

Cancer in

Dallas County

Mary Charlton, PhD & Amanda Kahl, MPH

March 6, 2025

Who we are



Mary Charlton, PhD

- Professor, University of Iowa College of Public Health
- Director, Iowa Cancer Registry
- President, Iowa Cancer Consortium
- Co-Leader of the Cancer Epidemiology & Population Science Program, Holden Comprehensive Cancer Center
- Research: Rural/ Urban differences in cancer prevention, screening, & quality of care



Amanda Kahl, MPH

- Epidemiologist, Iowa Cancer Registry
- Studies:
 - Associations between viral infections & cancer
 - Rural-urban differences in treatment and quality of cancer care
 - Cancer Registry data quality

99 Counties Project Team







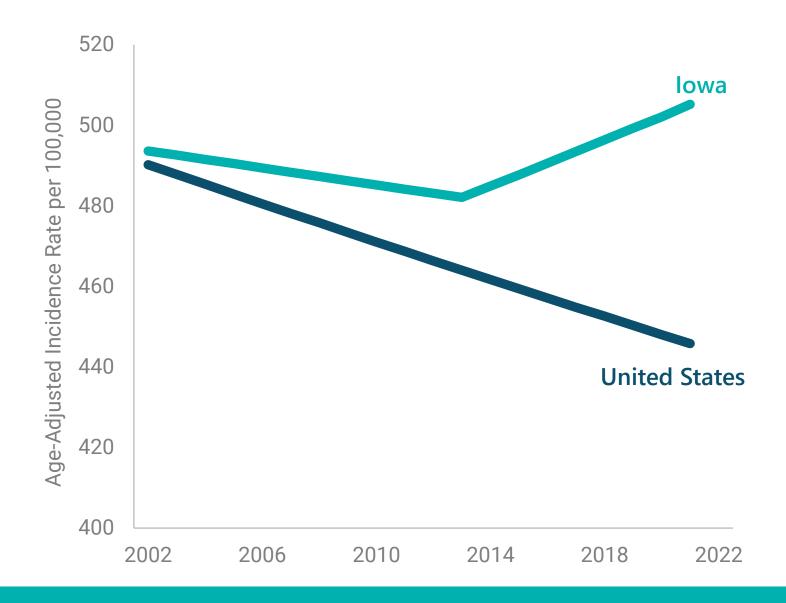


Holden Comprehensive Cancer Center



Iowa has the **second** highest rate of new cancers in the U.S.

lowa's rate is rising while the rest of the country improves

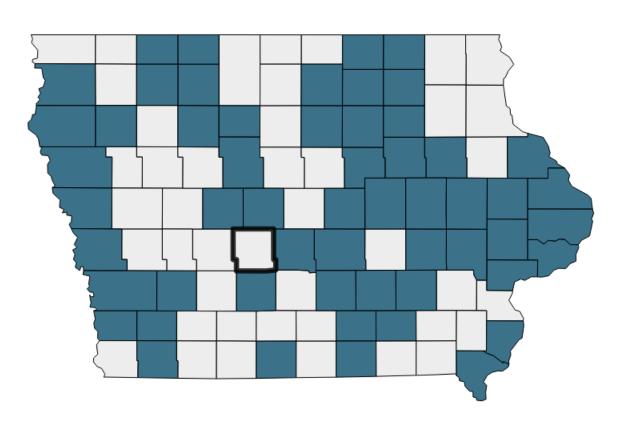




Over half of Iowa's counties have a higher incidence rate than the U.S.

56 Counties with rates **OVER** the national average

O Counties below the national average

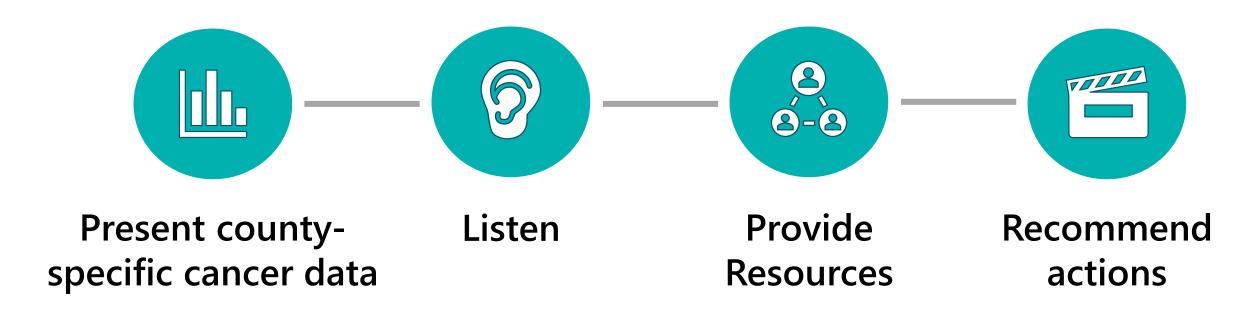


- Above National rates
- ☐ Similar to National rates



About the Project

Goal: to enhance community engagement & education around cancer prevention and control across all of lowa's 99 counties.





"Statistics are people with the tears wiped away"

Dr. Irving Selikoff

Cancer Control Partners in Iowa

State Government



Governor

- Implement state laws
- Advance and pursue policies and programs

lowa Legislature

- Propose and vote on legislation
- Appropriate money to state agencies and programs
- Create and modify lowa laws



Health and Human Services

Bureau of Chronic, Congenital and Inherited Conditions

Comprehensive Cancer Control Program

Cancer prevention, screening, survivorship

Care for Yourself (Breast & Cervical Cancer Program)

Colorectal Cancer Screening Program

Bureau of Environmental Health Services

- · Track environmental health-related diseases
- Assist local boards of health

Local (County) Public Health Services/Boards of Health

- · Address health priorities and health disparities
- Promote healthy living
- Protect against environmental hazards
- Assure access to health services

Unity Point, MercyOne, Great River, Avera, Mayo, Methodist, Gundersen, Sanford and numerous independent health systems, hospitals and clinics across lowa

Provide cancer prevention, screening, treatment, and survivorship services



Holden Comprehensive Cancer Center

Iowa's only NCI Designated
Cancer Center

Health Care, research, education



Iowa Cancer Consortium

Advocate, collaborate, plan



Data, research, education

American Cancer Society

Iowa Cancer Action Network

Advocate for better policies

ACS Iowa

Help with cancer treatment and recovery

UI Research Centers





Center for Health Effects of Environmental Contamination



Federal Funding for Cancer Control

- The <u>lowa Cancer Registry</u> is funded in part with Federal funds from the <u>National Cancer</u>
 <u>Institute (National Institutes of Health)</u>, Department of Health and Human Services, under Contract No. HHSN261201800012I
- The <u>Cancer in Iowa: 99 Counties Project</u> is specifically funded by Federal funds from the National Cancer Institute through grant award: 5R01CA254628-04S2, and through National Cancer Institute funds provided to the University of Iowa Holden Comprehensive Cancer Center (P30CA086862)
- The <u>lowa Cancer Consortium</u> acknowledges the **Centers for Disease Control and Prevention** (CDC) for its funding support under cooperative agreement NU58DP007103 awarded to the lowa Department of Health and Human Services (lowa HHS).

The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of CDC or the National Institutes of Health/National Cancer Institute.



Iowa Cancer Registry Goals



Assemble & report data on new cancers, cancer deaths, & survival

Respond to **data requests** from organizations & individuals

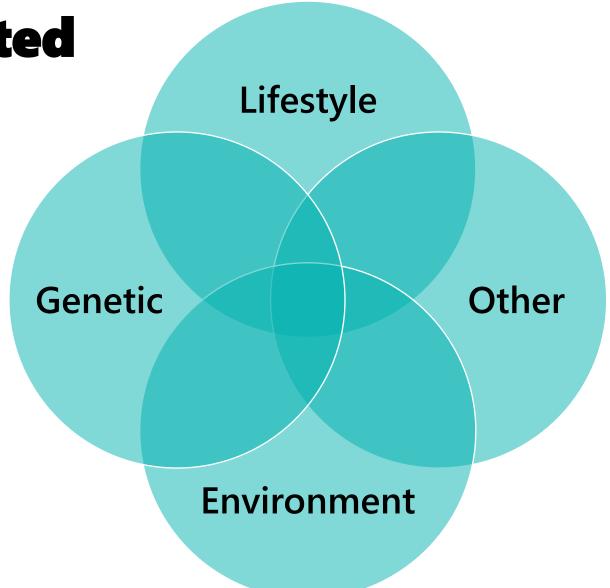
Support studies for cancer prevention, research, & education



Background on Cancer

Cancer is Complicated

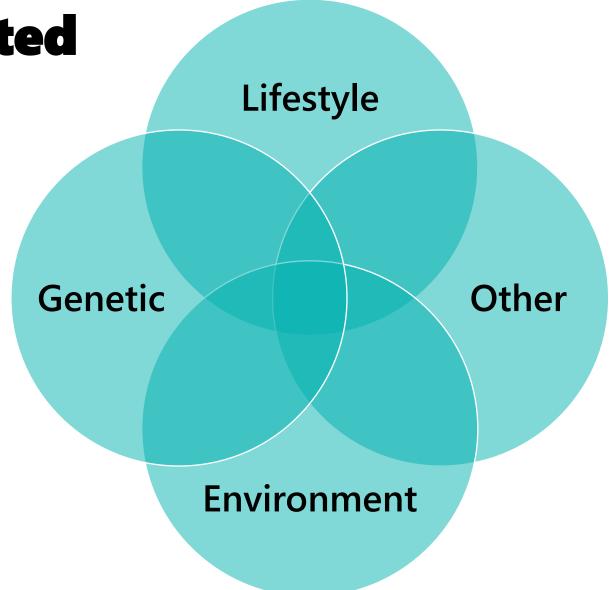
There is no one cause of cancer; it is a combination of different genetic, lifestyle, environmental, and **structural** risk factors that change the function of cells



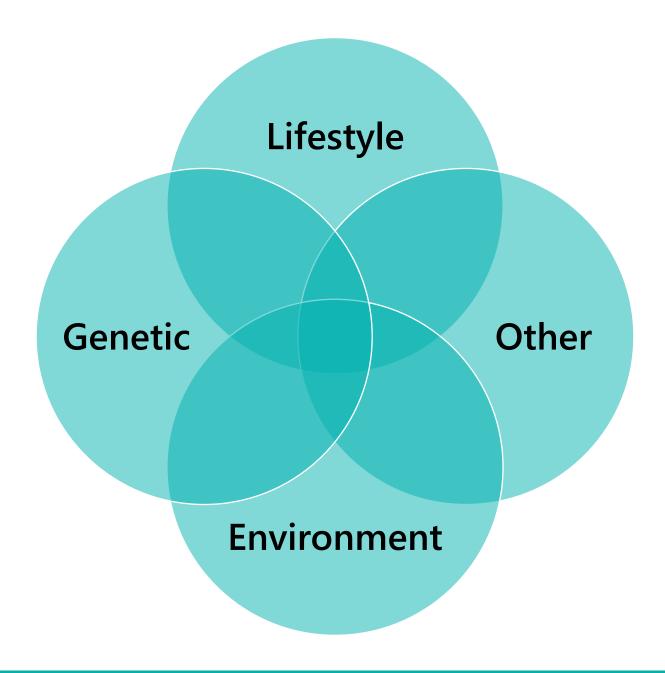


Cancer is Complicated

Risk factors are things that increase your chances of getting cancer

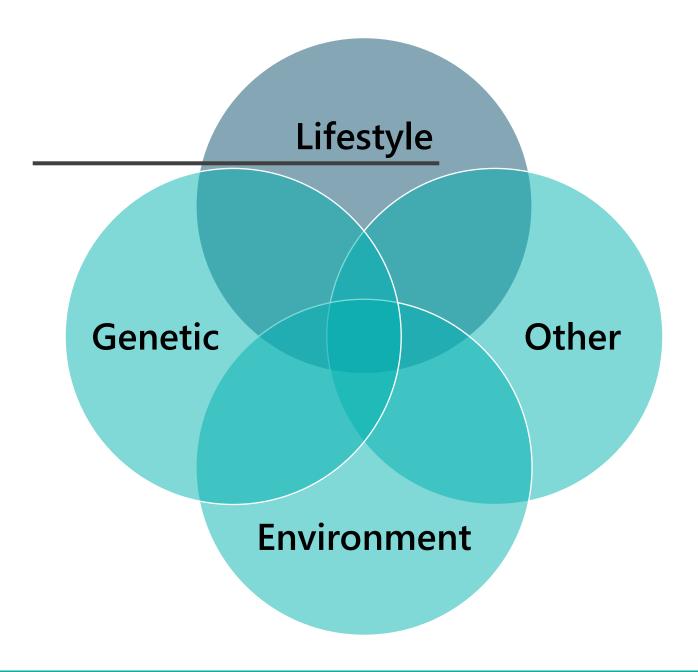




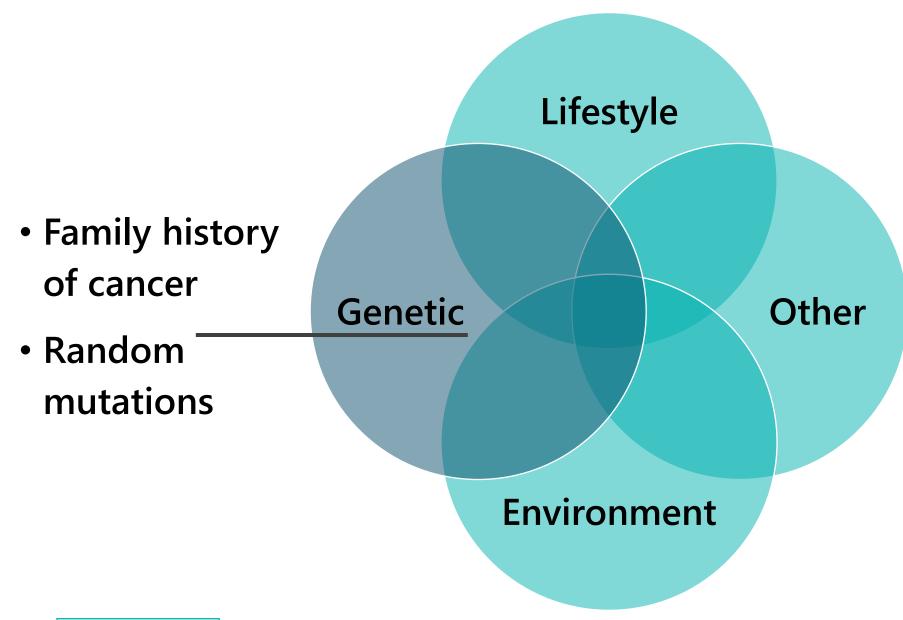




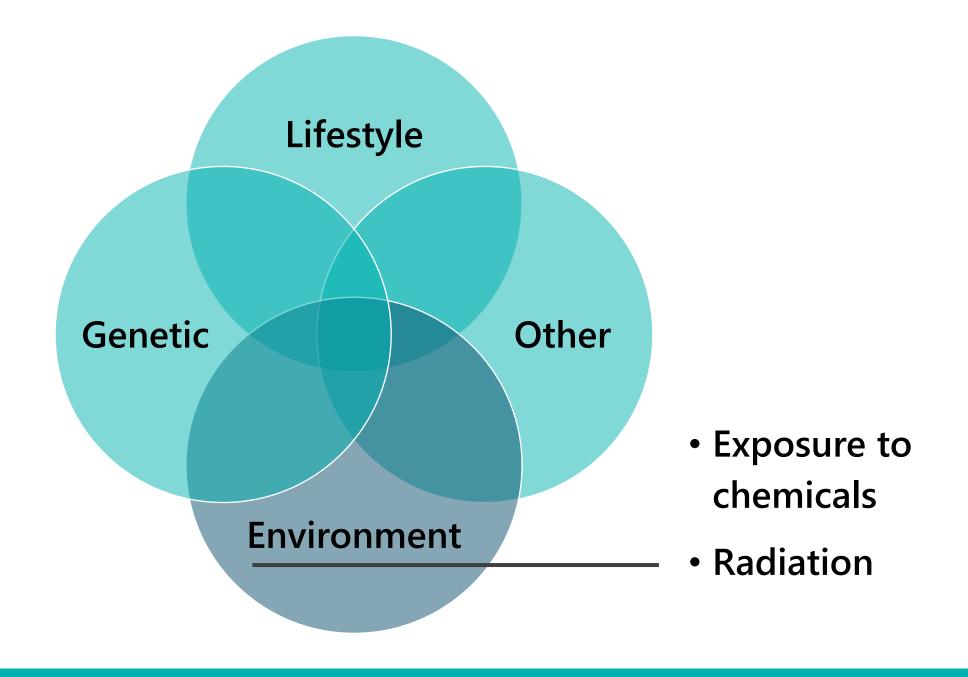
- Tobacco
- Alcohol
- Unhealthy diet
- Not being physically active
- Sunburns



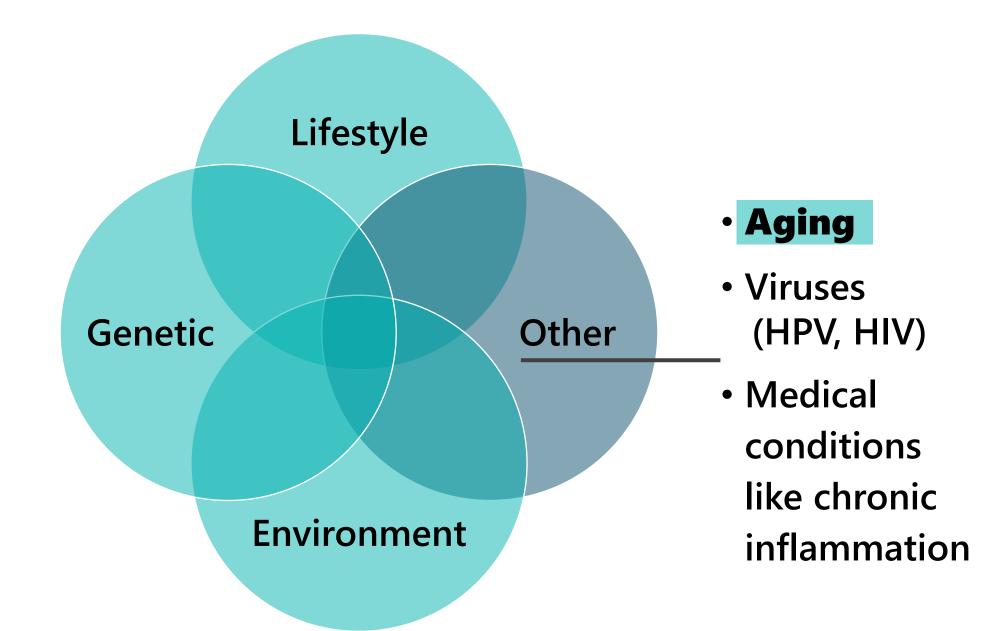














Cancer & the Environment

- Many Iowans understandably have questions about potential links between environmental exposures and cancer
- This is an important area of continued research, and lowans are right to ask questions and be cautious
- ICR, along with other population-based cancer registries, do not collect data on environmental risk factors, but we do share our data with researchers to support studies of cancer & environmental risk factors



Risk Factors

- There can be many years between exposure to risk factors & cancer development, which makes it difficult to prove connections.
 - For example, lung cancer may not occur until 30 years after a person starts smoking
- To reduce your risk, avoid risk factors whenever possible
- Today we will focus on things you can do to reduce your cancer risk. These things can be addressed at the state, community, and individual levels.



Key Terms

Incidence & Mortality

- Incidence
 - Number of new cases of a disease occurring during a specified time period in a population
- Mortality
 - Number of deaths from a disease that occur during a specified time period in a population



Rates & Counts

- Counts
 - -The number of new cases diagnosed or deaths from cancer
- Rates
 - -Adjusts the counts to give a # per 100,000 people
- Age-Adjusted Rates
 - -Addresses the question: *If the size and age of the populations were the same, would there be a difference in outcomes?*



Stage definition used today

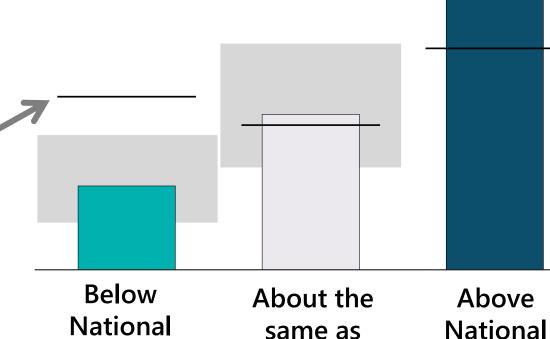
- Early Stage includes
 - Localized: Cancer is limited to the place where it started, with no sign that it has spread
- Late Stage includes
 - Regional: Cancer has spread to nearby lymph nodes, tissues, or organs.
 - Distant: Cancer has spread to distant parts of the body



How to read the graphs

Unless otherwise stated, bars are your county data

Black lines on bar graphs are United States data



National Rates

Rates

Rates

Grey boxes on bar graphs are 95% Confidence Intervals.

These are used to determine if rates are statistically different from each other



Cancer in Dallas County

New Cancers in Dallas County

All cancer types, average counts and rates, 2017-2021

Each year, there are about

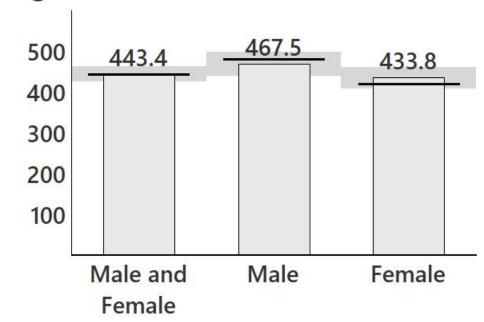
421

new cancers diagnosed in Dallas County

Cancer incidence rates in Dallas County are not different from the U.S. average

Ranks #92 of 99 counties

Cancer incidence rates are typically higher in men than women





Cancer deaths in Dallas County

All cancer types, average counts and rates, 2018-2022

Each year, there are about

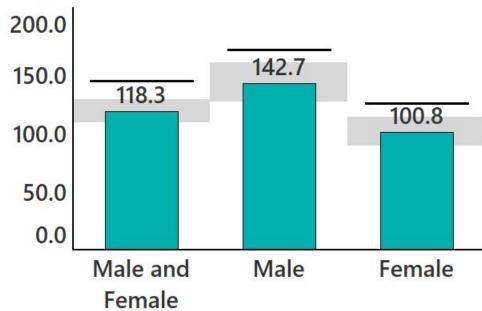
115

cancer deaths in Dallas County

Cancer mortality rates in Dallas County are lower than the U.S. average

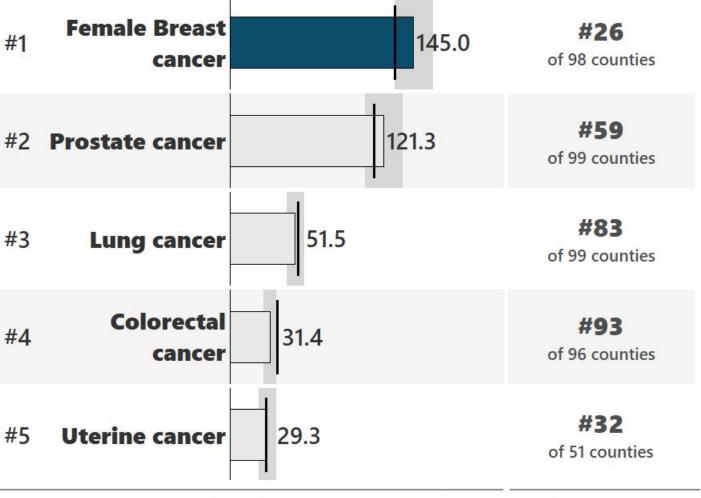
Ranks #95 of 99 counties

Cancer mortality rates are typically higher in men than women





Top cancers in Dallas County

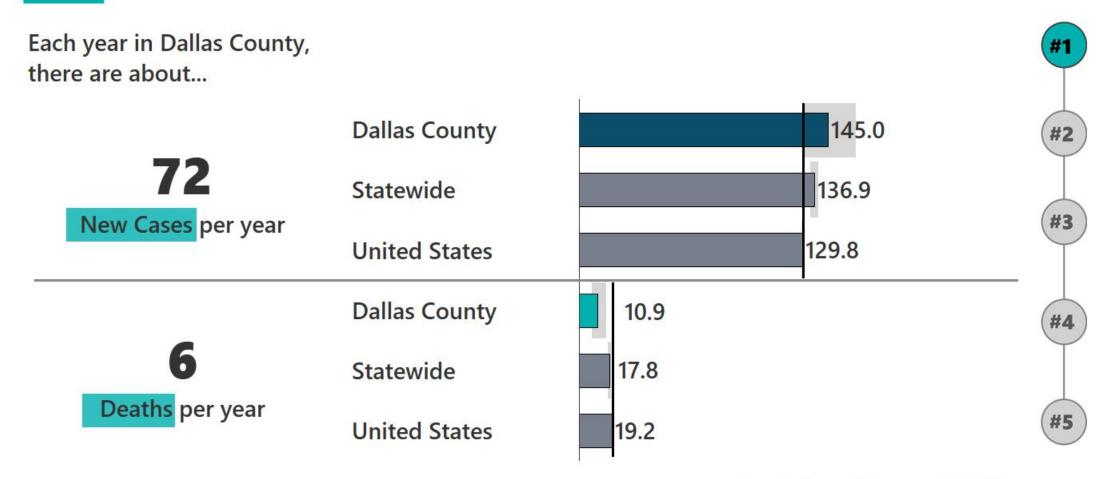


Age-Adjusted rate per 100k, 2017-2021

Rank compared to other counties, where #1 is highest in the state



#1 | Female Breast cancer





Age-Adjusted Rate per 100,000 Incidence (2017-2021); Mortality (2018-2022)

What can you do to prevent breast cancer?

Taking

Hormones







Physical Activity

Healthy **Foods**



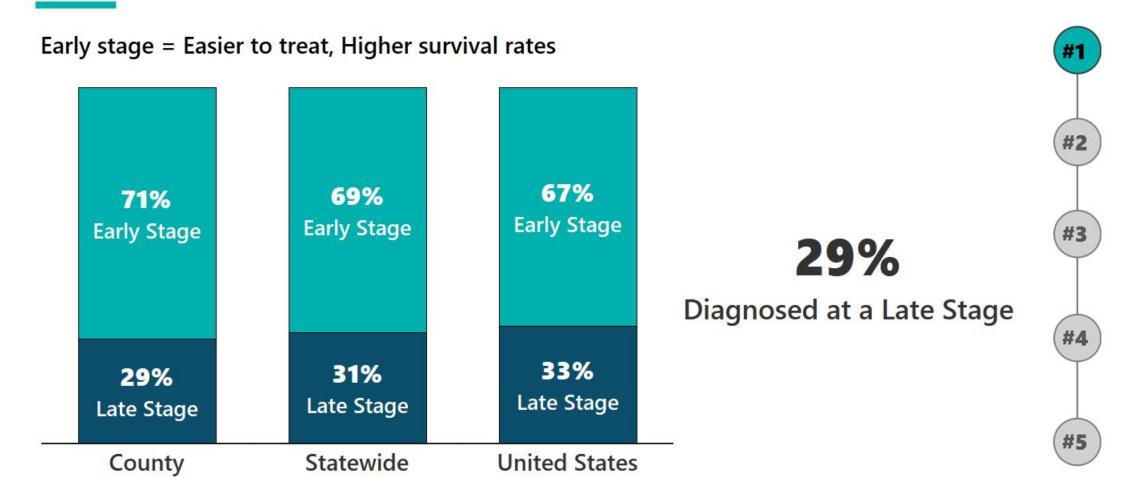






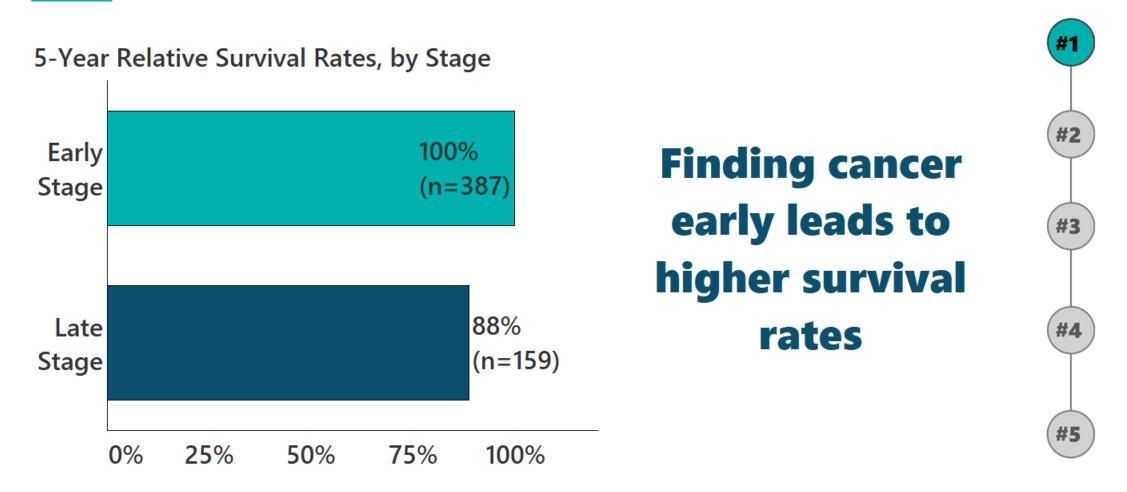


#1 | Female Breast cancer Stage at Diagnosis





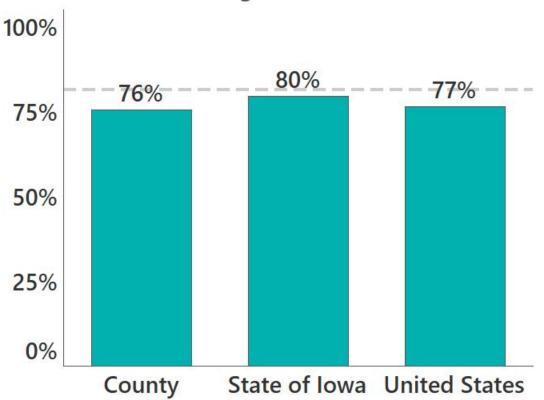
#1 | Female Breast cancer | 5-Year Survival





Breast Cancer Screening

Women age 50+ who are up to date with their breast cancer screening



Screening Guidelines

People with breasts ages 40-74 should screen with a mammogram every 2 years

Talk to your doctor if you have a family history of breast cancer



Data from 2022 BRFSS Goal: 81.4% by 2027

The Care for Yourself – Breast and Cervical Cancer Program (CFY-BCC)

We provide free breast and cervical cancer screenings across lowa.

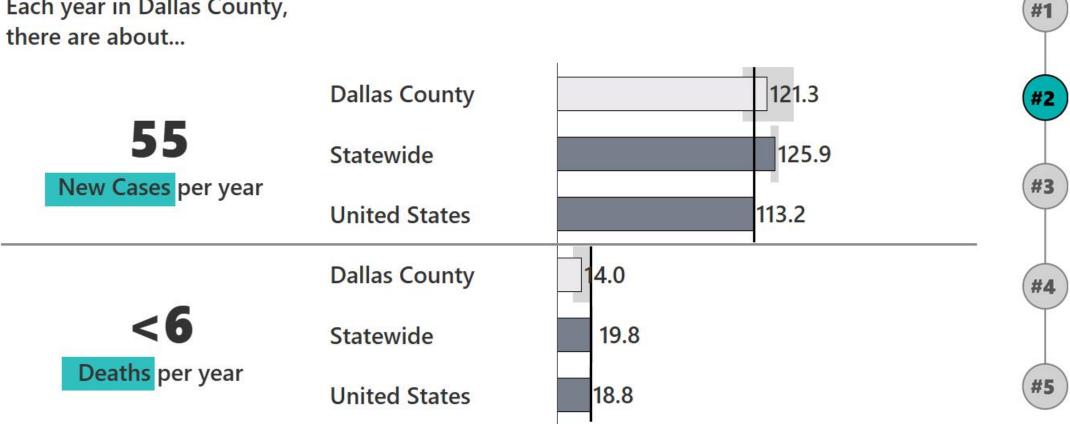
- ► CFY-BCC is also called the Iowa Breast and Cervical Cancer Early Detection Program.
- ► CFY-BCC serves Iowans between 21 and 64 years of age.
- ► Are at or earn less than 250% of the Federal Poverty Level.
- ► Call (866) 339-7909 to speak to a confidential coordinator immediately.
- ► CFY-BCC coordinators are available to help you Monday-Friday, 8:00 a.m. to 4:00 p.m.



https://hhs.iowa.gov/public-health/cancer/cfy

#2 Prostate cancer

Each year in Dallas County,





Age-Adjusted Rate per 100,000 Incidence (2017-2021); Mortality (2018-2022)

What can you do to prevent prostate cancer?







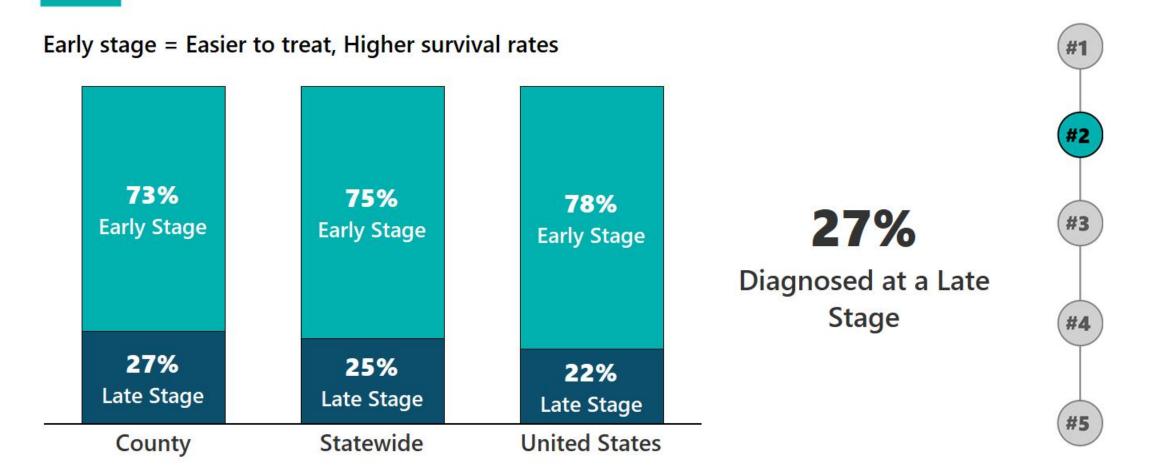






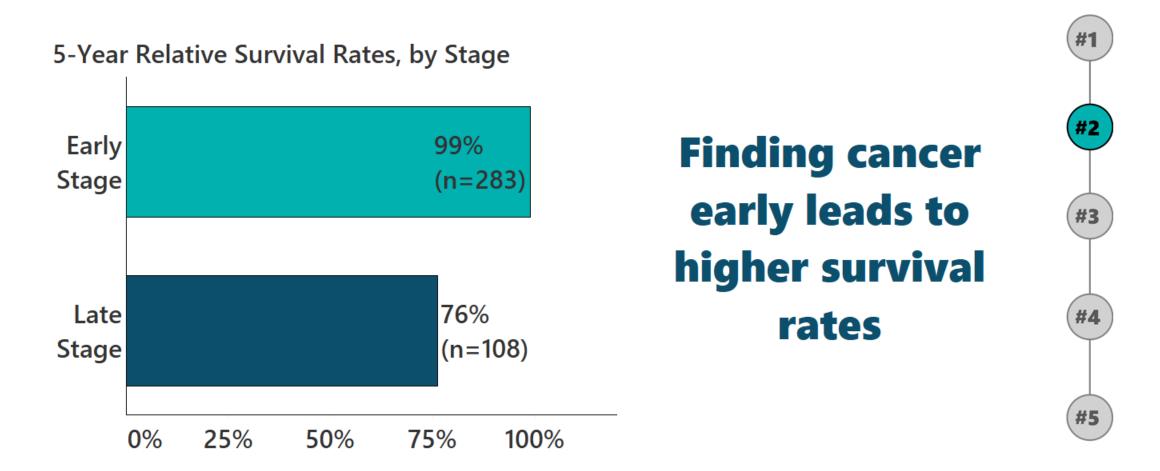


#2 | Prostate cancer | Stage at Diagnosis





#2 | Prostate cancer | 5-Year Survival





Prostate Cancer Screening

Screening Guidelines

Screening test: Prostate-specific antigen (PSA) blood test

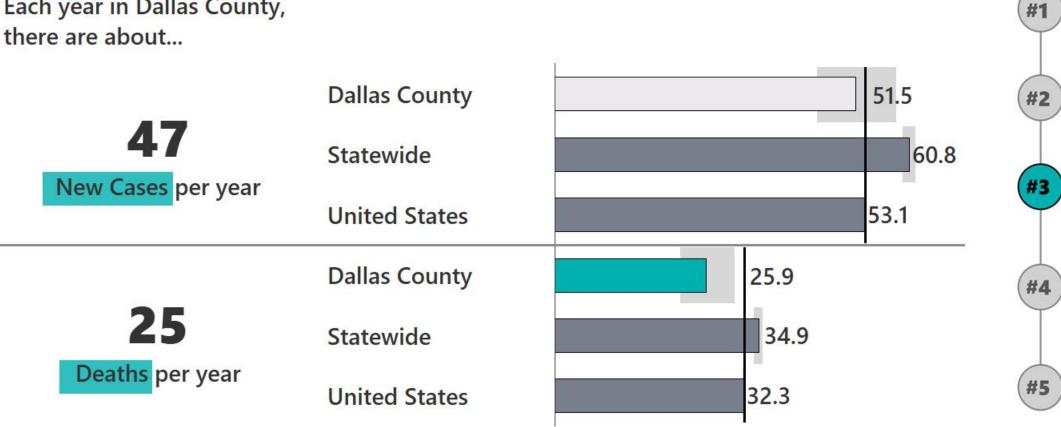
If you have a prostate and are 55-69 years old, discuss with your doctor if a PSA test is right for you

(U.S. Preventative Services Task Force)



#3 | Lung cancer

Each year in Dallas County,





Age-Adjusted Rate per 100,000 Incidence (2017-2021); Mortality (2018-2022)

What can you do to prevent lung cancer?





Test your home for Radon

+ Get Screened!







What is Radon?

- Radon is an invisible, tasteless, odorless, radioactive gas
- It is naturally produced by radium and uranium in the soil
- Radon becomes harmful when it becomes trapped and concentrated in the air
 - For example, when it leaks into a basement through a crack in the foundation or a space around a pipe

Learn more about Radon testing and mitigation:

Iowa Health & Human Services hhs.iowa.gov/radiological-health/radon

Iowa Cancer Consortium canceriowa.org/radon/

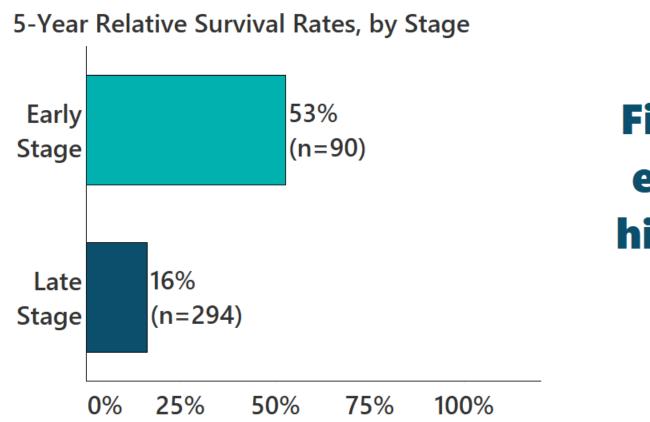


#3 | Lung cancer | Stage at Diagnosis

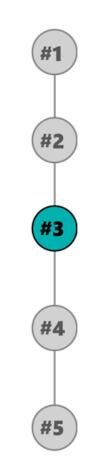
Early stage = Easier to treat, Higher survival rates #1 24% 26% 27% #2 **Early Stage Early Stage Early Stage 73%** (#3 Diagnosed at a Late 76% 74% 73% Late Stage Stage Late Stage Late Stage #4 #5 Statewide County **United States**



#3 | Lung cancer | 5-Year Survival

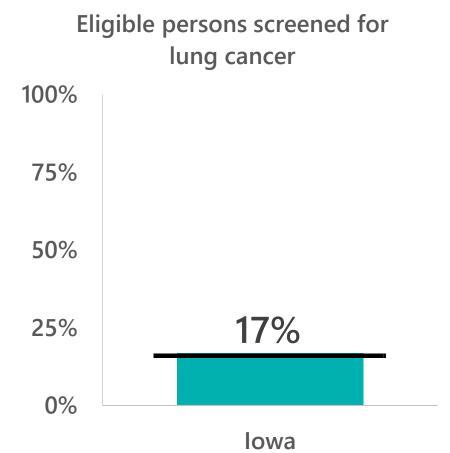








Lung Cancer Screening



Screening Guidelines

Lung cancer screening is a low-dose CT scan

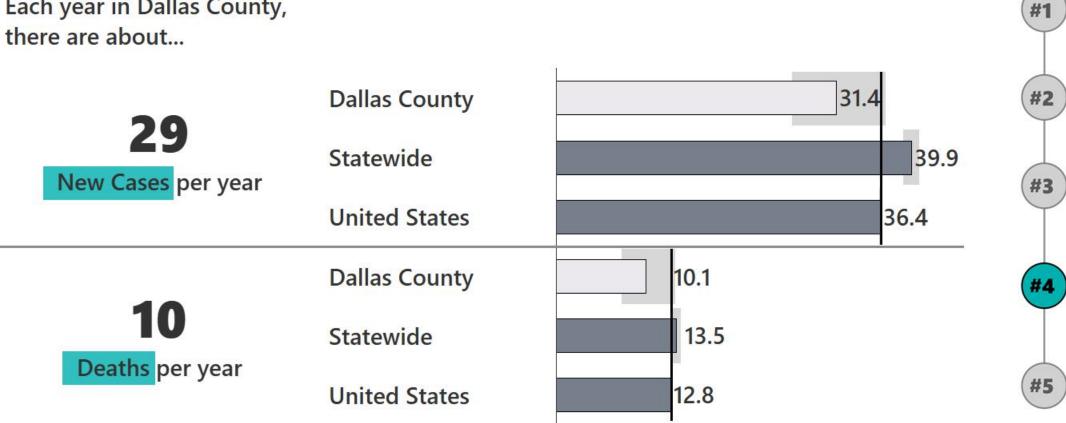
If you have smoked in the last 15 years and are between the ages 50-80 years talk to your doctor about being screened for lung cancer

(U.S. Preventative Services Task Force)



#4 | Colorectal cancer

Each year in Dallas County,





Age-Adjusted Rate per 100,000 Incidence (2017-2021); Mortality (2018-2022)

What can you do to prevent colorectal cancer?







Physical Activity

Healthy Foods



Smoking/ Tobacco

+ Get Screened!







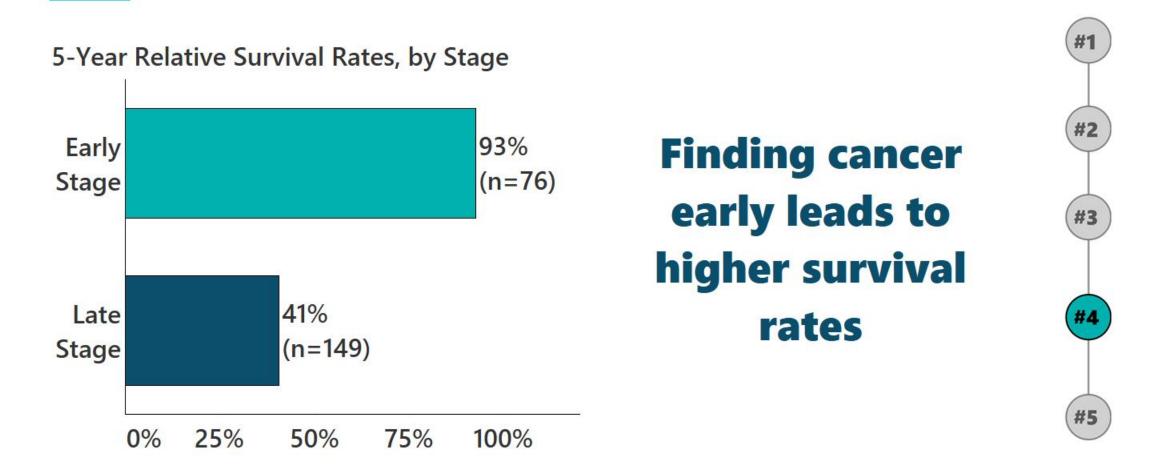


#4 | Colorectal cancer | Stage at Diagnosis

Early stage = Easier to treat, Higher survival rates #1 36% 37% 40% #2 **Early Stage Early Stage Early Stage** 64% #3 Diagnosed at a Late 64% 63% 60% Stage #4 **Late Stage** Late Stage **Late Stage** #5 County Statewide **United States**



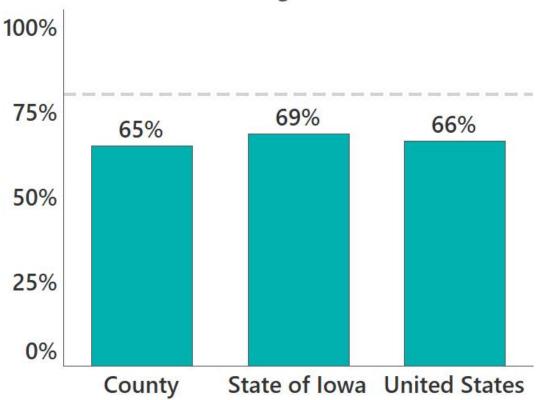
#4 | Colorectal cancer | 5-Year Survival





Colorectal Cancer Screening

Adults ages 45-75 who are up to date with their colorectal cancer screening



Screening Guidelines

Adults ages 45-75 can screen with either (1) an at-home, stool-based test, or (2) a colonoscopy.

Talk to your doctor about which is best for you.



Data from 2022 BRFSS Goal: 80% by 2027

Iowa Get Screened (IGS): Colorectal Cancer Program

We partner with Iowa's Federally Qualified Health Centers (FQHCs) and local public health agencies to increase colorectal cancer screening.

Through a collaboration with the Iowa Primary Care Association (Iowa PCA) and FQHCs, the program serves low-income Iowans, ages 45-75, to:

- ► Increase the number of cancers prevented
- ► Increase the diagnosis of early-stage colorectal cancer
- ► Reduce colorectal cancer incidence and mortality in the state



https://hhs.iowa.gov/public-health/cancer/colorectal-cancer-screening-program

#5 | Uterine cancer / Endometrial Cancer

Each year in Dallas County, #1 there are about... **Dallas County** 29.3 #2 30.3 Statewide New Cases per year #3 27.8 **United States** 5.6 **Dallas County** #4 5.2 Statewide **Deaths** per year 5.2 **United States**



Age-Adjusted Rate per 100,000 Incidence (2017-2021); Mortality (2018-2022)

What can you do to prevent uterine cancer?





Other Risk Factors

- Taking estrogen-only hormone replacement therapy (HRT) after menopause
- Type 2 diabetes
- Polycystic ovary syndrome (PCOS)
- Family history of endometrial cancer
- Genetic conditions, such as Lynch syndrome and BRCA

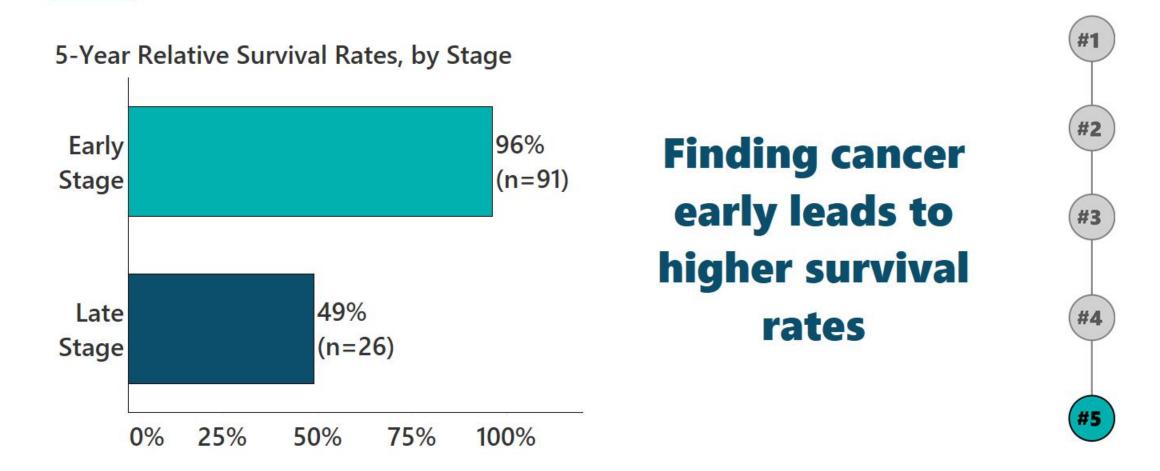


#5 | Uterine cancer | Stage at Diagnosis

Early stage = Easier to treat, Higher survival rates #2 71% 75% 22% 78% **Early Stage** #3 **Early Stage Early Stage** Diagnosed at a Late Stage #4 29% 25% 22% Late Stage Late Stage **Late Stage** #5 County Statewide **United States**



#5 | Uterine cancer | 5-Year Survival





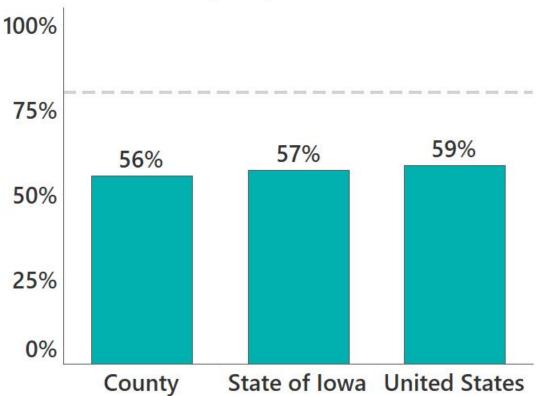
Talk to your doctor if you experience...

- Vaginal bleeding or discharge not related to menstruation (periods)
- Vaginal bleeding after menopause
- Difficult or painful urination
- Pain during sexual intercourse
- Pain in the pelvic area



A vaccine that prevents cancer: HPV

Adolescents ages 13-15 who have completed their HPV vaccine series (2022)

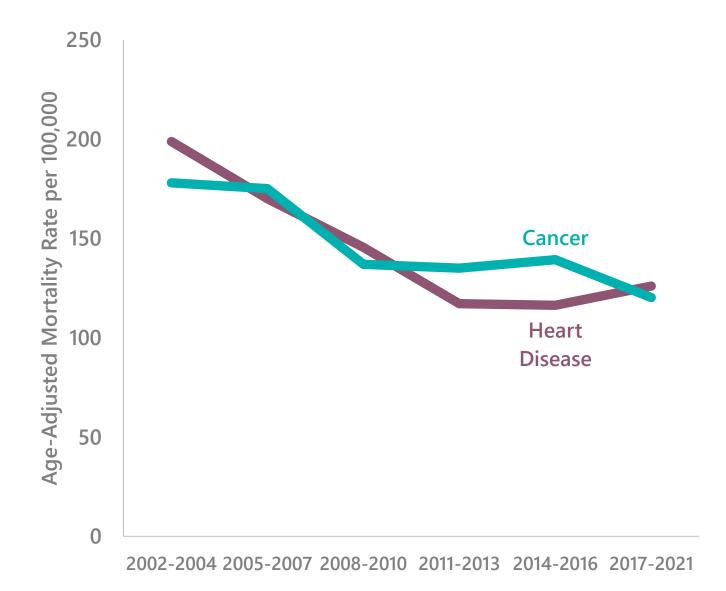


- HPV infection can cause cancers of the cervix, mouth and throat, anus, rectum, penis, vulva, and vagina.
- Iowa has the highest rate of oropharyngeal cancer in the U.S.
- Vaccine provides safe, effective, and lasting protection against HPV, thus reducing cancer risk
- Recommended at age 11 or 12 years, when immune response is best & before HPV exposure



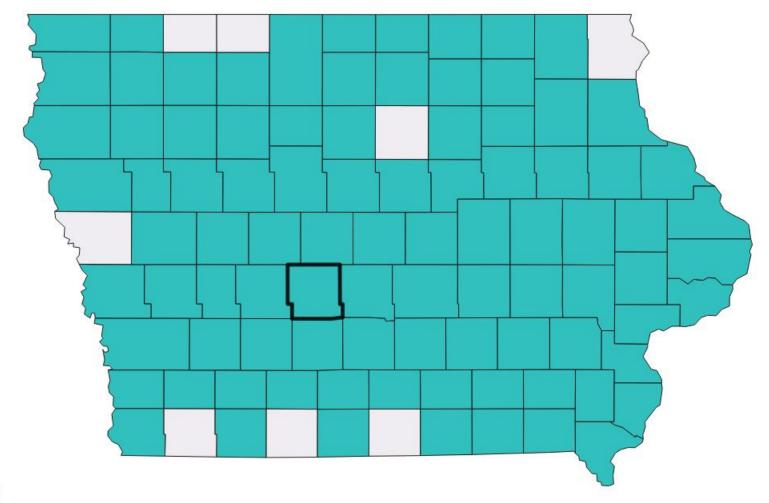
Data from 2022 IHHS & NIS-Teen Goal: 80% by 2027

Cancer is the **second** leading cause of death in Dallas County





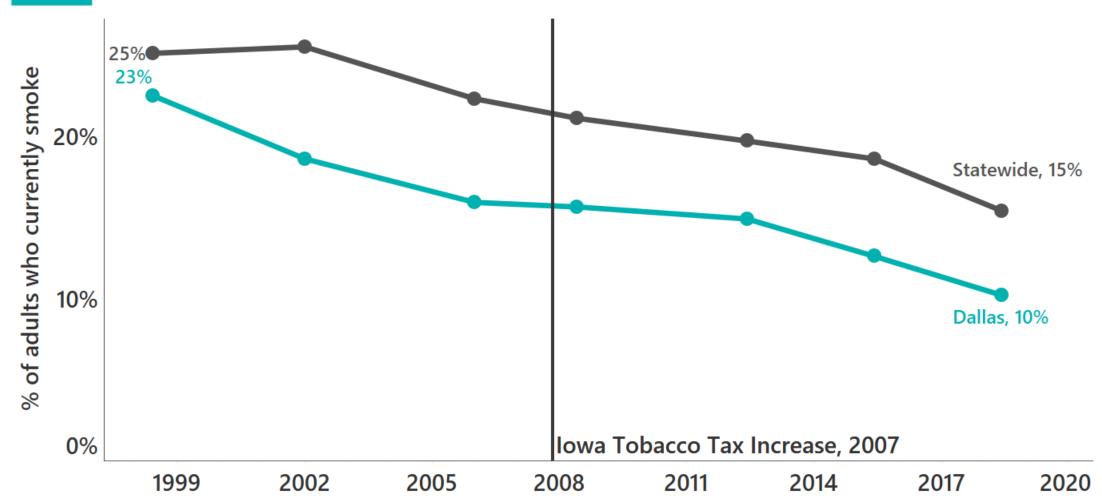
After the last tobacco tax was passed in 2007, smoking rates decreased in 92% of Iowa counties





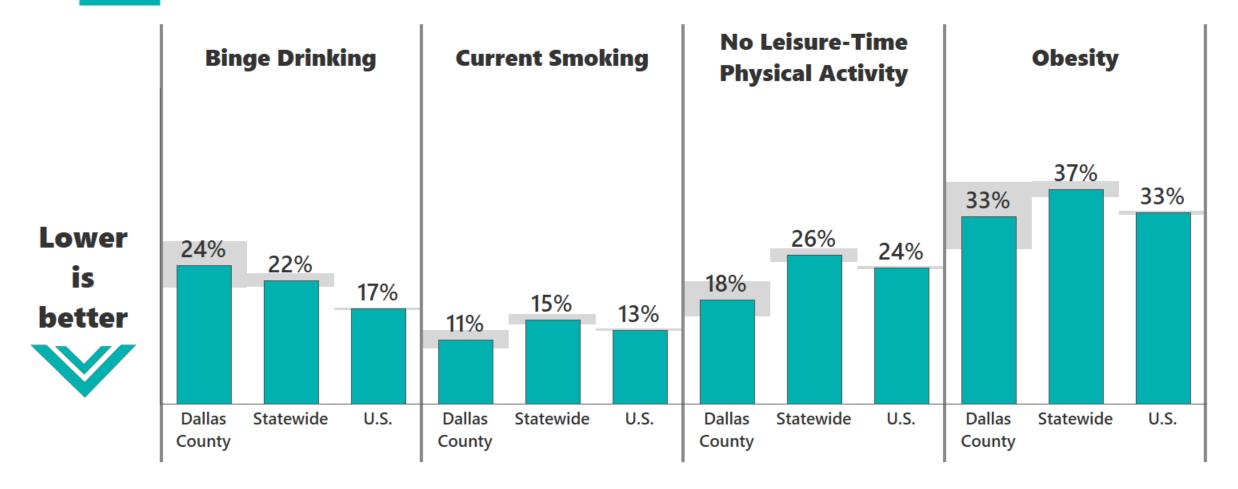
After the last increase to the tobacco tax was passed in 2007, smoking rates decreased* in Dallas County

*Determined by comparing data from 2004-2007 combined to 2011-2013 combined





Other Cancer Risk Factors





Resources to help understand and address cancer in lowa communities

Iowa Comprehensive Cancer Control Program (CCCP)

We work with partners to prevent cancer whenever possible and support cancer survivors across lowa.

- ► The CCCP partners with many organizations, including the Iowa Cancer Consortium, Iowa's cancer coalition.
- ► CCCP is involved in the revision and implementation of the Iowa Cancer Plan.
- ► Currently CCCP is focused on increasing HPV vaccination, increasing lung cancer screening, and supporting cancer survivors.

DELVERY DELVERY

Photo from the Iowa Cancer Consortium, taken at the Iowa Cancer Summit

https://hhs.iowa.gov/public-health/cancer https://canceriowa.org/iowa-cancer-plan/



lowa Cancer Consortium



- Connections and partnership
- Latest news and cancer updates via email
- Training and educational opportunities
- Grant opportunities and technical assistance
- Free cancer educational materials for distribution
- Blueprint for cancer control, the Iowa Cancer Plan



Virtually-hosted workgroups include:

- Cancer Screening & Early Detection
- Health Equity
- HPV (w/ Iowa Immunizes coalition)
- Policy
- Radon
- Research & Clinical Trials
- Rural Cancer
- Quality of Life
- Cancer & the Environment Task Force



Blueprint for cancer control, the *lowa Cancer Plan*

Chapters with sections that include priorities, strategies, and specific action steps which may be tailored to many settings to guide cancer control activities.

- 1. Health Equity: identify and eliminate cancer health disparities.
- 2. Prevention and Risk Reduction: whenever possible, prevent cancer from occurring.
- 3. Early Detection and Screening: promote the benefits of screening tests to ensure early diagnosis.
- **4. Diagnosis and Cancer-Directed Therapy:** reduce barriers to care, promote evidence-based practices, and encourage participation in clinical trials and other forms of research.
- **5. Survivorship and End-of-Life Care:** ensure resources to optimize quality-of-life for cancer survivors and their families.



Iowa Cancer Plan

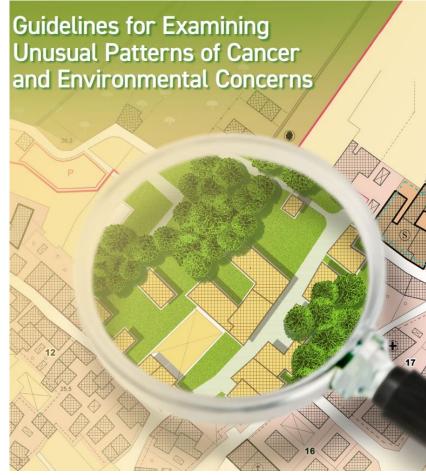
2023-2027



https://canceriowa.org/ iowa-cancer-plan/

What to do if you suspect a cancer cluster in your community

- If you are concerned about cancer excess in your area, please email us at ICR-CancerConcerns@uiowa.edu
- We will ask you about:
 - Geographic area of concern
 - Cancer types diagnosed in the area
 - Time frame
 - Exposure(s) of concern
- If possible, ICR will conduct an analysis comparing the expected number of cancers to what's been observed
 - A written report of the results will be sent to you and a meeting to discuss the results will be offered





Recommended Actions



Iowa Cancer Plan

Use to identify strategies aligned with community-specific needs

canceriowa.org/iowa-cancer-plan/





Engage American Cancer Society Cancer Action Network (ACSCAN) to promote cancer-relevant legislation

www.fightcancer.org



lowa Cancer Consortium

Connect for state-wide collaboration and potential community-level funding

www.canceriowa.org

Include cancer in needs assessments

Include cancer-relevant strategies in your hospital's community health needs assessments or public health department's needs assessment

hhs.iowa.gov/lphs/cha-chip



Main Takeaways

Cancer is an important health issue facing your county

There are proven ways to prevent cancer & find it early You can avoid risk factors and get screened

Iowa has a strong Cancer Plan, resources, & organizations to help fight cancer

Policy changes at the local and state levels can have a huge impact!

Please communicate your concerns & needs with your state representatives and local policymakers

And let us know how we can help!



This is only the first step.

These slides will be posted

These slides will be posted to the Iowa Cancer Registry website:

https://shri.public-health.uiowa.edu/cancer-data/cancer-in-iowa-99-counties-project/



If you have questions, please email us at ICR-99countiesproject@uiowa.edu

Cancer in Iowa: 99 Counties Project Resource Guide

- Organizations and programs we presented today
- IHHS Programs
 - Tobacco Use Prevention and Control
 - Immunization Program
 - The Hepatitis Program
 - Iowa Private Well Grants
 Program
 - Radon

- Iowa Rural Health Association
- Agricultural Health Study
- Environmental Exposures and Health Risks Fact Sheets
- Center for Health Effects of Environmental Contamination



And more!



Environmental Exposures and Health Risks Fact Sheets

These facts sheets include information on

- Cancer and non-cancer health risks for each environmental exposure
- How the exposures are regulated
- What you can do to limit your exposure

Environmental Health Fact Sheets

- Arsenic
- Nitrate
- Radon



NEW Environmental Exposures & Health Risks Fact Sheets







The University of Iowa Center for Health Effects of Environmental Contamination (CHEEC) supports and conducts research to identify, measure and study adverse health outcomes related to exposure to environmental toxins. CHEEC was established through the 1987 Iowa Groundwater Protection Act and has focused its efforts to date mainly on drinking water contaminants.

For questions about environmental contaminants, please contact Dr. Cwiertny at the email address below.



David Cwiertny
Director of CHEEC



Iowa Private Well Grants Program Iowa Health & Human Services

Iowa's <u>Private Well Grants Program</u> (PWG) provides free water testing to all private well owners and users for the analytes listed below. The Iowa DNR recommends that all private well owners have their water tested at least annually.

Follow the steps outlined on the Iowa DNR website.



To get your private well tested, please contact your local county health department.

County Health Department - contact list (click here)

- <u>Bacteria/coliform</u> (annually)
- <u>E.coli/fecal coliform</u> (annually)
- Nitrate (annually)
- Arsenic (every 3 years)
- Manganese (every 3 years)
- <u>PFAS</u> (requires pre-approval from the DNR)

Dallas County Resources

Private Well Testing

Contact the Dallas County Environmental Health Department

https://www.dallascountyiowa .gov/408/Private-Well-Information

Health Navigation Services

The Health Navigation program is available to all Dallas County residents.

The program aims to help clients improve their overall quality of life and advocate for their own health needs.

To refer someone to the Health Navigation Program, please call 515-993-3750 or use these Health Navigation Referral Forms on the website

https://www.dallascountyiowa.go v/419/Health-Navigation-Services

Radon Testing

Dallas County Environmental Health has radon test kits available for purchase and pickup at our office (please call for pricing).

https://www.dallascountyiowa .gov/410/Radon-Information

25747 N Avenue, Suite C Adel, IA 50003

Phone: 515-993-5803



Thank you!

→ https://shri.public-health.uiowa.edu/

Email questions here: ICR-99countiesproject@uiowa.edu