Longitudinal Associations Between Multiple Tobacco Product Use and Incident Asthma Among US Youth

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Results

Prevalence of Tobacco Use (Wave 1, 2013-14)

Adjusted Hazard Ratios

Background

• Use of non-cigarette tobacco products, including ENDS, have become more common over the last decade
• While the health effects of cigarettes are well-documented, little is known about the effects of ENDS use and dual/poly use

Data

• The Population Assessment of Tobacco and Health (PATH) study Waves 1-5 (including 4.5) (2013-2019)
• Analysis was restricted to youth and aged up young adults who had no history of asthma at baseline and at least one follow-up interview (n=9,140)

Measures

• Past-30-day tobacco product use was classified into the following use categories: 1) non-current, 2) exclusive cigarette, 3) exclusive ENDS, 4) exclusive other combustibles (OC), 5) dual cigarettes & ENDS/dual ENDS & OC (i.e., dual combustibles & ENDS), 6) dual cigarettes & OC, and 7) poly
• The OC category included use of cigars/cigarillos/little filtered cigars, traditional pipe, and/or hookah
• Incident asthma was defined as whether a health professional had diagnosed respondents with asthma in the past year.
• Covariates used in this analysis were age, sex, race/ethnicity, parental education, urbanicity, secondhand smoke exposure, household use of combustible products, and body mass index at baseline

Conclusions

• 574 respondents were diagnosed with asthma over the study period
• Exclusive cigarette use and dual cigarette and OC use were associated with incident asthma
• There were no statistically significant associations between exclusive ENDS and dual/poly use groups with ENDS and incident asthma

Abstract

This research was supported by the National Cancer Institute of the National Institutes of Health (NIH) and FDA Center for Tobacco Products (CTP) under Award Number U54CA229974. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or the Food and Drug Administration.