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## Exposure to Tobacco Coupons Among U.S. Middle and High School Students

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### Abstract

**Background**—Tobacco marketing contributes to increased tobacco use susceptibility and sustained use. There are limited data on youth exposure to tobacco coupons, a type of pro-tobacco promotion.

**Purpose**—To explore channels through which youth report exposure to coupons and characteristics associated with this exposure. This may help inform efforts aimed at decreasing youth exposure to advertising and promotion.

**Methods**—Data from the 2012 National Youth Tobacco Survey were analyzed in 2013 to estimate the self-reported prevalence of U.S. middle and high school student exposure to coupons through various channels. Associations among exposure to coupons and demographics, tobacco use, living with a tobacco user, and receptivity to tobacco marketing were examined using multivariate logistic regression models.

**Results**—Approximately 13% of students reported exposure to tobacco coupons in the past 30 days through mail, digital communications, or tobacco packages. Prevalence was greatest among current tobacco users (34.0%) and those receptive to tobacco marketing (23.4%) compared to non-tobacco users (9.3%) and those not receptive to tobacco marketing (8.2%), respectively. Coupon exposure varied by sex, grade, and race/ethnicity. In adjusted models, current tobacco use (AOR=3.4, 95% CI=3.0, 3.9); living with a tobacco user (AOR=2.1, 95% CI=1.9, 2.4); and receptivity to tobacco marketing (AOR=2.3, 95% CI=2.0, 2.7) were independently associated with coupon exposure.

**Conclusions**—Findings from this study indicate that despite restrictions on marketing to youth, youth are still being exposed to tobacco promotions such as coupons. Efforts to limit youth exposure may be valuable in reducing curiosity, susceptibility, and initiation.

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## Introduction

In 2012, approximately 6.7% of middle school and 23.3% of high school students reported using at least one tobacco product in the last 30 days.<sup>1</sup> In addition, the decline in youth cigarette smoking in particular has slowed in the last decade, with the number of youth susceptible to smoking initiation remaining steady.<sup>2</sup> Tobacco industry marketing contributes to this phenomenon, as it can raise susceptibility and initiation among youth by increasing awareness and curiosity of these products, positive attitudes and beliefs toward using these products and specific brands, and perceptions of norms around tobacco use.<sup>2-9</sup> Evidence<sup>3-6</sup> suggests that greater exposure to tobacco advertising and promotion increases risk of initiation.

More than \$208 million was spent by the industry on the development, distribution, and costs associated with redemption of cigarette and smokeless tobacco coupons in 2011, as industry marketing efforts have shifted away from traditional media outlets (e.g., magazines, television).<sup>10,11</sup> Coupons are also used to promote other tobacco products, including cigars and electronic cigarettes (e-cigarettes).<sup>12,13</sup> Coupons can be distributed through multiple channels, including point-of-sale promotions (POS), mail, Internet, magazines and newspapers, and tobacco product packaging,<sup>14</sup> and adult consumers can sign up to receive coupons and other information through industry-sponsored events by completing redemption information on coupons or through online registration.<sup>13,15</sup>

Therefore, a large portion of U.S. adult smokers (18%–55%) have used coupons or other price-related discounts during cigarette purchases.<sup>16-21</sup> Studies<sup>22,23</sup> have shown that smokers who used coupons were less likely to make quit attempts or successfully quit. A study<sup>4</sup> that included assessment of POS promotions concluded that price promotions increased the likelihood of youth progression from experimentation to regular smoking and were most influential among established smokers.

In addition to being price discount tools, coupons may also serve as pro-tobacco advertising by increasing awareness of the product category and brand. Research suggests that perceptions of advertising and brands may change as youth age and become susceptible to tobacco use. Younger youth perceive tobacco advertisements as promoting the product category (cigarettes) and behavior (smoking), whereas youth who reported susceptibility to smoking exhibited a better understanding of specific brands than those who were not susceptible.<sup>24</sup>

Tobacco marketing, including coupon distribution, targeted toward youth is a legally restricted practice; however, because of the nature of the distribution channels, it is possible that youth have received or been exposed to tobacco product coupons.<sup>25</sup> In this case, brand recognition and pro-tobacco advertisement may be more of a concern than price discounts, as only 14% of current smokers under age 18 years reported usually buying their own cigarettes directly in a store or gas station during the last 30 days.<sup>26</sup>

Researchers have highlighted the need to monitor and assess the exposure and impact of this marketing strategy.<sup>25,27</sup> However, although considerable research around youth exposure to other forms of advertising exists, little is known about youth exposure to tobacco coupons.

The current study uses data from the 2012 National Youth Tobacco Survey (NYTS) to examine the channels through which youth report exposure to these types of coupons and several characteristics associated with this exposure.

## Methods

### Sample

The NYTS is an ongoing, school-based survey focusing on tobacco-related measures. The NYTS uses a stratified three-stage cluster sample design to produce cross-sectional, nationally representative estimates of U.S. middle (Grades 6–8) and high (Grades 9–12) school students. Details of the NYTS methods are available elsewhere.<sup>28</sup> The NYTS data collection protocol was approved by a CDC IRB. Of the 284 selected schools, 228 (80.3%) participated in 2012, resulting in 24,658 (91.7%) surveys completed by students and a response rate of 73.6%.

### Measures

Demographic characteristics included sex; school grade (grades 6–8, 9 and 10, and 11 and 12); and race/ethnicity (Hispanic, non-Hispanic white, non-Hispanic black, or other non-Hispanic, including non-Hispanic Asian, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, or those identifying as two or more racial/ethnic groups).

Respondents were asked about their use of the following tobacco products: 1) cigarettes; 2) cigars, cigarillos, or little cigars; and 3) smokeless tobacco. Current use for this analysis was defined as using any one of these three products on at least 1 day during the past 30 days. Non-users were students who had not used any of these products in the past 30 days.

Receptivity to tobacco marketing was assessed by the question How likely is it that you would ever use or wear something—such as a lighter, T-shirt, hat, or sunglasses—that has a tobacco brand name, logo, or picture on it? Response options included very likely, somewhat likely, somewhat unlikely, or very unlikely. A dichotomous variable was created with students classified as either not receptive (very unlikely) or receptive (somewhat unlikely, somewhat likely, very likely). Students were identified as living with a tobacco user if they reported that anyone in their home used any form of tobacco.

Exposure to coupons was assessed using the survey item During the past 30 days, did you receive coupons from a tobacco company through... Students could select one or more of the following response options: the mail, e-mail, the Internet, social networks (such as Facebook and Twitter), a text message, and *on a cigarette pack or other tobacco product*. Alternatively, the response *I did not receive coupons from a tobacco company* could be selected. Although the question specifically asks about the receipt of coupons, it was not possible to verify whether the respondent was the intended recipient of the coupons. Thus, this measure is reported more broadly as exposure to coupons rather than receipt.

Because the prevalence of exposure to coupons by e-mail, Internet, social networks, and text messages was similar and these categories are not necessarily independent of each other (e.g., social networking sites are accessed through the Internet), responses to these channels

were aggregated into a dichotomous variable referred to as “digital communication.” Dichotomous outcome measures were created for exposure to coupons by mail or on a tobacco pack. Finally, an aggregate measure was created based on reported exposure to coupons from any of these marketing channels.

## Data Analysis

In 2013, analyses were conducted using SAS-callable SUDAAN, version 11 (RTI International, Research Triangle Park NC). The final student-level responses were weighted to reflect initial selection probabilities and non-response patterns, to minimize large variation in sampling weights, and to post-stratify the data to known characteristics of the sampling frame.

The prevalence of receiving coupons by each marketing channel or from any of the three channels in the past 30 days was estimated overall and according to sex, grade, race/ethnicity, current tobacco use, living with a tobacco user, and receptivity to tobacco marketing. Differences in point estimates were considered statistically significant by applying *t* tests using an alpha level of  $p=0.05$ . Multivariate logistic regression models were then employed to obtain AORs for the associations between each aforementioned outcome and covariate described, accounting for the other covariates.

## Results

In the unadjusted analysis, 13.1% of middle and high school students reported exposure to coupons from a tobacco company by mail, digital communication, or on a tobacco package in the past 30 days (Table 1). Six percent of students were exposed to coupons through the mail, and 3.7% from a tobacco package. More than 7% of students were exposed to coupons through any digital communication, ranging from 1.4% (text messages) to 4.1% (the Internet).

Although there were no differences by sex, some differences in coupon exposure across channels were apparent by grade level and race. Although current tobacco users were nearly four times more likely to be exposed to coupons (34%) than students not currently using tobacco, 9.3% of current non-users were still exposed in the past 30 days. Twenty percent of students living with a tobacco user reported exposure to coupons from any marketing channel in the past 30 days, compared with 7.8% of those not living with a tobacco user.

Students who were receptive to ever using or wearing items with a tobacco company logo were more likely to be exposed to coupons from the mail, digital communication, or a tobacco package (8.5% to 13.0%) than students who were not receptive (1.4% to 4.7%). Approximately 6.5% of students who reported exposure to tobacco coupons were neither current users nor reported living with a tobacco user.

In the adjusted multivariate logistic regression analysis (Table 2), non-Hispanic black students were less likely to report exposure to coupons through the mail (AOR=0.7, 95% CI=0.6, 0.8) or on a tobacco package (AOR=0.3, 95% CI=0.2, 0.5) than non-Hispanic white students. Hispanic students were more likely to report exposure through digital

communication (AOR=1.4, 95% CI=1.1, 1.9) than non-Hispanic white students. Current tobacco users were about twice as likely to be exposed to coupons through mail (AOR=2.3, 95% CI=1.9, 2.7) or digital sources (AOR=1.9, 95% CI=1.5, 2.3), compared with current non-users, and they were nearly 13 times more likely to report exposure from a tobacco package (AOR=12.9, 95% CI=9.5, 17.5).

Students living with someone using tobacco products were approximately three times more likely to report being exposed to tobacco product coupons in the mail, compared with those not living with a tobacco user (AOR=2.9, 95% CI=2.5, 3.5). Students who were receptive to ever using or wearing an item with a tobacco company logo were more likely to report exposure to tobacco product coupons than students who were not receptive (AOR=1.9, 95% CI=1.6, 2.2, AOR=3.0, 95% CI=2.4, 3.7, respectively).

When adjusted multivariate logistic regression analysis was stratified by tobacco use status, significant associations were identified for some demographic factors among current tobacco users only (Table 3). For example, among current tobacco users only, students in Grades 11 and 12 were less likely than younger students and non-Hispanic blacks were less likely than non-Hispanic whites to report receiving coupons.

Among both current tobacco users and non-users, living with a tobacco user and receptivity to using or wearing products with tobacco logos remained positively associated with tobacco coupon exposure. Among current tobacco users, students who used tobacco products more frequently (10 or more of the past 30 days) were more likely to report being exposed to tobacco coupons than students who used tobacco products on 1–9 days of the past 30 days.

## Discussion

The present findings reveal that more than one in eight U.S. middle and high school students reported exposure to tobacco coupons through mail, digital communication, or on a tobacco product, with approximately one in 15 students who were neither tobacco users nor living with a tobacco user reporting exposure to tobacco coupons. Students most likely to report exposure to tobacco coupons included current tobacco users, students who were receptive to tobacco industry marketing and promotions, and those living with a tobacco user.

Regardless of tobacco use status, students living with a tobacco user and those who were receptive to tobacco marketing were significantly more likely to be exposed to coupons.

Youth self-reported exposure to pro-tobacco advertising mirrors shifts in advertising expenditures seen after the Master Settlement Agreement. In 2011, more than 90% of middle and high school students reported exposure to pro-tobacco advertisements through POS, magazines, and the Internet.<sup>2</sup> The proportion of high school students who reported exposure to advertisements through POS (86.9%) was significantly higher than the proportion that reported exposure through magazines (54.0%) or the Internet (40.2%).<sup>2</sup>

However, although youth exposure to tobacco advertising online, in print media, in television/movies, and in stores has been studied previously, as has receipt and redemption of tobacco coupons by adults, little is known about youth exposure to tobacco coupons. To our knowledge, this study is the first to assess past 30-day exposure to tobacco coupons

among a U.S. nationally representative sample of youth. Findings from this study indicate that despite restrictions on marketing to youth, youth are still being exposed to tobacco promotions such as coupons. Efforts to limit youth exposure may be valuable in reducing curiosity, susceptibility, and initiation.

The health risks of living in a household with someone who smokes are well documented. Several studies<sup>29–34</sup> have also demonstrated the positive association of living with a cigarette smoker and youth initiation. There is some evidence<sup>5,32,33</sup> to suggest that the effects of parental smoking on youth initiation may vary by gender, with girls more likely than boys to initiate smoking if a parent or sibling smokes.

Although the specific mechanisms driving the increased risk of initiation associated with living with a tobacco user have not been determined, the availability of cigarettes and model smoking behavior are thought to be contributors.<sup>29</sup> The current study suggests that exposure to coupons is another factor that should be explored. It may be that exposure to pro-tobacco messaging as a result of living with a tobacco user (e.g., through coupons, direct mail, packaging) may be contributing to the increased risk of initiation associated with living with a tobacco user. For example, Cavazos-Rehg and colleagues<sup>35</sup> posited that youth who share computers with adults who search for tobacco-related content may be exposed to online tobacco advertising because of online tracking and advertisement placement tools.

The demographic differences observed in this study support similar research<sup>2</sup> that found differences in exposure to advertising by sex and race/ethnicity. Other studies<sup>36–38</sup> have also found demographic differences in response to advertising and promotions, including price sensitivity, use of price promotions, exposure, and receptivity to advertising. Nevertheless, the observed demographic differences in coupon exposure were much smaller than differences by current tobacco use, living with a tobacco user, and receptivity to tobacco marketing.

Evidence also indicates that brand-specific differences in marketing strategies may exist, suggesting that brand preference may affect if and how people receive tobacco advertising and promotions.<sup>12</sup>

Coupons are used to promote other tobacco products, including cigars and e-cigarettes.<sup>13–14</sup> Although research in this area is limited, it is also possible that advertising and promotion strategies differ by tobacco product. A recent local area study<sup>39</sup> of marketing strategies at retail outlets suggested that little cigars and cigarillos are sold for lower prices in neighborhoods that are primarily African American and in some areas that have greater proportions of young adults. Although it was not possible to examine youth exposure to coupons for different types of tobacco products in this study, this is an area of research that should be explored.

## Limitations

This study has several strengths; however, some limitations exist. Although the prevalence of reported exposure to coupons is high among current users, the NYTS did not collect information on behaviors that ensued from coupon exposure. In adults, coupon use has been

associated with preventing those who would otherwise quit from doing so.<sup>36</sup> Despite not knowing if or how the coupons were used, they may still serve as a means to introduce new types of tobacco products (e.g., snus, dissolvables, e-cigarettes) to youth and reinforce brand recognition.

In addition, youth are exposed to an abundance of advertising—for tobacco and other consumer goods—and it is unclear how well youth are able to accurately report exposure to specific types of tobacco marketing (e.g., coupons versus other forms of advertising) or recall specific channels of exposure (e.g., e-mail versus mail). In addition, industry-generated, third party-generated, and user-generated advertising exists; it is unknown whether youth are able to distinguish between tobacco industry-generated coupons and coupons from other sources. Given that this is a self-reported measure, actual exposure and channel of exposure to the coupons could not be independently verified.

Finally, the data were only collected from students enrolled in traditional middle or high schools who were able to complete the questionnaire without special assistance, and thus may not represent all youth.

## Conclusions

This study serves to quantify and generally characterize exposure to tobacco coupons among youth. Findings revealed that approximately 13% of youth reported exposure to tobacco coupons. Furthermore, current tobacco use, living with a tobacco user, and receptivity to tobacco marketing were independently associated with coupon exposure.

Youth may not be the intended recipients of tobacco coupons. However, little is known about the role of coupons in promoting brand and product imagery and loyalty among youth. More research is needed to assess the role of coupons in shaping attitudes, beliefs, susceptibility, and tobacco use behaviors. Another area for further exploration may be the relationship between exposure to pro-tobacco messages (including coupons) in the home and the increased risk of youth tobacco initiation associated with living with a tobacco user.

The U.S. Food and Drug Administration currently has the authority to regulate the marketing of cigarettes, smokeless tobacco, and roll-your-own tobacco to protect public health. This exploratory study suggests that although the marketing of tobacco products is restricted to adults, this is not preventing youth from being exposed to tobacco promotions such as coupons. Understanding youth exposure to tobacco promotions such as coupons, channels of exposure, and the extent to which this exposure contributes to the risk of becoming a tobacco user may help policymakers determine methods of limiting youth exposure to coupons and similar tobacco marketing strategies.

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**Table 1**

Prevalence of tobacco coupon exposure in the past 30 days by marketing channel, 2012 National Youth Tobacco Survey

	Sample <i>n</i>	Overall % (95% CI)	Mail % (95% CI)	Digital communication <sup>a</sup> % (95% CI)	Tobacco package % (95% CI)
<b>OVERALL</b>	24,658	13.1 (12.1, 14.1)	6.0 (5.4, 6.7)	7.4 (6.8, 8.0)	3.7 (3.3, 4.2)
<b>Sex</b>					
Female	12,041	12.7 (11.6, 13.9)	6.3 (5.6, 7.2)	7.2 (6.4, 8.0)	3.5 (3.0, 4.1)
Male (ref)	11,982	13.4 (12.3, 14.7)	5.8 (5.1, 6.6)	7.6 (6.9, 8.3)	3.9 (3.3, 4.6)
<b>Grade</b>					
6–8 (ref)	11,336	11.5 (10.6, 12.4)	6.0 (5.2, 6.8)	7.0 (6.3, 7.8)	2.4 (2.0, 2.8)
9, 10	6,231	<b>14.1 (12.5, 15.9)</b>	6.4 (5.4, 7.5)	<b>8.4 (7.4, 9.5)</b>	<b>4.0 (3.3, 4.9)</b>
11, 12	6,395	<b>14.3 (12.7, 16.1)</b>	5.7 (4.8, 6.7)	6.8 (5.7, 8.1)	<b>5.5 (4.6, 6.6)</b>
<b>Race/ethnicity</b>					
White, non-Hispanic (ref)	11,600	13.0 (11.7, 14.4)	6.6 (5.6, 7.6)	6.3 (5.7, 7.1)	4.3 (3.6, 5.1)
Black, non-Hispanic	3,025	11.5 (10.1, 13.1)	<b>4.6 (3.8, 5.4)</b>	7.6 (6.5, 8.9)	<b>1.4 (0.8, 2.3)</b>
Hispanic	5,549	14.0 (12.0, 16.2)	5.8 (4.9, 6.8)	<b>9.2 (7.5, 11.3)</b>	3.6 (2.9, 4.5)
Other, non-Hispanic <sup>b</sup>	3,136	14.1 (12.0, 16.6)	6.5 (5.2, 8.1)	<b>9.0 (7.4, 10.8)</b>	3.8 (3.0, 4.7)
<b>Currently use tobacco<sup>c</sup></b>					
Yes	3,340	<b>34.0 (31.1, 37.0)</b>	<b>13.5 (11.7, 15.6)</b>	<b>14.9 (13.4, 16.6)</b>	<b>18.7 (16.8, 20.7)</b>
No (ref)	20,172	9.3 (8.6, 10.0)	4.7 (4.2, 5.2)	5.9 (5.4, 6.5)	1.2 (0.9, 1.5)
<b>Lives with tobacco product user<sup>d</sup></b>					
Yes	9,751	<b>20.0 (18.4, 21.6)</b>	<b>10.2 (9.2, 11.3)</b>	<b>10.3 (9.5, 11.2)</b>	<b>6.5 (5.7, 7.5)</b>
No (ref)	13,060	7.8 (7.2, 8.5)	3.0 (2.6, 3.4)	5.1 (4.5, 5.7)	1.6 (1.3, 1.9)
<b>Receptivity to tobacco marketing</b>					
Receptive	7,274	<b>23.4 (21.6, 25.4)</b>	<b>10.4 (9.1, 11.9)</b>	<b>13.0 (11.8, 14.3)</b>	<b>8.5 (7.5, 9.6)</b>
Not receptive (ref)	15,659	8.2 (7.5, 9.0)	4.1 (3.6, 4.7)	4.7 (4.2, 5.2)	1.4 (1.2, 1.8)

Note: Boldface indicates statistically significant difference from the reference group ( $p < 0.05$ ).

<sup>a</sup>Digital communication includes coupons received by e-mail, Internet, social networks, or text message.

<sup>b</sup>Other non-Hispanic race/ethnicity includes non-Hispanic Asian, American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, and multi-race.

<sup>c</sup>Tobacco products include cigarettes, cigars, cigarillos or little cigars, or smokeless tobacco. Current use is defined as using at least one tobacco product on 1 or more of the past 30 days.

<sup>d</sup>Lives with at least one user of tobacco products, including cigarettes, smokeless tobacco, cigars, or any other form of tobacco.

**Table 2**

Correlates of tobacco coupon exposure in the past 30 days by marketing channel, 2012 National Youth Tobacco Survey, AOR (95% CI)

	Overall	Mail	Digital communication <sup>a</sup>	Tobacco package
<b>Sex</b>				
Female	1.1 (1.0, 1.2)	<b>1.2 (1.0, 1.4)</b>	1.1 (0.9, 1.2)	<b>1.3 (1.0, 1.6)</b>
Male (ref)	1.0	1.0	1.0	1.0
<b>Grade</b>				
6–8 (ref)	1.0	1.0	1.0	1.0
9, 10	0.9 (0.8, 1.1)	0.9 (0.7, 1.1)	1.0 (0.8, 1.1)	0.8 (0.6, 1.0)
11, 12	0.9 (0.7, 1.0)	<b>0.7 (0.6, 0.9)</b>	<b>0.7 (0.6, 1.0)</b>	0.9 (0.7, 1.3)
<b>Race/ethnicity</b>				
White, non-Hispanic (ref)	1.0	1.0	1.0	1.0
Black, non-Hispanic	0.9 (0.7, 1.1)	<b>0.7 (0.6, 0.8)</b>	1.2 (1.0, 1.5)	<b>0.3 (0.2, 0.5)</b>
Hispanic	1.1 (0.9, 1.4)	0.9 (0.7, 1.1)	<b>1.4 (1.1, 1.9)</b>	0.9 (0.6, 1.2)
Other, non-Hispanic <sup>b</sup>	1.2 (1.0, 1.5)	1.1 (0.8, 1.4)	<b>1.5 (1.2, 1.9)</b>	1.1 (0.8, 1.5)
<b>Currently use tobacco<sup>c</sup></b>				
Yes	<b>3.4 (3.0, 3.9)</b>	<b>2.3 (1.9, 2.7)</b>	<b>1.9 (1.5, 2.3)</b>	<b>12.9 (9.5, 17.5)</b>
No (ref)	1.0	1.0	1.0	1.0
<b>Lives with tobacco product user<sup>d</sup></b>				
Yes	<b>2.1 (1.9, 2.4)</b>	<b>2.9 (2.5, 3.5)</b>	<b>1.6 (1.4, 1.9)</b>	<b>2.3 (1.8, 3.0)</b>
No (ref)	1.0	1.0	1.0	1.0
<b>Receptivity to tobacco marketing</b>				
Receptive	<b>2.3 (2.0, 2.7)</b>	<b>1.9 (1.6, 2.2)</b>	<b>2.5 (2.0, 2.9)</b>	<b>3.0 (2.4, 3.7)</b>
Not receptive (ref)	1.0	1.0	1.0	1.0

Note: Each AOR is adjusted for all other characteristics in the table. Boldface indicates statistically significant difference from the reference group ( $p < 0.05$ ).

<sup>a</sup>Digital communication includes coupons received by e-mail, Internet, social networks, or text message.

<sup>b</sup>Other non-Hispanic race/ethnicity includes non-Hispanic Asian, American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, and multi-race.

<sup>c</sup>Tobacco products include cigarettes, cigars, cigarillos or little cigars, or smokeless tobacco. Current use is defined as using at least one tobacco product on 1 or more of the past 30 days.

<sup>d</sup>Lives with at least one user of tobacco products, including cigarettes, smokeless tobacco, cigars, or any other form of tobacco.

**Table 3**

Prevalence and correlates of exposure to tobacco coupons<sup>a</sup> stratified by tobacco use, 2012 National Youth Tobacco Survey

	Currently use tobacco <sup>b</sup>		Do not currently use tobacco	
	% (95% CI)	AOR <sup>c</sup> (95% CI)	% (95% CI)	AOR <sup>c</sup> (95% CI)
<b>OVERALL</b>	34.0 (31.1, 37.0)	9.3 (8.6, 10.0)		
<b>Sex</b>				
Female	35.8 (32.5, 39.3)	<b>1.3 (1.0, 1.6)</b>	9.6 (8.7, 10.6)	1.1 (1.0, 1.3)
Male (ref)	32.9 (29.5, 36.5)	1.0	8.9 (8.1, 9.8)	1.0
<b>Grade</b>				
6–8 (ref)	40.0 (35.7, 44.4)	1.0	9.5 (8.7, 10.4)	1.0
9, 10	35.5 (31.1, 40.2)	<b>0.7 (0.6, 0.9)</b>	9.3 (8.1, 10.6)	0.9 (0.8, 1.1)
11, 12	<b>30.5 (27.2, 34.1)</b>	<b>0.6 (0.4, 0.7)</b>	8.6 (7.2, 10.3)	0.9 (0.7, 1.1)
<b>Race/ethnicity</b>				
White, non-Hispanic (ref)	35.3 (31.7, 39.2)	1.0	8.9 (7.9, 9.9)	1.0
Black, non-Hispanic	<b>22.7 (18.3, 27.8)</b>	<b>0.6 (0.5, 0.8)</b>	9.4 (7.9, 11.1)	1.1 (0.9, 1.3)
Hispanic	35.5 (31.4, 39.8)	1.0 (0.8, 1.3)	10.0 (8.1, 12.3)	1.1 (0.9, 1.5)
Other, non-Hispanic <sup>d</sup>	37.0 (30.6, 43.7)	1.1 (0.8, 1.6)	10.8 (8.8, 13.2)	1.3 (1.0, 1.6)
<b>Lives with tobacco product user<sup>e</sup></b>				
Yes	<b>41.2 (37.5, 45.1)</b>	<b>2.1 (1.7, 2.7)</b>	<b>13.7 (12.5, 15.0)</b>	<b>2.0 (1.8, 2.3)</b>
No (ref)	20.1 (17.4, 23.1)	1.0	6.5 (5.9, 7.1)	1.0
<b>Receptivity to tobacco marketing</b>				
Receptive	<b>40.2 (36.6, 43.9)</b>	<b>1.8 (1.5, 2.2)</b>	<b>16.4 (14.7, 18.3)</b>	<b>2.4 (2.1, 2.9)</b>
Not receptive (ref)	22.9 (19.7, 26.4)	1.0	6.8 (6.1, 7.5)	1.0
<b>Frequency of days using tobacco</b>				
20 of past 30 days	<b>54.7 (50.3, 59.1)</b>	<b>3.7 (3.1, 4.5)</b>		
10–19 of past 30 days	<b>38.1 (32.8, 43.7)</b>	<b>2.0 (1.5, 2.6)</b>		
1–9 of past 30 days (ref)	22.8 (20.3, 25.4)	1.0		

Note: Boldface indicates statistically significant difference from the reference group ( $p < 0.05$ ).

<sup>a</sup>Tobacco coupons received through marketing channels that include mail, digital communication (e-mail, Internet, social networks, or text message), or on a tobacco package.

<sup>b</sup>Tobacco products include cigarettes, cigars, cigarillos or little cigars, or smokeless tobacco. Current use is defined as using at least one tobacco product on 1 or more of the past 30 days.

<sup>c</sup>Each AOR is adjusted for all other characteristics in the table.

<sup>d</sup>Other non-Hispanic race/ethnicity includes non-Hispanic Asian, American Indian/Alaska Native, Native Hawaiian/other Pacific Islander, and multi-race.

<sup>e</sup>Lives with at least one user of tobacco products, including cigarettes, smokeless tobacco, cigars, or any other form of tobacco.