

# An Examination of the Variation in Estimates of E-Cigarette Prevalence among U.S. Adults

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## **Abstract**

**Introduction:** Accurate estimates of e-cigarette use are needed to gauge its impact on public health. We compared the results of online and traditional, large scale surveys and provide additional estimates from the Population Assessment of Tobacco and Health (PATH) survey, with the aim of assessing the extent of variation in prevalence estimates.

**Materials and Methods:** We searched the peer-reviewed literature for nationally representative estimates of U.S. adult e-cigarette prevalence, and developed our own estimates from waves one, two, and three of the PATH survey. We compared estimates by age, gender, cigarette smoking status, and e-cigarette use intensity both between online and traditional surveys and among the traditional surveys.

**Results:** For specific years, online surveys generally yielded higher adult use rates than most traditional surveys, but considerable variation was found among traditional surveys. E-cigarette prevalence was greater for less intensive than for more intensive use. Levels of use were higher among current and recent former cigarette smokers than among former smokers of longer quit duration and never smokers, and by those of younger ages.

**Conclusions:** Considerable variation in e-cigarette use estimates was observed even for a specific year. Further study is needed to uncover the source of variation in e-cigarette prevalence measures, with a view towards developing measures that best explain regular use and transitions between the use of e-cigarettes and other tobacco products.

## **Recommended Citation**

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