

RESEARCH AND INFORMATION WORKING GROUP

ASTHMA

FACT SHEETS ON HEALTH AND ENVIRONMENT IN WASHINGTON

INTRODUCTION

Asthma is caused by inflammation and constriction of the airways, as well as excess mucous production in the lungs. Factors that trigger asthma include tobacco smoke, vehicle exhaust, ozone (or smog), carbon monoxide, airborne molds, pollens, dust, animal dander, many household and industrial products (such as formaldehyde from carpets and particleboard and perfume), wood smoke, exercise and stress.

PROPORTION OF ASTHMA DUE TO ENVIRONMENTAL CONTAMINANTS

The World Health Organization has estimated that 44% of asthma is due to environmental exposures, excluding pollen. Another study showed that about 10 to 35% of childhood asthma triggers are related to outdoor, non-biologic pollutants such as vehicle exhaust and emissions from industries. 2

ASTHMA IN WASHINGTON STATE

- About 40,000 Washington adults—one in 10 women and one in 14 men—currently have asthma, and about 120,000 youth in the state are affected by it.
- Asthma is more common in young boys than young girls, but by middle school these differences reverse so that by adulthood asthma is more common in women than men.³
- This table shows that there is higher prevalence of lifetime asthma among Blacks and Multiracial people in Washington state than among Whites.

Race	Lifetime Asthma Prevalence
White	15.5%
Black	20.7%
Hispanic	16.6%
Other	15.5%
Multiracial	23.4%

- Washington residents with an annual income of less than \$35,000 have a higher lifetime prevalence of asthma.⁴
- In childhood, the prevalence of asthma increases with age, as shown in the table below.⁵

Asthma Prevalence by Age, 1998	
Age (years)	Percent with asthma
0-4	7.2%
5-12	10.2%
13-17	14.5%
(Adults) 18 +	11.9%

- In Washington state in 1998, hospitalization for asthma was more common for the very young (ages 0-4 years) and the elderly (65+ years). The elderly had a higher rate of asthma-related deaths than other age groups.⁶
- In King County, there are about 9,500 children with asthma living in households with incomes less than 200% of the poverty level. Close to 40% (3,800) of these homes have at least one smoker.⁷
- Asthma is the second most common reason for children to be admitted to hospitals in King County.⁸

COMPARING WASHINGTON STATE NATIONALLY

- Washington state's 2004 lifetime prevalence of asthma was 15.5%, higher than the national average of 13.3%.
- Washington had the third highest lifetime prevalence rate for asthma in the country in 2004, up from the fifth highest in 2003. 10
- Washington State's 2004 rate of current asthma prevalence was 9.2%, higher than the national average of 8.3% and the 10th highest in the country.¹¹

SOURCES

- 1 http://www.who.int/quantifying_ehimpacts/publications/preventingdisease/en/index.html
- 2 http://www.ehponline.org/members/2002/110p721-728landrigan/landrigan-full.html
- 3 http://www.alaw.org/pdfs/wai/BurdenofAsthmaWASt-2005FINAL.pdf
- 4 http://apps.nccd.cdc.gov/brfss/income.asp?cat=AS&yr=2004&qkey=4417&state=WA
- 5 http://www.alaw.org/asthma/washington_asthma_initiative/data_website/prevalence.html
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