Supporting Statement: Part B 0910-0810

2019 Electronic Nicotine Delivery Systems Formative Data Collection to Inform Experimenter and Established User Definitions

Statistical Methods

The one-time actual burden figures are listed in Exhibits 1 & 2, Part A.

1. Respondent Universe and Sampling Methods

The respondent universe for this study is youth aged 13-17 years who have ever used an Electronic Nicotine Delivery System (ENDS) product. Study participants will be recruited from a national online panel of adults managed by Lightspeed. Adolescent children of adult panel participants will be invited to participate in the study through an email invitation to their parents asking for their consent to solicit their child's opinions. Potential participants will be screened (via a screener questionnaire linked from the email invitation) to ensure that they meet the study eligibility criteria (i.e., aged between 13-17 years and has ever used ENDS), and those qualifying for the study will proceed to the questionnaire. We intend for up to 1,600 respondents to complete the questionnaire.

As this study is considered part of formative research for campaign development and planning, these methods are not intended to generate nationally representative samples or precise estimates of population parameters. Generating a representative sample of the size necessary for this study, using Random Digital Dialing or other similar method, would be cost prohibitive. The study will use convenience samples rather than probability samples.

The sample drawn here is designed primarily to help CTP identify and characterize their target audiences to inform communication strategies. Specifically, the aims of this study are to:

- Assess tobacco-related Knowledge, Attitudes, and Beliefs (KABs), social context of ENDS use, tobacco dependence, tobacco-related advertising and countermarketing exposure, and use and correlates of various tobacco products among a sample of youth aged 13-17 who have ever used ENDS.
- Use measures of ENDS use to construct and then test which experimental use definitions are most optimal in discriminating between experimental and more established ENDS user groups on key attitudinal and behavioral constructs.

The panel provider, Lightspeed, has a proven and demonstrated ability to orchestrate and support the sampling plan specifications of this study. To obtain a final sample of up to 1,600 enrolled participants, we estimate that we will need to obtain parental

permission for up to 8,888 parents and screen up to 6,222 potential respondents. This estimate is based on the capabilities of the panel provider and previous research conducted within this target audience using similar methodologies.

2. Procedures for the Collection of Information

For the information collection, Lightspeed will send email invitations to the target audiences using their market research database panel. Adult panel members, who have indicated in their panel profile that they have a child in the eligible age range, will be contacted. Parents or guardians will be asked to provide permission before allowing their child to participate. Once a panel member or child of a panel member enters the secure web site, they will be presented with a brief introduction informing the participant of the confidential and voluntary nature of the study and will be asked to provide assent to participate. Next, participants will complete a brief screener to determine eligibility based on the study inclusion criteria (i.e. is aged 13-17 and has ever used an ENDS device such as an e-cigarette).

Those respondents who are determined to be eligible to participate will complete a one-time online survey with questions assessing ENDS use and its social context, measures of tobacco dependence, tobacco-related KABs, advertising and countermarketing exposure, a sensation-seeking scale, measures of other tobacco product use, and demographics. The study does not include any experimental components.

3. <u>Methods to Maximize Response Rates and Deal with Nonresponse</u>

Several features of this study have been designed to maximize participant response rate and questionnaire completion.

- Reminders: A series of reminders will be utilized to minimize drop off. The
 reminder email is identical to the recruitment email, see Attachment C.
 Participants should only read the email once. Parents of potential youth
 participants will receive up to two e-mail reminders that include a unique link to
 the survey to enable participants to easily complete the questionnaire. These
 reminders are intended to decrease non-response by ensuring participants have
 convenient access to complete the questionnaire, and by reminding participants
 who do not initially complete the questionnaire to complete it before the
 conclusion of data collection.
- Mobile Phone Responsiveness: Both the screener and questionnaire will be optimized for performance on a mobile phone, in addition to other electronic devices such as tablets and laptops. This is especially important as 95% of U.S. teens own or have access to a smartphone and 97% access the internet using mobile devices (Anderson & Jiang, 2018). Based on this information, we expect that many youth will attempt to complete the screener and questionnaire on a mobile phone. Ensuring that the surveys are optimized for mobile phone performance will reduce non-response and drop-off due to technical issues related to compatibility of the instruments with the mobile phone format.

• Token of Appreciation: In this study, we will use a token of appreciation in the form of points (called "Lifepoints") that are accrued and redeemable with the panel company for cash or other rewards. Lightspeed panelists will receive 100 Lifepoints, worth \$2, for their child's completion of a survey, which will help equalize the burden placed on participants with respect to their time and reduce overall burden by increasing questionnaire completion rates among participants who qualify via the screener. As participants often have competing demands for their time, a token of appreciation for participation in research is warranted. The use of a token of appreciation treats participants justly and with respect by recognizing and acknowledging the effort participants expend to participate. Numerous empirical studies have also shown that a token of appreciation can significantly increase response rates in cross-sectional studies and reduce attrition in longitudinal studies. (e.g., Abreu & Winters, 1999; Castiglioni, Pforr, & Krieger, 2008; Shettle & Mooney, 1999; Singer, 2002).

4. Test of Procedures or Methods to be Undertaken

The evaluation contractor RTI will conduct rigorous internal testing of the online survey instrument prior to its fielding. Evaluators will review the online test version of the instrument that we will use to verify that instrument skip patterns are functioning properly, delivery of campaign media materials is working properly, and that all survey questions are worded correctly and are in accordance with the instrument approved by OMB.

5. <u>Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data</u>

The following individuals inside the agency have been consulted on questionnaire development and data collection implementation.

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