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Patterns and Correlates of Polytobacco Use in the United States over a Decade: NSDUH 2002–2011

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Abstract

Background—Few studies have examined the patterns and correlates of polytobacco use among a large, nationally representative population over an extended period of time.

Methods—This study examined 10 years of data from the National Survey on Drug Use and Health (NSDUH) to establish time trends and correlates for exclusive and mixed use of cigarettes, smokeless tobacco (SLT), cigars, and pipes.

Results—Results show that rates of polytobacco use were essentially unchanged from 2002–2011 (8.7% to 7.4%), though some product combinations, including cigarettes and SLT, cigars and SLT, and use of more than two products have increased. In tobacco users under age 26, the proportion of polytobacco use increased, even as overall tobacco use declined. The factors associated with polytobacco use among tobacco users included sex, income, education, risk taking/seeking behaviors, and outward indicators of 'risk-liability'.

Conclusions—Findings provide a snapshot of trends of single and polytobacco product use as well as trends in combinations of product use. Longitudinal studies are needed to examine the sequence of individual patterns of tobacco product use and to identify whether polytobacco use

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Conflict of Interest

The authors have no conflicts of interest to declare. There have been no involvements that might raise the question of bias in the work reported or in the conclusions, implications, or opinions stated. The views and opinions expressed in this presentation are those of the authors only and do not necessarily represent the views, official policy or position of the US Department of Health and Human Services or any of its affiliated institutions or agencies.

Contributors

All of the authors have contributed equally to the work contained in this manuscript. Richard O'Connor, Maansi Bansal-Travers, and Andrew Hyland were responsible for the conception and design, Brian Fix was responsible for data analysis, and Brian Fix, Richard O'Connor, Lisa Vogl, Danielle Smith, Maansi-Bansal Travers, Kevin Conway, Bridget Ambrose, Ling Yang, and Andrew Hyland drafted the manuscript and revised it critically for important intellectual content. All authors read and approved the final manuscript.

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results in greater nicotine dependence, increased exposure to harmful and potentially harmful constituents and/or greater risk of tobacco related disease.

Keywords

polytobacco use; tobacco; cigarettes; smokeless tobacco; cigars; tobacco use trends

1. Introduction

While cigarettes remain the most common form of tobacco used in the United States, with an estimated 43.8 million (19.0%) current smokers (Centers for Disease Control Prevention, 2012), sales of alternative tobacco products such as smokeless tobacco (SLT) and cigars are increasing (Delnevo et al., 2012; Maxwell, 2011) and the tobacco market is evolving with greater prominence and promotion of products such as SLT, cigars, other tobacco preparations, and electronic cigarettes (Backinger et al., 2008; Tomar, 2003).

In considering regulatory decisions to effectively decrease the disease burden caused by tobacco use in the US, the Food and Drug Administration under the 2009 Family Smoking Prevention and Tobacco Control Act has the authority to regulate cigarettes, smokeless tobacco, roll-your-own tobacco, and cigarette tobacco. The agency has announced its intention to issue deeming regulations to extend its authority to other forms of tobacco (Department of Health and Human Services/Food and Drug Administration, 2012; United States, 2008). Polytobacco product use represents an understudied feature of alternative tobacco-product use that may negatively affect public health.

There is currently a limited understanding of the trends and correlates of polytobacco use in the US. Data from the Tobacco Use Supplement of the Current Population Survey indicate concurrent use of cigarettes and other tobacco products increased from 1995/96 to 1998 (0.88% to 1.76%) but declined to 1.19% by 2001/02 (Backinger et al., 2008). Among adult cigarette smokers, cigars were the most prevalent product (3.49%) concurrently used in 2001/02, followed by SLT use (2.15%), and pipes (0.78%) (Backinger et al., 2008).

Relatively few studies have examined characteristics of polytobacco users. Stratified analyses of Behavioral Risk Factor Surveillance System data found that polytobacco use was more common among younger adults, men, whites, all races/ethnicities other than Hispanic, people with lower income and lower educational achievement, and those reporting more-than-moderate alcohol use (United States, 2008). Additional research, although limited, similarly supports such differences by gender, racial, income and educational background (Delnevo et al., 2012; Backinger et al., 2008; Department of Health and Human Services/Food and Drug Administration, 2012).

Although many studies report that tobacco use is associated with increased risk of alcohol and illicit drug use and abuse/dependence (Bien and Burge, 1990; Blazer, 2009; Gulliver SB, 1995; Jackson KM, 2003) in adults and youth (12–14), such data are sparse with respect to polytobacco use. One study showed that concurrent users of SLT and cigarettes drank substantially more alcohol than those who used cigarettes exclusively (Wetter et al., 2002). Analysis of the 2002 and 2004 National Youth Tobacco Surveys found that adolescent polytobacco use was associated with having higher levels of lost autonomy over smoking as an indicator of nicotine dependence (Bombard et al., 2008).

The association between risky behaviors and polytobacco use has been well established. Among 8th grade and high-school aged males in southern California, risky behaviors such as having a higher risk-taking preference, and greater likelihood of having tried marijuana and alcohol were positively associated with dual use of SLT and cigarettes (Simon et al., 1993).

Similarly, a study of Air Force recruits noted that individuals who used SLT and cigarettes had higher risk-taking scores than individuals who used only one product (Lando et al., 1999). College students engaging in risky behaviors such as using marijuana and having multiple sexual partners were more likely to use multiple tobacco products (Rigotti et al., 2000). Among Swedish adolescent boys, concurrent users of cigarettes and snuff had higher rates of daily smoking than those who used cigarettes exclusively. Additionally, oral snuff use was significantly associated with problem behaviors including unsafe sex, drinking and driving, and school absenteeism (Galanti et al., 2001).

Few studies have examined patterns and correlates of polytobacco use in the US over a prolonged period of time. It is unclear whether overall population tobacco use is growing with the array of tobacco products on the market, and/or if use is shifting within those who already use tobacco. Understanding the sociodemographic and behavioral correlates of polytobacco use will assist policymakers in better understanding the dynamics of polytobacco use behavior and its potential for change in response to policy interventions. This study examines 10 years of data from the National Survey on Drug Use and Health (NSDUH) to establish time trends and correlates for exclusive and mixed use of cigarettes, SLT, cigars, and pipes. Age, sex, race, education, income, risky behaviors, and use of other drugs of abuse were analyzed as potential correlates of polytobacco use.

2. MATERIALS AND METHODS

2.1. Data source

Data come from the public-use data files of the 2002–2011 NSDUH, a nationally representative cross-sectional survey of non-institutionalized civilians aged 12 years and older. Conducted annually in the United States, NSDUH provides ongoing national prevalence estimates of drug use and disorders. Additional information regarding NSDUH can be found online (Department of Health and Human Services, 2009). This analysis was limited to the 2002–2011 time frame, as surveys prior to 2002 cannot be directly combined with later surveys due to changes in the sampling scheme.

2.2. Tobacco use measures

Use of tobacco products was assessed in terms of use in the 12 months prior to the survey. Information related to the variables under consideration and the exact question wordings can be found online (Inter-university Consortium for Political and Social Research, 2012). In the NSDUH survey, participants were asked about their use of cigarettes, cigars, and SLT within the past 12 months. In this analysis, participants who reported using no tobacco products during the past 12 months were treated as non-users. Participants reporting use of only one tobacco product during the past 12 months were considered single-product users. Polytobacco users were defined as participants who reported using more than one tobacco product during the 12 months prior to their interview, with combinations of use falling into the following categories: cigarettes/SLT, cigarettes/cigars, SLT/cigars, or more than two products.

Use of tobacco products was also assessed in terms of use during the 30 days prior to the survey interview. The NSDUH survey asked participants about their use of cigarettes, cigars, SLT, and pipes within the past 30 days. Similar to the past 12-month use measures, past 30-day polytobacco users were defined as participants who reported using more than one tobacco product during the past 30 days (i.e. a combination of two or more of the following products: cigarettes, SLT, cigars, and pipes). Participants who reported using only one type of tobacco product during the past 30 days were considered single-product users. Participants who reported using no tobacco products of any kind during the past 30 days were considered non-users.

2.3. Demographic and behavioral measures

Individual-level factors examined for associations with single-product use and polytobacco use patterns were broadly grouped into demographic and behavioral factors. Measures of drug and alcohol abuse or dependence, rather than use, were employed in the current analysis as they likely represent a more severe pattern of behavior.

We also examined a number of cigarette dependence-related measures. However, these were only asked of cigarette smokers, so those who reported no cigarette use were not included in these analyses. Measures of nicotine dependence based on the Nicotine Dependence Syndrome Scale (NDSS) and Fagerstrom Test of Nicotine Dependence (FTND) were used to assess level of nicotine dependence (the measure coded in NSDUH as FTND-derived nicotine dependence is actually time to first cigarette after waking, where those smoking within 30 minutes are classified as dependent). Additionally, a measure of cigarette craving frequency was examined after it was collapsed into a dichotomous variable indicating whether a participant reported cravings at least some of the time or not at all.

2.4. Statistical analysis

All statistical analyses were conducted using SUDAAN v11 (RTI International, Research Triangle Park, NC) running under SAS v9.3 (SAS Institute, Cary NC). A with-replacement (WR) design was specified given the multistage clustered sampling design. Two nesting variables (VESTR, VEREP) capture the explicit stratification and clustering of the NSDUH data. The individual-level weight (ANALWT_C) was used in calculating estimates properly adjusted to the US population aged 12 and over. 2011 survey weights are calibrated to the 2010 census while prior years are calibrated to the 2000 census. A survey-year variable was created and used in all analyses.

Measures of single use, polytobacco use, and various subtypes were examined overall in order to assess past 12-month and past 30-day prevalence. Additionally, these measures were examined among those who reported using any tobacco products within the past 12 months or past 30 days to assess changes in product use during the time period under consideration.

Trends in single product use within the past 12 months and within the past 30 days were assessed across survey years using Cochran-Mantel-Haentzel tests. Multinomial logistic regression was used to examine patterns of polytobacco use within the past 12 months and within the past 30 days as a function of individual-level factors. Covariates included in the overall multivariate logistic regression controlled for the following demographic measures: age, sex, education, race, income. Two additional substance abuse measures were included: illicit drug abuse or dependence within the past 12 months and alcohol abuse or dependence within the past 12 months. Finally, risk-taking behavior was examined by including the following covariates: past 12 month driving under the influence of drugs or alcohol, whether a participant had ever been arrested and booked for breaking the law, a measure of level of enjoyment derived from "doing dangerous things", and a measure of how often a participant likes to test themselves by doing risky things. Multivariate logistic regression models were also stratified by age using the following age categories: 12–17 years old, 18–25 years old, and 26 or older. Survey year was included as a covariate in all analyses.

3. RESULTS

3.1. Overall polytobacco use prevalence

Use of any tobacco products declined significantly over the 10-year study period, from 35.8% in 2002 to 31.5% in 2011 (Wald $\chi^2 = 82.17$, P < 0.001). Past 12-month prevalence of

polytobacco use decreased between 2002 (8.7%) and 2011 (7.4%) (Wald χ^2 = 20.77, P <0.001), while single product use dropped (27.1% in 2002 to 24.1% in 2011; Wald χ^2 = 56.58, P <0.001). Given the overall downward trend in tobacco use, remaining analyses focus on the distribution of single product versus polytobacco use among tobacco users.

3.2. Past 12-month polytobacco use among tobacco users

Figure 1 examines tobacco product use among participants who reported using any past-year tobacco product from 2002–2011. The trends are relatively stable. The proportion of SLT use increased slightly between 2002 (4.9%) and 2011 (5.4%) (Wald $\chi^2 = 5.51$, P = 0.019), while cigarettes declined (62.1% to 59.9%; (Wald $\chi^2 = 7.09$, P = 0.008). Polytobacco use was stable over this time period (23.9% in 2002, 23.4% in 2011; Wald $\chi^2 = 0.02$, P = 0.877). The proportion of tobacco users reporting cigarette use (62.1%-59.9%; Wald $\chi^2 = 7.09$, P = 0.008) or combined cigarette and cigar use (16.5%-14.6%; Wald $\chi^2 = 25.17$, P < 0.001) decreased between 2002 and 2011, while rates increased for cigar use (9.1%–10.8%; Wald $\chi^2 = 9.98$, P = 0.002), smokeless use (4.9%–5.4%; Wald $\chi^2 = 5.51$, P = 0.019), cigarette/smokeless use (3.2%–3.9%; Wald $\chi^2 = 28.70$, P < 0.001), smokeless/cigar use (1.1%–1.3%; Wald $\chi^2 = 4.93$, P = 0.026), and use of more than two products (3.1%–3.7%; Wald $\chi^2 = 17.48$, P < 0.001). Exclusive cigar use increased the most (1.7 percentage points) over the 10 years. Dual use of cigarettes and cigars was the most common polytobacco use pattern, though it declined slightly over time.

3.3. Past 30-day polytobacco use among tobacco users

Figure 2 examines polytobacco use among participants who reported any past-month tobacco use. The trends are similar to those observed in past-year tobacco use. Exclusive cigarette (72.9%-70.9%; Wald $\chi^2=14.25$, P<0.001) and combined cigarette/cigar use (8.7%-7.9%; Wald $\chi^2=4.90$, P=0.027) declined from 2002–2011, while exclusive cigar (6.6%–8.4%; Wald $\chi^2=9.28$, P=0.002), exclusive SLT use (6.1%–6.5%; Wald $\chi^2=5.85$, P=0.016), cigarette/SLT use (3.0%–3.4%; Wald $\chi^2=12.66$, P<0.001) and use of more than two products (0.1%–0.2%; Wald $\chi^2=5.86$, P=0.016) increased. The subtypes of pipe only, cigarettes/pipes, SLT/cigars, cigars/pipes, SLT/pipes, and more than two products accounted for a total of 2.8% of all tobacco use combinations in 2002 and 2.9% in 2011. Time trends in other product combinations did not achieve statistical significance. Since the percentage of tobacco use accounted for by each of these subtypes was small, we elected to sum the percentages and present these as an "other subtypes" category in Figure 2. Collapsing across product classes, trends in past 30-day polytobacco use (13.6% in 2002, 13.3% in 2011; Wald $\chi^2=0.43$, P=0.510) were as stable as the past-year trends.

3.4. Factors associated with polytobacco use

Tables 1-A and 1-B (in appendix) present demographic and behavioral factors associated with polytobacco use in the past 12 months, by survey year, among tobacco users. We observed substantial differences in prevalence of past 12-month polytobacco use by gender, age, race, education, past-year alcohol, marijuana, and/or illicit drug abuse or dependence, incarceration, driving a vehicle under the influence of alcohol or drugs, enjoyment of danger, and risk-taking. Among past 12-month tobacco users, polytobacco use increased slightly, but significantly, over time among those aged 18–25 (37.3%–38.6%; Wald χ^2 = 5.40, P = 0.020) but not among other age groups. There was no evidence for different time trends by sex, drug abuse/dependence, or liking dangerous or risky things.

Tables 2-A and 2-B (in appendix) present demographic and behavioral factors associated with polytobacco use in the past 30 days, by survey year, among tobacco users. The pattern of findings is similar, though absolute prevalence and use rates are lower than that found among past 12-month polytobacco users. The share of polytobacco use in the past 30 days

increased significantly over the 2002–2011 period among those aged 12–17 (23.5%–29.0%; Wald χ^2 = 5.29, P = 0.021) and 18–25 (21.4%–23.7%; Wald χ^2 = 8.88, P = 0.003), as well as among women (5.9%–6.8%; Wald χ^2 = 4.47, P = 0.037). We observed no significant time trends by drug abuse category (P for trend > 0.10), enjoyment of dangerous things (P for trend = 0.38), or doing risky things (P for trend=0.34).

3.5. Multivariate models – 12-month and 30-day polytobacco use among all tobacco users: 2002–2011

We used logistic regression to examine the independent factors associated with polytobacco use measured over the past 12 months (Tables 3-A and 3-B) and the past 30 days (Tables 4-A and 4-B). Polytobacco use over the past 12 months (compared to single-product use) was significantly and independently associated with age, gender, race/ethnicity, income, drug abuse/dependence, alcohol abuse/dependence, being arrested, reporting driving under the influence of alcohol and/or drugs (DUI) in past 12 months, and liking to do risky or dangerous things. The pattern of results is broadly consistent with the bivariate analyses, with some notable exceptions. As age increased, the odds of polytobacco use for males (but not females) increased, suggesting an underlying age-by-gender interaction. The association of income and past 12-month polytobacco use was only statistically significant among those aged 26 and older, while education and drug abuse/dependence were not significantly associated with past-year polytobacco use in this age group. Survey year was not associated with odds of past 12-month polytobacco use in multivariate analysis.

Tables 4-A and 4-B show the logistic regression findings for past 30-day polytobacco use. Polytobacco use was significantly and independently associated with age, gender, race/ethnicity, income, education, drug abuse/dependence, alcohol abuse/dependence, being arrested, reporting DUI in past 12 months, and liking to do risky or dangerous things. As in the 12-month models, odds for polytobacco use among males increased with age. The odds of polytobacco use among African-American tobacco users (relative to Whites) reverse when comparing 12–17 year olds (OR = 0.70) and 26+ year olds (OR = 1.27). Risk-taking was not observed to be a significant independent predictor among 12–17 year olds. We observed small but significant upward trends in odds of past 30-day polytobacco use by survey year among the 12–17 (OR = 1.02) and 18–25 (OR = 1.01) age groups.

3.6. Relationship of dependence and craving to likelihood of polytobacco use among cigarette smokers

Table 5 examines whether nicotine dependence or craving were associated with likelihood of polytobacco use of cigarettes and at least one other tobacco product (relative to exclusive cigarette use), controlling for the same set of covariates as above. Polytobacco use among cigarette smokers was associated with lower likelihood of having the first cigarette within 30 minutes of waking (for 12-month use only) and also a lower likelihood of strong cravings for cigarettes (for both 12-month and past 30-day use). The associations with the other covariates were essentially unchanged.

4. CONCLUSIONS

4.1. Conclusions and implications

This study builds upon prior research on single-product tobacco use (Lando et al., 1999) by comparing patterns and correlates of single and polytobacco use in a nationally representative study whose data can be used to help inform researchers and policy makers about the prevalence and potential risk of concurrent use of multiple tobacco products. Results indicate that the rates of any tobacco use in the US have decreased between 2002 and 2011, driven largely by a decrease in use of cigarettes. Among those who reported

tobacco use in the 12 months prior to their interview, cigarettes were the largest proportion of single-product use, followed by cigars. The proportion of exclusive cigar use and SLT use increased steadily between 2002 and 2011, as has the combined use of cigarettes and SLT.

Against this backdrop, tracking polytobacco use has been a key priority among epidemiologists and tobacco-control researchers. Overall tobacco use has declined between 2002 and 2011. The overall rate of polytobacco use has also declined, though the absolute magnitude of this decline is small. The proportion of polytobacco use has grown among tobacco users under age 26, though this growth was less for the 12-month than the 30-day measure. A similar, but smaller increase was noted among women. Certain product-use combinations have also increased. Specifically, we observed increases in the combined use of cigarettes and SLT, cigars and SLT, and use of more than two tobacco products. There are a number of plausible explanations for these results. Increased promotion of and/or access to non-cigarette tobacco products may facilitate experimentation (Mejia and Ling, 2010; Regan et al., 2012; Seidenberg et al., 2012; Villanti et al., 2013), with a subset of experimenters moving on to regular use. Indeed, SLT marketing expenditures increased between 2002–2010, from \$235 to \$444 million (United States Federal Trade Commission, 2012; Delnevo et al., 2012), with sales increasing from 112 million to 120 million lbs. Advertising for novel forms of SLT has targeted smokers and often encourages dual use (Timberlake et al., 2011; Wackowski et al., 2011). This might help explain the observed increases in exclusive SLT use and dual use of SLT and cigarettes.

Tax differentials may also lead to product substitution, since SLT and cigars are not taxed as heavily as cigarettes and thus are more affordable alternatives. Federal tax statistics indicate that consumption of non-cigarette combustible tobacco increased after the 2009 enactment of the State Children's Health Insurance Program, which instituted an increase in the federal cigarette excise tax (Centers for Disease Control Prevention, 2012), although trends in consumption since 2009 are less clear. Finally, the increasing denormalization of cigarette smoking, including expansion of smoke-free spaces both indoors and outdoors, may drive some smokers to seek out other forms of tobacco use; in this regard, non-combustible products may represent particularly attractive alternatives (O'Connor, 2012).

The factors associated with polytobacco use among tobacco users included those that predict tobacco use more broadly – sex, income, education, and risk taking/seeking behaviors. Polytobacco use was also associated with outward indicators of 'risk-liability' such as drug and alcohol abuse or dependence, having been arrested, and driving under the influence. This is consistent with polytobacco use being symptomatic of a larger cluster of risk factors, some associated with tobacco use more broadly and others with externalizing problems more specifically. Future analyses will examine in greater depth the sequencing of product use, including use of illicit drugs and alcohol, to explore these questions of underlying liability toward substance use.

Interestingly, when analyses were constrained to cigarette smokers, measures of cigarette dependence were not consistently associated with polytobacco use – indeed, if anything, they were inversely associated. Similarly, a measure of having strong cravings for cigarettes was also inversely associated with polytobacco use both in the past year and the past month. We hypothesize that the reason for this inverse association speaks to the nature of polytobacco use. A smoker who has frequent strong cravings for cigarettes may not be able to satisfy those cravings with another product. Laboratory research bears this out to some extent. Smokers using non-cigarette tobacco products often report less craving reduction for these products compared to cigarettes (Cobb et al., 2010; Hatsukami et al., 2011; Kotlyar et al., 2011). Since the NDSS and FTND measures focused on consumption patterns and needs

and desires for cigarettes specifically, these measures or constructs may not apply equally to other forms of tobacco use.

4.2. Limitations

Although these analyses of NSDUH provide a snapshot into trends of single and polytobacco product use in the US, the findings should be considered in light of several limitations. First, NSDUH data does not capture information on the use of certain tobacco products, such as e-cigarettes and waterpipes, the use of which may be fairly common and increasing. Especially with respect to more recent data, it is plausible that the study missed specific subgoups of tobacco users, thereby underestimating the prevalence of both tobacco use (as e-cigarettes and/or waterpipe use may offset some of the observed decline in any tobacco product use) and polytobacco use. Second, the measures of nicotine dependence in NSDUH are cigarette-based, so there was no opportunity to test how overall dependence on nicotine (not tied to the delivery vehicle) factors into polytobacco use. Third, the cross-sectional nature of the NSDUH prohibits the examination of the sequence and development of individual patterns of tobacco-product use. As such, we were unable to address whether polytobacco use results in greater nicotine dependence, as well as the association between polytobacco use and tobacco-related disease.

Longitudinal data are needed to more fully assess the public health impact of polytobacco use and the impact of the growth in marketing of alternative tobacco products. The upcoming longitudinal Population Assessment of Tobacco and Health (PATH) Study, designed to provide a more comprehensive picture of tobacco-product use in the US, will help to address these and other important issues.

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Highlights

• We examined 10 years of data from the National Survey on Drug Use and Health (NSDUH).

- Trends and correlates are established for exclusive and mixed use of tobacco products.
- Rates of polytobacco decreased from 2002–2011 (8.7% to 7.4%).
- In users under 26, polytobacco use increased, even as overall tobacco use declined.

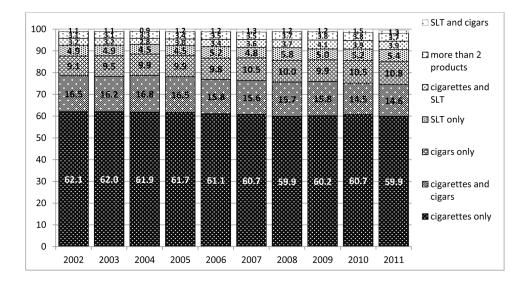


Figure 1.Past 12-Month Polytobacco Use Patterns Among Those Who Reported Using Tobacco Products 2002–2011 (n=201,702)

Note: In 2011, 0.57% reported using some to bacco product, but did not indicate which product was used

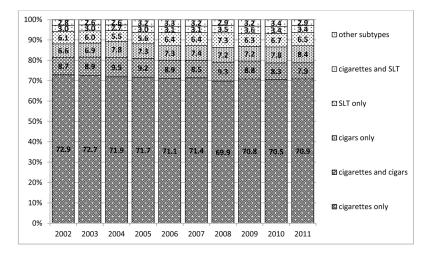


Figure 2.Past 30 Day Polytobacco Use Patterns Among Those Who Reported Using Tobacco Products 2002–2011 (n=160,194)

Table 1-A

Proportion of Past 12 Month Polytobacco Users Among All Past 12 Month Tobacco Users by Demographics Factors, United States, 2002–2011

31.77 31.7 31.95 (30.09, 33.51) (30.14, 33.30) (30.34, 33.62) 13.14 12.64 12.58 (11.87, 14.52) (11.59, 13.77) (11.58, 13.65) 38.8 40.08 42.01 (36.74, 40.90) (37.92, 42.29) (39.84, 44.22) 38.51 38.7 39.37 18.54 18.32 18.35 (17.04, 20.14) (17.24, 19.45) (17.11, 19.66) 24.69 24.51 25.03 21.58 21.2 18.35 (18.32, 25.24) (18.37, 24.32) (15.66, 21.99) 36.17 29.5 35.44 (22.35, 52.73) (20.67, 40.20) (26.79, 45.15) 13.56 12.87 (15.66, 21.99) 13.56 (6.59, 23.64) (9.18, 42.73) (11.30, 20.92) (12.56, 26.96) (12.82, 25.78) 35.05 (22.85 (26.96, 26.16) (19.21, 25.14) (6.59, 23.64) (9.18, 42.73) (13.0, 20.92) (12.56, 26.96) (12.82, 25.42) (20.33, 29.20) (21.89, 27.76) (22.56 (20.		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
11,72 11,234 11,254 11,187,14,52 11,159,13,77 11,128 11,365 11,365 11,37 11,187,13.65 11,367,13,77 11,187,13.65 11,37 11,187,13.65 11,37 11,38,13.65 11,37 11,38,13.65 13,37 13,38,13 13,37 13,38,13 13,37 13,38,13 13,37	Male	32.86 (31.40, 34.35)	31.66 (30.06, 33.29)		31.77 (30.09, 33.51)	31.7 (30.14, 33.30)	31.95 (30.34, 33.62)	32.41 (30.92, 33.94)	33.51 (32.24, 34.81)	30.59 (29.24, 31.98)	30.38 (29.00, 31.75)
March 38.69 38.74 39 38.8 40.08 40.08 42.01 March 35.97, 38.57 36.77, 40.74 36.97, 41.07 36.74, 40.90 37.92, 42.29 39.84, 44.22 March 35.97, 38.57 37.00, 39.38 36.66, 39.31 37.31, 39.73 37.31, 39.73 39.37 March 18.88 18.82 18.22 18.24 18.32 18.35 March 22.99 22.38 23.87 23.47 23.41, 26.03 24.51 25.03 March 22.99 22.35 20.65 21.58 21.28 21.2 25.03 March 22.99 22.35 20.65 21.88 21.2 21.89 March 22.99 21.34 22.34 22.34 22.34 22.34 22.34 March 22.99 21.34 22.35 20.65 21.88 21.2 21.84 March 22.99 21.34 22.35 20.65 21.88 21.2 21.84 March 22.39 21.34 22.35 22.34 22.34 22.34 22.34 March 22.39 21.34 22.35 22.34 22.34 22.34 March 22.39 23.34 23.37 23.84 22.34 23.37 23.44 March 22.39 23.34 23.37 23.34 23.34 23.34 March 23.35 23.34 23.37 23.34 23.34 23.34 March 23.35 23.34 23.37 23.34 23.34 23.34 March 23.35 23.34 23.34 23.34 23.34 23.34 March 23.35 23.34 23.34 23.34 23.34 March 23.34 23.34 23.34 23.34 23.34 March 23.34 23.34 23.34 23.34 23.34 23.34 March	Female	11.72 (10.70, 12.81)	12.34 (11.32, 13.45)	12.59 (11.82, 13.40)	13.14 (11.87, 14.52)	12.64 (11.59, 13.77)	12.58 (11.58, 13.65)	12.52 (11.49, 13.64)	13.08 (12.05, 14.19)	13.56 (12.24, 15.00)	12.3 (11.42, 13.24)
Mathematics 18.85 18.02 18.25 18.54 18.55	12–17 Years Old	38.69 (36.84, 40.57)	38.74 (36.77, 40.74)	39 (36.97, 41.07)	38.8 (36.74, 40.90)	40.08 (37.92, 42.29)	42.01 (39.84, 44.22)	38.91 (36.30, 41.59)	39.32 (37.46, 41.21)	36.88 (34.64, 39.18)	39.9 (37.69, 42.15)
re Am/AK Native (12.54) (12.54) (17.64, 20.14) (17.24, 19.45) (17.11, 19.66) (17.65, 20.17) (16.77, 19.33) (17.31, 19.24) (17.04, 20.14) (17.24, 19.45) (17.11, 19.66) (23.34, 25.66) (22.75, 25.01) (22.98, 24.77) (23.41, 26.03) (23.37, 25.69) (23.90, 26.20) (22.35, 25.21) (17.68, 23.98) (18.32, 25.24) (18.37, 24.52) (15.66, 21.99) (19.00, 26.11) (17.68, 23.98) (18.32, 25.24) (18.37, 24.32) (15.66, 21.99) (19.00, 20.31, 39.6) (20.38, 39.96) (23.35, 52.73) (20.67, 40.20) (26.79, 45.15) (19.00, 20.31, 39.6) (11.50, 21.17) (16.65, 32.09) (11.30, 20.92) (12.56, 26.99) (12.82, 25.78) (11.59, 33.11) (16.65, 32.09) (11.30, 20.92) (12.56, 26.99) (12.82, 25.78) (19.20, 26.46) (20.11, 36.16) (20.68, 37.70) (23.98, 39.50) (23.89, 45.45) (17.13, 29.80) (19.32, 34.45) (19.20, 26.46) (20.84, 26.00) (21.47, 26.98) (22.83, 26.19) (22.23, 26.19) (22.83,	18-25 Years Old	37.26 (35.97, 38.57)	38.19 (37.00, 39.38)	37.98 (36.66, 39.31)	38.51 (37.31, 39.73)	38.7 (37.03, 40.40)	39.37 (38.05, 40.71)	38.96 (37.38, 40.56)	40.24 (38.69, 41.81)	38.87 (37.29, 40.48)	38.56 (37.15, 39.98)
kAhft Am 23.87 23.86 24.69 24.51 25.03 kAhft Am (23.34, 25.66) (22.76, 25.01) (22.98, 24.77) (23.41, 26.03) 24.51 25.00 23.00, 26.20 kAhft Am (22.99) 22.35 20.65 11.58 21.2 18.62 ve Am/AK Native 25.39 31.34 29.21 36.17 29.5 35.44 ve HI/Other Pac Isl 20.52 31.66 60.65 13.56 12.87 20.67, 40.20 25.75, 45.15) ve HI/Other Pac Isl 20.52 31.66 60.65 13.56 12.87 20.67, 40.20 20.79, 45.15) n 15.04 15.04 (20.38, 39.60) (21.27.41) (6.59, 23.64) (21.84, 27.73) n 15.04 20.25 31.25 (6.12.27.41) (6.59, 23.64) (9.18, 42.73) n 15.05 30.05 31.25 (3.97, 25.20) (11.26, 27.41) (3.59, 26.20) (12.82, 23.64) (9.18, 42.73) 100 (including loss) 25.88 25.05 25.10	26 Years Old or Older	18.88 (17.65, 20.17)		18.25 (17.31, 19.24)	18.54 (17.04, 20.14)	18.32 (17.24, 19.45)	18.35 (17.11, 19.66)	19.14 (18.03, 20.31)	19.57 (18.52, 20.66)	18.48 (17.30, 19.71)	17.4 (16.35, 18.50)
k/Afr Am 22.99 22.35 20.65 21.58 21.2 18.62 ve Am/AK Native 25.39 31.34 29.21 36.17 29.5 15.66, 21.99 ve Am/AK Native 25.39 31.34 29.21 36.17 29.5 35.44 ve HI/Other Pac Is 20.53 31.34 29.21 36.17 29.5 35.44 a HI/Other Pac Is 20.52 31.66 60.65 13.56 12.87 21.55 n 15.93 15.74 23.51 15.51 (6.59, 23.64) (9.18, 42.73) n 9.15.93 15.74 23.51 15.51 (6.59, 23.64) (9.18, 42.73) than one race 27.41 28.43 31.22 35.05 (11.30, 20.92) (12.56, 26.96) (12.84, 22.73) than one race 27.41 28.43 31.22 35.05 (12.56, 26.96) (12.84, 26.76) (12.84, 26.76) 20.11, 36.10 20.24, 35.30 (20.84, 26.90) (21.47, 26.95) (12.47, 26.95) (12.47, 26.95) (12.47, 26.95)	NonHisp White	24.48 (23.34, 25.66)	23.87 (22.76, 25.01)	23.86 (22.98, 24.77)	24.69 (23.41, 26.03)	24.51 (23.37, 25.69)	25.03 (23.90, 26.20)	24.6 (23.46, 25.79)	24.99 (23.90, 26.11)	24.36 (23.25, 25.50)	23.5 (22.44, 24.59)
ve Am/AK Native 25.39 31.34 29.21 36.17 29.5 35.44 ve HI/Other Pac Is (19.90, 31.78) (25.06, 38.40) (20.38, 39.96) (20.33, 52.73) (20.67, 40.20) (26.79, 45.15) ve HI/Other Pac Is 20.52 31.66 60.65 13.56 12.87 21.55 n 15.93 15.74 23.51 15.71 (6.12, 27.41) (6.59, 23.64) (9.18, 42.73) s: than one race 27.41 28.43 31.22 35.05 (12.56, 26.96) (12.82, 25.78) c than one race 27.41 28.43 31.22 35.05 (17.3, 29.80) (12.36, 26.96) (12.82, 25.78) c than one race 27.41 28.43 31.22 35.05 (22.85 26.19 c than one race 27.41 28.43 31.22 35.05 (17.13, 29.80) (19.32, 25.78) c than one race 27.41 28.43 31.22 25.09 (25.89, 45.45) (17.13, 29.80) (19.25, 26.96) (12.84, 27.3) c than one race 27.41 <	NonHisp Black/Afr Am	22.99 (20.06, 26.21)		20.65 (17.68, 23.98)	21.58 (18.32, 25.24)	21.2 (18.37, 24.32)	18.62 (15.66, 21.99)	21.76 (19.22, 24.52)	22.62 (19.92, 25.56)	19.55 (16.60, 22.87)	21.13 (18.61, 23.88)
ve HI/Other Pac IsI 20.52 31.66 60.65 13.56 12.87 21.55 n (9.23, 39.61) (14.92, 46.32) (38.97, 78.81) (6.12, 27.41) (6.59, 23.64) (9.18, 42.73) n 15.93 15.74 23.51 15.51 18.72 18.43 s than one race 27.41 28.43 31.22 35.05 22.85 26.19 22.62 27.41 28.43 31.22 35.05 22.85 26.19 22.62 23.32 24.41 28.43 31.22 35.05 22.85 26.19 19.20, 26.46 (20.84, 26.00) (21.47, 26.95) (19.21, 25.14) (20.68, 26.76) (19.32, 34.45) 22.63 22.88 24.38 25.02 26.11 20.68, 26.76) (20.56, 26.19) 22.37 (12.00, 27.38) (22.03, 28.19) (21.22, 23.29.20) (21.89, 27.76) (22.28, 26.77) 22.37 (19.25, 23.48) (20.37, 25.70) (20.28, 26.27) (19.45, 25.18) (21.51, 26.67) 22.37 (20.78, 26.26) <th>NonHisp Native Am/AK Native</th> <td>25.39 (19.90, 31.78)</td> <td></td> <td>29.21 (20.38, 39.96)</td> <td>36.17 (22.35, 52.73)</td> <td>29.5 (20.67, 40.20)</td> <td>35.44 (26.79, 45.15)</td> <td>17.71 (12.13, 25.12)</td> <td>31.66 (22.74, 42.17)</td> <td>21.51 (16.13, 28.09)</td> <td>23.55 (16.84, 31.90)</td>	NonHisp Native Am/AK Native	25.39 (19.90, 31.78)		29.21 (20.38, 39.96)	36.17 (22.35, 52.73)	29.5 (20.67, 40.20)	35.44 (26.79, 45.15)	17.71 (12.13, 25.12)	31.66 (22.74, 42.17)	21.51 (16.13, 28.09)	23.55 (16.84, 31.90)
n 15.93 15.74 23.51 15.51 15.51 18.72 18.43 e than one race 27.41 28.43 31.22 35.05 22.85 26.96 (12.82, 25.78) 22.62 27.41 28.43 31.22 35.05 22.85 26.19 26.19 22.62 23.32 24.1 26.89, 45.45 (17.13, 29.80) (19.32, 34.45) 23.34 22.62 23.32 24.1 22.03 23.59 (19.20, 26.46) (20.84, 26.00) (21.47, 26.95) (19.21, 25.14) (20.68, 26.76) (20.56, 26.19) 00 (including loss) 25.88 24.38 25.02 26.11 24.71 26.88 22.37 22.84 22.03 23.34 23.34 24.21 24.22 22.37 21.29 22.93 23.14 22.18 24.25 24.25 22.73 22.73 21.79 23.56 23.56 25.42 21.51, 26.77 22.34 22.35 21.79 23.56 23.56 23.24	NonHisp Native HI/Other Pac Isl	20.52 (9.23, 39.61)		60.65 (38.97, 78.81)	13.56 (6.12, 27.41)	12.87 (6.59, 23.64)	21.55 (9.18, 42.73)	25.33 (11.49, 46.98)	32.06 (10.77, 64.86)	27.46 (10.73, 54.37)	21.91 (10.21, 40.90)
of (including loss) 27.41 28.43 31.22 35.05 22.85 26.19 22.62 23.32 24.1 22.03 23.59 23.59 23.59 23.54.45 00 (including loss) 25.88 24.1 22.03 23.59 23.59 23.59 00 (including loss) 25.88 24.38 25.02 26.11 24.71 26.88 22.37 21.29 22.09 22.93 23.14 22.18 24.29 22.37 21.29 22.93 23.14 22.18 22.56 22.73 21.79 22.63 23.56 21.51.28 22.56 22.73 21.79 23.65 23.56 23.56 21.51.28 22.56 22.73 21.79 23.69 23.56 23.62 25.42 21.51.28 22.73 21.79 23.69 21.60 23.56 21.61 23.56 22.73 21.79 23.59 21.04 23.78 21.94 23.51 22.84	NonHisp Asian	15.93 (9.47, 25.53)	15.74 (11.50, 21.17)	23.51 (16.65, 32.09)	15.51 (11.30, 20.92)	18.72 (12.56, 26.96)	18.43 (12.82, 25.78)	14.98 (9.39, 23.05)	17.69 (13.75, 22.46)	21.65 (16.00, 28.61)	16.75 (11.62, 23.55)
00 (including loss) 23.32 24.1 22.03 23.59 23.26 00 (including loss) 25.86 24.1 26.91 26.11 24.71 26.88 22.37 22.94 (21.60, 27.38) 22.09 22.93 23.14 22.18 24.29 22.37 21.29 22.93 23.14 22.18 21.50 22.73 21.79 23.69 23.50 23.56 (20.38, 25.26) (19.70, 24.04) (21.26, 26.31) (20.30, 27.18) (22.34, 28.18) (21.51, 26.67) 24.35 23.59 21.04 (21.60, 27.38, 25.26) (19.70, 24.04) (21.26, 26.31) (20.30, 27.18) (22.84, 28.18) (20.25, 25.04) 22.43 23.59 21.04 (18.50, 23.82) (16.34, 21.48) (20.44, 25.79) (19.40, 24.74) 22.84 22.93 23.64 23.12 21.94 24.35 23.59 21.04 18.77 23.12 22.84 23.59 21.04 23.42 21.94 22.84 23.59 21.04 23.51 21.94 22.35 21.04 23.54 23.42 24.35 22.35 21.04 23.51 21.94 22.84 23.21 23.24 <td< td=""><th>NonHisp more than one race</th><td>27.41 (20.11, 36.16)</td><td></td><td>31.22 (23.98, 39.50)</td><td>35.05 (25.89, 45.45)</td><td>22.85 (17.13, 29.80)</td><td>26.19 (19.32, 34.45)</td><td>24.31 (17.17, 33.23)</td><td>22.44 (17.73, 27.99)</td><td>27.2 (20.07, 35.72)</td><td>29.84 (23.95, 36.49)</td></td<>	NonHisp more than one race	27.41 (20.11, 36.16)		31.22 (23.98, 39.50)	35.05 (25.89, 45.45)	22.85 (17.13, 29.80)	26.19 (19.32, 34.45)	24.31 (17.17, 33.23)	22.44 (17.73, 27.99)	27.2 (20.07, 35.72)	29.84 (23.95, 36.49)
00 (including loss) 25.88 24.38 25.02 26.11 24.71 26.88 22.86, 29.04) (21.60, 27.38) (22.09, 28.19) (23.23, 29.20) (21.89, 27.76) (24.29, 29.64) 22.37 21.29 22.93 23.14 22.18 24 20.18, 24.72) (19.25, 23.48) (20.37, 25.70) (20.28, 26.27) (19.45, 25.18) (21.51, 26.67) 22.73 21.79 23.69 23.56 25.42 22.56 (20.38, 25.26) (19.70, 24.04) (21.26, 26.31) (20.30, 27.18) (22.84, 28.18) (20.25, 25.04) 24.35 23.59 21.04 18.77 23.12 21.95 (21.79, 27.10) (21.28, 26.07) (18.50, 23.82) (16.34, 21.48) (20.64, 25.79) (19.40, 24.74) 22.84 22.92 22.92 22.24 23.57 22.78 22.92 22.74 23.57 22.78 22.92 22.92 22.92 22.84 22.24 23.57 23.57 22.24 23.57 23.57<	Hispanic	22.62 (19.20, 26.46)	23.32 (20.84, 26.00)	24.1 (21.47, 26.95)	22.03 (19.21, 25.14)	23.59 (20.68, 26.76)	23.26 (20.56, 26.19)	26.55 (23.12, 30.29)	27.57 (24.86, 30.47)	23.58 (20.59, 26.85)	21.61 (19.04, 24.42)
22.37 21.29 22.93 23.14 22.18 24 (20.18, 24.72) (19.25, 23.48) (20.37, 25.70) (20.28, 26.27) (19.45, 25.18) (21.51, 26.67) 22.73 21.79 23.69 23.56 25.42 22.56 (20.38, 25.26) (19.70, 24.04) (21.26, 26.31) (20.30, 27.18) (22.84, 28.18) (20.25, 25.04) 24.35 23.59 21.04 18.77 23.12 21.95 (21.79, 27.10) (21.28, 26.07) (18.50, 23.82) (16.34, 21.48) (20.64, 25.79) (19.40, 24.74) 22.84 22.24 22.24 23.51 22.84 22.24 23.51 22.78 22.24 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 23.57 22.84 24.74 22.84 24.74 22.84 24.74 22.84 24.74 22.84	Less than 10,000 (including loss)	25.88 (22.86, 29.04)	24.38 (21.60, 27.38)	25.02 (22.09, 28.19)	26.11 (23.23, 29.20)	24.71 (21.89, 27.76)	26.88 (24.29, 29.64)	28.97 (26.00, 32.14)	29.27 (26.58, 32.12)	28.06 (24.93, 31.42)	28.09 (25.40, 30.94)
22.73 21.79 23.69 23.56 25.42 22.56 (20.38, 25.26) (19.70, 24.04) (21.26, 26.31) (20.30, 27.18) (22.84, 28.18) (20.25, 25.04) 24.35 23.59 21.04 18.77 23.12 21.95 (21.79, 27.10) (21.28, 26.07) (18.50, 23.82) (16.34, 21.48) (20.64, 25.79) (19.40, 24.74) 22.84 22.34 23.51 22.84 23.51 22.84 23.51 22.84 23.51 22.84 23.51 22.84 23.51 23.57 (19.66, 25.18) (19.41, 24.74) 23.51 23.54	10,000–19,999	22.37 (20.18, 24.72)	21.29 (19.25, 23.48)	22.93 (20.37, 25.70)	23.14 (20.28, 26.27)	22.18 (19.45, 25.18)	24 (21.51, 26.67)	21.15 (18.54, 24.00)	23.86 (21.30, 26.63)	22.28 (19.52, 25.31)	22.01 (19.45, 24.81)
24.35 23.59 21.04 18.77 23.12 21.95 21.95 (21.79, 27.10) (21.28, 26.07) (18.50, 23.82) (16.34, 21.48) (20.64, 25.79) (19.40, 24.74) 22.84 25.01 22.84 25.01 22.92 22.24 23.51 (20.64, 25.34) (20.64, 25.3	20,000–29,000	22.73 (20.38, 25.26)	21.79 (19.70, 24.04)	23.69 (21.26, 26.31)	23.56 (20.30, 27.18)	25.42 (22.84, 28.18)	22.56 (20.25, 25.04)	22.75 (19.89, 25.88)	24.73 (22.00, 27.67)	19.31 (17.17, 21.65)	23.68 (20.81, 26.81)
22.84 25.01 22.78 22.92 22.24 23.51 22.92 22.34 23.51	30,000–39,999	24.35 (21.79, 27.10)	23.59 (21.28, 26.07)	21.04 (18.50, 23.82)	18.77 (16.34, 21.48)	23.12 (20.64, 25.79)	21.95 (19.40, 24.74)	25.51 (22.70, 28.53)	23.57 (20.78, 26.61)	24.64 (21.73, 27.79)	21.66 (19.15, 24.39)
(20.24, 23.37) (13.30, 20.18) (13.31, 24.77) (20.30, 20.27)	40,000-49,999	22.84 (20.51, 25.34)	25.01 (22.29, 27.93)	22.78 (20.22, 25.57)	22.92 (19.96, 26.18)	22.24 (19.91, 24.77)	23.51 (20.96, 26.27)	24.25 (21.05, 27.77)	24.27 (21.35, 27.45)	25.38 (22.16, 28.88)	22.93 (19.90, 26.27)

Fix et al.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
50,000–74,999	25.11 (22.71, 27.67)	25.11 25.78 (22.71, 27.67) (23.05, 28.73)	23.47 (21.56, 25.50)	26.11 (23.44, 28.96)	24.33 (22.05, 26.76)	25.22 (22.84, 27.77)	24.81 (22.65, 27.10)	22.75 (20.85, 24.77)	22.24 (20.02, 24.62)	23.62 (21.08, 26.36)
75,000 or more	24.32 (22.21, 26.55)	24.32 23.33 (22.21, 26.55) (21.16, 25.65)	23.94 (23.94, 28.39)	23.36 (23.36, 28.39)	22.47 (22.47, 26.62)	22.19 (22.19, 26.21)	22.08 (22.08, 26.04)	24.16 (24.16, 28.47)	22.65 (22.65, 26.92)	21.2 (19.59, 22.91)
Grade School	23.42	23.42 22.79	23.93	21.96	22.86	24.78	21.3	26.55	22.78	24.52
	(19.99, 27.24)	(19.99, 27.24) (20.13, 25.69)	(20.89, 27.27)	(18.26, 26.18)	(19.28, 26.89)	(21.25, 28.67)	(17.03, 26.30)	(24.56, 32.23)	(19.23, 26.77)	(20.40, 29.18)
Some High School	28.96	28.96 27.29	27.46	26.88	26.7	31.71	29.48	29.04	26.21	27.74
	(27.02, 30.98)	(27.02, 30.98) (25.36, 29.32)	(25.67, 29.32)	(24.96, 28.90)	(24.59, 28.93)	(29.74, 33.76)	(27.23, 31.84)	(26.97, 31.21)	(23.82, 28.75)	(25.59, 30.00)
High School Graduate	22.36	22.36 22.01	21.94	22.86	23.78	21.99	22.17	25.98	22.43	22.22
	(20.90, 23.88)	(20.90, 23.88) (20.42, 23.68)	(20.48, 23.47)	(21.28, 24.52)	(22.21, 25.42)	(20.49, 23.56)	(20.63, 23.79)	(24.09, 27.97)	(20.57, 24.41)	(20.64, 23.88)
Some College	23.2 (21.25, 25.27)	23.2 22.93 (21.25, 25.27) (21.08, 24.89)	24.04 (22.08, 26.10)	25.8 (23.62, 28.12)	23.86 (22.09, 25.72)	23.71 (21.83, 25.70)	25.17 (23.44, 26.98)	22.99 (21.11, 24.98)	24.99 (23.15, 26.93)	23.43 (21.45, 25.53)
4 Year Degree +	22.69	22.69 23.55	22.84	21.37	21.27	20.74	22.72	21.48	21.89	19.01
	(20.13, 25.47)	(20.13, 25.47) (20.76, 26.57)	(20.62, 25.22)	(18.50, 24.54)	(18.97, 23.77)	(18.25, 23.48)	(20.40, 25.21)	(19.13, 24.02)	(19.79, 24.15)	(16.67, 21.58)

Table 1-B

Proportion of Past 12 Month Polytobacco Users Among All Past 12 Month Tobacco Users by Risk Factors, United States, 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No Alc. Abuse or Dependence - Past Year	20.97 (19.91, 22.07)	21.04 (20.00, 22.12)	20.44 (19.59, 21.32)	21.09 (19.92, 22.32)	20.87 (19.88, 21.89)	20.69 (19.58, 21.85)	21.19 (20.19, 22.22)	22.15 (21.26, 23.07)	21.1 (19.98, 22.26)	20.72 (19.80, 21.67)
Alc. Abuse or Dependence - Past Year	39.91 (37.28, 42.59)	37.17 (25.10, 39.30)	41.31 (38.75, 43.92)	40.22 (37.58, 42.92)	40.07 (38.05, 42.12)	42.09 (39.18, 45.05)	40.85 (37.99, 43.78)	39.81 (37.22, 42.45)	38.92 (36.06, 41.86)	36.84 (34.14, 39.64)
No Illicit Drug Abuse or Dependence-Past	22.2	22.02	22.14	22.59	22.06	22.46	22.63	23.57	22.02	21.38
Year	(21.10, 23.34)	(21.00, 23.08)	(21.35, 22.95)	(21.34, 23.89)	(21.15, 23.00)	(21.51, 23.43)	(21.65, 23.65)	(22.73, 24.42)	(21.01, 23.06)	(20.49, 22.30)
Marijuana Only Abuse or Dependence-	51.16	50.25	47.32	50.22	51.27	51.09	49.75	45.45	51.48	43.11
Past Year	(45.83, 56.47)	(45.96, 54.54)	(43.06, 51.61)	(45.61, 54.83)	(47.31, 55.21)	(46.21, 55.95)	(45.23, 54.27)	(41.34, 49.61)	(46.35, 56.57)	(38.27, 48.09)
Illicit Drugs Other Than Marijuana Abuse	38.9	35.76	38.3	33.17	40.58	37.83	39.07	36.64	37.04	41.59
or Dependence-Past Year	(31.70,46.61)	(29.57, 42.46)	(31.91, 45.13)	(27.80, 39.02)	(34.22, 47.27)	(31.45, 44.66)	(33.02, 45.48)	(29.62, 44.27)	(31.65, 42.79)	(34.88, 48.61)
Marijuana and Some Other Illicit Drug	55.4	56.67	54.86	55.83	61.76	55.44	55.53	57.5	48.22	57.43
Abuse or Dependence	(45.14, 65.21)	(46.49, 66.32)	(48.04, 61.50)	(45.41, 65.75)	(53.21, 69.63)	(46.54, 64.01)	(47.77, 63.03)	(48.46, 66.07)	(36.96, 59.68)	(47.30, 66.98)
Yes, been arrested for breaking law	31.82	31.94	32.91	29.63	30.74	30.29	30.79	32.61	28.46	28.29
	(29.80, 33.92)	(29.81, 34.14)	(30.76, 35.14)	(27.68, 31.65)	(28.80, 32.74)	(28.24, 32.41)	(28.99, 32.65)	(30.48, 34.82)	(26.93, 30.04)	(26.77, 29.85)
Never arrested for breaking law	21.04	20.19	20.23	21.77	21.24	21.47	21.56	21.49	21.58	20.6
	(19.91, 22.21)	(19.09, 21.34)	(19.32, 21.18)	(20.59, 22.99)	(20.17, 22.36)	(20.47, 22.50)	(20.37, 22.80)	(20.41, 22.61)	(20.31, 22.91)	(19.54, 21.69)
Don't drive and/or no alcohol/drug use	17.9 (16.84, 19.02)	17.78 (16.61, 19.01)	17.78 (16.80, 18.80)	18.57 (17.26, 19.96)	18.12 (17.01, 19.29)	18.66 (17.54, 19.83)	18.43 (17.32, 19.60)	18.68 (17.76, 19.62)	17.67 (16.46, 18.96)	17.48 (16.42, 18.59)
Yes -Drove under influence in past year	45.01	46.53	46.35	47.48	47.22	48.36	47.57	48.24	43.27	45.23
	(41.32, 48.75)	(43.91, 49.18)	(42.29, 50.45)	(43.39, 51.61)	(42.91, 51.58)	(45.03, 51.71)	(43.19, 51.98)	(44.64, 51.85)	(39.19, 47.45)	(40.48, 50.06)
No- Drove under influence in past year	38.35	36.19	37.11	35.89	37.02	35.9	36.69	37.39	36.14	34.26
	(36.42, 40.31)	(34.26, 38.18)	(35.08, 39.19)	(33.60, 38.24)	(34.90, 39.18)	(33.84, 38.01)	(34.64, 38.79)	(34.81, 40.05)	(34.27, 38.05)	(32.23, 36.36)
Never get a real kick out of doing dangerous things	14.77	14.83	14.31	14.16	14.02	14.37	14.52	15.69	14.83	14.7
	(13.53, 16.11)	(13.24, 19.59)	(13.08, 15.64)	(12.52, 15.97)	(12.43, 15.77)	(12.95, 15.91)	(13.11, 16.06)	(14.34, 17.15)	(13.25, 16.57)	(13.40, 16.10)
Seldom get a real kick out of doing dangerous things	23.43	23.14	24.83	24.3	25.4	23.96	24.77	24.44	24.35	22.58
	(21.50, 25.48)	(21.66, 24.70)	(23.33, 26.39)	(22.69, 25.98)	(23.82, 27.05)	(22.41, 25.57)	(23.33, 26.27)	(22.72, 26.24)	(22.47, 26.33)	(21.13, 24.09)
Sometimes get a real kick out of doing dangerous things	35.78	33.33	32.54	34.48	33.08	36.5	35.22	37.03	33.73	34.51
	(33.53, 38.11)	(31.62, 35.09)	(30.53, 34.61)	(32.07, 36.98)	(31.13, 35.09)	(34.91, 38.12)	(33.24, 37.25)	(34.94, 39.17)	(31.53, 35.99)	(32.64, 36.43)
Always get a real kick out of doing dangerous things	45.46	49.73	47.3	47	50.54	49.31	43	52.45	43.27	38.1
	(41.26, 49.72)	(45.77, 53.70)	(42.95, 51.68)	(42.35, 51.70)	(47.06, 54.02)	(44.66, 53.98)	(38.06, 48.09)	(48.31, 56.55)	(38.33, 48.34)	(33.55, 42.87)
Never like to test self by doing risky things	15.67	15.62	14.75	14.74	14.89	15.13	15.54	15.76	15.48	15.29
	(14.15, 17.31)	(14.06, 17.31)	(13.43, 16.18)	(13.38, 16.22)	(13.17, 16.78)	(13.58, 16.81)	(14.07, 17.14)	(14.41, 17.21)	(13.72, 17.41)	(14.19, 16.46)
Seldom like to test self by doing risky things	24.36	24.12	25.03	25.02	25.74	25.17	24.81	26.34	25.29	23.41
	(22.68, 26.13)	(22.80, 25.49)	(23.61, 26.50)	(23.33, 26.79)	(24.20, 27.35)	(23.67, 26.73)	(23.35, 26.34)	(24.84, 27.89)	(23.48, 27.18)	(21.83, 25.07)

Sometimes like to test self by doing risky things

Always like to test self by doing risky things

Table 2-A

Proportion of Past 30 day Polytobacco Users Among all Past 30 Day Tobacco Users by Demographics Factors, United States, 2002-2011

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Male	19.02 (17.89, 20.21)	18.94 (17.75, 20.20)	19.42 (18.22, 20.68)	19.64 (18.86, 21.09)	19.77 (18.27, 21.36)	19.54 (18.16, 21.00)	20.85 (19.35, 22.44)	20.29 (19.17, 21.46)	18.47 (17.09, 19.94)	17.84 (16.61, 19.14)
Female	5.94 (5.20, 6.77)	6.37 (5.52, 7.33)	6.26 (5.56, 7.03)	6.51 (5.78, 7.33)	6.49 (5.79, 7.27)	5.97 (5.20, 6.85)	6.09 (5.35, 6.92)	6.73 (6.03, 7.50)	7.73 (6.69, 8.92)	6.76 (5.94, 7.68)
12–17 Years Old	23.48 (21.45, 25.64)	25.02 (22.75, 27.43)	24.58 (22.18, 27.15)	25.24 (23.22, 27.38)	25.86 (23.50, 28.37)	27.1 (24.80, 29.52)	27.32 (24.80, 30.00)	26.15 (23.71, 28.74)	23.13 (20.78, 25.66)	29.02 (26.10, 32.11)
18–25 Years Old	21.4 (20.29, 22.55)	22.24 (21.11, 23.42)	23.23 (22.09, 24.41)	22.43 (21.30, 23.59)	23.03 (21.63, 24.48)	21.83 (20.47, 23.26)	23.41 (22.13, 24.75)	24.56 (23.17, 26.00)	23.24 (21.74, 24.80)	23.67 (22.34, 25.05)
26 Years Old or Older	10.88 (10.00, 11.83)	10.62 (9.68, 11.65)	10.83 (9.79, 11.96)	11.45 (10.39, 12.61)	11.41 (10.25, 12.70)	11.36 (10.37, 12.44)	12.09 (11.00, 13.27)	11.49 (10.61, 12.44)	10.3 (10.30, 12.58)	9.88 (8.85, 11.02)
NonHisp White	13.54 (12.63, 14.50)	13.24 (12.42, 14.11)	13.71 (12.67, 14.81)	14.2 (13.24, 15.22)	14.07 (12.86, 15.36)	14.23 (13.22, 15.30)	14.42 (13.26, 15.66)	14.36 (13.52, 15.24)	13.76 (12.80, 14.77)	12.96 (11.96, 14.03)
NonHisp Black/Afr Am	15.65 (12.71, 19.11)	15.89 (12.94, 19.37)	15.26 (12.26, 18.83)	14.71 (12.43, 17.33)	15.02 (12.79, 17.57)	13.73 (11.47, 16.35)	16.85 (14.16, 19.93)	14.58 (12.41, 17.05)	15.3 (12.10, 19.16)	15.73 (13.66, 18.05)
NonHisp Native Am/AK Native	16.97 (11.18, 24.92)	21.81 (14.70, 31.10)	14.46 (9.47, 21.47)	30.35 (15.31, 51.22)	22.08 (13.91, 33.21)	14.38 (9.46, 21.26)	13.04 (8.09, 20.34)	18.35 (11.90, 27.22)	15.48 (10.19, 22.83)	14.49 (9.75, 21.00)
NonHisp Native HI/Other Pac Isl	10.02 (3.53, 25.31)	14.72 (8.55, 24.17)	25.7 (11.24, 48.60)	10.49 (3.95, 25.04)	8.49 (3.44, 19.48)	21.82 (8.49, 45.63)	14.83 (5.31, 35.07)	6.61 (2.70, 15.27)	7.41 (2.76, 18.39)	11.32 (4.20, 27.11)
NonHisp Asian	4.17 (2.48, 6.93)	5.85 (3.76, 8.98)	6.58 (4.09, 10.41)	7.98 (4.90, 12.76)	9.52 (5.44, 16.13)	6.01 (3.45, 10.28)	5.21 (3.00, 8.89)	8.16 (5.26, 12.46)	9.62 (5.69, 15.81)	5.8 (3.67, 9.06)
NonHisp more than one race	16.22 (10.02, 25.18)	16.86 (11.58, 23.90)	21.71 (14.66, 30.93)	16.84 (18.35, 37.45)	15.21 (11.08, 20.52)	16.95 (10.86, 25.49)	15.24 (10.53, 21.55)	14.28 (10.23, 19.60)	14.44 (9.44, 21.45)	20.34 (14.54, 27.72)
Hispanic	13.19 (10.20, 16.90)	14.7 (12.56, 17.13)	14.41 (12.19, 16.94)	13.01 (10.89, 15.47)	15.73 (12.76, 19.22)	13.94 (11.19, 17.23)	16.97 (13.94, 20.49)	17.18 (14.22, 20.62)	15.95 (12.86, 19.61)	12.87 (10.85, 15.19)
Less than 10,000 (including loss)	14.31 (11.89, 17.13)	16.18 (13.69, 19.03)	15.17 (12.63, 18.12)	17.36 (14.77, 20.31)	15.63 (13.16, 18.47)	17.2 (14.67, 20.07)	19.39 (16.37, 22.83)	18.91 (16.32, 21.80)	19.12 (16.17, 22.47)	17.34 (15.24, 19.67)
10,000–19,999	12.4 (10.90, 14.08)	13.2 (11.16, 15.55)	15.32 (13.06, 17.89)	13.83 (11.73, 16.25)	14.41 (12.15, 17.00)	14.74 (12.19, 17.71)	14.07 (11.58, 16.99)	13.55 (11.80, 15.52)	14.04 (11.87, 16.54)	15.01 (12.75, 17.58)
20,000–29,000	14.42 (12.25, 16.91)	13 (10.90, 15.44)	13.54 (11.20, 16.27)	14.87 (12.13, 18.10)	13.82 (11.64, 16.33)	13.44 (11.47, 15.68)	13.56 (11.17, 16.37)	13.89 (11.83, 16.25)	11.71 (9.69, 14.09)	12.6 (11.03, 14.36)
30,000–39,999	15.53 (12.90, 18.59)	13.53 (11.52, 15.82)	13.18 (11.08, 15.61)	9.85 (8.24, 11.72)	13.35 (10.85, 16.32)	12.85 (11.05, 14.90)	16.38 (13.72, 19.43)	12.71 (10.76, 14.95)	13 (10.76, 15.62)	11.82 (9.96, 13.97)
40,000–49,999	12.46 (10.59, 14.62)	13.61 (11.38, 16.20)	13.44 (11.56, 15.56)	13.58 (11.58, 15.87)	14.73 (12.64, 17.11)	14.1 (11.77, 16.79)	15.09 (12.32, 18.35)	14.89 (12.56, 17.56)	16 (13.18, 19.30)	12.65 (10.59, 15.04)

75,000 or more

Grade School

50,000-74,999

4 Year Degree +

Some College

Table 2-B

Proportion of Past 30 day Polytobacco Users Among All Past 30 Day Tobacco Users by Risk Factors, United States, 2002-2011.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No Alc. Abuse or Depend Past Year	11.93 (11.20, 12.71)	12.08 (11.23, 12.99)	12.05 (11.15, 13.01)	12.69 (11.75, 13.69)	12.49 (11.47, 13.58)	11.97 (11.15, 12.85)	12.76 (11.79, 13.79)	13.09 (12.26, 13.96)	12.64 (11.59, 13.77)	11.89 (10.99, 12.85)
Alc. Abuse or Depend Past Year	22.06	22.08	24.08	22.74	24.21	25.14	25.81	22.57	22.72	21.66
	(19.81, 24.48)	(20.07, 24.22)	(22.07, 26.22)	(20.33, 25.35)	(22.10, 26.46)	(22.49, 28.00)	(23.12, 28.70)	(19.87, 25.53)	(20.67, 24.91)	(19.50, 23.98)
No Ilicit Drug Abuse or DependPast Year	12.4	12.72	12.97	13.33	12.99	12.87	13.76	13.56	13.04	12.11
	(11.65, 13.19)	(11.87, 13.63	(12.09, 13.90)	(12.42, 14.30)	(12.05, 14.00)	(21.01, 13.79)	(12.81, 14.78)	(12.83, 14.33)	(12.10, 14.04)	(11.24, 13.03)
Marijuana Only Abuse or DependPast	30.46	29.83	28.95	30.97	32.25	31.24	30.98	27.58	29.83	28.59
Year	(26.20, 35.08)	(26.20, 33.74)	(24.78, 33.51)	(26.45, 35.87)	(27.64, 37.24)	(26.76, 36.10)	(26.08, 36.34)	(23.11, 32.55)	(24.90, 35.29)	(24.37, 33.22)
Illicit Drugs Other Than Marijuana Abuse	21.85	17.25	22.23	19.66	23.54	23.39	19.5	23.96	24.57	23.27
or DependPast Year	(16.45, 28.43)	(12.54, 23.25)	(18.12, 26.96)	(15.07, 25.24)	(18.20, 29.88)	(17.29, 30.83)	(14.09, 26.35)	(18.15, 30.91)	(19.57, 30.36)	(18.60, 28.71)
Marijuana and Some Other Illicit Drug	37.67	38.1	29.65	35.27	48.28	40.75	44.95	43.15	28.1	37.46
Abuse or Depend.	(29.13, 47.06)	(30.92, 45.83)	(23.43, 36.74)	(26.61, 45.02)	(38.40, 58.29)	(30.78, 51.55)	(37.08, 53.08)	(34.33, 52.43)	(20.01, 37.91)	(30.31, 45.21)
Yes been arrested for breaking law	18.52 (16.72, 20.46)	18.46 (16.70, 20.35)	19.42 (17.32, 21.70)	18.75 (16.95, 20.70)	18.85 (17.09, 20.74)	19.16 (17.57, 20.86)	19.88 (18.15, 21.73)	19.78 (18.24, 21.42)	17.42 (15.97, 18.97)	15.66 (14.27, 17.17)
Never arrested for breaking law	11.55 (10.76, 12.39)	11.57 (10.79, 12.41)	11.66 (10.82, 12.56)	12.33 (11.41, 13.30)	12.4 (11.43, 13.45)	11.64 (10.69, 12.67)	12.42 (11.22, 13.72)	12.03 (11.09, 13.04)	12.5 (11.38, 13.71)	12.16 (11.16, 13.24)
Don't drive and/or no alcohol/drug use	10.13 (9.34, 10.99)	10.63 (9.70, 11.63)	10.72 (9.64, 11.91)	11.17 (10.10, 12.33)	10.99 (9.95, 12.12)	10.49 (9.60, 11.46)	11.49 (10.41, 12.67)	10.94 (10.10, 11.83)	10.76 (9.61, 12.04)	9.74 (8.74, 10.85)
Yes -Drove under influence in past year	26.78	25.23	27.47	27.21	26.91	32.2	28.26	25.81	25.7	27.28
	(23.82, 29.95)	(22.83, 27.80)	(24.30, 30.89)	(23.50, 31.28)	(23.53, 30.58)	(28.83, 35.76)	(24.66, 32.17)	(22.94, 28.90)	(22.11, 29.65)	(23.92, 30.92)
No- Drove under influence in past year	20.86 (19.05, 22.80)	20.33 (18.63, 22.14)	20.83 (19.98, 22.80)	20.98 (18.81, 23.32)	21.95 (20.19, 23.82)	21.01 (18.94, 23.24)	21.64 (19.89, 23.51)	22.43 (20.43, 24.56)	20.87 (18.72, 23.20)	20.4 (18.62, 22.29)
Never get a real kick out of doing	9.51	9.23	9.08	8.97	8.97	9.25	9.85	9.96	9.72	9.15
dangerous things	(8.32, 10.86)	(8.02, 10.61)	(7.81, 10.52)	(7.74, 10.39)	(7.58, 10.59)	(8.10, 10.55)	(8.56, 11.30)	(8.89, 11.15)	(8.38, 11.26)	(7.99, 10.45)
Seldom get a real kick out of doing	11.88	13.02	13.45	14.93	15.03	13.54	13.93	13.07	14.42	12.51
dangerous things	(10.67, 13.22)	(11.62, 14.56)	(12.11, 14.92)	(13.68, 16.28)	(13.55, 16.63)	(12.10, 15.13)	(12.49, 15.51)	(11.55, 14.76)	(12.71, 16.30)	(11.12, 14.05)
Sometimes get a real kick out of doing dangerous things	20.84	18.85	19.3	19.49	19.14	20.47	21.46	21.35	19.27	19.52
	(19.08, 22.71)	(17.16, 20.67)	(17.67, 21.03)	(17.42, 21.74)	(17.54, 20.85)	(18.75, 22.31)	(19.41, 23.66)	(19.44, 23.40)	(17.36, 21.34)	(17.93, 21.21)
Always get a real kick out of doing	25.02	31.73	32.33	28.99	34.75	31.59	29.52	36.58	25.74	24.1
dangerous things	(21.31, 29.13)	(27.26, 36.57)	(27.79, 37.23)	(24.20, 34.30)	(30.34, 39.44)	(27.22, 36.32)	(25.40, 34.01)	(31.99, 41.43)	(22.07, 29.79)	(20.56, 28.03)
Never like to test self by doing risky things	9.38 (8.24, 10.66)	9.62 (8.45, 10.93)	9.52 (8.15, 11.10)	9.43 (8.24, 10.76)	9.64 (8.27, 11.20)		10.4 (8.90, 12.12)	9.8 (8.60, 11.15)	9.53 (8.18, 11.07)	8.57 (7.60, 9.65)
Seldom like to test self by doing risky	12.54	14.04	13.6	14.51	14.61	13.48	14.15	14.34	14.49	13.63
things	(11.57, 13.58)	(12.79, 15.39)	(12.29, 15.02)	(12.98, 16.18)	(12.99, 16.38)	(12.21, 14.87)	(12.87, 15.54)	(12.97, 15.83)	(12.89, 16.25)	(12.13, 15.28)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sometimes like to test self by doing risky things	21.98 (19.87, 24.25)	21.98 18.46 19.87, 24.25) (16.64, 20.44)	20.2 (18.31, 22.23)	21.26 (19.03, 23.67)	20.48 (18.82, 22.24)	21.9 (19.68, 24.29)	22.07 (20.04, 24.24)	21.47 (19.53, 23.55)	20.99 (18.97, 23.15)	19.73 (17.90, 21.70)
Always like to test self by doing risky things	27.45 (22.79, 32.66)	27.45 30.5 22.79, 32.66) (26.13, 35.25)	29.33 (24.57, 34.59)	26.73 (22.30, 31.69)	33.24 (28.29, 38.58)	32.19 (27.60, 37.16)		38.49 (32.87, 44.42)	26.71 (21.21, 33.03)	30.88 (26.04, 36.19)

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Table 3-A

Adjusted Odds Ratios for Polytobacco Use Relative to Single Tobacco Product Use Among All Tobacco Users, Past 12 Months, Overall, United States 2002–2011.

		OVERALL	ALL		
		OR	T 95%	M 95%	Wald F p-value
Age	12–17	REF			<0.0001
	18–25	96.0	0.92	1.01	
	26–34	0.63^{*}	0.59	0.67	
	35-49	0.42	0.39	0.45	
	50+	0.28*	0.25	0.31	
Gender	Male	3.31*	3.19	3.45	<0.0001
	Female	REF			
Education	Grade school	1.00	0.89	1.12	0.0622
	Some high school	1.08	1.00	1.16	
	High school graduate	1.07	1.00	1.15	
	Some college	1.07	1.00	1.14	
	4 year degree +	REF			
Race/ethnicity	NonHisp White	REF			<0.0001
	NonHisp Black/Afr Am	0.86	0.80	0.92	
	NonHisp Native Am/AK Native	1.18	1.00	1.40	
	NonHisp Native HI/Other Pac Isl	96.0	0.67	1.37	
	NonHisp Asian	0.58	0.49	69.0	
	NonHisp more than one race	1.11^{*}	0.97	1.27	
	Hispanic	8.0	0.75	0.85	
Income	less than 10,000 (including loss)	1.12*	1.05	1.19	0.0007
	10,000 - 19,999	1.01	0.94	1.08	
	20,000 - 29,999	1.01	0.94	1.08	
	30,000 - 39,999	96.0	0.89	1.04	
	40,000 - 49,999	0.99	0.92	1.05	
	50,000 - 74,999	1.03	0.97	1.10	

		OVERALL	ALL		
		OR	L 95%	N 95%	Wald F p-value
	75,000 or more	REF			
Drug Abuse or Dependence	None	REF			<0.0001
	Marijuana (MJ) only	1.24*	1.16	1.32	
	Illicit drugs other than MJ	1.07	0.97	1.19	
	Illicit drugs and MJ	1.53*	1.34	1.75	
Alcohol Abuse or Dependence	No	REF			<0.0001
	Yes	1.38*	1.31	1.46	
Arrested	Yes	1.16*	1.11	1.21	<0.0001
	No	REF			
DUI 12 mo	Don't drive and/or no alc/drug use	09.0	0.57	0.63	<0.0001
	Use alc/drugs, yes DUI	1.04	0.97	1.11	
	Use alc/drugs, no DUI	REF			
Kick from dangerous things	Never	REF			<0.0001
	Seldom	1.15*	1.09	1.21	
	Sometimes	1.30*	1.22	1.37	
	Always	1.55*	1.41	1.71	
Test by doing risky things	Never	REF			<0.0001
	Seldom	1.14*	1.08	1.21	
	Sometimes	1.17*	1.10	1.24	
	Always	1.18*	1.05	1.32	
YEAR		1.00	0.99	1.01	0.8209

Table 3-B

Adjusted Odds Ratios for Polytobacco Use Relative to Single Tobacco Product Use Among All Tobacco Users, Past 12 Months, Stratified by Age Group, United States 2002–2011.

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		Age 12–17	-17			Age 18–25	25			Age 26+			
		OR	Г 95%	M 95%	Wald F p-value	OR	L 95%	N 95%	Wald F p-value	OR	Г 95%	N 95%	Wald F p-value
Gender	Male	2.35*	2.19	2.52	<0.0001	3.11*	2.97	3.25	<0.0001	3.56*	3.33	3.80	<0.0001
	Female	REF				REF				REF			
Education	Grade school	REF			<0.0001	1.29*	1.11	1.48	<0.0001	0.89	0.75	1.06	0.4766
	Some high school	1.19*	1.11	1.27		1.33*	1.23	1.43		0.95	0.85	1.05	
	High school graduate	0.94	0.75	1.17		1.32*	1.24	1.42		0.97	0.89	1.06	
	Some college	96.0	0.38	2.37		1.24*	1.15	1.33		1.00	0.92	1.09	
	4 year degree +	1.62	0.16	16.39		REF				REF			
Race/ethnicity	NonHisp White	REF			<0.0001	REF			<0.0001	REF			0.0053
	NonHisp Black/Afr Am	0.46^{*}	0.41	0.53		0.64	09.0	89.0		1.07	0.97	1.18	
	NonHisp Native Am/AK Native	1.09	0.86	1.39		1.05	0.88	1.27		1.30	0.99	1.70	
	NonHisp Native HI/Other Pac Isl	0.61	0.29	1.29		0.70	0.48	1.03		1.32	0.84	2.06	
	NonHisp Asian	0.39*	0.27	0.56		0.57*	0.50	0.65		0.70*	0.53	0.93	
	NonHisp more than one race	99.0	0.55	62.0		0.89	0.77	1.03		1.29*	1.07	1.56	
	Hispanic	0.70*	0.63	0.77		0.71*	0.67	0.75		0.99	0.90	1.10	
Income	less than 10,000 (including loss)	1.15	0.99	1.32	0.1308	1.05	0.98	1.12	0.0536	1.20*	1.06	1.36	0.02
	10,000 - 19,999	1.03	0.93	1.15		1.00	0.94	1.08		1.06	0.95	1.18	
	20,000 - 29,999	1.09	0.97	1.23		96.0	0.90	1.02		1.09	0.99	1.20	
	30,000 - 39,999	1.08	0.97	1.21		0.94	0.87	1.01		1.04	0.93	1.16	
	40,000 - 49,999	1.01	0.92	1.12		96.0	0.89	1.03		1.07	86.0	1.18	
	50,000 - 74,999	96.0	0.88	1.05		0.98	0.92	1.05		1.13*	1.04	1.24	
	75,000 or more	REF				REF				REF			
Drug Abuse or Dependence	None	REF			<0.0001	REF			<0.0001	REF			0.2413

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		2811	17.				i			Age 20+	+		
		OR	T 95%	%56 N	Wald F p-value	OR	T 95%	N 95%	Wald F p-value	OR	L 95%	N 95%	Wald F p-value
	Marijuana (MJ) only	1.40*	1.28	1.53		1.22*	1.13	1.32		1.17	0.99	1.37	
	Illicit drugs other than MJ	1.04	0.87	1.24		1.04	0.95	1.14		1.06	0.91	1.25	
	Illicit drugs and MJ	1.87*	1.54	2.26		1.56*	1.34	1.81		1.02	0.73	1.44	
Alcohol Abuse or	No	REF			<0.0001	REF			<0.0001	REF			<0.0001
Dependence	Yes	1.58*	1.46	1.71		1.37*	1.30	1.43		1.40*	1.28	1.52	
Arrested	Yes	1.28*	1.19	1.37		1.03	0.99	1.08	0.111	1.23*	1.16	1.30	<0.0001
	No	REF				REF				REF			
DUI 12 mo	Don't drive and/or no alc/ drug use	0.46	0.43	0.50	<0.0001	0.58	0.55	0.61	<0.0001	0.56*	0.52	0.61	<0.0001
	Use alc/drugs, yes DUI	1.31*	1.17	1.47		1.14*	1.07	1.21		0.97	0.85	1.12	
	Use alc/drugs, no DUI	REF				REF				REF			
Kick from	Never	REF			0.0084	REF			<0.0001	REF			<0.0001
dangerous things	Seldom	1.15	1.00	1.31		1.25*	1.16	1.35		1.18*	1.09	1.27	
	Sometimes	1.22*	1.07	1.40		1.43*	1.31	1.55		1.36*	1.25	1.48	
	Always	1.34*	1.13	1.58		1.67*	1.49	1.88		1.74*	1.42	2.13	
Test by doing	Never	REF			0.295	REF			0.0003	REF			<0.0001
risky things	Seldom	1.06	0.95	1.19		1.16^{*}	1.08	1.24		1.19*	1.10	1.28	
	Sometimes	1.11	0.99	1.26		1.19*	1.10	1.29		1.24*	1.12	1.36	
	Always	1.14	96.0	1.34		1.21*	1.07	1.37		1.26	0.99	1.59	
YEAR		1.00	0.99	1.01	0.9494	1.01	1.00	1.01	0.0632	1.00	0.99	1.01	0.5062

= P value < 0.05

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Adjusted Odds Ratios for Polytobacco Use Relative to Single Tobacco Product Use Among All Tobacco Users, Past 30 days, Overall, United States, 2002–2011.

Table 4-A

		OVERALL	ALL		
		OR	T 95%	%\$6 N	Wald F p-value
	12–17	REF			<.0001
	18–25	0.98	0.92	1.04	
	26–34	0.70	0.64	0.77	
	35-49	0.51	0.46	0.55	
	50+	0.39	0.34	0.44	
Gender	Male	3.41	3.26	3.58	<0.0001
	Female	REF			
Education	Grade school	1.31*	1.15	1.49	0.0001
	Some high school	1.19*	1.09	1.31	
	High school graduate	1.12*	1.03	1.22	
	Some college	1.07	0.98	1.16	
	4 year degree +	REF			
Race/ethnicity	NonHisp White	REF			<0.0001
	NonHisp Black/Afr Am	1.15*	1.05	1.25	
	NonHisp Native Am /AK Native	1.32*	1.05	1.66	
	NonHisp Native HI / Other Pac Isl	0.76	0.53	1.10	
	NonHisp Asian	0.41	0.35	0.48	
	NonHisp more than one race	1.26^{*}	1.08	1.47	
	Hispanic	0.88	0.81	0.95	
Income	less than 10,000 (including loss)	1.24*	1.13	1.35	<0.0001
	10,000 - 19,999	1.07	0.99	1.17	
	20,000 - 29,999	1.00	0.92	1.10	
	30,000 - 39,999	96.0	0.88	1.06	
	40,000 – 49,999	1.03	0.94	1.13	
	50,000 - 74,999	1.02	0.93	1.11	

		OVERALL	ALL		
		OR	L 95%	O 95%	Wald F p-value
	75,000 or more	REF			
Drug Abuse or Dependence	None	REF			<0.0001
	Marijuana (MJ) only	1.20*	1.10	1.32	
	Illicit drugs other than MJ	1.06	0.95	1.18	
	Illicit drugs and MJ	1.73*	1.48	2.02	
Alcohol Abuse or Dependence	None	REF			<0.0001
	Yes	1.25*	1.18	1.33	
Arrested	Yes	1.12*	1.07	1.18	<0.0001
	No	REF			
DUI 12 mo	Don't drive and/or no alc/drug use	89.0	0.64	0.73	<0.0001
	Use alc/drugs, yes DUI	1.02	0.94	1.10	
	Use alc/drugs, no DUI	REF			
Kick from dangerous things	Never	REF			<0.0001
	Seldom	1.04	96.0	1.13	
	Sometimes	1.11*	1.02	1.20	
	Always	1.35*	1.19	1.52	
Test by doing risky things	Never	REF			<0.0001
	Seldom	1.14*	1.05	1.23	
	Sometimes	1.27*	1.17	1.38	
	Always	1.36*	1.20	1.55	
YEAR		1.00	1.00	1.01	0.3379

Table 4-B

Adjusted Odds Ratios for Polytobacco Use Relative to Single Tobacco Product Use Among All Tobacco Users, Past 30 Days, Stratified by Age Group, United States, 2002–2011.

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				Age 12–17			7	Age 18–25				Age 26+	
		OR	7 95%	%\$6 N	Wald F p-value	OR	%S6 T	%\$6 N	Wald F p-value	OR	T 95%	N 95%	Wald F p-value
Gender	Male	2.26*	2.07	2.47	<0.0001	3.00*	2.85	3.16	<0.0001	3.87*	3.57	4.19	<0.0001
	Female	REF				REF				REF			
Education	Grade school	REF			0.139	1.79*	1.51	2.13	<0.0001	1.15	96.0	1.37	0.5382
	Some high school	1.07	96.0	1.19		1.63*	1.47	1.80		1.03	06.0	1.18	
	High school graduate	0.85	99.0	1.09		1.56^{*}	1.43	1.70		1.00	0.89	1.11	
	Some college	0.24	0.04	1.59		1.30*	1.18	1.44		1.02	0.92	1.13	
	4 year degree +					REF				REF			
Race/ethnicity	NonHisp White	REF			<0.0001	REF			<0.0001	REF			<0.0001
	NonHisp Black/Afr Am	0.70*	0.59	0.83		1.03	0.95	1.11		1.27*	1.13	1.42	
	NonHisp Native Am /AK Native	1.36	0.88	2.09		1.01	0.80	1.27		1.47*	1.04	2.08	
	NonHisp Native HI / Other Pac Isl	0.56	0.25	1.28		0.93	0.61	1.43		0.74	0.40	1.36	
	NonHisp Asian	0.39*	0.21	0.72		0.62*	0.52	0.75		0.31*	0.21	0.44	
	NonHisp more than one race	0.94	69:0	1.26		0.94	0.80	1.12		1.44*	1.18	1.78	
	Hispanic	0.79	0.68	0.91		0.82	0.76	0.88		1.02	0.89	1.16	
Income	less than 10,000 (including loss)	1.17	96.0	1.42	0.0499	1.13*	1.04	1.22	0.0033	1.41*	1.20	1.64	0.0017
	10,000-19,999	1.25*	1.07	1.47		1.05	0.97	1.14		1.13	0.99	1.29	
	20,000 - 29,999	1.20*	1.05	1.38		0.99	06.0	1.08		1.06	0.92	1.22	
	30,000 - 39,999	1.21*	1.03	1.43		96.0	0.88	1.05		1.01	0.88	1.17	
	40,000 - 49,999	1.07	0.92	1.23		0.97	0.88	1.13		1.12	0.97	1.28	
	50,000 - 74,999	1.05	0.92	1.20		1.03	0.94	1.13		1.07	0.95	1.21	
	75,000 or more	REF				REF				REF			

				Age 12–17				Age 18–25				Age 26+	
		OR	T 95%	%\$6 N	Wald F p-value	OR	T 95%	%\$6 N	Wald F p-value	OR	T 95%	%\$6 N	Wald F p-value
Drug Abuse or	None	REF			<0.0001	REF			<0.0001	REF			0.2466
Dependence	Marijuana (MJ) only	1.27*	1.13	1.44		1.26*	1.15	1.38		1.10	0.87	1.38	
	Illicit drugs other than MJ	1.07	0.88	1.29		1.09*	0.98	1.22		1.01	0.85	1.20	
	Illicit drugs and MJ	1.72*	1.39	2.14		1.74*	1.49	2.03		1.43	0.99	2.08	
Alcohol Abuse or	None	REF			<0.0001	REF			<0.0001	REF			<0.0001
Dependence	Yes	1.35*	1.22	1.50		1.18*	1.12	1.25		1.31*	1.19	1.46	
Arrested	Yes	1.17*	1.07	1.27	0.0009	1.07*	1.01	1.12	0.0169	1.15*	1.07	1.24	0.0002
	No	REF				REF				REF			
DUI 12 mo	Don't drive and/or no alc/ drug use	0.63	0.56	0.70	<0.0001	99.0	0.64	0.73	<0.0001	0.63*	0.56	0.70	<0.0001
	Use alc/drugs, yes DUI	1.39*	1.21	1.59		1.09*	1.01	1.18		0.93	08.0	1.08	
	Use alc/drugs, no DUI	REF				REF				REF			
Kick from	Never	REF			0.1645	REF			<0.0001	REF			0.0104
dangerous things	Seldom	1.08	06.0	1.30		1.15*	1.05	1.27		1.05	0.95	1.16	
	Sometimes	1.04	98.0	1.25		1.25*	1.12	1.39		1.13	1.00	1.27	
	Always	1.20	0.95	1.51		1.49*	1.27	1.74		1.46	1.16	1.83	
Test by doing	Never	REF			0.0792	REF			<0.0001	REF			0.0003
risky things	Seldom	1.13	0.95	1.34		1.17*	1.08	1.27		1.15*	1.04	1.27	
	Sometimes	1.25*	1.04	1.51		1.27*	1.15	1.40		1.33*	1.17	1.53	
	Always	1.28*	1.02	1.62		1.32*	1.16	1.51		1.55*	1.17	2.07	
YEAR		1.02*	1.00	1.03	0.0356	1.01*	1.00	1.02	0.0199	1.00	0.99	1.01	0.8903

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= P value < 0.05

Adjusted Odds Ratios for Polytobacco Use Relative to Exclusive Cigarette Use Among All Smokers in the Past 12 Months and Past 30 Days, United States, 2002–2011.

Table 5

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			Ì	12 Month Hea	95			20 dev Hee	
					2			20 mm 20	
		OR	T 95%	%56 N	Wald F p-value	OR	T 95%	%\$6 N	Wald F p-value
Age	12–17	5.23*	4.62	5.93	<0.001	2.96*	2.55	3.43	<0.001
	18–25	3.71*	3.35	4.10		2.60*	2.32	2.91	
	26–34	2.32*	2.09	2.58		1.89*	1.66	2.17	
	35–49	1.58*	1.42	1.75		1.38*	1.23	1.56	
	50+	REF				REF			
Gender	Male	4.30*	4.07	4.54	<0.001	4.13*	3.91	4.37	<0.001
	Female	REF				REF			
Education	Grade school	0.88	0.77	1.01	0.074	1.19*	1.04	1.37	0.063
	Some high school	*68.0	0.80	0.98		1.12	1.00	1.26	
	High school graduate	0.94*	0.86	1.02		1.12*	1.01	1.24	
	Some college	96.0	0.88	1.05		1.05	96.0	1.15	
	4 year degree +	REF				REF			
Race/ethnicity	NonHisp White	REF			<0.001	REF			<0.001
	NonHisp Black/Afr Am	0.87*	0.79	0.95		1.14*	1.03	1.25	
	NonHisp Native Am/AK Native	1.23*	1.01	1.51		1.42*	1.10	1.84	
	NonHisp Native HI / Other Pac Isl	*69.0	0.48	1.00		0.75	0.52	1.10	
	NonHisp Asian	0.42*	0.35	0.51		0.33^{*}	0.27	0.40	
	NonHisp more than one race	1.09	0.92	1.29		1.20	1.00	1.43	
	Hispanic	89.0	0.63	0.73		0.77*	0.70	0.84	
Income	less than 10,000 (including loss)	1.02	0.93	1.11	<0.001	1.18	1.08	1.29	<0.001
	10,000 - 19,999	0.87	0.81	0.94		0.98	0.90	1.06	
	20,000 – 29,999	0.87*	0.81	0.95		0.93	0.85	1.02	
	30,000 – 39,999	0.84^{*}	0.77	0.92		*06.0	0.91	0.99	

Fix et al.

			12	12 Month Use	se			30 day Use	
		OR	T 95%	%\$6 A	Wald F p-value	OR	T 95%	M 95%	Wald F p-value
	40,000 – 49,999	0.87*	0.79	96:0		0.97	0.88	1.07	
	50,000 – 74,999	0.93	0.85	1.01		0.97	0.88	1.06	
	75,000 or more	REF				REF			
Drug Abuse or Dependence	None	REF			<0.001	REF			<0.001
	Marijuana (MJ) only	1.25*	1.16	1.35		1.25*	1.13	1.39	
	Illicit drugs other than MJ	0.98	0.87	1.01		1.03	0.91	1.16	
	Illicit drugs and MJ	1.47*	1.24	1.76		1.77*	1.46	2.13	
Alcohol Abuse or Dependence	None	REF			<0.001	REF			<0.001
	Yes	1.34*	1.26	1.43		1.28*	1.20	1.36	
Arrested	Yes	1.09*	1.04	1.15	<0.001	1.10*	1.05	1.16	<0.001
	No	REF				REF			
DUI 12 mo	Don't drive and/or no alc/drug use	0.63*	0.59	0.67	<0.001	0.73*	89.0	0.78	<0.001
	Use alc/drugs, yes DUI	1.00	0.92	1.09		0.98	06.0	1.07	
	Use alc/drugs, no DUI	REF				REF			
Kick from dangerous things	Never	REF			<0.001	REF			<0.001
	Seldom	1.19*	1.12	1.28		1.09*	1.01	1.19	
	Sometimes	1.33*	1.22	1.44		1.17*	1.08	1.28	
	Always	1.71*	1.50	1.94		1.47*	1.30	1.67	
Test by doing risky things	Never	REF			<0.001	REF			<0.001
	Seldom	1.20*	1.12	1.29		1.12*	1.03	1.21	
	Sometimes	1.27*	1.16	1.39		1.28*	1.16	1.40	
	Always	1.28*	1.12	1.48		1.33*	1.15	1.53	
NDSS dependence	No	REF			0.633	REF			0.137
	Yes	0.99	0.93	1.05		0.95	0.88	1.02	
Time to first cigarette after waking	>30 min	REF			0.039	REF			0.843
	< 30 min	0.94*	68.0	1.00		0.99	0.93	1.06	
Strong cigarette cravings	No	REF			<0.001	REF			<0.001

	12 Month Use	ıth Use			30 day Use	
OR	60 %56 T	OR L 95% U 95% Wald F p-value OR L 95% U 95% Wald F p-value	OR	L 95%	%56 N	Wald F p-value
0.	Yes 0.8* 0.75 0.85	35	0.76*	0.71 0.81	0.81	
_ i	1.00 0.99 1.01	0.442	*101	1.00 1.03	1.03	0.008

* = *P* value <0.05