

**ENVIRONMENTAL PUBLIC HEALTH TRACKING
ADVISORY GROUP MEETING
September 9, 2004**

***A Strategic Planning Session will be held February 24-25, 2005, in Helena.
No Advisory Group meeting will be held before then.***

Attendees:

Gary Carter, IHS
Rick Chiotti, OPI
Dan Dennehy, Butte Silver Bow Health Dept.
Chris Deveny, EH Assessment Contractor
Tom Ellerhoff, DEQ
Rosina Everitte, DPHHS/FCHB
Alex Gorman, Women's Voices for the Earth
Gail Gutsche, MT State Legislator
Roman Hendrickson, MD, Sheridan
Wade Hill, MSU College of Nursing
Chris Korhonen, DPHHS/EPHT
Marjean Magraw, DPHHS/EPHT
Lou Olcott, DPHHS/Biomonitoring Project

Joanne Oreskovich, DPHHS/BRFSS
Dick Paulsen, ALA
Jeanne Seifert, Dawson Co. Health Dept.
Mike Spence, MD, DPHHS/State Medical Officer
Dan Strausbaugh, ATSDR
Diana Vanek, UM CEHS
Tony Ward, UM CEHS

Additional Attendees:

Leah Dreyer, DPHHS/EPHT
Jennifer Pinnow, Yellowstone Co. Health Dept.
David Ponder, MontPIRG
Howard Reid, DPHHS/FCS

The meeting opened with a welcome by Marjean Magraw, EPHT Project Coordinator. Attendees introduced themselves and noted their affiliations.

EPHT PROJECT UPDATE

Marjean Magraw, EPHT Project Coordinator

Marjean gave an update on the activities of the EPHT Project since the July meeting.

Recent Activities

- Marjean and Dr. Mike Spence, EPHT Principal Investigator, met with other Western Tracking States (WA, OR, NM, UT, NV, CA) in Seattle in July. The sites discussed current Tracking challenges, such as IT issues and data linkage, information that is lacking, surveillance, and working with stakeholders.
- Poster abstracts have been submitted for the National EPHT meeting in October. Chris Deveny will present a poster on the community needs assessment process; Wade Hill will present a poster on the results of his statewide assessment to determine familiarity with and involvement in environmental health issues at the local level; Curtis Noonan and Diana Vanek will present a poster on the UM CEHS pilot project linking air quality data and hospital discharge data.
- The Community Needs Assessments of 9 counties and 2 tribes are nearing completion, as is the UM CEHS pilot project and Dr. Hill's statewide survey. Results will be passed on to Advisory Group members as soon as they are available.
- The first EPHT project newsletter has been printed and sent to Advisory Group members and other stakeholders. The newsletter will be published quarterly, and suggestions for articles are welcome and appreciated.

- The inventory of databases at DPHHS and DEQ is nearing completion.
- The EPHT project has requested letters of interest from counties and tribes who want to begin community environmental health needs assessments. Three sites will be funded this year.
- For the 11 needs assessment sites from 2003-2004, there will be some funding to help address identified priority EH issues.
- Through work with NRIS, the EPHT project is looking to post mapped health and environmental information on a central website accessible to the public.
- Partner Outreach
 - MPHA: The September 15 Advisory Group meeting was held in conjunction with the MPHA meeting in Butte. Dr. Katherine Shea, Dr. Mark Anderson, Dr. Jerrold Eichner, Dr. Mike Spence all gave presentations, and Chris Deveny and Marjean Magraw presented on the Environmental Health Assessments with Jeanne Seifert (Dawson Co.), Jennifer Pinnow (Yellowstone Co.), and Dan Powers (Butte-Silver Bow Co.).
 - MEHA: October 4 & 5, Butte Copper King. Marjean, Dan Powers, and Jennifer Pinnow will give their presentation on the Environmental Health Assessments.
 - Educators: Conferences in Billings and Helena; coordinating with DEQ to have posters at the conferences.
 - Pediatricians: Mike Spence will address the Montana Pediatrician's Association at Chico on October 1 & 2.
 - EPA: Children's Environmental Health Regional Summit: Marjean, Dan Strausbaugh (ATSDR), and Bonnie Rouse (DEQ) will give a presentation on the efforts of the Montana Interagency Children's Environmental Health Network.

Next Steps

- Need input from key stakeholders to plan for next funding cycle. A Strategic Planning session will be held in Helena in February 2005.
- Given what we have learned:
 - What should EPHT look like in Montana?
 - What benefits should it provide to stakeholders?
 - How can we most efficiently meet the needs of multiple partners?
 - What knowledge and expertise can Advisory Group members contribute?

MERCURY IN FISH

David Ponder, MontPIRG

David Ponder, State Director of the Montana Public Interest Research Group, was invited to give a presentation on the work of MontPIRG and mercury in Montana's waterways, drawing on a study done by the U.S. PIRG.

David explained that Montana's rivers and lakes are a major tourist draw and source of industry, but are not free of the contamination that is a problem nation-wide. Fish a great food source, but not when contaminated. Recently, EPA tests found mercury in 100% of fish sampled across the U.S.; according to the EPA, eating contaminated fish is the primary method of exposure to methylmercury in the U.S.

Fish is good food, but not when it is contaminated Fish is a high-quality protein, is low in saturated fats, and high in Omega-3 fatty acids. Eating contaminated fish is the primary way people are exposed to methylmercury in the U.S., and most recent EPA tests have found mercury in 100% of fish samples. 45 states have issued fish consumption advisories due to dangerously high levels of methylmercury.

Where does mercury come from? Mercury comes from natural sources, such as geothermal or volcanic sources. It also is comes from human sources, notably coal-fired power plants, incinerators, household and consumer products, mining, and catastrophic wildfires.

Mercury Cycle Air emissions are the leading source of mercury pollution. Most deposition occurs within 50 to 500 miles of the emission source. Methylmercury then bioaccumulates and works it way up the food chain.

Health Effects of Methylmercury Exposure Mercury is a Persistent Bioaccumulative Toxin (PBT), and the severity of health effects depends on the magnitude of the exposure. Chronic high-level exposure can result in sensory, motor, and neurological impairment; in the most extreme case, death can result. Methylmercury exposure is of special concern to women of childbearing age, pregnant women, and young children.

What is a safe level of methylmercury exposure? Neurological problems are the most appropriate basis for setting an exposure limit. The National Academy of Sciences concluded EPA's reference dose of 0.1 micrograms per kilogram of body weight per day was a "scientifically justifiable level for the protection of public health." A 64 kg (~132 lbs) woman eating fish twice a week should not eat fish with a methylmercury level of greater than or equal to .1 ppm (parts per million). A "safe" dose for 47 kg (95th percentile) is about .07 ppm.

Even low-level exposure is a health concern Chronic low-dose exposure can result in IQ deficits, deficiencies in motor function, attention, and visuo-spatial performance. An estimated 60,000 children born in the U.S. each year are at risk for adverse neurodevelopmental effects due to *in utero* exposure. Some studies suggest low-level exposure in adult population can have adverse effects on the cardiovascular system.

In Montana In 2002, 941 pounds of mercury and mercury compounds were released into Montana's air. If all the proposed coal-fired power plants for Montana were developed, it would more than double that amount. Consumption advisories in Montana exist for 26 specific water bodies, covering 638,440 lake and reservoir acres (more than 75%) of the state's lake and reservoir acreage. Statewide consumption advisories for

Northern Pike, Walleye, and Lake Trout were issued in 2003; these advisories were based on testing done by FWP in 1994. Recently, 10 of 13 composite samples collected by EPA and the state exceeded .1 ppm; 11 of 13 exceed .07 ppm. Walleye at Big Horn Lake had the third highest concentration of mercury found in the nation.

Extent of Mercury Fish Advisories David asserted that the fish consumption advisories issued by DPHHS are inadequate, with no comprehensive strategy for monitoring mercury contamination; advisories are not protective of public health; and the public is poorly informed of risks.

- **Lack of Comprehensive and Coordinated Monitoring:** EPA suggests a two-tiered monitoring system. Tier one: routine screening of “all water bodies where commercial, recreational, or subsistence fishing is practiced.” Tier two: intense sampling of water bodies with high levels of contamination.
- **DPHHS advisories are not protective of public health:** Lack of comprehensive strategy for monitoring mercury contamination. Advisories are not protective of public health: the meal size, reference dose, and body weight assumptions are flawed, with differing recommendations by DPHHS, EPA, and CDC. The advisories are confusing, inconsistent and poorly publicized.

Recommendations David recommended improving the monitoring program, increasing public involvement and adding more monitoring locations with increased sampling frequency.

- Issue fully protective advisories, based on Montana-specific data, and giving advice that is protective of the majority.
- Improve risk communication, improving advisory readability and distribute it more broadly.
- DPHHS and FWP should solicit public input on the selection of water bodies to be monitored or the development of consumption advisories.

David noted that FWP and DPHHS are concerned about the issue, but the state lacks resources. Funding is needed to implement further action.

Howard Reid, of the DPHHS Food, Drug, and Cosmetics Program stated that additional funding had been continually sought by the DPHHS. He also acknowledged that the advisory information is difficult for the public to discern. The Food and Drug Program has wanted to repeat the sampling on which the guidelines were based, as the validity of the 1994 data is in question. Sampling needs to be repeated, with additional sample sites added. Testing will be done this fall by FWP, collecting 50-100 samples, yet there is no consistent pattern of sampling or of funding. David reiterated that while funding may not be available, more protective advice could easily be issued to the public.

Howard added that information is lacking to determine exactly where the mercury is coming from and how much is coming from which source. Mercury in Montana comes

from natural sources, atmospheric depositions, mining activity, etc. A combined advisory from EPA and FDA was issued in March 2004, and their information is also confusing, as fish consumption is encouraged yet cautioned in certain cases. Don Skaar (FWP) and Howard have been working on a new fish consumption guideline pamphlet that they hope will be a simplified resource for consumers.

Marjean noted that the EPHT project has met with Howard, Don Skaar, and DEQ to offer help in GIS mapping, and improving accessibility to information via the web. She encouraged continued cooperation between partners to improve awareness of consumption guidelines.

Roman Hendrickson suggested that FWP and DPHHS work together to coordinate sampling and funding efforts; Dr. Spence mentioned that he, Howard, and Don Skaar have together discussed new approaches to funding sources for monitoring, such as increased licensing fees.

Alex Gorman encouraged the group to think of other agency programs or advocacy groups who would be interested in helping disseminate consumption advisory information, such as through brochures or by posting the advisory on a website.

**A new Fish & Mercury Group has been formed from members who noted interest, and they have met once with FWP as of 10/06/2004.*

DISCUSSION: STRATEGIC PLANNING FOR NEXT FUNDING CYCLE

Marjean asked for feedback on the strategic planning sheet that was handed out at the meeting. **The strategic planning session will take place in Helena, February 24-25.** A facilitator who has worked extensively with the California tracking project will come to Montana to work with the Advisory Group on the strategic planning process. A concerted effort needs to be made to include and involve stakeholders who have not participated thus far. Suggestions for groups to include and comments on the following questions are welcome, and will help in the planning process. Please email your comments or ideas to Marjean at mmagraw@state.mt.us

- What should EPHT look like in Montana?
- What benefits should it provide to stakeholders?
- How can we most efficiently meet the needs of multiple partners?
- What knowledge and expertise can Advisory Group members contribute?

FOLLOW-UP & NEXT STEPS

Further information will be sent out concerning the specifics of the Strategic Planning session. There will not be another Advisory Group meeting before the Planning session. A winter newsletter will be sent out, and communications will continue to be sent by email. Marjean thanked the group for their attendance, and the meeting adjourned at 1:00 p.m.