

Children of Color, Urban Ecology, and the Elimination of Toxic Lead Pollution: The Twenty-First Century Policy Challenge

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Environmental Justice: General Definition

- Environmental justice is the principle that all people and communities are entitled to equal protection of their environment, health, employment, housing, and transportation as provided by federal and local civil rights laws.

Urban Ecology Paradigm

- Diffuse sources for childhood lead exposures
- Changing climate patterns increasing floods in coastal regions
- Global atmospheric pollution
- Population shifts to older suburban areas outside of inner-city

Estimates of Childhood LP in Allegheny County (PA)- No. with BLLs 10 ug/dL or Greater Not Screened

	All Children	All Children	Medicaid and High Risk Children	Medicaid and High Risk Children	
			(Allegheny Co.)	(State of PA)	
	NHANES	PA-NEDSS	EPSDT	EPSDT	
Findings					
Children with blood lead levels 10 ug/dL or higher	1, 156	3, 683	2, 268	2, 268	
Children with elevated blood lead levels not screened	987	3, 514	1, 1771	1, 292	
Total %	2, 143	7, 197	3, 439	3, 560	
Source: Keyser et al., 2006					

Summary of 90th Percentile Lead Data for Systems Serving 50,000+ People

SUMMARY	For Monitoring Periods Ending in 2003 and later	For Monitoring Periods Ending in 2000 and later
Total Number of Systems	--	834
Population Served	--	153,760,018
Total No. of Systems with Data	316	744
Population Served	63,020,639	132,228,947
Total No. of Systems > AL	12	27
Population Served	5,235,961	7,153,801
% Systems > AL	3.8%	3.6%
% Population Served	8.3%	5.4%
<i>Sources: US EPA, OFFICE OF WATER 2004</i>		

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Lead-Contamination in Drinking Water In Schools

A. National Regulations and Patterns

B. Local Lead-In-Drinking Water Controversies

- Seattle

- Philadelphia

- Washington, D. C.

Lead-Test Results in Seattle Public Schools 2005

Source: [Seattle Post-Intelligencer, 2005.](#)

LEAD LEVELS STILL HIGH

Seattle Public Schools has replaced 250 fountains across the city in efforts to reduce lead levels in drinking water. Some of the new fountains have been retested and partial results are in. So far, over 60 percent the new fountains are producing results above the district's safety standard of 10 parts per billion.

LEVELS OF LEAD IN NEW WATER FOUNTAINS

SCHOOL	FOUNTAINS		TESTED	FAILED	HIGHEST
	TESTED	FAILED			
Beacon Hill	6	4		58	
Broadview Thomson	15	10		73	
B.F. Day	12	4		50	
Eckstein	12	10		57	
Gatzert	12	1		51	
Graham Hill	8	7		98	
Green Lake	14	5		45	
High Point	8	5		92	
Kimball	8	6		58	
M.L. King	4	3		87	
Laurelhurst	7	5		29	
Leschi	8	2		28	
John Muir	17	1		14	
North Beach	3	1		85	
Rainier Beach	4	4		54	
Rainier View	16	13		75	
Rogers	18	6		53	
Roxhill	10	7		63	
Sacajawea	18	15		94	
Sanislo	14	8		48	
West Woodland	14	2		39	

*Highest reading of all fountains tested in parts per billion (ppbs).

Source: Seattle Public Schools

SEATTLE POST-INTELLIGENCER

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Preventive Technical Measures to Reduce Contamination From Urban Flooding

- Removal of toxins before flooding
- High tech street sweeping equipment
- Permeable pavements
- Trees and vegetation

Long-Term Goals to Improve Environmental Health of Urban Children

- Safe housing
- Increased flood warning, management and prevention
- Reductions in Air Pollution
- Safe Drinking Water in Schools