



## THE COLLABORATIVE ON HEALTH AND THE ENVIRONMENT - WASHINGTON



### RESEARCH AND INFORMATION WORKING GROUP

## REPRODUCTIVE DISORDERS

### FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

#### INTRODUCTION

Some environmental contaminants, such as lead, some pesticides, and tobacco smoke, are linked with reproductive disorders. Reproductive disorders include changes in puberty, reduced fertility in men and women, endometriosis, fetal death, premature births, low birth weight, and infant death.

The Collaborative on Health and the Environment (CHE) has published articles on the links between environmental exposures and reproductive disorders such as endometriosis<sup>1</sup> and infertility.<sup>2</sup>

There is very little information on many reproductive disorders in Washington state, although there is information on death rates, premature births and low birth weight.

#### PROPORTION OF REPRODUCTIVE DISORDERS DUE TO ENVIRONMENTAL CONTAMINANTS

There is no agreement on the proportion of reproductive disorders due to environmental contaminants. The proportion is likely to be significantly different for different disorders.

A 2006 report by the World Health Organization found that 6% of all perinatal health conditions in the developed world are due to environmental risks. This includes low birth weight and premature births.<sup>3</sup>

#### REPRODUCTIVE DISORDERS IN WASHINGTON STATE

- About 300,000 women in the state have endometriosis,<sup>4,5</sup> a condition which causes chronic pelvic pain and infertility. About 5.5 million women in the United States have endometriosis.<sup>6</sup>
- The infant death rate in Washington has decreased from 9.1 per 1,000 in 1988-89 to 5.1 per 1,000 in 1999-2000. For African American and American Indian infants, the death rate decreased from 15.9 to 8.6 per 1,000 over the same period of time. This is still almost 70% higher than the rate for White babies.<sup>7</sup>
- The fetal death rate in Washington state in 2002 was 5.5 per 1,000 live births.<sup>8</sup>
- Between 1993 and 2003 the proportion of premature births in Washington increased from 8.4% to 10.3%. The proportion of low birth weight babies increased over the same time period from 5.2% to 6.0%.<sup>9</sup>

- During 2001-2003, premature birth rates were highest for Native American infants (14.5%), followed by Blacks (13.3%), Hispanics (10.3%), Asians (9.9%) and Whites (9.5%).<sup>10</sup>
- Urban American Indians and Alaska Natives have a much higher rate of infant death and low birth weight than urban Whites.<sup>11</sup>
- Washington's rate of low birth weight increased slightly from 5.3% in 1990 to 5.8% in 2001. In 1999-2001, Garfield County had the highest low birth weight rate for the state (7.6%), and Blacks had the highest low birth weight rates (8.6%) as compared with other races/ethnicities in the state.<sup>12</sup>
- 1998 data indicate that African Americans and Native Americans in King County have infant death rates 2.7 as high as Whites in the county.<sup>13</sup>

## **COMPARING WASHINGTON STATE NATIONALLY**

- Washington has lower rates of infant death and low birth weight than the national rates, as shown in the table below.<sup>14,15</sup>

<b>Low Birth Weight and Infant Mortality Rates, 2003</b>		
	<b>WA State Rate</b>	<b>National Rate</b>
<b>Low Birth Weight</b>	4.6%	6.2%
<b>Infant Mortality</b>	5.6%	7.0%

- Between 1990 and 2002 the US fertility rate dropped from 70.7 to 64.8 births per 1,000 women aged 15-44 years, a decline of 9%. Washington's rates declined from 68.7 in 1990 to 60.2 in 2002.<sup>16</sup>

## **SOURCES**

- 1 <http://www.healthandenvironment.org/endometriosis>
- 2 <http://www.healthandenvironment.org/infertility>
- 3 [http://www.who.int/quantifying\\_ehimpacts/publications/preventingdisease.pdf](http://www.who.int/quantifying_ehimpacts/publications/preventingdisease.pdf)
- 4 [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=9163765&dopt=Citation](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9163765&dopt=Citation)
- 5 <http://www.ofm.wa.gov/databook/population/pt04.asp>
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- 13 [http://www.metrokc.gov/health/reports/infantmortality\\_version3.pdf](http://www.metrokc.gov/health/reports/infantmortality_version3.pdf)
- 14 [http://www.doh.wa.gov/cfh/mch/mch\\_assessment/mchdatareport/2005\\_pdfs/DataChapters/lbw.pdf](http://www.doh.wa.gov/cfh/mch/mch_assessment/mchdatareport/2005_pdfs/DataChapters/lbw.pdf)
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- 16 [http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52\\_19.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_19.pdf)