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For more information, please contact:  
Dr. Kate Davies, report author, 206-268-4811  
Elise Miller, M.Ed., Institute for Children's  
Environmental Health, 360-331-7904  
Contact information for reviewers/endorsers of study  
is listed at the end of the press release

## **REPORT REVEALS THE HIGH HEALTH CARE COSTS STEMMING FROM TOXICS IN WASHINGTON'S ENVIRONMENT**

### ***Report Author to Testify at PBT Hearing Tonight: State Department of Ecology can lower health care costs through adoption of a strong toxic chemical phase-out plan***

SEATTLE – More than \$2 billion a year in health care costs – an amount matching the biotechnology industry's contribution to the state economy – can be tied to diseases and disabilities linked to environmental contaminants, according to a study being released today by Dr. Kate Davies, faculty at Antioch University Seattle. The study was reviewed by the director of the Washington State Department of Health's Office of Environmental Health Assessments and others. The report, which shows how toxic exposures contribute to the state's spiraling health care bill, is being released to coincide with the Washington Department of Ecology's public hearing on a plan for evaluating and phasing out persistent bioaccumulative toxins (PBTs) at 7 p.m. tonight at the Seattle Best Western at 200 Taylor Ave. North. The report also is coming out on the same day as the introduction by Senators Frank Lautenberg and Jim Jeffords of the Kids-Safe Chemicals Act. Dr. Davies will discuss the results of the report at the PBT hearing, arguing that tighter regulations of toxic chemicals used by companies will pay off for the government by resulting in lower health care costs.

"This is a ringing endorsement for reducing toxics in the environment to not only save people's lives, but to save dollars for families, companies and the government as well," said Kate Davies, D.Phil., the report's author and a health researcher and faculty member at Antioch University Seattle. Dr. Davies is also a member of the PBT Rule Advisory Committee and chair of the Research and Information Working Group of the Collaborative on Health and the Environment-Washington. "This counters industry claims that stronger rules for phasing out chemicals cost more than they save. The true cost is in our health and prosperity and that is too high a price for an advanced civilization to pay."

Over the past five years, the Department of Ecology has developed a program to reduce and eliminate some of the deadliest toxic discharges in Washington – PBTs such as toxic flame retardants (PBDEs), mercury, dioxin and lead. These chemicals build up in the food chain and exposures to tiny amounts during certain developmental periods have been linked to birth defects, reproductive failure, learning and behavioral problems in young children, cancer, and other health problems. Recent studies have found alarming levels of PBTs in salmon, orca whales, mother's breast milk, and household dust.

The Department of Ecology is currently developing a rule that will determine what, how and when chemicals will be phased out under the PBT program. The program has already completed a phase-out plan for mercury and PBDEs. Dr. Davies argues that if the Department of Ecology develops a strong PBT program that includes a chemical phase-out, clean up of contaminated sites and prevention of new sources of pollution., this will help reverse these concerning trends in the buildup of toxics and could save Washingtonians hundreds of millions of dollars in health costs.

Dr. Davies' study uses recognized and conservative methodology from an earlier study conducted by Dr. Phil Landrigan of Mount Sinai Medical School in New York, on the national costs of childhood diseases attributable to contaminants (see <http://ehp.niehs.nih.gov/members/2002/110p721->

[728landrigan/EHP110p721PDF.PDF](#), published in Environmental Health Perspectives in 2002). To calculate the health and related costs of these conditions, they used an 'environmentally attributable fraction' (EAF) model that estimated the proportion of each condition that can reasonably be attributed to exposure to environmental contaminants. Dr. Landrigan has reviewed and endorsed Dr. Davies' study. It will be submitted to Northwest Public Health, the UW peer-reviewed public health journal later this summer. Dr. Davies is the first researcher to calculate the health care costs incurred by Washingtonians through exposure to toxic chemicals.

The study estimates the economic costs associated with several diseases and disabilities attributable to environmental contaminants in Washington State, including asthma, cardiovascular disease, cancer, lead exposure, birth defects, and neurobehavioral effects. The estimates are based on 'cost of illness' estimates that include direct health care costs and indirect costs, such as those associated with disease and early death.

Dr. Davies' report concludes that the 'best estimate' of the annual cost of childhood diseases and disabilities attributable to environmental contaminants, such as asthma, cancer, lead exposure, birth defects, and neurobehavioral effects, in Washington State is \$1.875 billion in 2004\$. This comprises \$.311 billion in direct health care costs and \$1.565 billion in indirect costs, with a range of \$1.6 - \$2.2 billion a year, depending on the methods and assumptions used.

It also states that the 'best estimate' of the annual cost of adult and childhood diseases and disabilities attributable to environmental contaminants, such as asthma, cardiovascular disease, cancer, lead exposure, birth defects, and neurobehavioral effects, in Washington State is \$2.734 billion. This comprises \$.782 billion in direct health care costs and \$1.953 billion in indirect costs, with a range of \$2.8 - \$3.5 billion a year, depending on the methods and assumptions used. These 'best estimates' amount to approximately .7% of the total Washington Gross State Product, which totaled \$260 billion in 2004.

It should be noted that these cost estimates are consistent with the results of other similar studies and that, like the previous studies, a significant proportion of the estimated costs can be attributed to lead exposure.

The report, "Economic Costs of Diseases and Disabilities Attributable to Environmental Contaminants in Washington State," is part of a larger effort by the Collaborative on Health and the Environment – Washington (CHE-WA), a regional network of more than 270 researchers, healthcare providers and other groups to collectively address the links between chronic health problems, their social and economic costs, and their environmental contributors.

"The cornerstone of public health is prevention and the state can play an important role in this," said Elise Miller, executive director of the Washington State-based Institute for Children's Environmental Health and chair of CHE-WA. "We can help ensure our children and future generations reach their fullest potential by adopting a strong rule on the phase-out of PBTs."

**A copy of the full report can be accessed at [www.iceh.org](http://www.iceh.org) or by calling ICEH at 360-331-7904.**

For additional information and comment on the study from individuals who have reviewed it:

Rob Duff, M.S., Director, Office of Environmental Health Assessments, Washington State Department of Health; Olympia; ph: 360-236-3181; E-mail: [robert.duff@doh.wa.gov](mailto:robert.duff@doh.wa.gov)

George Wright, Ph.D., Associate Professor, University of Washington, Department of Family Medicine; ph: 206-616-9255; cell: 206-579-6565; [gwright@fammed.washington.edu](mailto:gwright@fammed.washington.edu).

Philip Landrigan, MD, MSc, Chair, Department of Community and Preventive Medicine, Center for Children's Health and the Environment, Mount Sinai School of Medicine, New York, NY; ph: 212-241-4804 e-mail: phil.landrigan@mountsinai.org.

Robin Evans-Agnew, MN, Director, Asthma and Environmental Health, American Lung Association of Washington; ph: 206-441-5100 x21, robin@alaw.org.

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