Coresident e-cigarette contagion
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Q1: How many adolescents are potentially at increased risk of e-cigarette use given a coresident adult user?

Over half a million adolescents may be at increased risk of e-cigarette use given a coresident adult user.

Q2: What are the odds of adolescent e-cigarette use given any coresident user? 

Odds of adolescent current e-cigarette use is 4.5 times higher given any coresident user.

Q3: Is living with an e-cigarette user associated with measures of adolescent interest in e-cigarettes?

Adolescents with a coresident e-cigarette user are significantly more likely to report curiosity about and likelihood of trying e-cigarettes.

Discussion

Q1: Population estimates of at risk adolescents

• Adult e-cigarette use to quit smoking may inadvertently contribute to adolescent uptake.
• The age and relationship of coresident users may have differential impacts on adolescent use.
• Exploring these impacts requires nationally representative data with both adolescent and adult e-cigarette use information; this is not currently available.

Q2: Odds ratios given coresident e-cigarette use

• Coresident e-cigarette use has a large effect size, and is greater than the effect of coresident cigarette use on adolescent cigarette smoking.
• Perceived harm of e-cigarettes reduces the odds of adolescent use.

Q3: Curiosity and likelihood to try e-cigarettes

• Given the novelty of e-cigarettes and limited information, attitudes may be especially contagious.
• Consistent contact with e-cigarettes may have an outsized impact on adolescents.
• Exploring these impacts requires nationally representative data with both adolescent and adult e-cigarette use information; this is not currently available.

Data

Pooled 2014-2016 IPUMS NYTS: adolescent use and attitudes about e-cigarettes and other tobacco products