

Electronic Vapor Product Use Among Middle School Students in Nevada: Associations with Early Initiation of Cigarette and Marijuana Use

Abstract:

Background: Research demonstrates a rapid increase in electronic vapor (e-vapor) product use among adolescents and there is some evidence that use of e-cigarettes may lead to cigarette smoking. However, studies have not assessed the influence of e-vapor products on early initiation of smoking or marijuana use.

Methods: 4,535 middle school students from 133 schools in Nevada completed the 2015 Youth Risk Behavior Survey (YRBS). A two-stage (region and classroom) cluster sampling design was used to sample students in grades 6–8. Students who reported use of cigarettes and marijuana before age 11 were classified as early initiators. Weighted logistic regression was used to assess whether youth who use e-vapor products have a higher prevalence of early initiation of cigarettes and marijuana after controlling for sociodemographics. The results were stratified by age (11-12 years vs. 13-14 years).

Results: 19.4% of 11-12 year olds and 32.5% of 13-14 year olds had used e-vapor products. Among 11-12 year old students, the odds of early initiation (before age 11) of cigarette [AOR=20.94, (95% CI=7.71-56.92)] and marijuana use [15.37, (5.14-46.02)] were significantly higher among those who reported e-vapor product use. Although significant, weaker associations were found among 13-14 year olds: early initiation of cigarette use [4.48, (2.21-9.11)] and early initiation of marijuana use [8.13, (4.26-15.56)].

Conclusions: There is a strong relationship between e-vapor product use and early initiation of cigarette and marijuana use among middle school students, especially at younger ages. These results demonstrate the importance of intervening at an early age.

Learning Objectives:

Understand the influence of electronic vapor product use on the initiation of cigarette and marijuana use among adolescents.

Presenters:

Taylor Lensch, MPH
Youth Risk Behavior Survey (YRBS) Coordinator
University of Nevada, Reno
tlensch@unr.edu

Taylor Lensch, MPH, is a recent graduate from the University of Nevada, Reno, School of Community Health Sciences. He served as the Coordinator of the 2015 Youth Risk Behavior Survey (YRBS) and 2016 School Health Profiles Survey for the state of Nevada. This fall, Taylor will begin working on his Ph.D. in Public Health, with an emphasis in Epidemiology at the University of Nevada, Reno. His primary research interest involves studying adolescent health and risk behaviors.

Kristen Clements-Nolle, Ph.D., MPH
Associate Professor

University of Nevada, Reno
clements@unr.edu

Amberlee Baxa, MPH
YRBS Program Coordinator
Nevada Division of Public and Behavioral Health
abaxa@health.nv.gov

Chris Gay, BS
Graduate Assistant
University of Nevada, Reno
cgay@unr.edu

Sandra Larson, MPH
Manager, Office of Public Health Informatics and Epidemiology
Nevada Division of Public and Behavioral Health
slarson@health.nv.gov

Wei Yang, Ph.D.
Professor
University of Nevada, Reno
weiyang@unr.edu