

# Asthma

Asthma is a lung disease that inflames and narrows the airways. It causes recurring periods of wheezing, chest tightness, shortness of breath, and coughing. Indoor and outdoor air pollutants, stress, changes in temperature, colds and other infections, and exercise can trigger asthma attacks.

In 2016, 10% ( $\pm <1\%$ ) of Washington adults reported having asthma. Asthma prevalence increased from 1999 to 2010, and has been stable since 2011. The prevalence of current asthma among 10<sup>th</sup> graders was 10% ( $\pm 1\%$ ) in 2016, and has been stable.

Males, Asians, and Hispanics are less likely to have asthma than are other Washingtonians.

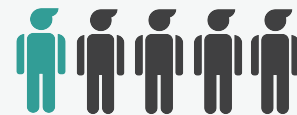
Good asthma care must be coordinated across many areas: healthcare, communities, schools, homes, and worksites. People who have asthma often have other chronic diseases. We know that much of what causes and worsens heart disease, stroke, diabetes, and some cancers also affects asthma. Asthma treatment will be more successful when Washington residents live in environments that make it easier to breathe and live healthy, active lives.

Currently, DOH lacks asthma-specific funding to make statewide policy, environment, and systems changes necessary to adequately and equitably support people with asthma.



**1 in 10**

Washington adults has asthma



**1 in 5**

Washington 10<sup>th</sup> graders has had asthma in their lifetime

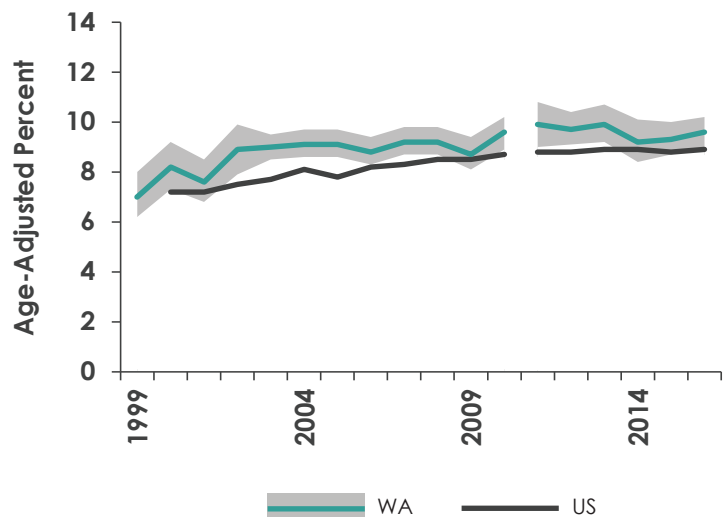


## Adults

### Time Trends

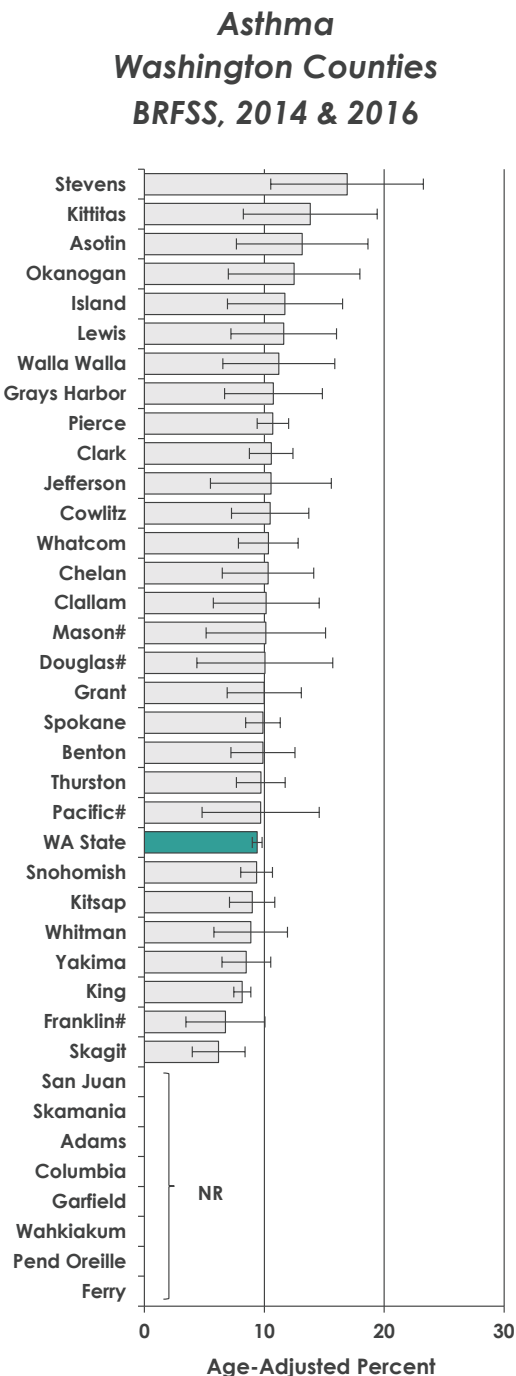
- In the 2016 Behavioral Risk Factor Surveillance System (BRFSS), the prevalence of asthma among Washington State adults was 10% ( $\pm <1\%$ ).
- Washington adults have a similar prevalence of asthma compared to U.S. adults.
- The prevalence of asthma in Washington has been stable from 2011-2016. Previously, it increased from 7% ( $\pm 1\%$ ) in 1999 to 10% ( $\pm <1\%$ ) in 2010.

**Asthma Prevalence  
Washington State & US  
BRFSS, 1999-2016**



# Geographic Variation

There are no counties with adult asthma prevalence that is different than the state prevalence.

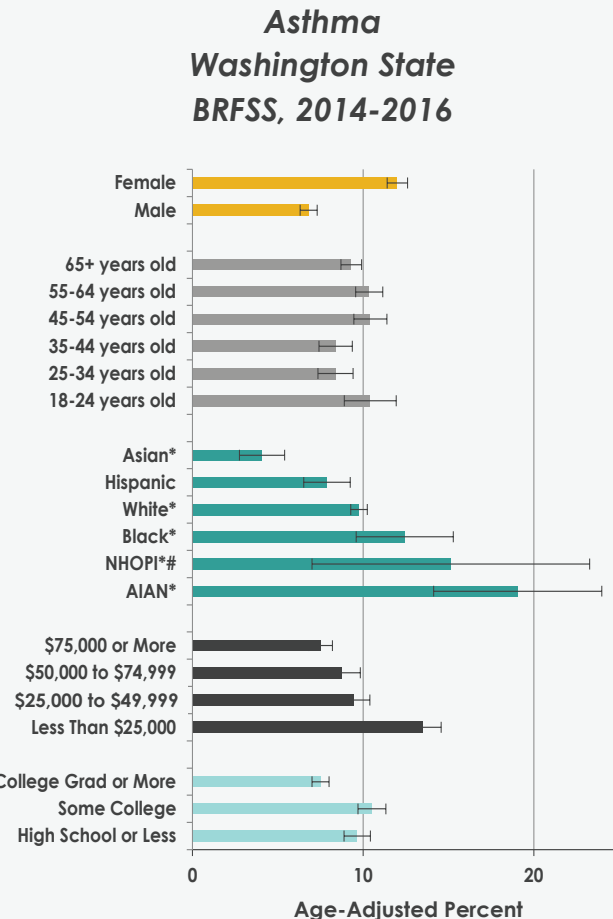


■ WA State       Lower than WA State  
 Same as WA State       Higher than WA State

NR: Not reported if RSE ≥ 30% or to protect privacy  
 #Relative standard error (RSE) is between 25% and 29%

# Disparities

- In the 2014-2016 BRFSS, males had lower asthma prevalence compared to females.
- Asthma prevalence was lower among adults 25-44 years old.
- Non-Hispanic (NH) Asians had the lowest asthma prevalence followed by Hispanics.
- The asthma prevalence among lesbian, gay and bisexual (LGB) adults was higher than the asthma prevalence among heterosexuals, 17% (±3%) vs 9% (±<1%) overall, 23% (±4%) vs 12% (±<1%) among females, and 11% (±4%) vs 7% (±<1%) among males, respectively (data not shown).



\*Non-Hispanic (all races) | AIAN: American Indian/Alaska Native | NHOPI: Native Hawaiian/Other Pacific Islander

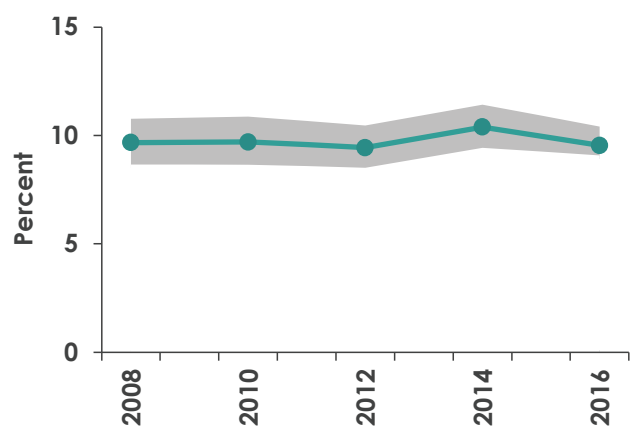


## Youth

### Time Trends

- In the 2016 Washington State Healthy Youth Survey (HYS) among 10<sup>th</sup> graders, the prevalence of lifetime asthma was 21% ( $\pm 1\%$ ), and current asthma was 10% ( $\pm 1\%$ ).
- Washington 10<sup>th</sup> grade students reported a similar prevalence of asthma compared to U.S. 10<sup>th</sup> graders.
- The prevalence of asthma among Washington 10<sup>th</sup> graders has been stable since 2008.

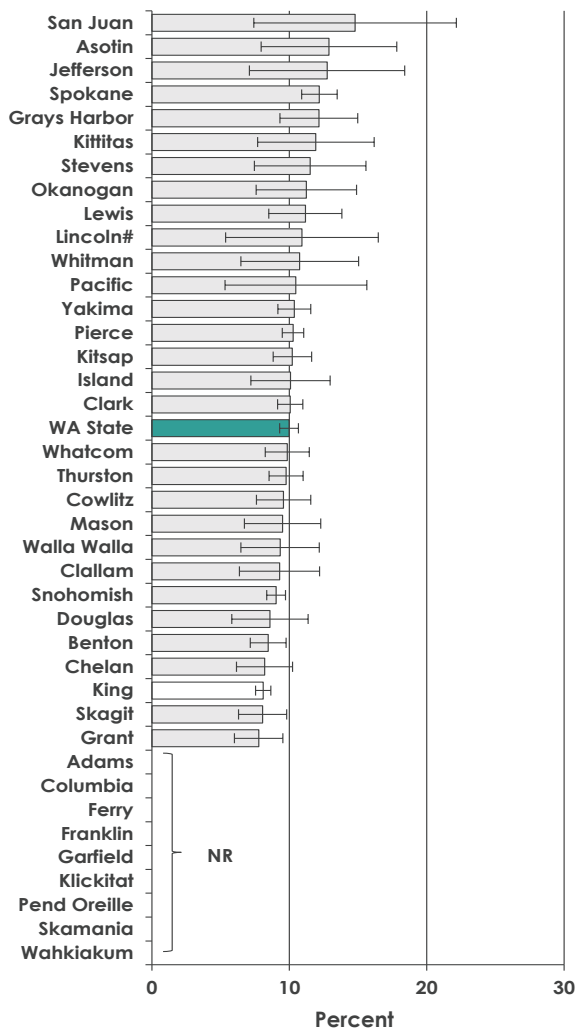
*Current Asthma, 10<sup>th</sup> Graders  
Washington State  
HYS*



# Geographic Variation

- In the combined 2014 & 2016 HYS, King County 10<sup>th</sup> graders had a lower prevalence of asthma compared to 10<sup>th</sup> graders in the state as a whole.
- There were no counties where the prevalence of asthma in 10<sup>th</sup> graders was higher than the prevalence among 10<sup>th</sup> graders in the state as a whole.

**Youth Asthma, 10<sup>th</sup> Graders  
Washington Counties  
HYS, 2014 & 2016**



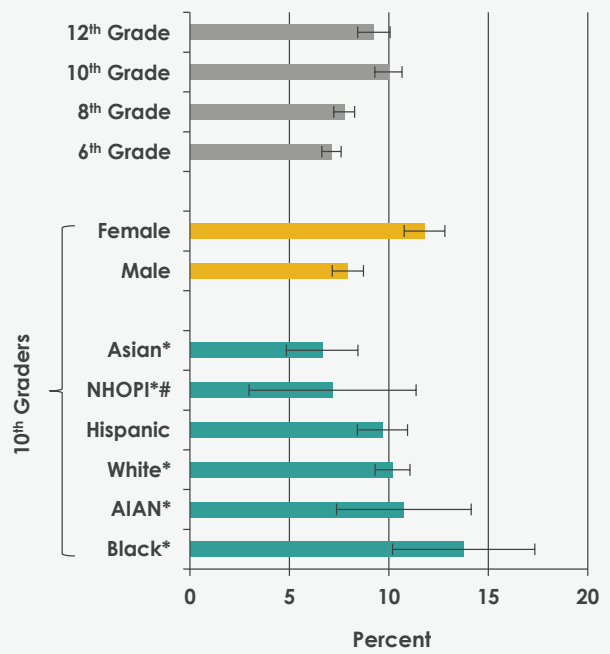
■ WA State      □ Lower than WA State  
□ Same as WA State      ■ Higher than WA State

NR: Not reported if RSE ≥ 30% or to protect privacy  
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# Disparities

- In the combined 2014 & 2016 HYS, asthma prevalence was highest among 10<sup>th</sup> and 12<sup>th</sup> graders.
- Female 10<sup>th</sup> graders had higher asthma prevalence compared to males.
- Black 10<sup>th</sup> graders had the highest asthma prevalence, and Asian students had the lowest.

**Current Asthma  
Washington State  
HYS, 2014 & 2016**



\*Non-Hispanic (all races) | AIAN: American Indian/Alaska Native | NHOPI: Native Hawaiian/Other Pacific Islander

# How is Washington addressing asthma?

In 2016, DOH and partners updated the [Washington State Asthma Plan](#) and agreed that in order to adequately improve the quality of life for people with asthma in Washington, three goals need to be met:

1. All people with asthma in Washington will have access to, and receive, affordable, high-quality care according to national guidelines.
2. All people with asthma in Washington will live in healthy homes and communities to support effective self-management and reduce exposure to asthma triggers.
3. All schools and early learning programs in Washington will be asthma-friendly.

In the absence of a state asthma program at the Department of Health, there continue to be some state-level efforts to work toward these goals. For example, there are three [performance measures](#) included in the [Medicaid Transformation Demonstration](#) that [Accountable Communities of Health](#) can choose to focus on, that would impact people with asthma:

- Medication management for people with asthma (5-64 years)

See also [Outdoor Air Quality](#)

Evidence-based interventions to address asthma are available in the [CDC Community Guide](#).

## Technical Notes

*Confidence Intervals:* Definition and examples are described in [Appendix C](#)

*Current Asthma in Healthy Youth Survey:* defined as those students who reported being told by a doctor or nurse that they had asthma, and that they still have asthma.

*Race and Ethnicity:* Classification described in [Appendix C](#)

- Medication management for people with asthma (5-64 years)
- Outpatient emergency department visits
- Children's and adolescents' access to primary care practitioners

Additionally, in 2015, the Washington State Legislature expanded its investment in healthy, safe, and energy-efficient low-income weatherization to include improvements that help children and adults combat asthma. The initiative is called [Weatherization Plus Health](#). In its pilot phase from 2016 to 2017, \$2.3 million was dedicated to eight grant projects around the state. Pilot projects finished their initial work in June 2017, with program evaluations expected by the end of summer 2018.

Lastly, partners and [local asthma coalitions](#) continue to invest their own resources into activities such as:

- Providing direct services for people with asthma in their communities
- Piloting innovative and collaborative programs to help reduce the burden of asthma
- Testing new payment models
- Working together to ensure quality asthma care is accessible and equitable statewide.