2024 INIOWA

IOWA CANCER REGISTRY

IOWA CANCER REGISTRY State Health Registry of Iowa

In last year's 2023 Cancer in Iowa Report, we presented data showing that Iowa has the second highest rate of new cancers in the U.S. We are using the data collected by the Iowa Cancer Registry and our partner organizations at the Iowa Department of Health and Human Services to examine the factors that may be driving our high rates of cancer. This year's report features a common cancer risk factor among Iowans: alcohol.

> Most people do not know that drinking any amount of alcohol increases their risk of developing cancer. Compared to other states, more lowans drink, and in greater amounts. This may be why lowa has the 4th highest incidence of alcohol-related cancers in the U.S., and the highest rate in the Midwest. In this report, we examine alcohol-related cancers, and present data on alcohol drinking in lowa. The purpose of this report is to increase awareness that all types of alcoholic beverages increase cancer risk, and reducing the amount we drink will reduce alcoholrelated cancers diagnosed among lowans.

The Cancer in Iowa Report is produced by the Iowa Cancer Registry. The Iowa Cancer Registry is Iowa's statewide cancer registry, meaning we collect cancer data on all Iowa residents. The adverse impact of cancer is evident in Iowa, and throughout the U.S. For this reason, cancer is a reportable disease in all fifty states, and the Iowa Administrative Code has designated the Iowa Cancer Registry to collect cancer data for Iowans and to use those data to track cancer trends and support efforts to reduce cancer diagnoses and deaths. Reducing Iowa's cancer burden requires the any people and organizations including providers patients researchers public health professionals.

cooperation of many people and organizations, including providers, patients, researchers, public health professionals, policy makers and advocates, among others.

The Iowa Cancer Registry is funded by the National Cancer Institute through the Surveillance, Epidemiology, and End Results (SEER) program, as well as the University of Iowa and the State of Iowa. But the funding generated by the registry goes beyond our operational expenses: research studies using Iowa Cancer Registry data have been funded by many other federal agencies and foundations and include large important studies such as the Agricultural Health Study. Iowa represents rural and Midwestern populations, and our data are included in many publications, national estimates, and projections of the impact of cancer.

Confidentiality is critically important to the Iowa Cancer Registry. It is the responsibility of the Iowa Cancer Registry to balance the need to protect its data and provide researchers the information needed to conduct studies to help reduce the burden of cancer. To meet this goal, the Iowa Cancer Registry has policies around research, reporting, and release of data to safeguard the confidentiality of patients, providers, and hospitals.

The 2024 Cancer in Iowa Report provides information on the status of cancer in our state. Key takeaways include:

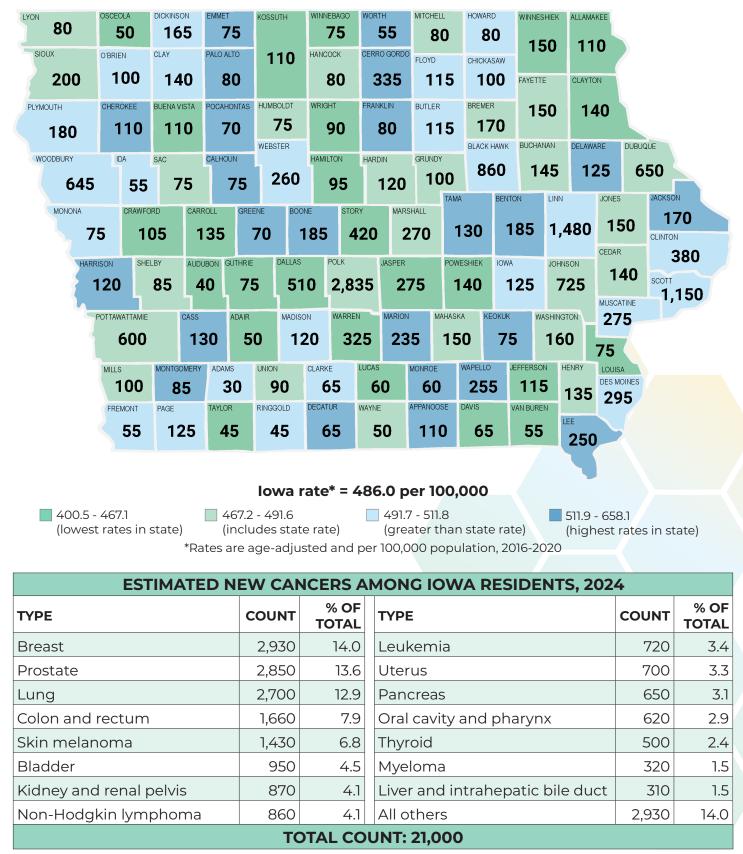
- An estimated 21,000 new, invasive cancers (meaning cancers that were diagnosed as stages 1-4, as well as in situ or stage 0 bladder cancers).
- An estimated 6,100 lowans will die from cancer.
- The number of cancer survivors is growing, with an estimated 168,610 survivors in Iowa.
- A special section on the relationship between drinking alcohol and risk of certain cancers, information on binge drinking in Iowa, and ways to decrease alcohol consumption.
- Examples of research projects using Iowa Cancer Registry data.
- A spotlight on Cancer Registrars (also known as Oncology Data Specialists), the people who collect cancer data, and ensure that it is secure, accurate, and complete.



The report can also be found online at lowa Cancer Reports.

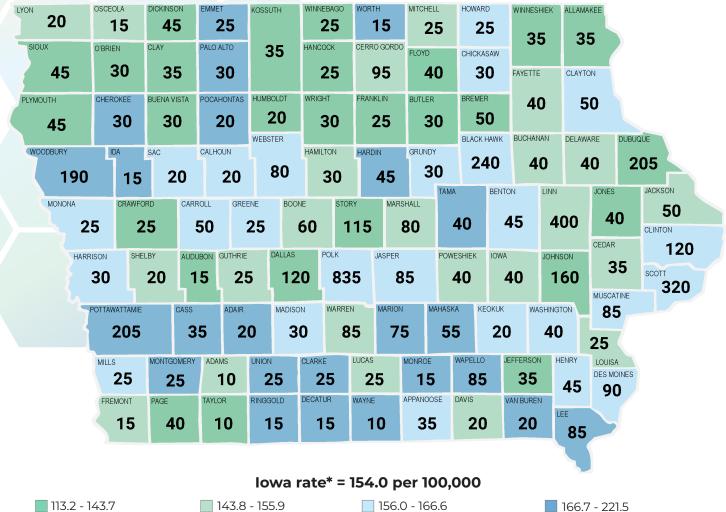
Estimates for New Cancers for 2024

The numbers in each of the counties represent the estimated counts of new cancer cases for 2024. The populations of each county vary widely in terms of size and age, so when comparing new cancers across counties it is important to focus on age-adjusted rates. The color of the county shows the rate of new cancers for years 2016-2020, with the counties with the lowest rates shaded **dark green** and highest rates shaded **dark blue**.



Estimates for Cancer Deaths for 2024

The numbers in each of the counties represent the estimated counts of cancer deaths for 2024. The populations of each county vary widely in terms of size and age, so when comparing deaths across counties it is important to focus on ageadjusted rates. The color of the county shows the rate of cancer deaths for years 2016-2020, with the counties with the lowest rates shaded dark green and highest rates shaded dark blue.



(lowest rates in state)

143.8 - 155.9 (includes state rate) 156.0 - 166.6

(greater than state rate)

(highest rates in state)

*Rates are age-adjusted and per 100,000 population, 2016-2020

ESTIMATED CANCER DEATHS AMONG IOWA RESIDENTS, 2024										
ТҮРЕ	COUNT	% OF TOTAL	ТҮРЕ	COUNT	% OF TOTAL					
Lung	1,430	23.4	Esophagus	190	3.1					
Colon and rectum	550	9.0	Bladder	180	3.0					
Pancreas	470	7.7	Brain	170	2.8					
Breast	390	6.4	Kidney and renal pelvis	170	2.8					
Prostate	340	5.6	Myeloma	140	2.3					
Leukemia	260	4.3	Ovary	130	2.1					
Liver and intrahepatic bile duct	240	3.9	Uterus	130	2.1					
Non-Hodgkin lymphoma	230	3.8	All others	1,080	17.7					
TOTAL COUNT: 6,100										

Living with Cancer

The number of cancer survivors is growing in Iowa, and nationwide. The Iowa Cancer Registry has tracked the vital status of more than 99 percent of cancer survivors diagnosed since 1973. According to Iowa Cancer Registry incidence and survival data for 1973-2019, there are an estimated 168,610 cancer survivors among Iowans (defined as people who are currently living with or having had cancer).

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SURVIVORS AMONG IOWA RESIDENTS DIAGNOSED WITH CANCER										
ТҮРЕ	COUNT	% OF TOTAL	TYPE COUNT % OF TOTAL							
Breast	36.920	21.9	Lung 7,005 4.2							
Prostate	30,990	18.4	Kidney and renal pelvis 6,890 4.1							
Colon and rectum	15.765	9.3	Leukemia 5,570 3.3							
Skin melanoma	13,530	8.0	Oral cavity and pharynx 4,850 2.9							
Uterus	9,005	5.3	Testis 2,875 1.7							
Thyroid	8,415	5.0	Cervix 2,530 1.5							
Bladder	8,125	4.8	Ovary 2,230 1.3							
Non-Hodgkin lymphoma	8,075	4.8	All others 5,835 3.5							
TOTAL COUNT: 168,610										

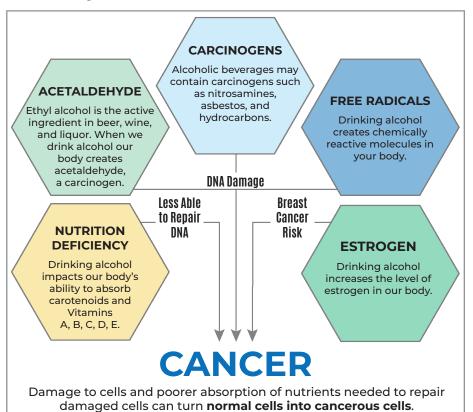
<mark>Key Points</mark>

- Iowa continues to have the 2nd highest and fastest growing rate of new cancers in the U.S.
- There is no one cause for cancer; rather it is the complex interplay of different genetic, behavioral, environmental, and structural factors that alter the way cells function and produce cancer.
- While the societal and structural causes of cancer substantially contribute to cancer risk and require societal-level interventions, there are things individuals can do to reduce their risk. To reduce one's risk of cancer, it is important to reduce exposure to modifiable risk factors (i.e., risk factors one has control over). **One modifiable risk factor where lowans stand out, and that may be contributing to higher cancer rates, is alcohol consumption.**
- Alcohol is a known carcinogen. Alcohol is a risk factor for several cancers, including oral cavity, pharynx, larynx, esophagus, colon & rectum, liver, and female breast cancers.
- Iowa has the 4th highest incidence of alcohol-related cancers in the U.S., and the highest rate in the Midwest.
- Iowa ranks 4th highest in the nation for binge drinking in 2022. The Behavioral Risk Factor Surveillance System (BRFSS) Survey defines binge drinking as drinking 5 or more drinks on one occasion for men and 4 or more drinks on one occasion for women. More than one fifth (22%) of Iowans report binge drinking, higher than the national average of 17%.
- Binge drinking is also a concern among lowa's youth: 23% of lowans ages 12-20 reported drinking at least one alcoholic drink and 15% reported binge drinking in 2019-2020.
- Any alcohol can increase one's risk of cancer, but binge drinking poses the greatest risk. For those choosing to drink, drink in moderation by limiting intake to 2 drinks or less in a day for men and 1 drink or less in a day for women, on days when alcohol is consumed. Those who are pregnant or might be pregnant, are younger than 21 years of age, or have certain medical conditions and/or are taking medications that can interact with alcohol should not drink at all.
- Any amount of alcohol reduction is likely to reduce one's risk of cancer.

ALCOHOL AND CANCER IN IOWA

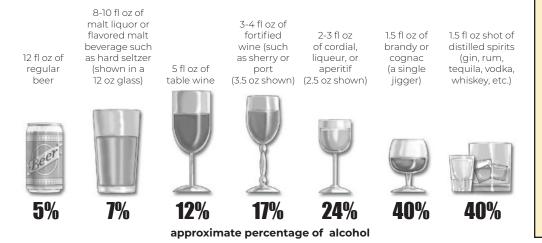
lowa has the 2nd highest and fastest growing rate of new cancers in the U.S. The lowa Cancer Registry and partner organizations are working to understand why. Cancers are caused by multiple risk factors working together to alter the way cells function. There is no one cause for cancer; rather it is the complex interplay of different genetic, behavioral, environmental, and structural factors that produce cancer. To reduce one's risk of cancer, it is important to reduce exposure to modifiable risk factors (i.e., risk factors one has control over). When looking across major modifiable risk factors for cancer, one place that lowans stand out from other states is alcohol consumption. Alcohol can increase one's risk of cancer through various pathways, shown in the figure below.

All types of alcoholic beverages, and any amount of drinking, increases one's risk of cancer. Yet only 40% of adults know that alcohol may increase cancer risk¹, even at low-to-moderate levels. The more alcohol a person drinks, the higher the risk of cancer. Alcohol also interacts with other factors, such as tobacco, human papillomavirus (HPV) infection, and environmental exposures, to create an even greater increase in risk of developing certain types of cancer. To help minimize the risks associated with drinking, the 2020-2025 Dietary Guidelines for Americans recommend that adults of legal drinking age can choose not to drink or to drink in moderation by limiting intake to 2 drinks or less in a day for men and 1 drink or less in a day for women, on days when alcohol is consumed². Those who are pregnant or might be pregnant, are younger than 21 years of age, or have certain medical conditions and/or are taking medications that can interact with alcohol should not drink at all.



What's a "standard drink"?

In the U.S., a "standard drink" (also known as an alcoholic drink equivalent) is defined as any drink that contains about 0.6 fluid ounces or 14 grams of pure alcohol. Although the drinks pictured below are different sizes, each contains approximately the same amount of alcohol and counts as one U.S. standard drink or one alcoholic drink equivalent.



The percentage of alcohol varies within and across beverage types. The standard drink guidelines shown here may not reflect serving sizes at different alcohol retailers and may be different depending on the strength (% alcohol) of the drink in question (e.g., many craft beers have higher alcohol content than regular beer). For help determining how many "standard drinks" are in certain beverages by container size, visit Rethinking Drinking.



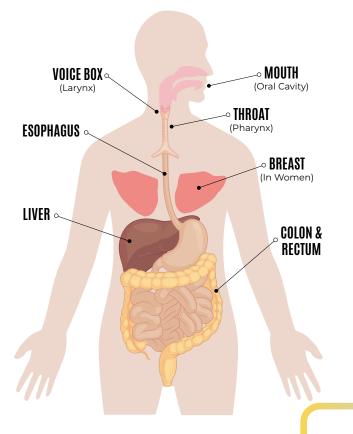
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Studies have provided convincing evidence that alcohol increases the risk for the following cancers:

ORAL CAVITY, PHARYNX, AND LARYNX

Compared to non-drinkers, heavy drinkers have 5 times the risk of developing oral cavity and pharyngeal cancers and approximately 2.5 times the risk of developing laryngeal cancers^{3,4}. The risks of these cancers are much greater among those who are heavy drinkers of alcohol and also use tobacco⁵.

lowa currently ranks 2nd highest in the rate of new cases of oral cavity and pharyngeal cancer in the U.S.



There is increasing evidence to suggest heavy drinking may also increase the risk of

cancers in other sites, including melanoma,

prostate, and pancreatic cancers. However,

more research is needed to confirm these

For more information on alcohol and its

ESOPHAGUS

Compared to non-drinkers, heavy drinkers have nearly 5 times the risk of developing esophageal cancer^{3,4}.

lowa ranks 4th highest in the rate of new cases of esophageal cancer in the U.S.

COLON & RECTUM

Compared to non-drinkers, heavy drinkers have nearly 2 times the risk of developing colorectal cancer compared with no alcohol consumption^{3,4,6}.

lowa ranks 8th highest in the rate of new cases of colorectal cancer in the U.S.

FEMALE BREAST

Compared to non-drinkers, heavy drinkers have nearly 2 times the risk of developing breast cancer^{3,4}.

lowa ranks 9th highest in the rate of new cases of female breast cancer in the U.S.

LIVER

While approximately 70% of liver cancers are caused by infection with hepatitis B or C, 30% are caused by heavy drinking. Compared to non-drinkers, heavy drinkers have 2 times the risk of developing liver cancer^{3,4,7,8}. Fortunately, lowans have a relatively low rate of hepatitis B and C compared to other states.

Iowa ranks 40th in the rate of new cases of liver cancer in the U.S.

Centers for Disease Control and Prevention

effects on health, visit:

findings.



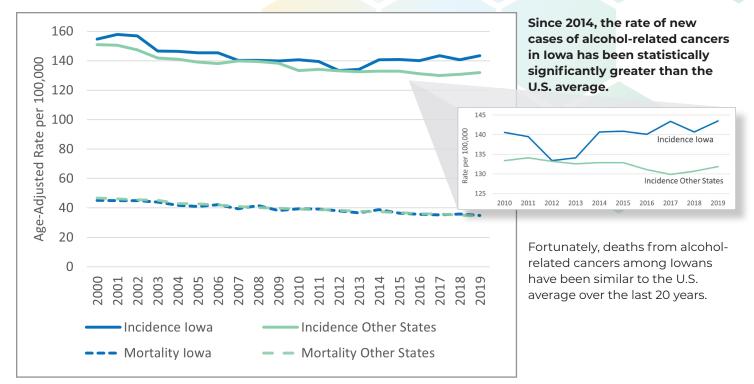
<u>National</u> <u>Institute on</u> <u>Alcohol Abuse</u> and Alcoholism



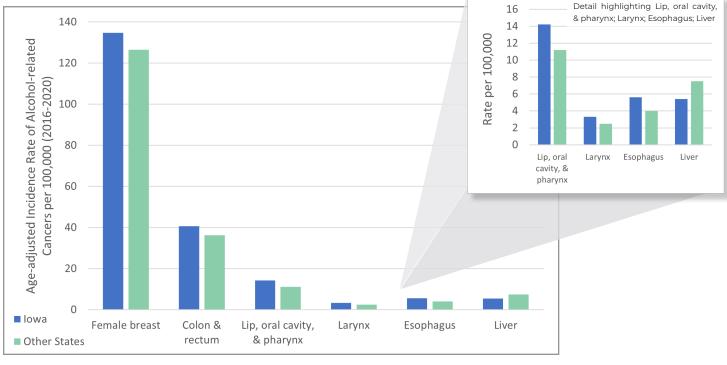
Iowa has the 4th highest incidence of alcohol-related cancers in the U.S. and has the highest rate in the Midwest.

Only Kentucky, Louisiana, and Mississippi have higher rates of alcohol-related cancers. In 2019, the rate of alcohol-related cancers was almost 10% higher in Iowa than the U.S. average.

The rate of new cases (solid lines) and rate of deaths (dashed lines) from alcohol-related cancers in Iowa (blue) and the U.S. (green) are shown below. Cancers included are female breast; colon & rectum; lip, oral cavity, pharynx, and larynx; liver; and esophagus.



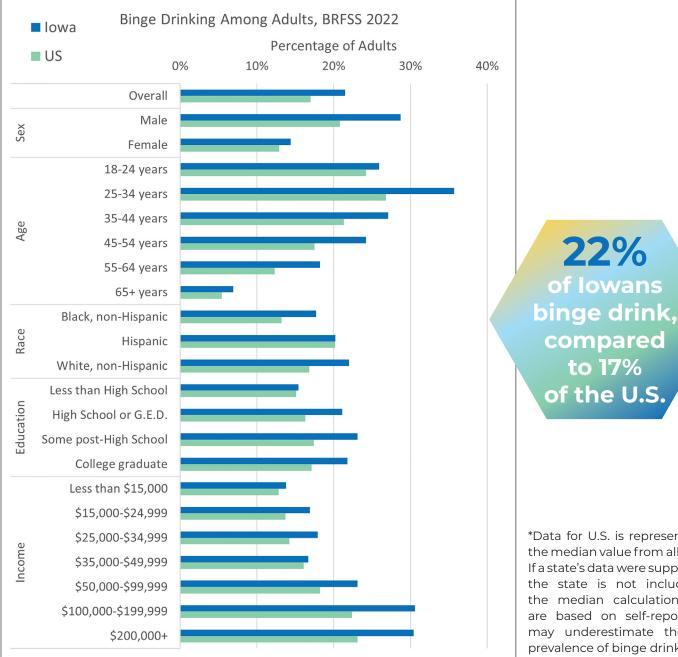
The graphs below show the rate of new cancers from alcohol-related cancers (2016-2020) in Iowa compared to other states. The rates of new cancer cases in Iowa are higher for several cancer sites, including female breast, colon & rectum, lip, oral cavity and pharynx, larynx, and esophagus. **It is important to note that not all cases of these cancer types are caused by alcohol consumption, but that alcohol could be a contributor to these cases.** Cancer occurs due to a combination of many factors including genetic risk and personal/family history of cancer, which, along with age, health status, the length of time a person has been consuming alcohol, and how much alcohol a person drinks (i.e., their total lifetime exposure), will all influence their risk for developing cancer.



lowa ranks 4th highest in the nation for adult binge drinking. The Behavioral Risk Factor Surveillance System (BRFSS) Survey defines binge drinking as 5 or more drinks for men or 4 or more drinks for women on one occasion. In 2022, 22% of adults in Iowa reported binge drinking compared to 17% in the U.S. Iowa ranks 6th highest in the nation for heavy drinking, defined as more than 14 drinks per week for men and more than 7 drinks per week for women. In 2022, 8% of adults in Iowa reported heavy drinking compared to 7% in the U.S. These percentages have remained steady over the past 10 years.

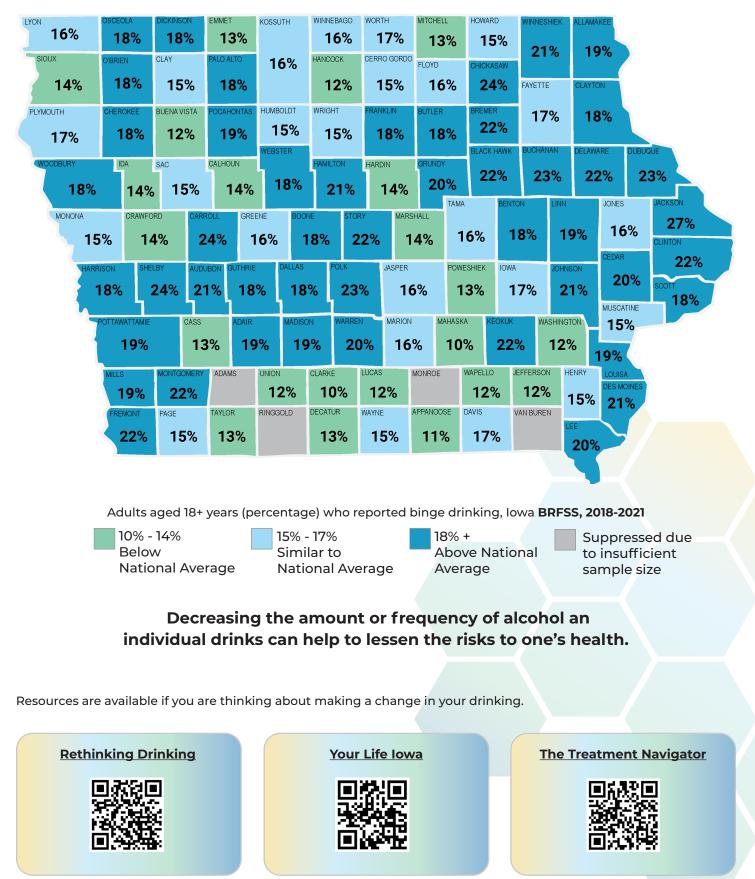
The figure below shows the percent of lowans (blue bars) whose drinking behaviors qualify as binge drinking, compared to the national average (green bars). In every category, binge drinking among lowans is greater than the national average. Regardless of sex, age, race, education level, or income, lowans binge drink more than the U.S. average. These data suggest the need to reduce binge drinking in Iowa across all Iowans.

While these data focus on the adult population, it is important to note that underage drinking is a serious public health problem. Alcohol is the most widely used substance among young people and can cause health and safety risks. Most adults who engage in high-risk alcohol drinking behavior started drinking before 21 years of age. Binge drinking is a concern among lowa's youth: 23% of lowans ages 12-20 reported drinking at least one alcoholic drink and 15% reported binge drinking⁹.



*Data for U.S. is represented as the median value from all states. If a state's data were suppressed, the state is not included in the median calculation. Data are based on self-report and may underestimate the true prevalence of binge drinking.

This map shows how the prevalence of adult binge drinking varies across lowa for 2018-2021. The counties shaded in **dark blue** have a higher percent of the population who report binge drinking compared to the U.S. average [16% for 2018-2021], whereas those shaded in **green** have a lower percent. Binge drinking is higher among lowa's urban (18.6%) and micropolitan (16.4%) counties compared to rural counties (15.7%); data not shown.



RESOURCES

The Iowa Cancer Plan, from the Iowa Cancer Consortium and partners, highlights different topics on which Iowans engaged in cancer prevention and control might focus.

<u>Priority 3</u> in the Iowa Cancer Plan's Prevention and Risk Reduction section is to Decrease Alcohol Consumption using 3 strategies:

- 1. Educate the public on the association between alcohol and cancer.
- 2. Create community environments that prevent and reduce the excessive use of alcohol.
- 3. Increase screening and treatment for excessive alcohol use.





For policy makers, providers, and public health professionals, there are several evidence-based strategies to employ.

According to the US Community Preventive Services Task Force, there is strong scientific evidence that price controls are effective strategies for reducing excessive alcohol consumption and related harms. For example, raising alcohol taxes has been associated with decreased consumption, especially among heavy drinkers, while increasing revenue for states. Excise taxes are based on the volume of alcohol sold, are often applied at the wholesale level, are beveragespecific (i.e., are usually different for beer, wine, and distilled spirits), and tend to decline over time due to inflation, unless they are increased periodically. An emerging strategy tested in Scotland is **minimum** unit pricing, in which a floor price is set below which a unit of alcohol (e.g., 8 grams in Scotland) cannot be sold. Evidence suggests this strategy is very effective at reducing alcohol-related deaths and hospitalizations.

Other evidence-based strategies recommended by the US Community Preventive Services Task Force include **maintaining and strengthening laws that hold alcohol retailers liable for the injuries and damages caused by their intoxicated customers.** Called Dram Shop Liability, it is intended to encourage responsible practices and deter over-serving patrons. Other regulatory measures have been associated with reduced alcohol use, including enhanced **enforcement of laws prohibiting sales to minors, restrictions on days of sale and/or hours of sale, and use of regulatory authority to limit alcohol outlet density.** Alcohol outlet density regulation is defined as applying regulatory authority – typically licensing or zoning processes – to reduce or limit the number of alcohol retailers, such as bars, restaurants, and liquor stores, in a given area through licensing or zoning processes.

Another recommended strategy for healthcare providers involves screening and brief intervention (SBI) to reduce excessive alcohol consumption. SBI consists of assessing patients' drinking patterns, followed by providing those who screen positive for excessive drinking with face-to-face feedback about its risks, and a short conversation about changing their drinking patterns, including referral to treatment if appropriate. Electronic screening and brief intervention (e-SBI) uses electronic devices (e.g., computers, telephones, or mobile devices) to facilitate delivery of key elements of traditional SBI. At a minimum, e-SBI involves screening individuals for excessive drinking, and delivering a brief intervention, which provides personalized feedback about the risks and consequences of excessive drinking. For more information on recommended strategies, visit the Community Guide.



RESEARCH AT THE IOWA CANCER REGISTRY

Chen A, Grubbs CS, Zafar FS, Loeffler BT, Mott SL, Carrel M, Powers JG. Association of Patient Proximity to Dermatologic Care With Melanoma Stage at Diagnosis and Outcome. JAMA Netw Open. 2023 Jan 3;6(1):e2252698. doi: 10.1001/ jamanetworkopen.2022.52698. PMID: 36696114; PMCID: PMC10187484.

The distance a patient lives from care has been associated with later melanoma diagnosis and higher death rates. This may be more of an issue in rural populations. The goal of this study was to determine whether and how distance to clinicians was related to the stage melanoma patients were diagnosed and cancer survival in lowa, a largely rural state. We included melanoma patients diagnosed 2009-2018. Locations of all full-time dermatology clinicians were identified. For each ZIP code tabulation area (ZCTA) and clinician type (physician, nurse practitioners/ physician assistants, or combined), we estimated patient road travel distance to care, travel time, and the number of clinicians per 100,000 population. Travel distance was categorized as < 50 miles or 50+ miles and time as < 60 minutes or 60+ minutes. ZCTAs averaged 2 physicians and 2 nurse practitioners/physician assistants per 100,000 population. More than 70% of patients lived in a ZCTA without a clinician, but most were less than 50 miles or less than 60 minutes travel from the nearest clinician. Presence of a fulltime clinician in the ZCTA did not result in earlier melanoma stage at diagnosis or higher cancer survival, as we might have expected. A longer travel distance to clinicians for melanoma care may not be as much of a barrier as previously thought, as patients seem willing to travel for care in Iowa.

Chlebowski RT, Aragaki AK, Anderson GL, Pan K, Neuhouser ML, Manson JE, Thomson CA, Mossavar-Rahmani Y, Lane DS, Johnson KC, Wactawski-Wende J, Snetselaar L, Rohan TE, Luo J, Barac A, Prentice RL; **Women's Health Initiative. Dietary Modification and Breast Cancer Mortality: Long-Term Follow-Up of the Women's Health Initiative Randomized Trial. J Clin Oncol. 2020 May 1;38(13):1419-1428. doi: 10.1200/JCO.19.00435. Epub 2020 Feb 7. PMID: 32031879; PMCID: PMC7193750.**

The University of Iowa participated in the Women's Health Initiative (WHI) Dietary Modification trial. This study assigned almost 49,000 postmenopausal women to either a change in diet or their usual diet, to test whether a low-fat diet with increases in vegetables and fruits and grains reduced breast cancer rates. Researchers also looked at death from breast cancer, as well as death from any cause after a breast cancer diagnosis. Cancer information was obtained from cancer registries across the U.S. (including the Iowa Cancer Registry), through a new system called the Virtual Pooled Registry Cancer Linkage System. Researchers found that eating a low-fat diet with increased vegetable, fruit, and grain consumption, reduced the risk of death from breast cancer, but not death from any cause after a breast cancer diagnosis. When looking at rates of new breast cancers, there was no difference between diets. However, the low-fat diet did result in lower rate of ER-positive, PR-negative breast cancers, which carry a poorer prognosis. The conclusion of this study was that eating a low-fat diet with increased vegetable, fruit, and grain consumption may reduce the risk of death from breast cancer in postmenopausal women.

Herbach EL, Nash SH, Lizarraga IM, Carnahan RM, Wang K, Ogilvie AC, Curran M, Charlton ME. **Patterns** of Evidence-Based Care for the Diagnosis, Staging, and First-line Treatment of Breast Cancer by Race-Ethnicity: A SEER-Medicare Study. Cancer Epidemiol Biomarkers Prev. 2023 Oct 2;32(10):1312-1322. doi: 10.1158/1055-9965.EPI-23-0218. PMID: 37436422; PMCID: PMC10592343.

Racial and ethnic disparities in receipt of guideline-recommended breast cancer treatment are well established; however, few studies document disparities in receipt of pre-diagnosis services necessary to determine what treatment should be given. The purpose of this study was to examine whether there are racial-ethnic differences in breast cancer diagnosis and first-line treatment. Cancer registry (SEER) data linked to Medicare claims were used to identify women aged 66 and older, diagnosed with breast cancer between 2000 and 2017. We evaluated services related to diagnosis (diagnostic mammography and breast biopsy), clinical workup (stage and grade determination, lymph node biopsy, and subtype determination), as well as treatment initiation (surgery, radiation, chemotherapy and other targeted therapies). We found that Black and American Indian/Alaska Native (AI/AN) women had lower rates of evidencebased care from diagnosis through firstline treatment compared to non-Hispanic White (NHW) women. AI/AN women had the lowest rates of HER2-targeted therapy and hormone therapy. Black women also had lower rates of HER2- targeted therapy compared to NHW women. Further efforts are needed to improve the delivery of guideline-recommended care beginning at the time of diagnosis to help eliminate disparities in breast cancer care and survival.

For more information on how to access Iowa Cancer Registry data for research, visit the <u>State Health</u> <u>Registry of Iowa (SHRI)</u>.



The Virtual Pooled Registry Cancer Linkage System (VPR-CLS) from the North American Association of Central Cancer Registries connects researchers with multiple cancer registries. More information can be found at the <u>VPR-CLS</u>.



GET INVOLVED—BECOME A CANCER REGISTRAR!

When I would tell people I had decided to go back to school at age 37 to become a cancer registrar, the response I got every time was, "What's a cancer registrar?" I must admit cancer registration is not a well-known career field. I hadn't ever heard of it until my own cancer diagnosis at age 30. Somewhere along the way during treatment, I learned that my cancer information would be collected for the hospital's cancer registry. I was intrigued because this meant my cancer journey would be tracked from diagnosis to death, and I felt like I had a small part in helping future cancer patients. Like, all the chemo and radiation I had just gone through had another purpose.

I would often explain that most large hospitals have a cancer registry, and that the cancer registrar is responsible for collecting cancer data for every patient diagnosed with or treated for cancer at that hospital. This involves searching through medical records to collect relevant information, such as diagnosis, stage, treatment, and survival of a patient, and entering it into the cancer registry database. Each hospital is required to regularly report these data to their state cancer registry, where data are compiled and shared at the national level.

Cancer registry data are used by so many at the local, state, and national level. For example, data are used by hospital physicians to improve treatment plans, researchers to develop clinical trials, public health officials to guide cancer control programs, legislators for the allocation of cancer-directed funds, and so many more.

After my treatment ended, I looked more into what a cancer registry does, and I began exploring a complete career change from agricultural field researcher to cancer registrar. However, I wasn't quite ready for the schooling that was required, so I dismissed the idea. Yet, it kept coming back over the next few years, until I decided to take it more seriously.

Becoming a certified cancer registrar involves completing a NCRA-accredited cancer registry degree program and passing a <u>certification exam</u> (https://www.ncra-usa.org/ ODS-Credential/Certification-Exam). Scott Community College, located in Bettendorf, Iowa, offers an <u>accredited</u> <u>program online</u> (https://eicc.edu/classes-programs/ pathway/health/cancer-information-management/). The program is designed to take two years but is also flexible, so classes can be adjusted to fit your timeframe. I was able to complete the online program at Scott Community College in two years by taking 2-3 classes a semester while working full-time.

The final semester of the program is an on-site practicum at a facility with a cancer registry. This is invaluable for students to work alongside certified cancer registrars and gain experience with cancer registry software and real-life cancer cases. My practicum was excellent preparation for the certification exam, and more importantly, it turned into full-time employment.

In the past year, I have completed my practicum, gained full-time employment as a cancer registrar, graduated from Scott Community College, and taken (and passed!) the certification exam. It is honestly surreal at times to reflect on all I have accomplished in one year. I am proud that I pushed myself to change careers at age 37, and that I am now working at the facility that treated my cancer ten years ago. I have a sense of purpose with my job knowing that the quality of my work will impact the cancer patients after me. Since becoming a cancer registrar, I truly enjoy what I do every day.

There is room for you to find your passion too! The cancer registry field is facing a national workforce shortage as current cancer registrars are reaching retirement age, and there are too few graduates starting careers. With facilities already short-staffed, now is the time to recruit new cancer registrars and promote the profession.

So, how about you? Are you interested in cancer registration yet? Do you...

- want to work in a medical field without direct patient contact,
- \cdot want a sense of purpose with your daily job,

• want to be a part of improving cancer outcomes, ...then consider becoming a cancer registrar! Just be prepared to enjoy what you do for the rest of your career!



Emily Hoffman is a ten-year cervical cancer survivor who is an active patient advocate, Cervivor Ambassador, and newly certified cancer registrar. Her advocacy work focuses on ending cervical cancer, the importance of cancer screenings and prevention, and young adult cancer survivorship. We are excited to share her story in this year's report!

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