

[Experts warn of high toxins in grain](#) Risk of maize grain contamination in Uganda due to poor post-harvest handling, *New Vision* (7/06/2010)

[McDonald's Recalls 'Shrek' Glasses](#) McDonald's Corp. is recalling 12 million glasses sold as a promotional tie-in to the latest "Shrek" movie because they contain the toxic metal cadmium. *The Wall Street Journal* (4/06/2010)

[Comparison of Current-Use Pesticide and Other Toxicant Urinary Metabolite Levels among Pregnant Women in the CHAMACOS Cohort and NHANES](#) Over 78% of women in this study had detectable levels of at least one of the OP pesticide-specific metabolites and > 30% had two or more. The authors conclude that the CHAMACOS cohort has an additional burden of precursor pesticide exposure compared with the national sample, possibly from living and/or working in an agricultural area, *Environmental Health Perspectives*

General

[Urban Area Disadvantage and Under-5 Mortality in Nigeria: The Effect of Rapid Urbanization](#) The authors examined trends in urban population growth and urban under-5 mortality between 1983 and 2003 in Nigeria. Urban under-5 mortality increased as urban population steadily increased between 1983 and 2003. Urban area disadvantage was significantly associated with under-5 mortality after adjusting for individual child- and mother-level demographic and socioeconomic characteristics. The authors conclude that their findings underscore the need for community- and individual-level interventions, *Environmental Health Perspectives*

[Toxic chemicals finding their way into the womb](#) A growing number of studies find toxic chemicals in mothers' and babies' bodies with no conclusive cause and effect as to health outcomes, CNN (3/06/2010)

[Poisoned Wells: In Asia, Cutting Arsenic Risk in Water Through Well-Drilling Techniques](#) Simple well-drilling techniques could the lower the risk of arsenic contamination of groundwater in Bangladesh, Nepal, western India, Myanmar, Cambodia and Vietnam, The New York Times (1/06/2010)

UPCOMING EVENTS

[Third European IRPA Congress](#)

14 – 18 June 2010, Helsinki, Finland

[4th International Conference on the History of Occupational and Environmental Health](#)

19 – 22 June 2010, San Francisco, USA

[Global Humanitarian Forum - Youth Forum 2010](#)

28 June – 1 July 2010. Geneva, Switzerland

[Workshop on Children's Health and the Environment](#)

Held immediately before the 26th International Congress of Pediatrics; 4 August 2010. Johannesburg, South Africa

[The 8th Annual Conference on Children's Health and the Environment](#)

24 September 2010, Washington DC

[Children First Symposium](#)

1 October 2010, University of California, San Francisco

[6th World Environmental Education Congress](#)

19 – 23 July 2011. Brisbane, Queensland, Australia

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