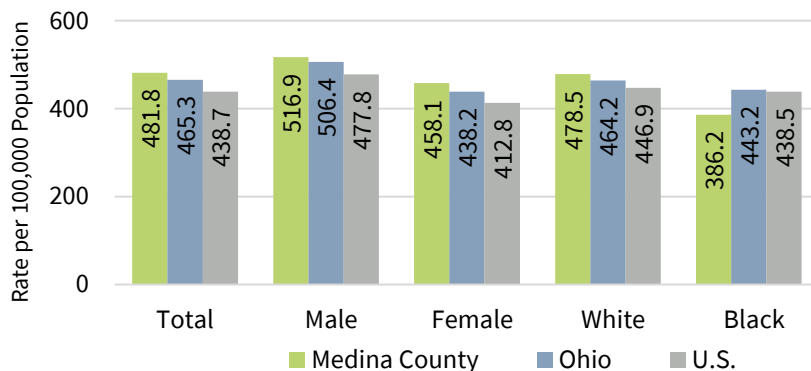**Department of Health**

Medina County Cancer Profile 2023

Introduction

Approximately four out of 10 Ohioans will be diagnosed with cancer at some point during their lifetime. Cancer is the second leading cause of death in Ohio, accounting for nearly one in five deaths. This report provides an overview of cancer in Medina County, Ohio, including data on cancer incidence (new cases) and mortality (deaths), and Ohio and U.S. comparisons, trends, early detection, and risk factors. This information can be used to increase awareness about the burden of cancer in Medina County and to develop targeted cancer programs in the community.

New Cancer Cases

Figure 1. Average Annual Age-Adjusted Cancer Incidence Rates by Sex and Race in Medina County, Ohio, and the United States, 2016-2020
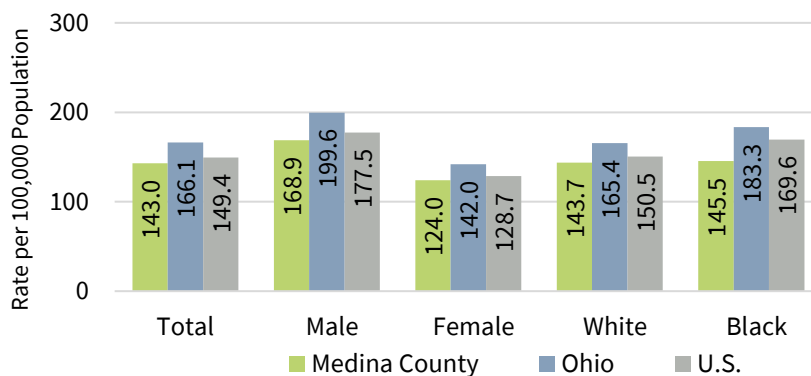

Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; Surveillance, Epidemiology, and End Results Program, National Cancer Institute, 2023. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

- An average of **1,150** new invasive cancer cases were diagnosed each year among Medina County residents in 2016-2020.

- In 2016-2020, the cancer incidence rate for all sites/types combined in Medina County was 481.8 per 100,000 population, compared with the Ohio rate of 465.3 per 100,000 and the U.S. rate of 438.7 per 100,000.

- Cancer incidence rates among males were higher than the rates among females in Medina County, Ohio, and the United States in 2016-2020.

Cancer Deaths

Figure 2. Average Annual Age-Adjusted Cancer Mortality Rates by Sex and Race in Medina County, Ohio, and the United States, 2016-2020
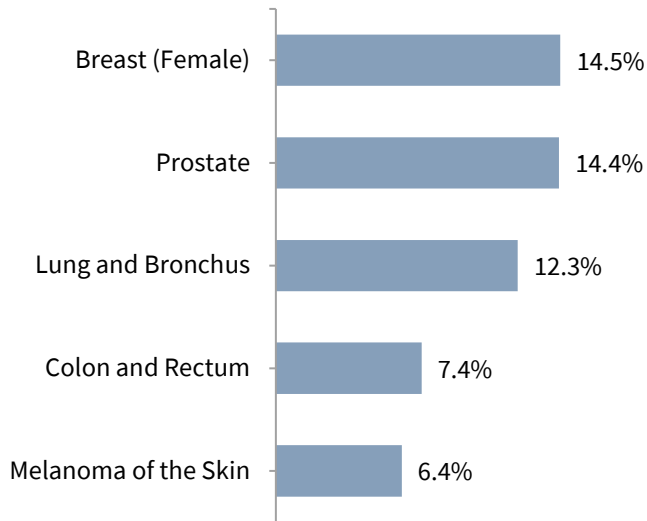

Source: Bureau of Vital Statistics, Ohio Department of Health, 2023; Surveillance, Epidemiology, and End Results (SEER) Program, National Cancer Institute, 2023. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

- An average of **346** cancer deaths occurred each year among Medina County residents in 2016-2020.

- The 2016-2020 cancer mortality rate in Medina County was 143.0 per 100,000 population, compared with the Ohio rate of 166.1 per 100,000 and the U.S. rate of 149.4 per 100,000.

- Cancer mortality rates among males were higher than the rates among females in Medina County, Ohio, and the United States in 2016-2020.

Top Five Cancers by Percentage of New Cancer Cases

Figure 3. Percentage of New Invasive Cancer Cases by Site/Type for the Top Five Cancers in Medina County, 2016-2020

| Cancer Site/Type	Percentage
Breast (Female)	14.5%
Prostate	14.4%
Lung and Bronchus	12.3%
Colon and Rectum	7.4%
Melanoma of the Skin	6.4%

- Female breast cancer was the leading cause of cancer incidence in Medina County in 2016-2020, accounting for 14.5% of cancer cases, followed by prostate cancer, lung and bronchus cancer, colon and rectum cancer, and melanoma of the skin.

- Together, the top five cancers accounted for 55% of all new invasive cancer cases.

Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.

Top Five Cancers by Percentage of Cancer Deaths

Figure 4. Percentage of Cancer Deaths by Site/Type for the Top Five Cancers in Medina County, 2016-2020

Cancer Site/Type	Percentage
Lung and Bronchus	25.5%
Colon and Rectum	7.3%
Breast (Female)	6.4%
Pancreas	6.3%
Prostate	5.0%
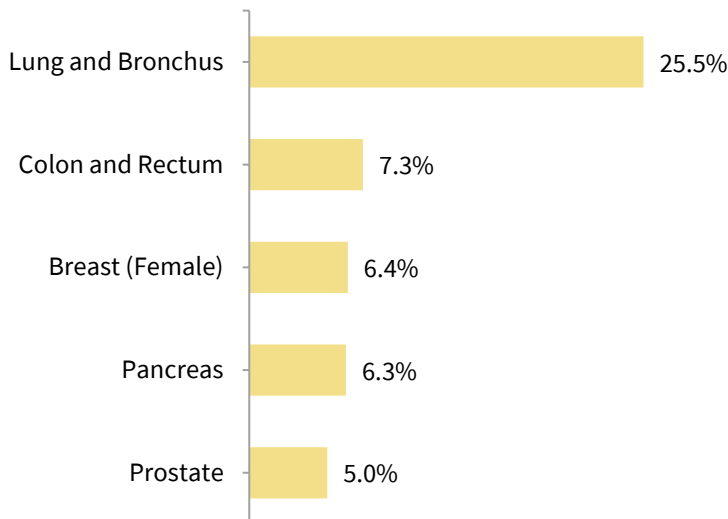
- Lung and bronchus cancer was the leading cause of cancer mortality in Medina County in 2016-2020, accounting for 25.5% of cancer deaths, followed by colon and rectum cancer, female breast cancer, pancreatic cancer, and prostate cancer.

- Together, the top five cancers accounted for 50% of all cancer deaths.

Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.

Cancer Sites/Types

Table 1. Average Annual Number and Age-Adjusted Cancer Incidence and Mortality Rates by Site/Type in Medina County, Ohio, and the United States, 2016-2020

	Incidence				Mortality			
	Medina County		Ohio	U.S.	Medina County		Ohio	U.S.
	Cases	Rate	Rate	Rate	Deaths	Rate	Rate	Rate
All Sites/Types	**1,150**	**481.8**	**465.3**	**438.7**	**346**	**143.0**	**166.1**	**149.4**
Bladder	52	20.9	21.4	18.2	12	5.0	4.9	4.2
Brain and Other CNS	18	8.0	6.9	6.2	11	4.9	4.6	4.4
Breast (Female)	167	137.5	129.5	126.9	22	16.4	21.0	19.6
Cervix	5	5.7	7.8	7.7	<2	*	2.2	2.2
Colon and Rectum	85	36.3	39.1	36.6	25	10.4	14.5	13.1
Esophagus	16	6.4	5.6	4.2	12	4.6	4.9	3.8
Hodgkin Lymphoma	5	2.9	2.7	2.5	<2	*	0.3	0.3
Kidney and Renal Pelvis	39	16.1	17.6	17.2	9	3.7	3.9	3.5
Larynx	5	2.1	3.7	2.7	<2	*	1.1	0.9
Leukemia	32	14.7	12.4	14.0	13	5.8	6.6	6.0
Liver and Intrahepatic Bile Duct	18	7.0	7.6	9.3	11	4.7	6.2	6.6
Lung and Bronchus	142	56.7	64.7	50.0	88	35.4	42.9	35.0
Melanoma of the Skin	74	32.2	25.3	21.0	10	4.5	2.5	2.1
Multiple Myeloma	15	6.1	6.3	7.1	7	3.0	3.4	3.1
Non-Hodgkin Lymphoma	54	23.3	19.0	18.7	14	5.8	5.7	5.1
Oral Cavity and Pharynx	35	14.3	12.6	11.4	5	2.2	2.8	2.5
Ovary	11	9.4	9.6	10.3	9	6.6	6.3	6.3
Pancreas	28	11.5	13.7	13.3	22	9.0	12.1	11.1
Prostate	166	133.0	114.1	113.4	17	17.3	19.3	18.8
Stomach	14	5.9	5.7	6.9	5	2.0	2.3	2.8
Testis	6	7.4	5.7	6.0	<2	*	0.3	0.3
Thyroid	40	20.3	14.7	13.9	<2	*	0.5	0.5
Uterus	42	31.5	30.9	27.6	8	5.8	5.3	5.1

Source: Ohio Cancer Incidence Surveillance System and the Bureau of Vital Statistics, Ohio Department of Health, 2023; Surveillance, Epidemiology, and End Results (SEER) Program, National Cancer Institute, 2023.

Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population. Rates are sex-specific for cancers of the breast, cervix, ovary, prostate, testis, and uterus.

CNS = Central Nervous System.

* Rates may be unstable and are not presented when the total count for 2016-2020 is less than five (incidence) or 10 (mortality).

The total for all sites/types includes an average of 80 new cases and 42 deaths of other types of cancer (not shown).

Trends

Figure 5. Age-Adjusted Cancer Incidence and Mortality Rates for All Cancers Combined in Medina County and Ohio by Year, 2011-2020
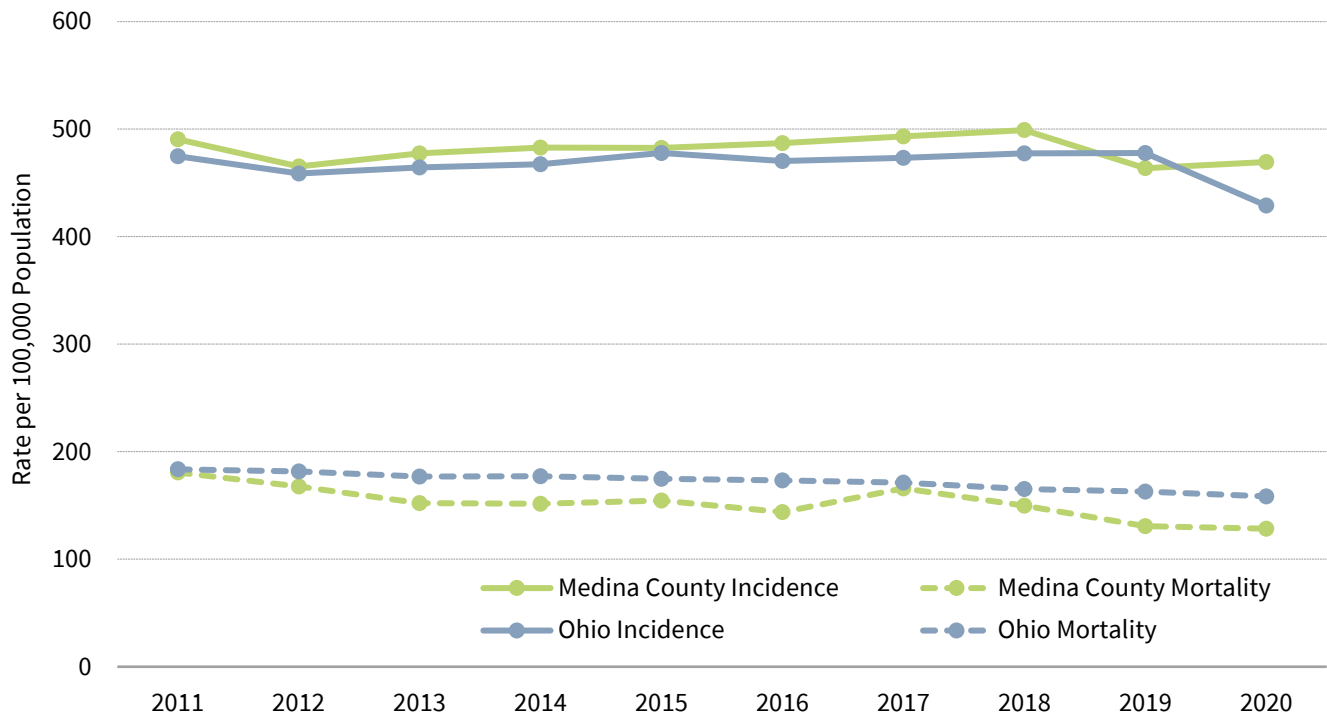
Source: Ohio Cancer Incidence Surveillance System and Bureau of Vital Statistics, Ohio Department of Health, 2023.
Rates are per 100,000 population and age-adjusted to the 2000 U.S. Standard Population.
Note: Cancer incidence and mortality rates at the county level are often variable from year to year, particularly for counties with small populations.
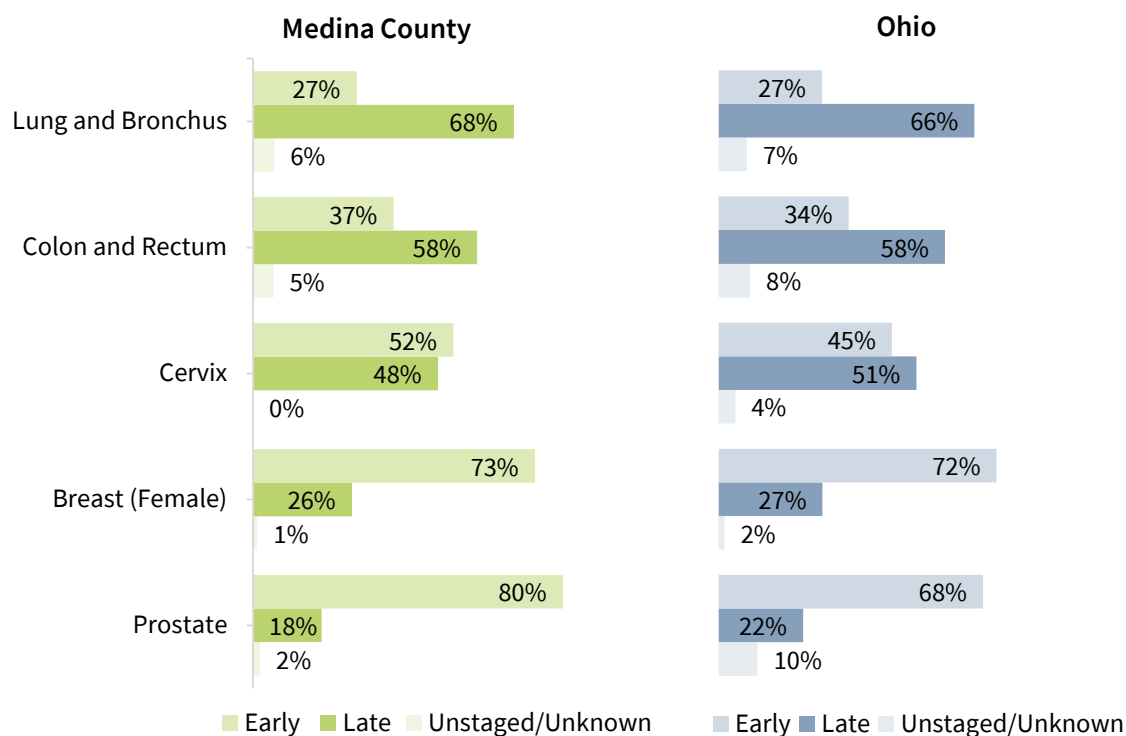
- Cancer incidence rates increased in Medina County from 2012 to 2018, followed by a decline in 2019-2020. In Ohio, cancer incidence rates were relatively stable from 2011 to 2019 but, decreased sharply in 2020.*

- Cancer mortality rates decreased 29% in Medina County from 2011 to 2020. In Ohio, cancer mortality rates decreased 14% during this 10-year period.

***Note**: *The COVID-19 pandemic disrupted health services, leading to delays and reductions in cancer screening and diagnosis. This may have contributed to the decline in new cancer cases in 2020.*

Stage at Diagnosis

Cancer stage at diagnosis is the extent or spread of the tumor from the site of origin. According to a system of summary staging (SEER Summary Stage), the stages, in order of increasing spread, are *in situ*, local, regional, and distant. Early-stage cancers are those diagnosed at the *in situ* or local stages, where the cancer has not spread to other parts of the body. Late-stage cancers are those diagnosed at the regional stage (cancer has spread to the lymph nodes) or distant stage (cancer has spread to other organs). Cancers may also be reported as unstaged/unknown when information is not sufficient to assign a stage. (See Glossary on page 8.) Please note that the percentage of unstaged/unknown cases can vary by cancer site/type and region and may impact the percentage distribution of early and late-stage cases; therefore, comparisons between the county and the state should be interpreted with caution when the proportion of unstaged/unknown cases in the county is considerably different than the state. Regular screening can result in the detection of certain cancers (including lung and bronchus, cervix, colon and rectum, breast, and prostate) at earlier stages, when treatment is more likely to be successful.

Figure 6. Proportion of Cases (%) by Stage Group for Select Cancers in Medina County and Ohio, 2016-2020

	Medina County			Ohio		
	Early	Late	Unstaged/Unknown	Early	Late	Unstaged/Unknown
Lung and Bronchus	27%	68%	6%	27%	66%	7%
Colon and Rectum	37%	58%	5%	34%	58%	8%
Cervix	52%	48%	0%	45%	51%	4%
Breast (Female)	73%	26%	1%	72%	27%	2%
Prostate	80%	18%	2%	68%	22%	10%

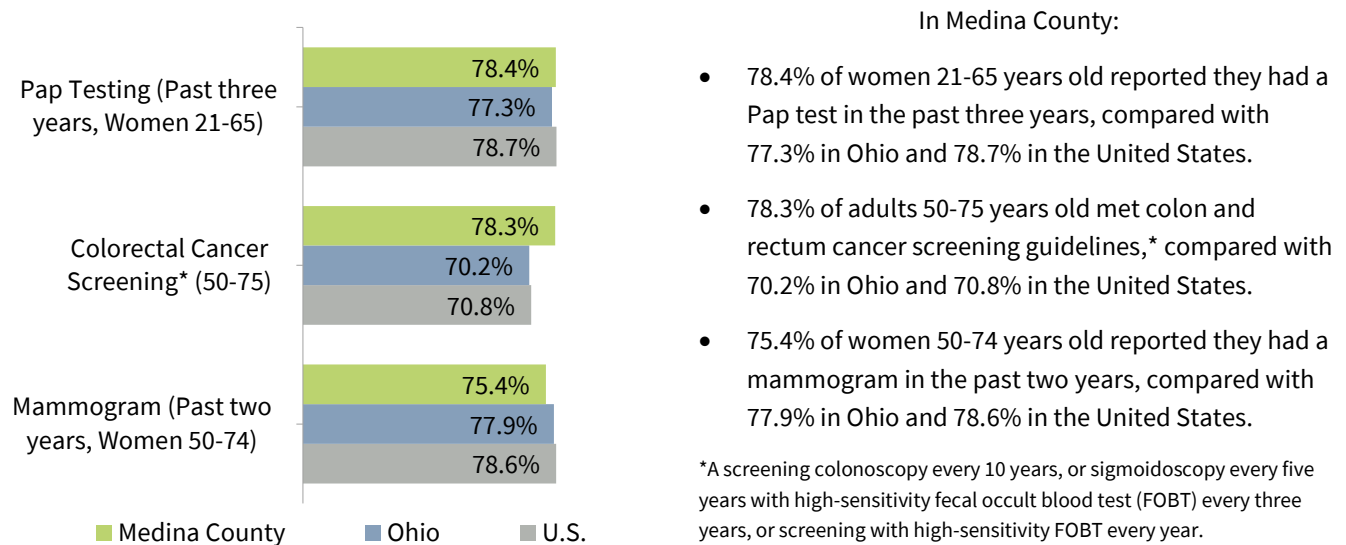Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.

- Medina County had higher proportions of early-stage cervical cancer and prostate cancer in 2016-2020, compared with Ohio.

Early Detection

Cancer screening can detect some cancers early when treatment is often less intensive and more successful. The American Cancer Society indicates that cancer screening is known to reduce mortality for cancers of the breast, colon and rectum, cervix, prostate, and lung and bronchus (among current or former heavy smokers). Screening can help prevent colon and rectum and cervical cancers by detecting precancerous lesions that can be removed.

Prevalence refers to the proportion of people with a certain disease or characteristic at a given time. Figure 7 shows the prevalence of adults in Medina County who reported having a recommended cancer screening test in 2018-2020, compared with Ohio and the United States.

Figure 7. Prevalence of Adults Who Reported Having a Recommended Cancer Screening Test in Medina County, Ohio, and the United States, 2018-2020

In Medina County:

- 78.4% of women 21-65 years old reported they had a Pap test in the past three years, compared with 77.3% in Ohio and 78.7% in the United States.

- 78.3% of adults 50-75 years old met colon and rectum cancer screening guidelines,* compared with 70.2% in Ohio and 70.8% in the United States.

- 75.4% of women 50-74 years old reported they had a mammogram in the past two years, compared with 77.9% in Ohio and 78.6% in the United States.

*A screening colonoscopy every 10 years, or sigmoidoscopy every five years with high-sensitivity fecal occult blood test (FOBT) every three years, or screening with high-sensitivity FOBT every year.
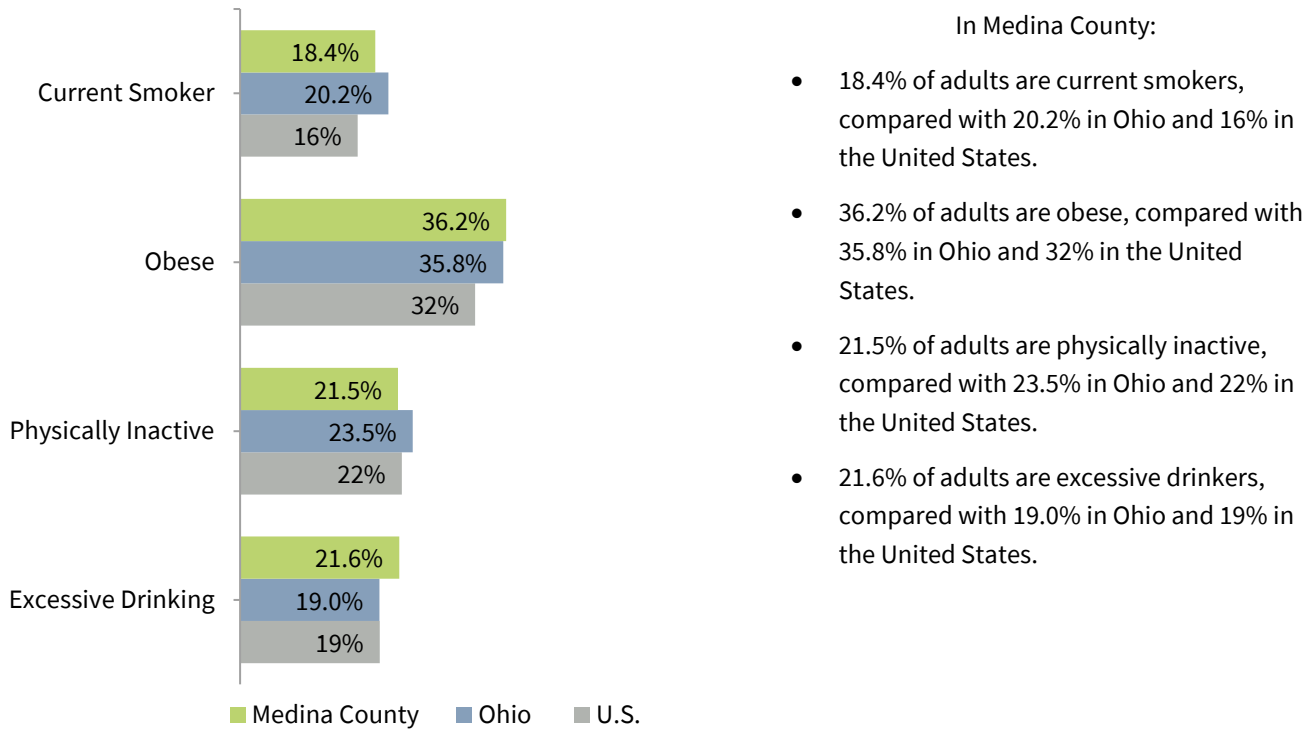
Source: 2018-2020 Ohio Behavioral Risk Factor Surveillance System, Ohio Department of Health, 2023; 2018 and 2020 Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, 2023.

Risk Factors

A cancer risk factor is anything that increases a person's risk of developing cancer. Modifiable cancer risk factors include health behaviors and lifestyle factors such as tobacco use, obesity, physical inactivity, and excessive drinking. It is often not just one factor that increases a person's risk of developing cancer; rather, cancer most often results from a complex interaction of multiple factors.

Figure 8. Prevalence of Adults Who Are Current Smokers, Obese, Physically Inactive, or Excessive Drinkers in Medina County, Ohio, and the United States, 2020

In Medina County:

- 18.4% of adults are current smokers, compared with 20.2% in Ohio and 16% in the United States.

- 36.2% of adults are obese, compared with 35.8% in Ohio and 32% in the United States.

- 21.5% of adults are physically inactive, compared with 23.5% in Ohio and 22% in the United States.

- 21.6% of adults are excessive drinkers, compared with 19.0% in Ohio and 19% in the United States.

Source: 2023 County Health Rankings, www.countyhealthrankings.org.
Current Smoker = Percentage of adults who are current smokers.
Obese = Percentage of adults (18 years old and older) with a body mass index (BMI) ≥ 30 kg/m^2.
Physically Inactive = Percentage of adults (18 years old and older) who reported no leisure-time physical activity in the past 30 days.
Excessive Drinking = Percentage of adults reporting binge or heavy drinking. Binge drinking = Five or more drinks per occasion (men) or four or more drinks per occasion (women) in the past 30 days. Heavy drinking = More than two drinks per day (men) or more than one drink per day (women).

Did You Know?

- Tobacco use is associated with 12 types of cancer. Nearly one-third of all cancer deaths could be prevented by eliminating tobacco use.

- Overweight and obesity are associated with at least 13 types of cancer. Nearly one-fifth of cancer deaths could be prevented by adopting healthy eating and active living practices.

Glossary

Age adjustment: A statistical method used to compare rates among groups of people with different age compositions. This method applies a standard age composition to the groups being compared to remove the effect of age. Rates presented in this report are age-adjusted to the 2000 U.S. standard population.

Incidence rate: The number of new cases of a disease that occur in a defined population per 100,000 during a specified period of time. Incidence counts and rates in this report were based on newly diagnosed invasive cancers and *in situ* (non-invasive) bladder cancers.

Invasive cancer: Cancer that has spread beyond the layer of cells where it first developed to involve adjacent tissues. Invasive cancer excludes basal and squamous cell carcinomas of the skin, benign and borderline brain and central nervous system tumors, and *in situ* cancers except urinary bladder.

Mortality rate: The number of deaths that occur in a defined population per 100,000 during a specified period of time.

Prevalence: The proportion of people with a certain disease or characteristic at a given time.

Stage at diagnosis: The degree to which a tumor has spread from its site of origin at the time of diagnosis. A system of summary staging is often used to group cases into the following stages:

> **In situ** – Noninvasive cancer that has not penetrated surrounding tissue.
>
> **Local** – A malignant tumor confined entirely to the organ of origin.
>
> **Regional** – A malignant tumor that has extended beyond the organ of origin directly into surrounding organs or tissues or into regional lymph nodes.
>
> **Distant** – A malignant tumor that has spread to parts of the body (distant organs, tissues, and/or lymph nodes) remote from the primary tumor.
>
> **Unstaged/Unknown** – Insufficient information is available to determine the stage or extent of the disease at diagnosis.

Stage group: Cancer stages are further collapsed into the following stage groupings:

> **Early stage** – Cancers diagnosed at the *in situ* or local stage.
>
> **Late stage** – Cancers diagnosed at the regional or distant stage.

Tumor: An abnormal lump or mass of tissue. Tumors can be benign (noncancerous) or malignant (cancerous).

Sources of Data and Additional Information

Ohio Cancer Incidence Surveillance System (OCISS):
Cancer incidence data were provided by OCISS, the central cancer registry for Ohio, and accessed through the Ohio Public Health Data Warehouse. OCISS is supported in part by the State of Ohio and the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries, cooperative agreement number NU58DP007097. The contents of this report are the sole responsibility of the Ohio Department of Health (ODH) and do not necessarily represent the official views of the CDC.

OCISS website: https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/ohio-cancer-incidence-surveillance-system/welcome-to.
Phone: 614-752-2689.
Email: ociss@odh.ohio.gov.

Ohio Public Health Data Warehouse:
The Ohio Public Health Data Warehouse is a self-service online tool where anyone can obtain the most recent public health data, including cancer incidence and mortality data, available about Ohio. The application allows for the creation of custom reports, charts, and maps from a variety of data sources, available at:
https://publicapps.odh.ohio.gov/EDW/DataCatalog/.

Ohio Vital Statistics:
Cancer mortality data were provided by the Bureau of Vital Statistics and accessed through the Ohio Public Health Data Warehouse.

County Health Rankings:
Risk factor data were obtained from *County Health Rankings Key Findings 2023*, University of Wisconsin Population Health Institute, available at https://www.countyhealthrankings.org/.

U.S. Statistics:
Cancer statistics for the United States were obtained from the Surveillance, Epidemiology, and End Results (SEER) Program, National Cancer Institute, and the National Center for Health Statistics, available at: https://seer.cancer.gov/. Data sources include the SEER*Stat Database, SEER 22 Registries Research Data, released April 2023, based on the November 2022 submission.

American Cancer Society:
https://www.cancer.org/.

National Cancer Institute:
https://www.cancer.gov/.

Centers for Disease Control and Prevention:
https://www.cdc.gov/cancer/.