

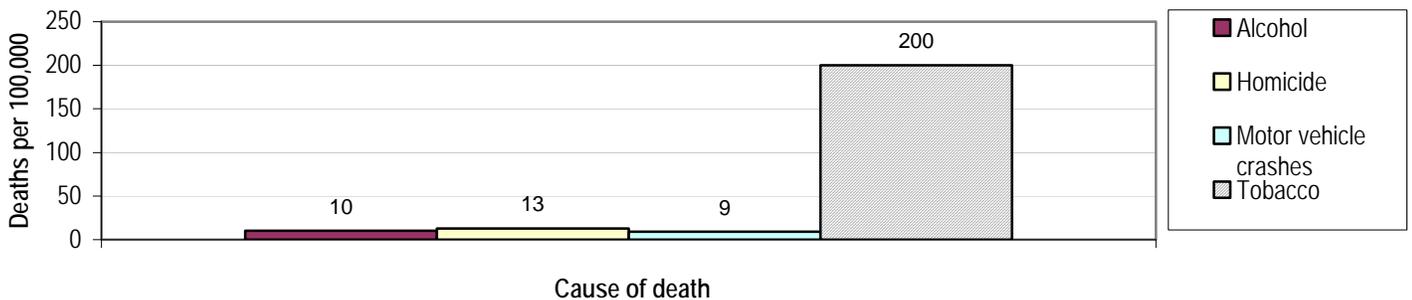
# Oregon Tobacco Prevention and Education Program African American Data Report – 2007

According to the 2005 U.S. Census of Oregon’s 3.6 million inhabitants, 1.6 percent (58,309 individuals) identified themselves as African American. Seventy-four percent of African Americans in Oregon live in Clackamas, Multnomah and Washington counties, the tri-County area that encompasses the Portland urban center.

## Tobacco’s annual toll on African Americans in Oregon

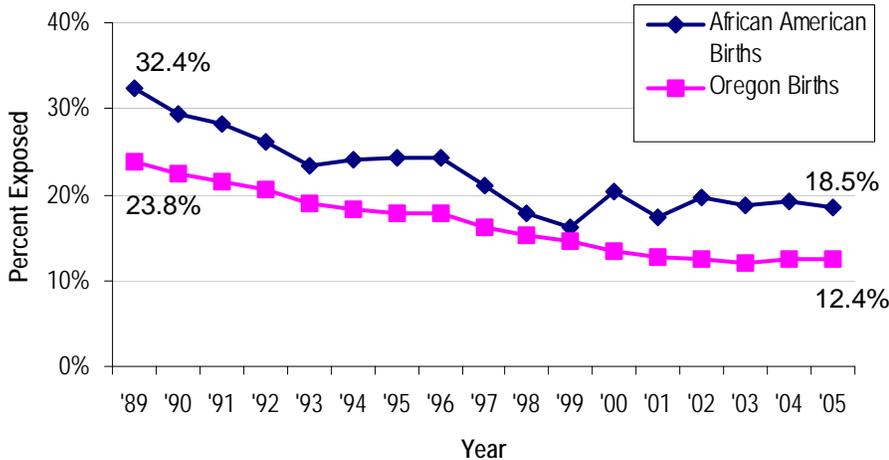
- 76 African Americans** die from tobacco use.
- 1,485 African Americans** suffer from a serious illness caused by tobacco use.
- \$11.9 million** is **spent** on medical care for African Americans for tobacco-related illnesses.
- \$12.0 million** in productivity is **lost** due to tobacco-related deaths.

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



Death among Oregon African Americans is 16 to 22 times more likely to be due to tobacco than due to alcohol, homicide or motor vehicle accidents.

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

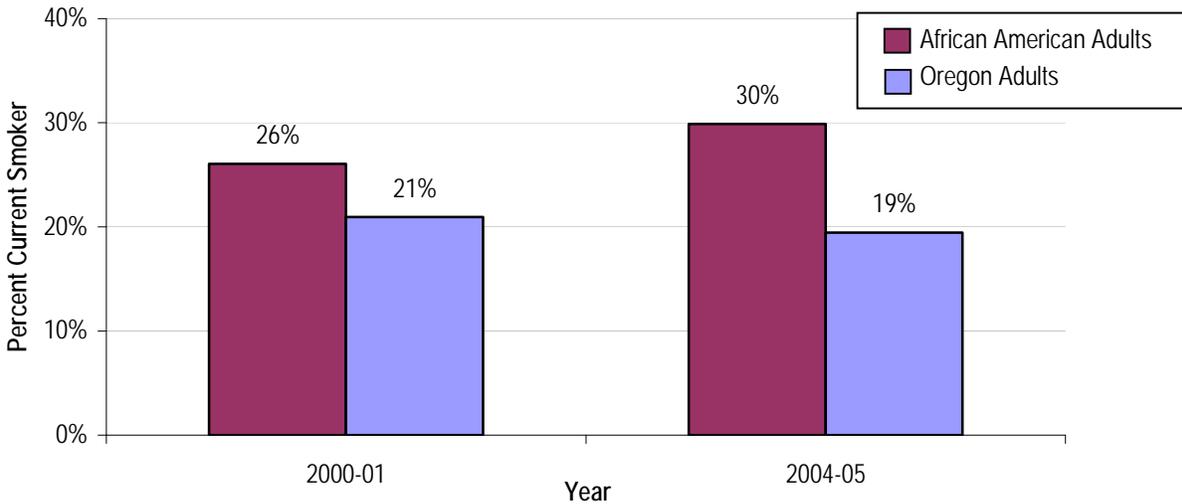


A lower percentage of the babies born to African American mothers were exposed to their mother’s cigarette smoking during the prenatal period in 2005 (18.5 percent) than in 1989 (32.4 percent).

*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>*

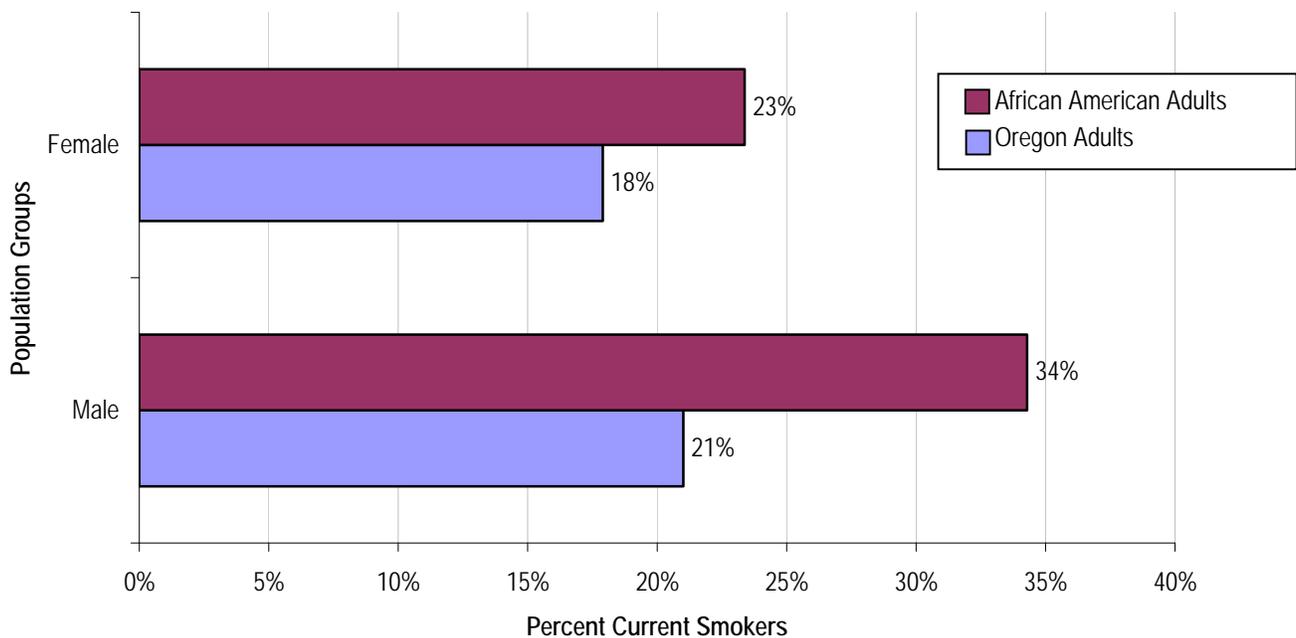
## Adult smoking

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



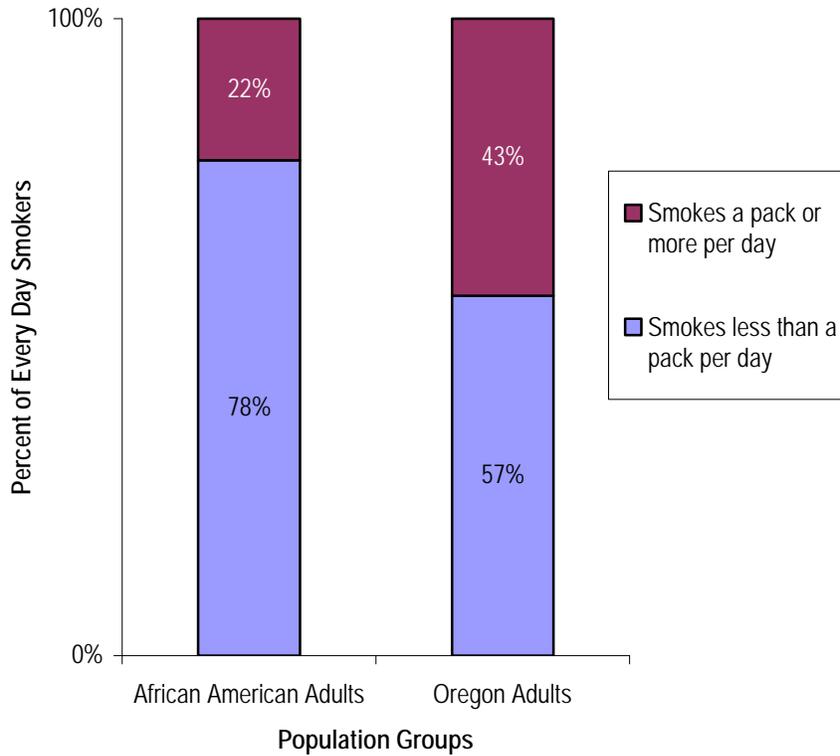
Although smoking prevalence among African Americans in Oregon appears to have increased since 2000-2001, this increase is not significant due to the small number of African American respondents to the surveys. A larger sample is needed to clarify any change in prevalence. At the same time, prevalence has significantly decreased among the overall Oregon population.

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



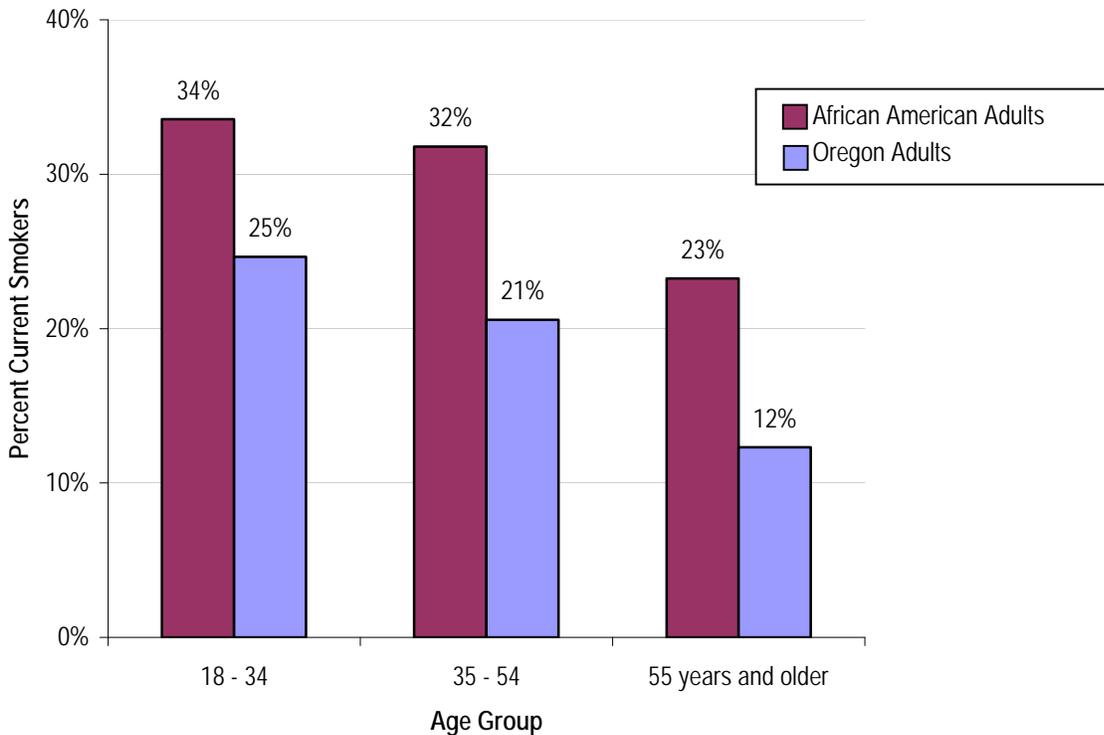
While African Americans have a higher overall smoking prevalence than the overall Oregon population, the difference is proportionate by sex. Smoking among African American women is 23 percent (vs. 18 percent among all Oregon women); and among men is 34 percent (vs. 21 percent).

Figure 5. Cigarette consumption among every day smokers, 2004-2005



Although African American adults are more likely to smoke, those who smoke every day appear to smoke fewer cigarettes per day on average than Oregon smokers in general. Seventy-eight percent smoke less than a pack per day, as compared with 57 percent of the overall Oregon population.

Figure 6. Smoking prevalence among Oregon adults, by age 2004-2005



Smoking prevalence among Oregon African American adults declines as age increases; however, the decline among all Oregon adults is proportionately larger.

## Adult quitting

Figure 7. Quit Intentions, 2004-2005

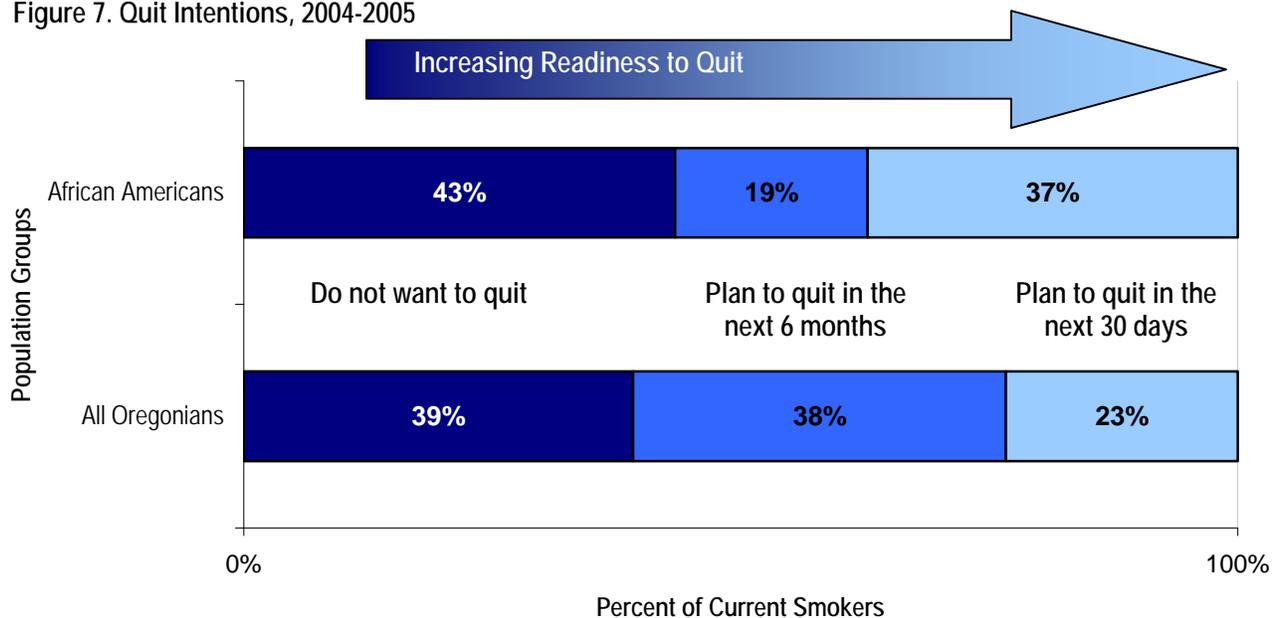


Figure 7 shows readiness to quit using the categories of the Transtheoretical Model.<sup>ii</sup> According to this model, smokers who do not want to quit are in the pre-contemplation phase. Those planning to quit in the next six months are contemplating, while those planning to quit in the next 30 days 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>

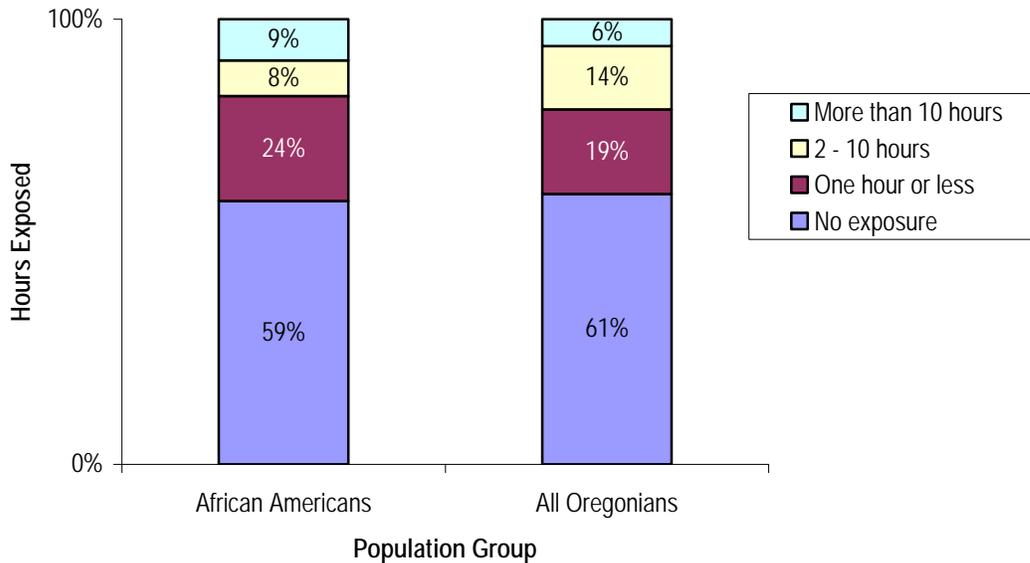
Compared with the overall Oregon population, African American smokers seem more likely to be in either pre-contemplation (“Do not want to quit”) or in the preparation phase (“Plan to quit in the next 30 days”). However, fewer African American smokers appear to be contemplating quitting, which could be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

*1.3 percent of adult African American smokers called the Oregon Quit Line in 2004-2005 as compared with 1.5 percent of all Oregon smokers.*

## Adult exposure to secondhand smoke

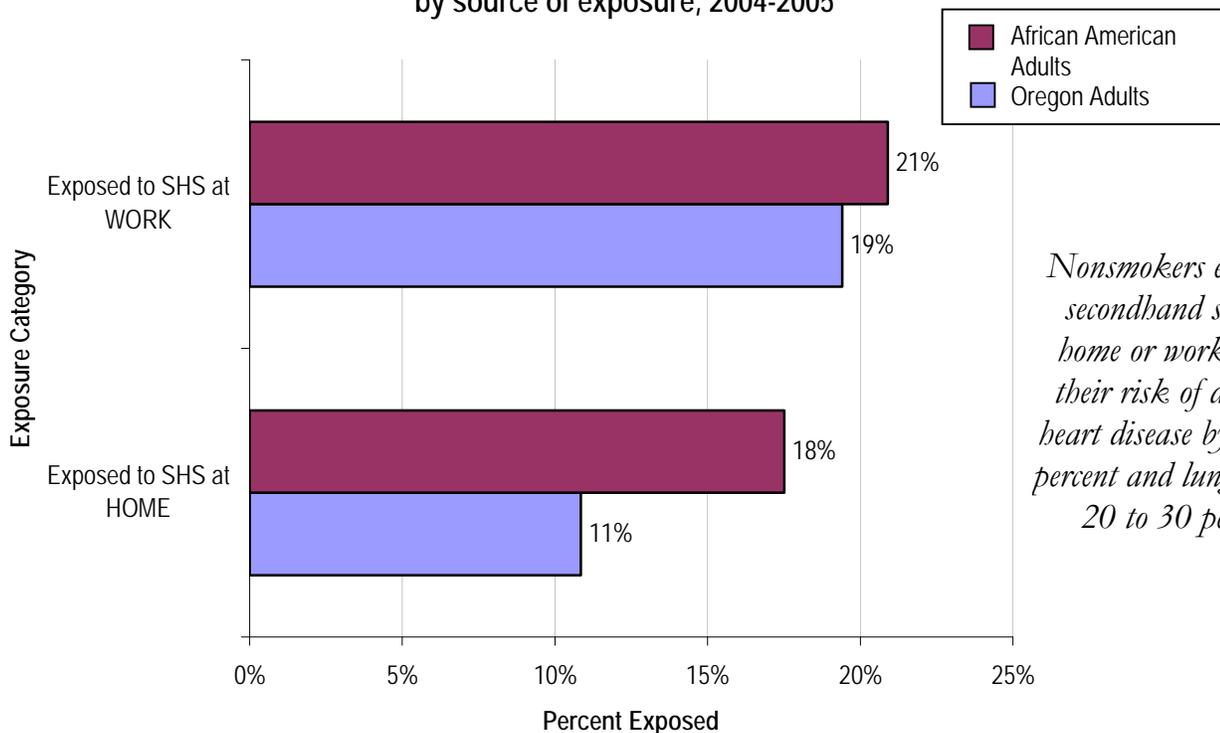
According to the 2006 Surgeon General’s Report – *The Health Consequences of Involuntary Exposure to Tobacco Smoke* – “There is no risk-free level of exposure to secondhand smoke: even small amounts of secondhand smoke exposure can be harmful to people’s health.”<sup>iv</sup>

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



African American adults are more likely than overall Oregon adults to be exposed to 10 hours or more of secondhand smoke (SHS) in a typical week. In Figure 9, the greatest disparity in secondhand smoke exposure appears in exposure to SHS at home, where the proportion of African Americans exposed to SHS is about 1.5 times that of overall Oregon adults.

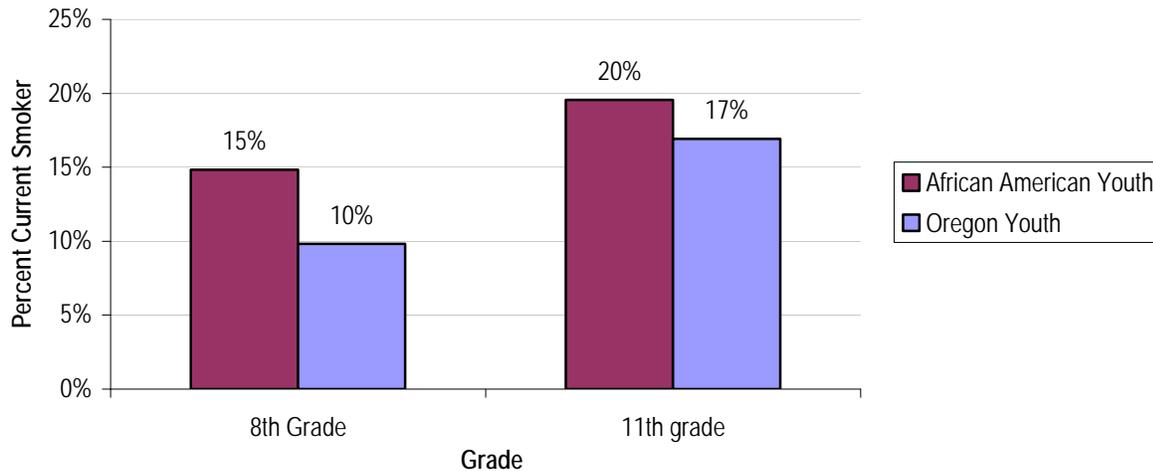
Figure 9. Secondhand smoke (SHS) exposure during the last 30 days by source of exposure, 2004-2005



## Youth smoking

As with adults, smoking among African American youth is higher than among overall Oregon youth. The prevalence of smoking among African American 8<sup>th</sup> graders is 50 percent higher than overall Oregon 8<sup>th</sup> graders. The gap between African American 11<sup>th</sup> graders and all Oregon 11<sup>th</sup> graders narrows; however smoking prevalence remains high.

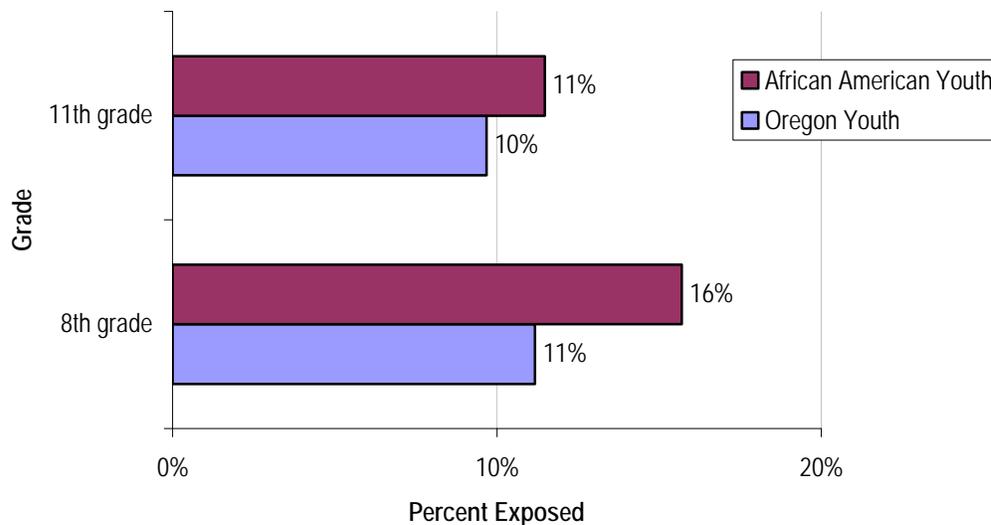
Figure 10. Smoking prevalence among Oregon youth, 2005 - 2006



## 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

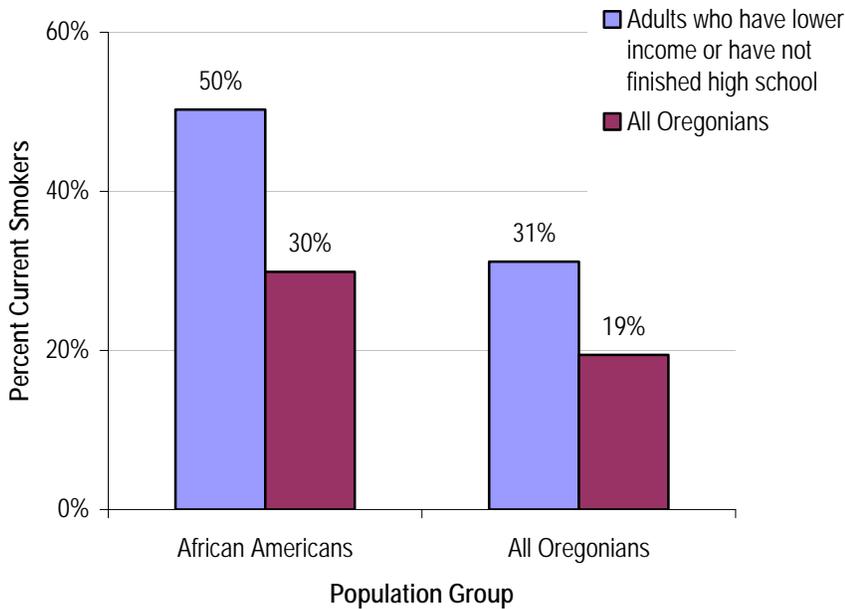


Similar to adult estimates, African American youth are more likely than overall Oregon youth in general to be exposed to SHS in the home. This difference is particularly true for 8<sup>th</sup> graders.

## Smoking among African American 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>

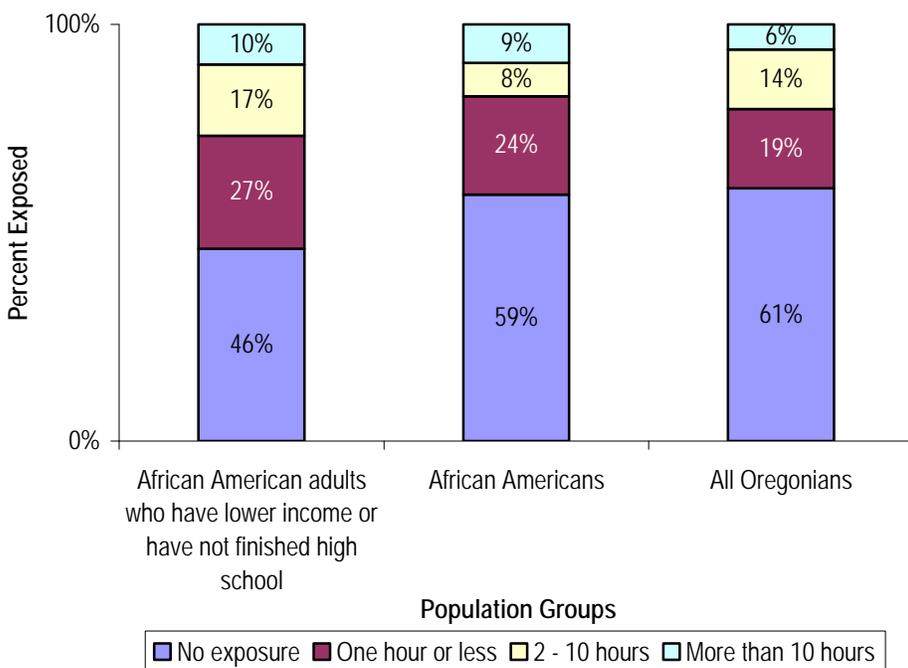
Figure 12. Smoking prevalence among Oregon adults, 2004-2005



Twenty-eight percent of African American adults in Oregon have incomes lower than the federal poverty line or have not finished high school as compared with 18 percent of the overall population. This group is more likely to smoke and be exposed to secondhand smoke than Oregon adults in general.

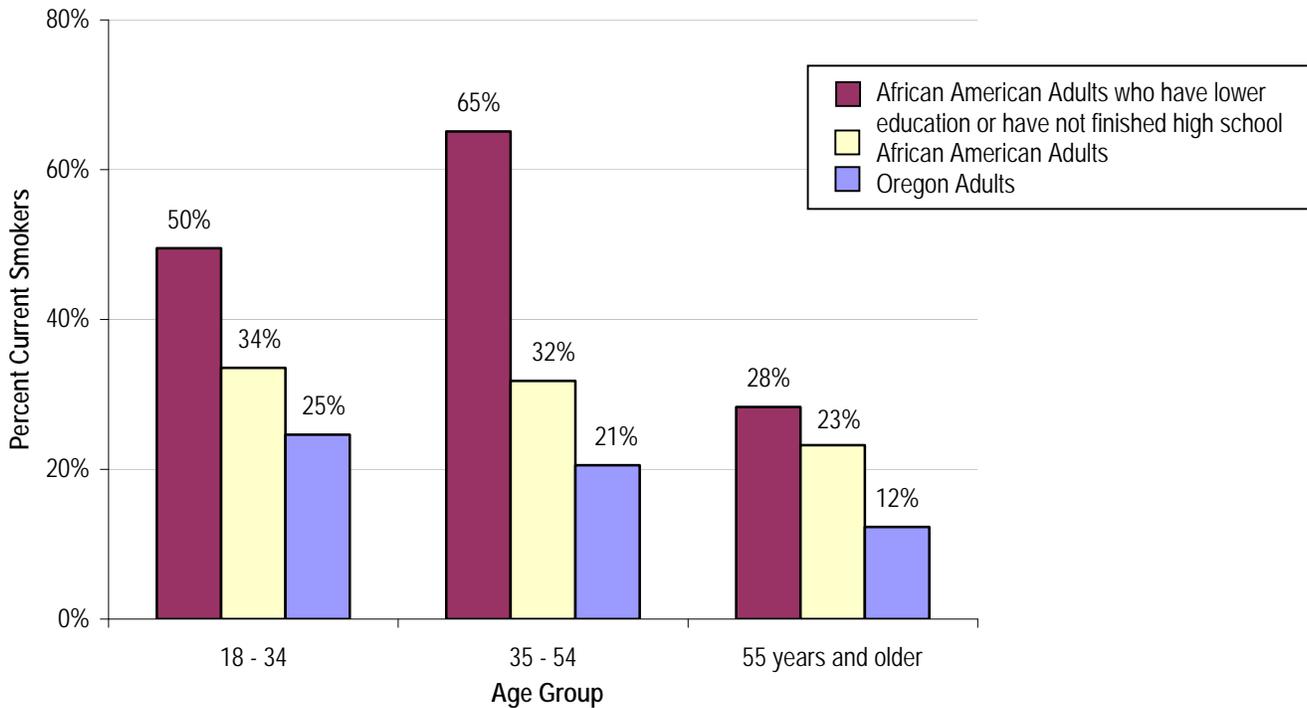
In Oregon, African American adults who have lower income or have not finished high school have a higher smoking prevalence (50 percent) than all African American adults (30 percent). This trend mirrors the elevated smoking prevalence among all Oregonians who have lower income and have not completed high school (31 percent).

Figure 13. Hours of secondhand smoke exposure from all sources during a typical week, 2004-2005



In addition to higher prevalence of smoking, African American adults who have lower income or have not finished high school are exposed to significantly more secondhand smoke (54 percent) than the overall Oregon adult population (39 percent). Ten percent of those exposed are exposed to more than 10 hours of secondhand smoke.

Figure 14. Smoking prevalence among Oregon adults by age, 2004-2005



Although smoking among Oregon African American adults declines as age increase, this pattern does not hold true for African American adults who have lower income or have not finished high school. Smoking prevalence among the 35 to 54 year age group (65 percent) is double the prevalence among African Americans (32 percent), and triple the prevalence among Oregon adults in general for this age group (21 percent).

## Methods

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

Figure Number	Oregonians	African Americans	African American adults who have lower income or have not finished high school	Oregon adults who have lower income or have not finished high school
5	4,173	126		
6	23,359	446		
7	1,222	84		
8	6,521	285		
9 - WORK	9,004	221		
9 - HOME	6,719	297		
12			143	3,618
13	6,521	285	105	
14	23,359	446	143	

## **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 to 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.

## **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 reported smoking 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) oversample, except when looking at trends including the 2000-2001 BRFSS oversample. “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> Oregon 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 2005-2006 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 weighting 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.

One in eight African American households, like most of the U.S. population, have wireless only households, meaning no landline is present.<sup>ix</sup> Assuming the trend is similar in Oregon, the current BRFSS methodology may exclude certain African American adults from the sample because they do not have landlines.

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>viii</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,xi</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).

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- <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.

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