

Children's Environmental Health International Initiatives

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

May 2017

GLOBAL ACCELERATED ACTION FOR THE HEALTH OF ADOLESCENTS (AA-HA!): GUIDANCE TO SUPPORT COUNTRY IMPLEMENTATION

The Sustainable Development Goals, which seek to achieve global economic, social and environmental sustainable development by 2030, will not be realized without investment in adolescent health and well-being. The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030) that was launched in 2015 to support the Sustainable Development Goals, provides an unprecedented opportunity to improve adolescent health and to respond more effectively to adolescents' needs.

More than 3000 adolescents die every day, from largely preventable causes. Most of these deaths can be prevented with good health services, education and social support. But in many cases, adolescents who suffer from mental health disorders, substance use, or poor nutrition cannot obtain critical prevention and care services.

UN partners, led by WHO, have developed guidance to support country implementations for the AA-HA!; they aim to assist policy makers and programme managers to plan interventions for the health needs of adolescents. Investment in adolescent health brings a triple dividend: benefits for adolescents now, for their future adult lives and for their children.

[Full report](#)

[Summary](#)

[Comic book](#)

[Infographics](#)

[Press release](#)

CHILDREN'S ENVIRONMENTAL HEALTH NEWS

Press Releases

[Public Health, Environmental and Social Determinants of Health \(PHE\) during the 70th World Health Assembly](#)

The 70th World Health Assembly will be held from 22-31st May 2017 in Geneva. Public Health, Environmental and Social Determinants of health topics to be discussed and events to be held at this year's World Health Assembly include:

- Technical Briefing on Health and Environment
- PHE Agenda items:
 - [The role of the health sector in the Strategic Approach to International Chemicals Management towards the 2020 goal and beyond](#)
 - [Progress report – Public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention](#)
- Side events on Social Determinants of Health
- [BreatheLife Campaign Interactive Space](#)

[World Health Assembly elects Dr Tedros Adhanom Ghebreyesus as new WHO Director-General](#)

The Member States of WHO have elected Dr Tedros Adhanom Ghebreyesus as the new Director-General of WHO. Prior to his election as WHO's next Director-General, Dr Tedros Adhanom Ghebreyesus served as Minister of Foreign Affairs, Ethiopia from 2012-2016 and as Minister of Health, Ethiopia from 2005-2012. He has also served as chair of the Board of the Global Fund to Fight AIDS, Tuberculosis and Malaria; as chair of the Roll Back Malaria (RBM) Partnership Board, and as co-chair

JOURNAL ARTICLES

Air Pollution

[Effects of Prenatal PM10 Exposure on Fetal Cardiovascular Malformations in Fuzhou, China: A Retrospective Case-Control Study](#)

Maternal exposure to ambient air pollution has been associated with increased risk of congenital heart defects in offspring, however the results are inconsistent. Authors investigated whether there is an association between prenatal exposure to PM10 during early pregnancy and fetal cardiovascular malformations by assigning 10-day or 1-month averages of daily particulate matter using an air monitor-based inverse distance weighting method during early pregnancy. PM10 levels were positively associated with the risks of atrial septal defect, patent ductus arteriosus, overall fetal cardiovascular malformations, ventricular septal defect and tetralogy of Fallot in the first and second gestation months.

Environmental Health Perspectives

Chemicals

[Prenatal Exposure to Organophosphate Pesticides and IQ in 7-Year-Old Children](#)

Organophosphate (OP) pesticides are neurotoxic at high doses. Authors examined associations between prenatal and postnatal exposure to OP pesticides and cognitive abilities in school-age children. Averaged maternal DAP concentrations were associated with poorer scores for Working Memory, Processing Speed, Verbal Comprehension, Perceptual Reasoning, and Full-Scale intelligence quotient (IQ). However, children's urinary DAP concentrations were not consistently associated with cognitive scores.

Environmental Health Perspectives

[Serum Vaccine Antibody Concentrations in Adolescents Exposed to Perfluorinated Compounds](#)

Postnatal exposure to perfluorinated alkylate substances (PFASs) is associated with lower serum concentrations of specific antibodies against certain childhood vaccines at age 7 years. Authors followed a Faroese birth cohort to determine these associations at age 13 years. Serum concentrations of PFASs and of antibodies against diphtheria and tetanus were measured and compared with data from the previous examination

of the Board of the Partnership for Maternal, Newborn and Child Health. WHO (23/5/2017)

[New WHO study on health and well-being of Europe's youth reveals that obesity continues to rise](#)

The number of obese adolescents is continuing to rise in many countries across the WHO European Region. Childhood obesity is considered one of the most serious public health challenges of the 21st century. Obese children are at greater risk of type 2 diabetes, asthma, sleep difficulties, musculoskeletal problems and future cardiovascular disease, as well as school absence, psychological problems and social isolation. Policy initiatives and interventions need to target high-risk adolescents within the context of families, schools and wider communities, and prioritize policies that improve young people's access to healthy diets. WHO EURO (17/5/2017)

[At least one in four children live in poverty in the Middle East and North Africa](#)

According to a recent UNICEF analysis covering 11 countries in the Middle East and North Africa, poverty continues to impact at least 29 million children – one in four children in the region. While important progress has been made in most countries to reduce poverty, the number of children living in poverty continues to be high. Major challenges stand in the way of measuring the impact of poverty on children and taking collective action towards poverty alleviation. UNICEF (15/5/2017)

[Reviewing the health impact and effectiveness of urban green space interventions](#)

Leading up to the Sixth Ministerial Conference on Environment and Health to be held 13 to 15 June in Ostrava, Czech Republic, WHO has launched a new report aiming to fill the knowledge gap on the benefits of urban green spaces. The report provides the results of an evidence review and an assessment of local case studies on urban green space interventions. Increasing or improving urban green space can deliver positive health, social and environmental outcomes for all population groups, particularly among lower socioeconomic status groups. WHO EURO (11/5/2017)

[United Nations Global Road Safety Week – #SlowDown to save lives](#)

Road traffic injuries are the leading killer among children and young people aged 5–29 years. The

at age 7. Serum concentrations of PFASs and antibodies generally declined from age 7 to age 13. Diphtheria antibody concentrations decreased at elevated PFAS concentrations at ages 13 and 7 years.

Environmental Health Perspectives

[Prenatal Residential Proximity to Agricultural Pesticide Use and IQ in 7-Year-Old Children](#)

Authors evaluated the relationship between prenatal residential proximity to agricultural use of potentially neurotoxic pesticides and neurodevelopment in 7-year old children. They observed a decrease of 2.2 points (95% Confidence Interval (CI): -3.9, -0.5) in Full-Scale intelligence quotient (IQ) and 2.9 points (95% CI: -4.4, -1.3) in verbal comprehension for each standard deviation increase in toxicity-weighted use of organophosphate pesticides.

Environmental Health Perspectives

[Manganese in Drinking Water and Cognitive Abilities and Behavior at 10 Years of Age: A Prospective Cohort Study](#)

Cross-sectional studies have indicated impaired neurodevelopment by elevated drinking water manganese concentrations (W-Mn); this study aims to prospectively evaluate effects of W-Mn, from fetal life to school-age, on children's cognitive abilities and behaviour. prenatal W-Mn (<3 mg/L) was positively associated with cognitive ability measures in girls, but not in boys. W-Mn at all time-points was associated with increased risk of conduct problems, especially in boys. At the same time, the prenatal W-Mn was associated with a decreased risk of emotional problems in the boys. In girls, W-Mn was mainly associated with low prosocial scores.

Environmental Health Perspectives

[Effects of Neonicotinoid Pesticide Exposure on Human Health: A Systematic Review](#)

In this systematic review, authors sought to identify human population studies on the health effects of neonics. Three neonic poisoning studies reported two fatalities and an occupational exposure study of 19 forestry workers reported no adverse effects. Four general population studies reported associations between chronic neonic exposure and adverse developmental or neurological outcomes, including tetralogy of Fallot, anencephaly, autism spectrum disorder, and a symptom cluster including memory loss and finger tremor.

Environmental Health Perspectives

United Nations (UN) Global Road Safety Week, on 8–14 May 2017, seeks to increase understanding of the dangers of speed and to spur action on measures to address it, thereby saving lives on the roads. Europe is making progress on road safety, and death rates from road crashes have been going down. Yet despite an 8.1% reduction between 2010 and 2013 in the Region as a whole, fatal crashes continue to increase in some countries. Practitioners and policy-makers can use country profiles to assess progress and to ramp up efforts to achieve the Decade of Action goal of halving road traffic deaths by 2020 – also target 3.6 of the Sustainable Development Goals (SDGs). WHO EURO (8/5/2017)

[Speed management key to saving lives, making cities more liveable](#)

Excessive or inappropriate speed contributes to 1 in 3 road traffic fatalities worldwide. Road traffic crashes remain the number one cause of death among young people aged 15–29 years. They are estimated to cost countries from 3–5% of GDP and push many families into poverty. Countries that have had the most success in reducing rates of road traffic death and injury in recent decades are those that have addressed the issue holistically, prioritizing safe speed as 1 of 4 components of the safe system approach, along with safe roads and roadsides, safe vehicles, and safe road users. By taking these measures populations benefit from the added advantages of increases in walking and cycling and reductions in air and noise pollution. Such actions have positive health benefits on rates of cardiovascular disease, cancer, diabetes and other noncommunicable diseases. WHO (5/5/2017)

[Hand hygiene is key to safe care and prevention of antibiotic resistance](#)

61% of health workers do not sanitize their hands when necessary, which puts people at risk of contracting an infection. PAHO calls on countries and health centers to strengthen prevention and control of infections. As part of the SAVE LIVES: Clean Your Hands campaign, which takes place on May 5, the Pan American Health Organization (PAHO) calls for improved hand hygiene to prevent antimicrobial resistance. Resistance to antibiotics is one of the greatest threats to global health, food security and development. Increasing numbers of serious infections are becoming more difficult to treat because of the loss of efficacy of antibiotics. WHO PAHO (4/5/2017)

[Aerobic Fitness and Neurocognitive Function Scores in Young Faroese Adults and Potential Modification by Prenatal Methylmercury Exposure](#)

Exposure to methylmercury was shown to decrease neural stem cell populations, whereas aerobic fitness has beneficial effects on the adult brain that relies on improved neurogenesis in the hippocampus. Authors examined the association between aerobic fitness and neurocognitive outcomes at young adult age, along with the potential moderating effect of prenatal exposure to methylmercury. Higher aerobic capacity was associated with better performance in short-term memory and processing speed. However, prenatal methylmercury exposure seemed to attenuate these positive associations.

Environmental Health Perspectives

[Manganese exposure and neurotoxic effects in children](#)

Studies indicate that children who ingested Mn in drinking water (WMn) at or above a level of 0.241 mg/L for a minimum of three years performed more poorly in school as measured by mastery of language, mathematics, and in their overall grade average. The Mn-exposed children also performed more poorly on a battery of neurobehavioral tests. It was also found a significant association between higher WMn and lower cognitive performance, verbal function, and full-scale intelligence quotient (IQ) scores. Young children appear to make up a vulnerable group in exposed populations. Toxicity of WMn is a problem particularly in areas of industrial waste or where Mn is leaching from the soil into public drinking water. Practical and cost-effective approaches are available to remove Mn from drinking water.

Environmental Research

E-waste

[Launch of Transboundary E-waste Controversy Map](#)

Step is pleased to announce the launch of its Transboundary E-waste Controversy Map. The map provides a publicly accessible tool for people concerned about the issue of cross-border shipments of e-waste. Transboundary movements of e-waste are a matter of concern for a wide variety of actors including legislators, regulatory authorities, NGOs, corporations, and individual citizens. This online document offers a mapping of the complex terrain of actors and issues

[Hand hygiene a key defence in Europe's fight against antibiotic resistance](#)

Antimicrobial resistance (AMR), and resistance to antibiotics in particular, continues to grow in the WHO European Region and hundreds of thousands of patients die or are considerably affected each year by health care-associated infections (HAI) and diseases caused by germs that are resistant to antimicrobial medicines. Protecting patients against HAI can be achieved by improving hand hygiene at five key moments. Making infection prevention and hand hygiene a national policy priority by aligning and strengthening existing programmes will go far in combating AMR and protecting patients from resistant infections. WHO EURO (4/5/2017)

[WHO South-East Asia pledge intensified efforts against neglected tropical diseases](#)

Making significant progress against neglected tropical diseases, countries in WHO South-East Asia Region resolved to further fast track efforts to eradicate, eliminate and control, by 2020, these diseases which affect the most marginalized and neglected population, pushing them further into poverty and a life marred by deformity and stigma. The WHO South-East Asia Region is targeting elimination of lymphatic filariasis, kala-azar, schistosomiasis, trachoma and leprosy as a public health problem. WHO SEARO (26/4/2017)

[World Malaria Day focuses on wiping out the disease](#)

WHO is calling for increased political and financial commitment to wipe out a disease that continues to kill more than 400 000 people each year. The need for sustained investment and political commitment to reduce malaria cases was focused on in this year's theme. Between 2010 and 2015 the Western Pacific Region reduced malaria incidence by 30%, and deaths from malaria by a massive 58%. By 2020 the aim is to reduce malaria prevalence by 30%, reduce deaths by 50%, and eliminate malaria in at least three countries. WHO WPRO (24/4/2017)

[In Kenya, the path to elimination of malaria is lined with good preventions](#)

A broad range of preventive measures have resulted in major progress against malaria – but declining resources underscore the need for even more efficient work. 70% of Kenya's population are at risk of malaria, yet preventive measures have translated into major progress. Tailored interventions are necessary due to the difference in

associated with transboundary movements of e-waste.

STEP

New Publications

[The Impact of Climate Change on Children in Spain](#) (report in Spanish)

UNICEF reports on the impact of climate change on children, stating it is a growing and unprecedented threat. Spain is one of the European countries most affected by climate change, with a strong impact for children. Waves of heat and cold, air pollution, rising sea levels and exacerbation in allergies and respiratory diseases are the main consequences of climate change affecting children in Spain today.

The increased vulnerability to climate change consequences in children stems from their increased metabolism, social behaviour and the fact they're still developing. Children's absence from decision making despite their increased vulnerability means the promotion of children's rights is a fundamental point in environmental, health and anti-poverty policy making.

UNICEF

[The cost of the Double Burden of Malnutrition: Social and Economic Impact](#)

The combined impact of undernutrition and overweight/obesity, also known as the "Double Burden of Malnutrition," contributed to the loss of billions of dollars to the economies of Latin America. Losses are estimated at US\$500 million in Chile, US\$4.3 billion in Ecuador and US\$28.8 billion in Mexico, which represent respectively 0.2%, 4.3% and 2.3% loss of GDP.

This study by the United Nations World Food Programme and Economic Commission for Latin America and the Caribbean adopts a broad view in order to evaluate a new reality: the increase of overweight and obesity in a context where undernutrition still prevails. It showed that the double burden has significant negative impacts on sickness and mortality rates, educational outcomes and productivity, and therefore carries huge economic consequences for affected individuals, communities and nations. All stages of development were focused on, and environmental effects were considered.

United Nations World Food Programme and Economic Commission for Latin America and the Caribbean

transmission across regions. Countrywide, malaria prevalence dropped from 11% to 8% between 2010 and 2015. Maintaining these advances will not be easy. In western Kenya malaria mosquitoes have started to develop resistance to the pyrethroid insecticides. One preventive tool that has not yet been deployed is the RTS,S/AS01 malaria vaccine. WHO AFRO (4/2017)

WHO Fact sheets

[Drowning](#) Updated May 2017

[Road traffic injuries](#) Updated May 2017

[Diarrhoeal disease](#) Updated May 2017

[Adolescents: health risks and solutions](#) Updated May 2017

In the Media

[F.D.A. Warns of Faulty Lead Testing in Children and Mothers](#)

Blood tests used to check for lead poisoning in children and women since 2014 may have wrongly indicated that children were safe from lead exposure, federal health officials warned Wednesday. The original tests may have underestimated blood lead levels. Infants and young children are especially vulnerable to the effects of lead poisoning, which can cause cognitive deficits and affect almost every system in the body. Health officials urged retesting of children under 6 who had blood drawn from a vein for a lead test done using Magellan Diagnostics LeadCare systems and whose test result was less than 10 micrograms/decilitre. New York Times (17/5/2017)

['Recycling plastics contaminate children's toys with toxic chemicals'](#)

Ahead of the eighth meeting of the Conference of the Parties to the Stockholm Convention (SC COP-8) in Geneva, Switzerland, a new global survey has revealed that recycling plastics containing toxic flame retardant chemicals found in electronic waste results in contamination of new children's toys and related products. The substances include octabromodiphenyl ether (OctaBDE), decabromodiphenyl ether (DecaBDE), and hexabromocyclododecane (HBCD). This study found all three toxic chemicals in recycled plastic children's products. These chemicals are known to disrupt human hormone systems, adversely

[Summary of pilot study](#)

[Preventive Medicine for the Planet and Its Peoples](#)

With warming temperatures come longer summer heat waves that increase mortality, particularly among vulnerable populations — elderly and poor people, residents of urban heat islands, and people with mental illness. There are a plethora of other negative health effects including compromised lung function, allergen exposure, vector-borne disease distribution and natural disasters. How do we protect the public? Adaptation, or “managing the unavoidable,” is accomplished through secondary prevention — strategies and practices designed to reduce harm and protect people from climate-related threats. Mitigation requires primary prevention — strategies and practices designed to reduce the underlying causes of climate change. The good news is that we know how to reduce the impact of climate change.

The New England Journal of Medicine

[The Emergence of Environmental Health Literacy—From Its Roots to Its Future Potential](#)

Authors propose a definition of and conceptual framework for environmental health literacy (EHL), describe EHL in its social and historical context, identify the complementary fields and domains where EHL is being defined and implemented, and outline a research agenda. Extensive reviews of web and literature searches indicate that the concept of EHL is evolving rapidly, as are the definitions of its scope and inquiry. Authors believe that a more nuanced model based on Bloom’s taxonomy is better suited to EHL and to future research in this area. They posit that EHL can potentially benefit the conduct and outcomes of community-engaged and health disparities EHS research and can ensure that the translation of research findings will lead to greater understanding of specific risks, reduction of exposures, and improvement of health outcomes for individuals and communities.

Environmental Health Perspectives

UPCOMING EVENTS

[Sixth Ministerial Conference on Environment and Health](#)

13–15 June 2017, Ostrava, Czech Republic

[European Academy of Pediatrics 2017 Congress](#)

12–15 October 2017. Ljubljana, Slovenia

impacting the development of the nervous system and children’s intelligence. The Guardian Nigeria (17/4/2017)

[The key to children’s good health may be all around them](#)

The University of Alberta and World Health Organization are working to protect children’s health from environmental threats. The Children’s Environmental Health Clinic (ChEHC), based at Edmonton’s Misericordia Hospital and run by the University of Alberta’s Department of Pediatrics, has been named a WHO Collaborating Centre. Led by clinical professor of pediatrics Irena Buka, the team behind the clinic will develop, promote and deliver educational tools and strategies for health professionals and policy-makers in child health and environment issues. The University of Alberta (20/4/2017)

[Children with elevated lead levels aren’t being tested or diagnosed, study says](#)

In the United States, pediatric health care providers are not doing enough testing of children’s blood lead levels in many states, according to a study published Thursday in the journal Pediatrics. Children are at higher risk for lead poisoning and more susceptible to the toxic effects than adults. Lead poisoning is considered a problem affecting children in the Northeast and Midwest, yet 22 states, mostly in the West and South, and District of Columbia missed more than 50% of their expected cases of lead poisoning. Budget cuts to the CDC’s lead poisoning prevention programs have harmed states’ ability to promote prevention, testing and follow-up for lead. CNN (27/4/2017)

[Your city could be exporting deadly air pollution – here’s why](#)

Globally, air pollution caused by microscopic fine particles (PM_{2.5}) kills 3.5m people each year. Very little attention is paid to the impact of cross-border air pollution on human health and well-being. The movement of air pollutants from transport and agricultural activities in one country can affect the air quality in another. Goods and services produced in one region for use by another region are responsible for 22% (762,400) of air pollution-related deaths worldwide. Many developed countries transfer their manufacturing abroad, resulting in air pollution effectively being exported. As consumers, we have the power and the responsibility to demand better environmental and social standards. The Conversation (19/4/2017)

[International Conference of the Public Health Foundation of India and the Pacific Basin Consortium](#)

14–16 November 2017, New Delhi, India

EDUCATION AND TRAINING

[WHO Children's Environmental Health Training Modules Survey](#)

A growing number of diseases in children from rural and urban areas are linked to unsafe, degraded environments. However, many health care providers are unable to recognize, assess and manage environmentally-related diseases in children. In order to address this issue, WHO produced a few years ago, the WHO Training Package on Children's Environmental Health for the Health Sector. The package is currently being reviewed, and opportunities to maximize its promotion and use are being defined. If you have used the WHO training package please take a few minutes to complete this survey.

[Training package for health care providers](#)

[LSHTM/WHO Short Course Adolescent Health in Low and Middle Income Countries](#)

5 - 16 June 2017, London, United Kingdom.

[Global Occupational and Environmental Determinants of Diseases: a multidisciplinary approach for prevention](#)

10–14 July 2017, Brescia, Italy

[WHO/EURO Summer School on Refugee and Migrant Health](#)

10–14 July 2017, Syracuse, Italy

[Advanced International Training Course in Occupational and Environmental Health](#)

17–21 July 2017, Bangkok, Thailand

[Teaching interventions crossing borders](#)

21 August–1 September 2017, Munich, Germany

[UK clean air strategy: Government to publish draft proposals](#)

The UK government is set to publish a draft air pollution plan after a protracted legal battle with environmental campaigners. According to the Royal College of Physicians, air pollution across the UK is linked to around 40,000 premature deaths every year. 37 of the 43 regions of the UK are in breach of NO₂ limits, which is linked to a range of respiratory diseases. Councils will be given the power to impose fines or restrictions on all polluting vehicles in 'clean air zones' which there are plans to create many more of. BBC (5/5/2017)

[Chromium contamination continues in suburbs](#)

An Anna University study finds that the impact of decades-long pollution of groundwater continues in Chennai, India. The number of tanneries has dwindled and a common effluent treatment plant has been set up in Pallavaram, the concentration of chromium remains above the permissible limit of 0.05 mg/l. Residents noted the effluent was being treated now and released into open drains linked to the Adyar. But a recent study by the Department of Geology, Anna University, has revealed that the groundwater samples from these areas have chromium levels of up to 0.51 mg/litre. The Hindu (4/5/2017)

[America's Tap Water: Too Much Contamination, Not Enough Reporting, Study Finds](#)

If you live in the United States, there is a nearly one-in-four chance your tap water is either unsafe to drink or has not been properly monitored for contaminants in accordance with federal law, a new study has found. The council's report found that there were around 80,000 reported violations of drinking water safety regulations in 2015. Of those, more than 12,000 were "health-based" violations, or cases that involved actual contamination problems. New York Times (4/5/2017)

[Road accidents biggest global killer of teenagers](#)

Road injuries account for about one in 10 adolescent deaths. Most of the road fatalities involved males between the ages of 10 and 19 and are 'vulnerable' road users: pedestrians, cyclists and motorcyclists. Over two-thirds of all adolescent deaths occur in low- and middle-income countries in Africa and South East Asia, most are preventable. In some countries road safety education and legislation encouraging drivers to slow down appears to be reducing road accident rates. Globally, adolescent deaths as a whole have

been declining, but some fatalities are becoming more commonplace. BBC News (16/5/2017)

[Links to past issues and how to subscribe](#)

This document is not a formal publication of the United Nations Environment Programme and the World Health Organization and the views expressed in the featured documents are not necessarily the views of the organizations.

Have news for us?

If you would like to submit information to future HECANET issues, email us at heca@who.int with the subject line "INFORMATION FOR HECANET".

Collated and distributed with the cooperation of the [Children's Health and the Environment Program, The University of Queensland, Brisbane, Australia](#)

ACKU