

E-CIGARETTE AND TOBACCO EXPOSURE BIOMARKERS AMONG AMERICAN INDIAN SMOKERS

American Indians/Alaska Natives have high rates of cigarette smoking. However, few studies have evaluated electronic cigarette use among American Indian/Alaska Natives who smoke. The primary objective of this study was to assess the links between electronic cigarette use (current, past, and never) and smoking-related measures in a sample of adult American Indians who currently smoke cigarettes.

WHY IT MATTERS

This report intended to see if electronic cigarette use among American Indian/Alaska Natives smokers was linked with smoking cessation behaviors such as intention to quit smoking, previous quit attempts, and nicotine levels. This is important among this population because American Indians/Alaska Natives have high rates of tobacco use but low representation in tobacco studies.

It is unknown if electronic cigarettes help with smoking cessation. However, it is important to understand if electronic cigarettes are linked to with smoking cessation behaviors in order to inform public interventions to get people to stop using tobacco.

HOW IT WAS DONE

We collected survey and tobacco biomarker data, including exhaled carbon monoxide and nicotine levels, for 375 adult American Indian smokers at Cherokee Nation healthcare facilities in 2016.

WHAT WAS FOUND

Current electronic cigarette users were more likely than never users to report a quit attempt in the past 12 months. Current and past e-cigarette users were more likely than never users to report an intention to quit smoking. Electronic cigarette use was not linked with confidence to quit smoking, cigarette packs smoked per day, or nicotine levels.

WHAT IT MEANS

Electronic cigarette use was linked with previous and future quit attempts, but not with the number of cigarettes smoked per day or confidence to quit smoking. This suggests that many smokers who also use electronic cigarettes might benefit from the addition of evidence-based smoking cessation treatments.

For more information about this study, please contact Dr. Ashley Comiford, epidemiologist for Cherokee Nation at ashley-comiford@cherokee.org. The study was supported by the National Cancer Institute, National Institutes of Health, grant numbers P20CA202923 and P20CA20291. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health or Cherokee Nation.

Reference: Comiford, A.L., Rhoades, D.A., Spicer, P., Ding, K., Dvorak, J.D., Driskill, L., Wagener, T.L. and Doescher, M.P., 2018. E-cigarettes and Tobacco Exposure Biomarkers among American Indian Smokers. *American journal of health behavior*, 42(6), pp.101-109.