
Children's Environmental Health International Initiatives

This is an international mailing list provided by [WHO](#) and [UNEP](#) dedicated to promoting healthy environments for children

November 2010

Children's Environmental Health side event at the Second Inter-Ministerial Conference on Health and Environment in Africa

African Health and Environment Ministers gathered in Luanda, Angola on 23-26 November 2010 for the Second Inter-Ministerial Conference on Health and Environment. This landmark Conference reaffirmed the political commitment made by Ministers at the Libreville Conference in 2008, on enhanced inter-sectoral actions and co-benefits for human health and the environment, as part of their engagement towards sustainable development in the African region.

The Conference addressed progress made by countries in the implementation of the Libreville Declaration, identified country-level actions and agreed on the continent's health and environment top priorities with a view to achieving the Millennium Development Goals.

The four-day Conference adopted a Statement for Africa on climate change and health for the 16th Conference of the Parties to the United Nations Framework Convention on Climate Change to be held in Cancun, Mexico, December 2010.

Jointly organized by the World Health Organization and the United Nations

CHILDREN'S ENVIRONMENTAL HEALTH NEWS

Press Releases

[Norway renews large scale support for UNICEF's education programmes and focus on equal rights for girls](#)

The Norwegian Government renewed its long commitment to children today, by signing a new cooperation agreement to provide additional funds for UNICEF's work with children, especially for education and girls' rights. UNICEF (29/11/10)

[Asia-Pacific governments agree to speed progress towards the elimination of new HIV infections among newborns](#)

Asia Pacific governments and UN officials have agreed to accelerated efforts towards eliminating the transmission of HIV from mothers to their newborn children at a meeting in the People's Democratic Republic of Laos. UNICEF (26/11/10)

[New atlas shows Africa's vulnerable water resources in striking detail](#)

The major challenges facing Africa's water resources have been laid out in striking clarity in a new atlas compiled by

Environment Programme and hosted by the Government of the Republic of Angola, the second Inter-Ministerial Conference on Health and Environment in Africa brought together ministers of health and ministers in charge of environment of African countries, as well as participants from a broad range of constituencies such as multilateral agencies and secretariats of international agreements, cooperation partners, development banks and regional political and economic organizations, scientific experts, civil society, including NGOs, the media, academia and the private sector.

This Conference followed the [First Inter-Ministerial Conference](#) where health and environment Ministers in Africa agreed to build a strategic health and environment alliance to reduce environmental threats to human health and well-being. At the 2008 conference, Ministers signed and adopted the Libreville Declaration which committed governments to taking the measures required to stimulate the policy, institutional and investment changes needed to optimize synergies between health, environment and other relevant sectors. In Luanda the Ministers signed the Luanda Commitment to implement the Libreville declaration.

WHO organized a side event focusing on child health and the environment in Africa. Dr Maria Neira, Dr Ruth Etzel and Mrs Hawa Senkoro described children's unique vulnerability to hazards in the environment, and provided information about prevention of paraffin (kerosene) poisoning among children under 5 years of age. For additional information, please contact Dr Etzel at ETZELR@WHO.INT

the United Nations Environment Programme (UNEP). UNEP (25/11/10)

[UNICEF calls for a comprehensive Child Act in Afghanistan](#)

Afghanistan needs a comprehensive Child Act fully in line with the provisions and principles of the Convention on the Rights of the Child. In Afghanistan today one in five children die before reaching their fifth birthday - mostly from easily preventable diseases like diarrhoea and pneumonia – five million children are still out of school, over three million of whom are girls, and only six percent of children are registered at birth, leaving the great majority without a legal identity, protected and cared for by law. UNICEF (23/11/10)

[New Study Reviews the World Bank Group's Response to The Global Financial Crisis](#)

The Independent Evaluation Group (IEG) released "The World Bank Group's Response to the Global Economic Crisis"—an appraisal of the significant role the World Bank Group (WBG) has played in addressing the global economic downturn. IEG's evaluation shows that the organization has sought to achieve three objectives: support the most vulnerable, maintain long-term infrastructure investment, and sustain the potential for private sector-led growth. In doing so, the WBG committed \$128.7 billion and disbursed a record \$80.6 billion during fiscal years 2009 and 2010—more than any other international financial institution (IFI). World Bank (18/11/10)

Convention on the Rights of the Child

On November 20, 1989, 21 years ago, a remarkable milestone for the protection and realization of the rights of all children - the Convention on the Rights of the Child – was officially opened for signature by United Nations Member States. The Convention on the Rights of the Child (CRC) is the first legally binding instrument designed to protect and promote the rights of people under 18 years old.

Built on varied legal systems and cultural traditions, the Convention is a universally agreed set of non-negotiable standards and obligations. These basic standards—also called human rights—set minimum entitlements and freedoms that should be respected by governments. They are founded on respect for the dignity and worth of each individual, regardless of race, colour, gender, language, religion, opinions, origins, wealth, birth status or ability and therefore apply to every human being everywhere.

The Convention on the Rights of the Child sets out the rights that must be realized for children to develop their full potential, free from hunger and want, neglect and abuse. It reflects a new vision of the child. Children are neither the property of their parents nor are they helpless objects of charity. They are human beings and are the subject of their own rights. The Convention offers a vision of the child as an individual and as a member of a family and community, with rights and responsibilities appropriate to his or her age and stage of development. By recognizing children's rights in this way, the Convention firmly sets the focus on the whole child.

[PLoS Medicine: Poor sanitation and water kill more than two million children annually](#)

A new series published today in leading medical journal Public Library of Science Medicine reveals that poor sanitation, water and hygiene not only lead to more than two million children dying annually, but also result in a massive global disease burden.

UNICEF (16/11/10)

[Extension of UNEP- Bayer Partnership on Youth and the Environment Millions of Young People Engaged Worldwide](#)

A global partnership on youth and the environment that engages millions of young people worldwide launched by the United Nations Environment - Programme (UNEP) and Bayer AG in 2004 - will be extended to the end of 2013. UNEP (8/11/10)

[UNICEF focuses response on children in storm-ravaged Haiti](#)

UNICEF teams are in the field and in Port-au-Prince conducting assessments and preparing to deploy supplies and human resources in addition to those already prepositioned to respond to emergency needs in hardest-hit areas following the passage of Hurricane Tomas. UNICEF (7/11/10)

[UNICEF positions emergency supplies for tropical storm as cholera outbreak continues in Haiti](#)

UNICEF is rushing to ensure adequate emergency supplies in preparation for a severe tropical storm, as it works with UN and NGO partners to support the Government of Haiti's response to the

The Convention places equal emphasis on all of the rights for children. There is no such thing as a 'small' right and no hierarchy of human rights. These rights are indivisible and interrelated, with a focus on the child as a whole. Governmental decisions with regard to any one right must be made in the light of all the other rights in the Convention.

[Convention on the Rights of the Child](#)

JOURNAL ARTICLES

Air Pollution

[Air Pollution and Emergency Department Visits for Otitis Media:](#)

Otitis media (OM) is one of the most common early childhood infections, resulting in an enormous economic burden to the health care system through unscheduled doctor visits and antibiotic prescriptions. The authors investigated the association between ambient air pollution exposure and emergency department (ED) visits for OM using 10 years of ED data from Edmonton, Alberta, Canada, and measures of carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide, and particulate matter (PM; median aerometric diameter ≤ 10 and 2.5 μm). After applying a time-stratified case-crossover technique to analyze the associations between ambient air pollution and health outcomes, the authors observed positive associations between ED visits for OM and increased CO and NO₂ levels. The strongest associations were observed in the warmer months (April–September) in girls and all children exposed to CO and NO₂. The authors conclude that their data support the hypothesis that ED visits for OM are associated with ambient air pollution.

Environmental Health Perspectives

recent cholera outbreak. UNICEF (3/11/10)

In the Media

[Cleaning agents may harm health](#)

Chemicals used to improve cleanliness may be harming the health of children and adults, new US research suggests. Australian Associated Press (29/11/10)

[Clue found to penis birth defect](#)

The latest research, in the journal Nature Genetics, found a gene which, when mutated, more than doubled the risk of hypospadias. The problem starts during the development of the sexual organs in the womb, and while there have been suggestions that exposure to environmental chemicals early in pregnancy may contribute, evidence to support this is not conclusive. BBC (29/11/10)

[UNLV researcher studies risk of lead in green turf](#)

A team of researchers say green synthetic turf should be monitored for lead hazards. The "green stuff" in fake grass is lead chromate. When the compound breaks down, it can release lead that could be inhaled or ingested by those at play, including football players or kids in day care centers and parks. Associated Press (28/11/10)

Chemicals

[Assessing Children's Dietary Pesticide Exposure: Direct Measurement](#)

In response to calls for more direct measurements of pesticide residues in foods consumed by children, and to compare direct measures of pesticide residues in foods representing actual consumption with those reported by the U.S. Department of Agriculture Pesticide Data Program, the authors measured pesticide residues in 239 24-hr duplicate food samples collected from 46 children in the Children's Pesticide Exposure Study (CPS). Parents collected duplicate food samples of all conventional fruits, vegetables, and fruit juices consumed by their children, and individual or composite food items were analyzed for residues of organophosphate (OP) and pyrethroid insecticides. The authors report that 14% and 5% of food samples contained at least one OP or pyrethroid insecticide, respectively. They also detected a total of 11 OP insecticides and 3 pyrethroid insecticides. The authors conclude that findings support the need to reduce the presence of these pesticides in the food supply. *Environmental Health Perspectives*

[In Utero Exposure to Bisphenol A Shifts the Window of Susceptibility](#)

Bisphenol A (BPA) is a ubiquitous environmental chemical with reported endocrine-disrupting properties. The authors examined whether prenatal exposure to BPA would predispose the adult rat mammary gland to carcinogenesis. The authors treated pregnant rats orally with BPA on gestation days 10–21. For tumorigenesis studies, prenatally exposed female offspring received a single gavage of dimethylbenzanthracene (DMBA) on postnatal day (PND) 50 or PND100. The authors report that prenatal exposure of the

[Bacteria and Asthma: Untangling the Links](#)

There is mounting evidence that bacteria matter for the onset of asthma. Studies and observations suggest that the balance of bacteria and other microbes help guide immune development — and that when the balance is disrupted, disease may follow. *Science* (27/11/10)

[Gender bending chemical Bisphenol A will be banned from baby bottles in EU](#)

A potentially harmful chemical commonly found in plastic baby bottles is to be banned from their manufacture from next year. Tests show that Bisphenol A (BPA) can leach from the bottle into any liquid it contains, with potentially damaging results. The organic compound is believed to affect development in young children. The European Union yesterday approved the ban, which will come into effect in Europe next year. *London Daily Mail* (26/11/10)

[Australia won't ban 'toxic' BPA](#)

Australia would not ban baby bottles containing the chemical Bisphenol-A over fears it may harm children's health, despite it being prohibited in both Canada and Europe. *WA Daily* (26/11/10)

[Farmers giving antibiotics 'in excess' to livestock](#)

A premature baby, born after 25 weeks, being treated in a hospital in Guangdong Province was found to have drug resistance to a wide range of antibiotics. It was believed that this was because the child's mother had eaten meat and eggs containing high volumes of antibiotic residue. *Shanghai Daily* (26/11/10)

dam to BPA, combined with a single exposure of female offspring to DMBA on PND100—but not on PND50—significantly increased tumor incidence while decreasing tumor latency. Prenatal exposure of the dam to BPA in the absence of DMBA increased cell proliferation and elicited differential effects at the protein level at PND100 compared with PND50. The authors conclude that oral prenatal exposure to BPA increases mammary cancer susceptibility in offspring and shifts the window of susceptibility for DMBA-induced tumorigenesis in the rat mammary gland from PND50 to PND100. These changes are accompanied by differential effects of prenatal BPA exposure on the expression of key proteins involved in cell proliferation.

Environmental Health Perspectives

[Species-Specific Differential AhR Expression Protects Human Neural Progenitor Cells against Developmental Neurotoxicity of PAHs](#)

Persistent organic pollutants (POPs) bioaccumulate through the food chain and may adversely affect human health and the environment. Due to their lipophilicity, POPs cross the human placenta, exposing the fetus to contaminants that could possibly affect central nervous system development. Many POPs are known aryl hydrocarbon receptor (AhR) ligands and activators of AhR signaling; therefore, other researchers have hypothesized that AhR activation may be associated with neurotoxicity produced by developmental exposure to POPs. To address this hypothesis, the authors used neurosphere cultures derived from human and mouse (wild-type and AhR-deficient) neural progenitor cells (NPCs) and studied the effects of different AhR agonists [3-methylcholanthrene and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)] and an antagonist (3-methoxy-4-nitroflavone) on

[Passive smoking 'kills 165,000 children a year'](#)

Passive smoking is responsible for more than 600,000 deaths worldwide each year, including 165,000 child deaths, according to the most comprehensive study so far on the issue. That means that around one in every hundred deaths can be laid at the door of second-hand tobacco. Caledonian Mercury (26/11/10)

[Living Off Toxic Trash in the Philippines](#)

A large and growing community of slum dwellers earn a living off the Pier 18 landfill. They collect all sorts of junk – including the prized and dangerous electronic waste or "e-waste". With small bare hands, children break light bulbs and pull the coiled copper from the bottoms. Then they burn clumps of plastic-coated electric wire, which when burned, emit carcinogens. CBS News (24/11/10)

[Can traumatic events trigger inherited depression?](#)

New evidence suggests that traumatic events can affect the genes, and lives, of children as yet unborn. London Daily Telegraph. (23/11/10)

[Newfound water risk: Lead-leaching valves](#)

Hidden elements in drinking-water lines can shed large amounts of lead, a toxic heavy metal. And it's quite legal, even if it does skirt the intent of federal regulations. Science News (23/11/10)

[Cholera tightens grip on Haiti](#)

As cholera rampages through Haiti, some epidemiologists are warning that

neurosphere development. They also analyzed expression of AhR and genes involved in AhR signaling. In contrast to wild-type mouse NPCs, both human NPCs and AhR-deficient mouse NPCs were insensitive to AhR agonism or antagonism. These data suggest that humans may be less vulnerable to AhR-ligand mediated effects than some laboratory animal species.

Environmental Health Perspectives

Water And Sanitation

[Impact of a Citywide Sanitation Program in Northeast Brazil on Intestinal Parasites Infection in Young Children](#)

The importance of an uncontaminated water supply and proper sanitation in controlling enteric infections, as well as contributing to poverty eradication, has been recognized by the international community. Although sanitation appears to be no less effective as a public health measure than water supply improvements, targets for improving sanitation worldwide are not being met, and there is a lack of rigorous evidence demonstrating the effectiveness of sanitation programs in preventing disease in large populations. The authors evaluated the impact of a sanitation program implemented throughout the city of Salvador in Bahia State, Brazil, on infection with *Ascaris lumbricoides*, *Trichuris trichuria*, and *Giardia duodenalis* in two cross-sectional studies of children aged 1–4 years. The prevalence of infection was reduced after intervention, and most of this reduction appeared to be explained by the increased coverage of each neighborhood by the sewage system constructed during the intervention. The authors conclude that their data support the implementation of sanitation programs at the city or regional level and that they are more effective than programs that target changes at the

the country could face more than half a million cases over the coming year. Yet tracking and treating the disease is proving increasingly difficult as civil unrest grips the county. Nature News (23/11/10)

[Cadmium, lead found in drinking glasses](#)

Drinking glasses depicting comic book and movie characters such as Superman, Wonder Woman and the Tin Man from "The Wizard of Oz" exceed federal limits for lead in children's products by up to 1,000 times, according to laboratory testing commissioned by The Associated Press. Associated Press (22/11/10)

[Child asthma rate down with less smoking](#)

Asthma rates are down for young children in Canada, and researchers are crediting reduced exposure to smoking at home as one of the reasons. CBC Canada (22/11/10)

[Extra weight in early childhood foretells later disease risk](#)

Baby fat can be a harbinger of serious disease later on. Being overweight as a young child is a strong predictor of diabetes and heart disease risk in early adulthood, a new Dutch study finds. Science News (20/11/10)

[Smoking during pregnancy 'increases risk of children turning to crime'](#)

Smoking in pregnancy can cause harm to the child's developing brain that puts them at greater risk of having a long-term criminal record, claim researchers. London Daily Mail (20/11/10)

domestic or household level.

Environmental Health Perspectives

[Hygiene, Sanitation, and Water: Forgotten Foundations of Health](#)

Globally, around 2.4 million deaths (4.2% of all deaths) could be prevented annually if everyone practised appropriate hygiene and had good, reliable sanitation and drinking water. These deaths are mostly of children in developing countries from diarrhoea and subsequent malnutrition, and from other diseases attributable to malnutrition. In this introductory paper to the PLoS Medicine series on water and sanitation, the authors develop the idea that these basic needs are the forgotten foundations of health.

Summary Points:

- * A massive disease burden is associated with deficient hygiene, sanitation, and water supply and is largely preventable with proven, cost-effective interventions.

- * The total benefits of these interventions are greater than the health benefits alone and can be valued at more than the costs of the interventions.

- * Hygiene, sanitation, and water supply are development priorities, yet the ambition of international policy on drinking water and sanitation is inadequate.

- * Hygiene, sanitation, and water supply continue to have health implications in the developed world.

- * The active involvement of health professionals in hygiene, sanitation, and water supply is crucial to accelerating and consolidating progress for health.

PLOS Medicine

[Sanitation and Health](#)

Adequate sanitation, together with good hygiene and safe water, are fundamental to good health and to social and economic development. Improvements in one or more of these three components of good health

[‘Never-smokers’ more vulnerable to COPD](#)

A new study shows that exposure to indoor air pollution is the most important cause for COPD at a young age because of exposure to biomass fuel since childhood. Mumbai Daily News and Analysis (17/11/10)

[Conference explores ways to keep kids safe from household chemicals](#)

A conference looking at ways to reduce children's exposure to environmental contaminants brought together about 70 educators, health-care professionals, representatives from non-profit organizations and concerned citizens. Fredericton Daily Gleaner (17/11/10)

[Prenatal Exposures Prompt EPA to Re-examine Chemical Regulations](#)

U.S. EPA regulators convened with scientists last month to discuss how to design regulations for chemicals based on emerging science that connects exposures during pregnancy with disease much later in life. New York Times (15/11/10)

[Better sanitation could save 2 million lives a year](#)

Nearly 20 percent of the world's population still defecates in the open, and action to improve hygiene, sanitation and water supply could prevent more than 2 million child deaths a year. Reuters (16/11/10)

can substantially reduce the rates of morbidity and the severity of various diseases and improve the quality of life of huge numbers of people, particularly children, in developing countries.

Summary Points:

- * 2.6 billion people in the world lack adequate sanitation—the safe disposal of human excreta. Lack of sanitation contributes to about 10% of the global disease burden, causing mainly diarrhoeal diseases.

- * In the past, government agencies have typically built sanitation infrastructure, but sanitation professionals are now concentrating on helping people to improve their own sanitation and to change their behaviour.

- * Improved sanitation has significant impacts not only on health, but on social and economic development, particularly in developing countries.

- * The health sector has a strong role to play in improving sanitation in developing countries through policy development and the implementation of sanitation programmes.

PLOS Medicine

[Hygiene, Sanitation, and Water: What Needs to Be Done?](#)

This paper is the fourth in a four part series. Previous papers in this series have set out the importance for health of sanitation and water and touched on the importance of hygiene. This paper analyses the causes of poor national progress, discusses how these can be addressed, and highlights the potential roles of the various actors—especially the health sector—in tackling the challenges that lie ahead.

PLOS Medicine

Global Change

[Availability and quality of cause-of-death](#)

[Over 60 percent of child deaths in India avoidable: survey](#)

More children under the age of five die in India than in any other country in the world, and from five main causes that are avoidable, a study in India has found. Reuters (14/11/10)

[Pesticide contamination alarms experts](#)

If new research holds true across the population globally, one mouthful out of five that children eat is tainted with pesticides. Sydney Morning Herald (12/11/10)

[Bogor children suffers from lead poisoning](#)

A government-sanctioned team has found that children in one village in Bogor, West Java, have been suffering from chronic lead poisoning. Children in Cinangka Village, Bogor, have an average lead level of 32.62 micrograms per deciliter of blood, exceeding the safe level of 10 micrograms per liter set by the World Health Organization (WHO). Jakarta Post (12/11/10)

[Queensland health authorities monitor PNG cholera outbreak.](#)

QUEENSLAND health officials are monitoring a cholera outbreak on a remote island near the Torres Strait following the deaths of 13 children. Australian Associated Press (12/11/10)

[Cholera in Haiti — The Climate Connection](#)

After lying dormant in Haiti for half a century, a three-week-old cholera outbreak has killed more than 700 people and is advancing across the country. On Tuesday, the epidemic

[data for estimating the global burden of injuries](#)

Reliable estimates of the burden of death and disability due to injury are essential for shaping national and global health priorities. Although the quality of the information available in developing countries is relatively poor, past efforts at quantifying the global burden of disease have convincingly established that injuries contribute approximately 10% to global mortality and 12% to global morbidity. A study into the global burden of disease was commissioned by The World Bank in 1991 and a new study is currently under way. This paper focuses on the availability and quality of global mortality data reported by national death registration systems to the World Health Organization (WHO) mortality database. The WHO mortality database is the largest single repository of international data on causes of death. This study builds on past work by Mathers et al., who examined the quality of cause-of-death data in this database.

An important finding of this analysis is that reliable national death registration data were available for less than 30% of the global population, which means that alternative data sources must be used for estimating global injury mortality. This analysis is a step towards making global injury data comparable across countries.

Bulletin of the World Health Organization

Reproductive Health

[Impact of community-based interventions on maternal and neonatal health indicators: Results from a community randomized trial in rural Balochistan, Pakistan](#)

Pakistan has high maternal mortality, particularly in the rural areas. The delay in decision making to seek medical care during obstetric emergencies remains a significant

reached Port-au-Prince, Haiti's capital and largest city, where more than a million people are still squatting in overcrowded tent camps and sharing scant latrines. Circle of Blue Waternews (11/11/10)

[Fetal Origins Of Disease](#)

A growing body of scientific research suggests that exposure to chemical toxicants in the womb can lead to chronic health problems, including obesity, diabetes, heart disease, and cancer, later in life. Chemical and Engineering News (8/11/10)

['Recycled' lead in children's blood: Report](#)

Blood samples taken from children living near illegal lead battery smelters in Greater Jakarta show an average blood lead level almost four times higher than acceptable, according to a report. Jakarta Post (6/11/10)

[Bisphenol A goes through the skin](#)

Two studies have thrown the controversial compound bisphenol A (BPA) back into the limelight. One study found that the chemical is readily absorbed through the skin, while a second study found that people who routinely touch BPA-laden till receipts have higher than average levels of the chemical in their bodies. Nature News (4/11/10)

factor in maternal mortality. The authors present results from an experimental study in rural Pakistan. Village clusters were randomly assigned to intervention and control arms (16 clusters each). Pregnant women in intervention clusters received prenatal care and prophylactic iron therapy more frequently than pregnant women in control clusters. Providing safe motherhood education to husbands resulted in further improvement of some indicators. There was a small but significant increase in percent of hospital deliveries but no impact on the use of skilled birth attendants. Perinatal mortality reduced significantly in clusters where only wives received information and education in safe motherhood. The authors concluded that providing safe motherhood education increased the probability of pregnant women having prenatal care and utilization of health services for obstetric complications.

Reproductive Health

[Autism breakthrough as scientists discover key gene in brain](#)

Scientists are a step closer to unlocking the riddle of autism. Autism and related conditions such as Asperger's syndrome affect more than one in 100 British children - ten times more than just 30 years ago. London Daily Mail (4/11/10)

UPCOMING EVENTS

[6th World Environmental Education Congress](#)

19 – 23 July 2011. Brisbane, Queensland, Australia

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