



Learning and Developmental Disabilities Initiative

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



Biweekly Bulletin September 7, 2011

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

www.healthandenvironment.org/working_groups/learning/r/bulletins

LDDI Highlights

AAIDD Webinar September 20th

In this webinar titled "Screening for Developmental Neurotoxicity: An In Vitro Approach Using High Content Imaging", Dr. William Mundy will explain EPA's exciting efforts to speed up testing of possible developmental neurotoxicants. For more information, please see event #8 below.

Autism Society Webinar September 24th

Please join The Autism Society from your home computer Saturday September 24th at noon as we welcome Dr. Suruchi Chandra and Dr. Anju Ussman to discuss Autism and Environment II: What We Know for the Clinic and Home. These two clinicians will discuss integrative medicine treatments for autism, summarize recent research of environmental exposures and the developing brain, and present steps to take in the home and school to optimize the environment of a person with autism. This webinar is free, and we welcome all who wish to learn. It is the second in our two-part series and will be recorded and archived on our website for future reference. For more information, please see event #9 below.

New Members

The Learning and Developmental Disabilities Initiative welcomes these new members:

- Amanda Evans, MSPH, Cincinnati, Ohio
- Ayaz Shah, MPhil, Shikarpur, Pakistan

Announcements

A daily news feed with articles and announcements is available on CHE's website:
<http://www.healthandenvironment.org/news/announce>.

[Active Aging Week 2011.](#)

Now in its ninth year, Active Aging Week, September 25 - October 1, promotes the benefits of active, healthy lifestyles for adults over 50.

[Call for applicants: National Community Partner Forum, Realizing the Promise of Community-Engaged Health Disparities Research.](#)

Applications are due October 3rd to attend the December 6-7th forum in Boston.

[EPA announces schedule for dioxin assessment.](#)

The US Environmental Protection Agency (EPA) announced today that it plans to complete the noncancer portion of EPA's Reanalysis of Key Issues Related to Dioxin

Toxicity and Response to NAS Comments, and post the final non-cancer assessment to the Integrated Risk Information System (IRIS) by the end of January 2012.

[See a related article: [Dioxins: More delays for EPA assessment of the chemical's most hazardous form](#)]

[Call for comments: New ideas for NIH Common Fund Programs.](#)

The National Institutes of Health invites the public to post comments and discuss posts to help refine broad conceptual topics into programs that more closely address Common Fund criteria. Please submit your comments by Wednesday September 14th.

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

Physicians for Social Responsibility (PSR) seeks an executive director. The application closing date is October 15, 2011.

[Job opening: Bethesda, Maryland.](#)

NIEHS is accepting applications through Sept. 30 from senior investigators qualified for a tenured appointment as director of its Clinical Research Program, a senior leadership position within the NIEHS Office of the Scientific Director.

[Job opening: Webster, Texas.](#)

The City of Webster's Community Development Department is accepting applications for the position of Environmental Health Inspector. The purpose of this position is to protect the health and safety of the citizens. The position requires a bachelor's degree in a related field and three years of relevant experience.

[Job opening: Boise, Idaho.](#)

The Idaho Department of Health and Welfare is currently seeking an Environmental Public Health Risk Assessor for the Bureau of Community and Environmental Health. Applications are due by September 10, 2011.

Upcoming Events

Online Calendar. These and more upcoming events are listed in a searchable calendar: <http://www.healthandenvironment.org/cgi-bin/searchevents.cgi>. The calendar now lists deadlines for funding proposals and conference abstracts.

1) 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

2) How to Bring About Large-scale Behavior Change

One remaining part, Saturday 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](#)

3) National Environmental Public Health Tracking Conference

Monday through Thursday, September 12 - 15, 2011

Atlanta, Georgia

at the Ritz-Carlton

Sponsor: US Centers for Disease Control and Prevention

The 2011 National Environmental Public Health Tracking Conference, Tracking in Action: Leading the Way to Better Environmental Public Health, will unite the environmental public health community and provide opportunities to discuss and highlight successes of environmental public health and the National Environmental Public Health Tracking Program, share innovative approaches and reflect on lessons learned along the way, discuss the future of environmental public health, and build partnerships and identify next steps for environmental public health tracking.

Price: see the [Registration page](#)

[Visit the website](#)

Contact: CDC, 800-232-4636 or cdcinfo@cdc.gov

4) International Society for Environmental Epidemiology 2011

Tuesday through Friday, September 13 - 16, 2011

Barcelona, Spain

at the Palau de Congressos de Barcelona, Fira de Barcelona, Av. Reina María Cristina

Sponsor: International Society for Environmental Epidemiology

For this conference we have specific themes: Sustainable transport and health: Impact of transport on health and approaches to reduce health impacts; Impact of climate change: from water scarcity to Saharan dust episodes; Early exposure-later life: in utero and early life exposures and effects in later life; and New methods and technologies. We hope that the conference will stimulate discussion and research in these particular areas.

Price: see the [Registration page](#)

[Visit the website](#)

5) Are Vaccines Safe and Effective? An Educational Opportunity for Parents and Practitioners

Wednesday September 14, 2011

6:30 - 9:30 p.m.

New York, New York

at the Philip Coltoff Center, 219 Sullivan Street

Sponsor: Dr. Lawrence B. Palevsky

In this workshop, you will hear discussions on vaccine science: What is current vaccine

science and who is funding it and doing it? How do vaccines work, and have they done, and do they do what we're told they do? What role do vaccine ingredients play when injected into infants and children? What do the ingredients do to our children once they're injected? Do vaccines contribute to the development of chronic illnesses in children? How do our children get into school if they're not vaccinated? How does the immune system work in babies and children? Attendees will hear some of the answers to these questions, along with the research that questions whether vaccines are safe and effective, and whether the scientific process is even at work to prove the answers to these questions. Attendees will also be asked to look at the issues that drive us to make the decisions we make, many of which come to us through fear, bullying, uncertainty, and a lack of knowledge, and to perhaps think alternatively about how illnesses occur and disappear.

Price: \$35 per ticket or \$60 per couple from the same household

[Visit the website](#)

Contact: see the [Contact page](#)

6) Epi Info™ 7 Webinar Demonstrations

two remaining dates on September 14 and 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

7) 3rd Alberta-Zhejiang Life Sciences International Forum on Food Safety, Environmental Contamination and Human Health Risk Assessment and Management

Monday through Wednesday, September 19 - 21, 2011

Hangzhou, Zhejiang China
in the World Heritage Site

Sponsor: The Health Bureau of Zhejiang Province, the Science and Technology Department of Zhejiang Province in China and the Office of the Chief Medical Officer of Health, Alberta Health and Wellness in Canada

The vision of the forum is healthy people, safe environments, and prosperous economy. The forum provides an opportunity to learn about the fundamental concepts and practice of human health risk assessment and risk management. It will provide an opportunity for the participants to become familiar with the concepts of public health and safety protection, public health policy development and decision making processes, current regulatory frameworks for industrial development and principals of food safety.

Price: see the [Registration page](#)

[Visit the website](#)

Contact: Dorothy Huang, 403-220-5511 or acft@ucalgary.ca

8) Screening for Developmental Neurotoxicity: An In Vitro Approach using High Content Imaging

Tuesday September 20, 2011

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

Sponsor: American Association on Intellectual and Developmental Disabilities

Dr. William Mundy will explain EPA's exciting efforts to speed up testing of possible

developmental neurotoxicants in a webinar open to the public. EPA's National Health and Environmental Effects Research Laboratory scientists are protecting human health through cost-effective methods to test and rank chemicals for their potential to cause developmental neurotoxicity. These new approaches, designed to be rapid and less costly than current rodent models, include high throughput in vitro assays and medium throughput zebrafish embryonic development assays. Historically, scientists studied laboratory animals as surrogates for humans, which was expensive and time-consuming. To date, only a small number of the thousands of chemicals currently in commerce have been assessed for their potential toxicity. Very few chemicals have been tested for effects on the developing nervous system. New testing methods can quickly screen chemicals for effects on the nervous system. EPA is developing in vitro cultures of rodent and human neurons that recapitulate cell proliferation differentiation, growth, and synapse formation, providing faster, less expensive ways of learning how to improve human health.

Price: free

[Visit the website](#)

Contact: Joyce Martin, JD, JMartin@aidd.org

9) Autism and Environment II: What We Know for the Clinic and Home

Saturday September 24, 2011

noon Eastern time

Sponsor: The Autism Society

Please join The Autism Society from your home computer Saturday September 24th at noon as we welcome Dr. Suruchi Chandra and Dr. Anju Ussman. These two clinicians will discuss integrative medicine treatments for autism, summarize recent research of environmental exposures and the developing brain, and present steps to take in the home and school to optimize the environment of a person with autism. This webinar is free and we welcome all who wish to learn. It is the second in our two-part series and will be recorded and archived on our website for future reference.

Price: free

[Visit the website](#)

10) New Frontiers in Environmental Health

Thursday September 29, 2011

12:30 - 1:20 p.m.

Seattle, Washington

at the University of Washington Department of Environmental and Occupational Health Sciences Room T-435

Sponsor: University of Washington Department of Environmental and Occupational Health Sciences

Howie Frumkin, MD, DrPH, dean of the UW School of Public Health, will speak as part of the ENV H 580 Environmental Health Seminar. This lecture is open to the public.

Price: free

[Visit the website](#)

Contact: DEOHS, 206-543-6991 or ehadmin@u.washington.edu

News and Journal Articles

[Researcher links economic recession with growing minority health disparities.](#)

Tuesday, September 06, 2011

Health disparities research is a multifaceted area of study, consisting of several key components including basic, clinical, social, and behavioral research, each one conducted with the primary goal of further understanding why health differences exist between various populations. NIEHS Environmental Factor.

[See a related article: [Socioeconomic status and race/ethnicity independently predict health decline among older diabetics](#) and others about environmental justice: [Burning issues: EPA justice conference brings attention to Detroit](#) and [Where you reside can give strong clues on life expectancy](#)]

Assessing risk posed by chemicals in mixtures.

Tuesday, September 06, 2011

Rather than anticipating the risk to health and the environment posed by a specific waste outflow, the problem has become one of understanding and managing the risk that multiple, everyday exposures may pose to health. Health & Environment.

[See another article about real and perceived risk: [What you don't know can kill you](#) and one about chemical regulation based on risk: [EU prepares to re-open REACH 'can of worms.'](#)]

Toxic Taps Part 2: Study eyes arsenic-IQ link in local kids.

Tuesday, September 06, 2011, 2011

Columbia University researchers, in conjunction with the University of New Hampshire, have been in Greater Augusta sampling the wells and testing the intelligence of children such as Brennan's since 2006. Kennebec Journal.

[See other articles about water quality: [Should Chicagoans filter their drinking water?](#); [Researchers study micropollutants in wastewater](#); [No local fervor for fluoride in water](#); [Ark. panel allows mining firm more water discharge](#); [Death by fashion: is your wardrobe poisoning the world's water supply?](#); [Water scientists issue warning on coal seam gas](#); [Contaminated soil in Seminole Co. spreading toward lake](#); [Factories release toxic waste in drains](#); [United Nations takes issue with water quality in Central Valley](#); [A matter of risk: radiation, drinking water and deception](#) and [Private well? Experts urge testing for toxics](#)]

Maternal prenatal urinary phthalate metabolite concentrations and child mental, psychomotor and behavioral development at age three years.

Tuesday, September 06, 2011

Certain prenatal phthalate exposures may decrease child mental and motor development and increase internalizing behaviors. Environmental Health Perspectives.

[See other articles about phthalates: [Common plasticizer alters an important memory system in male rat brains](#) and [Moms' plasticizer exposure troubling for baby boys](#)]

The timing and tempo of puberty affect behavior.

Monday, September 05, 2011

A new study suggests that behavior and mood problems can be predicted by how early or late puberty starts and how fast or slow it progresses, and that this may be governed by different endocrine processes and may influence behavior in different ways. Los Angeles Times, California.

Associations of early childhood manganese and lead co-exposure with neurodevelopment.

Thursday, September 01, 2011

We observed evidence of synergism between lead and manganese, whereby lead toxicity was increased among children with high manganese co-exposure. Environmental Health Perspectives.

[See other articles about heavy metals: [Metal sources and exposures in the homes of young children living near a mining-impacted Superfund site](#); [Biomarkers of methyl mercury exposure immunotoxicity among fish consumers in Amazonian Brazil](#); [Identification of sources of lead exposure in French children by lead isotope analysis: A cross-sectional study](#); [Legislature approves tougher penalties for lead in jewelry](#); [Chinese natural health product recalled due to excess mercury: Health Canada](#); [Smelter agrees to cut lead emissions](#) and [UC grantees' lab-on-a-chip detects toxic heavy metals in humans](#)]

Just relax! Mom's stress is linked to baby's health.

Wednesday, August 31, 2011

Higher amounts of everyday stress during pregnancy can increase the risk of many early childhood diseases and health problems, finds one of the largest studies to date on the link between prenatal environment and health after birth. Environmental Health News.

[As waters recede, threat of mold rises.](#)

Wednesday, August 31, 2011

As power slowly gets restored to residents after Tropical Storm Irene hit on Sunday, thousands must now deal with flooded basements, bedrooms, and living rooms -- and possibly mold. Boston Globe, Massachusetts.

[Utah gives hookah the hook.](#)

Tuesday, August 30, 2011

Starting in mid-September, Utah bars and clubs cannot allow patrons to smoke most hookah products indoors. The Utah Department of Health announced Monday that it has amended the Utah Indoor Clean Air Act to ban hookah products that contain tobacco. Salt Lake Tribune, Utah.

[See other articles about tobacco and smoking: [Exclusive: Smoked out: tobacco giant's war on science](#); [Indonesia fails to convince WTO on U.S. clove-cigarette ban](#); [No progress on nitrosamine levels in U.S. cigarettes](#) and [Decrease in smoking reduces death rates within months](#)]

[Kids' lack of free play harmful: journal.](#)

Sunday, August 28, 2011

Hovering helicopter parents who restrict their kids' unstructured play may actually harm, rather than help, children according to the latest issue of the American Journal of Play, a scholarly journal which has gathered a distinguished group of experts to probe the near-extinction of free play and its effects on children and society. Health, Medical, and Science Updates.

[See another article about children and lifestyle: ['Most' American children not getting enough vitamin D](#)]

[Drug studies in journals intentionally designed to mislead, confuse: UCLA.](#)

Sunday, August 28, 2011

The researchers suggest that commercial sponsors of research may promote the use of outcomes that are most likely to indicate favorable results for their products, Hochman said. Health, Medical, and Science Updates.

[The color of controversy.](#)

Sunday, August 28, 2011

The link between food dyes and child hyperactivity is getting renewed attention. Depending on your point of view, a recent official food advisory panel either affirmed that food dyes were safe, questioned whether they were safe enough or offered a conclusion that somehow merged the two. Science News.

[See other articles about diet and health: [Future heart health 'shaped by diet'](#); [Ingredients of shady origins, posing as supplements](#); [Dietary intervention and DEHP reduction](#) and [Dietary intervention and DEHP reduction: Rudel et al. respond](#)]

[Moms' smoking linked to psychiatric meds in kids.](#)

Saturday, August 27, 2011

Kids whose moms smoked while pregnant were more likely to end up on medications such as antidepressants, stimulants and drugs for addiction in a new study from Finland that hints at maternal smoking's effect on a baby's developing brain. Reuters.

[See another article about mental health: [Father time: children with older dads at greater risk for mental illness](#)]

[Families wanted for study of arsenic.](#)

Saturday, August 27, 2011

University of New Hampshire and Columbia University researchers are looking for families in Elliot and South Berwick to participate in a study examining a potential link between arsenic exposure in children and development of cognitive skills.

Seacoastonline.com.

[See other articles about arsenic: [Sales halted after arsenic found in chicken drug](#) and [Toxic Taps Part 2: Study eyes arsenic-IQ link in local kids](#)]

[Air pollution exposure during pregnancy, ultrasound measures of fetal growth, and adverse birth outcomes: a prospective cohort study.](#)

Saturday, August 27, 2011

Results suggest that maternal air pollution exposure is inversely associated with fetal growth during the second and third trimester and with weight at birth. PM10 exposure was positively associated with preterm birth and small size for gestational age at birth. Environmental Health Perspectives.

[See other articles about air pollution: [Ambient concentrations and personal exposure to polycyclic aromatic hydrocarbons \(PAH\) in an urban community with mixed sources of air pollution](#); [Variability of environmental exposure to fine particles, black smoke, and trace elements among a Swedish population](#); [Spatial and seasonal distribution of aerosol chemical components in New York City: \(1\) Incineration, coal combustion, and biomass burning](#); [Coal plant rules set off battle](#); [Spatial and seasonal distribution of aerosol chemical components in New York City: \(2\) Road dust and other tracers of traffic-generated air pollution](#); [Prenatal exposure to residential air pollution and infant mental development: modulation by antioxidants and detoxification factors](#); [WikiLeaks reveals China's failure to measure dangerous pollution](#); [Pending regulations to reduce coal pollution](#); [Plants brace for new rules](#); [Statement by EPA Administrator Lisa P. Jackson on the ozone national ambient air quality standards](#); [Texas regulators hail clean-air surrender](#); [Air-quality researchers tackle health implications of ultra-fine particles](#); [Air pollution more harmful to poor; makes them vulnerable](#) and [Mass. steps up efforts to cut school bus pollution](#)]

[Vaccine-safety report should reassure doctors and parents, experts say.](#)

Friday, August 26, 2011

Vaccines rarely cause serious side effects, health officials say. When problems do arise, they most often occur in people with preexisting immune system disorders. Los Angeles Times, California.

[See related articles: [Vaccine cleared again as autism culprit](#) and [Despite concerns, more U.S. children receiving vaccinations](#)]

[Quinn signs law inspired by Antioch High students.](#)

Friday, August 26, 2011

Gov. Pat Quinn signed a new state law Wednesday creating a prescription drug collection and disposal program utilizing local law enforcement agencies across Illinois as a drop-off site for the incineration of unused drugs. Lake County News-Sun, Illinois.

[Municipal bylaw to reduce cosmetic/non-essential pesticide use on household lawns -- a policy implementation evaluation.](#)

Friday, August 26, 2011

Bylaws or ordinances implemented through education and enforcement are a viable policy option for reducing urban cosmetic pesticide use. Environmental Health.

[See other articles about pesticides: [EPA reaches Title VI civil rights agreement with the California Department of Pesticide Regulation](#); [A prospective study of organochlorines in adipose tissue and risk of non-Hodgkin's lymphoma](#); [California defied own scientists with pesticide approval](#); [Complaints about crop dusters rising in Indiana](#); [Prostate cancer and ambient pesticide exposure in agriculturally intensive areas in California](#); [Association of hexachlorobenzene \(HCB\), dichlorodiphenyltrichloroethane \(DDT\), and dichlorodiphenyldichloroethane \(DDE\) with in vitro fertilization \(IVF\) outcomes](#); [Methyl iodide controversy heats up along with field fumigation](#); [Pajaro Valley growers avoiding new pesticide](#); [USC study tackles pesticide-prostate cancer link](#) and [Methyl iodide's toxic saga continues](#)]

[SEC bears down on fracking.](#)

Friday, August 26, 2011

The Securities and Exchange Commission is asking oil and gas companies to provide it

with detailed information--including chemicals used and efforts to minimize environmental impact--about their use of a controversial drilling process used to crack open natural gas trapped in rocks. Wall Street Journal.

[See another article about fossil fuel extraction: [New EPA regulations aim to cut oil, natural gas emissions](#)]

The new epicenter of China's discontent.

Thursday, August 25, 2011

Anger over pollution is not new in China. As many as 90,000 "mass incidents" in China were sparked by environmental concerns last year, researchers say. Yet unlike many factories targeted by farmers who've watched crops fail or seen relatives fall ill, the chemical plant near Dalian was not linked to egregious past health hazards. Rather, the fear was for the future. Foreign Policy.

[See another article about pollution in China: [Apple attacked over pollution in China](#)]

Exercise can substitute effectively as second 'medication' for people with depression.

Wednesday, August 24, 2011

Exercise can be as effective as a second medication for as many as half of depressed patients whose condition have not been cured by a single antidepressant medication. ScienceNewsline.

Maquiladora factories manufacture toxic pollutants.

Wednesday, August 24, 2011

Since the 1960s, maquiladoras or export assembly plants have been the cornerstone of Mexico's strategy to attract foreign direct investment and boost exports. But the environmental and social costs have been high. Inter Press Service.

[See a related article: [Black sand in the desert](#)]

Scented laundry products emit hazardous chemicals through dryer vents.

Wednesday, August 24, 2011

Findings, published online this week in the journal *Air Quality, Atmosphere and Health*, show that air vented from machines using the top-selling scented liquid laundry detergent and scented dryer sheet contains hazardous chemicals, including two that are classified as carcinogens. EurekAlert!

[See other articles about hazardous consumer products: [Haircare company recalls toxic straightening product](#); [Only 10pc leather products get PCSIR certification](#); [Flame retardants tied to lower birth weights](#); [Inkling of concern: chemicals in tattoo inks face scrutiny](#); [A crawling issue: head lice treatments worse than the pest itself?](#) and [Study: perc remains in dry-cleaned clothes](#)]

Baylor scientists develop new approaches to predict the environmental safety of chemicals.

Wednesday, August 24, 2011

In the Baylor study, researchers suggest using data from other chemicals, such as what concentrations can cause toxicity in aquatic organisms to predict the toxicity of another chemical that scientists expect causes toxicity in the same way. Baylor News.

[See other articles about research methodology: [European birth cohorts for environmental health research](#) and [Conducting research with tribal communities: sovereignty, ethics and data-sharing issues](#)]

EPA forces environmental cleanup at 55 tribal schools in Arizona.

Tuesday, August 23, 2011

The US Environmental Protection Agency announced a comprehensive settlement with the Department of the Interior to address alleged violations of waste, water, air, toxics and community right-to-know laws at schools and public water systems in Indian Country owned or operated by DOI's Indian Affairs Office. ABC15.com.

[See articles about other contaminated sites: [Toxic dump near Kettleman City agrees to pay penalties](#); [Impact of Gulf spill's underwater dispersants is examined](#); [EPA seeks public comment on the proposed plan for the SAPP Battery Superfund site in Cottdale.](#)

[Fla.; EPA to hold public meeting for the Continental Cleaners Site in Miami, FL; EPA finds unsafe levels of toxic vapors in homes; Cleanup jobs & health concerns after oil spill; Superfund site cleanup breaks ground; Pollution scandal brings halt to projects; Gulf oil spill cleanup workers' health claims drawing scrutiny from Kenneth Feinberg; The poisoning of the Nanpan River basin; Workers from Ground Zero face multitude of illnesses; and Navajo woman helps prompt uranium mine cleanup\]](#)

Lessons Learned

Beyond Risk Assessment to Precautionary Assessment

by Steven G. Gilbert, PhD, DABT

"We should remember that risk assessment data can be like the captured spy: If you torture it long enough, it will tell you anything you want to know."

- William Ruckelshaus (1st administrator of US EPA) 1984

Risk assessment is an expression of our values and ethical decision making. Classical risk assessment was defined in a 1983 report by the National Research Council as including four basic elements: hazard identification, dose-response assessment, exposure assessment, and, finally, risk characterization. Initial efforts were focused on defining a numeric probability for developing cancer, which evolved into quantitative risk assessment. This approach became highly technical and dominated by experts in risk assessment. While the initial goals of risk assessment were laudable, it has degenerated into defining how much hazard is tolerable or is necessary in any given situation.

The goal of precautionary assessment (PA) is to move beyond risk assessment and allow communities and individual to incorporate their knowledge, values and ethics into a more comprehensive evaluation of a hazardous condition. The PA combines the philosophy and ethics of the precautionary principle with the standard scientific evaluation of the hazards. Precautionary assessment contains three basic elements: a) community and social issues, b) exposure, and c) hazard and toxicity. Each element is broken down into a series of questions that are scored numerically and summed to produce a summary score for each element. The PA is designed to help place the knowledge available within the context of the community. In contrast to the traditional risk assessment, the PA is a more comprehensive approach to evaluating the human and environmental health risks. Overall, the PA is a more reasonable, rational, and responsible approach to evaluating risk of chemicals.



Precautionary assessment moves beyond classical risk assessment and is in keeping with the concept of epiprecaution. Much of our basic ethical construct and risk assessment has been based around "do no harm" or "minimize harm." But is this simple approach good enough? Recent advances in epigenetics and our understanding of how DNA expression can be modified indicate that subtle changes are possible beyond changing the DNA sequence. We must move beyond just "doing no harm" to "doing good."

Precautionary assessment is a tool to implement the ethics of epiprecaution. We have an ethical responsibility and the biological rationale to demand that our children have an environment in which they can reach and maintain their full potential, not just free of exposure to chemicals but an environment that is supportive and nurturing.

Precautionary assessment - Toxipedia: <http://toxipedia.org/x/YjM>

Ethics of Epiprecaution - Toxipedia: <http://toxipedia.org/x/BgFt>

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 general children's environmental health: http://www.healthandenvironment.org/working_groups/childrens_health/bulletins
- 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 LDDI 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 Learning and Developmental Disabilities Initiative Working Group at the bottom of the application.

Nancy Hepp
Collaborative on Health and the Environment

[Join Our Mailing List!](#)