AMES ANDR, Va. — Roughly one in five young adults uses e-cigarettes daily or recreationally, and nearly one in four believes the products are harmless and not addictive, according to findings from the American Society of Clinical Oncology (ASCO)’s third annual National Cancer Opinion Survey. This comes after the Centers for Disease Control and Prevention (CDC) issued the results from its National Youth Tobacco Survey earlier this month, reporting that e-cigarette use among pre-teens and teens is on the rise. It is also despite warnings from the U.S. Surgeon General that e-cigarettes (also known as vapes) contain addictive and harmful or potentially harmful ingredients, including nicotine; lead and other heavy metals; and flavorants such as diacetyl, a chemical linked to serious lung disease. Amid public debate over banning flavored e-cigarettes, the ASCO survey also found that nearly three in 10 young adults think flavored e-cigarettes are less damaging to a person’s health than non-flavored ones. In addition, nearly seven in 10 Americans support raising the legal age to purchase e-cigarettes from 18 to 21.

The National Cancer Opinion Survey is a large, nationally representative survey of the general public conducted online by The Harris Poll on behalf of ASCO.
“We should do everything in our power to prevent a generation of young people from becoming addicted to nicotine, regardless of how it is delivered,” said ASCO President Howard A. “Skip” Burris III, MD, FACP, FASCO. “As an organization of cancer doctors, we’re also concerned about the potential for e-cigarettes to become a gateway for youth to use cancer-causing tobacco products¹ and the serious side effects that are beginning to emerge.”

On August 17, the Food and Drug Administration (FDA) and CDC began investigating deaths from severe respiratory illness associated with e-cigarette use. Since then, the Trump Administration has announced it plans to ban the sale of most flavored e-cigarettes; at the state level, both New York and Michigan are also enacting bans on flavored vaping products.

The National Cancer Opinion Survey, commissioned by ASCO, was conducted from July 9 – August 10, 2019, among 4,001 US adults aged 18 and over. Of these adults, 195 have or have had cancer. A broader set of survey findings will be released on October 30, 2019.

Troubling Misperceptions about E-Cigarettes Among Young Adults

Among Generation Z (ages 18-22) and Millennials (ages 23-38), the survey found:

- 20% of Generation Z and 24% of Millennials believe e-cigarettes are harmless
- 22% of Generation Z and 24% of Millennials believe you cannot get addicted to e-cigarettes
- 27% of Generation Z and 29% of Millennials think flavored e-cigarettes are less damaging to your health than non-flavored e-cigarettes

Older adults are less likely to hold these misperceptions:

<table>
<thead>
<tr>
<th>Agreement with Statements About E-Cigarettes (% Strongly/Somewhat agree)</th>
<th>Total</th>
<th>Gen Z (18-22) (A)</th>
<th>Millennials (23-38) (B)</th>
<th>Gen X (39-54) (C)</th>
<th>Boomers (55-72) (D)</th>
<th>Silent (73+) (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flavored e-cigarettes are less damaging to your health than non-flavored e-cigarettes.</td>
<td>21%</td>
<td>27%</td>
<td>29%</td>
<td>21%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>You can’t get addicted to e-cigarettes.</td>
<td>20%</td>
<td>22%</td>
<td>24%</td>
<td>21%</td>
<td>14%</td>
<td>21%</td>
</tr>
<tr>
<td>E-cigarettes are harmless.</td>
<td>16%</td>
<td>20%</td>
<td>24%</td>
<td>17%</td>
<td>10%</td>
<td>7%</td>
</tr>
</tbody>
</table>
“These beliefs among young adults about e-cigarettes parallel early misperceptions about tobacco products,” said Dr. Burris. “Education is crucial to correcting misinformation and preventing what could become a public health crisis.”

**Young People Report Greater Use of E-Cigarettes Than Older Adults** “These beliefs among young adults about e-cigarettes parallel early misperceptions about tobacco products,” said Dr. Burris. “Education is crucial to correcting misinformation and preventing what could become a public health crisis.”

More than one in five Millennials (21%) report being a regular (daily or recreational) user of e-cigarettes, compared to 18% of Generation Z and 15% of Generation X (ages 39-54). In contrast, only 5% of Baby Boomers (ages 55-72) and 1% of the Silent Generation (ages 73 and older) say they use e-cigarettes regularly.

One in six parents (17%) with children ages 9-17 say their children have tried e-cigarettes, with 7% of parents of 9-17-year-olds saying their child uses the products regularly. In addition, 73% of parents with children of those ages say they have talked with their child(ren) about the dangers of e-cigarettes. Children under the age of 18 were not surveyed as part of this research.

Overall, one in eight Americans (13%) report using e-cigarettes regularly. Of them, a majority (80%) currently smoke or have smoked traditional cigarettes in the past.

The majority of this group says they have used e-cigarettes to decrease their use of traditional cigarettes (44%) or to quit smoking them altogether (41%).

“There is no doubt that quitting smoking is one of the best things you can do for your health. If you are trying to quit, we recommend talking to your doctor about methods that are proven to work,” said ASCO Chief Medical Officer Richard L. Schilsky, MD, FACP, FSCT, FASCO. “No e-cigarette products are currently approved by the FDA as cessation aids, and more research to understand these products, the substances in them, and the acute and long-term effects of their use is urgently needed.”

**Americans Support Policy Changes to Address E-Cigarette Use**
Amid growing public concern over the dangers of e-cigarettes, even before the recent deaths and investigations linked to e-cigarettes, Americans indicated support for policy change. For example, as of August 10:

- 71% support FDA regulation of e-cigarettes
- 68% support raising the legal age for purchasing e-cigarettes from 18 to 21, roughly the same percentage who support raising the legal age for purchasing tobacco products from 18 to 21 (69%)
- Slightly less than half of Americans (46%) support banning the sale of flavored e-cigarettes, and four in 10 (41%) support banning the sale of all e-cigarettes

“There are so many unanswered questions about e-cigarettes,” said ASCO Chief Medical Officer Richard L. Schilsky, MD, FACP, FSCT, FASCO. “We need more research about these products so we can begin to answer these questions and protect the health and safety of the American public through education and, where necessary, regulation.”

In a 2015 policy statement, ASCO and the American Association for Cancer Research called for a number of steps to be taken in the interest of public health, including requiring e-cigarette packaging to carry safety labels with a warning about nicotine addiction, prohibiting youth-oriented advertising, and banning the sale of e-cigarettes containing candy or youth-oriented flavors unless there is evidence demonstrating these products do not encourage use of e-cigarettes by youth. Read the full statement.

Additional information on e-cigarettes, as well as oncologist-approved tobacco cessation resources, can be found on ASCO’s patient information website, Cancer.Net, at: www.cancer.net/tobacco.

To view the full set of e-cigarette findings from ASCO’s National Cancer Opinion Survey, visit https://www.asco.org/cancer-survey

**About ASCO:**

**About The National Cancer Opinion Survey**

Founded in 1964, the American Society of Clinical Oncology, Inc. (ASCO®) is committed to making a world of difference in cancer care. As the world's leading organization of its kind, ASCO represents nearly 45,000 oncology professionals who care for people living with cancer. Through research, education, and promotion of the highest-quality patient care, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. ASCO is supported by its affiliate organization, Conquer Cancer, the ASCO Foundation. Learn more at [www.ASCO.org](http://www.ASCO.org), explore patient education resources at [www.Cancer.Net](http://www.Cancer.Net), and follow us on [Facebook](http://Facebook), [Twitter](http://Twitter), [LinkedIn](http://LinkedIn), and [YouTube](http://YouTube).

ASCO's National Cancer Opinion Survey was established in 2017 by the American Society of Clinical Oncology (ASCO), in collaboration with The Harris Poll, to track the U.S. public's views on cancer research and care. As the world's leading organization of oncology professionals who care for people with cancer, ASCO believes it is critical to understand what the public, including patients, think of, expect, and need from the nation's cancer care system. The poll, supported by the Mission Endowment of Conquer Cancer, the ASCO Foundation, is designed to be conducted annually to measure shifts in the public's perceptions of a range of cancer-related issues over time.

This survey was conducted online in the U.S. by The Harris Poll on behalf of ASCO between July 9 – August 10, 2019 among 4,001 US adults aged 18+ and an oversample of 814 adults 18+ with cancer for a total of 1,009 adults with cancer. For all US adults age 18+ figures for age by gender, education, region, household size, marital status and employment status were adjusted, as needed to population distributions from the US Census Bureau, separately for
Hispanic, Black/African American (not Hispanic) and all other (not Hispanic). The race/ethnicity groups were then combined into overall total based on their proportion within the US adult population. The adults age 18+ with cancer were weighted separately, as needed, using population distributions from the CDC’s NHIS for those diagnosed with cancer, using the same demographic variables as above.

All sample surveys and polls, whether or not they use probability sampling, are subject to multiple sources of error which are most often not possible to quantify or estimate, including sampling error, coverage error, error associated with nonresponse, error associated with question wording and response options, and post-survey weighting and adjustments. Therefore, The Harris Poll avoids the words “margin of error” as they are misleading. All that can be calculated are different possible sampling errors with different probabilities for pure, unweighted, random samples with 100% response rates. These are only theoretical because no published polls come close to this ideal. Respondents for this survey were selected among those who have agreed to participate in online surveys. No estimates of theoretical sampling error can be calculated.