



Bulletin of the Canadian Network for Human Health and the Environment

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Welcome to the eighteenth 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:

barb.mackinnon@nb.lung.ca. The deadline for the next Bulletin is **March 12, 2010**.

CONFERENCES

The RCEN's 2010 Conference: September 17-19

2010 Annual General Assembly and Conference on the Environment will be held in Montreal, from September 17-19. The theme of this year's event is "Conserving Biodiversity Pays: The Values of Ecosystem Services." To read the full article, please visit: <http://www.cen-rce.org/AGA/2010/index.html>.

GENERAL

Intergovernmental Panel on Climate Change Introduces Newsletter

The IPCC newsletter "IPCC News" - Issue 1 is now available at:
http://www.ipcc.ch/pdf/Newsletter/IPCC_newsletter_2010_issue_1.pdf.

Introducing "Docs Talk," A New Blog on Health and Environment

The David Suzuki Foundation, in collaboration with the Canadian Association of Physicians for the Environment, launched a new blog. To access the blog, please visit:
<http://beta.davidsuzuki.org/blogs/docs-talk>. It's also available in French as [Vert Santé](#).

Mind, Disrupted: A Bio-Monitoring Project

Twelve leaders and self-advocates from the learning and developmental disabilities community recently stepped forward to have their bodies tested for a set of known or suspected neurotoxic or endocrine disrupting chemicals. Mind, Disrupted is a synthesis of the results of these tests and the experiences of the participants. To read the full report, please visit:
<http://www.minddisrupted.org>.

Canadian Approaches to Assessing Water Security: An Inventory of Indicators

This report documents and assesses the strength of the indicators currently used in Canada to measure and assess water security, with a focus on both federal and provincial levels. To read the full report, please visit: <http://www.cnhhe-rcshe.ca/pdf/IndicatorsReportFINAL.pdf>.

Health Canada Food Additives Notices

The Bureau of Chemical Safety would like to advise you of the following update(s) to the “Food Additives” section of Health Canada website:

- Health Canada Proposal to Improve Food Colour Labelling Requirements [February 2010] <http://www.hc-sc.gc.ca/fn-an/consultation/init/feb2010-food-aliments-col/index-eng.php>.
- Have Your Say: Health Canada Proposing Improved Labelling Requirements for Food Colours http://www.hc-sc.gc.ca/ahc-asc/media/advisories-avis/2010/2010_22-eng.php.

CPCHE Launches New Checklist Tool for Advancing Environmental Health in Child Care Settings

The Canadian Partnership for Children's Health and Environment (CPCHE) has released Advancing Environmental Health in Child Care Settings: A Checklist for Child Care Practitioners and Public Health Inspectors. This hands-on resource is designed to assist child care practitioners and public health inspectors in identifying practical steps to reduce potentially harmful exposures to toxic chemicals and pollutants in child care settings. To obtain your copy of the checklist, please visit: <http://www.healthyenvironmentforkids.ca/resources/advancing-environmental-health-child-care-settings-checklist-child-care-practitioners-and->

HEALTH AND ENVIRONMENT NEWS

New Interactive Atlas Maps North America's Shared Environment

The North American Environmental Atlas—a tri-national partnership coordinated by the Commission for Environmental Cooperation (CEC)—provides a unique way to see the continent as a continuous, shared environment. It gives users access to free and accurate geospatial data and map layers related to significant continental environmental issues. To read the full article, please visit: <http://www.cec.org/naatlas>.

Health Canada Slow to Act on Lead-Filled Children's Jewelry

Canadian children were exposed to jewelry containing 100 per cent lead for over a year because Health Canada failed to alert parents of the potentially deadly risk, Canwest News Service has learned. To read the full article, please visit: <http://www.canada.com/life/Health%20Canada%20slow%20lead%20filled%20children%20jewelry/2456638/story.html>.

Silver is a Potent Nerve Cell Toxicant

It takes a relatively high amount of silver to cause illness or death in adults. However, silver can pass from a mother to her fetus, creating concern that developing cells may be particularly vulnerable to silver's effects and that exposure at such an early stage may lead to neural development disorders in the children. Cells exposed to silver at a concentration five times less than chlorpyrifos had inhibited DNA synthesis, reduced protein synthesis, fewer numbers and poorer health. These effects were significantly greater than those of the known neurotoxicant. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/newscience/silver-is-potent-neurotoxicant>.

Study: Copper Pipes Could Cause People Over 50 to Contract Alzheimer's Disease and Heart Disease

The study from the American Chemical Society found that people were at risk from copper as they aged. This leads to a build-up of copper in the body which then leads to Alzheimer's disease, heart disease and diabetes because the body cannot process the metal. To read the full article, please visit: <http://www.telegraph.co.uk/health/healthnews/7046426/Copper-pipes-could-cause-heart-disease-and-Alzheimers.html>.

Industrial Solvent Linked to Increased Risk of Parkinson's Disease

Exposure to the industrial solvent trichloroethylene increases a person's risk of developing Parkinson's disease nearly sixfold. Animal studies had suggested a potential problem with the solvent, but the new study by the Parkinson's Institute in California is the first to quantify the risk. To read the full article, please visit: http://latimesblogs.latimes.com/booster_shots/2010/02/industrial-solvents-sharply-increase-risk-of-parkinsons-disease.html.

Pesticide exposure, family history raise risk of prostate Cancer

Men are more prone to developing prostate cancer if they meet a dual criteria: exposure to an organophosphate pesticide and relatives who had the disease. The insecticide coumaphos is primarily used to control pests on beef and dairy cattle. To read the full article, please visit: <http://www.environmentalhealthnews.org/ehs/newscience/insecticide-plus-family-history-raise-risk-of-prostate-cancer>.

Traffic Fumes Increase the Risks of Child Pneumonia

Children whose home is within 100 metres of a main road could be as much as 65% more likely than others to develop pneumonia. Although the disease is usually associated with the elderly, it is a significant childhood illness. To read the full article, please visit: <http://www.guardian.co.uk/society/2010/jan/24/traffic-pollution-child-pneumonia>.

Ozone Levels Raise Respiratory Death Rate: Study

People who live in areas with the most ozone pollution are 25 percent to 30 percent more likely to die from lung disease than those living in areas with the cleanest air, researchers recently reported. To read the full article, please visit: <http://www.ottawacitizen.com/health/Ozone%20levels%20raise%20respiratory%20death%20rate%20Study/1382224/story.html>.

Infant Swimmers May Increase Their Risk of Respiratory Disease

Children who start swimming before the age of 2 may be at increased risk of a common infant lung infection, and possibly asthma and respiratory allergies later in life, a new study suggests. The findings add to evidence that exposure to chlorinated pools may affect children's respiratory health. To read the full article, please visit: <http://health.asiaone.com/Health/News/Story/A1Story20100127-194703.html>.

Chronic Health Conditions Increasing in Children, Study Finds

More than a quarter of all U.S. children have a chronic health condition, new research suggests, a significant increase from the rate seen in earlier decades. Fewer children today are affected by congenital defects, infectious diseases and accidents than they were 50 years ago; instead,

cultural, lifestyle and environmental conditions appear to be the root cause of many pediatric illnesses. To read the full article, please visit:

<http://www.latimes.com/news/nationworld/nation/la-sci-child-health17-2010feb17,0,456579.story>.

Children More Likely to Have Attention, Behavioral Problems When Exposed to Phthalates in Womb: Study

Children exposed in the womb to chemicals in cosmetics and fragrances are more likely to develop behavioral problems commonly found in children with attention deficit disorders, according to a study of New York City school-age children. Children were 2.5 times more likely to have attention problems that were “clinically significant” if their mothers were among those highest exposed to phthalates, the study found. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/news/phthalates-and-attention-deficits>.

Human Placenta Cells Die After BPA Exposure

Exposure to very low concentrations of the plastic monomer bisphenol A (BPA) causes cellular damage and death in cultured human placenta cells, researchers report. The doses used for this study are similar to blood levels found in pregnant women. A particularly worrying finding is that effects were most pronounced at the lowest – rather than the highest – concentrations of BPA. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/human-placental-cells-die-after-bpa-exposure>.

Benzene Exposure Linked to Sperm Abnormalities that Cause Birth Defects

Men exposed to benzene at levels close to the U.S. permissible limit are more likely to have an abnormal number of chromosomes in their sperm, researchers report in the journal *Environmental Health Perspectives*. Some sperm can develop with either too many or too few chromosomes. Known as aneuploidy, this can adversely impact fertility and fetal development. Aneuploidy (in either the sperm or the egg) is the largest known cause of miscarriages in people. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/benzene-linked-to-sperm-abnormalities>.

Younger Mothers' Breast Milk Has Highest Levels of Flame Retardants

Women older than 35 had the lowest levels of PBDEs in their milk. The highest levels were measured in breast milk from women aged 25 to 29, followed by women younger than 25 years old. The results suggest that younger mothers may have higher exposure to these flame retardant chemicals through their environment or lifestyles. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/younger-womens-breast-milk-higher-levels-of-pbdes>.

Dust Harbors New Fire Retardants Associated with Hormone, Sperm Changes

As one class of flame retardants is phased out due to health concerns, new types – sometimes with widespread exposure and unknown effects – may be phased in. A new study examining one type of potential replacement chemicals called organophosphorous flame retardants finds that men exposed through house dust had lower thyroid hormone levels and reduced sperm concentration. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/op-fire-retardants-in-dust-linked-to-hormone-sperm-changes>.

Soy Formula Associated with Higher Risk of Fibroids in Women

Women who were fed soy-based infant formula as babies are 25 percent more likely to develop uterine fibroids than those who were breastfed or given milk-based formula. Hormones guide the development of these non-cancerous tumors in the uterus that can cause pelvic pain, heavy bleeding and reproductive problems. To read the full article, please visit:

<http://www.environmentalhealthnews.org/ehs/newscience/soy-formula-associated-with-higher-risk-of-fibroids-in-women/>.

Nuclear Watchdog Investigates Possible Mass Radiation Exposure

The Canadian Nuclear Safety Commission says as many as 217 workers may have been exposed to radioactivity at the Bruce nuclear power station on the shores of Lake Huron while refurbishing a reactor in late November. It is believed to be one of the largest mass exposures to radiation at a Canadian nuclear site. To read the full article, please visit:

<http://www.theglobeandmail.com/news/national/nuclear-incident-exposes-217-workers-at-bruce-power/article1469970>.

Arsenic Exposure Activates an Oncogenic Signaling Pathway; Leads to Increased Cancer Risk

Researchers have found a new oncogenic signaling pathway by which the environmental toxin arsenic may lead to adverse health effects, including bladder cancer. These study results are published in Cancer Research, a journal of the American Association for Cancer Research. To read the full article, please visit:

<http://www.sciencedaily.com/releases/2010/02/100223132010.htm>.