

**Submission Id: 3666**

**Title**

*Tobacco use and associated protective factors by ethnicity among Asian American adolescents in Minnesota*

**Priority 1 (Research Category)**

Social determinants and vulnerable populations

**Presenters**

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**Abstract**

Context: Asian Americans are a diverse racial group, yet little research has described how adolescent tobacco use varies among Asian ethnic groups and how protective factors for tobacco use among general adolescent populations apply to these groups. Objective: To describe tobacco use patterns and protective factors in a statewide sample of Asian American adolescents by ethnicity. Setting/Dataset: 2019 Minnesota Student Survey. Population Studied: 8th, 9th, and 11th grade Asian Americans in Minnesota (n=10,482). Outcome measures: Dichotomized past 30-day use of cigarettes, cigars, e-cigarettes, hookah, chewing tobacco, dual/poly ( $\geq 2$ ), and any tobacco. Study Design & Analysis: Descriptive statistics examined tobacco use differences by ethnicity. Multivariable logistic regression modelled associations between 6 protective factors (internal developmental assets, positive student-teacher relationships, peer and parent anti-smoking norms, college aspirations, family caring) and e-cigarette use, adjusting for sex, grade, metro residence, and economic hardship. An interaction model (protective factor x ethnicity) assessed differences by ethnicity. Results: Among respondents, 9.0% identified as Indian, 0.3% Burmese, 7.9% Chinese, 2.5% Filipino, 25.0% Hmong, 3.2% Karen, 4.6% Korean, 2.7% Laotian, 8.2% Vietnamese, 7.5% other, 7.5% multiple Asian ethnicities, and 21.6% multi-racial. E-cigarettes were the predominant form of tobacco use across groups. Laotian and multi-racial groups reported the highest e-cigarette use (16.6% and 16.3%), whereas Chinese and Asian Indian groups reported the lowest levels (4.7% and 5.0%). All 6 protective factors were significantly associated with lower odds of e-cigarette use across groups with significant interactions for internal developmental assets and peer anti-smoking norms. Higher developmental asset scores were associated with lower e-cigarette use in Asian Indian, Chinese, Hmong, Vietnamese, and multi-racial respondents. Peer anti-smoking norms were associated with lower e-cigarette use in Asian Indian, Chinese, Hmong, Vietnamese, and other respondents. Conclusions: E-cigarettes are the most prevalent tobacco product used by Asian adolescents in Minnesota. Protective factors from the general population appear to function similarly for these youth. Heterogeneity in e-cigarette use by ethnicity underscores the

importance of disaggregating tobacco use by ethnicity to inform tailored tobacco prevention and control strategies.