

**Collaborative on Health and the Environment-Washington (CHE-WA)
Quarterly Meeting
Thursday, January 5th
2:00-4:00 p.m.
Antioch University Seattle, Room 100**

Participants

- Morgan Barry, Public Health – Seattle and King County
- Mary Bartholet, Washington State Nurses Association
- David Blake, Northwest Clean Air Agency
- Nanda Blazej, Cascadia Consulting and Antioch graduate student
- Marnie Boardman, Washington Department of Health
- Melissa Campbell, Antioch graduate student
- Diane Cortese, citizen advocate
- Tim Crosby, Woodinville Farmers' Market
- Kate Davies, Antioch University
- Ticiang Diangson, Seattle Public Utilities
- Steve Gilbert, Institute for Neurotoxicology and Neurological Disorders
- Linn Gould, Erda Environmental
- Emma Johnson, Washington Department of Ecology
- Jeff Ketchel, Pubic Health – Seattle and King County
- Connor Lee, Oberlin College student and Antioch University intern January 2006
- Maria Mason, Coalition for Environmentally Safe Schools
- Tracee Mayfield, Public Health – Seattle and King Country
- Mo McBroom, Washington Environmental Council
- Suellen Mele, Washington Citizens for Resource Conservation
- Elise Miller, Institute for Children's Environmental Health
- Linda Park, Seattle Biotech Legacy Foundation
- Glen Patrick, Washington Department of Health
- Janna Rolland, consultant
- Marianne Seifert, citizen advocate
- Margaret Shield, Toxic Free Legacy Coalition
- Thelma Simon, Cle Elum school district parent
- Pam Tazioli, Breast Cancer Fund
- Jim Tood, Washington Citizens for Resource Conservation
- Heather Trim, People for Puget Sound

Introductions

Elise Miller, executive director of the Institute for Children's Environmental Health, coordinator of CHE-WA and facilitator for the meeting, welcomed everyone, and participants introduced themselves. Elise noted that the third anniversary of CHE-WA is coming up in March. She thanked Marnie Boardman for arranging for Dave Blake to give the science update, Kate Davies for once again hosting CHE-WA at Antioch, and

Connor Lee for serving as the note taker for this meeting.

Science Update

Dave Blake, Environmental Specialist Indoor Air/Asbestos at Northwest Clean Air Agency, spoke about indoor air quality in Washington schools based on studies that he and Rich Prill of Washington State University have conducted.

(Copies of Dave Blake's PowerPoint presentation are available on the website: <http://washington.chenw.org/meetings.html>.)

Dave has been testing the indoor air quality (IAQ) in schools around the Pacific Northwest. He noted that Washington State is a leader nationwide for school IAQ, but that doesn't mean that Washington State schools have great IAQ. The key problems are inadequate design, construction and performance standards; budget cuts affecting maintenance and custodial staff; and the age of many school buildings.

Last summer, Dave presented the results of seven years of walkthroughs of Washington schools implementing the EPA's "Indoor Air Quality Tools for Schools." The paper identified five features for a healthy indoor environment: dry, clean, comfortable, with pollutants controlled, and with adequate fresh air ventilation. It also provided examples of problems for each of these features. For example, the study found that 42 percent of classrooms have levels of carbon dioxide (CO₂) over 1000 ppm, indicating inadequate ventilation. In 36 percent of schools there was at least one room with over 2000 ppm. This is particularly troubling as carbon dioxide is a surrogate indicator for other airborne pollutants.

In 2004, Dave conducted a study to evaluate the effects of carbon dioxide concentrations in classrooms on absenteeism in Washington and Idaho. This study found that a 1000-ppm increase in the difference between indoor and outdoor carbon dioxide levels resulted in 10 to 20 percent increase in absenteeism. It found that there was two percent less absenteeism in traditional classrooms over portable classrooms, which are usually more poorly ventilated.

Glen Patrick, an epidemiologist with Washington Department of Health, has obtained a CDC grant for a pilot project to develop a model indoor environmental quality data collection program for use in Washington public schools. This will create a standardized electronic system for data feedback from schools. Its goals will be to inventory conditions, document baseline parameters and indoor environmental quality (IEQ) measurements, and track investigatory measurements and diagnostic testing in response to identified IEQ problems.

Question: Do you have a sense of the remediation costs?

Response: Dave responded that it varies from school to school. Many have small problems that can be fixed by simply opening more vents, while others need complete carpeting or HVAC replacement.

Question: Were there clear scientifically valid sampling procedures followed in these studies so that they can be replicated?

Response: Dave commented that carbon dioxide was measured at the same time of day and season throughout. It was measured at what was presumed to be its worst, later in the day during the winter.

Question: Are similar studies being done for workplaces?

Response: Dave said that Richard Prill is doing a study of small businesses.

Question: Are health data going to be included and are you observing baseline rates of various health problems such as asthma, learning disabilities, etc.?

Response: Dave responded that the study will try to include absenteeism data, but it is often deleted quarterly by the schools and sometimes is withheld for privacy reasons.

Question: From an environmental justice perspective, it would be nice to see correlations with race and income data. Is or can this be done?

Response: Glen responded saying that race and free/reduced lunch data are available and will eventually be analyzed as well.

Question: Breast cancer rates are higher for certain professions: airlines, teachers, nurses. Will there be any follow-up on adults who work in school buildings, particularly with analysis of length of exposure?

Response: Glen commented that occupational exposures and effects are beyond the scope of his program. He suggested approaching L&I.

Legislative Update

Mo McBroom, Policy Director, Washington Environmental Council, presented an overview of the Priorities for a Healthy Washington for 2006 and discussed other legislative activities/opportunities related to environmental health.

The Priorities are 1) electronic waste recycling, banning toxic flame retardants; 2) Puget Sound pollution; 3) biofuels; and 4) land use protections.

Electronic waste (e-waste) contains lead, mercury and PBDEs. The environmental community is proposing a bill that will set up a free statewide recycling program for e-waste available to businesses, small municipalities and individuals which would be funded by industry, although the costs may be transferred to purchasers. The work on e-waste is revolutionary because it would require manufacturers to think about what happens to the finished product after its useful lifetime, rather than just focusing on manufacturing product.

(Further information on the e-waste bill is available at <http://wastenotwashington.org>)

Question: How is the e-waste bill related to work in the EU?

Response: Mo replied that the bill is based on the EU approach of extended user responsibility which is being used around the world.

Last year, a bill last year to ban PBDEs didn't pass. This year's bill is more specific and focused.

The environmental community is also supporting a bill that would require diesel and gasoline to contain bio fuels. This would reduce dependence on foreign oil, give farmers another outlet for their product, and reduce particulate emissions. On a related note, there is also a bill to require manufacturers to remove mercury switches from end-of-life automobiles. Mercury is released into the air from these switches when the cars are recycled.

Mo discussed the Model Toxics Control Account in the state budget. It was raided last year for the general fund. The environmental community is lobbying hard to protect it this year.

Several upcoming events were mentioned: On January 10th there will be a "Speakers Toolkit Training for 2006 Policy Changes", sponsored by Washington Physicians for Social Responsibility on the South campus of the University of Washington. January 18th is "Moms and Docs" Lobby Day focusing on PBDEs. There is an Environmental Lobby Day on January 26th. Information for these events is on the CHE-WA calendar.

Pharmaceuticals

Jim Todd of Washington Citizens for Resource Conservation (WCRC) discussed their new "Take Back Pharmaceuticals" initiative. Pharmaceuticals have been detected in surface waters and can cause adverse effects on aquatic organisms. The effects on human health are unknown.

The long-term goal of this initiative is to create a statewide system for collecting unwanted pharmaceuticals. The short-term goal is to develop and launch a pilot program. However, state regulations will make it difficult. WCRC is requesting support for a pilot program, and a form letter can be found on the CHE-WA website.

Emma Johnson from the Department of Ecology described several studies on unwanted pharmaceuticals, including a 1989 USGS study of the wastewater effluent from a tertiary treatment plant in Sequim. This study analyzed for 24 substances, of which 16 were detected including acetaminophen (Tylenol), codeine, and caffeine. Fish and tadpoles showed effects. A Canadian study detected levels of pharmaceuticals in tap water from four cities.

A study in England found that over half of prescribed medications were not used and only 18 percent of antibiotics prescriptions were finished. In King County, about 50 percent of unused medications are put in the trash and 30 percent are put down the drain.

Question: Can you distinguish between disposal of unwanted pharmaceuticals and excretion?

Response: Emma replied that this is unknown, but she thought that perhaps 80 percent

comes from excretion and 20 percent from disposal.

Question: Nursing home staff are often required to flush unused drugs down the toilet to avoid abuse of the drug. Is this a good idea?

Response: Emma responded that disposal options are being studied, such as having sharps-style containers for unwanted pharmaceuticals. She commented that British Columbia has an industry-funded take-back program.

Question: How should we dispose of unwanted pharmaceuticals?

Response: Jim and Emma suggested asking your physician or pharmacist about take-back programs. Some Costco stores will take back pharmaceuticals.

Question: How do 'take-back programs' dispose of unwanted pharmaceuticals?

Response: Jim and Emma said that take back programs often incinerate them, although this has some problems.

New School Rules

Maria Mason and Thelma Simon of the Coalition for Environmentally Safe Schools discussed the Department of Health's proposed school rules on indoor air quality.

Maria gave a summary of the history of indoor air in schools in the region and handed out copies of a timeline. In 1993, there was an indoor air quality problem at Blakely Elementary School on Bainbridge Island. Following this, there were problems in Cle Elum. For example, many students had headaches and 124 girls had ovarian cysts, triple periods or missed periods. The State Department of Health said that 20 percent of the students needed to be sick for action to be taken. One young man who had attended Blakely ES recently committed suicide. There have also been several lawsuits initiated by teachers and students.

The Coalition has been lobbying for state action to improve school environmental quality for years. There have been numerous reports, but no one government would accept responsibility for dealing with the problems. Now, the State Board of Health School Rules Committee is proposing to develop new school rules that will be recommended to the Department of Health.

Thelma discussed the possible changes to the WAC. She started by noting that Governor Gregoire was attorney general when the original reports on this topic were prepared. She went to comment on the need for timely school inspections.

Question: What rules are you asking to be changed?

Response: Maria and Thelma replied that construction standards need to be changed. HVAC and roof checks aren't currently required after schools are built. Construction contracts are awarded to the lowest bidder, which leads to poor outcomes. Moreover, there is very poor oversight of construction. The superintendent signs off on new construction, not someone with knowledge of construction.

Question: Aren't there regulations regarding healthy schools?

Response: Maria and Thelma responded that there are some, but most are guidelines. This School Rules Committee is considering the benefits a regulatory approach versus providing nonmandatory guidance. There is evidence that schools without strong leadership or funding for this topic do not currently follow the guidelines.

Open Space Discussions

Participants broke into four small groups to further discuss 1) school rules, 2) pharmaceuticals and cosmetics, 3) how to reach out to health affected groups and 4) Indoor Environmental Quality (IEQ) at daycare centers. The content of these discussions were briefly reported back to the main group.

1) School Rules (continued discussion from earlier presentation)

- Cost-benefit analysis used that does not reflect true costs on emotional and social levels too
- Lack of data for the proposed rule
- Problems disrupted social cohesion of the community (polarization)
- Owner of major company in Cle Elum on school board (people felt they couldn't speak up because they feared for their jobs)
- Will send out email when draft rule comes out

2) Pharmaceuticals (continued discussion from earlier presentation)

- "Take back" is most direct and immediate to address problem
- Other options are developing new medicines, such as creating a shortened half-life for medications and packaging with individual pills so that others could be reused without concern.

3) IEQ in Daycare Centers

- Seattle Public Utilities is conducting water studies in daycare studies and will report back once data is recorded
- Envirostar is starting an incentives program for childcare centers

4) Health Affected Groups (outreach)

- CHE national started by engaging a broad range of health-affected groups as did CHE-WA; however, now few of those groups engage in the quarterly CHE-WA meeting and other activities.
- Idea: CHE-WA and the Washington Toxics Legacy Coalition could cosponsor a meeting bringing together executive directors of various health-affected groups both to educate them about environmental health links and offer advocacy opportunities. By having these groups sit together, they will also learn in a very direct way how toxic chemicals are affecting all of them.
- Organizing a working/planning group for this meeting.

Wrap-up and Next Steps

Elise mentioned that the science update at the next meeting of CHE WA will be presented by Dr. Ngozi Oleru on the built environment, health and land use. Elise will

circulate the date of the next meeting as soon as she is able to confirm it with Dr. Oleru.

Upcoming Events (see the CHE WA calendar for further information)

January 25: The first lecture in this year's environmental health lecture series, "Our Health, Our Environment: Making the Link" is on the built environment and public health at Town Hall. It will be given by Dr. Larry Frank.

April 5: People for Puget Sound is organizing a conference on "Toxics in Puget Sound: Connecting the Marine Environment to Health and our Community" at Town Hall. The evening lecture will be an extension of the environmental health lecture series.

June 22: The CHE-WA Precautionary Principle Working Group will be holding a meeting at Antioch to discuss the next steps in Washington State. This meeting will follow the first national meeting on the precautionary principle which will be held in Baltimore earlier in June.