



# THE COLLABORATIVE ON HEALTH AND THE ENVIRONMENT - WASHINGTON



## RESEARCH AND INFORMATION WORKING GROUP

### LEARNING AND DEVELOPMENTAL DISABILITIES

#### FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

##### INTRODUCTION

Eleven developmental and neurobehavioral disabilities have been linked with environmental contaminants, including attention deficit hyperactivity disorder (ADHD)/hyperactivity, autism, developmental delay and cognitive impairment, decreased IQ/mental retardation, cerebral palsy, Parkinson's Disease, seizures, behavioral problems, decreased coordination, delayed growth and Minamata disease.

The Collaborative on Health and the Environment has published a paper on "Developmental Disabilities and Environmental Factors."<sup>1</sup>

##### PROPORTION OF LEARNING AND DEVELOPMENTAL DISABILITIES DUE TO ENVIRONMENTAL CONTAMINANTS

Overall, about 28% of neurobehavioral disorders are directly or indirectly due to environmental contaminants, not including tobacco, alcohol, or drugs.<sup>2</sup> The proportion of individual learning and developmental problems due to environmental contaminants is not known.

##### LEARNING AND DEVELOPMENTAL DISABILITIES IN WASHINGTON STATE

- The number of children in Washington with ADHD is likely to be between 54,000 and 124,000, although the precise number is not known.<sup>3,4</sup>
- Autism is increasing in Washington and nationwide. In 1999, there were 51 new cases reported in the state, and in 2003 there were 2,824 new cases reported.<sup>5</sup> The reason for this increase is unknown.
- About 3,000-4,500 children in Washington state are likely to have some degree of cerebral palsy.<sup>6,7</sup>
- In 1993, the prevalence of mental retardation in children aged 6-17 years in Washington state was 8.3 per 1,000. The prevalence in adults aged 18-64 years was 5.1 per 1,000.<sup>8</sup>
- The number of children in Washington with developmental disabilities is likely to be about 300,000, although the exact number is not known.<sup>9,10</sup>

- One in 18 young children (6-11 years old) and one in 15 adolescents (12-17 years old) in Washington state exhibits serious behavioral or emotional problems. This is about 64,800 youth in total.<sup>11</sup>
- As of December 2000, more than 5,500 infants and toddlers (under three years of age) in Washington state were enrolled in public early intervention services for developmental delays, disabilities, or special health care needs.<sup>12</sup>
- About 31,500 people in Washington state have Parkinson's Disease.<sup>13</sup>
- Neurobehavioral disorders due to environmental contaminants in Washington state cost between \$36.2 million and \$611.1 million (in 2004 dollars) annually.<sup>14</sup>

## COMPARING WASHINGTON STATE NATIONALLY

- In 2001, 13.7% of Washington state children had special health care needs. This is higher than the national rate of 12.8%.<sup>15</sup>
- The rate of enrollment in public early intervention services for developmental delays, disabilities, or special health care needs was 2.3% in 2001, higher than the national rate of 2%.<sup>16</sup>
- Washington state's prevalence rates for mental retardation in both children and adults in 1993 were lower than the national rates, as shown in this table.<sup>17</sup>

State and National Rates of Mental Retardation, 1993		
	WA State (per 1,000)	National (per 1,000)
<b>Children (aged 6-17)</b>	8.3	11.4
<b>Adults (aged 18-64)</b>	5.1	6.6

## SOURCES

- 1 [http://www.healthandenvironment.org/learning\\_behavior/peer\\_reviewed](http://www.healthandenvironment.org/learning_behavior/peer_reviewed)
- 2 Committee on Developmental Toxicology, Board on Environmental Studies and Toxicology, National Research Council. *Scientific Frontiers in Developmental Toxicology and Risk Assessment*. (2000). Washington DC: The National Academies Press.
- 3 <http://www.cdc.gov/ncbddd/adhd/what.htm>
- 4 <http://www.ofm.wa.gov/databook/default.asp#population>
- 5 <http://www.fightingautism.org/idea/autism.php?s=WA&z=m>
- 6 [http://www.marchofdimes.com/professionals/14332\\_1208.asp](http://www.marchofdimes.com/professionals/14332_1208.asp)
- 7 <http://www.ofm.wa.gov/databook/default.asp#population>
- 8 <http://www.cdc.gov/mmwr/preview/mmwrhtml/00040023.htm>
- 9 [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=7509480&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=7509480&dopt=Abstract)
- 10 <http://www.ofm.wa.gov/databook/default.asp#population>
- 11 [http://hspsc.org/policy\\_forums/emotional\\_behavioral\\_problems.aspx](http://hspsc.org/policy_forums/emotional_behavioral_problems.aspx)
- 12 <http://www1.dshs.wa.gov/rda/research/7/79/h.shtm>
- 13 <http://www.nwpcf.com/aboutpark.asp#whatispd>
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