

Medina County Cancer Analysis for Montville Landfill Area

Community Report

June 2026



Background

In response to concerns raised on social media regarding the number of cancer cases in the area near the Montville Landfill, the Medina County Health Department (MCHD) completed the following analysis. This analysis looks at all-cancer incidence rates by census tract near the Montville Landfill. In the absence of a specific cancer type of concern, incidence rates for all cancer types/sites combined were examined. However, it is important to consider that different cancer types have different known risk factors. The causes of cancer are complex and can vary greatly. Cancer most often results from a complex interaction of multiple factors that occur over time. These factors can be lifestyle, genetic, occupational, and environmental.¹ A high cancer incidence rate in one community does not necessarily mean that there is a single environmental cause.

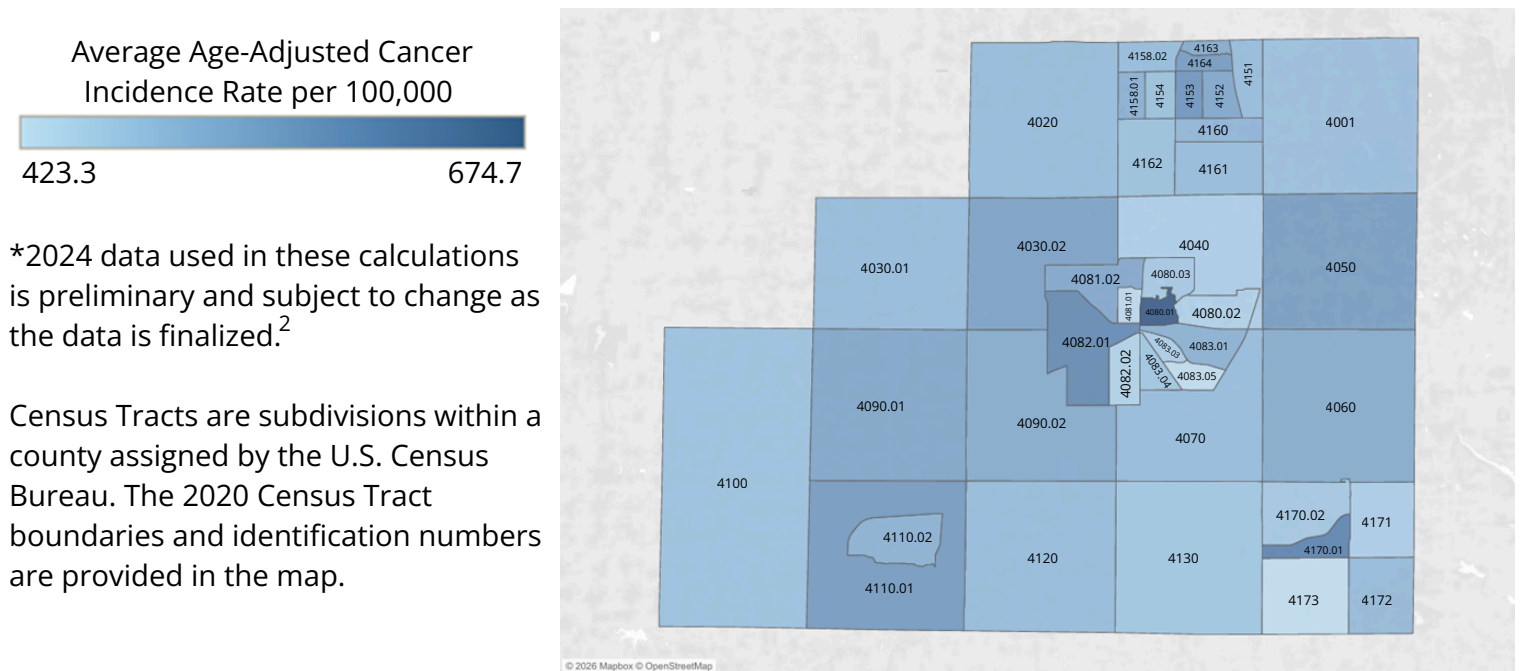
Methods

Cancer cases were identified through the Ohio Cancer Incidence Surveillance System (OCISS). OCISS is a cancer registry that has collected data on cancer cases diagnosed among Ohio residents since 1992. It is required by Ohio law that all Ohio providers of medical care report cancers diagnosed and/or treated in Ohio within six months.² Cancer data compilation and quality control processes are complex and result in a delay from when a new cancer case is diagnosed and the data is ready for analysis.³ The Medina County Health Department (MCHD) monitors OCISS for increases in all cancer types among Medina County residents. All cancer cases included in this report were newly diagnosed invasive cancer cases and *in situ* (non-invasive) bladder cancer cases diagnosed in Medina County residents from 2015 to 2024.

Age-adjusted incidence rates for all cancer sites/types combined were calculated using the U.S. 2000 standard population for age adjustment.³ Age-adjusting is a statistical technique used to compare rates between populations with different age distributions. To calculate age-adjusted rates, the population was divided into age-groups. Population counts by age-group was obtained from Table P12 of the U.S. 2020 Decennial Census.⁴ Age-specific rates were calculated for each age group, multiplied by the standard population proportion for the respective age group, and summed to give an overall age-adjusted rate. Age-adjusted all-cancer incidence rates were mapped using Tableau version 2025.2. Census tract shape files were obtained from the United States Census Bureau, 2020 Decennial Census for Medina County.⁴

Results

Figure 1. Average Annual Age-Adjusted Cancer Incidence Rates by Census Tract in Medina County, 2015-2024*



The age-adjusted cancer incidence rate for all cancer cases combined in Medina County was 490.5 per 100,000 population. The cancer incidence rates for all census tracts in Medina County ranged from 423.3 per 100,000 to 674.7 per 100,000 for the ten-year period of 2015 to 2024.

Table 1. Number and Average Annual Age-Adjusted Cancer Incidence Rates by Census Tract in Montville Landfill Area, 2015-2024*

2020 Census Tract	Census Tract Description	Number of Cancer Cases 2015-2024	Population Estimate for 2015-2024**	Age-Adjusted Cancer Incidence Rate per 100,000
4070	Includes Montville Landfill	452	76,210	487.9
4083.04	Northwest of Montville Landfill	201	36,660	471.0
4083.05	North of Montville Landfill	125	28,940	423.3
<i>Medina County</i>	<i>Entire county</i>	<i>12,280</i>	<i>1,824,700</i>	<i>490.5</i>

*2024 data used in these calculations is preliminary and subject to change as the data is finalized.

**The population estimates for 2015-2024 are counts from the 2020 U.S. Decennial Census multiplied by 10 to provide a population estimate for the 10-year period.

The age-adjusted incidence rate for the census tract (CT) including the Montville Landfill (CT 4070) was 487.9 per 100,000 population. Additionally, the two census tracts that border the landfill directly north had an age-adjusted all cancer incidence rate of 471.0 per 100,000 (CT 4083.04) and 423.3 per 100,000 (CT 4083.05). These rates are similar to the overall cancer incidence rate of 490.5 per 100,00 in Medina County.

Conclusions and next steps

Based on the all-cancer incidence rates for the census tracts in the Montville Landfill area, there is no evidence to suggest further investigation is warranted at this time based on established cancer protocols. For this analysis, all-cancer incidence rates were examined due to the absence of a specific cancer type of concern. However, it is important to acknowledge that there are different known risk factors for different types of cancer and all risk factors are not known at this time.

One of the most effective ways to reduce cancer cases is to change modifiable risk factors. Modifiable risk factors can include behavior, lifestyle (e.g. alcohol and tobacco use), and environmental factors.¹ The effects of excess body weight, alcohol consumption, physical inactivity, and unhealthy diet combined can be attributed to an estimated 18% of cancer cases. Additionally, smoking can be estimated to cause 30% of cancer deaths.¹ For this reason, the Medina County Health Department focuses on primary prevention, in addition to cancer surveillance, through programs such as smoking cessation and healthy living.

The Medina County Health Department continues to monitor cancer rates in the Medina County community. In response to community cancer concerns, MCHD works closely with the Ohio Department of Health to determine if the number of cases of a specific cancer type in a specific geographic area is higher than we would expect based on state and national cancer rates. If a verified cancer cluster was identified in Medina County, MCHD would notify the public.

MCHD acknowledges the profound impact that cancer has on individuals, families, and the community and will continue to further our mission to prevent disease, assure a healthful environment, prolong life, and promote well-being for the residents of Medina County.

Sources

1. Cancer Risk Factors, Ohio Department of Health. December 2020. <https://odh.ohio.gov/know-our-programs/ohio-cancer-incidence-surveillance-system/resources/cancer-risk-factors>
2. Ohio Cancer Incidence Surveillance System (OCISS).
 - a. Cancer incidence data used in these analyses were obtained from the Ohio Cancer Incidence Surveillance System (OCISS), Ohio Department of Health (ODH), a cancer registry partially supported by the National Program of Cancer Registries at the Centers for Disease Control and Prevention (CDC) through Cooperative Agreement Number NU58DP007097. Use of these data does not imply that ODH or CDC agrees or disagrees with the analyses, interpretations or conclusions in this report (or publication/presentation).
3. Cancer Data Toolkit: Chronic Disease Epidemiology and Evaluation Section Ohio Cancer Incidence Surveillance System, Ohio Department of Health. March 2025.
4. United States Census Bureau, 2020 Census. <https://www.census.gov/>

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 figure are age-adjusted to the 2000 U.S. standard population.

Cancer cluster: A greater than expected number of the same or causally-related cancer cases that occurs within a group of people in a geographic area over a defined period of time.

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 rates in this report were based on newly diagnosed invasive cancer cases and *in situ* (non-invasive) bladder cancer cases. This method is consistent with the Ohio Department of Health's reporting of cancer incidence rates.

Invasive cancer: Cancer that has spread beyond the layer of cells where is first developed to involve adjacent tissues. Invasive cancer excludes basal and squamous cell carcinomas of skin, benign and borderline brain and central nervous system tumors, and *in situ* cancers except urinary bladder. This definition of invasive cancer is consistent with the Ohio Department of Health's definition of invasive cancer.

Questions about this report can be directed to the Medina County Health Department epidemiologist via email at epidemiology@medinahealth.org.

Services are partially supported by your local health levy. This institution is an equal opportunity provider.

