

associations of (1) perceived e-cigarette addictiveness and (2) nicotine addiction concern on intending to quit smoking cigarettes in the next six months, controlling for harm perceptions, tobacco product use, tobacco dependence, and demographics. Our analytic sample was restricted to current cigarette smokers. RESULTS: Among current smokers, a greater proportion of those reporting that cigarettes were more addictive than e-cigarettes intended to quit smoking cigarettes (84.5%; 95% CI: 70.9, 92.4) compared to those who believed the products were similarly addictive (45.3%; 95% CI: 26.2, 65.9) or those that answered "don't know" about either product (65.3%; 95% CI: 38.4, 85.1) ( $p=0.04$ ). A greater proportion of current smokers concerned about nicotine addiction intended to quit (74.8%; 95% CI: 62.5, 84.1) compared to those that were not concerned (43.8%; 95% CI: 24.5, 65.2) or that answered "don't know" (31.9%; 95% CI: 0.8, 96.3) ( $p=0.02$ ). Only the relationship between concern for nicotine and quit intentions remained after adjusting for covariates. Smokers concerned about nicotine had greater odds of quit intention compared to those not concerned (AOR: 7.02; 95% CI: 1.23, 40.2;  $p=0.03$ ). CONCLUSIONS: Similar to prior research on perceptions of harm, perceptions of the addictiveness of e-cigarettes relative to cigarettes was not associated with quit intentions. However, general concern for addiction to nicotine may influence smokers' intentions to quit cigarettes.

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CORRESPONDING AUTHOR: Elisabeth Donaldson, US Food and Drug Administration, MD, USA, Elisabeth.Donaldson@fda.hhs.gov

## POS2-5 HIGHER LEVELS OF TOXICANT EXPOSURE IN CIGARETTE SMOKERS OF DISCOUNT COMPARED TO PREMIUM BRANDS

Emily Wasserman, Samantha Reilly\*, Reema Goel, Jonathan Foulds, John Richie, Joshua Muscat, Pennsylvania State University, PA, USA

BACKGROUND: Increased cigarette costs have inadvertently strengthened the appeal of discounted brands to price-sensitive users. While smokers perceive discounted brands as having poorer quality, little is known about their delivery of toxic tobacco smoke constituents compared to premium-branded tobacco products. METHODS: We investigated the differences between discount and premium brand smokers using the National Health and Nutrition Examination Survey (NHANES) 2011-2012 Special Smoker Sample. Discounted and premium cigarette brands were defined by their marketing. Our analyses focused on demographic differences among these two types of cigarette smokers, and 11 biomarkers of harmful and potentially harmful constituents (HPHCs) listed by the FDA. All urinary biomarker concentrations were corrected for dilution by creatinine. Data were analyzed using linear regression models adjusting for potential confounders. All analyses accounted for the complex survey sampling weights and sampling design. RESULTS: A total of 990 non-tobacco users and 594 recent cigarette smokers were eligible for analysis, of which 142 (24.38% weighted) smoked discount brand cigarettes and 452 (75.62% weighted) smoked premium. Discount brand smokers had significantly higher levels of 9 of the 11 biomarkers examined, including NNAL, compared to premium brand smokers. CONCLUSIONS: These findings suggest that discount cigarette use may be associated with higher exposure to several carcinogenic and toxic HPHCs. These results may have important regulatory implications for product standards, as higher exposures could lead to a greater degree of harm. SIGNIFICANCE: The higher observed BOE levels in discounted brand smokers are suggestive of an increase in potential harm, relative to premium brand smokers. Our results provide a platform for the FDA to begin establishing product standards that could help lower BOEs and reduce the potential harm that all smokers are at risk for when smoking cigarettes.

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CORRESPONDING AUTHOR: Samantha Reilly, Pennsylvania State University, PA, USA, sreilly@phs.psu.edu

## POS2-6 POPULATION ASSESSMENT OF TOBACCO AND HEALTH (PATH) STUDY BIOSPECIMEN COLLECTION AND BIOMARKER ANALYSES

A. Yesy Del Valle-Pinero<sup>1\*</sup>, Heather Kimmel<sup>2</sup>, Charles Lawrence<sup>3</sup>, Benjamin Blount<sup>4</sup>, Kathryn Edwards<sup>3</sup>, Cindy Chang<sup>1</sup>, Nicolette Borek<sup>1</sup>, Marushka Silveira<sup>2</sup>, Kara Duffy<sup>1</sup>, Andrew Hyland<sup>5</sup>, Dana van Bemmel<sup>1</sup>, <sup>1</sup>Center for Tobacco Products, U.S. Food and Drug Administration, MD, USA, <sup>2</sup>National Institute of Drug Abuse, National Institutes of Health, MD, USA, <sup>3</sup>Westat, MD, USA, <sup>4</sup>Centers for Disease Control and Prevention, GA, USA, <sup>5</sup>Roswell Park Cancer Institute, NY, USA

BACKGROUND: The Population Assessment of Tobacco and Health (PATH) Study is a longitudinal cohort study initiated in 2011 with the goal of comprehensively assessing tobacco use behavior, attitudes, beliefs, exposures and tobacco-related health outcomes in order to inform FDA-CTP regulatory research and activities. Biomarker data on tobacco exposures for non-cigarette tobacco products are limited in the current literature. The biospecimens collected during the PATH Study provide a valuable resource for characterizing tobacco exposures across different types of products. METHODS: Wave 1 (baseline, W1) was fielded between September 2013 and December 2014 and included 13,651 youth (12-17yr) and 32,320 adults ( $\geq 18$ yr). For W1, a subgroup of consenting adults provided up to three biospecimens. Urine biospecimens were collected by field interviewers and blood biospecimens by a phlebotomist. Each biospecimen was shipped overnight to the PATH Study biorepository for processing and long-term storage. Analyses were performed on 11,522 W1 urine specimens and 7,159 blood specimens selected based on tobacco use status, including never, current, and former users of cigarettes, smokeless tobacco including snus pouches, traditional cigars, cigarillos, filtered cigars, pipe tobacco, hookah, and electronic cigarettes. Biomarkers associated with tobacco exposure and potential harm measured included: nicotine metabolites, tobacco specific nitrosamines, polycyclic aromatic hydrocarbons, volatile organic compounds, heavy metals, and inflammatory and oxidative stress markers. Access to the PATH Study Biomarker Restricted-Use Files data is available via the National Addiction & HIV Data Archive Program (NAHDAP) site at: <https://doi.org/10.3886/ICPSR36840> Regulatory Significance: PATH Study data, from both the questionnaire and the biomarker analyses, will help to better understand a broad range of research questions, such as changes in tobacco exposure over time, and provide scientific evidence to inform FDA's regulatory mission under the Family Smoking Prevention and Tobacco Control Act (2009).

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CORRESPONDING AUTHOR: A. Yesy Del Valle-Pinero, Center for Tobacco Products, U.S. Food and Drug Administration, MD, USA, Arseima.DelValle-Pinero@fda.hhs.gov

## POS2-7 CIGARILLO SALES IN LEGALIZED MARIJUANA MARKETS IN THE US

Daniel Giovenco\*, Torra Spillane, Columbia University Mailman School of Public Health, NY, USA

SIGNIFICANCE: Nearly half of marijuana users in the United States also use cigarillos, with many using the products as "blunts" to smoke marijuana. A concern within the tobacco control community is the impact that marijuana legalization may have on tobacco use behaviors, given the high prevalence of co-use between the two products. This study uses regional and national tobacco sales data to characterize the cigarillo marketplace in states with legalized recreational marijuana in 2016. METHODS: Cigarillo sales data from 2016 were obtained from the Nielsen Research Company in the following market regions: Denver, CO; Seattle, WA; Portland, OR; and the overall U.S. Sales data were unavailable in Alaska, the only other state where the sale of recreational marijuana was legal in 2016. Descriptive statistics highlighted differences in the market share of various product features (e.g., flavor, packaging style, brand) between each region and the national marketplace. RESULTS: Product features such as fruit flavors, single sticks, and 2-3 packs were more popular in legal marijuana regions compared to the overall U.S. Black & Mild, a brand not traditionally used for blunts, was the top brand nationally (32.8% of the market share), but Swisher, more commonly used for blunts, was the most popular brand in the three market regions. In Seattle and Portland, for example, over half of all cigarillo sales were for Swisher products (59.1% and 52.1%, respectively). Cigarillo wraps (i.e., no tobacco filler) were particularly common in Denver, constituting 11.4% all cigarillo sales versus 2.8% nationally. Per capita cigarillo sales, however, were considerably lower in regions where marijuana