

Introduction





Introduction from the Indiana Department of Health

Dear Indiana Residents,

The mission of the Indiana Department of Health (IDOH) is to promote, protect and improve the health and safety of all Hoosiers. The IDOH vision is that every Hoosier reaches their optimal health regardless of where they live, learn, work or play. This report provides signposts to direct IDOH's efforts to do just that.

IDOH is pleased to present the seventh iteration of Indiana's Cancer Facts and Figures, a comprehensive report on the burden of cancer in our state. This report provides information to inform decision making, support program goals, and increase education about cancer risks and guidelines.

This report provides updated information on cancer topics, issues, and trends as well as reviews cancer incidence, mortality, survival information and cancer symptoms. The report also includes risk factors related to cancer development, actionable steps to reduce individual risk and information about best practices in cancer early detection, treatment, and survivorship.

The Indiana Cancer Facts and Figures Seventh Edition is a publication of the IDOH Comprehensive Cancer Control Section funded in part by a grant from the Centers for Disease Control and Prevention (CDC) and The National Comprehensive Cancer Control Program. These grant dollars are also used to fund the work of the Indiana Cancer Consortium (ICC). The ICC armed with this report will work collectively to improve and overcome the cancer burden in Indiana. These efforts benefit all residents of our state and as we move forward together as a single cancer control alliance focused on the health and well-being of Indiana residents.

IDOH is committed to convening partners, monitoring the cancer burden in Indiana, and working with the community to develop and implement evidence-based interventions that will decrease cancer morbidity and mortality in Indiana. IDOH and the ICC also thank all those who contributed time, resources, and expertise to compile this report and who work tirelessly on cancer control in Indiana.

Tim Arndt Comprehensive Cancer Control Manager Indiana Department of Health



The Plan

The collaborative process is best understood through the development and implementation of Indiana's current cancer control plan—Indiana's roadmap to coordinate cancer control efforts. The Indiana Cancer Control Plan 2023-2027 is comprised of five focus areas: primary prevention, early detection, treatment, health equity, and survivorship. Within these five areas, experts in the fields of public health, cancer research, and treatment identified the most important activities that, when implemented, can reduce cancer in Indiana. Action by action, as more partners engage in strategies from this plan, extraordinary accomplishments are made. This is the power of our unique cancer control alliance. Together we are stronger than cancer.

Key Activities

- Lead the development, implementation, and evaluation of a comprehensive plan to reduce cancer morbidity and mortality in Indiana
- Recognize excellence in cancer prevention and control
- Provide guidance on current issues in cancer policy, research, detection, treatment, and survivorship
- Convene a multi-sectored and diverse membership to discuss cancer-related challenges facing Indiana
- Strengthen communication, resource sharing, and collaboration to reduce duplication and inefficiency
- Educate Indiana's public health and healthcare workforce to implement evidence-based strategies
- Advocate for strong policy, systems, and environmental changes that decrease cancer risk factors
- Increase dedicated funding for cancer prevention and control in Indiana

Indiana Cancer Facts and Figures Seventh Edition

The Indiana Cancer Facts and Figures Seventh Edition includes timely cancer information and identifies current cancer trends and their potential impact on Indiana residents. This report helps measure Indiana's progress toward meeting the goals and objectives outlined in the <u>Indiana Cancer Control Plan 2023-2027</u>. This publication is an exemplary application of collaboration in public health. We hope that the sharing of knowledge, resources, and expertise among the many participating organizations who have contributed to the production of this tool will inspire organizations across the state to tackle the cancer burden together.

Incidence

Annual incidence is the number of new cases of cancer diagnosed during a calendar year. Average annual incidence is the number of new cases diagnosed during a specified number of years. Indiana resident incidence data in this report, unless otherwise noted, were obtained from the Indiana State Cancer Registry (ISCR). To ensure case completion, according to state law, cancer



cases are reported to the ISCR within six months of diagnosis or first encounter. All data must be verified as correct and complete prior to publication, therefore, the most current data available for this report were from 2020.

Mortality

Annual mortality is the number of deaths during a calendar year among those who had a diagnosis of cancer. The death and diagnosis might not occur in the same year. Average annual mortality is the average number of deaths during a specified number of years. Indiana resident mortality data in this report, unless otherwise noted, are from the ISCR, which obtains annual death certificate record information from the Indiana Department of Health Vital Records Department. Data from 2020 were the most current mortality data available for this report. Visit www.in.gov/health/cdpc/cancer for data requests and more publications available.

Cancer Rates

Cancer rates represent the number of new cases of cancer per 100,000 people (incidence) or the number of cancer deaths per 100,000 people (mortality) during a specific period (see example below). Typically, incidence rates are calculated based only on the number of invasive cancer cases that occurred during a period and do not include in situ cases. Invasive cancer is cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding healthy tissues.

Example

If a county's lung cancer incidence rate is 40.0 cases per 100,000 people, that means 40 new cases of invasive lung cancer were diagnosed for every 100,000 people. If the county's population is 25,000, then an incidence rate of 40.0 means 10 new cases of invasive lung cancer were diagnosed in that county during that year. Rates provide a useful way to compare cancer burden irrespective of the actual population size. Rates can be used to compare demographic groups (males have higher lung cancer rates than females), race/ethnic groups (African-American males have higher prostate cancer rates than White males), or geographic areas (Indiana has higher lung cancer incidence rates than California). Population data to calculate the incidence rates were obtained from www.seer.cancer.gov/popdata.

Age-Adjusted Rates

Older age groups generally have higher cancer rates than younger age groups. For example, in Indiana, more than 80 percent of new lung cancer cases occur in those aged 60 and older. As a result, if one county's lung cancer incidence rate is higher than another, the first question asked is whether the county with a higher rate has an older population.

To address this issue, all mortality and incidence rates presented in this report, unless otherwise noted, have been age-adjusted. This removes the impact of different age



distributions between populations and allows for direct comparisons of those populations. Additionally, age adjustment allows for a comparison of rates within a single population over time.

On the other hand, age-specific rates are incidence or mortality rates for specific age groups.

Statistical Significance

When comparing two cancer incidence or mortality rates, either between two counties or between men and women, it is often of interest to determine if the difference in rates is statistically significant. This means that the difference between the two rates is unlikely to be the result of chance alone. Statistically significant differences in cancer rates between one county compared to another, or in one group compared to another, can help identify potentially modifiable risk factors for cancer such as health equity disparities, geographic or cultural factors, or challenges in access to care. The term "statistical significance" refers only to the process and results of the statistical calculations and in no way implies any judgment about the importance or significance of cancer.

Other Common Terms Used and Groups Referenced in this Report

- Adults: People aged 18 years and older
- Black: For the means of this report, Black is encompassing of all Black individuals diagnosed or died of cancer in the United States and Indiana regardless of country of birth.
- **Age-Specific Rate:** The total number of new cases or deaths among residents in a specific age group divided by the population of that age group then multiplied by 100,000.
- American Cancer Society (ACS): A nationwide, community-based non-governmental health organization dedicated to eliminating cancer.
 Headquartered in Atlanta, Georgia, the ACS supports six geographic regions with 350 offices nationwide and has both a national and global community presence.
 Additional information is available at cancer.org.
- **Burden:** The number of new cases or deaths from cancer or overall impact of cancer in a community.
- Carcinogen: Any chemical, physical, or viral agent that is known to cause cancer.
- Centers for Disease Control and Prevention (CDC): A federal agency that
 conducts and supports health promotion, prevention, and preparedness activities
 in the United States, with the goal of improving overall public health. Additional
 information is available at cdc.gov.
- **Five Year Survival:** The percentage of people who are alive five years after their cancer is diagnosed. While statistically valid, these percentages are based on historical data and might not reflect current advances in treatment. Therefore, five-year survival rates should not be used to predict an individual's survival with cancer.



- Lifetime Risk of Developing or Dying from Cancer: The chance a person has, over the course of his or her lifetime (from birth to death), of being diagnosed with or dying from cancer.
- **Malignant Tumor:** Cancerous tumor that has the capability of invading neighboring tissues and may be capable of spreading to distant tissues.
- **Metastasis:** Cancer that spreads to a different part of the body from where it started.
- **Morbidity:** The rate of disease in a population during a specific period of time.
- Mortality: The rate of death in a population during a specific period of time.
- National Center for Health Statistics (NCHS): Housed at the CDC, the NCHS is the nation's principal health statistics agency. The organization compiles statistical information to guide actions and policies to improve public health. Additional information is available at https://www.cdc.gov/nchs/index.htm.
- **Prevalence:** The proportion of people with a certain disease or condition at a specific point in time.
- **Risk Factor:** Anything that increases a person's probability of getting a disease. Risk factors can be lifestyle-related, environmental, or genetic (inherited).
- Surveillance, Epidemiology, and End Results (SEER) Program: Contained within the National Cancer Institute, SEER works to provide information on cancer statistics in an effort to reduce the burden of cancer among the US population. Additional information is available at seer.cancer.gov.
- **Staging:** The process of finding out whether cancer has spread and if so, how far. There is more than one system for staging (See Pages 12-13 for additional information).
- References are provided at the end of every section in this report, in order to provide readers with access to additional information.

Questions About Cancer

What is Cancer?

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. The cancer cells form tumors that destroy normal tissue. If cancer cells break away from a tumor, they can travel through the bloodstream or the lymphatic system to other areas of the body, where they might form new tumors (metastases). If this growth is not controlled, cancer might be fatal.

Are All Growths and Tumors Cancerous?

Not all irregular growths of abnormal cells lead to cancer. A tumor can be either benign (non-cancerous) or malignant (cancerous). Benign tumors do not metastasize and, with very rare exceptions, are not life-threatening. Benign tumors usually grow slowly, remain localized, and do not destroy surrounding normal tissue.



What Causes Cancer?

All cancers develop because of damage to or mutation of genes that control cell growth and division. These genetic changes can be caused by exposure to external factors, such as tobacco, poor diet, alcohol, chemicals, sunlight, radiation, or infectious organisms. They can also be caused by internal factors, such as inherited mutations, hormones, or immune conditions. Only about 5 to 10 percent of all cancers are the result of inherited gene mutations.¹

External and internal factors often act together or in sequence to initiate or promote cancer development. Many years often pass between exposures or mutations and detectable cancer. Due to these factors, it is often difficult to directly identify causes of specific cancer cases.

Who Gets Cancer?

Anyone can get cancer at any age; however, middle and older aged people are most likely to develop cancer.

In Indiana, during 2020, 74.2 percent of all cancer cases occurred among people aged 55-84 (25 percent among people aged 55-64, 30.3 percent among people aged 65-74, and 18.9 percent among people aged 75-84) [Figure 1].

See Age Group (years)

1,700.6

2,000

1,700.6

1,700.6

2,000

1,500

1,500

1,500

1,500

Age Group (years)

Figure 1. Number and Rate of New Cancer Diagnoses Among Residents-Indiana, 2020

Source: Indiana State Cancer Registry

Can Cancer Be Prevented?

Many cancers can be prevented by modifying external risk factors and making lifestyle changes, such as eliminating tobacco use, improving dietary habits, increasing physical activity, maintaining a healthy weight, taking advantage of cancer-preventative vaccinations, and avoiding excessive sun. Additionally, many cancers can be prevented or identified at an early stage if people receive regular medical care and obtain early-detection cancer screenings.

Screening recommendations specific to each section are included throughout this publication and are up-to-date as of the time of print.

Figure 2 describes the burden of some lifestyle and external factors among Indiana adults and Figure 3 describes cancer screening rates among Indiana adults.



Figure 2. Cancer Risk Factor Behaviors and Access to Medical Care Among Adults*- Indiana, 2020

Source: Indiana Behavioral Risk Factor Surveillance System, 2022.

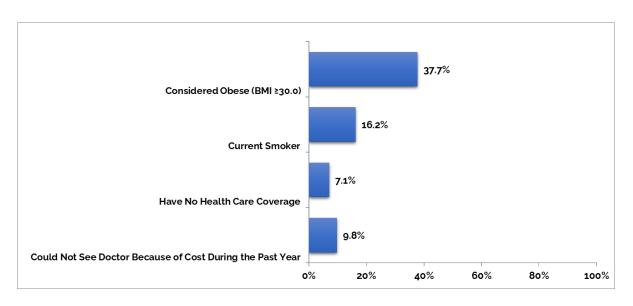
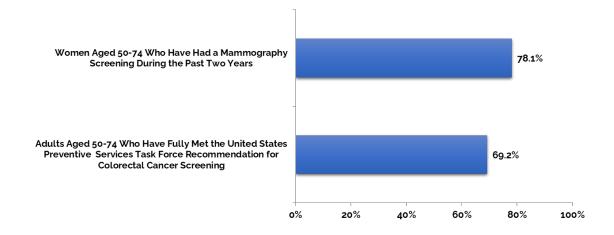


Figure 3. Cancer Screening Rates-Indiana, 2020

Source: Indiana Behavioral Risk Factor Surveillance System, 2021.





What Are the Risk Factors?

- **Tobacco:** The ACS estimates that 80 percent of all cancer deaths are caused by tobacco use.² Each of those deaths could have been prevented by not using tobacco products. In 2022, 29 percent of Indiana adults were current smokers.⁴ Men and women who smoke cigarettes are about 25 times more likely to develop lung cancer than people who never smoke.²
- Body Weight, Diet, and Physical Activity: According to the CDC, overweight and obesity are associated with 13 types of cancer, which make up approximately 40 percent of all diagnosed cancers. In 2019, 35.3 percent of Indiana adults were considered obese. Additionally, in 2019, 53.7 percent of Indiana adults did not get the recommended 150 minutes of exercise per week (recommendations available at https://www.cdc.gov/physicalactivity/basics/index.htm). In 2019, 41.3 percent did not consume fruit one or more times per day and 21.1 percent did not consume vegetables one or more times per day. Diets low in animal fat and high in fruits and vegetables could help prevent certain cancers.
- Infection with Human Papillomavirus (HPV) and Other Infectious Diseases: HPV is the single greatest risk factor for cervical cancer. The CDC estimates that HPV vaccination could prevent more than 90 percent of cancers caused by HPV—estimated to be 33,000 cases every year—from ever developing. In all, an estimated 13 percent of cancers worldwide are related to infectious exposures, such as the hepatitis B virus (HBV), HPV, human immunodeficiency virus (HIV), Helicobacter pylori bacteria, and others. Many of these infections can be prevented through behavioral changes or the use of vaccines or antibiotics.
- **Sun Exposure:** Excessive exposure to ultraviolet radiation from the sun or other sources, such as tanning beds, is the greatest risk factor for developing skin cancer. The U.S. Department of Health and Human Services and the International Agency for Research on Cancer have found that exposure to sun lamps or sunbeds is classified as a known human carcinogen, the same classification as tobacco.⁸
- **Health Care Coverage:** Uninsured and underinsured patients are substantially more likely to be diagnosed with cancer at a later stage when treatment can be more extensive and costly. According to the U.S. Census Bureau, approximately 26 million Americans, 7.7 percent, were uninsured in 2022. For Indiana, in 2022, 7 percent of Indiana residents were uninsured.⁴
- Screening: Early diagnosis through regular screening examinations saves lives by identifying cancers when they are most curable and treatment is more successful.
 Cancers that can be detected by screening include breast, cervix, colon, lung, oral cavity, prostate, rectum, skin, and testicular cancers.



How is Cancer Staged?

A cancer's stage is based on the primary tumor size and location in the body and whether it has spread from the site of origin to other areas of the body. There are two main staging systems used to classify tumors. In a clinical setting, the TNM staging is most often used. In a population health setting, the summary staging system is used.

The TNM staging system assesses tumors in three ways: extent of the primary tumor (T), absence or presence of regional lymph node involvement (N), and absence or presence of distant metastases (M). Once the T, N, and M are determined, a stage is assigned. Stages are given numbers (I, II, III, IV) and represent a scale; stage I is the earliest possible diagnosis and stage IV is advanced.

Summary staging is useful for descriptive and statistical analyses of cancer data, is used for population health reporting, and thus emphasized throughout this report. An in situ tumor is a tumor at the earliest possible stage, when cells have not invaded surrounding tissue. This stage can only be diagnosed by microscopic examination.

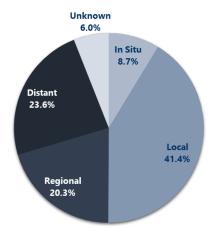
A localized tumor is any tumor that has not spread beyond the primary organ. A regional or distant tumor is one that has spread to other parts of the body (this is also referred to as a tumor that has metastasized), either through the blood or lymphatic systems. With an unstaged/unknown tumor, there is insufficient information available to determine the stage of the disease.

What is the Impact of Stage at Diagnosis on Survival?

Staging is essential in determining the choice of therapy and assessing prognosis. It is a strong predictor of survival; generally, the earlier the stage, the better the prognosis. Locally and nationally, about half of newly diagnosed cases are either in situ or localized [Figure 4].

Figure 4. Percent of Cancer Cases Diagnosed During Each Stage*- Indiana, 2016-2020

*Includes all reportable in situ and invasive cancers. Source: Indiana State Cancer Registry





How is Cancer Treated?

- **Surgery:** Mostly used for localized tumors, this removes the tumor by removing the cancerous mass.
- Chemotherapy: Used with the intention of curing or inducing remission in cancers in early stages, this uses either intravenous or oral drugs to destroy cancer cells.
- **Hormone therapy:** This may be given to block the body's natural hormones and to slow or stop the growth of certain cancers.
- **Immunotherapy or biologic therapies:** These therapies are used to stimulate and strengthen a person's own immune system to destroy the cancer cells.
- Radiation or radiotherapy: Used with the intention of curing some cancers or to relieve symptoms associated with the disease, this uses high-energy rays to destroy or slow the growth of cancer cells.

Can Cancer Be Cured?

Many cancers can be cured, if detected and promptly treated. For most types of cancer, if a person's cancer has been in remission (all signs and symptoms of the disease are absent) for five years, the person is considered cured. However, the length of remission at which a person is considered cured differs by cancer type. Certain skin cancers, such as basal cell carcinoma, are considered cured as soon as the lesion is removed.

What are the Most Common Cancers?

Indiana mirrors the nation when it comes to the top four most common cancers. Excluding skin cancers, breast and prostate are the most prevalent cancers among females and males, respectively. Lung, including bronchus, and colon cancers are the next most common cancers among both sexes [Table 1]. Annually, lung cancer is responsible for the most cancer-related deaths among both sexes [Table 1].



Table 1. Leading Sites of New Cancer Cases and Deaths Among Indiana Residents by Sex, 2020

Number (%) of New Cases Males **Females Prostate** 3,409 21.2% **Breast** 5,394 31.3% 14.4% Lung and Bronchus **Lung and Bronchus** 2,321 2,278 13.2% **Colon and Rectum Corpus and Uterus, NOS** 2,152 1,349 8.4% 12.5% Melanoma of the Skin **Colon and Rectum** 1,044 6.5% 1,255 7.3% **Urinary Bladder** 1,073 6.7% Melanoma of the Skin 767 4.5% **Kidney and Renal Pelvis Non-Hodgkin Lymphoma** 862 5.4% 586 3.4% Non-Hodgkin Lymphoma Thyroid 738 4.6% 494 2.9% **Oral Cavity and Pharynx Kidney and Renal Pelvis** 495 2.9% 711 4.4% Leukemia 625 3.9% **Pancreas** 503 2.9% **Pancreas** 552 3.4% Leukemia 418 2.4% Other

21.1% **Other**

All Sites

2,883

17,225

16.4%

3,391

16,075

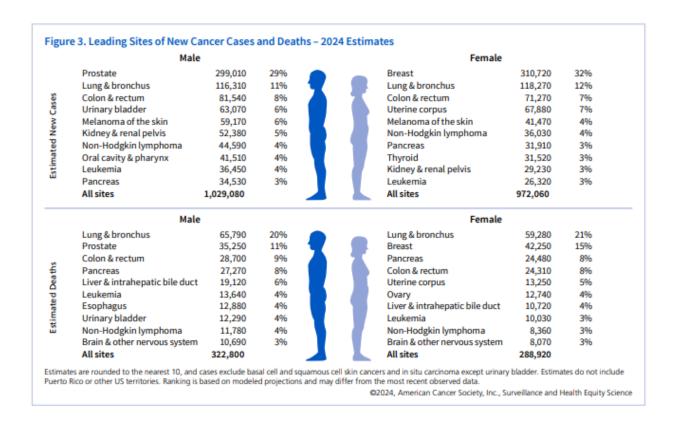
Number (%) of Deaths

All Sites

| Males | | | Females | | |
|-------------------------------------|-------|-------|-----------------------------------|-------|-------|
| Lung and Bronchus | 1,732 | 28.5% | Lung and Bronchus | 1,429 | 26.0% |
| Colon and Rectum | 561 | 9.2% | Breast | 842 | 15.3% |
| Prostate | 557 | 9.2% | Colon and Rectum | 512 | 9.3% |
| Pancreas | 481 | 7.9% | Pancreas | 462 | 8.4% |
| Esophagus | 308 | 5.1% | Ovary | 248 | 4.5% |
| Leukemia | 228 | 3.8% | Leukemia | 176 | 3.2% |
| Urinary Bladder | 254 | 4.2% | Corpus and Uterus, NOS | 228 | 4.2% |
| Non-Hodgkin Lymphoma | 236 | 3.9% | Non-Hodgkin Lymphoma | 188 | 3.4% |
| Liver and Intrahepatic Bile Duct | 289 | 4.8% | Brain and Other Nervous System | 165 | 3.0% |
| Kidney and Renal Pelvis | 172 | 2.8% | Liver and Intrahepatic Bile Duct | 182 | 3.3% |
| Other | 1,249 | 20.6% | Other | 1,054 | 19.2% |
| All Sites | 6,067 | | All Sites | 5,486 | |



Figure 5. Leading Sites of New Cancer Cases and Deaths Among Indiana Residents, 2024



How Many People Will Get Cancer?

About 2.4 million Hoosiers, or approximately two in five people now living in Indiana, will eventually develop cancer. Nationally, 4.1 in 10 men will develop cancer in their lifetime; while 3.9 in 10 women will develop cancer in their lifetime.²

How Many People Alive Today Have Ever Had Cancer?

More than 18 million Americans with a history of cancer were alive on January 1, 2022.² Some of these individuals were cancer-free, while others still had evidence of cancer and might have been undergoing treatment.

How Many Cases of Cancer are Expected to Occur This Year?

The ACS estimates that approximately 42,710 Indiana residents will be diagnosed with cancer in 2024, amounting to more than four new cases of cancer diagnosed every hour of every day.² Nationally, an estimated 2 million new cancer cases are expected in 2024.² These estimates did not include cases of non-melanoma skin cancer and carcinoma in situ (except for in situ urinary bladder cancer cases).



How Many People Are Expected to Die from Cancer This Year?

Approximately 14,280 Indiana residents are expected to die of cancer in 2024, which translates to approximately 39 people every day.² Cancer is the second leading cause of death in Indiana following heart disease. Among children aged five to 14 years, cancer is the second leading cause of death following accidental injury.²

How Many People Today Survive Cancer?

According to the CDC, the five-year survival rate for cancer from 2013 to 2019 in the United States was 69 percent.¹⁷ Factors such as early stage of disease at diagnosis can greatly improve the probability of survival after five years.

How Does Cancer Incidence and Mortality in Indiana Compare with the Rest of the US?

Indiana's age-adjusted cancer incidence rate during 2016-2020 was 438.74 per 100,000 people. This was lower than, but very similar to, the national rate of 442.3 per 100,000 people (2.3 percent difference) [Table 2; Figure 6].

However, during the same period, Indiana's age-adjusted cancer mortality rate was 10.4 percent higher than the national rate (175.6 versus 158.3 deaths per 100,000 people). This included being 12.1 percent higher among Indiana males (213.9 versus 289.5 deaths per 100,000 males) and 8.7 percent higher among Indiana females (148.1 versus 135.7 deaths per 100,000 females) [Table 2].

Lung cancer had the largest differences between the Indiana and US incidence and mortality rates, as the incidence rate among Indiana residents was almost 17.6 percent higher and the mortality rate was 19.5 percent higher [Figure 6, Figure 7]. This increase in risk is mostly attributable to Indiana having a high prevalence of smokers compared to the rest of the US. In 2022, Indiana's adult smoking rate was 16.2 percent.¹⁴

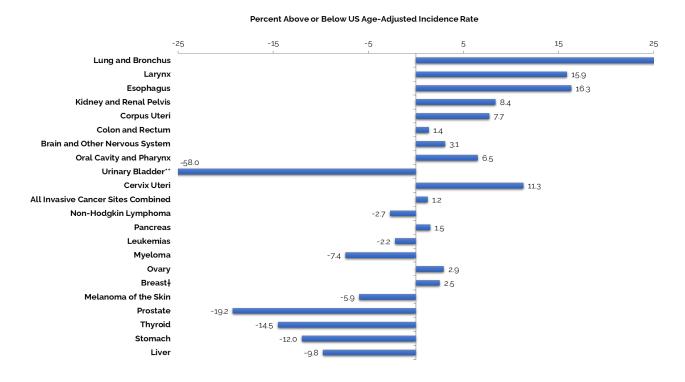
Table 2. Cancer Incidence and Mortality (death) Rate Comparisons Between Indiana and the U.S., By Sex and Race, 2016-2020*

*Age-adjusted to the US 2000 Standard Population. Source: United States Cancer Statistics: Data Visualizations Accessed at https://gis.cdc.gov/cancer/USCS/#/AtAGlance/

| | Incidence rate per 100,000 people (2016-2020) | | | Mortality rate per 100,000 people (2016-2020) | | |
|--------|---|--------|------------|---|--------|------------|
| | Indiana | United | Difference | Indiana | United | Difference |
| | maiana | States | (%) | maiana | States | (%) |
| Total | 438.7 | 442.3 | 0.8% | 158.5 | 149.4 | 5.9% |
| Male | 469.3 | 480.6 | 2.4% | 193.1 | 177.5 | 8.4% |
| Female | 420.1 | 416.4 | 0.9% | 140.4 | 128.7 | 8.7% |
| White | 441.6 | 461.9 | 4.5% | 143.3 | 154.4 | 7.5% |
| Black | 427.2 | 445.9 | 4.3% | 145.9 | 174.7 | 18.0% |



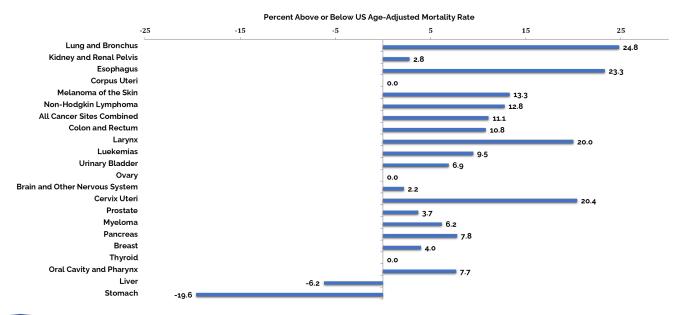
Figure 6. How do Indiana Cancer Incidence Rates Compare to U.S. Rates? * (2016-2020)



*Age-adjusted to the US 2000 Standard Population. ** Urinary Bladder includes invasive and in situ. †Female breast cancers only. Source: Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2019.

Figure 7. How Do Indiana Cancer Mortality (death) Rates Compare to U.S. Rates?* (2016-2020)

Source: United States Cancer Statistic





Is the Cancer Burden in the U.S. and Indiana Lessening?

The burden of specific cancer types among US residents has changed over the years [Figures 8 and 9]. For example, with the gradual decrease in smoking rates among Americans over the past several decades, lung cancer mortality rates have begun to decrease, especially among U.S. males.

In Indiana, in 2020, the age-adjusted incidence rates for all cancers combined decreased 4.4 percent from 459.3 to 438.7 cases per 100,000 people. Likewise, the age-adjusted mortality rates decreased 23 percent from 208.5 to 158.5 deaths per 100,000 people. However, trends varied among the different cancer types.¹⁶

These statistics indicate that progress continues to be made in the early detection and treatment of certain cancers, and that the incidence and mortality of some cancers is declining. However, a significant cancer burden still exists among Indiana residents that requires continued and increasingly targeted cancer control efforts.

Figure 1. Trends in Age-adjusted Cancer Death Rates by Site, Males, US, 1930-2021

Lung & bronchus

Lung & bronchus

Colon & rectum

Prostate

Prostate

Pancreas

Liver

Pancreas

Leukemia

1930 1935 1940 1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020

Year of death

Rates are age adjusted to the 2000 US standard and exclude deaths in Puerto Rico and other US territories. Note: Due to changes in ICD coding, numerator information differs from contemporary data for cancers of the liver, lung and bronchus, and colon and rectum.

Source: US Mortality Volumes 1930 to 1959, US Mortality Data 1960 to 2021, National Center for Health Statistics, Centers for Disease Control and Prevention.

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Figure 8. Cancer Mortality (death) Rates Among Males by Site*- U.S. 1930-2021



Figure 9. Cancer Mortality (death) Rates Among Females by Site*- U.S., 1930-

2021

How Does Indiana Track Changes in Cancer Risk and Risk Behavior Data?

The ISCR was established in 1985 to compile information on cancer cases and other related data necessary to conduct epidemiological studies of cancer and develop appropriate preventive and control programs. The data in this registry allow for the evaluation of cancer prevention efforts and the measurement of progress toward reaching the state goal of reducing cancer incidence and mortality among Indiana residents.

Additionally, several data sources are used to describe the burden of risk factors (e.g., obesity) and cancer screening rates among Indiana residents. The Behavioral Risk Factor Surveillance System (BRFSS) provides yearly data that can be used to generate Indiana-specific estimates for a large number of cancer risk and preventative factors. These findings can be tracked over time and compared to other states to evaluate how Indiana is progressing in those areas.

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