Center for Child Environmental Health Risks Research

Department of Environmental & Occupational Health Sciences, University of Washington

Projects at the Center for Children's Environmental Health Risks Research are aimed at reducing the adverse effects of environmental pesticide exposures in children. Researchers from the University of Washington and the Fred Hutchinson Cancer Research Center work in the lab, in the field and in the community to bring a unique and successful approach to the study of children's environmental health.

In the Lab

Pesticide effects in children are not well understood. Children are uniquely susceptible to pesticide exposure because their bodies are growing and developing. Children consume more air, food and liquid per pound than adults, increasing their exposure to environmental contaminants. Laboratory projects seek to understand the ways that pesticide exposures impact children's learning and development. Genetic differences are also explored.



Children in orchard Photo courtesy of Kathy Hall, DEOHS Publications

In the Field

Children's activity patterns are significantly different from adults. Understanding children's pathways of exposure can help researchers design interventions to minimize pesticide exposures. Exposure research at the Center is unique in that it links children's activities and movements at a specific time and place with the distribution of pesticides during and after application. Field-based projects aim to understand how children's behavior and circumstances affect the ways they come in contact with pesticides.

In the Community

Community partnerships are essential for making lab and field work relevant to community concerns. The Center has partnered with investigators at the Fred Hutchinson Cancer Research Center and with community organizations in the Yakima Valley to actively involve community members in research, intervention and training activities. Center researchers have established an infrastructure that integrates data from research studies and translates the findings into improved public health practices and child-protective policies. Information on methodology and research results is shared with other institutions and National Centers.

Research at the Center:

- Expands understanding of children's unique risks to environmental contaminants and how exposure to these contaminants can adversely impact growth and development.
- Promotes national child health goals by developing novel data, methods and technologies and translating results to relevant audiences.
- Integrates laboratory, field and community based approaches to address the issue of children's susceptibility to pesticides.

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