



Bulletin of the Canadian Network for Human Health and the Environment

Number 23

August 2010

Welcome to the twenty-third Bulletin of the Canadian Network for Human Health and the Environment!

Visit us at: www.cnhhe-rcshe.ca

If you have new information that would be useful to others on any aspect of human health and the environment, please forward it to us for inclusion in the next Bulletin:

Louise.Steeves@nb.lung.ca. The deadline for the next Bulletin is **August 13, 2010**.

CONFERENCES & EVENTS

Resources from Recent CHE Calls:

If you missed any of the following CHE calls, you may listen to MP3 recordings and find supporting materials at the following links:

- June 10, 2010 - [Nanotechnology: A New Chapter in Environmental Health Sciences](#)
 - May 18, 2010 - [The President's Cancer Panel Report: "Reducing Environmental Cancer Risk: What We Can Do Now"](#)
 - May 11, 2010 - [The Information Age and EMF/RF Illness](#)
 - May 4, 2010 - [CHE Cafe call with Annie Leonard, *The Story of Stuff*](#)
-

GENERAL

CESI Indicators Update

Environment Canada updated results of the Canadian Environmental Sustainability Indicators (CESI) initiative. Key findings at the national level are as follows:

Air quality: Exposure to ground level ozone levels has increased in Canada 13% between 1990 and 2007. There were no significant changes in exposure to fine particulates for the period 2000-2007.

Water quality: The majority of rivers and lakes in Canada have fair or better water quality. Of the sites monitored, 82% rated freshwater quality as “excellent”, “good” or “fair”, and 18% rated freshwater quality as “marginal” and “poor”.

Greenhouse gases: Canada’s 2008 greenhouse gas emissions decreased 2.1% from 2007 levels.

Protected areas (new this year): Canada has protected 9.4% or 939,993 square kilometers of its land as of mid-2009. About 0.6% of its marine territory has been protected. There has been an increase of approximately 81% of the overall area protected since 1990. For all of the updated information, link to the CESI indicators site at:

http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&?WT.mc_id=CESI3

Resources Submitted by Bonnie Hamilton-Bogart

Here are some of the relevant resources/contacts that I picked up while at meetings/conferences of the Canadian Network for Human Health and the Environment, the Canadian Community of Practice in Ecosystem Approaches to Health, Canadian Public Health Association and the Community Health Nurses Association of Canada. (Yes, that was a busy week!)

1. Canadian Community of Practice in Ecosystems Approaches to Health: (Celine Surette of our NB Collaborative is on the Canada Core Team) Website: http://www.copeh-canada.org/index_en.php

Title of Meeting: ‘Ecohealth in Canada: Actions to link public health, ecosystem sustainability and social equity’

This Community of Practice plans to take the outcomes of this meeting (plus follow-up) to next year’s CPHA. The presentation will consist of: innovations to increase collaboration and integration among public health, social equity and ecosystem sustainability concerns; strategies to support policy leadership through integrated capacity building, research and practice; and, priorities for advancing these opportunities and policy innovations.

2. Resources for our Children’s Bill of Rights for Environmental Health:

A paper by Don Spady: Spady D, Ries N, Ladd BD, Buka I, Osornio-Vargas AR, Soskolne CL. Governance Instruments That Protect Children's Environmental Health: Is Enough Being Done? *Environmental Law Review*; 10 (3) 2008: 200-217.

Resource Person (one of the authors above): Colin Soskolne, professor, University of Alberta / Global Ecological Integrity Group

We could request his help with additional literature/research or to review our work. Email: colin.soskolne@ualberta.ca

3. Books: a. Soskolne, C. 2008. “Sustaining Life on Earth: Environmental and Human Health through Global Governance”

Can be purchased at <http://www.LexingtonBooks.com/ISBN/0739117297>

The book is an interdisciplinary collaboration with a broad array of disciplines, from law, to health, ecology, biology, economics, social sciences, theology, and ethics, all concerned with the sustainability of living systems. It is anchored in the Earth Charter as the available set of values and principles to which, if we both individually and collectively subscribed would lead us from a path with catastrophic consequences to one of sustainability.

b. *Social Determinants of Health: The Canadian Facts*. (2010). Mikkonen and Raphael:

Available online at: <http://www.thecanadianfacts.org>

Purpose of the book is to promote greater awareness of the social determinants of health and the development and implementation of public policies that improve their quality.

4. Canadian Public Health Association: Policy/position Statements

Website: <http://www.cpha.ca/en/programs/policy.aspx>

The CPHA is open to the idea of developing a position paper on the impact of climate change on public health, and the role of public health practitioners. Anyone wanting to participate with me on this, please contact me.

5. Resource person: Della Faulkner, Canadian Nurses Association, Nurse Consultant, Public Policy

Email: dfaulkner@cna-aiic.ca Tel: 613-237-2159, Ext. 230

Della is interested in finding nurse researchers in the field of environmental health.

That's all for now. Hope this assists you in your ongoing work on behalf of children's environmental health!

Batch 1 Risk Management Update and Notification of Notices of Intent Under CEPA

Please find a summary of the most recent milestones for the risk management of substances in Batch 1 of the Chemicals Management Plan. This table outlines the risk management actions that were proposed for each chemical substance in Batch 1 of the Challenge that has met one or more of the criteria of section 64 of the *Canadian Environmental Protection Act*, 1999. To access the summary, please visit: <http://www.cnhhe-rcshe.ca/pdf/Batch1RMActionsTable-EN.pdf>.

Chemicals Management Plan Batch 10

The public has until August 25, 2010 to submit written comments on the draft screening assessment reports and the risk management scope documents. One of the thirteen substances assessed in Batch 10 was proposed as harmful to human health and the environment. The draft screening assessment reports and the risk management scope document for the substance that is proposed as harmful to health and the environment is available on the Chemical Substances Web site at: <http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/batch-lot-10/index-eng.php>.

HEALTH AND ENVIRONMENT NEWS

Chemicals with Unknown Toxicity Form When Polypropylene Plastic is Heated

The chemical composition of an everyday plastic could be more complicated than what a list of raw ingredients would suggest, report a group of Austrian chemists. Their discovery concerns chemicals that manufacturers add to stabilize polypropylene (PP) plastics. The synthetic antioxidant additives break down when exposed to high temperatures typical of the manufacturing process, especially when they are combined with a common mineral filler called talc. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/newscience/polypropylene-plastic-additives-break-down-with-heat>.

Placental Transfer of the Polybrominated Diphenyl Ethers BDE-47, BDE-99 and BDE-209 in a Human Placenta Perfusion System: An Experimental Study

Polybrominated diphenyl ethers (PBDEs) have been widely used as flame retardants in consumer products. PBDEs may affect thyroid hormone homeostasis, which can result in irreversible damage of cognitive performance, motor skills and altered behaviour. Thus, in utero exposure is of very high concern due to critical windows in fetal development. To read the full study, please visit: <http://www.ehjournal.net/content/9/1/32>.

Diabetes Linked to Traffic Air Pollution; Risk Increases with Inflammation

German researchers report more evidence of another risk factor for developing type II diabetes: traffic related air pollution. After following a group of middle-aged women for 16 years, the

authors find that exposure to high levels of air pollution is associated with an increased risk of type II diabetes in later years. Women with high serum levels of a protein by-product associated with low-level inflammation or infection were particularly prone to developing diabetes in response to pollutants. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/diabetes-linked-to-traffic-air-pollution-and-inflammation>.

Toxic Pollutants Rise in North America

North American industrial facilities released or transferred more than 5.7 billion kilograms of toxic pollutants in 2006, the Commission for Environmental Cooperation said in its annual report released Tuesday. That's up from 5.5 billion kilograms reported in 2005.

To read the full article, please visit: <http://www.cbc.ca/technology/story/2010/07/13/pollution-levels-north-america.html#ixzz0tqIHogM3>.

Climate Change Can be Hazardous to Your Health

From heat stress to sewage overflows, climate change promises to bring extreme weather that can throw our nation's ill-prepared public health infrastructure 'back to the 1890s,' according to experts. To read the full article, please visit: <http://www.dailyclimate.org/tdc-newsroom/2010/07/climate-health>.

BADGE, Made from BPA, Reacts with Food

A main component of food can linings forms new chemicals when it reacts with different parts of food, according to research published in the Journal of Agricultural and Food Chemistry.

BADGE – which is short for bisphenol A diglycidyl ether – is manufactured from bisphenol A and is a building block of certain types of resins that coat food and drink cans. Like its parent compound, BADGE has endocrine disrupting properties. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/newscience/badge-a-bisphenol-a-derivative-reacts-with-food>.

Meat with Antibiotics off the Menu at Some Hospitals

The Northwest Side hospital is one of 300 across the nation that have pledged to improve the quality and sustainability of the food they serve, not just for the health of their patients but, they say, the health of the environment and the U.S. population. To read the full article, please visit: <http://www.chicagotribune.com/health/ct-met-hospital-meat-20100718,0,5448653.story>.

World Simmers in Hottest Year So Far

The world is enduring the hottest year on record, according to a U.S. national weather analysis, causing droughts worldwide and a concern for U.S. farmers counting on another bumper year. For the first six months of the year, 2010 has been warmer than the first half of 1998, the previous record holder, by 0.03 degree Fahrenheit, said Jay Lawrimore, chief of climate analysis at the federal National Climatic Data Center. Period of a El Nino weather pattern is being blamed for the hot temperatures globally. To read the full article, please visit: <http://planetark.org/wen/58829>.

Living Near Traffic Pollution Tied to Heart Deaths

Middle-aged and older adults who live near high-traffic roads may have a heightened risk of dying from heart disease -- but the odds seem to go down if they move to a less-traveled

neighborhood, a new study finds. To read the full article, please visit: <http://www.reuters.com/article/idUSTRE66E4GT20100715>.

Prenatal Exposure Can Shape Infants' Health

When pregnant mice inhaled diesel exhaust and mold together, their offspring grew up to have fewer signs of allergies and asthma-like symptoms, found a new study. The study doesn't imply that pregnant women should intentionally spend time sitting in heavy traffic or sniffing fungi for the sake of their babies. Instead, the findings help explain how exposure to substances in the womb might affect offspring down the line -- an area of research that's still defined by unknowns. To read the full article, please visit: <http://news.discovery.com/human/pregnancy-pollutants-exposure-health.html>.

Arsenic Collects in Top Soil, Contaminating Rice, Reducing Yield

Arsenic in irrigation water or soil congregates in the top layers of soil where rice roots grow, allowing the plants to incorporate the toxic metal into the grain. The arsenic tends to stay in the top soil regardless of growing season, type of rice or other farming factors, according to a two-year study comparing water and soil sources of the metal. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/news/arsenic-accumulates-in-top-soil-contaminates-rice-yield>.

Brigham Will Recruit Patients for Gene Study

Patients who go to Brigham and Women's Hospital for routine care will soon be asked to provide a blood sample for genetic testing, with the results used to build a massive database to help untangle how genes affect human health. The researchers ultimately hope to compile genetic information from 100,000 patients — some ill, some healthy. By linking the data to medical records and following patients over time, the scientists hope to illuminate the interplay of genes, lifestyle, and the environment in causing disease. To read the full article, please visit: http://www.boston.com/news/health/articles/2010/07/13/brigham_will_recruit_patients_for_gene_study.

Dash for Gas Raises Environmental Worries

American politicians often extol natural gas as abundant, cleaner-burning than other fossil fuels, and domestically produced, unlike Middle Eastern oil. But the process of extracting it is raising concerns among people with wells in their backyards. To read the full article, please visit: http://www.nytimes.com/2010/07/12/business/energy-environment/12iht-green.html?_r=1&src=busln.

Lifesaving Drugs May be Killing Health Workers

Sue Crump braced as the chemo drugs dripped into her body. She knew treatment would be rough. She had seen its signature countless times in the ravaged bodies and hopeful faces of cancer patients in hospitals where she had spent 23 years mixing chemo as a pharmacist. At the same time, though, she wondered whether those same drugs — experienced as a form of "secondhand chemo" while she mixed the drugs as a pharmacist at Swedish Medical Center and elsewhere — may have caused her cancer to begin with. To read the full article, please visit: http://seattletimes.nwsourc.com/html/localnews/2012327665_chemo11.html.

Association Between Arsenic Exposure and Plasma Cholinesterase Activity: A Population Based Study in Bangladesh

Chronic arsenic exposure has been scientifically shown as a cause for liver damage, cancers, neurological disorders and several other ailments. The relationship between plasma cholinesterase (PChE) activity and arsenic exposure has not yet been clearly documented. However, decreased PChE activity has been found in patients suffering liver dysfunction, heart attack, cancer metastasis and neurotoxicity. Therefore, in this study, we evaluated the PChE activity in individuals exposed to arsenic via drinking water in Bangladesh. To read the full study, please visit: <http://www.ehjournal.net/content/9/1/36>.

N.W.T. Mercury Levels Not Flagged by Scientists: Official

The Northwest Territories' top health official says people living in the two regions where high mercury levels were found in lake fish should have been better informed about the problem by federal scientists. People in the Dehcho and Sahtu regions were warned only on June 16 about higher than normal mercury levels in Trout Lake, Cli Lake, Lac St. Therese and Kelly Lake even though data on the elevated levels existed as early as 2008. To read the full article, please visit: <http://www.cbc.ca/canada/north/story/2010/07/09/nwt-mercury-lakes-nep-data.html#ixzz0uEHntfDf>.

Are Air Pollutants Linked to Bowel Disease Risk?

Young people who live in areas with higher levels of certain air pollutants may be more likely to have inflammatory bowel disease than those living under clearer skies, a new study suggests. To read the full article, please visit: <http://www.reuters.com/article/idUSTRE6685F920100709>.

House-Proud Women Cancer Risk

House-proud women who like to keep their homes clean and fragrant may be at greater risk of breast cancer, research suggests. Scientists found significant links between the disease and women's use of cleaning products, air fresheners and mould removers. General use of cleaners doubled the risk of breast cancer in women who used them the most, experts found. To read the full article, please visit: <http://news.smh.com.au/breaking-news-world/houseproud-women-cancer-risk-20100720-10ic6.html>.

Study Finds Painters are 30% More Likely to Develop Cancer of Bladder

Painters are at significantly increased risk of developing bladder cancer and the danger increases the longer a person works in the trade, a new study has found. The research, published in Occupational and Environmental Medicine, is based on almost 3,000 cases of the disease in professional painters reported in 41 separate studies. The study found that plasterers, glaziers, wallpaper hangers, artists and decorators were exposed to the same risk. To read the full article, please visit: <http://www.irishtimes.com/newspaper/health/2010/0720/1224275071857.html>.

Self-Reported Chemicals Exposure, Beliefs About Disease Causation, and Risk of Breast Cancer in the Cape Cod Breast Cancer and Environment Study: A Case-Control Study

Household cleaning and pesticide products may contribute to breast cancer because many contain endocrine disrupting chemicals or mammary gland carcinogens. This population-based case-control study investigated whether use of household cleaners and pesticides increases breast cancer risk. To read the full study, please visit: <http://www.ehjournal.net/content/9/1/40>.

Pigments May be a New Source of PCBs

Researchers at the University of Iowa have discovered that PCBs are present in many more kinds of paint pigment than previously known. While the U.S. Environmental Protection Agency knew about some of the contamination, the extent of the problem is a surprise. The researchers suggest that the contaminated pigments used in a variety of paints, inks, cosmetics, plastics and other consumer goods are probably a source of ongoing exposures in humans. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/newscience/pcbs-contaminate-paint-pigments>.

The Ugly Side of Beauty, Some Cosmetics Can Be Toxic

The Food, Drug and Cosmetic Act of 1936 has only two pages that relate to cosmetics, and it has not been updated despite a sea change in the industry. The fact is, the Food and Drug Administration has no authority to make cosmetics companies test products for safety or recall products that are found to be harmful. Although the average woman uses a dozen personal care products each day that contain a total of 168 chemicals and the average man uses six products containing 85 chemicals, there is no federal regulation of these ingredients. To read the full article, please visit: <http://www.post-gazette.com/pg/10201/1073854-314.stm#ixzz0uEU5bNPX>.

Ontario Dropping Eco Fee

The Ontario government is dropping its short-lived and controversial eco fee in the face of growing consumer and retailer malcontent. Environment Minister John Gerretsen will announce on Tuesday that fees attached to thousands of household items will be eliminated, according to government sources. The fees went into effect on July 1, the same day as the Harmonized Sales Tax, without the knowledge of most Ontarians. They were attacked by politicians of all stripes, along with retailers, including Canadian Tire, which announced on Monday it was refusing to collect the fee. To read the full article, please visit:

<http://news.nationalpost.com/2010/07/19/ontario-dropping-eco-fee/#ixzz0uEZ0j7ze>.

Lead Levels Decline in Soil, Blood in Post-Hurricane New Orleans

Lead levels in both soil and children declined dramatically after hurricanes twice flooded New Orleans in 2005. The researchers who report the results propose that the flooding altered the soil lead conditions, thereby lowering children's exposure to the neurotoxin. Few studies have examined the impact of these specific natural disasters on environmental health outcomes. The results suggest a need for tougher policies that address soil contamination within children's play areas on both private and public property. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/soil-blood-lead-levels-decline-after-hurricanes>.

Kellogg's Cereal Recall Highlights a New Concern: Chemicals Leaching from Food Packaging

Kellogg is recalling as many as 28 million boxes of cereal because a chemical is leaching from the food packaging into the cereal. The Food and Drug Administration states the reason for the recall as "uncharacteristic off-flavor and smell coming from the liner in the package." To read the full article, please visit: <http://www.thedailygreen.com/healthy-eating/eat-safe/kellogg-cereal-recall-0628>.

In Europe, Dyed Foods Get Warning Label

In the European Union, most foods that contain artificial food dyes must bear warning labels stating that the food “may have an adverse effect on activity and attention in children.” As a practical matter, it’s unclear exactly how many foods will have to use that language on labels, since dyes were never as widely used in Europe as in the United States. To read the full article, please visit: <http://www.cspinet.org/new/201007201.html>.