



Initiative on Children's Environmental Health

[of the Collaborative on Health and the Environment](#)



Biweekly Bulletin July 13, 2011

This bulletin lists upcoming events plus recent announcements, news and journal articles, calls for proposals and other items related to children's environmental health. They are archived and searchable on our website:

http://www.healthandenvironment.org/working_groups/childrens_health/bulletins.

ICEH Highlights

Children's Environmental Health Training

The Collaborative on Health and the Environment-Washington Chapter (CHE-WA) and the Washington State Environmental Health Association are offering a six-hour course in which you and your colleagues will discuss the connections between housing and children's environmental health and participate in case studies designed to strengthen your ability to identify and resolve common children's environmental health issues. More details are shown in event #7 below.

Announcements

A daily news feed with articles and announcements is available on CHE's website:

<http://www.healthandenvironment.org/news/announce>.

[EPA releases new report on sewage pollution in New York and New Jersey.](#)

The US Environmental Protection Agency has prepared an important report, Keeping Raw Sewage and Contaminated Stormwater Out of the Public's Water, to answer commonly asked questions about combined sewer overflows.

[EPA proposes safeguards for hazardous waste recycling.](#)

Today's proposal will improve accountability and oversight of hazardous materials recycling, while allowing for important flexibilities that will promote its economic and environmental benefits. EPA is opening up this proposal for public comment.

[See another article about waste handling: [EPA sued over state toxic waste dump sites](#)]

[EPA seeks input from small entities on revisions for the lead and copper rule.](#)

The US Environmental Protection Agency is inviting small businesses, governments, and non-profit organizations to participate as Small Entity Representatives for a Small Business Advocacy Review Panel. The panel will focus on the agency's development of a rule that proposes revisions to the lead and copper rule.

[Job opening: Tumwater, Washington.](#)

The Washington State Department of Health, Division of Environmental Health, Office of Environmental Health, Safety, and Toxicology (OEHST), is searching for a qualified environmental health professional with a strong scientific background to manage the Site Assessments and Toxicology Section (SATS) and provide supervision and leadership to section staff.

Job opening: Oakland, California.

Worksafe, a California-based organization dedicated to eliminating workplace hazards, has an opening for a legal director to work with the Board, Executive Director and staff to determine how best to achieve the mission, including the supervision of staff

attorneys, providing advice to legal services attorneys as well as others who represent low wage and immigrant workers. Deadline to apply is July 18, 2011. Send cover letter, resume, and list of references to snoero@worksafe.org. Please include your last name in the subject line of your email and in the filenames of attachments.

Upcoming Events

Online Calendar. These and more upcoming events, including requests for proposals and abstracts, are listed in a searchable calendar:

<http://www.healthandenvironment.org/cgi-bin/searchevents.cgi>

1) Environmental Health Communication: Methods, Research, and Training

Friday July 15, 2011

8:00 a.m. - 4:00 p.m.

Bethesda, Maryland

at the National Institutes of Health Natcher Center

Sponsor: National Institute of Environmental Health Sciences Partnerships for Environmental Public Health (PEPH)

Communication is a central component to PEPH. Within the PEPH program, the grantees have developed many different communication approaches and materials. The purpose of this working meeting is to provide a venue for grantees and partners from different programs within PEPH to have focused, small group discussions on diverse themes of environmental health communication. Anticipated outcomes of the meeting include: 1) increased interaction among grantees, 2) improved awareness and sharing of methods and materials, and 3) development of a white paper on the current state of environmental health communication and the gaps and opportunities. The meeting format is envisioned to be concurrent breakouts with one keynote session and a report back session. We anticipate having one or two preworkshop webinars and a postworkshop webinar to maintain participant engagement.

Price: free

[Visit the website](#)

Contact: Justin Crane, 919-794-4702

2) Mold and Moisture: Double Trouble for Schools

Wednesday July 20, 2011

1:00 - 2:00 p.m. Eastern time

Sponsor: US Environmental Protection Agency

Controlling moisture and mold in school buildings is essential when creating a healthy school environment. Participants will learn the myths and facts about mold, when mold testing is necessary and when it's not, and practical solutions for mold prevention and management.

Price: free

[Visit the website](#)

3) Breast Health and Early Life Exposures

Thursday July 21, 2011

1:00 p.m. Pacific / 4:00 p.m. Eastern time

Sponsor: Collaborative on Health and the Environment Working Groups on Fertility/Reproductive Health and on Cancer and Breast Cancer

A recent review published in *Environmental Health Perspectives* reports the conclusions of an international workshop on the current science related to early-life environmental

exposures and mammary gland development. The Mammary Gland Evaluation and Risk Assessment Workshop met in Oakland, California, in November 2009. More than 60 international experts, including biologists, epidemiologists, toxicologists, physicians, public health officials and breast cancer activists reviewed the evidence from animal and human studies of environmental toxicants and breast development. Workshop scientists concluded that chemical exposures during critical periods of development may influence breast growth, ability to breastfeed, and cancer risk. This discussion of the current state of the science on environmental exposures and breast health will feature article authors Ruthann Rudel of the Silent Spring Institute, Suzanne Fenton of the National Toxicology Program, and Susan Makris of the Environmental Protection Agency's Office of Research and Development. The authors will present findings on some of the chemicals that affect breast development, including bisphenol A (BPA), atrazine, dioxin, PBDEs, PFOA, dibutylphthalate (DBP), and nonylphenol. Drs. Fenton and Makris will delve into the regulatory implications of the workshop findings.

Price: free

[Visit the website](#)

Contact: CHE, info@healthandenvironment.org

4) 6th International Conference on the Impact of Environmental Factors on Health

Monday through Wednesday, July 25 - 27, 2011

Riga, Latvia

at the Reval Hotel Latvija

Sponsor: Wessex Institute of Technology and the Journal of Safety and Security Engineering

Health problems related to the environment have become a major source of concern all over the world. The health of the population depends upon good quality environmental factors including air, water, soil, food and many others. The aim of society is to establish measures that can eliminate or considerably reduce hazardous factors from the human environment to minimize the associated health risks. The ability to achieve these objectives is in great part dependent on the development of suitable experimental, modeling and interpretive techniques, which allow a balanced assessment of the risk involved as well as suggesting ways in which the situation can be improved. The interaction between environmental risk and health is often complex and can involve a variety of social, occupational and lifestyle factors. This emphasizes the importance of considering an interdisciplinary approach. The language of the conference will be English.

Price: unknown

[Visit the website](#)

Contact: Irene Moreno Millan, 44 (0) 238 029 3223 or imoreno@wessex.ac.uk

5) How To Bring About Large-scale Behavior Change

Three parts, all held on Saturdays: July 30, August 13 and September 10, 2011
10:00 a.m. - 2:00 p.m.

Seattle, Washington

at the Seattle Public Library main branch, Wright-Ketcham meeting room

Sponsor: Sustainable Seattle

One of the most confounding challenges facing the sustainability movement is how to bring about a massive shift in human behavior. This master class series explores a variety of powerful insights from cognitive science for developing successful social change strategies. You'll learn how meaning arises in the workings of the human brain, why emotions are absolutely vital for engaging people in a process of persistent change, and what the root causes are that have driven societal institutions to the edge of ecological collapse. Participants will explore the evolutionary origins of morality and discover the psychological foundations of identity that merge values, ideology, and

institutions into the powerful stories we collectively live in the modern world. Techniques will be provided to begin using this knowledge to communicate effectively, increase civic engagement, and design better structures for bringing about large-scale behavioral change. Participants can register for the entire series or individual sessions.

Price: see the website

[Visit the website](#)

6) Coal Mining in Alaska: Hazards to Human Health and the Environment

Monday August 1, 2011

9:00 a.m. Alaska / 10:00 a.m. Pacific / 1:00 p.m. Eastern time

Sponsor: Collaborative on Health and the Environment-Alaska

There is increasing pressure to develop Alaska's coal for foreign export and domestic use, yet coal development poses serious threats to human health and the environment. The coal mining industry is the leading cause of fatal occupational injuries in the United States according to the National Institute for Occupational Safety and Health. Inhaling coal dust causes black lung disease in coal mine workers. Coal mining is also hazardous to people living nearby, who have been found to have higher rates of cardiopulmonary disease, chronic obstructive pulmonary disease (COPD), hypertension, lung disease and kidney disease. Communities near coal mines may also face health problems linked to water pollution, as exposed rock from rubble deposits and abandoned mines releases heavy metals and other pollutants that contaminate drinking water and surface water. Join us to learn more about the health hazards of coal mining and community concerns about the proposed Wishbone Hill and Chuitna coal mines in Alaska.

Price: free

[Visit the website](#)

Contact: CHE, info@healthandenvironment.org

7) Children's Environmental Health Training

Three dates: Tuesday August 2th (Tumwater), Thursday August 4th (Shoreline) and Wednesday August 24th (Spokane), 2011

8:30 a.m. - 3:30 p.m.

Tumwater, Shoreline and Spokane, Washington

Sponsor: The Washington State Environmental Health Association and the Collaborative on Health and the Environment-Washington Chapter (CHE-WA)

Children spend a large portion of their time in their homes, and this training will focus on providing safe, healthy, lead-free environments for young children in and around their homes. During this six-hour course, you and your colleagues will discuss the connections between housing and children's environmental health and participate in case studies designed to strengthen your ability to identify and resolve common children's environmental health issues. Lunch is provided.

Price: \$25.00 for preregistration by the deadlines on the announcement; on-site registration is \$35.00

[Visit the website](#)

Contact: Kerri Wagner, 360-738-8946 kerri@wseha.org

8) ElectroMagnetic Detection & Mitigation Seminar

Thursday through Monday, August 4 - 8, 2011

Clearwater, Florida

at the Moccasin Lake Nature Park

Sponsor: Institute for Bau-Biologie and Ecology

This seminar offers five days of lectures, hands-on labs for instrumentation usage, and

interactive discussions. Participants will learn to identify, detect and mitigate electromagnetic emissions through proven case studies and practical examples. Sessions will explore the vital interrelationships between the built environment and human health, with emphasis on communications radiations from cell phones, cordless phones, smart meters, wireless internet and wireless games. This seminar is geared to the environmentally conscious public, as well as to working professionals in the fields of architecture, engineering, interior design, building trades, real estate, city planning, health care, etc.

Price: \$1275, applying an early-bird discount of \$100

[Visit the website](#)

Contact: IBE, 866-960-0333

9) Can Exposures to Toxic Chemicals Contribute to Intellectual and Developmental Disabilities?

Tuesday August 9, 2011

2:00 - 3:30 p.m. Eastern time

Sponsor: The Arc

Which toxics are associated with IDD's? Which ones pose the greatest threat? Is there anything that can be done to minimize the risk of exposure? Join us for this webinar about how environmental toxics may contribute or exacerbate IDD's and how one chapter is putting this knowledge into action. You will walk away with research-based facts that will be helpful for the individuals and families your chapter serves. Session speakers include Elise Miller, MEd, executive director of The Collaborative on Health and the Environment, and Meredith Salmi with The Arc of the Greater Twin Cities in Minnesota.

Price: free

Contact: Laurie Ertz, ertz@thearc.org

News and Journal Articles

[Large human study links phthalates, BPA and thyroid hormone levels.](#)

Tuesday, July 12, 2011

Generally speaking, greater concentrations of urinary phthalate metabolites and BPA were associated with greater impacts on serum thyroid measures, said John Meeker, assistant professor at U-M SPH and lead study author. ScienceDaily.

[See another article about BPA: ['BPA-free' bottles live up to manufacturers' claims, new study suggests](#)]

[City vs. country: Who is healthier?](#)

Tuesday, July 12, 2011

For many urban dwellers, the country conjures up images of clean air, fresh food and physical activities. But these days, Americans residing in major cities live longer, healthier lives overall than their country cousins--a reversal from decades past. Wall Street Journal.

[Secondhand smoke tied to mental health problems in kids: study.](#)

Monday, July 11, 2011

New research suggests that secondhand smoke exposure can increase the odds of developing certain mental and behavioral disorders by 50 percent. Huffington Post.

[See other articles about tobacco use: [Study finds text messages help smokers quit](#); [Kentuckians buying fewer cigarettes](#); [Big Tobacco takes on Australia over bland branding](#); [Smoking gives birth to health issues](#); [Second-hand smoke exposure and coronary artery calcification among non-smoking participants of a population-based cohort](#); [Gruesome pictures can get the US to quit smoking](#) and [Study links secondhand smoke to learning disabilities in kids](#)]

[4th of July parades, fireworks, and waste.](#)

Saturday, July 09, 2011

It's not the Fourth of July without a parade and fireworks -- plus lots of trash and some not-so-healthy toxins and pollutants. Environmental News Network.

[Bill would let federal health researchers ban certain chemicals.](#)

Friday, July 08, 2011

A new bill could alter the landscape of chemical regulation in the United States by empowering researchers to take swift action against the most potentially harmful chemicals in use today. CNN.

[See other articles about regulation of toxicants: [DEP seeks to repeal some environmental rules](#) and [EPA proposes to review new uses of 14 chemicals classified as glymes](#)]

[First study of its kind shows benefits of providing medical insurance to poor.](#)

Thursday, July 07, 2011

When poor people are given medical insurance, they not only find regular doctors and see doctors more often but they also feel better, are less depressed and are better able to maintain financial stability, according to a new, large-scale study that provides the first rigorously controlled assessment of the impact of Medicaid. New York Times.

[See other articles related to poverty and health outcomes: [Major health problems linked to poverty](#) and [Red tape, catch-22s impede progress in Texas' colonias](#)]

[Could scented candles kill you? They're many women's favourite indulgence -- but their fumes are as toxic as cigarettes.](#)

Thursday, July 07, 2011

Could the very candles used to soothe our mood actually be bad for us? Research has shown some scented candles produce smoke laced with almost as many toxins as those produced by cigarettes. London Daily Mail, United Kingdom.

[See other articles about hazardous consumer products: [Greens warn against dangerous dildos](#) and [Call for regulation of hair-smoothing products](#)]

[Ranchers using Agent Orange to deforest the Amazon.](#)

Thursday, July 07, 2011

Hundreds of acres of Amazon rainforest were defoliated using Agent Orange, reports IBAMA, Brazil's environmental law enforcement agency. Use of chemical defoliant, while a relatively new phenomenon in the region, represents a troubling development, the lead investigator said. Mongabay.

[See other articles about pesticides: [Greenpeace takes on Monsanto over 'pesticides arms race'](#); [EPA approves two insecticides for control of invasive stink bug](#) and [Status of legislation and regulatory control of public health pesticides in countries endemic with or at risk of major vector-borne diseases](#)]

[Some pediatricians taking stand for vaccine program.](#)

Wednesday, July 06, 2011

A small but growing number of parents think vaccines against childhood diseases are unsafe and are refusing or delaying shots for their children, despite the discrediting of a medical study linking vaccines and autism that stirred alarm. Chicago Tribune, Illinois.

[Air pollution linked to learning and memory problems, depression.](#)

Tuesday, July 05, 2011

Long-term exposure to air pollution can lead to physical changes in the brain, as well as learning and memory problems and even depression, new research in mice suggests. ScienceDaily.

[See other articles about air pollution: [EPA to tackle emissions from trucks used at ports](#); [EPA edges closer to national coal plant cleanup](#); [Peat wildfire linked to heart failure risk](#); [Report: Michigan's old coal plants cause 180 deaths a year](#); [Clean Air Act enforced on tribal lands](#); [Chemical properties of air pollutants and cause-specific hospital admissions among the elderly in Atlanta, GA](#); [EPA offers energy tips on summer cooling to save money, reduce air pollution](#); [Smoke from Southeast wildfires is health hazard](#); [Exhausting ride for cyclists: Air pollutants trigger heart risk](#); [Scientists say Pentagon misleads on dust study](#); [Neighborhood gags as its economic engine spews pollution](#); [EPA seeks to](#)

[adopt emission standards for large commercial aircraft; EPA rule seeks to curb long-distance air pollution; State pushing back against new air standards; How dirty is the yellow school bus?; Indoor air pollution linked to cardiovascular risk and EPA proposes criteria to waive federal requirements for capturing gasoline vapors when refueling vehicles\]](#)

Autoimmune mysteries spark ongoing research.

Tuesday, July 05, 2011

Parks's presentation addressed current knowledge surrounding environmental risk factors for the nearly 80 autoimmune diseases that affect five to eight percent of the population. NIEHS Environmental Factor.

Home is where the mold is.

Tuesday, July 05, 2011

A thick carpet of soot-black mold runs down one woman's bathroom wall and across the ceiling of her children's bedrooms. Rub it and the spores float, landing on sink tops and children's hair. The problem is indicative of the declining conditions at the city's public housing towers. New York Times.

In the 'stroke belt,' erosion of memory is more likely too.

Tuesday, July 05, 2011

A large national study suggests that people in the American South are more likely to experience a decline in cognitive ability over several years -- specifically, problems with memory and orientation. Possible causes range from nutrition to environmental factors like air quality. New York Times.

New study implicates environmental factors in autism.

Tuesday, July 05, 2011

A new study of twins suggests that environmental factors, including conditions in the womb, may be at least as important as genes in causing autism. New York Times.

[See other articles about autism: [Prenatal vitamins lower autism risk](#); [Are antidepressants linked to autism?](#); [Autism: New findings](#) and [Risk factors for autism remain elusive: study](#)]

Bangladesh leather trade's toxic cost.

Monday, July 04, 2011

Bangladesh's booming leather industry brought in more than \$460 million in revenue last year. But the human cost is also high, with many workers suffer from diseases related to exposure to the fumes of a toxic chemical called chromium. Al Jazeera, Qatar.

[See other articles about occupational exposures: [EU proposes more protection for workers exposed to radiation](#) and [Toxic metals in 'clean' shop towels may pose a health risk to some workers](#)]

Kentucky activists allege coal companies violate Clean Water Act thousands of times.

Sunday, July 03, 2011

Activists in eastern Kentucky's coal country used the records of two mining companies to identify thousands of alleged Clean Water Act violations in just the first three months of 2011. Living On Earth.

[See other articles about water contamination: [Don't be alarmed by some pollution reports, Kitsap Health District says](#); [Toxic sludge to be dumped in Canon City](#); [Radioactivity in some water supplies](#); [Contaminated water warning issued in Missoula](#); [Hackensack River too dirty to host oysters](#); [Vindication mixes with continued uncertainty for Exxon plaintiffs](#); [\\$24 million plant to treat ground water at Hanford](#); [Concern rising over pollutants in waters](#); [High levels of pollutants found at L.A. County water sites](#); [Halliburton confirms well contamination in Duncan](#) and [Dow ruled responsible for groundwater pollution](#)]

QuickStats: percentage of children aged 5--17 years ever receiving a diagnosis of learning disability, by race/ethnicity and family income group --- National Health

Interview Survey, United States, 2007--2009.

Friday, July 01, 2011

For children in all three racial/ethnic groups, the percentage of children ever receiving a diagnosis of learning disability decreased as family income increased. Morbidity and Mortality Weekly Report.

£1million victory for families of MoD asbestos victims.

Friday, July 01, 2011

The Ministry of Defense must pay a total of £1million compensation to the families of three people who died after breathing in asbestos as children living on military bases. London Daily Mirror, United Kingdom.

[See another article about asbestos: [Roofs can turn carcinogenic](#)]

Budgets cripple tests for mercury.

Friday, July 01, 2011

South Carolinians who eat fish from the state's waterways will not learn if they have elevated mercury because health officials have given up on a proposed major statewide campaign to reduce the amount of mercury in the environment and determine the extent of health risk. Charleston Post and Courier, South Carolina.

[See other articles about mercury and other contaminants in food: [Toxins in Great Lakes fish](#); [Fish found in Jacksonville contain high levels of mercury, PCBs](#); [Bacteria from Dutch poultry linked to superbugs in people, scientists find](#) and [It's not all white: The cocktail of up to 20 chemicals in a glass of milk](#)]

New York's ban on fracking to lift with study release.

Friday, July 01, 2011

An executive order banning hydraulic fracturing in New York is set to expire today as a key environmental study of the natural gas drilling process is set to be released. Industry officials say potential drilling in New York would have minimal impact on Pennsylvania. Pittsburgh Tribune-Review, Pennsylvania

[See other articles about fracking and drilling: [France vote outlaws 'fracking' shale for natural gas, oil extraction](#); [NJ first in US to ban hydrofracking](#) and [Pa. study to measure possible health impacts of drilling](#)]

Chemical contamination in Tohoku, with Lizzie Grossman and Winnie Bird.

Friday, July 01, 2011

Now public health officials are beginning to assess another potential source of disaster-related exposures: hazardous chemicals that may have been released when major industrial centers along Japan's east coast were damaged or destroyed.

[See other articles about contaminated sites: [Comment period extended for proposal to clean up former Texaco site near Fillmore](#); ['Compromised' site to go on market](#); [Poison gas threat to informal settlements](#); [EPA plans public meeting on Pedricktown Superfund site](#); [EPA update on Yellowstone River Oil Spill \(Silvertip Pipeline\), July 11, 2011](#); [EPA to outline cleanup plan for contaminated groundwater at NL Industries Superfund site in Oldmans Township](#); [EPA extends public comment period on proposed remedies for Radford Army Ammunition Plant](#); [NIH-funded research network to explore oil spill health effects](#); [Federal TCE study to be revived](#) and [EPA seeks public input on cleanup plan for Crown Vantage Landfill Superfund site in Alexandria Township, New Jersey](#)]

Cinnamon and Alzheimer.

Friday, July 01, 2011

An extract found in cinnamon bark, called CEppt, contains properties that can inhibit the development of the Alzheimer disease. Environmental News Network.

[See other articles about nutrition and health: [Getting enough 'sunshine vitamin' may not just be about catching rays, new blood test reveals](#); [The power of D: What's inside the bun?](#); [The health beef over barbecued meat](#); [Dietary calcium intake and risk of fracture and osteoporosis: prospective longitudinal cohort study](#); [Maternal malnutrition may mediate metabolic malady: Study](#); [Somalia food crisis reaching 'unimaginable proportions'](#); [Red wine and exercise](#); [Imported fish with banned chemicals reaching U.S. consumers](#); [Use of vitamin supplements and risk of total cancer and cardiovascular](#)

[disease among the Japanese general population: A population-based survey; Industries lobby against voluntary nutrition guidelines for food marketed to kids and Salt ups death risk considerably: new study\]](#)

Pollutants linked to diabetes in new study.

Thursday, June 30, 2011

People with higher levels of pesticides and other pollutants [PCBs] in their blood may be more likely to get type 2 diabetes, suggests a new study of elderly Swedes. Reuters.

[See another article about toxicants and diabetes: [Association between urinary arsenic and diabetes mellitus in the Korean general population according to KNHANES 2008](#) and articles about obesity: [New report: adult obesity increases in 16 states in the past year](#) and [Startling rise in levels of obesity\]](#)

Perfluorochemicals linked with impulsivity.

Thursday, June 30, 2011

Children's exposure to a growing list of industrial chemicals, including certain pesticides and phthalates, has been linked to development of attention deficit hyperactivity disorder. Now evidence suggests that perfluorinated chemicals boost ADHD risks by making children prone to impulsive behavior, a core ADHD feature. Chemical & Engineering News.

Exposure to PBDEs in the office environment: evaluating the relationship between dust, handwipes, and serum.

Thursday, June 30, 2011

Our research suggests exposure to PentaBDEs in the office environment contributes to PentaBDE body burden with exposure likely linked to PBDE residues on hands. In addition, hand-washing may decrease exposure to PBDEs. Environmental Health Perspectives.

[See other articles linking exposures to noncancer health outcomes: [C8 exposure linked to osteoarthritis; Relationship between urinary phthalate and bisphenol A concentrations and serum thyroid measures in U.S. adults and adolescents from NHANES 2007-08](#) and [Arsenic exposure and motor function among children in Bangladesh\]](#)

West Africa faces food shortages.

Wednesday, June 29, 2011

West Africa faces serious food shortages due to repeated floods caused mainly by climate change, experts warned in the Nigerian capital Abuja. Agence France-Presse.

The over-50s are fitter now than they were at 25.

Wednesday, June 29, 2011

The average 50-something is fitter and healthier than they were in their mid-20s, a report revealed yesterday. They have better diets, take more exercise and have increased free time to focus on their health. London Daily Mail, United Kingdom.

[See other articles about lifestyle and health: [Television viewing and risk of type 2 diabetes, cardiovascular disease, and all-cause mortality: a meta-analysis; Half a million children facing liver disease timebomb; Twin study shows lifestyle, diet can significantly influence course of macular degeneration](#) and [Sitting, per se, as opposed to lack of exercise, may be a new risk factor\]](#)

Three hours in the sun a day 'can halve breast cancer risk.'

Wednesday, June 29, 2011

Spending an average of three hours a day exposed to sunlight can slash the risk of breast cancer by up to 50 per cent, according to research. London Daily Mail, United Kingdom.

[See other articles about cancer: [Court rules against Samsung in cancer cluster case; Shade: A weapon against skin cancer, childhood obesity; Mount Allison tackles cancer with 'green' chemistry; Critics: Cancer plan lacks poisons; Skin lesion risk seen at moderate arsenic levels; Cured meats not linked to pancreatic cancer; Arsenic linked to kidney cancer; Global prevention of environmental and occupational cancer; Superfund postdoc unravels arsenic exposure; NIEHS grantee honored for new video on breast](#)

[cancer research; High folate intake may reduce risk of colorectal cancer and Alcohol consumption guidelines inadequate for cancer prevention, analysis finds\]](#)

[Can TSA's scanning machines give you cancer? New fears after claim government is covering up 'clusters' of disease among airport workers.](#)

Wednesday, June 29, 2011

Claims that the government is covering up 'clusters' of cancer among Transport Security Administration workers have sparked fears the agency's airport scanning machines could pose a risk to travelers. London Daily Mail, United Kingdom.

[See a report about radiation from Smart Meters: [An Investigation of Radiofrequency Fields Associated with the Itron Smart Meter](#) and other articles about radiation exposures: [Canada says Wi-Fi safe despite cancer warning](#); [Mobile phones cause 'five-fold increase in brain cancer risk'](#); [IAEA seeks more safety for M'sia rare earth plant](#); [Germany approves end to the nuclear era](#); [Mobile phones 'unlikely' to cause cancer](#); [Wired but tired: is modern life draining your energy?](#); [Harmful UV radiation levels could increase in UK, Ireland](#) and [Yogyakarta gets a glimpse of the horror of Chernobyl, 25 years on\]](#)

[City's lead poisoning prevention program to be limited due to loss of funding.](#)

Wednesday, June 29, 2011

Racine, Wisconsin's Health Department's lead poisoning prevention program will be limited because of a loss of federal funding, according to the city. Racine Journal Times, Wisconsin.

[See a similar article from New York: [Number of children with lead poisoning edges up in Monroe](#) and another article about lead hazards: [Grand Rapids and 'Get The Lead Out' celebrate more than 1,000 homes made safer for kids\]](#)

[Environmental Health Research Foundation releases report on the benefits of green space.](#)

Wednesday, June 29, 2011

The report is a scientific review of literature that provides a comprehensive evaluation and analysis of recent research studies from a variety of sources across the U.S. on the environmental and health benefits of properly maintained green space. Sacramento Bee, California.

[Prenatal lead exposure and weight of 0 to 5 year-old children in Mexico City.](#)

Wednesday, June 29, 2011

Maternal bone lead was associated with lower weight over time among female but not male children up to 5 years of age. Environmental Health Perspectives.

[See other articles about pre- and perinatal exposures and health: [Associations between polybrominated diphenyl ether \(PBDE\) flame retardants, phenolic metabolites, and thyroid hormones during pregnancy](#); [Swine flu vaccine safe in pregnancy: study](#); [Burning coal indoors linked to birth defects](#); [A balanced diet plus low dose BPA exposure in womb and while nursing causes fatter, sicker rats](#); [Prenatal exposure to phthalates and infant development at six months: prospective Mothers and Children's Environmental Health \(MOCEH\) Study](#) and [An in vivo animal study assessing long-term changes in hypothalamic cytokines following perinatal exposure to a chemical mixture based on Arctic maternal body burden\]](#)

Lessons Learned

Radiation - Good, Bad and Ugly - Exploited and Abused by Steven G. Gilbert, PhD, DABT

"The Atomic Age was born in secrecy, and for two decades after Hiroshima, the high priests of the cult of the atom concealed vital information about the risks to human health posed by radiation. Dr. Alice Stewart, an audacious and insightful medical researcher, was one of the first experts to alert the world to the dangers of low-level radiation." - Stuart Udall, former US Secretary of the Interior

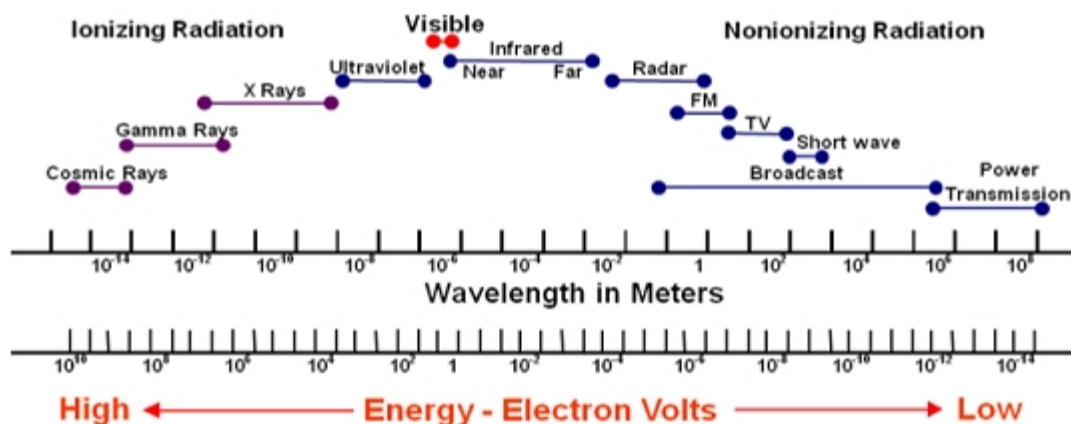
"Millions of Americans every year depend upon medical imaging exams to diagnose disease and detect injury, and thousands more rely on radiation therapy to treat and cure their cancers." - Charles W. Pickering

"The current lack of a national standard for operators of medical imaging and radiation therapy equipment poses a hazard to American patients and jeopardizes quality health care." - Charles W. Pickering

"'Not to worry,' their bosses told them. 'If you swallow any radium, it'll make your cheeks rosy.' The women at Radium Dial sometimes painted their teeth and faces and then turned off the lights for a laugh." From Radium Girls By Martha Irvine, The US Radium Corporation a factory in Orange, New Jersey around 1917

All life depends on electromagnetic radiation. We are surrounded by and depend on radiation-emitting devices, from the sun -- we depend on the sun's radiation for photosynthesis and heat -- to our cell phones and radios, from medical x-rays to the electricity that powers our homes. There are many benefits from radiation-emitting devices, for plants depend on small doses of radiation, living by converting this energy through photosynthesis to sustain them and in turn provide food for many of the earth's animals. However, we are still learning about some of the health effects.

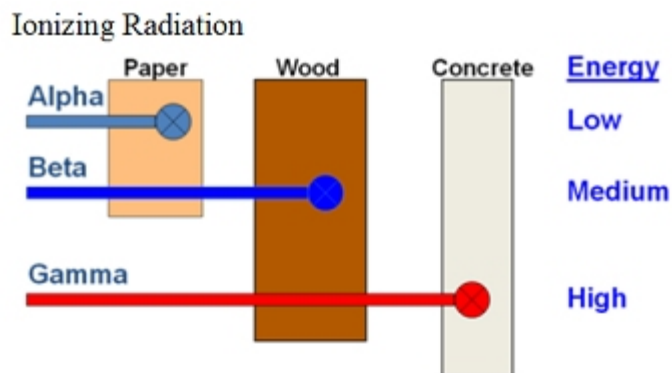
The electromagnetic spectrum is roughly divided into ionizing and nonionizing radiation. The distinction depends on the amount of energy carried by the radiation, which is directly related to the frequency of vibration of the electric and magnetic fields. When the frequency (and hence energy) is high enough, the radiation can separate electrons from atoms, ionizing the material it passes through. For biological material this energy can damage cellular DNA and disrupt function. Nonionizing radiation includes ultraviolet, visible, infrared, microwaves, radio & TV, and power transmission. Ionizing radiation includes high-energy radiation such as cosmic rays, x-rays or gamma rays generated by nuclear decay. Ionizing radiation also includes several types of subatomic particles such as beta radiation (high energy electrons) and alpha radiation (helium ions) and others. Medical x-rays are an example of a common beneficial exposure to ionizing radiation.



The challenges have been to assess the human health and ecological effects of both ionizing and nonionizing radiation. While we depend on the sun, we are also familiar with the hazards of solar radiation that can result in sunburn, cataracts and skin cancer. Microwave radiation, used by cell phones, is also a potential concern as it warms the skin or internal organs. Excessive use of a cell phone on the ear may increase the rate of brain cancers. There is also controversy around the potential hazards of exposure to low-frequency energy such as AC power lines. The challenge as always is to limit exposure.

The effects of high-dose ionizing radiation are well documented. We

also know a great deal about energy emitted and how to reduce exposure. An important distinction is whether there is external exposure to a radioactive material or ingestion of a radioactive particle. Ingestion of a radioactive particle results in nearby cellular exposure and greater likelihood of cellular damage resulting in cancer. For example, iodine-131 is taken up by the thyroid and can cause thyroid cancer. The young are particularly vulnerable.



The challenge that our modern society faces is to exploit the properties of ionizing and nonionizing radiation while putting in place appropriate safeguards that protect human and environmental health. We must also recognize that children are more vulnerable to radiation exposure than adults, be it solar radiation, microwaves, or iodine-131. We have an ethical responsibility to ensure that our children can reach and maintain their full potential, free of unnecessary radiation exposure.

Nonionizing Radiation at Toxipedia: <http://toxipedia.org/x/gg0>

Ionizing Radiation at Toxipedia: <http://toxipedia.org/x/g00>

Alice Mary Stewart at Toxipedia: <http://toxipedia.org/x/MNJb>

Looking back to go forward

Lessons Learned is a bulletin feature focusing on an historical event that provides an important lesson for ensuring a more sustainable and healthy environment. Please feel free to send suggestions to [Steve Gilbert](#).

Past Lessons Learned: <http://toxipedia.org/x/06Jb>

The Collaborative on Health and the Environment offers this information as a service but does not endorse any of the events, articles or announcements.

Companion bulletins are available for different audiences:

- For those interested in environmental health as it relates to learning and developmental disabilities: <http://www.iceh.org/LDDIbulletins.html>
- For those interested in environmental health in Washington State and the Pacific Northwest: <http://washington.chenw.org/bulletins.html>

While there is overlap with this bulletin, there are some events and announcements unique to those bulletins.

If you would like to join the Collaborative on Health and the Environment (CHE) and the ICEH Working Group, please complete the application on the CHE website: <http://www.healthandenvironment.org/application> Joining CHE means receiving up to four email messages a month from the CHE National listserv. CHE costs nothing to join and the benefit is shared information and opportunities for further engagement, if you choose. Be sure to mark that you want to join the Initiative on Children's Environmental Health Working Group at the bottom of the application.

Nancy Hepp
Collaborative on Health and the Environment

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