

# Oregon Tobacco Prevention and Education Program Latino(a) Data Report – 2007

According to the 2005 U.S. Census of Oregon’s 3.6 million inhabitants, 9.9 percent (353,433 individuals) identified themselves as Latino(a). Forty-three percent of individuals identifying as Latino live in the tri-county area comprising the Portland metropolitan area (Multnomah, Clackamas and Washington Counties).

## Tobacco’s annual toll on the Latino population in Oregon

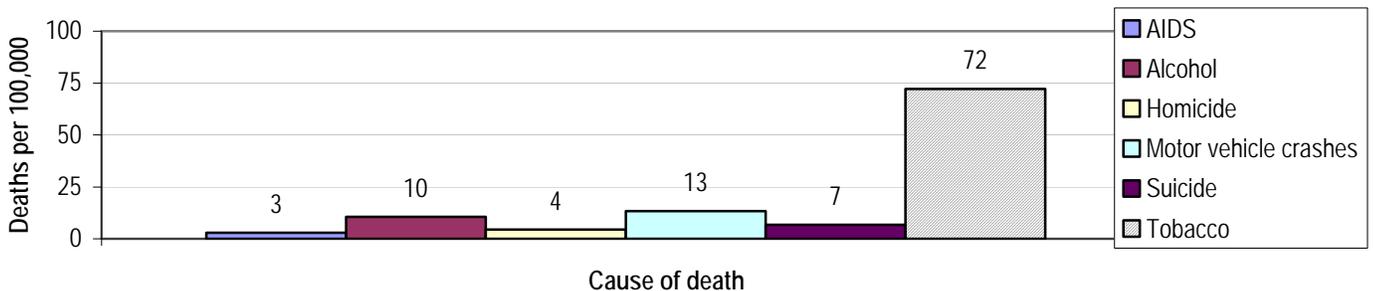
**50 Latinos(as)** die from tobacco use.

**977 Latinos(as)** suffer from a serious illness caused by tobacco use.

**\$7.9 million** is spent on medical care for Latinos(as) for tobacco-related illnesses.

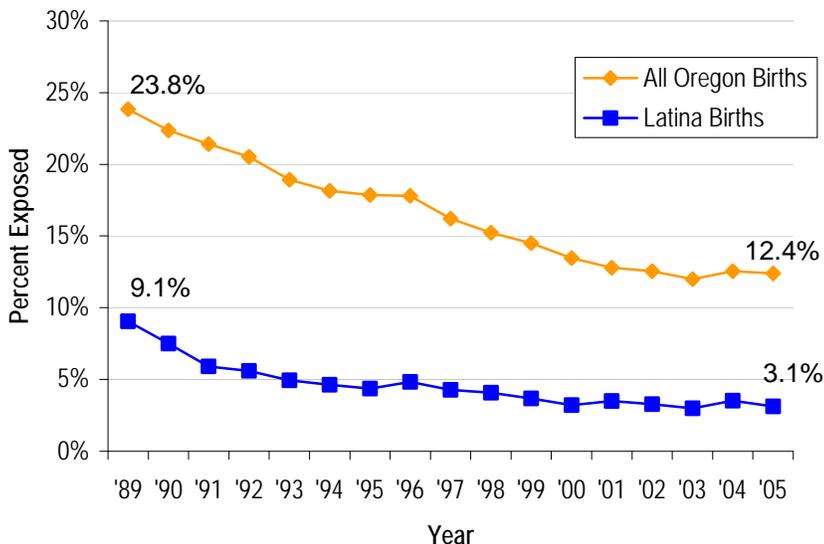
**\$7.9 million** in productivity is lost due to tobacco-related deaths.

Figure 1. Selected causes of death among Oregon Latinos, 2000-2004



Death among Oregon Latinos is 5 to 25 times more likely to be due to tobacco than due to AIDS, alcohol, homicide, motor vehicle accidents, and suicide.

Figure 2. Infants born to women who smoked during pregnancy, 1989 - 2005



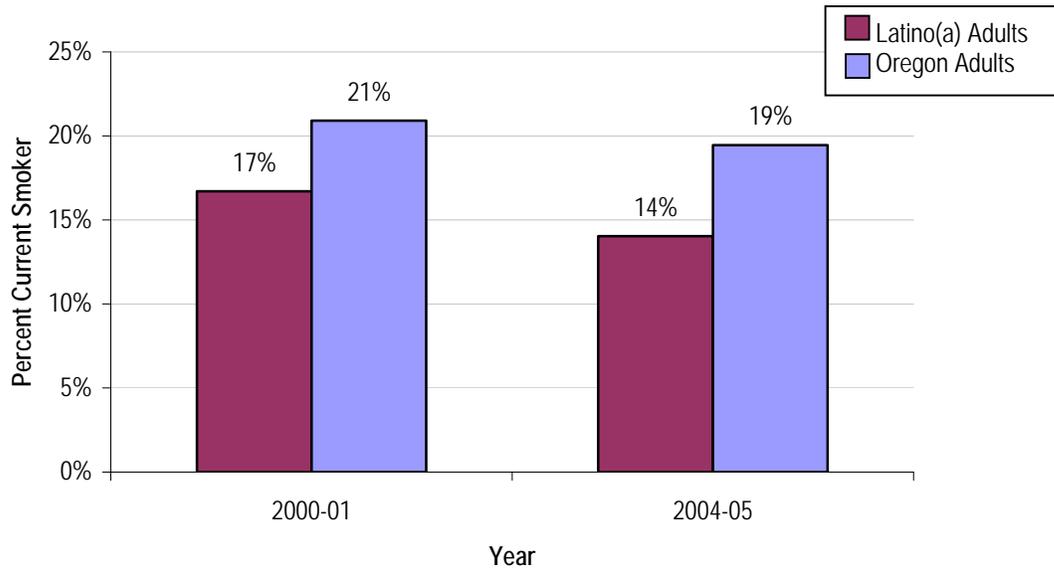
A lower percentage of the babies born to Latina mothers were exposed to their mother’s cigarette smoking during the prenatal period in 2005 (3.1 percent) than in 1989 (9.1 percent).

*The risk for perinatal mortality, both stillbirths and neonatal deaths, and the risk for sudden infant death syndrome (SIDS) are higher for the offspring of women who smoke during pregnancy.*

- 2001 Surgeon General’s Report<sup>i</sup>

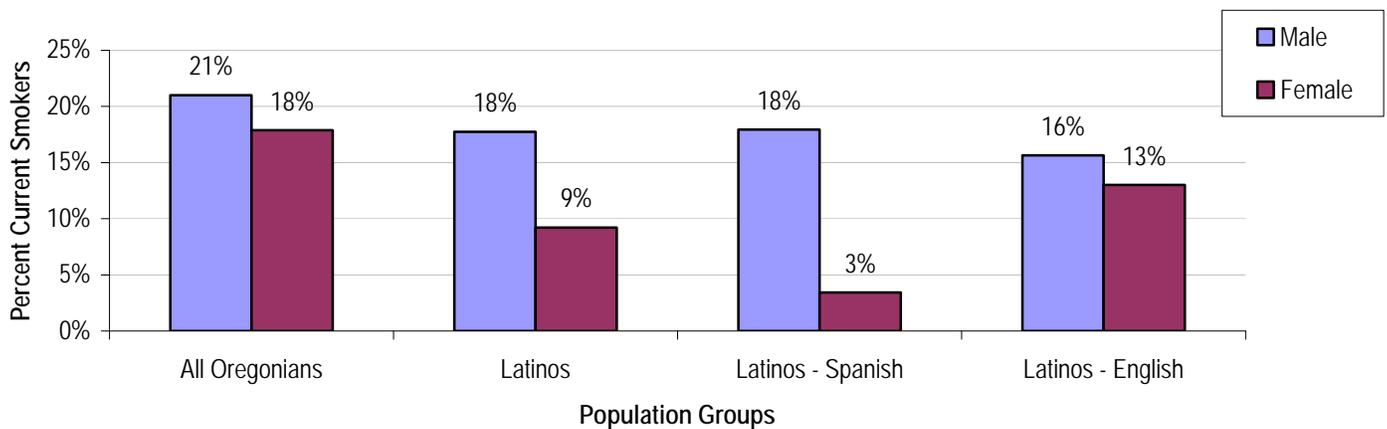
## Adult smoking

Figure 3. Smoking prevalence among Oregon adults, 2000-01 and 2004-05



The prevalence of smoking among Latino(a) adults has decreased since 2000-2001. The 2004-2005 overall smoking prevalence (14 percent) is lower than that of the overall population in Oregon (19 percent). While overall estimates are helpful in understanding tobacco use among Latino(a) adults, it is important to look at subpopulations: male and female, as well as English and Spanish as a primary language (Figure 4).

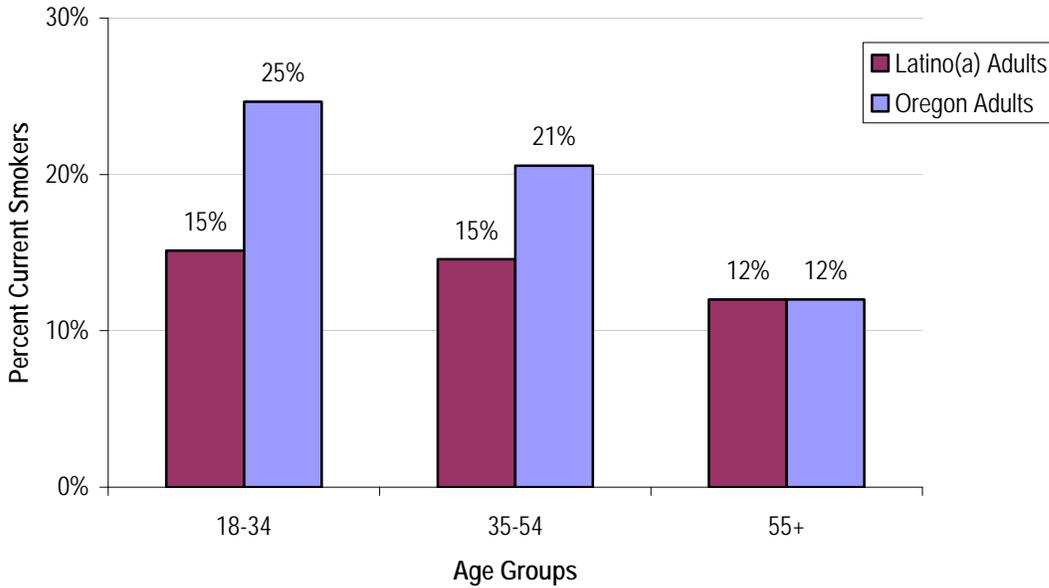
Figure 4. Smoking prevalence among Oregon adults by sex and language preference, 2004-2005



Gender plays an important role in smoking patterns within the Latino community. While Latino male prevalence does not vary greatly between subcategories, Latina women who answered the survey\* in English are four times as likely to smoke as women who prefer answering questions in Spanish.

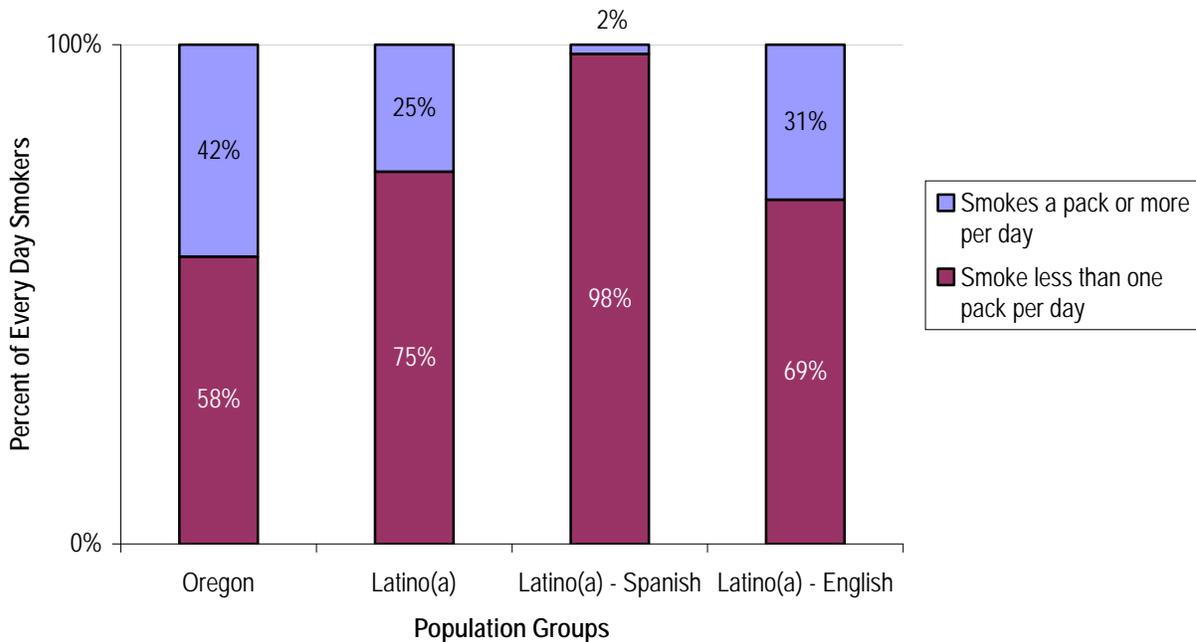
\* The Behavioral Risk Factor Surveillance System (BRFSS) is a population-based telephone survey offered in Spanish and English.

Figure 5. Smoking prevalence among Oregon adults by age, 2004-2005



Unlike to overall Oregon population, smoking among Latino adults does not dramatically decrease with age. However, adults 55 years and older have the lowest prevalence of smoking (12 percent for both Latinos and the overall Oregon population).

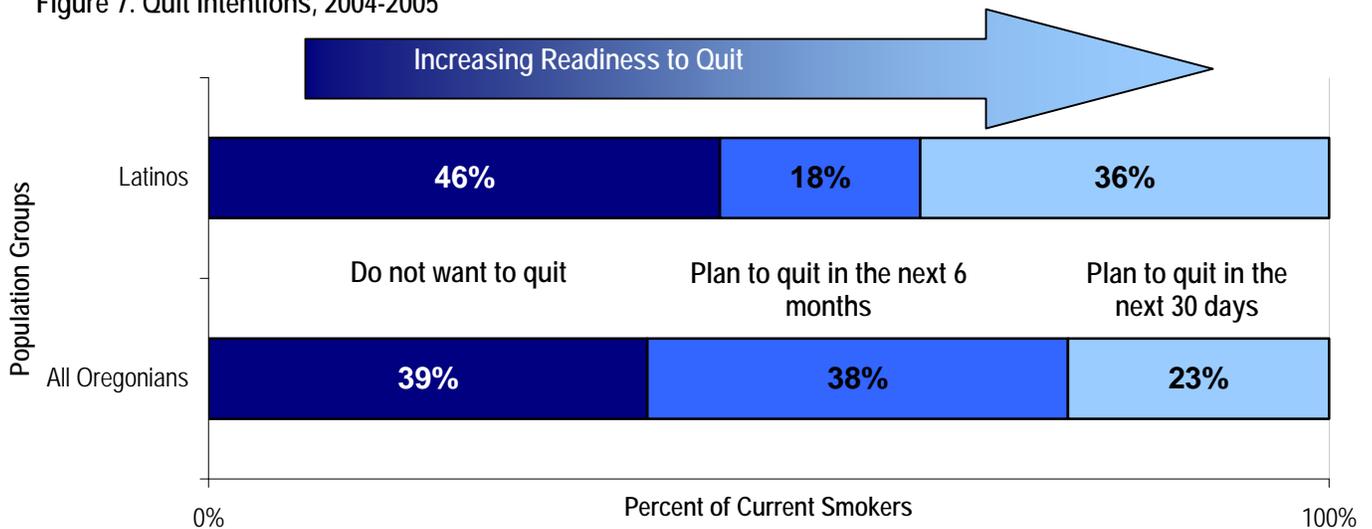
Figure 6. Cigarette Consumption Patterns Among Every Day Smokers, 2004-2005



Most Latino smokers smoke less than one pack of cigarettes a day. Less than two percent of Spanish speaking Latino(a) smokers smoke a pack or more per day, compared with 31 percent of English-speaking Latino(a) smokers.

## Adult quitting

Figure 7. Quit Intentions, 2004-2005



The figure above shows readiness to quit using the categories of the Transtheoretical Model.<sup>ii</sup> According to this model, smokers who do not want to quit are in the pre-contemplation phase. Those planning to quit in the next six months are contemplating, while those planning to quit in the next 30 days are in the preparation stage of change.

Quitting smoking is a complicated, nonlinear process for many people. A person often plans to quit, and then may quit for some period of time, before relapsing and starting the process again. The diagram above includes those who have relapsed, as well as those who have yet to attempt to quit smoking. The average person attempts to quit smoking two to three times before achieving lasting success.<sup>iii</sup>

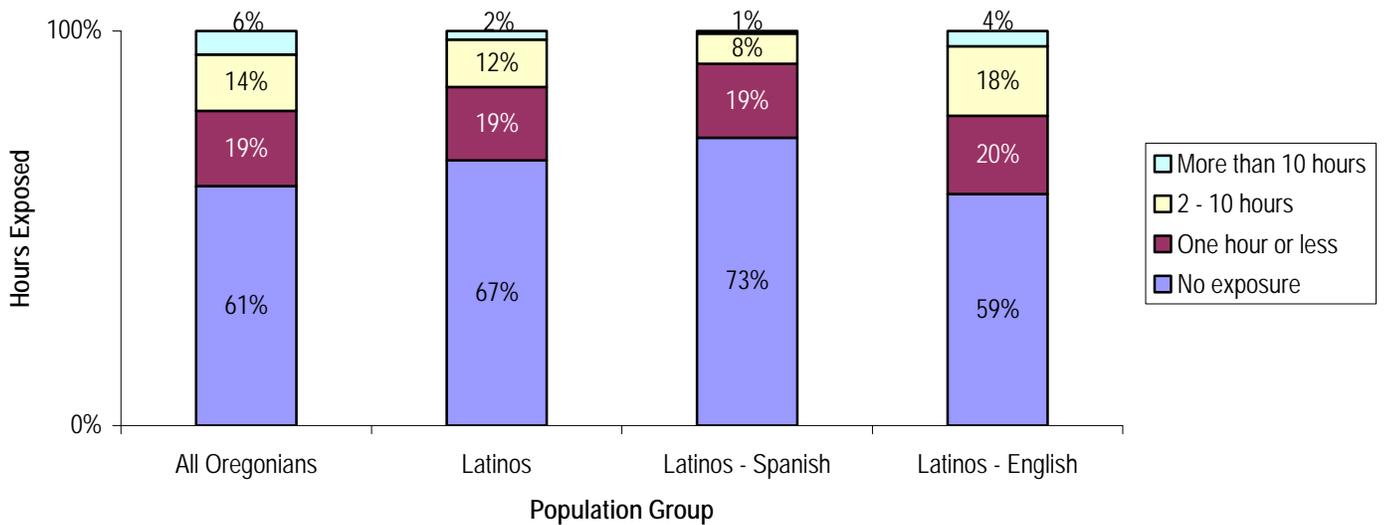
Compared with the overall Oregon population, Latino(a) smokers seem more likely to be in either the pre-contemplation (“Do not want to quit”) or in the preparation phase (“Plan to quit in the next 30 days”). However, fewer Latino(a) smokers appear to be contemplating quitting, which could be the result of less social pressure to quit among the Latino(a) community.

*1.6 percent of adult Latino(a) smokers called the Oregon Quit Line in 2004-2005 as compared with 1.5 percent of all Oregon smokers.*

## Adult exposure to secondhand smoke

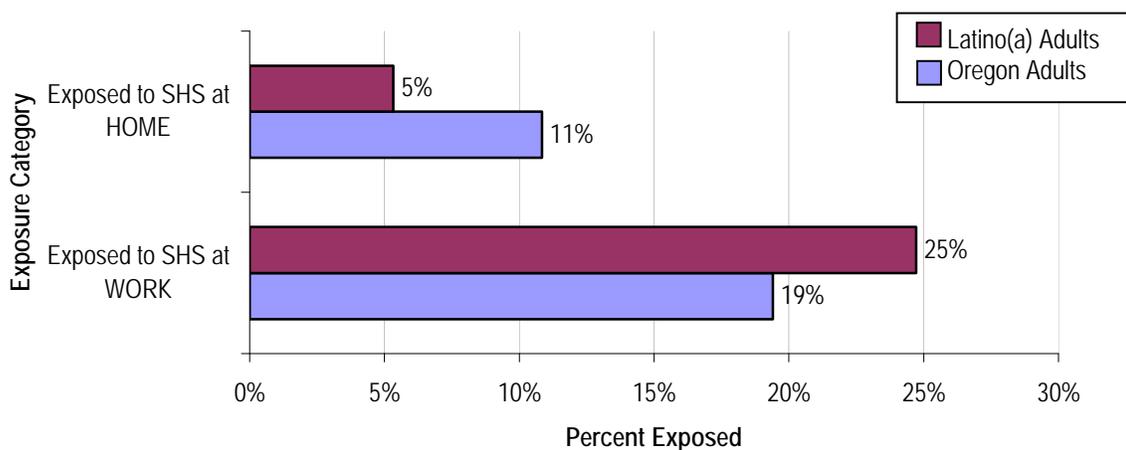
According to the 2006 Surgeon General’s Report – *The Health Consequences of Involuntary Exposure to Tobacco Smoke* – “There is no risk-free level of exposure to secondhand smoke: even small amounts of secondhand smoke exposure can be harmful to people’s health.”<sup>iv</sup>

Figure 8. Hours of secondhand smoke exposure from all sources during a typical week, 2004-2005



Latinos in Oregon are less likely to be exposed to secondhand smoke during a typical week than overall Oregon adults. However, English-speaking Latinos are exposed to more hours of secondhand smoke than the overall population in Oregon, which may be related to greater workplace exposure. Figure 9 demonstrates that Latinos are more likely to be exposed at work than the overall population in Oregon.

Figure 9. Secondhand smoke (SHS) exposure during the last 30 days by source of exposure, 2004-2005

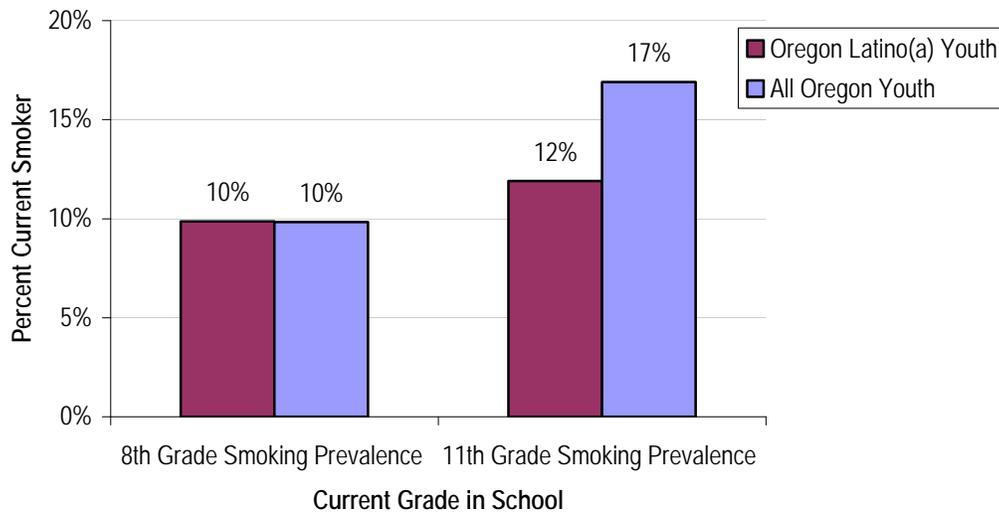


*Nonsmokers exposed to secondhand smoke at home or work increase their risk of developing heart disease by 25 to 30 percent and lung cancer by 20 to 30 percent.*<sup>iv</sup>

## Youth smoking

As compared with the overall Oregon population, smoking prevalence among Latino youth remains low after the 8<sup>th</sup> grade and into adulthood.

Figure 10. Smoking prevalence among Oregon youth, 2005

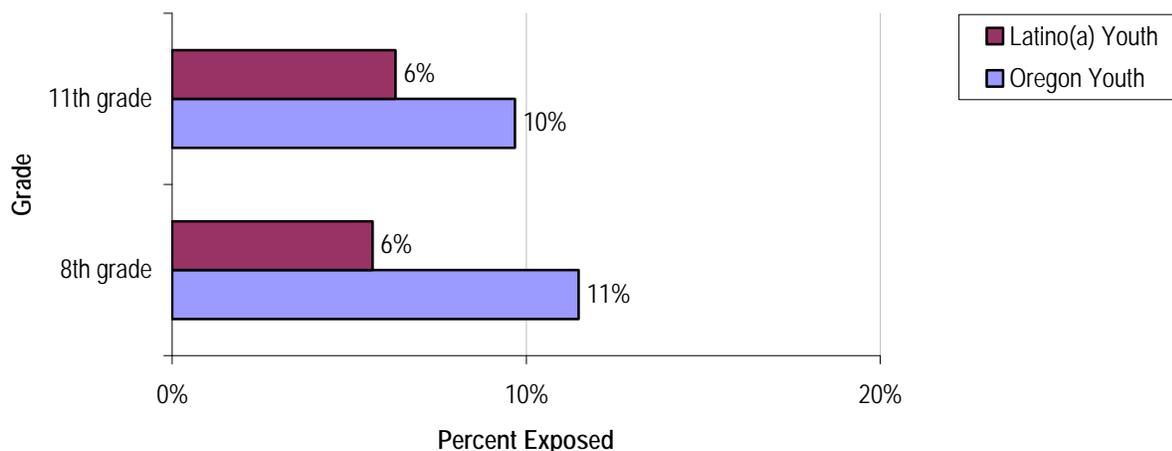


While smoking prevalence increased between 8<sup>th</sup> and 11<sup>th</sup> grade Latino youth, the increase was lower in magnitude than the increase seen among all Oregon 8<sup>th</sup> and 11<sup>th</sup> graders.

## Youth exposure to secondhand smoke

Exposure to secondhand smoke in the home has been correlated with increased smoking prevalence among youth. Recent findings from the Global Tobacco Youth Survey indicate youth who never smoked are 1.4 to 2.1 times more likely to be susceptible to initiate smoking if they were exposed to secondhand smoke in the home.<sup>v</sup>

Figure 11. Secondhand smoke exposure in the home among Oregon youth, 2005



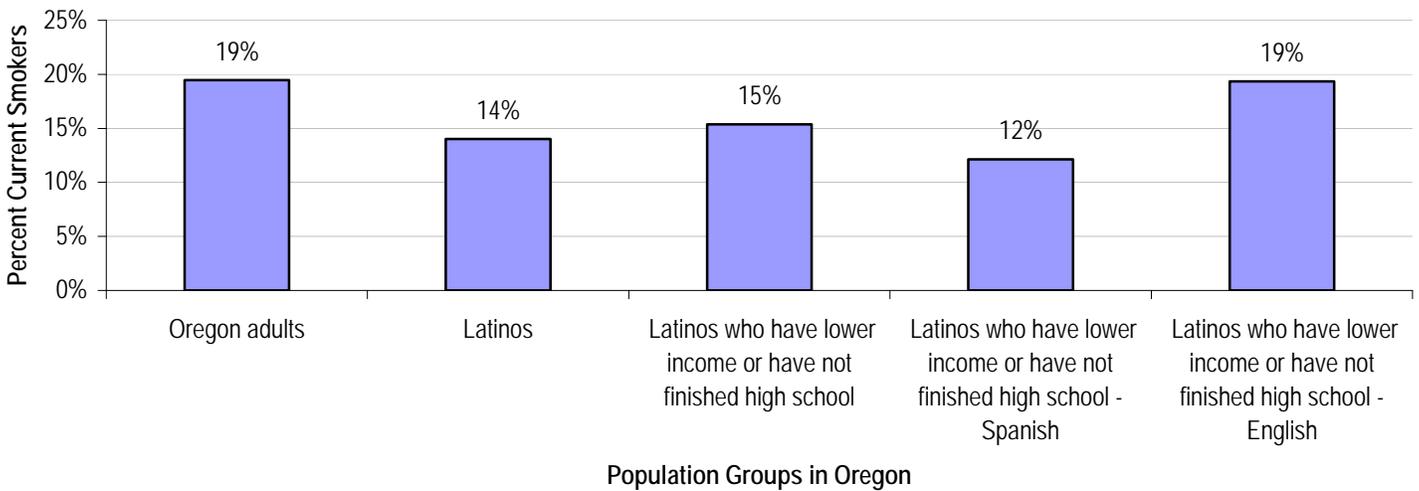
Latino youth experience less exposure to secondhand smoke in the home than all Oregon youth. This could be related to the overall lower smoking prevalence in the home environment reported by Latino adults.

## Smoking among Latino adults who have lower income or have not finished high school

Smoking prevalence varies by race/ethnicity as well as by societal factors. Both income and level of education completed have been associated with increased prevalence of smoking. Americans living below the federal poverty line are 40 percent more likely to smoke than those living at or above the federal poverty line.<sup>vi</sup>

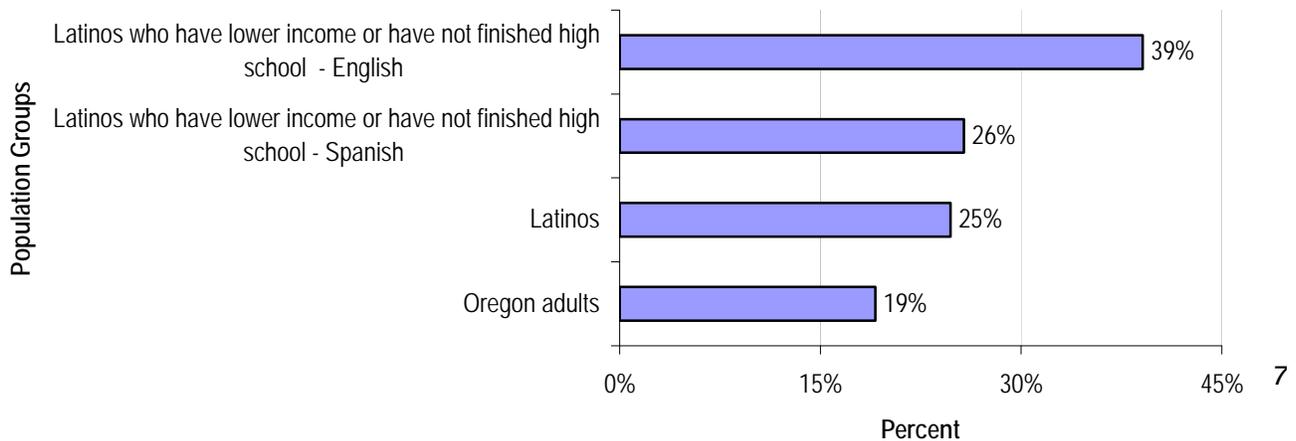
Fifty-seven percent of Latino adults in Oregon have incomes lower than the federal poverty line or have not finished high school compared with 18 percent of the overall Oregon population. Latinos who have lower incomes and have not finished high school were more likely to smoke if the survey was completed in English compared with those who took the survey in Spanish.

Figure 12. Smoking prevalence among Oregon adults, 2004-2005



As depicted in Figures 12 and 13, one's preferred language plays a distinct role in smoking patterns and exposure to secondhand smoke. Language in this instance can be used to approximate acculturation among the Oregon Latino community. Acculturation refers to the adoption of behavior patterns and/or socialization between Latinos and the predominant (English-speaking) culture of the United States. Acculturation appears correlated with increased smoking and exposure to secondhand smoke.

Figure 13. Secondhand smoke exposure at work in the last 30 days, 2004-2005



## Methods

### Denominator sizes for the survey data depicted in figures

Figure Number	All Oregonians	Latinos	Latinos - Spanish	Latinos - English	Latinos**	Latinos** - Spanish	Latinos** - English
4	23,575	1,332	646	636			
6	4,173	183	67	111			
7	1,222	55					
8	6,719	356	152	185			
9 - WORK	16,678	927					
9 - HOME	6,719	356					
12	23,575	1,332			722	518	173
13	16,678	927				368	127

\*\* Refers to adults who have lower income or have not finished high school

### General

All survey data, unless otherwise specified, are age-adjusted and weighted. “Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time.”<sup>vii</sup> This method helps better depict what is happening in a population where age may be correlated with the outcome, in this case, tobacco use.

Weights were applied to survey data to account for Oregon’s population distribution by age and sex during the survey year. Weights are an artificial adjustment to ensure that survey data reflect the population being studied.

All significance testing was conducted at the 95 percent confidence level using an immediate form of a Student’s t-test in Stata 9.0.

The Behavioral Risk Factor and Surveillance System (BRFSS) was offered in both English and Spanish in 2004 and 2005. The data included in this Fact Sheet include the 2005 BRFSS race oversample as well. The oversample was only offered in English, thus all Latinos that participated in the oversample (n = 27) took the survey in English.

### Tobacco related deaths

Using Oregon Vital Statistics data, age-adjusted death rates for specific causes by race were calculated for 2000 – 2004 (numerator >= 20).

### Percent of live births to mothers that smoked

Using Oregon Vital Statistics data, proportions of live births in which the mother smoked during the prenatal period were calculated. Data are not age-adjusted or weighted. They are actual counts.

### Adult smoking, quitting and secondhand smoke exposure

Adult estimates were calculated using the 2004-2005 Behavioral Risk Factor Surveillance System (BRFSS) dataset. “The Behavioral Risk Factor Surveillance System (BRFSS) is the

world's largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984.”<sup>viii</sup> All data are age-adjusted and weighted.

A current smoker is defined as someone who has smoked at least 100 cigarettes in his or her life and currently smokes.

### **Youth tobacco use and exposure to secondhand smoke**

All estimates are calculated using the 2005 Oregon Healthy Teens (OHT) survey. The Oregon Healthy Teens survey is a comprehensive, school-based, anonymous and voluntary survey. OHT monitors risk behaviors and other factors that influence the health and well being of Oregon's children and adolescents. Data are weighted by statewide youth population estimates, but are not age-adjusted because only 8<sup>th</sup> and 11<sup>th</sup> graders were surveyed, and the data can only reflect trends for these two groups.

### **Adults who have lower income or have not finished high school**

Estimates were calculated using the 2004-2005 BRFSS race oversample, and were age-adjusted. The same weight strategy used for adult estimates was applied to this analysis. Adults who have lower income or have not finished high school is defined as respondents living below 100 percent of the federal poverty line and/or possessing less than a high school education. The 100 percent federal poverty line variable was calculated using household size and income. Income on BRFSS is collected using categories rather than actual numbers. At the lower end of income, these categories increase by \$5000 increments. The category that matched the 100 percent federal poverty line for household size in the year the survey was conducted was used for the calculation.

### **Potential limitations**

BRFSS is the main source of population-level data to assess tobacco use and exposure among adults in the state of Oregon. The survey is administered using random-digit-dialing of landline phones.

According to a national study in 2006, Latino(a) adults were more likely to have wireless only households than the overall population (15.3 percent versus 12.8 percent).<sup>ix</sup> Assuming the trend is similar in Oregon, the current BRFSS methodology might exclude almost one-sixth of Latino(a) adults from the sample.

Nationally, wireless only households have a significantly higher prevalence of smoking (29.6 percent) as compared with landline only households (18.9 percent). Households without telephone service have the highest smoking prevalence (41.5 percent).<sup>xi</sup> These limitations may lead to underreporting of smoking prevalence, as multiple studies have confirmed the correlation between cell phone usage and smoking.<sup>x,xii</sup>

Additionally, institutionalized populations (e.g. individuals in hospitals, prisons, nursing homes, mental health facilities, etc.) are not included in BRFSS. These populations may have higher rates of smoking than the general population.

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- <sup>i</sup> U.S. Department of Health and Human Services. *Women and Smoking: A Report of the Surgeon General*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2001.
- <sup>ii</sup> Prochaska, James O. *Changing for good: the revolutionary program that explains the six stages of change and teaches you how to free yourself from bad habits*. New York: W. Morrow, 1994.
- <sup>iii</sup> *You Can Quit Smoking: Consumer Guide*. U.S. Department of Health and Human Services, Public Health Service. June 2000.
- <sup>iv</sup> U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
- <sup>v</sup> "Exposure to Secondhand Smoke Among Students Aged 13 – 15 years – Worldwide, 2000-2007." *CDC Morbidity and Mortality Weekly Report*. vol. 56 . no. 20, May 25, 2007.
- <sup>vi</sup> Smoking Habits and Prevention Strategies in Low Socio-economic Status Populations. *National Network on Tobacco Prevention and Poverty*. 2004
- <sup>vii</sup> National Center for Health Statistics Definitions Web Page. 22 May 2007  
[www.cdc.gov.mill1.sjlibrary.org/nchs/datawh/nchsdefs/ageadjustment.htm](http://www.cdc.gov.mill1.sjlibrary.org/nchs/datawh/nchsdefs/ageadjustment.htm).
- <sup>viii</sup> "Turning Information into Health, Behavioral Risk Factor and Surveillance System." Center for Disease Control. 11 July 2007 [www.cdc.gov/brfss/index.htm](http://www.cdc.gov/brfss/index.htm).
- <sup>ix</sup> Blumeberg SJ, Luke JV. "Wireless Substitution: Early release of estimates based on data from the national Health Interview Survey, July – December 2006." National Center for Health Statistics. 14 May 2007 [www.cdc.gov/nchs/nhis.htm](http://www.cdc.gov/nchs/nhis.htm).
- <sup>x</sup> Blumeberg et al. "Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution." *American Journal of Public Health*. vol. 96, no. 5, May 2006.
- <sup>xi</sup> Nelson et al. "A Comparison of National Estimates from the National Health Interview Survey and the Behavioral Risk Factor Surveillance System." *American Journal of Public Health*. vol. 93, no. 8, August 2003.

2007 Fact Sheet prepared by Dayna Kirk, MPH, Research Analyst  
and Stacey Schubert, MPH, Senior Research Analyst

Tobacco Prevention and Education Program  
Department of Human Services  
800 NE Oregon Street, Suite 730  
Portland, OR 97232  
(971) 673-0984  
[www.healthoregon.org/tobacco](http://www.healthoregon.org/tobacco)