HOUSEHOLD HEALTH SURVEY DATA SPOTLIGHT: Lack of a high school diploma and poverty increase the risk for vaping among young adults aged 18-34 in Southeastern Pennsylvania

E-cigarette use can cause severe lung injuries resulting in hospitalization and even death.¹ National data about those most likely to use e-cigarettes exist, but little is known about e-cigarette use within the Southeastern Pennsylvania (SEPA) region (Philadelphia, Bucks, Chester, Delaware, and Montgomery counties). This HOUSEHOLD HEALTH SURVEY DATA SPOTLIGHT examines the factors associated with e-cigarette use among SEPA young adults.

Nationally, e-cigarettes are most frequently used by youth and young adults.¹,² The same has been found in SEPA as an analysis of 2018-2019 PHMC Household Health Survey (HHS) data revealed that young adults aged 18-34 in SEPA were more likely to report having used e-cigarettes in the past month than adults 35 and older (p<.001).
To gain a better understanding of young adults who use e-cigarettes, we took a closer look at the characteristics of this population.

**Which young adults in SEPA used e-cigarettes in the past month?**

- Approximately three in ten young adults without a high school degree (29%) used e-cigarettes compared to 19% of young adults with a high school degree ($p<.01$).
- 26% of poor* young adults used e-cigarettes compared to 16% of young adults who are not poor ($p<.001$).
- One in five young adult men (20%) in SEPA used e-cigarettes compared to 15% of women ($p<.001$).
Geographic variations in e-cigarette use exist within SEPA. A larger percentage of young adults in Bucks (21%) and Chester (21%) counties reported using e-cigarettes than in Philadelphia (17%), Montgomery (16%), or Delaware (13%) counties.

Strategies to prevent initiation of e-cigarette use among young adults are urgently needed, as well as cessation resources to help those who already use e-cigarettes. Understanding the characteristics of this population, including social and behavioral contexts, is critical as policies and interventions are developed to reduce e-cigarette use. As described above, in SEPA, young adults are more likely than all other adults to use e-cigarettes. Continued data collection could help explain whether policy changes and awareness campaigns are changing the prevalence of e-cigarette use among young adults.\(^3\)
*Note: Percent differences were assessed with the chi-square statistic on weight-adjusted data. In this spotlight poverty level was defined using the poverty guidelines set by the U.S. Department of Health and Human Services. Poor adults are those living at or below 100% federal poverty level, and non-poor are those living above 100% federal poverty level. The poverty guidelines are used for administrative purposes (e.g., determine financial eligibility for federal programs). The guidelines, which are updated annually, are based on the family size living in the same household. For example, using the 2018 Federal Poverty Guidelines a household/family of 5 people are considered living below 100% of poverty line if the household/family income is below $29,420. A household/family of 5 people is considered to be at 100-150% of the poverty line if their combined income is between $29,420 and $44,130. For additional information about poverty guidelines see: https://aspe.hhs.gov/poverty-guidelines. Race and ethnicity categories are non-Hispanic or Latino unless otherwise noted. Other includes Biracial or Multiracial, Asian or Pacific Islander, American Indian or Alaska Native, and something else or refused to answer.


The Southeastern Pennsylvania (SEPA) Household Health Survey (HHS), conducted continuously since 1983 by Public Health Management Corporation (PHMC), is a comprehensive health survey of 7,500 households in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties. The survey collects information from residents about their health status, use of health services, access to care, and many other timely health issues. Findings from the survey are used to better understand how social determinants of health, economic, and environmental factors can impact individuals and communities.

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