



American Stroke Association.

International Stroke Conference

E-cigarettes linked to higher risk of stroke, heart attack, diseased arteries

American Stroke Association News Release – Abstract 9, Session A2

Study Highlight:

- E-cigarette smokers may have higher odds of stroke, heart attack and coronary heart disease.

Embargoed until 4 a.m. CT/5 a.m. ET, Wednesday, Jan. 30, 2019

DALLAS, Jan. 30, 2019 — Using [e-cigarettes](#) increases your odds of having a [stroke](#), [heart attack](#) and [coronary heart disease](#), according to preliminary research to be presented in Honolulu at the American Stroke Association's International Stroke Conference 2019, a world premier meeting for researchers and clinicians dedicated to the science and treatment of cerebrovascular disease.

In 2016, 3.2 percent of U.S. adults and 11.3 percent of high school students reported using e-cigarettes in the preceding 30 days. Its use among young people increased by 900 percent between 2011 and 2015.

In the largest study to date examining e-cigarettes and stroke, researchers tapped a database of 400,000 respondents. That database, the 2016 behavioral risk factor surveillance system (BRFSS) survey, collected data from residents in all 50 states about their health-related risk behaviors, chronic health conditions and use of preventive services.

“Compared with non-users, e-cigarette users were younger, had a lower body mass index and a lower rate of diabetes,” said Paul M. Ndunda, M.D., the study's author and an assistant professor in the School of Medicine at the University of Kansas in Wichita.

Some 66,795 respondents reported ever regularly using e-cigarettes. The control group was the 343,856 respondents who reported having never used e-cigarettes. Odds ratios were calculated using logistic regression analysis. Researchers found compared with non-users, e-cigarette users had:

- 71 percent higher risk of stroke;
- 59 percent higher risk of heart attack or angina;
- 40 percent higher risk of coronary heart disease; and
- Double the rate of cigarette smoking.

They also found 4.2 percent of e-cigarette users reported having suffered a stroke. However, the study data did not show deaths attributable to e-cigarette use.

[The American Heart Association cautions against the use of e-cigarettes](#), stating that e-cigarettes containing nicotine are tobacco products that should be subject to all laws that apply to these products. The Association also calls for strong new regulations to prevent access, sales and marketing of e-cigarettes to youth and for more research into the product's health impact.

Coauthor is Tabitha Muutu, M.D. Researchers reported no funding for this study.

Note: Scientific presentation is 7:12 a.m. HT/12:12 p.m. ET, Wednesday, Feb. 6, 2019.

Additional Resources:

- Downloadable multimedia **related** to this news release are on the right column of the release link [JDB/SDW INSERT LINK](#)
- [AHA e-cigarette policy](#)
- [What you need to know about vaping](#)
- [Tobacco aside, e-cigarette flavorings may harm blood vessels](#)
- For more news from AHA International Stroke Conference 2019, follow us on Twitter [@HeartNews](#) #ISC19.

Statements and conclusions of study authors that are presented at American Heart Association scientific meetings are solely those of the study authors and do not necessarily reflect association policy or position. The association makes no representation or warranty as to their accuracy or reliability. The association receives funding primarily from individuals; foundations and corporations (including pharmaceutical, device manufacturers and other companies) also make donations and fund specific association programs and events. The association has strict policies to prevent these relationships from influencing the science content. Revenues from pharmaceutical and device corporations are available at <https://www.heart.org/en/about-us/aha-financial-information>.

###

About the American Stroke Association

The American Stroke Association is devoted to saving people from stroke — the No. 2 cause of death in the world and a leading cause of serious disability. We team with millions of volunteers to fund innovative research, fight for stronger public health policies and provide lifesaving tools and information to prevent and treat stroke. The Dallas-based association officially launched in 1998 as a division of the American Heart Association. To learn more or to get involved, call 1-888-4STROKE or visit StrokeAssociation.org. Follow us on [Facebook](#) and [Twitter](#).

Contact Information: Paul Ndunda, M.D., University of Kansas may be reached at 316-258-3350 or muutu@live.com. (Please do not publish contact information.)

For Media Inquiries and ASA Expert Perspective: 214-706-1173

Karen Astle: 214-706-1392; karen.astle@heart.org

For Public Inquiries: 1-800-AHA-USA1 (242-8721)

Feb. 6-8, 2019: AHA News Media Office at the

Honolulu Convention Center: 808-792-6530

heart.org and strokeassociation.org