

Early-Onset Cancer in Iowa: What We Know and How We Can Help Our Patients

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Acknowledgements

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Disclosures

No conflicts to disclose.

“Second highest, fastest rising cancer rate.”

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- 70-100 cancer related bills introduced by state legislature
- Dozens of town halls and community forums discussing cancer
- 300+ mentions in the media
- \$1,000,000+ appropriated...and rising

The mysterious rise of cancer among young adults in the corn belt

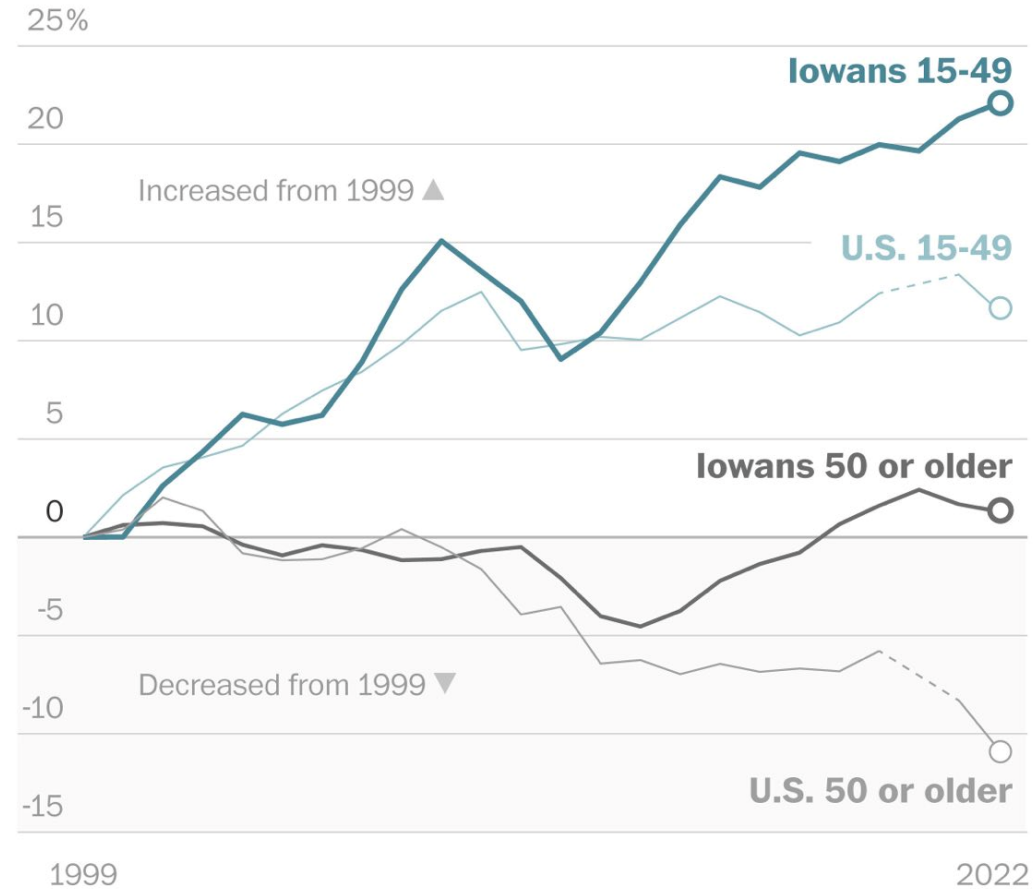
Washington Post (10/2025)

*The six leading states for corn production — Iowa, Nebraska, Illinois, Minnesota, Indiana and Kansas — had the same cancer frequency as the rest of the nation for young adults and the overall population when state-level tracking began in 1999. In the 2000s they began to diverge, and since 2015 the states have had a significantly higher cancer rate among those ages 15 to 49. **In the latest data from 2022, those states have a rate 5 percent higher for young adults***

-WaPo

Cancer rates rising for young adults

Nationally, cancer prevalence for adults 50 or older has declined since 1999, while rates for adults under 50 have risen. In Iowa, rates for younger adults have risen more than the nation as a whole.



*Low baseline, faster increase for early onset

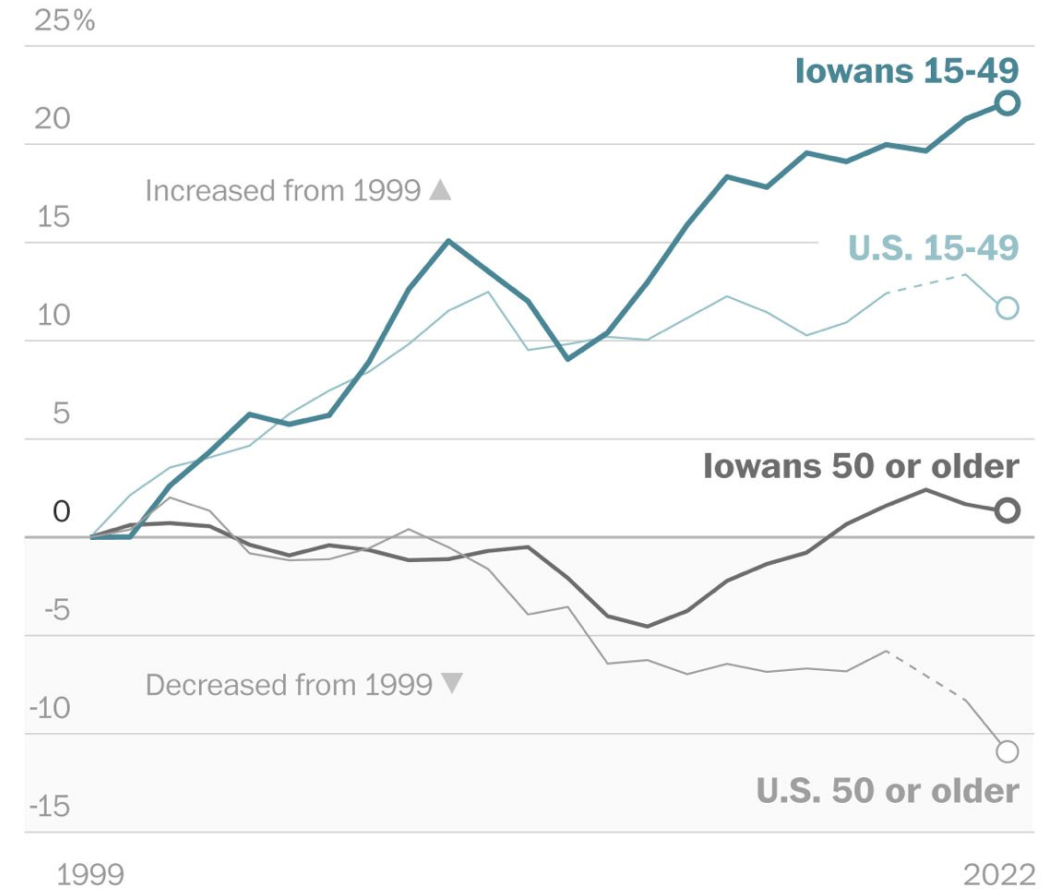
*Fastest increase for Iowa early onset

*Higher baseline, 1-2% increase for 50+ Iowa

*Consistent decline for all other states

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What early-onset cancer rise fastest in Iowa?

Where is the greatest burden within the state?

Brief Methods

Methodology

Data:

National Program of Cancer Registries (national analysis);

Surveillance, Epidemiology, and End Results (SEER) (Iowa analysis)

Methodology

Measures:

Cancer Incidence Rate (cases per 100,000 population)

Annual Percentage Change (2001-2022)

Methodology

Inclusion Criteria:

Early-Onset Cancer (Age 20-49)

Risk-Associated

Alcohol	HPV	Physical/Obesity	Tobacco	Nitrate?
Head and Neck Colorectal Digestive* Female breast	Head and Neck Cervical Digestive* Other Female Genital* Male Genital*	Colorectal Digestive Female Genital Thyroid Female Breast	Head and Neck Lung Colorectal Digestive Other*	Colorectal Esophagus Stomach Pancreas Ovary Bladder Kidney Brain/CNS Thyroid NHL Leukemia

What early-onset cancer rates
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Males

All Sites	134
Colorectal	20.6
Male genital	18.7
Melanoma	15.4
Other Digestive	10.0
Head & Neck	7.5
Thyroid	7.5
Lung	4.3

What early-onset cancer rates are highest in Iowa?

Females

All Sites	240.4
Breast	84.0
Melanoma	29.1
Thyroid	26.7
Other Female Genital	23.3
Colorectal	16.5
Cervix	9.0
Other Digestive	7.7
Lung	4.2
Head & Neck	3.6

What early-onset cancer rates are highest in Iowa?

Males (risk associated)

Nitrate	71.5
Tobacco	58.7
Physical Activity / Obesity	48.2
Alcohol	30.6
HPV	4.3

What early-onset cancer rates are highest in Iowa?

Females (risk associated)

Alcohol	105
Nitrate	78.3
Physical Activity / Obesity	74.9
Tobacco	49.2
HPV	12.7

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In 2022, Iowa's 185.70 early-onset cancer rate was #3 in the nation.

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In 2022, Iowa's 185.70 early-onset cancer rate was #3 in the nation.

Males (#4): 133.9

Females (#5): 240.4

What early-onset cancers rank highest in Iowa?

#23 Lung
#29 Cervical
#32 Digestive

What early-onset cancers rank highest in Iowa?

#11 Alcohol-associated

#13 HPV-associated

#14 Thyroid

#14 Male Genital

#15 Female Breast

#23 Lung

#29 Cervical

#32 Digestive

What early-onset cancers rank highest in Iowa?

#8 Colorectal

#6 Head and Neck

#5 Melanoma

#4 Other Female Genital

#11 Alcohol-associated

#13 HPV-associated

#14 Thyroid

#14 Male Genital

#15 Female Breast

#23 Lung

#29 Cervical

#32 Digestive

What early-onset cancers rank highest in Iowa?

#8 Colorectal

#6 Head and Neck

#5 Melanoma

#4 Other Female Genital

#7 Tobacco-associated

#4 Physical Activity/Obesity-associated

#4 Nitrate-associated

#11 Alcohol-associated

#13 HPV-associated

#14 Thyroid

#14 Male Genital

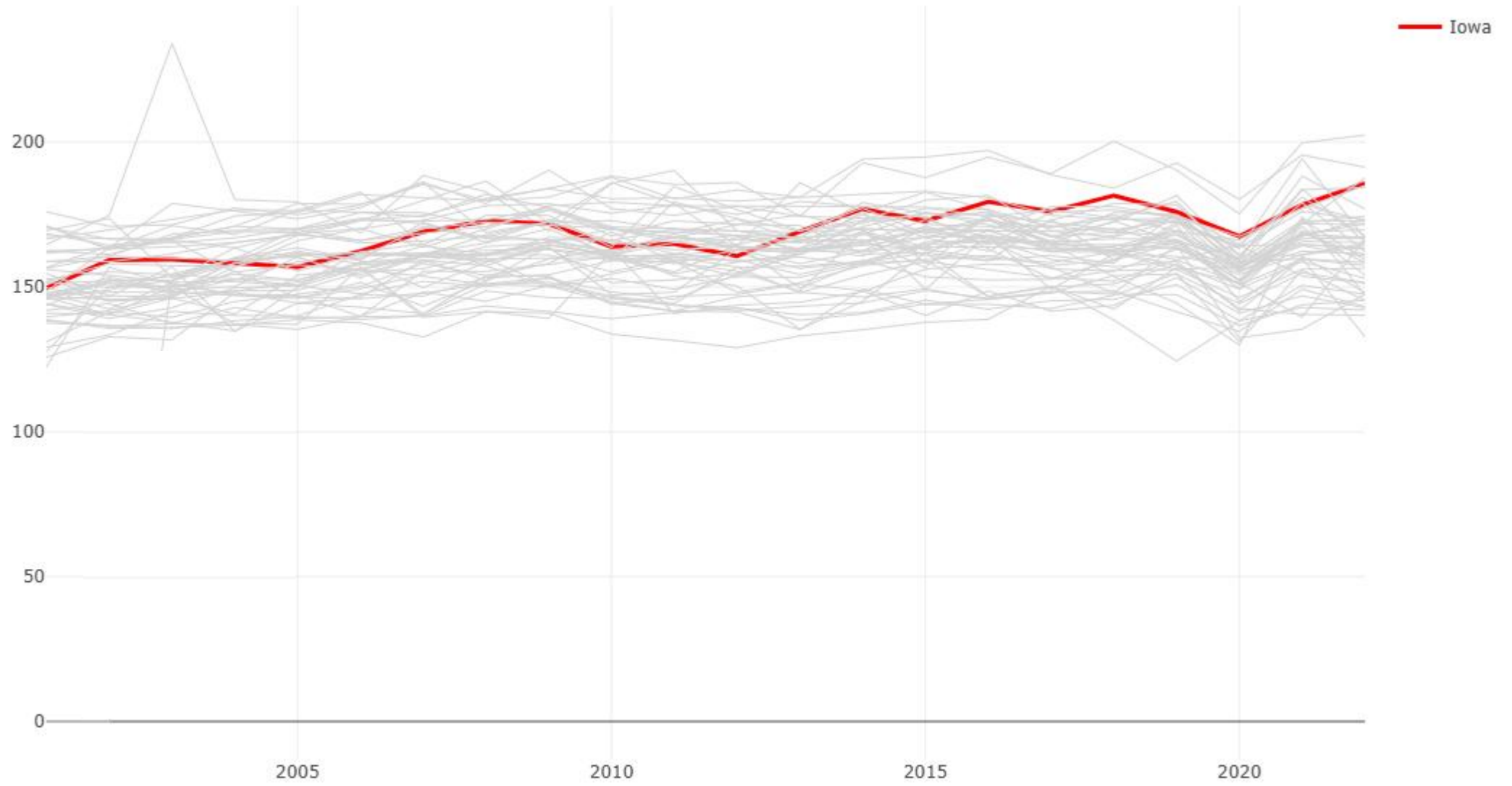
#15 Female Breast

#23 Lung

#29 Cervical

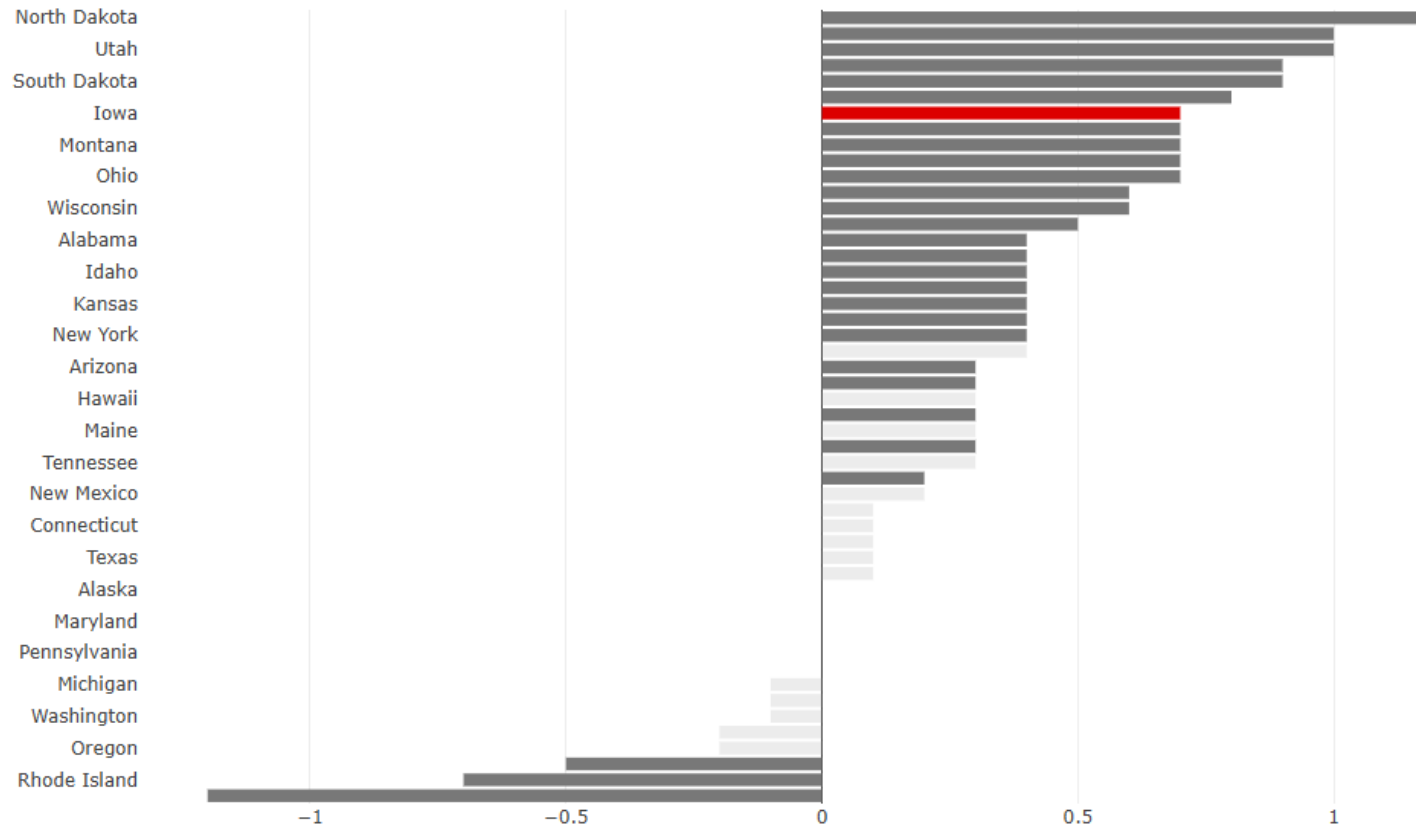
#32 Digestive

What early-onset cancers
are rising fastest in Iowa?



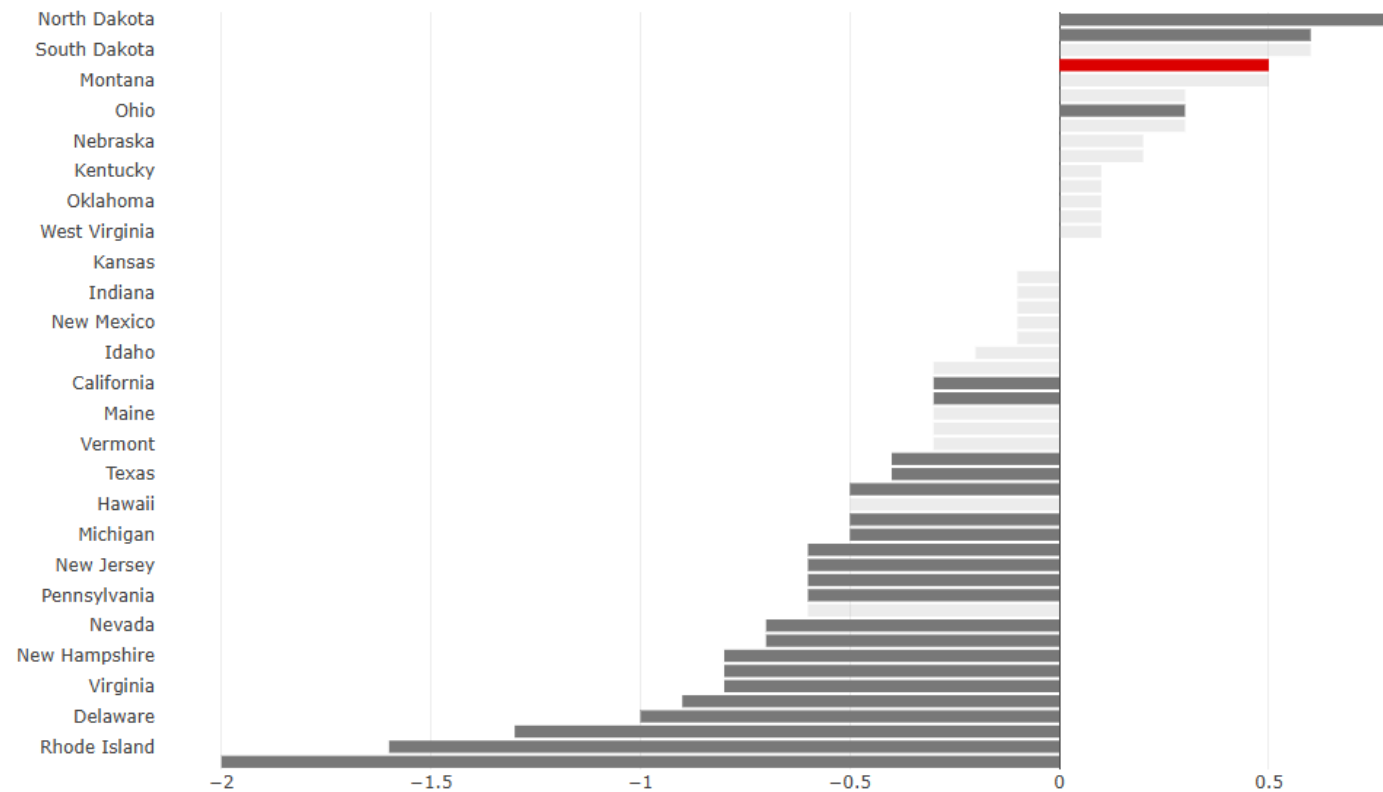
What early-onset cancers are rising fastest in Iowa?

Overall, Iowa's early-onset incidence is rising 0.7% annually (#7).



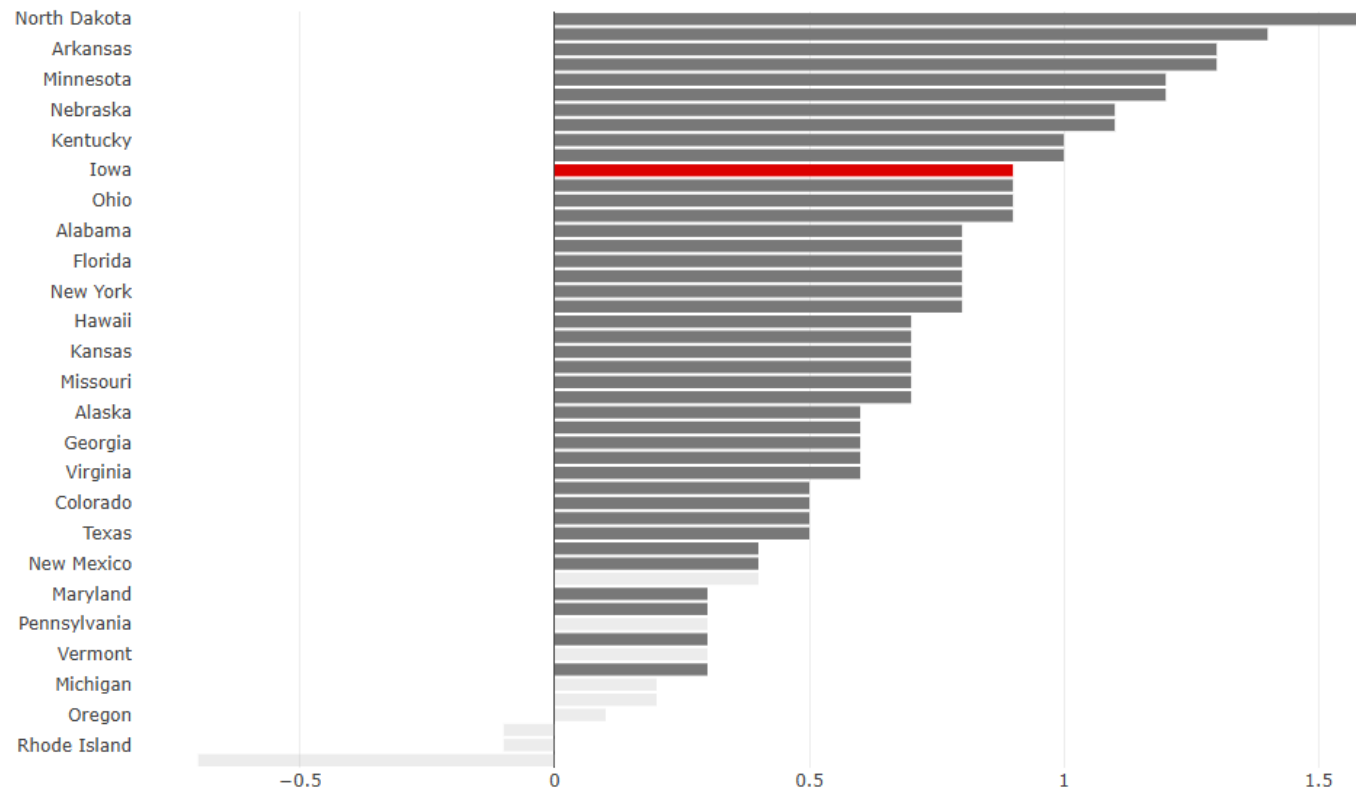
What early-onset cancers are rising fastest in Iowa?

In males, Iowa's early-onset incidence is rising 0.5% annually (#4).



What early-onset cancers are rising fastest in Iowa?

In females, Iowa's early-onset incidence is rising 0.9% annually (#11).



What early-onset cancers are rising fastest in Iowa?

Both Males & Females

Colorectal +2.9% (#4)

Lung -3.1% (#5)*

Melanoma +1.8% (#7)

What early-onset cancers are rising fastest in Iowa?

Males

Head and Neck +0.3% (#1)

What early-onset cancers are rising fastest in Iowa?

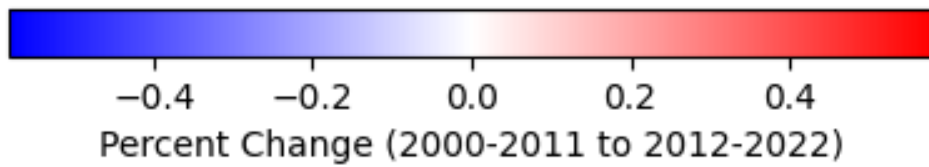
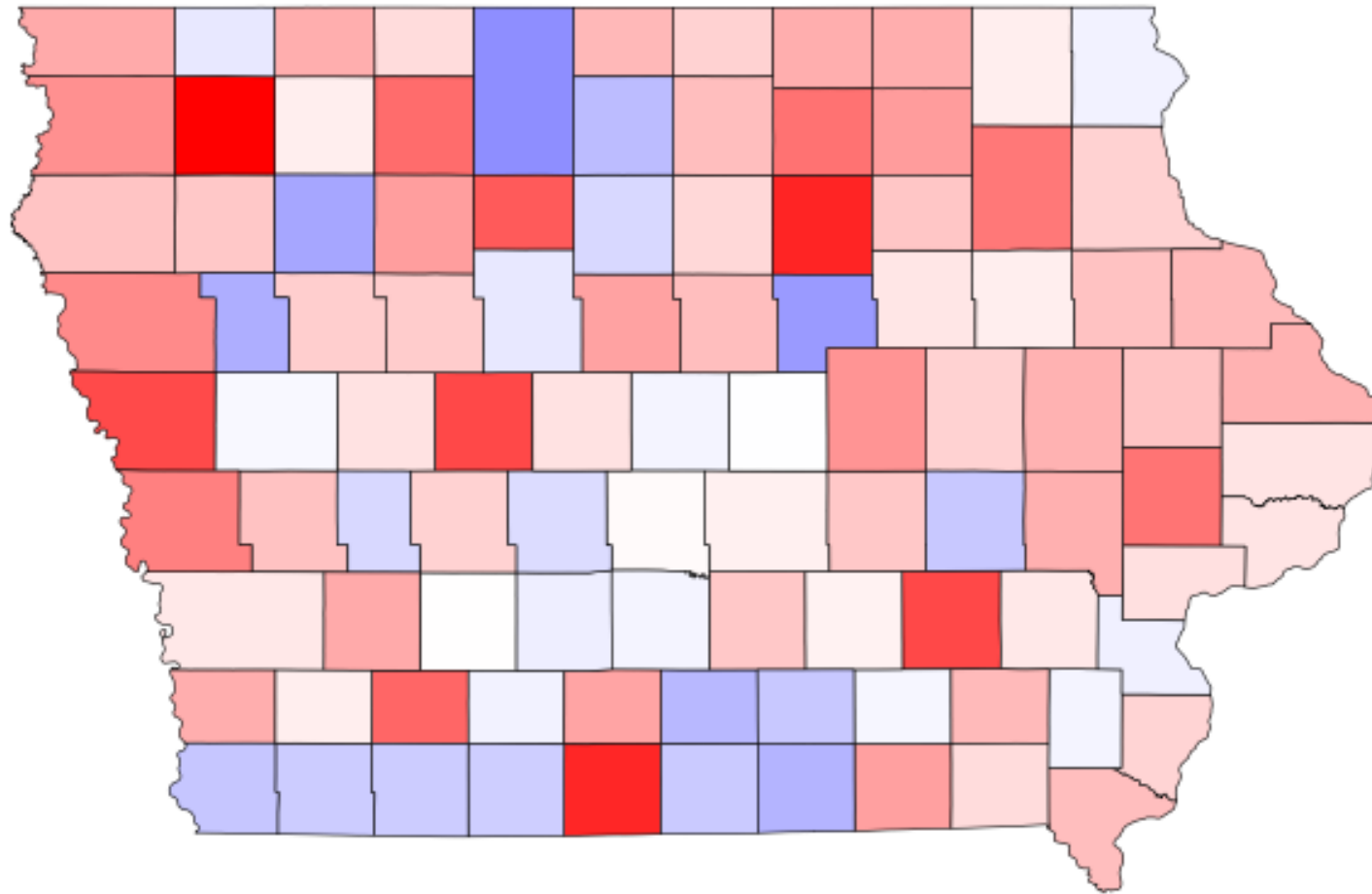
Females

Breast +0.8% (#13)

What early-onset cancers are rising fastest in Iowa?

Both Males & Females
Tobacco +0.8% (#4)
HPV +0.8% (#2)
Alcohol +1.1% (#7)
Phys/Ob +1.9% (#13)
Nitrate +1.1% (#17)

Where is the greatest
burden within the state?



Summary

Summary

Most Common	Highest Rank	Fastest Rising
Female Breast		Female Breast
Colorectal	Colorectal	Colorectal
Melanoma	Melanoma	Melanoma
Other Female Genital	Other Female Genital	
	Head and Neck	Head and Neck

Summary

Most Common	Highest Rank	Fastest Rising
Nitrate	Nitrate	Nitrate
Tobacco	Tobacco	Tobacco
Physical Activity / Obesity	Physical Activity / Obesity	Physical Activity / Obesity
Alcohol		Alcohol
		HPV

What Now?

Prevent and Control

Screening amenable cancers (female breast, colorectal).

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Increase cigarette smoking cessation and HPV vaccination (tobacco, HPV)

Prevent and Control

Screening amenable cancers (female breast, colorectal).

Increase cigarette smoking cessation and HPV vaccination.

Reduce alcohol consumption, obesity/BMI, and exposure to nitrates.

Contact

<https://bit.ly/4bc3FUU>



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