

# Why Does Iowa have the 2<sup>nd</sup> Highest and Fastest Rising Cancer Rate in the United States?

Iowa has the 2nd highest cancer incidence (new cancer) rate in the U.S. Iowa's overall cancer incidence rate is rising while the U.S. rate is falling (Figure 1). Only 6 states have rising incidence rates, but Iowa's is rising the fastest. The four cancers listed below largely explain Iowa's high and increasing cancer incidence. If you remove these four cancers from consideration, Iowa's cancer incidence becomes more like the rest of the U.S., though still a bit higher (Figure 2).

## Lung Cancer

- Incidence is declining more slowly in Iowa than in the rest of the US (Figure 3). Iowa ranks 2<sup>nd</sup> to last in reducing ageadjusted lung cancer incidence from 1990 to 2019 (5% decline in Iowa vs. 23% decline in the U.S.).
- Iowa ranks last in reducing lung cancer mortality from 1990-2019 (6% decline in Iowa vs. 27% decline in the U.S.). Among women, age-adjusted lung cancer mortality *increased* 26% in Iowa compared to a 6% decrease in the U.S. Lung cancer is the leading cause of cancer mortality and accounts for almost 25% of cancer deaths in Iowa.
- Lung cancer can largely be prevented. The two most common risk factors include:
  - $_{\odot}~$  Tobacco use -- causes over 80% of lung cancers, and 15% of lowans still report smoking.
  - Radon -- the leading cause of lung cancer among non-smokers; all of Iowa is at high risk for exposure.

### Melanoma

- Iowa has the 5<sup>th</sup> highest incidence rate and it is rising faster in Iowa than most other states (Figure 4).
- The primary driver of melanoma is exposure to ultraviolet light from the sun or use of indoor tanning beds.

# **Breast Cancer**

- Iowa has the 9<sup>th</sup> highest incidence rate, and it is rising faster in Iowa than most other states (Figure 5).
- Iowa's breast cancer trend is mostly increasing in the early-stage, hormone-receptor-positive type.
- Risk factors for breast cancer include alcohol and obesity, both of which increase estrogen levels:
  - Drinking alcohol -- Iowa ranks 4<sup>th</sup> in the US for binge-drinking and for alcohol-associated cancers.
  - Obesity -- Iowa ranks 11<sup>th</sup> for obesity (36%) and only 1 in 5 Iowans meet physical activity guidelines.

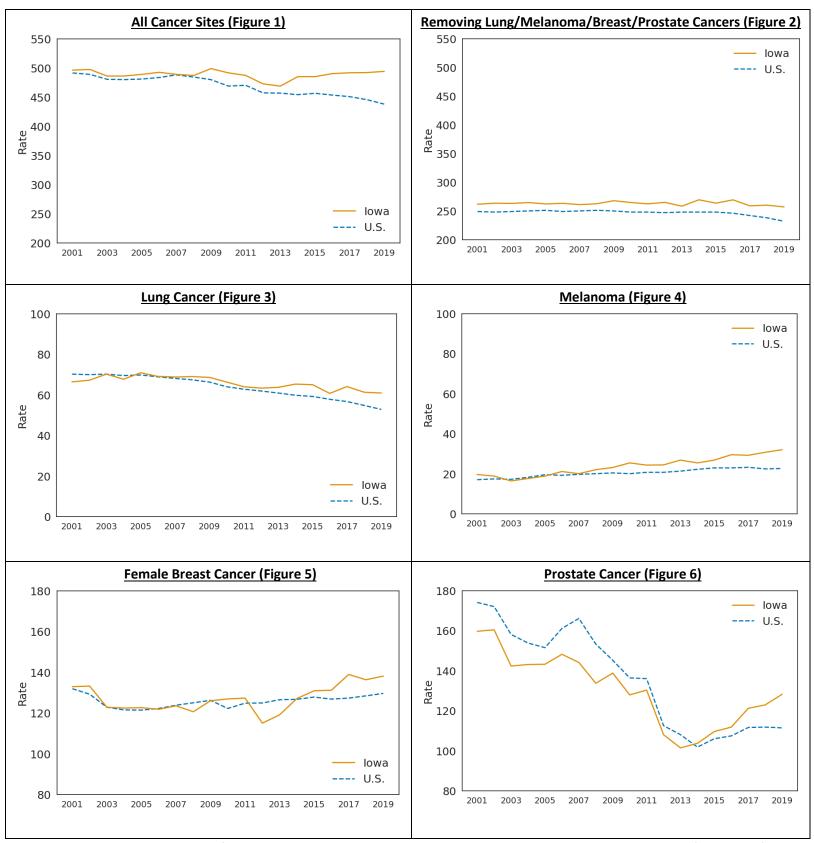
# **Prostate Cancer**

- Iowa has the 4<sup>th</sup> highest incidence rate among Black males and the 7<sup>th</sup> highest rate among White males, and it is rising faster in Iowa than in many other states (**Figure 6**).
- There are few known risk factors for prostate cancer. However, some evidence suggests:
  - Tobacco use, binge-drinking and heavy drinking are associated with prostate cancer incidence and mortality.
  - o Obesity may increase the risk of developing an aggressive, fast-growing, and deadly form of prostate cancer.
  - Chemical exposures (e.g., exposure to arsenic, exposure to PFAS among firefighters, and exposure to certain pesticides among farmers) have been linked to prostate cancer.

### The Iowa Cancer Plan has identified the following strategies to significantly reduce the burden of cancer in Iowa:

- Effective tobacco prevention policies (e.g., increasing the cigarette tax rate) and smoking cessation treatment
- Radon mitigation strategies
- Policies that increase opportunities for sun protection in outdoor settings, increase awareness about skin cancer prevention and screening, or decrease use of indoor tanning beds could reduce melanoma rates.
  As of Jan. 2024, 44 states have laws that restrict minors' use of commercial tanning devices, 20 of which completely ban use of tanning beds for minors. Iowa has no laws restricting use of tanning beds by minors.
- Policies to decrease alcohol consumption and binge drinking
- Enhancing opportunities for Iowans to access nutritious food and be physically active

## Age-Adjusted Cancer Incidence Trends in Iowa compared to Other States (per 100,000 population)



Source: National Program of Cancer Registries and Surveillance, Epidemiology and End Results Program (2001-2019). U.S. = age-adjusted incidence for all states excluding Iowa. All rates are age-adjusted to account for differences in age groups between Iowa and other states. Y-axes vary according to each cancer's incidence rate.

### Published February 12, 2024