



Tobacco-Related Disparities in Washington State

Tobacco is a Health Equity Problem

Tobacco use remains a leading cause of preventable death and disease in Washington state. It is associated with six of the top 10 leading causes of death highlighted below and more than 8,700 people die from tobacco use and/or exposure to secondhand smoke each year. Statewide, about 15% of adults were current cigarette smokers in 2014 and about 100,000 Washington state youth are projected to die from their own smoking.ⁱ

The top 10 leading causes of death for Washington state residents, 2014

1. Cancer
2. Heart disease
3. Alzheimer's disease
4. Unintentional injury
5. Chronic lower respiratory disease
6. Cerebrovascular disease
7. Diabetes
8. Suicide
9. Chronic liver diseases
10. Influenza and pneumonia

Since the implementation of the Tobacco Prevention and Control Program (TPCP) in 1999, Washington state has seen significant overall declines in tobacco use and increasing public awareness of the harmful effects of smoking. However, 16 years later, disproportionately high rates of smoking persist in certain populations. For example, one-in-four adults with an annual household income less than \$35,000 smoke cigarettes, while only about one-in-12 adults in households making \$75,000 or more smoke. Lower income households also have a higher prevalence of secondhand smoke exposure, may have less access to resources to help them quit, and may have more tobacco marketing in their neighborhood than higher income households.

These differences are reflected in tobacco-related health disparities, which occur when communities, groups, and individuals have “worse” health outcomes compared to the rest of the population. Often, disparities occur in groups identified by race or ethnicity, sex, sexual orientation or identity, age, disability, socioeconomic status, or geographic location.

HEALTH EQUITY exists when all people have the opportunity to attain their full health potential.

HEALTH DISPARITIES develop when economic, social, or environmental conditions prevent a person from meeting their full health potential.



To eliminate tobacco-related disparities, we need to ensure that all people benefit from appropriate tobacco control policies and programs and receive appropriate resources to build and strengthen their communities. Eliminating health disparities benefits everyone. The state Medicaid program currently pays more than \$780 million per year in smoking-related healthcare costs. State and local efforts to achieve health equity and eliminate tobacco-related disparities will reduce the overall rate of tobacco use in Washington state and subsequently reduce the statewide economic burden.

Tobacco Prevention Can Reduce Chronic Disease Disparities

The Surgeon General’s 2014 report, *The Health Consequences of Smoking – 50 Years of Progress*, provides several updates on the diseases caused by smoking, as well as the total burden of these diseases that is attributable to cigarette smoking (Table 1).

Some of these diseases and conditions identified in Table 1 are more common in certain groups in Washington state, thus increasing the health disparity of tobacco-related harms. For example:

- **Black/African American** adults have a significantly higher rate of diabetes compared with non-Hispanic White adults.¹
- **American Indian/Alaska Native** adults have significantly higher rates of respiratory cancer,² heart disease and diabetes compared with non-Hispanic White adults.¹
- **Low-Income**³ adults have significantly higher rates of heart disease, diabetes and asthma compared to adults with higher income.¹
- **Lesbian, Gay and Bisexual** adults have a higher prevalence of asthma than heterosexual adults.¹
- **Native Hawaiian and Pacific Islander** adults have a significantly higher prevalence of diabetes compared with non-Hispanic White adults.¹

TABLE 1: Smoking attributable causes of death

Lung cancer
Other cancers including cancers of the lip, pharynx and oral cavity, esophagus, stomach, pancreas, larynx, cervix uteri, kidney and renal pelvis, bladder, liver, colon and rectum, and acute myeloid leukemia
Coronary heart disease
Other heart disease including rheumatic heart disease, pulmonary heart disease, and other forms of heart disease
Cerebrovascular disease
Other vascular diseases including atherosclerosis, aortic aneurysm, and other arterial diseases
Diabetes mellitus
Pneumonia, influenza, and tuberculosis
Chronic obstructive pulmonary disease (COPD)
Prenatal conditions (e.g., acute vascular disorders of intestine, respiratory distress syndrome, and low birth weight)
Sudden infant death syndrome (SIDS)
Residential fires

¹ 2012-2014 Washington State Behavioral Risk Factor Surveillance System, age-standardized prevalence

² 2011-2012 Washington State Cancer Registry, age-standardized incidence

³ Adults with an annual household income less than \$35,000 compared to adults with an annual household income more than \$75,000



Tobacco Use Prevalence and Harm Is Hidden By Lack of Data

A lack of data does not mean that disparities do not exist. Some limitations of general population surveys and risk factor surveillance systems include:

- **Exclusion of specific groups of people**, including people who do not speak English or Spanish, youth who are not enrolled in public schools, or people who do not feel comfortable taking government-sponsored surveys.
- **Small communities** that do not have enough people included in health surveys to provide reliable results. The surveys are intended to represent the state, which is primarily non-Hispanic White (80% in 2014). The sampling strategy results in relatively small numbers of responses for other race/ethnic groups and imprecise estimates (e.g., Native Hawaiian or other Pacific Islander), which can make it difficult to assess disparities across these racial and ethnic groups.
- **Grouping of diverse populations** in a way that masks important differences in some groups (e.g., Asian Americans). For example, these systems do not consistently assess racial and ethnic origin sub-groups, such as Cambodian Asian or Mexican Hispanic, which could reveal additional disparities.
- **Reliance on self-reported data** which may be influenced by poor recall or social pressure to not report unhealthy behaviors.

An example of the disparities not captured by general population surveys includes high smoking rates among Asian American communities. Although Washington state data shows that Asian Americans have a lower prevalence of smoking (9.7%) than non-Hispanic Whites, disaggregated data collected in-language for the National Latino and Asian American Study show that approximately one-in-three (more than 30%) Vietnamese and Korean men in the United States smoke. Furthermore, community-based studies conducted in Asian languages show high smoking prevalence rates among Cambodian, Chinese, Korean, Lao, and Vietnamese men. Data taken from the National Survey on Drug Use and Health, 2002-2005, also shows that the prevalence of cigarette smoking among Asian American adults, 18 years and older, varies considerably by sub-groups (APPEAL, 2013).

The Asian and Pacific Islander communities have been strong supporters of appropriate strategies to collect data to accurately represent their communities, including disaggregating data by ethnicity and gender, and using in-language methods. The Washington State Department of Health recently solicited and received feedback from community partners on potential improvements to the 2016 Behavioral Risk Factor Surveillance System (BRFSS) and Healthy Youth Survey (HYS) and is assessing the feasibility of including questions on Asian ethnic origin in both of these surveys.

Data monitoring is also a critical issue for LGBT communities. LGBT communities are sometimes left out of critical surveillance at the national, state, and local levels, and LGBT questions are not routinely included in demographic sections of health monitoring and evaluation surveys.^{vi} However, in 2014, Washington state's HYS added sexual orientation as a demographic variable.



What Do Tobacco-Related Disparities Look Like In Washington State?

To describe disparities among youth, we present data from the 2014 Washington State Healthy Youth Survey. For adults, we present data from the 2012-2014 Behavioral Risk Factor Surveillance System (BRFSS).

YOUTH

Healthy Youth Survey (HYS): The Healthy Youth Survey is a school-based paper-and-pencil survey of students in grades 6, 8, 10, and 12 that is conducted every two years in Washington state.

The prevalence of past 30-day cigarette smoking among 10th grade students fell from 10% in 2012 to 8% in 2014. Similarly, the prevalence of secondhand smoke exposure in a room among 10th grade students fell from 34% in 2012 to 28% in 2014.

As reflected in Figures 1 and 2, disparities still exist. American Indian or Alaska Native youth have a higher prevalence of smoking and a higher prevalence of exposure to secondhand smoke than the state average (indicated by the dotted line). Likewise, a higher prevalence of smoking and exposure to secondhand smoke exists among students with lower grades (C's, D's, and F's), students that experienced harassment (in general or because of their perceived sexual orientation), and students who speak Russian or Ukrainian at home.

FIGURE 1: Disparities in current cigarette smoking among 10th grade youth in Washington state (2014)

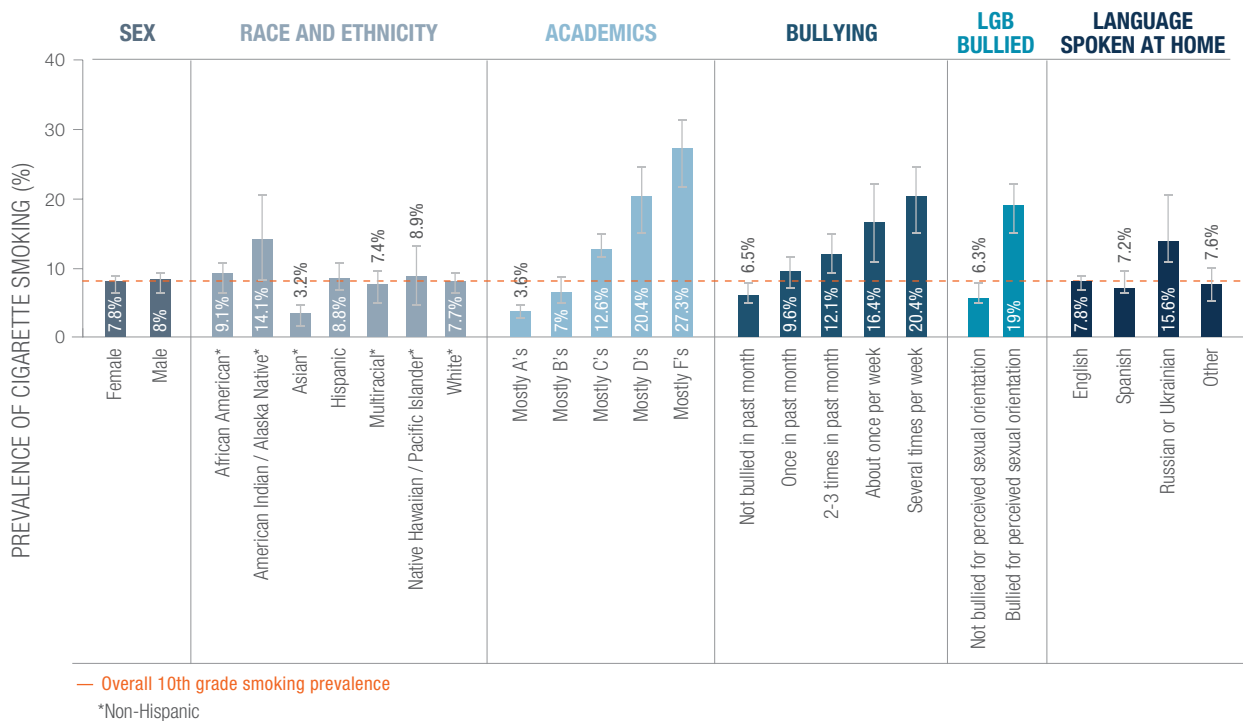




FIGURE 2: Disparities in exposure to secondhand smoke (SHS) among 10th grade youth in Washington state (2014)



Alternative Forms of Tobacco Use

With nearly 9 out of 10 smokers starting before age 18, tobacco policies and programs must adapt to new products introduced to the market and target interventions to prevent youth initiation.

E-Cigarettes and Hookah

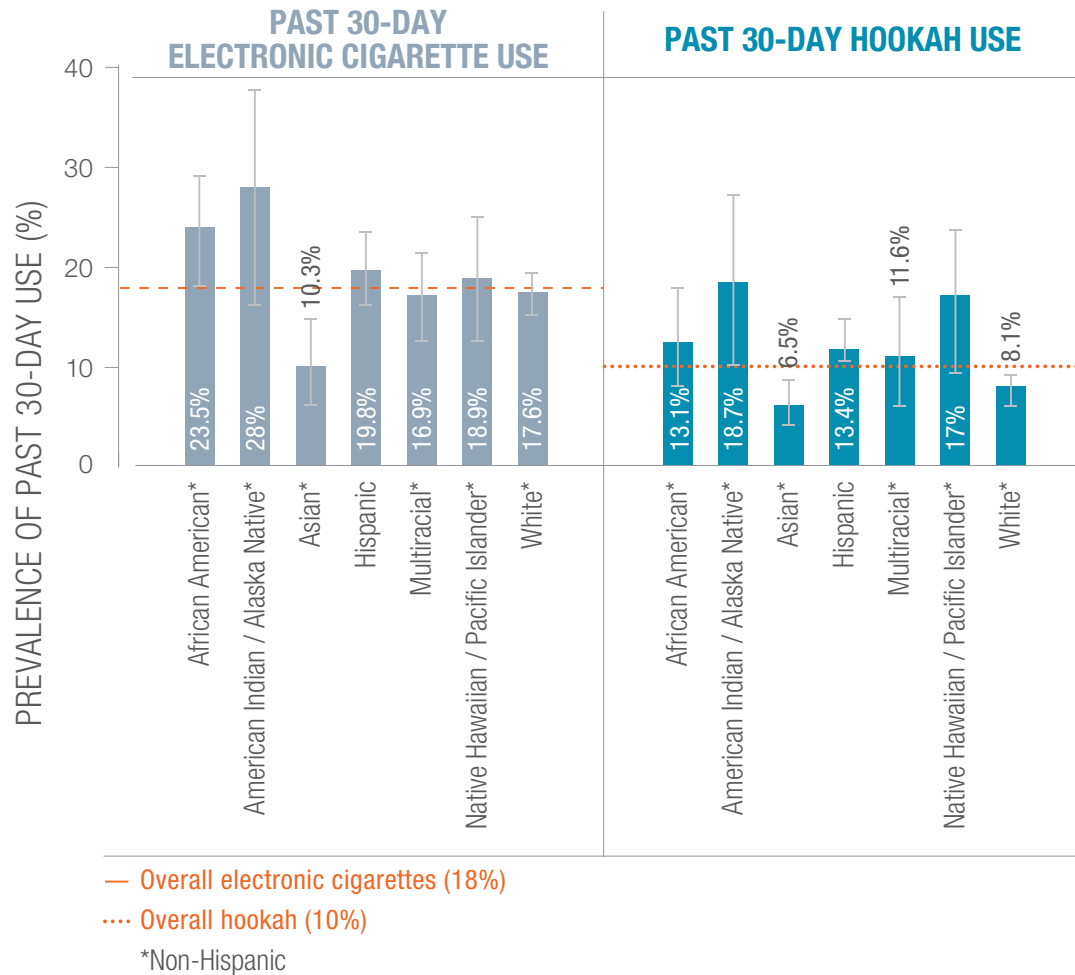
Among 10th grade students, the overall prevalence of using hookah in the past 30 days was 10.0% and the prevalence of using electronic cigarettes was 18.0%. The use of alternative tobacco products such as these (Figure 3) demonstrates disparities similar to those seen with cigarette smoking. American Indian or Alaska Native youth have the highest prevalence of electronic cigarette and hookah use while Asian youth report the lowest prevalence.

Overall Tobacco Use Remains High

A recent report from the Centers for Disease Control and Prevention (CDC) indicates recent national increases in hookah and electronic cigarette use are canceling out reductions in cigarette smoking, resulting in stagnant or even increasing rates of youth tobacco use.^x



FIGURE 3: Racial and ethnic disparities in past 30-day hookah and electronic cigarette use among 10th grade youth, Washington state (2014)



Menthol

According to the U.S. Food and Drug Administration, menthol cigarettes - the only flavored cigarette not banned nationwide - increase smoking initiation among youth, progression to regular smoking and reduced success in smoking cessation. Furthermore, marketing has been used to drive menthol preference in urban African American communities.ⁱⁱ

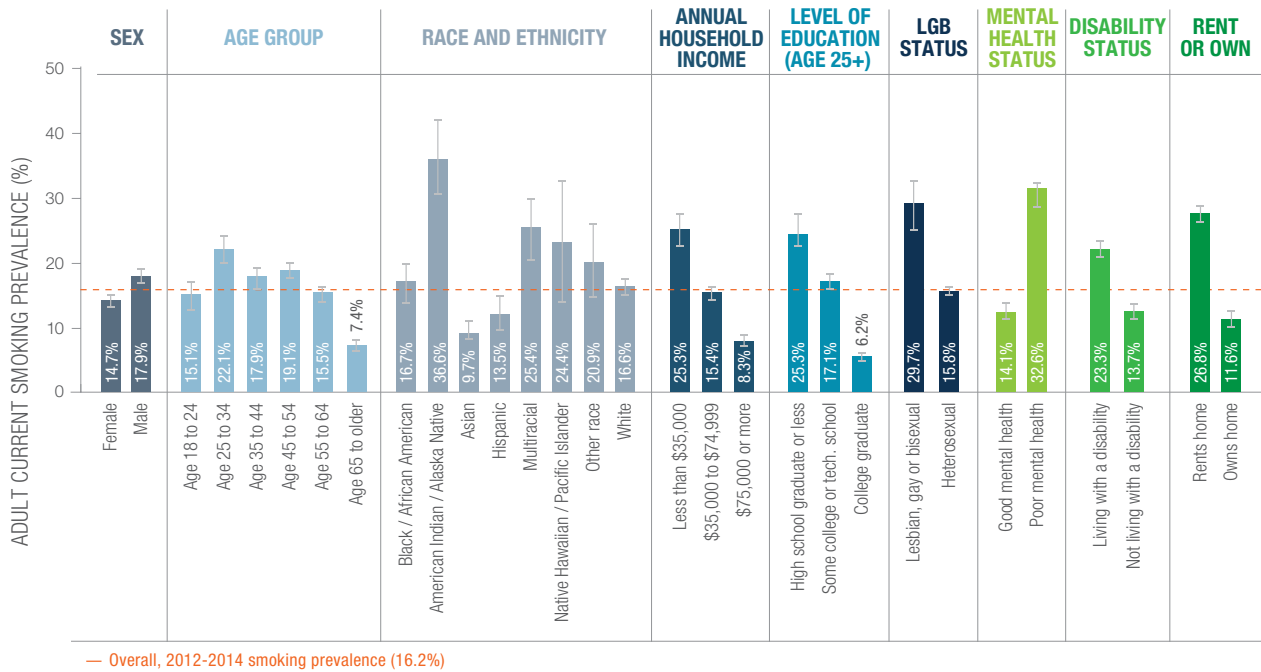
ADULTS

Behavioral Risk Factor Surveillance System (BRFSS): The Washington state BRFSS is an annual phone survey of non-institutionalized adults.

Although some groups make up a relatively small proportion of the state population, they account for a disproportionate part of Washington state’s “smoker population.” Figure 4 shows that American Indian/Alaskan Natives have a higher prevalence of smoking than non-Hispanic Whites, and highlights additional smoking disparities in the state by education, income, sexual orientation, living arrangements, mental health and disability status.



FIGURE 4: Disparities in current cigarette smoking among adults in Washington State (2012-2014)



Disparities in smoking mean that even small populations have thousands of people at risk as shown in Table 2. **In addition to the race and ethnicities represented in the table, 64,850 LGBT Washington state adults smoke cigarettes.**^{iii*}

TABLE 2: Cigarette smoking and population size among adults in Washington state by race and ethnicity (2012-2014)

Adult Population (WA OFM, 2014)	Percent of total*	Cigarette smoking prevalence (BRFSS 2012-2014)	Estimated number of adult smokers (percent of total**)
Washington State Adults	100%	16.2%	884,000 (100%)
Hispanic Adults	12%	13.5%	88,000 (10.0%)
Black/African American (non-Hisp.)	3.5%	16.7%	32,000 (3.6%)
American Indian/Alaska Native (non-Hisp.)	1.3%	36.6%	26,000 (2.9%)
Asian (non-Hisp.)	7.4%	9.7%	39,000 (4.4%)
Native Hawaiian/Pacific Islander (non-Hisp.)	0.6%	24.4%	8,000 (0.9%)
Two or more races (non-Hisp.)	3.9%	25.4%	54,000 (6.1%)
White (non-Hisp.)	70.0%	16.6%	634,314 (71.7%)

*N=5,458,809 adults
**N=884,000



Unknowns

The Washington state BRFSS consistently indicated that Black or African American adults had a higher prevalence of smoking than White adults between 2003 and 2010. In 2011, the Centers for Disease Control and Prevention made major changes to the BRFSS sampling and data processing methodology, making newer results incomparable to older results.^{iv} Since 2011, BRFSS has not indicated a disparity in adult smoking prevalence between Black or African American adults and White adults. It is unknown at this time whether this is because smoking prevalence in these two race groups changed or the lack of a difference is because of the change in methodology. The lack of a difference in smoking prevalence between Black or African American and White adults is consistent, however, with the youth results presented here and recent national estimates from a separate risk behavior surveillance system.^v

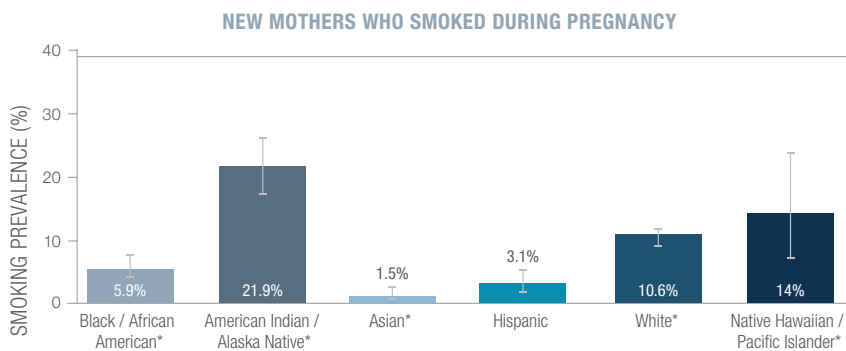
Quit Attempts

In Washington state, about 59% of adults who smoke made a quit attempt in the previous year. The prevalence of current smokers having made a quit attempt in the past year does not vary across population groups the way cigarette smoking does. The prevalence of making a quit attempt did not vary by race/ethnicity, annual household income, level of education, or sexual orientation (WA BRFSS, 2012-2014).

Pregnancy Risk Assessment Monitoring System (PRAMS): The Washington state PRAMS assesses women who recently gave birth using both phone and mail surveys. Recent mothers are asked about how many cigarettes they smoked on an average day before becoming pregnant, in the last three months of pregnancy and current usage.

Recent mothers who identify as American Indian or Alaska Native have the highest prevalence of smoking followed by Native Hawaiian or other Pacific Islanders. However, small sample sizes make it difficult to compare groups.

FIGURE 5: Smoking prevalence among pregnant women



Related Issues

Tobacco use is often related to other problems such as substance use and behavioral health problems. Interventions to address tobacco use among adults or youth should consider that some people affected by tobacco use are also struggling with substance use or mental health problems and plan interventions that address or account for these other issues.



Certain Communities Suffer Disproportionately from Tobacco Retail Outlets and Advertising

When communities are densely populated with tobacco retailers, increased access to tobacco products and environmental cues may promote smoking. Research shows that young people who are exposed to tobacco advertising or live in areas with high retailer density, or both, are more likely to smoke.^{vii} Furthermore, communities that allow the sale of cigarettes and other tobacco products near schools have higher rates of youth tobacco use than communities that have tobacco free zones around schools.^{viii}

The geographic distribution of retailers within Washington is strongly associated with the highway system. In 2014, 98% of tobacco retailers were within 2,000 feet of a Washington state highway and 50% were within 900 feet. Most gas stations also sell tobacco products.

A previous review of tobacco retailer density in Washington state found that some communities with higher percentages of minority and low-income populations have higher tobacco retailer density. For example, there are more tobacco retailers per capita in census tracts with a higher percentage of low-income individuals than the state average and the density of retailers decreases as the percent of the population living in poverty decreases.

There were also more tobacco retailers per capita in census tracts with higher percentages of people who lack a high school education, are Black or African American, are American Indian or Alaska Native, or are Hispanic/Latino.^{ix}

Despite Progress - We Need To Do More

Everyone - whether policymakers, community leaders, or public health professionals - has a role to play in eliminating tobacco-related disease, disability, and death. Good work is in progress, but despite efforts, tobacco-related disparities persist. However, we know what works to prevent and eliminate tobacco-related disease and disparities moving forward.

- **Comprehensive programs:** Research shows that the more money states invest in comprehensive tobacco prevention and control programs, the greater the reductions in smoking. The longer states invest, the greater the impact. Implementing and sustaining a comprehensive program requires political will and commitment, and funding.
- **Funded community partnerships:** Greater attention must be provided to populations carrying a disproportionate burden related to tobacco use by creating and sustaining funded community partnerships.
- **Public policies:** Public policies should be advanced to reduce exposure to targeted tobacco industry advertising, restrict youth access, and create and expand smoke-free places.
- **Media campaigns:** Strategic, culturally appropriate, targeted and mass media campaigns should be implemented.
- **Cessation resources:** Adequate and appropriate cessation resources should be provided.
- **Data and evaluation:** Data and evaluation systems should be enhanced to ensure the disaggregation of subpopulation data and the evaluation of culturally appropriate interventions.

The mission is to achieve a tobacco-free, healthy, and fit society to be able to flourish in the 21st century...Enough is enough.

—Remarks from Acting Surgeon General RADM Boris Lushniak, January 17, 2014



Communities Addressing Disparities

Addressing a pervasive issue like tobacco requires community mobilization, involvement, and support. Among other state-led interventions, the TPCP funds community and Tribal/Urban Indian organizations that reach populations experiencing tobacco-related disparities. The following community organizations are helping reduce tobacco disparities statewide:

- **American Indian Health Commission for Washington State**
Jan Olmstead, Lead Public Health Consultant
janolmstead@gmail.com
- **Asian Pacific Islander Coalition Advocating Together for Healthy Communities**
Elaine Ishihara, Executive Director
e.ishihara@comcast.net
- **Center for MultiCultural Health**
Janelle Okorogu, Project Coordinator
janelle@cschc.org
- **El Centro de la Raza**
Rocio G. Martinez, Smoking Cessation and Tobacco Prevention Coordinator
rmartinez@elcentrodelaraza.org
- **Gay City Health Project**
Fred Swanson, Executive Director
fred@gaycity.org

For More Information, Contact

Frances Limtiaco, Washington State Department of Health, Frances.Limtiaco@doh.wa.gov

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).

-
- i Campaign for Tobacco Free Kids. (September 25, 2015). Toll of Tobacco in United States: The Toll of Tobacco in Washington. http://www.tobaccofreekids.org/facts_issues/toll_us/washington
 - ii Food and Drug Administration. Preliminary scientific evaluation of the possible public health effects on menthol versus nonmenthol cigarettes.
 - iii Gallup, "State of the States" series, June to December 2012, <http://www.gallup.com/poll/160517/lgbt-percentage-highest-lowest-north-dakota.aspx>.
 - iv Centers for Disease Control and Prevention (CDC). Methodologic changes in the Behavioral Risk Factor Surveillance System in 2011 and potential effects on prevalence estimates. MMWR Morb Mortal Wkly Rep. 2012 Jun 8;61(22):410-3. Available from: <http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html>. Accessed November 4, 2015.
 - v Jamal A, Agaku IT, O'Connor E, King BA, Kenemer JB, Neff L. Current cigarette smoking among adults--United States, 2005-2013. MMWR Morb Mortal Wkly Rep. 2014 Nov 28;63(47):1108-12. PubMed PMID: 25426653.
 - vi Network for LGBT Health Equity, The Fenway Institute. *MPOWERED: Best and Promising Practices for LGBT Tobacco Prevention and Control*; August 2012.
 - vii US Department of Health and Human Services. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA. US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health; 2012.
 - viii Center for Public Health Systems Science. Point-of-Sale Strategies: A Tobacco Control Guide. St. Louis: Center for Public Health Systems Science, George Warren Brown School of Social Work at Washington University in St. Louis and the Tobacco Control Consortium; 2014
 - ix Washington State Department of Health. Tobacco-related disparities in Washington State. 2014.
 - x Arrazola, R. A., Singh, T., Corey, C. G., Husten, C. G., Neff, L. J., Apelberg, B. J., ... & Caraballo, R. S. (2015). Tobacco use among middle and high school students—United States, 2011-2014. MMWR Morb Mortal Wkly Rep, 64(14), 381-5.



DOH 340-240 Dec. 2015