



PESTICIDES AND HEALTH

FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

INTRODUCTION

Pesticides include:

- Insecticides, intended to kill insects;
- Herbicides, intended to destroy weeds;
- Fungicides, intended to destroy fungi;
- Rodenticides, intended to kill rats, mice and other rodents.

Fertilizers are not normally considered pesticides.

Pesticides can cause a variety of different health effects depending on the type of pesticide, the dose, and the route and timing of exposure. Health effects associated with pesticides include cancer, birth defects, reproductive disorders, neurotoxic effects, liver and kidney damage, and irritation/sensitization.

The following organizations provide general information on pesticides and health:

- The US Environmental Protection Agency - www.epa.gov
- The Natural Resources Defense Council - www.nrdc.org
- The Pesticides Action Network North America (PANNA) - www.panna.org
- The National Coalition Against the Misuse of Pesticides - www.beyondpesticides.org

PESTICIDES AND HEALTH IN WASHINGTON STATE

- Washington state's 'Pesticide Incident Reporting and Tracking' (PIRT) system records and investigates complaints about pesticides.
- In 2003, more than 2,500 complaints were investigated under PIRT, as shown in the table below.¹

Pesticide Incident Reporting and Tracking System Complaints, 2003	
Department of Agriculture (WSDA)	22 complaints
Department of Ecology (DOE)	33 complaints
Department of Health	242 complaints
Department of Labor and Industries (L&I)	155 complaints
Washington Poison Control (WPC)	1,937 complaints

- In June 2006, 110 people were registered with the Washington State Department of Agriculture as pesticide-sensitive individuals.²
- The City of Seattle's Pesticide Reduction Program aims to eliminate the use of the most potentially hazardous herbicides and insecticides and to reduce overall pesticide use by 30%.³
- Thirty-nine pesticides, or their breakdown products, were detected in water samples from urban streams in King County from 1998 to 2003.⁴ All 14 streams studied had pesticide compounds in them. Twenty-five compounds were found in Juanita Creek, on the northeast side of Lake Washington. Herbicides made up more than 60% of the compounds detected in each stream.
- All children in Seattle are likely to have measurable levels of organophosphate pesticides in their urine.⁵
- Switching preschoolers to a diet of organic foods reduced the children's exposure to organophosphate pesticides from above to below the EPA's current guidelines, according to a University of Washington study.⁶

COMPARING WASHINGTON STATE NATIONALLY

- Washington is one of a few states with a system in place for tracking pesticide incidents, the Pesticide Incident Reporting and Tracking (PIRT) system.
- The National Agricultural Statistics Service has a database on the use of pesticides on agricultural crops, searchable by state, year, commodity and chemical.⁷
- The US Geological Survey also generates maps showing pesticide use nationally, compound by compound.⁸

SOURCES

- 1 <http://www.doh.wa.gov/ehp/ts/PIRT/pirt2004ar/2004-pirt.htm>
- 2 <http://agr.wa.gov/PestFert/Pesticides/docs/PsiSensIndivList.pdf>
- 3 <http://www.seattle.gov/environment/pesticides.htm>
- 4 <http://pubs.usgs.gov/sir/2004/5194/#IDAQTOZ>
- 5 <http://ehp.niehs.nih.gov/members/2001/109p299-303lu/lu-full.html>
- 6 http://www.ewg.org/pdf/20021122_UWstudy.pdf
- 7 http://www.pestmanagement.info/nass/app_usage.cfm
- 8 http://ca.water.usgs.gov/pnsp/pesticide_use_maps/compound_listing.php?year=97