



Initiative on Children's Environmental Health

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



Biweekly Bulletin August 10, 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 #5 below.

Announcements

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

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

[Call for abstracts: Weight of the Nation.](#)

Weight of the Nation is designed to provide a forum to highlight progress in the prevention and control of obesity through policy and environmental strategies. Submissions are due no later than October 2, 2011.

[Intensive training program opportunity from the Community-Based Research Infrastructure to Better Science project.](#)

The face-to-face training for both newly forming and experienced collaborative community-academic research partnerships will be held in Northern California five weekends (one per month) from January through May 2012. The application deadline is September 30, 2011.

[Call for comments: Chlorpyrifos Preliminary Human Health Assessment for Registration Review.](#)

As part of the registration review process, the Agency has completed a comprehensive preliminary human health risk assessment for all chlorpyrifos uses. Written comments on this proposed rule must be received by September 6, 2011.

[See a related announcement: [Call for comments: Registration Review of Chlorpyrifos](#)]

[Call for comments: Secondary National Ambient Air Quality Standards for Oxides of Nitrogen and Sulfur.](#)

Written comments on this proposed rule must be received by September 30, 2011.

[APHA launches Public Health Newswire.](#)

The American Public Health Association (APHA) recently launched Public Health Newswire, a portal for public health news, opinion and exchange.

[Protect Your Groundwater Day, September 13th.](#)

On Protect Your Groundwater Day, the National Ground Water Association urges you to ACT. Use this day to begin doing your part for protecting one of our most important natural resources -groundwater.

'Safe People-Safe Places' initiative launched.

The 'Safe People-Safe Places' suite of courses are accredited by the Chartered Institute of Environmental Health (CIEH) and will provide basic, intermediate and advanced courses in food safety, fire safety and health and safety.

National Day of Action--Stroller Brigade, August 10th.

Friendly stroller brigades will be taking place from coast to coast to ask our Senators for their support for taking action on toxic chemicals found in our homes and products.

EPA releases draft policy for ensuring scientific integrity / agency seeking public comment.

The draft policy reflects the Obama Administration's commitment to the ethical standards and transparency necessary for ensuring the highest quality science. Comments on this draft policy should be sent to osa.staff@epa.gov by September 6, 2011.

EPA publishes rule to improve reporting of chemical information.

The U.S. Environmental Protection Agency is increasing the type and amount of information it collects on commercial chemicals from chemical manufacturers, allowing the Agency to better identify and manage potential risks to Americans' health and the environment.

[See other articles about chemical oversight: [EPA awards contracts to U.S. companies to screen chemicals for human health impacts](#) and [A signal-to-noise crossover dose as the point of departure for health risk assessment](#)]

EPA proposes air pollution standards for oil and gas production.

These proposed updated standards - which are being issued in response to a court order - would rely on cost-effective existing technologies to reduce emissions that contribute to smog pollution and can cause cancer while supporting the administration's priority of continuing to expand safe and responsible domestic oil and gas production.

[See another announcement regarding air quality: [President Obama announces historic 54.5 mpg fuel efficiency standard](#)]

EPA Student Diversity Intern Program.

Numerous opportunities are available within EPA for students to gain valuable work experience while contributing to the mission of protecting human health and safeguarding the environment. The submission deadline is August 19, 2011.

Job opening: Portland, Oregon.

The planning committee for the 4th Annual Northwest Environmental Health Conference is currently seeking a part-time volunteer to work as a Support and Coordination Intern for the 4th Annual Northwest Environmental Health Conference to be held in February 2012. Applications are due August 15, 2011.

Job opening: Seattle, Washington.

The Puget Sound Clean Air Agency currently has openings for an engineer and an environmental justice coordinator. Applications are due August 15th and 26th, respectively.

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) How to Bring About Large-scale Behavior Change

Two remaining parts, both held on Saturdays: 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](#)

2) Third Safe Routes to School National Conference

Tuesday through Thursday, August 16 - 18, 2011

Minneapolis, Minnesota

Sponsor: hosted by the Minnesota Department of Transportation and Blue Cross and Blue Shield of Minnesota; presented by the National Center for Safe Routes to School and the Safe Routes to School National Partnership

Transportation professionals, SRTS advocates, program representatives, elected officials and community members will connect with colleagues to discuss ideas, resources, projects and noteworthy practices to enhance work that is creating healthier kids and communities.

Price: unknown

[Visit the website](#)

3) 2011 Environmental Justice Conference: One Community-One Environment

Tuesday through Friday, August 23 - 26, 2011 (August 23 is an optional training day)

Detroit, Michigan

Sponsor: Co-sponsored by the United States Environmental Protection Agency (EPA); and EPA's Offices of Air and Radiation (OAR), Water (OW), Solid Waste and Emergency Response (OSWER), and Research and Development (ORD); the National Institute of Environmental Health Sciences (NIEHS); and Greendoor Initiative

Conference participants can learn about the following: 1) models for effective community engagement and capacity building; 2) strategies for addressing pollutions sources that impact EJ communities; 3) federal interagency working group on EJ; 4) workforce development training and job creation; 5) updates: federal agencies' priorities for EJ; 6) hands-on demonstrations of tools and resources; and 7) funding opportunities.

Price: unknown

[Visit the website](#)

Contact: Lena (Vickey) Epps-Price, 919-541-5573 or epps-price.lena@epa.gov

4) Partnership on Alternatives to Certain Phthalates Kickoff Meeting

Wednesday August 24, 2011
Crystal City, Virginia and virtual

Sponsor: US Environmental Protection Agency

The Environmental Protection Agency (EPA) is planning a Design for the Environment (DfE) Alternatives Assessment under the Phthalates Chemical Action Plan. This alternatives assessment will help stakeholders identify safer chemicals and provides a basis for informed decision making by developing an in-depth comparison of potential human health and environmental impacts of chemical alternatives. The alternatives assessment will build upon existing knowledge with an emphasis on the potential for disproportionate impacts on children and other sensitive subpopulations. An option to attend via telephone is available.

Price: free

[Visit the website](#)

Contact: Cal Baier-Anderson of DfE, 202-564-1933 or Baier-Anderson.Caroline@epa.gov

5) Children's Environmental Health Training

Wednesday August 24, 2011

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

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

6) Toxic Chemicals That Disrupt Hormones: Impacts to Fish and People

Wednesday August 24, 2011

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

Sponsor: Collaborative on Health and the Environment-Alaska

This is a one-hour discussion with environmental biologist Dr. Frances Solomon about endocrine-disrupting chemicals (EDCs). Dr. Solomon will discuss the toxic properties of EDCs, exposure pathways for fish and humans with a focus on routes of exposure for people living in the Arctic, why young humans and juvenile fish are more vulnerable to the toxic effects of EDCs, and how you can reduce your exposure to endocrine-disrupting chemicals. We will also discuss the specific impacts of two groups of EDCs-phthalates and perfluorinated compounds (PFCs)-and proposed regulatory reform including the Safe Chemicals Act of 2011 and the Safe Cosmetics Act of 2011.

Price: free

[Visit the website](#)

Contact: Alaska Community Action on Toxics, 907-222-7714 or diana@akaction.org

7) Radon in Schools: What You Need to Know

Wednesday August 24, 2011

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

Sponsor: US Environmental Protection Agency

Join speakers Neil Case and Dan Moors, Mechanical System Engineers at Colorado Springs School District 11, as they discuss how to properly manage radon in schools. Attendees will learn the facts about radon in schools, including its characteristics and prevalence, and why it is necessary to test every school for radon; how to discover effective methods and best practices for testing and remediating radon in school buildings; hear firsthand from a school district that has identified radon issues and taken proactive steps to resolve its issues; and learn how radon management is an essential part of a comprehensive IAQ management program that embodies the Framework for Effective School IAQ Management.

Price: free

[Visit the website](#)

8) Symposium on Ethics of Environmental Health

Wednesday through Saturday, August 24 - 27, 2011

Prague, The Czech Republic

at the Courtyard by Marriott Prague Flora

Sponsor: The Society of Radiation Research and Emergency Planning in the Czech Medical Association

This first Symposium on Ethics of Environmental Health will address highly topical issues at the intersection of radiation protection, toxicology, ecology, medicine, risk ethics and bioethics.

Price: around 480 EUR

[Visit the website](#)

Contact: see the [Contact page](#)

9) Epi Info™ 7 Webinar Demonstrations

three dates from August 25 - September 27, 2011

Sponsor: US Centers for Disease Control and Prevention

Epi Info™ 7, scheduled for release in fall 2011, represents a complete technology overhaul of the Epi Info platform. The Epi Info™ development team invites interested public health professionals who work with epidemiological data to attend one of these upcoming LiveMeeting webinars.

Price: free

[Visit the website](#)

Contact: Sara Bedrosian, eri7@cdc.gov

10) Conference on Performance Measures for Transportation and Livable Communities

Wednesday and Thursday, September 7 - 8, 2011

Austin, Texas

at the Omni Austin Hotel Downtown

Sponsor: University Transportation Center for Mobility and others listed on the website

Transportation is a key element of livable communities. Developing and applying appropriate performance measures to transportation and livability is critical to ensuring that intended federal, state and local goals and objectives are being met. This conference will address the current state of the practice with performance measures for transportation and livable communities in urban, suburban, exurban and rural areas. Current research, projects and initiatives will be highlighted and future research needs

will be discussed. The two-day conference will include keynote speakers, plenary sessions, breakout sessions and poster presentations on topics related to performance measures for transportation and livable communities. The conference will help advance research in the field of livability performance measures and help agencies such as state departments of transportation, metropolitan planning organizations, transit agencies and other groups to develop and use appropriate performance measures that address transportation and livability goals.

Price: \$275

[Visit the website](#)

Contact: UTCM, 979-845-2538

11) Public Health International Conference 2011

Thursday and Friday, September 8 - 9, 2011

London, United Kingdom

at Friends House, 173-177 Euston Road

Sponsor: *Public Health Journal*

Taking as its theme health and well being, the conference will explore the relationships between health, well being and the factors which influence them in a global environment.

Price: see the [Booking form](#)

[Visit the website](#)

Contact: Claire Robins, crobins@rsph.org.uk

News and Journal Articles

[Increase in public health spending results in healthier people, study suggests.](#)

Tuesday, August 09, 2011

A groundbreaking new study published in the journal *Health Affairs*, suggests that increases in public health spending result in healthier people, especially in communities with fewer resources. *ScienceDaily*.

[See a related article: [Getting 50-year-old Americans as healthy as Europeans could save Medicare and Medicaid \\$632 billion by 2050, study says](#)]

[Exposure to the plastic component bisphenol A alters hormonal response of women undergoing in-vitro fertilization.](#)

Tuesday, August 09, 2011

A University at Albany-led research team has identified a link between exposure to bisphenol A (BPA), a molecular component of plastics and resins used in baby bottles and the linings of canned foods, and a reduction in the peak estrogen concentrations among women undergoing in-vitro fertilization (IVF). University at Albany News Center.

[See other articles about exposure to endocrine-disrupting chemicals: [Permanent oviduct posteriorization following neonatal exposure to the phytoestrogen genistein](#); [Early life soy exposure and gender-role play behavior in children](#) and [Low concentrations of bisphenol A induce mouse spermatogonial cell proliferation by G-protein-coupled receptor 30 and estrogen receptor-a](#)]

[Temporal changes in the levels of perfluorinated compounds in California women's serum over the past 50 years.](#)

Tuesday, August 09, 2011

Serum samples collected from California women at different time periods: 1960s (n = 40), 1980s (n = 30), and 2009 (n = 35) were examined for the presence of 12 perfluorinated compounds (PFCs). *Environmental Science & Technology*.

[See a related article: [Retrospective exposure estimation and predicted versus observed serum perfluorooctanoic acid concentrations for participants in the C8 Health Project](#)]

[Critics question safety of smart meters.](#)

Tuesday, August 09, 2011

High-tech smart meter devices aren't even installed yet and they're already stirring up a

lot of controversy. Some say they're an invasion of privacy, while others say it could increase your risk of cancer. CTV News, British Columbia.

Morning smoking has cancer risk.

Tuesday, August 09, 2011

People who smoke soon after getting up in the morning are more likely to develop cancer than those who light up later in the day, say US researchers. BBC. [See other articles about tobacco use: [SAHA to ban smoking in public housing](#); [Elderly housing in Providence going smoke-free](#) and [Hookah lounges are hot, trendy and clouded with risks](#)]

Scrutinizing sunscreens.

Monday, August 08, 2011

Lotions containing inorganic nanoparticles are drawing the attention of toxicologists and the ire of some consumer groups. Chemical & Engineering News.

A mysterious salmonella outbreak shows the holes in our food safety system.

Friday, August 05, 2011

The bacteria salmonella -- which causes more foodborne illnesses than any other microbe -- rarely makes the news, even though the infections cost the U.S. more than \$3 billion each year. So you probably aren't aware that the U.S. is currently in the grip of a more than five month-long, multistate salmonella outbreak. Time Magazine. [See another article about food safety: [When antibiotics no longer work](#) and [China arrests 2,000 in food safety crackdown](#)]

UN slams Shell as Nigeria needs biggest ever oil clean-up.

Friday, August 05, 2011

A U.N. report has criticized Shell and the Nigerian government for contributing to 50 years of pollution in a region of the Niger Delta which it says needs the world's largest ever oil clean-up, costing an initial \$1 billion and taking up to 30 years. Reuters. [See other articles about contaminated sites: [Colorado: Feds agree to study impacts of uranium mining](#); [Occidental Chemical must pay for multi-billion dollar cleanup of Passaic River at Newark](#); [EPA seeks public input on plan to clean up Peninsula Boulevard Superfund site in Hempstead, New York](#); [Policies to clean up toxic industrial contaminated sites of Gela and Priolo: a cost-benefit analysis](#); [Massey, Southern W.Va. residents settle coal slurry case](#); [Neponset River still contaminated](#); [Obama Administration divided over Cancer Alley case](#); [Poor neighborhoods, polluted schools](#); [Shuttle, rocket liftoffs leave legacy of costly cleanups at KSC](#); [Dow Chemical settles with feds on enviro violations](#); [Investigators detect no signs of pollution at former U.S. base](#); [Latest tests show methane at dump site](#); [Cancer chemicals detected at Camp Carroll](#); [New concerns about contaminated groundwater at ex-Textil site](#); [Sampling results from oil spill show expected results](#); [DHEC criticized in pollution case](#); [criminal probe sought](#); [Know your contaminants](#) and [EPA to hold public meeting regarding Ore Knob Mine Site, Ore Knob, NC](#)]

Projecting future heat-related mortality under climate change scenarios: a systematic review.

Friday, August 05, 2011

Projecting heat-related mortality requires understanding of the historical temperature-mortality relationships, and consideration of the future changes in climate, population and acclimatization. Environmental Health Perspectives.

One tainted water well, and concern there may be more.

Thursday, August 04, 2011

For decades, oil and gas industry executives as well as regulators have maintained that a drilling technique known as hydraulic fracturing has never contaminated underground drinking water. But there is in fact a documented case, and an EPA report suggests there may be more. New York Times. [See a related article: [Environmental groups press EPA on fracking fluid](#)]

Reconnecting children and nature.

Thursday, August 04, 2011

What happens when children fail to bond with nature? Researchers believe the disconnect contributes to ADD, childhood obesity, higher rates of physical and emotional illness, vitamin D deficiency, and a weakening of the necessity they will feel for environmental stewardship when they grow up. Miller-McCune.

New sensor seen as tool to detect manganese.

Thursday, August 04, 2011

"We demonstrated we can do a measurement of manganese, lead and cadmium and we can use a single sample-a drop of blood-and do a measurement of all three metals on the same sample," he said. Marietta Times, Ohio.

How safe is your soil?

Thursday, August 04, 2011

As backyard gardening and urban farming continues to explode in popularity, many may be ignorant of the fact that urban topsoil, particularly throughout the East Bay flatlands, contains a cocktail of heavy metal pollutants that can be consumed by humans and pets through contaminated plants and soil dust. Lead, in particular, is virtually ubiquitous. There's little consensus on what to do about it. East Bay Express, California. [See a related article: [West Oakland's innovative approach to soil decontamination](#)]

Dangers of household chemicals probed.

Thursday, August 04, 2011

Research into possible links between household chemicals and diseases such as ADHD, asthma and obesity in children is set to begin in Brisbane. NineMSN.com. [See other articles about children's exposures: [Study: 60% of car seats contain toxic chemicals](#); [Kids from drug-making homes mostly healthy: study](#); [Cadmium limits coming](#); [Some toys sold in Davao found to contain toxic material](#) and [Build-A-Bear recalls label pin due to lead content](#)]

The legacy of waste couture, with Luz Claudio.

Wednesday, August 03, 2011

Author Luz Claudio tells host Ashley Ahearn about the inspiration for "Waste Couture" -- a 2007 news feature that explored the environmental and occupational health implications of producing cheap clothing -- as well as why this story has captured so much attention and changes she has seen in fashion since its publication.

Using nutrition to alter host susceptibility to environmental toxicants.

Tuesday, August 02, 2011

Building on this nutritional paradigm, Hennig advocates for what he calls "a mindful nutrition", including healthy diet and a regular exercise routine, as key to countering the effects of genetic predisposition to disease and exposure to environmental pollutants. NIEHS Environmental Factor. [See other articles about nutrition and nutrients: [Fructose consumption increases risk factors for heart disease: study suggests US dietary guideline for upper limit of sugar consumption is too high](#); [Effort is growing to offer healthier choices in vending machines](#); [A different diabetes: arsenic plus high-fat diet yields an unusual diabetes phenotype in mice](#); [Seventy percent of 8-month-olds consume too much salt, UK study shows](#); [Lancet paper blasts Cochrane salt study](#); [U of A researchers strive to increase awareness of forgotten essential nutrient \[choline\]](#); [MSG-a hidden danger](#); [Omega 3 fatty acids have protective benefits when taken during pregnancy, study suggests](#) and [Stranded in 'food deserts,' hundreds of thousands of N.J. residents lack access to healthy, fresh food](#)]

Even when affluent, minorities live in poorer neighborhoods.

Tuesday, August 02, 2011

The average affluent black or Hispanic household lives in a poorer neighborhood than does the average working-class white household. Neighborhood poverty is associated with disparities in health, environmental quality, safety and public schools. California Watch. [See other articles related to environmental justice: [Climate change an extra](#)

[burden for Native Americans, study says](#) and ['Rich countries encourage uranium mining in poor nations'\]](#)

On the waterfront: Big drop in emissions seen at port.

Tuesday, August 02, 2011

Emissions from the Port of Long Beach have dropped sharply since harbor officials launched ambitious clean-air programs nearly five years ago, a new study shows. Long Beach Press-Telegram, California. [See other articles about air quality: [All diesel exhaust is not the same: engine load alters toxicity](#); [Formaldehyde exposure and lower respiratory infections in infants: findings from the PARIS Cohort Study](#); [Black carbon as an additional indicator of the adverse health effects of airborne particles compared to PM10 and PM2.5](#); [Analysis says Connecticut likely to see pollution surge](#); [NASA's eyes in the sky study pollution on Earth](#); [EPA requires cleanup at NM coal-powered plant](#); [U.S. Steel wins state spray permit, Gary appealing](#); [Air pollution and general practitioner access and utilization: A population-based study in Sarnia, 'Chemical Valley,' Ontario and Feds to help on pollution\]](#)

Study links asthma to magnetic-field exposure of pregnant moms.

Tuesday, August 02, 2011

Can magnetic fields from power lines, computers and even common household appliances lead to health problems? A new study suggests that pregnant women with the highest levels of exposure to magnetic fields are more likely to have a child who develops asthma, compared to pregnant women with low exposure levels. Toronto Globe and Mail, Ontario. [See an opposing view: [Experts criticise study linking magnetic field exposure to asthma risk](#) and other articles about asthma: [Mold exposure in infancy raises asthma risk](#) and [Air cleaner helps asthmatic kids living with smokers\]](#)

Increased risk of Parkinson's disease in methamphetamine users, study finds.

Monday, August 01, 2011

People who abused methamphetamine or other amphetamine-like stimulants were more likely to develop Parkinson's disease than those who did not, in a new study from the Centre for Addiction and Mental Health (CAMH). ScienceDaily.

Day camp helps children recovering from lead poisoning.

Monday, August 01, 2011

Little Plumbs, a day camp pilot project in Fort Wayne, is helping preschool children overcome developmental and neurological effects of high lead levels in their blood. Fort Wayne News-Sentinel, Indiana. [See other articles about lead exposures: [High lead levels in baked clay eaten during pregnancy](#); [Blood tests for lead exposure 'needless'](#); [Lieu seeks state EPA investigation of high levels of lead at airport](#); [Get the lead out](#); [Millions in damages for lead poisoning](#); [DEC plans costly cleanup](#) and [Tibetans in Amdo suffer lead exposure from Chinese factories\]](#)

Cashiers sought for health study.

Monday, August 01, 2011

Researchers at the National Institute of Environmental Health Sciences are recruiting cashiers willing to have blood and urine samples taken to be tested for a potentially toxic chemical - bisphenol A, or BPA for short - that is used to manufacture the slick receipt paper many cashiers handle on a daily basis. Raleigh News & Observer, North Carolina. [See other articles about occupational exposures: [First measurements of harmful haloacetic acids in urine of swimmers and pool workers](#); [Number of cancer deaths linked to workplace won't fall 'for 20 years'](#) and [Work related complaints of neck, shoulder and arm among computer office workers: a cross-sectional evaluation of prevalence and risk factors in a developing country\]](#)

A study in balance: how microbiomes are changing the shape of environmental health.

Monday, August 01, 2011

This field of study has taken an evolutionary leap forward with new research showing human microbiomes may play a far greater role in environmental health than ever

imagined. Environmental Health Perspectives.

[Autism risks: genes may not play biggest role.](#)

Sunday, July 31, 2011

As many as one in 80 American children are thought to be autistic, and most scientists trace the main risk factor to genetics. But now, researchers believe that environmental factors could play as big a role as genetics. The largest study of autism in twins ever conducted found, to the surprise of researchers, an unusually high number of fraternal twins with autism. All Things Considered, NPR. [See other articles about autism: [Australian research finds autism risk](#) and ['Environment' poses a knotty challenge in autism](#)]

[Dr. Michael Hendryx, measuring mining's toll on health.](#)

Sunday, July 31, 2011

After years of neglect, health complaints from coal country are finally being investigated, thanks largely to one man. And his startling findings about cancer, birth defects and more are striking a nerve. Living On Earth. [See another article about mining hazards: [Study finds increased cancer rates near Coal River mine sites](#)]

[The new dirt on dry cleaners.](#)

Sunday, July 31, 2011

A shakeup is coming to an industry that has changed little for decades. Many dry cleaners will be required to find new solvents to replace a widely used cleaning agent called perchloroethylene, or perc, by 2020. As a result, businesses are using a growing array of new methods to clean garments. Wall Street Journal.

[N.R.C. lowers estimate of how many would die in meltdown.](#)

Sunday, July 31, 2011

The Nuclear Regulatory Commission is approaching completion of an ambitious study that concludes that a meltdown at a typical American reactor would lead to far fewer deaths than previously assumed. New York Times. [See other articles about risks with nuclear radiation: [Strontium-90 detected in fish near Vermont Yankee](#); [Japanese parents live with radiation fear](#); [Japan's air: 300 times more radioactive than Chernobyl](#) and [Assessing the health risks of food contaminated by radiation is an inexact science](#)]

[Mobile use doesn't alter kids' cancer risk: study.](#)

Friday, July 29, 2011

Children and adolescents who use mobile phones are at no bigger risk of developing brain cancer than those who do not use them, according to a study of patients aged 7 to 19 partially funded by mobile phone operators. Reuters. [See a rebuttal: [No cell phone-children's cancer risk? The media might be wrong](#) and other related articles: [Are cellphone towers hazardous to your health?](#) and [Are mobile phones safe for children to use?](#)]

[Children who grow up on farms 'more likely to get cancer.'](#)

Thursday, July 28, 2011

Children who grow up on farms where animals are kept are much more likely to develop cancer, according to a new study. Youngsters raised on chicken farms are three times more likely to develop blood cancers later in life, according to the research. Edinburgh Scotsman, United Kingdom. [See other articles about cancer: [Scant evidence to link 9/11 to cancer, US report says](#); [New Maryland plan targets cancer deaths](#); [Health officials warn homeowners about asbestos cleanup](#); [Feds: Asbestos fraud at Buffalo, NY, project](#); [Genetic variation in base excision repair pathway genes, pesticide exposure, and prostate cancer risk](#); [Dioxin exposure and cancer risk in the Seveso Women's Health Study](#); [Cancer experts condemn councils for offering sunbeds in leisure centres](#); [Law firm highlights rise in asbestos-related deaths](#) and [Exercise benefits cancer survivors, new report](#)]

[Chromium 6 limit in water goal set by Calif. EPA.](#)

Thursday, July 28, 2011

The agency set a public health goal for hexavalent chromium, also known as chromium 6, that will be used by the state's Department of Public Health to help create a legally enforceable limit on the chemical in drinking water. The agency set the goal at .02 parts per billion. San Francisco Chronicle. *[See other articles about water quality: [EPA report illustrates serious sewage pollution problem in New York and New Jersey](#); [EPA protects rivers, lakes and streams by plugging abandoned oil wells in western New York](#); [Outer Cape Cod now protected from boat sewage pollution](#); [Exposure to trihalomethanes through different water uses and birth weight, small for gestational age and preterm delivery in Spain](#); [EPA announces public comment period on proposal to ban dumping sewage from boats into Jamaica Bay](#); [12 brands of bottled water declared unsafe](#); [Alliance calls for action to protect the Great Lakes](#); [Toxic chromium found in Chicago drinking water](#); [Odd chemicals turn up in drinking water](#) and [EPA and USDA create a partnership to improve drinking water systems and develop workforce in rural communities](#)]*

[Yoga boosts stress-busting hormone, reduces pain, study finds.](#)

Wednesday, July 27, 2011

A new study by York University researchers finds that practicing yoga reduces the physical and psychological symptoms of chronic pain in women with fibromyalgia. *[See another article about movement and health: [How exercise can keep the brain fit](#) and about lifestyle and brain function: [Grasping for any way to prevent Alzheimer's](#)]*

[Methylmercury hinders enzyme that protects against heart disease.](#)

Wednesday, July 27, 2011

High amounts of methylmercury in a person's blood can inhibit an enzyme that helps prevent atherosclerosis, researchers report in a new study. Environmental Health News. *[See other articles related to mercury: [Precarious balance: methylmercury, selenium, and cardiovascular health](#); [Getting the mercury out](#) and [State warns against eating lower Tonto Creek fish](#)]*

[Researchers examine cumulative health risks.](#)

Wednesday, July 27, 2011

New Bedford residents, like those in many cities, are at risk for high rates of attention deficit hyperactivity disorder and high blood pressure, according to state and federal studies, and researchers are studying the reasons why. Boston Globe, Massachusetts.

[Plant-powered plastics.](#)

Wednesday, July 27, 2011

Chemists are working to reduce the volume of this hydrocarbon-based, hard-to-degrade material that can release potentially toxic ingredients into the environment. Some of the more promising research involves green plants. Science News.

[Thalidomide returns: Scandal-hit drug is now used across NHS.](#)

Wednesday, July 27, 2011

Thalidomide, the cause of the biggest medical scandal of the last century, is today recommended for use across the NHS. London Independent, United Kingdom.

[CDC still listening to youth-vaccination debate.](#)

Wednesday, July 27, 2011

The CDC recommends meningitis immunizations for children ages 11 to 18 to help prevent the rare but potentially fatal bacterial meningitis. But the recent FDA approval of a vaccine for babies as young as 9 months has prompted federal officials to consider adding it to the other 16 recommended immunizations. Chicago Tribune, Illinois.

[Coalition of health and environmental groups challenges California's pesticide plan.](#)

Wednesday, July 27, 2011

The state's programs often include spraying harmful pesticides, some of which drift onto homes and people. eNews Park Forest, Illinois. *[See another article related to pesticides: [Contaminated wells lead to lower assessments on DeLand properties](#)]*

Lessons Learned

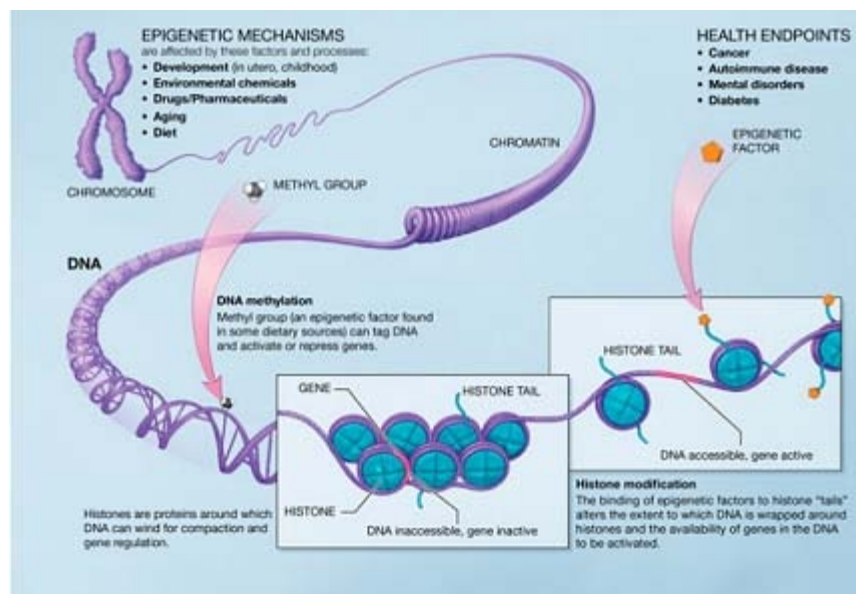
Epigenetics - The Genes but More

by Steven G. Gilbert, PhD, DABT

Epi, means "upon", "above", "in addition to". Epigenetics is the study of changes in gene expression caused by mechanisms other than changes in the genetic (DNA) code.

"We recognized in 1996 that, with progress in the field of genetics accelerating at a breathtaking pace, we need to ensure that advances in treatment and prevention of disease do not constitute a new basis for discrimination."

- Olympia Snowe



Source: The National Institutes of Health

describing the functionality of DNA. Decoding the genome and looking for variations in an individual's DNA was a focus of research to help explain individual variability and susceptibility to disease or toxic effects. We have been accustomed to blaming a lot on "our genes", but then the story became both more complicated and intriguing with the recognition of the subtle power of epigenetics.

Conrad Hal Waddington (November 8, 1905 - September 26, 1975) postulated that it was not just the genes that shaped development but also the environment that shape the genes. In the late 1930s he wrote a textbook describing developmental epigenetics, a term that then meant how the environment shaped genetic activity. Understanding a possible mechanism had to wait for a far deeper understanding of DNA and its role in development. Epigenetics is now defined as changes in gene expression other than changing ("above" or "in addition to") the DNA sequence. Typically gene expression is silenced or suppressed by DNA methylation or histone deacetylation, but without altering the sequence of the silenced genes. These ideas were first articulated in 1975. The power and subtlety of epigenetics is these changes can be passed to the next generation.



Conrad Waddington

While we are now well aware of the damage thalidomide, alcohol, lead, mercury or PCBs can cause to the developing organism, more subtle epigenetic changes can also result from environmental exposures. A dramatic example of the power of epigenetic information transfer was demonstrated by research on the endocrine disruptive fungicide

The concept of epigenetics, meaning something acting above or in addition to genes, is both old and new. One of the greatest mysteries was how life replicates, adapts, changes, and reproduces. Austrian scientist Gregor Johann Mendel (July 20, 1822 - January 6, 1884) founded the new science of genetics by demonstrating the inheritance of certain traits in pea plants follows particular patterns. Mendel did not know it, but he was

vinclozolin. Male offspring of the exposed mother rat transferred disease susceptibility to the next generation. Further research has indicated that epigenetic changes can result from exposure to environmental hazards such as cigarette smoke, arsenic, alcohol, phthalates, BPA, and other chemicals. Furthermore, epigenetic changes can occur through nutrition, methyl content of diet, intake of folic acid and vitamins or even social and maternal behavior toward the offspring. This really emphasizes the importance of a loving and supportive environment during development. Epigenetic changes are associated with cancer, neurodevelopment disorders, autoimmune disease, diabetes, asthma, behavioral disorders and other changes.

Our expanding appreciation of the influence of development for epigenetic changes will have profound effects on risk assessment and really argues for a precautionary approach to chemicals during development. We have an ethical responsibility to ensure that our children have an environment in which they can reach and maintain their full potential, free of exposure to chemicals that cause adverse epigenetic changes. In addition, we must move beyond just doing no harm to one of creating a positive and supportive environment for our children.

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>

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- 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.

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Nancy Hepp
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