

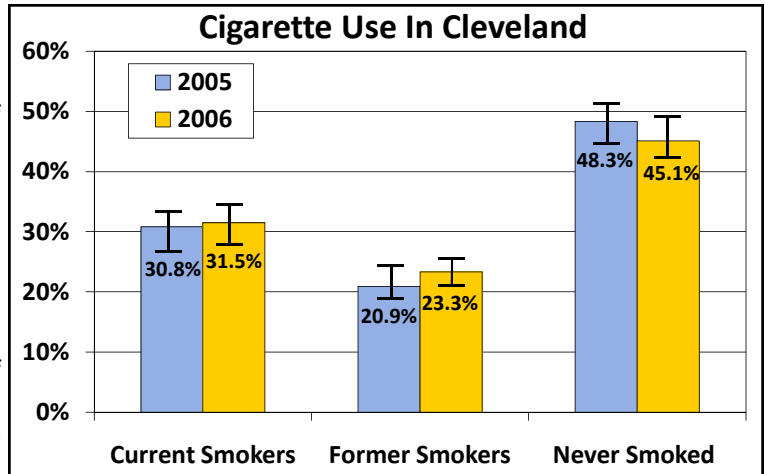
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The Cleveland Behavioral Risk Factor Surveillance Survey is funded by Steps to a Healthier Cleveland.

Status of Cigarette Use in Cleveland

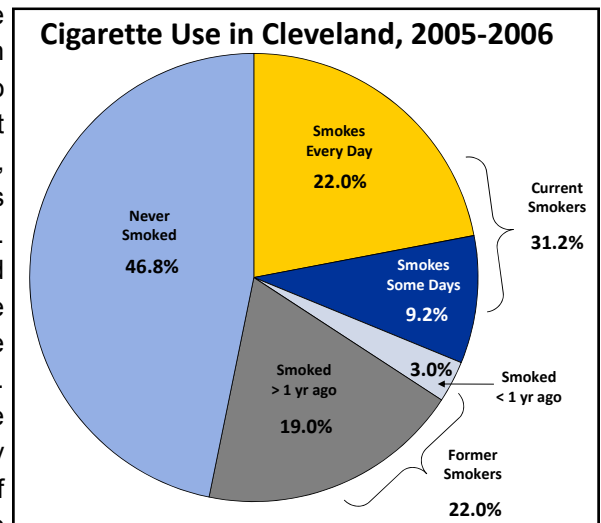
In 2006, nearly 70% of all Cleveland adults reported being non-smokers. This includes almost half (45.1%) who reported never smoking cigarettes, and an additional 23.3% who were former smokers who have since been successful in quitting. Still, in 2006, almost a third of all Cleveland residents (31.5%) were currently using cigarettes.



Though the prevalence of cigarette smoking appears to have increased slightly since 2005, caution should be used when making assumptions about an increasing trend. The confidence intervals around the estimates overlap and suggest that the prevalence has remained fairly stable. Until a third year of data are available, more accurate conclusions about a possible trend cannot be made.

Current and Former Cigarette Users

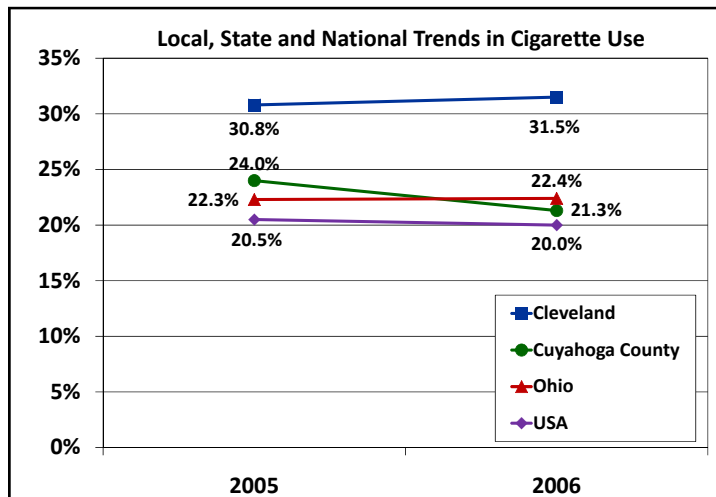
The data from 2005 and 2006 were combined in the figure to the right in order to increase the sample size and to look more closely at the status of current and former cigarette users. Again, nearly half (46.8%) of all Clevelanders reported never smoking cigarettes. Almost another quarter (22.0%) reported that they were former smokers, the majority of which had been smoke-free for more than one year (19.0% of adults). Of the 31.2% of current smokers, the majority reported smoking every day (22.0% of adults), while another 9.2% of adults reported smoking more sporadically (i.e., smoke "some days").



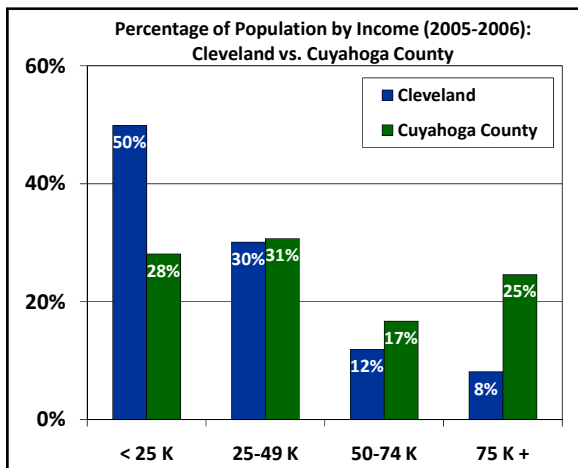
The majority of former smokers in Cleveland reported being smoke-free for more than one year.

Local, State and National Trends in Cigarette Use

Similar to Ohio and the nation, the prevalence of cigarette use in Cleveland has remained fairly steady for the past two years. In 2005, 30.8% of adults in Cleveland reported currently smoking cigarettes, as compared to 31.5% of adults in 2006. In contrast, cigarette use in Cuyahoga County appears to have decreased by nearly 3% between 2005 and 2006, bringing the prevalence below that of the state¹. Such a decline has been consistent since 2003 at which time the prevalence of cigarette use was 26.5% (data not shown). More noteworthy, however, is that the prevalence of cigarette use in Cuyahoga County, the state of Ohio, and the nation are fairly similar and far below that of the city of Cleveland.

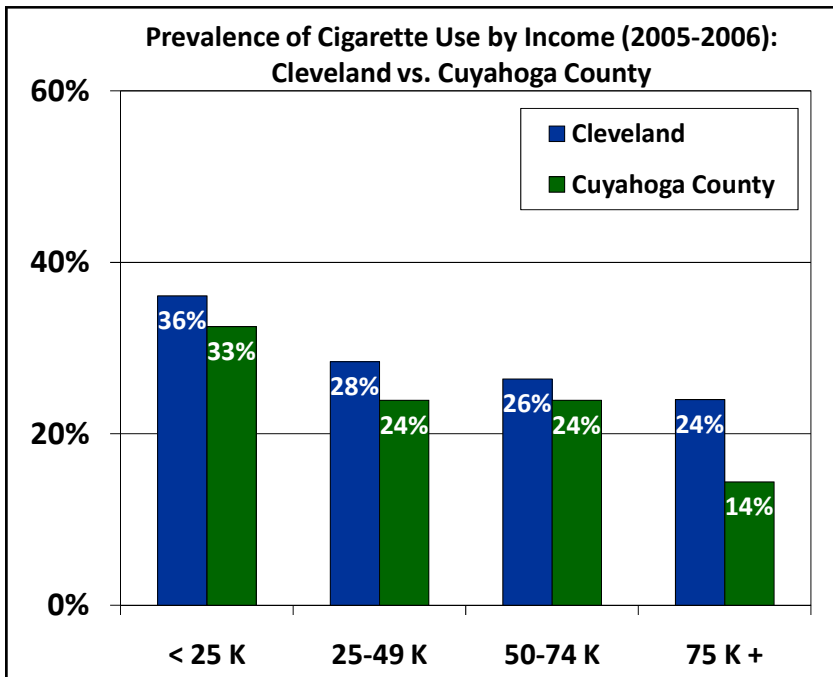


Putting Cleveland's Cigarette Smoking Prevalence into Context



What appears to be a significantly higher prevalence of cigarette use in the city of Cleveland requires a contextual perspective. Research shows that low socioeconomic status (e.g., low income) is a strong predictor of cigarette smoking². According to the U.S. Census Bureau, the 2006 median household income in Cleveland was \$26,535; in contrast, the median household incomes for Cuyahoga County, Ohio, and the nation were considerably higher at \$41,522, \$44,532, and \$48,451 respectively³. Local county and city BRFSS data show similar contrasts in income. As seen in the figure to the left, in 2005-2006, 28% of residents in the county reported an annual household income of less than \$25,000, as compared to 50% of residents in the city.

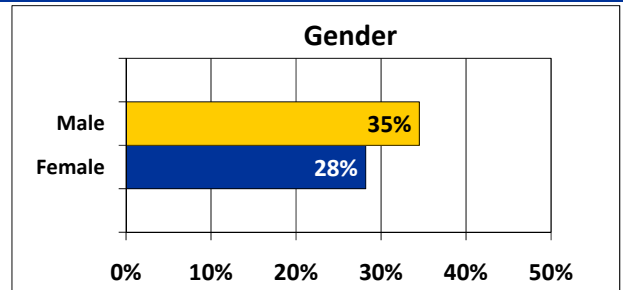
In order to place smoking prevalence within this context, we examined prevalence of smoking for Cuyahoga County and the city of Cleveland within specific categories of income. The figure to the right displays smoking prevalence in Cleveland compared to smoking prevalence in Cuyahoga County for four income categories. While cigarette use remained higher in Cleveland than across Cuyahoga County in each income category, the prevalence was more similar, particularly at the lower ends of the income range. For example, 36% of Clevelanders who made less than \$25,000 smoked, as compared to 33% of similar adults who live in Cuyahoga County.



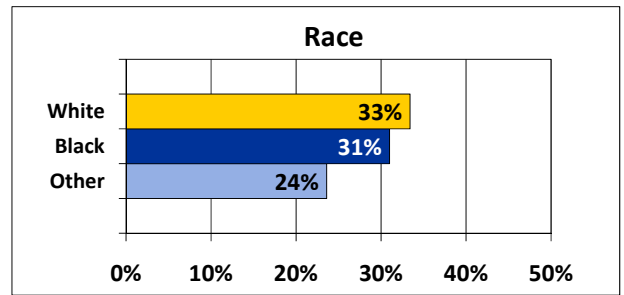
Low socioeconomic status is a strong predictor of smoking; a large percentage of low income residents in Cleveland has influenced the high prevalence of cigarette use.

Cigarette Use by Demographic Characteristics, 2005-2006

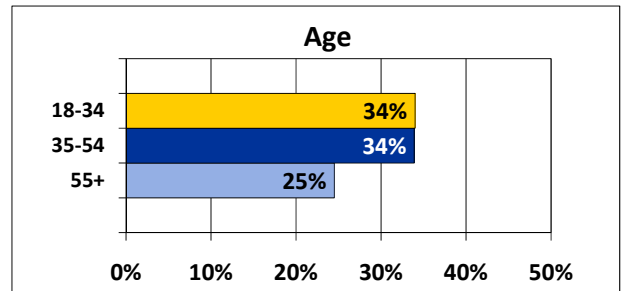
GENDER: National, state, and county data (not shown) typically show that men are more likely to smoke cigarettes than women. Consistent with this trend, men in Cleveland reported a higher prevalence of smoking cigarettes than women (35% vs. 28%).



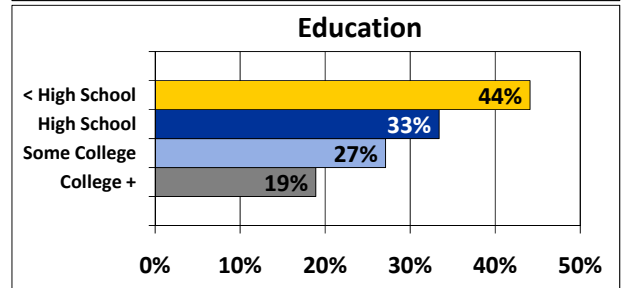
RACE: While data from the nation, state, and county (not shown) typically show that black adults exhibit the highest prevalence of cigarette smoking, white adults in Cleveland reported the highest prevalence of cigarette smoking (33%), followed by black adults (31%), and adults from other race/ethnic groups (24%).



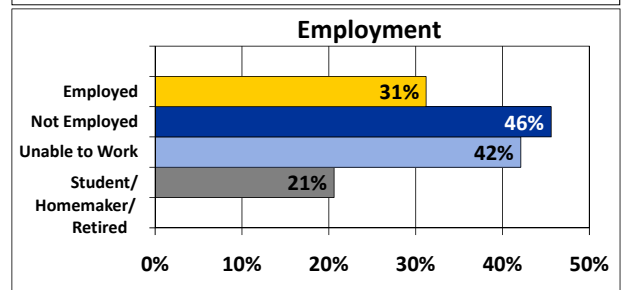
AGE: Adults in Cleveland aged 18-34 and 35-54 reported a similar prevalence of smoking (both 34%). Compared to younger adults, adults aged 55 and older reported a lower smoking prevalence at 25%; such a decline in smoking is generally typical with age.



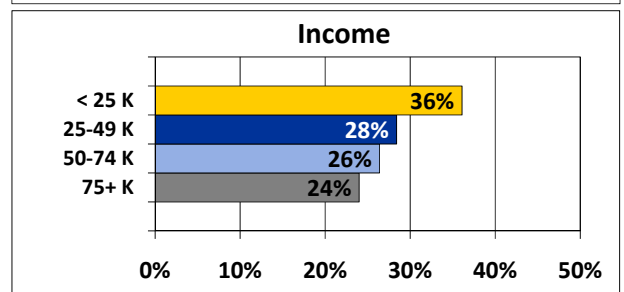
EDUCATION: Again consistent with national, state, and county data (not shown), in Cleveland, the more educated the respondents, the lower the likelihood that they smoked cigarettes. As shown to the right, college graduates reported a smoking prevalence that was more than half that of those who had not finished high school (19% vs. 44%).



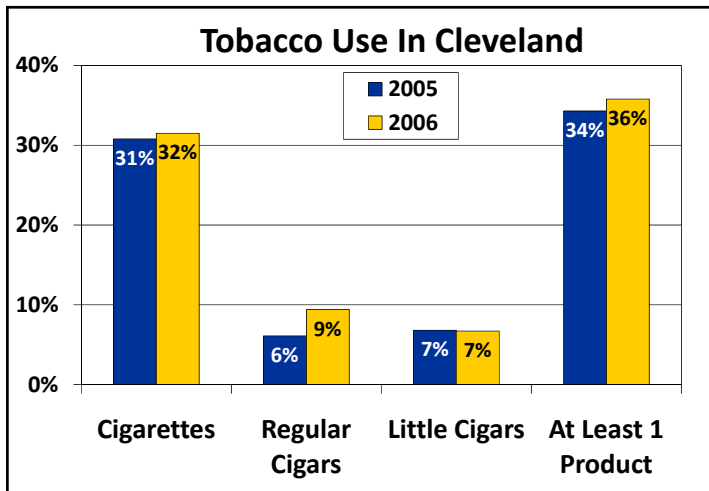
EMPLOYMENT: Overall, adults who were not employed or who were unable to work reported the highest prevalence of smoking (46% and 42% respectively), followed by employed adults (31%), and students, homemakers, and retired adults who reported a smoking prevalence of only 21%.



INCOME: Like education, smoking consistently dropped as income increased. Clevelanders reporting the least amount of income at less than \$25,000 reported the highest prevalence of smoking at 36%, followed by those reporting an income of \$25,000 to \$49,000 (28%), and those making \$50,000 to \$74,000 (26%). Clevelanders reporting the most income at \$75,000 or more reported the lowest smoking prevalence at 24%.



Types of Tobacco Products Used

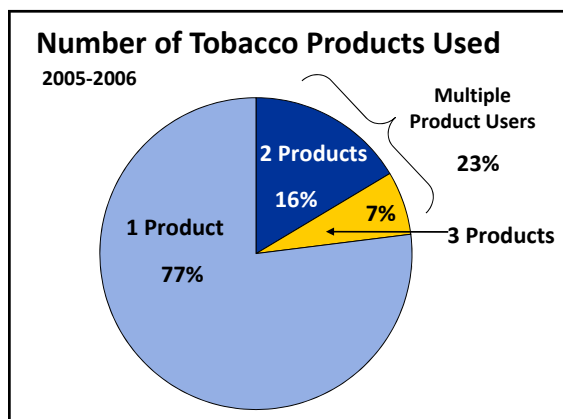


Although the majority of tobacco users in Cleveland prefer cigarettes, a variety of other tobacco products are also used. In 2006, 9% of Clevelanders reported smoking cigars and 7% reported smoking little cigars. When taken together, in 2006, more than a third (36%) of Clevelanders reported currently using at least one tobacco product.

Caution should be used in interpreting trends in use, for instance, in the possible increase in cigar use from 2005 to 2006. The sample sizes of cigar and little cigar users are relatively small, and the margin of error around such estimates is large.

In 2006, 36% of adults in Cleveland currently used at least one tobacco product.

Multiple Tobacco Product Use



	Among Cigarette Users	Among Cigar Users	Among Little Cigar Users
% who also use: Cigarettes	---	60%	65%
% who also use: Cigars	15%	---	57%
% who also use: Little Cigars	14%	50%	---

As shown in the pie chart, more than three-quarters (77%) of tobacco users in Cleveland reported using only one product. Among the 23% of users who reported multiple product use, most used only one additional product. Still, 7% of tobacco users in Cleveland reported smoking cigarettes, cigars, and little cigars.

Exploration of multiple product use revealed interesting patterns. Cigar and little cigar users were much more likely to smoke cigarettes than cigarette smokers were to smoke cigar products. As shown, at least half of cigar/little cigar users also smoked the opposite product and at least 60% also smoked cigarettes.

	Cigarette Users	Cigar Users	Little Cigar Users
Average Age (mean years)	43	39	33
Gender:			
Male	52%	73%	65%
Female	48%	27%	35%
Race:			
White	42%	37%	25%
Other	58%	63%	75%
Education (HS or less)	68%	61%	79%
Employed	56%	62%	56%
Income (< 25 K)	57%	54%	73%

Who smokes what?

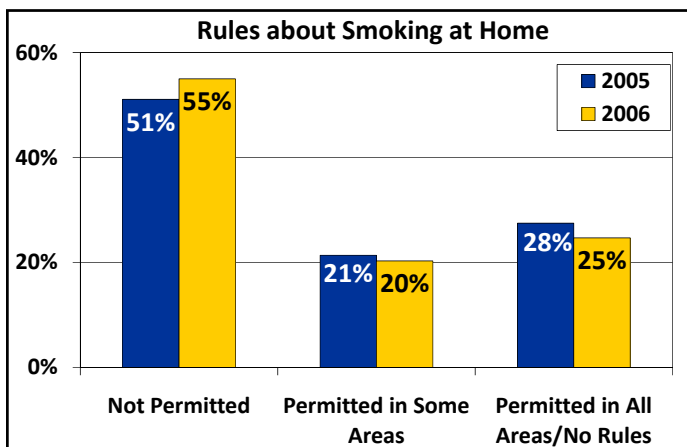
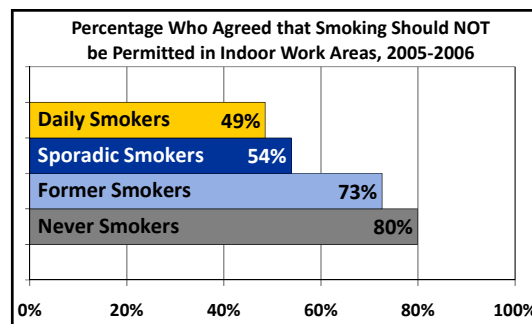
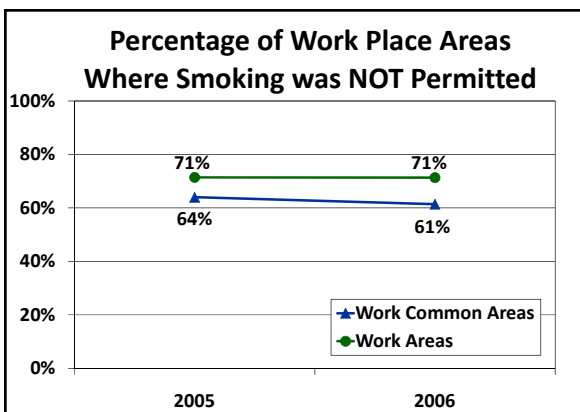
The table to the left provides a description of cigarette, cigar, and little cigar users. Cigarette users tended to be older than cigar product users, while little cigars users were much younger than cigarette users. All smokers were more likely to be male, particularly cigar smokers (73%). While all smokers tended to be non-white, the large majority of little cigar smokers (75%) were non-white. Although employed at fairly similar percentages, differences were observed between smokers in education and income. An overwhelming majority of little cigar users reported a low level of education at high school or less (79%) as well as a low level of household income at less than \$25,000 a year (73%).

Rules about Smoking at Work

Prior to the passing of Ohio's smoke-free workplace act in November 2006, the majority of Cleveland residents reported working for employers who restricted smoking in both common work areas (61%) and work areas (71%). While promising, nearly 30% of Clevelanders, including 24% of non-smokers (data not shown), still worked for a company that permitted smoking in work areas. Additionally, even more workers were potentially exposed to secondhand smoke in common work areas, including almost 40% of all employed Clevelanders, as well as 34% of non-smokers (data not shown).

When asked whether they thought smoking should NOT be allowed in indoor work spaces, the vast majority of never and former smokers agreed. Moreover, approximately half of all daily smokers also agreed, as did those reporting more sporadic smoking patterns (i.e., smoke "some days"). Given the passing of Ohio's smoke-free workplace act, it will be important to continue to track such information from local residents, in order to help inform not only compliance with the law, but shifting attitudes of support as well.

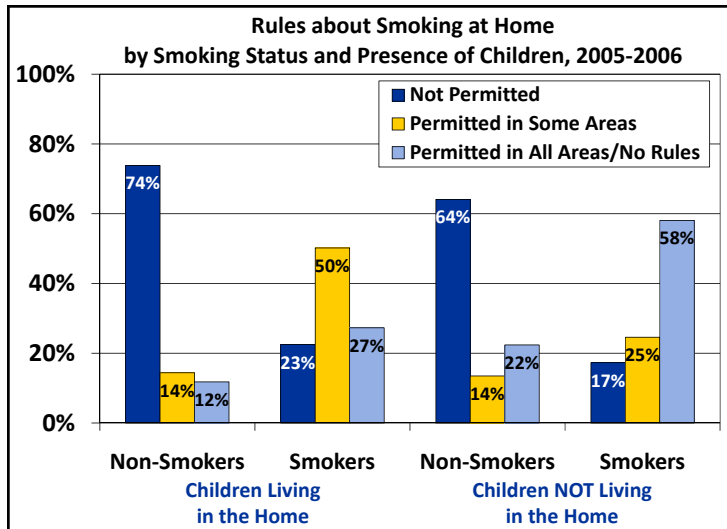
In 2006, 24% of NON-SMOKERS still worked for an employer that permitted smoking in work areas.



Rules about Smoking at Home

In 2006, more than half of Cleveland adults reported that smoking was not permitted in their homes (55%). Up 4% from 2005, this shift could represent a positive trend towards more restrictive policies. A closer look at the data suggest that the change may be driven by those who initially were without established rules, as supported by the 3% drop in this category. Continued tracking of trends in smoking rules at home will reveal if positive changes in Cleveland households are in fact taking place.

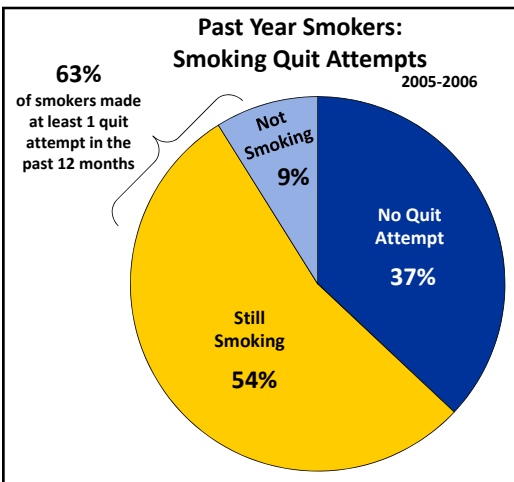
Nearly 80% of smokers with children in the home allowed smoking in some or all areas of the home.



Children's Exposure to Smoke at Home

Children are said to have the highest level of involuntary secondhand smoke exposure. As seen above, non-smokers, with or without children in the home, reported the most restrictive rules in regard to smoking in the home, although those with children were more likely to restrict smoking than those without (74% vs. 64%). Among smokers, those with children in the home were more likely to restrict smoking (23% entirely; 50% to some areas) than those without children (17% entirely; 25% to some areas). Even so, nearly 80% of smokers with children in the home continued to allow smoking in some or all areas of the home.

Smoking Cessation



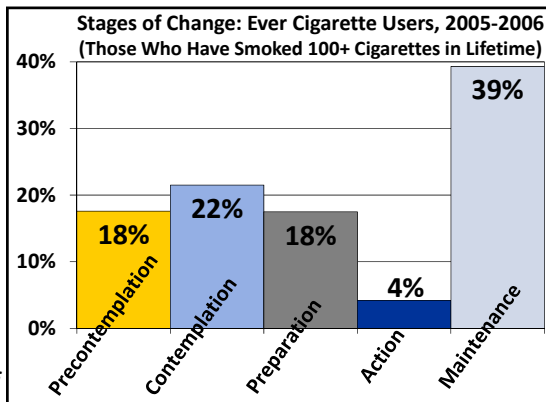
Smoking Quit Attempts

Attempts to quit smoking cigarettes were examined among adults who reported smoking in the past year. Of past year smokers, 63% reported making at least one quit attempt in the past 12 months; 9% reported not currently smoking as a result, while 54% reported still currently smoking. Of those no longer smoking, the majority (70%), were recent quitters within the past 6 months (data not shown). Still, while the majority of cigarette smokers made quit attempts, just over a third (37%) had not made any attempts to quit smoking cigarettes during the past year.

63% of all past year smokers made at least one smoking quit attempt in the past 12 months.

Tobacco Stages of Change⁴

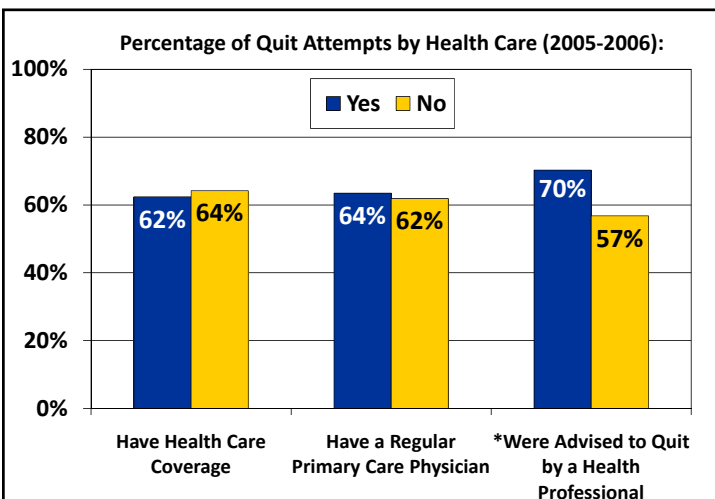
- Precontemplation:** No intentions to quit in the next 6 months.
- Contemplation:** Intentions to quit in the next 6 months (but not immediately in the next 30 days) OR intentions to quit in the next 30 days, but no quit attempts in the past 12 months.
- Preparation:** Intentions to quit in the next 30 days AND at least 1 quit attempt in the past 12 months.
- Action:** In the process of quitting (quit in the past 6 months).
- Maintenance:** Tobacco-free for 6 months or more.



Regarding their readiness to quit, smokers can be grouped into *Stages of Change* according to their history of quit attempts and their intentions to quit smoking in the next 6 months and 30 days. The definitions for each of the stages are provided in the box above⁴.

As seen in the figure to the right, a large percentage of ever smoking adults were in a stage of *maintaining* a smoke-free status (39%). Among them, 73% reported being smoke-free for more than 5 years (data not shown). While 4% of ever smokers were recent quitters in the *action* stage, current smokers were fairly evenly spread across the other stages, with slightly more falling within the *contemplation* stage, expecting to quit within 6 months, but not immediately within 30 days.

The Role of Health Care in Smoking Cessation



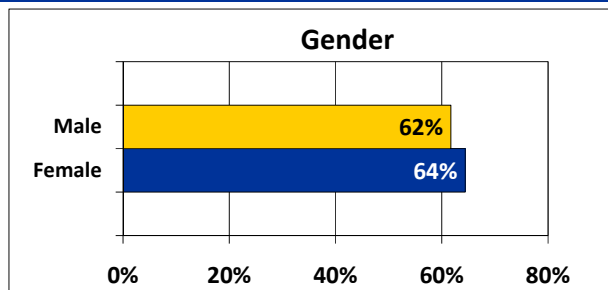
Among past year smokers in Cleveland, neither having health care coverage nor a primary care physician was associated with the incidence of quit attempts. A similar percentage of those with and without health care coverage (62% vs. 64%) and at least one primary care physician (64% vs. 62%) made at least one quit attempt. Receiving advice to quit from a health care professional, however, did appear to have an impact on quit attempts. Among past year smokers in Cleveland who had seen a health professional for any kind of care in the past 12 months (*81% of past year smokers), 70% of those who were advised to quit made at least one quit attempt compared to only 57% of those who were not advised to quit.

**Note: The number of past year smokers advised to quit by a health professional reflects those who saw one in the past 12 months (81% of past year smokers); thus, the sample of quit attempters in this category is slightly smaller than the others.*

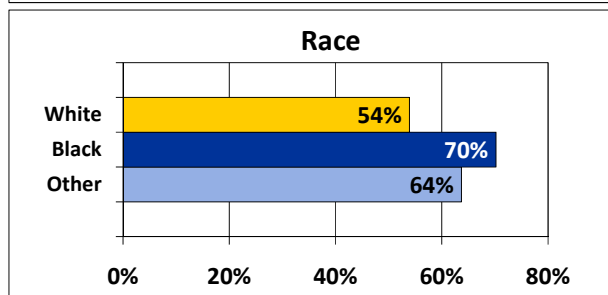
Past Year Quit Attempts by Demographic Characteristics, 2005-2006

Overall, 63% of past year smokers made a quit attempt in the past 12 months (see page 5). Additionally, it is noteworthy that all demographic groups contributed to this high percentage; the majority of each group made a quit attempt in the past 12 months.

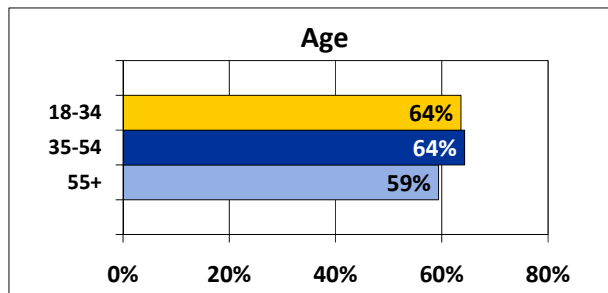
GENDER: Although males were much more likely to smoke cigarettes than females (see page 3), they were nearly just as likely as females to make a quit attempt in the past year (62% vs. 64%).



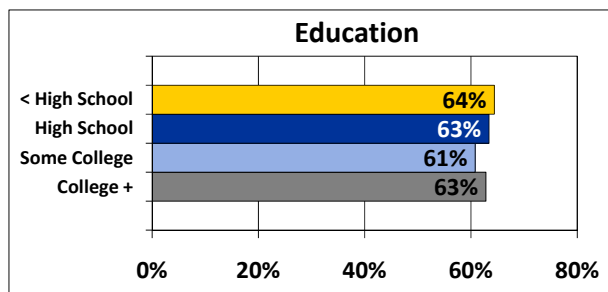
RACE: Regarding race, black adults were most likely to have made at least one smoking quit attempt in the past year (70%), followed by those from other races/ethnicities (64%). White adults were the least likely to make a smoking quit attempt (54%); they also exhibited the highest prevalence of smoking of all the groups (see page 3).



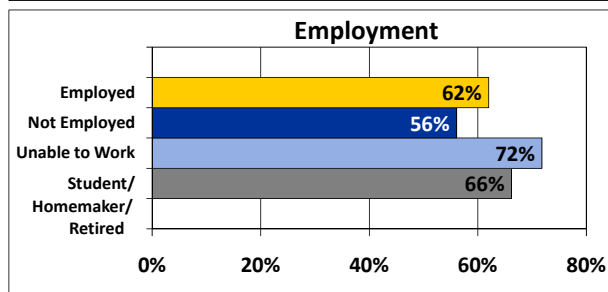
AGE: Just as they were similar in their reported smoking prevalence (see page 3), adults aged 18-34 and 35-54 were also similar in their past-year quit attempts (both 64%). Adults aged 55 and older, who smoked less than the other groups (see page 3), also made fewer smoking quit attempts in the past 12 months (59%).



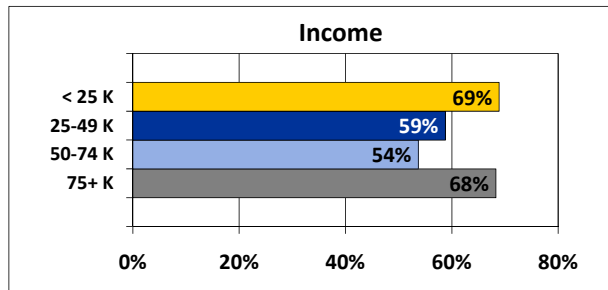
EDUCATION: Although smoking prevalence steadily decreased as education increased (see page 3), adults in Cleveland of all educational levels were fairly similar in their likeliness to make at least one smoking quit attempt in the past year; the percentage of quit attempts for each group ranged within 61% to 64%.



EMPLOYMENT: Those exhibiting the highest percentage of smoking quit attempts in the past year were adults who were unable to work (72%), followed by students, homemakers, and retired adults (66%), and adults who were employed (62%). Adults who were not employed were the least likely to make smoking quit attempts; they also reported the highest prevalence of smoking of all the groups (see page 3).



INCOME: Like education, smoking prevalence decreased as income increased (see page 3). However, those with the lowest and highest income levels both made the most quit attempts; additionally, their percentage of quit attempts was similar at 69% and 68% respectively.



Notes:

- All Sample sizes are at least N=30.
- Confidence intervals are provided for overall current, former, and never smoking prevalence; for confidence intervals for all other estimates, please refer to the data tables on the Center for Health Promotion Research website (www.case.edu/affil/healthpromotion) available in May 2008.

References:

1. Borawski, E, Przepyszny, K, Subhas, N, Russell, M, & Trapl, E. (April 2007). *Data Brief: Tobacco Use in Cuyahoga County, 2003-2006*. Cleveland, OH: The Center for Health Promotion Research at Case Western Reserve University.
2. Fagan P, King G, Lawrence D, Petrucci SA, Robinson RG, Banks D, Marable S, & Grana R. Eliminating tobacco-related health disparities: Directions for future research. *American Journal of Public Health*. 2004; 94(2):211-217.
3. U.S. Census Bureau, 2006, American Community Survey.
4. Prochaska J, & DiClemente C. Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting Clinical Psychology*. 1983; 51:390-395.

Local Data Sources: Cleveland Steps Behavioral Risk Factor Surveillance Survey (Steps-BRFSS), 2005-2006; Cuyahoga County Behavioral Risk Factor Surveillance Survey (CC-BRFSS), 2005-2006.

State/National Data Sources: Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003-2006. (See website: <http://apps.nccd.cdc.gov/brfss/>)

Methodology: The Steps-BRFSS is a point-in-time survey modeled after the CDC's state-based BRFSS System of health surveys administered annually by each state. The BRFSS is conducted via telephone interviews of randomly selected adults from randomly sampled, telephone-equipped households. A total of 2,657 adults in Cleveland were surveyed between 2005 and 2006. All participants' answers were aggregated and weighted, based on Census population figures, so that the sample represents all Cleveland adults. For more information on the methodology, including the sample description, as well as variable definitions used in this report, please refer to the Cleveland Steps Behavioral Risk Factor Surveillance Survey Methodology Brief, available on the Center for Health Promotion Research website at: www.case.edu/affil/healthpromotion.

Funding Source: The Steps-BRFSS is funded by *Steps to a Healthier Cleveland*. Under the direction of the Cleveland Department of Public Health, *Steps to a Healthier Cleveland* is a city-wide program designed to engage Clevelanders to live longer, better, and healthier lives. A part of the U.S. Department of Health and Human Service's *Steps to a HealthierUS* (5-year) Cooperative Agreement, the local program is one of 40 funded communities nationwide implementing chronic disease prevention and health promotion efforts. The aim of this initiative is to reduce the burden of diabetes, overweight/obesity, and asthma, and to address the three related risk factors of physical inactivity, poor nutrition, and tobacco use. In order to help inform the direction of programmatic efforts and to evaluate their effectiveness, the Center for Health Promotion Research at Case Western Reserve University is responsible for managing the collection of local data via the Steps-BRFSS. For more information on *Steps* and the Cleveland Department of Public Health, please visit: <http://www.clevelandhealth.org/steps>.

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