THE LANCET COMMISSION ON POLLUTION AND HEALTH

Pollution is the largest environmental cause of disease and premature death in the world today. It disproportionately kills the poor and the vulnerable. Nearly 92% of pollution-related deaths occur in low-income and middle-income countries and, in countries at every income level, disease caused by pollution is most prevalent among minorities and the marginalised. Children are at high risk of pollution-related disease and even extremely low-dose exposures to pollutants during windows of vulnerability in utero and in early infancy can result in disease, disability, and death in childhood and across their lifespan.

Despite its substantial effects on human health, the economy, and the environment, pollution has been neglected, especially in low-income and middle-income countries, and the health effects of pollution are under-estimated in calculations of the global burden of disease.

Pollution is costly. It endangers planetary health, destroys eco-systems, and is intimately linked to global climate change. In many parts of the world, pollution is getting worse with chemical pollution a great and growing global problem.

The good news is that much pollution can be eliminated, and pollution prevention can be highly cost-effective. The claim that pollution control stifles economic growth and that poor countries must pass through a phase of pollution and disease on the road to prosperity has repeatedly been proven to be untrue.

The aim of this Lancet Commission on pollution and health is to raise global awareness of pollution, end neglect of pollution-related disease, and mobilise the resources and the political will needed to effectively confront pollution. To advance this

CHILDREN’S ENVIRONMENTAL HEALTH NEWS

Press Releases

Tenfold increase in childhood and adolescent obesity in four decades: new study by Imperial College London and WHO

The number of obese children and adolescents (aged five to 19 years) worldwide has risen tenfold in the past four decades. If current trends continue, more children and adolescents will be obese than moderately or severely underweight by 2022, according to a new study led by Imperial College London and WHO. WHO (11/10/2017)

Eradicating hunger in Latin America and the Caribbean by 2030 is becoming increasingly unlikely

The total number of persons that suffer from hunger in Latin America and the Caribbean has increased, reversing decades of progress. Meanwhile, overweight affects all age groups in men and women, and constitutes a major health problem in all countries in the region of the Americas. This is according to the Panorama of Food Security and Nutrition in Latin America and the Caribbean 2017, published by the Food and Agriculture Organisation of the United Nations (FAO) and the Pan American Health Organisation (PAHO). WHO PAHO (10/10/2017)

WHO to establish high-level commission on noncommunicable diseases

Dr Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization (WHO), announced today the establishment of a new High-level global Commission on Noncommunicable Diseases (NCDs). The announcement came at the 64th Session of WHO’s Regional Committee for the Eastern Mediterranean being held in Islamabad, 9-12 October. The commission’s aim is to identify innovative ways to curb the world’s biggest causes
aim, the authors make six recommendations. Additional recommendations are presented at the end of each Section. The key recommendations are:

1. Make pollution prevention a high priority nationally and internationally and integrate it into country and city planning processes.
2. Mobilise, increase, and focus the funding and the international technical support dedicated to pollution control.
3. Establish systems to monitor pollution and its effects on health.
4. Build multi-sectoral partnerships for pollution control.
5. Integrate pollution mitigation into planning processes for non-communicable diseases.
6. Research pollution and pollution control.

Full report, executive summary (French, Spanish), commentaries, podcast

WHO commentary

Global pollution map

Infographic

INTERNATIONAL LEAD POISONING PREVENTION WEEK OF ACTION

Lead poisoning is preventable, yet the Institute for Health Metrics and Evaluation has estimated that, based on 2015 data, lead exposure accounted for 494,550 deaths and 9.3 million disability adjusted life years (DALYs) due to long-term effects on health, with the highest burden in developing regions. Of particular concern is the role of lead exposure in the development of intellectual disability in children. Even though there is wide recognition of this problem and many countries have taken action, exposure to lead, particularly in childhood, remains of key concern to health care providers and public health officials worldwide.

From 22 to 28 October 2017 the international lead poisoning prevention week of action took place, with a particular focus on eliminating lead paint.

WHO campaign

Campaign materials in Arabic, Chinese, French, English, Russian and Spanish

of death and extend life expectancy for millions of people. The commission will support ongoing political efforts to accelerate action on cardiovascular disease, cancers, diabetes and respiratory disease, as well as reducing suffering from mental health issues and the impacts of violence and injuries. WHO (10/10/2017)

Revealed: Every Londoner is exposed to dangerous toxic air particles

The Mayor of London, Sadiq Khan, has released shocking new research which reveals that every Londoner in the capital lives in an area exceeding World Health Organization (WHO) guidelines for the most dangerous toxic particles known as PM2.5. The research, based on the latest updated London Atmospheric Emissions Inventory, also shows that 7.9 million Londoners – nearly 95 per cent of the capital’s population – live in areas of London that exceed the guidelines by 50 per cent or more. UNEP (4/10/2017)

Historic Milestone Reached in Global Fight Against Mercury Pollution

In a landmark display of international cooperation, more than 160 countries committed to tackling one of the world’s greatest chemical health threats at the first meeting of the Conference of the Parties to the Minamata Convention on Mercury. The world’s first environmental and health treaty in a decade saw many countries pledge political and financial support to help reduce and eliminate mercury, a heavy metal affecting the health of millions of people worldwide from Guyana and Kiribati, to Uganda and Japan. WHO (2/10/2017)

UN Environment charts path towards a pollution-free planet

Outlining the many ways in which the world can move to a healthier, more sustainable way of living, UN Environment today launched “Towards a pollution-free planet”, a report that serves as a call to action to governments, businesses, local authorities, civil society and individuals to prevent and reduce pollution, and clean up the planet. UN Environment Executive Director Erik Solheim said: "Pollution is a universal challenge that threatens wildlife, devastates ecosystems, and kills millions of people every year. But the good news is that we already know what we need to do to prevent and reduce it, and clean up the planet. Now the responsibility is on governments, businesses, cities and local authorities, civil society and individuals around the world to commit to act to beat pollution.
**JOURNAL ARTICLES**

**Chemicals**

*Reduction of in utero lead exposures in South African populations: Positive impact of unleaded petrol*

This study aimed to assess in utero Pb exposure, examine birth outcomes, and identify confounding factors in the large cohort of South African population, following the legislated removal of Pb from petrol. Lead was measured in the maternal blood, urine and cord blood using Inductive Coupled Plasma Mass spectrometry (ICP-MS). The statistical analyses included Spearman's correlation, Wilcoxon rank sum (Mann Whitney), Kruskal-Wallis rank tests and multivariate linear regression. This study has demonstrated not only the positive impact that the introduction of unleaded petrol and lead-free paint has had on *in utero* exposure to Pb in South Africa, but has also contributed new data on the topic, in a region where such data and scientific investigations in this field are lacking.

*PLOS One*

*Prenatal Organophosphorus Pesticide Exposure and Child Neurodevelopment at 24 Months: An Analysis of Four Birth Cohorts*

Organophosphorus pesticides (OPs) are used in agriculture worldwide. Residential use was common in the United States before 2001. Engel et al pooled data from four birth cohorts to assess how exposure to organophosphorus pesticides may affect neurodevelopment at 24 months. From the combined data, the authors estimated that a 10-fold increase in prenatal exposure was associated with a 1-point decrease in the Bayley Mental Development Index. However, they noted that the combined estimate should be interpreted with caution given the differences among the studies. A careful examination of the site-specific findings remains essential in understanding the implications of heterogeneity in exposure period, source, and susceptibility.

*Environmental Health Perspectives*

*In Utero Exposure to Select Phenols and Phthalates and Respiratory Health in Five-Year-Old Boys: A Prospective Study*

...in all its forms. This report explains how it can be done." UNEP (28/9/2017)

**Region of the Americas aims to be smoke-free by 2022**

High-level health authorities from throughout the Region of the Americas agreed today to adopt legislation that will create 100% smoke-free environments in all countries of the Region by 2022, one of the measures that the World Health Organization (WHO) considers to be most effective in controlling the smoking epidemic and preventing associated diseases. PAHO (27/9/2017)

**Bus Manufacturers Commit to Bring Cleaner ‘Soot-Free’ Buses to 20 Megacities**

Four of the world’s largest bus and engine manufacturers have committed today to make it easier for major cities to purchase buses equipped with low emissions technologies, in order to tackle climate change and toxic air pollution. BYD, Cummins, Scania and Volvo Buses will ensure ‘soot-free’ engine technology is available for purchase in 20 megacities beginning in 2018. The manufacturers will each release through their websites a full product portfolio available in each city and will begin publicly reporting the number of soot-free buses sold in each year. UNEP (27/9/2017)

**World Unites Against Mercury Pollution**

More than 150 countries are gathering in Geneva this week to mark a major milestone in their efforts to fight mercury pollution. Mercury is one of the most dangerous chemicals to human health and the environment. The Parties to the Minamata Convention on Mercury, which entered into force on 16 August 2017, will now begin to implement the new global treaty which includes banning new mercury mines and phasing-out existing ones; regulating the use of mercury in artisanal and small-scale gold mining, certain industrial processes and the production of everyday items such as certain Compact fluorescent lamps, batteries and teeth fillings; as well as controlling the emissions of mercury as a by-product from a range of industrial sectors – including coal burning. (25/9/2017)

**WHO Fact Sheets**

*Food safety* Reviewed October 2017

*Vector-borne diseases* Reviewed October 2017
Phenols and phthalates may have immunomodulatory and proinflammatory effects and thereby adversely affect respiratory health. Authors estimated the associations between gestational exposure to select phthalates and phenols and respiratory health in boys. No phenol or phthalate metabolite exhibited clear deleterious associations simultaneously with several respiratory outcomes. Ethyl-paraben, bisphenol A, 2,5-dichlorophenol, and DIDP tended to be associated with altered respiratory health, with ethyl-paraben and bisphenol A exhibiting some consistency across respiratory outcomes. The trends between bisphenol A pregnancy level and increased asthma and bronchiolitis/bronchitis rates in childhood were consistent with a previous cohort study. 

*Environmental Health Perspectives*

**Early-Life Phthalate Exposure and Adiposity at 8 Years of Age**

Early-life phthalate exposure may influence child adiposity, but prior studies have not determined if there are periods of enhanced vulnerability to phthalates. This study examined the relationship between child adiposity at 8 y of age and repeated urinary biomarkers of phthalate exposure from gestation through childhood to determine if there are distinct periods of vulnerability. Prenatal phthalate concentrations were not associated with excess child adiposity. Monobenzyl phthalate (MBzP) concentrations during pregnancy and childhood were inversely associated with adiposity. The associations of di(2-ethylhexyl) phthalate (∑DEHP) metabolites and monoethyl phthalate (MEP) with child adiposity depended on the timing of exposure. A 10-fold increase in ∑DEHP at 1 and 5 y was associated with a 2.7% decrease [95% confidence interval (CI): −4.8, −0.5] and 2.9% increase (95% CI: 0.3, 5.5) in body fat, respectively. MEP concentrations at 5 and 8 y of age were associated with higher child adiposity, but earlier childhood concentrations were not. 

*Environmental Health Perspectives*

**Exposure to Low Levels of Lead in Utero and Umbilical Cord Blood DNA Methylation in Project Viva: An Epigenome-Wide Association Study**

Early-life exposure to lead is associated with deficits in neurodevelopment and with hematopoietic system toxicity. DNA methylation may be one of the underlying mechanisms for the adverse effects of prenatal lead on the offspring, but epigenome-wide methylation data for low levels of prenatal lead exposure are lacking. 

*Obesity and overweight* Updated October 2017

**Schistosomiasis** Updated October 2017

### In the Media

**Pollution linked to one in six deaths**

Pollution has been linked to nine million deaths worldwide in 2015, a report in The Lancet has found. Almost all of these deaths occurred in low- and middle-income countries, where pollution could account for up to a quarter of deaths. Bangladesh and Somalia were the worst affected. Air pollution had the biggest impact, accounting for two-thirds of deaths from pollution. Brunei and Sweden had the lowest numbers of pollution-related deaths. Most of these deaths were caused by non-infectious diseases linked to pollution, such as heart disease, stroke and lung cancer. BBC News (19/10/2017)

**Toxic firefighting chemicals ‘the most seminal public health challenge’**

The US, like Australia, is still grappling with how to respond to widespread contamination caused by past use of per- and poly-fluoroalkyl substances (PFAs) in firefighting foam. The manmade chemicals share a probable link with cancer, do not break down in the environment and have contaminated groundwater, drinking water, soil and waterways. The Australian government has continued to maintain there is no concrete evidence of a link between the chemicals and adverse health impacts, but has been criticised for the inadequacy of its response. The Guardian (18/10/2017)

**To check air pollution, graded action plan enforced in Delhi-NCR**

The Environment Pollution (Prevention and Control) Authority (EPCA) Tuesday announced that Delhi-NCR will be placed under the “very poor” and “severe” categories under the Graded Response Action Plan (GRAP). “As per the action plan, several measures will be taken till March 15 to avoid the ‘severe+’ category that the region had suffered over the last year when a public health emergency was declared,” said Sunita Narain, the Director-General of Centre for Science and Environment (CSE), and member, EPCA. Ever since the GRAP was notified by the central government in January, Delhi-NCR has been under “moderate” and “poor” categories. The Indian Express (18/10/2017)

**Factories to be taxed for PM2.5 emissions: EPA**
Authors investigated the association between prenatal maternal lead exposure and epigenome-wide DNA methylation in umbilical cord blood nucleated cells in Project Viva, a prospective U.S.-based prebirth cohort with relatively low levels of lead exposure. Prenatal low-level lead exposure was associated with newborn DNA methylation, particularly in female infants. *Environmental Health Perspectives*

Prenatal Exposure to Mercury: Associations with Global DNA Methylation and Hydroxymethylation in Cord Blood and in Childhood

To date, no studies have evaluated the association between prenatal mercury exposure and DNA hydroxymethylation, an epigenetic modification important for tissue differentiation and embryonic development. Authors sought to evaluate the association between prenatal mercury exposure and offspring global DNA methylation and hydroxymethylation at birth and test for persistence of the association in childhood. Prenatal mercury exposure was associated with lower %5hmC genomic content and a corresponding increase in the ratio of %5mC to %5hmC in cord blood. This association was persistent in early but not midchildhood blood. Our results demonstrate the potential malleability of epigenetic modifications associated with mercury exposure in utero. *Environmental Health Perspectives*

Prenatal Serum Concentrations of Brominated Flame Retardants and Autism Spectrum Disorder and Intellectual Disability in the Early Markers of Autism Study: A Population-Based Case-Control Study in California

Prior studies suggest neurodevelopmental impacts of polybrominated diphenyl ethers (PBDEs), but few have examined diagnosed developmental disorders. Authors aimed to determine whether prenatal exposure to brominated flame retardants (BFRs) is associated with autism spectrum disorder (ASD) or intellectual disability without autism (ID). Contrary to expectation, higher PBDE concentrations were associated with decreased odds of ASD and ID, though not in girls. These findings require confirmation but suggest potential sexual dimorphism in associations with prenatal exposure to BFRs. *Environmental Health Perspectives*

Factories emitting fine particulate pollutants such as PM2.5 will have to pay an air pollution tax from next year, Environmental Protection Administration (EPA) officials said yesterday, adding that new standards for the tax are to be launched by the end of this year. Drafting the rules is expected to be finalized by the end of this year and they are scheduled to be put in place in April at the earliest, the EPA said. According to the Standards of Air Quality, the nation’s annual average PM2.5 concentration should be kept below 15 micrograms per cubic meter (mcg/m3). *Taipei Times* (17/10/2017)

Lead poisoning plummets thanks to cleaner petrol

Lead poisoning in expectant mothers has fallen dramatically since lead was finally phased out of petrol in 2006. Pre-birth exposure to lead in South African coastal populations is around a fifth of its 1996 levels' and lower than in New York in the US and Montreal in Canada. Researchers from the universities of Pretoria and Johannesburg, who reported their findings on Monday, also examined possible socio-economic, behavioural and lifestyle factors linked to lead exposure. *Times Live* (17/10/2017)

Africa tops global hunger index, driven by war and climate shocks

Global hunger has fallen more than a quarter since 2000, but conflict and climate shocks are beginning to reverse these gains, an annual global hunger index said on Thursday. Nearly half of the 119 countries surveyed had "serious", "alarming" or "extremely alarming" hunger levels between 2012 and 2016, with war-torn Central African Republic worst affected, followed by Chad, Sierra Leone, Madagascar and Zambia. *Thomson Reuters Foundation News* (12/10/2017)

Even thirdhand smoke poses health risks

Thirdhand smoke is residual chemicals that include nicotine left on surfaces by tobacco smokers. We are exposed to these chemicals by touching contaminated surfaces or breathing in the off-gassing from these surfaces. This residue can react with common indoor pollutants to create toxic mixes including cancer-causing compounds, which pose a potential health hazard to the smoker, non-smokers and children. Children and non-smoking adults are at risk of tobacco-related health problems when they inhale, swallow or touch substances containing thirdhand smoke. *The Philadelphia Tribune* (10/10/2017)
Toward a More Sustainable Trajectory for E-Waste Policy: A Review of a Decade of E-Waste Research in Accra, Ghana

Global flows of e-waste from the Global North to the Global South continue to damage local environments and harm human health. Weak e-waste regulations and limited use of safety measures for e-waste workers in Accra, Ghana, foster an exploitative environment within the industry, and pose health risks for those working and living near e-waste processing sites. This paper presents an integrated review of over 40 e-waste studies specific to Accra, with particular emphasis on the well-studied e-waste processing site in Agbogbloshie, and synthesizes the existing research base across interdisciplinary themes of human health, environmental health, globalization, trade and informalization, and public policy.

Despite significant international attention to Accra’s e-waste problem, loopholes within international environmental regulations and treaties provide few incentives and resources for Ghana to strengthen protections for human and environmental health.

Int. J. Environ. Res. Public Health

The urgent need for health impact assessment: proposing a transdisciplinary approach to the e-waste crisis in sub-Saharan Africa

Electronic waste (e-waste) is a growing health and environmental concern in developing countries. In the sub-Saharan African region e-waste is considered a crisis with no end in sight yet; there is lack of structures and regulations to manage the problem. In this article, authors discuss the potential of Health Impact Assessment (HIA) in addressing the health, environmental, and social impacts of e-waste in sub-Saharan Africa. Authors draw from environmental policy, environmental communication, global health policy, and health communication to argue that managing e-waste could be framed as ongoing HIA where all the steps of HIA are performed on a rolling basis with input from local communities. Further, authors suggest that HIA should be infused into recycling legislation to help streamline the practice in order to make it safe for health and the environment and to maximize the economic benefits.

Global Health Promotion

New Publications

Progressing the Sustainable Development Goals through Health in All Policies: Case studies from around the world

SF to ban sale of upholstered furniture containing flame retardants linked to cancer

San Francisco is expected to ban the sale of upholstered furniture with flame retardant chemicals. The ban, introduced by Supervisor Mark Farrell, would extend to online sales and also include children’s products, such as booster seats, changing pads and high chairs. These flame retardant chemicals, which come in the form of foams, like those found in sofas, are linked to cancer and increase risks of birth defects and learning disabilities, according to studies. San Francisco Observer (10/10/2017)

Groups urge government to toughen toxic chemicals law

Five environmental groups say Canada’s law governing toxic chemicals is outdated and they urge the government to amend soon it to protect children and the general population. Muhannad Malas of Environmental Defence uses the example of a class of chemicals called phthalates to highlight the need to change the law. Radio Canada International (10/10/2017)

Indian court bans firecracker sales in Delhi ahead of peak pollution season

India’s top court on Monday temporarily banned the sale of firecrackers in and around the capital ahead of Diwali, the Hindu festival of lights, as it looks to prevent a repeat of severe air pollution that forced school closures last year. The ban takes effect immediately and will run until Nov. 1, said a panel of Supreme Court judges headed by Justice Arjan Kumar Sikri, adding its impact on the region’s air quality would have to be examined after the festival. Reuters (9/10/2017)

Defence admits three-year delay in warning people about toxic foam danger

The Department of Defence has admitted it should have warned the public about a chemical contamination scandal three years earlier than it did — and says the cost to taxpayers to clean up the problem nationwide will mount into the hundreds of millions of dollars. Defence is now tackling perfluorinated chemical pollution — the source of which was the widespread use of firefighting foam — at no fewer than 18 Defence bases across the country. At some, local drinking water has been contaminated. ABC News (9/10/2017)

Tamil Nadu: E-waste policy drafted in 2010 yet to be implemented
WHO and the Government of South Australia published the Case Study Book on Health in All Policies (HiAP), which describes experiences from around the world in the context of the 2030 Sustainable Development Agenda. While there is no single or simple model for HiAP, there is a growing evidence base of facilitating conditions for HiAP. The case study book documents experiences, capturing important elements of HiAP practice through an analysis of established and emerging models. The book is aimed at the international community and the broader sustainable development network. It will be of interest to those who want to know more about implementing HiAP.

Government of South Australia and WHO

RELX Group Sustainable Development Goals (SDGs) Resource Centre

The Sustainable Development Goals (SDGs) set out the UN agenda for people, planet and prosperity through 2030. The SDGs were adopted by 193 states at the United Nations in September 2015. The 17 goals and 169 targets aim to stimulate action in areas of critical importance to humanity and the environment. RELX is a dedicated signatory of the UN Global Compact which uses the SDGs to chart business participation in achieving these aims. The SDG Resource Centre showcases the latest in science, law, business, events and more that can help drive forward the SDGs, drawing on content from across the whole of our company and from key partners as well. The aim is to support the UN in implementing the SDGs and to broaden awareness and understanding of the SDGs for our customers, governments, researchers, companies, NGOs and individuals.

UPCOMING EVENTS

2017 Climate and Health Summit
11 November 2017, Bonn, Germany

International Conference of the Public Health Foundation of India and the Pacific Basin Consortium
14–16 November 2017, New Delhi, India

Twenty-third session of the UNECE Committee on Environmental Policy
14–17 November 2017, Geneva, Switzerland

9th Excellence in Pediatrics Conference

Despite being an I-T hub and a big consumer of computers and laptops, Tamil Nadu lags behind other states in recycling its e-waste. Seven years ago Tamil Nadu drafted Tamil Nadu e-waste policy 2010 but a very little has been done to execute the policy. About 26 units are into recycling business but there is no concrete data on the recycled e-waste, an informed state official said adding that Tamil Nadu was lagging behind Maharashtra and Karnataka due to lack of capacity building and training of workers engaged into e-waste. Deccan Chronicle (3/10/2017)

We are all at risk from poisonous mercury. It's time to take action

Mercury is far more pervasive than most people realise, and we have no idea how many people are at risk. It can be found in everything from mascara and dental amalgam to thermometers and skin whitening creams – and that’s before it reaches the food chain. That’s why the first conference of the parties to the Minamata convention, taking place this week, is so important. The convention has now been ratified by 83 countries – four this week alone – and the list is growing. The Guardian (29/9/2017)

Minamata victim makes plea at U.N. forum to stop pollution

Embryonic Minamata disease victim Shinobu Sakamoto strained her disabled body to the fullest extent to make her desperate pleas heard loud and clear. “Please do not allow pollution to occur. Please protect women and children. Let’s (eradicate mercury pollution) together,” Sakamoto, 61, of Minamata, Kumamoto Prefecture, told a gathering at the first Conference of the Parties to the Minamata Convention on Mercury (COP1) on Sept. 28 here. Sakamoto gave an eight-minute speech during the official event titled “A Moment to Minamata,” which was held before an audience of about 150 visitors before the ministerial conference. The Asahi Shimbum (29/9/2017)

E-waste in India is going to informal sector

India generated about 1.7 million tonnes of electronic waste in 2016, ranking among the top three countries in Asia with the highest e-waste generation in absolute quantities after China and Japan. But, only 1.5% of the total e-waste generated is recycled by formal recyclers or “institutional process” of recycling, according to a study done by Assocham. The study also suggests that by 2020, India’s e-waste from old mobiles and computers will rise by about 1800% and 500% respectively, compared to levels in 2007.
EDUCATION AND TRAINING

WHO Children’s environmental Health training modules translated into Japanese
Three modules from the WHO Training Package for Health Care Providers “Why children?”, “Children are not little adults” and “Chemicals” are now available in Japanese.

Nutrition challenge badge
The Nutrition Challenge Badge is designed to help children and young people learn about the importance of a balanced and varied diet to ensure all the nutritional needs of the body for a happy and healthy life. This booklet includes information about how to make healthy food choices, and understand the importance of food safety and provides guidance on how to adopt a sustainable diet reduces impacts on our environment. Most of all, the booklet is packed with activities and curriculum ideas to stimulate learning and encourage children and young people to lead healthy lifestyles that are good for themselves and for the planet.

FAO and Youth and United Nations Global Alliance

Pediatric Environmental Health Toolkit Training Module
This online training was developed for pediatric health-care providers, health educators, and other health professionals interested in environmental health anticipatory guidance for pediatric patients and their parents or guardians. It is offered for free continuing education credits through the Agency for Toxic Substances and Disease Registry (ATSDR).

Sunday Guardian Live (24/9/2017)
E-waste on Ramganga banks has toxic chemicals: Panel to NGT
E-waste lying on the banks of the Ramganga river in Moradabad in Uttar Pradesh contains hazardous chemicals such as chromium and cadmium, a committee has told the National Green Tribunal. The committee, comprising officials of the UP Pollution Control Board (UPPCB), Moradabad Nagar Nigam, UP Public Works Department and the UP Rural Engineering Services, told the tribunal that the concentration of metals in the e-waste, which was in the form of black powder, was above the prescribed level.

Outlook India (27/9/2017)
The Urbanization of Malnutrition
Rapid urbanization is increasingly shifting the impacts of malnutrition from rural to urban areas. One in three stunted under-five children out of 155 million across the world now lives in cities and towns. Degrading land productivity, deepening impacts of changes in climate, conflict, and food insecurity, poverty and lack of livelihood opportunities are driving mostly the rural poor into towns and cities, with projections that just 13 years from now, 5 billion people will be living in the world’s urban areas. While the urban population is forecast to double within these 30 years (starting in 2000), the area taken over will triple, increasing by 1.2 million square kilometers, says the Global Land Report 2017.

Inter Press Service (15/9/2017)

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