

# Prices, use restrictions, and electronic cigarette use: evidence from ITC US of the 4CV1 (2016) Survey

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## Abstract

**Aims:** To determine if there are associations between changes in the explicit (i.e., price) and implicit (i.e., use restrictions in public places) costs of cigarettes and nicotine vaping products (NVPs) and their use patterns in the United States.

**Methods:** Data came from the Wave 1 (2016) US data of the ITC Four Country Smoking and Vaping Survey (ITC US 4CV1) and Nielsen Scanner Track database. A multiple logistic regression model was applied to estimate the likelihoods of NVP use (vaping at least monthly), cigarette/NVP concurrent use (vaping and smoking at least monthly), and switch from cigarettes to NVPs (had quit smoking < 24 months and currently vape) among ever smokers, conditioning upon cigarette/NVP prices, use restrictions and socio-demographics.

**Results:** Living in places where vaping is allowed in smoke-free areas was significantly associated with an increase in the likelihood of vaping (Marginal Effect, M.E. = 0.17;  $p < 0.05$ ) and the concurrent use of cigarettes and NVPs (M.E. = 0.11;  $p < 0.05$ ). Higher NVP prices were associated with decreased likelihood of NVP use, concurrent use, and complete switch ( $P > 0.05$ ). Higher cigarette prices were associated with greater likelihood of cigarette and NVP concurrent use ( $P > 0.05$ ). Working in places where vaping is banned is associated with lower likelihood of vaping and NVP and cigarette concurrent use ( $P > 0.05$ ).

**Conclusions:** Higher prices for nicotine vaping products (NVPs) and vaping restrictions in public places are associated with less NVP use and less concurrent use of vaping and smoking. Public policies that increase prices for vaping devices and supplies (i.e., regulations, taxes) and restrict where vaping is allowed are likely to suppress vaping.

## Recommended Citation

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