Summit County Public Health

Summit County 2023 Cancer Report

A summary of cancer incidence and mortality data for Summit County through 2020

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Preface

The Summit County 2023 Cancer Report presents a summary of cancer incidence (new cases) and mortality (deaths) for Summit County, with a focus on cancer cases diagnosed from 2016 to 2020. Cancer data by sex, race, age group, and stage at diagnosis in during this time period (reported as a 5 year average) are provided, along with 10-year trends (2010-2020) in Summit County cancer rates, estimates of cancer survival, and five-year (2016-2020) Summit County cluster maps for selected cancers. The collection and analysis of population-based cancer data help determine the burden of cancer in Summit County's communities, which can be used by public health professionals, policymakers, researchers, and others to develop, implement, and evaluate cancer prevention and control activities, support cancer-related research, and inform residents of the cancer burden in Summit County.

Ohio Cancer Incidence Surveillance System

Cancer incidence data for Summit County were provided by the Ohio Cancer Incidence Surveillance System (OCISS) at the Ohio Department of Health (ODH). OCISS, the central cancer registry for Ohio, collects cancer incidence (new case) data for all Ohio residents. All Ohio medical providers who diagnose or treat patients with cancer are required by state law to report each case of cancer to OCISS within six months of diagnosis or first contact. A reportable cancer is any primary malignancy, with the exception of basal and squamous cell carcinoma of the skin and carcinoma in situ of the cervix. Benign brain tumors are also reportable. Due to the complexity of the cancer data collection and quality control process, there is a delay between the time a new cancer is diagnosed and the time the data is ready for analysis. The typical delay is about 24 months after the end of the calendar year of diagnosis, at which time cancer registries across the nation officially report data to federal and national programs. Incidence data presented in this report are for cancer cases diagnosed through Dec. 31, 2020. OCISS data quality, completeness of reporting, and timeliness are evaluated annually by the Centers for Disease Control and Prevention (CDC) National Program of Cancer Registries (NPCR) and by the North American Association of Central Cancer Registries (NAACCR). OCISS data routinely meet national data quality standards. One quality standard is the calculation of percent completeness, using national cancer case and death rates from the National Cancer Institute Surveillance, Epidemiology and End Results Program (SEER). For the 2016 to 2020 time period, preliminary completeness rates were 93.7% in Ohio and 92.7% in Summit County.

Ohio Vital Statistics

Cancer mortality data for Summit County was provided by the ODH Bureau of Vital Statistics. The Bureau of Vital Statistics receives certificates of death from local vital statistics offices and from other states when an Ohio resident dies outside of Ohio. Cancer death data in this report were categorized by the primary underlying cause of death.

Ohio Public Health Data Warehouse

Ohio cancer incidence and mortality rates for 2016 to 2020 were obtained from the Ohio Public Health Data Warehouse. In addition to this report, OCISS data are available to the public in the Ohio Public Health Data Warehouse on the ODH website at https://publicapps.odh.ohio.gov/EDW/DataCatalog/. The warehouse is a self-service online tool where anyone can obtain the most recent public health data available about Ohio. The warehouse currently has reports of OCISS data from the official end of year file for 1996-2020, which contains approximately 1.7 million records.

Overview

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. Although some forms of cancer are rare, cancer is much more common than most people realize. Cancer is not one disease but many – there are more than 100 different types of cancer, many of which have different causes and risk factors. Although cancer may strike at any age, nearly 80% of all cancers in the United States are diagnosed in people 55 years or older, according to data from the National Cancer Institute.

New Cases

Incidence counts and rates in this report were calculated using invasive cancers only (cancers that can invade nearby tissues and spread to other parts of the body), with the addition of *in situ* (non-invasive) bladder cancers. According to the American Cancer Society, more than 1.9 million new cancer cases are expected to occur in the United States in 2023. In Summit County, 15,944 new invasive cancer cases were diagnosed and reported among males and females from 2016 to 2020, a five year average of 3,189 cases per year. Breast cancer had the highest number of cases from 2016 to 2020, with 2,442 cases (yearly average of 488 cases per year), followed by lung and bronchus cancer, prostate cancer, and colon and rectum cancer. From 2016 to 2020, males in Summit County were more likely to be diagnosed with cancer than females, and white people had higher incidence rates than Black people and Asians/Pacific Islanders. The cancer incidence rate for all cancers combined in Summit County was relatively stable from 2010 to 2019 and then showed a sharp decline from 2019 to 2020 (7%), likely due to disruptions in access to care, including delays in cancer diagnoses and screenings, during the COVID-19 pandemic.

Deaths

Cancer is the second most common cause of death in Summit County, Ohio and the United States, accounting for nearly one of every four deaths. The American Cancer Society estimates that 609,820 deaths from cancer are expected in the United States in 2023, which is about 1,670 deaths per day. Cancer claimed the lives of 5,993 Summit County residents from 2016 to 2020 (a 5 year average of 1,199). The average cancer mortality rate in Summit County (162.2 per 100,000 population) was nearly 9% higher than the U.S. rate (149.4 per 100,000) and slightly lower than the Ohio rate (166.4 per 100,000). From 2016 to 2020, lung and bronchus cancer was the leading cause of cancer death in Summit County, followed by colon and rectum cancer, pancreatic cancer, and breast cancer. During this time period, males in Summit County were more likely to die of cancer than females, and Black people were more likely to die of cancer than white people and Asians/Pacific Islanders. The age-adjusted cancer mortality rate in Summit County decreased 12% from 2010 to 2020.

Calculation of Rates

In addition to the reporting of number of new cancer cases and cancer deaths, rates are calculated to allow for comparison between sexes, races, geographic areas and other socioeconomic factors. A rate is the number of cases or deaths per total population of a group, and usually reported in the format of number of cases or deaths per 100,000 population.

INCIDENCE RATE (IR): $$IR = (\# \ new \ cancer \ cases \div population) * 100,000$$

MORTALITY RATE (MR): $$MR = (\# \ new \ cancer \ cases \div population) * 100,000$$

If rates are calculated over a time period that is greater than one year, then the average rate is calculated by dividing the total rate by the number of years.

Stage at Diagnosis and Survival

Cancer stage at diagnosis refers to the extent or spread of a cancer in the body. Five-year relative survival compares the survival of people diagnosed with cancer with the survival of people who do not have cancer. The earlier a cancer is diagnosed, the better chance a person has of surviving. For example, when lung and bronchus cancers are diagnosed at the local stage (when tumors are confined to the lung and bronchus), 60% of people are estimated to survive five years or more after diagnosis, but when diagnosed after the cancer has spread to distant organs or tissues, only 7% survive five years or more. For all cancers combined, five year relative survival in Ohio has steadily increased since 1996.

New Cancer Cases and Deaths

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

	Incidence				Mortality			
	Summit County		Ohio Rate	United States Rate	Summit County		Ohio Rate	United States Rate
	Cases	Rate			Deaths	Rate		
All Sites / Types	3,189	449.0	459.9	442.3	1,199	162.2	166.4	149.4
Bladder	150	20.1	21.3	18.9	35	4.8	4.9	4.2
Brain and other CNS	45	7.2	6.9	6.4	33	4.7	4.7	4.4
Breast (Both sexes)	488	71.7	69.2	67.6	86	12.1	11.7	10.8
Breast - Female	484	132.7	129.5	127.0	86	21.7	21.1	19.6
Cervix Uteri	16	5.0	7.7	7.5	6	1.7	2.3	2.2
Colon & Rectum	251	35.1	38.5	36.5	102	13.8	14.5	13.1
Corpus Uteri	109	27.9	30.8	27.4	16	4.1	5.3	5.1
Esophagus	37	4.9	5.6	4.5	32	4.2	4.9	3.8
Hodgkin Lymphoma	17	3.2	2.7	2.6	3	0.4	0.3	0.3
Kidney & Renal Pelvis	107	15.5	17.6	17.2	24	3.2	3.9	3.5
Larynx	28	3.7	3.7	2.9	8	1.0	1.2	0.9
Leukemia	90	13.2	12.2	13.9	49	6.7	6.5	6.0
Liver & Intrahepatic duct	50	6.4	7.6	8.6	41	5.4	6.3	6.6
Lung and Bronchus	437	58.5	64.7	54.0	298	39.9	43.0	35.0
Melanoma of Skin	183	27.0	22.9	22.5	17	2.4	2.5	2.1
Multiple Myeloma	47	6.5	6.3	7.0	27	3.8	3.4	3.1
Non-Hodgkin Lymphoma	136	19.0	18.8	18.6	42	5.9	5.6	5.1
Oral Cavity/Pharynx	90	12.5	12.5	11.9	22	3.0	2.9	2.5
Ovary	35	9.6	9.6	10.1	26	6.4	6.3	6.3
Pancreas	102	13.7	13.7	13.2	93	12.4	12.2	11.1
Prostate	377	103.9	111.6	110.5	60	19.5	19.2	18.8
Stomach	42	6.0	5.7	6.2	19	2.7	2.3	2.8
Testis	18	7.4	5.6	5.8	1	0.4	0.3	0.3
Thyroid	99	17.1	14.6	13.3	3	0.5	0.5	0.5

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 people and age-adjusted to the 2000 U.S. standard population. Rates are sex-specific for cancers of the 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).

- In Summit County, 15,944 new invasive cancer cases were diagnosed from 2016 to 2020, which was an average of 3,189 cases per year. This was an average incidence rate of 449 cases per 100,000 residents, which was slightly lower than the Ohio rate (459.9 per 100,000) and slightly higher than the national rate (442.3 per 100,000).
- 5,993 cancer deaths were reported in Summit County from 2016 to 2020, which was an average of 1,199 deaths per year. This was an average mortality rate of 162.2 deaths per 100,000 residents, which was slightly lower than the Ohio rate (166.4 per 100,000) and slightly higher than the national rate (149.4 per 100,000).

Figure 1. Top 10 Cancers by Percent of New Invasive Cancer Cases and Percent of Cancer Deaths, Summit County, 2016-20

Percent of new cancer cases, 2016-20

Cancer Type	Percent
Breast	15.3%
Lung and Bronchus	13.7%
Prostate	11.8%
Colon & Rectum	7.9%
Melanoma of Skin	5.7%
Bladder	4.7%
Non-Hodgkin Lymph	4.3%
Uterus	3.4%
Kidney & Renal Pelvis	3.3%
Pancreas	3.2%
All other types	19.2%

Percent of cancer deaths 2016-20

Percent
7.2%
24.9%
5.0%
8.5%
1.4%
2.9%
3.5%
1.4%
2.0%
7.8%
22.6%
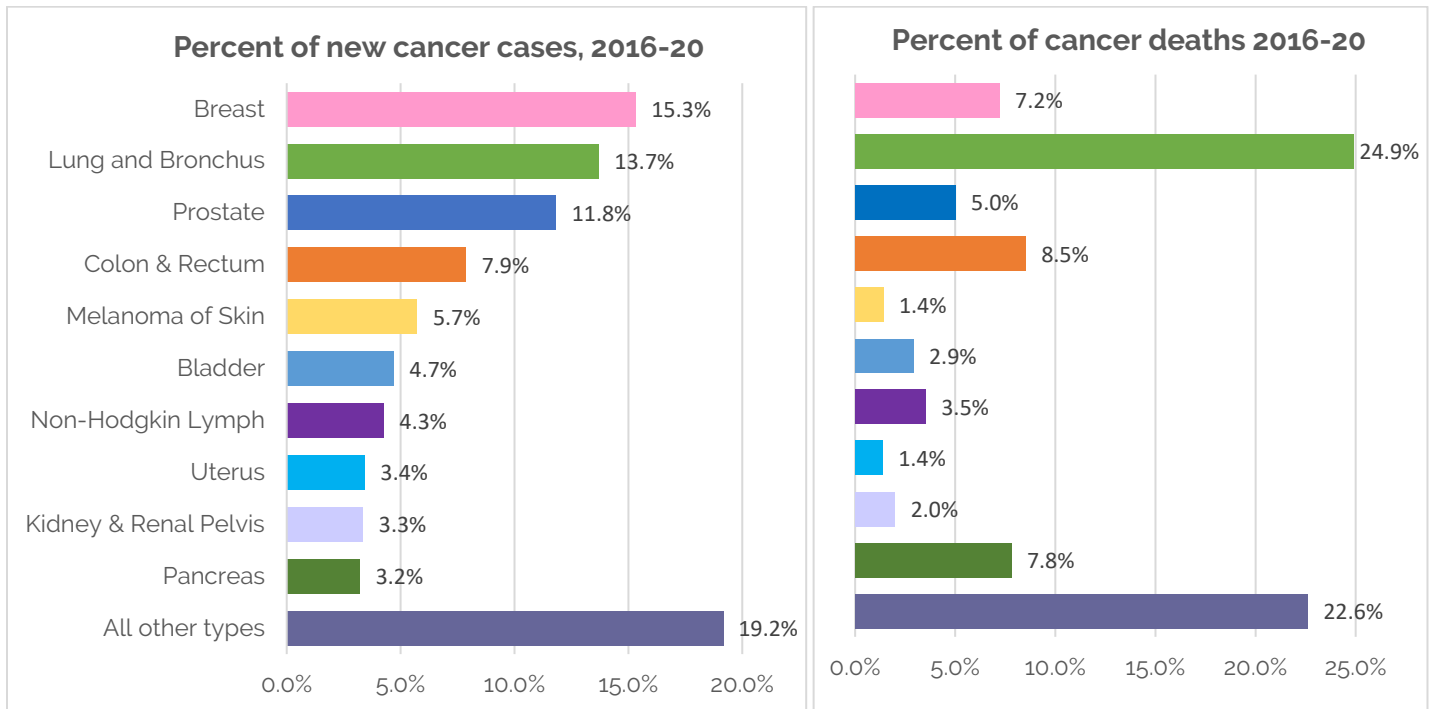
Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.

Figure 2. Top 10 Cancers by Percent of Total Cancer Deaths in Summit County, 2016-20

Cancer Type	Percent of cancer deaths
Lung and Bronchus	24.9%
Colon & Rectum	8.5%
Pancreas	7.8%
Breast	7.2%
Prostate	5.0%
Leukemia	4.1%
Non-Hodgkin Lymphoma	3.5%
Liver & Intrahepatic Bile…	3.5%
Bladder	2.9%
Brain and Other CNS	2.8%
All Other Types	17.1%
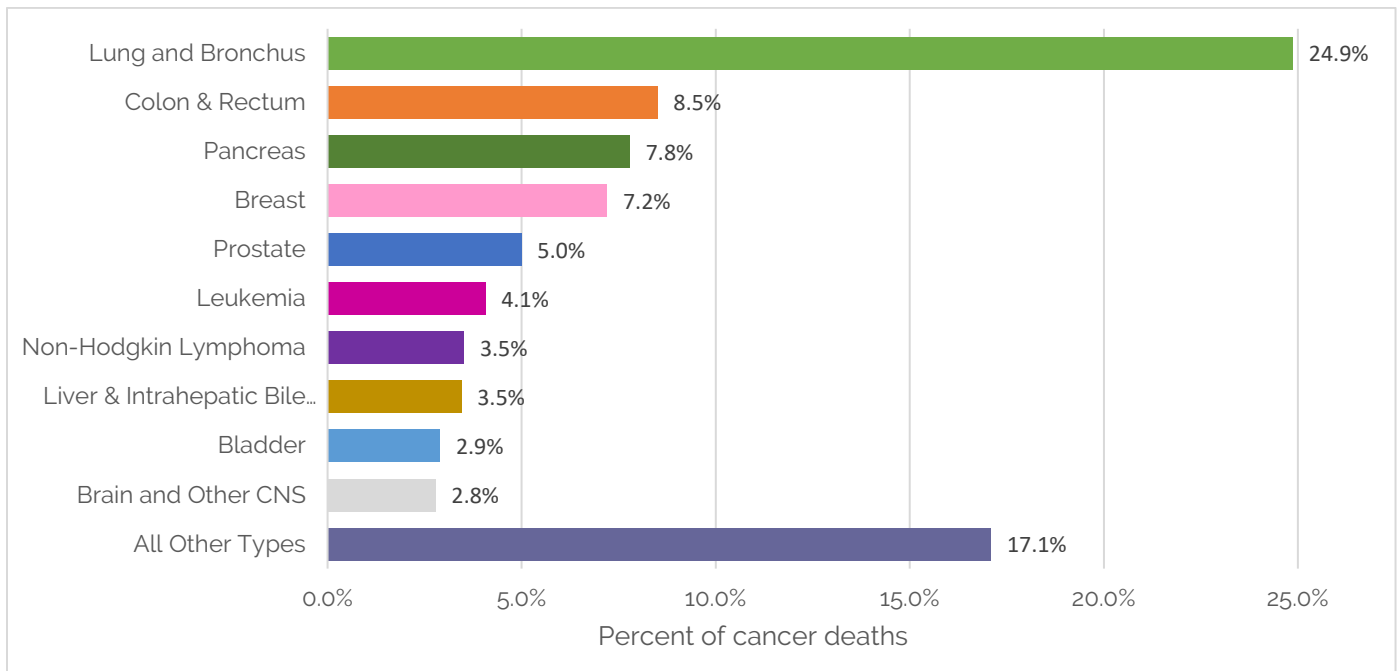
Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.

Table 2. Average Annual New Invasive Cancer Cases and Incidence Rates by Cancer Site/Type and Sex, Summit County, 2016-20

	Summit County		Males		Females	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites / Types	3189	449.0	1591	482.7	1598	428.9
Bladder	150	20.1	115	35.5	35	8.4
Brain and other CNS	45	7.2	25	8.2	19	6.0
Breast	488	133.8	4	1.4	484	132.7
Cervix Uteri	16	5.0	NA	NA	16	5.0
Colon & Rectum	251	35.1	131	40.4	120	30.9
Corpus Uteri	109	27.9	NA	NA	109	27.9
Esophagus	37	4.9	29	8.3	8	2.1
Hodgkin Lymphoma	17	3.2	9	3.7	7	2.7
Kidney & Renal Pelvis	107	15.5	64	20.2	43	11.5
Larynx	28	3.7	22	6.4	6	1.5
Leukemia	90	13.2	51	16.5	40	10.5
Liver & Intrahepatic Bile Duct	50	6.4	34	9.3	16	4.1
Lung and Bronchus	437	58.5	218	65.7	219	53.2
Melanoma of Skin	183	27.0	106	33.8	76	22.4
Multiple Myeloma	47	6.5	29	9.0	18	4.4
Non-Hodgkin Lymphoma	136	19.0	79	24.8	56	14.5
Oral Cavity/Pharynx	90	12.5	61	18.3	29	7.5
Ovary	35	9.6	NA	NA	35	9.6
Pancreas	102	13.7	53	15.7	49	12.0
Prostate	377	103.9	377	103.9	NA	NA
Stomach	42	6.0	28	8.8	14	3.8
Testis	18	7.4	18	7.4	NA	NA
Thyroid	99	17.1	25	8.6	74	25.3
Other Sites/Types	237	**	112	**	125	**

1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.
* Not applicable; sex-specific cancer.
** Rates are not calculated due to multiple cancer sites/types in this category.
CNS = Central Nervous System.

- Breast cancer was the leading type of cancer incidence in Summit County from 2016 to 2020, with 15.3% of new invasive cancer cases, followed by lung and bronchus cases (13.7%), prostate cancer (11.8%), and colon and rectum cancer (7.9%).

- These four sites / types accounted for nearly half (48.7%) of all new invasive cancer cases in Summit County from 2016 to 2020.

- Overall, males had a 12.5% higher average cancer incidence rate (482.7 per 100,000) than females (428.9 per 100,000) in Summit County from 2016 to 2020. Males had higher rates for every cancer site/type except breast cancer and thyroid cancer.

Table 3. Average Annual Cancer Deaths and Mortality Rates by Cancer Site/Type and Sex, Summit County, 2016-20

	Summit County		Males		Females	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Sites / Types	1199	162.2	625	194.2	574	139.9
Bladder	35	4.8	22	7.4	13	3.0
Brain and other CNS	33	4.7	18	5.5	15	3.9
Breast	86	21.9	1	*	86	21.7
Cervix Uteri	6	1.7	NA	NA	6	1.7
Colon & Rectum	102	13.8	53	16.4	49	11.6
Corpus Uteri	16	4.1	NA	NA	16	4.1
Esophagus	32	4.2	25	7.6	7	1.6
Hodgkin Lymphoma	3	0.4	1.6	*	1	*
Kidney & Renal Pelvis	24	3.2	15	4.6	9	2.1
Larynx	8	1.0	5	1.5	3	0.6
Leukemia	49	6.7	27	8.8	22	5.1
Liver & Intrahepatic Bile Duct	41	5.4	27	7.7	14	3.4
Lung and Bronchus	298	39.9	157	47.9	141	34.1
Melanoma of Skin	17	2.4	11	3.6	6	1.5
Multiple Myeloma	27	3.8	16	5.0	12	2.8
Non-Hodgkin Lymphoma	42	5.9	25	8.3	17	4.2
Oral Cavity/Pharynx	22	3.0	15	4.7	6	1.6
Ovary	26	6.4	NA	NA	26	6.4
Pancreas	93	12.4	47	14.0	46	11.1
Prostate	60	19.5	60	19.5	NA	NA
Stomach	19	2.7	12	3.9	7	1.7
Testis	1	0.4	1	*	NA	NA
Thyroid	3	0.5	1.8	*	1	*
Other Sites/Types	154	**	83	**	71	**

1 Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.
2 Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.
NA = Not applicable; sex-specific cancer.
*Rates may be unstable and are not presented when the 5 year average count is less than two.
** Rates are not calculated due to multiple cancer sites/types in this category.
CNS = Central Nervous System.

- Lung and bronchus cancer was the leading cause of cancer death in Summit County from 2016 to 2020, with 24.9% of cancer deaths, followed by colon and rectum cancer (8.5%), pancreatic cancer (7.8%), and breast cancer (7.2%).

- These four sites / types accounted for nearly half (48.4%) of all cancer deaths in Summit County from 2016 to 2020.

- In 2020, cancer remained the second most common cause of death in Summit County, Ohio, and the United States, accounting for one of every four deaths.

- Overall, males had a 38.8% higher average cancer mortality rate (194.2 per 100,000) than females (139.9 per 100,000) in Summit County from 2016 to 2020. Males had higher mortality rates for every cancer site/type except breast cancer.

Cancer by Age Group

Figure 3. Percent of New Invasive Cancer Cases by Age Group, Summit County, 2016-20
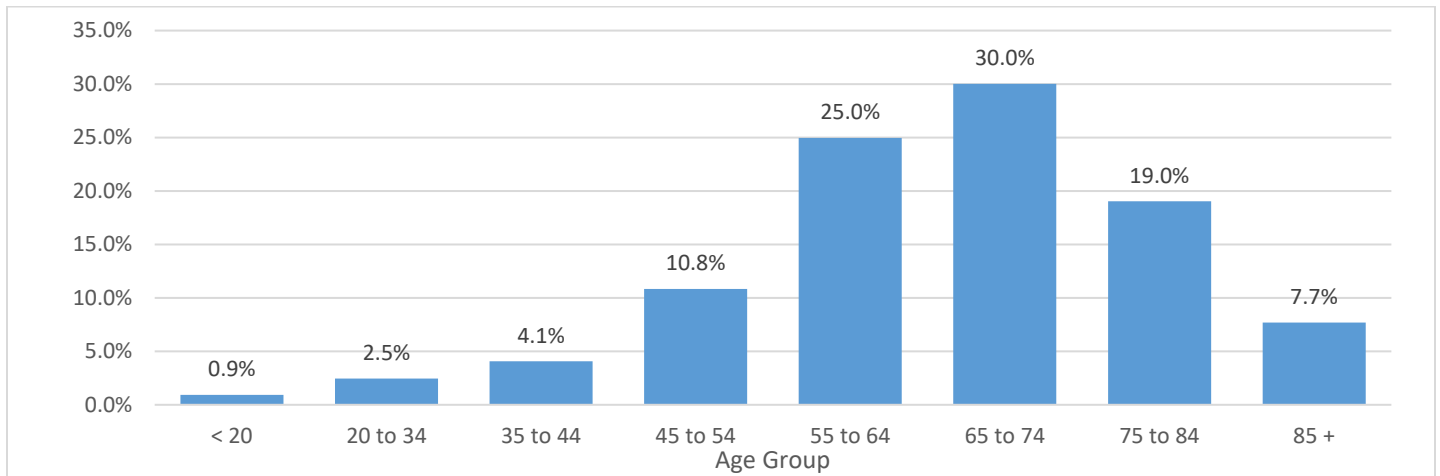
Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.

- Invasive cancer (all sites or types) was most frequently diagnosed among people aged 65 to 74 (30.0%), followed by those aged 55 to 64 (25.0%) and those aged 75 to 84 (19.0%). Less than 1% of cases were diagnosed among Summit County residents younger than 20 years of age.

Figure 4. Percent of Cancer Deaths by Age Group, Summit County, 2016-20
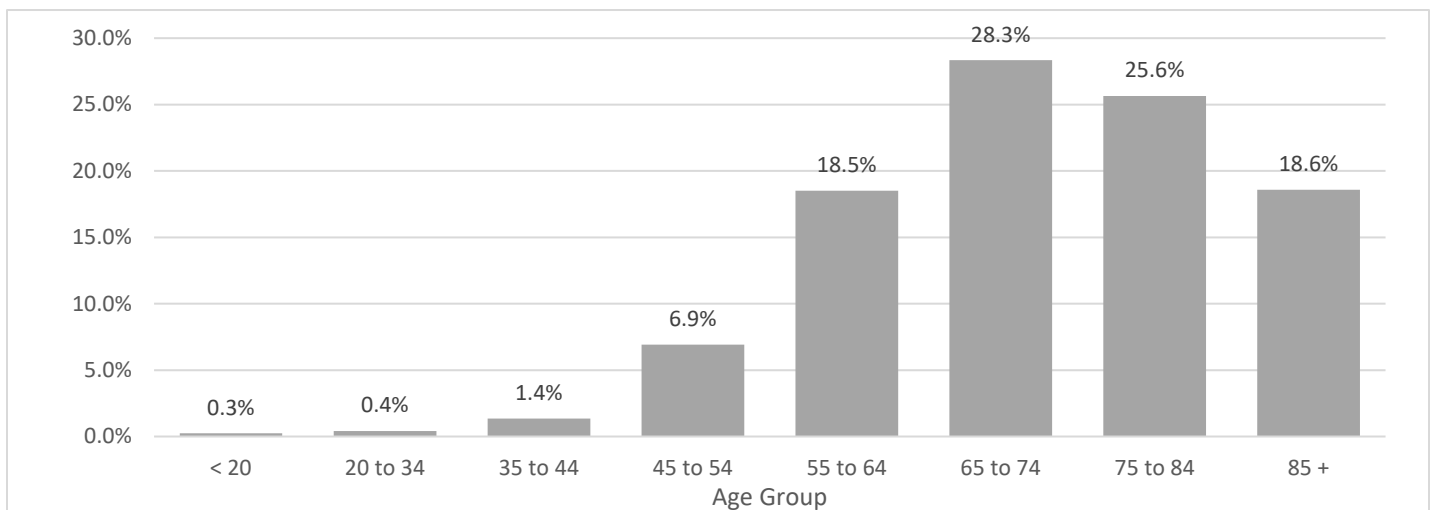
Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.

- Cancer deaths (all sites or types) were most frequent among people aged 65 to 74 (29.6%), followed by those aged 75 to 84 (26.5%) and those aged 55 to 64 (18.5%). Less than 1% of cases were diagnosed among Summit County residents younger than 35 years of age.

Cancer by Race

Figure 5. Incidence Rates for Leading Causes of Cancer by Race, Summit County, 2016-20
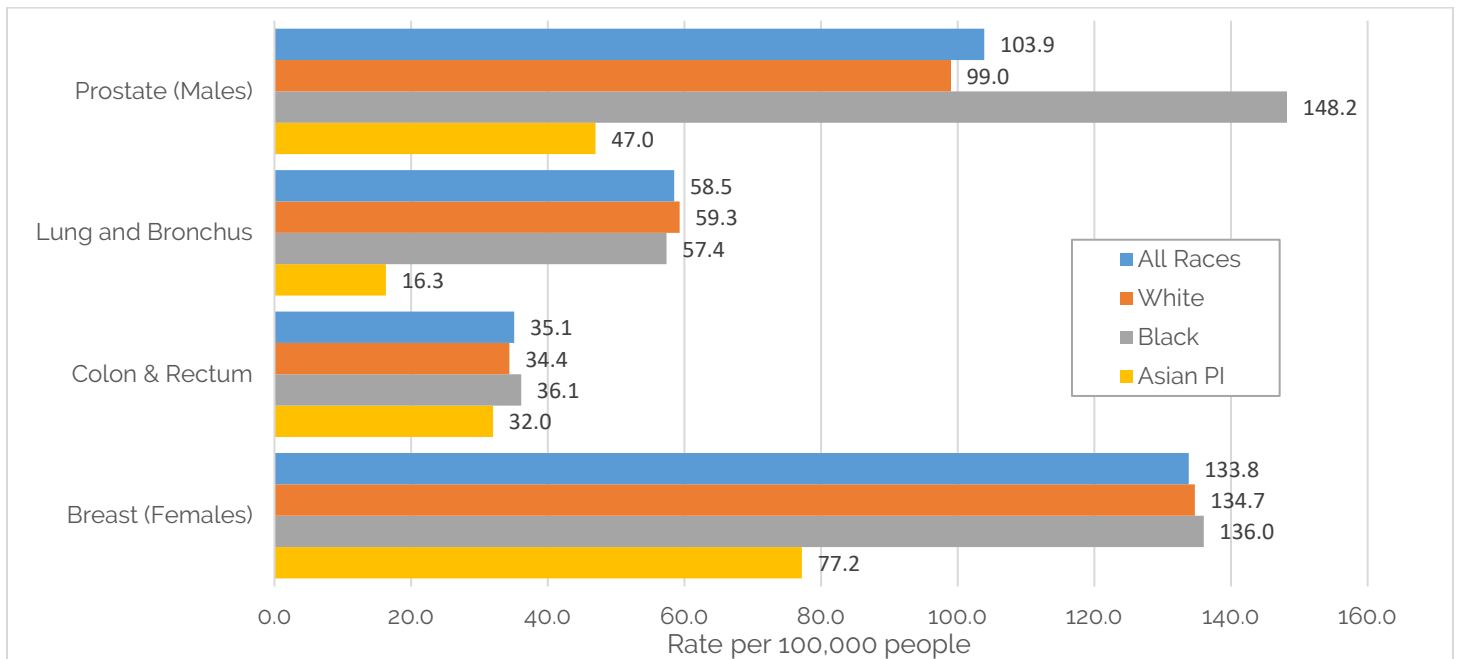
1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

- In Summit County from 2016 to 2020, the incidence rate for female breast cancer was similar for Black women (136.0 per 100,000) and white women (134.7 per 100,000). The incidence rate for Asian / Pacific Islander women was nearly half the rate of the other race groups, at 77.2 per 100,000.

- Incidence rates were similar among Black, white and Asian / Pacific Islander residents in Summit County from 2016 to 2020 for colon and rectum cancer.

- In Summit County from 2016 to 2020, the incidence rate for lung and bronchus cancer was slightly higher for whites (59.3 per 100,000) when compare to Blacks (57.4 per 100,000). With an incidence rate of 16.3 per 100,000, Asian / Pacific Islanders were diagnosed at a rate that was nearly one fourth the rate of whites and Black Summit County residents.

- From 2016 to 2020, the prostate cancer incidence rate for Black men (148.2 per 100,000) was nearly 50% higher than the rate for white men (99.0 per 100,000) and over three times higher than the rate for Asian / Pacific Islander men (47.0 per 100,000).

- Asian / Pacific Islander residents in Summit County had the lowest cancer incidence for the four leading cancer types / sites from 2016 to 2020.

Table 4. Average Annual New Invasive Cancer Cases and Incidence Rates by Cancer Site / Type and Race, Summit County, 2016-20

	All Races		White		Black		Asian PI	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Sites / Types	3189	449.0	2729	451.7	384.0	439.6	37.2	247.4
Bladder	150	20.1	137	21.1	10.2	12.9	0.8	*
Brain and other CNS	45	7.2	39	7.5	5.4	6.1	0.4	*
Breast (female only)	488	133.8	415	134.7	64.6	136.0	7.0	77.2
Cervix Uteri	16	5.0	13	5.2	2.2	4.4	0.4	*
Colon & Rectum	251	35.1	210	34.4	31.2	36.1	4.4	32.0
Corpus Uteri	109	27.9	94	28.5	12.2	23.1	2.6	25.3
Esophagus	37	4.9	33	5.1	2.4	2.6	0.8	*
Hodgkin Lymphoma	17	3.2	15	3.4	1.8	*	0.2	*
Kidney & Renal Pelvis	107	15.5	91	15.6	14.0	16.0	0.8	*
Larynx	28	3.7	23	3.6	4.6	5.4	0.2	*
Leukemia	90	13.2	80	13.6	7.2	8.2	1.2	*
Liver & Intrahepatic Bile Duct	50	6.4	38	5.8	9.2	9.6	2.0	11.9
Lung and Bronchus	437	58.5	381	59.3	51.6	57.4	2.2	16.3
Melanoma of Skin	183	27.0	171	29.8	1.6	*	0.4	*
Multiple Myeloma	47	6.5	33	5.2	13.0	16.1	0.4	*
Non-Hodgkin Lymphoma	136	19.0	122	19.8	9.6	11.6	2.2	19.5
Oral Cavity/Pharynx	90	12.5	78	12.7	9.4	10.8	1.8	*
Ovary	35	9.6	30	9.8	4.0	8.4	0.6	*
Pancreas	102	13.7	85	13.2	15.8	18.5	1.2	*
Prostate	377	103.9	310	99.0	61.6	148.2	2.6	47.0
Stomach	42	6.0	32	5.3	8.6	10.3	0.8	*
Testis	18	7.4	16	8.3	1.0	*	0.4	*
Thyroid	99	17.1	83	17.8	12.4	14.7	2.0	10.8
Other Sites/Types	237	**	203	**	30.4	**	1.8	**

1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 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.
* Rates may be unstable and are not presented when the 5 year average count is less than two.
** Rates are not calculated due to multiple cancer sites/types in this category.
CNS = Central Nervous System.
Asian PI = Asian/Pacific Islander.

- Black people had higher incidence rates than white people in Summit County for the following cancers from 2016 to 2020: breast, colon and rectum, kidney and renal pelvis, larynx, liver and intrahepatic bile duct, multiple myeloma, pancreas, prostate, and stomach. Asian/Pacific Islanders had comparatively low rates for the most common cancers.

- Incidence rates among white people were at least 50% higher than Black people for bladder cancer, esophageal cancer, Hodgkin lymphoma, leukemia, and Non-Hodgkin lymphoma; nearly three times higher for testicular cancer; and 15 times higher for melanoma of the skin.

Figure 6. Mortality Rates for Leading Causes of Cancer by Race, Summit County, 2016-20
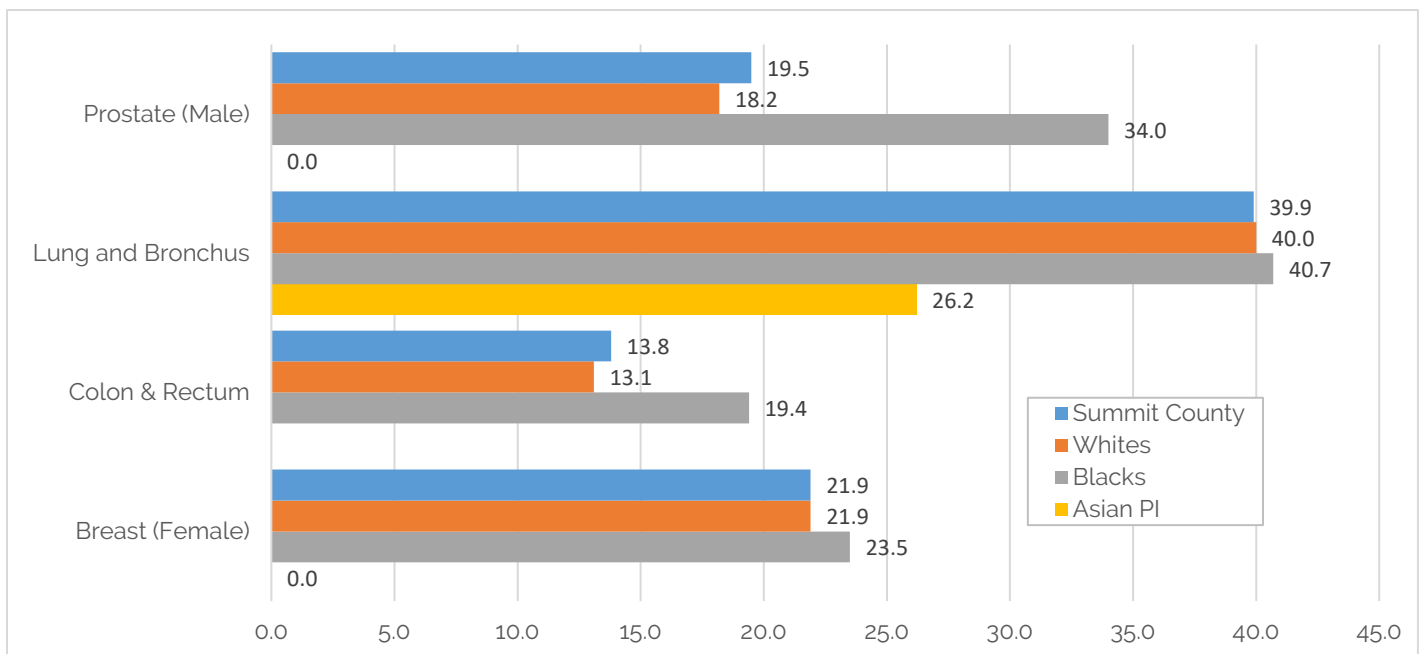
Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.

- In Summit County from 2016 - 2020, the average mortality rate for female breast cancer was highest among black women (23.5 per 100,000), compared with white women (21.9 per 100,000).

- Mortality rates for colon and rectum cancer was 45% higher among Black Summit County residents (19.4 per 100,000) than white residents (13.1 per 100,000) from 2016 to 2020.

- In Summit County from 2016 to 2020, the average mortality rate for lung and bronchus cancer was similar among Black people (40.7 per 100,000) and white people (40.0 per 100,000).

- From 2016 to 2020, the average prostate cancer mortality rate for Black men (34.0 per 100,000) was nearly double the rate among white men (18.2 per 100,000) in Summit County.

- For all cancer types, Asians/Pacific Islanders had the lowest cancer mortality rate (112.9 per 100,000) in Summit County, while Blacks had the highest rate (181.5 per 100,000). See Table 5.

Why are there racial disparities in cancer diagnoses and outcomes?

According to KFF: "Racial disparities in cancer incidence and outcomes are well-documented, with research showing that they are driven by a combination of structural, economic, and socioenvironmental inequities that are rooted in racism and discrimination, as well as genetic and hereditary factors that may be influenced by the environment. Despite significant advancements and improvements in cancer outcomes and treatment over time, disparities persist."

Indeed socioeconomic disparities exist in Summit County, and SCPH hopes to address these disparities in the context of cancer in a future report.

Source: KFF: Racial Disparities in Cancer Outcomes, Screening, and Treatment

Table 5. Average Annual Cancer Deaths and Mortality Rates by Cancer Site / Type and Race, Summit County, 2016-20

	Summit County		Whites		Blacks		Asian PI	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Sites / Types	1,199	162.2	1,027.4	160.4	153.4	181.5	14.0	112.9
Bladder	35	4.8	31.4	4.9	2.8	3.5	0.2	*
Brain and other CNS	33	4.7	30.4	5.0	32.8	3.3	0.2	*
Breast (female only)	86	21.9	73.8	21.9	12.0	23.5	0.4	*
Cervix Uteri	6	1.7	4.6	1.4	1.8	*	0.0	*
Colon & Rectum	102	13.8	84.2	13.1	16.4	19.4	1.0	*
Corpus Uteri	16	4.1	13.4	3.8	2.8	6.0	0.2	*
Esophagus	32	4.2	29.4	4.5	1.8	*	0.8	*
Hodgkin Lymphoma	3	0.4	2.6	0.4	0.4	*	0.0	*
Kidney & Renal Pelvis	24	3.2	21.8	3.4	2.0	2.3	0.0	*
Larynx	8	1.0	6.6	1.0	1.2	*	0.0	*
Leukemia	49	6.7	44.4	6.9	4.4	5.3	0.0	*
Liver & Intrahepatic duct	41	5.4	31.2	4.6	8.0	8.9	1.8	*
Lung and Bronchus	298	39.9	258.4	40.0	35.2	40.7	3.4	26.2
Melanoma of Skin	17	2.4	16.0	2.7	0.8	*	0.0	*
Multiple Myeloma	27	3.8	20.4	3.2	6.0	7.5	1.0	*
Non-Hodgkin Lymphoma	42	5.9	39.4	6.3	2.4	3.4	0.2	*
Oral Cavity/Pharynx	22	3.0	19.0	3.0	1.8	*	0.8	*
Ovary	26	6.4	22.4	6.3	3.4	7.2	0.0	*
Pancreas	93	12.4	79.4	12.3	13.2	15.4	0.8	*
Prostate	60	19.5	49.6	18.2	9.8	34.0	0.4	*
Stomach	19	2.7	14.0	2.2	3.8	4.9	1.2	*
Testis	1	0.4	0.8	*	0.2	*	0.0	*
Thyroid	3	0.5	2.4	0.4	0.6	*	0.2	*
Other Sites/Types	154	**	131.8	**	19.8	**	1.4	**

1 Source: Bureau of Vital Statistics, Ohio Public Health Data Warehouse, Ohio Department of Health, 2023.
2 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.
* Rates may be unstable and are not presented when the 5 year average count is less than 2.
** Rates are not calculated due to multiple cancer sites/types in this category.
Asian PI = Asian / Pacific Islander
CNS = Central Nervous System.

- In 2020, the overall cancer mortality rate for Black people (174.4 per 100,000) was 10%higher than the rate for white people (158.2 per 100,000) in Ohio. Asians/Pacific Islanders had the lowest cancer mortality rate (69.3 per 100,000), followed by Hispanics (81.5 per 100,000).

- Black Ohioans had higher mortality rates than white Ohioans for 10 out of 23 cancer sites/types in 2020 for which rates could be calculated. Mortality rates were more than two times higher among Black Ohioans than white Ohioans for multiple myeloma, prostate cancer, and stomach cancer.

Trends in Summit County Cancer Rates

Figure 7. Overall Trend in Cancer Incidence Rates, Summit County, Ohio and United States, 2010 - 2020
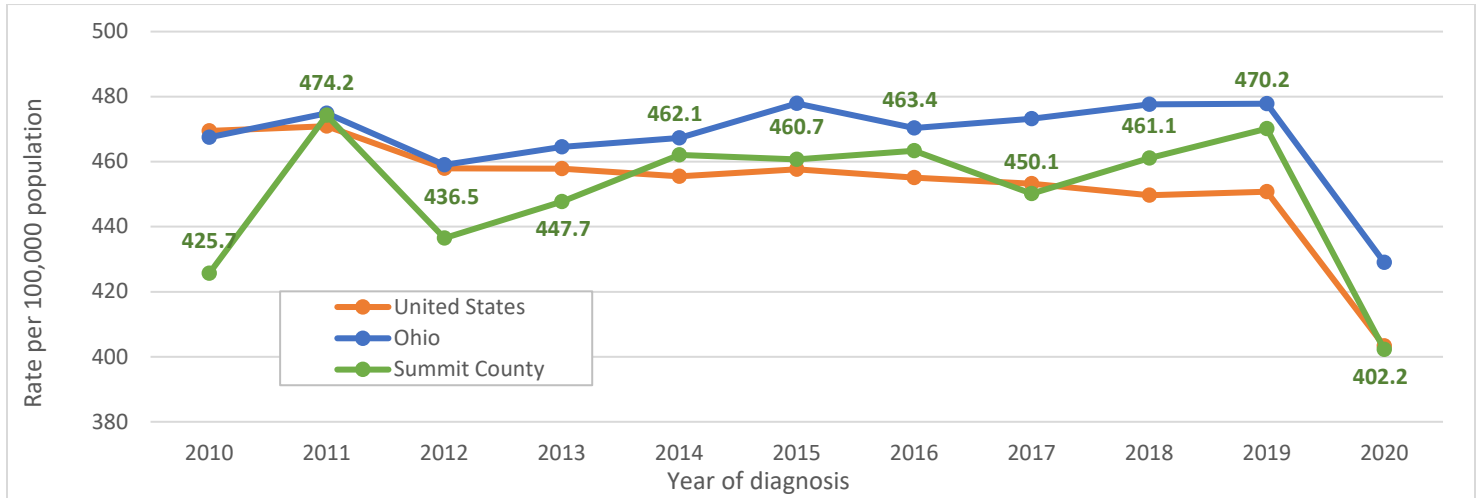
1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

- The age-adjusted cancer incidence rate for all cancers combined in Summit County exhibited an increasing trend from 2010 (425.7 per 100,000) to 2019 (470.2 per 100,000) and decreased sharply in 2020 (402.2 per 100,000). The decrease in 2020 was likely due to disruptions in access to care, including delays in cancer diagnoses and screenings, during the COVID-19 pandemic.

Figure 8. Overall Trend in Cancer Mortality Rates, Summit County, Ohio and United States, 2010 - 2020
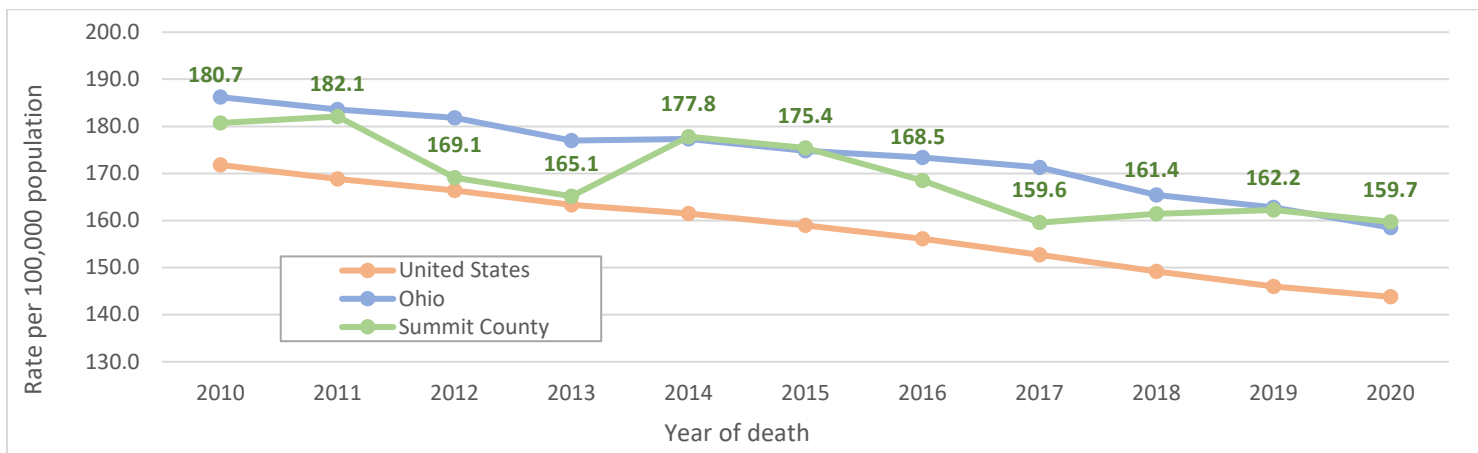
1 Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.
2 Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

- The age-adjusted cancer mortality rate for all cancers combined decreased 12% in Summit County from 2010 (180.7 per 100,000) to 2020 (159.7 per 100,000).

Figure 9. Age-adjusted Cancer Incidence Rates by Top 5 Sites or Types in Males, Summit County by Year, 2010-2020

1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 Rates are per 100,000 males and age-adjusted to the 2000 U.S. standard population.

- Prostate cancer is the most frequently diagnosed cancer among males. Prostate cancer diagnoses in Summit County fluctuated but followed a declining trend from 2012 to 2020 after peaking in 2011 (148.8 per 100,000).

- Lung and bronchus cancer incidence rates among Summit County males declined 31% from 2010 (82.9 per 100,000) to 2020 (57.0 per 100,000).

- Colon and rectum cancer incidence rates in Summit County declined 29% from 2011 (47.8 per 100,000) to 2020 (34.2 per 100,000) among males.

- Incidence rates for bladder cancer remained relatively consistent from 2010 (30.8 per 100,000) to 2020 (32.7 per 100,000) among Summit County males.

- Among Summit County males, incidence rates for melanoma of the skin increased by nearly 60% from 2010 (23.1 per 100,000) to 2020 (36.6 per 100,000).

- *Incidence rates in 2020 were likely impacted by disruptions in access to care, including delays in cancer diagnoses and screenings, during the COVID-19 pandemic.*
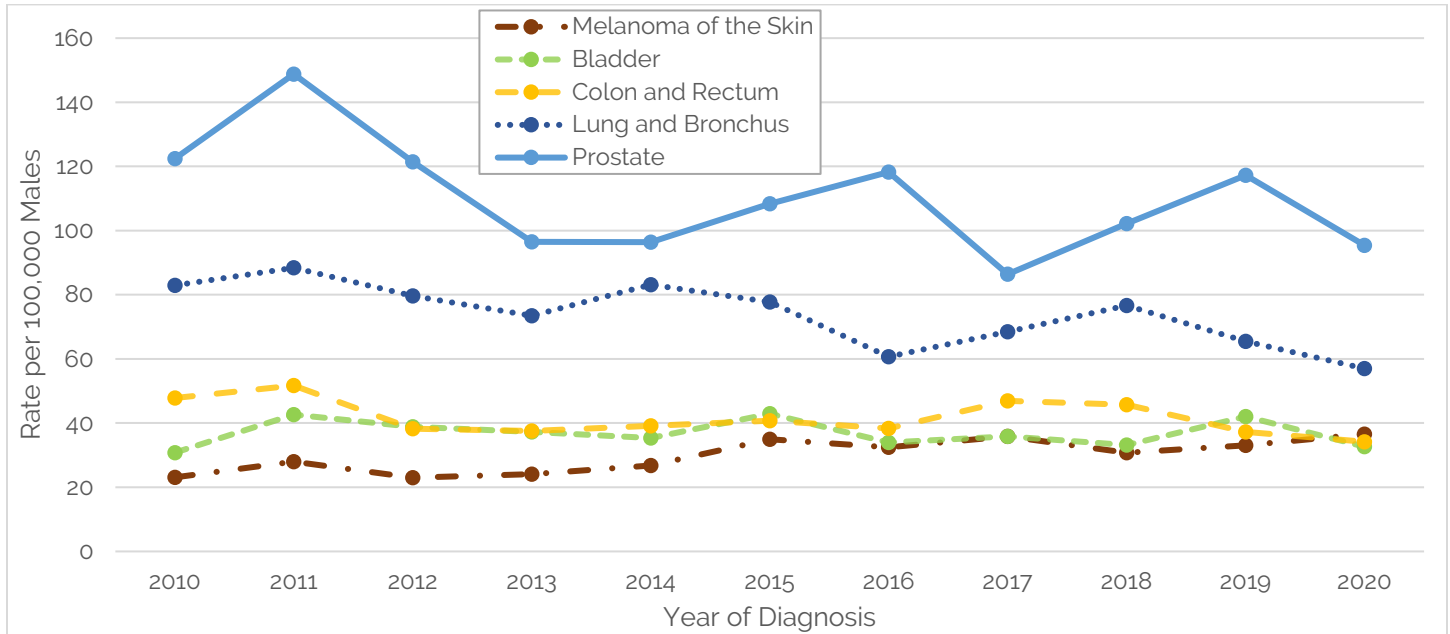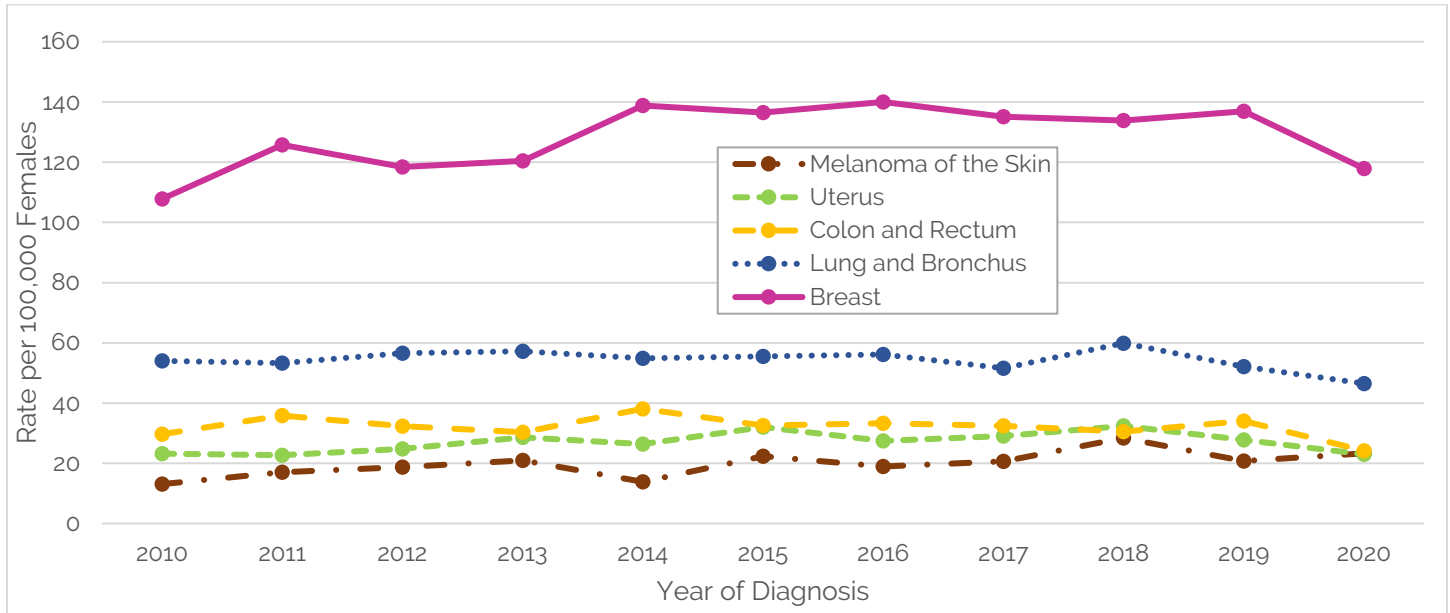
Figure 10. Age-adjusted Cancer Incidence Rates by to 5 Sites / Types in Females, Summit County by Year, 2010-2020

1 Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.
2 Rates are per 100,000 females and age-adjusted to the 2000 U.S. standard population.

- Breast cancer is the most frequently diagnosed cancer among females. Breast cancer incidence rates in Summit County increased by 27% from 2010 (107.8 per 100,000 females) to 2019 (136.9 per 100,000) but decreased in 2020 (117.9 per 100,000).

- Lung and bronchus cancer incidence rates among Summit County females were relatively stable from 2010 (54.0 per 100,000) to 2019 (52.1 per 100,000) and decreased in 2020 (46.5 per 100,000).

- Among females in Summit County, colon and rectum cancer incidence rates were relatively stable from 2010 (29.7 per 100,000) to 2019 (34.0 per 100,000), and decreased in 2020 (24.2 per 100,000).

- Uterine cancer incidence rates increased by 20% from 2010 (23.2 per 100,000) to 2019 (27.8 per 100,000) in Summit County, and decreased in 2020 (23.0 per 100,000).

- Similar to males, incidence rates of melanoma of the skin increased 78% among Summit County females from 2010 (13.1 per 100,000) to 2020 (23.3 per 100,000).

- *Summit County incidence rates in 2020 were likely impacted by disruptions in access to care, including delays in cancer diagnoses and screenings, during the COVID-19 pandemic.*
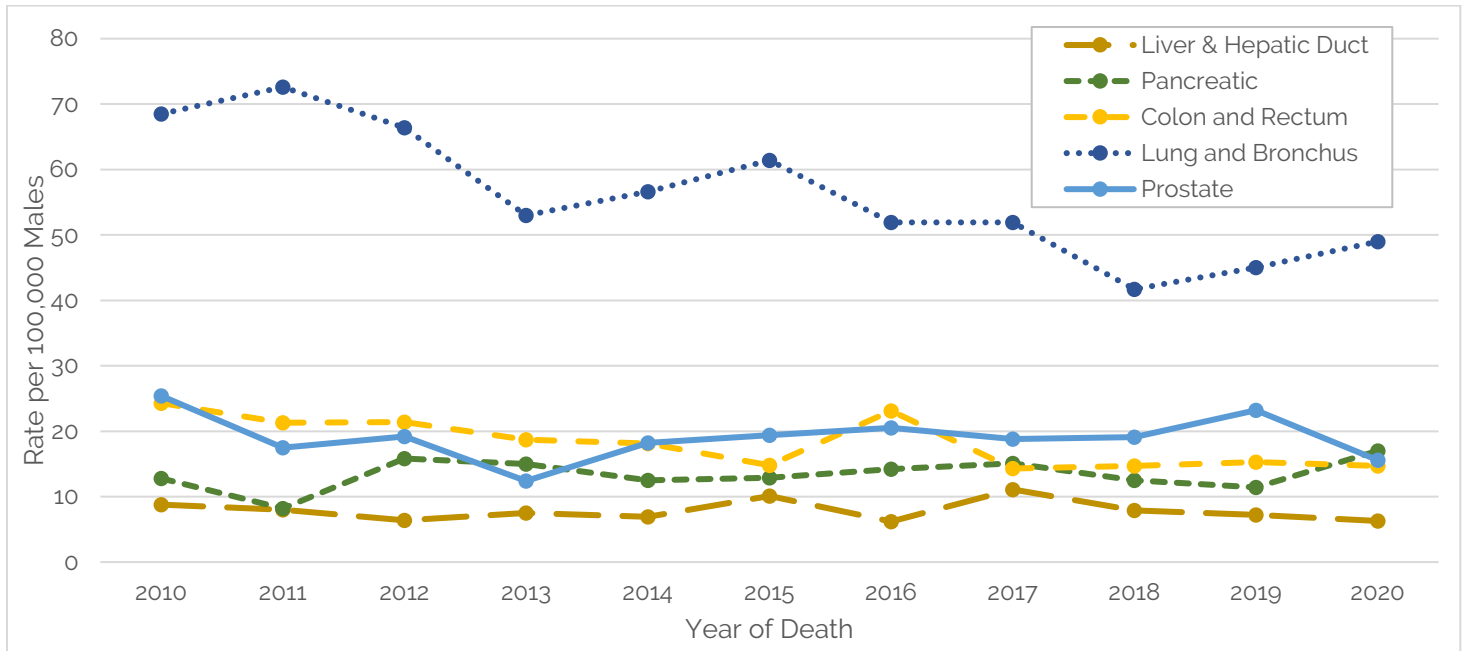
Figure 11. Age-adjusted Cancer Mortality Rates by Top 5 Sites / Types in Males, Summit County by Year, 2010-2020

1 Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.
2 Rates are per 100,000 males and age-adjusted to the 2000 U.S. standard population.

- Lung and bronchus cancer is the leading cause of cancer death among men. Lung and bronchus cancer mortality rates among Summit County males declined 29% from 2010 (68.5 per 100,000) to 2020 (49.0 per 100,000).

- Prostate cancer mortality rates in Summit County males remained relatively stable from 2010 to 2020, fluctuating between 12.4 per 100,000 and 25.4 per 100,000 during that time period.

- Colon and rectum cancer mortality rates in males decreased nearly 40% in Summit County from 2010 (24.3 per 100,000) to 2020 (14.7 per 100,000).

- Pancreatic cancer mortality rates increased about 33% among males in Summit County from 2010 (12.8 per 100,000) to 2020 (17.0 per 100,000).

- Liver and intrahepatic bile duct cancer mortality rates decreased by 28% among Summit County males from 2011 (8.8 per 100,000) to 2020 (6.3 per 100,000).
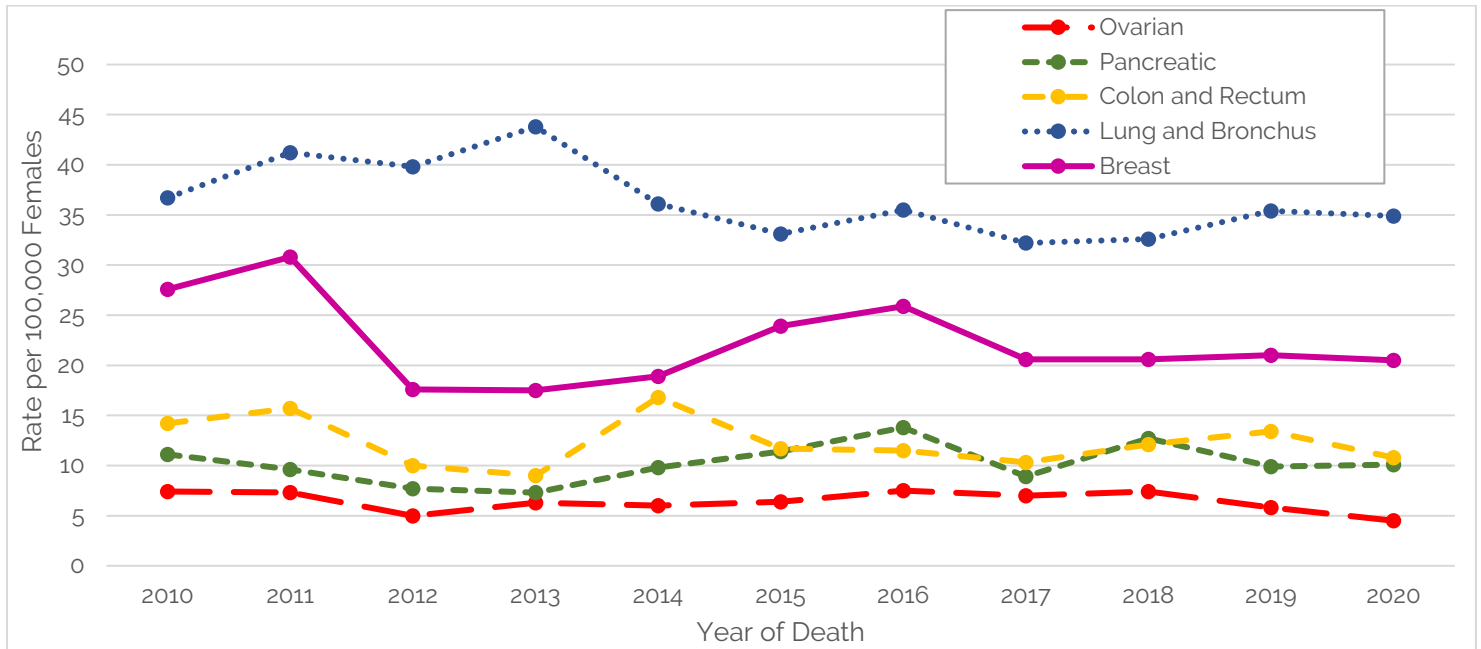
Figure 12. Age-adjusted Cancer Mortality Rates by Top 5 Sites / Types in Females, Summit County by Year, 2010-2020

1 Source: Bureau of Vital Statistics, Ohio Department of Health, 2023.
2 Rates are per 100,000 females and age-adjusted to the 2000 U.S. standard population.

- Lung and bronchus cancer is the leading cause of cancer death among females. Lung and bronchus cancer mortality rates among Summit County females declined 5% from 2011 (36.7 per 100,000) to 2020 (34.9 per 100,000).

- Breast cancer mortality rates among Summit County females decreased 25%, from 27.6 per 100,000 in 2011 to 20.5 per 100,000 in 2020.

- Colon and rectum cancer mortality rates declined 24% in Summit County from 2011 (14.2 per 100,000) to 2020 (10.8 per 100,000) among females.

- Pancreatic cancer mortality rates remained relatively stable among Summit County females from 2010 to 2020, fluctuating between 7.3 per 100,000 and 13.8 per 100,000 during that time period.

- Ovarian cancer mortality rates in Summit County decreased 39% from 2011 (7.4 per 100,000) to 2020 (4.5 per 100,000).

Stage at Diagnosis for Selected Cancers

Cancer stage at diagnosis refers to the extent or spread of a cancer in the body. If cancer cells are present only in the layer of cells where they developed and have not spread, the stage is in situ. If cancer cells have penetrated beyond the original layer of tissue, the cancer has become invasive and is categorized as local (confined to the site of origin), regional (spread to adjacent lymph nodes, organs, or tissues), or distant (spread to distant organs or tissues).   Diagnosing cancer during the early stages increases survival rates.

Figure 13. Proportion of Cases (%) by Stage Group for Select Cancers in Summit County and Ohio, 2016-20
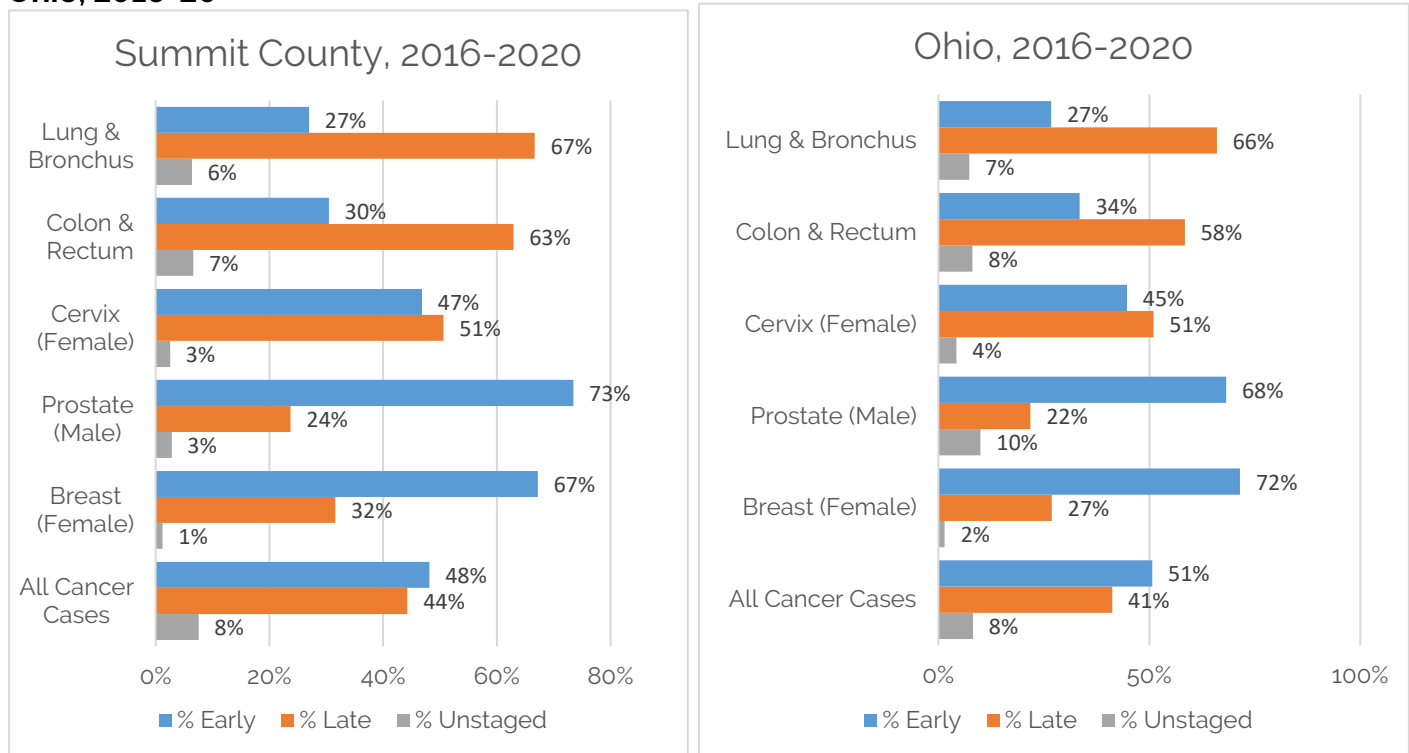
Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023.

- For lung and bronchus cancers diagnosed in Summit County from 2016 to 2020, 27% were in the early stages and 67% were in the late stages. This is similar to the distribution of Ohio cases (27% and 66%, respectively).
- 30% of colon and rectum cancer cases were diagnosed in the early stage in Summit County; 63% were diagnosed in later stages. In Ohio, 34% of were diagnosed in the early stage and 58% were in later stages at time of diagnosis.
- In Summit County from 2016 to 2020, 47% of cervical cancers were diagnosed early (in situ or at a local stage), and 51% were in later stages. In Ohio, 45% of cervical cancer cases were diagnoses in the early stages; 51% were diagnosed in later stages.
- Most prostate cancers in Summit County were diagnosed in early stages (73%), while 24% were diagnosed in later stages. In Ohio, 67% of prostate cancer cases were diagnosed in early stages and 22% were diagnosed in later stages.

- In Summit County from 2016 to 2020, 67% of breast cancers among females were diagnosed early (in situ or at a local stage), which is lower for the rate in Ohio (72%). 32% of Summit County cases were diagnosed in later stages, while the statewide rate was 27%.
- For all cancer cases in Summit County, 48% were diagnosed in earlier stages and 44% were diagnosed in later stages. In addition, 8% of Summit County cases did not have stage at diagnosis data. In Ohio, 51% of all cancer cases were diagnosed in earlier stages, 41% were in later stages, and 8% of cases were unstaged.

Early Detection

Cancer screening can detect some cancers early when treatment is often less intensive and more successful. Screening is known to reduce mortality for cancers of the breast, colon and rectum, cervix, and lung (among people who smoke, or used to smoke). 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 ___ shows the prevalence of adults in Summit County who reported having a recommended cancer screening test, compared with Ohio and the United States. Since the screening data was collected in 2020, it reflects screening behaviors that occurred mostly prior to the COVID-19 pandemic. However, there has likely been a dramatic reduction in cancer screening in 2020 and years following due to the COVID-19 pandemic, and its full impact on cancer prevention and early detection may not be known until more data becomes available in the years to come.

Figure 14. Prevalence of Adults Who Reported Having a Recommended Cancer Screening Test in Summit County, Ohio, and the United States, 2020
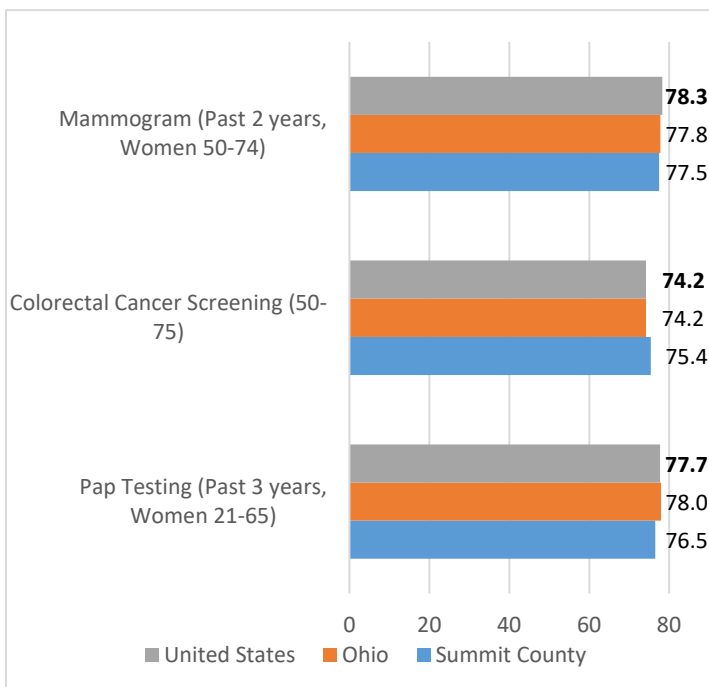
In Summit County:

- 76.5% of women ages 21-65 reported they had a Pap test in the past three years, compared with 78.0% in Ohio and 77.7% in the United States.

- 75.4% of adults ages 50-75 met colon and rectum cancer screening guidelines,* compared with 74.2% in Ohio the United States.

- 77.5% of women ages 50-74 reported they had a mammogram in the past two years, compared with 77.8% in Ohio and 78.3% 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: 2020 Ohio Behavioral Risk Factor Surveillance System, Ohio Department of Health, 2023; 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 (e.g., 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 15. Prevalence of Adults Who Are Current Smokers, Obese, Physically Inactive, or Excessive Drinkers in Summit County, Ohio and the United States, 2020
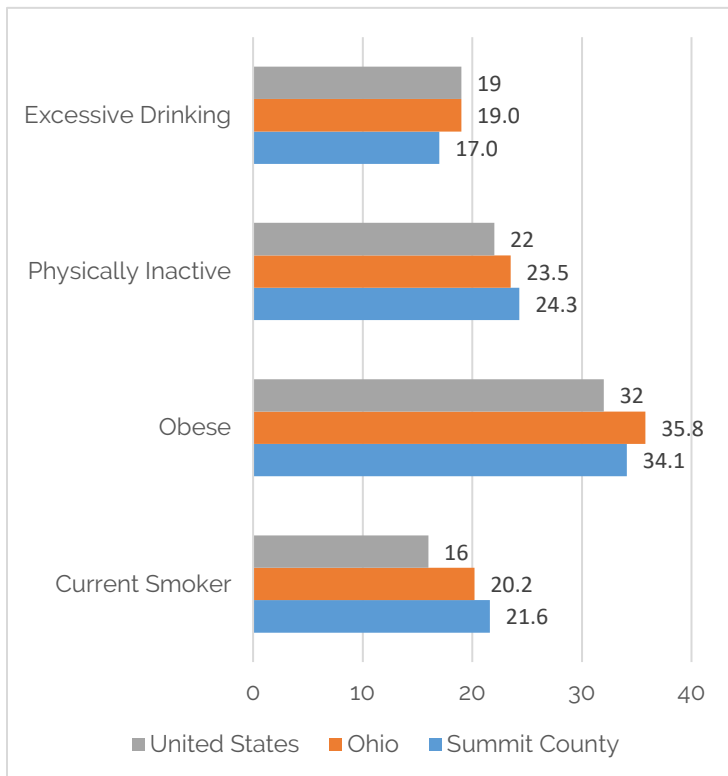
Source: 2023 County Health Rankings, www.countyhealthrankings.org, 2023. Current smoker, excessive drinking, obesity and physical inactivity data are from 2020.

Current Smoker = Percentage of adults who are current smokers.

Obese = Percentage of adults (age 20+) with a body mass index (BMI) ≥ 30 kg/m2.

Physically Inactive = Percentage of adults (age 20+) 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).

In Summit County:

- 21.6% of adults are current smokers, compared with 20.2% in Ohio and 17% in the United States.

- 34.1% of adults are obese, compared with 35.8% in Ohio and 32% in the United States.

- 24.3% of adults are physically inactive, compared with 23.5% in Ohio and 22% in the United States.

- 17.0% of adults are excessive drinkers, compared with 19.0% in Ohio and 19% in the United States.

DID YOU KNOW? (From the CDC)

- Tobacco use is associated with 12 types of cancer, and tobacco use causes nearly 90% of lung cancer cases. 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 diet and exercise practices.

- The CDC states that excessive drinking can increase the risk of several cancers, including oral (mouth and throat), esophagus, larynx, colon and rectum, liver, breast (in women), and prostate.

Maps of Incidence and Mortality Rates for Select Cancers by

Figure 16. All Cancer Sites/Types Incidence Rates by Cluster, Summit County, 2016-20

Rate per 100,000 Population

All Sites / Types
- ☐ 409.3 - 440.1
- ☐ 440.2 - 464.7
- ☐ 464.8 - 483.5
- ☐ 483.6 - 525.2

Summit County
Rate: 449.0

Sag - Nthf - Mace 464.7

Twinsburg 467.6

Richfld - Bos 483.5

Hudson 497.3

Cuy Falls 452.4

Stow - Silver Lk 440.1

Cop - Bath - Fair 431.1

Akron NW 431.0

Mun Falls - Tall 466.7

Akron N 480.9

Akron W 409.3

Akron Cen 457.7

Akron SW 525.2

Akron S 460.6

Akron SE 523.4

Norton 468.2

Spring - Lake 468.1

Barberton 477.0

Cov - Grn 440.0

Franklin 420.5
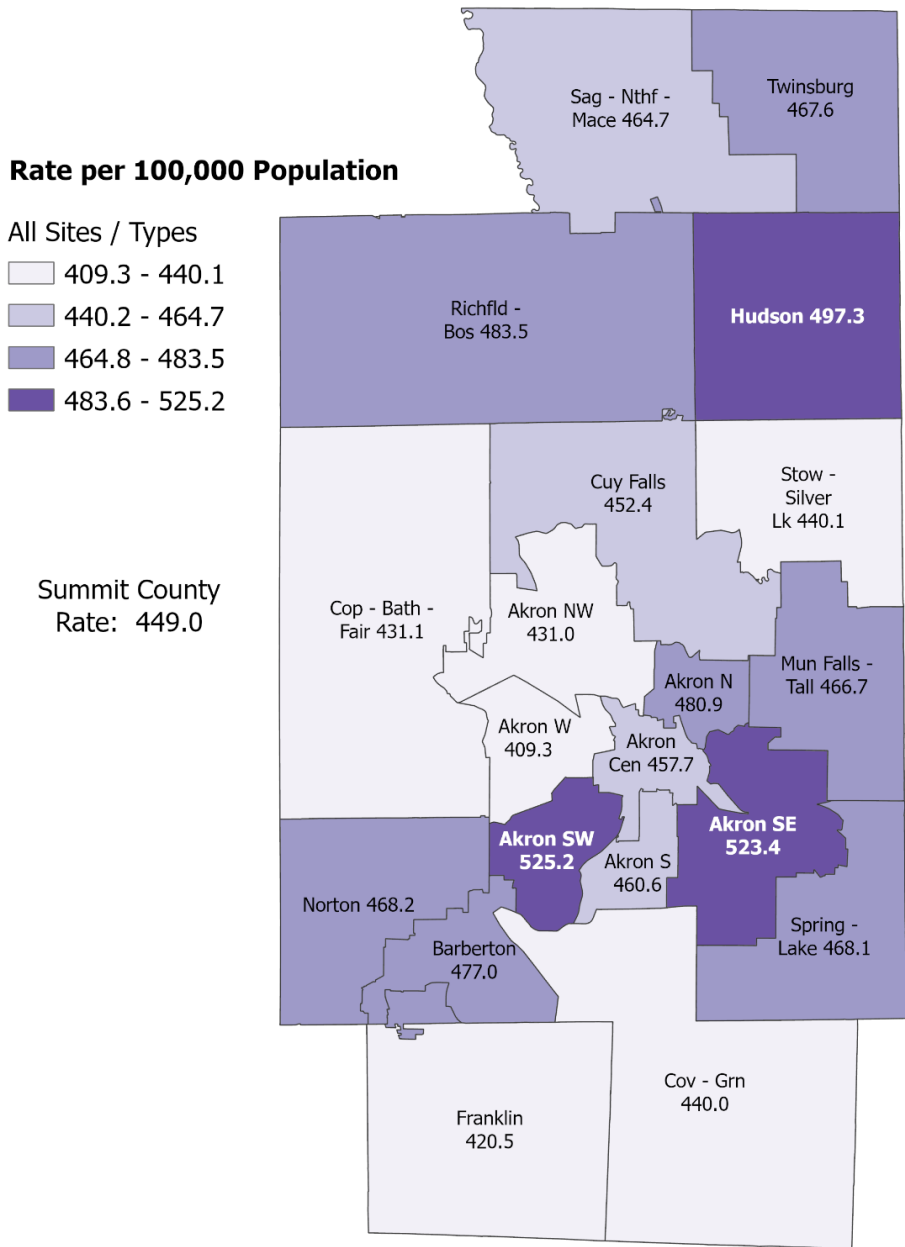
- In Summit County, the cluster with the highest age-adjusted cancer incidence rate from 2016 to 2020 (Akron SW, 525.2 per 100,000) had a rate 25% higher than the cluster with the lowest rate (Akron West, 409.3 per 100,000).

- Other clusters with higher rates of cancer incidence were Akron SE (523.4 per 100,000) and Hudson (497.3 per 100,000).

- Summit County clusters with lower cancer incidence also included Franklin (420.5 per 100,000), Akron Northwest (431.0 per 100,000) and Copley / Bath / Fairlawn (431.1 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2017-2021 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 17. All Cancer Sites/Types Mortality Rates by Cluster, Summit County, 2016-20
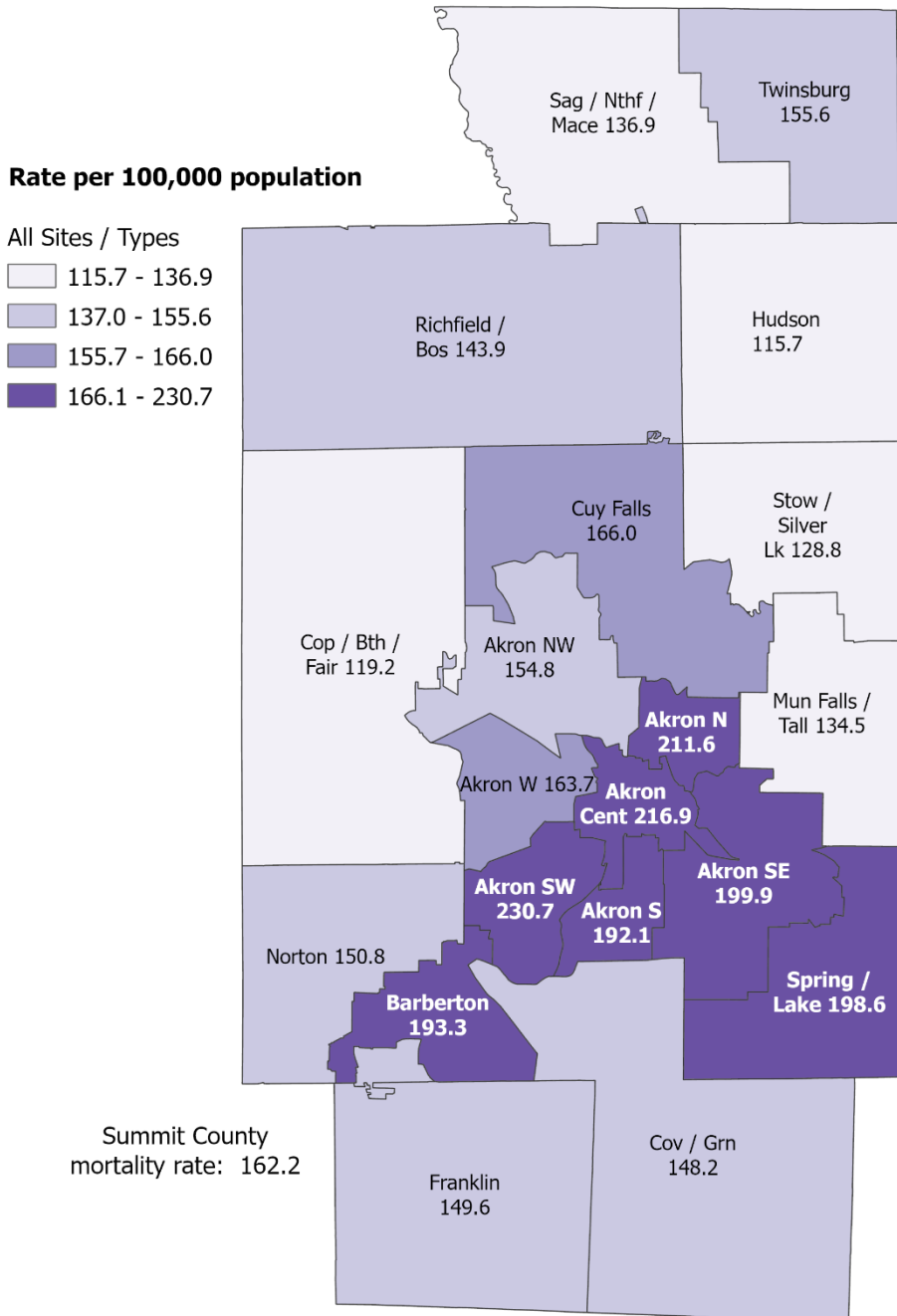
- From 2016 to 2020, the Summit County cluster with the highest age-adjusted cancer mortality rate (Akron SW, 230.7 per 100,000) had a rate 2 times higher than the county with the lowest rate (Hudson, 115.7 per 100,000).

- Clusters in the south, east and north areas of Akron, Barberton, and Springfield / Lakemore tended to have higher age-adjusted mortality rates for all cancers combined from 2016 to 2020. These rates ranged from 192.1 to 230.7 deaths per 100,000).

- Clusters located in suburban settings in western, north and east areas of Summit County had the lowest overall cancer mortality rates, ranging from 115.7 to 136.9 deaths per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 18. Lung and Bronchus Cancer Incidence Rates by Cluster, Summit County, 2016-20

Rate per 100,000 Population

Lung and Bronchus
- 28.7 - 42.5
- 42.6 - 57.3
- 57.4 - 74.0
- 74.1 - 102.2

Summit County
Rate: 58.5

Sag - Nthf - Mace 51.2

Twinsburg 49.0

Richfld - Bos 42.5

Hudson 28.7

Stow - Silver Lk 45.5

Cuy Falls 56.5

Cop - Bath - Fair 37.5

Akron NW 39.3

Mun Falls - Tall 50.6

Akron N 93.4

Akron W 47.8

Akron Cen 92.2

Akron SW 102.2

Akron S 74.0

Akron SE 90.7

Norton 59.5

Spring - Lake 81.3

Barberton 83.5

Cov - Grn 61.8

Franklin 57.3

- From 2016 to 2020, the Summit County cluster with the highest age-adjusted lung and bronchus cancer incidence rate (Akron SW, 102.2 per 100,000) had a rate 3.5 times higher than the cluster with the lowest rate (Hudson, 28.7 per 100,000).

- Clusters in the south, east and north areas of Akron, Barberton, and Springfield / Lakemore tended to have higher age-adjusted incidence rates for lung and bronchus cancers from 2016 to 2020. These rates ranged from 102.2 to 81.3 new cases per 100,000).

- Other Summit County clusters with lower rates of lung and bronchus cancer incidence were Copley / Bath / Fairlawn (37.5 per 100,000), Akron Northwest (39.3 per 100,000), and Richfield / Boston (42.5 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 19. Lung and Bronchus Cancer Mortality Rates by Cluster, Summit County, 2016-20
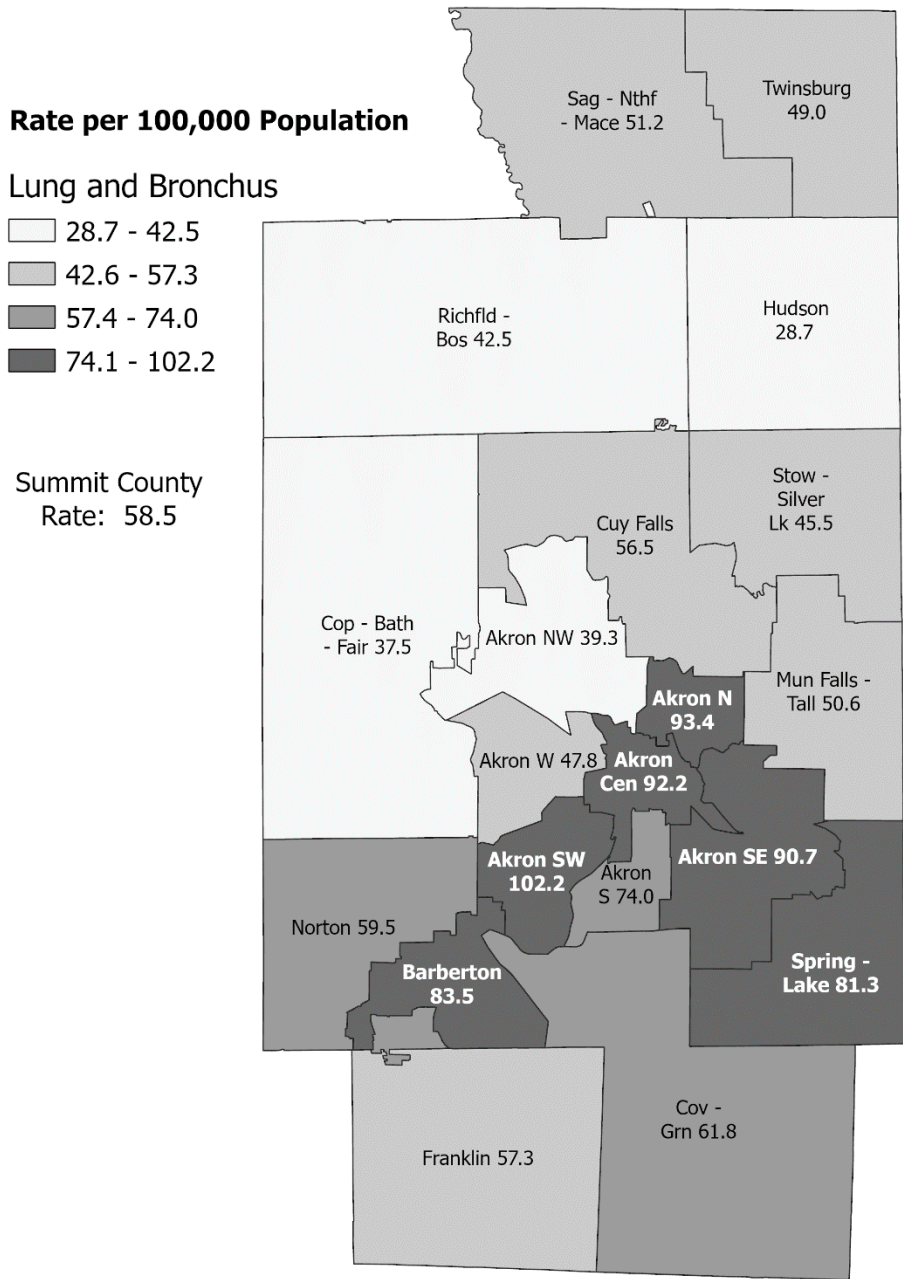

Rate per 100,000 population

Lung and Bronchus

- 23.1 - 30.2
- 30.3 - 37.1
- 37.2 - 41.1
- 41.2 - 80.9

Sag / Nthf / Mace 28.3

Twinsburg 30.2

Richfield / Bos 28.7

Hudson 25.7

Stow / Silver Lk 24.3

Cuy Falls 39.2

Cop / Bath / Fair 23.1

Akron NW 29.9

Akron N 62.3

Mun Falls / Tall 36.0

Akron W 37.1

Akron Cent 80.9

Akron SW 61.6

Akron S 61.1

Akron SE 60.4

Norton 36.4

Spring / Lake 57.2

Barberton 63.1

Summit County mortality rate: 39.9

Cov / Grn 32.5

Franklin 41.1

- From 2016 to 2020, the Summit County cluster with the highest age-adjusted lung and bronchus cancer mortality rate (Akron Central, 80.9 per 100,000) had a rate 3.5 times higher than the cluster with the lowest rate (Copley / Bath / Fairlawn, 23.1 per 100,000).

- As seen with total cancer deaths, clusters in the south, east and north areas of Akron, Barberton, and Springfield / Lakemore tended to have higher age-adjusted mortality rates for lung and bronchus cancer from 2016 to 2020. These rates ranged from 57.2 to 80.9 deaths per 100,000).

- Clusters located in suburban settings in the northern half of Summit County had the lowest overall cancer mortality rates, ranging from 23.1 to 30.2 deaths per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 20. Colon and Rectum Cancer Incidence Rates by Cluster, Summit County, 2016-20
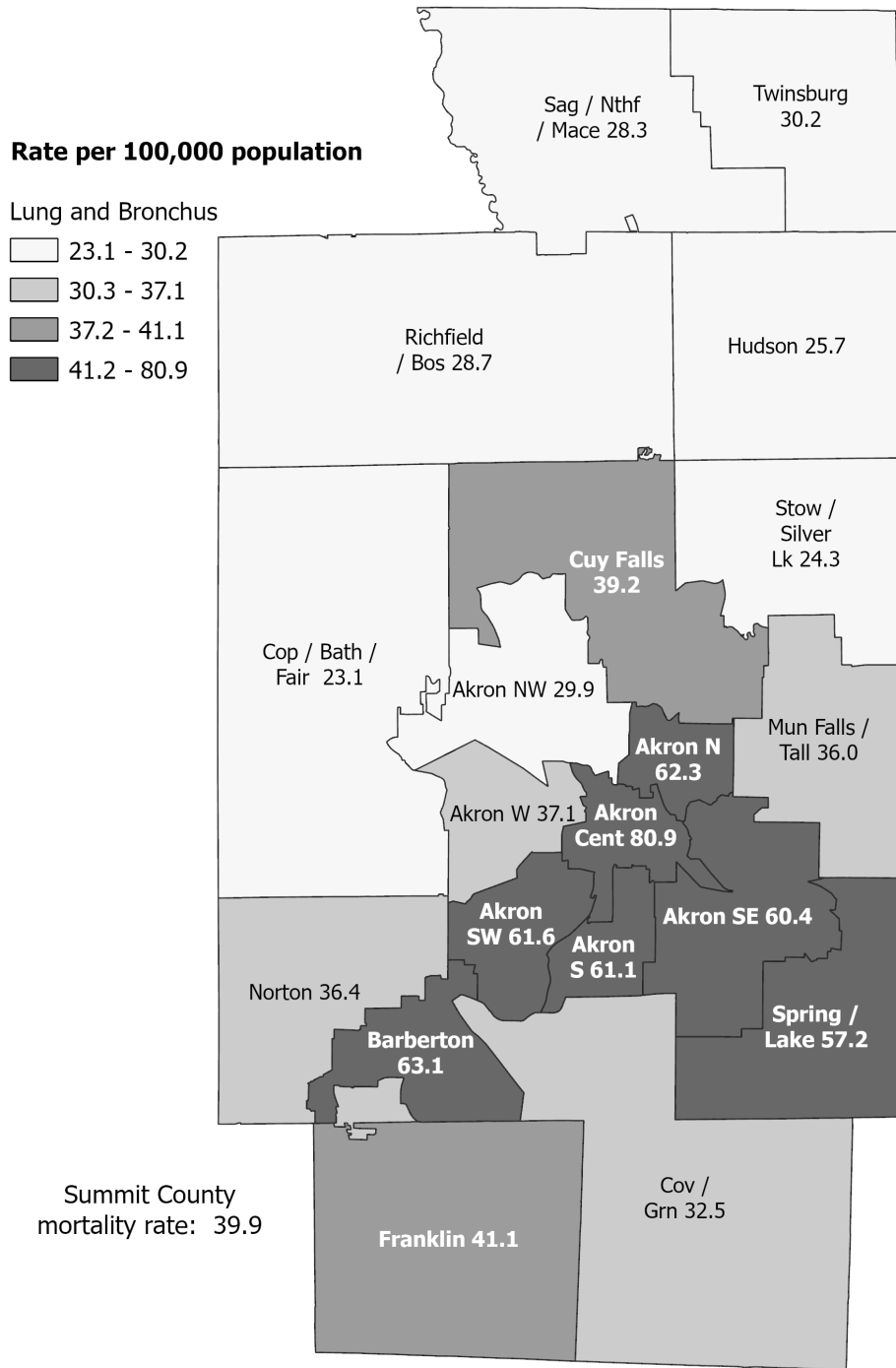

Rate per 100,000 population

Colon and Rectum
- 24.6 - 26.2
- 26.3 - 33.1
- 33.2 - 40.8
- 40.9 - 51.9

Summit County Rate: 35.1

Map labels:
- Sag - Nthf - Mace 37.5
- Twinsburg 31.1
- Richfld - Bos 31.0
- Hudson 34.6
- Cuy Falls 35.5
- Stow - Silver Lk 35.9
- Cop - Bath - Fair 26.2
- Akron NW 26.0
- Akron N 33.1
- Mun Falls - Tall 24.6
- Akron W 35.8
- Akron Cen 51.9
- Akron SW 40.8
- Akron SE 49.4
- Akron S 46.1
- Norton 38.2
- Barberton 49.6
- Spring - Lake 35.0
- Cov - Grn 31.0
- Franklin 38.4

- In Summit County from 2016 to 2020, the cluster with the highest age-adjusted colon and rectum cancer incidence rate (Akron Central, 51.9 per 100,000) had a rate more than two times higher than the cluster with the lowest rate (Munroe Falls / Tallmadge, 24.6 per 100,000).

- Other clusters with higher rates of colon and rectum cancer incidence were Barberton (49.6 per 100,000), Akron Southeast (49.4 per 100,000) and Akron South (46.1 per 100,000).

- Other Summit County clusters with lower rates of colon and rectum cancer incidence were Copley / Bath / Fairlawn (26.2 per 100,000) and Akron Northwest (26.0 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

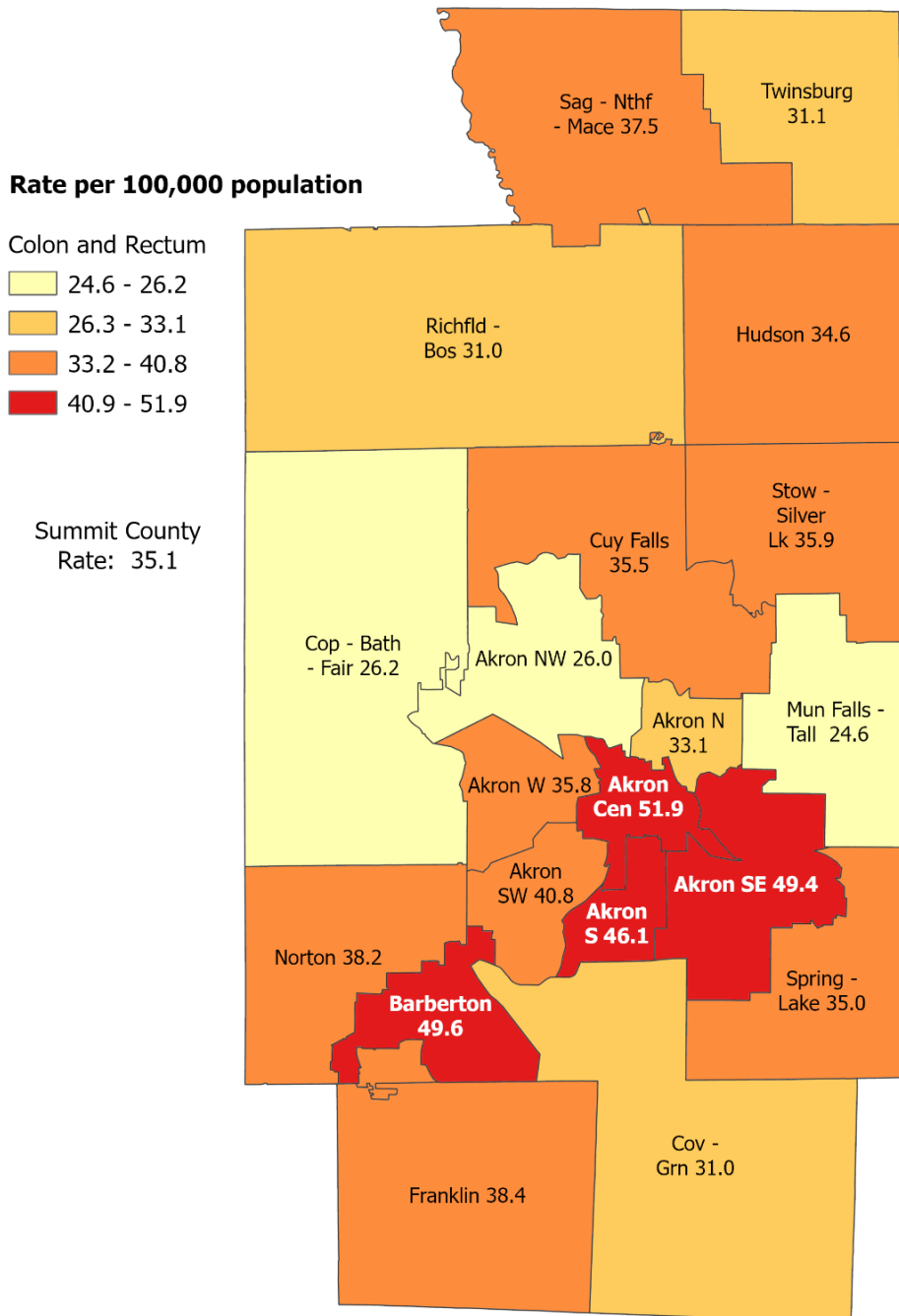**Figure 21. Colon and Rectum Cancer Mortality Rates by Cluster, Summit County, 2016-20**
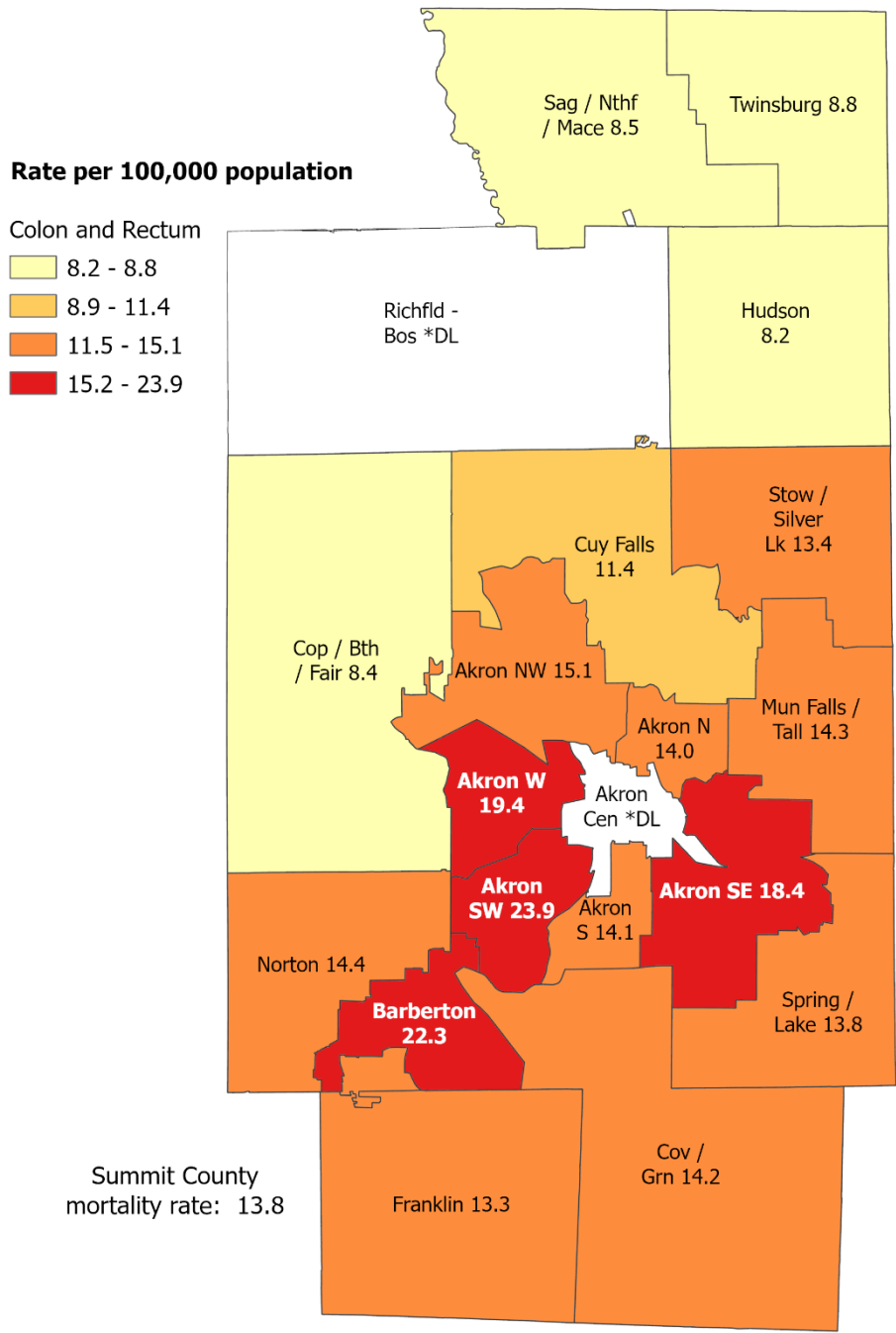

Rate per 100,000 population

Colon and Rectum
- 8.2 - 8.8
- 8.9 - 11.4
- 11.5 - 15.1
- 15.2 - 23.9

Sag / Nthf / Mace 8.5

Twinsburg 8.8

Richfld - Bos *DL

Hudson 8.2

Stow / Silver Lk 13.4

Cuy Falls 11.4

Cop / Bth / Fair 8.4

Akron NW 15.1

Akron N 14.0

Mun Falls / Tall 14.3

Akron W 19.4

Akron Cen *DL

Akron SW 23.9

Akron S 14.1

Akron SE 18.4

Norton 14.4

Barberton 22.3

Spring / Lake 13.8

Summit County mortality rate: 13.8

Franklin 13.3

Cov / Grn 14.2

- The Summit County cluster with the highest age-adjusted colon and rectum cancer mortality rate (Akron SW, 23.9 per 100,000) had a rate 2.9 times higher than the cluster with the lowest rate (Hudson, 8.2 per 100,000) from 2016 to 2020.

- Other clusters with higher rates of colon and rectum cancer incidence were Akron Southeast (23.9 per 100,000), Barberton (22.3 per 100,000) and Akron West (19.4 per 100,000).

- Other clusters in Summit County with lower colon and rectum cancer mortality rates, were Copley / Bath / Fairlawn (8.4 per 100,000), Sagamore Hills / Northfield / Macedonia (8.5 per 100,000) and Twinsburg (8.8 per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

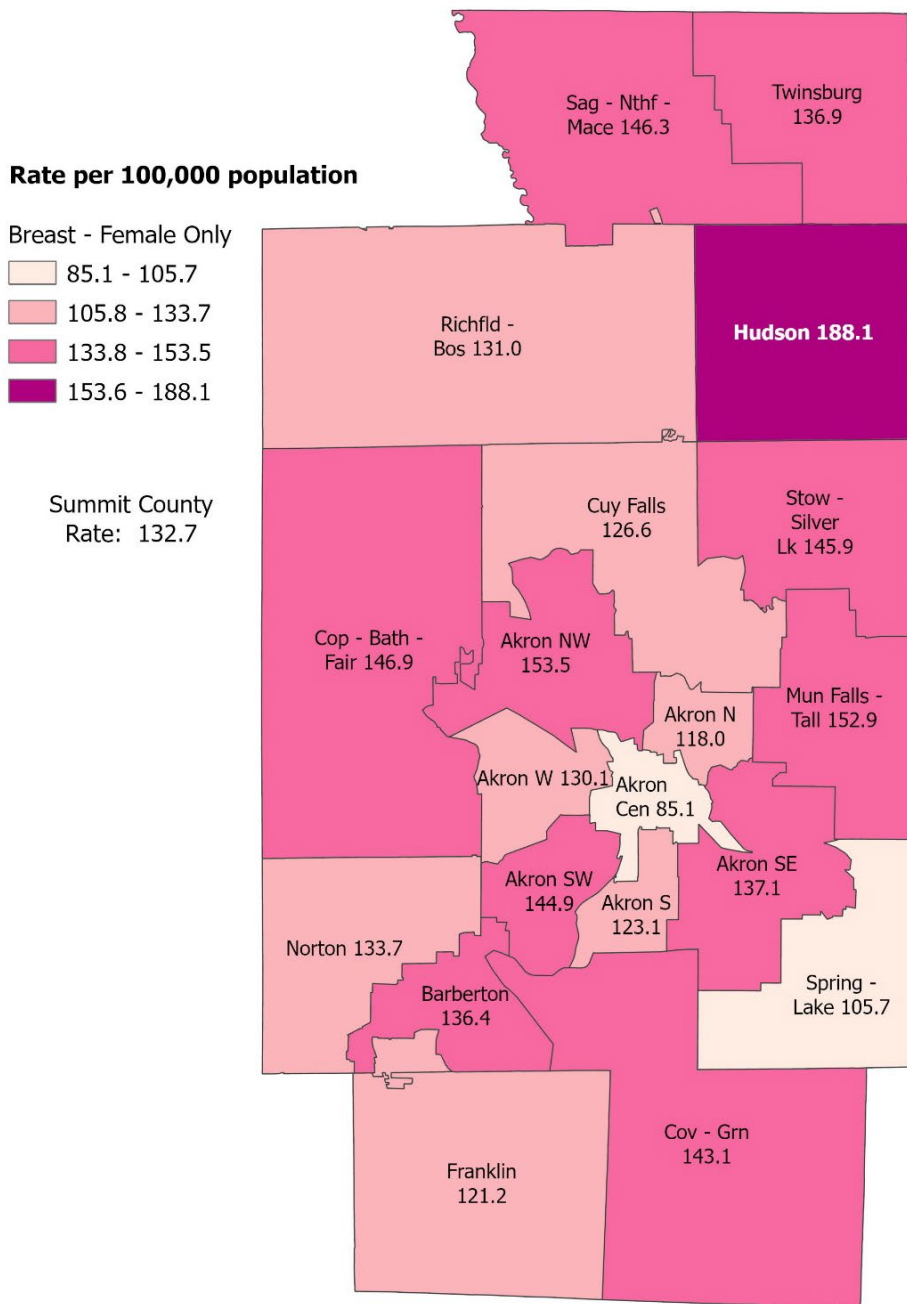2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

3. DL = Data Limited; Data withheld when the 5 year total deaths are below 10

Figure 22. Female Breast Cancer Incidence Rates by Cluster, Summit County, 2016-20

Rate per 100,000 population

Breast - Female Only

- 85.1 - 105.7
- 105.8 - 133.7
- 133.8 - 153.5
- 153.6 - 188.1

Summit County
Rate: 132.7

Sag - Nthf - Mace 146.3
Twinsburg 136.9
Richfld - Bos 131.0
Hudson 188.1
Cuy Falls 126.6
Stow - Silver Lk 145.9
Cop - Bath - Fair 146.9
Akron NW 153.5
Akron N 118.0
Mun Falls - Tall 152.9
Akron W 130.1
Akron Cen 85.1
Akron SW 144.9
Akron S 123.1
Akron SE 137.1
Norton 133.7
Barberton 136.4
Spring - Lake 105.7
Cov - Grn 143.1
Franklin 121.2

- In Summit County from 2016 to 2020, the cluster with the highest age-adjusted female breast cancer incidence rate (Hudson, 188.1 per 100,000) had a rate more than two times higher than the cluster with the lowest rate (Akron Central, 85.1 per 100,000).

- Other clusters with higher breast cancer incidence rates in women were Stow / Silver Lake (145.9 per 100,000) and Munroe Falls / Tallmadge (152.9 per 100,000).

- Lower rates on female breast cancer were also observed in Springfield / Lakemore (105.7 per 100,000) and Akron North (118.0 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 23. Female Breast Cancer Mortality Rates by Cluster, Summit County, 2016-20

Rate per 100,000 population

Breast - Female Only

- 9.1 - 13.6
- 13.7 - 21.4
- 21.5 - 26.0
- 26.1 - 29.2

Sag / Nthf / Mace 24.9

Twinsburg 24.1

Richfld - Bos 9.1

Hudson 18.8

Stow / Silver Lk 17.5

Cuy Falls 24.4

Cop / Bth / Fair 21.4

Akron NW 27.3

Akron N *DL

Mun Falls / Tall 13.6

Akron W 24.4

Akron Cen *DL

Akron SW 24.5

Akron SE 21.1

Norton 29.2

Akron S 29.0

Spring / Lake 23.7

Barberton 26.0

Summit County mortality rate: 21.7

Franklin 23.0

Cov / Grn 20.8

- In Summit County from 2016 to 2020, the cluster with the highest age-adjusted female breast cancer mortality rate (Norton, 29.2 per 100,000) had a rate over 3 times higher than the cluster with the lowest rate (Richfield / Boston, 9.1 per 100,000).

- Other clusters with higher rates of female breast cancer mortality were Akron South (29.0 per 100,000) and Akron Northwest (27.3 per 100,000).

- In addition to Richfield / Boston, clusters located in suburban settings in the eastern half of Summit County had the lowest overall cancer mortality rates: Munroe Falls / Tallmadge (13.6 per 100,000), Stow / Silver Lake (17.5 per 100,000), and Hudson (18.8 per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

3. DL = Data Limited; Data withheld when the 5 year total deaths are below 10

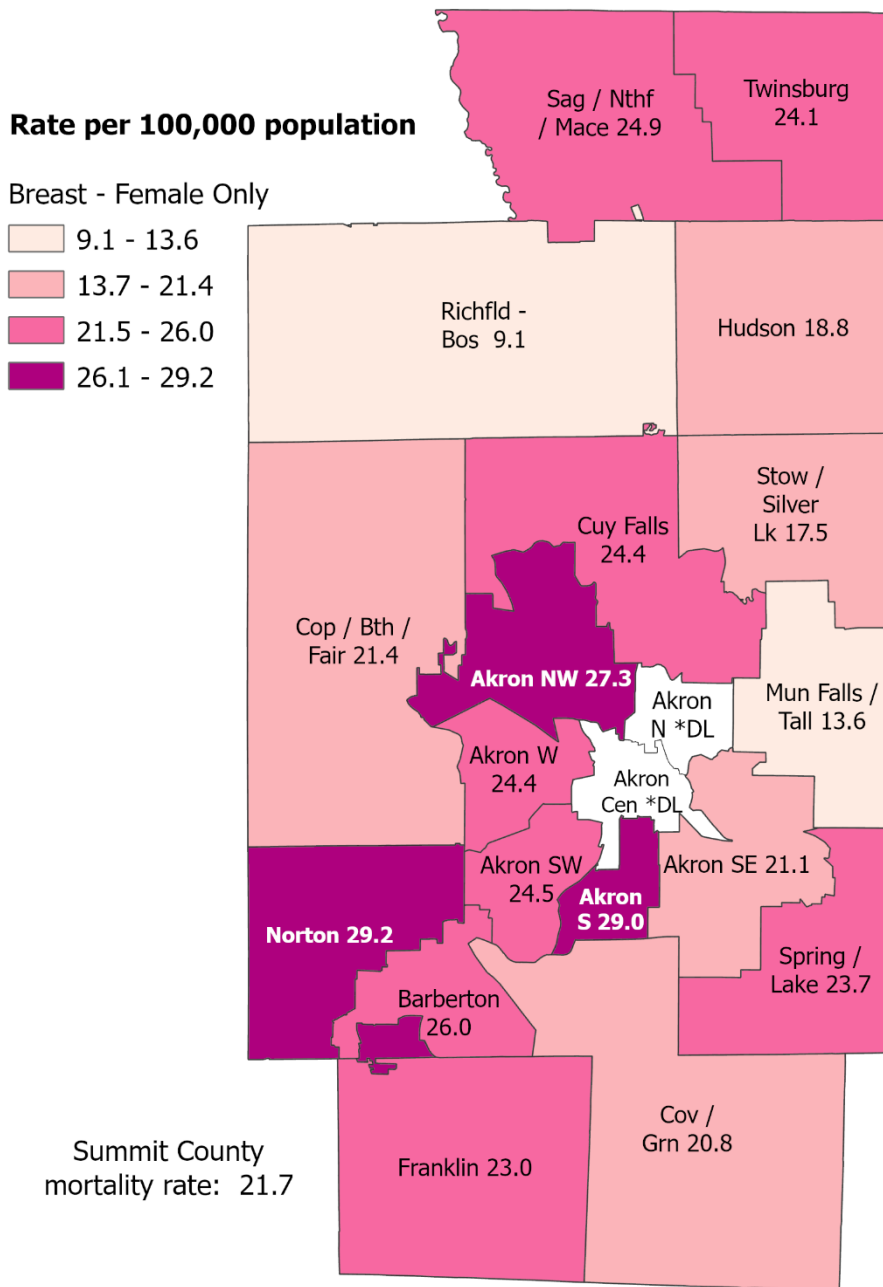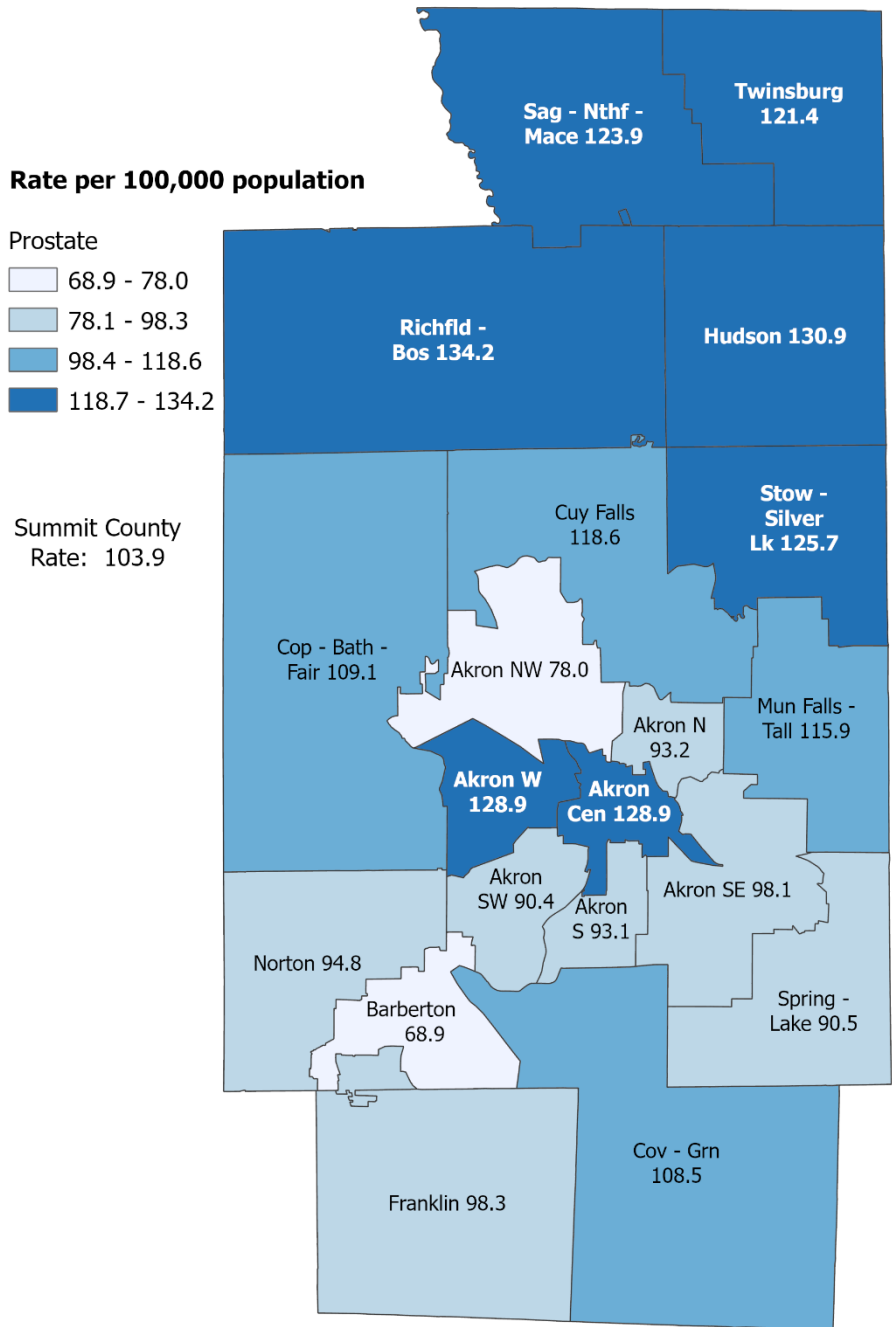**Figure 24. Prostate Cancer Incidence Rates by Cluster, Summit County, 2016-20**

Rate per 100,000 population

Prostate
- ☐ 68.9 - 78.0
- ☐ 78.1 - 98.3
- ☐ 98.4 - 118.6
- ☐ 118.7 - 134.2

Summit County
Rate: 103.9

Map labels:
- Sag - Nthf - Mace 123.9
- Twinsburg 121.4
- Richfld - Bos 134.2
- Hudson 130.9
- Cuy Falls 118.6
- Stow - Silver Lk 125.7
- Cop - Bath - Fair 109.1
- Akron NW 78.0
- Akron N 93.2
- Mun Falls - Tall 115.9
- Akron W 128.9
- Akron Cen 128.9
- Akron SW 90.4
- Akron S 93.1
- Akron SE 98.1
- Norton 94.8
- Spring - Lake 90.5
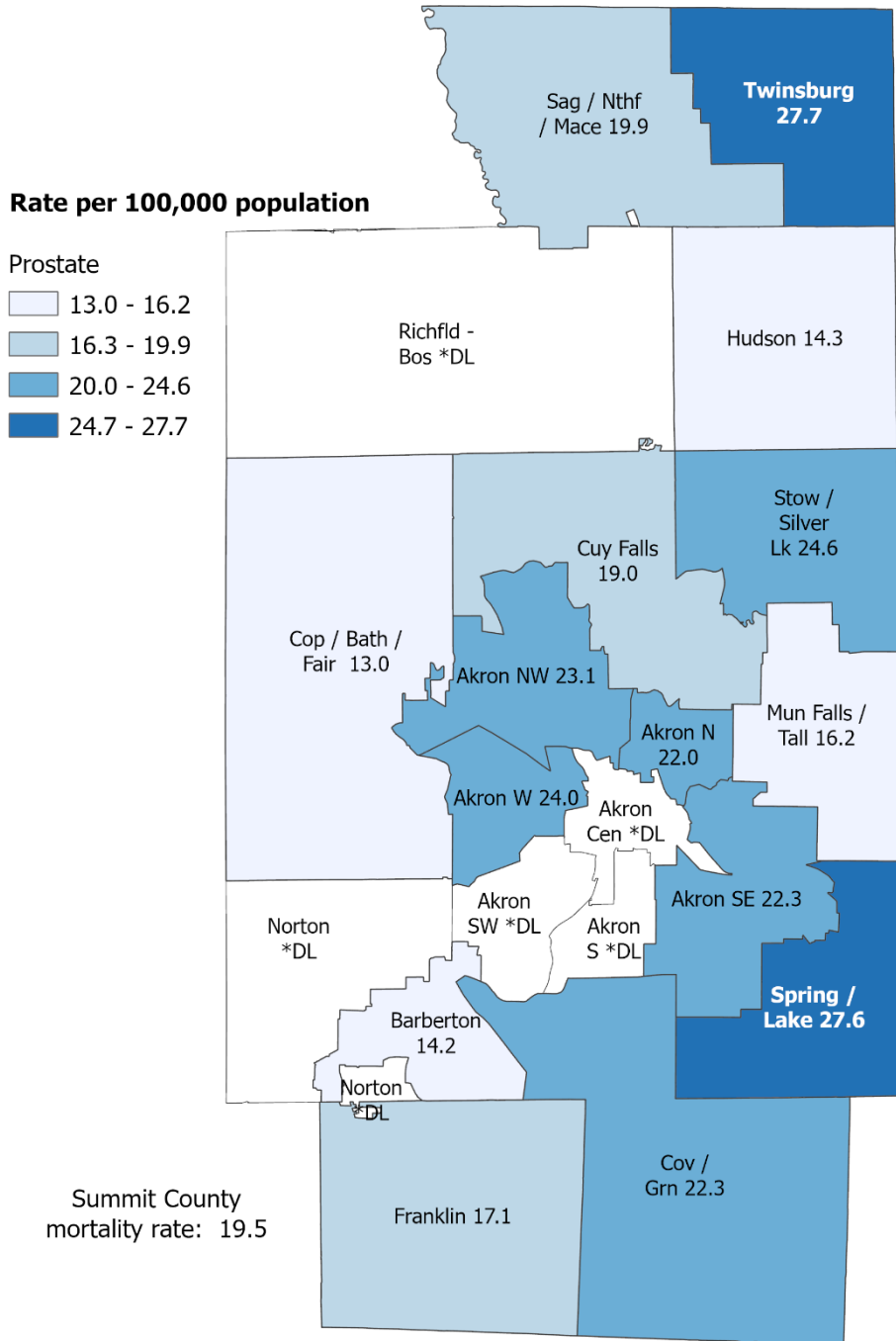- Barberton 68.9
- Cov - Grn 108.5
- Franklin 98.3

- In Summit County from 2016 to 2020, the cluster with the highest age-adjusted prostate cancer incidence rate (Richfield / Boston, 134.2 per 100,000) had a rate nearly two times higher than the cluster with the lowest rate (Barberton, 68.9 per 100,000).

- Clusters in the northern half of Summit County, along with Central and West Akron, had higher age-adjusted incidence rates for prostate cancer from 2016 to 2020. These rates ranged from 134.2 to 121.4 new cases per 100,000).

- Other clusters in Summit County with lower incidence rates of prostate cancer include Akron Northwest (78.0 per 100,000), Akron Southwest (90.4 per 100,000) and Springfield / Lakemore (90.5 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

Figure 25. Prostate Cancer Mortality Rates by Cluster, Summit County, 2016-20

Rate per 100,000 population

Prostate
- 13.0 - 16.2
- 16.3 - 19.9
- 20.0 - 24.6
- 24.7 - 27.7

Sag / Nthf / Mace 19.9

Twinsburg 27.7

Richfld - Bos *DL

Hudson 14.3

Stow / Silver Lk 24.6

Cuy Falls 19.0

Cop / Bath / Fair 13.0

Akron NW 23.1

Mun Falls / Tall 16.2

Akron N 22.0

Akron W 24.0

Akron Cen *DL

Norton *DL

Akron SW *DL

Akron S *DL

Akron SE 22.3

Spring / Lake 27.6

Barberton 14.2

Norton *DL

Cov / Grn 22.3

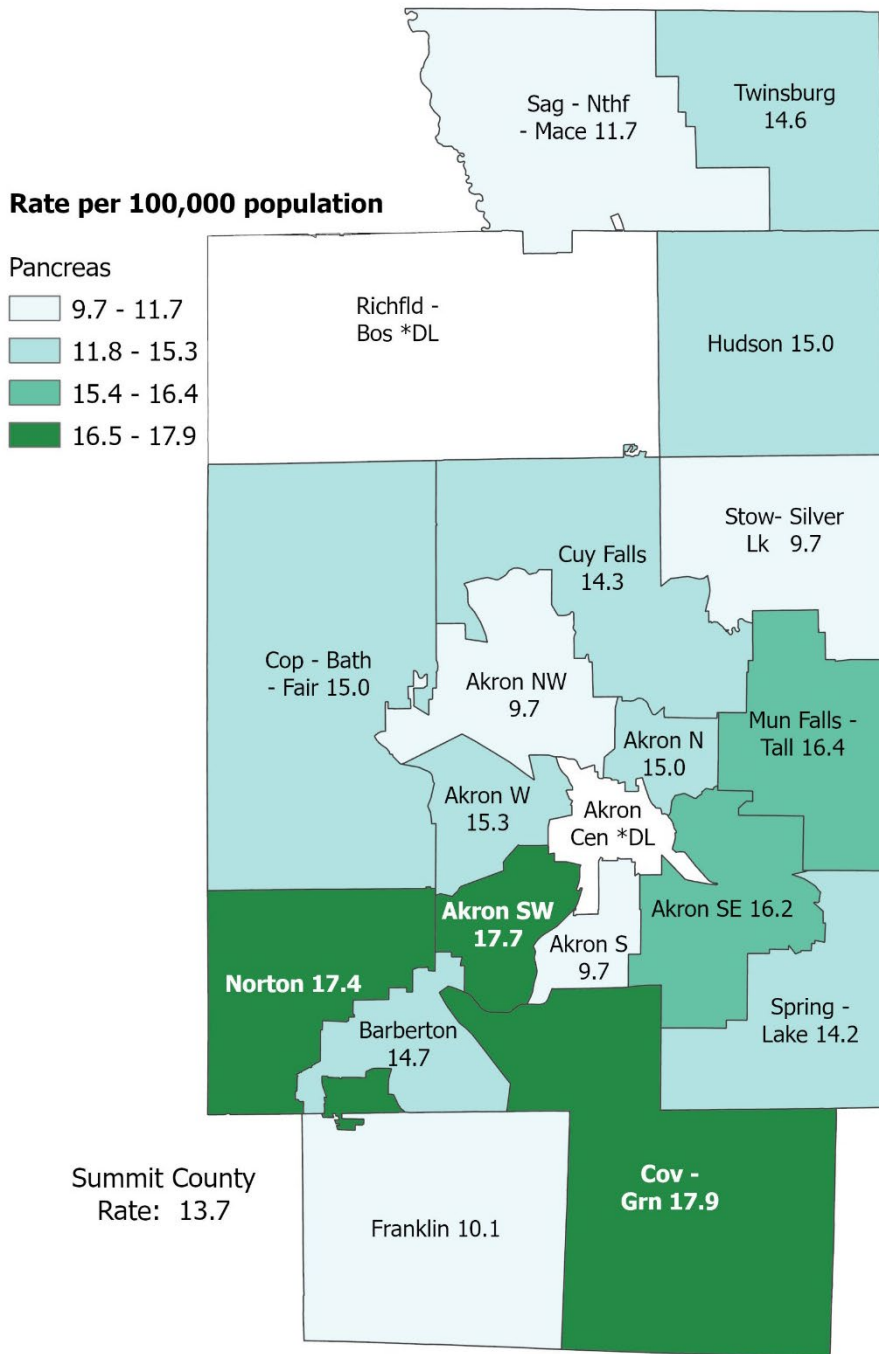Summit County mortality rate: 19.5

Franklin 17.1

- In Summit County, the cluster with the highest age-adjusted prostate cancer mortality rate from 2016 to 2020 (Twinsburg, 27.7 per 100,000) had a rate 3.5 times higher than the cluster with the lowest rate (Copley / Bath / Fairlawn, 13.0 per 100,000)

- Other clusters with higher rates of prostate cancer mortality were Springfield / Lakemore (27.6 per 100,000) and Stow / Silver Lake (24.6 per 100,000).

- Other clusters in Summit County with lower prostate cancer mortality rates, were Barberton (14.2 per 100,000) Hudson (14.3 per 100,000) and Munroe Falls / Tallmadge (16.2 per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

3. DL = Data Limited; Data withheld when the 5 year total deaths are below 10

Figure 26. Pancreatic Cancer Incidence Rates by Cluster, Summit County, 2016-20

Rate per 100,000 population

Pancreas
- 9.7 - 11.7
- 11.8 - 15.3
- 15.4 - 16.4
- 16.5 - 17.9

Sag - Nthf - Mace 11.7

Twinsburg 14.6

Richfld - Bos *DL

Hudson 15.0

Cuy Falls 14.3

Stow- Silver Lk 9.7

Cop - Bath - Fair 15.0

Akron NW 9.7

Akron N 15.0

Mun Falls - Tall 16.4

Akron W 15.3

Akron Cen *DL

Akron SW 17.7

Akron S 9.7

Akron SE 16.2

Norton 17.4

Barberton 14.7

Spring - Lake 14.2

Summit County Rate: 13.7

Cov - Grn 17.9

Franklin 10.1

- In Summit County from 2016 to 2020, the cluster with the highest age-adjusted pancreatic cancer incidence rate (Coventry / Green, 17.9 per 100,000) had a rate nearly two times higher than the clusters with the lowest rate (Stow / Silver Lake, Akron Northwest, and Akron South, 9.7 per 100,000).

- Other clusters with higher rates of pancreatic cancer incidence were Akron Southwest (17.7 per 100,000) and Norton (17.4 per 100,000).

- Lower rates of pancreatic cancer incidence were found in the following clusters: Franklin (10.1 per 100,000) and Sagamore Hills / Northfield / Macedonia (11.7 per 100,000).

1. Sources: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

3. DL = Data Limited; Data withheld when the 5 year total deaths are below 10

Figure 27. Pancreatic Cancer Mortality Rates by Cluster, Summit County, 2016-20.
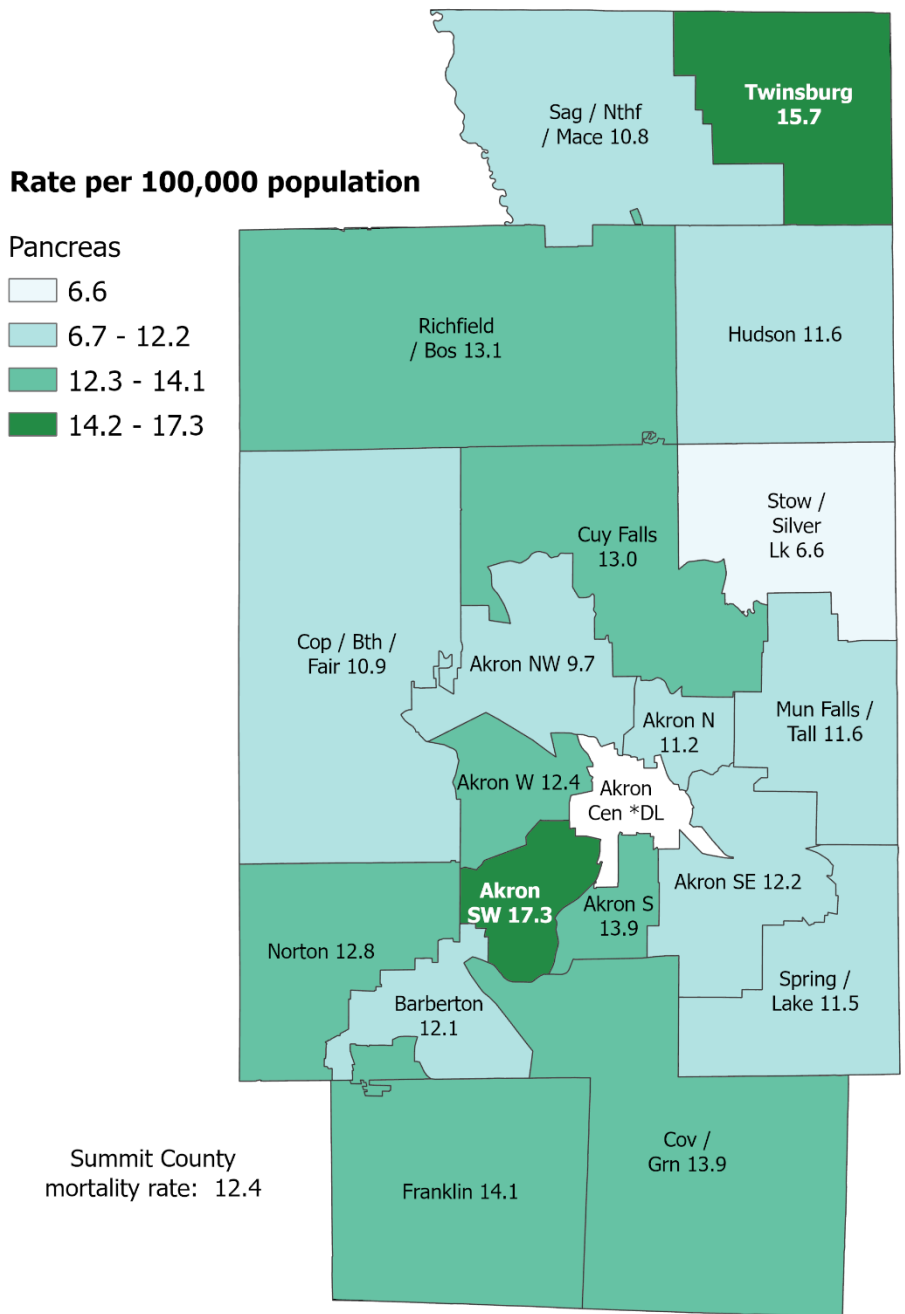
- In Summit County, the cluster with the highest age-adjusted pancreatic cancer mortality rate from 2016 to 2020 (Akron Southwest, 17.3 per 100,000) had a rate 2.6 times higher than the cluster with the lowest rate (Stow / Silver Lake, 6.6 per 100,000)

- Other clusters with higher rates of pancreatic cancer mortality were Twinsburg (15.7 per 100,000) Franklin (14.1 per 100,000) Akron South (13.9 per 100,000) and Coventry / Green (13.9 per 100,000).

- Lower rates of pancreatic cancer mortality were found in the following clusters: Akron Northwest (9.7 per 100,000), Sagamore Hills / Northfield / Macedonia (10.8 per 100,000) and Copley / Bath / Fairlawn (10.9 per 100,000).

1. Sources: Bureau of Vital Statistics, Ohio Department of Health, 2023; 2016-2020 American Community Survey, 5 year estimates.

2. Rates are per 100,000 population and age-adjusted to the 2000 U.S. standard population.

3. DL = Data Limited; Data withheld when the 5 year total deaths are below 10

Community Resources: Summit County

Stewart's Caring Place is a non-profit organization that works to enhance the quality of life for those living with cancer. Stewart's Caring Place is a cancer wellness and educational resource center for individuals and families touched by cancer, offering a wide range of services free of charge. Stewart's Caring Place can provide emotional, social, physical and spiritual support to individuals with cancer in one peaceful setting that is inclusive, non-judgmental and confidential, yet will connect you with others. Phone number: (330) 836-1772   https://www.stewartscaringplace.org/

Stephen A. Comunale, Jr. Family Cancer Foundation provides financial assistance for essential expenses, delivers meals, and provides other services to Summit County residents who are receiving active treatment for cancer; i.e., treatment within the past year.   https://stephencomunale.org/

2-1-1 Resource Database for Summit, Medina and Portage Counties: Search Results for Health/Disability Related Support Groups for Cancer. This search is restricted to resources serving Akron, Summit County.
https://211summit.org/

Summa Health Cancer Institute offers several different support groups, all providing an opportunity to meet and talk with others who are having similar experiences coping with cancer. Patients, survivors, family members and friends are welcome.
https://www.summahealth.org/medicalservices/cancer/education-and-support/support-groups

Cleveland Clinic Akron General's McDowell Cancer Center
https://my.clevelandclinic.org/locations/akron-general/specialties/cancer#patient-resources-tab

The One-In-Six Foundation
https://www.oneinsix.org/cms/one_in_six_foundation/index.html

Free radon tests for Ohio homeowners (Ohio Department of Health)
https://ohio.radon.com/

Tobacco Cessation Resources through Summit County Public Health:
https://www.scph.org/quit

Akron Children's Hospital Adolescent and Young Adult Cancer Program
https://www.akronchildrens.org/departments/Adolescent-and-Young-Adult-Cancer-Program.html

Community Resources: State of Ohio

American Cancer Society in Ohio: The American Cancer Society has programs and services to help you manage cancer treatment and recovery and find the emotional support you need. And best of all, our help is free. Find programs and services in Ohio.
https://www.cancer.org/about-us/local/ohio.html

The Ohio Department of Health Breast and Cervical Cancer Project (BCCP) can help all women navigate cancer screenings. BCCP's Patient Navigation Program helps guide women through the healthcare system, find providers and community resources, and answer questions about scheduling appointments, using insurance, and more. The Ohio BCCP program also offers no-cost breast and cervical cancer screenings and diagnostic testing to qualified participants. Phone number: 1 (800) 430-2227, option 3
https://www.scph.org/bccp/about

Breast Cancer Fund of Ohio: Through our partnerships with various companies and organizations, we are able to have a huge impact across the state of Ohio. Our mission is to provide support for those who are dealing with the financial side effects of breast cancer. Many people are familiar with cancer treatment such as chemotherapy, surgery, and radiation but the effects of having this disease far outreaches treatment alone.
https://www.bcfohio.org/

Data Sources and Methods

Summit County Incidence Data

Incidence rates in this publication are per 100,000 population and age-adjusted to the 2000 U.S. standard population using the direct method. Under the direct method, the population was first divided into 19 age groups, i.e., <1, 1-4, 5-9, 10-14, 15-19 … 85+, and the age-specific rate was calculated for each age group. Each age-specific rate was then multiplied by the U.S. standard population proportion for the respective age group. Cancer cases were coded using the International Classification of Diseases for Oncology, Third Edition (ICD-O-3). OCISS data are presented for 23 primary site/type groupings following the conventions of the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. Incidence data include invasive cancer cases only, with the addition of in situ bladder cancer cases. Staged data include both invasive and all in situ cancer cases.

Summit County Mortality Data

Mortality rates in this publication are per 100,000 population and directly age-adjusted to the 2000 U.S. standard population using 19 age groups, i.e., <1, 1-4, 5-9, 10-14, 15-19 … 85+. Mortality data were coded using the International Classification of Diseases, version 10 (ICD-10). Summit County cancer mortality data were obtained using the Summit County residents death database through the Ohio Public Health Data Warehouse's Mortality database, available at https://publicapps.odh.ohio.gov/EDW/DataCatalog/.

Ohio Incidence Data

Cancer incidence data (case counts and age-adjusted rates) for Ohio are available to the public in the Ohio Public Health Data Warehouse on the ODH website at https://publicapps.odh.ohio.gov/EDW/DataCatalog/

Ohio Mortality Data

Cancer mortality data (case counts and age-adjusted rates) for Ohio are available to the public in the Ohio Public Health Data Warehouse on the ODH website at https://publicapps.odh.ohio.gov/EDW/DataCatalog/

U.S. Incidence Data

Cancer incidence statistics for the United States can be obtained from the U.S. Cancer Statistics (USCS), Centers for Disease Control and Prevention and National Cancer Institute, available at https://www.cdc.gov/cancer/uscs/.

U.S. Mortality Data

Cancer mortality statistics for the United States can be obtained from the U.S. Cancer Statistics (USCS), Centers for Disease Control and Prevention and National Cancer Institute, available at https://www.cdc.gov/cancer/uscs/. National death data is also available at CDC WONDER online database: https://wonder.cdc.gov/

Other Sources of Information

Ohio Department of Health: https://odh.ohio.gov/know-our-programs/ohio-cancer-incidencesurveillance-system/Cancer-Programs-ODH

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

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

Centers for Disease Control and Prevention (CDC): https://www.cdc.gov/cancer/index.htm

U.S. Census Bureau, American Community Survey (ACS) and 2020 Decennial census data.