Another Cry for Primary Prevention

by Elise Miller, MEd
CHE Director

How many of us have sat with loved ones in the throes of cancer? No doubt way too many. My cousin just passed away two days ago from lung cancer, having never smoked in her life. She joins several other family members and close friends who have died of one form of cancer or another in the last few years. Unfortunately, all of you likely have similar stories to share, and not just about older people in your lives, but about those younger and younger--including those who exercise regularly and have healthy diets.

One would think this untenable situation would catapult our society into action--it would move us to do whatever it takes to implement primary prevention strategies, not just look for cures. But instead the President's Cancer Panel report on environmental contributors to cancer sits on the proverbial shelf collecting dust. As do other seminal reports that provide clear analyses of the science linking chemical contaminants and other chronic diseases and disorders as well as how to address these issues--such as Endocrine Society's statement on endocrine disrupting chemicals, the joint opinion issued by the American College of Obstetricians and Gynecologists (ACOG) and the American Society of Reproductive Medicine (ASRM) on environmental chemicals and reproductive health, and the National Academy of Sciences "Science and Decisions" report which offers concrete recommendations to contend with the inadequacies of current risk assessment practices--to name just a few.

Not only are we slow to respond collectively to the knowledge we already have regarding human health, we also regularly learn that some advances in our field,
such as removing Bisphenol-A (BPA) from water bottles or taking triclosan out of cosmetics, turn out not to be lasting victories for public health. Instead, the synthetic chemicals used as replacements are found to have potential human health impacts as well--usually after the new product is already out in the marketplace [see: Avon plans to remove triclosan from products, but what will replace it? The Guardian].

I could of course go on and on, but my point here is not to plunge us all into despair with a litany of multiple and interrelated woes that can undermine our health. Instead, when anyone close to us dies of a disease that might have been preventable, I think it's useful to pause and reflect on the reality in which we live. And for me, that time of reflection then serves as a springboard for my renewed commitment to voicing the truth--whether that is about the mounting environmental health science linking certain exposures to chronic disease and disability, the need for chemical policy reform, the promise of green chemistry, the interplay of the social and environmental determinants of health, or the exceptional persistence of communities fighting for their rights to clean water, air, and food. The comforting news is that my voice is not alone, but is inspired and amplified by the concerted efforts of colleagues like you.

As we experience the often devastating effects of chronic disease and disabilities on those near and far, may our collective cry for primary prevention finally be heard. Thank you for all that you do to move us towards this goal.

With warm regards,
Elise

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CHE Partnership Calls

**CHE Partnership call: Establishing Community Rights to Transform Environmental and Public Health Decision-Making**

Tuesday April 15, 2014 at 10:00 am Pacific/1:00 pm Eastern

*Hosted by the Cumulative Impacts Working Group*

**RSVP for this call**

The idea of free, prior and informed consent is deeply embedded in the science and research establishment. No experiments can be undertaken on a human subject without their free, prior and informed consent. This right is being extended to communities as a matter of international law. Communities have a right to give or withhold their consent to extractive or polluting industries. The idea that government obtains its legitimacy from the consent of the governed is deeply embedded in US political theory, beginning with the Declaration of Independence. Imagine creating new institutions and mechanisms for communities to exercise their right to free, prior and informed consent.

This community right of consent has the possibility of significantly altering how environmental decisions are made. Public health, with its moral authority, its experience with consent as an ethical matter, and its work with community based research is in a unique position to lead the way in developing new mechanisms for communities to exercise their right to free, prior and informed consent.

Join this working group call on for a presentation by Carolyn Raffensperger, executive director of the Science and Environmental Health Network (SEHN) and co-coordinator of the Cumulative Impacts Working Group, on the community right of free, prior, and informed consent and how it might transform public health and environmental
CHE Partnership call: Dr. Philippe Grandjean on Chemical Brain Drain: How the Next Generation's Brain Functions are Endangered by EDCs and Environmental Chemicals
Wednesday April 16, 2014 at 10:00 am Pacific/1:00 pm Eastern
Hosted by the EDC Strategy Working Group

RSVP for this call

Dr. Philippe Grandjean suggests that new scientific insights reveal that the next generation's brain functions are endangered by environmental chemicals. The fetus is not protected by the placenta and therefore shares the mother's cumulated exposures to toxic chemicals. Infants and children are likewise exposed to a cocktail of foreign substances against which the body has no innate defense. Prenatal and early postnatal brain development is an extremely complex process that we now know is uniquely vulnerable. Lead, mercury and a few other substances have long been known to be toxic to brain development. Recent research suggests that many chemicals, perhaps thousands, may cause similar effects because they can gain access to the developing brain and exert their toxicity to brain cells. This new insight needs to be translated into public policy to protect the brain functions of the next generation. On this call Dr. Grandjean will discuss what he terms "chemical brain drain" and how we might work to protect the brain health of future generations.

CHE Partnership call: Healthy Urban Gardens: Your Soil Health and You
Thursday April 24, 2014 at 10:00 am Pacific/1:00 pm Eastern

RSVP for this call

Urban agriculture continues to thrive, with a million or more households participating in community gardens in cities around the world. Millions more people are growing vegetables and fruits in their own urban backyards. Community gardens provide people with opportunities to grow nutritious and affordable fresh foods, enhance community building and increase productive use of abandoned land. The soil in these gardens is frequently contaminated with toxic substances such as arsenic (As), lead (Pb) and polycyclic aromatic hydrocarbons (PAHs) from decades of anthropogenic activities. In an effort to leverage the benefits of consuming and growing local food, urban gardeners need to understand and minimize risks posed by exposure to contaminated soils. Join experts on this to learn best practices for locally grown food initiatives, including measuring soil health, how to replace contaminated soils, how to compost safely, which plants take up what toxicants, and alternative growing methods. Communication of findings and use of the findings for decision-making purposes by gardeners, gardening organizations, health departments and regulatory authorities will also be addressed.

Featured speakers:

Dr. Wendy Heiger-Bernays is on the faculty of the Department of Environmental Health at the Boston University School of Public Health. Her work reflects her education in molecular toxicology and her professional experience in regulatory toxicology and risk assessment. Her interests center on understanding how environmental hazards adversely affect people's health and how risks associated with these exposures can be quantified and decreased.
Dr. Monica Ramirez-Andreotta, Assistant Professor of Health Sciences at Northeastern University, has a doctorate in Soil, Water and Environmental Science from the University of Arizona (UA) that focused on integrating the fundamentals of environmental science, human exposure assessment, and developing methods for environmental health justice.

Dr. Sabine Martin is currently a Program Associate with the Department of Agronomy at Kansas State University and a principal investigator on an EPA grant dealing with contaminant uptake by food crops grown in community gardens located on brownfields sites. She also is the owner and president of CTOR Solutions, a company providing guidance and assistance to communities dealing with brownfields redevelopment issues.

CHE Cafe call: Where Health and Profit Meet: How Corporations Influence Public Health with Nicholas Freudenberg
Tuesday April 29, 2014 at 10:00 am Pacific/1:00 pm Eastern

RSVP for this call

Dr. Nicholas Freudenberg, Distinguished Professor of Public Health at City University of New York and Hunter College, and author of a new book, *Lethal but Legal: Corporations, Consumption, and Protecting Public Health*, will join Steve Heilig, CHE Director of Public Health & Education, and Director of Public Health & Education at the San Francisco Medical Society, for a conversation about his book. *Lethal but Legal* examines how corporations have impacted and influenced public health over the last century, first in industrialized countries and now in developing regions.

During this discussion Dr. Freudenberg and Steve will discuss the complex relationship between private corporations, public health, and environmental health policy. In his book, Dr. Freudenberg writes, "Every day, corporate managers make decisions about what products to make and how and where to market them. These seemingly ordinary choices, the lifeblood of our market economy, shape our environment and lifestyles so pervasively that their influence is all but invisible. But, increasingly, what corporations decide also shapes our patterns of health and disease." We will explore with Dr. Freudenberg how reforms he outlines in his book aim to strike a healthier balance between large companies' right to make a profit and governments' responsibility to protect their populations.

Special Announcements

CHE's new quarterly Top 10 environmental health stories now available
CHE offers this selection of research, news and announcements that were of special significance during the first quarter of 2014. Items include research that made a noteworthy contribution to the field, news and announcements that took a conversation to a new level and/or new audience and some welcome action. Visit the CHE blog to see this quarter's list. Comments welcome.

Congressional briefing: What the Elk River Chemical Spill Exposed: The Links
Between the Environment and the Health of Our Most Vulnerable

CHE partners recently held a briefing on Capitol Hill for a packed room of over 100 attendees. The event was co-sponsored by the American Congress of Obstetricians and Gynecologists, the American Society for Reproductive Medicine, the American Academy of Pediatrics, March of Dimes, and the UCSF Program on Reproductive Health and the Environment. The panel discussion featured speakers (l-r): Jeanne A. Conry, MD, PhD, President of ACOG; Rebecca Z. Sokol, MD, MPH, President of ASRM, Jerome A. Paulson, MD, FAAP Chair of AAP's Council on Environmental Health; and Moderator: Edward R.B. McCabe, MD, PhD Senior Vice President and Chief Medical Officer, March of Dimes Foundation.

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:

- March 25, 2014: Exposure to Toxic Chemicals Among Pregnant Women and Children: The Role of Prevention with Dr. Tracey Woodruff
- March 19, 2014: Dr. Frederica Perera on the Effects of Prenatal Exposures to EDCs on Childhood Development
- March 13, 2014: Dr. Phil Landrigan and Dr. Ruth Etzel on Children's Environmental Health
- March 11, 2014: The Link Between Arsenic Exposure and Diabetes: A Review of the Current Research

You can subscribe via podcast to receive notifications of new call recordings added to the CHE archives. View a list of past calls and subscribe to the podcast.

CHE Working and Regional Group Updates

Stay in touch with CHE through social media:
Visit CHE's blog to read recent posts.
Visit CHE's Facebook page.
Join CHE on Twitter.

CHE Asthma
~ coordinated by Genon Jensen, info@healthandenvironment.org

~ HEAL presents views on EU air package at Clean Air for Europe conference
At an EU institutional hearing in Brussels, HEAL presented its view's on the EU air package. Despite progress being made in the last decades, poor air quality is still a predominant environmental cause of premature death in the EU. View meeting conference presentations and summary

~ 7 million premature death annually linked to air pollution
With new estimates, WHO reports that in 2012 around 7 million people died as a result of air pollution exposure -- that is one in eight of total global deaths. This finding more than doubles previous estimates and confirms that air pollution is now the world's largest single environmental health risk. Read more

~ Poor children in New York twice as likely to have asthma
A new report, The Prevalence and Cost of Asthma in New York State, provides a closer look at asthma rates in New York, and who is struggling the most with it. Read the report
CHE Breast Cancer
~ coordinated by Michael Lerner and Jeanne Rizzo, info@healthandenvironment.org

~ Breast cancer and occupational exposures
The Breast Cancer Fund continues to offer its study group series on breast cancer and occupational exposures. The most recent session took place on April 7th and focused on women working in service industries such as nail and beauty salons and custodial services.
See notes, session recordings and readings from past sessions
RSVP for the next session: Health Care, May 5th

CHE Climate Change
~ coordinated by Genon Jensen, info@healthandenvironment.org

~ Scientists sound alarm on climate change
Based on the evidence, about 97% of climate experts have concluded that human-caused climate change is happening. What We Know helps us understand the science behind the realities, risks and response to the climate challenge.
Read more

~ Health and medical organizations call for climate action in IPCC report
Health and medical organisations from around the world called on governments last week to respond to the major health risks described in the recent Intergovernmental Panel on Climate Change (IPCC)'s Second Working Group report released on March 31.
Read more

~ Health sector materials--What does the latest IPCC report mean for human health?
The Global Climate and Health Alliance (GCHA) have published a range of briefing materials, infographics and a short video to explain the health implications of the Intergovernmental Panel on Climate Change's Working Group II report available at http://www.climateandhealthalliance.org/ipcc

~ Webinar: "Climate Change: Health Impacts, Opportunities and Policy Responses
This webinar will take place on Wednesday April 9th from noon-1:00 pm EST/ 8:00-9:00 pm BST and will feature the authors of the IPCC report's health chapter.
Read more

CHE Diabetes-Obesity
~ coordinated by Sarah Howard, sarhow@gmail.com

~ Prospective evidence: BPA, phthalates, and type 2 diabetes
The first prospective study on diabetes in relation to BPA or phthalates has just been published (ahead of print), in Environmental Health Perspectives. The results suggest that BPA and phthalate exposures may be associated with the risk of type 2 diabetes among middle-aged women, but not older women. The association between BPA and phthalates in younger but not older women may be due to menopausal status (although chance cannot be ruled out).
Read the full commentary on this study by Sarah Howard, CHE Diabetes and Obesity Spectrum Working Group Coordinator, on CHE's blog.

CHE Working Group on Electromagnetic Fields
~ coordinated by Antoinette Stein, nettestein@gmail.com

~ Video: Wireless Communication, Health Risks, and Precaution
Dr. Leszczynski, Editor-in-Chief of the new journal Radiation and Health lectures in this 90-minute video (in English).
View the video

~ BioInitiative Working Group announces new links and website updates
The BioInitiative Working Group announced a new feature on their website called 'What's New.' From time to time, new information of interest to readers will be posted. This may include updated technical chapters, BioInitiative Working Group expert comments on scientific reviews, perspective pieces and individual commentaries, letters and press releases from the BioInitiative Working. In addition, in March and April 2014, four sections of the *BioInitiative 2012 Report* were updated. 

**Visit the website**

**CHE Fertility and Reproductive Health**
~ coordinated by Karin Russ, 
karin@healthandenvironment.org

~ **Webinar series: Fracking, Natural Gas, and Maternal Health: What They Mean for Families and Communities**
Many of the chemicals associated with gas extraction and development have been connected with acute and chronic health problems in children and women, including respiratory, neurological, reproductive, and developmental impacts. This webinar series focuses on our current understanding of possible impacts and how we can advance our knowledge through research, medicine, and public health practice. Each of these presentations is part of a six-week series beginning Monday, April 21st. [Read more and RSVP](#).

~ **New articles and research published in academic and scientific journals**

**Studies in infertility:**

*Shedding Light on the Controversy Surrounding the Temporal Decline in Human Sperm Counts: A Systematic Review.* The authors call into question the validity of sperm studies conducted in recent decades, saying: "Studies of semen quality have been hampered by three sources of possible error. First, semen quality is highly variable... within individuals. Second, it is difficult to recruit men to volunteer for studies involving semen analysis; as such, selection biases are unavoidable... Third, studies rarely indicate whether seminal parameters have varied according to the geographic region."

*Long-term Relationship of Ovulation-Stimulating Drugs to Breast Cancer Risk.* "Although the increased breast cancer risk among nulligravid women associated with gonadotropins most likely reflects an effect of underlying causes of infertility, reasons for the elevated risk associated with multiple clomiphene cycles are less clear."

**Articles on birth outcomes:**

*Extreme heat and risk of early delivery among preterm and term pregnancies.* In a study of nearly 220,000 births over a 30 year period, researchers found higher ambient temperatures and extreme heat episodes were associated with earlier delivery among term births.

*Apples to Apples: Comparing PM2.5 Exposures and Birth Outcomes in Understudied Countries.* The strengths and weaknesses of a recent WHO Global Survey on Maternal and Perinatal Health study are examined, including a novel use of satellite imaging data.

*Birth defects and mothers’ proximity to natural gas development: Is there a connection?*
The prevalence of congenital heart defects was 30% higher among babies of mothers living closest to natural gas wells during pregnancy.

**CHE Healthy Aging and the Environment Initiative**
~ coordinated by Maria Valenti, mvalenti@igc.org

~ **New articles and research published in academic and scientific journals**


**~ Upcoming Events**

May 7-9, Arlington, VA: The 2014 *National Training Conference on the Toxics Release Inventory (TRI) and Environmental Conditions in Communities* will feature keynote addresses by EPA Administrator Gina McCarthy and Dillard University Deep South Center for Environmental Justice Director Beverly Wright. *Registration open until Friday, April 18, 2014.*

June 10-14, Washington, DC: National Center for Creative Aging Leadership Conference: "THE CREATIVE AGE: Exploring Potential in the Second Half of Life." The conference will Convene leaders from local to international across the sectors of aging, arts, health, and social services dedicated to promoting creative and healthy aging. *Register here*

Nov 5-9, Washington, DC: *Gerontological Society of America annual scientific conference:* "Making Connections: From Cells to Societies."

**CHE Regional Working Groups Update**

**CHE Alaska**
~ coordinated by Pamela Miller, pamela@akaction.org

~ CHE-AK Working Group call: Acid Rock Drainage and Water Quality: Potential Environmental Health Impacts in Alaska

Wednesday April 30, 2014 at 9:00 am Alaska/10:00 am Pacific/1:00 pm Eastern

*RSVP for this call*

Join environmental geochemist Kendra Zamzow, PhD, for a discussion of how acid mine drainage affects water chemistry and environmental health. Acid rock drainage is one of the major sources of toxic metals associated with mining. When waste rock excavated from the mine is exposed to air and water, it chemically reacts to form sulfuric acid, essentially dissolving the surface of the rock. Metals leach out from the rock and may contaminate both surface and ground water. Metal leaching of some elements like arsenic and selenium can also occur without acid. Direct exposure to these metals can be harmful to fish and people, and indirectly metal reactions can lead to changes in water quality that affect aquatic habitat. Dr. Zamzow is an environmental biogeochemist and the *Alaska representative for the Center for Science in Public Participation (CSP2).* She specializes in microbial interactions with trace metals, environmental toxicology, and processes relating to acid rock drainage, metal leaching, and water quality.

**CHE HEAL**
~ coordinated by Lisette van Vliet, lisette@env-health.org

~ HEAL re-launches the Chemicals Health Monitor

The revived online service aiming to improve public health by promoting support for more protective regulation of hazardous chemicals in Europe and beyond consists of a revamped website, newsletter and social media tools, all available in English and German. *Read more*

~ Farmers who are "victims of pesticides" call for EU action

Three French farmers affected by cancer and neurological problems associated with
pesticides called for urgent action in Brussels last week on exposure to hazardous chemicals, especially pesticides that can disrupt the human hormone system. Read more

~ TTIP--how the EU-US trade talks could harm our healthy by affecting chemicals regulation
EU-US negotiations on a trade agreement (called the Trans-Atlantic Trade and Investment Partnership TTIP) have been criticized for their lack of transparency and little involvement of civil society. Concerns have been raised relating the potential weakening of existing standards and democratic procedures. This briefing by HEAL and CHEM Trust deals with the threat to undermine EU chemicals regulation.

CHE Washington
~ coordinated by Aimee Boulanger and Steve Gilbert, info@healthandenvironment.org

~ CHE-WA Children's Environmental Health Working Group meeting
Thursday April 10, 2014 at 9:30 am Pacific
Public Health-Seattle & King County, Chinook Building, Room 126, 401 5th Ave., Seattle.

RSVP to gail.gensler@kingcounty.gov or call 206-263-3082
To participate by phone: 1-866-756-1071, access code: 9016859

At this month’s meeting Sonia Hoglander, an electrical engineer, building biologist, and activist dedicated to reversing the impacts of electromagnetic radiation on health and the environment will give a brief overview of electromagnetic radiation’s impact on health, and the efforts of two organizations, Washington Wireless Awareness and Means For Change.

Announcements and News Highlights

Training Opportunity in Community Based Participatory Research in Breast Cancer, the Environment and Disparities
Do you wonder about the effects of the environment on the development of breast cancer? And why some groups of women are more likely to get breast cancer or die from the disease? Commonweal, the California Breast Cancer Research Program and Plumbline Coaching and Consulting are partnering this summer to train academics and community-based leaders to conduct community based participatory research to answer these questions. California-based teams are encouraged to apply. To learn more, participate in one of our informational webinars (April 23 or May 2).

Register for a webinar and learn more at http://www.cbcrp.org/community/quickstart.php. For more information, contact Heather Sarantis at QuickStart@cabreastcancer.org.

Reach the Decision Makers 2014 training program
Reach the Decision Makers is a program of the UCSF Program for Reproductive Health and the Environment (PRHE). PRHE’s mission is to create a healthier environment for human reproduction and child development through advancing scientific inquiry, clinical care and health policies that prevent exposures to harmful chemicals in our environment. PRHE applies respected scientific expertise to answer complex environmental health-related questions and to develop science-based policy strategies.

This one-year training program is made possible through a grant from the Kresge Foundation. Costs associated with the program (travel, shared housing, food, teleconference costs) will be covered by the program and each fellow will receive a $500 stipend for participating. Out-of-pocket costs to participants are expected to be minimal beyond the time commitment required for participation. Please see the application for exact dates of in-person and webinar trainings. Applications are due May 2, 2014.
EPA calls for 2014 Presidential Green Chemistry Challenge Award nominations

EPA is looking for nominations from companies and institutions that have developed safer chemical processes and products that may reduce the generation and use of chemicals that are hazardous to people’s health and the environment. Nominations are due by April 30, 2014.

Read more

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Environmental Health News (EHN) and its sister site, The Daily Climate, offer a wealth of valuable information each day at no cost to subscribers. The daily email subscriptions and the 350,000-item news archive have recently been supplemented by a Facebook page and Twitter feed.

Environmental Health News: email, Facebook, Twitter and a website archive
Visit the website
Visit the EHN archives page
Sign up for EHN's free weekly e-newsletters focused on children's health and energy and health
Friend EHN on Facebook by searching for Environmental Health News

March 2014 issue of Environmental Health Perspectives available online
Read more

March 2014 issue of Environmental Factor available online
Read more

CHE maintains a news feed of environmental health related news announcements and events collected from a multitude of sources on CHE's website.

Reports, Resources and Other Updates

Journal of Transport and Health
The aim of this journal is to promote cross-disciplinary research into the many ways in which transport policy affects health and inequalities, how awareness of these links can affect transport policy decisions--and how poor health can affect transport options for individuals.

Read more

Global Atlas of Environmental Justice
Environmental Justice Organisations, Liabilities and Trade (EJOLT) project launches today its Global Atlas of Environmental Justice, a visually attractive and interactive online mapping platform detailing around 1000 environmental conflicts (and growing). It allows users to search and filter across 100 fields and to browse by commodity, company, country and type of conflict.

Read more

CHE lists hundreds of reports, books, videos, databases and other resources in a searchable Portal to Science on CHE's website.

Thank you for taking the time to read the latest about CHE. As always, we welcome your questions and suggestions. Please direct comments to Elise Miller, Director of CHE, at elise@healthandenvironment.org

Best wishes,

Elise Miller, MEd, Director
Steve Heilig, Director of Public Health and Education at San Francisco Medical Society and CHE
Erika Sanders, Administrative Coordinator

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