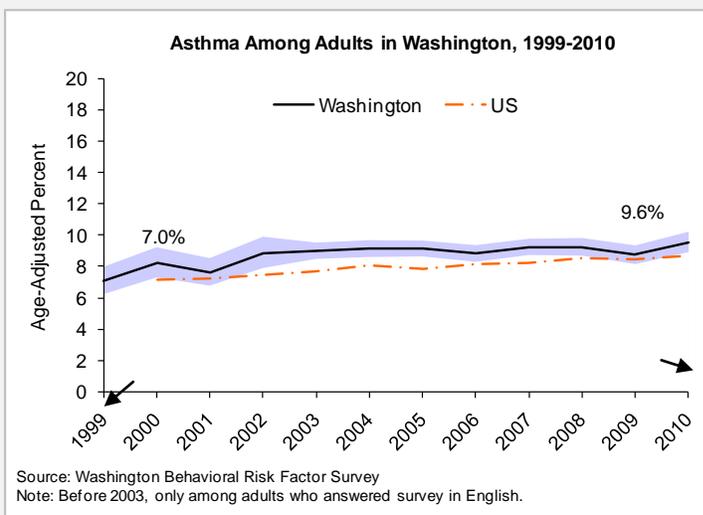


Washington State 2013

Asthma is a chronic inflammatory disorder of the airways which is associated with airway hyper-responsiveness, airflow limitation and respiratory symptoms. Asthma rates in Washington State are ranked among the highest in the nation. Asthma can reduce an individual's quality of life and limit their ability to participate in activities. The symptoms of asthma place a substantial burden on affected individuals and their families. Asthma symptoms can include cough, wheezing, shortness of breath, chest tightness, and phlegm. Uncontrolled asthma increases the likelihood of unplanned doctor visits and expensive hospitalizations.

Prevalence

- Washington State has been identified by the Centers for Disease Control and Prevention (CDC) as having one of the nation's highest rates of asthma in both adults and youth.
- Currently, about 508,934 adults (10%) and 106,000 children (7%) have asthma in Washington State.
- Asthma prevalence in Washington has been higher than the national average since measurement began in 1999. 2001, 2009, and 2011 were the only years that Washington State asthma prevalence was not significantly higher than the national average.
- Asthma rates in Washington State have remained relatively constant from 2003 to 2010, while overall rates for the United States have increased slightly over the same time period.



Mortality

- Asthma deaths are rare and mortality rates have decreased from 1.9 per 100,000 individuals in the 1990s to 1.2 per 100,000 individuals in 2011.
- During 2007-2011, on average 74 Washingtonians have died from asthma each year.
- Asthma death rates are higher among women than men, and increase with age, up to an average annual mortality rate of 1.41 deaths per 100,000 women, and 0.98 deaths per 100,000 men.

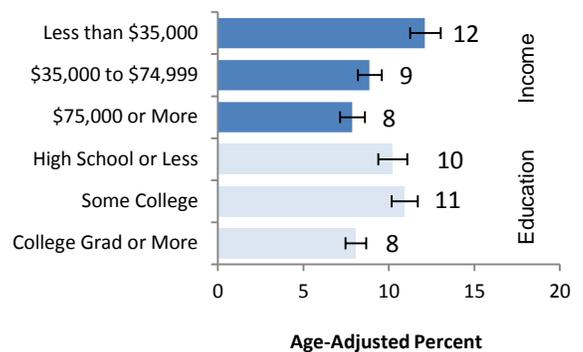
Geographic Variation

- Adult asthma prevalence varies between counties. In 2009-2011 combined, the age-adjusted county-level prevalence for current asthma ranged from 6 percent to 15 percent.
- Five counties were at least two percent above the state average asthma prevalence rate of 10 percent: Columbia (11.6 percent), Cowlitz (12.4 percent), Grays Harbor (13.1 percent), Pacific (14.2 percent), and Garfield (14.7 percent).

Prevalence by Education and Income

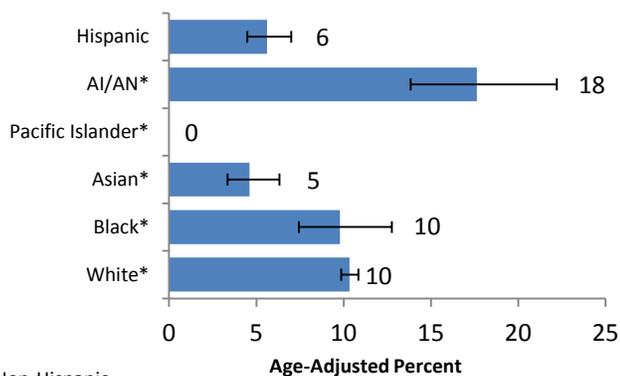
- Income is significantly associated with asthma prevalence. Individuals with lower income are more likely to have asthma than individuals with higher income. This relationship remains significant after controlling for age, gender, education, race, and Hispanic origin.
- After controlling for age, gender, income, race, and Hispanic origin, there is no significant relationship between educational attainment and asthma.

Asthma Among Adults by Income and Education in Washington, 2009-2011



Source: Washington Behavioral Risk Factor Survey

Asthma Among Adults by Race/Ethnicity in Washington, 2009-2011



* Non-Hispanic

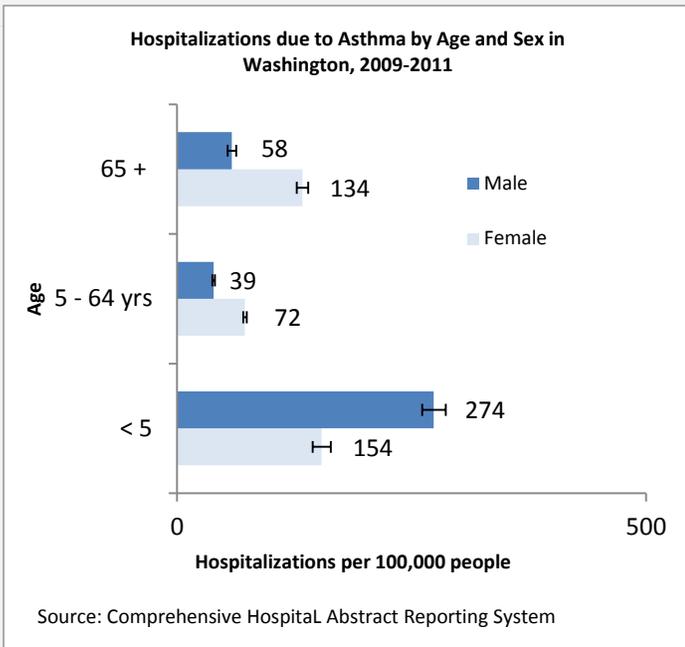
AI/AN = American Indian/Alaska Native

Source: Washington Behavioral Risk Factor Survey

Prevalence by Race and Ethnicity

- During 2009 through 2011, American Indians and Alaskan Natives were nearly twice as likely to have asthma as white people.
- Consistent with national data, people of Hispanic origin and Asians had lower asthma risk than white people after controlling for age, gender, income and education.
- There were no significant differences in asthma rates between blacks, Pacific Islanders, and whites in Washington State.
- Estimates for the Pacific Islander population are unreliable due to small sample size, and therefore are not reported here.

Hospitalizations



- Proper asthma management can prevent hospitalizations.
- Children younger than 5 account for over half the hospitalizations for asthma in the state, with boys more likely to be hospitalized than girls.
- Adults age 65+ are hospitalized at twice the rate of people age 5-64. Females are more likely to be hospitalized than males for people age 5+.
- The rate of hospitalizations has decreased significantly from 127 per 100,000 females and 89 per 100,000 males in 2000 to 79 per 100,000 females and 52 per 100,000 males in 2011.
- National data has shown that hospitalizations are higher among some ethnic groups and for those with low income. This information is currently unavailable for Washington State.

Risk Factors

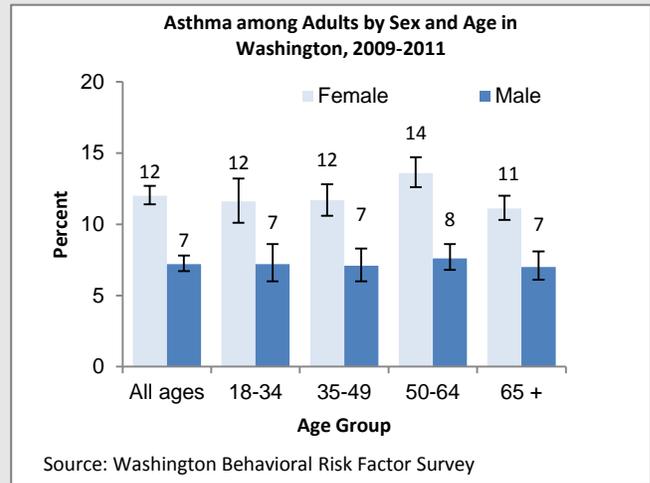
Asthma is likely a syndrome rather than a single illness with a single cause. More research is needed to determine how different factors interact to cause asthma.

- Many people with allergies have asthma and there is reasonable evidence that early exposure to dust mites and roaches may cause asthma in some individuals.
- Exposures to allergens and other indoor particles may contribute to asthma symptoms.
- Children with parents who smoke are more likely to develop asthma than children of non-smokers. Tobacco smoke is a probable cause of new cases of asthma in adults and adolescents. Approximately 500 new cases of asthma each year are traceable to second-hand smoke.
- Viral respiratory infections can trigger asthma attacks.
- Exposure to outdoor air pollutants such as ozone or diesel exhaust can trigger asthma attacks.
- Exposure to allergens or irritants in the workplace may trigger asthma.
- Obesity is a risk factor for asthma. Thirteen percent of obese adults compared to eight percent of non-obese adults in Washington State have asthma.
- Youth who smoke cigarettes or marijuana, or use inhalants, are more likely to have asthma than youth who do not.
- Some people are genetically more susceptible to asthma than others.

Prevalence by Gender and Age

Adults

- Asthma can occur at any age.
- In Washington State, and the United States as a whole, adult women are more likely than adult men to have asthma.
- Two-thirds of adults were diagnosed with asthma after age 18.
- Half of adults with current asthma had trouble sleeping because of their symptoms.



Children

- Until adolescence, boys are more likely to have asthma than girls. Beginning at about grade 10, girls are more likely to have asthma than boys.
- Some youth with asthma miss school because of their condition, and youth with more severe asthma symptoms are likely to have lower academic achievement than youth with few symptoms or those without asthma.
- About 1 in 9 children has ever been diagnosed with asthma, and approximately 1 in 14 children currently have asthma.
- One-third of youth with current asthma had trouble sleeping because of their symptoms.

Conclusion

Asthma affects large numbers of adults and children in Washington State. Because asthma is a complex disease, controlling asthma requires well-organized, combined efforts. Successful public health interventions should focus on controlling symptoms and preventing asthma attacks. In addition, implementing policies that support healthy homes and buildings and minimizing exposures to asthma triggers will decrease the burden of asthma on Washington residents.

Data Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System, supported in part by Centers for Disease Control and Prevention, Cooperative Agreement U58/CCU022819 and DP001996-1.

For more information and references see Washington State Department of Health at

<http://www.doh.wa.gov/>

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