Reducing Adult Tobacco Use in Vermont

Research Report
Data Collected **November 2012**

Presented To: **Vermont Department of Health**

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Executive Summary

In 2011, 19.1% of Vermont adults were smokers, nearly identical to the national prevalence of 19%, which places the state of VT at the 11th lowest prevalence in the US (CDC, 2011a). However, for the purposes of this report, we will use the 2013 Vermont Tobacco Evaluation and Review Board (VTERB) age-adjusted adult smoking prevalence of 20.2% (VTERB, 2013).

In order to help achieve VTERB's goal of 12% adult prevalence rate by 2020, the Vermont Department of Health (VDH) contracted Rescue Social Change Group (Rescue SCG) to conduct a study designed specifically to understand the motives underlying adult tobacco use. The main goal of the study was to identify potential strategies, messages, and channels to ensure that limited resources efficiently motivate current VT smokers to quit. This study was designed to address five main objectives:

1. Understand knowledge, perceptions, and beliefs related to tobacco use among current smokers;
2. Identify motivations for starting and continuing to smoke;
3. Identify barriers and motivations to quitting smoking;
4. Identify the best communication channels to reach current smokers;
5. Identify the best messages to decrease smoking prevalence and increase quit attempts.

To achieve the above-stated research objectives, Rescue SCG researchers conducted 9 focus groups with 94 Vermont adults in Barre, Brattleboro, Burlington, Rutland, and St. Johnsbury. Participants were low-income Vermont residents with low levels of education, who had used tobacco in the previous week. In addition, two focus groups composed exclusively of young adults (n = 22), aged 18-24, were conducted in Burlington to uncover qualitative insights from this segment of Vermont adults. Young adult participants were tobacco users recruited from bars and clubs in downtown Burlington.

Secondary Research: Media and Cessation Campaigns

An overwhelming body of evidence proves that strong mass media campaigns have the power to help reduce adult tobacco use. Previous state- and national-level mass media campaigns, including California, Massachusetts, New York, Brazil, and Australia, demonstrate that mass media campaigns are associated with declines in adult smoking (Bala, Strzeszynski, & Cahill, 2008; Davis, Farrelly, Duke, Kelly, & Willett, 2012; Levy, de Almeida, & Szklo, 2012; Wakefield et al., 2008). These campaigns offer us insights into the important role of messaging, reach, intensity, duration, and cessation support in effective campaigns.

In recent years, a number of mass media campaign strategies have been tested and tried, many with mixed results. To date, only ads that are both highly emotional and include personal testimonies have been consistently shown to be effective among the adult population, including ads with personal testimonials from either former smokers or family members (Biener, McCallum-Keeler, & Nyman, 2000; Durkin et al., 2012; Durkin, Biener, & Wakefield, 2009; Mosbaek, Austin, Stark, & Lambert, 2007). This may in part be because personal narratives often reduce the tendency towards counterarguments and self-exemptions (Biener et

al., 2000). In addition, highly emotional ads are more likely to be recalled, thought about, and discussed (Biener et al., 2000; Terry-McElrath et al., 2005). Although other message types have not been consistently effective, there is some evidence to suggest that advertisements modeling "how to quit" behavior can serve as an effective complement to a campaign employing highly emotional personal testimonials (Mosbaek et al., 2007; Davis et al., 2012).

The use of evidenced-based cessation treatments can double or sometimes triple smoking cessation success rates and should be included as part of the mass media campaign to maximize the campaign's success (CDC, 2011b). Including a Quitline number on the advertisements, for instance, reliably increases quit calls (CDC, 2012). In turn, Quitline calls are most effective when it provides connections to other treatment resources, such as free NRTs or proactive counseling (CDC, 2012). When Minnesota's hotline began offering free NRT, call volume increased substantially and led to a corresponding increase in the state's quit rate (Schillo, et al., 2006).

Beyond messaging strategy, research shows that reach, intensity, and duration also play a critical role in a campaign's success (Wakefield et al., 2008). Overall, high intensity is necessary to ensure adequate reach and exposure, with researchers estimating that an average of 1200 gross rating points (GRPs) per quarter is the minimum amount required to reduce adult smoking prevalence (Durkin et al., 2012).

Qualitative Findings Part 1: Adult Discussion About Technology Access and Usage

The majority of participants had Internet access on their phones and personal computers. The most popular smartphone destination is Facebook, followed by music apps. Facebook usage is so popular that even homeless participants reported accessing their profiles from the library. Participants were comfortable "sharing" links, articles, and videos on social media sites and recalled "liking" pages on Facebook. Few reported clicking on Facebook side panel ads and many were skeptical of online contests. Some participants had satellite or cable at home, while very few watched TV on Hulu. All of the participants had watched videos on YouTube, and many recalled watching YouTube ads in their entirety even when it was not required. Approximately half of all participants had satellite or cable on their television, with sports, history, learning, and discovery content being the most popular.

Qualitative Findings Part 2: Adult Discussion About Tobacco Use and Health

Among older adults, intermittent tobacco use is not common. All participants described themselves as "regular smokers" who cited stress, habits, and addiction as primary causes of continued smoking. Participants perceive a very high prevalence of smoking that is much higher than the actual 20.2% state prevalence rate. However, this perception of high prevalence is likely an accurate reflection of tobacco use among their social networks. All participants were aware of the negative health effects of smoking, and many had personally experienced them. While most adults do not want to smoke anymore, some were highly skeptical of the probability of developing a serious long-term smoking-related disease.

Qualitative Findings Part 3: Adult Discussion About Quitting Tobacco

Throughout the focus groups, it became evident that most adults do not want to smoke anymore. Participants described multiple attempts at quitting or reducing their tobacco use, with varying levels of success. Although participants were interested in quitting, many perceived quitting as an all or nothing process.

Participants described the financial costs of purchasing tobacco products, and their current (or future) children as motivations for quitting smoking. Participants described the financial toll of purchasing cigarettes regularly. Many of the participants recalled time when they had tried to quit in the past when the cost of a pack of cigarettes increased. In addition, participants expressed concern over role-modeling smoking for children, or their children smelling like cigarettes as motivation to quit smoking. Many participants refused to smoke in their homes or in their cars in order to reduce their young children's exposure to secondhand smoke.

Cessation approaches included cold turkey, hypnotism, alternative products (i.e. e-cigarettes, roll-your-own), FDA regulated Nicotine Replacement Therapies (NRT), and the Vermont Quit Network's Quitline, but participants do not have a consistent positive impression on any one approach. Although e-cigarettes are not federally regulated NRT products, many of the participants had tried switching to e-cigarettes to quit smoking. Few of the adults who had tried NRTs and prescription cessation products (nicotine gum, the patch, and prescription Chantix) had a positive impression of the products and their efficacy. Although participants had tried various cessation methodologies and were aware of the obstacles present during quit attempts, most participants did not have a quit plan to overcome these challenges. Overall, participants had a negative impression of the usefulness of the VT Quitline, even if they had never called. The few that had called, or knew others who called, maintained negative impression of the service. These individuals expressed concerns about the length of the process, the interactions of the counselors, and the efficacy of the cessation method. Few focus group participants were aware that NRTs were available through the service. A few participants were aware of local cessation support, such as quit groups at the hospital. Those who were aware of this option had very positive opinions, a stark contrast to their negative impression of the Quitline.

Throughout the focus groups, participants expressed a lack of confidence in their future ability to quit, because of previously unsuccessful quit attempts. Stress was also described as one of the primary reasons for relapsing during a quit attempt. In particular, low income smokers have a lot of more pervasive challenges in their lives, which makes it harder for them to give up smoking. Participants also mentioned the lack of social support to quit from their immediate network of romantic partners, friends, and family, all of whom tend to use tobacco regularly. While women have historically attributed continued smoking to a fear of weight gain during cessation (Borelli et al., 2001), weight gain was cited only once as a barrier to cessation.

Qualitative Findings Part 4: Adult Discussion of Anti-Tobacco Ads

Participants believed that ads that included a emotional content, a serious tone, thought-provoking, or that were considered interesting would be more effective in convincing smokers to quit. Although participants preferred ads with interesting messaging that "caught their attention," they did not require new information on the health effects of smoking to be effective. Message content that participants deemed effective included ads that focus on the health effects of smoking on both adults and children.

Four ads that participants described as the most effective included, Australia 's National Tobacco Campaign's "Every Cigarette Does You Damage", the NYC Health's "Abandoned Child," and the CDC's "Shawn Tips" and "Terrie Tips." These ads were reviewed positively because of their serious and emotional tone and content. "Every Cigarette Does you Damage" by Australia's National Tobacco Campaign graphically demonstrates the damage that smoking does to one's heart and arteries by showing actual organs. The CDC's "Shawn Tips" and "Terrie Tips" features actual people talking about the hard-hitting health effects of tobacco use. NYC Health's depiction of an "Abandoned Child," losing parents to tobacco use, was described as an enormously powerful image, particularly among parents.

Ads that featured statistics were described as less personal and less emotionally effective for convincing smokers to quit. Statistics were interpreted as distant and non-relatable, and were frequently questioned by participants. Participants described personal anecdotes from their past, friends, and family that seemingly contradicted statistics presented in the ads, like in "Pregnancy Risks" by the UK National Health Service. Participants also reported that ads that they found funny were less likely to be effective, as the humor undermined the gravity of the message presented in the ad. Three ads were described as least effective in participants' qualitative evaluation of campaigns due to their creativity and humor including The Alabama Tobacco Free Families "Baby Exchange" ad and Legacy's "Drinking and Smoking" and "Coffee and Smoking." Participants felt that these ads were "corny," unrealistic, and felt that the content was "sarcastic." Although participants could relate to the content of an anxious mother or a smoker trying to drink coffee, they did not feel that the tone or content of these ads would motivate a smoker to quit.

Quantitative Analysis: Adult Evaluation of Anti-Tobacco Ads

Several facets influenced perceptions of effectiveness throughout the ads. Ads that made participants think or affected them emotionally were rated higher on average and accounted for the most variance in effectiveness. In addition, the seriousness and interesting nature of ad content were also related to increased effectiveness of ads. Humor in an ad was negatively related to effectiveness; in other words, as ratings of "funny" increased, ad effectiveness decreased. In addition, ads that were creative, ads that had likable and relatable actors, and ads that presented previously unknown information were not effective in motivating users to reduce tobacco use.

Ads that had the highest effectiveness ratings included “Misery of Emphysema”, “Shawn Tips”, “Terrie Tips,” and “Every Cigarette Does You Damage.” The primary description for the best nine ads was “serious”. The most humorous and creative ads were perceived to be the least effective, such as “Drinking and Smoking” and “Get Unhooked.”

Qualitative Findings Part 5: Young Adult Focus Group Discussions

Unlike participants in the broader adult focus groups, Young Adult (YA) participants described themselves as intermittent smokers who smoked with friends or when they drank alcohol. As such, social venue such as bars, nightclubs, and alcohol play a major role in YA tobacco use. While the majority of participants smoked cigarettes, YA participants mentioned using e-cigarettes, hookah, chew (though infrequently), and roll your own tobacco as an alternative to purchasing cigarettes. Compared to older adult participants, YA participants expressed a much lower desire to quit smoking. Participants did not see the immediate need to quit, describing their future intentions to quit for when they had kids, or when they were older or middle aged. Barriers to quitting included a need for personal relaxation and enjoyment, and difficulty quitting in the midst of a social group of smokers. Some described their experiences quitting, with varying levels of success.

YA participants identified members of the punk scene, hipsters, and townies as regular smokers. Participants named varying tobacco products across peer groups included Newports for “gangsters,” roll your own (or “rollies”) among “artsy kids,” and Marlboros for townies. Gangsters were identified as smoking Newports and “artsy kids” among groups that used tobacco.

YA participants valued ad content that reflected novel themes including tobacco industry animal abuse and fair trade. Participants were also partial to ads that reflected taboo health effects of smoking such as impotence, and messages relating nicotine to the addictiveness of crack.

YA participants evaluated ad effectiveness differently than their older adult counterparts. Interestingly, ads that were deemed effective in the broader adult focus groups were not deemed effective by YAs. For instance, YA participants reacted negatively to the messengers in CDC’s “Shawn Tips” and “Terrie Tips,” and evaluated Alabama Tobacco Free Families ad “Abandoned Child” as overdramatic and ineffective for an audience other than parents.

YA participants expressed high level of interest in the Commune Quit Group, relating to the YAs whose testimonials were featured in the video. YAs found the people depicted in the video as relatable, and motivational. YA participants also responded well to Commune posters, both in the manner in which they are developed (local artists) as well as the message of the posters, which included tobacco industry animal testing, fair trade, addiction, and impotence.

Implications & Discussion

The following implications have been compiled based on a combined analysis of both qualitative and quantitative data that are pertinent to tobacco cessation and health in VT adults. The implications are organized based on the specific objectives of the study.

Objective 1: Understand knowledge, perceptions, and beliefs related to tobacco use

1. Most older adult smokers already want to quit – Most adults have attempted to quit in the past with varying levels of success and can be motivated to quit again with the right message and support.
2. Adults and YAs identify as different kinds of smokers – Because adults identify as regular smokers while YAs identify as intermittent smokers, efforts to reach each group should be customized to maximize reach and impact.
3. Unique YA peer crowds have different tobacco use trends – YA participants identified various peer crowds such as punk scene, hipsters, and townies as regular smokers, each with a preferred type of tobacco product, which implies that targeted interventions are necessary for each peer crowd.

Objective 2: Identify motivations for starting and continuing to smoke

4. Social network plays key role in tobacco use – Participants reported much higher level of smoking among their peer crowd than the state's 20.2% adult prevalence rate, which makes it harder for them to quit because they are surrounded by people who smoke.
5. Smoking is believed to relieve stress – Smoking is cited as a coping mechanism to deal with daily stressors.

Objective 3: Identify barriers and motivations to quitting smoking

6. YAs have different quitting priorities compared to older adults – Unlike adults in the overall study, YAs expressed much lower desire to quit smoking and were confident in their ability to quit if they ever wanted to, implying a different cessation strategy is necessary for this adult sub-segment.
7. Quit attempts are not based on quit plans – Lack of quit plan to avoid or address triggers contribute to failed quit attempts because participants are not as prepared as they could be.
8. Failed quit attempts frequently resulted in reduced perception of self-efficacy – Each failed quit attempt reduces participants' self-efficacy in their ability to quit, which increases the importance of comprehensive efforts that effectively motivates smokers to quit, encourages repeat attempts, and provides the necessary resources to increase success rate.
9. Financial reasons & family are strong motivators for adults to quit tobacco use – The high cost of using tobacco products is a strong motivator for low-income populations to quit tobacco use, along with

concern about exposing children to secondhand smoke and causing negative role modeling to their children.

Objective 4: Identify the best communication channels to reach current smokers

10. Internet access is pervasive and readily available – Participants have Internet access on their phones and personal computers, and even homeless participants frequently use Facebook and YouTube by accessing the Internet from their friends' homes or the library.

Objective 5: Identify the best messages to decrease smoking prevalence and increase quit attempts

11. Quitline is negatively perceived – Participants widely expressed resistance and disdain to Quitline, even if they have never called before.
12. Urgency and self-efficacy needs to be present in all ads – Participants did not feel the immediate need to quit, so to be effective, messages should concurrently focus on urgency to quit and self-efficacy.
13. Adults favor serious, interesting, thought-provoking, and emotional ads – Ratings of effectiveness in ads decreased with humor, whereas likeability, relatability, creativity, and new information were unrelated to effectiveness.
14. YAs value novel and creative ad content – YAs respond well to content that touched upon tobacco industry deception as well as health messaging that addressed impotence and compared nicotine to crack.
15. Statistics do not work well – Participants have too many personal experiences that defy statistics, requiring that messaging related to health effects be depicted by a real person in a testimonial format rather than presented as a statistic in order to be effectively processed by the audience.

Recommendations

The following recommendations are based on the findings of this research project and reflect the resources we believe are currently available in the state's tobacco prevention efforts.

1. Produce local testimonials about tobacco health effects featuring family members

Testimonials should feature non-smoking family members discussing the impact of smoking on their lives in addition to the smoker describing those health effects on his or her own life. The appearance of children describing their well-being or their future can be especially effective. Tobacco use levels, in particular, should be displayed to show smokers that both low and high levels of smoking could lead to life-threatening diseases.

2. Produce "how-to-quit" ads to increase self-efficacy to quit

Messaging depicting how-to-quit can show smokers successful cessation methods and ultimately increase self-efficacy for quitting. Ads should feature strategies proven to increase quit success, such as developing

a quit plan, to help smokers better prepare for their next quit attempt. All ads should have both urgency and self-efficacy components in order for VDH efforts to be more successful in reducing overall adult tobacco prevalence.

3. Increase branding and awareness of local, personal quit resources

Rather than using resources to try to change their opinions of the Quitline, resources may be better allocated to support quit resources that adults are more open to trying and are already available at the local level. Improved marketing of these services should include statewide branding of local quit counselors to increase program recognition and legitimacy. Additionally, counselors in local programs could also be incentivized to increase their outreach and impact.

4. YA who identify as social smokers require tailored cessation programming

The majority of YA smokers are not ready to quit, describing themselves as intermittent or social smokers. Commune, an existing tobacco prevention program in San Diego that targets the high-risk Hipster subculture, tested well with local YAs. It is recommended that Commune be implemented as a bar/club-based strategy that focuses on reducing the social acceptability of smoking in the nightlife community through bar-based quit groups. This strategy includes messages that appeal to YAs, highlighting the social consequences and short-term health effects of smoking.

5. Promote messages that reinforce the idea that cessation is not an all-or-nothing process

Adults who had attempted to quit before had a low sense of self-efficacy about their ability to quit effectively, with most describing the quitting process as all-or-nothing. Ads should feature messages that describe cessation as a long-term process and that they should “keep trying” to give adults the courage to continue trying to quit. These messages should be complemented with testimonial ads that increase the urgency to quit.

Introduction

In 2011, 19.1% of Vermont adults were smokers, nearly identical to the national prevalence of 19%, which is the 11th lowest state prevalence in the US (CDC, 2011a). However, for the purposes of this report, we will use the 2013 Vermont Tobacco Evaluation and Review Board (VTERB) age-adjusted[1] adult smoking prevalence of 20.2% (VTERB, 2013). To help achieve VTERB's goal of 12% adult prevalence rate by 2020, the VT Department of Health (VDH) contracted Rescue Social Change Group (Rescue SCG) to conduct a study designed specifically to understand the motives underlying adult tobacco use. The main goal of the study was to identify potential strategies, messages, and channels to ensure that limited resources efficiently motivate current VT smokers to quit. This study was designed to address five main objectives:

1. **Understand knowledge, perceptions, and beliefs related to tobacco use among smokers;**
2. **Identify motivations for starting and continuing to smoke;**
3. **Identify barriers and motivations to quitting smoking;**
4. **Identify the best communication channels to reach current smokers;**
5. **Identify the best messages to decrease smoking prevalence and increase quit attempts.**

These objectives were explored through focus groups where both qualitative and quantitative data were collected from adults, and unique qualitative insights from young adults (YA). In November 2012, Rescue SCG researchers conducted 9 focus groups with 94 Vermont adults in Barre, Brattleboro, Burlington, Rutland, and St. Johnsbury. Participants were low-income and/or low education Vermont residents who had used tobacco in the previous week. In addition, two focus groups composed exclusively of YAs (N=22), aged 18-24, were conducted in Burlington to uncover qualitative insights from this segment of VT adults. YA participants were tobacco users recruited from bars and clubs in downtown Burlington. References to "young adults" or "YAs" in this report refer specifically to participants in these two groups. In all other instances, content refers to the 9 VT adult focus groups and excludes these two YA groups.

This report begins with a summary of secondary research pertaining to evaluations of adult-focused media and cessation campaigns, which was used to guide the development of this study. Next, the report includes sections on research methodology, analysis of qualitative discussions from focus groups, quantitative analysis of tobacco control prevention ads from adult focus group participants, and qualitative analysis from YA focus groups. The report concludes with research implications and recommendations for the VDH in regards to adult tobacco cessation efforts in Vermont. On behalf of the research team at Rescue SCG, we appreciate the opportunity to provide this report and truly hope it helps the VDH achieve its objectives.

[1]*Age-adjustment refers to statistical weighting of age groups within a study sample so that estimates better reflect prevalence within actual age groups found in the population.*

Secondary Research: Media & Cessation Campaigns

Secondary research was conducted prior to this study to inform the development of study methods and ensure that researchers built upon existing research on adult tobacco prevention. The following themes were identified as the most useful during the design of the current study.

Effectiveness of Mass Media Campaigns

In the fight to eliminate smoking-related disease and disability, mass media campaigns can be a critical tool for increasing adult tobacco cessation. An overwhelming body of evidence demonstrates that mass media campaigns can effectively reduce adult tobacco use (Community Preventive Services Task Force, 1999; Durkin, Brennan & Wakefield, 2012; Centers for Disease Control [CDC], 2007; National Cancer Institute [NCI], 2008; 2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008). In evaluating their effectiveness, a review of 26 studies of mass media campaigns (Durkin et al., 2012), as well as a systemic review by the Task Force on Community Preventative Services (1999), firmly concluded that mass media campaigns promote quitting and reduce adult smoking prevalence. Likewise, a comprehensive report released in 2008 by the National Cancer Institute concluded that mass media campaigns can reduce tobacco use in both youth and adults (NCI, 2008). Although extensive research demonstrates that mass media campaigns are an effective strategy in reducing adult tobacco use, the findings also underline the important role that messaging, reach, intensity, and duration play in the campaign's success.

Analysis of past statewide and national mass media campaigns in California, Massachusetts, New York, Brazil, and Australia, has shown definite declines in smoking in association with their mass media expenditures in each locality (Bala et al., 2008; Davis et al., 2012; Levy et al., 2012; Wakefield et al., 2008). After their respective campaigns' conclusions, California, Massachusetts, and New York all reported significant decreases in smoking prevalence; in addition, Massachusetts demonstrated positive results up to eight years after their campaign's conclusion (Bala et al., 2008; Davis et al., 2012). One study evaluating exposure to the New York Tobacco Control Program's campaign showed that, as advertising increased from 6 percent in 2003 to 45 percent in 2009, 30-day intentions to quit increased from 26 percent to 35 percent (Davis et al., 2012). Furthermore, during the same time period, the number of average daily cigarettes consumed in New York decreased from 15 to 11 (Davis et al., 2012). Overall, New York experienced a greater overall decline in adult smoking (18%) than the general United States population (5%) in 2009 (Davis et al., 2012). Similar results have been found abroad. In the 2012, a study of Brazil's mass media efforts estimated that approximately 6% of the 50% reduction in smoking within the last 20 years was directly attributable to their mass media campaigns (Levy et al., 2012). During Australia's mass media campaign, monthly smoking prevalence decreased from 27.1% in September of 1997 to 18.7% in August 2004 partly due to advertising exposure (Wakefield et al., 2008).

Effective Mass Media Campaign Message Strategies

In recent years, a variety of campaign message strategies have been tried and tested, many with mixed results. Overall, ads that are both highly emotional and include personal testimonies have been consistently effective among the adult population (Biener, McCallum-Keeler, & Nyman, 2000; Durkin et al., 2012; Durkin, Biener, & Wakefield, 2009; Mosbaek, Austin, Stark, & Lambert, 2007). In an analysis of Massachusetts' antismoking campaigns, researchers found that although exposure to all ad categories (combinations of with/without personal testimonies and with/without emotion) were associated with a greater likelihood of quitting, smokers exposed to highly emotional ads that included personal testimonies were significantly more likely to quit smoking (Durkin et al., 2009). A separate review of 26 studies of mass media campaigns determined that negative health effect messages were the most effective, with mixed evidence for other messaging types – such as how-to-quit, anti-industry, and social norms messaging (Durkin et al., 2012). These findings are supported by the 2012 study of Australia's anti-tobacco advertising campaign, in which messaging emphasizing the serious harms of smoking was associated with short-term increases in the likelihood to make a quit attempt (Wilson et al., 2012). In an academic review of 19 mass media campaigns worldwide, researchers concluded that, "behavioral research has suggested that adult audiences are most likely to respond to graphic depictions of the health consequences of smoking" (Wilson et al., 2012).

Many campaigns have included ads that are highly emotional in nature and feature personal testimonies. Research demonstrates that ads that feature testimonials from former smokers are believable, memorable, and motivational (CDC, 2012). The national CDC Tips campaign, which targeted adults age 18-54, featured former smokers talking about their experiences living with smoking-related diseases (CDC, 2012). In order to determine if the ad was effective in convincing smokers to quit, the CDC Tips ads were evaluated based on calls to the national Quitline and unique visits to the associated smoking cessation website. Although it is too early to tell the exact impact the campaign had on smoking prevalence in the United States, the campaign increased calls to the Quitline by 132% (207,519 additional calls) and increased unique visits to the smoking cessation website by 428% (510,571 additional unique visitors) (CDC, 2012). Highly graphic and emotional content depicting the health consequences of smoking and the portrayal of personal loss was used in New York's statewide ad campaign with previously described success (Davis et al., 2012). Similar campaigns have taken place outside of the United States. Since 2002, Australia's anti-tobacco ads have depicted the serious health consequences of smoking through graphic images and personal testimonials (Wakefield et al., 2008). These ads are repeatedly found to be successful, and were recently used in New York's state campaign (Davis et al., 2012; Durkin et al., 2012).

Although the majority of highly emotional ads with personal testimonies feature former smokers themselves, a few campaigns have seen success with highly emotional personal testimonials from family members. In a study of Oregon's quit ads, researchers tested family member testimonials, former smoker testimonials, actors who spoke about reasons to quit tobacco, how-to-quit modeling, and secondhand smoke messages. The family member testimonials featured real people talking about the emotional impact of a

family member's illness and eventual death, including Quitline information at the end. Testimonials from family members were found to be more effective than any of the other ad categories -- including testimonials from former smokers (Mosbaek et al., 2007). Researchers hypothesized that the success of these ads was due to the inability of tobacco users to deny the emotional message of the family member, compared to the ease with which they can be in denial about health effects on their own bodies (Mosbaek et al., 2007). Having children is also associated with smoking cessation in parents, regardless of socio-economic status (SES). Thus, campaigns utilizing testimonials from sons and daughters might strengthen the effect of family member testimonial ads for parents (Jarvis, 1996).

Unlike an expert testimony or demonstration, narratives that include highly emotional, personal testimonials that focus on the negative health effects of tobacco use have also been found to reduce the tendency towards counterarguments and self-exemptions (Biener et al., 2000). Research has demonstrated that highly emotional ads are more likely to be recalled, perceived as effective, thought about, and discussed (Biener et al., 2000; Terry-McElrath et al., 2005). Furthermore, health concerns, which are some of the most commonly cited reasons for quitting, are inherently personal and emotional in nature (Bala et al., 2008; Kaleta et al., 2012). While ads that feature personal testimonies have consistently been found effective in the general population and those of moderate and low SES, some research suggests that ads are less effective (or possibly ineffective) in the high SES population (Durkin & Biener, 2009).

There is some evidence to suggest that advertisements modeling "how to quit" or cessation behavior can serve as an effective complement to a campaign employing highly emotional personal testimonials. In a study comparing Oregon's anti-tobacco ads, "Quitting Takes Practice" was the most effective TV ad only when shown during the daytime (Mosbaek et al., 2007). However, "Krystell Memorial" – a testimonial of a girl who had lost her mother to tobacco – was most effective at night (Mosbaek et al., 2007). The New York state anti-tobacco ad campaigns also included mixed message content as 30% of advertisements modeled "how to quit" behavior, while the other 70% was reserved for highly emotional, graphic advertisements (Davis et al., 2012). In contrast, a review of 20 studies investigating the effectiveness of cessation-only media campaigns (i.e., messaging focused only on providing motivation to join in a quit effort or to receive assistance and advice on how to quit) was unable to offer sufficient evidence of effectiveness (Hopkins et al., 2001). Although cessation-only ads may be less effective in a stand-alone capacity, "how to quit" ads were successful in New York and Oregon when included as part of a comprehensive mass media approach.

There are several other campaign message strategies that have not been as effective as those previously discussed. In one study of Massachusetts' anti-smoking ads, researchers found that exposure to ads that were not emotional and utilized either quit testimonials (including motivation strategies), humor, anti-industry messaging, or stories about how smoking impacts fitness, appearance, or social standing, were not associated with adult smoking cessation (Durkin & Biener, 2009). Additionally, a separate review of 26

studies of mass media campaigns failed to find consistent evidence of the effectiveness of other messaging types, including "how to quit", anti-industry, and social norms (Durkin et al., 2012).

In choosing the most cost-effective campaign messaging strategy, research suggests that, overall, messaging aimed at the general public is effective at reaching and influencing a broad audience, including lower-SES populations and racial minorities. Although numerous studies have explored the impact of mass media campaigns on socioeconomic disparities in smoking, they have seen mixed results – with some campaigns seeing a reduction in socioeconomic disparities and others showing results equivalent to the general population (Durkin et al., 2012). Durkin and colleagues' (2012) review of 26 studies of media campaigns concluded that, "general population campaigns of at least moderate intensity and duration are effective for motivating quitting in lower SES groups." Similarly, studies comparing the effects of mass media campaigns across racial and ethnic groups, have found mixed results – with some campaigns resulting in greater effects for particular racial groups while others failed to find statistically different results (Niederdeppe, Kuang, Crock, & Skelton, 2008; Vallone et al., 2011; Zhu et al., 2011; Wilson et al., 2012).

Impact of Intensity, Reach, and Duration on Mass Media Campaigns

While extensive research has shown that mass media campaigns can effectively reduce adult tobacco use, the same research also emphasizes the critical role that messaging, reach, intensity, and duration play in a campaign's success. In terms of intensity and reach, there is a consensus throughout the research that shows that increases in media expenditures (and therefore ad placements), directly translate into increases in individual awareness of campaign advertisements (Davis et al., 2012). A study of New York's youth-focused media campaign demonstrated that every $1,000 increase in TV, radio, and print expenditures, resulted in increased calls to the smokers Quitline by 0.1%, 5.7% and 2.8% respectively (Davis, Nonnemaker, & Farrelly, 2007). In Australia, research found that media exposure to the national campaign was closely tied to smoking cessation; this research suggests that media campaigns require adequate and frequent exposure in order to achieve successful cessation outcomes (Wakefield et al., 2008). Researchers in Brazil estimated that the nation's highly publicized media campaign experienced more success (a 3.25% reduction in smoking prevalence) than the campaigns with moderate (1.8%) or low (0.5%) publicity (Levy et al., 2012). Similarly, an analysis of the mass media campaign from Massachusetts found that the odds of a smoker having quit increased by 11% with each ten additional antismoking advertisement exposures (Durkin et al., 2009). During Australia's successful, adult-focused mass media campaign between 1995 and 2006, there was an average of 2.88 potential advertisement exposures per month for all adults in the Australian media market. Overall, high intensity is necessary to ensure adequate exposure, and research suggests that greater advertising exposure is more of a necessity for adults than for youth (Durkin et al., 2012). In the systematic review of 26 studies, researchers concluded that an average of 1200 gross rating points (GRPs) per quarter (a total of 4800 per year) is the minimum amount necessary to reduce adult smoking prevalence, with a higher number of GRPs resulting in a higher return (Durkin et al., 2012).

Several other factors impact a campaign's reach and associated effectiveness, including media placement and duration. Recent research suggests that radio advertising exceeds the reach of television between 6 AM and 6 PM among smokers, and that smokers are generally heavier users of radio than non-smokers (Nelson et al., 2008). Not as much research exists on the impact that duration of a campaign has on a campaign's success. A review of evidence by Community Preventive Service's Task Force (1999) concluded that all seven studies of mass media campaigns that ran for two years or more reduced tobacco use. In some instances, states have continued to see results after a campaign's conclusion – such as in Massachusetts, where the state continued to see positive results for up to eight years after the campaign. In other states, such as California, smoking prevalence only decreased while the campaign was active (Bala et al., 2008).

The Role of Quitlines in Mass Media Campaigns

One common trait across past mass media anti-tobacco campaigns is the presence of a Quitline tag, which typically includes the local or national Quitline number and, in more recent times, a website address. Past studies have consistently shown that if the mass media campaign includes a Quitline number, people will call the Quitline. The recent CDC Tips campaign generated an additional 207,519 calls to state Quitlines and 510,571 visits to the smoking cessation website (CDC, 2012). In Minnesota, researchers found a statistically significant, positive correlation between advertisement levels, Quitline call volume, and online cessation registrations (Schillo et al., 2011). Similar to the CDC Tips campaign, Minnesota's campaign generated more online registrations than Quitline calls. Researchers also found an increase in Quitline calls the week following increases in online registrations, suggesting that many smokers visit the website first before making a decision to call (Schillo et al., 2011).

Although not utilized by all smokers in their quit attempts, research routinely demonstrates that Quitlines are effective at helping people quit smoking. An intensive review of research by the U.S. Public Health Service found that Quitline counseling significantly increases cessation rates compared to little or no counseling, and that the addition of Quitline counseling to nicotine replacement therapy (NRT) further improves cessation rates (CDC, 2012). Furthermore, a 2006 study found that smokers who received counseling and NRTs through a Quitline were three times more likely to succeed in their quit attempt compared to smokers who received materials in the mail. A 2000 study of the California Smokers' Helpline found that the quit rate for smokers who called the Quitline was two times higher than those who attempted to quit cold turkey (An et al., 2006; Zhu, Anderson, Johnson, Tedeschi, & Roeseler, 2000).

However, Quitlines are most effective when they provide connections to other treatment resources, such as NRTs, and offer proactive counseling (Ossip-Klein & McIntosh, 2003; Swartz, Cowan, Klayman, Welton, & Leonard, 2005). For example, when Minnesota's hotline began offering free NRTs to callers, the volume increased substantially, leading to a corresponding increase in the state's quit rate (Schillo, et al., 2006). Research also suggests that proactive Quitline counseling helps smokers quit. While one or two brief calls

are less likely to result in a successful quit attempt, three or more calls to a Quitline significantly increase the odds of success, especially when compared to receiving materials in the mail or NRTs alone (Ossip-Klein et al., 2003). This is consistent with other research findings that suggest person-to-person treatment of four or more sessions is significantly more effective than three or fewer sessions (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008).

Cessation Methods and Success Rates

Despite the evidence that Quitlines are an effective intervention, very few smokers utilize Quitlines or other evidence-based cessation methods in their quit attempts. In fact, 68.3% of smokers who made a quit attempt in 2010 did not take advantage of any evidence-based counseling or medication (CDC, 2011b). Unfortunately, the lack of cessation service utilization is a driving factor behind the nation's low cessation success rate. Although 68.8% of current smokers report wanting to quit, only 52.4% of smokers attempted to quit in the past year and only 6.2% were successful (CDC, 2011b). The use of evidenced-based cessation treatments can double, or sometimes triple, smoking cessation success rates (CDC, 2011b).

In addition to Quitlines, there are many evidence-based cessation methods available to current smokers. In May 2008, the U.S. Public Health Service (USPHS) released updated clinical treatment guidelines for tobacco cessation, offering an intensive scientific review of existing cessation research. Their research concluded that "individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity," and that seven first-line medications reliably increase long-term smoking cessation rates. Among the cessation medications deemed effective are bupropion SR and varenicline (aka Chantix), nicotine gum, inhaler, lozenge, nasal spray, and patch (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008). Moreover, the USPHS guidelines found that "counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication, however, is more effective than either alone" (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008).

Although counseling and medication in any amounts have been proven more effective than quitting without assistance, individualized treatment can greatly increase a smoker's chances of success. Research shows that different people respond better to different treatments, based on their backgrounds and medical history (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008). For example, higher-dose versions of NRTs have been found effective in highly addicted smokers (Hatsukami et al., 2007; Herrera et al., 1995; Shiffman et al., 2002). For some individuals, combination NRT, such as combining the nicotine patch with nicotine gum or nasal spray, may also increase long-term success (2008 PHS Guideline Update Panel, Liaisons, and Staff, 2008). In some studies of effective cessation counseling techniques, researchers have found that patients are more likely to quit effectively if they form their own quit plan than if their provider created a quit plan for them (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003). Based on this research, in an ideal situation, each smoker would receive personalized quit advice and medication based on their personal history of tobacco use.

The final, and most often-overlooked factor in decreasing adult tobacco use is the role that physicians play. A multitude of research has shown that smokers frequently cite advice from their physician as motivation to quit smoking (Kreuter, Chheda, & Bull, 2000; Richmond, 1999; Whitlock, Orleans, Pender, & Allan, 2002; NCI, 1994). Yet, although 70% of smokers see a physician each year, less than half (39% - 48.3%) of smokers reported receiving advice to quit (CDC, 2011b; Carpenter et al., 2004). According to the most recent Healthcare Effectiveness Data and Information Set, pregnant women who smoke were identified at 81% of physician visits, yet they received cessation counseling at only 23% of those visits (Moran, Thorndike, Armstrong, & Rigotti, 2003). U.S. Public Health Service and American Academy of Family Physician guidelines state, "All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates" (Okuyemi, Nollen, & Ahluwalia, 2006).

Research Methods

To address the objectives of the study, Rescue SCG conducted 9 focus groups with 94 adult smokers (primarily 24-40 years) and 2 focus groups with 22 young adults (YA) smokers (18-24 years). This section of the report and all demographic and quantitative data presented in this report represent 94 adult smokers only, and excludes the two YA groups. Recruitment information and qualitative data from the YA-only groups are reported exclusively in the section titled "Qualitative Findings Part 5: Young Adult Focus Group Discussions."

It is important to keep in mind that study findings are not representative of the entire state since study participants were recruited from a convenience sample and a restricted population group (low education and low income) from five cities in Vermont: Barre, Brattleboro, Burlington, Rutland, and St. Johnsbury. However, while not representative, this study does offer valuable insights from Vermont (VT) tobacco users that can be used to inform development of cessation and prevention efforts in VT. For each city, breakdowns of the number of adult focus groups participants as well as overall demographic information are presented in Tables 1 and 2, respectively.

Table 1. Adult Participants per City (In Chronological Order of the Field Research)

City	Adult Focus Group Participants
Burlington	15
Barre	15
St. Johnsbury	26
Brattleboro	18
Rutland	20
TOTAL	94

Table 2. Demographics of Sampled Cities*

City	Population	White	African American	Hispanic	Asian	American Indian
Barre	8,967	95.2%	1.3%	2.3%	0.9%	0.2%
Brattleboro	7,414	90.8%	2.2%	3.0%	2.8%	0.3%
Burlington	42,282	88.9%	3.9%	2.7%	3.6%	0.3%
Rutland	16,217	95.9%	0.8%	1.5%	0.8%	0.3%
St. Johnsbury	6,193	95.3%	0.9%	1.8%	1.3%	0.7%

*Data obtained from United States Census Bureau (2012a-d)

Recruitment

Adult participants were selected through street recruitment by trained independent contractors. Contractors approached a convenience sample of adults at libraries, parks, Social Security offices, homeless shelters,

gas stations, and other public areas in each of the five cities and asked them a series of verbal questions to predetermine eligibility, including residency, age, availability, and education level. If candidates passed the prequalification verbal questions and expressed interest in participating in the focus groups, they were asked to complete the recruitment survey. The 27-item questionnaire asked potential participants to record age, gender, length of VT residency, income, education level, tobacco use, as well as whether they have minor children, visited a doctor in the last year for check-up or for chronic condition, employment status, and alcohol use. Upon completion, participants were given $5 cash for filling it out completely as a good faith to motivate focus group attendance. However, participants were not informed of the $5 cash incentive prior to completing the survey to avoid participants expressing false interest in the focus groups simply to receive the $5. Study inclusion criteria are summarized in Table 3.

Table 3. Inclusion Criteria and Modifications

Type	Original Criteria	Modified Criteria
Residency	Live in Vermont for 9 months or more	- No change -
Age	Must be 25 to 40 years old	Must be 18 to 50 years old
Education Level	Equal or less than high school graduate	Modified to include college graduate
	AND	OR
Household Income	Within 250% of federal poverty level	- No change -
Tobacco Use	Use tobacco once in the past week	- No change -

The original inclusion criteria were slightly modified to address some concerns encountered in Burlington, the first research location. Recruiters experienced considerable difficulty finding subjects who simultaneously satisfied the 25-40 age range, low income, and low education criteria. The age range was expanded to 18-50 years old to increase the sampling pool. In an attempt to find subjects who have both low income and low education, recruiters frequented social service agencies such as homeless shelters and halfway homes. Recruited participants, while meeting the sampling requirements, were often extreme representatives of low SES populations, including former convicts, homeless people, and those suffering from mental illness. While these are important hard-to-reach populations, it was clear that the information collected from these populations would be skewed to represent an extremely small subpopulation of Vermonters who have more pressing needs such as adequate housing and employment before they can be expected to satisfy less immediate, yet nonetheless important needs, such as quitting tobacco use. Therefore, in order to acquire a more representative sample, the low income AND low education criteria were modified to low income OR low education. All qualified candidates were offered $75 to participate in the focus groups and reminded via phone, email, and/or text one or two days before the focus groups.

Focus Group Activities

After the check in process, the focus groups conducted at each location were composed of various exercises and discussion topics. Trained Rescue SCG researchers conducted the focus groups with an

established Discussion Guide, which included a script and questions to address the topics below in a semi-structured manner:

Welcome – An introduction to the study, discussion of confidentiality, ground rules, and a verbal agreement to participate. At this time, participants consented to have the discussion group audio recorded.

Discussion of Technology Access and Usage – Participants were asked to discuss the types of technology devices and platforms they use and how often, including cellphones/smartphones, home Internet, favorite websites, and level of participation in various social networking/sharing sites.

Discussion of Tobacco Use Definitions, Context, and Habits – Participants were asked to discuss their own tobacco use behavior, definitions of addiction, and the nature of their positive associations with tobacco use.

Discussion of Health Awareness – Participants were asked to discuss their current and future health status as it relates to tobacco use as well as sources of health information.

Discussion of Tobacco Use Patterns – Participants were shown a series of pictures on a projector of people they do not know. They were asked to discuss the perceived tobacco use of each person, patterns of use, characteristics, and lifestyle (i.e., job, children, etc.). This exercise is designed for participants to project perceived norms about tobacco use that they may not share otherwise.

Discussion of Personal Quit Attempts – Participants discussed their current readiness to quit, whether or not they have tried to quit, and the methods they utilized. They also discussed others' perceptions of their quit attempts and the types of resources that would be most useful to them, including web resources.

Discussion of Tobacco Ads and Campaigns – Respondents were asked to watch 16 tobacco prevention advertisements. After viewing each ad, participants individually answered a set of written questions, followed by a group verbal discussion. The questions focused on understanding the potentially effective facets of an ad and an overall effectiveness rating for each ad. The discussion was focused on understanding perceptions and assessments of the ad. See Table 4 for a full listing of all of the ads that were evaluated. In earlier focus groups, ads 1, 4, 5, and 13 were broadly perceived to be ineffective by nearly all participants. As a result, they were replaced by ads 17-20 in the remaining 2 groups in an attempt to find additional ads that are perceived to be effective.

Table 4. Tobacco Videos Evaluated

#	Ad	Brand
1	Drinking and Smoking	Legacy, USA
2	Coffee and Smoking	Legacy, USA
3	Roosevelt Tips	CDC, USA
4	Baby Exchange	Alabama Tobacco Free Families
5	Get Unhooked	National Health Service, UK

6	Left Behind	Tobacco Free Florida
7	Never Give Up Giving Up	Quit Victoria, AU
8	Impotence	National Health Service, UK
9	Heart Attack Waiting to Happen	NYC Health
10	Terrie Tips	CDC, USA
11	Pregnancy Risks	National Health Service, UK
12	When You Smoke, They Smoke	Santa Clara County Public Health
13	Meet Mick	Quit Victoria, AU
14	Every Cigarette Does You Damage	Australia's National Tobacco Campaign, AU
15	Abandoned Child	NYC Health
16	Shawn Tips	CDC, USA
17	Secondhand Smoke, It's Nothing to Kid About	Michigan Tobacco Quitline
18	The Power to Quit is Inside Me	West Virginia Tobacco Quit Line
19	Misery of Emphysema	NYC Health
20	Great Start	Legacy

Note: Ads 17-20 were shown to the last two adult focus groups in Rutland in place of ads 1, 4, 5, and 13. Since only a small subset of participants viewed Ads 17-20, they were excluded from the quantitative analysis of individual ads.

Instruments and Activity Design

Rescue SCG carefully crafted each activity and instrument using best practices in qualitative and quantitative research, and when appropriate, best practices specific to tobacco control research. For qualitative data collection, it is important to control for various situational factors that can affect participants' willingness to contribute to discussion (i.e., facilitators asking participants about health behaviors and status in front of strangers). Rescue SCG reduced this threat to validity by creating a safe, conversational environment for discussions. The use of quantitative collection tools during the focus groups allowed participants to answer personal questions and personal assessments of ad materials independently to reduce the potential for social disapproval. These mixed research methods give participants the opportunity to express diverse perspectives that may diverge from the group, but also encourage groups of participants to reach a consensus. By facilitating opportunities for both personal and group responses, we attain a more comprehensive look at this population.

Participant Description

Gender was approximately equal with 48.9% of participants reporting their gender as male. The majority of participants were White (85.5%) and the other participants were a mix of African American (6.7%), American Indian/Alaska Native (1.1%), Hawaiian/Pacific Islander (1.1%), and Hispanic (5.6%). Participants were all adults from 18 to 50 years of age, a larger range than originally anticipated, in order to ensure sufficient focus group participants. The average age was 29.8 years. Race and age information are presented below in Figures 1 and 2.

Figure 1. Participant Race

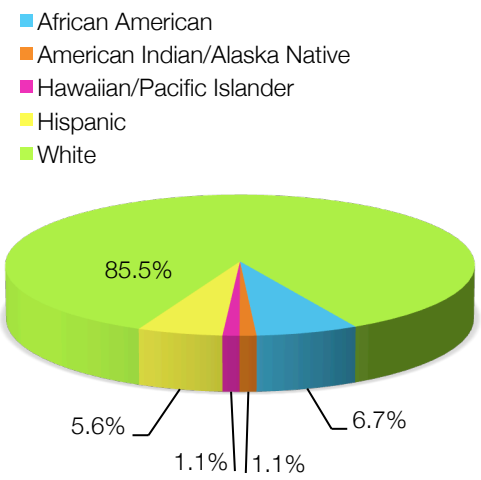
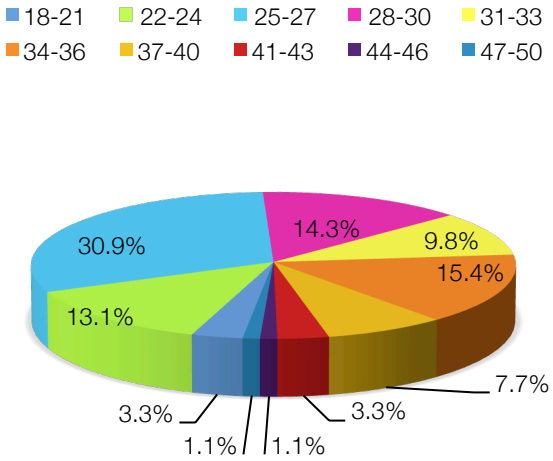
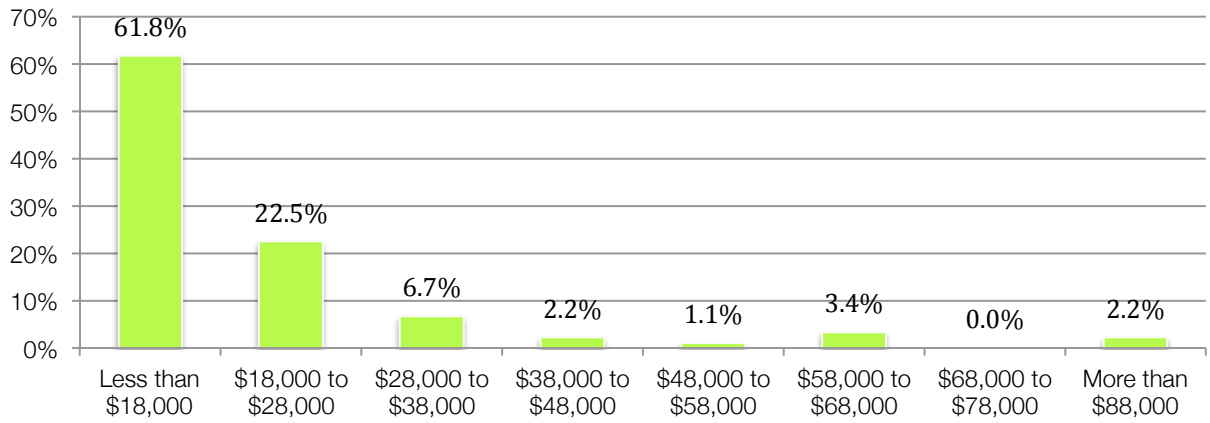


Figure 2. Participant Age



94.5% of adult participants reported living in Vermont for at least 9 months, although all participants verbally confirmed their VT residency of 9 months or more during recruitment. 63% of participants had children, with 96.6% of parents indicating their children were under the age of 17. In terms of highest education level attained, 19% of participants did not complete high school, 58.3% were high school graduates, 20.2% completed some college, and 2.5% were college graduates. 84.3% of adult participants had a household income level below $28,000. More detailed information on participant household income is presented in Figure 3 on the following page.

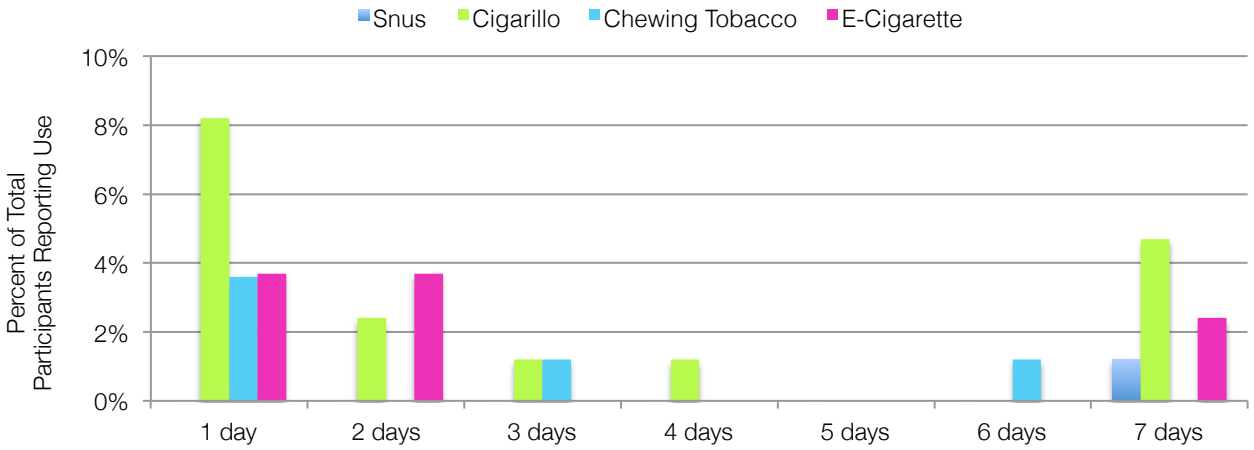
Figure 3. Participant Household Income Levels



All participants reported smoking cigarettes in the last 7 days, with only 5.6% reporting that their smoking was not daily. Other tobacco product (OTP) use, such as Snus, cigarillos, chewing tobacco, and e-

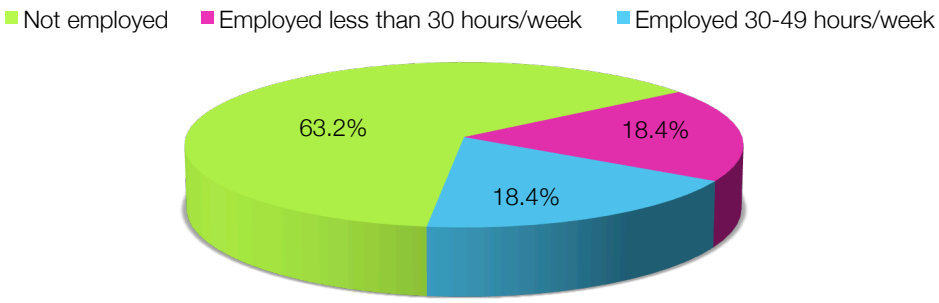
cigarettes were relatively low compared to cigarette use with cigarillos and e-cigarettes being the most common alternatives. Specifically, in the last 7 days, 1.2% of participants used Snus, 17.6% used cigarillos, 6.0% used chewing tobacco, and 9.8% used e-cigarettes. Daily OTP use in the last 7 days was reported for Snus (1.2%), cigarillos (4.7%), and e-cigarettes (2.4%). See Figure 4 for detailed (OTP) use over the last 7 days. Please note that the percentages in Figure 4 are not mutually exclusive because some participants reported using a combination of varying levels of OTPs over the last week. Additionally, 37.6% reported drinking alcohol in the last 7 days, and 15.9% reported binge drinking (more than 5 drinks) at least 1 day out of the last 7.

Figure 4. Frequency of OTP Use By Day in the Last 7 Days



Participants also reported whether they have visited a physician in the last year. 79.5% reported that they visited a doctor for a regular check-up, and 45.5% reported that they visited a doctor for a chronic condition. Regarding current employment status, 63.2% of participants were unemployed and another 18.4% worked less than 30 hours per week. See Figure 5 for a breakdown of employment status.

Figure 5. Employment Status



Qualitative Findings Part 1: Adult Discussion About Technology Access and Usage

Focus group facilitators engaged participants in discussions regarding their personal experience with technology and tobacco use. Participants were asked about their experience and the nature of their technology usage in addition to their online activity (computer and mobile phone), television subscriptions and viewership, and use of social media.

Most of the participants had smart phones with internet access. Participants described Facebook as the most popular phone destination, followed by music applications.

- "I have unlimited [data] through Boost Mobile." (Female, Burlington)
- "Just Facebook and shopping…clothes, shoes, phones, accessories." (Female, Barre)
- "I use [Twitter] to stay connected and for entertainment, basically." (Female, Barre)
- "If you have Pandora or Sirius[XM] Radio, you can choose a genre or the name of an artist and they'll play music based on the artist or the genre you put in…so in my opinion a lot of people aren't listening to the radio because they have the option of Pandora." (Female, St. Johnsbury)
- "I use Pandora and Last FM [an online music library]." (Male, Rutland)

Very few of the participants recalled clicking on side panel ads on Facebook, but most recalled "liking" a page.

- [Do you click on Facebook ads?] "No, I try to stay away from those as much as possible." (Male, Barre)
- "[I like] a lot of pages [on Facebook]. I think I'm at over 500." (Female, St. Johnsbury)
- "[I've] accidentally [clicked an ad on Facebook]." (Female, St. Johnsbury)
- [Regarding ads] "A lot of times it'll say, oh, 'free this or that,' so you click on it and they want you to do a survey for this and they'll say we'll send you this and it never gets sent. A lot of the time it's just your information being taken. And that's happened to me" (Female, Brattleboro)

When asked about their television consumption, approximately half of participants had satellite or cable at home. While some participants named specific shows and channels, participants with cable subscriptions named sports, learning, and entertainment content most often.

- "I watch mostly sports. Sometimes at night I might watch How I Met Your Mother." (Male, Burlington)
- "I watch a lot of Discovery channel, History Channel, NatGeo…" (Male, Barre)
- "I watch Bravo, the History Channel, Animal Planet, Fox News, CNN, sometimes MTV." (Female, Barre)
- "I like to watch football." (Male, St. Johnsbury)
- "I like Shark Week." (Female, St. Johnsbury)

Very few of the participants reported watching television programming on Hulu, whereas nearly all participants had watched videos on YouTube at some point and had positive reactions to it.

- “I love YouTube. The old school stuff I can find on there.” (Male, Burlington)
- “YouTube rocks.” (Male, Burlington)

Many had at least one example of watching an ad all the way through on YouTube even though it was not required.

- “If it's only like 10 seconds long, I become more lazy. I'll wait the extra 5 seconds so I don't have to move my finger…there's funny ones occasionally. If they're funny, I'll watch ‘em.” (Male, Rutland)
- “It depends on what [ad] it is, car stuff, stuff for Ford, culinary stuff once in awhile, those pique my interest.” (Female, St. Johnsbury)

Among participants who used social media, most were comfortable sharing links, articles and videos.

- “I share pictures.” (Male, Barre)
- “Music videos. I've shared music videos [on Facebook].” (Male, Brattleboro)
- “I share pictures with quotes on them and sometimes newspaper articles, I share links to those.” (Male, Rutland)
- “I share videos and artwork…” (Female, Rutland)

For the most part, participants were skeptical about online contests. Participants, however, were aware of clues used to determine their legitimacy.

- “I ignore it. That's what started the junk mail. Like Rite Aid, Wal-Mart, you get a receipt and it says fill out this questionnaire for a chance to win a grand, shopping spree, or whatever, and that's how it starts.” (Male, Burlington)
- “I did the Taco Bell one a lot. I knew a lot of people…who said they won an iPad. I never won an iPad, though.” (Female, Rutland)
- “I'm kinda cautious about that now. Even on the computer, I won't be giving out my info.” (Male, Burlington)
- “Usually you go to it, I've tried them before, and two pages in, they’ll want your credit card number, so then [I exit the windows] all the way out.” (Female, St. Johnsbury)
- “Knowing people who've won [online contests. Makes it seem more legit].” (Female, Rutland)

Computer access and Facebook usage was not limited by income status as a few homeless participants reported having Facebook profiles and using the library or friends’ houses to access them.

- “Yeah, I gotta go to the library to use the computer. Sometimes I go there everyday during the week to check mail, sometimes once or twice a week. It varies.” (Male, Burlington)
- “I go to my neighbor’s house to use the computer.” (Female, St. Johnsbury)

Summary of Qualitative Findings: Technology Usage and Access

The majority of participants had Internet access on their phones and personal computers. The most popular smartphone destination is Facebook, followed by music apps. Facebook usage is so popular that even homeless participants reported accessing their profiles from the library. Participants were comfortable "sharing" links, articles, and videos on social media sites and recalled "liking" pages on Facebook. Few reported clicking on Facebook side panel ads and many were skeptical of online contests. Some participants had satellite or cable at home, while very few watched TV on Hulu. All of the participants had watched videos on YouTube, and many recalled watching YouTube ads in their entirety even when it was not required. Approximately half of all participants had satellite or cable on their television, with sports, history, learning, and discovery content being the most popular.

Qualitative Findings Part 2: Adult Discussion About Tobacco Use and Health

Next, participants discussed their tobacco use, history, and attitudes towards the habit and perceived repercussions.

Among older adults, intermittent tobacco use is not common. Most of the participants identified as smoking regularly.

- "If you smoke, you smoke." (Male, Burlington)
- "I've been smoking since I was 10. Kinda couldn't imagine life without cigarettes…Averaging about a pack [a day]. Take big drags, inhale kinda deep. Man, it sucks. Smoking's f-ing stupid." (Male, Burlington)
- [Do you consider yourself a smoker?] "[I'm a] Chimney." (Male, Barre)

Stress was most frequently cited alongside addiction and habit as the causes of continued smoking throughout the focus groups. Participants described the role of tobacco in dealing with day-to-day stress. Many described personal life events (divorce, finances) that they considered stressful as being reasons for using tobacco.

- "It's scientifically proven to calm your nerves, that's why people do it." (Female, Burlington)
- "If I'm stressed or angry, I can't smoke enough...If I'm not doing good or if shit is happening in the family, I just, I dunno, it just kind of replaces drugs." (Male, Burlington)
- "I have emphysema. And I sang and it's just not good for me. I got pneumonia. I was supposed to go on X Factor and ended up with laryngitis…I won't smoke for a week ort two and then I go back to it. I think a lot of it has to do with stress and having to worry about your housing situation, bills, food whatever and shit. World issues..." (Female, Burlington)
- "I definitely smoked more during the divorce." (Male, Barre)
- "…[I smoke] when I can't get through to child support, when my insurance has been shut off, stress…" (Female, Brattleboro)

Adult participants described how engrained smoking was in their lives. Most participants described having a spouse, partner, parents, and/or friends who smoke.

- "I think 90% of everyone I know smokes." (Male, Rutland)
- "It's convenient because my boyfriend smokes regular and I smoke menthols, so we can share a pack [regarding Camel Crush]." (Female, Barre)

In addition to the pervasiveness of tobacco use in their social life, many of the participants associated their tobacco use with drinking alcohol. Focus group members frequently described alcohol use as a reason for smoking more or relapsing during a quit attempt.

- “Alcohol and caffeine intensify it [the desire to smoke]…if I'm trying to quit I steer clear of alcohol.” (Female, Burlington)
- “If I'm drinking, I pull one [cigarette] out and I don't even realize it, and I smoke another one.” (Male, Barre)
- “I only smoke when I drink. I don't smoke for a week, then I grab some beers and I smoke a pack.” (Male, St. Johnsbury)
- “If I drink, I'm a chain smoker. I quit... but I had to totally quit drinking to quit smoking. And then I started drinking, so I had a cigarette…before you know it, I'm back to smoking...I can't not smoke when I drink.” (Male, St. Johnsbury)
- “I smoke a heck of a lot more when I drink. It seems like those two...I can't have a drink without smoking a cigarette” (Female, Rutland)

Throughout the focus groups, participants estimated that there was a high prevalence of smoking in their respective towns, all of which was considerably higher than age-adjusted adult prevalence of 20.2% (VTERB, 2013). However, participants’ estimation of prevalence is most likely an accurate reflection of their extended social circle.

- “I would say at least 70% [of people smoke], if you're talking within the town of Brattleboro. I count the cigarette butts on the floor.” (Male, Brattleboro)
- “I'd say 70-80% [of people in Rutland smoke] at least!” (Female, Rutland)
- “I think, like, everybody smokes [in Rutland].” (Female, Rutland)

Some of the focus group participants were highly critical of the probabilities that they would get a smoking-related disease. Some even expressed disbelief that tobacco was associated with health repercussions.

- “I honestly don't think tobacco causes lung cancer. I think it's all the chemicals they put in there that does. Because there were Indians and all those people were smoking for years and you've never heard of cancer. “ (Male, Barre)
- “The doctor would be the last place I'd go [for health information]. I do a lot of reading...I just think doctors are sales reps for the pharmaceutical companies these days. And they won't tell you anything unless they can bottle it up and sell it to you.” (Male, Barre)

Regardless of these sentiments, most of the participants in the focus groups had experienced a negative health effect of smoking.

- “I have chronic bronchitis due to the fact that I grew up with asthma and I smoke cigarettes. It doesn't help much…you notice it more when you get a cold…That's why I've cut down on cigarettes because of the asthma and bronchitis.” (Male, Burlington)
- “[I tried to quit because I was] just waking up coughing every night. Coughing up phlegm and shit.” (Female, Barre)

- “The cough and shit. Hack stuff up in the morning, like phlegm and shit. It's disgusting…and then I go smoke a cigarette (laughs).” (Female, Barre)
- “I got a blood clot from smoking so I've been trying to quit, because that's a big health issue.” (Female, Barre)

Summary of Qualitative Findings: Tobacco Use and Health

Among older adults, intermittent tobacco use is not common. All participants described themselves as “regular smokers” who cited stress, habits, and addiction as the cause of continued smoking. Participants perceive a very high prevalence of smoking that is much higher than the actual 20.2% state prevalence rate. However, this perception of high prevalence is likely an accurate reflection of tobacco use among their social networks. All participants were aware of the negative health effects of smoking, and many had personally experienced them. While most adults do not want to smoke anymore, some were highly skeptical of the probability of developing a serious long-term smoking-related disease.

Qualitative Findings Part 3: Adult Discussion About Quitting Tobacco

Focus group facilitators also engaged participants in discussions about their attitudes towards quitting, experiences during quit attempts, preferred cessation methods, and barriers to quitting.

General Attitudes Towards Quitting

Throughout the focus groups it became evident that regardless of attitudes towards the health effects of tobacco use, most participants did not want to smoke anymore. Participants described their dislike of the habit, and their continued struggle to quit smoking. While many were interested in quitting, few had intentions for quitting in the future.

- "I am in the process of trying to quit. Again. For probably the 6th time." (Female, Brattleboro)
- "I don't like smelling like cigarettes, like that's my least favorite part of being a smoker." (Female, Rutland)
- "I don't have a plan to quit, but if it happens it'd be good." (Female, Barre)
- "I always go through the same thought process. I can't breathe, my hair smells gross, it's nasty, I don't want to spend the money. And health risks are actually a big factor in me wanting to quit, because I don't want to do this to myself or to other people." (Female, Rutland)

Motivations to Quit

Many of the participants described money as a motivating factor for quitting. Participants described the financial toll of purchasing cigarettes regularly. Many of the participants recalled time when they had tried to quit in the past when the cost of a pack of cigarettes increased. One participant was aware of the exact amount quitting would cost.

- "I was smoking 6 packs a day and now I smoke 2 [packs/day]. The reason I want to quit is because I'm sick and it would save me $2,400 a year." (Female, Burlington)
- [Why do you want to quit?] "Money." (Female, Rutland)
- "When the prices went up, like a dollar or two [I wanted to quit]." (Male, Rutland)

Participants described their children, or their future children as an important incentive for quitting. Participants expressed concern over role-modeling smoking for children, or children smelling like cigarettes. Many participants refused to smoke in their homes or in their cars in order to reduce their young children's exposure to secondhand smoke. One participant described being motivated to quit in the past when her daughter had asked her to stop smoking.

- "And my kids, well, I don't smoke in my house, but when I used to smoke in my vehicle and in my house, their clothes would smell like cigarettes, their school bags smell like cigarettes...it's for my

kids too, because they're only 9 and 3 and they're breathing in the secondhand smoke. So instead of smoking inside, we go outside." (Female, Barre)

- "I always told myself if I ever had a child, I would definitely stop smoking." (Male, Barre)
- "That's why I want to quit because I don't want [my son] to think it's something good to get into it." (Female, St. Johnsbury)
- "My daughter asked me to quit smoking. I did actually quit for awhile and then something happened and I started smoking again." (Female, St. Johnsbury)
- "I absolutely refuse to smoke around kids. I have two kids." (Female, Brattleboro)

Approaches to Quitting Tobacco Use

Participants also reported their experience with quitting tobacco use and the methods they tried in the past. Some of the participants perceived cessation as an "all-or-nothing" process. Other participants recognized cessation as a process, focusing on cutting down but few had managed to quit smoking completely.

- "I'm cutting down, slowly, gradually, but a lot of the time, if you don't really want to quit, you find yourself not really trying." (Male, St. Johnsbury)
- "When I did quit for 5 years, I had set a goal 2 years out that by my 25th birthday, by then I'd be done. I knew it was getting closer and closer, and I was cutting back more and more. And it worked for 5 years, until I got laid off." (Male, Brattleboro)

Some of the examples of cessation methods participants described included going cold turkey incrementally, hypnotism, and e-cigarettes. Although e-cigarettes are not federally regulated Nicotine Replacement Therapy products, many of the participants had tried switching to e-cigarettes to quit smoking. Participants expressed dissatisfaction with e-cigarettes as an alternative to cigarettes, complaining about the high financial cost of purchasing cartridges, the nicotine output, the inconvenience of re-charging the device, and reservations about the safety of the products.

- "I had that e-cigarette. That worked for about 2 weeks." (Male, Brattleboro)
- "I went to a Russian one time, they called him the Mad Russian. Some kind of hypnotist…He just talked and made a bunch of weird noises. In a group like this. And the statistics, the data on him, 1% went back to smoking. I guess I was one of the 1%. I don't even think he did anything to anyone, I think it was just the fact that I paid $65 to try to quit." (Male, Barre)
- "I could smoke [the e-cigarette] indoors, but at the end of the day it just wasn't a cigarette. And I guess I got my nicotine fix, but it didn't feel like it." (Female, Rutland)
- "The vapor that you're breathing in with the e-cigarette is not good for you, I don't recommend it. Not to mention, it's more expensive per month, well, not per month but on a three month basis, you get these three cartridges that are good for up to 300 pulls, but those cartridges are also batteries so you have to charge them. So not only are you paying upwards of $20 or so per month...plus they're so strong...I think they're worse actually." (Female, St. Johnsbury)

Although some of the participants reported trying Nicotine Replacement Therapies (NRTs) and prescriptions cessation aids, few had positive impressions of the products. Participants described their experience using the nicotine patch, prescription cessation aid Chantix, and nicotine gum. In addition to inefficacy, participants described nausea, changes in energy, and new addictions that they attributed to the nicotine in the products they had attempted to use.

- "I used the patch for the first month [of a 9 month quitting period]. After I came off the patch I was like a hormonal woman. I was a mental case. It was just cuckoo. I couldn't get my head straight and my energy was up and down. I'd want to go run a marathon, the next minute I'd want to sleep." (Male, Barre)
- [Why did you stop using the patch?] "I could feel it affecting me. The drugs. The nicotine. When I take the patch off, I'm more alert...go through some weird changes." (Male, Barre)
- "I tried the Chantix, I took it. It did work for like 3 days because you'd light up a cigarette it'd make you really nauseous, but I stopped taking it. If I was going to quit, I'd use that." (Female, St. Johnsbury)
- "I quit for 4 months because of that gum but then I realized I'm addicted to this gum now. So I quit the gum and 3 weeks later, I wanted a cigarette." (Male, St. Johnsbury)

Despite varying approaches to cessation, participants infrequently had quit plans during their previous attempts. Participants described coping mechanisms during quit attempts, including keeping their hands busy, bumming cigarettes from friends, and personal justifications for using alternative tobacco products. Although many were aware of the future obstacles of cessation, participants reported knowingly entering a quit attempt without a strategy to overcome likely consequences.

- "I twirl my hair, keep my hands busy. It never works, though." (Female, St. Johnsbury)
- "I had a plan, not buying them anymore. And then I'd ask my buddies, 'oh hey can I get a butt.' I quit, I'm not buying them anymore. It's cheaper that way." (Male, St. Johnsbury)
- "I've made a couple of New Year's resolutions. It's always like, when I get to two cigarettes before I'm supposed to stop, it's almost impossible to quit cold turkey." (Female, Brattleboro)
- "I remember switching to 'rollies' when I was trying to quit at one point. The reasoning behind it was that if I smoked something that I didn't like, I'd be less inclined to quit smoking. All that happened is that I switched brands, and now I smoke the organic, natural, American Spirits. I justify by saying that it's organic, so it's probably not that bad for me." (Male, Rutland)
- "I think that's why I've failed. Because I haven't [made a plan] like that." (Female, Rutland)

Perceptions of Vermont Quit Network's 'Quitline' and Local Support

Many participants had negative impressions of the usefulness of the Quitline without ever having called themselves. When asked about their perceptions of the Quitline, participants were quick to dismiss the possible effectiveness of the program for themselves. Participants perceived that the service provided

pamphlets, tips, and reasons that they already knew to quit. Overall, participants likened the service to a lecture about "why smoking is bad."

- "A waste of time, probably. I'd get pamphlets and stuff that I'm probably just going to throw away and never look at so I personally would never call." (Male, Rutland)
- "I think that is so bugged out. What are you gonna call the Quitline for? They're not gonna help you." (Male, Burlington)
- "Probably just one of those typical helplines. Call and they have suggestions and tips…" (Male, Barre)
- "I personally don't like it when people push me to do things, it makes me want to do it even more." (Female, Barre)
- [Who should call?] "Someone who's serious about quitting, I guess. If they think themselves that it'll help them. Because it won't help everyone. [It wouldn't help] me." (Male, Brattleboro)
- "I'm sure everyone who's a smoker has heard, 'ok, it's not healthy, you shouldn't do it, bad for your kids, second hand smoke is worse than actually smoking a cigarette.' Everyone knows this. So, how is someone on the phone gonna convince me to stop smoking when I already know this?" (Female, Brattleboro)

Out of the few who had called the VT Quitline or knew people who had called to quit, most maintained somewhat negative impressions of the program. Only about half of participants were aware that the VT Quitline provided free NRT to callers regardless of insurance status. Those who had called expressed concerns about the length of the process, the interactions with the counselors, and the efficacy of the cessation method. Some complained about the activities they were required to complete, which included multiple phone calls and online activities. While many expressed heightened interest in calling upon learning about the cessation aids, participants maintained that they would only call if they were ready to quit.

- "The Quitline does help, but only if you really want it" (Female, Burlington)
- "I quit for 4 months, the state [programs] would pay for my chewing gum" (Male, St. Johnsbury)
- "You see ads on TV. Yes [I've called]. They won't stop calling, either. They keep on calling and calling, once you give them your number, they definitely have your number." (Male, Barre).
- [Is the Quitline helpful?] "No. It's just like if I'm talking to you…they're just going to give me advice tell me to quit...I can talk to my grandma and she'll tell me the same thing. They don't give as much good information as they can." (Male, Barre)
- "I was told that I was going to get nicotine gum and stuff to help me quit, and I was on the phone with them for such a long time that it got frustrating so I hung up the phone…it was more than 30 minutes. And then they told me I needed to go online and do all this stuff online. And then they wanted to keep me on the phone and I just thought it would be quick and easy." (Female, Barre)
- "I called it. You gotta do like 5 sessions. You call like 5 times and if it doesn't work they send you patches and things like that…I just wanted to quit smoking, but just going through the survey, doing

the questionnaire…I just hung up the phone, I can't take that. I just want to quit, I just want to put something on my arm." (Male, Brattleboro)

Few of the participants were aware of local cessation programs, including quit groups available at the hospital. Those who were aware of this option described it very positively, a stark contrast to their impression of the Quitline. Others who are not already aware of quit groups expressed candid interested in such programs.

- "I thought that it [cessation group] was kind of handy. You have all these other people who want to quit and it's like you all kind of talk about how you're feeling at that point. It's more support than you would get through…the Quitline. 'Cause that's real. You're all in a group, you're all talking." (Female, Barre)
- "[It'd have to be like] an AA meeting, but for smoking instead of drinking, everyone supporting each other." (Male, St. Johnsbury)

Barriers to Quitting Tobacco Use

One of the most important barriers to quitting described by participants was a low sense of self-efficacy to quit effectively because of previously unsuccessful attempts. Though many had attempted quitting, they described a negative experience and an associated lack of confidence in their ability to quit smoking in the future. Many were disappointed in their previous failures, and the perceived impossibility of quitting.

- "It's hard. Every time I quit, I go right back." (Female, St. Johnsbury)
- "I set a goal for 30, but who knows…" (Female, St. Johnsbury)
- "I always say [I'm going to quit] next month." (Male, St. Johnsbury)

Throughout the focus groups, stress was cited as the primary reason for relapsing during a quit attempt. Many participants described smoking as a coping mechanism for dealing with personal stress, including divorce, break-ups, jobs, financial issues, and every day stressors. Many participants were convinced of the stress allaying qualities of cigarettes, describing cessation as another stressor where cigarettes were their solution.

- "[I started again because of] a lot of things. Stress. Break-ups." (Male, Barre)
- "For people with anxiety or like problems with stress, when you quit smoking it heightens it and makes it three times as worse." (Female, St. Johnsbury)
- "Stress. Life. Everyday life. Something traumatic can happen and it hits you like a brick and you don't know what to do. You don't have the tools to assess it, so you smoke a cigarette." (Female, St. Johnsbury)
- "...after this pack I'm done. And then I get stressed out and all I want is a cigarette. I feel like I'm going to crawl out of my skin when I don't have one, so I always fall back." (Female, Rutland)

- "The day I got the news I got laid off, I went out and bought a pack of cigarettes. Been trying to quit ever since." (Male, Brattleboro)
- "It's scientifically proven to calm your nerves, that's why people do it." (Female, Burlington)
- "I definitely smoked more during the divorce." (Male, Barre)
- "…[I smoke] when I can't get through to child support, when my insurance has been shut off, stress…" (Female, Brattleboro)

Low income participants who smoked described having a multitude of challenges in their lives that have made it harder for them to quit smoking. Issues such as unemployment, homelessness, drug abuse, mental illness were frequently described as more "important" for them to worry about than quitting smoking. Low income participants also described the difficulty maintaining cessation while being homeless.

- "When I called the Quitline, I quit for 2 1/2 years. And then I got really stressed out living on the street." (Female, Burlington)
- "I got a lot more problems in my life than quitting cigarettes right now. Got a lot on my plate, so, cigarettes are the least of my worries." (Male, Barre)
- "Not knowing where my next meal is coming from…I started smoking again." (Female, Burlington)

Multiple participants reported that friends and family were not helpful during quit attempts. This difficulty was prevalent as many rely on members of their social support network to help them through the stress associated with cessation. However, participants described their constant exposure to their friends and family's tobacco use in their homes, while socializing, and a disheartening lack of support from their social network.

- "If you're trying to quit and you walk into like your folks' house or something and they're smoking, it's hard." (Male, Barre)
- "They won't offer [a cigarette], but you see them smoke around you and it's like, "Oh, can I get one of those?" And they're like sure." (Female, St. Johnsbury)
- "[I tried to quit] with my sister. That didn't go well. She was a total bitch. I had to avoid her because she got so moody…we socialize now, but she's gone back to smoking." (Male, St. Johnsbury)
- "[They're not helpful] and they're not really supportive either. They're like, 'You won't be able to quit.'" (Female, Rutland)
- "I don't know if it's that my family members or friends wouldn't be supportive. I think that they'd think it's a good thing. But cigarettes are sort of on the low end of the spectrum. They're not considered as bad as other things, so I feel like if someone is trying to get away from something that is worse, that is where the support system comes in and cigarettes are just kind of, you know, there's worse things." (Female, Rutland)
- "It's hard for me personally because the majority of my friends smoke and it is such a social thing. We take drags of each other. We'll go outside together to have a cigarette. If one of us says we

want to quit, we'll be like, 'Yeah, do it! I wish I could do that!' And we're still smoking away. My family would be supportive. My friends, it's not that they wouldn't be supportive, it's just a completely different scenario. It's one of the reasons I can't quit." (Female, Rutland)

While women have historically attributed continued smoking to a fear of weight gain during cessation (Borelli et al., 2001), weight gain was cited only once as a barrier to cessation.

- "That's the reason why I didn't want to quit. When I did quit, I'd pack on the pounds. If I go the gym, I don't want to smoke, so if I could go to the gym all day everyday, I might be ok." (Female, St. Johnsbury)

Summary of Qualitative Findings

Throughout the focus groups, it became evident that most adults do not want to smoke anymore. Participants described multiple attempts at quitting or reducing their tobacco use, with varying levels of success. Although participants were interested in quitting, many perceived quitting as an all or nothing process.

Participants described the financial costs of purchasing tobacco products, and their current (or future) children as motivations for quitting smoking. Participants described the financial toll of purchasing cigarettes regularly. Many of the participants recalled times when they had tried to quit in the past because the cost of a pack of cigarettes had recently increased. In addition, participants expressed concern over role-modeling smoking for children, or their children smelling like cigarettes as motivation to quit smoking. Many participants refused to smoke in their homes or in their cars in order to reduce their young children's exposure to secondhand smoke.

Cessation approaches included cold turkey, hypnotism, alternative products (i.e. e-cigarettes, roll-your-own), FDA regulated Nicotine Replacement Therapies (NRT), and the Vermont Quit Network's Quitline, but participants do not have a consistent positive impression on any one approach. Although e-cigarettes are not federally regulated Nicotine Replacement Therapy products, many of the participants had tried switching to e-cigarettes to quit smoking. Few of the adults who had tried NRTs (nicotine gum, the patch, and prescription Chantix) had a positive impression of the products and their efficacy. Although participants had tried various cessation methodologies and were aware of the obstacles present during quit attempts, most participants did not have a quit plan to overcome these challenges. Overall, participants had a negative impression of the usefulness of the VT Quitline, even if they had never called. The few that had called, or knew others who called, maintained negative impression of the service. These individuals expressed concerns about the length of the process, the interactions with the counselors, and the efficacy of the cessation method. Few focus group participants were aware that NRTs were available through the service. A few participants were aware of local cessation support, such as quit groups at the hospital. Those who

were aware of this option had very positive opinions, a stark contrast to their negative impression of the Quitline.

Throughout the focus groups, participants expressed a lack of confidence in their future ability to quit, because of previously unsuccessful quit attempts. Stress was also described as one of the primary reasons for relapsing during a quit attempt. In particular, low income smokers have a lot of more pervasive challenges in their lives, which makes it harder for them to give up smoking. Participants also mentioned the lack of social support to quit from their immediate network of romantic partners, friends, and family, all of whom tend to use tobacco regularly. While women have historically attributed continued smoking to a fear of weight gain during cessation (Borelli et al., 2001), weight gain was cited only once as a barrier to cessation.

Qualitative Findings Part 4: Adult Discussion of Anti-Tobacco Ads

Participants in each focus group were shown sixteen tobacco prevention and/or cessation ads, which are listed in Table 5. After viewing each ad, participants completed a questionnaire about the ad individually. Data from the questionnaire are analyzed and presented in the "Quantitative Analysis: Adult Evaluation of Anti-Tobacco Ads" section. Participants then discussed their thoughts and opinions about each ad as a group in regards to how effective it would be to convince smokers to quit. In this section, we discuss findings from the qualitative discussion of the ads using direct quotes from focus group participants. In general, participants believed that to be effective, ads needed to be emotional, interesting, thought provoking, and serious. Additionally, participants did not require new information on the health effects of smoking to be effective. Finally, ads that were funny or creative were deemed ineffective.

Table 5. Tobacco Videos Evaluated

#	Ad	Brand
1	Drinking and Smoking	Legacy, USA
2	Coffee and Smoking	Legacy, USA
3	Roosevelt Tips	CDC, USA
4	Baby Exchange	Alabama Tobacco Free Families
5	Get Unhooked	National Health Service, UK
6	Left Behind	Tobacco Free Florida
7	Never Give Up Giving Up	Quit Victoria, AU
8	Impotence	National Health Service, UK
9	Heart Attack Waiting to Happen	NYC Health
10	Terrie Tips	CDC, USA
11	Pregnancy Risks	National Health Service, UK
12	When You Smoke, They Smoke	Santa Clara County Public Health
13	Meet Mick	Quit Victoria, AU
14	Every Cigarette Does You Damage	Australia's National Tobacco Campaign, AU
15	Abandoned Child	NYC Health
16	Shawn Tips	CDC, USA
17	Secondhand Smoke, It's Nothing to Kid About	Michigan Tobacco Quitline
18	The Power to Quit is Inside Me	West Virginia Tobacco Quit Line
19	Misery of Emphysema	NYC Health
20	Great Start	Legacy

Note: Ads 17-20 were shown to the first two Adult focus groups in Burlington in place of ads 1, 4, 5, and 13.

In each of the focus groups, participants reported that ads that appealed to them emotionally would be effective for convincing smokers to quit. Ads that participants believed were especially emotional included Tobacco Free Florida's "Left Behind" and NYC Health's "Abandoned Child." Participants related to these ads, expressing concern over the effects of a parent's death on their own children, or the deaths of their parents from tobacco. Overall, participants reacted positively to their connection with the ads, and the depicted victims of tobacco related illness.

- “I have a little girl, so all these questions really affect me, makes me think, I was emotionally attached to her, because that could be [my daughter] and I could be the man in the picture. It made me feel sad for her. Right away, her dad's gone and she's got to go through life with douchebags with cigarettes around her, thinking that killed my dad. It was a great commercial.” (Male, Burlington)
- “Emotional. People can relate to it [people with kids].” (Female, Barre)
- “Sad. It makes you think about her as a person, not just a commercial. She had to deal with all that.” (Male, St. Johnsbury)
- “I think on this one it hits you more emotionally, more than any of them, I think this one of the best ones they've put on there so far, emotionally wise…imagine how you are right now…and if you were gone…commercial can almost make you cry.” (Male, Brattleboro)

Participants appreciated interesting messaging and content, which caught their attention, contributing to their perception of the ad’s effectiveness. Participants, however, were not always able to discern what it was about the ad that they found was interesting. Ads that participants evaluated as interesting included UK National Health Service’s “Pregnancy Risks” and “Get Unhooked” ads.

- “I liked it. It was interesting. It caught my attention.” (Male, Barre)
- “I didn't like it. I didn't find it interesting.” (Male, Barre)
- “It was interesting. I can't really put my finger on it.” (Female, Brattleboro)

Participants from each of the focus groups observed that ads that were serious would be more effective in persuading smokers to quit. Participants appreciated the seriousness of ads, relating it to their feelings about death particularly among their family. The serious nature of the ads and the depictions of the health effects of tobacco use strongly affected participants. Ads that participants labeled as particularly serious include CDC’s “Roosevelt Tips,” Quit Victoria’s “Meet Mick,” Tobacco Free Florida’s “Left Behind,” and NYC Health’s “Abandoned Child.”

- “I witnessed my mother dead. I woke up and went to see my mother and my mom smoked like three packs a day and she died of a heart attack so it hits home a little bit.” (Female, St. Johnsbury)
- “Everyone except me, my ma, my sister and her kids, everyone else is f-ing dead from smoking. All that heart attack shit--it's pretty scary. I don't like to think about that. It's like a song that gets stuck in your head. But it's serious man. Serious as a heart attack, ha-ha.” (Male, Burlington)
- “I think it moves me closer [to not smoking], being so serious.” (Female, Burlington)
- “It should be serious. This guy had a heart attack, I had a heart attack. It hit home. I didn't like the first two, they were stupid and ridiculous." (Male, Burlington)
- “Definitely a reality slap." (Male, Barre)
- “Well, I dunno, the fear mongering is pretty motivating. Seeing the guy with the big scar on his chest, and that other guy, his hospital bed that he died in. That really made me think, that hospital bed,

thinkin' about it. Is that how I want to go out? You know? That one really made me think. [Your family] watching you gasp for air. *Gun shot noise* I wouldn't let it happen." (Male, Barre)

Throughout the focus groups, ads that talked about real health effects experienced by real people were perceived to be thought provoking and effective in convincing people to quit. These ads included "Every Cigarette Does You Damage" from Australia's National Tobacco Campaign, Quit Victoria's "Meet Mick," and the CDC's "Roosevelt Tips," "Shawn Tips," and "Terrie Tips." Participants were drawn to the personal stories, and fascinated by the ages of the depicted victims of tobacco use; many were convinced that these ads would be especially effective in convincing people to quit smoking.

- "It got the message across, especially with the scar on his chest." (Male, Burlington)
- "It was impactful because it had, like the man with the scar on his chest, it was a visible example of what smoking does from an actual smoker. So it definitely has impact." (Female, Rutland)
- "That's crazy! He's 32 and he has all that stuff in his chest. [The age really stood out] yeah…I'm like, 34 and is that what mine looks like?" (Male, St. Johnsbury)
- "Seeing her personal story invites one to express some empathy…really kind of put yourself in her shoes…it's more about not just myself, but the people I know that smoke. Like my father, he's getting old and just seeing health complications due to smoking is something I'm probably going to be faced with soon." (Male, Rutland)
- "It's kind of ignorant not to make an attempt to quit after watching a commercial like that. Because that's not an actor, that guy, that's real. That's reality…I think [the ads with real people] are better. It makes it real." (Male, Barre)
- "If you're someone who's lost someone to lung cancer or heart disease, [ads with real people] make you think about it more because it hits closer to home." (Female, St. Johnsbury)
- "It's pretty informative. It's serious though, you know what I mean? At the end of the day, most of us can make our own choices, and if you're going to make the choice to do something, you need to know what the consequences are and take responsibility for it, whether it's smoking or robbing someone, you got to think through what you're doing and if you're not ready for that, don't do it. Ultimately. But it's informative and it's definitely a deterrent and that's a good thing." (Male, Brattleboro)

The two ads that highlighted the health effects of tobacco use on children using a serious tone were described as effective throughout focus groups, NYC Health's "Abandoned Child" and UK National Health Service's "Pregnancy Risks." These results are consistent with what the previously described reactions to serious ad content. Participants were particularly affected by this content as it related to children and pregnant women. All of the participants acknowledged the negative health effects of secondhand smoke on children.

- “That was a good one. It was pretty much saying if you're smoking around your kid, your kid may as well be smoking too.” (Male, Brattleboro)
- “The commercials with the kids really hit home.” (Female, Burlington)
- “It made me not want to smoke around pregnant women.” (Female, Barre)
- “It's amazing how many people don't realize how much secondhand smoke affects a kid.” (Male, St. Johnsbury)
- “I always hide my cigarette if I see kids looking at me, because I don't want them thinking…the more they're exposed to seeing other people smoking, the more the seed is planted in their head that it's normal and ok.” (Male, Rutland)

Throughout the focus groups, it became clear that new information was not required for an ad to be effective, as many ads featuring well-known health consequences were characterized as effective for convincing smokers to quit. For instance, there were two ads that included well-known health information included CDC’s “Meet Mick” and NYC Health’s “Heart Attack Waiting to happen” which exemplified the effects of a heart attack. The common and well-known information still captivated participants’ attention.

- “[It's not exaggerated] even if .1% of smokers end up like that, it's still the truth.” (Male, Barre)
- “This one represents reality more than any of the others.” (Male, Barre)
- “That one to me hit harder than the rest, because of all the diseases that can happen to you as a result of smoking, I think that one's the most common outcome right there…I've already seen it happen to people in my age bracket…emphysema’s a slow death. Painful.” (Male, Barre)

However, participants were critical of ads that featured statistics as the sole source of health information. These ads were seen as less personal and less emotionally effective for convincing smokers to quit. Statistics were interpreted as distant and non-relatable, and were frequently questioned by participants. Participants described personal anecdotes, from their past, friends, and family that seemingly contradicted statistics presented in the “Pregnancy Risks” ad by UK National Health Service.

- "It's not that I don't like the commercial, I just don’t think that, but you can't just sit there and say everyone has the same experience. My kids were born healthy, completely healthy, and I did smoke a little bit when I was pregnant. So I guess if you're smoking a pack a day when you're pregnant. Everyone knows that's unhealthy and you shouldn't do it, it's not good for a child. But that's just too general. I don't know. Not every woman has the same experience, not everyone's body is the same. I don't know." (Female, Brattleboro)
- "I didn't smoke my entire pregnancy, I had twins, and one of my sons had open heart surgery at 7 weeks old. So it didn’t have any effect. I did not smoke while I was pregnant and my husband smoked outside. He never smoked indoors with me. I quit when I was pregnant and my son still has a heart defect." (Female, Brattleboro).

- "Some people never smoke and get lung cancer. Some live till they're 80 smoking butts and cigars and shit." (Female, Brattleboro)
- (1 in 5 deaths in the US is caused by cigarettes) "That's real? That's a real number? That's a crazy number, like, your statistics, that's crazy." (Female, Brattleboro).

Four ads that were described as the most effective included: Australia's National Tobacco Campaign's "Every Cigarette Does You Damage", the NYC Health's "Abandoned Child" and the CDC's "Shawn Tips" and "Terrie Tips." These ads were reviewed positively because of their serious and emotional content. "Every Cigarette Does you Damage" by Australia's National Tobacco Campaign graphically demonstrates the damage that smoking does to one's heart and arteries by showing actual organs. In the CDC's "Shawn Tips" and "Terrie Tips", surgical scars and electronic voice boxes were among depictions of the "real health effects" of tobacco, narrated by actual people and were evaluated positively by participants. The depiction of the "Abandoned Child" was described as an enormously powerful image, particularly among parents.

- "It's good, it lets you know about the awful effects that can be taken to the max and that's what they should do. There shouldn't be anything funny about it." (Male, Burlington)
- "I think out of all of them, that one had more beneficial information to me. That right there opened my eyes to why you're doing this…I just know that I have cancer and I keep smoking anyway. Am I gonna quit when I have a hole in my neck? I don't even know if I'm going to go get help for it." (Male, Brattleboro)
- "It was impactful because it had, like the man with the scar on his chest, it was a visible example of what smoking does from an actual smoker. So it definitely has impact." (Female, Rutland)
- "It hits you like a baseball bat if you have a kid…it gets the point across well." (Male, Barre)
- "I like the part where people think they're super human. It can't happen to them. That's so true. So realistic." (Male, St. Johnsbury)
- "In terms of most likely to motivate me to stop smoking cigarettes I think that one is the winner so far. Because it focuses on somebody that's around my age that's been smoking for, how long was he smoking for? Anyway, around my age who has that much shit in the esophagus or aorta. You know? I'm most likely to relate to something like that." (Female, Brattleboro)
- "It was pretty informative. That's serious though, you know what I mean. At the end of the day, most of us can make our own choices...but…you need to know what the consequences are and you need to take responsibility for it, regardless of what it is…it's definitely informative and I think it's a deterrent and I think that's a good thing." (Male, Brattleboro)

Although West Virginia Tobacco Quit Line's "The Power to Quit is Inside Me" and NYC Health's "Misery of Emphysema" were only shown to two groups, each ad scored highly in those two groups. As described in the Methods section, these ads replaced ads that were removed because they were consistently being rated as ineffective. These evaluations are consistent with perceptions of effectiveness associated with serious and emotional content. These evaluations are consistent with perceptions of effectiveness

associated with serious and emotional content described previously. By highlighting imagery associated with pregnancy and emphysema. The depiction of emphysema was especially graphic, as a singular man coughed severely in an isolated room.

- “Bad acting, but the guilt tripping kind of works. I will probably never be pregnant myself (laughs) but if my girlfriend got pregnant, I would quit the second she did. I mean the pack of cigarettes in my pocket goes in the trash. Because it's not just my health at risk now, it's someone else's.” (Male, Rutland).
- “This one seems more effective. It's really, really painful to watch.” (Male, Rutland)
- “She was bad, but the message is still…that's really happening regardless of if she's a bad actress or not. That's still the case. Everywhere you go there are pregnant people who are smoking, who are trying to quit smoking.” (Female, Rutland)
- “It's scary because that could happen to any of us.” (Female, Rutland)
- “It seems like it would be easier just to die than to be living like that. [It puts a different perspective on it because] you might not die from it, you might just have to live like that.” (Female, Rutland)

Participants reported that ads that they found funny were less likely to be effective, as the humor undermined the message presented in the ad. Three ads were described as least effective in participant’s qualitative evaluation of campaigns: The Alabama Tobacco Free Families ad, “Baby Exchange”, and Legacy’s “Drinking and Smoking” and “Coffee and Smoking.” Participants felt that these ads were “corny,” unrealistic, and felt that the content was “sarcastic.” Although participants could relate to the content of an anxious mother or a smoker trying to re-learn drink coffee, they did not feel that the tone or content of these ads would motivate a smoker to quit.

- “It's stupid...It's corny." (Female, Brattleboro)
- “I can relate to it but it doesn't motivate me to change." (Female, Barre)
- “It kind of makes it scarier to quit. You're reminded of how hard it is.” (Female, Brattleboro)
- “It's nothing I didn't know. Everyone knows it's bad to smoke when you're pregnant. And I think it's kind of messed up for her to be like, this isn't the baby I wanted. Like, who says that…I don't really like the commercial. But maybe if they had done it in a different way, maybe made it more serious and not so sarcastic, it would've been a good commercial." (Female, Brattleboro)
- “I smoked with all my kids and they're healthy and fine. And who's going to trade in their baby because it cries?" (Female, St. Johnsbury)
- “Treated smoking like a joke” (Male, Burlington)

Summary of Findings

Participants were shown sixteen anti-tobacco ads in each group and asked to describe how “effective” these ads would be in convincing smokers to quit. Common themes appeared throughout the focus groups regarding the content and presentation of messages in each of the different advertisements

In general, participants believed that ads that included emotional content, a serious tone, thought provoking, or that were considered interesting would be more effective in convincing smokers to quit. Although participants preferred ads with interesting messaging that "caught their attention," they did not require new information on the health effects of smoking to be effective. Message content that participants deemed effective included ads that focus on the health effects of smoking on both adults and children.

Four ads that adults described as the most effective included, Australia's National Tobacco Campaign's "Every Cigarette Does You Damage", NYC Health's "Abandoned Child," and CDC's "Shawn Tips" and "Terrie Tips." These ads were reviewed positively because of their serious and emotional tone and content. "Every Cigarette Does you Damage" graphically demonstrates the damage that smoking does to one's heart and arteries by showing actual organs. "Shawn Tips" and "Terrie Tips" feature actual people talking about the hard-hitting health effects of tobacco use. NYC Health's depiction of an "Abandoned Child," was described as an enormously powerful image, particularly among parents.

Ads that featured statistics were described as less personal and less emotionally effective for convincing smokers to quit. Statistics were interpreted as distant and non-relatable, and were frequently questioned by participants. Participants described personal anecdotes from their past, friends, and family that seemingly contradicted statistics presented in the ads, like in "Pregnancy Risks" by the UK National Health Service. Participants also reported that ads that they found funny were less likely to be effective, as the humor undermined the message presented in the ad. Three ads were described as least effective in participants' qualitative evaluation of campaigns due to their creativity and humor included The Alabama Tobacco Free Families ad, "Baby Exchange", and Legacy's "Drinking and Smoking" and "Coffee and Smoking." Participants felt that these ads were "corny," unrealistic, and felt that the content was "sarcastic." Although participants could relate to the content of an anxious mother or a smoker trying to drink coffee, they did not feel that the tone or content of these ads would motivate a smoker to quit.

Quantitative Analysis: Adult Evaluation of Anti-Tobacco Ads

In addition to conventional discussion-based focus groups, Rescue SCG supplements focus group discussions with quantitative data collection activities to achieve a well-rounded data-based approach. The quantitative components of the study included the recruitment survey and a quantitative tobacco ad assessment. Quantitative analysis from the recruitment survey were presented in the Research Methods section on page 16 In this section, results from the quantitative exercises will be discussed.

Facets of Effective Tobacco Cessation Ad

Participants were asked to view and rate the effectiveness of various tobacco prevention ads by evaluating the statement, "Does this commercial motivate you to reduce your tobacco use?" The ratings were made on a five-point Likert-type scale, ranging from "Definitely Not" to "Definitely Yes". The ads shown represented a wide array of facets, including stimulating thought, emotionally evocative, previously unknown information, likability of the actors, creativity, funny, relatability of the actors, interesting, and serious.

Reported in Table 6 on the next page are the Pearson's (*r*) correlation coefficients and Coefficients of Determination (R^2) between each ad facet (left column) and the item assessing overall effectiveness in motivating participants to reduce their tobacco use. The correlation (*r*) information tells us the strength of the relation between two variables and whether the relation exists outside of chance. To determine strength, we look at the value of the Pearson's correlation coefficient, which ranges from +1.0 to -1.0. In general, the closer the absolute value of the correlation to 1, the stronger the correlation; the closer the absolute value is to 0, the weaker the correlation. Absolute values from r = .20 to .29 are considered weak, r = .30 to .39 are considered moderate, and r = .40 and above are considered strong. Positive correlations mean that as one variable increases in ratings, so does the other variable; negative correlations mean that as one variable increases in ratings, the other decreases. We determine whether the relation exists outside of chance by examining the p-value. A p-value less than .05 ($p < .05$) indicates statistical significance and means that there is less than a 5% probability that the finding is due to chance alone. A p-value less than .01 ($p < .01$) indicates a stronger level of statistical significance and means that there is less than a 1% probability that the finding is due to chance alone. Finally, by calculating the Coefficient of Determination (R^2) by multiplying *r* x *r*, we produce a percentage of variability in reported effectiveness that is due to the particular ad facet. For example, for "This commercial really made me THINK," $R^2 = .39$, which means that 39% of the variability in effectiveness is due to the ad making adults think.

Table 6. Ad Facets and Effectiveness

Ad Facets	Relation to "Reduce Tobacco Use" Effectiveness, r	Significance, p-value	R^2 (% of variability in Effectiveness due to the Ad Facet)
This commercial really made me THINK	.63	.00**	.39 (39%)
This commercial affected me EMOTIONALLY	.62	.00**	.38 (38%)
The information in this commercial was something I DID NOT KNOW	.10	.16	.01 (1%)
I LIKED the people in this commercial	.10	.15	.01 (1%)
This commercial was CREATIVE	.13	.10	.01 (1%)
This commercial was FUNNY	-.12	.11	.01 (1%)
I can RELATE with the people in this commercial	.04	.33	.00 (0%)
This commercial was SERIOUS	.32	.00**	.10 (10%)
This commercial was INTERESTING	.36	.00**	.12 (12%)

**Indicates a statistically significant *p*-value at $p < .01$.

In Table 6 we see that nearly all correlations were positive, which means that as the rating of the ad facet increases, so does the rating of effectiveness. However, "[t]his commercial was funny" was negatively related to effectiveness, which means that as ratings of "funny" increased, ad effectiveness decreased. However, this finding was not statistically significant. Only four ad facets were significantly related to ad effectiveness. "This commercial made me think" and "This commercial affected me emotionally" were the strongest and accounted for the most variance in effectiveness at 39% and 38%, respectively. "This commercial was interesting" and "This commercial was serious" were also significantly related to ad effectiveness, accounting for 12% and 10% of variance, respectively.

Conversely, several facets were not effective (no statistical significance). On average, ads that were creative, funny, ads that had likable and relatable actors, and ads that presented previously unknown information were not significantly effective nor ineffective in motivating users to reduce tobacco use.

These findings suggest that certain characteristics make an ad more effective. First, the ad must make people think and affect them emotionally. These are common themes across marketing research. While many commercial brands focus only on attention and likability, tobacco prevention ads must make adults think and affect them on a deeper level in order to be effective. Second, the ad must be serious and interesting. In contrast, humor may reduce the effectiveness of ads. Ads that are serious in tone and interesting enough to catch the attention of viewers will be most effective.

Lastly, individual factors not accounted for by the variables in the model still play a considerable role in determining effectiveness. Though the available data does not allow for further investigation, individuals could also find different ads appealing because of their unique characteristics, personalities, and different social influences. A larger sample and more psychographic and demographic data points would be necessary to explore these differences.

Effectiveness Ratings of Tobacco Cessation Ads

Now that we have some indication of what ad characteristics make some ads more effective than others, the next step is to determine which ads were rated effective. Again, an effective ad is defined as one in which participants positively report that it would "motivate you to reduce your tobacco use".

Reported in Table 7 are the effectiveness scores for each of the ads ordered from most effective to least effective. In addition, the total participants that rated each ad is also noted (N) since not all ads were shown to all participants. Here, we can see that the "Misery of Emphysema," "Shawn Tips," "Terrie Tips" and "Every Cigarette Does You Damage" ads were perceived to be the most effective by participants. However, the Misery of Emphysema ad was only shown in two focus groups (N = 20), so we must interpret that rating with caution. In addition, the "Impotence," "Coffee and Smoking," "Get Unhooked" and "Drinking and Smoking" ads were rated as the least effective ads by participants.

In addition to effectiveness ratings, we also listed which descriptor was most strongly associated with each of the ads based on participants' descriptor ratings. Here, we can see that the top nine ads were all described as "serious." In contrast, the four worst performing ads were described as "funny" (3 ads) and "creative" (1 ad). This reinforces our previous finding that adults believe serious ads are more effective and funny ads are less effective.

Table 7. Effectiveness Ratings of Tobacco Cessation Ads
(In order from most effective to least effective)

#	Ad	Brand	Top Descriptor	Average Effectiveness Score	N
19*	Misery of Emphysema	NYC Health	Serious	4.10	20
16	Shawn Tips	CDC, USA	Serious	3.79	92
10	Terrie Tips	CDC, USA	Serious	3.73	92
14	Every Cigarette Does You Damage	Australia's National Tobacco Campaign, AU	Serious	3.66	93
17*	Secondhand Smoke, It's Nothing to Kid About	Michigan Tobacco Quitline	Serious	3.65	20
3	Roosevelt Tips	CDC, USA	Serious	3.59	94
15	Abandoned Child	NYC Health	Serious	3.58	91
9	Heart Attack Waiting to Happen	NYC Health	Serious	3.46	92
12	When You Smoke, They	Santa Clara County Public	Serious	3.40	93

#	Ad	Brand	Top Descriptor	Average Effectiveness Score	N
	Smoke	Health			
18*	The Power to Quit is Inside Me	West Virginia Tobacco Quit Line	Emotional	3.35	20
13	Meet Mick	Quit Victoria, AU	Serious	3.26	72
6	Left Behind	Tobacco Free Florida	Serious	3.20	93
7	Never Give Up Giving Up	Quit Victoria, AU	Interesting	3.04	91
20*	Great Start	Legacy	Serious	2.85	20
11	Pregnancy Risks	National Health Service, UK	Serious	2.84	93
4	Baby Exchange	Alabama Tobacco Free Families	Serious	2.65	74
8	Impotence	National Health Service, UK	Funny	2.48	93
2	Coffee and Smoking	Legacy, USA	Funny	2.13	94
5	Get Unhooked	National Health Service, UK	Creative	2.13	72
1	Drinking and Smoking	Legacy, USA	Funny	1.79	73

** Ads 17-20 were only shown to 20 participants. The scores for these ads should be interpreted with caution.*

Summary of Quantitative Findings

Several facets influenced perceptions of effectiveness throughout the ads. Ads that made participants think or affected them emotionally were rated higher on average and accounted for the most variance in effectiveness. In addition, the seriousness and interesting nature of ad content was also related to increased the effectiveness of ads. Humor in an ad was negatively related to effectiveness; in other words, as ratings of "funny" increased, ad effectiveness decreased. In addition, ads that were creative, ads that had likable and relatable actors, and ads that presented previously unknown information were not effective in motivating users to reduce tobacco use.

The most serious ads in the study were also perceived to be the most effective, including Misery of "Emphysema" and "Shawn's Tips." The most humorous and creative ads were perceived to be the least creative, such as "Drinking and Smoking" and "Get Unhooked."

Qualitative Findings Part 5: Young Adult Focus Group Discussions

Rescue SCG conducted two large focus groups with 22 young adults (18 to 24 years old) in order to capture their unique tobacco use behaviors, perceptions, beliefs, and opinions as well as impressions of various ad campaigns. Young adult (YA) participants were recruited from bars and clubs in Burlington, VT. Because the method of recruitment for YA-specific focus groups required bars and clubs, it was not possible to have YA-specific focus groups in the other four cities because they were located in areas that had significantly smaller nightlife options. Recruiters verbally prequalified potential participants to ensure that they are between 18-26 years old, have lived in VT at least 6 months, and have smoked at least one cigarette in the last 30 days. As with the other participants in this study, YA participants received $5 cash on the spot for completing the survey and $75 for participation in the group. With consent from participants, both focus groups were audio recorded.

Tobacco Use and Health

As the focus group began, YA participants discussed their tobacco use habits, reasons they started, as well as motivations and barriers to quitting. Participants were then shown a selection of tobacco cessation advertisements from local and national health organizations and tobacco cessation materials from the Commune brand. We present the primary findings from the two YA focus group discussions below, highlighting aspects of the discussion that are specific to this age group.

Young Adult Tobacco Use Culture

For the purposes of this report, “Peer Crowds” are defined as the macro-level connections between peer groups with similar interest, lifestyles, influencers, and habits. While a teen has a local peer group s/he socializes with, the teen and his/her peer group belong to a larger “peer crowd” that shares significant cultural similarities across geographic areas. YA participants identified prevalence of specific peer crowds in VT, including punk scene, hipsters, townies, gangsters, and “artsy kids”.

Participants varied in their estimation of the prevalence and type of tobacco used in these groups. Participants estimated that fewer YAs in VT used chew, but that large portions of the previously named peer crowds smoked regularly.

- “The hipster, punk scene [has more regular smokers.]” (Male, Burlington)
- “The townies [all smoke].” (Female, Burlington)
- “I’ve never smoked in my life, but sometimes I pack lip. It’s not very popular in Vermont. I’m the only person I know up here who does it.” (Male, Burlington)
- “I have one or two friends who chew.” (Male, Burlington)
- “A gangster is more likely to smoke a Newport. A townie is more likely to smoke a Marlboro. An artsy kid is more likely to smoke a rollie. There’s a demographic to it.” (Male, Burlington)
- “It crosses the boundaries of all of those groups.” (Male, Burlington)

YA participants described the major role of bars, nightclubs, and alcohol in YA tobacco use. Smoking while drinking was described as a common part of the YA social life and an escape from the noise of a party, as well as an invitation to meet other people. Participants described alcohol as being a key part of their smoking behaviors, and a key motivator for starting again during a quit attempt.

- “Pretty much everyone turns into a smoker if you've been drinking enough, you know?” (Male, Burlington)
- “College students maybe don't go out every night, but if they go out one night a week, and they have a drink, and they smoke, that makes them [social smokers].” (Male, Burlington)
- “I don't think it's so much the physiological effects of tobacco [that I like, it’s] chemical, it's more the social aspect...Like, the ADD of being stuck in a bar, but every half hour everyone goes outside, lights up, goes back in. Fresh Air.” (Male, Burlington)
- “There's a culture that comes with smoking. It allows you to meet other people because they're smokers as well. Can I get a light? Can I get a smoke? It also allows you to separate from, like if you're at a party and it's really crazy in there, you get to step out for 10 minutes and smoke and get away. Then you can go back. It allows you, it gives you something else to do.” (Male, Burlington)
- “I'll quit now, for like a month, but then if I'm out drinking, I'll start bumming cigarettes or buy a pack, and then it's back.” (Male, Burlington)
- “It comes with drinking. Every time I drink, I smoke a cigarette.” (Male, Burlington)
- “I'm usually a smoker when I drink, so if I'm at the bars and someone offers me a cigarette, I'm not going to decline.” (Male, Burlington)
- “I mostly smoke when I drink. Maybe once a week. Now that I'm out of college I don't drink as much.” (Male, Burlington)
- “I was a regular smoker, but then 3 months ago I just stopped. Without trying. And now I just smoke when I drink, that's it.” (Female, Burlington)

YA described themselves as intermittent smokers. Many started and continued smoking with friends to relax. Participants smoked even when they did not purchase their own tobacco products and described the buzz of smoking occasionally.

- “Tobacco is just one of those things that everyone dabbles in a little bit.” (Male, Burlington)
- “If you don't smoke all the time, you just smoke when other people are around. And if you don't buy your own cigarettes [that makes you a social smoker].” (Male, Burlington)
- “I have a roommate who's a regular smoker. I don't ever buy cigarettes for myself, but if I'm out with her she'll be like, "You have to smoke with me, because I don't want to stand outside by myself." (Female, Burlington)
- “If you don't smoke very often, you definitely get a buzz. Which is kind of nice.” (Male, Burlington)

- “I'll sometimes smoke a cigarette. Every once in awhile. I'll even sometimes buy a pouch of tobacco and smoke it. But then I'll go months and months and not smoke, not desire it. But on occasion sometimes it's pleasant to me.” (Male, Burlington)
- “I started socially, definitely. Around a year ago. When I was 20.” (Female, Burlington)
- “I started socially, 2-3 a day. Then it went up from there, to like half a pack. It was a gradual thing.” (Male, Burlington)
- “I stopped buying packs a couple months ago, but I still find myself smoking, like bumming cigarettes quite often. I'm more of a social smoker now, but I was a regular smoker.” (Male, Burlington)
- “I smoke at night. During the day I have things to do and like feeling like I can breathe better. Pretty much as soon as I get out of work because that's the first time I can relax. I can sit down and take my time to actually enjoy it.” (Male, Burlington)
- “I smoke when I want to. I stopped smoking when I found out I was pregnant, and then just recently started again. But I don't smoke all the time, just when I want to.” (Female, Burlington)

Tobacco Use Habits and Preferred Brands

Participants described their use of chew and roll your own tobacco as an alternative to purchasing cigarettes. Roll your own, or “rollies” were described as a higher quality, less commercial, herbal, and once, inexpensive alternative to cigarettes. One participant mentioned the use of a ‘rolling machine.’

- “There’s a lot of chewing. There’s a lot of rolling.” (Male, Burlington)
- “It partly has to do with the commercialization, I mean, buying a pack of cigarettes is so easy. Its what everyone else does and people just do it. Rolling your own is more, like, you gotta take the initiative to roll a cigarette. You’re interacting with the herb more.” (Male, Burlington)
- “The quality of tobacco in a pack of rollies is far better than in a pack of Marlboros.” (Male, Burlington)
- “There’s only rolling in certain areas of town. Certain demographics. The artsy hipsters.” (Male, Burlington)
- “[Rolling used to be cheaper]. It’s like $9 a pouch. And now you’ve got those rolling machines.” (Male, Burlington)
- “Rolling is also cheaper. It’s half as expensive.” (Male, Burlington)
- “What about the medicinal use of tobacco? Native American’s view it as sacred. I have friends who roll it with other herbs like lavender, damiana, ganje. It’s ceremonial. It’s probably not very common, but I wouldn’t say tobacco is [not] without positive qualities. Otherwise no one would smoke it.” (Male, Burlington)

YA participants described their preferred brands of tobacco products. Hookah and e-cigarettes were mentioned as alternative tobacco products used by YA, particularly given the cold weather.

- “I smoke Marlboros.” (Male, Burlington)
- “It’s gotta be Winston Red’s for me. Always 100’s too.” (Male, Burlington)
- “I say, probably most often I smoke [Marlboro] 27’s.” (Female, Burlington)
- “I like Peter Stokkebye or American Spirit.” (Male, Burlington)
- “I used an e-cig when I was living in a dorm room. Because sometimes it's so cold out, you just don't even want to bother.” (Female, Burlington)
- “Hookah is great. Shisha.” (Female, Burlington)

Quitting Readiness and Quit Attempts

YA participants did not express a desire to quit compared to older adults. Barriers to quitting described by participants included a need for personal relaxation and enjoyment, and difficulty quitting in the midst of a social group of smokers. Participants did not see the immediate need to quit, describing their future intentions to quit for when they had kids, when they were older or middle aged. Some described their experiences quitting, with varying levels of success. Some had an easy time, while others described a low sense of self-efficacy to quit effectively because of previously unsuccessful attempts. One participant did not want to call the Quitline because she was already aware of all of the health effects.

- “I never actively try to quit. I'll just not buy a pack and stop smoking for like a couple weeks, or a month.” (Male, Burlington)
- “I know it's bad for me, but I enjoy it a lot.” (Male, Burlington)
- “I feel like most people quit before they have kids these days. I'll quit when I have kids." (Male, Burlington)
- “Is there an age when your lungs stop repairing themselves? I think I learned that in health class a long time ago. At that age [I'll quit]. 26, I think?” (Female, Burlington)
- “Quitting is definitely in my mind, but all my friends smoke so it makes it difficult for me sometimes." (Male, Burlington)
- “I would like to quit in a couple years. But I don't see any point to quitting right now. I like it.” (Female, Burlington)
- “I have a bookends idea of smoking. I think it's permissible right now, I'll probably quit in the middle of my life, depending on whenever that is, and then when I'm old and decrepit, I'll probably take it up vigorously.” (Male, Burlington)
- “It doesn't help when most of your friends smoke, even socially.” (Female, Burlington)
- “I accidentally quit. I didn't try to, it just happened. Weird after 6 years of smoking. I didn't try. I literally just dug into my backpack one morning and found a crumpled pack of cigarettes and thought, I haven't had a cigarette in 3 weeks.” (Female, Burlington)
- "I've quit a few times. I quit for like 8 months once and 4 months another time. I just woke up and said ‘I'm not smoking,’ and I didn't.” (Male, Burlington)

- "I probably should quit, I've been smoking since I was 16. I have no idea [if I'll quit]. I've quit before and then I just start smoking again. Especially during work, I'll take a break or something." (Male, Burlington)
- "I wouldn't call [the Quitline]. What are you gonna say to me? It's all rhetoric. I feel like I already know all the risks." (Male, Burlington)

Discussion of Anti-Tobacco Ads

YAs saw seventeen ads total, which includes the same sixteen ads that were shown to broader adult focus groups in Burlington and as well as a Commune brand ad produced by Rescue SCG, which is specifically targeted to YAs. Table 7 contains the names and brands the ads participants watched.

Table 7. YA Anti-Tobacco Ads

#	Name	Brand
1	Drinking and Smoking	Legacy, USA
2	Coffee and Smoking	Legacy, USA
3	Roosevelt Tips	CDC, USA
4	Baby Exchange	Alabama Tobacco Free Families
5	Get Unhooked	National Health Service, UK
6	Left Behind	Tobacco Free Florida
7	Never Give Up Giving Up	Quit Victoria, AU
8	Impotence	National Health Service, UK
9	Heart Attack Waiting to Happen	NYC Health
10	Terrie Tips	CDC, USA
11	Pregnancy Risks	National Health Service, UK
12	When You Smoke, They Smoke	Santa Clara County Public Health
13	Meet Mick	Quit Victoria, AU
14	Every Cigarette Does You Damage	Australia's National Tobacco Campaign, AU
15	Abandoned Child	NYC Health
16	Shawn Tips	CDC, USA
17	Quit	Commune, Rescue SCG

There were common subjects that appeared throughout the advertisements that YA associated with effectiveness in convincing smokers to quit. YA participants positively rated ads as being effective when content appealed to their peer group on a social level. YA participants did not evaluate ads the same manner as adults in the rest of the study. For instance, ads that were deemed effective in the older adult focus groups were not deemed effective by YAs.

Messages that have been found effective include elements that appeal to YA on a social level. For instance, messaging highlighting the social consequences and short-term health effects of using tobacco were positively evaluated by participants.

- “People don't give a shit about their own health, but they might be more concerned about someone else’s. Like if I knew I was hurting someone else through my habit, it'd be more powerful than knowing I was hurting myself. If you know it's not just you that it's hurting, it's more powerful.” (Male, Burlington)

There were four ads that YAs seemed to agree were effective through discussion, including Legacy’s “Coffee and Smoking,” Santa Clara County Public Health’s “When You Smoke, They Smoke,” Quit Victoria’s “Never Give Up Giving Up,” and Australia’s National Tobacco Campaign “Every Cigarette Does You Damage.” Participants appreciated creativity in the ads that they saw, positive and encouraging messaging, and the relatability of the content and message in the ad. YAs positive impressions of each these four ads are discussed in detail below.

“Coffee and Smoking” (Legacy)

Although rated poorly by older adults, YA participants were attracted to the symbolism of this ad, the creativity, and the positive tone of the ad.

- “It wasn't really about coffee; it was more symbolic. It was about learning how to do things that you're used to doing but removing the cigarettes from it. Which I think is a creative approach.” (Male, Burlington)
- “I thought it was creative. And it was kind of nice that it had a positive message at the end, like a little more supportive than a lot of things. Like if you were really struggling with quitting cigarettes, as opposed to just negative campaigns.” (Female, Burlington)

“Never Give up Giving Up” (Quit Victoria)

YA participants called this ad relatable to their own experiences, and appreciated the recognition of the process of cessation. Participants appreciated the positive tone and the self-empowering nature of the message.

- “It's more relatable, because I've tried to quit before and those kind of things happen and you end up smoking again. But then there's thinking about it in terms like that, instead of being like, ‘I tried to quit and it didn't work, so it's never gonna work.’ It shows a progression of just keep it up and eventually it could work for you.” (Male, Burlington)
- “It makes quitting seem much simpler and not as big of a deal and dramatic and serious, which is part of what makes it so hard when reacting to a commercial. They blow it up into this huge life decision and I'm like, "I don't want any part of that, get it away." But if it's just simple, easy, fun, then maybe.” (Male, Burlington)
- “It's more of a self-empowering journey, than like, ‘You need to do this now or you're f-ed,’ which was nice.” (Female, Burlington)

"When You Smoke, They Smoke" (Santa Clara County Public Health)

Participants related to the content of this ad, speaking about their experience and their feelings about smoking around children. Participants frequently described how their parents had smoked around them or their siblings.

- "I could really relate to that one. My sister, when I was living back home with her, she had a kid and it's when I was starting smoking…We were going for a drive one time and I really wanted a cigarette in the car, I was like freaking out. I really, really wanted one and she wouldn't let me… then I realized, my mom smokes around my niece and shit and my niece has asthma and stuff and I'm like, 'Mom, you really shouldn't be doing that.' So now I changed my mind about that stuff because I was ignorant. I don't like people who smoke around kids. I think it's disgusting and really rude." (Female, Burlington)
- "I can relate to that because my parents always smoked inside when I was growing up...My clothes and stuff always smelled like smoke. So I'd go to school, I'm talking 4th grade maybe, my teacher would come up to me and say, 'Oh, were you outside smoking?' and I was like, 'Are you serious? I'm nine.' But everything I owned smelled like smoke. It changed the way people perceived me. I think smoking is disgusting, personally. If you want to do it, do it outside…but for me to be forced to be around someone smoking against my will, that's not cool." (Male, Burlington)
- "I thought it was really creative how the kids exhaled the smoke. I liked that." (Male, Burlington)
- "I also grew up in a household where my mom and dad and brother smoked. And as a kid, I always asked them…"What are you smoking? What is that?" We were on a walk at the aqueduct one day and I asked again and my dad was like, 'Do you want to try it? You're not going to like it.' I was like 8 years old and it was a Newport. And now I smoke Newports!" (Female, Burlington)
- "My mom smoked inside too and I had asthma. She smoked during the pregnancy. I remember how much it smelled gross and wasn't fun. It's nicer to smoke outside. If you're gonna smoke a cigarette and relax, take a minute to enjoy it. Go outside!" (Female, Burlington)
- "I hate smoking around kids. Even if I'm walking down Church Street and I'm pretty drunk, I'll hide it. I feel terrible." (Female, Burlington)

"Every Cigarette Does You Damage" (Australia's National Tobacco Campaign)

YA participants positively evaluated this ad. One participant in particular identified with the messenger coughing, relating it to his own experience.

- "Age 32, that's sort of, for a lot of people either right in front of them or pretty soon." (Male, Burlington)
- "The weird thing that made me connect was at the end when he coughed. Because it came up out of his throat and all of a sudden he coughed. I cough too! He's smoking in his kitchen and he

coughs slightly and I was just thinking, when I smoke a cigarette, I might cough, and then I was thinking about all that shit in my veins…I don't know why that one thing clicked." (Male, Burlington)

Interestingly, ads that were deemed effective in older adult focus groups were not deemed effective by YAs. For instance, YA participants were highly critical of the messengers who continued to smoke after suffering the effects of smoking in the CDC's "Shawn Tips" and "Terrie Tips."

"Shawn Tips" and "Terrie Tips" (CDC)

YA participants reacted negatively to the messenger in Shawn Tips, criticizing and questioning his continued use of tobacco even when experiencing severe health repercussions.

- "I think that guy's a douchebag. If you know you're killing yourself, why would you still be smoking? Anybody who's dumb enough to smoke during radiation or cancer treatment…he deserves whatever he brings upon himself." (Male, Burlington)
- "I think it takes away from the message of 'it could happen to you,' because if I was on chemo or diagnosed with cancer I would not be smoking. So no, that would not happen to me because I am not a f-ing idiot." (Male, Burlington)

Similar to "Shawn Tips," participants who viewed "Terrie Tips" were critical of the messenger's continued use of tobacco, calling it "ludicrous." Participants were also skeptical of the likelihood of Terrie's medical condition; comparing her health to older adults they knew who had smoked for long periods of time.

- "It didn't really affect me emotionally at all. It's just like, her voice was really abrasive and she was just kind of, I just didn't like her. And that definitely wouldn't make me want to smoke less. I fail to have any empathy for people like that. You obviously were smoking an insane amount of cigarettes to get to that point. That's ludicrous. That's your own fault. When it comes down to it, yeah, it's addictive, but you're still a consumer." (Female, Burlington)
- "That's such a rarity for something like that to happen. My old neighbor, she's gotta be 80 by now, and she smokes 2 ½ packs a day. She sits there and chain-smokes six cigarettes in a row. But she's still healthy, she still works, she still goes to the store, gets her hair done, she still has a normal life. So how often is this really gonna happen? It's like a fraction of a percent." (Male, Burlington)

Unlike older adults, YAs believed that NYC Health's "Abandoned Child" was ineffective among their age group. However, they did think that this ad would be effective among parents, but believed it was overdramatic for their taste.

- "It was just really melodramatic. Like, OK, make smokers feel like the bad guys." (Female, Burlington)
- "This would be effective if I had a kid or I was a parent or something. The only perspective I have is with that child, losing my parents as a kid and flipping out." (Male, Burlington)

Discussion of Commune Brand

There were several tobacco prevention ads that were considered effective among YAs that should be utilized in future messaging efforts. YAs also evaluated the Commune brand produced by Rescue SCG very positively. In order to attain a comprehensive picture of YA impressions of Commune, participants were shown both the "Commune Quit Group" video and select printed posters created for the Commune brand.

Commune Quit Group Video

Participants were shown the "Commune Quit Group" video, which features the stories and experiences of YA smokers and their involvement with the Commune cessation program. The ad features testimonials from several young men and women, each of whom describe their tobacco use and how much they liked the Commune cessation program. Participants were intrigued and encouraged by the concept, expressing interest in joining the group. YAs found the people depicted in the video as relatable, and motivational.

- "I'm intrigued to know more about it." (Male, Burlington)
- "I would research it." (Female, Burlington)
- "It's pretty relatable. All those people are like in our age group and social status. Similar. They all seem like they could have been any one of us." (Male, Burlington)
- "They made themselves seem very approachable and Commune seemed very approachable, instead of 'you're gonna die, or you're hurting all these people and yourself.' Instead of making you this bad guy or a potential victim, they're like, 'hey come join us, we're this cool group.' (Female, Burlington)
- "They're like, "don't worry, we got you." (Male, Burlington)
- "It felt welcoming because they weren't telling you all the things you were doing wrong, they were just telling you we're here to help." (Male, Burlington)

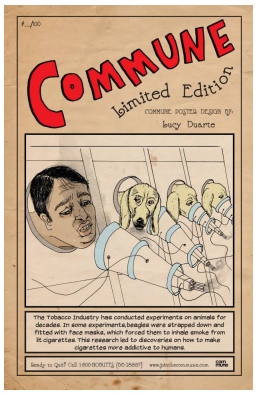
Commune Posters

As part of the program, local artists collaborate with Commune to create artistic representations of the tobacco industry's deceptive practices in posters for Commune events. Five posters were shown to participants varying in content from tobacco industry animal testing ("Kermit," "Beagles"), to fair trade ("Pyramid Scheme"), to the health effects of tobacco ("Freebase Nicotine," "Impotence"). Participants liked the use of local artist collaboration to create Commune materials.

- "The fact that you said it was local artists collaborating did change the way I looked at it. It made me feel nice that it was a local artist collective embarking on this project together, rather than a bunch of advertisers sitting around and funneling ideas. It was nice that it was one person that created the poster." (Male, Burlington)

YA participants were shown two Commune posters that highlighted the tobacco industry's use of animal testing in product development: "Kermit" and "Animal Testing-Beagles". Participants were affected by the imagery of animal abuse in "Beagles" while "Kermit" depicted an image from YA's childhood using tobacco.

"Animal Testing-Beagles" (Commune)



- "I really like the illustration. It's like Ralph Steadman before drugs." (Animal Test-Beagles, Male, Burlington)
- "That's pretty powerful." (Animal Testing-Beagles, Male, Burlington)
- "It's sad. People love dogs." (Animal Testing-Beagles, Male, Burlington)

"Kermit" (Commune)

- "I think that one's pretty provocative. It's shoving some big issues in your face. Immediately, crack's illegal. Everyone knows that. So if someone can get away with using it for certain methods, you'll start to see ties, like, people are letting it happen. What's going on there?" (Kermit, Male, Burlington)
- "It's a pretty severe dichotomy between something that will potentially kill you and a childhood love." (Kermit, Female, Burlington)

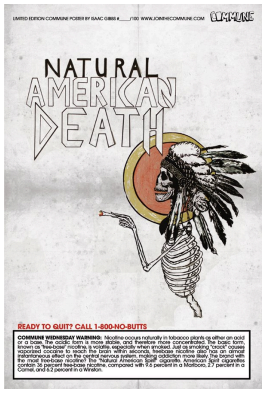
Participants were drawn to "Pyramid Scheme" which described the power of big tobacco over low-income countries, and the disparities of the high-income crop for export. YAs were taken by the novel approach to tobacco control as the ad deviated from traditional description of the health effects of tobacco.

"Pyramid Scheme" (Commune)

- "I liked it." (Pyramid Scheme, Male, Burlington)
- "It makes me think that tobacco should be grown more sustainably." (Pyramid Scheme, Female, Burlington)
- "It's interesting to look at the issue from that perspective, rather than just health risks, like fair trade or you're hurting another country. It's bigger." (Pyramid Scheme, Male, Burlington)
- "It's not shaming you." (Pyramid Scheme, Female, Burlington)

- “I think it's powerful imagery and it would get a lot of people to think about it. People would light up a smoke and see that and at least feel a little bit guilty about starving someone of food so they can feed their habit.” (Pyramid Scheme Poster, Male, Burlington)

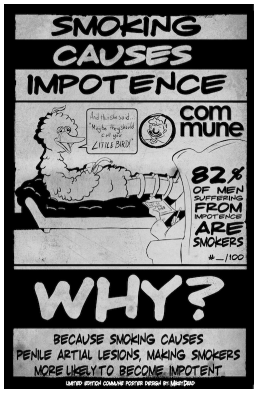
“Freebase Nicotine” and “Impotence” addressed the effect of tobacco industry practices on health. YA participants commented on the similarity to the image in “Freebase Nicotine” to the popular RJ Reynolds tobacco brand, American Spirits. YA participants positively reviewed information presented in “Impotence” as effective for convincing smokers to quit.



“Freebase Nicotine” (Commune)

- “I think most people who choose this brand, choose it because it has less additives, it's supposed to be more natural. But apparently it's more addicting. So it's not necessarily worse for you, but it's more addicting.” (Male, Burlington)
- “I like the artwork.” (Female, Burlington)

“Impotence” (Commune)



- “If there's a way to get people to reconsider smoking, it's to bring their dick into it. It's true, I think that general point is the best way. I think people care much more about their dick than third world children. Nobody wants to have an embarrassingly un-erect penis when the time comes.” (Male, Burlington)
- “People care more about being able to [have sex] than their own health.” (Burlington, Male)

Summary of Qualitative Findings

To begin the discussion, facilitators asked YAs to describe tobacco use culture among YAs in Vermont in addition to personal tobacco history and quit readiness among participants. Participants were then shown a selection of anti-tobacco advertisements from local and national health organizations and then anti-tobacco materials from the Commune brand. We present the primary findings from those focus group discussions below, highlighting aspects of the discussion that are specific to this age group.

Young Adult Discussion of Tobacco Culture in Vermont

YA participants described themselves as intermittent smokers, who smoked with friends or when they drank alcohol. The participants discussed the major role of bars, nightclubs, and alcohol in YA tobacco use. Smoking while drinking was described as a common part of the YA social life, an escape from the noise of a party and an invitation to meet other like-smokers.

Brand preferences identified among YA participants included Marlboro, Winston Red's, Peter Stokkebye, and American Spirits. In addition, YA participants used e-cigarettes, hookah, chew (though infrequently), and roll your own tobacco as an alternative to purchasing cigarettes. "Rollies" were described as a higher quality, less commercial, herbal, and once, inexpensive alternative to cigarettes. One participant mentioned the use of a 'rolling machine.'

YA participants identified members of the punk scene, hipsters, and townies as regular smokers. Participants named varying tobacco products across peer groups, including Newports for "gangsters," roll your own (or "rollies") among "artsy kids," and Marlboros for townies. Gangsters and "artsy kids" were among the groups that were believed to use the most tobacco.

Compared to participants of the broader adult study, YA participants expressed a much lower desire to quit smoking. Barriers to quitting described by YA participants included a need for personal relaxation and enjoyment, and difficulty quitting in the midst of a social group of smokers. Participants did not see the immediate need to quit, describing their future intentions to quit for when they had kids, when they were older or middle aged. Some described their experiences quitting, with varying levels of success. Some had an easy time, while others described a low sense of self-efficacy to quit effectively because of previously unsuccessful attempts. One participant mentioned avoiding the VT Quitline, because of a concern for being lectured on the health effects of smoking that she was already aware of.

Reactions to Anti-Tobacco Advertisements

YA participants valued ad content that reflected novel themes including tobacco industry animal abuse and fair trade. Participants were also partial to ads that reflected taboo health effects of smoking such as impotence, and messages relating nicotine to the addictiveness of crack.

Other ads that were deemed effective by YA included: Legacy's "Coffee and Smoking", Santa Clara County Public Health's "When You Smoke, They Smoke", Quit Victoria's "Never Give Up Giving Up", and Australia's National Tobacco Campaign "Every Cigarette Does You Damage". Participants appreciated creativity in the ads that they saw, the positive and encouraging messaging, and the relatability of the content and message in the ad.

YAs evaluated ad effectiveness differently than their older adult counterparts; ads that were deemed effective in broader adult study were not deemed effective by YAs. For instance, YA participants reacted negatively to the messengers in the CDC's "Shawn Tips" and "Terrie Tips" ads. YA participants criticized the messengers who continued to use tobacco even when they were undergoing severe health repercussions of smoking. Unlike older adults, YAs also thought that NYC Health's "Abandoned Child" was overdramatic and ineffective for an audience other than parents.

Discussion of Commune Brand

YA participants expressed high level of interest in Commune quit groups, relating to the YAs who were featured testimonials in the video. YAs found the people depicted in the video as relatable, and motivational. YA participants also responded well to Commune posters, both in the manner in which they are developed (local artists) as well as the message of the posters, which included tobacco industry animal testing, fair trade, addiction, and impotence.

Implications & Discussion

This section is designed to discuss the implications of the research findings on tobacco cessation efforts among a broad adult population (18 – 50 years old) and a YA sub-population (18 – 26 years old) in VT. The following implications are based on a combined analysis of all qualitative and quantitative data sets to provide pertinent information on the best strategies for tobacco prevention in VT, organized as they relate to the specific objectives of the study.

Objective 1: Understand knowledge, perceptions, and beliefs related to tobacco use

1. Most Older Adult Smokers Already Want to Quit

Most older adult smokers already want to quit, and have attempted to do so in the past with varying levels of success. Exposing these adults to tobacco messages that are appealing and relatable can motivate them to start to think about quitting again. With the right messages and support, adults can be motivated to be better prepared to quit in their next attempt. It is important for comprehensive tobacco prevention program to have adequate resources readily available and accessible to those who want to quit in order to fully leverage their desire to quit. Since the Quitline is not positively perceived by study participants, other support programs or approaches should be considered.

2. Adults and YAs Identify as Different Kinds of Smokers

For the most part, older adult participants identified as "regular smokers" interested in finding cessation methods that worked for them whereas most YAs in the YA sub-study identified as intermittent smokers. Even YAs who were regular smokers described their desire to quit in the future and not in the near future, after a life milestone like starting a family. In fact, some even said that they currently like smoking and do not see a reason to quit. As a result, these two groups have different attitudes towards smoking and quitting, and should be addressed in different ways to maximize reach and impact.

3. Unique YA Peer Crowds Have Different Tobacco Use Trends

While the majority of YA participants smoked cigarettes, they also mentioned using e-cigarettes, hookah, chew (though infrequently), and roll your own tobacco as alternatives. YA participants identified members of the punk scene, hipsters, and townies as regular smokers. Participants named varying tobacco products across peer crowds, including Newports for "gangsters," roll your own (or "rollies") among "artsy kids," and Marlboros for townies. Since YAs see smoking as a social behavior, differences between these unique peer crowds should be considered when developing YA tobacco cessation messages.

Objective 2: Identify motivations for starting and continuing to smoke.

4. Social Network Plays Key Role in Tobacco Use

Focus group participants in both the overall study and YA sub-study perceived that the majority of people in their social network smoked. While it is not reflective of the 20.2% adult prevalence rate in VT, their perceptions indicate their day-to-day reality, which makes it harder for them to quit since they are surrounded by people who smoke. YA participants, in particular, cited smoking as way to socialize at bars and meet new people. Older adults described a lack of support for quitting smoking in their social group, making it even harder for them when they made quit attempts.

5. Smoking Is Believed to Relieve Stress

Participants often cited smoking as a coping mechanism to deal with their daily stressors such as financial issues, relationship issues, or job-related issues, among others. Many also described stress as the trigger that caused past quit attempts to fail. It is unclear whether participants related this stress-reliever quality of smoking with the fact that they are physiologically addicted to nicotine.

Objective 3: Identify barriers and motivations to quitting smoking

6. YAs Have Different Quitting Priorities Compared to Adults

Unlike adults in the overall study participants, YAs described themselves as intermittent smokers who smoked with friends or when they were drinking. Compared to adult participants, YA participants expressed a much lower desire to quit smoking. Those who had attempted to quit in the past described the process as unchallenging, and were confident in their ability to quit if they ever wanted to. Participants did not see the immediate need to quit, describing their future intentions to quit for when they had kids or when they were older. One participant even expressed that she believed her lungs were repairing the damage smoking was causing. In all, YA participants did not believe that they were addicted to tobacco, identifying as social smokers who therefore had no need to quit. Even some regular smokers believed their addiction was easy to overcome. As a result of these attitudes, cessation in this age group is likely to require different strategies than best practices adult tobacco cessation.

7. Quit Attempts Are Not Based on Quit Plans

When participants describe their various quit attempts, none had a quit plan. While a variety of approaches are utilized from cold turkey to NRT and e-cigs, participants seem to lack a plan to avoid or address triggers that are inevitable in any quit effort. This may contribute to the fact that many participants relapse and consequently lose confidence in their ability to actually quit permanently when in fact they are simply not as well prepared as they could be.

8. Failed Quit Attempts Frequently Resulted in Reduced Perception of Self-Efficacy

Participants who have attempted to quit in the past recognize the challenges associated with quitting. With each failed attempt, they increasingly lost faith in themselves and their ability to quit. This is important to address because if they do not believe they can quit, they are less likely to try to quit again. As such, prevention efforts should consider comprehensive strategies that effectively reach out to tobacco users, motivates them to quit, encourages repeat attempts for those who have already tried, and then provides them with the necessary resources to increase chances of success.

9. Financial Reasons & Family are Strong Motivators for Adults to Quit Tobacco Use

Participants recognize that a significant amount of money is required to support their tobacco use. Within low-income populations, the high cost of cigarettes is a motivation to quit. Additionally, participants expressed concern about exposing their children to secondhand smoke and negative role modeling, citing that they smoke outside of the house and/or car so as to keep their children safe. While adults may be skeptical about having serious health issues due to tobacco use, they seem to be more open to considering this possibility of the impact it would have on their children and loved ones if they do get diagnosed with a disease caused by tobacco use.

Objective 4: Identify the best communication channels to reach current smokers

10. Internet Access is Pervasive & Readily Available

The majority of participants reported having Internet access on their phones and personal computers. Participants were familiar with Facebook, and many were comfortable “sharing” or “liking” content on the social media site. YouTube was also widely used by participants and described fondly. Even homeless participants described accessing Facebook at local libraries and their friends’ homes. Based on these findings, Internet-based ads or programs seem to be a better way to reach out to this population than mass media.

Objective 5: Identify the best messages to decrease smoking prevalence and increase quit attempts

11. Quitline is Negatively Perceived

While participants were aware of the Quitline, few were aware or interested in the resources available from the service. Members of each group discussed resistance to calling the Quitline because they did not want to be ‘lectured’ on the health effects of smoking that they were already aware of. Adult participants who had called the Quitline described their experience by lamenting about the length of the process and the ineffectiveness of the counselors. Although participants were cynical about the effectiveness of the Quitline and had a low sense of self-efficacy when it came to cessation, many expressed a continued desire to quit. Regardless of the negative perception of the Quitline, there is a continued need for quit resources and quit

plan facilitation among adults. None of the participants mentioned other online or in-person cessation resources available from the Vermont Quit Network. It seems that participants would benefit more from in-person cessation support efforts.

12. Urgency and Self-Efficacy Needs to Be Present in All Ads

Participants in both the overall study and the YA sub-study had intentions to quit smoking eventually, but many were complacent about the immediacy with which they should quit, even when presented with the immediate benefits of cessation. Even participants who had experienced the negative health effects of smoking were not in a hurry to quit. Although various messaging mediums address issues of urgency and self-efficacy effectively, it is difficult to create advertisements that address both concurrently. For instance, testimonial ads, featuring smokers or family members describing the effect of tobacco use of their lives, create urgency but not self-efficacy. Furthermore, "how-to-quit" ads show smokers methods of cessation, creating self-efficacy but not urgency. As such, both the urgency and self-efficacy components should be properly highlighted in the all communication efforts.

13. Adults Favor Serious, Interesting, Thought-Provoking, and Emotional Ads

Ads targeting adults must include message characteristics and topics that have been found effective among adults, particularly those who identify as regular smokers. Adults believed that ads that included a serious tone, interesting, or emotional content would be more effective in convincing smokers to quit. Topics that participants deemed effective include the health effects of smoking on adults and children. Participants did not require health information to be novel. Participants positively evaluated content that was thought-provoking, emotionally affective, serious, or interesting. Ratings of effectiveness in ads decreased with high levels of humor, whereas likeability, relatability, creativity, and new information were unrelated to effectiveness.

14. YAs Value Novel and Creative Ad Content

YA participants evaluated ad effectiveness differently than their older adult counterparts. YAs, who generally identify as intermittent smokers, require different message characteristics and topics in anti-tobacco advertising. Although YAs agreed that smoking around children was unsafe, they did not relate as much to ads featuring the effects of smoking on one's own children (NYC Health's "Abandoned Child"). YAs were critical of the depictions of older adults who continued using tobacco even while they were suffering from the severe health repercussions of smoking (CDC's "Shawn Tips" and "Terrie Tips"). YAs value novel and creative ad content that deviates from traditional tobacco control messaging. For example, they responded well to Commune brand content that touched upon tobacco industry deception, health messaging that addressed impotence, and compared nicotine to crack.

15. Statistics Do Not Work Well

Regardless of age, few participants acknowledged the immediacy or the probability of developing a smoking-related disease. Moreover, participants had a hard time accepting statistics because they have too many personal experiences that defy statistics. Consistent with the positive responses to the CDC's Tips campaign, the health effects of tobacco use need to be depicted by a real person in a testimonial format rather than presented as a statistic in order for the message to be effectively processed by the audience.

Recommendations

VT has the unique challenge of further reducing the state's adult tobacco prevalence to be below the national average. This study was designed to provide insights from 18 – 50 year-old adults tobacco users, with a sub-study to focus on YAs to better inform tobacco cessation efforts. The following recommendations are based on the findings of this research project and reflect the resources we believe are currently available in the state's tobacco prevention efforts.

1. Produce local testimonials about tobacco health effects featuring family members

In order to show adults the urgency with which they should quit, VDH should produce local testimonials about the effects of tobacco use. To create emotionally appealing and serious messaging, testimonials should ideally feature non-smoking family members discussing the impact of smoking on their lives in addition to the smoker describing those health effects on his or her own life. The appearance of children describing their well being or their future can be especially effective, helping smokers conclude that the time to quit is now. In addition, multiple testimonials should cover a range of tobacco use levels (social, intermittent, chain smoker, etc.) and types of tobacco products to ensure that all tobacco users are addressed. Tobacco use levels, in particular, should be displayed to show smokers that both low and high levels of smoking could lead to life-threatening diseases.

2. Produce "how-to-quit" ads to increase self-efficacy to quit

In order to complement the urgency created by testimonial ads, additional messaging depicting how-to-quit can show smokers successful cessation methods and ultimately increase self-efficacy for quitting. These ads should highlight the fact that most people fail to quit multiple times before they are successful to encourage adults to try again. In addition, featuring strategies proven to increase quit success, such as developing a quit plan, can help smokers better prepare for their next quit attempt. However, these ads should only be produced and aired alongside ads that establish the urgency to quit. In fact, the how-to-quit ad could even begin with a clip from the urgency to quit ads to directly connect the two messages. By having both urgency and self-efficacy components in all messages, VDH efforts will be more successful in reducing overall adult tobacco prevalence.

3. Increase branding and awareness of local, personal quit resources.

Adult participants did not have positive opinions on Quitline, even if they have never personally called. Rather than using resources to try to change their opinions of the Quitline, resources may be better allocated to support quit resources that adults are more open to trying and are already available at the local level. Improving the branding of in-person cessation and allocating some marketing resources to promoting these local, personal quit resources will better connect those who want to quit with what is already available in their community rather than asking them to call the Quitline and talk to a stranger with whom they will never meet. In-person cessation support seems more likely to result in long-term behavior change. It is true

that the cost of providing in-person cessation is more expensive that telephone cessation. However, when the cost of convincing an individual to use each service is considered, it is likely that telephone-based cessation and in-person cessation have comparable total costs (service plus advertising).

Improved marketing of these services should include statewide branding of local quit counselors to increase program recognition and legitimacy. Examples from the commercial world, such as Best Buy's Geek Squad Tech Support or Apple's Genius Bar Expert, demonstrate how a local, human-driven service can be branded in a way that establishes a positive expectation in an area that is usually associated with frustration and agony (computer tech support). If adults enter cessation services with a positive expectation, they are more likely to succeed. In addition, a single, statewide brand would allow equity earned by each positive encounter in different parts of the state to accumulate, and spread program awareness as well as positive expectations. In addition, physicians can also be included as a target audience to be trained on the cessation counselor brand to ensure consistent messaging in both advertising and doctors' offices.

Branding and advertising are not the only strategies that would increase use of local cessation services. Counselors in local programs could also be incentivized to increase their outreach and impact. This is a common tactic used in commercial marketing when services are provided by individuals. Small incentives and/or recognition could significantly increase the number of smokers each counselor is able to reach. In addition, if long-term quit status of participants could be independently verified, rewarding counselors for long-term quit incidents could also increase the quality of the service provided. In fact, these tactics would likely turn tobacco cessation counselors into vocal advocates for tobacco-free lifestyles in their communities. Since many Vermont communities are tightknit, this could lead to entire communities knowing who their counselor is and encouraging each other to join the program.

4. YA who identify as social smokers require tailored cessation programming

The majority of YA smokers are not ready to quit, describing themselves as intermittent or social smokers. Bars, nightclubs, and alcohol play a major role in YA tobacco use and are part of the reason that intermittent use begins. Across the US, there is a prevailing misperception especially among YA that nondaily or "social smoking," defined as occasional tobacco use among friends or when drinking alcohol, is less addictive than smoking regularly (Schane, Glantz, & Ling, 2009). Because of the importance of alcohol in YA tobacco use in VT, we recommend the implementation of Commune, an existing tobacco prevention program in San Diego that targets the high-risk Hipster subculture, which tested well with local YAs. Commune is a bar/club-based strategy that focuses on reducing the social acceptability of smoking in the nightlife community through bar-based quit groups. This strategy includes messages that appeal to YAs, highlighting the social consequences and short-term health effects of smoking.

5. Promote messages that reinforce the idea that cessation is not an all-or-nothing process

Adults who had attempted to quit before had a low sense of self-efficacy about their ability to quit effectively. Most described the process of quitting as an "all-or-nothing process." Adults described several barriers and pitfalls in their past cessation attempts, including stress and smoking among friends, family, and partners. Participants were also interested in quitting because of the cost of smoking. Ads with messages that describe cessation as a long-term process and that they should "keep trying" can give adults the courage to continue trying to quit, even in the face of adversity. These messages can also encourage smokers with the short-term gains during cessation, such as the incremental increases in savings or health gains even after one hour of cessation. As previously stated, however, these messages should be complemented with testimonial ads that increase the urgency to quit. Ongoing, consistent messages that maintain an urgency to quit are the foundation for other messages, such as "how-to-quit" or "keeping trying", to be successful.

Appendix

Thinking Big… A Recommendation For Future Tobacco Control Funding

In the Recommendations section, we focused on recommendations that we believe are possible with current funding levels. However, this study led us to one additional recommendation that likely does not fit in currently available funding, but that might be worthy of future grant funding from federal or private sources.

This study was conducted concurrent to a study on adult obesity in VT (findings reported in a separate report). Interestingly, a cessation counselor at one of the focus group locations was able to recruit participants who qualify for both tobacco and obesity focus groups, implying significant comorbidities between the two health issues. Through discussion with this counselor, we learned that often times, cessation counselors refer adults to other preventative health programs and other resources, such as weight loss, counseling, drug treatment, low-income support, or even domestic violence assistance. These referrals were not part of an official program, but rather each counselor's own sense of responsibility for the individuals he or she is serving.

Through our discussions with low-income tobacco users, we found that most of them had many different health issues, including chronic disease, drug abuse, domestic violence, obesity, and mental health issues, amongst others. These issues often prevented them from trying to quit smoking or from staying tobacco-free. However, when participants in both this study and the obesity study discussed these issues, few were actively seeking help to resolve or improve their health situation, believing that it was a personal issue they needed to resolve on their own. Few were interested in seeking help for these other health problems, as many of these services were stigmatized and believed to be for those who have hit "rock bottom." Some were even in denial that these health problems even existed. Despite a myriad of health issues, these adults responded positively to the idea of visiting a local cessation counselor.

While not the focus of either study, we observed the co-occurring health problems that many low-income tobacco users face and their reluctance to seek help to address them. Cessation counselors, however, were very aware of this reality within the population that they serve. This led us to pose the following question, "Could cessation counselors be trained to be gateways to broader preventative health services, and could the health system support this process?"

Turning once again to the commercial world, we could learn from common sales practices to take advantage of opportunities just like this one. Upselling is one of these strategies, defined by Wikipedia as "a sales technique whereby a seller induces the customer to purchase more expensive items, upgrades, or other add-ons in an attempt to make a more profitable sale." RadioShack is one of the most adept users of this strategy. Many people have likely found themselves asking how RadioShack can survive selling $2 batteries. They survive because of an extremely sophisticated upselling strategy that ensures many $2 battery customers leave with new cell phones or TVs. If VDH were RadioShack, then local tobacco

cessation could be its $2 batteries, and drug treatment, weight loss programs, and women's support groups could be its cell phones and TVs.

Cessation counselors provide a preventative health service that is perceived by high-risk individuals as friendly, personalized, and helpful. Some of the stigmas associated with other preventative health services are not associated with tobacco cessation. While this observation is anecdotal and was not the focus of this study, we see a tremendous opportunity if these observations are widespread. VDH could improve the overall health of a high-risk adult population simply by providing more in-person cessation services and building a system of "preventative health upselling."

First, cessation counselors would have to be trained in a comprehensive set of health issues and how to work with individuals with comorbidities. On paper, cessation counselors would actually be highly trained social workers, but their participants would perceive them simply as cessation counselors. Then, preventative health programs would have to be better organized and branded. This is necessary to facilitate the transition from cessation to other programs, allowing counselors to show their participants that these other programs are "just like this cessation program." Next, to solidify the connection, cessation counselors should be trained to build cognitive connections between cessation and these other health issues. For example, explaining to an obese smoker that exercise will help him or her quit and then connecting that smoker with an exercise program allows the cessation counselor to regularly check-in on other program participation and continue to serve as the individual's overall preventative health point of contact. These services could all be included as part of a comprehensive "quit strategy" that is customized for that individual based on the urgency of each health issue. In addition, by connecting these issues, stigmas are minimized because the obese individual can say to him or herself that they are not exercising because they have a weight problem (something many of overweight adults are uncomfortable with), but instead because they are trying to quit smoking, which is generally not stigmatized. Over time, low-income individuals would come to see their cessation counselor as a health resource, and cessation counselors could stay involved after a person has successfully quit as part of a long-term quit strategy.

This concept could justify significant increases in the funding for both local cessation services as well as marketing of these services, as long as a comprehensive "upselling" strategy and infrastructure were in place. Through this program, VDH could ensure that each cessation participant receives a full portfolio of preventative health services. Revisiting the RadioShack example, it would make sense to increase spending on battery advertisements if the company knew that every five battery purchases leads to a cell phone sale. Similarly, increases in local cessation services and promotions could also be justified if we know that every three new cessation participants led to one new obesity prevention participant, or a women's health participant (these are hypothetical numbers).

Finally, this approach could create long-term relationships between preventative health professionals and high-risk individuals. Since most adults do not visit their doctors until something is wrong, VDH could ensure

that preventative health is delivered through a novel channel. “Preventative Health Upselling” could change the way all preventative health programs are marketed by focusing marketing dollars on those with the lowest barriers to entry (tobacco cessation) and training counselors to increase participation in those with the highest barriers to entry (drug treatment, domestic violence, etc.). While outsiders might wonder why so much emphasis is placed on tobacco cessation, a behind-the-scenes look would show a carefully crafted network of counselors and comprehensive preventative health programs that result in healthier Vermonters.

References

2008 PHS Guideline Update Panel, Liaisons, and Staff. (2008). Treating tobacco use and dependence: 2008 update U.S. Public Health Service Clinical Practice Guideline executive summary. Respiratory Care, 53(9), 1217–1222.

Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcomes. Journal of Consulting and Clinical Psychology, 71(5), 862–878. doi:10.1037/0022-006X.71.5.862

An, L. C., Zhu, S.-H., Nelson, D. B., Arikian, N. J., Nugent, S., Partin, M. R., & Joseph, A. M. (2006). Benefits of telephone care over primary care for smoking cessation: A randomized trial. Archives of Internal Medicine, 166(5), 536–542. doi:10.1001/archinte.166.5.536

Bala, M.M, Strzeszynski, L., & Cahill, K. (2008). Mass media interventions for smoking cessation in adults. The Cochrane Database of Systematic Reviews, (1), CD004704. doi:10.1002/14651858.CD004704.pub2

Bala, M. M., Strzeszynski, L., Topor-Madry, R., & Cahill, K. (2013). Mass media interventions for smoking cessation in adults. The Cochrane Database of Systematic Reviews, 6, CD004704. doi:10.1002/14651858.CD004704.pub3

Biener, L., McCallum-Keeler, G., & Nyman, A. L. (2000). Adults' response to Massachusetts's anti-tobacco television advertisements: Impact of viewer and advertisement characteristics. Tobacco Control, 9(4), 401–407.

Borrelli, B., Spring, B., Niaura, R., Hitsman, B., & Papandonatos, G. (2001). Influences of gender and weight gain on short-term relapse to smoking in a cessation trial. Journal of Consulting and Clinical Psychology, 69(3), 511–515. doi:10.1037/0022-006X.69.3.511

Carpenter, M. J., Hughes, J. R., Solomon, L. J., & Callas, P. W. (2004). Both smoking reduction with Nicotine replacement therapy and motivational advice increase future cessation among smokers unmotivated to quit. Journal of Consulting and Clinical Psychology, 72(3), 371–381.doi:10.1037/0022-006X.72.3.371

Centers for Disease Control and Prevention. (2007). Best practices for comprehensive tobacco control programs—2007. Atlanta, GA: US Department of Health and Human Services, CDC. Available at www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm.

Centers for Disease Control and Prevention. (2011a). Tobacco state highlights: Vermont. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Centers for Disease Control and Prevention (CDC). (2011b). Quitting smoking among adults - United States, 2001-2010. MMWR. Morbidity and Mortality Weekly Report, 60(44), 1513-1519.

Centers for Disease Control and Prevention (CDC). (2012). Increases in Quitline calls and smoking cessation website visitors during a national tobacco education campaign--March 19-June 10, 2012. MMWR. Morbidity and Mortality Weekly Report, 61(34), 667–670.

Community Preventive Services Task Force. (1999). Guide to Community Preventive Services. Reducing tobacco use initiation: Mass media campaigns when combined with other interventions. Retrieved from www.thecommunityguide.org/tobacco/initiation/massmediaeducation.html.

Davis, K. C., Farrelly, M. C., Duke, J., Kelly, L., & Willett, J. (2012). Antismoking media campaign and smoking cessation outcomes, New York State, 2003-2009. Preventing Chronic Disease, 9, E40.

Davis, K. C., Nonnemaker, J. M., & Farrelly, M. C. (2007). Association between national smoking prevention campaigns and perceived smoking prevalence among youth in the United States. The Journal of Adolescent Health, 41(5), 430–436. doi:10.1016/j.jadohealth.2007.05.008

Durkin, S.J., Brennan, E., & Wakefield, M. (2012). Mass media campaigns to promote smoking cessation among adults: An integrative review. Tobacco Control, 21(2), 127–138. doi:10.1136/tobaccocontrol-2011-050345

Durkin, S. J., & Biener, L (2009). Effects of different types of antismoking ads on reducing disparities in smoking cessation among socioeconomic subgroups. American Journal of Public Health, 99(12), 2217–2223. doi:10.2105/AJPH.2009.161638

Hatsukami, D., Mooney, M., Murphy, S., LeSage, M., Babb, D., & Hecht, S. (2007). Effects of high dose transdermal nicotine replacement in cigarette smokers. Pharmacology, Biochemistry, and Behavior, 86(1), 132–139. doi:10.1016/j.pbb.2006.12.017

Herrera, N., Franco, R., Herrera, L., Partidas, A., Rolando, R., & Fagerström, K. O. (1995). Nicotine gum, 2 and 4 mg, for nicotine dependence. A double-blind placebo-controlled trial within a behavior modification support program. Chest, 108(2), 447–451.

Hopkins, D. P., Briss, P. A., Ricard, C. J., Husten, C. G., Carande-Kulis, V. G., Fielding, J. E., … Task Force on Community Preventive Services. (2001). Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. American Journal of Preventive Medicine, 20(Suppl.2), 16–66.

Jarvis, M. J. (1996). The association between having children, family size and smoking cessation in adults. Addiction, 91(3), 427–434.

Kaleta, D., Korytkowski, P., Makowiec-Dąbrowska, T., Usidame, B., Bąk-Romaniszyn, L., & Fronczak, A. (2012). Predictors of long-term smoking cessation: Results from the global adult tobacco survey in Poland (2009-2010). BMC Public Health, 12, 1020.doi:10.1186/1471-2458-12-1020

Kreuter, M. W., Chheda, S. G., & Bull, F. C. (2000). How does physician advice influence patient behavior? Evidence for a priming effect. Archives of Family Medicine, 9(5), 426–433.

Levy, D., de Almeida, L. M., & Szklo, A. (2012). The Brazil SimSmoke policy simulation model: The effect of strong tobacco control policies on smoking prevalence and smoking-attributable deaths in a middle income nation. PLoS Medicine, 9(11), e1001336. doi:10.1371/journal.pmed.1001336

Moran, S., Thorndike, A. N., Armstrong, K., & Rigotti, N. A. (2003). Physicians' missed opportunities to address tobacco use during prenatal care. Nicotine & Tobacco Research, 5(3), 363–368.

Mosbaek, C. H., Austin, D. F., Stark, M. J., & Lambert, L. C. (2007). The association between advertising and calls to a tobacco Quitline. Tobacco Control, 16(Suppl.1), i24–29. doi:10.1136/tc.2007.020222

National Cancer Institute (NCI). (1994). Tobacco and the Clinician: Interventions for Medical and Dental Practice. Monograph No. 5. NIH Publication No. 94-3696.
National Cancer Institute (NCI). (2008). The Role of the Media in Promoting and Reducing Tobacco use. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub No. 97-6242.
Nelson, D. E., Gallogly, M., Pederson, L. L., Barry, M., McGoldrick, D., & Maibach, E. W. (2008). Use of consumer survey data to target cessation messages to smokers through mass media. American Journal of Public Health, 98(3), 536–542. doi:10.2105/AJPH.2006.090340
Niederdeppe, J., Kuang, X., Crock, B., & Skelton, A. (2008). Media campaigns to promote smoking cessation among socioeconomically disadvantaged populations: What do we know, what do we need to learn, and what should we do now? Social Science & Medicine, 67(9), 1343–1355. doi:10.1016/j.socscimed.2008.06.037
Okuyemi, K. S., Nollen, N. L., & Ahluwalia, J. S. (2006). Interventions to facilitate smoking cessation. American Family Physician, 74(2), 262–271.
Ossip-Klein, D. J., & McIntosh, S. (2003). Quitlines in North America: Evidence base and applications. The American Journal of The Medical Sciences, 326(4), 201–205.
Richmond, R. L. (1999). Physicians can make a difference with smokers: Evidence-based clinical approaches. Presentation given during the Symposium on Smoking Cessation at the 29th World Conference of the IUATLD/UICTMR and Global Congress on Lung Health, Bangkok, Thailand, 23-26 November 1998. International Union Against Tuberculosis and Lung Disease. The International Journal of Tuberculosis and Lung Disease: The Official Journal of The International Union Against Tuberculosis and Lung Disease, 3(2), 100–112.
Schane, R. E., Glantz, S. A., & Ling, P. M. (2009). Social smoking: Implications for public health, clinical practice, and intervention research. American Journal of Preventive Medicine, 37(2), 124–131. doi:10.1016/j.amepre.2009.03.020
Schillo, B. A., Mowery, A., Greenseid, L. O., Luxenberg, M. G., Zieffler, A., Christenson, M., & Boyle, R. G. (2011). The relation between media promotions and service volume for a statewide tobacco Quitline and a web-based cessation program. BMC Public Health, 11, 939. doi:10.1186/1471-2458-11-939
Shiffman, S., Dresler, C. M., Hajek, P., Gilburt, S. J. A., Targett, D. A., & Strahs, K. R. (2002). Efficacy of a nicotine lozenge for smoking cessation. Archives of Internal Medicine, 162(11), 1267–1276.
Swartz, S. H., Cowan, T. M., Klayman, J. E., Welton, M. T., & Leonard, B. A. (2005). Use and effectiveness of tobacco telephone counseling and nicotine therapy in Maine. American Journal of Preventive Medicine, 29(4), 288–294. doi:10.1016/j.amepre.2005.06.015
Terry-McElrath, Y., Wakefield, M., Ruel, E., Balch, G. I., Emery, S., Szczypka, G., … Flay, B. (2005). The effect of antismoking advertisement executional characteristics on youth comprehension, appraisal, recall, and engagement. Journal of Health Communication, 10(2), 127–143. doi:10.1080/10810730590915100
The Vermont Tobacco Evaluation and Review Board (VTERB). (2013). Annual Report. Retrieved from http://humanservices.vermont.gov/boards-committees/tobacco-board/vterb-2013-annual-report-final-01-15-2013/view
United States Census Bureau. (2012a). State and County QuickFacts: Barre. Retrieved from http://quickfacts.census.gov/qfd/states/50/5003175.html
United States Census Bureau. (2012b). State and County QuickFacts: Bennington. Retrieved from http://quickfacts.census.gov/qfd/states//50/5004750.html
United States Census Bureau. (2012c). State and County QuickFacts: Brattleboro. Retrieved from http://quickfacts.census.gov/qfd/states/50/5007975.html
United States Census Bureau. (2012d). State and County QuickFacts: St. Johnsbury. Retrieved from http://quickfacts.census.gov/qfd/states/50/5062125.html
Vallone, D. M., Niederdeppe, J., Richardson, A. K., Patwardhan, P., Niaura, R., & Cullen, J. (2011). A national mass media smoking cessation campaign: Effects by race/ethnicity and education. American Journal of Health Promotion, 25(Suppl.5), S38–50.doi:10.4278/ajhp.100617-QUAN-201
Wakefield, M. A., Durkin, S., Spittal, M. J., Siahpush, M., Scollo, M., Simpson, J. A., … Hill, D. (2008). Impact of tobacco control policies and mass media campaigns on monthly adult smoking prevalence. American Journal of Public Health, 98(8), 1443–1450. doi:10.2105/AJPH.2007.128991
Whitlock, E. P., Orleans, C. T., Pender, N., & Allan, J. (2002). Evaluating primary care behavioral counseling interventions: An evidence-based approach. American Journal of Preventive Medicine, 22(4), 267–284.
Wilson, L. M., Avila Tang, E., Chander, G., Hutton, H. E., Odelola, O. A., Elf, J. L., … Apelberg, B. J. (2012). Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: A systematic review. Journal of Environmental and Public Health, 2012, 961724. doi:10.1155/2012/961724
Zhu, S. H., Anderson, C. M., Johnson, C. E., Tedeschi, G., & Roeseler, A. (2000). A centralised telephone service for tobacco cessation: The California experience. Tobacco Control, 9(Suppl.2), II48–55.
Zhu, S.H., Gardiner, P., Cummins, S., Anderson, C., Wong, S., Cowling, D., & Gamst, A. (2011). Quitline utilization rates of African-American and white smokers: The California experience. American Journal of Health Promotion, 25(Suppl.2), S51–58. doi:10.4278/ajhp.100611-QUAN-185