Public Awareness of Alcohol as a Risk Factor for Cancer

Alcohol consumption increases the risk of developing several types of cancer, including liver, colorectal, esophageal, and breast, and it is estimated that alcohol use accounts for about 6% of all incident cancer cases and 4% of all cancer deaths in the United States. Although alcohol has been recognized as a carcinogen for decades, awareness of the link between alcohol and cancer among the general public remains low. Nationally representative surveys consistently demonstrate that less than half of the population is aware that alcohol is a risk factor for cancer. Furthermore, research suggests that certain demographic, behavioral, and cognitive characteristics (such as age, sex, cancer history, drinking behavior, information seeking, health self-efficacy, and beliefs about cancer) may be associated with awareness that alcohol increases cancer risk.

Increasing awareness of the link between cancer and alcohol use, especially among high-risk populations, could be important to reducing the burden of alcohol-related cancers. An accurate understanding of risk could help change public attitudes toward alcohol use, help individuals make informed decisions about their drinking behavior, and motivate people to comply with public health recommendations to reduce alcohol consumption. Research suggests that media campaigns, individual counseling in health care settings, and placement of warning labels on alcohol products may be potentially effective strategies for increasing awareness of the association between alcohol and cancer.

Alcohol use has increased significantly in the United States over the past few decades, particularly among women, racial/ethnic minority groups, and individuals of lower socioeconomic status. Studies also suggest that alcohol consumption increased significantly during the COVID-19 pandemic (especially among women)—making it increasingly important to inform the public about the relationship between alcohol and cancer risk.

Quick Facts

- Alcohol is a known risk factor for several cancers, including liver, breast, colorectal, and esophageal cancers.
- Alcohol consumption is increasing in the United States, particularly among women, racial/ethnic minority groups, and individuals of lower socioeconomic status.
- There is no safe amount of alcohol when it comes to cancer risk. Although heavy drinking carries the greatest risk, even low and moderate levels of alcohol consumption increase cancer risk.
- Because they contain ethanol, all types of alcoholic beverages, including wine, beer, and liquor, can increase cancer risk.
- Studies suggest that most Americans are unaware that alcohol increases cancer risk.

**Percentage of Americans Who Think Cancer Can Result from Drinking Too Much Alcohol (2019)**

- **Yes:** 31.4%
- **Don't know:** 36.0%
- **No:** 23.9%
- **Missing data:** 8.7%

*Source: HINTS 5 Cycle 3, 2019*

**Alcohol Consumption by American Adults (2020)**

<table>
<thead>
<tr>
<th>Number of drinks per week</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>48.3%</td>
</tr>
<tr>
<td>1–10</td>
<td>32.9%</td>
</tr>
<tr>
<td>11–20</td>
<td>5.7%</td>
</tr>
<tr>
<td>21–30</td>
<td>3.1%</td>
</tr>
<tr>
<td>31+</td>
<td>1%</td>
</tr>
<tr>
<td>Missing data</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

*One “drink” can be 12 fl oz of regular beer, 8-9 fl oz of malt liquor, 5 fl oz of table wine, or 1.5 oz of 80-proof distilled spirits.*

*Source: HINTS 5 Cycle 4, 2020*
Prevalence and Predictors of Awareness That Alcohol Causes Cancer

A recently published study used data from HINTS 5 Cycle 3 (2019) to examine awareness of alcohol as a cancer risk factor among American adults and assess whether demographic characteristics, drinking behavior, risk perceptions, or cancer beliefs are associated with knowing that drinking too much alcohol increases cancer risk. Awareness of the alcohol-cancer link was low: 34% of Americans were aware that excess alcohol consumption increases cancer risk, while 27% believed that alcohol was not a cancer risk factor, and another 39% did not know.

Several factors were predictive of reporting misbeliefs or uncertainty about the link between alcohol and cancer. Agreeing that “there are so many recommendations about preventing cancer, it’s hard to know which ones to follow,” and agreeing that “there’s not much you can do to lower your chances of getting cancer” were associated with reporting that alcohol does not cause cancer. On the other hand, higher perceptions of personal cancer risk and having ever sought health information were associated with lower likelihood of believing alcohol is not a risk factor for cancer. Agreeing that there’s not much you can do to lower your chances of getting cancer and that there are so many cancer recommendations, it’s hard to know which ones to follow also predicted higher likelihood of answering “don’t know.” Conversely, educational attainment and health information seeking were associated with lower likelihood of being uncertain about the link between alcohol and cancer. Self-reported alcohol consumption was not associated with either incorrect or “don’t know” responses, indicating that these results may reflect a true knowledge deficit, rather than defensive processing due to personal drinking behavior.

How Can This Inform Your Work?

HINTS data show that relatively few American adults are aware of the link between alcohol and cancer, suggesting a need for both individual- and population-level communication efforts. Public health campaigns could raise awareness by highlighting the cancers known to be caused by alcohol and emphasizing that any level of alcohol use increases cancer risk (although risk is greater at higher levels of drinking). Broad-reaching media campaigns in other countries have proven effective in raising awareness about alcohol and cancer, but more targeted interventions may also be needed. For example, different intervention strategies may be effective for those who are unaware of the association between alcohol and cancer (e.g., education), and those who believe there is no association (e.g., misinformation correction). Targeted campaigns could also be used to reach specific subgroups who are more likely to be uncertain about the link between alcohol and cancer.

Health care providers can also play a role in addressing the knowledge deficit regarding alcohol and cancer, as research suggests that screening for alcohol use during health care appointments and counseling patients about the consequences of alcohol use (including cancer-related risks) could increase awareness and motivate patients to modify their drinking behavior. As even moderate drinking can increase cancer risk, discussing alcohol use reduction as a cancer prevention strategy may benefit many individuals who report drinking regularly.

References Used in This Brief


About HINTS

tests.cancer.gov

The National Cancer Institute (NCI) created the Health Information National Trends Survey (HINTS) to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use communication channels to obtain health information for themselves and their loved ones. HINTS data can also help practitioners create more effective health communication strategies. The HINTS survey has been fielded 13 times to date.

HINTS Briefs provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings resulting from analyses of how certain demographic characteristics influence specific outcomes. Many Briefs summarize research findings from recent peer-reviewed journal articles that have used HINTS data.

For More Information on Cancer

• Call the NCI Cancer Information Service at 1-800-4-CANCER
• Visit https://www.cancer.gov
• Order NCI publications at https://pubs.cancer.gov/ncipl/home.aspx
• Visit Facebook.com/cancer.gov and https://www.youtube.com/ncigov

October 2021