Cancer Incidence and Mortality among Ohio Residents 2003-2007

February 2011

Ohio Cancer Incidence Surveillance System

Ohio Department of Health

The Ohio State University Comprehensive Cancer Center —

James Cancer Hospital and Solove Research Institute

Cancer Incidence and Mortality among Ohio Residents

2003-2007

February 2011

Ohio Cancer Incidence Surveillance System

The Ohio Department of Health

Theodore Wymyslo, M.D., Director

The Ohio State University Comprehensive Cancer Center — James Cancer Hospital and Solove Research Institute

Michael A. Caligiuri, M.D., Director, Comprehensive Cancer Center;
CEO, James Cancer Hospital and Solove Research Institute

Table of Contents

Page Number

Contact Information vi
Acknowledgements vi
Suggested Citation vi

Introduction 2
Purpose 2
Importance of Cancer Incidence and Mortality Data 2
Ohio Cancer Incidence Surveillance System (OCISS) Creation 2
Mission of the OCISS 3
Goals of the OCISS 3
The OCISS and the National Program of Cancer Registries 3

Methods 3
Case Reporting 3
Required Data Elements 4
Data Quality Assurance Procedures 4
Coding and Classification of Cancer Cases 4
Coding and Classification of Cancer Deaths 5
Age-Adjustment of Cancer Incidence and Mortality Data 5
Average Annual Cases and Deaths 5
Population Estimates 5
National Cancer Incidence and Mortality 6
Cancer Incidence by Race and Ethnicity 6

Summary of 2003-2007 Ohio Cancer Incidence and Mortality Data 7

Tables
1. **Site / Type and Gender:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons 10
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons 11
2. **Site / Type and Race:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons 12
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons 13
3. **All Sites / Types by Age Group and Gender:**
   a. Average Annual Number of Invasive Cancer Cases and Age-specific Incidence Rates, per 100,000 Persons 14
   b. Average Annual Number of Cancer Deaths and Age-specific Mortality Rates, per 100,000 Persons 15
4. **Four Leading Sites / Types by Age Group and Gender:**
   a. Average Annual Number of Invasive Cancer Cases and Age-specific Incidence Rates, per 100,000 Persons 16
   b. Average Annual Number of Cancer Deaths and Age-specific Mortality Rates, per 100,000 Persons 17

5. **All Sites / Types Combined:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 18
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 19
6. **Bladder:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 20
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 21
7. **Brain and Other Central Nervous System:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 22
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 23
8. **Breast:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 24
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 25
9. **Cervix:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Females, by County of Residence 26
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence 27
10. **Colon and Rectum:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 28
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 29
11. **Corpus Uterus:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Females, by County of Residence 30
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence 31
12. **Esophagus:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 32
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 33
13. **Hodgkin's Lymphoma:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 34
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 35
14. **Kidney and Renal Pelvis:**
   a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 36
   b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 37

15. **Larynx:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 38
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 39
16. **Leukemias:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 40
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 41
17. **Liver and Intrahepatic Bile Duct:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 42
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 43
18. **Lung and Bronchus:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 44
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 45
19. **Melanoma of the Skin:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 46
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 47
20. **Multiple Myeloma:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 48
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 49
21. **Non-Hodgkin's Lymphoma:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 50
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 51
22. **Oral Cavity and Pharynx:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 52
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 53
23. **Ovary:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Females, by County of Residence 54
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence 55
24. **Pancreas:**
    a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 56
    b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 57

25. **Prostate:**
a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Males, by County of Residence 58
b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Males, by County of Residence 59
26. **Stomach:**
a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 60
b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 61
27. **Testis:**
a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Males, by County of Residence 62
b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Males, by County of Residence 63
28. **Thyroid:**
a. Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates per 100,000 Persons, by County of Residence and Gender 64
b. Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender 65
29. **Breast (Female):**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 66
30. **Cervix:**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 68
31. **Colon and Rectum:**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 70
32. **Lung and Bronchus:**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 72
33. **Melanoma of the Skin:**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 74
34. **Oral Cavity and Pharynx:**
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 76
35. **Prostate**:
Average Annual Number and Percent of Cancer Cases by County of Residence and Stage at Diagnosis 78

References 80

Appendices

I. Required Data Elements for Ohio Cancer Case Reports..... 81
II. Estimated Percent of OCISS Case Completeness by Cancer Site/Type, Ohio, 2003-2007 82
III. Estimated Percent of OCISS Case Completeness by County of Residence, Ohio, 2003-2007..... 83
IV. Cancer Site and Histology Codes, International Classification of Diseases for Oncology, Third Edition (ICD-O-3) 84
V. Cancer Site and Mortality Codes, International Classification of Diseases and Related Health Problems, Tenth Edition (ICD-10) 85
VI. Average Annual Population Estimates by Age Group, Race and Gender, Ohio 2003-2007 86
VII. Average Annual Population Estimates by County and Gender, Ohio, 2003-2007 87
VIII. Cancer by Site/Type and Extended Race Categories: Incidence, Average Annual Number and Percent of Invasive Cancer Cases, Ohio, 2003-2007 88
IX. Cancer by Site/Type and Ethnicity: Incidence, Average Annual Number and Percent of Invasive Cancer Cases, Ohio, 2003-2007 89
X. Technical Notes..... 90

Contact Information

Ohio Cancer Incidence Surveillance System
Ohio Department of Health
246 North High Street
Columbus, Ohio 43215

Telephone: (614) 752-2689
FAX: (614) 728-4638
E-Mail: ociss@odh.ohio.gov
Web site: http://www.odh.ohio.gov/healthstats/ocisshs/ci_surv1.aspx

Acknowledgements

The following individuals contributed to this report:

Holly L. Sobotka, M.S.; Diana Slone, C.T.R.; Barbara Warther, C.T.R.; Georgette Haydu, M.A.; Lynn Giljahn, M.P.H; Robert J. Campbell, Ph.D., Ohio Department of Health

James L. Fisher, Ph.D.; Julie A. Stephens, M.S.; John M. McLaughlin, Ph.D.; Jesse Plascak, M.P.H.; Electra D. Paskett, Ph.D., The Ohio State University

The Ohio Cancer Incidence Surveillance System staff:
Rhonda Burton; Hazel Cade, R.H.I.T.; Alice Daugherty, L.P.N., C.T.R.; Jim Irwin, B.A., C.T.R.; Lynn Ogden, M.P.A., C.T.R.; William Ruisinger, C.T.R.; Dan Schlichting, B.A., B.S.; Tina Shoaf, L.M.T., C.T.R; Barbara Stewart, C.T.R.; Donna M. Truex, C.D.M., C.F.P.P., C.T.R.; Jocelyn Wilson, C.T.R.; Beulah Wyant, C.T.R.

Sincere appreciation to all the cancer registrars, medical records staff and other health professionals reporting cancer cases in Ohio whom made this report possible.

Suggested Citation

Cancer Incidence and Mortality among Ohio Residents, 2003-2007. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, February 2011.

This report is public information. Reproduction and copying of this report for cancer prevention and control, education and program planning are greatly encouraged. Citation of source, however, is appreciated.

The OCISS is supported in part by the State of Ohio and the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries. The contents of this document do not necessarily represent the official views of the CDC.

Ohio Cancer Incidence and Mortality

2003-2007

Introduction

In the United States, it is estimated one out of three males and females will develop invasive cancer in their lifetime. Cancer is second only to heart disease as the leading cause of death among all Ohioans. Cancer is not just one disease but a group of more than 200 very different diseases characterized by uncontrolled growth and spread of abnormal cells. Each type of cancer differs in risk factors, prevention, early detection, treatment and survival.

The Ohio Cancer Incidence Surveillance System (OCISS) at the Ohio Department of Health (ODH) is the central cancer registry for the state of Ohio. The OCISS is a "population-based" registry, meaning that the goal of the OCISS is to collect data on every cancer case diagnosed among Ohio residents. Cancer incidence data for Ohio provide: the foundation for comprehensive cancer prevention, early detection and control programs and community health assessments; the means to identify geographic, behavioral, biological and other patterns of disease; and the ability to determine whether rates of cancer incidence in Ohio and its communities are comparable with other state, community and national rates.

The Vital Statistics (VS) Program at ODH is responsible for collecting and coding all deaths among Ohio residents. Cancer mortality data, combined with incidence data, provide a more comprehensive picture of the cancer burden in the state and among various populations.

Purpose

The purpose of this report, *Cancer Incidence and Mortality among Ohio Residents, 2003-2007*, is to provide a summary of 2003-2007 cancer cases diagnosed among Ohio residents that were reported to the OCISS and 2003-2007 Ohio cancer deaths. This report includes: a summary of the importance of cancer incidence and mortality data; an overview of the OCISS, including the creation of the OCISS, mission and goals; methods for case reporting and quality assurance procedures; coding and classification of cancer cases and deaths; assumptions and procedures for data analysis; background on race/ethnicity data; and a summary and presentation of 2003-2007 cancer incidence and mortality data for Ohio.

Importance of Cancer Incidence and Mortality Data

One of the most important measures of the impact of cancer in Ohio is the incidence of the disease, or the number of persons diagnosed with cancer during a specified time period. Incidence data are valuable in identifying areas of Ohio in which cancer rates are high, the demographic characteristics of those persons with the disease and the risk factors that contribute to its development. These persons can then be targeted more effectively and efficiently for cancer prevention, early detection and control. Examples include: smoking cessation programs in areas with high lung cancer incidence; breast cancer education and early detection programs in areas with high rates and later stage diagnoses; and cervical cancer screening programs targeting age- and race-specific subgroups at high risk. Incidence data also provide a basis for researchers to evaluate the efficacy of clinical therapies and new diagnostic procedures and to monitor the success of cancer prevention efforts across the state.

The burden of cancer among Ohio residents can be more accurately measured by also looking at the mortality of the disease, or the number of persons who died from cancer during a specified time period. Mortality data are used to evaluate the effectiveness of early detection programs, treatments and new technologies. They are also used to determine areas and populations with inadequate access to and usage of medical care. In addition, mortality trends are of great benefit to determine patterns of disease over time.

Ohio Cancer Incidence Surveillance System (OCISS) Creation

Ohio House Bill 213, which made cancer a reportable disease and created the OCISS, was passed by the Ohio General Assembly and signed by Gov. George Voinovich in 1991.[1] All primary malignancies, with the exception of basal and squamous cell carcinoma of the skin and carcinoma *in situ* of the cervix, diagnosed on or after Jan. 1, 1992, are required to be reported

to the OCISS at ODH within six months of diagnosis (Ohio Revised Code Section 3701.26). The reporting law was expanded in 2004 to include benign brain tumors on the list of reportable conditions.

In 1999, the Ohio General Assembly designated that "the Arthur G. James Cancer Hospital and Richard J. Solove Research Institute at The Ohio State University (OSU) shall analyze data collected by the OCISS." Subsequent to this legislation, ODH formed a partnership with OSU wherein ODH maintains primary responsibility for conducting basic registry operations and OSU assists in data analysis and producing reports in collaboration with ODH.

Mission of the OCISS

The OCISS was created: "*To provide high-quality cancer incidence and mortality data, and analyses; to monitor the occurrence of cancer, and to identify high-risk populations for the various types of cancer; to support qualified research efforts and the design and evaluation of interventions concerned with the prevention, early detection and control of cancer in Ohio*."

Goals of the OCISS

- To fulfill this mission, the OCISS has identified four goals:
- To gather high quality cancer incidence data that are accurate, complete and timely;
- To promote and provide data for studies designed to identify factors relating to cancer etiology, prevention, and control;
- To respond to requests from individuals and organizations in Ohio and across the United States for cancer data and analyses; and
- To provide data and expertise for cancer research and education.

The OCISS and the National Program of Cancer Registries

In 1995, the OCISS received a grant from the Centers for Disease Control and Prevention (CDC) and became a part of the National Program of Cancer Registries (NPCR). Through this grant, the OCISS incorporated national standards set by the NPCR and the North American Association of Central Cancer Registries (NAACCR) for data completeness, quality and timeliness. The CDC/NPCR grant allowed Ohio to join 45 other states in standardized collection of cancer data. The OCISS continues to be funded as part of the NPCR surveillance system.

Methods

Case Reporting

Reporting sources of OCISS data include Ohio hospitals, ambulatory surgery and radiation therapy centers, free-standing pathology laboratories, nursing homes and physician offices. Ohio residents diagnosed with cancer in Indiana, Michigan, Pennsylvania, West Virginia, Kentucky and Florida are reported to the OCISS by cancer registries in those states.

Cancer cases are also identified via Ohio death certificate files from the VS Program at ODH.[2] Follow-back is conducted for each case in which a type of cancer is listed as the underlying cause of death to determine if the case has already been reported to the OCISS. If the case has not been reported, contact is made with the physician and/or facility listed on the death certificate and a case report is generated and added to the database upon verification of the diagnosis.

Required Data Elements

As a cancer incidence system, the OCISS requires each reporting source to submit, at a minimum, a subset of 39 data elements on all new cases of cancer within six months of diagnosis and/or first date of contact. These required elements include demographic characteristics and other information necessary to compute incidence, as well as information on treatment, staging, etc. The required 39 data variables reported for each cancer case are listed in **Appendix I**.

Data Quality Assurance Procedures

The integrity of the 2003-2007 OCISS dataset was maintained through the procedures of the OCISS Data Quality Assurance Plan, which is based on the NAACCR Standards for Cancer Registries, Volumes I, II and III.[3] Quality assurance edits and other data cleansing procedures were made using the CDC CRS Plus software, with final edit checks and analyses performed via SAS and SEER*Stat, a software package developed by the Surveillance Epidemiology and End Results (SEER) Program.[4,5,6]

Completeness of reporting was estimated by computing an expected Ohio cancer incidence rate for 2003-2007. This rate was calculated using the 2003-2007 U.S. cancer incidence-to-mortality rate ratio from the SEER Program of the National Cancer Institute and 2003-2007 Ohio age-adjusted mortality rates.[6,7] According to these methods, the estimated completeness of reporting was 94 percent for all cancer sites/types combined. This estimate is slightly less than the 95 percent national standard for complete cancer case reporting; thus, case counts and direct age-adjusted cancer incidence rates may be underestimated for select cancer sites/types, geographic areas and demographic subgroups. Cancer sites/types meeting the standard of 95 percent for complete case reporting include the following: brain and other central nervous system (CNS); cervix; colon and rectum; corpus uterus; esophagus; kidney and renal pelvis; larynx; lung and bronchus; melanoma of the skin; ovary; and testis (**Appendix II**). In addition, 33 of 88 counties (38 percent) were determined to be complete according to this standard (**Appendix III**).

Coding and Classification of Cancer Cases

Cancer cases were defined as primary malignancies diagnosed among Ohio residents from 2003-2007, and were coded according to the International Classification of Diseases for Oncology, Third Edition (ICD-O-3), codes C00.0-C80.9.[8] Cases were grouped, by ICD-O code, into 24 major cancer site/type groupings (including "Other Sites/Types") in the manner of the SEER Program at the National Cancer Institute (**Appendix IV**).[7] Cases were classified as to county of residence at diagnosis based on the mailing address provided by the source reporting the cases. Edit checks for compatibility of ZIP code, mailing address and county of residence were made using GenEDITS Plus software.[9]

Cancer cases are categorized as *in situ* or invasive. *In situ* cancers are malignant tumors that have not penetrated the basement membrane (supportive tissue underlying the epithelium) of the organ of origin or extended beyond the epithelial tissue; whereas, invasive cancers have infiltrated the tissue of the organ in which the tumor originated. Incidence counts and rates include invasive cancers only, with the addition of *in situ* bladder cancers. The inclusion of *in situ* bladder cancers in the calculation of incidence rates is consistent with the methodology of the SEER Program.

The stage of cancer at diagnosis, defined as the degree of spread from the site of origin, was classified as *in situ*, localized, regional, distant or unstaged/unknown. Please note that staging data include both *in situ* and invasive cancers, thus the case counts for cancers by stage at diagnosis differ from the counts used to calculate incidence rates.

Coding and Classification of Cancer Deaths

The VS Program at ODH receives Certificates of Death from county vital statistics programs and from other states when an Ohio resident death occurred out of state.[2] Death certificates from 2000 to the present are coded using the ACME/MICAR automated processing systems.[10] ODH staff examine the certificates for completeness and correctness, following National Center for Health Statistics (NCHS) specifications for coding and key entry. Deaths are categorized by the primary underlying cause of death listed on the death certificate.

Cancer deaths for 2003-2007 were coded based on the International Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10), codes C000 to C979 (**Appendix V**).[11] Deaths were classified as to county of residence based on the information listed on the death certificate, where available. When county information was not provided, ODH staff used the address and/or city of residence to ascertain the county of residence.

Age-Adjustment of Cancer Incidence and Mortality Data

Areas with large populations are likely to have more persons diagnosed with and dying from cancer each year, therefore incidence and mortality data are adjusted based on population size to give a rate, or the number of new invasive cancer cases or deaths per unit of population (i.e., per 100,000 persons). This allows one to compare incidence and mortality in an area with a smaller population, such as Holmes County, to an area with a larger population, such as Cuyahoga County. It is also common to statistically adjust the rates based on the age distribution of the population, because increasing age is strongly associated with higher cancer rates.

The rates presented in this report were age-adjusted using the direct method, which weights the age-specific rates for a given population (i.e., gender, race or geographic area) by the age distribution of a standard population. Nineteen five-year age groups (i.e., <1, 1-4, 5-9, 10-14… 85+) were used in age adjustment. Please note that rates may be unstable and are not presented when the count for 2003-2007 is less than five.

Cancer Incidence and Mortality among Ohio Residents, 2003-2007 uses the 2000 U.S. Standard Population in age adjustment.[12] Rates presented in OCISS reports published prior to the 1999 cancer monograph (February 2002) were age-adjusted to the 1970 standard. Comparison of data age-adjusted to different standards would lead to erroneous conclusions and, thus, should be avoided.

Average Annual Cases and Deaths

This monograph presents average annual numbers of cancer cases and deaths for the years 2003-2007. An average annual number represents the number of cases or deaths diagnosed per year, on average, from 2003 to 2007. These numbers are calculated by summing the number of cancer cases or deaths occurring from 2003 to 2007, dividing the result by five and rounding to the nearest whole number. Please note: as the result of rounding to the nearest whole number, average annual numbers of cancer cases or deaths presented in the following tables may not sum up to row or column totals.

Population Estimates

The vintage 2008 post-censal estimates for July 1, 2003-2007 from the U.S. Census Bureau were used in the calculation of incidence and mortality rates.[13] The estimates were calculated by bridging the 31 race categories collected in the 2000 Census to the following four categories: white; black or African American; American Indian or Alaskan Native; and Asian or Pacific Islander. The latter two categories (i.e., American Indian or Alaskan Native; Asian or Pacific Islander) are grouped as “additional races” in this report due to the small number of cancer cases

diagnosed among these racial categories. Population estimates by age group, race and gender are shown in **Appendix VI**, and estimates by Ohio county and gender in **Appendix VII**.

National Cancer Incidence and Mortality

The SEER Program at the National Cancer Institute serves as the source of the 2003-2007 national cancer incidence and mortality data presented in this report.[6,7] SEER collects and publishes cancer incidence data from 17 population-based registries covering 26 percent of the U.S. population. The SEER Program also publishes U.S. mortality rates calculated from the NCHS public-use mortality file. National cancer rates are of benefit to determine if rates in Ohio for specific sites/types of cancer, demographic populations and geographic areas are higher than expected compared to the U.S. cancer burden.

Cancer Incidence by Race and Ethnicity

A goal of the OCISS is to assure the quality and completeness of race and ethnicity data for all Ohio cancer cases. These data are critical to cancer prevention, early detection and treatment programs, genetic studies and other research. An analysis of Ohio cancer cases by extended race categories is presented in **Appendix VIII** and by ethnicity in **Appendix IX**; however, it should be noted that race/ethnicity data quality and completeness vary by reporting source and should be interpreted with caution.

Summary of 2003-2007 Ohio Cancer Incidence and Mortality Data

- An annual average of 58,136 new invasive cancer cases were diagnosed and reported among Ohio residents. Of these, 29,591 cases (50.9 percent) were diagnosed among males and 28,545 cases (49.1 percent) among females.

- An average of 24,917 cancer deaths occurred each year among Ohio residents. A slightly higher percentage of deaths occurred among males (51.6 percent; 12,859 deaths/yr) compared to females (48.4 percent; 12,058 deaths/yr).

- The leading sites of cancer incidence were lung and bronchus; breast; prostate; and colon and rectum. These four sites combined accounted for 54.6 percent of total cancer cases.

- The leading site of cancer incidence for males was prostate cancer, comprising 26.9 percent of all cases among males (7,961 cases/yr). The leading site of cancer incidence among females was breast cancer, accounting for more than one-fourth (28.3 percent) of cases among females (8,073 cases/yr).

- The four leading sites of cancer mortality were lung and bronchus; colon and rectum; breast; and pancreas. About 53 percent of total cancer deaths were from these sites of cancer.

- Lung and bronchus cancer was the leading site of cancer death for both males and females, followed by prostate and colon and rectum cancers for males and breast and colon and rectum cancers for females.

- About 87 percent of total cancer cases occurred among whites, 9.7 percent among blacks and less than 1 percent among persons of additional races. However, the average annual age-adjusted incidence rate per 100,000 was highest among blacks (491.3 per 100,000), compared to whites (458.6 per 100,000) and additional races (354.3 per 100,000). Race was unknown for 2.1 percent of cases in 2003-2007.

- About 89 percent of total cancer deaths occurred among whites, 10.9 percent among blacks and less than 1 percent among persons of additional races. The average annual age-adjusted mortality rate for blacks, however, was 25.9 percent higher than the mortality rate for whites (247.2 and 196.3 per 100,000, respectively).

- The leading sites of cancer incidence among whites were lung and bronchus cancer and female breast cancer, comprising 30.1 percent of total cancer cases. In contrast, the leading sites of cancer incidence among blacks were prostate cancer (17.7 percent) and lung and bronchus cancer (17.4 percent).

- The number of cancer cases for all sites combined increased with advancing age until ages 75-79, followed by a decline among persons age 80 and older. The average annual rate of cancer incidence, however, continued to increase through ages 80-84.

- The number of cancer deaths for all sites combined increased with advancing age until ages 75-79, followed by a decline among persons age 80 and older. The average annual rate of cancer mortality, however, continued to increase through age 85 and older.

- The Ohio average annual age-adjusted incidence rate for all cancer sites/types combined was 470.0 cases per 100,000, which was slightly higher than the U.S. (SEER) rate of 461.6 per 100,000.

- The Ohio average annual age-adjusted mortality rate for all cancer sites/types combined was 199.6 deaths per 100,000, which was 8.6 percent higher than the U.S. rate of 183.8 per 100,000.

- Ten specific sites/types of cancer were found to have higher age-adjusted incidence rates in Ohio compared to SEER: bladder; brain and other CNS; colon and rectum; corpus uterus; esophagus; Hodgkin's lymphoma; kidney and renal pelvis; larynx; lung and bronchus; and testis.

- A total of 16 cancer sites/types had higher mortality rates in Ohio compared to the United States: bladder; brain and other CNS; breast; colon and rectum; corpus uterus; esophagus; Hodgkin's lymphoma; kidney and renal pelvis; larynx; leukemia; lung and bronchus; multiple myeloma; non-Hodgkin's lymphoma; oral cavity and pharynx; pancreas; and prostate.

- Males had higher incidence rates compared to females for each specific site/type of cancer, with the exception of breast cancer and thyroid cancer.

- Males were also found to have higher mortality rates compared to females for each specific site/type of cancer, with the exception of breast cancer and thyroid cancer.

- Incidence data by stage at diagnosis reveal the majority of cancers of the female breast (70.2 percent), melanomas of the skin (91.4 percent) and prostate (88.9 percent) were reported to the OCISS as early stage at diagnosis (*in situ* and localized); whereas, the greatest percentage of cancers of the colon and rectum (52.4 percent), lung and bronchus (79.6 percent) and oral cavity and pharynx (65.2 percent) were late stage at diagnosis (regional and distant). An equal percentage of cervical cancers were early and late stage at diagnosis, not taking into account *in situ* cancers, which are not required to be reported (Percentages calculated after removing cancers reported to the OCISS unstaged or with an unknown stage at diagnosis).

- About 15 percent of lung and bronchus cancers were reported to the OCISS unstaged or with an unknown stage at diagnosis. This cancer site had the highest percentage of unstaged/unknown cases among the cancers that are staged.

This page left intentionally blank.

Table 1a

Site/Type and Gender: Incidence

Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

	MALE			FEMALE			TOTAL		
	Cases	Rate	Percent	Cases	Rate	Percent	Cases	Rate	Percent
All Cancer Sites/Types	**29,591**	**548.4**	**100.0%**	**28,545**	**418.6**	**100.0%**	**58,136**	**470.0**	**100.0%**
Bladder	2,012	38.8	6.8%	679	9.5	2.4%	2,691	21.6	4.6%
Brain and Other CNS[3]	439	7.9	1.5%	380	5.9	1.3%	819	6.8	1.4%
Breast	65	1.2	0.2%	8,073	119.9	28.3%	8,139	65.7	14.0%
Cervix	*	*	*	487	8.0	1.7%	487	***	0.8%
Colon and Rectum	3,184	60.0	10.8%	3,186	44.5	11.2%	6,370	51.1	11.0%
Corpus Uterus	*	*	*	1,830	26.9	6.4%	1,830	***	3.1%
Esophagus	547	10.1	1.8%	149	2.1	0.5%	696	5.6	1.2%
Hodgkin's Lymphoma	186	3.4	0.6%	163	2.7	0.6%	348	3.0	0.6%
Kidney and Renal Pelvis	1,085	19.5	3.7%	764	11.3	2.7%	1,849	15.0	3.2%
Larynx	430	7.6	1.5%	127	1.9	0.4%	557	4.4	1.0%
Leukemia	746	14.0	2.5%	604	8.9	2.1%	1,351	11.1	2.3%
Liver and Intrahepatic Bile Duct	385	6.9	1.3%	177	2.5	0.6%	561	4.5	1.0%
Lung and Bronchus	5,142	96.3	17.4%	4,152	59.8	14.5%	9,295	75.0	16.0%
Melanoma of the Skin	1,193	21.9	4.0%	1,029	16.3	3.6%	2,222	18.3	3.8%
Multiple Myeloma	338	6.3	1.1%	298	4.2	1.0%	636	5.1	1.1%
Non-Hodgkin's Lymphoma	1,249	23.1	4.2%	1,131	16.4	4.0%	2,380	19.3	4.1%
Oral Cavity and Pharynx	835	14.6	2.8%	385	5.7	1.3%	1,220	9.8	2.1%
Ovary	*	*	*	836	12.4	2.9%	836	***	1.4%
Pancreas	697	13.0	2.4%	710	9.9	2.5%	1,407	11.3	2.4%
Prostate	7,961	145.5	26.9%	*	*	*	7,961	***	13.7%
Stomach	463	8.8	1.6%	297	4.1	1.0%	760	6.1	1.3%
Testis	308	5.6	1.0%	*	*	*	308	***	0.5%
Thyroid	252	4.5	0.9%	834	13.7	2.9%	1,087	9.2	1.9%
Other Sites/Types	2,074	**	7.0%	2,252	**	7.9%	4,326	**	7.4%

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] CNS = Central Nervous System.
* Not applicable.
** Rates not presented for "Other Sites/Types" due to the high degree of variability in this category.
*** The rates for each gender-specific cancer are shown in the rate column for the respective gender.

Table 1b

Site/Type and Gender: Mortality

Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

	MALE			FEMALE			TOTAL		
	Deaths	Rate	Percent	Deaths	Rate	Percent	Deaths	Rate	Percent
All Cancer Sites/Types	**12,859**	**248.4**	**100.0%**	**12,058**	**167.9**	**100.0%**	**24,917**	**199.6**	**100.0%**
Bladder	443	9.1	3.4%	188	2.4	1.6%	631	5.0	2.5%
Brain and Other CNS[3]	295	5.3	2.3%	245	3.6	2.0%	540	4.4	2.2%
Breast	14	0.3	0.1%	1,875	26.5	15.5%	1,889	15.1	7.6%
Cervix	*	*	*	159	2.4	1.3%	159	***	0.6%
Colon and Rectum	1,203	23.5	9.4%	1,252	16.7	10.4%	2,456	19.6	9.9%
Corpus Uterus	*	*	*	323	4.5	2.7%	323	***	1.3%
Esophagus	511	9.5	4.0%	137	1.9	1.1%	648	5.2	2.6%
Hodgkin's Lymphoma	33	0.6	0.3%	27	0.4	0.2%	60	0.5	0.2%
Kidney and Renal Pelvis	341	6.5	2.7%	224	3.1	1.9%	566	4.5	2.3%
Larynx	141	2.6	1.1%	38	0.5	0.3%	179	1.4	0.7%
Leukemia	522	10.2	4.1%	430	5.9	3.6%	952	7.7	3.8%
Liver and Intrahepatic Bile Du	355	6.6	2.8%	204	2.8	1.7%	559	4.5	2.2%
Lung and Bronchus	4,224	80.2	32.9%	3,187	45.2	26.4%	7,411	59.7	29.7%
Melanoma of the Skin	205	3.9	1.6%	119	1.7	1.0%	324	2.6	1.3%
Multiple Myeloma	240	4.7	1.9%	239	3.3	2.0%	478	3.8	1.9%
Non-Hodgkin's Lymphoma	487	9.5	3.8%	434	5.9	3.6%	921	7.4	3.7%
Oral Cavity and Pharynx	223	4.0	1.7%	110	1.5	0.9%	333	2.6	1.3%
Ovary	*	*	*	605	8.6	5.0%	605	***	2.4%
Pancreas	681	12.8	5.3%	700	9.5	5.8%	1,381	11.0	5.5%
Prostate	1,232	26.2	9.6%	*	*	*	1,232	***	4.9%
Stomach	250	4.9	1.9%	175	2.4	1.5%	426	3.4	1.7%
Testis	13	0.2	0.1%	*	*	*	13	***	0.1%
Thyroid	28	0.5	0.2%	34	0.5	0.3%	62	0.5	0.2%
Other Sites/Types	1,417	**	11.0%	1,353	**	11.2%	2,770	**	11.1%

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] CNS = Central Nervous System.
* Not Applicable.
** Rates not presented for "Other Sites/Types" due to the high degree of variability in this category.
*** The rates for each gender-specific cancer are shown in the rate column for the respective gender.

Table 2a

Site/Type and Race: Incidence

Average Annual Number and Percent of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, Ohio, 2003-2007[1,2,3]

	WHITE			BLACK			ADDITIONAL RACES[4]			UNKNOWN[5]		TOTAL
	Cases	Rate	Percent	Cases	Rate	Percent	Cases	Rate	Percent	Cases	Percent	Cases
All Cancer Sites/Types	**50,771**	**458.6**	**100.0%**	**5,637**	**491.3**	**100.0%**	**526**	**354.3**	**100.0%**	**1201**	**100.0%**	**58,136**
Bladder	2,452	21.8	4.8%	130	12.0	2.3%	18	14.0	3.4%	91	7.6%	2,691
Brain and Other CNS[6]	757	7.2	1.5%	47	3.7	0.8%	11	5.7	2.0%	4	0.3%	819
Breast (Female)	7,088	118.7	14.0%	799	118.7	14.2%	82	91.3	15.5%	104	8.7%	8,073
Cervix	413	4.1	0.8%	61	5.1	1.1%	7	6.8	1.4%	6	0.5%	487
Colon and Rectum	5,574	49.7	11.0%	633	56.4	11.2%	57	41.0	10.8%	107	8.9%	6,370
Corpus Uterus	1,656	7.9	3.3%	130	9.0	2.3%	19	19.9	3.6%	26	2.1%	1,830
Esophagus	621	5.5	1.2%	63	5.6	1.1%	4	3.1	0.8%	7	0.6%	696
Hodgkin's Lymphoma	302	3.0	0.6%	35	2.6	0.6%	5	2.2	1.0%	6	0.5%	348
Kidney and Renal Pelvis	1,626	14.7	3.2%	196	16.7	3.5%	12	7.9	2.3%	14	1.2%	1,849
Larynx	487	4.3	1.0%	62	5.3	1.1%	3	1.6	0.5%	5	0.4%	557
Leukemia	1,207	11.1	2.4%	112	9.5	2.0%	16	9.9	3.0%	16	1.4%	1,351
Liver and Intrahepatic Bile Duct	441	3.9	0.9%	103	8.6	1.8%	15	11.6	2.9%	3	0.2%	561
Lung and Bronchus	8,212	73.6	16.2%	982	87.8	17.4%	62	49.4	11.7%	39	3.2%	9,295
Melanoma of the Skin	2,035	19.0	4.0%	12	1.0	0.2%	8	5.4	1.5%	167	13.9%	2,222
Multiple Myeloma	512	4.6	1.0%	114	10.1	2.0%	6	4.0	1.1%	4	0.3%	636
Non-Hodgkin's Lymphoma	2,150	19.5	4.2%	157	13.1	2.8%	26	16.4	4.9%	48	4.0%	2,380
Oral Cavity and Pharynx	1,074	9.7	2.1%	118	9.8	2.1%	14	9.1	2.7%	14	1.2%	1,220
Ovary	758	12.6	1.5%	61	9.1	1.1%	10	11.8	2.0%	7	0.6%	836
Pancreas	1,223	10.9	2.4%	165	14.8	2.9%	13	10.6	2.4%	6	0.5%	1,407
Prostate	6,478	130.7	12.8%	997	212.0	17.7%	58	97.1	11.0%	428	35.6%	7,961
Stomach	617	5.5	1.2%	118	10.7	2.1%	12	8.0	2.3%	14	1.1%	760
Testis	287	6.1	0.6%	11	1.7	0.2%	4	3.1	0.8%	5	0.4%	308
Thyroid	958	9.3	1.9%	81	6.5	1.4%	24	11.3	4.5%	24	2.0%	1,087
Other Sites/Types	3,843	*	7.6%	450	*	8.0%	42	*	8.0%	57	4.7%	4,392

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] The rates of breast, cervix, corpus uterus, ovary, prostate and testis cancer are gender-specific (i.e., the population denominator is males or females only).
[4] "Additional Races" includes Asian, Pacific Islander, American Indian and Alaskan Native.
[5] Rates not presented for "Unknown" races due to the high degree of variablility in this category.
[6] CNS = Central Nervous System.
* Rates not presented for "Other Sites/Types" due to the high degree of variability in this category.

Table 2b

Site/Type and Race: Mortality

Average Annual Number and Percent of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, Ohio, 2003-2007[1,2,3]

	WHITE			BLACK			ADDITIONAL RACES[4]			TOTAL
	Deaths	Rate	Percent	Deaths	Rate	Percent	Deaths	Rate	Percent	Deaths
All Cancer Sites/Types	**22,100**	**196.3**	**100.0%**	**2,724**	**247.2**	**100.0%**	**94**	**72.9**	**100.0%**	**24,917**
Bladder	582	5.1	2.6%	48	4.6	1.8%	<1	*	0.4%	631
Brain and Other CNS[5]	510	4.7	2.3%	28	2.3	1.0%	3	1.3	2.8%	540
Breast (Female)	1,637	25.8	7.4%	230	34.4	8.5%	7	10.1	8.5%	1,875
Cervix	135	2.4	0.6%	23	3.4	0.8%	1	1.4	1.5%	159
Colon and Rectum	2,165	19.0	9.8%	284	26.2	10.4%	7	5.5	7.9%	2,456
Corpus Uterus	277	4.3	1.3%	46	7.0	1.7%	<1	*	0.9%	323
Esophagus	588	5.2	2.7%	58	5.1	2.1%	2	1.8	2.6%	648
Hodgkin's Lymphoma	55	0.5	0.2%	5	0.4	0.2%	0	*	0.0%	60
Kidney and Renal Pelvis	510	4.5	2.3%	54	4.9	2.0%	2	1.1	1.7%	566
Larynx	153	1.4	0.7%	25	2.3	0.9%	<1	*	0.4%	179
Leukemia	869	7.8	3.9%	79	7.2	2.9%	3	2.3	3.6%	952
Liver and Intrahepatic Bile Duct	466	4.1	2.1%	85	7.4	3.1%	8	6.4	8.8%	559
Lung and Bronchus	6,596	58.9	29.8%	794	71.9	29.1%	21	16.9	22.4%	7,411
Melanoma of the Skin	319	2.9	1.4%	4	0.3	0.1%	<1	*	0.6%	324
Multiple Myeloma	396	3.5	1.8%	81	7.5	3.0%	2	1.2	1.7%	478
Non-Hodgkin's Lymphoma	863	7.7	3.9%	54	4.8	2.0%	3	3.1	3.6%	921
Oral Cavity and Pharynx	288	2.5	1.3%	43	3.7	1.6%	2	1.4	1.9%	333
Ovary	557	8.8	2.5%	46	7.0	1.7%	3	3.5	2.8%	605
Pancreas	1,213	10.7	5.5%	161	14.7	5.9%	6	5.4	6.6%	1,381
Prostate	1,032	24.1	4.7%	198	52.2	7.3%	2	5.2	2.3%	1,232
Stomach	339	3.0	1.5%	80	7.5	2.9%	6	4.7	6.4%	426
Testis	12	0.2	0.1%	1	0.2	0.0%	0	*	0.0%	13
Thyroid	56	0.5	0.3%	6	0.6	0.2%	<1	*	0.2%	62
Other Sites/Types	2,482	**	11.2%	291	**	10.7%	11	**	12.2%	2,783

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] The rates of breast, cervix, corpus uterus, ovary, prostate and testis cancer are gender-specific (i.e., the population denominator is males or females only).
[4] "Additional Races" includes Native American, Chinese, Japanese, Hawaiian and Filipino. Deaths coded to "Other Asian" or unknown race were imputed to the "White," "Black" or "Additional Races" categories according to the standards of the National Center for Health Statistics.
[5] CNS = Central Nervous System.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e., the average annual count is less than one).
** Rates not presented for "Other Sites/Types" due to the high degree of variability in this category.

Table 3a

All Sites/Types by Age Group and Gender: Incidence

Average Annual Number of Invasive Cancer Cases and Age-specific Incidence Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
All Ages[3]	**29,591**	**548.4**	**28,545**	**418.6**	**58,136**	**470.0**
< 1	19	25.0	17	23.7	36	24.4
1 - 4	71	23.5	60	20.6	131	22.1
5 - 9	43	11.3	39	10.6	82	10.9
10 - 14	53	13.0	47	12.0	100	12.5
15 - 19	96	23.2	81	20.7	177	22.0
20 - 24	130	33.0	145	37.3	275	35.1
25 - 29	172	46.8	245	67.0	417	56.9
30 - 34	238	66.0	412	112.8	650	89.5
35 - 39	351	90.3	693	176.0	1,044	133.5
40 - 44	667	155.6	1,275	290.8	1,942	224.0
45 - 49	1,235	279.0	1,970	429.7	3,205	355.7
50 - 54	2,217	557.0	2,449	590.2	4,666	573.9
55 - 59	3,172	942.7	2,835	797.0	6,007	867.8
60 - 64	3,713	1,504.8	2,917	1,065.6	6,630	1,273.8
65 - 69	4,295	2,239.9	3,161	1,402.6	7,456	1,787.5
70 - 74	4,303	2,756.2	3,296	1,668.8	7,599	2,148.9
75 - 79	4,139	3,189.7	3,478	1,879.6	7,617	2,419.6
80 - 84	2,900	3,306.2	2,919	1,957.1	5,820	2,456.7
85+	1,775	2,889.6	2,506	1,708.2	4,281	2,056.8

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
[3] The 2003-2007 rate for "All Ages" combined is direct age-adjusted to the U.S. 2000 standard population.

Table 3b

All Sites/Types by Age Group and Gender: Mortality

Average Annual Number of Cancer Deaths and Age-specific Mortality Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Ages[3]	**12,859**	**248.4**	**12,058**	**167.9**	**24,917**	**199.6**
<1	<1	*	1	1.4	2	1.1
1 - 4	7	2.4	5	1.7	12	2.1
5 - 9	11	2.9	7	2.0	18	2.5
10 - 14	10	2.5	9	2.3	19	2.4
15 - 19	14	3.4	9	2.3	23	2.9
20 - 24	24	6.0	17	4.3	40	5.2
25 - 29	28	7.7	24	6.6	52	7.1
30 - 34	38	10.6	46	12.7	85	11.6
35 - 39	69	17.8	106	27.0	176	22.5
40 - 44	191	44.6	235	53.5	426	49.1
45 - 49	419	94.7	446	97.4	866	96.1
50 - 54	733	184.1	660	159.2	1,393	171.4
55 - 59	1,065	316.5	865	243.3	1,930	278.9
60 - 64	1,311	531.4	1,068	390.1	2,379	457.1
65 - 69	1,564	815.8	1,297	575.6	2,861	686.0
70 - 74	1,830	1,172.1	1,567	793.2	3,397	960.5
75 - 79	2,119	1,633.1	1,877	1,014.3	3,996	1,269.3
80 - 84	1,866	2,127.3	1,810	1,213.3	3,676	1,551.8
85+	1,558	2,535.7	2,008	1,368.7	3,566	1,713.1

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
[3] The 2003-2007 rate for "All Ages" combined is direct age-adjusted to the U.S. 2000 standard population.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e., the average annual count is less than one).

Table 4a

Four Leading Sites/Types by Age Group and Gender: Incidence

Average Annual Number of Invasive Cancer Cases and Age-specific Incidence Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

MALES								
	Prostate		Lung and Bronchus		Colon and Rectum		Bladder	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Ages[3]	**7,961**	**145.5**	**5,142**	**96.3**	**3,184**	**60.0**	**2,012**	**38.8**
< 1	<1	*	0	*	0	*	0	*
1 - 4	0	*	<1	*	0	*	<1	*
5 - 9	0	*	<1	*	0	*	<1	*
10 - 14	0	*	<1	*	<1	*	0	*
15 - 19	0	*	<1	*	<1	*	<1	*
20 - 24	0	*	1	0.3	2	0.6	2	0.4
25 - 29	<1	*	2	0.5	8	2.1	3	0.8
30 - 34	0	*	6	1.5	19	5.4	4	1.2
35 - 39	4	0.9	18	4.7	34	8.6	11	2.8
40 - 44	30	7.1	71	16.6	71	16.7	28	6.5
45 - 49	153	34.6	172	38.9	131	29.5	50	11.3
50 - 54	521	130.8	329	82.7	247	61.9	95	23.9
55 - 59	996	296.0	480	142.7	312	92.8	162	48.0
60 - 64	1,284	520.3	659	267.2	346	140.4	217	87.8
65 - 69	1,529	797.6	791	412.5	422	220.2	266	138.6
70 - 74	1,366	874.8	868	555.7	447	286.0	320	204.7
75 - 79	1,102	849.0	873	672.7	481	370.6	358	275.9
80 - 84	625	712.9	579	659.6	397	452.3	290	330.3
85+	350	570.4	292	475.0	267	434.3	206	336.0

FEMALES								
	Breast		Lung and Bronchus		Colon and Rectum		Corpus Uterus	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Ages[3]	**8,073**	**119.9**	**4,152**	**59.8**	**3,186**	**44.5**	**1,830**	**26.9**
< 1	0	*	0	*	0	*	0	*
1 - 4	0	*	<1	*	0	*	0	*
5 - 9	0	*	0	*	0	*	0	*
10 - 14	0	*	<1	*	0	*	0	*
15 - 19	1	0.3	<1	*	1	0.3	<1	*
20 - 24	6	1.4	1	0.3	2	0.6	2	0.4
25 - 29	32	8.7	3	0.8	8	2.1	5	1.3
30 - 34	99	27.0	5	1.3	16	4.3	19	5.1
35 - 39	237	60.1	17	4.4	37	9.3	40	10.1
40 - 44	503	114.6	76	17.4	69	15.7	68	15.5
45 - 49	787	171.7	173	37.8	123	26.8	127	27.7
50 - 54	913	220.2	237	57.1	188	45.4	220	52.9
55 - 59	986	277.1	340	95.7	239	67.2	297	83.6
60 - 64	893	326.4	492	179.6	280	102.4	266	97.2
65 - 69	868	385.1	629	279.2	336	149.0	228	101.3
70 - 74	800	405.1	694	351.6	409	207.3	190	96.0
75 - 79	811	438.4	698	377.0	494	267.1	158	85.3
80 - 84	632	423.7	479	321.3	481	322.5	122	81.8
85+	506	345.0	306	208.8	503	342.7	89	60.8

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
[3] The 2003-2007 rate for "All Ages" combined is direct age-adjusted to the U.S. 2000 standard population.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 4b

Four Leading Sites/Types by Age Group and Gender: Mortality

Average Annual Number of Cancer Deaths and Age-specific Mortality Rates, per 100,000 Persons, Ohio, 2003-2007[1,2]

MALES								
	Lung and Bronchus		Prostate		Colon and Rectum		Pancreas	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate
All Ages[3]	**4,224**	**80.2**	**1,232**	**26.2**	**1,203**	**23.5**	**681**	**12.9**
<1	0	*	0	*	0	*	0	*
1 - 4	0	*	0	*	0	*	0	*
5 - 9	0	*	0	*	0	*	0	*
10 - 14	0	*	0	*	0	*	0	*
15 - 19	<1	*	0	*	0	*	0	*
20 - 24	<1	*	0	*	<1	*	<1	*
25 - 29	<1	*	0	*	<1	*	<1	*
30 - 34	3	0.9	0	*	4	1.2	1	0.3
35 - 39	9	2.4	0	*	7	1.9	2	0.5
40 - 44	49	11.3	1	0.3	16	3.6	11	2.6
45 - 49	128	28.9	5	1.1	34	7.6	24	5.5
50 - 54	240	60.4	15	3.7	63	15.9	49	12.4
55 - 59	366	108.8	29	8.6	97	28.8	75	22.3
60 - 64	504	204.3	56	22.6	108	43.6	81	33.0
65 - 69	613	319.6	96	49.9	143	74.6	85	44.4
70 - 74	694	444.5	155	99.5	167	107.2	99	63.2
75 - 79	739	569.7	226	174.5	200	153.8	109	84.3
80 - 84	551	628.3	283	322.6	190	216.1	78	89.4
85+	326	530.7	365	594.9	174	282.6	65	105.8

FEMALES								
	Lung and Bronchus		Breast		Colon and Rectum		Pancreas	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Ages[3]	**3,187**	**45.2**	**1,875**	**26.5**	**1,252**	**16.7**	**700**	**9.5**
<1	0	*	0	*	0	*	0	*
1 - 4	<1	*	0	*	0	*	0	*
5 - 9	0	*	0	*	0	*	0	*
10 - 14	0	*	0	*	0	*	0	*
15 - 19	0	*	0	*	0	*	0	*
20 - 24	<1	*	1	0.3	<1	*	0	*
25 - 29	<1	*	2	0.6	1	0.3	<1	*
30 - 34	2	0.6	12	3.2	4	1.0	1	0.3
35 - 39	9	2.3	34	8.7	8	2.0	3	0.7
40 - 44	46	10.4	67	15.2	17	3.8	7	1.5
45 - 49	107	23.4	118	25.7	30	6.5	17	3.7
50 - 54	157	37.8	152	36.6	46	11.0	35	8.5
55 - 59	231	64.9	184	51.8	64	18.1	42	11.9
60 - 64	334	122.0	181	66.1	86	31.4	53	19.4
65 - 69	436	193.3	185	82.0	110	49.0	71	31.7
70 - 74	538	272.3	195	98.9	141	71.3	93	47.0
75 - 79	561	303.0	230	124.3	188	101.6	115	62.0
80 - 84	438	293.8	226	151.3	224	150.2	127	85.4
85+	328	223.8	288	196.4	334	227.4	135	91.9

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
[3] The 2003-2007 rate for "All Ages" combined is direct age-adjusted to the U.S. 2000 standard population.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 5a

All Sites/Types Combined: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**29,591**	**548.4**	**28,545**	**418.6**	**58,136**	**470.0**
SEER[3]		**538.9**		**408.0**		**461.6**
Adams	74	527.5	61	387.4	136	444.2
Allen	274	528.4	274	427.2	548	466.9
Ashland	127	473.0	115	358.3	242	404.0
Ashtabula	320	605.5	284	445.4	604	513.6
Athens	130	580.4	112	409.1	242	479.7
Auglaize	119	510.4	121	414.6	240	452.0
Belmont	233	605.9	217	441.5	450	504.4
Brown	121	578.3	99	414.1	220	486.6
Butler	756	525.1	762	421.2	1,518	461.4
Carroll	88	546.3	71	404.3	159	467.2
Champaign	103	534.9	95	411.3	198	460.5
Clark	401	544.1	374	409.7	774	463.4
Clermont	442	564.0	440	453.3	882	497.8
Clinton	110	583.0	106	451.4	215	503.5
Columbiana	340	579.7	291	411.7	631	480.6
Coshocton	101	545.2	96	420.5	198	470.6
Crawford	126	520.1	116	388.9	242	440.9
Cuyahoga	3,731	567.6	3,768	425.3	7,499	480.7
Darke	140	497.6	115	340.6	255	406.3
Defiance	95	479.8	85	362.8	180	410.0
Delaware	308	592.8	289	447.7	597	507.8
Erie	263	569.1	238	463.1	502	507.6
Fairfield	312	521.8	306	422.9	618	462.9
Fayette	77	530.0	67	388.6	144	447.6
Franklin	2,277	562.1	2,392	438.4	4,669	485.0
Fulton	94	467.3	99	401.9	193	426.8
Gallia	86	543.1	76	401.2	162	459.9
Geauga	246	492.5	228	403.2	474	441.5
Greene	369	516.9	368	424.4	737	460.9
Guernsey	116	545.2	115	455.9	231	490.7
Hamilton	2,017	527.3	2,093	404.5	4,110	451.0
Hancock	178	518.5	169	388.7	347	441.7
Hardin	83	581.7	69	392.5	153	469.7
Harrison	55	571.1	43	392.6	98	468.8
Henry	69	480.1	64	364.5	133	409.3
Highland	111	540.7	95	388.0	207	454.2
Hocking	75	485.1	72	450.5	147	465.0
Holmes	60	370.9	58	309.2	118	336.2
Huron	144	525.4	133	394.1	277	448.1
Jackson	83	527.9	86	431.3	169	467.7
Jefferson	257	608.5	229	441.3	486	508.1
Knox	150	536.4	148	436.4	298	474.0
Lake	661	548.2	625	417.2	1,286	470.3
Lawrence	163	508.2	185	475.0	348	486.5
Licking	396	558.2	405	467.3	801	502.8
Logan	129	550.6	116	418.8	245	475.9
Lorain	781	555.1	718	416.4	1,499	472.7
Lucas	1,124	569.7	1,089	418.7	2,213	476.3
Madison	99	523.6	88	414.4	187	453.6
Mahoning	836	614.5	739	419.1	1,575	497.6
Marion	181	559.0	173	444.5	354	488.1
Medina	412	552.0	369	416.5	781	473.9
Meigs	69	574.7	55	367.3	124	452.8
Mercer	105	506.8	105	445.8	211	463.3
Miami	251	493.5	243	398.2	494	435.7
Monroe	46	503.3	36	360.7	82	423.5
Montgomery	1,455	548.2	1,454	425.0	2,909	473.2
Morgan	47	553.4	35	355.9	82	447.0
Morrow	85	532.5	74	405.9	159	464.4
Muskingum	226	539.7	228	431.9	454	472.7
Noble	39	553.2	33	441.5	72	485.5
Ottawa	147	598.9	129	459.0	277	518.2
Paulding	48	493.1	46	394.8	94	435.1
Perry	93	572.3	79	410.1	171	479.1
Pickaway	135	533.8	120	431.6	255	471.6
Pike	70	518.9	67	419.5	137	458.8
Portage	374	548.0	327	400.7	702	463.0
Preble	112	515.2	105	411.8	217	455.3
Putnam	89	537.0	73	370.2	161	434.0
Richland	350	522.7	327	408.2	677	454.0
Ross	193	536.9	182	435.1	375	472.3
Sandusky	172	562.1	169	446.5	342	487.3
Scioto	238	633.7	211	435.6	449	514.5
Seneca	160	571.9	145	418.0	305	479.4
Shelby	117	537.6	103	383.2	220	446.5
Stark	1,080	548.7	968	389.5	2,048	453.6
Summit	1,423	538.3	1,392	410.2	2,815	460.9
Trumbull	709	589.9	622	417.1	1,331	488.5
Tuscarawas	236	492.1	225	384.0	461	426.7
Union	93	523.3	98	443.5	191	476.0
Van Wert	72	479.1	70	374.8	142	417.0
Vinton	38	613.9	35	480.8	73	534.0
Warren	396	530.3	404	441.2	800	474.8
Washington	210	608.6	180	441.4	389	511.7
Wayne	256	479.2	255	397.4	511	428.8
Williams	96	483.5	98	417.2	194	441.3
Wood	255	494.3	246	379.4	501	422.9
Wyandot	59	495.7	62	431.8	121	453.9

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
Note: Low county numbers and rates may reflect underreporting for that county.

Table 5b

All Sites/Types Combined: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**12,859**	**248.4**	**12,058**	**167.9**	**24,917**	**199.6**
US[3]		**225.4**		**155.4**		**183.8**
Adams	38	284.2	26	156.8	65	211.9
Allen	115	229.1	113	162.6	229	188.9
Ashland	62	237.8	50	143.2	112	182.0
Ashtabula	137	267.1	121	179.5	258	215.9
Athens	54	254.0	48	166.2	101	201.9
Auglaize	55	238.0	51	160.6	105	189.8
Belmont	108	283.4	96	171.0	204	215.6
Brown	52	267.6	45	183.9	96	218.1
Butler	336	254.9	320	176.9	656	206.7
Carroll	33	214.7	26	135.7	59	171.0
Champaign	49	269.9	37	152.9	86	200.5
Clark	194	272.1	174	176.7	368	214.5
Clermont	176	244.3	174	182.4	350	207.5
Clinton	45	252.4	43	177.3	89	208.1
Columbiana	142	249.4	120	158.4	262	196.3
Coshocton	49	266.6	44	182.9	93	218.1
Crawford	63	268.2	55	163.8	117	206.5
Cuyahoga	1,664	255.1	1,653	172.5	3,317	204.1
Darke	64	230.5	58	149.0	122	183.6
Defiance	44	230.4	39	158.5	82	185.5
Delaware	97	219.5	94	160.0	191	182.9
Erie	102	227.2	95	171.0	197	192.9
Fairfield	130	238.9	125	173.2	255	199.7
Fayette	38	269.7	34	186.4	72	221.3
Franklin	945	257.3	951	176.8	1,897	207.1
Fulton	43	225.7	39	149.9	83	179.6
Gallia	40	261.9	30	155.4	70	198.4
Geauga	88	190.1	89	151.1	177	167.2
Greene	145	220.8	134	150.6	279	178.5
Guernsey	56	275.7	46	170.1	103	213.4
Hamilton	872	236.2	923	168.4	1,796	193.3
Hancock	76	227.2	71	150.5	148	182.6
Hardin	39	280.4	34	179.7	73	219.2
Harrison	23	242.7	20	163.8	43	199.6
Henry	31	219.0	30	153.7	61	178.9
Highland	58	292.5	39	153.0	97	212.4
Hocking	38	261.3	30	183.2	68	217.8
Holmes	30	193.0	29	146.7	59	168.0
Huron	64	240.5	55	157.3	118	191.3
Jackson	45	294.5	41	194.7	86	235.3
Jefferson	117	278.3	99	170.2	216	214.5
Knox	65	244.2	61	172.1	126	198.8
Lake	287	247.9	267	169.3	554	200.9
Lawrence	88	290.7	81	197.1	170	235.3
Licking	156	236.7	156	177.5	312	201.0
Logan	64	290.0	51	172.4	115	222.2
Lorain	332	246.7	318	178.8	650	205.9
Lucas	502	263.5	480	174.9	982	208.8
Madison	43	253.6	37	170.9	80	202.2
Mahoning	349	254.5	335	172.5	684	204.3
Marion	89	290.0	75	181.9	163	225.6
Medina	151	221.1	130	147.0	280	178.1
Meigs	39	332.2	26	162.3	64	233.0
Mercer	51	249.0	42	159.8	93	196.6
Miami	112	231.5	97	151.7	209	183.5
Monroe	21	221.8	16	151.8	37	183.1
Montgomery	610	237.4	600	165.4	1,210	193.7
Morgan	22	262.5	13	119.3	35	187.3
Morrow	41	274.4	28	156.7	69	210.3
Muskingum	111	270.8	107	185.7	217	219.2
Noble	18	269.6	13	160.9	31	207.6
Ottawa	63	261.4	54	183.3	117	215.5
Paulding	24	253.2	20	169.7	44	205.3
Perry	48	303.1	36	182.2	83	235.1
Pickaway	62	272.7	49	174.0	110	213.5
Pike	34	257.2	29	171.0	63	207.5
Portage	157	245.9	140	171.1	297	202.0
Preble	48	230.2	46	174.5	93	197.7
Putnam	38	235.3	34	154.1	72	185.8
Richland	160	248.1	141	165.4	301	199.2
Ross	92	280.5	79	181.1	171	219.4
Sandusky	72	241.2	71	170.7	142	196.7
Scioto	103	278.1	88	169.7	191	212.4
Seneca	67	242.8	53	145.3	120	185.8
Shelby	47	224.8	37	131.7	84	169.9
Stark	442	230.2	420	155.1	862	184.5
Summit	649	254.7	591	164.2	1,240	199.2
Trumbull	302	258.1	266	164.0	568	201.6
Tuscarawas	114	242.5	93	146.1	207	185.7
Union	38	243.3	34	165.3	72	195.5
Van Wert	35	236.0	30	146.4	65	185.4
Vinton	17	287.7	13	174.6	30	221.2
Warren	147	220.5	137	155.5	283	181.6
Washington	88	260.2	79	181.3	167	212.9
Wayne	121	237.0	108	161.7	229	191.7
Williams	46	238.5	41	160.7	87	191.4
Wood	118	239.9	111	163.2	228	193.0
Wyandot	26	218.4	26	161.3	52	184.7

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.

Table 6a

Bladder: Incidence

Average Annual Number of Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**2,012**	**38.8**	**679**	**9.5**	**2,691**	**21.6**
SEER[3]		**37.2**		**9.2**		**21.1**
Adams	4	28.6	1	8.3	5	17.6
Allen	19	37.5	6	7.7	24	20.3
Ashland	8	28.9	2	6.0	10	15.7
Ashtabula	23	43.9	7	10.3	30	25.1
Athens	7	30.3	3	11.3	10	19.8
Auglaize	10	44.6	3	8.2	13	24.2
Belmont	19	48.7	5	8.2	23	24.6
Brown	9	42.6	2	8.7	11	24.1
Butler	42	32.8	13	7.0	55	17.6
Carroll	7	42.5	<1	*	8	22.1
Champaign	7	36.1	2	7.8	9	20.2
Clark	30	42.2	7	7.1	37	21.8
Clermont	31	43.0	7	7.6	38	22.6
Clinton	9	51.3	4	19.0	13	31.9
Columbiana	26	44.4	10	13.5	36	26.9
Coshocton	9	47.3	2	7.0	10	24.4
Crawford	8	31.8	2	6.1	10	17.1
Cuyahoga	260	39.8	100	10.4	360	22.2
Darke	10	36.6	2	5.1	13	18.6
Defiance	6	32.2	3	10.9	9	19.1
Delaware	19	41.6	5	9.3	25	23.4
Erie	20	43.2	6	10.7	26	25.3
Fairfield	20	37.4	6	8.1	26	20.2
Fayette	5	37.7	2	11.5	7	22.6
Franklin	128	34.5	44	8.1	172	18.7
Fulton	7	39.2	3	12.4	11	23.7
Gallia	5	33.1	2	9.0	7	19.2
Geauga	19	39.7	5	8.7	24	22.1
Greene	25	36.8	4	4.4	29	18.1
Guernsey	7	34.6	3	11.8	10	21.2
Hamilton	111	30.2	52	9.5	164	17.7
Hancock	13	38.2	4	7.6	17	21.2
Hardin	6	41.2	2	9.0	7	22.7
Harrison	4	41.8	<1	*	5	21.1
Henry	7	50.6	1	5.2	8	24.5
Highland	7	35.6	2	9.3	9	20.3
Hocking	3	21.4	2	9.9	5	15.2
Holmes	3	21.9	<1	*	4	11.4
Huron	10	39.7	3	7.8	13	21.3
Jackson	2	15.3	2	7.9	4	11.3
Jefferson	16	38.5	6	10.1	22	21.8
Knox	10	37.4	2	5.9	12	19.3
Lake	51	43.0	12	8.1	63	23.0
Lawrence	9	26.8	4	10.2	13	17.5
Licking	31	48.0	8	9.7	39	25.7
Logan	8	32.1	2	6.0	9	17.8
Lorain	56	41.6	21	11.9	78	24.4
Lucas	83	43.7	27	9.9	109	23.4
Madison	5	31.5	3	13.6	8	20.6
Mahoning	75	55.4	18	9.3	94	28.2
Marion	11	34.3	4	9.4	15	20.1
Medina	38	54.6	9	9.8	46	29.1
Meigs	4	31.6	<1	*	4	15.1
Mercer	7	34.4	4	14.6	11	23.0
Miami	18	37.2	5	7.6	23	20.0
Monroe	3	32.4	1	9.2	4	19.5
Montgomery	84	33.2	37	10.0	121	19.4
Morgan	4	42.8	1	11.1	5	26.4
Morrow	4	22.6	1	5.7	5	13.7
Muskingum	16	39.3	4	6.7	20	19.8
Noble	3	49.1	1	13.4	4	29.1
Ottawa	8	33.4	2	6.6	10	18.4
Paulding	3	35.7	<1	*	4	17.0
Perry	6	36.7	1	6.7	7	20.1
Pickaway	8	34.9	4	13.4	12	23.2
Pike	5	36.7	2	13.2	7	22.9
Portage	26	40.9	8	9.8	34	23.2
Preble	7	32.6	2	6.8	9	18.1
Putnam	6	39.3	2	9.3	8	22.6
Richland	21	32.0	6	7.1	27	18.1
Ross	12	36.0	5	10.5	17	21.9
Sandusky	16	53.7	3	6.7	19	26.5
Scioto	18	48.0	6	10.9	23	26.3
Seneca	12	46.5	5	14.4	18	27.5
Shelby	7	36.6	3	9.7	10	20.4
Stark	72	37.5	26	10.0	98	21.2
Summit	110	43.0	40	11.1	150	24.3
Trumbull	57	48.2	21	12.8	78	27.6
Tuscarawas	16	35.3	7	9.9	23	20.5
Union	7	39.9	1	6.7	8	21.9
Van Wert	5	33.3	2	9.0	7	19.1
Vinton	3	45.2	1	16.9	4	30.3
Warren	28	39.9	8	9.7	36	23.0
Washington	13	40.0	5	10.7	17	22.6
Wayne	22	44.1	7	10.2	29	24.4
Williams	4	22.0	3	11.1	7	15.8
Wood	17	34.9	7	10.3	24	20.5
Wyandot	2	15.3	1	6.6	3	10.0

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 6b

Bladder: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**443**	**9.1**	**188**	**2.4**	**631**	**5.0**
US[3]		**7.5**		**2.2**		**4.3**
Adams	<1	*	<1	*	2	5.2
Allen	4	7.5	2	1.9	5	4.2
Ashland	2	7.0	<1	*	2	3.7
Ashtabula	3	7.0	2	2.5	5	4.2
Athens	1	8.0	1	3.3	2	4.9
Auglaize	2	7.1	1	2.4	3	4.7
Belmont	4	9.3	1	1.6	5	4.9
Brown	1	8.4	<1	*	2	5.3
Butler	10	8.8	5	2.6	15	4.8
Carroll	<1	*	0	*	<1	*
Champaign	3	16.0	<1	*	3	7.4
Clark	7	10.1	3	3.1	10	5.7
Clermont	5	8.2	2	2.4	7	4.7
Clinton	2	13.8	1	4.7	3	8.3
Columbiana	4	7.0	3	3.3	6	4.8
Coshocton	2	13.1	1	6.0	4	8.7
Crawford	2	10.1	1	3.5	4	5.9
Cuyahoga	61	9.4	27	2.6	88	5.1
Darke	2	6.5	1	2.5	3	3.9
Defiance	2	8.8	<1	*	2	4.9
Delaware	2	5.2	2	3.0	4	4.1
Erie	5	11.3	2	3.2	7	6.7
Fairfield	4	8.2	2	2.4	6	4.7
Fayette	<1	*	<1	*	2	4.8
Franklin	30	8.9	14	2.6	44	4.9
Fulton	2	12.7	<1	*	3	5.7
Gallia	1	10.1	1	4.7	2	6.5
Geauga	3	7.5	1	2.1	4	4.3
Greene	5	8.2	2	1.9	6	4.3
Guernsey	1	6.6	2	5.4	3	5.9
Hamilton	29	8.3	16	2.6	45	4.7
Hancock	3	9.4	<1	*	3	3.8
Hardin	2	16.8	<1	*	3	7.6
Harrison	<1	*	<1	*	1	4.5
Henry	2	18.2	<1	*	3	7.0
Highland	2	12.0	<1	*	3	5.8
Hocking	1	10.1	0	*	1	4.5
Holmes	1	8.0	<1	*	2	4.6
Huron	3	12.9	1	3.1	4	6.7
Jackson	1	8.0	<1	*	2	5.5
Jefferson	4	9.6	<1	*	5	4.5
Knox	2	8.1	<1	*	2	3.8
Lake	7	6.6	3	2.0	11	3.8
Lawrence	2	6.9	2	4.3	4	5.5
Licking	4	7.0	2	2.2	6	4.2
Logan	2	7.0	<1	*	2	3.5
Lorain	13	9.9	5	2.7	18	5.5
Lucas	20	10.7	5	1.6	24	5.1
Madison	1	8.8	<1	*	2	4.3
Mahoning	11	8.0	4	1.5	15	4.1
Marion	2	9.4	1	2.8	4	5.3
Medina	6	9.6	2	1.9	8	5.2
Meigs	1	9.5	1	6.6	2	7.5
Mercer	2	9.8	<1	*	2	4.7
Miami	4	10.4	1	2.2	6	5.3
Monroe	<1	*	0	*	<1	*
Montgomery	22	9.0	10	2.6	32	5.0
Morgan	<1	*	<1	*	1	7.3
Morrow	<1	*	<1	*	1	3.4
Muskingum	4	10.6	2	2.2	6	5.3
Noble	1	18.4	0	*	1	8.2
Ottawa	2	8.3	<1	*	2	3.9
Paulding	<1	*	<1	*	1	5.2
Perry	1	7.5	<1	*	1	4.0
Pickaway	3	11.5	<1	*	3	6.4
Pike	2	12.9	<1	*	2	7.3
Portage	7	13.2	2	2.9	10	7.0
Preble	1	5.6	<1	*	2	4.1
Putnam	2	10.6	<1	*	2	5.3
Richland	5	7.9	2	2.0	7	4.5
Ross	2	7.5	2	3.8	4	5.3
Sandusky	3	10.5	2	3.2	5	6.1
Scioto	4	10.9	2	3.9	6	6.7
Seneca	3	10.9	1	2.5	4	5.7
Shelby	2	10.7	<1	*	3	6.1
Stark	14	7.6	7	2.2	21	4.2
Summit	23	9.7	10	2.6	33	5.2
Trumbull	10	8.3	5	2.8	15	5.0
Tuscarawas	4	8.9	1	2.0	5	4.7
Union	1	11.0	<1	*	2	5.0
Van Wert	2	13.7	1	6.5	3	9.6
Vinton	<1	*	<1	*	1	8.3
Warren	7	10.9	2	2.9	9	6.0
Washington	3	8.7	1	2.7	4	4.8
Wayne	4	9.3	<1	*	5	4.2
Williams	<1	*	<1	*	2	3.7
Wood	6	13.5	<1	*	7	5.9
Wyandot	<1	*	<1	*	1	3.7

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009) Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 7a

Brain and Other Central Nervous System: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**439**	**7.9**	**380**	**5.9**	**819**	**6.8**
SEER[3]		**7.6**		**5.5**		**6.5**
Adams	1	7.7	<1	*	1	4.2
Allen	5	9.7	4	5.9	9	7.8
Ashland	1	5.2	1	5.1	3	5.1
Ashtabula	4	8.0	3	5.0	7	6.6
Athens	2	10.5	2	7.9	4	8.7
Auglaize	1	6.3	2	8.5	4	7.7
Belmont	4	11.7	3	6.6	7	9.0
Brown	1	4.8	<1	*	2	4.1
Butler	14	8.4	9	5.1	23	6.7
Carroll	1	9.3	2	9.9	3	9.7
Champaign	2	10.8	2	7.4	4	8.9
Clark	5	6.7	4	5.7	9	5.8
Clermont	8	9.0	7	7.8	16	8.6
Clinton	1	6.2	1	6.4	3	6.4
Columbiana	3	6.0	4	5.5	7	5.8
Coshocton	2	11.6	2	10.0	4	10.7
Crawford	2	7.9	1	5.7	3	6.9
Cuyahoga	43	6.6	44	5.5	88	6.0
Darke	2	7.6	2	7.0	4	7.4
Defiance	1	6.2	1	6.2	2	5.9
Delaware	5	7.6	4	6.1	9	7.1
Erie	4	9.5	3	6.6	7	8.1
Fairfield	6	9.5	4	5.9	10	7.6
Fayette	1	7.5	2	9.2	3	8.8
Franklin	36	7.9	40	7.3	76	7.5
Fulton	1	6.1	3	10.5	4	8.4
Gallia	2	11.1	1	7.7	3	9.3
Geauga	4	8.3	4	6.4	7	7.3
Greene	7	9.8	4	4.9	11	7.2
Guernsey	2	10.2	<1	*	2	5.6
Hamilton	28	7.1	22	4.7	50	5.7
Hancock	3	9.6	3	7.0	6	8.4
Hardin	1	6.3	1	6.7	2	6.6
Harrison	<1	*	<1	*	<1	*
Henry	<1	*	<1	*	2	5.4
Highland	2	8.9	2	8.9	4	8.7
Hocking	2	10.9	1	8.2	3	9.5
Holmes	2	12.0	1	5.2	3	9.0
Huron	2	8.0	2	6.3	4	7.2
Jackson	3	16.5	2	9.6	4	13.0
Jefferson	3	7.2	2	5.1	5	6.0
Knox	2	7.7	2	6.8	4	7.4
Lake	10	7.9	9	6.7	19	7.3
Lawrence	2	5.2	2	6.9	4	6.1
Licking	8	10.5	6	7.7	14	9.1
Logan	3	14.0	2	8.1	5	10.9
Lorain	11	7.2	8	5.1	19	6.1
Lucas	20	9.5	13	5.2	33	7.2
Madison	2	11.2	2	9.5	4	10.5
Mahoning	11	8.0	9	5.3	19	6.5
Marion	3	9.4	3	8.3	6	8.7
Medina	6	7.2	5	5.7	11	6.2
Meigs	2	14.8	<1	*	2	9.4
Mercer	2	7.3	2	7.5	3	7.5
Miami	4	8.6	2	3.5	6	6.0
Monroe	1	13.2	<1	*	2	11.0
Montgomery	19	7.2	18	5.8	37	6.3
Morgan	<1	*	<1	*	<1	*
Morrow	2	10.6	1	7.7	3	8.9
Muskingum	3	7.8	4	7.6	7	7.6
Noble	1	14.9	<1	*	1	9.1
Ottawa	2	8.1	2	5.7	4	7.1
Paulding	1	12.3	<1	*	2	9.7
Perry	1	6.3	<1	*	2	4.6
Pickaway	3	11.6	1	5.8	5	8.4
Pike	1	10.4	<1	*	2	7.6
Portage	7	9.5	7	8.5	14	9.1
Preble	2	7.5	1	4.1	3	6.0
Putnam	<1	*	1	6.9	2	5.7
Richland	8	11.5	5	6.1	12	8.8
Ross	3	8.7	2	4.8	5	6.8
Sandusky	3	9.4	2	6.3	5	7.7
Scioto	4	9.8	4	8.3	7	9.0
Seneca	3	9.6	2	7.9	5	8.7
Shelby	2	8.0	1	5.8	3	6.5
Stark	14	7.1	13	5.7	27	6.4
Summit	17	6.2	15	4.8	32	5.4
Trumbull	11	9.5	6	4.7	17	7.0
Tuscarawas	4	8.7	2	3.8	6	6.1
Union	2	6.7	1	5.9	3	6.3
Van Wert	<1	*	<1	*	1	4.0
Vinton	<1	*	<1	*	1	8.5
Warren	7	7.4	6	6.3	13	6.9
Washington	2	5.9	3	8.2	5	7.1
Wayne	4	6.6	3	5.7	7	6.1
Williams	1	6.9	2	7.5	3	7.2
Wood	4	6.3	4	7.1	8	6.8
Wyandot	1	9.1	<1	*	2	7.2

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 7b

Brain and Other Central Nervous System: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**295**	**5.3**	**245**	**3.6**	**540**	**4.4**
US[3]		**5.2**		**3.5**		**4.3**
Adams	1	10.2	<1	*	2	5.4
Allen	3	5.2	2	3.7	5	4.5
Ashland	<1	*	1	4.4	2	3.6
Ashtabula	4	6.8	2	3.6	6	5.2
Athens	2	7.3	2	5.8	3	6.4
Auglaize	1	4.2	2	5.4	3	4.8
Belmont	2	5.8	2	4.6	5	5.3
Brown	1	4.8	<1	*	2	4.0
Butler	9	5.5	5	2.9	14	4.2
Carroll	<1	*	1	5.2	2	4.9
Champaign	1	5.7	<1	*	2	3.7
Clark	4	5.5	3	3.1	7	4.1
Clermont	4	4.6	4	4.4	8	4.6
Clinton	<1	*	<1	*	1	3.4
Columbiana	2	4.2	2	3.1	5	3.7
Coshocton	2	8.1	<1	*	2	5.8
Crawford	<1	*	1	3.1	2	3.2
Cuyahoga	33	5.0	31	3.5	64	4.2
Darke	1	5.2	2	4.7	3	5.0
Defiance	1	7.7	<1	*	2	4.7
Delaware	2	2.6	3	4.8	5	3.8
Erie	2	5.0	2	3.7	4	4.4
Fairfield	3	3.9	2	2.5	4	3.2
Fayette	<1	*	1	7.3	2	5.0
Franklin	21	5.2	21	3.9	43	4.4
Fulton	<1	*	2	6.4	2	4.8
Gallia	<1	*	1	6.1	2	5.3
Geauga	3	5.2	3	4.9	5	5.0
Greene	5	6.6	3	4.0	8	5.1
Guernsey	2	8.1	<1	*	2	4.6
Hamilton	21	5.1	15	2.9	36	3.9
Hancock	2	6.3	2	4.0	4	5.3
Hardin	1	6.2	<1	*	1	3.0
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	1	3.9
Highland	<1	*	1	4.2	2	3.8
Hocking	1	6.5	<1	*	2	5.2
Holmes	1	6.3	1	5.6	2	6.2
Huron	1	4.7	1	3.5	2	4.0
Jackson	<1	*	<1	*	1	3.7
Jefferson	2	5.0	<1	*	3	2.9
Knox	1	4.7	2	5.4	3	5.2
Lake	7	5.9	6	4.1	13	4.9
Lawrence	1	2.8	2	4.8	3	4.0
Licking	4	4.9	3	3.7	7	4.3
Logan	2	6.4	1	3.6	3	5.0
Lorain	6	4.1	6	3.4	11	3.6
Lucas	12	5.9	10	4.0	22	4.9
Madison	1	5.8	<1	*	2	4.3
Mahoning	7	5.4	8	4.4	15	4.8
Marion	2	5.6	2	6.1	4	5.9
Medina	5	6.6	3	3.7	8	4.9
Meigs	<1	*	<1	*	1	4.7
Mercer	2	8.8	1	4.4	3	6.8
Miami	4	7.5	2	2.6	5	4.8
Monroe	<1	*	<1	*	1	8.6
Montgomery	15	5.7	11	3.4	26	4.4
Morgan	<1	*	<1	*	<1	*
Morrow	1	6.5	<1	*	1	3.6
Muskingum	2	5.3	3	5.3	5	5.2
Noble	<1	*	<1	*	<1	*
Ottawa	2	7.7	2	7.1	4	7.3
Paulding	1	11.0	<1	*	1	6.3
Perry	<1	*	<1	*	<1	*
Pickaway	2	5.9	<1	*	2	4.0
Pike	<1	*	<1	*	<1	*
Portage	5	6.4	5	5.8	9	6.3
Preble	1	5.4	2	7.5	3	6.4
Putnam	<1	*	<1	*	<1	*
Richland	6	8.1	3	3.2	8	5.6
Ross	2	5.8	2	4.3	4	5.1
Sandusky	2	6.0	2	3.9	4	5.0
Scioto	2	5.3	1	2.5	3	3.8
Seneca	3	9.1	2	4.5	4	6.8
Shelby	1	6.5	<1	*	2	3.2
Stark	12	5.9	8	3.4	20	4.5
Summit	14	5.1	8	2.4	22	3.6
Trumbull	6	5.3	4	2.3	10	3.8
Tuscarawas	3	6.9	2	4.0	5	5.3
Union	<1	*	1	5.4	2	4.5
Van Wert	<1	*	1	6.7	2	6.5
Vinton	<1	*	0	*	<1	*
Warren	5	4.8	3	3.5	8	4.2
Washington	<1	*	2	4.1	2	3.2
Wayne	3	4.9	3	4.8	6	4.8
Williams	<1	*	1	5.3	2	4.4
Wood	3	4.4	3	5.2	6	4.9
Wyandot	<1	*	1	9.3	2	7.0

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 8a

Breast: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**65**	**1.2**	**8,073**	**119.9**	**8,139**	**65.7**
SEER[3]		**1.2**		**122.9**		**66.5**
Adams	0	*	16	102.8	16	53.1
Allen	2	4.2	79	127.1	81	69.8
Ashland	0	*	34	109.5	34	58.3
Ashtabula	<1	*	69	109.3	70	59.3
Athens	<1	*	28	102.8	28	55.6
Auglaize	<1	*	34	117.4	35	65.4
Belmont	<1	*	66	137.8	67	75.3
Brown	<1	*	27	110.9	27	60.7
Butler	1	1.0	218	120.0	219	65.2
Carroll	<1	*	19	111.3	19	58.1
Champaign	0	*	26	110.9	26	58.9
Clark	<1	*	105	118.7	106	64.6
Clermont	<1	*	126	126.5	127	68.0
Clinton	0	*	28	119.6	28	64.2
Columbiana	<1	*	75	107.8	76	58.0
Coshocton	0	*	23	97.6	23	53.5
Crawford	0	*	32	111.2	32	60.2
Cuyahoga	10	1.6	1,045	121.2	1,055	68.4
Darke	0	*	35	109.0	35	57.8
Defiance	<1	*	22	94.0	22	50.7
Delaware	<1	*	99	148.1	99	78.5
Erie	<1	*	70	140.7	71	74.5
Fairfield	<1	*	94	128.1	95	69.0
Fayette	0	*	17	98.2	17	52.3
Franklin	4	1.0	710	128.8	715	71.9
Fulton	<1	*	28	114.7	29	62.6
Gallia	0	*	18	95.3	18	51.7
Geauga	1	1.8	73	129.9	74	69.7
Greene	<1	*	120	139.5	121	75.4
Guernsey	<1	*	36	143.4	37	78.8
Hamilton	5	1.3	605	119.1	610	66.9
Hancock	<1	*	55	129.3	55	70.0
Hardin	<1	*	16	90.3	16	49.8
Harrison	<1	*	9	85.6	10	47.1
Henry	<1	*	14	80.9	14	44.8
Highland	<1	*	25	100.0	25	55.3
Hocking	0	*	18	113.7	18	57.5
Holmes	<1	*	16	88.3	16	47.1
Huron	<1	*	35	103.9	35	56.8
Jackson	0	*	21	105.8	21	57.9
Jefferson	<1	*	56	114.2	56	62.8
Knox	<1	*	41	125.4	42	67.2
Lake	2	1.3	176	118.6	177	64.7
Lawrence	<1	*	51	131.5	51	72.3
Licking	2	2.7	119	135.3	121	73.9
Logan	<1	*	32	118.3	33	63.6
Lorain	2	1.0	199	114.6	200	62.4
Lucas	3	1.5	300	117.9	303	65.2
Madison	0	*	24	111.0	24	56.6
Mahoning	2	1.3	214	126.3	216	70.2
Marion	0	*	45	116.8	45	61.3
Medina	<1	*	110	121.5	110	64.4
Meigs	<1	*	12	78.5	12	43.2
Mercer	<1	*	29	126.6	30	66.0
Miami	<1	*	74	121.9	75	66.0
Monroe	0	*	9	94.2	9	49.1
Montgomery	3	1.0	414	123.1	416	68.2
Morgan	0	*	10	103.2	10	54.2
Morrow	<1	*	21	115.4	22	63.1
Muskingum	0	*	56	108.6	56	59.3
Noble	0	*	6	86.5	6	42.8
Ottawa	<1	*	38	138.5	38	73.6
Paulding	0	*	12	104.1	12	54.8
Perry	0	*	21	111.8	21	59.1
Pickaway	0	*	35	123.8	35	63.8
Pike	0	*	16	102.6	16	54.8
Portage	<1	*	91	111.4	91	59.2
Preble	0	*	34	133.8	34	70.8
Putnam	<1	*	22	115.6	22	60.3
Richland	<1	*	96	123.4	97	65.9
Ross	0	*	48	114.8	48	59.7
Sandusky	1	3.9	47	127.4	48	69.5
Scioto	<1	*	47	99.8	47	55.3
Seneca	<1	*	40	114.8	40	63.0
Shelby	0	*	30	114.3	30	60.3
Stark	2	1.2	268	110.0	270	60.5
Summit	3	1.1	404	121.0	407	66.7
Trumbull	2	1.5	174	119.5	175	65.6
Tuscarawas	<1	*	62	107.3	63	58.8
Union	<1	*	27	120.9	28	65.3
Van Wert	<1	*	21	113.4	21	62.4
Vinton	<1	*	8	114.7	9	62.0
Warren	<1	*	124	132.3	124	70.2
Washington	<1	*	45	112.3	45	60.9
Wayne	<1	*	66	102.3	66	55.1
Williams	<1	*	24	102.9	24	55.3
Wood	1	2.5	73	112.5	74	61.3
Wyandot	0	*	19	135.7	19	73.2

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 8b

Breast: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**14**	**0.3**	**1,875**	**26.5**	**1,889**	**15.1**
US[3]		**0.3**		**24.0**		**13.5**
Adams	0	*	5	28.8	5	15.4
Allen	<1	*	17	24.6	17	14.2
Ashland	0	*	8	23.1	8	13.1
Ashtabula	0	*	20	29.8	20	16.5
Athens	<1	*	4	12.7	4	7.5
Auglaize	0	*	9	30.1	9	16.5
Belmont	0	*	13	22.6	13	13.1
Brown	<1	*	6	26.8	7	15.0
Butler	<1	*	47	25.9	48	14.6
Carroll	0	*	5	25.9	5	13.9
Champaign	0	*	4	18.5	4	10.3
Clark	<1	*	24	25.3	24	14.4
Clermont	<1	*	23	23.9	23	13.5
Clinton	0	*	5	21.3	5	12.2
Columbiana	<1	*	17	21.7	17	12.5
Coshocton	0	*	7	27.6	7	15.7
Crawford	0	*	8	23.1	8	13.3
Cuyahoga	1	0.2	247	26.8	249	15.5
Darke	0	*	12	32.3	12	17.7
Defiance	0	*	6	24.7	6	13.8
Delaware	0	*	18	28.6	18	15.6
Erie	<1	*	11	21.3	11	11.7
Fairfield	<1	*	21	29.3	21	16.4
Fayette	0	*	6	34.4	6	19.5
Franklin	<1	*	150	27.4	151	16.0
Fulton	0	*	8	31.2	8	17.5
Gallia	0	*	3	18.2	3	10.2
Geauga	<1	*	12	21.1	13	11.8
Greene	<1	*	22	24.7	22	14.3
Guernsey	0	*	7	26.2	7	14.2
Hamilton	1	0.3	153	28.2	154	16.4
Hancock	0	*	10	23.0	10	12.9
Hardin	0	*	5	25.2	5	14.4
Harrison	0	*	3	19.2	3	11.0
Henry	0	*	4	20.5	4	11.1
Highland	0	*	6	25.5	6	14.2
Hocking	0	*	3	19.2	3	9.9
Holmes	0	*	5	26.5	5	14.3
Huron	0	*	7	20.3	7	11.3
Jackson	0	*	5	23.6	5	13.3
Jefferson	<1	*	14	25.5	15	14.6
Knox	0	*	9	26.3	9	14.1
Lake	<1	*	42	27.6	43	15.7
Lawrence	<1	*	14	35.1	14	20.2
Licking	<1	*	29	32.9	29	18.7
Logan	0	*	6	19.8	6	10.9
Lorain	<1	*	50	28.4	50	15.9
Lucas	<1	*	76	27.7	77	16.1
Madison	<1	*	6	26.5	6	15.4
Mahoning	0	*	56	30.6	56	17.4
Marion	<1	*	9	21.0	9	12.1
Medina	<1	*	23	25.7	23	14.2
Meigs	<1	*	3	16.8	3	9.9
Mercer	0	*	8	32.0	8	17.2
Miami	<1	*	16	25.8	17	14.4
Monroe	0	*	2	16.6	2	8.7
Montgomery	<1	*	92	25.8	92	14.8
Morgan	0	*	3	24.2	3	13.8
Morrow	<1	*	4	24.3	5	14.2
Muskingum	0	*	15	27.5	15	15.5
Noble	0	*	1	16.3	1	8.2
Ottawa	<1	*	10	33.7	10	18.9
Paulding	0	*	3	21.0	3	12.0
Perry	0	*	5	26.7	5	14.5
Pickaway	0	*	8	28.1	8	15.5
Pike	<1	*	4	25.6	5	15.0
Portage	0	*	22	26.6	22	14.7
Preble	0	*	7	24.9	7	13.9
Putnam	0	*	6	30.6	6	16.7
Richland	0	*	24	28.7	24	15.8
Ross	0	*	12	28.2	12	15.4
Sandusky	<1	*	12	29.1	12	16.6
Scioto	<1	*	12	24.3	12	14.2
Seneca	0	*	9	27.0	9	14.7
Shelby	0	*	4	16.3	4	8.8
Stark	<1	*	69	26.0	70	15.0
Summit	1	0.4	94	26.8	95	15.3
Trumbull	0	*	45	28.3	45	15.9
Tuscarawas	<1	*	14	21.9	14	12.9
Union	0	*	6	27.7	6	15.8
Van Wert	0	*	3	17.0	3	9.3
Vinton	0	*	1	17.9	1	8.8
Warren	<1	*	24	26.5	25	14.6
Washington	<1	*	13	32.3	13	17.8
Wayne	0	*	18	26.4	18	14.7
Williams	0	*	5	21.4	5	11.9
Wood	0	*	16	23.9	16	13.8
Wyandot	0	*	3	21.0	3	12.1

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 9a

Cervix: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Cases	Rate
Ohio	**487**	**8.0**
SEER[3]		**8.1**
Adams	1	8.0
Allen	5	9.3
Ashland	2	7.2
Ashtabula	5	8.8
Athens	4	14.9
Auglaize	3	12.7
Belmont	3	7.3
Brown	1	5.4
Butler	14	7.9
Carroll	<1	*
Champaign	2	11.7
Clark	7	9.4
Clermont	6	6.4
Clinton	2	7.7
Columbiana	6	10.7
Coshocton	2	11.8
Crawford	3	10.4
Cuyahoga	62	8.4
Darke	2	6.6
Defiance	1	7.6
Delaware	6	8.2
Erie	3	6.6
Fairfield	4	6.1
Fayette	3	18.4
Franklin	49	8.7
Fulton	2	7.9
Gallia	3	15.8
Geauga	3	5.9
Greene	4	5.6
Guernsey	2	8.6
Hamilton	29	6.2
Hancock	4	9.5
Hardin	2	13.3
Harrison	2	18.2
Henry	2	10.6
Highland	3	12.6
Hocking	2	14.4
Holmes	<1	*
Huron	3	9.6
Jackson	2	12.9
Jefferson	3	8.7
Knox	3	8.8
Lake	7	6.0

	Cases	Rate
Lawrence	4	10.4
Licking	7	9.4
Logan	2	6.4
Lorain	16	10.3
Lucas	17	7.3
Madison	2	8.3
Mahoning	10	6.7
Marion	3	7.6
Medina	6	6.7
Meigs	2	12.8
Mercer	2	11.9
Miami	4	6.9
Monroe	<1	*
Montgomery	25	8.6
Morgan	<1	*
Morrow	2	10.0
Muskingum	5	11.5
Noble	1	16.1
Ottawa	2	7.9
Paulding	1	12.1
Perry	2	9.1
Pickaway	2	6.4
Pike	2	11.3
Portage	5	6.4
Preble	2	6.8
Putnam	2	10.2
Richland	7	10.0
Ross	4	12.0
Sandusky	3	9.3
Scioto	5	13.0
Seneca	3	9.2
Shelby	1	4.1
Stark	11	5.6
Summit	19	6.4
Trumbull	7	5.7
Tuscarawas	4	7.6
Union	1	4.5
Van Wert	1	6.3
Vinton	<1	*
Warren	7	7.3
Washington	3	9.4
Wayne	6	10.6
Williams	2	10.8
Wood	5	8.0
Wyandot	2	13.2

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 9b

Cervix: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Deaths	Rate
Ohio	**159**	**2.4**
US[3]		**2.4**
Adams	0	*
Allen	1	2.1
Ashland	1	3.0
Ashtabula	2	2.6
Athens	1	5.2
Auglaize	1	3.9
Belmont	2	3.4
Brown	<1	*
Butler	4	2.3
Carroll	0	*
Champaign	<1	*
Clark	2	2.4
Clermont	2	2.3
Clinton	<1	*
Columbiana	2	2.5
Coshocton	1	4.5
Crawford	<1	*
Cuyahoga	17	2.1
Darke	<1	*
Defiance	<1	*
Delaware	<1	*
Erie	1	1.8
Fairfield	1	1.8
Fayette	2	9.7
Franklin	17	3.1
Fulton	0	*
Gallia	1	5.0
Geauga	<1	*
Greene	1	1.5
Guernsey	1	5.5
Hamilton	10	2.1
Hancock	1	2.5
Hardin	1	9.2
Harrison	<1	*
Henry	<1	*
Highland	1	3.9
Hocking	1	7.1
Holmes	<1	*
Huron	1	2.9
Jackson	1	5.9
Jefferson	<1	*
Knox	1	4.4
Lake	3	2.1

	Deaths	Rate
Lawrence	1	2.5
Licking	1	1.3
Logan	<1	*
Lorain	5	3.3
Lucas	5	2.1
Madison	1	5.2
Mahoning	3	1.7
Marion	2	5.0
Medina	2	1.8
Meigs	<1	*
Mercer	1	7.8
Miami	1	1.9
Monroe	<1	*
Montgomery	8	2.6
Morgan	0	*
Morrow	<1	*
Muskingum	2	4.3
Noble	0	*
Ottawa	<1	*
Paulding	<1	*
Perry	1	6.4
Pickaway	<1	*
Pike	<1	*
Portage	2	2.0
Preble	<1	*
Putnam	<1	*
Richland	2	2.9
Ross	1	2.7
Sandusky	<1	*
Scioto	2	4.3
Seneca	<1	*
Shelby	<1	*
Stark	6	2.5
Summit	5	1.7
Trumbull	2	1.2
Tuscarawas	1	1.9
Union	<1	*
Van Wert	<1	*
Vinton	<1	*
Warren	<1	*
Washington	2	3.9
Wayne	2	3.3
Williams	1	4.4
Wood	2	3.0
Wyandot	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 10a

Colon and Rectum: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**3,184**	**60.0**	**3,186**	**44.5**	**6,370**	**51.1**
SEER[3]		**55.8**		**41.7**		**47.9**
Adams	11	76.3	8	51.1	19	61.2
Allen	28	54.9	32	46.9	60	50.1
Ashland	17	65.8	13	37.7	31	50.2
Ashtabula	33	62.4	36	54.2	68	57.5
Athens	13	61.8	12	44.0	26	51.7
Auglaize	16	66.7	15	46.2	31	55.8
Belmont	32	82.7	28	50.3	60	64.9
Brown	10	52.3	13	53.9	23	53.4
Butler	83	59.8	86	47.6	169	52.8
Carroll	10	60.1	7	39.1	17	49.8
Champaign	10	51.7	13	54.6	23	53.2
Clark	44	60.7	42	43.2	86	51.0
Clermont	44	57.1	46	48.0	90	52.1
Clinton	10	55.6	11	44.5	21	49.7
Columbiana	41	71.4	38	50.6	80	59.3
Coshocton	12	65.5	13	51.8	25	58.8
Crawford	13	53.8	16	47.6	29	50.3
Cuyahoga	389	59.2	406	42.9	795	49.6
Darke	14	49.4	15	40.3	29	44.6
Defiance	9	45.9	9	37.0	18	41.2
Delaware	30	62.1	24	38.8	54	48.7
Erie	32	70.5	28	51.0	61	60.1
Fairfield	33	57.3	37	50.1	70	53.5
Fayette	9	65.0	9	52.3	19	57.6
Franklin	221	56.8	225	41.7	446	47.9
Fulton	9	45.9	13	48.2	21	47.0
Gallia	10	63.2	7	34.7	17	47.0
Geauga	24	50.5	22	38.9	47	44.1
Greene	39	56.9	43	48.3	82	51.9
Guernsey	17	76.8	12	45.5	29	60.1
Hamilton	215	57.2	234	42.6	449	48.5
Hancock	15	43.8	19	41.4	33	42.1
Hardin	10	70.4	8	44.2	18	55.5
Harrison	8	85.4	6	50.9	14	66.2
Henry	8	59.6	6	29.6	14	42.4
Highland	14	66.3	13	49.1	27	57.4
Hocking	10	62.0	7	44.9	17	54.4
Holmes	10	64.3	10	53.6	21	59.1
Huron	20	74.5	16	43.7	36	57.8
Jackson	11	66.8	10	47.6	20	55.4
Jefferson	29	67.3	32	56.6	61	61.6
Knox	19	68.3	20	57.7	39	61.8
Lake	71	60.4	66	41.5	137	49.8
Lawrence	22	70.2	21	51.6	43	60.1
Licking	45	65.9	40	46.7	85	54.5
Logan	14	63.1	12	41.7	27	50.7
Lorain	85	61.5	80	44.6	165	52.0
Lucas	113	58.8	118	43.1	232	49.4
Madison	9	46.4	9	41.1	18	43.1
Mahoning	91	66.1	95	47.7	185	55.4
Marion	19	61.4	23	56.8	42	58.0
Medina	37	50.1	34	39.3	71	44.3
Meigs	9	74.6	8	54.4	17	63.0
Mercer	18	88.8	12	47.4	31	65.1
Miami	31	61.1	28	44.2	59	52.0
Monroe	5	55.3	5	47.4	10	52.3
Montgomery	144	54.7	156	42.9	299	48.1
Morgan	5	57.8	6	56.3	11	57.1
Morrow	8	55.6	8	46.2	17	50.7
Muskingum	27	64.4	26	46.2	53	53.8
Noble	5	70.7	6	75.2	11	73.3
Ottawa	18	75.4	12	41.7	30	56.5
Paulding	5	49.7	7	55.6	12	54.0
Perry	12	73.8	10	48.9	22	61.3
Pickaway	13	53.2	15	52.0	28	52.1
Pike	7	55.7	7	43.0	14	48.2
Portage	36	55.8	35	42.2	71	48.5
Preble	12	55.3	10	38.4	22	46.3
Putnam	11	69.4	8	38.1	19	50.6
Richland	42	63.3	41	48.2	82	54.9
Ross	21	59.6	20	46.6	41	52.3
Sandusky	21	70.0	18	43.7	39	54.9
Scioto	24	65.1	24	45.6	48	54.2
Seneca	18	64.5	19	49.9	37	56.4
Shelby	15	71.9	16	55.6	31	63.6
Stark	117	60.0	117	43.7	234	50.6
Summit	159	60.5	159	44.7	318	51.4
Trumbull	73	61.6	73	46.0	146	52.0
Tuscarawas	28	59.4	27	41.7	55	49.2
Union	10	64.2	12	56.4	22	58.3
Van Wert	11	73.4	10	47.9	21	59.9
Vinton	5	89.4	3	42.6	8	61.5
Warren	42	58.5	34	38.0	76	46.6
Washington	21	63.5	18	40.8	39	50.7
Wayne	24	46.0	31	46.5	55	46.1
Williams	10	51.3	10	41.7	21	45.9
Wood	30	61.2	26	39.8	57	48.2
Wyandot	8	69.4	4	29.0	12	45.0

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
Note: Low county numbers and rates may reflect underreporting for that county.

Table 10b

Colon and Rectum: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**1,203**	**23.5**	**1,252**	**16.7**	**2,456**	**19.6**
US[3]		**21.2**		**14.9**		**17.6**
Adams	3	24.1	2	11.3	5	16.7
Allen	10	19.3	10	15.1	20	16.7
Ashland	7	28.2	6	15.5	13	21.5
Ashtabula	13	24.3	12	18.3	25	20.9
Athens	6	27.2	6	22.2	12	24.7
Auglaize	6	27.3	6	16.5	12	20.0
Belmont	15	40.5	12	19.7	27	28.3
Brown	4	21.1	5	19.2	9	20.5
Butler	23	18.4	32	17.5	55	17.8
Carroll	3	18.2	2	11.7	5	14.5
Champaign	6	31.4	4	17.6	10	23.5
Clark	19	25.8	16	15.7	35	20.0
Clermont	14	19.7	14	14.7	28	16.8
Clinton	3	15.6	4	14.6	7	16.0
Columbiana	12	21.4	13	16.4	25	18.4
Coshocton	3	15.4	5	19.0	8	17.6
Crawford	6	24.7	8	23.2	14	24.2
Cuyahoga	155	23.8	164	16.1	319	19.2
Darke	6	22.0	10	22.3	16	22.9
Defiance	4	19.9	4	14.9	8	17.3
Delaware	8	17.8	8	13.3	16	15.6
Erie	11	24.7	10	17.0	21	20.1
Fairfield	13	24.1	15	20.1	28	22.0
Fayette	5	32.7	5	27.2	10	29.4
Franklin	90	24.5	91	16.7	181	20.0
Fulton	3	14.7	6	20.4	8	18.2
Gallia	5	31.8	3	15.9	8	22.7
Geauga	8	17.3	10	16.3	18	16.9
Greene	12	18.8	12	13.6	24	15.8
Guernsey	7	33.2	6	19.7	13	25.8
Hamilton	78	21.4	98	16.9	176	18.6
Hancock	5	13.7	8	16.1	13	15.5
Hardin	4	28.1	4	20.1	8	24.0
Harrison	3	26.9	2	18.3	5	22.5
Henry	4	28.2	3	14.7	7	21.2
Highland	5	27.1	5	19.2	10	22.7
Hocking	3	20.7	4	21.6	7	22.0
Holmes	3	19.6	5	21.8	8	22.0
Huron	8	30.1	5	15.1	13	21.3
Jackson	5	34.2	4	20.4	10	26.1
Jefferson	10	25.4	10	15.9	20	19.7
Knox	6	23.8	8	21.7	15	22.5
Lake	25	22.0	24	14.3	49	17.6
Lawrence	10	34.8	9	21.2	19	26.8
Licking	14	21.6	16	18.4	30	19.7
Logan	5	23.7	6	18.8	11	21.0
Lorain	32	24.2	32	17.3	64	20.2
Lucas	49	26.6	49	17.3	99	20.9
Madison	4	24.9	3	12.4	7	17.6
Mahoning	36	26.8	42	19.5	78	22.5
Marion	8	29.1	8	18.7	16	22.6
Medina	13	19.9	12	13.6	25	16.5
Meigs	3	26.5	4	21.6	7	24.5
Mercer	6	28.2	5	18.8	11	22.6
Miami	10	22.0	10	15.0	20	17.9
Monroe	2	22.1	3	21.4	5	22.5
Montgomery	55	21.4	56	14.7	111	17.6
Morgan	2	23.9	<1	*	3	14.7
Morrow	4	27.0	4	23.5	8	25.1
Muskingum	11	29.1	13	22.4	25	24.7
Noble	2	27.4	2	17.7	3	22.9
Ottawa	9	35.8	5	17.0	14	25.7
Paulding	2	23.6	3	23.4	5	22.9
Perry	5	30.3	5	23.7	9	26.6
Pickaway	6	22.9	4	15.5	10	18.8
Pike	3	25.0	4	21.7	7	22.5
Portage	15	25.4	11	13.2	26	18.3
Preble	5	22.1	4	16.4	9	18.9
Putnam	4	22.6	4	17.4	8	19.1
Richland	17	27.3	17	19.7	35	23.0
Ross	9	28.1	8	17.5	17	21.7
Sandusky	8	26.3	7	16.1	15	20.0
Scioto	9	26.3	10	16.6	19	20.6
Seneca	7	26.6	6	14.3	13	19.1
Shelby	4	18.5	6	20.7	10	19.9
Stark	37	19.4	45	15.4	81	17.2
Summit	61	24.3	60	15.8	121	19.2
Trumbull	29	24.8	29	17.4	58	20.1
Tuscarawas	11	23.5	8	10.9	18	16.2
Union	5	31.6	4	17.7	8	22.8
Van Wert	3	22.0	3	14.8	7	18.5
Vinton	2	32.0	1	15.0	3	21.5
Warren	12	18.4	13	15.0	25	16.2
Washington	9	27.0	7	15.3	16	20.3
Wayne	11	23.4	13	18.9	24	20.5
Williams	3	14.7	5	17.5	8	16.7
Wood	11	22.8	13	19.4	24	20.3
Wyandot	3	29.1	3	17.4	7	22.7

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 11a

Corpus Uterus: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Cases	Rate
Ohio	**1,830**	**26.9**
SEER[3]		**23.3**
Adams	3	20.2
Allen	17	26.4
Ashland	8	25.9
Ashtabula	18	28.8
Athens	7	25.9
Auglaize	10	35.8
Belmont	15	32.0
Brown	6	24.1
Butler	46	25.2
Carroll	5	30.9
Champaign	5	21.5
Clark	24	26.4
Clermont	22	21.8
Clinton	7	29.6
Columbiana	18	25.4
Coshocton	7	30.7
Crawford	7	24.3
Cuyahoga	263	30.1
Darke	7	21.4
Defiance	6	24.7
Delaware	17	26.5
Erie	14	28.1
Fairfield	20	27.3
Fayette	5	25.2
Franklin	148	26.9
Fulton	9	36.6
Gallia	6	34.3
Geauga	18	29.7
Greene	21	23.4
Guernsey	8	32.6
Hamilton	120	23.6
Hancock	11	25.2
Hardin	6	31.3
Harrison	4	32.8
Henry	5	29.7
Highland	5	20.8
Hocking	5	31.9
Holmes	6	34.0
Huron	9	27.1
Jackson	6	29.0
Jefferson	13	24.6
Knox	9	26.6
Lake	44	29.0

	Cases	Rate
Lawrence	11	28.7
Licking	27	30.4
Logan	9	32.7
Lorain	47	27.1
Lucas	65	25.0
Madison	6	30.7
Mahoning	43	25.8
Marion	10	27.4
Medina	29	32.4
Meigs	3	21.8
Mercer	7	30.5
Miami	14	22.7
Monroe	2	14.6
Montgomery	79	23.1
Morgan	3	33.3
Morrow	5	28.4
Muskingum	17	32.8
Noble	3	41.8
Ottawa	10	35.9
Paulding	3	23.4
Perry	4	21.1
Pickaway	8	30.3
Pike	4	28.0
Portage	23	27.2
Preble	4	15.8
Putnam	4	19.6
Richland	23	28.4
Ross	16	38.5
Sandusky	15	38.9
Scioto	14	28.6
Seneca	9	27.0
Shelby	8	31.6
Stark	61	24.9
Summit	80	23.8
Trumbull	38	25.9
Tuscarawas	16	26.9
Union	7	28.1
Van Wert	5	27.4
Vinton	2	23.7
Warren	26	27.5
Washington	13	31.6
Wayne	20	30.9
Williams	9	38.4
Wood	14	21.9
Wyandot	5	34.1

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
Note: Low county numbers and rates may reflect underreporting for that county.

Table 11b

Corpus Uterus: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Deaths	Rate
Ohio	**323**	**4.5**
US[3]		**4.1**
Adams	<1	*
Allen	3	3.7
Ashland	2	5.3
Ashtabula	3	5.2
Athens	1	4.0
Auglaize	1	3.8
Belmont	2	4.1
Brown	1	5.9
Butler	9	4.8
Carroll	<1	*
Champaign	1	5.0
Clark	4	4.1
Clermont	3	3.0
Clinton	1	6.4
Columbiana	5	6.8
Coshocton	<1	*
Crawford	1	2.8
Cuyahoga	57	5.9
Darke	1	2.4
Defiance	1	5.0
Delaware	3	4.3
Erie	3	4.7
Fairfield	3	3.7
Fayette	1	5.0
Franklin	25	4.7
Fulton	1	4.7
Gallia	<1	*
Geauga	2	3.7
Greene	3	3.7
Guernsey	1	4.7
Hamilton	22	4.1
Hancock	3	7.0
Hardin	<1	*
Harrison	<1	*
Henry	<1	*
Highland	1	4.1
Hocking	<1	*
Holmes	2	11.5
Huron	2	6.2
Jackson	<1	*
Jefferson	3	4.6
Knox	2	5.1
Lake	7	4.4

	Deaths	Rate
Lawrence	2	3.8
Licking	4	5.1
Logan	1	4.6
Lorain	8	4.4
Lucas	15	5.3
Madison	<1	*
Mahoning	7	3.5
Marion	<1	*
Medina	5	5.6
Meigs	<1	*
Mercer	<1	*
Miami	2	3.5
Monroe	<1	*
Montgomery	18	5.0
Morgan	<1	*
Morrow	<1	*
Muskingum	2	3.9
Noble	<1	*
Ottawa	2	5.9
Paulding	<1	*
Perry	<1	*
Pickaway	<1	*
Pike	<1	*
Portage	4	4.4
Preble	<1	*
Putnam	<1	*
Richland	6	6.4
Ross	2	4.5
Sandusky	3	6.9
Scioto	1	2.6
Seneca	<1	*
Shelby	1	3.8
Stark	11	4.3
Summit	15	4.2
Trumbull	6	3.9
Tuscarawas	2	3.8
Union	<1	*
Van Wert	<1	*
Vinton	0	*
Warren	2	1.8
Washington	3	6.3
Wayne	2	3.3
Williams	1	5.4
Wood	2	3.6
Wyandot	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 12a

Esophagus: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**547**	**10.1**	**149**	**2.1**	**696**	**5.6**
SEER[3]		**7.8**		**1.9**		**4.5**
Adams	1	11.1	<1	*	2	5.3
Allen	6	10.3	2	2.3	7	6.0
Ashland	2	7.1	<1	*	3	4.2
Ashtabula	6	10.6	2	3.1	8	6.6
Athens	2	7.4	<1	*	2	4.1
Auglaize	3	11.0	<1	*	3	6.0
Belmont	5	13.6	1	1.8	6	6.8
Brown	2	9.0	<1	*	2	4.8
Butler	10	7.6	5	2.5	15	4.7
Carroll	1	7.9	<1	*	1	4.2
Champaign	2	11.6	<1	*	3	6.0
Clark	7	10.2	1	1.2	9	5.1
Clermont	5	6.1	2	2.1	7	3.9
Clinton	1	7.7	<1	*	2	5.3
Columbiana	6	10.1	2	3.4	9	6.6
Coshocton	2	9.0	1	5.8	3	7.2
Crawford	3	11.2	<1	*	3	5.8
Cuyahoga	64	9.6	26	2.8	90	5.7
Darke	3	12.1	<1	*	4	5.8
Defiance	2	10.6	<1	*	3	5.8
Delaware	5	10.7	<1	*	6	5.4
Erie	4	9.0	1	1.6	5	5.2
Fairfield	6	9.1	1	1.4	7	5.0
Fayette	1	8.3	<1	*	2	4.8
Franklin	42	10.5	12	2.2	54	5.8
Fulton	2	11.5	<1	*	2	5.3
Gallia	2	11.0	0	*	2	4.9
Geauga	4	8.6	2	3.2	6	5.3
Greene	6	8.4	2	1.9	7	4.7
Guernsey	3	12.2	0	*	3	5.5
Hamilton	32	8.4	13	2.4	45	4.9
Hancock	5	14.1	1	2.0	6	7.2
Hardin	2	16.0	0	*	2	6.9
Harrison	<1	*	<1	*	1	4.6
Henry	<1	*	<1	*	1	3.0
Highland	2	11.6	<1	*	3	6.1
Hocking	3	16.2	<1	*	3	9.9
Holmes	1	6.1	0	*	1	2.9
Huron	3	9.4	1	2.7	4	5.7
Jackson	1	7.3	<1	*	2	4.4
Jefferson	4	9.5	1	2.2	5	5.4
Knox	4	15.4	1	2.8	5	8.3
Lake	11	8.7	3	1.9	14	4.9
Lawrence	4	12.6	1	2.9	5	7.2
Licking	10	14.8	3	2.9	13	8.0
Logan	4	15.0	<1	*	4	7.5
Lorain	16	11.4	4	2.4	20	6.4
Lucas	21	10.6	7	2.5	28	6.0
Madison	4	18.4	0	*	4	8.6
Mahoning	14	10.2	3	1.6	17	5.3
Marion	4	11.1	<1	*	4	5.9
Medina	9	12.1	1	1.4	10	6.2
Meigs	3	22.4	<1	*	3	10.2
Mercer	2	10.4	1	4.2	3	7.2
Miami	7	13.4	2	3.1	9	7.7
Monroe	<1	*	<1	*	1	5.9
Montgomery	25	9.3	6	1.8	31	5.0
Morgan	<1	*	<1	*	<1	*
Morrow	2	12.7	<1	*	2	6.9
Muskingum	4	10.5	1	1.8	5	5.5
Noble	<1	*	0	*	<1	*
Ottawa	3	11.3	<1	*	3	5.7
Paulding	1	12.0	<1	*	1	6.4
Perry	3	20.4	<1	*	4	10.6
Pickaway	2	6.9	<1	*	2	3.7
Pike	2	12.1	<1	*	2	5.8
Portage	7	9.7	<1	*	8	5.0
Preble	2	10.9	<1	*	3	6.6
Putnam	2	13.9	<1	*	2	6.1
Richland	9	12.5	1	1.6	10	6.6
Ross	5	15.1	<1	*	6	7.3
Sandusky	4	14.0	2	3.7	6	8.1
Scioto	5	14.6	<1	*	6	6.3
Seneca	2	9.5	1	2.7	3	5.4
Shelby	3	11.0	<1	*	3	6.3
Stark	18	9.3	4	1.7	23	4.9
Summit	25	9.5	8	2.3	33	5.4
Trumbull	12	9.8	2	1.3	14	5.0
Tuscarawas	5	11.4	<1	*	6	5.6
Union	1	4.9	0	*	1	2.3
Van Wert	2	12.1	<1	*	2	6.3
Vinton	<1	*	<1	*	<1	*
Warren	7	10.4	1	1.5	8	5.2
Washington	5	15.5	<1	*	6	7.8
Wayne	4	8.2	1	1.5	5	4.5
Williams	2	12.2	<1	*	3	6.9
Wood	3	6.3	1	1.8	5	3.9
Wyandot	1	8.2	0	*	1	3.7

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 12b

Esophagus: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**511**	**9.5**	**137**	**1.9**	**648**	**5.2**
US[3]		**7.8**		**1.7**		**4.4**
Adams	1	12.1	0	*	1	4.7
Allen	4	8.3	<1	*	5	4.5
Ashland	3	10.0	<1	*	3	5.4
Ashtabula	5	10.0	1	2.2	7	5.8
Athens	2	9.2	<1	*	3	5.3
Auglaize	2	10.2	<1	*	3	5.8
Belmont	6	16.3	<1	*	7	7.4
Brown	1	4.4	0	*	1	2.1
Butler	10	7.9	3	1.8	14	4.3
Carroll	<1	*	0	*	<1	*
Champaign	4	19.0	<1	*	4	9.7
Clark	8	11.1	2	1.7	10	5.9
Clermont	6	8.4	2	2.1	8	5.0
Clinton	1	4.9	<1	*	1	3.3
Columbiana	5	8.9	2	2.6	7	5.5
Coshocton	1	7.1	<1	*	2	4.1
Crawford	3	13.0	<1	*	4	7.2
Cuyahoga	59	8.8	21	2.2	80	5.0
Darke	4	14.7	<1	*	5	6.7
Defiance	1	6.2	<1	*	2	3.9
Delaware	4	8.5	1	2.0	5	4.9
Erie	3	7.0	1	2.2	5	4.6
Fairfield	4	6.4	<1	*	5	3.6
Fayette	2	11.3	<1	*	2	6.0
Franklin	36	9.2	13	2.4	48	5.2
Fulton	2	11.1	<1	*	3	5.8
Gallia	1	9.3	<1	*	2	5.1
Geauga	4	8.3	1	2.2	5	4.6
Greene	5	7.3	1	1.7	6	4.0
Guernsey	3	14.7	<1	*	3	6.6
Hamilton	31	8.2	12	2.1	43	4.6
Hancock	5	14.9	<1	*	6	7.2
Hardin	2	16.2	0	*	2	6.7
Harrison	<1	*	<1	*	<1	*
Henry	<1	*	0	*	<1	*
Highland	3	13.6	<1	*	3	6.6
Hocking	2	9.8	<1	*	2	5.4
Holmes	<1	*	<1	*	1	2.8
Huron	3	11.8	1	3.2	4	6.9
Jackson	1	7.0	<1	*	2	4.3
Jefferson	4	10.2	<1	*	5	5.2
Knox	4	13.2	<1	*	4	7.1
Lake	14	11.0	3	2.1	17	6.1
Lawrence	4	13.1	<1	*	5	6.6
Licking	8	12.3	2	2.4	10	6.6
Logan	2	10.5	<1	*	3	6.1
Lorain	14	10.1	5	2.7	19	6.0
Lucas	23	11.8	7	2.3	30	6.4
Madison	4	19.8	<1	*	4	10.1
Mahoning	14	10.1	3	1.5	17	5.2
Marion	4	14.0	<1	*	5	6.7
Medina	9	11.9	1	1.1	10	6.1
Meigs	3	23.6	0	*	3	9.8
Mercer	2	10.7	1	4.3	3	7.3
Miami	6	12.1	1	1.7	7	6.1
Monroe	<1	*	0	*	<1	*
Montgomery	24	9.2	6	1.7	30	4.9
Morgan	<1	*	<1	*	1	5.4
Morrow	3	16.3	<1	*	3	8.9
Muskingum	3	7.1	1	2.2	4	4.4
Noble	<1	*	0	*	<1	*
Ottawa	3	11.5	0	*	3	5.3
Paulding	1	11.9	<1	*	2	7.1
Perry	3	16.9	<1	*	4	10.2
Pickaway	2	6.0	<1	*	2	3.1
Pike	2	12.7	<1	*	2	7.2
Portage	5	7.3	1	1.2	6	4.1
Preble	2	11.7	<1	*	3	6.4
Putnam	2	13.8	<1	*	2	6.1
Richland	7	10.3	2	2.0	8	5.6
Ross	5	15.3	<1	*	6	7.5
Sandusky	2	7.8	1	3.7	4	5.5
Scioto	4	11.9	<1	*	5	5.3
Seneca	2	6.2	<1	*	2	3.5
Shelby	1	6.1	<1	*	2	4.0
Stark	15	7.6	4	1.4	18	4.0
Summit	25	9.3	7	2.0	32	5.1
Trumbull	12	9.9	2	1.4	14	5.1
Tuscarawas	4	9.1	1	2.2	6	5.0
Union	1	7.3	0	*	1	3.2
Van Wert	2	10.8	<1	*	2	5.1
Vinton	1	14.8	1	13.2	2	14.0
Warren	5	7.7	<1	*	6	3.9
Washington	4	12.1	<1	*	5	6.0
Wayne	4	6.7	<1	*	4	3.5
Williams	2	10.9	<1	*	3	6.8
Wood	3	6.7	1	1.7	5	3.9
Wyandot	1	8.2	0	*	1	3.7

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 13a

Hodgkin's Lymphoma: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**186**	**3.4**	**163**	**2.7**	**348**	**3.0**
SEER[3]		**3.2**		**2.5**		**2.8**
Adams	1	6.3	<1	*	2	5.3
Allen	2	4.4	1	2.2	3	3.3
Ashland	<1	*	<1	*	1	2.3
Ashtabula	2	3.7	2	3.0	3	3.4
Athens	1	5.9	<1	*	2	3.8
Auglaize	1	6.9	<1	*	2	4.4
Belmont	<1	*	1	4.4	2	3.2
Brown	<1	*	<1	*	<1	*
Butler	6	3.7	6	3.4	13	3.6
Carroll	<1	*	<1	*	1	3.8
Champaign	<1	*	1	5.9	1	3.6
Clark	1	1.6	2	2.2	3	1.9
Clermont	3	3.7	3	3.3	6	3.5
Clinton	1	5.7	<1	*	2	4.9
Columbiana	1	2.4	2	3.7	3	3.0
Coshocton	<1	*	<1	*	1	3.0
Crawford	<1	*	1	5.8	2	4.7
Cuyahoga	22	3.5	20	2.8	41	3.1
Darke	1	3.7	<1	*	2	3.0
Defiance	<1	*	<1	*	1	3.1
Delaware	2	3.3	1	1.2	3	2.2
Erie	1	4.4	2	5.0	3	4.6
Fairfield	2	2.7	2	2.9	4	2.9
Fayette	<1	*	<1	*	1	3.8
Franklin	14	2.8	16	2.8	30	2.7
Fulton	<1	*	<1	*	1	2.4
Gallia	<1	*	<1	*	<1	*
Geauga	<1	*	2	3.7	2	2.6
Greene	5	5.8	2	2.6	7	4.2
Guernsey	1	5.1	<1	*	2	3.9
Hamilton	16	3.9	10	2.2	26	3.0
Hancock	3	7.4	1	3.9	4	5.4
Hardin	1	7.0	<1	*	1	4.0
Harrison	0	*	<1	*	<1	*
Henry	<1	*	1	8.0	2	5.8
Highland	<1	*	<1	*	<1	*
Hocking	<1	*	<1	*	<1	*
Holmes	<1	*	<1	*	<1	*
Huron	<1	*	1	4.7	2	3.4
Jackson	0	*	0	*	0	*
Jefferson	1	4.3	<1	*	2	2.8
Knox	1	3.5	<1	*	2	3.1
Lake	4	4.0	4	3.1	8	3.6
Lawrence	1	3.3	1	3.5	2	3.4
Licking	2	3.0	2	2.7	4	2.8
Logan	<1	*	<1	*	1	2.5
Lorain	4	2.9	3	2.1	8	2.5
Lucas	9	4.2	7	3.2	16	3.7
Madison	1	4.2	<1	*	2	4.3
Mahoning	4	3.2	5	3.5	8	3.4
Marion	1	2.9	1	3.6	2	3.1
Medina	1	1.7	2	2.9	4	2.3
Meigs	<1	*	<1	*	<1	*
Mercer	<1	*	<1	*	1	3.0
Miami	2	3.9	<1	*	2	2.5
Monroe	<1	*	<1	*	<1	*
Montgomery	8	2.9	8	2.7	15	2.8
Morgan	0	*	0	*	0	*
Morrow	<1	*	<1	*	<1	*
Muskingum	<1	*	1	3.0	2	2.4
Noble	<1	*	0	*	<1	*
Ottawa	<1	*	<1	*	<1	*
Paulding	0	*	0	*	0	*
Perry	1	6.1	<1	*	2	5.3
Pickaway	1	3.2	<1	*	2	2.9
Pike	0	*	<1	*	<1	*
Portage	3	3.3	2	2.1	5	2.7
Preble	<1	*	<1	*	<1	*
Putnam	<1	*	<1	*	<1	*
Richland	2	2.4	2	2.5	3	2.4
Ross	1	2.4	1	3.1	2	2.8
Sandusky	<1	*	<1	*	1	1.7
Scioto	2	4.1	<1	*	2	2.3
Seneca	1	3.2	1	4.2	2	3.8
Shelby	<1	*	<1	*	<1	*
Stark	9	4.8	6	3.2	15	4.0
Summit	9	3.4	6	2.2	15	2.8
Trumbull	4	3.7	4	3.6	8	3.6
Tuscarawas	2	4.5	2	4.5	4	4.5
Union	1	4.3	1	5.2	2	4.9
Van Wert	<1	*	<1	*	1	4.5
Vinton	0	*	<1	*	<1	*
Warren	4	4.1	2	2.3	6	3.2
Washington	<1	*	<1	*	1	1.5
Wayne	3	4.9	<1	*	3	3.1
Williams	<1	*	<1	*	<1	*
Wood	1	1.9	1	1.7	2	1.7
Wyandot	<1	*	<1	*	1	4.5

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 13b

Hodgkin's Lymphoma: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**33**	**0.6**	**27**	**0.4**	**60**	**0.5**
US[3]		**0.5**		**0.3**		**0.4**
Adams	<1	*	<1	*	<1	*
Allen	<1	*	<1	*	<1	*
Ashland	<1	*	<1	*	<1	*
Ashtabula	<1	*	<1	*	1	0.9
Athens	<1	*	0	*	<1	*
Auglaize	<1	*	<1	*	<1	*
Belmont	<1	*	<1	*	<1	*
Brown	0	*	0	*	0	*
Butler	1	0.7	1	0.6	2	0.6
Carroll	<1	*	0	*	<1	*
Champaign	0	*	<1	*	<1	*
Clark	<1	*	<1	*	<1	*
Clermont	<1	*	<1	*	1	0.7
Clinton	0	*	0	*	0	*
Columbiana	<1	*	0	*	<1	*
Coshocton	<1	*	0	*	<1	*
Crawford	<1	*	0	*	<1	*
Cuyahoga	6	1.0	4	0.4	10	0.7
Darke	0	*	<1	*	<1	*
Defiance	<1	*	0	*	<1	*
Delaware	<1	*	<1	*	<1	*
Erie	0	*	<1	*	<1	*
Fairfield	<1	*	<1	*	<1	*
Fayette	<1	*	0	*	<1	*
Franklin	4	0.8	1	0.2	5	0.4
Fulton	0	*	0	*	0	*
Gallia	<1	*	0	*	<1	*
Geauga	<1	*	0	*	<1	*
Greene	<1	*	<1	*	1	0.7
Guernsey	0	*	<1	*	<1	*
Hamilton	2	0.6	2	0.4	5	0.5
Hancock	<1	*	0	*	<1	*
Hardin	<1	*	0	*	<1	*
Harrison	0	*	<1	*	<1	*
Henry	0	*	0	*	0	*
Highland	0	*	0	*	0	*
Hocking	0	*	<1	*	<1	*
Holmes	0	*	0	*	0	*
Huron	0	*	<1	*	<1	*
Jackson	<1	*	0	*	<1	*
Jefferson	<1	*	<1	*	<1	*
Knox	0	*	<1	*	<1	*
Lake	<1	*	<1	*	1	0.4
Lawrence	<1	*	<1	*	<1	*
Licking	<1	*	<1	*	<1	*
Logan	<1	*	0	*	<1	*
Lorain	<1	*	<1	*	1	0.4
Lucas	1	0.7	1	0.4	3	0.6
Madison	<1	*	<1	*	<1	*
Mahoning	<1	*	<1	*	<1	*
Marion	0	*	0	*	0	*
Medina	<1	*	<1	*	<1	*
Meigs	0	*	0	*	0	*
Mercer	<1	*	<1	*	<1	*
Miami	0	*	<1	*	<1	*
Monroe	0	*	0	*	0	*
Montgomery	2	0.9	1	0.3	3	0.6
Morgan	0	*	0	*	0	*
Morrow	0	*	0	*	0	*
Muskingum	<1	*	<1	*	<1	*
Noble	0	*	0	*	0	*
Ottawa	0	*	0	*	0	*
Paulding	0	*	0	*	0	*
Perry	0	*	0	*	0	*
Pickaway	0	*	0	*	0	*
Pike	0	*	0	*	0	*
Portage	<1	*	0	*	<1	*
Preble	<1	*	<1	*	<1	*
Putnam	0	*	<1	*	<1	*
Richland	<1	*	0	*	<1	*
Ross	<1	*	<1	*	<1	*
Sandusky	<1	*	0	*	<1	*
Scioto	<1	*	<1	*	<1	*
Seneca	<1	*	<1	*	<1	*
Shelby	0	*	0	*	0	*
Stark	<1	*	1	0.6	2	0.4
Summit	1	0.4	2	0.5	3	0.4
Trumbull	<1	*	<1	*	<1	*
Tuscarawas	<1	*	<1	*	<1	*
Union	0	*	<1	*	<1	*
Van Wert	<1	*	0	*	<1	*
Vinton	0	*	<1	*	<1	*
Warren	<1	*	<1	*	1	0.6
Washington	<1	*	0	*	<1	*
Wayne	<1	*	0	*	<1	*
Williams	0	*	0	*	0	*
Wood	<1	*	<1	*	<1	*
Wyandot	0	*	<1	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 14a

Kidney and Renal Pelvis: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**1,085**	**19.5**	**764**	**11.3**	**1,849**	**15.0**
SEER[3]		**19.2**		**9.9**		**14.1**
Adams	3	23.2	2	10.1	5	16.5
Allen	9	18.0	9	14.3	18	15.8
Ashland	5	17.9	3	9.2	8	13.2
Ashtabula	9	16.7	9	14.1	18	15.4
Athens	4	19.4	4	12.6	8	15.4
Auglaize	4	18.5	3	10.1	7	13.9
Belmont	8	20.2	4	7.6	12	13.3
Brown	6	26.1	4	15.2	10	20.9
Butler	30	20.5	24	13.0	53	16.1
Carroll	3	21.7	2	11.7	5	16.5
Champaign	4	19.2	4	16.9	8	18.3
Clark	14	19.1	10	11.3	24	15.0
Clermont	18	20.7	13	13.1	30	16.5
Clinton	5	24.2	3	11.2	7	16.7
Columbiana	11	18.8	9	11.6	20	15.1
Coshocton	3	19.2	2	9.0	5	13.6
Crawford	4	16.8	4	12.2	8	14.3
Cuyahoga	131	19.8	89	10.2	221	14.3
Darke	5	19.0	3	8.8	8	13.4
Defiance	3	15.8	2	8.8	5	12.1
Delaware	13	24.2	7	11.8	20	17.6
Erie	9	19.6	6	11.2	15	15.4
Fairfield	11	16.8	7	9.8	18	13.3
Fayette	3	17.5	1	6.3	4	11.7
Franklin	86	19.8	67	12.2	152	15.6
Fulton	4	18.7	3	11.3	7	15.0
Gallia	2	13.0	2	12.5	5	12.9
Geauga	9	17.8	6	10.0	15	13.8
Greene	14	19.9	10	10.9	23	14.6
Guernsey	3	14.9	3	11.3	6	13.0
Hamilton	71	18.0	61	11.8	132	14.5
Hancock	7	19.1	3	7.5	10	12.5
Hardin	2	15.6	2	10.9	4	13.5
Harrison	1	14.6	<1	*	2	8.6
Henry	2	14.8	2	11.6	4	13.3
Highland	5	26.5	2	9.6	8	17.3
Hocking	2	9.0	2	11.3	4	10.2
Holmes	3	21.0	1	5.6	4	12.9
Huron	4	14.2	3	9.9	8	12.1
Jackson	3	19.4	3	13.6	6	16.4
Jefferson	8	19.5	5	9.8	13	14.2
Knox	5	16.9	4	10.8	8	13.4
Lake	26	20.7	16	10.6	42	15.2
Lawrence	7	21.1	6	14.7	12	17.6
Licking	16	21.2	10	11.5	26	16.0
Logan	5	20.8	3	12.0	8	15.9
Lorain	27	18.8	16	9.2	43	13.5
Lucas	42	20.7	28	11.2	70	15.2
Madison	4	22.9	1	5.6	6	13.5
Mahoning	25	18.2	15	8.4	40	12.6
Marion	5	15.4	6	16.3	11	15.6
Medina	18	21.0	8	9.0	25	14.7
Meigs	2	17.2	2	11.5	4	13.5
Mercer	3	13.9	3	11.1	6	12.3
Miami	9	18.1	8	13.4	18	15.5
Monroe	2	18.8	1	14.7	3	16.7
Montgomery	57	21.0	38	11.3	95	15.6
Morgan	1	15.2	2	19.3	3	16.9
Morrow	3	20.5	2	12.8	6	16.6
Muskingum	9	22.0	6	10.7	15	16.0
Noble	2	28.1	<1	*	3	17.6
Ottawa	6	22.3	3	11.5	9	16.2
Paulding	2	17.9	2	21.3	4	18.6
Perry	3	18.8	2	9.8	5	14.0
Pickaway	6	23.9	3	9.7	9	16.2
Pike	3	19.6	2	14.6	5	17.4
Portage	16	21.8	8	9.1	24	15.0
Preble	6	24.8	3	12.6	9	18.3
Putnam	4	21.2	1	7.1	5	13.6
Richland	9	13.1	8	10.4	17	11.6
Ross	9	24.6	6	14.5	15	18.6
Sandusky	5	16.0	5	12.0	10	14.0
Scioto	8	21.0	7	15.0	15	17.3
Seneca	4	13.1	4	10.7	8	12.0
Shelby	5	23.9	3	13.3	8	17.6
Stark	43	21.4	30	12.8	73	16.6
Summit	56	20.7	38	11.5	94	15.4
Trumbull	22	17.7	18	12.1	39	14.5
Tuscarawas	10	20.5	8	13.1	18	16.6
Union	3	16.8	3	12.6	6	14.5
Van Wert	2	14.8	1	6.8	4	10.6
Vinton	<1	*	1	16.3	2	13.7
Warren	14	16.2	13	14.5	26	15.6
Washington	8	21.8	6	15.9	14	18.5
Wayne	10	18.0	5	8.2	15	12.6
Williams	4	20.3	4	17.8	8	18.8
Wood	12	21.6	6	8.5	17	14.5
Wyandot	4	36.6	2	10.9	6	22.5

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 14b

Kidney and Renal Pelvis: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**341**	**6.5**	**224**	**3.1**	**566**	**4.5**
US[3]		**5.9**		**2.7**		**4.1**
Adams	1	8.7	<1	*	2	5.8
Allen	3	6.9	4	6.0	7	6.2
Ashland	1	4.2	<1	*	2	3.3
Ashtabula	3	5.7	3	4.6	6	5.2
Athens	2	7.2	1	4.0	3	5.5
Auglaize	1	5.2	<1	*	2	3.9
Belmont	3	8.2	2	2.9	5	5.2
Brown	1	7.3	1	5.9	3	6.3
Butler	8	6.2	7	4.0	16	4.9
Carroll	<1	*	<1	*	1	2.9
Champaign	2	8.8	<1	*	2	5.0
Clark	5	6.3	3	3.3	8	4.6
Clermont	6	7.7	4	4.3	10	5.6
Clinton	1	8.3	<1	*	2	4.7
Columbiana	4	6.5	3	3.3	6	4.9
Coshocton	1	7.2	1	4.2	2	5.6
Crawford	2	9.0	2	6.8	4	7.3
Cuyahoga	43	6.6	26	2.6	69	4.2
Darke	3	11.6	2	5.1	5	7.7
Defiance	1	4.9	1	5.0	2	4.9
Delaware	5	10.2	3	5.2	8	7.3
Erie	2	4.6	1	1.8	3	3.0
Fairfield	3	6.3	2	3.0	6	4.5
Fayette	1	10.0	<1	*	2	5.6
Franklin	22	5.7	13	2.5	36	3.9
Fulton	2	9.0	<1	*	3	5.6
Gallia	2	11.8	<1	*	2	6.4
Geauga	2	4.7	1	2.8	3	3.5
Greene	5	7.4	3	3.0	7	4.6
Guernsey	2	10.6	<1	*	3	6.3
Hamilton	23	6.2	16	2.8	40	4.2
Hancock	2	4.9	1	3.5	3	3.8
Hardin	1	8.9	<1	*	1	4.4
Harrison	<1	*	<1	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	2	8.7	<1	*	2	4.4
Hocking	1	7.3	<1	*	2	6.1
Holmes	<1	*	<1	*	1	4.1
Huron	2	6.0	2.0	5.8	4	5.9
Jackson	1	6.8	<1	*	2	4.5
Jefferson	3	6.5	2	2.7	4	4.3
Knox	2	6.5	<1	*	2	3.7
Lake	11	9.5	6	4.0	17	6.2
Lawrence	2	5.9	2	4.9	4	5.3
Licking	4	6.5	3	3.4	7	4.7
Logan	1	5.8	<1	*	2	3.8
Lorain	8	5.9	6	3.4	15	4.6
Lucas	13	7.2	8	2.9	21	4.6
Madison	2	9.6	<1	*	2	5.4
Mahoning	8	5.6	5	2.7	13	3.9
Marion	1	5.2	2	5.2	3	4.7
Medina	4	6.2	2	2.1	6	3.7
Meigs	1	8.6	<1	*	1	5.0
Mercer	<1	*	1	4.4	2	3.7
Miami	2	4.6	2	2.4	4	3.4
Monroe	<1	*	<1	*	<1	*
Montgomery	16	6.2	11	3.1	27	4.4
Morgan	<1	*	<1	*	<1	*
Morrow	2	11.5	<1	*	2	6.4
Muskingum	3	8.2	2	2.8	5	5.3
Noble	1	18.2	<1	*	1	9.7
Ottawa	1	5.3	1	3.3	2	4.1
Paulding	1	11.4	<1	*	2	7.9
Perry	<1	*	1	4.9	2	5.2
Pickaway	2	9.9	<1	*	3	4.9
Pike	<1	*	<1	*	1	3.2
Portage	4	6.4	2	2.7	6	4.2
Preble	2	8.4	<1	*	2	4.8
Putnam	2	10.2	<1	*	2	5.5
Richland	3	4.8	3	3.9	6	4.2
Ross	4	12.5	2	3.6	6	7.3
Sandusky	1	3.3	2	3.9	3	3.7
Scioto	3	7.7	2	4.7	5	6.0
Seneca	1	4.7	<1	*	2	3.0
Shelby	1	4.6	1	4.7	2	4.5
Stark	13	6.6	9	3.2	21	4.6
Summit	17	6.9	12	3.4	29	4.8
Trumbull	7	6.0	5	3.1	12	4.3
Tuscarawas	2	5.1	2	2.7	4	3.9
Union	2	10.3	1	5.2	3	7.4
Van Wert	<1	*	<1	*	1	3.5
Vinton	<1	*	<1	*	<1	*
Warren	3	4.0	3	3.7	6	4.0
Washington	2	5.1	1	2.1	3	3.5
Wayne	3	5.8	1	1.8	4	3.4
Williams	2	7.5	1	3.8	3	5.8
Wood	3	6.0	3	4.2	6	4.9
Wyandot	<1	*	<1	*	1	3.3

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 15a

Larynx: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**430**	**7.6**	**127**	**1.9**	**557**	**4.4**
SEER[3]		**6.1**		**1.3**		**3.4**
Adams	2	11.4	<1	*	2	7.2
Allen	4	7.4	<1	*	4	3.7
Ashland	1	3.3	0	*	1	1.6
Ashtabula	3	5.1	1	1.4	4	3.1
Athens	2	9.8	<1	*	3	5.3
Auglaize	1	5.9	0	*	1	2.6
Belmont	2	4.1	1	2.5	3	3.2
Brown	2	9.3	<1	*	3	5.5
Butler	14	9.1	4	2.4	18	5.3
Carroll	<1	*	<1	*	1	3.3
Champaign	2	10.7	<1	*	3	6.9
Clark	7	9.6	4	3.9	11	6.4
Clermont	7	8.9	2	1.8	9	5.0
Clinton	2	13.6	<1	*	3	6.5
Columbiana	4	6.4	<1	*	5	3.6
Coshocton	<1	*	0	*	<1	*
Crawford	<1	*	1	3.7	2	3.5
Cuyahoga	55	8.2	15	1.8	70	4.6
Darke	2	8.3	<1	*	3	5.1
Defiance	1	6.9	0	*	1	3.0
Delaware	3	4.4	1	2.7	4	3.6
Erie	3	5.6	<1	*	3	3.4
Fairfield	4	5.6	1	1.4	5	3.3
Fayette	2	12.7	<1	*	3	7.8
Franklin	30	7.2	12	2.1	41	4.2
Fulton	1	5.2	<1	*	1	2.9
Gallia	2	10.0	<1	*	2	6.8
Geauga	3	4.6	<1	*	3	2.5
Greene	5	5.9	<1	*	5	2.9
Guernsey	2	10.0	<1	*	3	6.1
Hamilton	30	7.6	11	2.2	41	4.5
Hancock	2	4.2	0	*	2	2.0
Hardin	1	6.6	<1	*	2	4.6
Harrison	1	11.7	0	*	1	5.7
Henry	<1	*	<1	*	<1	*
Highland	2	8.6	<1	*	2	4.4
Hocking	1	6.8	0	*	1	3.3
Holmes	1	5.6	<1	*	1	3.3
Huron	2	7.4	<1	*	3	4.5
Jackson	3	16.2	<1	*	3	8.1
Jefferson	6	15.4	1	2.4	8	8.1
Knox	2	5.3	<1	*	2	3.8
Lake	10	8.1	2	1.1	11	4.1
Lawrence	3	7.7	1	2.4	4	4.9
Licking	6	8.2	2	1.9	8	4.6
Logan	2	8.7	<1	*	3	5.3
Lorain	11	7.2	4	2.2	14	4.4
Lucas	17	8.4	5	1.8	22	4.7
Madison	1	6.1	0	*	1	2.8
Mahoning	12	8.8	5	3.0	17	5.5
Marion	2	6.4	1	2.3	3	4.3
Medina	5	6.8	<1	*	6	3.6
Meigs	2	11.8	<1	*	2	7.7
Mercer	1	4.5	0	*	1	2.1
Miami	4	7.3	1	1.8	5	4.3
Monroe	<1	*	<1	*	<1	*
Montgomery	25	9.1	7	2.1	32	5.1
Morgan	<1	*	<1	*	1	5.8
Morrow	1	7.9	0	*	1	3.8
Muskingum	3	5.9	1	2.3	4	3.9
Noble	1	13.4	<1	*	1	8.1
Ottawa	1	4.0	<1	*	2	3.0
Paulding	<1	*	<1	*	1	4.6
Perry	3	22.1	1	5.4	4	12.3
Pickaway	3	11.5	<1	*	4	6.6
Pike	1	7.1	0	*	1	3.3
Portage	4	5.2	1	1.5	5	3.2
Preble	2	9.3	0	*	2	4.1
Putnam	1	8.2	<1	*	2	4.5
Richland	6	8.4	2	1.9	7	4.8
Ross	3	8.3	<1	*	3	4.2
Sandusky	2	7.6	1	3.1	4	5.0
Scioto	4	10.4	1	2.2	5	5.9
Seneca	1	4.6	<1	*	2	3.5
Shelby	2	7.6	<1	*	2	4.2
Stark	14	7.1	4	1.7	19	4.1
Summit	19	6.9	7	2.1	26	4.2
Trumbull	11	8.9	4	2.6	15	5.4
Tuscarawas	2	4.6	1	1.9	3	3.2
Union	1	5.1	<1	*	1	3.2
Van Wert	<1	*	0	*	<1	*
Vinton	2	22.6	<1	*	2	12.5
Warren	6	7.1	2	1.9	8	4.3
Washington	4	11.5	1	2.6	5	6.8
Wayne	4	6.7	1	1.5	5	4.0
Williams	3	12.3	<1	*	3	6.7
Wood	4	6.5	<1	*	4	3.2
Wyandot	1	8.8	<1	*	1	4.3

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 15b

Larynx: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**141**	**2.6**	**38**	**0.5**	**179**	**1.4**
US[3]		**2.2**		**0.5**		**1.2**
Adams	<1	*	0	*	<1	*
Allen	1	2.6	<1	*	2	1.4
Ashland	<1	*	0	*	<1	*
Ashtabula	1	1.9	<1	*	1	1.1
Athens	1	6.5	<1	*	2	3.2
Auglaize	<1	*	0	*	<1	*
Belmont	<1	*	<1	*	<1	*
Brown	<1	*	<1	*	1	2.3
Butler	4	3.0	1	0.6	5	1.6
Carroll	<1	*	<1	*	1	2.8
Champaign	<1	*	<1	*	<1	*
Clark	3	3.6	2	1.8	5	2.6
Clermont	1	1.3	1	1.0	2	1.2
Clinton	<1	*	<1	*	<1	*
Columbiana	2	2.5	<1	*	2	1.3
Coshocton	<1	*	0	*	<1	*
Crawford	<1	*	0	*	<1	*
Cuyahoga	21	3.1	5	0.5	25	1.6
Darke	1	3.2	0	*	1	1.5
Defiance	0	*	0	*	0	*
Delaware	<1	*	<1	*	2	1.6
Erie	<1	*	0	*	<1	*
Fairfield	1	1.6	0	*	1	0.7
Fayette	<1	*	0	*	<1	*
Franklin	9	2.3	4	0.8	14	1.4
Fulton	<1	*	<1	*	1	2.1
Gallia	<1	*	0	*	<1	*
Geauga	<1	*	0	*	<1	*
Greene	2	2.4	<1	*	2	1.5
Guernsey	1	3.9	0	*	1	1.9
Hamilton	10	2.6	3	0.6	13	1.4
Hancock	1	3.4	0	*	1	1.6
Hardin	<1	*	0	*	<1	*
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	<1	*	0	*	<1	*
Hocking	1	6.9	0	*	1	3.5
Holmes	<1	*	0	*	<1	*
Huron	<1	*	0	*	<1	*
Jackson	1	6.1	0	*	1	2.7
Jefferson	2	4.3	<1	*	3	2.6
Knox	<1	*	0	*	<1	*
Lake	2	2.4	<1	*	3	1.1
Lawrence	<1	*	0	*	<1	*
Licking	1	2.0	0	*	1	0.8
Logan	1	4.1	<1	*	1	2.2
Lorain	4	3.2	<1	*	5	1.6
Lucas	8	3.7	2	0.9	10	2.1
Madison	<1	*	0	*	<1	*
Mahoning	3	2.0	1	0.6	4	1.2
Marion	<1	*	<1	*	<1	*
Medina	2	2.0	0	*	2	1.0
Meigs	<1	*	<1	*	<1	*
Mercer	<1	*	<1	*	<1	*
Miami	2	3.0	<1	*	2	1.6
Monroe	<1	*	0	*	<1	*
Montgomery	6	2.2	1	0.4	7	1.1
Morgan	<1	*	0	*	<1	*
Morrow	<1	*	<1	*	1	3.6
Muskingum	1	3.2	<1	*	2	2.1
Noble	<1	*	0	*	<1	*
Ottawa	0	*	<1	*	<1	*
Paulding	<1	*	<1	*	<1	*
Perry	<1	*	0	*	<1	*
Pickaway	<1	*	<1	*	<1	*
Pike	<1	*	0	*	<1	*
Portage	2	2.6	<1	*	2	1.4
Preble	0	*	0	*	0	*
Putnam	<1	*	<1	*	1	2.8
Richland	2	2.6	<1	*	2	1.5
Ross	1	2.2	<1	*	1	1.3
Sandusky	1	3.6	<1	*	2	2.2
Scioto	1	2.8	<1	*	1	1.4
Seneca	<1	*	0	*	<1	*
Shelby	<1	*	0	*	<1	*
Stark	4	2.0	2	0.6	6	1.2
Summit	7	2.6	2	0.6	10	1.5
Trumbull	3	2.8	1	0.7	4	1.6
Tuscarawas	1	1.9	0	*	1	0.9
Union	<1	*	<1	*	<1	*
Van Wert	<1	*	0	*	<1	*
Vinton	<1	*	0	*	<1	*
Warren	<1	*	<1	*	1	0.7
Washington	1	2.7	<1	*	1	1.5
Wayne	1	2.4	<1	*	2	1.5
Williams	<1	*	0	*	<1	*
Wood	1	2.3	<1	*	2	1.3
Wyandot	<1	*	0	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 16a

Leukemia: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**746**	**14.0**	**604**	**8.9**	**1,351**	**11.1**
SEER[3]		**15.8**		**9.6**		**12.3**
Adams	2	11.0	1	8.6	3	9.6
Allen	8	15.7	5	6.7	13	10.9
Ashland	5	20.8	4	13.5	10	16.5
Ashtabula	7	14.8	6	8.9	13	11.4
Athens	3	12.9	2	7.6	5	10.0
Auglaize	2	9.7	2	7.9	4	8.6
Belmont	5	13.1	4	6.6	9	10.0
Brown	2	9.8	1	5.1	3	7.3
Butler	17	11.1	16	8.9	33	10.1
Carroll	3	17.9	2	10.6	5	13.8
Champaign	2	12.0	2	8.0	4	9.5
Clark	6	8.5	7	7.2	13	7.7
Clermont	9	11.7	9	9.1	18	10.1
Clinton	3	18.1	2	6.8	5	11.8
Columbiana	7	11.9	7	10.6	14	11.0
Coshocton	2	10.1	3	14.5	5	12.4
Crawford	4	16.4	<1	*	5	8.5
Cuyahoga	102	15.8	83	9.3	186	12.0
Darke	5	17.3	3	9.3	8	12.6
Defiance	3	13.1	1	5.6	4	9.0
Delaware	8	13.9	7	10.1	14	11.5
Erie	5	10.1	4	7.7	9	8.8
Fairfield	9	14.7	8	11.0	16	12.5
Fayette	2	13.7	<1	*	3	8.3
Franklin	58	14.1	44	8.1	102	10.7
Fulton	3	16.0	2	8.1	5	11.6
Gallia	3	20.7	2	8.2	5	13.6
Geauga	7	13.3	5	9.3	12	11.4
Greene	10	15.3	7	7.7	17	10.6
Guernsey	5	22.7	2	6.3	6	13.9
Hamilton	43	11.3	37	7.3	80	8.8
Hancock	5	13.8	3	6.8	8	9.8
Hardin	2	15.0	2	15.7	4	14.8
Harrison	<1	*	2	16.8	2	12.1
Henry	2	14.8	4	20.6	6	17.6
Highland	3	16.8	2	6.0	5	11.6
Hocking	3	19.2	2	13.8	5	16.0
Holmes	2	13.3	2	9.8	4	11.5
Huron	4	12.8	2	5.9	6	8.9
Jackson	3	16.2	3	12.8	5	14.4
Jefferson	8	19.0	5	8.5	12	12.8
Knox	4	15.9	4	10.1	8	12.8
Lake	17	14.8	16	10.7	33	12.4
Lawrence	3	9.8	5	12.8	8	11.4
Licking	12	16.8	8	9.2	19	12.6
Logan	3	15.3	3	12.1	7	13.3
Lorain	18	12.7	17	10.2	35	11.3
Lucas	32	16.2	25	9.4	57	12.2
Madison	2	11.4	2	7.2	4	9.6
Mahoning	20	15.4	17	10.4	37	12.4
Marion	4	13.6	3	6.8	7	10.0
Medina	10	13.7	8	9.9	18	11.5
Meigs	2	19.7	<1	*	3	12.2
Mercer	3	14.8	2	8.2	5	11.3
Miami	6	12.6	3	4.9	9	8.2
Monroe	1	15.8	<1	*	2	12.9
Montgomery	40	15.3	30	8.7	70	11.6
Morgan	2	25.1	<1	*	2	13.8
Morrow	2	12.0	2	11.4	4	12.0
Muskingum	4	10.4	4	7.3	8	8.8
Noble	<1	*	<1	*	1	9.6
Ottawa	2	9.6	3	11.7	6	10.9
Paulding	1	9.1	<1	*	2	8.5
Perry	2	13.4	2	8.5	4	10.6
Pickaway	3	14.4	3	9.3	6	11.3
Pike	1	10.6	2	12.9	3	12.0
Portage	9	14.6	7	8.3	16	11.0
Preble	4	21.5	3	10.5	7	15.1
Putnam	3	19.4	2	12.4	6	15.1
Richland	9	14.2	7	8.8	16	11.2
Ross	6	17.3	3	7.9	9	12.0
Sandusky	4	13.8	2	5.5	6	9.2
Scioto	7	19.0	5	10.5	12	13.7
Seneca	4	15.2	4	12.0	8	13.5
Shelby	3	11.8	2	6.4	5	9.2
Stark	22	11.4	21	8.4	43	9.7
Summit	35	13.3	31	9.2	66	11.0
Trumbull	17	14.8	17	10.8	34	12.8
Tuscarawas	6	11.4	6	9.5	12	10.5
Union	3	16.3	2	7.7	5	11.8
Van Wert	2	15.1	2	10.6	4	12.3
Vinton	<1	*	<1	*	<1	*
Warren	9	11.6	8	9.0	17	10.2
Washington	7	20.2	4	9.1	11	14.2
Wayne	7	14.0	5	7.9	12	10.7
Williams	3	15.2	2	10.3	5	12.2
Wood	6	12.3	4	6.5	11	9.1
Wyandot	1	8.8	2	18.0	3	13.5

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 16b

Leukemia: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**522**	**10.2**	**430**	**5.9**	**952**	**7.7**
US[3]		**9.7**		**5.4**		**7.2**
Adams	<1	*	<1	*	1	4.8
Allen	5	10.6	5	6.6	10	8.3
Ashland	4	15.9	2	6.2	6	10.3
Ashtabula	5	9.5	5	7.8	10	8.4
Athens	2	10.0	1	4.0	3	6.5
Auglaize	2	8.5	2	7.3	4	7.7
Belmont	4	11.2	3	4.6	7	7.4
Brown	3	14.2	1	5.3	4	8.9
Butler	12	9.3	12	6.4	24	7.6
Carroll	2	11.5	1	5.1	3	7.9
Champaign	2	10.8	1	3.7	3	6.8
Clark	6	8.8	4	4.1	11	6.0
Clermont	6	8.8	7	7.3	13	7.7
Clinton	2	8.8	1	4.5	3	6.4
Columbiana	5	9.0	3	4.2	8	6.4
Coshocton	2	8.9	1	5.2	3	7.1
Crawford	3	13.4	2	5.9	5	9.1
Cuyahoga	68	10.5	59	6.1	127	7.8
Darke	3	11.6	2	5.5	5	8.1
Defiance	2	8.6	1	5.6	3	7.2
Delaware	3	4.8	4	6.8	6	6.0
Erie	5	10.9	4	6.5	9	8.2
Fairfield	6	11.9	4	5.4	10	8.0
Fayette	<1	*	1	4.8	2	5.4
Franklin	41	11.2	31	5.8	72	8.0
Fulton	2	8.3	1	4.9	3	6.6
Gallia	1	8.6	1	6.2	3	7.5
Geauga	4	7.7	5	8.6	9	8.2
Greene	6	10.0	4	4.9	10	6.8
Guernsey	3	13.6	1	5.1	4	8.8
Hamilton	33	9.2	25	4.4	58	6.2
Hancock	3	9.3	2	4.8	6	6.8
Hardin	1	7.7	1	9.0	2	7.8
Harrison	<1	*	2	13.7	2	10.1
Henry	1	8.9	2	11.0	4	10.3
Highland	1	7.4	<1	*	2	5.0
Hocking	1	12.2	1	5.9	2	8.3
Holmes	2	10.1	1	5.0	3	7.3
Huron	2	8.2	1	3.5	4	5.7
Jackson	2	12.8	2	10.5	4	11.0
Jefferson	4	9.7	4	6.0	8	7.6
Knox	3	13.2	2	6.2	6	8.8
Lake	9	8.1	11	6.9	20	7.4
Lawrence	3	7.9	3	7.9	6	8.0
Licking	8	12.8	4	4.8	12	8.2
Logan	3	14.0	2	5.0	5	9.0
Lorain	13	10.0	11	6.3	25	7.9
Lucas	18	9.8	16	5.7	34	7.2
Madison	2	10.0	3	15.2	5	13.3
Mahoning	12	9.1	13	7.1	25	7.9
Marion	4	14.7	2	5.0	6	8.8
Medina	7	10.0	5	6.2	12	7.6
Meigs	2	13.1	<1	*	2	8.7
Mercer	3	14.5	2	7.0	5	10.7
Miami	6	13.2	3	5.6	9	8.6
Monroe	2	17.8	<1	*	2	11.5
Montgomery	27	10.5	21	5.6	47	7.6
Morgan	<1	*	<1	*	<1	*
Morrow	3	15.6	1	5.7	4	10.4
Muskingum	4	9.4	3	5.3	7	7.0
Noble	<1	*	<1	*	<1	*
Ottawa	1	5.6	2	8.1	4	7.1
Paulding	<1	*	1	11.3	2	10.0
Perry	2	11.1	1	7.1	3	9.0
Pickaway	2	10.9	2	8.6	5	9.6
Pike	1	8.2	1	5.9	2	6.8
Portage	8	12.2	5	5.8	12	8.5
Preble	2	9.6	1	4.9	3	6.9
Putnam	3	19.3	1	6.0	5	12.4
Richland	6	9.7	6	6.7	12	8.0
Ross	4	11.6	2	5.6	6	7.9
Sandusky	4	13.1	3	6.6	6	9.1
Scioto	4	12.6	2	4.0	7	7.2
Seneca	3	10.5	3	8.1	5	9.0
Shelby	2	8.2	1	5.2	3	6.8
Stark	20	10.5	18	6.6	38	8.2
Summit	26	10.2	21	5.8	47	7.5
Trumbull	10	8.9	9	5.7	19	7.2
Tuscarawas	5	10.7	5	7.3	10	8.9
Union	2	13.7	2	7.5	4	10.2
Van Wert	1	10.1	2	9.1	4	9.4
Vinton	1	22.0	0	*	1	9.4
Warren	6	9.2	5	6.1	11	7.6
Washington	3	8.4	2	4.6	5	6.1
Wayne	7	14.8	5	6.8	12	10.0
Williams	3	15.9	1	4.6	4	9.4
Wood	5	10.5	4	5.7	9	7.5
Wyandot	1	10.8	1	8.5	3	9.0

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 17a

Liver and Intrahepatic Bile Duct: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**385**	**6.9**	**177**	**2.5**	**561**	**4.5**
SEER[3]		**10.7**		**3.7**		**6.9**
Adams	<1	*	<1	*	1	3.8
Allen	2	4.2	2	2.5	4	3.3
Ashland	2	5.9	1	3.5	3	4.6
Ashtabula	2	3.3	1	2.0	3	2.4
Athens	1	3.8	<1	*	2	3.0
Auglaize	1	6.0	<1	*	2	3.7
Belmont	2	5.3	1	2.7	3	3.8
Brown	2	9.8	<1	*	3	5.2
Butler	12	8.8	4	2.4	17	5.1
Carroll	<1	*	<1	*	<1	*
Champaign	1	4.9	<1	*	1	2.6
Clark	2	3.3	3	2.8	5	3.1
Clermont	6	6.8	2	2.1	8	4.3
Clinton	1	6.8	<1	*	2	3.9
Columbiana	5	8.6	1	1.6	6	4.7
Coshocton	<1	*	1	3.8	2	3.8
Crawford	2	10.2	1	2.9	3	5.9
Cuyahoga	59	8.7	24	2.6	83	5.3
Darke	1	4.2	<1	*	2	3.1
Defiance	<1	*	<1	*	1	2.5
Delaware	3	6.9	1	1.7	4	3.9
Erie	3	5.7	2	3.1	4	4.3
Fairfield	4	6.6	1	1.3	5	3.7
Fayette	1	8.7	<1	*	1	4.5
Franklin	38	8.9	15	2.8	53	5.5
Fulton	1	5.1	<1	*	2	4.2
Gallia	2	10.6	0	*	2	4.6
Geauga	1	2.3	1	1.5	2	2.0
Greene	4	7.1	2	2.6	7	4.4
Guernsey	1	5.6	<1	*	2	3.3
Hamilton	39	9.9	15	2.9	55	5.9
Hancock	2	5.4	<1	*	3	3.4
Hardin	1	7.3	1	7.7	2	7.3
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	1	4.3
Highland	2	8.1	<1	*	2	4.8
Hocking	1	9.5	<1	*	2	6.4
Holmes	<1	*	<1	*	<1	*
Huron	1	4.1	<1	*	2	2.9
Jackson	<1	*	<1	*	1	2.8
Jefferson	3	6.5	3	4.9	6	5.6
Knox	1	3.3	1	4.0	2	3.8
Lake	7	6.1	4	2.4	11	4.0
Lawrence	2	6.2	1	3.0	3	4.2
Licking	5	6.6	1	1.6	6	3.9
Logan	2	9.3	<1	*	3	5.5
Lorain	7	4.9	5	2.7	12	3.7
Lucas	15	7.1	7	2.6	22	4.6
Madison	1	7.2	<1	*	2	4.5
Mahoning	12	8.5	3	1.6	15	4.7
Marion	2	5.1	1	2.2	3	3.8
Medina	3	4.0	2	2.0	5	3.0
Meigs	1	11.8	<1	*	2	6.7
Mercer	1	5.6	<1	*	2	3.8
Miami	2	3.8	2	3.3	4	3.6
Monroe	<1	*	<1	*	<1	*
Montgomery	25	9.1	11	3.0	36	5.7
Morgan	<1	*	0	*	<1	*
Morrow	<1	*	<1	*	1	3.8
Muskingum	1	2.8	<1	*	2	1.7
Noble	<1	*	<1	*	<1	*
Ottawa	2	9.3	<1	*	3	5.1
Paulding	<1	*	<1	*	<1	*
Perry	1	8.9	<1	*	2	4.5
Pickaway	2	7.7	1	4.2	3	6.1
Pike	<1	*	<1	*	1	3.3
Portage	5	7.7	3	3.6	8	5.5
Preble	1	4.1	<1	*	1	2.4
Putnam	<1	*	<1	*	1	2.6
Richland	5	8.0	2	1.8	7	4.7
Ross	2	4.6	<1	*	3	3.5
Sandusky	1	3.6	<1	*	2	2.4
Scioto	3	8.3	3	5.0	6	6.6
Seneca	3	8.9	<1	*	3	4.3
Shelby	<1	*	<1	*	1	1.9
Stark	11	5.5	6	2.5	17	3.9
Summit	16	5.9	9	2.7	26	4.2
Trumbull	7	6.1	5	2.8	12	4.3
Tuscarawas	2	5.2	1	2.3	4	3.5
Union	<1	*	<1	*	1	3.3
Van Wert	<1	*	<1	*	1	2.6
Vinton	0	*	0	*	0	*
Warren	4	4.9	2	2.1	6	3.5
Washington	2	4.7	1	2.7	3	3.7
Wayne	2	4.4	2	2.2	4	3.4
Williams	1	6.7	<1	*	1	3.3
Wood	3	4.9	1	1.8	4	3.2
Wyandot	<1	*	<1	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 17b

Liver and Intrahepatic Bile Duct: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**355**	**6.6**	**204**	**2.8**	**559**	**4.5**
US[3]		**7.7**		**3.2**		**5.2**
Adams	<1	*	<1	*	2	5.3
Allen	2	3.8	2	3.1	4	3.4
Ashland	1	3.9	1	3.8	2	3.8
Ashtabula	3	6.0	3	3.6	6	4.5
Athens	<1	*	1	3.4	2	3.4
Auglaize	<1	*	<1	*	2	2.8
Belmont	1	3.2	2	3.3	3	3.3
Brown	2	6.9	<1	*	2	4.7
Butler	12	8.8	5	2.6	17	5.3
Carroll	<1	*	<1	*	1	3.5
Champaign	1	5.3	<1	*	1	3.2
Clark	2	3.4	4	3.6	6	3.6
Clermont	7	8.8	2	2.6	9	5.4
Clinton	1	7.3	<1	*	2	4.7
Columbiana	3	5.4	1	1.9	5	3.5
Coshocton	2	8.8	2	6.8	3	7.8
Crawford	2	9.4	1	4.1	4	6.4
Cuyahoga	55	8.2	33	3.3	88	5.5
Darke	<1	*	<1	*	1	2.0
Defiance	1	5.5	<1	*	2	3.4
Delaware	3	6.6	2	3.7	5	5.0
Erie	2	4.9	2	3.5	4	4.0
Fairfield	3	5.3	2	3.1	6	4.1
Fayette	<1	*	<1	*	<1	*
Franklin	32	8.0	16	2.9	48	5.1
Fulton	1	5.5	1	3.9	2	4.9
Gallia	1	7.0	<1	*	1	3.9
Geauga	2	4.9	1	2.1	4	3.4
Greene	4	6.8	2	2.2	6	4.2
Guernsey	1	6.0	<1	*	2	3.5
Hamilton	33	8.4	13	2.4	46	4.9
Hancock	3	9.5	<1	*	4	4.9
Hardin	<1	*	1	5.1	1	4.2
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	1	6.2	<1	*	2	3.8
Hocking	<1	*	<1	*	1	3.2
Holmes	<1	*	<1	*	<1	*
Huron	<1	*	<1	*	1	1.9
Jackson	1	8.1	<1	*	2	4.9
Jefferson	3	7.1	1	2.1	4	4.3
Knox	1	3.2	1	4.1	2	3.9
Lake	6	5.5	5	3.2	11	4.1
Lawrence	3	10.1	2	4.2	5	6.7
Licking	4	5.9	2	2.3	6	3.9
Logan	2	8.8	<1	*	3	5.5
Lorain	7	4.8	6	3.6	13	4.1
Lucas	15	7.5	6	2.1	21	4.4
Madison	<1	*	<1	*	1	2.5
Mahoning	11	8.0	5	2.4	16	4.9
Marion	2	4.8	2	4.7	4	5.0
Medina	4	4.9	2	2.4	6	3.5
Meigs	1	9.9	<1	*	2	5.7
Mercer	<1	*	<1	*	1	2.0
Miami	3	6.9	2	2.8	5	4.6
Monroe	<1	*	<1	*	<1	*
Montgomery	19	7.0	11	3.0	29	4.7
Morgan	<1	*	0	*	<1	*
Morrow	<1	*	<1	*	1	3.2
Muskingum	1	3.4	<1	*	2	2.1
Noble	<1	*	<1	*	1	8.5
Ottawa	2	6.8	<1	*	2	4.1
Paulding	<1	*	<1	*	<1	*
Perry	1	10.3	<1	*	2	5.3
Pickaway	2	7.8	2	5.7	4	7.3
Pike	1	8.0	<1	*	2	5.7
Portage	5	6.9	2	2.9	7	4.9
Preble	2	7.0	1	4.7	3	5.9
Putnam	<1	*	<1	*	2	3.9
Richland	4	5.7	2	2.2	6	3.8
Ross	2	6.4	1	2.6	4	4.6
Sandusky	<1	*	<1	*	1	1.5
Scioto	2	5.1	2	4.2	4	4.7
Seneca	2	8.6	<1	*	3	4.7
Shelby	<1	*	<1	*	1	2.1
Stark	11	5.4	7	2.5	18	3.8
Summit	16	5.9	9	2.6	25	4.1
Trumbull	9	7.7	4	2.3	13	4.6
Tuscarawas	2	4.9	2	3.1	4	3.7
Union	<1	*	<1	*	1	2.9
Van Wert	<1	*	1	4.1	1	3.7
Vinton	<1	*	<1	*	<1	*
Warren	4	5.3	2	2.3	6	3.6
Washington	2	4.6	1	2.8	3	3.6
Wayne	2	3.8	2	2.5	4	3.2
Williams	2	7.8	<1	*	2	4.8
Wood	3	5.4	2	2.5	4	3.6
Wyandot	<1	*	<1	*	1	3.5

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 18a

Lung and Bronchus: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**5,142**	**96.3**	**4,152**	**59.8**	**9,295**	**75.0**
SEER[3]		**76.2**		**52.4**		**62.5**
Adams	16	109.8	8	46.0	23	74.6
Allen	52	100.9	37	56.8	89	75.3
Ashland	23	86.1	13	39.7	36	60.3
Ashtabula	53	100.4	41	63.3	94	79.7
Athens	23	104.5	17	58.8	40	78.8
Auglaize	21	89.1	14	48.8	35	65.5
Belmont	40	104.5	28	54.6	68	74.9
Brown	25	118.7	16	66.3	41	89.9
Butler	142	102.2	116	64.5	258	79.9
Carroll	17	107.1	11	58.4	28	80.6
Champaign	19	97.3	14	61.2	33	76.6
Clark	79	109.4	60	62.2	139	81.8
Clermont	94	123.8	85	89.4	179	104.1
Clinton	19	101.1	17	70.8	36	83.6
Columbiana	63	108.1	39	54.3	103	77.1
Coshocton	20	108.1	14	58.1	34	79.1
Crawford	20	81.1	16	51.1	36	64.1
Cuyahoga	607	92.4	540	59.2	1,147	72.6
Darke	22	77.2	12	32.4	33	52.5
Defiance	20	100.6	13	56.4	33	75.9
Delaware	45	95.5	31	53.8	76	71.6
Erie	48	103.1	34	63.8	83	81.2
Fairfield	54	93.9	45	62.9	99	75.7
Fayette	16	105.6	8	42.4	23	70.3
Franklin	386	101.6	354	67.3	740	80.9
Fulton	14	71.5	11	43.7	25	55.7
Gallia	20	123.7	13	64.3	33	89.7
Geauga	32	63.4	27	47.0	59	54.3
Greene	59	83.1	47	53.0	106	66.7
Guernsey	22	104.9	15	55.8	37	76.9
Hamilton	344	90.9	337	64.0	680	74.8
Hancock	32	93.8	19	42.5	51	64.1
Hardin	17	121.1	10	53.9	27	83.6
Harrison	12	121.6	6	56.5	18	86.3
Henry	11	72.1	7	37.6	17	52.7
Highland	23	109.9	13	54.6	36	78.8
Hocking	18	114.1	12	71.8	29	90.7
Holmes	8	52.2	6	33.4	14	41.3
Huron	26	92.9	17	48.9	42	68.0
Jackson	18	114.8	13	65.0	31	86.3
Jefferson	46	108.2	36	64.1	82	82.3
Knox	25	90.5	18	51.7	43	67.6
Lake	113	94.7	94	60.9	207	74.8
Lawrence	39	119.3	30	73.4	68	93.2
Licking	59	84.3	60	68.1	119	74.8
Logan	24	100.8	16	56.9	40	76.9
Lorain	141	101.1	104	59.4	245	77.2
Lucas	187	96.6	176	66.4	363	78.3
Madison	20	112.9	14	65.6	34	85.0
Mahoning	129	93.8	102	55.8	230	71.1
Marion	40	120.4	31	76.4	70	95.9
Medina	58	79.7	45	52.0	102	64.4
Meigs	15	121.7	10	67.7	25	90.6
Mercer	18	84.7	12	46.9	29	62.9
Miami	35	70.5	31	49.9	66	58.1
Monroe	8	84.4	5	44.2	13	62.2
Montgomery	253	96.4	244	68.9	497	79.8
Morgan	12	133.2	4	37.9	16	81.7
Morrow	18	107.8	10	54.7	28	80.2
Muskingum	47	113.0	36	66.4	84	86.3
Noble	6	93.9	5	61.7	11	75.7
Ottawa	25	100.8	16	56.3	41	75.2
Paulding	10	98.4	5	42.7	15	67.1
Perry	20	121.6	11	59.0	31	86.7
Pickaway	30	122.0	18	62.4	48	88.6
Pike	15	115.1	13	75.6	28	93.1
Portage	62	92.0	52	63.9	114	75.6
Preble	21	96.9	14	55.1	35	72.8
Putnam	12	75.3	8	37.1	20	53.5
Richland	63	95.1	43	51.2	106	70.3
Ross	47	133.0	25	59.2	72	91.0
Sandusky	31	102.0	22	57.0	53	74.6
Scioto	52	136.6	40	79.7	92	103.1
Seneca	29	100.7	19	53.5	48	73.6
Shelby	20	91.8	11	40.5	31	63.7
Stark	172	88.0	131	50.7	303	66.3
Summit	252	96.1	199	57.1	451	73.3
Trumbull	117	97.6	95	60.8	212	76.0
Tuscarawas	38	78.3	25	41.9	64	58.0
Union	16	98.6	14	69.6	30	82.2
Van Wert	12	77.7	11	56.5	23	65.7
Vinton	9	148.1	6	85.5	16	112.1
Warren	59	85.0	52	59.5	111	70.2
Washington	40	112.3	26	61.6	66	83.6
Wayne	48	87.6	29	45.4	77	64.3
Williams	20	100.0	13	54.6	33	73.9
Wood	41	79.3	32	49.5	72	62.0
Wyandot	10	81.3	10	61.1	20	71.4

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
Note: Low county numbers and rates may reflect underreporting for that county.

Table 18b

Lung and Bronchus: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**4,224**	**80.2**	**3,187**	**45.2**	**7,411**	**59.7**
US[3]		**68.8**		**40.6**		**52.5**
Adams	15	109.0	6	36.7	22	69.4
Allen	40	78.6	28	41.8	68	56.5
Ashland	20	78.3	12	34.6	32	53.5
Ashtabula	45	85.8	29	43.5	74	62.3
Athens	19	87.6	13	45.2	32	63.0
Auglaize	17	74.7	10	30.6	27	48.1
Belmont	32	83.0	24	44.7	56	60.7
Brown	21	103.4	14	58.6	35	78.0
Butler	122	89.2	91	50.7	213	66.6
Carroll	14	88.1	7	37.7	21	60.7
Champaign	13	70.0	12	49.1	25	57.4
Clark	64	89.5	56	57.3	120	70.6
Clermont	73	98.9	58	61.3	131	77.3
Clinton	16	89.3	13	53.8	29	68.8
Columbiana	52	89.9	32	42.7	84	62.7
Coshocton	16	84.9	12	51.4	28	65.4
Crawford	20	81.1	12	36.4	31	55.4
Cuyahoga	497	75.8	404	43.3	901	56.3
Darke	18	64.3	7	20.2	25	39.8
Defiance	14	73.4	11	46.3	25	57.8
Delaware	32	72.4	23	40.0	55	53.4
Erie	33	71.4	26	46.3	59	57.0
Fairfield	42	76.2	32	45.1	75	58.0
Fayette	15	105.0	6	31.8	21	63.2
Franklin	321	86.8	276	52.6	597	65.9
Fulton	11	57.5	8	30.8	19	42.3
Gallia	15	91.9	9	46.1	24	66.5
Geauga	26	53.5	20	35.2	46	43.1
Greene	49	71.0	34	38.5	83	52.5
Guernsey	17	81.4	13	47.5	30	61.8
Hamilton	276	74.2	264	49.4	540	59.0
Hancock	26	76.5	14	29.8	40	49.7
Hardin	13	91.8	9	45.3	21	65.6
Harrison	10	97.7	6	51.2	15	72.1
Henry	8	57.5	7	39.5	16	47.5
Highland	21	106.2	9	34.7	30	65.1
Hocking	15	97.1	8	47.6	22	70.1
Holmes	6	37.0	5	28.7	11	32.3
Huron	20	75.5	14	40.9	34	55.4
Jackson	17	110.8	10	50.4	28	76.6
Jefferson	43	101.1	25	42.6	68	67.3
Knox	19	72.4	14	39.7	34	53.3
Lake	95	80.1	72	46.0	167	60.3
Lawrence	32	99.7	24	58.1	56	76.0
Licking	50	71.8	39	44.6	89	56.2
Logan	21	92.7	15	49.8	36	68.6
Lorain	114	83.2	83	47.0	197	62.4
Lucas	161	83.5	136	50.3	297	63.7
Madison	15	87.7	11	48.2	26	64.2
Mahoning	103	75.5	74	38.7	177	53.6
Marion	32	99.2	23	56.2	55	75.2
Medina	44	61.8	31	36.5	75	47.8
Meigs	14	115.8	9	55.4	23	81.4
Mercer	16	76.9	7	27.4	23	49.1
Miami	33	66.7	24	37.9	57	49.6
Monroe	7	74.9	4	44.0	12	58.2
Montgomery	200	76.9	172	48.0	372	59.5
Morgan	8	90.2	4	35.5	12	61.5
Morrow	13	84.5	7	37.2	20	59.2
Muskingum	40	95.2	30	52.9	70	71.2
Noble	4	63.1	5	58.8	9	59.8
Ottawa	21	85.3	14	47.6	34	62.9
Paulding	9	91.1	4	35.5	13	59.2
Perry	18	110.1	10	53.8	28	78.8
Pickaway	23	97.1	15	51.5	38	71.4
Pike	13	97.7	9	52.7	22	72.4
Portage	51	77.7	40	48.4	91	61.0
Preble	17	81.1	11	43.6	28	59.5
Putnam	10	59.6	7	33.2	17	44.8
Richland	54	81.2	33	38.3	86	56.9
Ross	35	105.5	21	50.0	57	72.9
Sandusky	24	80.0	16	41.1	41	57.1
Scioto	39	102.9	28	53.4	66	73.7
Seneca	24	83.3	12	33.4	36	55.3
Shelby	17	79.2	10	38.6	27	56.2
Stark	151	77.9	109	41.3	260	56.1
Summit	210	81.2	155	43.7	365	59.0
Trumbull	97	81.4	68	42.7	165	58.7
Tuscarawas	38	79.5	22	36.0	61	54.9
Union	11	70.4	10	51.5	22	60.2
Van Wert	11	71.2	8	42.4	19	54.5
Vinton	7	107.8	4	49.6	10	75.6
Warren	46	68.5	39	44.7	84	54.5
Washington	31	87.7	22	51.5	53	67.0
Wayne	38	71.3	26	40.1	64	53.9
Williams	16	85.4	9	36.2	25	57.0
Wood	38	75.2	28	43.0	67	56.5
Wyandot	7	61.0	7	44.7	15	53.7

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.

Table 19a

Melanoma of the Skin: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**1,193**	**21.9**	**1,029**	**16.3**	**2,222**	**18.3**
SEER[3]		**25.6**		**16.2**		**20.1**
Adams	2	17.8	2	13.1	4	14.9
Allen	10	20.0	9	14.8	19	16.8
Ashland	5	18.4	3	10.7	8	14.2
Ashtabula	14	26.5	12	21.2	26	23.3
Athens	4	17.4	5	18.5	9	17.2
Auglaize	7	28.6	4	17.6	11	22.3
Belmont	6	15.4	8	18.8	14	16.6
Brown	5	25.8	3	12.4	8	18.4
Butler	29	19.0	25	14.0	54	16.2
Carroll	4	25.5	4	24.4	8	24.9
Champaign	6	27.6	3	15.7	9	21.0
Clark	16	22.1	14	17.2	31	18.7
Clermont	20	24.5	15	15.1	35	18.7
Clinton	5	26.4	5	22.1	10	23.9
Columbiana	13	22.9	11	16.6	24	18.9
Coshocton	4	23.2	5	26.9	9	24.3
Crawford	5	21.3	6	21.3	11	21.1
Cuyahoga	130	20.0	107	13.4	237	15.9
Darke	4	15.8	4	16.0	9	15.1
Defiance	5	23.0	3	15.5	8	18.5
Delaware	19	31.7	18	25.4	37	27.8
Erie	12	27.9	11	23.9	24	25.0
Fairfield	18	28.3	11	16.1	29	21.1
Fayette	3	22.5	3	19.6	6	20.5
Franklin	89	20.2	95	16.9	184	17.8
Fulton	5	23.4	6	24.6	11	23.8
Gallia	3	16.0	3	16.4	5	16.0
Geauga	12	23.7	7	13.9	19	18.4
Greene	20	27.6	16	20.3	37	23.2
Guernsey	7	30.9	5	23.1	12	26.4
Hamilton	70	18.1	69	14.2	138	15.3
Hancock	9	27.3	7	17.1	16	20.9
Hardin	3	20.7	2	9.7	5	14.9
Harrison	2	24.0	2	20.9	4	21.4
Henry	4	25.6	4	24.9	8	24.1
Highland	3	12.8	3	11.2	5	11.9
Hocking	3	21.7	3	19.0	6	20.3
Holmes	2	11.7	2	10.6	4	11.0
Huron	5	18.1	5	15.2	10	16.3
Jackson	2	14.6	3	16.5	5	14.3
Jefferson	6	15.4	5	10.8	11	12.7
Knox	8	28.0	5	15.8	13	21.2
Lake	25	20.7	22	16.6	47	18.0
Lawrence	6	20.2	6	17.5	13	18.5
Licking	21	28.0	23	27.3	44	27.3
Logan	4	15.9	5	19.5	9	17.8
Lorain	32	22.3	28	17.6	60	19.5
Lucas	46	22.6	36	14.5	82	17.8
Madison	6	27.8	4	21.0	10	23.0
Mahoning	20	14.6	15	10.2	35	11.7
Marion	8	27.5	6	18.9	14	20.4
Medina	23	29.2	18	20.7	42	24.6
Meigs	2	14.5	2	11.6	3	13.5
Mercer	7	31.7	6	31.5	13	30.9
Miami	10	19.4	11	19.1	20	18.5
Monroe	2	19.2	2	17.9	3	17.7
Montgomery	57	21.5	44	14.2	101	17.0
Morgan	3	34.4	1	10.8	4	22.1
Morrow	2	11.7	3	14.9	5	13.3
Muskingum	11	26.1	13	27.6	24	26.3
Noble	1	12.0	1	12.8	2	13.1
Ottawa	7	29.0	4	15.7	11	20.5
Paulding	2	18.5	<1	*	3	12.6
Perry	3	16.4	4	22.6	7	19.5
Pickaway	5	18.2	4	17.3	9	16.7
Pike	3	24.1	2	12.6	5	17.7
Portage	17	24.1	11	13.3	28	18.0
Preble	4	19.9	3	11.4	7	15.1
Putnam	5	28.1	2	12.2	7	18.6
Richland	12	17.4	9	13.0	21	14.8
Ross	7	17.9	5	11.1	11	13.9
Sandusky	5	15.8	5	14.5	10	15.1
Scioto	10	27.2	8	19.9	18	22.5
Seneca	6	19.3	5	16.9	11	17.7
Shelby	2	9.1	3	13.3	5	11.0
Stark	59	30.1	43	19.5	102	23.6
Summit	67	25.2	49	15.9	116	19.6
Trumbull	26	22.0	15	11.3	41	16.0
Tuscarawas	8	18.1	9	18.2	18	17.3
Union	5	25.7	6	26.9	11	26.1
Van Wert	3	18.2	2	12.5	5	14.7
Vinton	<1	*	1	14.5	2	11.8
Warren	21	27.3	23	23.7	44	24.4
Washington	7	21.5	7	22.2	14	21.2
Wayne	8	15.2	6	10.5	15	12.5
Williams	4	20.0	4	20.2	8	19.9
Wood	14	26.9	12	19.0	26	22.1
Wyandot	<1	*	3	23.5	4	15.2

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 19b

Melanoma of the Skin: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**205**	**3.9**	**119**	**1.7**	**324**	**2.6**
US[3]		**4.0**		**1.7**		**2.7**
Adams	0	*	<1	*	<1	*
Allen	2	3.9	2	3.1	4	3.2
Ashland	<1	*	<1	*	1	2.0
Ashtabula	1	2.4	1	1.9	2	2.0
Athens	1	4.9	<1	*	2	3.3
Auglaize	1	6.0	1	4.4	3	5.0
Belmont	2	5.1	1	2.8	3	3.7
Brown	1	7.0	<1	*	1	3.3
Butler	6	4.3	4	2.0	10	3.0
Carroll	<1	*	<1	*	<1	*
Champaign	1	5.1	<1	*	2	3.6
Clark	4	6.2	1	1.5	6	3.5
Clermont	3	4.5	1	1.5	5	2.8
Clinton	2	7.7	1	4.4	3	6.0
Columbiana	3	5.4	2	2.1	5	3.4
Coshocton	1	5.6	<1	*	2	3.9
Crawford	1	4.5	<1	*	2	3.4
Cuyahoga	19	2.9	11	1.2	30	1.9
Darke	1	4.7	<1	*	2	3.3
Defiance	1	7.1	<1	*	2	4.2
Delaware	2	3.7	<1	*	3	2.3
Erie	2	5.9	1	2.5	4	3.9
Fairfield	2	3.4	2	2.3	4	2.8
Fayette	<1	*	<1	*	<1	*
Franklin	13	3.4	10	1.9	24	2.5
Fulton	<1	*	<1	*	<1	*
Gallia	<1	*	<1	*	1	2.6
Geauga	1	2.7	1	2.1	3	2.4
Greene	4	5.0	1	1.6	5	3.1
Guernsey	1	5.5	<1	*	1	2.7
Hamilton	13	3.5	7	1.3	20	2.2
Hancock	1	3.2	1	3.5	2	3.2
Hardin	1	7.0	<1	*	2	5.0
Harrison	<1	*	<1	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	1	7.3	<1	*	2	3.6
Hocking	<1	*	<1	*	1	4.8
Holmes	1	7.3	<1	*	2	5.1
Huron	1	4.7	<1	*	2	2.7
Jackson	<1	*	<1	*	1	2.7
Jefferson	1	2.7	<1	*	2	1.8
Knox	2	5.5	<1	*	2	3.1
Lake	5	3.9	2	1.5	7	2.6
Lawrence	2	6.1	<1	*	2	3.0
Licking	2	3.6	2	2.9	5	3.1
Logan	1	5.7	<1	*	2	4.1
Lorain	5	3.9	3	1.9	9	2.7
Lucas	8	4.2	5	1.9	13	2.8
Madison	1	5.5	<1	*	1	2.9
Mahoning	4	2.7	2	1.2	6	1.8
Marion	2	6.9	<1	*	3	3.9
Medina	4	4.8	1	1.6	5	3.2
Meigs	<1	*	<1	*	<1	*
Mercer	1	6.4	<1	*	2	4.3
Miami	3	5.1	1	1.9	4	3.3
Monroe	<1	*	<1	*	<1	*
Montgomery	8	3.2	6	1.8	14	2.4
Morgan	<1	*	<1	*	1	5.6
Morrow	<1	*	<1	*	1	3.1
Muskingum	2	3.8	1	2.4	3	2.9
Noble	<1	*	<1	*	<1	*
Ottawa	1	4.6	<1	*	1	2.5
Paulding	<1	*	<1	*	<1	*
Perry	0	*	0	*	0	*
Pickaway	<1	*	<1	*	1	2.3
Pike	<1	*	0	*	<1	*
Portage	1	2.0	2	2.2	3	2.1
Preble	<1	*	<1	*	1	2.7
Putnam	<1	*	<1	*	1	3.1
Richland	2	2.9	2	2.3	3	2.4
Ross	1	4.1	<1	*	2	2.5
Sandusky	1	4.7	<1	*	2	2.4
Scioto	2	5.3	2	3.8	4	4.3
Seneca	1	3.6	<1	*	1	2.0
Shelby	<1	*	<1	*	<1	*
Stark	10	5.0	3	1.2	13	2.8
Summit	8	3.0	5	1.5	13	2.1
Trumbull	5	4.7	2	1.3	7	2.8
Tuscarawas	3	5.6	2	3.3	4	4.2
Union	<1	*	<1	*	<1	*
Van Wert	<1	*	<1	*	1	3.1
Vinton	<1	*	<1	*	<1	*
Warren	3	4.4	2	2.2	5	3.1
Washington	1	4.1	1	2.4	2	3.2
Wayne	2	3.5	<1	*	3	2.2
Williams	<1	*	<1	*	1	2.3
Wood	3	6.1	<1	*	4	3.0
Wyandot	<1	*	<1	*	1	4.2

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 20a

Multiple Myeloma: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**338**	**6.3**	**298**	**4.2**	**636**	**5.1**
SEER[3]		**7.1**		**4.5**		**5.6**
Adams	<1	*	<1	*	1	3.4
Allen	3	5.5	3	4.0	5	4.7
Ashland	2	6.4	2	6.6	4	6.7
Ashtabula	4	8.0	2	3.2	6	5.4
Athens	<1	*	<1	*	1	2.9
Auglaize	1	6.2	2	6.2	3	6.1
Belmont	2	4.0	2	3.1	3	3.6
Brown	1	5.5	1	4.3	2	4.7
Butler	8	5.4	7	3.7	15	4.5
Carroll	1	6.1	<1	*	2	5.6
Champaign	1	7.6	1	3.8	2	5.8
Clark	4	5.0	4	4.3	8	4.6
Clermont	5	6.7	6	5.9	11	6.4
Clinton	2	8.6	1	4.6	3	6.5
Columbiana	3	5.7	2	2.8	5	3.9
Coshocton	2	10.4	<1	*	2	5.7
Crawford	2	8.2	1	4.3	3	6.2
Cuyahoga	49	7.4	45	5.0	94	6.0
Darke	2	7.0	2	4.0	4	5.7
Defiance	2	9.6	2	6.4	4	7.9
Delaware	3	5.0	2	3.7	5	4.4
Erie	3	5.4	<1	*	3	3.3
Fairfield	2	3.8	4	6.1	7	5.1
Fayette	1	9.0	0	*	1	4.3
Franklin	24	5.9	22	4.2	46	4.9
Fulton	<1	*	<1	*	1	2.6
Gallia	<1	*	<1	*	1	2.9
Geauga	3	6.2	3	5.3	6	5.9
Greene	4	6.4	5	5.2	9	5.8
Guernsey	2	8.4	1	4.8	3	6.5
Hamilton	23	5.8	20	3.8	43	4.6
Hancock	2	5.7	2	2.5	4	4.2
Hardin	<1	*	<1	*	1	4.2
Harrison	<1	*	<1	*	1	5.0
Henry	1	7.1	1	5.2	2	6.2
Highland	2	7.3	1	3.7	3	5.4
Hocking	<1	*	1	8.9	2	7.0
Holmes	<1	*	<1	*	<1	*
Huron	<1	*	1	3.6	2	3.0
Jackson	2	12.5	1	5.4	3	8.3
Jefferson	3	6.0	2	4.0	5	4.8
Knox	2	9.3	<1	*	3	4.4
Lake	6	4.9	5	3.3	11	3.9
Lawrence	2	6.6	1	2.9	3	4.6
Licking	4	5.6	3	3.7	7	4.4
Logan	1	5.2	1	3.5	2	4.4
Lorain	10	7.0	5	2.8	15	4.6
Lucas	12	5.9	14	5.1	25	5.4
Madison	<1	*	1	4.6	2	4.5
Mahoning	7	5.1	9	4.8	16	4.9
Marion	2	5.5	1	3.5	3	4.3
Medina	5	6.9	3	3.7	9	5.1
Meigs	<1	*	<1	*	1	4.1
Mercer	2	9.4	2	6.6	4	8.0
Miami	3	5.3	2	2.6	4	3.9
Monroe	<1	*	<1	*	1	4.7
Montgomery	21	7.9	22	6.1	43	6.8
Morgan	<1	*	<1	*	1	5.1
Morrow	<1	*	<1	*	<1	*
Muskingum	4	9.3	2	3.5	6	5.8
Noble	1	14.9	<1	*	1	8.0
Ottawa	1	4.0	1	4.9	2	4.4
Paulding	<1	*	<1	*	1	5.3
Perry	<1	*	1	6.3	2	5.8
Pickaway	2	7.2	1	3.2	3	5.2
Pike	<1	*	<1	*	1	4.8
Portage	4	6.1	3	4.2	7	5.1
Preble	2	7.0	2	6.0	3	6.6
Putnam	<1	*	<1	*	1	3.1
Richland	5	7.4	4	4.4	9	5.8
Ross	2	6.3	2	5.2	4	5.5
Sandusky	1	4.5	<1	*	2	2.3
Scioto	2	4.6	3	5.1	4	4.9
Seneca	1	5.2	2	4.2	3	4.6
Shelby	<1	*	<1	*	1	2.1
Stark	11	5.7	10	3.7	21	4.6
Summit	18	6.7	15	4.4	33	5.4
Trumbull	10	8.9	7	4.8	17	6.3
Tuscarawas	2	5.0	3	4.7	5	4.7
Union	<1	*	1	4.3	2	4.3
Van Wert	<1	*	0	*	<1	*
Vinton	<1	*	<1	*	<1	*
Warren	4	5.7	4	4.7	8	5.2
Washington	2	5.9	1	2.7	3	4.1
Wayne	4	7.3	2	3.2	6	5.2
Williams	<1	*	1	3.7	2	3.9
Wood	2	3.8	3	4.5	5	4.1
Wyandot	1	8.4	0	*	1	3.4

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 20b

Multiple Myeloma: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**240**	**4.7**	**239**	**3.3**	**478**	**3.8**
US[3]		**4.4**		**2.9**		**3.6**
Adams	<1	*	1	6.6	2	5.3
Allen	2	4.7	2	3.3	5	3.8
Ashland	1	4.6	2	5.0	3	4.8
Ashtabula	2	3.9	1	1.4	3	2.4
Athens	<1	*	1	3.4	2	3.2
Auglaize	1	4.7	2	5.0	3	4.9
Belmont	<1	*	1	1.9	2	2.0
Brown	<1	*	2	7.3	3	6.1
Butler	6	4.6	4	2.2	10	3.2
Carroll	<1	*	<1	*	1	2.7
Champaign	<1	*	1	4.6	2	4.7
Clark	3	4.1	3	2.4	6	3.2
Clermont	3	3.9	4	4.0	7	4.1
Clinton	1	6.3	<1	*	2	4.6
Columbiana	2	3.9	2	3.1	4	3.3
Coshocton	1	8.0	<1	*	2	4.9
Crawford	1	6.0	2	5.5	3	5.7
Cuyahoga	35	5.3	38	3.9	72	4.4
Darke	2	5.8	1	2.7	3	4.2
Defiance	1	6.1	<1	*	2	4.3
Delaware	2	5.2	2	3.4	4	4.3
Erie	2	5.1	2	2.9	4	3.9
Fairfield	3	5.8	2	3.3	6	4.4
Fayette	<1	*	<1	*	1	3.1
Franklin	16	4.4	18	3.4	34	3.7
Fulton	<1	*	<1	*	1	2.2
Gallia	<1	*	<1	*	<1	*
Geauga	2	3.3	1	2.5	3	3.0
Greene	3	4.0	3	3.3	6	3.7
Guernsey	1	6.8	1	4.5	3	5.4
Hamilton	15	4.0	21	3.9	36	3.8
Hancock	2	6.0	3	4.8	5	5.6
Hardin	<1	*	<1	*	1	3.5
Harrison	<1	*	0	*	<1	*
Henry	<1	*	1	5.3	2	5.1
Highland	1	7.0	<1	*	2	4.3
Hocking	<1	*	<1	*	1	3.6
Holmes	<1	*	0	*	<1	*
Huron	1	3.5	1	3.5	2	3.5
Jackson	1	10.2	1	6.5	3	7.7
Jefferson	2	4.5	<1	*	3	2.8
Knox	<1	*	1	2.6	2	2.7
Lake	7	5.9	4	2.7	11	3.9
Lawrence	2	8.0	1	2.9	4	5.1
Licking	3	4.6	3	3.4	6	3.9
Logan	<1	*	<1	*	1	1.9
Lorain	6	4.8	4	2.1	10	3.1
Lucas	7	3.6	10	3.4	17	3.5
Madison	<1	*	1	5.2	1	3.5
Mahoning	4	3.1	6	2.8	10	2.9
Marion	2	5.3	<1	*	2	3.4
Medina	3	4.3	2	2.5	5	3.3
Meigs	<1	*	<1	*	1	4.4
Mercer	1	4.6	1	3.3	2	4.2
Miami	2	4.3	3	5.0	5	4.6
Monroe	<1	*	<1	*	<1	*
Montgomery	13	5.1	12	3.3	26	4.1
Morgan	<1	*	<1	*	<1	*
Morrow	<1	*	<1	*	1	2.7
Muskingum	1	3.8	2	3.8	4	3.7
Noble	1	15.5	0	*	1	6.8
Ottawa	<1	*	<1	*	2	2.9
Paulding	<1	*	<1	*	<1	*
Perry	<1	*	<1	*	1	2.9
Pickaway	1	6.5	<1	*	2	4.4
Pike	<1	*	<1	*	1	3.2
Portage	3	5.1	1	1.5	5	3.0
Preble	1	5.7	1	4.7	2	5.1
Putnam	<1	*	<1	*	1	3.7
Richland	4	5.1	4	4.4	7	4.8
Ross	1	4.6	2	4.6	3	4.3
Sandusky	1	4.0	1	2.7	2	3.3
Scioto	<1	*	2	4.1	3	3.0
Seneca	<1	*	1	4.0	2	3.2
Shelby	1	5.3	<1	*	1	2.7
Stark	9	4.7	6	2.1	15	3.2
Summit	13	4.9	15	4.2	28	4.5
Trumbull	6	5.4	5	2.8	11	3.8
Tuscarawas	2	5.2	2	2.3	4	3.6
Union	<1	*	1	4.4	2	3.9
Van Wert	<1	*	<1	*	1	2.7
Vinton	<1	*	0	*	<1	*
Warren	4	5.7	3	3.2	6	4.3
Washington	<1	*	<1	*	1	1.8
Wayne	3	5.9	2	3.2	5	4.3
Williams	1	7.4	<1	*	2	4.5
Wood	2	4.8	2	2.7	4	3.7
Wyandot	<1	*	<1	*	1	4.1

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 21a

Non-Hodgkin's Lymphoma: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**1,249**	**23.1**	**1,131**	**16.4**	**2,380**	**19.3**
SEER[3]		**23.6**		**16.5**		**19.6**
Adams	2	15.6	2	13.5	4	14.4
Allen	10	19.9	9	13.3	19	16.3
Ashland	4	15.7	5	15.1	9	15.1
Ashtabula	14	26.4	12	19.2	26	22.4
Athens	4	16.5	5	16.6	9	16.5
Auglaize	5	21.1	5	16.9	10	19.0
Belmont	10	26.4	8	15.9	19	21.2
Brown	6	28.5	6	24.2	12	26.1
Butler	32	22.3	32	18.2	64	19.8
Carroll	3	17.2	3	19.2	6	18.3
Champaign	4	21.4	2	7.3	6	13.4
Clark	14	18.7	14	14.8	28	16.5
Clermont	19	22.7	16	17.1	35	19.8
Clinton	2	12.3	3	10.9	5	11.2
Columbiana	13	21.4	12	17.2	25	19.4
Coshocton	4	22.8	4	18.3	8	20.4
Crawford	6	26.1	5	15.6	11	19.8
Cuyahoga	156	24.1	147	16.1	303	19.5
Darke	6	21.7	6	17.5	12	19.2
Defiance	4	23.1	4	13.5	8	17.8
Delaware	14	25.7	10	15.6	24	20.2
Erie	12	27.9	8	15.2	21	20.8
Fairfield	14	22.1	11	15.7	25	18.8
Fayette	3	22.9	3	15.0	6	18.4
Franklin	98	23.0	82	15.1	180	18.6
Fulton	6	29.1	5	19.1	11	23.8
Gallia	4	25.6	4	19.6	8	22.5
Geauga	10	20.7	10	17.8	21	18.9
Greene	13	19.1	15	17.2	28	18.0
Guernsey	4	21.2	5	20.0	9	20.1
Hamilton	82	21.3	77	14.8	159	17.6
Hancock	6	19.2	9	18.0	15	18.5
Hardin	3	24.0	4	23.0	7	22.9
Harrison	2	19.1	2	20.2	4	19.3
Henry	4	32.0	4	18.6	8	25.0
Highland	5	23.5	5	19.3	10	21.4
Hocking	2	11.0	2	16.1	4	13.6
Holmes	3	19.8	2	8.5	5	14.0
Huron	7	24.7	6	16.5	13	20.3
Jackson	3	21.4	4	20.4	8	21.2
Jefferson	12	30.2	9	16.1	22	21.9
Knox	6	22.7	6	17.0	12	19.3
Lake	28	23.2	32	21.3	60	22.1
Lawrence	9	26.7	6	15.4	15	20.7
Licking	15	21.0	12	13.9	27	16.8
Logan	6	24.6	5	15.7	10	20.2
Lorain	30	21.3	26	14.8	56	17.7
Lucas	48	23.9	45	16.9	93	20.0
Madison	4	17.8	4	18.4	7	17.8
Mahoning	36	27.1	30	17.5	66	21.6
Marion	11	32.3	8	19.7	18	25.6
Medina	20	26.2	18	20.3	37	23.1
Meigs	4	35.8	3	22.1	7	27.7
Mercer	5	24.7	6	23.0	11	23.5
Miami	13	26.5	10	17.0	23	20.7
Monroe	2	22.3	2	14.9	4	18.3
Montgomery	61	23.2	58	16.7	119	19.5
Morgan	2	20.0	2	16.7	3	18.6
Morrow	3	19.3	2	13.0	5	15.9
Muskingum	9	23.0	11	19.8	20	21.2
Noble	1	14.0	1	13.3	2	13.9
Ottawa	8	33.5	7	23.1	15	28.0
Paulding	3	28.4	2	19.8	5	23.6
Perry	4	26.2	3	14.4	7	20.1
Pickaway	7	27.2	3	10.3	10	18.5
Pike	5	35.0	2	14.3	7	24.1
Portage	15	22.0	13	15.5	28	18.4
Preble	6	30.4	4	15.3	10	21.7
Putnam	4	27.8	3	17.3	8	20.5
Richland	16	23.9	15	18.8	31	20.9
Ross	7	19.3	7	15.8	14	17.9
Sandusky	6	19.4	8	21.1	14	20.0
Scioto	12	32.0	7	15.0	19	22.0
Seneca	7	25.3	7	18.2	14	21.9
Shelby	5	23.4	3	12.5	8	16.8
Stark	40	20.4	40	15.8	80	17.7
Summit	60	22.3	54	15.7	114	18.6
Trumbull	29	24.1	19	12.5	48	17.6
Tuscarawas	9	17.8	9	16.2	18	16.8
Union	5	22.4	4	18.3	8	20.9
Van Wert	4	26.3	2	12.3	6	18.2
Vinton	1	16.4	3	33.4	4	26.0
Warren	19	24.8	15	17.1	34	20.3
Washington	6	16.2	9	21.3	15	19.2
Wayne	11	21.7	12	19.2	24	19.9
Williams	3	15.1	5	21.6	8	18.5
Wood	14	27.6	9	13.1	23	19.4
Wyandot	4	31.2	4	27.4	8	27.8

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than
Note: Low county numbers and rates may reflect underreporting for that county.

Table 21b

Non-Hodgkin's Lymphoma: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**487**	**9.5**	**434**	**5.9**	**921**	**7.4**
US[3]		**8.7**		**5.5**		**6.9**
Adams	1	9.4	1	8.4	3	8.8
Allen	6	11.7	4	5.2	10	8.0
Ashland	2	7.5	2	4.5	4	6.2
Ashtabula	7	14.8	4	6.1	11	9.4
Athens	2	8.9	2	7.5	4	7.9
Auglaize	3	12.3	2	5.6	5	8.7
Belmont	4	9.0	7	10.7	10	10.3
Brown	2	11.7	<1	*	3	6.7
Butler	13	10.2	13	7.2	26	8.4
Carroll	2	10.3	1	5.1	3	7.7
Champaign	1	5.4	<1	*	2	4.0
Clark	6	8.0	7	6.9	13	7.2
Clermont	5	7.3	6	7.0	11	7.0
Clinton	<1	*	1	6.1	2	5.3
Columbiana	6	11.1	5	6.3	11	8.5
Coshocton	3	14.9	3	11.6	5	13.4
Crawford	1	6.0	1	4.3	3	5.0
Cuyahoga	60	9.3	60	5.9	121	7.3
Darke	3	11.2	3	8.8	6	9.6
Defiance	1	7.9	<1	*	2	3.9
Delaware	3	7.2	4	6.3	7	6.7
Erie	3	6.5	3	5.4	6	5.7
Fairfield	5	9.9	4	5.3	9	7.3
Fayette	1	7.5	2	11.4	3	9.8
Franklin	32	8.5	26	4.8	58	6.3
Fulton	2	9.7	1	4.3	3	6.6
Gallia	<1	*	<1	*	1	3.2
Geauga	5	9.4	5	8.8	10	9.0
Greene	5	7.8	6	7.2	11	7.2
Guernsey	2	9.7	<1	*	3	5.8
Hamilton	28	7.6	28	4.9	56	6.0
Hancock	3	9.3	4	8.8	7	8.9
Hardin	<1	*	2	9.0	2	7.5
Harrison	1	15.1	1	11.2	3	13.1
Henry	2	15.7	1	5.0	3	9.6
Highland	3	14.1	2	7.3	5	10.8
Hocking	1	5.9	<1	*	2	5.6
Holmes	3	18.5	1	5.2	4	11.3
Huron	3	9.3	2	4.5	4	6.8
Jackson	1	7.6	2	8.8	3	8.7
Jefferson	4	10.3	5	8.5	9	9.1
Knox	3	12.9	1	3.0	4	7.1
Lake	13	11.4	10	6.2	24	8.5
Lawrence	3	10.0	4	8.7	7	9.2
Licking	4	6.0	4	5.1	8	5.2
Logan	3	13.5	2	5.8	5	9.2
Lorain	14	10.3	10	5.5	24	7.8
Lucas	21	11.1	14	4.9	35	7.5
Madison	1	7.6	1	6.7	3	6.9
Mahoning	15	11.0	13	6.3	28	8.1
Marion	3	9.7	2	4.3	5	6.9
Medina	10	13.7	7	7.7	17	10.6
Meigs	2	18.6	<1	*	3	11.1
Mercer	3	14.3	2	7.6	5	10.7
Miami	5	10.9	3	4.6	8	7.2
Monroe	<1	*	1	8.1	2	8.8
Montgomery	21	8.2	19	5.2	41	6.5
Morgan	<1	*	<1	*	1	6.3
Morrow	1	8.1	<1	*	2	5.8
Muskingum	5	13.4	5	8.1	10	10.1
Noble	<1	*	<1	*	<1	*
Ottawa	3	13.2	3	9.1	6	10.9
Paulding	1	12.7	1	7.3	2	10.4
Perry	2	13.2	<1	*	3	7.8
Pickaway	2	10.8	1	4.9	4	7.5
Pike	2	11.5	<1	*	2	7.9
Portage	5	8.2	5	6.7	10	7.3
Preble	2	12.1	2	6.0	4	8.9
Putnam	2	11.8	2	7.4	4	8.7
Richland	6	9.9	5	5.9	11	7.7
Ross	3	10.3	3	7.3	7	8.6
Sandusky	3	9.1	3	7.0	5	7.5
Scioto	4	11.3	3	5.3	7	7.8
Seneca	2	7.9	3	7.0	5	7.6
Shelby	2	13.0	1	5.1	4	7.3
Stark	16	8.5	15	5.3	31	6.6
Summit	23	8.8	21	5.5	43	6.9
Trumbull	10	8.5	8	4.6	18	6.3
Tuscarawas	4	7.4	4	6.9	8	7.1
Union	2	10.0	2	8.4	4	9.6
Van Wert	1	10.2	<1	*	2	6.3
Vinton	<1	*	1	20.2	2	14.2
Warren	6	9.5	4	4.4	10	6.4
Washington	4	12.1	3	6.4	7	9.0
Wayne	6	12.0	5	7.5	11	9.3
Williams	1	5.1	2	8.1	3	6.6
Wood	7	13.9	5	6.8	11	9.8
Wyandot	<1	*	2	9.9	2	8.4

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 22a

Oral Cavity and Pharynx: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**835**	**14.6**	**385**	**5.7**	**1,220**	**9.8**
SEER[3]		**15.4**		**6.1**		**10.4**
Adams	2	14.7	<1	*	3	9.5
Allen	8	13.8	4	4.8	11	9.4
Ashland	3	10.5	1	2.5	4	6.3
Ashtabula	8	14.3	5	8.1	13	11.0
Athens	6	26.9	2	5.9	8	16.0
Auglaize	3	11.0	2	6.5	4	8.3
Belmont	6	16.6	3	6.6	10	11.4
Brown	4	17.0	1	4.2	5	10.4
Butler	21	13.7	9	5.0	30	9.0
Carroll	3	16.6	<1	*	3	9.0
Champaign	2	11.8	1	3.8	3	7.7
Clark	12	15.5	4	4.2	16	9.5
Clermont	10	11.1	4	4.3	14	7.6
Clinton	4	17.7	1	5.8	5	11.4
Columbiana	10	16.6	4	4.9	14	10.6
Coshocton	4	20.1	<1	*	4	10.7
Crawford	4	18.2	2	5.6	6	11.3
Cuyahoga	106	15.7	55	6.2	160	10.5
Darke	3	8.9	2	5.7	4	7.0
Defiance	1	5.2	<1	*	2	4.4
Delaware	8	13.4	4	5.9	12	9.5
Erie	7	14.9	2	4.9	9	9.7
Fairfield	7	11.2	3	3.8	10	7.2
Fayette	2	11.5	<1	*	2	7.4
Franklin	67	14.5	28	5.1	95	9.3
Fulton	3	15.3	2	5.8	5	10.7
Gallia	2	12.3	1	4.6	3	8.5
Geauga	7	13.2	3	5.9	10	9.1
Greene	12	15.2	4	5.4	16	9.9
Guernsey	4	17.8	2	7.1	6	12.0
Hamilton	55	13.7	28	5.5	83	9.2
Hancock	4	10.3	1	2.4	5	6.1
Hardin	2	13.1	1	6.5	3	9.6
Harrison	2	19.7	<1	*	2	11.2
Henry	2	15.3	<1	*	3	8.7
Highland	4	18.9	1	5.9	5	11.7
Hocking	2	11.2	<1	*	3	7.8
Holmes	1	7.6	<1	*	2	4.7
Huron	3	11.7	1	3.7	5	7.4
Jackson	2	10.0	1	5.5	3	7.4
Jefferson	10	22.2	3	5.7	13	13.5
Knox	5	15.1	3	9.6	8	12.1
Lake	16	12.7	11	7.6	27	10.0
Lawrence	4	11.8	2	5.8	6	8.5
Licking	12	15.7	8	8.7	20	12.2
Logan	3	11.9	<1	*	3	6.5
Lorain	22	14.6	10	6.0	32	10.0
Lucas	27	13.1	20	7.7	47	10.2
Madison	3	15.0	1	5.8	4	10.4
Mahoning	21	15.5	9	5.3	30	9.7
Marion	5	15.9	4	10.2	9	12.4
Medina	10	12.2	5	5.5	15	8.7
Meigs	2	13.8	1	6.6	3	9.6
Mercer	2	8.8	2	9.7	4	9.3
Miami	7	12.0	5	8.2	12	10.0
Monroe	1	12.3	<1	*	1	7.7
Montgomery	45	16.1	20	6.1	65	10.6
Morgan	1	12.3	<1	*	2	10.3
Morrow	3	19.4	1	4.8	4	11.6
Muskingum	9	21.0	1	2.6	11	11.0
Noble	2	21.0	<1	*	2	13.4
Ottawa	3	13.3	2	5.2	5	9.0
Paulding	2	15.8	<1	*	3	11.5
Perry	3	15.0	<1	*	4	9.6
Pickaway	5	16.3	1	4.1	6	10.4
Pike	2	16.7	<1	*	3	11.2
Portage	12	15.9	5	5.9	17	10.5
Preble	4	16.7	<1	*	4	9.5
Putnam	3	15.1	1	6.6	4	10.1
Richland	10	14.7	6	7.8	16	11.0
Ross	7	15.8	2	4.1	8	9.9
Sandusky	5	16.4	2	3.7	7	9.6
Scioto	8	22.0	3	7.2	12	14.0
Seneca	5	16.6	1	4.4	6	10.1
Shelby	3	11.0	2	7.7	5	9.2
Stark	33	16.2	13	5.4	47	10.3
Summit	41	14.4	19	5.5	60	9.7
Trumbull	23	18.9	9	5.9	32	11.9
Tuscarawas	4	9.1	3	5.2	7	7.0
Union	2	11.9	2	9.5	4	10.5
Van Wert	2	11.5	<1	*	2	5.9
Vinton	2	23.4	<1	*	2	14.1
Warren	9	10.6	6	6.1	15	8.4
Washington	6	16.2	2	4.9	8	10.3
Wayne	8	13.6	3	4.5	11	8.9
Williams	2	12.1	2	7.3	4	9.4
Wood	7	12.7	3	4.6	10	8.2
Wyandot	<1	*	<1	*	1	4.7

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 22b

Oral Cavity and Pharynx: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**223**	**4.0**	**110**	**1.5**	**333**	**2.6**
US[3]		**3.9**		**1.4**		**2.5**
Adams	<1	*	0	*	<1	*
Allen	3	5.2	1	1.3	4	3.2
Ashland	1	5.6	<1	*	2	3.1
Ashtabula	3	4.9	2	2.4	4	3.6
Athens	1	4.3	<1	*	1	2.7
Auglaize	<1	*	<1	*	<1	*
Belmont	2	4.8	<1	*	3	2.9
Brown	<1	*	0	*	<1	*
Butler	9	6.2	3	1.5	12	3.6
Carroll	<1	*	<1	*	<1	*
Champaign	<1	*	<1	*	<1	*
Clark	2	3.0	1	1.0	3	2.0
Clermont	2	3.2	0	*	2	1.4
Clinton	<1	*	<1	*	1	3.3
Columbiana	2	3.7	1	1.9	4	2.8
Coshocton	1	6.3	<1	*	1	3.4
Crawford	2	9.1	<1	*	3	5.4
Cuyahoga	33	4.8	16	1.7	49	3.1
Darke	<1	*	<1	*	1	1.4
Defiance	<1	*	<1	*	<1	*
Delaware	2	3.0	<1	*	3	2.3
Erie	1	2.7	2	2.9	3	2.9
Fairfield	1	1.9	1	1.4	2	1.6
Fayette	1	6.3	<1	*	1	3.6
Franklin	13	3.2	7	1.2	20	2.1
Fulton	1	6.3	<1	*	2	3.9
Gallia	1	6.6	<1	*	1	3.8
Geauga	1	2.8	<1	*	2	2.1
Greene	2	3.0	<1	*	3	1.9
Guernsey	1	4.8	1	3.8	2	4.2
Hamilton	17	4.3	8	1.3	25	2.6
Hancock	<1	*	<1	*	1	1.6
Hardin	<1	*	<1	*	1	2.9
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	<1	*	<1	*	<1	*
Hocking	<1	*	<1	*	1	3.2
Holmes	<1	*	0	*	<1	*
Huron	<1	*	<1	*	1	1.6
Jackson	<1	*	0	*	<1	*
Jefferson	2	5.5	1	1.9	4	3.5
Knox	1	3.4	<1	*	1	1.9
Lake	4	3.4	3	2.1	7	2.6
Lawrence	1	3.4	<1	*	2	2.7
Licking	3	4.1	2	2.7	6	3.5
Logan	2	9.0	<1	*	2	4.6
Lorain	6	4.1	3	1.4	8	2.6
Lucas	9	4.5	9	3.4	19	4.0
Madison	<1	*	<1	*	1	2.7
Mahoning	6	4.2	3	1.3	8	2.6
Marion	2	5.1	1	2.7	3	4.1
Medina	2	2.8	<1	*	3	1.7
Meigs	<1	*	<1	*	<1	*
Mercer	1	6.2	1	3.5	2	4.6
Miami	1	2.2	1	1.8	2	2.0
Monroe	0	*	0	*	0	*
Montgomery	9	3.3	5	1.3	14	2.2
Morgan	<1	*	0	*	<1	*
Morrow	<1	*	<1	*	<1	*
Muskingum	3	7.8	<1	*	4	3.6
Noble	0	*	0	*	0	*
Ottawa	<1	*	<1	*	1	2.3
Paulding	0	*	<1	*	<1	*
Perry	2	12.4	<1	*	2	6.7
Pickaway	<1	*	1	3.6	2	3.2
Pike	<1	*	0	*	<1	*
Portage	4	5.8	2	2.6	6	4.0
Preble	<1	*	<1	*	1	2.0
Putnam	<1	*	<1	*	1	3.0
Richland	2	3.2	2	2.4	4	2.8
Ross	1	3.0	<1	*	2	1.9
Sandusky	1	3.1	<1	*	1	1.9
Scioto	1	2.9	<1	*	2	2.3
Seneca	<1	*	<1	*	<1	*
Shelby	1	5.7	<1	*	2	3.6
Stark	8	4.1	4	1.3	12	2.5
Summit	12	4.4	5	1.3	17	2.8
Trumbull	4	3.6	2	1.1	6	2.2
Tuscarawas	2	4.3	<1	*	3	2.8
Union	1	5.1	<1	*	2	4.3
Van Wert	<1	*	<1	*	1	2.9
Vinton	0	*	0	*	0	*
Warren	3	4.0	<1	*	4	2.4
Washington	1	2.7	<1	*	2	2.1
Wayne	2	4.2	1	1.8	3	2.9
Williams	1	5.0	<1	*	1	2.6
Wood	2	4.3	<1	*	3	2.5
Wyandot	<1	*	0	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 23a

Ovary: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Cases	Rate
Ohio	**836**	**12.4**
SEER[3]		**12.9**
Adams	3	18.1
Allen	8	12.9
Ashland	4	12.7
Ashtabula	8	12.5
Athens	5	17.3
Auglaize	3	8.7
Belmont	6	12.6
Brown	2	6.9
Butler	23	12.6
Carroll	2	9.3
Champaign	3	14.1
Clark	11	11.7
Clermont	12	11.8
Clinton	2	10.2
Columbiana	7	10.9
Coshocton	2	10.5
Crawford	4	11.1
Cuyahoga	106	12.3
Darke	4	11.5
Defiance	3	12.3
Delaware	9	13.1
Erie	9	17.7
Fairfield	8	11.0
Fayette	2	10.4
Franklin	71	13.0
Fulton	2	8.8
Gallia	2	11.4
Geauga	5	8.9
Greene	11	12.9
Guernsey	3	13.3
Hamilton	53	10.5
Hancock	8	18.4
Hardin	1	6.3
Harrison	2	16.4
Henry	3	16.7
Highland	3	12.2
Hocking	2	9.8
Holmes	2	9.1
Huron	5	14.3
Jackson	2	8.6
Jefferson	8	15.3
Knox	4	11.2
Lake	18	12.0

	Cases	Rate
Lawrence	7	16.4
Licking	13	14.5
Logan	4	13.6
Lorain	21	12.0
Lucas	33	13.1
Madison	2	7.1
Mahoning	22	12.5
Marion	6	13.8
Medina	15	16.6
Meigs	<1	*
Mercer	4	17.4
Miami	8	12.9
Monroe	1	12.5
Montgomery	36	10.5
Morgan	<1	*
Morrow	3	17.2
Muskingum	6	10.4
Noble	2	23.9
Ottawa	3	11.4
Paulding	2	15.0
Perry	1	7.5
Pickaway	3	9.3
Pike	1	7.5
Portage	12	14.3
Preble	4	13.6
Putnam	3	14.3
Richland	9	12.3
Ross	6	14.9
Sandusky	4	10.1
Scioto	6	13.0
Seneca	3	7.4
Shelby	4	14.2
Stark	32	12.8
Summit	43	12.5
Trumbull	19	13.5
Tuscarawas	8	15.4
Union	2	8.4
Van Wert	2	8.9
Vinton	<1	*
Warren	11	11.9
Washington	6	13.7
Wayne	9	13.3
Williams	4	15.4
Wood	9	14.8
Wyandot	1	7.1

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 23b

Ovary: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Females, by County of Residence, Ohio, 2003-2007[1,2]

	Deaths	Rate
Ohio	**605**	**8.6**
US[3]		**8.6**
Adams	1	7.9
Allen	6	9.2
Ashland	4	11.0
Ashtabula	5	7.6
Athens	2	7.3
Auglaize	3	9.1
Belmont	6	10.8
Brown	1	4.0
Butler	16	8.8
Carroll	1	7.3
Champaign	2	8.2
Clark	9	9.6
Clermont	9	9.2
Clinton	3	10.9
Columbiana	6	7.3
Coshocton	2	10.4
Crawford	3	10.0
Cuyahoga	79	8.5
Darke	4	9.8
Defiance	2	7.1
Delaware	4	6.6
Erie	6	11.6
Fairfield	7	9.2
Fayette	<1	*
Franklin	50	9.3
Fulton	1	5.6
Gallia	1	4.8
Geauga	4	6.2
Greene	6	6.8
Guernsey	1	5.5
Hamilton	43	8.0
Hancock	6	12.6
Hardin	3	13.6
Harrison	<1	*
Henry	2	9.4
Highland	1	5.6
Hocking	<1	*
Holmes	<1	*
Huron	2	6.5
Jackson	2	9.4
Jefferson	6	10.4
Knox	4	10.3
Lake	15	9.8

	Deaths	Rate
Lawrence	4	9.8
Licking	9	10.6
Logan	3	9.9
Lorain	18	10.0
Lucas	23	9.0
Madison	1	6.6
Mahoning	17	9.5
Marion	4	11.2
Medina	7	7.8
Meigs	<1	*
Mercer	2	9.4
Miami	5	7.6
Monroe	1	13.1
Montgomery	28	7.7
Morgan	<1	*
Morrow	1	7.6
Muskingum	4	7.5
Noble	1	11.6
Ottawa	3	8.1
Paulding	<1	*
Perry	<1	*
Pickaway	2	7.3
Pike	2	9.5
Portage	10	11.5
Preble	3	9.7
Putnam	2	9.6
Richland	4	4.5
Ross	4	10.4
Sandusky	3	6.7
Scioto	4	8.9
Seneca	2	6.8
Shelby	1	4.6
Stark	24	9.1
Summit	30	8.4
Trumbull	14	8.8
Tuscarawas	6	10.5
Union	1	5.5
Van Wert	2	8.5
Vinton	<1	*
Warren	6	6.4
Washington	3	7.4
Wayne	6	9.3
Williams	3	11.4
Wood	6	9.7
Wyandot	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 24a

Pancreas: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**697**	**13.0**	**710**	**9.9**	**1,407**	**11.3**
SEER[3]		**13.3**		**10.5**		**11.7**
Adams	1	7.9	<1	*	2	6.4
Allen	7	13.7	8	11.1	15	12.4
Ashland	2	6.8	2	4.9	3	5.8
Ashtabula	7	13.1	9	13.4	16	13.6
Athens	2	8.8	4	14.0	6	12.0
Auglaize	2	10.1	2	7.8	5	8.8
Belmont	6	16.3	6	9.8	12	12.5
Brown	3	12.0	3	13.1	6	12.7
Butler	18	13.0	20	11.0	38	12.0
Carroll	1	7.9	1	5.4	2	6.7
Champaign	3	18.5	2	6.6	5	11.5
Clark	9	12.7	9	9.2	18	10.7
Clermont	9	11.1	7	7.0	15	9.1
Clinton	2	11.2	2	9.4	5	10.6
Columbiana	7	12.6	5	6.2	12	9.2
Coshocton	2	12.8	2	8.0	4	10.2
Crawford	2	8.2	3	9.0	5	8.4
Cuyahoga	98	14.9	110	11.4	208	12.9
Darke	4	12.7	4	9.8	7	11.2
Defiance	1	6.3	2	9.4	3	7.7
Delaware	5	9.0	5	7.8	10	8.6
Erie	4	8.7	4	7.6	8	8.2
Fairfield	7	12.5	8	11.2	15	12.0
Fayette	<1	*	2	12.4	3	9.4
Franklin	55	14.0	59	11.1	115	12.4
Fulton	3	14.8	2	7.7	5	11.2
Gallia	3	16.4	2	11.8	5	13.8
Geauga	6	12.8	7	11.9	13	12.6
Greene	10	14.8	8	8.8	18	11.4
Guernsey	2	8.8	2	7.6	4	8.2
Hamilton	51	13.6	53	9.7	105	11.3
Hancock	3	8.7	4	9.2	7	9.3
Hardin	2	13.7	1	5.0	3	8.7
Harrison	<1	*	1	12.6	2	8.4
Henry	2	13.2	1	6.2	3	9.1
Highland	4	19.6	2	6.3	6	12.4
Hocking	2	14.7	1	7.3	4	11.0
Holmes	1	5.8	2	10.3	3	8.6
Huron	5	17.6	3	8.1	7	11.9
Jackson	2	9.4	2	11.8	4	10.8
Jefferson	7	15.0	6	9.7	12	12.1
Knox	5	16.7	6	15.0	10	16.0
Lake	14	11.4	15	9.4	29	10.4
Lawrence	3	8.9	5	10.8	7	10.2
Licking	8	11.6	8	8.8	16	10.1
Logan	2	8.2	4	14.0	6	11.4
Lorain	16	11.3	19	10.4	34	10.7
Lucas	26	13.3	26	9.3	52	10.9
Madison	3	15.2	<1	*	3	8.0
Mahoning	22	15.6	22	11.1	44	13.1
Marion	6	20.6	3	7.7	9	12.5
Medina	9	10.7	7	7.7	16	9.4
Meigs	1	12.5	1	7.6	3	9.9
Mercer	2	11.1	1	5.4	4	8.0
Miami	7	12.9	7	10.6	13	11.8
Monroe	<1	*	<1	*	1	5.0
Montgomery	34	12.6	35	9.6	68	11.0
Morgan	1	13.5	<1	*	2	9.9
Morrow	2	11.4	1	7.6	3	9.0
Muskingum	7	16.8	5	8.1	12	12.0
Noble	<1	*	<1	*	1	7.9
Ottawa	3	13.2	5	16.1	8	14.8
Paulding	1	8.2	2	16.0	3	12.9
Perry	2	11.4	2	11.3	4	11.6
Pickaway	4	14.5	3	9.9	6	12.2
Pike	3	19.6	1	5.6	4	12.3
Portage	7	10.3	8	9.4	15	9.8
Preble	2	8.8	3	12.4	5	10.8
Putnam	2	10.6	2	9.7	4	10.1
Richland	9	14.3	8	9.1	17	11.3
Ross	4	12.0	5	12.6	9	12.0
Sandusky	2	7.9	4	10.2	7	9.3
Scioto	6	15.4	3	5.2	9	9.8
Seneca	4	12.6	4	9.5	7	11.3
Shelby	3	13.8	2	8.0	5	10.3
Stark	23	11.3	25	9.2	47	10.2
Summit	34	13.0	37	10.3	72	11.4
Trumbull	20	16.3	15	9.0	34	12.1
Tuscarawas	4	9.1	6	9.1	10	8.9
Union	2	11.1	1	5.8	3	7.7
Van Wert	2	14.1	<1	*	3	8.7
Vinton	<1	*	<1	*	1	7.6
Warren	9	12.7	9	10.6	18	11.7
Washington	5	14.5	4	10.5	9	12.1
Wayne	6	10.3	6	9.1	12	9.7
Williams	3	15.1	3	13.3	6	13.7
Wood	5	10.7	5	8.2	11	9.3
Wyandot	<1	*	2	13.0	2	8.6

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 24b

Pancreas: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**681**	**12.8**	**700**	**9.5**	**1,381**	**11.0**
US[3]		**12.3**		**9.4**		**10.7**
Adams	1	8.8	<1	*	2	7.0
Allen	5	10.0	7	9.6	12	9.8
Ashland	1	5.1	2	6.1	3	5.7
Ashtabula	7	13.7	9	12.6	16	13.4
Athens	2	8.7	3	9.2	4	8.9
Auglaize	3	11.0	4	12.1	7	11.8
Belmont	7	19.1	6	10.2	13	13.9
Brown	2	9.8	3	14.0	6	12.4
Butler	17	12.4	21	11.4	38	12.0
Carroll	2	9.9	1	6.2	3	7.8
Champaign	2	10.4	3	9.9	4	10.0
Clark	9	12.2	10	9.8	18	10.7
Clermont	8	10.6	8	8.3	16	9.4
Clinton	2	8.0	3	10.2	4	9.6
Columbiana	7	12.6	6	6.9	13	9.6
Coshocton	2	11.8	2	8.9	4	10.2
Crawford	3	12.4	2	7.2	5	9.3
Cuyahoga	94	14.4	109	11.0	203	12.4
Darke	3	9.2	4	10.0	6	9.5
Defiance	1	7.1	2	7.6	3	7.4
Delaware	4	7.8	5	8.2	9	8.1
Erie	4	9.4	4	7.3	8	8.2
Fairfield	7	11.8	7	9.3	13	10.6
Fayette	<1	*	2	13.2	3	9.8
Franklin	56	14.8	54	10.0	110	12.0
Fulton	3	12.6	3	10.0	5	11.5
Gallia	2	12.8	2	8.3	4	10.2
Geauga	6	12.0	6	10.3	12	11.5
Greene	10	13.8	8	9.2	18	11.3
Guernsey	3	13.5	2	8.0	5	10.8
Hamilton	47	12.3	49	8.8	96	10.3
Hancock	3	8.8	4	7.8	7	8.5
Hardin	2	14.0	2	8.5	4	11.1
Harrison	<1	*	<1	*	2	7.4
Henry	2	14.0	2	7.8	4	10.3
Highland	4	18.3	2	8.8	6	12.7
Hocking	2	13.3	1	8.3	3	10.8
Holmes	1	8.4	2	12.4	4	10.9
Huron	4	16.3	3	9.7	8	12.6
Jackson	1	6.3	2	12.0	3	9.3
Jefferson	7	16.4	7	11.7	14	13.9
Knox	3	13.1	4	12.0	8	12.3
Lake	15	11.9	16	9.6	30	10.8
Lawrence	3	9.9	3	7.1	6	8.4
Licking	10	14.7	7	7.9	17	10.9
Logan	2	10.0	4	14.9	7	12.7
Lorain	17	12.3	21	11.6	38	11.9
Lucas	26	13.4	27	9.6	53	11.0
Madison	2	13.5	<1	*	3	7.8
Mahoning	19	14.2	19	9.1	38	11.4
Marion	5	17.3	3	6.1	7	10.1
Medina	8	10.4	7	7.0	14	8.7
Meigs	1	12.0	<1	*	2	8.3
Mercer	2	11.6	1	4.6	4	7.3
Miami	6	11.6	7	10.7	13	11.3
Monroe	<1	*	<1	*	2	7.7
Montgomery	34	13.1	32	8.3	66	10.5
Morgan	1	15.1	1	9.7	2	12.7
Morrow	2	15.2	2	9.3	4	11.6
Muskingum	7	16.6	4	5.9	11	10.7
Noble	<1	*	<1	*	2	10.7
Ottawa	4	14.6	4	12.2	7	13.4
Paulding	1	11.9	1	10.5	2	11.0
Perry	2	10.1	3	14.2	4	12.7
Pickaway	3	14.1	3	9.1	6	11.1
Pike	2	16.9	<1	*	3	10.2
Portage	7	9.7	9	10.5	15	10.3
Preble	2	11.0	2	8.5	5	9.9
Putnam	2	11.9	1	6.7	3	9.1
Richland	8	13.1	8	9.5	16	10.8
Ross	4	11.0	4	9.2	8	9.9
Sandusky	4	12.6	5	11.7	9	12.3
Scioto	5	12.6	3	5.5	8	8.7
Seneca	4	14.4	4	9.3	8	11.9
Shelby	2	11.7	2	6.7	4	8.6
Stark	24	12.0	25	8.9	48	10.3
Summit	34	13.0	39	10.7	73	11.6
Trumbull	18	14.8	15	8.9	33	11.6
Tuscarawas	6	12.9	5	8.1	12	10.2
Union	2	14.4	1	7.1	3	9.9
Van Wert	3	17.4	1	5.6	4	11.3
Vinton	<1	*	<1	*	1	9.1
Warren	10	14.6	9	10.8	19	12.6
Washington	5	13.8	5	10.5	9	11.9
Wayne	6	10.8	7	10.2	13	10.5
Williams	3	13.9	3	12.1	6	12.4
Wood	7	13.7	6	9.2	13	11.1
Wyandot	<1	*	2	10.4	2	8.8

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 25a

Prostate: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Males, by County of Residence, Ohio, 2003-2007[1,2]

	Cases	Rate
Ohio	**7,961**	**145.5**
SEER[3]		**156.9**
Adams	17	124.1
Allen	70	133.3
Ashland	34	124.9
Ashtabula	100	187.5
Athens	39	172.0
Auglaize	25	106.1
Belmont	63	160.3
Brown	31	145.2
Butler	197	131.4
Carroll	24	147.4
Champaign	24	126.5
Clark	100	129.5
Clermont	111	140.6
Clinton	27	143.6
Columbiana	87	146.0
Coshocton	21	112.2
Crawford	36	143.6
Cuyahoga	1,040	157.3
Darke	37	131.8
Defiance	25	123.1
Delaware	92	171.4
Erie	73	150.6
Fairfield	82	132.7
Fayette	18	118.2
Franklin	652	161.0
Fulton	23	112.6
Gallia	19	112.9
Geauga	81	154.8
Greene	100	133.1
Guernsey	24	109.0
Hamilton	593	154.1
Hancock	47	136.6
Hardin	22	147.5
Harrison	14	141.5
Henry	15	103.3
Highland	22	106.0
Hocking	17	108.2
Holmes	12	73.8
Huron	35	126.8
Jackson	18	118.3
Jefferson	66	152.1
Knox	37	127.0
Lake	179	144.0
Lawrence	29	90.9
Licking	106	141.5
Logan	36	149.4
Lorain	214	151.3
Lucas	292	147.7
Madison	25	126.8
Mahoning	254	184.5
Marion	39	119.6
Medina	118	155.6
Meigs	13	101.9
Mercer	22	107.2
Miami	70	131.7
Monroe	15	152.5
Montgomery	410	151.4
Morgan	9	100.5
Morrow	23	147.8
Muskingum	46	107.8
Noble	10	133.9
Ottawa	38	149.9
Paulding	12	118.1
Perry	17	110.7
Pickaway	28	111.9
Pike	12	89.1
Portage	110	158.2
Preble	26	112.0
Putnam	21	125.7
Richland	92	133.7
Ross	34	95.1
Sandusky	44	142.2
Scioto	52	135.1
Seneca	45	159.8
Shelby	32	145.9
Stark	311	154.5
Summit	360	135.2
Trumbull	197	157.8
Tuscarawas	70	143.5
Union	26	142.7
Van Wert	19	123.5
Vinton	9	154.1
Warren	109	145.0
Washington	56	155.0
Wayne	59	107.7
Williams	25	125.5
Wood	64	123.1
Wyandot	17	141.7

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 25b

Prostate: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Males, by County of Residence, Ohio, 2003-2007[1,2]

	Deaths	Rate
Ohio	**1,232**	**26.2**
US[3]		**24.7**
Adams	4	34.3
Allen	9	18.6
Ashland	8	31.2
Ashtabula	14	29.2
Athens	4	21.4
Auglaize	4	16.2
Belmont	9	24.6
Brown	3	19.5
Butler	28	25.6
Carroll	3	22.9
Champaign	4	28.8
Clark	20	29.8
Clermont	13	21.8
Clinton	5	28.3
Columbiana	12	22.8
Coshocton	5	26.9
Crawford	6	28.1
Cuyahoga	200	31.5
Darke	6	22.7
Defiance	6	38.0
Delaware	11	32.0
Erie	10	23.8
Fairfield	13	27.6
Fayette	2	17.8
Franklin	85	27.5
Fulton	6	33.4
Gallia	3	21.2
Geauga	10	26.1
Greene	12	21.2
Guernsey	4	23.8
Hamilton	94	27.7
Hancock	6	19.5
Hardin	3	26.5
Harrison	2	24.7
Henry	3	27.3
Highland	3	16.8
Hocking	3	25.0
Holmes	3	21.3
Huron	6	24.8
Jackson	3	24.7
Jefferson	8	21.3
Knox	7	27.1
Lake	29	27.8

	Deaths	Rate
Lawrence	7	25.9
Licking	14	25.5
Logan	6	31.6
Lorain	27	21.9
Lucas	43	24.5
Madison	3	16.6
Mahoning	41	29.5
Marion	8	27.5
Medina	14	26.4
Meigs	4	35.0
Mercer	5	26.1
Miami	11	24.7
Monroe	1	15.6
Montgomery	55	23.1
Morgan	1	17.0
Morrow	4	33.6
Muskingum	8	19.9
Noble	3	47.9
Ottawa	4	19.0
Paulding	2	20.8
Perry	4	30.0
Pickaway	4	22.1
Pike	2	18.4
Portage	13	23.8
Preble	3	16.7
Putnam	3	21.4
Richland	16	27.3
Ross	5	18.0
Sandusky	7	24.3
Scioto	5	15.3
Seneca	4	17.7
Shelby	3	16.7
Stark	42	23.5
Summit	73	31.1
Trumbull	31	27.9
Tuscarawas	10	23.7
Union	2	20.2
Van Wert	3	17.7
Vinton	1	25.6
Warren	14	24.3
Washington	8	25.8
Wayne	13	28.3
Williams	5	26.7
Wood	9	19.8
Wyandot	2	20.1

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 26a

Stomach: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**463**	**8.8**	**297**	**4.1**	**760**	**6.1**
SEER[3]		**10.9**		**5.5**		**7.8**
Adams	1	10.3	<1	*	2	6.4
Allen	3	5.5	3	4.4	6	5.0
Ashland	2	7.3	1	2.8	3	4.8
Ashtabula	5	9.7	4	6.4	9	7.9
Athens	2	8.2	<1	*	2	4.5
Auglaize	2	8.6	<1	*	2	4.3
Belmont	4	10.9	2	4.0	6	6.7
Brown	1	6.4	<1	*	2	3.6
Butler	11	8.5	8	4.3	18	5.8
Carroll	1	5.9	<1	*	1	3.9
Champaign	3	14.3	<1	*	3	7.7
Clark	9	12.4	4	3.7	13	7.7
Clermont	6	8.8	3	3.1	9	5.5
Clinton	3	13.5	1	5.6	4	9.2
Columbiana	4	7.7	2	2.5	6	4.7
Coshocton	1	8.3	<1	*	2	4.2
Crawford	2	7.8	<1	*	2	4.5
Cuyahoga	71	10.8	58	5.8	129	7.9
Darke	2	7.9	1	3.4	4	5.6
Defiance	1	8.1	<1	*	2	3.7
Delaware	4	8.6	1	2.5	5	4.9
Erie	2	5.5	2	3.1	4	4.1
Fairfield	4	8.2	2	2.8	6	5.0
Fayette	2	12.4	<1	*	2	7.2
Franklin	34	9.0	21	3.8	55	5.8
Fulton	2	11.4	<1	*	3	6.6
Gallia	<1	*	<1	*	1	3.2
Geauga	3	6.5	3	4.9	6	5.6
Greene	5	7.1	3	3.9	8	5.1
Guernsey	2	9.0	<1	*	3	5.5
Hamilton	39	10.2	21	3.8	60	6.5
Hancock	3	8.4	<1	*	4	4.6
Hardin	1	7.4	<1	*	1	3.5
Harrison	<1	*	<1	*	1	4.0
Henry	<1	*	<1	*	1	3.0
Highland	1	6.6	1	6.2	3	6.2
Hocking	<1	*	1	7.9	2	6.7
Holmes	<1	*	<1	*	1	3.0
Huron	2	9.1	1	4.3	4	6.5
Jackson	2	11.2	1	5.3	3	7.7
Jefferson	4	10.0	3	6.0	7	7.7
Knox	2	7.0	<1	*	2	3.4
Lake	13	11.5	6	4.1	19	7.2
Lawrence	3	10.6	2	4.8	5	7.4
Licking	4	6.1	4	4.2	7	4.7
Logan	<1	*	1	3.6	2	3.8
Lorain	15	10.5	9	4.9	23	7.3
Lucas	19	9.6	11	4.0	30	6.3
Madison	1	5.2	<1	*	1	3.4
Mahoning	13	9.5	12	5.6	25	7.3
Marion	3	8.9	2	3.8	5	6.3
Medina	7	10.3	3	3.2	10	6.3
Meigs	1	9.0	<1	*	1	4.8
Mercer	2	8.2	1	4.6	3	6.0
Miami	3	7.2	2	2.7	5	4.6
Monroe	<1	*	<1	*	1	4.8
Montgomery	21	8.3	13	3.8	35	5.6
Morgan	0	*	<1	*	<1	*
Morrow	2	14.2	<1	*	3	9.3
Muskingum	3	7.6	4	6.6	7	6.9
Noble	<1	*	<1	*	<1	*
Ottawa	2	9.4	<1	*	3	5.2
Paulding	<1	*	<1	*	<1	*
Perry	2	11.2	<1	*	2	7.1
Pickaway	2	9.1	2	5.8	4	7.2
Pike	1	7.9	2	10.0	3	9.2
Portage	5	8.6	4	4.7	9	6.5
Preble	1	6.3	<1	*	2	3.3
Putnam	1	8.0	<1	*	2	5.2
Richland	4	6.5	4	4.5	8	5.4
Ross	3	7.6	2	4.0	5	5.9
Sandusky	2	6.5	<1	*	3	3.9
Scioto	3	6.6	2	5.2	5	5.9
Seneca	2	6.7	1	3.9	3	5.3
Shelby	2	11.1	1	3.8	3	6.8
Stark	14	7.2	10	3.6	24	5.2
Summit	19	7.6	16	4.4	35	5.7
Trumbull	12	10.5	8	4.8	20	7.2
Tuscarawas	3	6.7	2	3.3	5	4.7
Union	1	7.1	<1	*	2	4.4
Van Wert	<1	*	<1	*	1	3.3
Vinton	1	16.1	<1	*	2	11.0
Warren	4	5.9	3	3.9	8	4.9
Washington	4	10.5	2	4.1	5	6.8
Wayne	4	8.0	2	2.4	6	4.8
Williams	<1	*	<1	*	1	3.1
Wood	3	6.2	1	2.0	4	3.7
Wyandot	<1	*	<1	*	1	4.3

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 26b

Stomach: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**250**	**4.9**	**175**	**2.4**	**426**	**3.4**
US[3]		**5.3**		**2.7**		**3.8**
Adams	1	7.5	<1	*	1	4.4
Allen	2	3.3	2	2.3	3	2.8
Ashland	1	3.9	<1	*	2	2.5
Ashtabula	2	4.6	2	2.5	4	3.7
Athens	<1	*	<1	*	<1	*
Auglaize	1	5.1	<1	*	1	2.6
Belmont	2	5.0	1	2.1	3	3.0
Brown	<1	*	<1	*	<1	*
Butler	7	5.8	3	1.9	11	3.5
Carroll	0	*	<1	*	<1	*
Champaign	1	7.6	<1	*	1	3.7
Clark	4	5.2	2	2.0	6	3.2
Clermont	2	3.6	2	2.5	5	2.9
Clinton	<1	*	<1	*	1	3.3
Columbiana	2	2.7	<1	*	2	1.8
Coshocton	<1	*	<1	*	1	2.4
Crawford	<1	*	<1	*	<1	*
Cuyahoga	43	6.7	36	3.6	79	4.8
Darke	2	5.6	<1	*	2	3.6
Defiance	<1	*	<1	*	1	2.3
Delaware	2	4.0	<1	*	2	2.3
Erie	1	2.1	1	1.9	2	2.1
Fairfield	2	3.3	1	1.5	3	2.3
Fayette	<1	*	<1	*	1	4.0
Franklin	20	5.6	12	2.2	32	3.5
Fulton	1	5.8	<1	*	2	3.8
Gallia	<1	*	<1	*	<1	*
Geauga	1	3.0	1	2.3	3	2.6
Greene	2	2.3	2	2.6	4	2.5
Guernsey	<1	*	<1	*	1	2.5
Hamilton	19	5.2	13	2.3	32	3.4
Hancock	<1	*	0	*	<1	*
Hardin	<1	*	<1	*	1	3.6
Harrison	<1	*	0	*	<1	*
Henry	<1	*	<1	*	<1	*
Highland	<1	*	<1	*	1	2.7
Hocking	<1	*	<1	*	1	3.1
Holmes	<1	*	<1	*	1	4.0
Huron	1	3.9	1	2.7	2	3.4
Jackson	2	9.9	<1	*	2	5.0
Jefferson	1	3.4	1	1.9	3	2.6
Knox	1	3.5	<1	*	1	2.2
Lake	7	6.4	6	3.5	13	4.8
Lawrence	1	4.8	1	2.5	2	3.4
Licking	2	3.4	2	2.1	4	2.6
Logan	<1	*	1	3.6	2	3.9
Lorain	9	7.0	5	2.7	14	4.4
Lucas	10	5.3	7	2.5	17	3.7
Madison	<1	*	<1	*	1	3.6
Mahoning	9	6.7	8	3.2	17	4.7
Marion	1	4.7	2	4.7	4	5.1
Medina	2	2.7	1	1.5	3	2.0
Meigs	<1	*	<1	*	1	4.2
Mercer	<1	*	<1	*	<1	*
Miami	1	3.2	1	2.1	3	2.6
Monroe	<1	*	<1	*	<1	*
Montgomery	12	4.7	8	2.3	20	3.2
Morgan	<1	*	<1	*	<1	*
Morrow	<1	*	<1	*	<1	*
Muskingum	2	4.3	1	2.3	3	3.1
Noble	<1	*	<1	*	<1	*
Ottawa	<1	*	<1	*	1	2.6
Paulding	0	*	<1	*	<1	*
Perry	<1	*	<1	*	1	4.0
Pickaway	2	7.9	1	4.3	3	5.7
Pike	0	*	<1	*	<1	*
Portage	3	5.4	3	3.3	6	4.3
Preble	<1	*	<1	*	<1	*
Putnam	<1	*	<1	*	<1	*
Richland	2	3.5	1	1.6	4	2.5
Ross	2	6.1	1	2.7	3	4.2
Sandusky	<1	*	<1	*	1	1.9
Scioto	2	5.1	1	2.6	3	3.7
Seneca	<1	*	<1	*	1	2.3
Shelby	<1	*	<1	*	<1	*
Stark	9	4.2	5	1.7	13	2.8
Summit	15	5.9	10	2.6	25	4.0
Trumbull	7	5.8	4	2.1	10	3.7
Tuscarawas	2	4.6	<1	*	3	2.2
Union	1	6.6	<1	*	1	3.6
Van Wert	<1	*	<1	*	<1	*
Vinton	0	*	0	*	0	*
Warren	3	4.4	2	2.4	5	3.3
Washington	2	4.6	<1	*	2	2.7
Wayne	2	3.6	1	1.6	3	2.4
Williams	<1	*	0	*	<1	*
Wood	2	3.3	<1	*	2	2.0
Wyandot	<1	*	<1	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 27a

Testis: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Males, by County of Residence, Ohio, 2003-2007[1,2]

	Cases	Rate
Ohio	**308**	**5.6**
SEER[3]		**5.4**
Adams	1	7.4
Allen	3	6.3
Ashland	1	4.0
Ashtabula	2	3.3
Athens	3	10.2
Auglaize	1	4.9
Belmont	1	4.0
Brown	1	6.9
Butler	7	4.1
Carroll	<1	*
Champaign	1	5.4
Clark	4	7.1
Clermont	5	5.6
Clinton	<1	*
Columbiana	3	5.7
Coshocton	<1	*
Crawford	1	6.9
Cuyahoga	35	5.9
Darke	2	9.6
Defiance	<1	*
Delaware	4	5.1
Erie	1	3.9
Fairfield	4	5.5
Fayette	<1	*
Franklin	32	5.5
Fulton	1	5.6
Gallia	1	9.3
Geauga	3	6.7
Greene	3	4.0
Guernsey	<1	*
Hamilton	19	5.0
Hancock	2	7.0
Hardin	<1	*
Harrison	<1	*
Henry	<1	*
Highland	2	7.9
Hocking	<1	*
Holmes	<1	*
Huron	1	4.6
Jackson	<1	*
Jefferson	2	5.7
Knox	1	4.5
Lake	6	5.0

	Cases	Rate
Lawrence	<1	*
Licking	6	7.8
Logan	<1	*
Lorain	7	4.8
Lucas	11	5.4
Madison	1	3.9
Mahoning	8	7.2
Marion	1	2.7
Medina	6	8.0
Meigs	<1	*
Mercer	2	8.0
Miami	2	3.4
Monroe	0	*
Montgomery	15	5.8
Morgan	<1	*
Morrow	1	6.1
Muskingum	2	5.6
Noble	<1	*
Ottawa	1	4.8
Paulding	0	*
Perry	<1	*
Pickaway	2	7.2
Pike	<1	*
Portage	3	3.9
Preble	1	7.0
Putnam	1	7.6
Richland	3	5.0
Ross	2	4.1
Sandusky	2	8.4
Scioto	3	8.0
Seneca	2	6.3
Shelby	2	10.5
Stark	11	7.0
Summit	16	6.4
Trumbull	6	6.5
Tuscarawas	2	6.0
Union	2	9.0
Van Wert	<1	*
Vinton	<1	*
Warren	6	6.0
Washington	3	9.2
Wayne	3	5.7
Williams	2	8.7
Wood	3	4.8
Wyandot	1	9.5

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 27b

Testis: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Males, by County of Residence, Ohio, 2003-2007[1,2]

	Deaths	Rate
Ohio	**13**	**0.2**
US[3]		**0.2**
Adams	0	*
Allen	<1	*
Ashland	0	*
Ashtabula	<1	*
Athens	<1	*
Auglaize	0	*
Belmont	<1	*
Brown	0	*
Butler	<1	*
Carroll	<1	*
Champaign	0	*
Clark	0	*
Clermont	0	*
Clinton	0	*
Columbiana	0	*
Coshocton	<1	*
Crawford	<1	*
Cuyahoga	1	0.2
Darke	<1	*
Defiance	0	*
Delaware	0	*
Erie	0	*
Fairfield	<1	*
Fayette	0	*
Franklin	<1	*
Fulton	0	*
Gallia	<1	*
Geauga	<1	*
Greene	0	*
Guernsey	0	*
Hamilton	1	0.3
Hancock	0	*
Hardin	0	*
Harrison	0	*
Henry	0	*
Highland	<1	*
Hocking	0	*
Holmes	0	*
Huron	0	*
Jackson	<1	*
Jefferson	0	*
Knox	0	*
Lake	0	*

	Deaths	Rate
Lawrence	0	*
Licking	0	*
Logan	0	*
Lorain	1	0.7
Lucas	<1	*
Madison	0	*
Mahoning	<1	*
Marion	0	*
Medina	<1	*
Meigs	0	*
Mercer	0	*
Miami	0	*
Monroe	0	*
Montgomery	<1	*
Morgan	0	*
Morrow	0	*
Muskingum	0	*
Noble	0	*
Ottawa	0	*
Paulding	0	*
Perry	0	*
Pickaway	0	*
Pike	<1	*
Portage	<1	*
Preble	<1	*
Putnam	<1	*
Richland	0	*
Ross	0	*
Sandusky	0	*
Scioto	0	*
Seneca	<1	*
Shelby	0	*
Stark	<1	*
Summit	<1	*
Trumbull	0	*
Tuscarawas	<1	*
Union	0	*
Van Wert	0	*
Vinton	0	*
Warren	0	*
Washington	0	*
Wayne	0	*
Williams	0	*
Wood	<1	*
Wyandot	0	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 28a

Thyroid: Incidence

Average Annual Number of Invasive Cancer Cases and Age-adjusted Incidence Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Cases	Rate	Cases	Rate	Cases	Rate
Ohio	**252**	**4.5**	**834**	**13.7**	**1,087**	**9.2**
SEER[3]		**5.2**		**15.2**		**10.2**
Adams	<1	*	3	20.8	3	12.6
Allen	3	5.5	9	15.4	12	10.4
Ashland	1	4.1	4	16.3	6	10.3
Ashtabula	3	4.5	8	15.2	11	10.0
Athens	1	4.6	2	7.6	3	6.0
Auglaize	1	4.8	4	17.3	5	10.9
Belmont	2	6.0	5	14.0	7	9.9
Brown	1	4.7	3	13.3	4	9.0
Butler	9	5.6	24	13.4	33	9.6
Carroll	<1	*	<1	*	1	3.8
Champaign	<1	*	2	8.3	2	5.3
Clark	2	3.5	13	16.0	15	9.9
Clermont	2	2.5	16	16.1	18	9.5
Clinton	1	5.9	5	22.3	6	14.1
Columbiana	3	4.8	9	15.2	12	9.9
Coshocton	2	10.4	3	12.9	5	11.6
Crawford	1	4.7	3	10.5	4	7.8
Cuyahoga	30	4.6	94	12.3	124	8.7
Darke	<1	*	2	8.2	3	5.2
Defiance	1	4.6	2	8.6	3	6.8
Delaware	5	7.1	15	20.2	20	13.8
Erie	3	6.4	9	19.3	11	13.1
Fairfield	3	5.0	8	11.6	12	8.3
Fayette	<1	*	2	16.4	3	9.5
Franklin	24	5.1	94	16.7	119	10.9
Fulton	1	5.3	2	9.1	3	7.1
Gallia	<1	*	2	14.2	3	8.6
Geauga	2	3.8	7	13.5	9	8.8
Greene	4	6.0	12	15.2	16	10.6
Guernsey	<1	*	2	8.7	2	5.7
Hamilton	19	4.7	59	12.8	77	8.9
Hancock	3	7.8	4	10.9	7	9.5
Hardin	<1	*	1	9.4	2	5.4
Harrison	<1	*	1	15.8	2	9.1
Henry	<1	*	2	15.9	3	8.5
Highland	1	4.5	4	17.5	5	11.2
Hocking	<1	*	1	9.5	2	6.3
Holmes	<1	*	1	6.9	2	4.1
Huron	1	3.9	6	18.7	7	11.5
Jackson	<1	*	1	8.5	2	5.5
Jefferson	4	9.3	8	20.2	12	14.9
Knox	0	*	6	20.8	6	10.6
Lake	6	4.8	12	9.4	18	7.1
Lawrence	2	5.7	7	19.7	8	13.0
Licking	5	7.3	14	17.0	19	12.2
Logan	<1	*	3	12.2	4	7.7
Lorain	6	3.7	25	16.1	31	10.0
Lucas	9	4.4	29	12.5	38	8.5
Madison	1	5.8	5	23.2	6	13.5
Mahoning	4	3.6	14	9.7	18	6.7
Marion	1	3.8	<1	*	2	2.9
Medina	5	5.7	17	18.4	21	12.2
Meigs	0	*	1	8.9	1	4.5
Mercer	<1	*	2	10.7	3	6.9
Miami	1	2.9	4	7.3	5	5.0
Monroe	0	*	1	15.4	1	7.6
Montgomery	10	3.9	40	13.5	50	8.8
Morgan	<1	*	<1	*	2	10.4
Morrow	<1	*	2	9.8	2	7.6
Muskingum	2	5.1	6	11.9	8	8.6
Noble	<1	*	<1	*	<1	*
Ottawa	3	12.7	4	18.0	7	15.5
Paulding	<1	*	<1	*	<1	*
Perry	<1	*	2	10.6	3	7.3
Pickaway	<1	*	4	17.3	5	8.2
Pike	<1	*	2	16.3	3	9.2
Portage	3	4.0	9	11.1	12	7.6
Preble	<1	*	3	13.2	4	7.9
Putnam	<1	*	2	15.4	3	9.6
Richland	1	2.0	7	10.2	8	5.9
Ross	1	3.4	6	15.8	7	9.1
Sandusky	1	3.9	5	17.3	7	10.5
Scioto	2	6.2	6	13.2	8	9.8
Seneca	<1	*	4	13.4	5	8.1
Shelby	1	4.8	3	11.7	4	8.2
Stark	7	3.6	21	10.3	28	7.0
Summit	8	2.9	34	11.5	42	7.4
Trumbull	7	5.7	16	12.9	23	9.4
Tuscarawas	2	4.3	6	13.5	9	8.9
Union	<1	*	6	24.0	7	14.7
Van Wert	<1	*	2	14.0	2	7.7
Vinton	0	*	<1	*	<1	*
Warren	6	6.1	18	18.8	24	12.3
Washington	3	9.7	4	12.4	8	11.1
Wayne	4	6.2	15	25.9	18	16.2
Williams	<1	*	2	7.2	2	4.6
Wood	3	5.3	9	15.8	12	10.7
Wyandot	<1	*	<1	*	1	4.9

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 17 Registries Public-Use, Nov 2009 Submission.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).
Note: Low county numbers and rates may reflect underreporting for that county.

Table 28b

Thyroid: Mortality

Average Annual Number of Cancer Deaths and Age-adjusted Mortality Rates, per 100,000 Persons, by County of Residence and Gender, Ohio, 2003-2007[1,2]

	MALE		FEMALE		TOTAL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Ohio	**28**	**0.5**	**34**	**0.5**	**62**	**0.5**
US[3]		**0.5**		**0.5**		**0.5**
Adams	0	*	<1	*	<1	*
Allen	<1	*	<1	*	1	0.8
Ashland	0	*	<1	*	<1	*
Ashtabula	<1	*	<1	*	<1	*
Athens	0	*	0	*	0	*
Auglaize	<1	*	0	*	<1	*
Belmont	0	*	<1	*	<1	*
Brown	0	*	0	*	0	*
Butler	0	*	1	0.8	1	0.4
Carroll	0	*	0	*	0	*
Champaign	<1	*	0	*	<1	*
Clark	1	2.0	<1	*	2	1.0
Clermont	<1	*	<1	*	<1	*
Clinton	0	*	<1	*	<1	*
Columbiana	<1	*	<1	*	<1	*
Coshocton	<1	*	0	*	<1	*
Crawford	0	*	<1	*	<1	*
Cuyahoga	3	0.4	5	0.5	8	0.5
Darke	0	*	<1	*	<1	*
Defiance	0	*	<1	*	<1	*
Delaware	1	1.8	0	*	1	0.8
Erie	0	*	<1	*	<1	*
Fairfield	0	*	<1	*	<1	*
Fayette	0	*	<1	*	<1	*
Franklin	3	0.8	2	0.3	5	0.5
Fulton	0	*	0	*	0	*
Gallia	0	*	<1	*	<1	*
Geauga	<1	*	<1	*	<1	*
Greene	<1	*	<1	*	<1	*
Guernsey	<1	*	0	*	<1	*
Hamilton	3	0.8	3	0.5	6	0.7
Hancock	<1	*	<1	*	<1	*
Hardin	0	*	0	*	0	*
Harrison	0	*	0	*	0	*
Henry	<1	*	0	*	<1	*
Highland	0	*	<1	*	<1	*
Hocking	0	*	<1	*	<1	*
Holmes	<1	*	0	*	<1	*
Huron	<1	*	<1	*	<1	*
Jackson	<1	*	0	*	<1	*
Jefferson	<1	*	<1	*	<1	*
Knox	<1	*	<1	*	<1	*
Lake	<1	*	<1	*	1	0.4
Lawrence	<1	*	<1	*	<1	*
Licking	<1	*	<1	*	<1	*
Logan	0	*	0	*	0	*
Lorain	<1	*	<1	*	1	0.4
Lucas	2	0.7	2	0.8	4	0.8
Madison	<1	*	<1	*	<1	*
Mahoning	<1	*	<1	*	<1	*
Marion	0	*	0	*	0	*
Medina	<1	*	<1	*	1	0.6
Meigs	0	*	0	*	0	*
Mercer	<1	*	0	*	<1	*
Miami	0	*	<1	*	<1	*
Monroe	<1	*	0	*	<1	*
Montgomery	<1	*	2	0.7	3	0.5
Morgan	<1	*	0	*	<1	*
Morrow	<1	*	<1	*	<1	*
Muskingum	0	*	<1	*	<1	*
Noble	0	*	0	*	0	*
Ottawa	0	*	0	*	0	*
Paulding	0	*	<1	*	<1	*
Perry	0	*	0	*	0	*
Pickaway	<1	*	<1	*	<1	*
Pike	<1	*	0	*	<1	*
Portage	0	*	<1	*	<1	*
Preble	0	*	<1	*	<1	*
Putnam	0	*	<1	*	<1	*
Richland	<1	*	<1	*	<1	*
Ross	<1	*	<1	*	<1	*
Sandusky	<1	*	<1	*	<1	*
Scioto	<1	*	<1	*	<1	*
Seneca	<1	*	0	*	<1	*
Shelby	0	*	<1	*	<1	*
Stark	<1	*	<1	*	1	0.2
Summit	<1	*	1	0.3	2	0.3
Trumbull	<1	*	<1	*	1	0.4
Tuscarawas	<1	*	<1	*	<1	*
Union	<1	*	0	*	0	*
Van Wert	0	*	0	*	<1	*
Vinton	0	*	0	*	0	*
Warren	<1	*	<1	*	1	0.7
Washington	0	*	0	*	0	*
Wayne	<1	*	<1	*	<1	*
Williams	<1	*	0	*	<1	*
Wood	<1	*	<1	*	<1	*
Wyandot	<1	*	0	*	<1	*

[1] Source: Ohio Cancer Incidence Surveillance System and the Vital Statistics Program, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Surveillance, Epidemiology and End Results (SEER) Program national cancer mortality rates for 2003-2007, calculated from the National Center for Health Statistics public use data file, released June 2010.
* Rates may be unstable and are not presented when the case count for 2003-2007 is less than five (i.e. the average annual count is less than one).

Table 29

Breast (Female)

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**1,830**	**18.5%**	**4,896**	**49.4%**	**2,433**	**24.6%**	**430**	**4.3%**	**315**	**3.2%**	**9,903**
Adams	2	9.1%	10	59.1%	4	25.0%	<1	4.5%	<1	2.3%	18
Allen	19	19.6%	47	47.6%	24	24.9%	5	4.7%	3	3.1%	98
Ashland	9	20.4%	23	54.2%	9	20.8%	<1	1.9%	1	2.8%	43
Ashtabula	16	18.5%	41	48.6%	18	21.1%	5	5.9%	5	5.9%	85
Athens	5	14.7%	17	51.5%	7	21.5%	2	7.4%	2	4.9%	33
Auglaize	7	17.8%	20	47.6%	11	25.5%	3	7.2%	<1	1.9%	42
Belmont	17	20.1%	37	45.0%	24	28.8%	3	3.6%	2	2.4%	83
Brown	5	14.7%	16	50.6%	9	29.5%	1	4.5%	<1	0.6%	31
Butler	53	19.5%	129	47.8%	72	26.7%	9	3.2%	8	2.8%	270
Carroll	5	20.0%	13	53.3%	5	20.0%	<1	3.3%	<1	3.3%	24
Champaign	3	11.0%	16	55.2%	8	26.9%	1	4.1%	<1	2.8%	29
Clark	20	16.1%	63	50.3%	35	28.0%	3	2.5%	4	3.0%	126
Clermont	30	19.4%	77	49.1%	38	24.4%	8	5.1%	3	2.1%	156
Clinton	8	22.3%	19	52.0%	8	21.2%	1	2.8%	<1	1.7%	36
Columbiana	14	15.3%	43	48.9%	21	23.6%	3	3.8%	7	8.3%	89
Coshocton	4	13.7%	11	43.5%	9	32.8%	1	4.6%	1	5.3%	26
Crawford	5	13.9%	16	43.9%	13	33.7%	2	4.3%	2	4.3%	37
Cuyahoga	245	19.0%	638	49.4%	306	23.8%	65	5.1%	36	2.8%	1,290
Darke	7	16.3%	17	39.7%	13	30.6%	3	6.7%	3	6.7%	42
Defiance	5	17.9%	14	53.0%	5	17.2%	2	7.5%	1	4.5%	27
Delaware	22	18.2%	63	52.6%	29	23.7%	4	3.0%	3	2.5%	121
Erie	12	15.0%	44	53.4%	21	25.4%	3	3.6%	2	2.7%	83
Fairfield	16	14.8%	58	52.3%	27	24.2%	6	5.2%	4	3.4%	111
Fayette	4	20.8%	11	52.8%	3	15.1%	1	4.7%	1	6.6%	21
Franklin	157	18.1%	427	49.2%	222	25.6%	36	4.2%	26	3.0%	867
Fulton	6	17.5%	16	48.0%	9	26.3%	2	5.8%	<1	2.3%	34
Gallia	6	24.6%	11	44.9%	6	24.6%	1	4.2%	<1	1.7%	24
Geauga	18	19.8%	49	54.0%	19	20.5%	3	3.3%	2	2.4%	91
Greene	24	16.8%	71	49.3%	39	26.9%	5	3.6%	5	3.5%	144
Guernsey	7	16.6%	20	46.5%	14	33.2%	1	3.2%	<1	0.5%	43
Hamilton	153	20.2%	382	50.4%	176	23.2%	30	4.0%	17	2.2%	758
Hancock	8	12.7%	33	53.2%	18	28.3%	2	3.2%	2	2.5%	63
Hardin	5	23.5%	10	49.0%	4	20.6%	<1	2.9%	<1	3.9%	20
Harrison	2	16.4%	5	47.3%	3	29.1%	<1	1.8%	<1	5.5%	11
Henry	2	14.6%	8	51.2%	4	23.2%	1	8.5%	<1	2.4%	16
Highland	6	20.0%	18	57.4%	5	14.8%	2	5.2%	<1	2.6%	31
Hocking	3	14.2%	12	58.5%	4	19.8%	<1	2.8%	1	4.7%	21
Holmes	3	15.8%	8	41.1%	5	27.4%	<1	3.2%	2	12.6%	19
Huron	8	18.7%	23	54.7%	9	20.1%	2	4.7%	<1	1.9%	43
Jackson	4	16.8%	13	50.4%	6	24.8%	1	4.8%	<1	3.2%	25
Jefferson	12	18.0%	35	51.3%	16	24.2%	3	3.8%	2	2.7%	68
Knox	5	11.2%	25	54.5%	11	23.2%	3	6.0%	2	5.2%	47
Lake	46	20.6%	114	51.4%	45	20.5%	11	4.8%	6	2.7%	221

Continued on pg. 67

Table 29 (continued)

Breast (Female)

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	6	9.9%	29	52.1%	13	23.8%	5	9.2%	3	5.0%	56
Licking	19	13.8%	75	54.7%	32	23.4%	5	3.9%	6	4.2%	138
Logan	9	21.7%	20	47.8%	10	25.1%	<1	1.4%	2	3.9%	41
Lorain	55	21.6%	117	46.1%	61	24.0%	11	4.3%	10	3.9%	253
Lucas	76	20.1%	175	46.5%	97	25.8%	18	4.7%	10	2.8%	375
Madison	4	14.5%	13	46.4%	9	33.3%	<1	2.2%	1	3.6%	28
Mahoning	41	16.0%	124	48.7%	66	25.9%	10	3.9%	14	5.5%	255
Marion	11	20.3%	25	43.8%	15	26.3%	4	6.4%	2	3.2%	56
Medina	30	21.4%	66	47.2%	34	24.1%	6	4.3%	4	3.0%	139
Meigs	3	21.6%	8	56.8%	2	16.2%	<1	5.4%	0	0.0%	15
Mercer	5	15.0%	16	47.4%	8	23.1%	3	7.5%	2	6.9%	35
Miami	16	18.1%	46	50.7%	22	24.1%	4	4.2%	3	2.9%	90
Monroe	3	21.7%	6	46.7%	3	23.3%	<1	5.0%	<1	3.3%	12
Montgomery	95	18.6%	251	49.4%	119	23.4%	26	5.1%	18	3.5%	508
Morgan	1	12.7%	6	52.7%	3	30.9%	<1	1.8%	<1	1.8%	11
Morrow	4	16.4%	10	40.6%	7	27.3%	1	5.5%	3	10.2%	26
Muskingum	13	19.4%	32	46.2%	20	28.9%	2	3.2%	2	2.3%	69
Noble	2	22.5%	4	47.5%	2	27.5%	<1	2.5%	0	0.0%	8
Ottawa	5	11.2%	22	51.2%	13	31.2%	2	3.7%	1	2.8%	43
Paulding	2	15.7%	5	37.1%	5	34.3%	<1	1.4%	2	11.4%	14
Perry	3	12.4%	11	45.5%	7	29.8%	2	9.1%	<1	3.3%	24
Pickaway	6	15.6%	21	50.2%	10	23.4%	2	5.9%	2	4.9%	41
Pike	3	13.8%	9	45.7%	6	31.9%	1	6.4%	<1	2.1%	19
Portage	21	19.0%	55	49.1%	28	25.1%	4	3.6%	4	3.2%	112
Preble	7	16.3%	20	48.8%	9	22.2%	3	7.4%	2	5.4%	41
Putnam	6	22.0%	14	49.6%	6	22.0%	1	3.5%	<1	2.8%	28
Richland	20	17.5%	57	49.1%	32	27.4%	4	3.4%	3	2.6%	117
Ross	10	17.7%	30	51.2%	15	24.9%	2	3.1%	2	3.1%	59
Sandusky	7	13.0%	29	53.3%	15	27.8%	2	4.1%	1	1.9%	54
Scioto	11	18.5%	25	44.3%	15	26.5%	5	8.0%	2	2.8%	57
Seneca	6	13.8%	25	54.3%	11	24.6%	2	4.3%	1	3.0%	46
Shelby	7	19.1%	20	52.7%	7	17.6%	1	3.7%	3	6.9%	38
Stark	78	22.7%	164	47.4%	80	23.1%	13	3.6%	11	3.2%	346
Summit	82	16.9%	245	50.3%	125	25.8%	22	4.6%	12	2.4%	486
Trumbull	40	18.6%	114	53.3%	47	22.0%	7	3.1%	7	3.1%	213
Tuscarawas	11	15.0%	39	53.0%	19	26.0%	2	2.7%	2	3.3%	73
Union	5	14.9%	15	47.8%	9	26.7%	2	5.0%	2	5.6%	32
Van Wert	7	24.3%	13	46.3%	6	23.5%	<1	2.2%	1	3.7%	27
Vinton	2	20.8%	5	49.1%	2	20.8%	<1	3.8%	<1	5.7%	11
Warren	33	21.1%	72	45.7%	44	28.2%	4	2.6%	4	2.4%	157
Washington	9	16.5%	29	55.1%	12	23.2%	2	3.0%	1	2.2%	53
Wayne	19	22.2%	41	48.0%	18	21.0%	3	3.1%	5	5.7%	85
Williams	7	21.6%	15	47.7%	7	23.5%	2	5.2%	<1	2.0%	31
Wood	19	20.5%	43	46.7%	22	24.0%	5	5.0%	3	3.7%	92
Wyandot	4	16.4%	12	50.0%	6	25.0%	1	6.0%	<1	2.6%	23

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 30

Cervix

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1,2]

	Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**224**	**46.0%**	**177**	**36.2%**	**48**	**9.9%**	**39**	**7.9%**	**487**
Adams	<1	33.3%	<1	50.0%	0	0.0%	<1	16.7%	1
Allen	3	53.8%	1	23.1%	<1	11.5%	<1	11.5%	5
Ashland	<1	20.0%	1	70.0%	<1	10.0%	0	0.0%	2
Ashtabula	3	52.0%	1	24.0%	<1	8.0%	<1	16.0%	5
Athens	2	44.4%	1	38.9%	<1	11.1%	<1	5.6%	4
Auglaize	<1	20.0%	1	40.0%	<1	20.0%	<1	20.0%	3
Belmont	1	42.9%	1	50.0%	<1	7.1%	0	0.0%	3
Brown	<1	66.7%	<1	16.7%	<1	16.7%	0	0.0%	1
Butler	7	48.6%	5	38.6%	1	10.0%	<1	2.9%	14
Carroll	<1	66.7%	<1	33.3%	0	0.0%	0	0.0%	1
Champaign	1	63.6%	<1	18.2%	<1	18.2%	0	0.0%	2
Clark	3	40.0%	2	34.3%	1	14.3%	<1	11.4%	7
Clermont	3	45.2%	3	45.2%	<1	3.2%	<1	6.5%	6
Clinton	<1	50.0%	<1	50.0%	0	0.0%	0	0.0%	2
Columbiana	3	51.6%	2	25.8%	<1	6.5%	1	16.1%	6
Coshocton	<1	16.7%	2	75.0%	0	0.0%	<1	8.3%	2
Crawford	1	53.8%	<1	15.4%	<1	15.4%	<1	15.4%	3
Cuyahoga	30	47.6%	23	36.3%	5	8.4%	5	7.7%	62
Darke	1	55.6%	<1	33.3%	<1	11.1%	0	0.0%	2
Defiance	<1	42.9%	<1	28.6%	<1	28.6%	0	0.0%	1
Delaware	3	48.4%	2	35.5%	<1	9.7%	<1	6.5%	6
Erie	1	33.3%	1	33.3%	<1	20.0%	<1	13.3%	3
Fairfield	2	47.6%	1	23.8%	<1	14.3%	<1	14.3%	4
Fayette	<1	20.0%	2	53.3%	<1	20.0%	<1	6.7%	3
Franklin	23	46.3%	16	32.0%	7	13.5%	4	8.2%	49
Fulton	<1	37.5%	1	62.5%	0	0.0%	0	0.0%	2
Gallia	1	46.2%	1	38.5%	0	0.0%	<1	15.4%	3
Geauga	1	46.2%	1	38.5%	<1	7.7%	<1	7.7%	3
Greene	2	45.5%	2	40.9%	<1	9.1%	<1	4.5%	4
Guernsey	<1	30.0%	<1	20.0%	<1	30.0%	<1	20.0%	2
Hamilton	13	43.5%	12	40.1%	2	8.2%	2	8.2%	29
Hancock	2	55.6%	1	27.8%	<1	11.1%	<1	5.6%	4
Hardin	1	50.0%	<1	10.0%	<1	30.0%	<1	10.0%	2
Harrison	<1	44.4%	<1	33.3%	0	0.0%	<1	22.2%	2
Henry	<1	50.0%	<1	50.0%	0	0.0%	0	0.0%	2
Highland	<1	28.6%	1	50.0%	<1	7.1%	<1	14.3%	3
Hocking	<1	40.0%	<1	40.0%	<1	20.0%	0	0.0%	2
Holmes	<1	50.0%	0	0.0%	0	0.0%	<1	50.0%	<1
Huron	<1	26.7%	1	33.3%	1	40.0%	0	0.0%	3
Jackson	1	58.3%	<1	25.0%	<1	16.7%	0	0.0%	2
Jefferson	2	64.3%	<1	14.3%	<1	7.1%	<1	14.3%	3
Knox	<1	30.8%	2	61.5%	<1	7.7%	0	0.0%	3
Lake	4	51.4%	2	29.7%	<1	8.1%	<1	10.8%	7

Continued on pg. 69

Table 30 (continued)

Cervix

	Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	2	61.1%	<1	22.2%	<1	5.6%	<1	11.1%	4
Licking	4	54.1%	3	35.1%	<1	8.1%	<1	2.7%	7
Logan	<1	37.5%	<1	25.0%	<1	25.0%	<1	12.5%	2
Lorain	8	49.4%	5	31.6%	2	11.4%	1	7.6%	16
Lucas	7	41.9%	8	48.8%	<1	3.5%	1	5.8%	17
Madison	<1	12.5%	1	62.5%	<1	12.5%	<1	12.5%	2
Mahoning	3	34.0%	5	46.0%	<1	6.0%	1	14.0%	10
Marion	1	46.2%	<1	30.8%	<1	15.4%	<1	7.7%	3
Medina	4	67.9%	1	17.9%	<1	3.6%	<1	10.7%	6
Meigs	<1	37.5%	<1	50.0%	0	0.0%	<1	12.5%	2
Mercer	<1	27.3%	<1	27.3%	<1	27.3%	<1	18.2%	2
Miami	2	47.4%	2	42.1%	<1	5.3%	<1	5.3%	4
Monroe	<1	50.0%	0	0.0%	0	0.0%	<1	50.0%	0
Montgomery	13	52.0%	9	35.0%	1	5.7%	2	7.3%	25
Morgan	<1	100.0%	0	0.0%	0	0.0%	0	0.0%	0
Morrow	<1	33.3%	<1	33.3%	0	0.0%	<1	33.3%	2
Muskingum	2	38.5%	3	50.0%	<1	7.7%	<1	3.8%	5
Noble	<1	60.0%	<1	40.0%	0	0.0%	0	0.0%	1
Ottawa	<1	40.0%	<1	40.0%	<1	20.0%	0	0.0%	2
Paulding	<1	14.3%	1	71.4%	<1	14.3%	0	0.0%	1
Perry	<1	37.5%	<1	37.5%	<1	25.0%	0	0.0%	2
Pickaway	<1	50.0%	<1	37.5%	<1	12.5%	0	0.0%	2
Pike	<1	12.5%	<1	50.0%	<1	12.5%	<1	25.0%	2
Portage	3	56.0%	<1	16.0%	1	20.0%	<1	8.0%	5
Preble	<1	25.0%	1	62.5%	<1	12.5%	0	0.0%	2
Putnam	1	75.0%	<1	25.0%	0	0.0%	0	0.0%	2
Richland	3	42.9%	3	37.1%	<1	11.4%	<1	8.6%	7
Ross	3	59.1%	1	27.3%	<1	9.1%	<1	4.5%	4
Sandusky	1	37.5%	2	56.3%	0	0.0%	<1	6.3%	3
Scioto	2	40.7%	2	40.7%	<1	11.1%	<1	7.4%	5
Seneca	1	46.2%	1	46.2%	<1	7.7%	0	0.0%	3
Shelby	<1	60.0%	<1	40.0%	0	0.0%	0	0.0%	1
Stark	5	43.9%	4	35.1%	2	15.8%	<1	5.3%	11
Summit	9	48.4%	7	34.7%	2	10.5%	1	6.3%	19
Trumbull	4	54.5%	2	33.3%	<1	12.1%	0	0.0%	7
Tuscarawas	1	31.6%	1	36.8%	<1	10.5%	<1	21.1%	4
Union	<1	66.7%	<1	33.3%	0	0.0%	0	0.0%	1
Van Wert	<1	60.0%	<1	40.0%	0	0.0%	0	0.0%	1
Vinton	<1	100.0%	0	0.0%	0	0.0%	0	0.0%	0
Warren	4	57.1%	2	31.4%	<1	5.7%	<1	5.7%	7
Washington	1	37.5%	1	43.8%	<1	6.3%	<1	12.5%	3
Wayne	2	33.3%	2	40.0%	<1	3.3%	1	23.3%	6
Williams	1	54.5%	<1	9.1%	<1	18.2%	<1	18.2%	2
Wood	2	48.0%	2	44.0%	<1	8.0%	0	0.0%	5
Wyandot	<1	25.0%	1	62.5%	<1	12.5%	0	0.0%	2

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] Cervical cancer *in situ* is not required to be reported to the OCISS and thus not presented.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 31

Colon and Rectum

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**471**	**6.9%**	**2,477**	**36.2%**	**2,142**	**31.3%**	**1,103**	**16.1%**	**648**	**9.5%**	**6,841**
Adams	<1	1.0%	8	42.7%	5	27.1%	2	11.5%	3	17.7%	19
Allen	6	9.4%	26	39.1%	16	23.6%	11	16.1%	8	11.8%	66
Ashland	1	3.8%	10	31.3%	12	38.8%	5	16.9%	3	9.4%	32
Ashtabula	6	7.8%	27	36.4%	19	25.3%	12	15.9%	11	14.6%	74
Athens	1	4.5%	12	46.3%	7	27.6%	3	12.7%	2	9.0%	27
Auglaize	4	11.9%	13	37.3%	9	26.6%	7	19.2%	2	5.1%	35
Belmont	6	8.5%	21	32.0%	22	33.8%	9	14.3%	7	11.3%	66
Brown	3	10.0%	8	32.3%	8	30.8%	4	15.4%	3	11.5%	26
Butler	14	7.7%	68	37.0%	58	31.5%	26	14.3%	17	9.5%	184
Carroll	4	20.0%	6	26.7%	7	35.2%	3	12.4%	1	5.7%	21
Champaign	2	8.1%	8	30.6%	7	29.8%	5	18.5%	3	12.9%	25
Clark	4	4.4%	33	36.5%	30	32.7%	13	14.4%	11	11.9%	90
Clermont	5	4.9%	42	44.0%	29	30.4%	12	12.7%	8	8.0%	95
Clinton	4	15.9%	10	38.1%	4	16.7%	4	17.5%	3	11.9%	25
Columbiana	4	5.2%	25	29.3%	29	34.0%	14	16.2%	13	15.2%	84
Coshocton	1	5.3%	9	34.8%	10	39.4%	4	16.7%	1	3.8%	26
Crawford	2	7.7%	9	30.3%	10	31.0%	6	19.4%	4	11.6%	31
Cuyahoga	55	6.5%	302	35.6%	264	31.1%	141	16.6%	87	10.3%	851
Darke	2	5.8%	9	29.7%	11	36.8%	4	12.3%	5	15.5%	31
Defiance	<1	2.2%	7	39.1%	7	38.0%	3	15.2%	1	5.4%	18
Delaware	2	4.2%	23	39.8%	18	32.4%	9	15.5%	5	8.1%	57
Erie	6	9.0%	21	31.4%	23	35.0%	10	15.6%	6	9.0%	67
Fairfield	2	2.2%	28	39.0%	23	32.3%	11	16.0%	7	10.4%	71
Fayette	<1	3.1%	7	36.5%	6	32.3%	1	7.3%	4	20.8%	19
Franklin	20	4.3%	164	35.1%	161	34.5%	85	18.3%	36	7.8%	466
Fulton	2	8.5%	9	38.5%	7	30.8%	4	17.9%	1	4.3%	23
Gallia	1	5.6%	6	31.5%	5	30.3%	4	24.7%	1	7.9%	18
Geauga	5	10.3%	19	35.6%	14	27.6%	7	12.6%	7	13.8%	52
Greene	9	9.9%	35	38.1%	23	24.9%	17	18.7%	8	8.4%	91
Guernsey	1	4.0%	9	30.7%	12	40.0%	6	18.7%	2	6.7%	30
Hamilton	38	7.8%	174	35.7%	154	31.5%	78	16.0%	43	8.9%	487
Hancock	3	7.7%	14	37.6%	10	28.7%	8	21.0%	2	5.0%	36
Hardin	1	5.2%	7	36.5%	6	32.3%	3	13.5%	2	12.5%	19
Harrison	1	9.0%	6	41.0%	5	29.5%	2	12.8%	1	7.7%	16
Henry	<1	4.0%	6	38.7%	5	32.0%	3	17.3%	1	8.0%	15
Highland	1	4.3%	12	41.7%	7	25.9%	5	18.0%	3	10.1%	28
Hocking	<1	1.1%	7	37.5%	6	36.4%	2	12.5%	2	12.5%	18
Holmes	3	11.9%	8	33.9%	6	27.1%	4	15.3%	3	11.9%	24
Huron	4	11.0%	15	38.0%	12	30.5%	5	13.5%	3	7.0%	40
Jackson	1	4.7%	7	30.8%	7	33.6%	4	17.8%	3	13.1%	21
Jefferson	7	9.7%	26	38.6%	19	28.0%	8	11.8%	8	11.8%	68
Knox	4	9.6%	14	31.7%	15	33.5%	7	17.0%	4	8.3%	44
Lake	9	6.1%	52	35.4%	46	31.4%	20	13.7%	20	13.4%	146

Continued on pg. 71

Table 31 (continued)

Colon and Rectum

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	4	8.1%	21	44.4%	11	22.6%	7	14.5%	5	10.3%	47
Licking	6	6.4%	28	30.4%	34	37.9%	16	17.4%	7	7.9%	91
Logan	3	8.9%	11	38.4%	9	30.8%	5	17.1%	1	4.8%	29
Lorain	15	8.2%	63	35.2%	53	29.8%	30	16.9%	18	9.8%	179
Lucas	9	3.7%	89	37.0%	81	33.7%	46	19.3%	15	6.3%	241
Madison	2	11.1%	6	32.3%	5	26.3%	4	21.2%	2	9.1%	20
Mahoning	8	4.2%	67	34.6%	63	32.5%	30	15.3%	26	13.3%	194
Marion	5	10.2%	18	39.1%	12	26.0%	7	14.5%	5	10.2%	47
Medina	9	11.4%	30	37.7%	23	28.0%	11	13.6%	7	9.2%	81
Meigs	<1	1.1%	7	40.2%	5	27.6%	3	17.2%	2	13.8%	17
Mercer	3	7.8%	11	34.3%	10	29.5%	6	16.9%	4	11.4%	33
Miami	5	8.2%	27	42.6%	19	30.4%	8	12.5%	4	6.3%	64
Monroe	<1	5.5%	5	47.3%	2	21.8%	2	21.8%	<1	3.6%	11
Montgomery	16	5.0%	128	40.5%	88	27.9%	56	17.8%	28	8.8%	315
Morgan	<1	3.5%	5	42.1%	3	29.8%	2	17.5%	<1	7.0%	11
Morrow	<1	3.4%	6	33.3%	7	41.4%	2	13.8%	1	8.0%	17
Muskingum	1	1.9%	24	43.7%	18	33.3%	8	14.4%	4	6.7%	54
Noble	<1	5.3%	4	33.3%	4	35.1%	2	17.5%	1	8.8%	11
Ottawa	1	3.8%	9	28.8%	13	41.7%	6	19.9%	2	5.8%	31
Paulding	1	9.2%	5	40.0%	4	27.7%	2	12.3%	1	10.8%	13
Perry	1	6.0%	10	41.4%	7	28.4%	4	16.4%	2	7.8%	23
Pickaway	<1	0.7%	10	34.5%	9	33.1%	6	20.9%	3	10.8%	28
Pike	<1	2.7%	6	39.2%	5	35.1%	2	13.5%	1	9.5%	15
Portage	5	7.1%	32	41.4%	23	30.6%	11	14.9%	5	6.0%	76
Preble	1	3.5%	10	41.7%	6	27.8%	4	18.3%	2	8.7%	23
Putnam	1	5.8%	8	39.8%	5	23.3%	5	23.3%	2	7.8%	21
Richland	8	8.4%	28	30.7%	34	38.2%	14	15.1%	7	7.6%	90
Ross	2	4.2%	13	29.3%	18	41.4%	6	13.5%	5	11.6%	43
Sandusky	4	8.4%	19	44.9%	11	26.6%	6	15.0%	2	5.1%	43
Scioto	7	12.0%	20	37.2%	14	24.8%	9	17.2%	5	8.8%	55
Seneca	3	7.1%	16	39.6%	12	31.0%	5	13.7%	3	8.6%	39
Shelby	3	8.2%	13	38.2%	9	27.1%	4	12.4%	5	14.1%	34
Stark	32	11.9%	88	33.3%	84	31.5%	38	14.3%	24	9.1%	266
Summit	25	7.2%	122	35.5%	112	32.8%	53	15.5%	31	9.0%	343
Trumbull	5	3.2%	50	33.2%	55	36.3%	26	17.5%	15	9.8%	151
Tuscarawas	10	15.1%	22	34.3%	18	27.8%	8	12.0%	7	10.8%	65
Union	1	5.2%	10	44.0%	5	19.8%	5	21.6%	2	9.5%	23
Van Wert	4	16.8%	8	31.2%	7	29.6%	2	8.0%	4	14.4%	25
Vinton	<1	4.8%	3	38.1%	3	40.5%	1	11.9%	<1	4.8%	8
Warren	5	6.6%	31	38.2%	22	27.5%	15	18.6%	7	9.1%	82
Washington	4	8.9%	15	35.5%	13	29.4%	10	23.4%	1	2.8%	43
Wayne	5	8.6%	21	34.7%	21	34.3%	8	13.2%	6	9.2%	61
Williams	3	12.0%	10	43.6%	6	25.6%	3	11.1%	2	7.7%	23
Wood	3	5.0%	24	40.8%	17	28.1%	10	17.1%	5	9.0%	60
Wyandot	1	8.8%	5	35.3%	3	25.0%	3	19.1%	2	11.8%	14

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 32

Lung and Bronchus

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**9**	**0.1%**	**1,608**	**17.3%**	**2,252**	**24.2%**	**4,068**	**43.7%**	**1,367**	**14.7%**	**9,304**
Adams	<1	0.8%	4	16.9%	7	30.5%	8	33.9%	4	17.8%	24
Allen	0	0.0%	13	15.0%	18	20.6%	50	55.6%	8	8.7%	89
Ashland	0	0.0%	4	12.2%	8	23.3%	15	42.8%	8	21.7%	36
Ashtabula	0	0.0%	13	13.6%	18	19.5%	41	43.7%	22	23.1%	94
Athens	0	0.0%	6	16.1%	10	24.6%	17	42.2%	7	17.1%	40
Auglaize	0	0.0%	8	23.3%	9	24.4%	15	41.5%	4	10.8%	35
Belmont	0	0.0%	14	20.0%	17	24.7%	29	42.6%	9	12.6%	68
Brown	0	0.0%	7	18.1%	11	27.9%	13	31.9%	9	22.1%	41
Butler	<1	0.2%	41	15.7%	66	25.7%	118	45.7%	33	12.7%	258
Carroll	0	0.0%	6	22.3%	5	17.3%	11	38.1%	6	22.3%	28
Champaign	0	0.0%	3	9.6%	10	28.7%	13	38.9%	8	22.8%	33
Clark	<1	0.3%	21	15.3%	31	22.5%	55	39.4%	31	22.5%	140
Clermont	0	0.0%	38	21.4%	49	27.5%	76	42.6%	15	8.5%	179
Clinton	<1	1.1%	6	15.4%	10	28.6%	16	42.9%	4	12.1%	36
Columbiana	<1	0.2%	14	13.4%	22	21.4%	42	40.9%	25	24.1%	103
Coshocton	0	0.0%	6	18.8%	6	17.6%	14	41.8%	7	21.8%	34
Crawford	<1	0.6%	6	17.1%	10	28.2%	11	31.5%	8	22.7%	36
Cuyahoga	2	0.2%	187	16.2%	265	23.1%	499	43.5%	196	17.0%	1,148
Darke	0	0.0%	5	15.0%	7	21.0%	15	44.3%	7	19.8%	33
Defiance	0	0.0%	4	11.4%	8	24.7%	17	51.2%	4	12.7%	33
Delaware	0	0.0%	12	16.4%	19	24.9%	36	47.4%	9	11.4%	76
Erie	0	0.0%	13	15.7%	23	27.6%	36	44.1%	10	12.6%	83
Fairfield	0	0.0%	16	15.8%	24	23.8%	45	45.7%	15	14.7%	99
Fayette	<1	0.9%	3	11.1%	5	23.1%	11	45.3%	5	19.7%	23
Franklin	0	0.0%	144	19.4%	167	22.5%	350	47.3%	80	10.8%	740
Fulton	0	0.0%	3	13.6%	7	28.0%	12	48.0%	3	10.4%	25
Gallia	0	0.0%	6	17.8%	8	23.3%	15	47.2%	4	11.7%	33
Geauga	<1	0.3%	12	19.7%	11	18.4%	24	40.1%	13	21.4%	59
Greene	0	0.0%	19	17.9%	28	26.7%	45	42.7%	14	12.8%	106
Guernsey	<1	0.5%	7	19.8%	9	25.1%	14	36.9%	7	17.6%	37
Hamilton	<1	0.0%	135	19.8%	166	24.3%	308	45.3%	72	10.6%	680
Hancock	0	0.0%	10	19.8%	14	26.9%	21	41.5%	6	11.9%	51
Hardin	0	0.0%	5	17.6%	5	19.1%	13	47.8%	4	15.4%	27
Harrison	0	0.0%	4	24.2%	4	23.1%	7	39.6%	2	13.2%	18
Henry	0	0.0%	3	15.1%	4	23.3%	8	44.2%	3	17.4%	17
Highland	0	0.0%	7	18.2%	10	26.5%	13	34.8%	7	20.4%	36
Hocking	<1	0.7%	6	21.6%	7	25.0%	11	35.8%	5	16.9%	30
Holmes	0	0.0%	<1	4.2%	3	18.3%	8	54.9%	3	22.5%	14
Huron	<1	0.9%	6	15.0%	12	29.0%	19	45.3%	4	9.8%	43
Jackson	0	0.0%	6	17.9%	7	21.2%	13	41.7%	6	19.2%	31
Jefferson	0	0.0%	18	21.5%	23	28.4%	34	41.3%	7	8.8%	82
Knox	0	0.0%	10	22.8%	11	25.1%	17	38.6%	6	13.5%	43
Lake	<1	0.1%	37	17.7%	46	22.3%	81	38.9%	43	21.0%	207

Continued on pg. 73

Table 32 (continued)

Lung and Bronchus

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	0	0.0%	10	15.2%	13	18.4%	29	41.8%	17	24.6%	68
Licking	0	0.0%	18	15.3%	29	24.1%	56	47.1%	16	13.5%	119
Logan	0	0.0%	5	12.0%	8	19.0%	22	54.5%	6	14.5%	40
Lorain	<1	0.1%	35	14.1%	61	25.0%	107	43.5%	43	17.4%	245
Lucas	<1	0.1%	62	17.0%	95	26.1%	173	47.5%	33	9.2%	363
Madison	<1	0.6%	6	16.3%	5	15.7%	17	49.4%	6	18.0%	34
Mahoning	0	0.0%	36	15.7%	57	24.8%	94	40.7%	43	18.7%	230
Marion	0	0.0%	11	16.2%	18	25.0%	28	39.2%	14	19.6%	70
Medina	<1	0.6%	18	17.9%	28	27.6%	38	37.0%	17	16.9%	103
Meigs	0	0.0%	5	19.2%	6	23.2%	11	45.6%	3	12.0%	25
Mercer	0	0.0%	5	17.8%	7	24.0%	11	38.4%	6	19.9%	29
Miami	0	0.0%	12	17.5%	18	27.2%	30	45.3%	7	10.0%	66
Monroe	0	0.0%	2	17.5%	3	25.4%	5	38.1%	2	19.0%	13
Montgomery	0	0.0%	96	19.4%	122	24.5%	227	45.6%	52	10.5%	497
Morgan	0	0.0%	3	21.8%	3	20.5%	6	39.7%	3	17.9%	16
Morrow	0	0.0%	4	14.5%	7	24.6%	11	40.6%	6	20.3%	28
Muskingum	<1	0.2%	16	19.6%	23	27.4%	34	40.3%	10	12.4%	84
Noble	0	0.0%	2	14.3%	2	16.1%	5	44.6%	3	25.0%	11
Ottawa	0	0.0%	6	14.1%	13	31.6%	17	41.3%	5	13.1%	41
Paulding	0	0.0%	3	21.9%	3	20.5%	6	39.7%	3	17.8%	15
Perry	0	0.0%	4	12.9%	6	20.6%	15	47.1%	6	19.4%	31
Pickaway	0	0.0%	8	17.5%	10	20.4%	22	45.4%	8	16.7%	48
Pike	0	0.0%	5	17.1%	6	22.9%	11	39.3%	6	20.7%	28
Portage	0	0.0%	22	19.5%	32	27.9%	43	37.4%	17	15.1%	114
Preble	0	0.0%	7	21.1%	10	28.0%	13	36.0%	5	14.9%	35
Putnam	0	0.0%	2	11.0%	4	22.0%	12	59.0%	2	8.0%	20
Richland	0	0.0%	17	16.4%	24	22.2%	50	46.7%	16	14.7%	106
Ross	0	0.0%	11	15.6%	16	22.5%	31	43.6%	13	18.3%	72
Sandusky	0	0.0%	8	14.3%	12	22.3%	24	46.0%	9	17.4%	53
Scioto	0	0.0%	17	18.2%	26	28.4%	39	42.3%	10	11.1%	92
Seneca	<1	0.8%	8	15.8%	11	23.3%	23	47.1%	6	12.9%	48
Shelby	<1	0.6%	5	17.2%	5	17.2%	12	36.9%	9	28.0%	31
Stark	<1	0.1%	43	14.0%	77	25.4%	137	45.3%	46	15.2%	304
Summit	1	0.2%	84	18.7%	108	23.8%	186	41.2%	73	16.1%	452
Trumbull	<1	0.1%	32	15.0%	59	27.8%	93	44.0%	28	13.1%	212
Tuscarawas	0	0.0%	7	11.0%	14	21.7%	27	42.5%	16	24.8%	64
Union	<1	0.7%	6	20.3%	9	28.8%	10	32.0%	6	18.3%	31
Van Wert	0	0.0%	4	16.7%	5	23.7%	10	42.1%	4	17.5%	23
Vinton	0	0.0%	3	19.0%	2	15.2%	8	50.6%	2	15.2%	16
Warren	0	0.0%	25	22.7%	26	23.7%	49	44.1%	11	9.5%	111
Washington	0	0.0%	11	17.3%	16	24.8%	32	48.5%	6	9.4%	66
Wayne	0	0.0%	11	13.8%	19	24.5%	31	40.6%	16	21.1%	77
Williams	0	0.0%	4	13.5%	9	26.4%	16	49.1%	4	11.0%	33
Wood	0	0.0%	14	19.6%	18	25.4%	30	41.2%	10	13.8%	72
Wyandot	0	0.0%	5	25.5%	5	25.5%	7	33.7%	3	15.3%	20

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 33

Melanoma of the Skin

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**1,223**	**35.5%**	**1,730**	**50.2%**	**195**	**5.7%**	**83**	**2.4%**	**214**	**6.2%**	**3,445**
Adams	2	27.6%	3	55.2%	<1	13.8%	0	0.0%	<1	3.4%	6
Allen	6	24.4%	14	55.9%	2	7.1%	2	7.1%	1	5.5%	25
Ashland	2	22.6%	7	62.3%	<1	5.7%	0	0.0%	1	9.4%	11
Ashtabula	12	31.9%	18	48.2%	3	7.9%	1	2.6%	4	9.4%	38
Athens	3	27.1%	7	59.3%	<1	3.4%	<1	3.4%	<1	6.8%	12
Auglaize	3	21.4%	8	54.3%	2	12.9%	<1	2.9%	1	8.6%	14
Belmont	4	21.6%	8	47.7%	1	8.0%	2	11.4%	2	11.4%	18
Brown	3	28.1%	6	52.6%	1	12.3%	0	0.0%	<1	7.0%	11
Butler	31	36.9%	39	46.1%	6	7.1%	3	3.5%	5	6.4%	85
Carroll	4	33.9%	7	55.9%	<1	6.8%	0	0.0%	<1	3.4%	12
Champaign	3	27.0%	8	65.1%	<1	1.6%	<1	1.6%	<1	4.8%	13
Clark	17	35.2%	22	46.6%	4	8.1%	<1	1.7%	4	8.5%	47
Clermont	20	36.4%	29	52.9%	3	5.5%	1	1.8%	2	3.3%	54
Clinton	6	37.0%	7	42.0%	2	12.3%	<1	3.7%	<1	4.9%	16
Columbiana	11	31.5%	19	52.2%	2	4.5%	<1	0.6%	4	11.2%	36
Coshocton	5	35.6%	7	46.6%	2	12.3%	<1	2.7%	<1	2.7%	15
Crawford	2	17.9%	8	59.7%	2	13.4%	<1	3.0%	<1	6.0%	13
Cuyahoga	117	33.0%	191	53.8%	21	5.9%	7	2.0%	18	5.2%	354
Darke	4	32.8%	6	46.9%	1	7.8%	<1	1.6%	1	10.9%	13
Defiance	10	55.1%	6	31.5%	2	9.0%	0	0.0%	<1	4.5%	18
Delaware	26	41.1%	30	48.1%	3	5.1%	<1	0.6%	3	5.1%	63
Erie	12	33.3%	18	49.7%	2	6.2%	1	2.8%	3	7.9%	35
Fairfield	17	36.8%	21	46.5%	3	7.0%	<1	1.8%	4	7.9%	46
Fayette	2	27.9%	4	46.5%	1	11.6%	<1	7.0%	<1	7.0%	9
Franklin	96	34.3%	146	52.0%	14	5.0%	7	2.4%	18	6.3%	281
Fulton	8	43.6%	9	48.9%	<1	2.1%	<1	2.1%	<1	3.2%	19
Gallia	2	25.0%	4	58.3%	<1	5.6%	<1	2.8%	<1	8.3%	7
Geauga	14	42.7%	15	46.3%	2	5.5%	<1	1.2%	1	4.3%	33
Greene	26	41.2%	27	43.4%	3	4.2%	2	2.9%	5	8.4%	62
Guernsey	4	26.3%	10	63.8%	<1	1.3%	<1	3.8%	<1	5.0%	16
Hamilton	94	40.5%	109	46.8%	11	4.9%	5	2.2%	13	5.6%	232
Hancock	7	31.6%	13	56.4%	<1	2.6%	1	5.1%	1	4.3%	23
Hardin	1	19.4%	3	54.8%	<1	9.7%	<1	3.2%	<1	12.9%	6
Harrison	<1	8.7%	3	73.9%	<1	4.3%	<1	4.3%	<1	8.7%	5
Henry	4	35.6%	7	55.9%	<1	5.1%	0	0.0%	<1	3.4%	12
Highland	6	51.9%	3	31.5%	<1	1.9%	<1	5.6%	1	9.3%	11
Hocking	1	16.7%	4	55.6%	<1	8.3%	<1	8.3%	<1	11.1%	7
Holmes	2	36.7%	2	36.7%	<1	13.3%	<1	3.3%	<1	10.0%	6
Huron	4	30.6%	8	54.2%	<1	4.2%	<1	4.2%	1	6.9%	14
Jackson	3	35.9%	4	46.2%	<1	7.7%	<1	2.6%	<1	7.7%	8
Jefferson	3	23.6%	9	62.5%	1	6.9%	<1	4.2%	<1	2.8%	14
Knox	4	24.4%	10	58.1%	1	7.0%	1	5.8%	<1	4.7%	17
Lake	32	40.7%	36	45.2%	5	6.0%	2	3.0%	4	5.0%	80

Continued on pg. 75

Table 33 (continued)

Melanoma of the Skin

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	5	28.9%	9	52.2%	2	11.1%	<1	2.2%	1	5.6%	18
Licking	27	38.6%	37	51.8%	2	2.8%	1	1.4%	4	5.4%	71
Logan	2	21.4%	6	55.4%	1	10.7%	<1	1.8%	1	10.7%	11
Lorain	32	34.3%	48	52.4%	4	4.6%	1	1.5%	7	7.2%	92
Lucas	62	43.1%	63	43.6%	8	5.8%	2	1.5%	9	6.0%	144
Madison	2	14.3%	8	69.6%	<1	7.1%	<1	1.8%	<1	7.1%	11
Mahoning	24	40.9%	26	44.6%	2	4.1%	2	3.4%	4	7.1%	59
Marion	4	22.8%	10	56.5%	1	7.6%	<1	2.2%	2	10.9%	18
Medina	25	37.3%	32	48.2%	3	3.9%	2	3.0%	5	7.5%	66
Meigs	2	34.6%	3	57.7%	<1	3.8%	0	0.0%	<1	3.8%	5
Mercer	3	19.8%	10	60.5%	<1	2.5%	1	8.6%	1	8.6%	16
Miami	18	47.2%	17	43.0%	1	3.6%	<1	1.0%	2	5.2%	39
Monroe	1	23.8%	1	33.3%	<1	19.0%	<1	9.5%	<1	14.3%	4
Montgomery	67	39.9%	78	46.3%	7	4.4%	3	1.7%	13	7.8%	168
Morgan	2	33.3%	2	40.0%	<1	10.0%	<1	13.3%	<1	3.3%	6
Morrow	<1	11.5%	4	76.9%	<1	3.8%	<1	3.8%	<1	3.8%	5
Muskingum	8	24.8%	20	62.7%	3	8.1%	<1	2.5%	<1	1.9%	32
Noble	2	44.4%	1	33.3%	<1	16.7%	<1	5.6%	0	0.0%	4
Ottawa	5	31.7%	8	47.6%	2	9.8%	<1	3.7%	1	7.3%	16
Paulding	2	48.0%	2	44.0%	0	0.0%	<1	4.0%	<1	4.0%	5
Perry	3	27.1%	7	68.8%	<1	4.2%	0	0.0%	0	0.0%	10
Pickaway	3	26.2%	6	45.9%	2	16.4%	<1	3.3%	1	8.2%	12
Pike	2	23.5%	4	64.7%	<1	2.9%	<1	2.9%	<1	5.9%	7
Portage	13	32.4%	22	54.4%	2	4.9%	<1	1.0%	3	7.4%	41
Preble	3	28.6%	5	53.1%	<1	6.1%	<1	4.1%	<1	8.2%	10
Putnam	4	34.6%	6	55.8%	<1	3.8%	0	0.0%	<1	5.8%	10
Richland	4	14.5%	16	62.9%	3	13.7%	2	7.3%	<1	1.6%	25
Ross	4	26.3%	7	46.1%	1	7.9%	<1	3.9%	2	15.8%	15
Sandusky	9	46.9%	8	40.8%	<1	4.1%	<1	4.1%	<1	4.1%	20
Scioto	7	26.4%	15	60.0%	1	4.8%	1	4.0%	1	4.8%	25
Seneca	4	28.9%	8	52.6%	1	6.6%	<1	3.9%	1	7.9%	15
Shelby	3	39.5%	5	58.1%	0	0.0%	<1	2.3%	0	0.0%	9
Stark	61	37.6%	84	51.5%	7	4.4%	3	1.7%	8	4.8%	163
Summit	61	34.4%	94	53.1%	7	4.2%	3	1.8%	11	6.5%	177
Trumbull	19	31.8%	32	53.3%	5	7.6%	2	3.0%	3	4.3%	60
Tuscarawas	8	32.3%	11	42.3%	2	6.2%	1	3.8%	4	15.4%	26
Union	4	28.6%	9	59.7%	<1	5.2%	<1	2.6%	<1	3.9%	15
Van Wert	1	20.7%	4	65.5%	<1	3.4%	<1	6.9%	<1	3.4%	6
Vinton	<1	20.0%	<1	40.0%	<1	10.0%	<1	10.0%	<1	20.0%	2
Warren	28	38.7%	35	49.0%	4	5.6%	1	2.0%	3	4.8%	71
Washington	7	32.1%	10	49.1%	2	10.4%	<1	0.9%	2	7.5%	21
Wayne	11	43.8%	10	40.0%	2	6.9%	<1	0.8%	2	8.5%	26
Williams	9	52.8%	7	38.2%	<1	4.5%	<1	2.2%	<1	2.2%	18
Wood	21	43.8%	19	41.3%	2	5.1%	1	2.1%	4	7.7%	47
Wyandot	1	24.0%	3	60.0%	<1	4.0%	<1	4.0%	<1	8.0%	5

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 34

Oral Cavity and Pharynx

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**25**	**2.0%**	**374**	**30.0%**	**554**	**44.5%**	**192**	**15.4%**	**101**	**8.1%**	**1,246**
Adams	0	0.0%	<1	26.7%	1	46.7%	<1	20.0%	<1	6.7%	3
Allen	<1	1.8%	3	24.6%	5	40.4%	3	22.8%	1	10.5%	11
Ashland	0	0.0%	1	36.8%	1	31.6%	<1	5.3%	1	26.3%	4
Ashtabula	0	0.0%	3	25.4%	6	44.8%	2	14.9%	2	14.9%	13
Athens	0	0.0%	3	37.5%	3	42.5%	1	15.0%	<1	5.0%	8
Auglaize	<1	4.3%	1	26.1%	2	34.8%	1	26.1%	<1	8.7%	5
Belmont	<1	5.9%	3	33.3%	2	23.5%	3	27.5%	1	9.8%	10
Brown	0	0.0%	<1	16.7%	3	54.2%	<1	12.5%	<1	16.7%	5
Butler	1	2.6%	7	22.6%	16	50.3%	4	11.6%	4	12.9%	31
Carroll	0	0.0%	<1	26.7%	1	33.3%	0	0.0%	1	40.0%	3
Champaign	0	0.0%	<1	17.6%	3	76.5%	<1	5.9%	0	0.0%	3
Clark	<1	2.4%	4	25.6%	7	43.9%	2	13.4%	2	14.6%	16
Clermont	<1	2.7%	5	35.1%	6	41.9%	3	17.6%	<1	2.7%	15
Clinton	0	0.0%	2	36.0%	3	52.0%	<1	4.0%	<1	8.0%	5
Columbiana	<1	1.4%	4	28.6%	6	41.4%	2	14.3%	2	14.3%	14
Coshocton	0	0.0%	1	27.3%	2	50.0%	1	22.7%	0	0.0%	4
Crawford	<1	3.2%	1	22.6%	2	38.7%	<1	9.7%	2	25.8%	6
Cuyahoga	2	1.4%	50	30.6%	72	44.2%	29	17.8%	10	6.0%	163
Darke	0	0.0%	2	36.4%	1	31.8%	1	27.3%	<1	4.5%	4
Defiance	0	0.0%	<1	40.0%	<1	20.0%	<1	20.0%	<1	20.0%	2
Delaware	0	0.0%	4	32.8%	5	39.3%	1	9.8%	2	18.0%	12
Erie	<1	2.1%	2	18.8%	7	68.8%	1	10.4%	0	0.0%	10
Fairfield	<1	3.8%	3	32.7%	4	36.5%	2	17.3%	1	9.6%	10
Fayette	0	0.0%	<1	16.7%	2	66.7%	<1	16.7%	0	0.0%	2
Franklin	1	1.2%	24	24.7%	49	50.7%	17	17.7%	5	5.6%	96
Fulton	0	0.0%	2	36.0%	3	52.0%	<1	8.0%	<1	4.0%	5
Gallia	0	0.0%	<1	26.7%	1	46.7%	<1	13.3%	<1	13.3%	3
Geauga	<1	4.0%	3	32.0%	5	48.0%	1	14.0%	<1	2.0%	10
Greene	<1	2.4%	4	23.2%	8	50.0%	2	14.6%	2	9.8%	16
Guernsey	0	0.0%	2	28.6%	3	50.0%	1	21.4%	0	0.0%	6
Hamilton	1	1.7%	28	33.3%	36	42.9%	11	12.7%	8	9.4%	85
Hancock	<1	7.7%	2	30.8%	2	38.5%	1	23.1%	0	0.0%	5
Hardin	0	0.0%	<1	25.0%	1	43.8%	<1	18.8%	<1	12.5%	3
Harrison	0	0.0%	<1	27.3%	1	45.5%	<1	18.2%	<1	9.1%	2
Henry	<1	6.7%	<1	26.7%	1	40.0%	<1	13.3%	<1	13.3%	3
Highland	0	0.0%	2	46.2%	2	30.8%	<1	15.4%	<1	7.7%	5
Hocking	0	0.0%	<1	15.4%	1	38.5%	<1	15.4%	<1	30.8%	3
Holmes	0	0.0%	1	62.5%	<1	25.0%	0	0.0%	<1	12.5%	2
Huron	1	14.8%	1	22.2%	3	48.1%	<1	11.1%	<1	3.7%	5
Jackson	0	0.0%	1	38.5%	1	53.8%	<1	7.7%	0	0.0%	3
Jefferson	<1	1.6%	6	45.3%	5	37.5%	2	15.6%	0	0.0%	13
Knox	0	0.0%	2	31.6%	4	52.6%	1	13.2%	<1	2.6%	8
Lake	1	3.6%	10	34.3%	10	35.7%	5	19.3%	2	7.1%	28

Continued on pg. 77

Table 34 (continued)

Oral Cavity and Pharynx

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	0	0.0%	2	28.1%	3	40.6%	1	18.8%	<1	12.5%	6
Licking	<1	2.9%	7	34.0%	8	37.9%	3	13.6%	2	11.7%	21
Logan	0	0.0%	<1	5.9%	2	70.6%	<1	5.9%	<1	17.6%	3
Lorain	<1	1.8%	11	32.1%	15	44.2%	5	13.9%	3	7.9%	33
Lucas	2	3.7%	15	30.2%	22	44.1%	7	15.1%	3	6.9%	49
Madison	0	0.0%	<1	19.0%	2	57.1%	<1	9.5%	<1	14.3%	4
Mahoning	1	2.6%	9	29.6%	12	40.1%	3	11.2%	5	16.4%	30
Marion	<1	6.3%	4	39.6%	3	33.3%	1	12.5%	<1	8.3%	10
Medina	<1	1.3%	5	36.0%	6	42.7%	2	13.3%	1	6.7%	15
Meigs	<1	7.1%	<1	28.6%	2	57.1%	<1	7.1%	0	0.0%	3
Mercer	<1	8.7%	<1	13.0%	2	47.8%	1	21.7%	<1	8.7%	5
Miami	<1	1.7%	5	39.0%	5	39.0%	2	13.6%	<1	6.8%	12
Monroe	0	0.0%	<1	57.1%	<1	28.6%	<1	14.3%	0	0.0%	1
Montgomery	1	1.8%	20	30.1%	29	44.7%	10	15.2%	5	8.2%	66
Morgan	0	0.0%	<1	37.5%	<1	25.0%	<1	12.5%	<1	25.0%	2
Morrow	<1	4.5%	1	22.7%	2	50.0%	<1	18.2%	<1	4.5%	4
Muskingum	0	0.0%	3	26.4%	5	49.1%	1	13.2%	1	11.3%	11
Noble	0	0.0%	<1	30.0%	<1	40.0%	<1	30.0%	0	0.0%	2
Ottawa	<1	3.8%	2	38.5%	2	34.6%	<1	15.4%	<1	7.7%	5
Paulding	<1	7.1%	1	42.9%	1	35.7%	<1	7.1%	<1	7.1%	3
Perry	<1	5.3%	<1	15.8%	2	47.4%	<1	15.8%	<1	15.8%	4
Pickaway	0	0.0%	<1	13.8%	3	58.6%	2	27.6%	0	0.0%	6
Pike	<1	5.9%	<1	23.5%	2	58.8%	<1	5.9%	<1	5.9%	3
Portage	<1	3.4%	5	26.4%	9	51.7%	2	13.8%	<1	4.6%	17
Preble	0	0.0%	2	36.4%	1	27.3%	1	27.3%	<1	9.1%	4
Putnam	0	0.0%	1	26.3%	2	42.1%	<1	15.8%	<1	15.8%	4
Richland	0	0.0%	4	24.7%	7	44.4%	5	28.4%	<1	2.5%	16
Ross	<1	2.4%	1	14.3%	5	57.1%	2	26.2%	0	0.0%	8
Sandusky	<1	2.9%	2	22.9%	4	54.3%	<1	8.6%	<1	11.4%	7
Scioto	<1	1.7%	4	30.0%	5	45.0%	2	16.7%	<1	6.7%	12
Seneca	<1	3.1%	3	50.0%	2	31.3%	<1	9.4%	<1	6.3%	6
Shelby	0	0.0%	<1	17.4%	2	43.5%	1	26.1%	<1	13.0%	5
Stark	<1	0.9%	14	29.4%	20	41.7%	8	16.6%	5	11.5%	47
Summit	1	2.0%	20	32.1%	27	44.3%	9	14.4%	4	7.2%	61
Trumbull	1	2.5%	12	38.0%	14	42.9%	4	11.0%	2	5.5%	33
Tuscarawas	0	0.0%	1	16.7%	3	47.2%	2	25.0%	<1	11.1%	7
Union	0	0.0%	<1	14.3%	2	57.1%	1	23.8%	<1	4.8%	4
Van Wert	0	0.0%	<1	30.0%	<1	30.0%	<1	30.0%	<1	10.0%	2
Vinton	0	0.0%	<1	20.0%	1	60.0%	<1	10.0%	<1	10.0%	2
Warren	1	6.4%	6	38.5%	7	44.9%	1	7.7%	<1	2.6%	16
Washington	0	0.0%	2	28.9%	4	52.6%	<1	10.5%	<1	7.9%	8
Wayne	<1	5.3%	4	31.6%	5	42.1%	2	15.8%	<1	5.3%	11
Williams	<1	4.8%	1	28.6%	2	52.4%	<1	14.3%	0	0.0%	4
Wood	<1	1.9%	4	34.6%	5	44.2%	1	9.6%	1	9.6%	10
Wyandot	0	0.0%	<1	66.7%	<1	33.3%	0	0.0%	0	0.0%	1

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

Table 35

Prostate

Average Annual Number and Percent of Cancer Cases, by County of Residence and Stage at Diagnosis, Ohio, 2003-2007[1]

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Ohio	**3**	**0.0%**	**6,630**	**83.3%**	**555**	**7.0%**	**270**	**3.4%**	**506**	**6.4%**	**7,964**
Adams	0	0.0%	14	82.4%	<1	2.4%	0	0.0%	3	15.3%	17
Allen	0	0.0%	54	77.0%	4	5.7%	4	5.1%	9	12.2%	70
Ashland	0	0.0%	27	79.4%	2	6.5%	1	4.1%	3	10.0%	34
Ashtabula	0	0.0%	81	81.7%	6	6.4%	3	3.4%	8	8.4%	100
Athens	0	0.0%	34	87.0%	2	4.7%	1	3.1%	2	5.2%	39
Auglaize	0	0.0%	20	80.6%	2	8.9%	2	7.3%	<1	3.2%	25
Belmont	0	0.0%	58	92.0%	1	1.6%	2	2.5%	2	3.8%	63
Brown	0	0.0%	26	85.0%	1	4.6%	1	3.3%	2	7.2%	31
Butler	0	0.0%	162	82.1%	21	10.8%	5	2.7%	9	4.4%	197
Carroll	0	0.0%	20	81.0%	3	10.7%	<1	1.7%	2	6.6%	24
Champaign	0	0.0%	20	80.3%	2	7.4%	1	4.1%	2	8.2%	24
Clark	0	0.0%	81	80.9%	8	8.0%	3	3.2%	8	7.8%	100
Clermont	0	0.0%	100	90.6%	6	5.2%	1	1.3%	3	2.9%	111
Clinton	0	0.0%	21	77.4%	1	5.3%	1	3.8%	4	13.5%	27
Columbiana	0	0.0%	70	81.1%	6	7.1%	2	2.1%	8	9.7%	87
Coshocton	0	0.0%	16	76.2%	2	11.4%	<1	1.9%	2	10.5%	21
Crawford	0	0.0%	29	80.9%	3	7.9%	<1	2.2%	3	9.0%	36
Cuyahoga	<1	0.0%	844	81.1%	75	7.2%	49	4.7%	72	7.0%	1,040
Darke	0	0.0%	32	86.1%	3	7.0%	1	3.2%	1	3.7%	37
Defiance	0	0.0%	19	75.8%	3	10.5%	1	4.0%	2	9.7%	25
Delaware	0	0.0%	80	86.5%	7	7.4%	2	2.0%	4	4.1%	92
Erie	0	0.0%	59	81.0%	6	8.0%	4	5.2%	4	5.8%	73
Fairfield	0	0.0%	70	85.9%	7	8.0%	3	3.2%	2	2.9%	82
Fayette	0	0.0%	15	84.3%	1	6.7%	0	0.0%	2	9.0%	18
Franklin	<1	0.0%	559	85.6%	43	6.6%	19	2.9%	32	4.9%	653
Fulton	0	0.0%	20	86.7%	1	6.2%	<1	2.7%	1	4.4%	23
Gallia	0	0.0%	17	89.4%	1	5.3%	<1	3.2%	<1	2.1%	19
Geauga	<1	0.2%	66	80.6%	7	8.3%	3	3.9%	6	6.9%	82
Greene	0	0.0%	78	77.4%	9	8.8%	2	2.0%	12	11.8%	100
Guernsey	0	0.0%	18	77.3%	3	14.3%	1	5.0%	<1	3.4%	24
Hamilton	0	0.0%	521	88.0%	27	4.6%	23	3.9%	21	3.5%	593
Hancock	<1	0.4%	37	79.6%	5	11.5%	3	6.4%	1	2.1%	47
Hardin	0	0.0%	18	81.5%	<1	2.8%	1	6.5%	2	9.3%	22
Harrison	0	0.0%	12	89.7%	<1	4.4%	<1	2.9%	<1	2.9%	14
Henry	0	0.0%	12	80.0%	2	10.7%	0	0.0%	1	9.3%	15
Highland	0	0.0%	18	82.6%	2	7.3%	1	6.4%	<1	3.7%	22
Hocking	0	0.0%	15	83.9%	1	5.7%	<1	3.4%	1	6.9%	17
Holmes	0	0.0%	9	74.1%	1	10.3%	<1	3.4%	1	12.1%	12
Huron	0	0.0%	30	85.1%	2	5.2%	2	5.7%	1	4.0%	35
Jackson	0	0.0%	14	78.3%	2	12.0%	1	5.4%	<1	4.3%	18
Jefferson	0	0.0%	59	89.4%	1	2.1%	2	3.3%	3	5.1%	66
Knox	<1	0.5%	29	78.4%	5	12.4%	<1	2.2%	2	6.5%	37
Lake	0	0.0%	136	75.8%	13	7.4%	5	2.9%	25	13.9%	179

Continued on pg. 79

Table 35 (continued)

Prostate

	In situ		Localized		Regional		Distant		Unstaged/Unknown		Total
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases
Lawrence	0	0.0%	23	78.2%	2	8.2%	<1	2.0%	3	11.6%	29
Licking	0	0.0%	87	82.4%	8	7.2%	3	2.8%	8	7.6%	106
Logan	0	0.0%	28	79.2%	3	7.3%	2	4.5%	3	9.0%	36
Lorain	<1	0.1%	185	86.2%	11	5.2%	8	3.5%	11	4.9%	214
Lucas	0	0.0%	253	86.6%	19	6.4%	11	3.8%	9	3.1%	292
Madison	<1	0.8%	20	80.8%	3	11.2%	<1	2.4%	1	4.8%	25
Mahoning	0	0.0%	201	79.4%	14	5.4%	7	2.7%	32	12.6%	254
Marion	0	0.0%	33	83.8%	4	9.1%	1	2.5%	2	4.6%	39
Medina	0	0.0%	98	82.9%	10	8.1%	3	2.4%	8	6.6%	118
Meigs	0	0.0%	11	84.4%	<1	3.1%	<1	3.1%	1	9.4%	13
Mercer	0	0.0%	19	84.8%	<1	3.6%	1	4.5%	2	7.1%	22
Miami	0	0.0%	60	86.0%	5	7.2%	3	4.0%	2	2.9%	70
Monroe	0	0.0%	13	89.3%	<1	4.0%	<1	2.7%	<1	4.0%	15
Montgomery	<1	0.0%	337	82.3%	27	6.6%	11	2.8%	34	8.2%	410
Morgan	0	0.0%	7	79.5%	<1	6.8%	1	11.4%	<1	2.3%	9
Morrow	0	0.0%	20	86.0%	1	6.1%	<1	1.8%	1	6.1%	23
Muskingum	0	0.0%	38	81.0%	4	9.1%	2	5.2%	2	4.7%	46
Noble	0	0.0%	8	83.3%	<1	4.2%	<1	8.3%	<1	4.2%	10
Ottawa	0	0.0%	31	81.8%	3	8.9%	<1	2.1%	3	7.3%	38
Paulding	0	0.0%	9	81.0%	<1	3.4%	1	8.6%	<1	6.9%	12
Perry	0	0.0%	14	81.6%	2	9.2%	1	5.7%	<1	3.4%	17
Pickaway	0	0.0%	25	89.4%	1	3.5%	<1	2.1%	1	4.9%	28
Pike	0	0.0%	9	74.6%	1	11.9%	1	8.5%	<1	5.1%	12
Portage	0	0.0%	96	87.1%	6	5.3%	2	1.6%	7	6.0%	110
Preble	0	0.0%	21	80.3%	2	9.1%	1	5.3%	1	5.3%	26
Putnam	0	0.0%	16	75.2%	2	10.5%	1	4.8%	2	9.5%	21
Richland	0	0.0%	72	78.4%	8	8.3%	3	2.8%	10	10.5%	92
Ross	0	0.0%	26	78.6%	3	8.9%	2	6.5%	2	6.0%	34
Sandusky	0	0.0%	36	82.2%	3	5.9%	1	3.2%	4	8.7%	44
Scioto	0	0.0%	39	76.0%	8	16.3%	2	3.1%	2	4.7%	52
Seneca	0	0.0%	39	86.5%	3	5.8%	1	3.1%	2	4.5%	45
Shelby	0	0.0%	28	87.0%	2	6.8%	<1	0.6%	2	5.6%	32
Stark	<1	0.1%	260	83.6%	25	8.2%	10	3.1%	16	5.1%	311
Summit	<1	0.1%	304	84.3%	25	6.8%	14	4.0%	17	4.8%	361
Trumbull	<1	0.1%	165	83.7%	13	6.5%	4	1.8%	16	7.9%	197
Tuscarawas	0	0.0%	60	85.7%	4	6.0%	2	2.9%	4	5.4%	70
Union	0	0.0%	23	88.4%	2	7.0%	0	0.0%	1	4.7%	26
Van Wert	<1	1.0%	16	83.3%	2	8.3%	<1	3.1%	<1	4.2%	19
Vinton	0	0.0%	8	82.6%	<1	4.3%	<1	4.3%	<1	8.7%	9
Warren	0	0.0%	94	85.9%	8	7.7%	2	1.8%	5	4.6%	109
Washington	<1	0.4%	50	88.9%	4	7.5%	1	1.8%	<1	1.4%	56
Wayne	0	0.0%	42	72.0%	5	8.9%	3	4.8%	8	14.3%	59
Williams	0	0.0%	19	77.6%	2	8.0%	1	5.6%	2	8.8%	25
Wood	<1	0.3%	54	83.5%	6	9.7%	1	1.9%	3	4.7%	64
Wyandot	0	0.0%	15	87.2%	2	9.3%	<1	2.3%	<1	1.2%	17

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
Note: Low county numbers result in unstable percentages and may reflect underreporting for that county.

References

[1] Ohio General Assembly – 119th Session. House Bill 213. Columbus, Ohio, 1991.

[2] Ohio Certificates of Death. Vital Statistics Program, Ohio Department of Health, Columbus, Ohio, March 2010.

[3] North American Association of Central Cancer Registries. Standards for Cancer Registries: Volumes I (June 2008), II (May 2008), and III (August 2008). Sacramento, California.

[4] CRS Plus. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2010.

[5] SAS Institute Inc. Version 9.2. Cary, NC, 2002-2008.

[6] Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Incidence – SEER 17 Regs Public-Use, Nov 2009 Sub (1975-2007), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2010, based on the November 2009 submission.

[7] Altekruse SF, Kosary CL, Krapcho M, et. al. (eds). *SEER Cancer Statistics Review, 1975-2007*, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2007/, based on November 2007 SEER data submission, posted to the SEER Web site, 2008.

[8] International Classification of Diseases for Oncology, Third Edition. World Health Organization, Geneva, Switzerland, 2000.

[9] GenEDITS Plus. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2010.

[10] Mortality Medical Data System, National Center for Health Statistics.

[11] International Classification of Diseases and Related Health Problems, Tenth Revision. World Health Organization, Geneva, Switzerland, 1992.

[12] Day JC. *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995-2050*. U.S. Bureau of the Census, Current Population Reports, P25-1130. Washington DC: U.S. Government Printing Office; 1996.

[13] *Bridged-race Vintage 2008 Postcensal Population Estimates for July 1, 2001 – July 1, 2007, by Year, County, Single-year of Age, Hispanic Origin, and Sex*. National Center for Health Statistics, Centers for Disease Control and Prevention, Sept. 2, 2009.

Appendix I

Required Data Elements for Ohio Cancer Case Reports

1) Last name of patient
2) First name of patient
3) Middle initial of patient
4) Social Security number of patient (if available)
5) County of residence at diagnosis
6) City of residence at diagnosis
7) Street address at diagnosis
8) State of residence at diagnosis
9) ZIP code at diagnosis
10) Birth date
11) Sex
12) Race
13) Hispanic origin
14) Age in years at diagnosis
15) Date of diagnosis
16) Date of first contact for this cancer office (outpatient or inpatient)
17) Source of information
18) Anatomical site of the cancer
19) Laterality of diagnosis
20) Sequence
21) Histology
22) Grade
23) OCISS source reporting code number
24) American Joint Committee on Cancer edition number
25) Diagnostic confirmation
26) First course of treatment
27) Date treatment began
28) Class of case
29) Occupation and industry
30) Tobacco use
31) Date of death
32) Underlying cause of death
33) Physician's name
34) Stage at diagnosis per American Joint Committee on Cancer
35) Stage at diagnosis per Surveillance, Epidemiology and End Results Program
36) Primary site text—from medical reports
37) Histology text—from medical reports
38) Staging text—from medical reports
39) Treatment text—from medical reports

Appendix II

Estimated Percent of OCISS Case Completeness

By Cancer Site/Type, Ohio, 2003-2007[1,2,3]

	% Complete
All Cancer Sites/Types	**94%**
Bladder	88%
Brain and Other CNS[4]	>100%
Breast (Female)	88%
Cervix	99%
Colon and Rectum	96%
Corpus Uterus	>100%
Esophagus	>100%
Hodgkin's Lymphoma	86%
Kidney and Renal Pelvis	97%
Larynx	>100%
Leukemia	84%
Liver and Intrahepatic Bile Duct	75%
Lung and Bronchus	>100%
Melanoma of the Skin	95%
Multiple Myeloma	86%
Non-Hodgkin's Lymphoma	92%
Oral Cavity and Pharynx	91%
Ovary	96%
Pancreas	94%
Prostate	87%
Stomach	87%
Testis	>100%
Thyroid	90%

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Expected incidence rates were estimated based on the Surveillance, Epidemiology, and End Results (SEER) Program national background cancer incidence to mortality rate ratio for 2003-2007, *SEER Cancer Statistics Review 1975-2007*, National Cancer Institute, 2010.
[4] CNS = Central Nervous System.
Note: Completeness may exceed 100 percent if the observed number of cases exceeds the number expected based on the SEER incidence to mortality rate ratio and Ohio mortality rates.

Appendix III

Estimated Percent of OCISS Case Completeness

By County of Residence, Ohio, 2003-2007[1,2,3]

	% Complete		% Complete
Ohio	**94%**	Lawrence	82%
		Licking	100%
Adams	83%	Logan	85%
Allen	98%	Lorain	91%
Ashland	88%	Lucas	91%
Ashtabula	95%	Madison	89%
Athens	95%	Mahoning	97%
Auglaize	95%	Marion	86%
Belmont	93%	Medina	>100%
Brown	89%	Meigs	77%
Butler	89%	Mercer	94%
Carroll	>100%	Miami	95%
Champaign	91%	Monroe	92%
Clark	86%	Montgomery	97%
Clermont	96%	Morgan	95%
Clinton	96%	Morrow	88%
Columbiana	97%	Muskingum	86%
Coshocton	86%	Noble	93%
Crawford	85%	Ottawa	96%
Cuyahoga	94%	Paulding	84%
Darke	88%	Perry	81%
Defiance	88%	Pickaway	88%
Delaware	>100%	Pike	88%
Erie	>100%	Portage	91%
Fairfield	92%	Preble	92%
Fayette	81%	Putnam	93%
Franklin	93%	Richland	91%
Fulton	95%	Ross	86%
Gallia	92%	Sandusky	99%
Geauga	>100%	Scioto	96%
Greene	>100%	Seneca	>100%
Guernsey	92%	Shelby	>100%
Hamilton	93%	Stark	98%
Hancock	96%	Summit	92%
Hardin	85%	Trumbull	96%
Harrison	94%	Tuscarawas	91%
Henry	91%	Union	97%
Highland	85%	Van Wert	90%
Hocking	85%	Vinton	96%
Holmes	80%	Warren	>100%
Huron	93%	Washington	96%
Jackson	79%	Wayne	89%
Jefferson	94%	Williams	92%
Knox	95%	Wood	87%
Lake	93%	Wyandot	98%

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] The 2003-2007 rates were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009). Rates are direct age-adjusted to the U.S. 2000 standard population.
[3] Expected incidence rates were estimated based on the Surveillance, Epidemiology, and End Results (SEER) Program national background cancer incidence to mortality rate ratio for 2003-2007, *SEER Cancer Statistics Review 1975-2007*, National Cancer Institute, 2010.
Note: Completeness may exceed 100 percent if the observed number of cases exceeds the number expected based on the SEER incidence to mortality rate ratio and Ohio mortality rates.

Appendix IV

Cancer Site and Histology Codes

International Classification of Diseases for Oncology, Third Edition (ICD-O-3)[1,2]

Cancer Site/Type	ICD-O-3 Site and Histology Code(s)
All Cancer Sites/Types	**C000-C809**
Oral Cavity and Pharynx	C000-C009; C019-C029; C079-C089; C040-C049; C030-C039; C050-C059; C060-C069; C110-C119; C090-C099; C100-C109; C129; C130-C139; C140-C142; C148
Esophagus	C150-C159
Stomach	C160-C169
Colon and Rectum	C180-C189; C199; C209; C260
Liver and Intrahepatic Bile Duct	C220-C221
Pancreas	C250-C259
Larynx	C320-C329
Lung and Bronchus	C340-C349
Melanoma of the Skin	C440-C449 (Types 8720-8790)
Breast	C500-C509
Cervix	C530-C539
Corpus Uterus	C540-C549; C559
Ovary	C569
Prostate	C619
Testis	C620-C629
Bladder	C670-C679
Kidney and Renal Pelvis	C649; C659
Brain and Other CNS[3]	C700-C729
Thyroid	C739
Hodgkin's Lymphoma	Types 9650-9667
Non-Hodgkin's Lymphoma	Types 9590-9596, 9670-9671; 9673; 9675; 9678; 9680; 9684; 9687; 9689-9691; 9695; 9698-9702; 9705; 9708-9709; 9714-9719; 9727-9729; 9823 (excluding sites C420, C421 and C424); 9827 (excluding sites C420, C421 and C424)
Multiple Myeloma	Types 9731-9732; 9734
Leukemias	Types 9733; 9742; 9800; 9801; 9805; 9820; 9823 (sites C420, C421 and C424); 9826; 9827 (sites C420, C421 and C424); 9831; 9832-9834; 9835-9837; 9840; 9860; 9861; 9863; 9866; 9867; 9870; 9871-9874; 9875; 9876; 9891; 9895-9897; 9910; 9920; 9930; 9931; 9940; 9945; 9946; 9948; 9963; 9964

[1] Source of Table: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, April 2004, adapted from the International Classification of Diseases for Oncology, Third Edition, World Health Organization, Geneva, 2000.
[2] Types 9590-9989 are excluded for all cancer sites except where indicated.
[3] CNS = Central Nervous System.

Appendix V

Cancer Site Mortality Codes

International Statistical Classification of Diseases and Related Health Problems, 10th Edition (ICD-10)[1]

Cancer Site/Type	ICD-10
All Cancer Sites/Types	**C000-C979**
Oral Cavity and Pharynx	C000-C149
Esophagus	C150-C159
Stomach	C160-C169
Colon and Rectum	C180-C209; C260
Liver and Intrahepatic Bile Duct	C220-C229
Pancreas	C250-C259
Larynx	C320-C329
Lung and Bronchus	C340-C349
Melanoma of the Skin	C430-C439
Breast	C500-C509
Cervix	C530-C539
Corpus Uterus	C540-C559
Ovary	C560-C569
Prostate	C610-C619
Testis	C620-C629
Bladder	C670-C679
Kidney and Renal Pelvis	C640-C659
Brain and Other CNS[2]	C700-C729
Thyroid	C730-C739
Hodgkin's Lymphoma	C810-C819
Non-Hodgkin's Lymphoma	C820-C829; C830-C839; C840-C849; C850-C859; C963
Multiple Myeloma	C900; C902
Leukemias	C901; C910-C959

[1] Source of Table: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, August 2006, adapted from the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, World Health Organization, Geneva, 1992.
[2] CNS = Central Nervous System.

Appendix VI

Average Annual Population Estimates by Age Group, Race and Gender, Ohio, 2003-2007[1]

	All Races			White			Black			Additional Races[2]		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
< 1	76,142	72,444	148,585	61,469	58,314	119,783	12,819	12,370	25,189	1,854	1,760	3,614
1 - 4	303,277	289,301	592,578	247,830	235,561	483,391	48,632	47,050	95,682	6,816	6,690	13,505
5 - 9	383,629	368,207	751,836	314,901	300,803	615,704	61,115	59,452	120,568	7,613	7,952	15,565
10 - 14	411,302	393,111	804,413	337,362	321,553	658,914	66,758	64,617	131,375	7,183	6,942	14,125
15 - 19	412,770	392,535	805,306	344,223	326,647	670,870	61,866	59,354	121,221	6,681	6,534	13,215
20 - 24	393,667	389,000	782,668	330,541	326,732	657,273	54,194	53,860	108,054	8,933	8,408	17,340
25 - 29	368,029	365,902	733,932	309,071	303,238	612,310	47,661	52,518	100,180	11,297	10,146	21,442
30 - 34	361,401	365,166	726,567	306,085	304,623	610,709	43,996	49,284	93,280	11,320	11,259	22,579
35 - 39	388,578	393,677	782,255	334,740	334,518	669,258	44,014	49,458	93,472	9,824	9,702	19,525
40 - 44	428,444	438,509	866,953	373,340	376,228	749,568	46,695	53,526	100,222	8,409	8,754	17,163
45 - 49	442,694	458,445	901,140	389,743	397,369	787,112	45,995	53,673	99,668	6,956	7,403	14,359
50 - 54	398,104	414,889	812,992	353,793	362,646	716,439	38,624	45,550	84,174	5,687	6,692	12,379
55 - 59	336,511	355,721	692,232	302,424	314,194	616,617	29,216	35,797	65,013	4,871	5,730	10,601
60 - 64	246,749	273,702	520,451	223,416	243,794	467,210	19,894	26,091	45,986	3,438	3,817	7,255
65 - 69	191,747	225,371	417,118	173,124	200,592	373,716	16,087	22,148	38,235	2,535	2,632	5,167
70 - 74	156,135	197,493	353,628	140,994	176,188	317,182	13,560	19,313	32,874	1,581	1,991	3,573
75 - 79	129,751	185,042	314,793	118,595	167,449	286,044	10,184	16,217	26,401	972	1,376	2,348
80 - 84	87,726	149,160	236,886	80,774	136,987	217,761	6,422	11,284	17,706	530	889	1,419
85+	61,426	146,720	208,146	56,707	135,492	192,200	4,314	10,444	14,759	405	783	1,188
Total	5,578,082	5,874,395	11,452,477	4,799,132	5,022,928	9,822,060	672,047	742,009	1,414,056	106,903	109,458	216,361

[1] The 2003-2007 average annual counts were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).
[2] "Additional Races" includes Asian, Pacific Islander, American Indian and Alaskan Native.

Appendix VII

Average Annual Population Estimates by County and Gender, Ohio, 2003-2007[1]

	MALE	FEMALE	TOTAL
Ohio	**5,578,082**	**5,874,395**	**11,452,477**
Adams	13,786	14,310	28,096
Allen	52,234	53,409	105,642
Ashland	26,520	27,527	54,047
Ashtabula	49,807	52,056	101,863
Athens	30,893	32,174	63,067
Auglaize	22,810	23,605	46,415
Belmont	34,090	34,669	68,759
Brown	21,502	22,174	43,676
Butler	170,737	178,480	349,218
Carroll	14,265	14,637	28,902
Champaign	19,317	19,979	39,296
Clark	68,040	73,218	141,258
Clermont	93,097	96,229	189,326
Clinton	20,756	21,467	42,223
Columbiana	54,717	54,999	109,716
Coshocton	17,937	18,682	36,619
Crawford	21,735	23,255	44,990
Cuyahoga	627,678	697,825	1,325,502
Darke	25,814	26,745	52,559
Defiance	19,087	19,634	38,721
Delaware	73,429	74,935	148,363
Erie	37,941	39,900	77,842
Fairfield	68,092	68,917	137,009
Fayette	13,864	14,324	28,189
Franklin	538,973	562,794	1,101,767
Fulton	20,870	21,621	42,491
Gallia	15,106	15,812	30,918
Geauga	46,418	47,750	94,168
Greene	76,087	80,088	156,176
Guernsey	19,786	20,875	40,661
Hamilton	406,184	442,067	848,250
Hancock	35,741	37,745	73,487
Hardin	15,663	16,078	31,741
Harrison	7,597	7,994	15,592
Henry	14,411	14,709	29,120
Highland	20,669	21,580	42,249
Hocking	14,341	14,384	28,725
Holmes	20,504	20,598	41,102
Huron	29,326	30,479	59,805
Jackson	16,007	17,122	33,129
Jefferson	33,413	36,674	70,087
Knox	28,227	29,691	57,918
Lake	113,287	118,800	232,087

	MALE	FEMALE	TOTAL
Lawrence	30,014	32,389	62,403
Licking	75,091	78,578	153,668
Logan	22,750	23,544	46,294
Lorain	146,673	151,549	298,222
Lucas	216,097	230,669	446,767
Madison	22,264	18,750	41,014
Mahoning	117,702	127,884	245,586
Marion	34,237	31,446	65,683
Medina	81,743	83,689	165,432
Meigs	11,179	11,825	23,005
Mercer	20,474	20,280	40,754
Miami	49,309	51,057	100,366
Monroe	7,214	7,338	14,552
Montgomery	261,799	282,425	544,224
Morgan	7,229	7,441	14,670
Morrow	16,961	17,019	33,980
Muskingum	40,825	44,373	85,199
Noble	8,151	6,046	14,197
Ottawa	20,362	20,836	41,198
Paulding	9,550	9,842	19,392
Perry	17,288	17,482	34,770
Pickaway	28,115	24,540	52,655
Pike	13,605	14,316	27,921
Portage	75,651	79,208	154,859
Preble	20,838	21,085	41,923
Putnam	17,277	17,354	34,630
Richland	64,026	62,848	126,874
Ross	39,165	35,731	74,896
Sandusky	30,030	31,190	61,220
Scioto	37,225	39,248	76,474
Seneca	28,425	28,791	57,216
Shelby	24,107	24,351	48,458
Stark	182,348	196,588	378,936
Summit	263,271	281,716	544,987
Trumbull	105,105	111,907	217,011
Tuscarawas	44,563	46,767	91,330
Union	21,833	23,763	45,596
Van Wert	14,171	14,880	29,052
Vinton	6,592	6,676	13,268
Warren	97,480	95,480	192,960
Washington	30,163	31,894	62,057
Wayne	56,033	57,127	113,160
Williams	19,118	19,332	38,449
Wood	60,152	63,616	123,768
Wyandot	11,116	11,512	22,628

[1] The 2003-2007 average annual counts were calculated using vintage 2008 postcensal estimates for July 1, 2003-2007 (U.S. Census Bureau, 2009).

Appendix VIII

Cancer by Site/Type and Extended Race Categories: Incidence

Average Annual Number and Percent of Invasive Cancer Cases, Ohio, 2003-2007[1]

	White		Black		Amer. Indian, Alaskan Native		Chinese		Japanese		Filipino		Korean		Asian Indian, Pakistani		Vietnamese		Additional Races[2]		Unknown[3]	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
All Cancer Sites/Types	**50,771**	**100.0%**	**5,637**	**100.0%**	**19**	**100.0%**	**42**	**100.0%**	**18**	**100.0%**	**19**	**100.0%**	**15**	**100.0%**	**84**	**100.0%**	**17**	**100.0%**	**312**	**100.0%**	**1,201**	**100.0%**
Bladder	2,452	4.8%	130	2.3%	<1	2.1%	2	5.7%	<1	1.1%	<1	1.1%	<1	2.7%	3	3.1%	<1	2.4%	11	3.6%	91	7.6%
Brain and Other CNS[4]	757	1.5%	47	0.8%	<1	1.0%	<1	1.4%	<1	1.1%	0	0.0%	<1	2.7%	1	1.7%	<1	1.2%	8	2.4%	4	0.3%
Breast (Female)	7,144	14.1%	806	14.3%	4	21.6%	6	15.2%	4	23.3%	2	9.6%	3	17.6%	16	19.3%	1	8.3%	46	14.7%	105	8.8%
Cervix	413	0.8%	61	1.1%	0	0.0%	<1	0.5%	<1	1.1%	1	5.3%	<1	1.4%	<1	0.7%	<1	1.2%	5	1.6%	6	0.5%
Colon and Rectum	5,574	11.0%	633	11.2%	1	6.2%	5	12.3%	3	14.4%	4	19.1%	2	10.8%	10	11.7%	2	10.7%	31	9.9%	107	8.9%
Corpus Uterus	1,656	3.3%	130	2.3%	<1	2.1%	1	2.4%	<1	2.2%	<1	3.2%	<1	1.4%	3	3.6%	<1	1.2%	13	4.2%	26	2.1%
Esophagus	621	1.2%	63	1.1%	<1	2.1%	0	0.0%	<1	2.2%	<1	1.1%	0	0.0%	1	1.2%	0	0.0%	2	0.8%	7	0.6%
Hodgkin's Lymphoma	302	0.6%	35	0.6%	<1	2.1%	0	0.0%	0	0.0%	0	0.0%	<1	1.4%	<1	0.5%	0	0.0%	4	1.3%	6	0.5%
Kidney and Renal Pelvis	1,626	3.2%	196	3.5%	<1	2.1%	<1	0.9%	<1	1.1%	0	0.0%	<1	2.7%	2	2.6%	<1	2.4%	8	2.6%	14	1.2%
Larynx	487	1.0%	62	1.1%	<1	2.1%	<1	0.5%	0	0.0%	0	0.0%	0	0.0%	<1	0.5%	0	0.0%	2	0.5%	5	0.4%
Leukemias	1,207	2.4%	112	2.0%	<1	4.1%	1	3.3%	<1	2.2%	<1	2.1%	<1	4.1%	2	2.9%	<1	4.8%	9	2.8%	16	1.4%
Liver and IBD[5]	441	0.9%	103	1.8%	<1	2.1%	1	2.8%	<1	2.2%	<1	4.3%	<1	1.4%	2	2.4%	2	9.5%	9	2.8%	3	0.2%
Lung and Bronchus	8,212	16.2%	982	17.4%	3	15.5%	7	15.6%	3	14.4%	4	19.1%	3	17.6%	7	8.8%	3	20.2%	32	10.4%	39	3.2%
Melanoma of the Skin	2,035	4.0%	12	0.2%	<1	1.0%	<1	1.4%	0	0.0%	0	0.0%	<1	1.4%	<1	0.2%	<1	1.2%	7	2.1%	167	13.9%
Multiple Myeloma	512	1.0%	114	2.0%	0	0.0%	<1	0.9%	0	0.0%	0	0.0%	0	0.0%	1	1.4%	<1	1.2%	4	1.2%	4	0.3%
Non-Hodgkin's Lymphoma	2,150	4.2%	157	2.8%	1	5.2%	3	7.1%	<1	4.4%	<1	3.2%	<1	1.4%	4	4.3%	1	7.1%	15	4.9%	48	4.0%
Oral Cavity and Pharynx	1,074	2.1%	118	2.1%	<1	2.1%	1	2.8%	<1	1.1%	<1	1.1%	0	0.0%	3	3.8%	<1	4.8%	8	2.6%	14	1.2%
Ovary	758	1.5%	61	1.1%	<1	2.1%	<1	1.9%	0	0.0%	<1	3.2%	<1	4.1%	2	2.6%	0	0.0%	6	1.9%	7	0.6%
Pancreas	1,223	2.4%	165	2.9%	<1	2.1%	1	2.4%	<1	3.3%	<1	1.1%	<1	5.4%	2	2.1%	<1	2.4%	8	2.4%	6	0.5%
Prostate	6,478	12.8%	997	17.7%	<1	3.1%	2	4.3%	1	7.8%	2	8.5%	<1	5.4%	9	10.3%	1	8.3%	42	13.3%	428	35.6%
Stomach	617	1.2%	118	2.1%	<1	1.0%	2	4.3%	2	8.9%	<1	1.1%	1	9.5%	2	1.9%	<1	3.6%	5	1.5%	14	1.1%
Testis	287	0.6%	11	0.2%	0	0.0%	0	0.0%	<1	1.1%	0	0.0%	0	0.0%	<1	0.7%	0	0.0%	3	1.0%	5	0.4%
Thyroid	958	1.9%	81	1.4%	1	7.2%	2	5.2%	<1	1.1%	<1	3.2%	<1	5.4%	5	5.5%	<1	2.4%	14	4.4%	24	2.0%
Other Sites/Types	3,787	7.5%	442	7.8%	3	13.4%	4	9.0%	1	6.7%	3	13.8%	<1	4.1%	7	8.1%	1	7.1%	22	7.2%	55	4.6%

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, March 2010.
[2] "Additional Races" includes the following categories: Hawaiian (2 cases); Laotian (5 cases); Kampuchean (2 cases); Thai (2 cases); Micronesian, Not Otherwise Specified (NOS) (1 case); Samoan (2 cases); Other Asian (52 cases); Pacific Islander, NOS (19 cases); and Other Unspecified (224 cases). There was less than one average annual case for the following races: Chamorran; Guamanian, NOS; Polynesian, NOS; Tahitian; Melanesian, NOS; Fiji Islander; and New Guinean.
[3] Race was unknown for 2.1% of invasive cancer cases in Ohio from 2003-2007.
[4] CNS = Central Nervous System.
[5] IBD = Intrahepatic Bile Duct.

Appendix IX

Cancer by Site/Type and Ethnicity: Incidence

Average Annual Number and Percent of Invasive Cancer Cases, Ohio, 2003-2007[1,2]

	Non-Hispanic		Mexican		Puerto Rican		Cuban		South/Central American Except Brazil		Other Spanish Hispanic/ Latino, NOS		Spanish/ Hispanic/ Latino, NOS		Spanish Surname Only		Dominican Republic		Unknown[3]	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
All Cancer Sites/Types	**47,393**	**100.0%**	**80**	**100.0%**	**57**	**100.0%**	**5**	**100.0%**	**9**	**100.0%**	**18**	**100.0%**	**160**	**100.0%**	**17**	**100.0%**	**15**	**100.0%**	**10,381**	**100.0%**
Bladder	2,141	4.5%	3	4.2%	<1	1.4%	0	0.0%	0	0.0%	<1	2.2%	5	3.1%	<1	3.5%	1	6.8%	539	5.2%
Brain and Other CNS[4]	710	1.5%	2	2.0%	1	1.8%	<1	4.3%	<1	2.2%	0	0.0%	3	2.1%	<1	1.2%	<1	1.4%	102	1.0%
Breast (Female)	6,618	14.0%	9	10.7%	8	13.3%	0	0.0%	1	13.3%	1	7.7%	19	12.1%	3	16.3%	2	14.9%	1,477	14.2%
Cervix	397	0.8%	<1	1.0%	<1	1.1%	0	0.0%	<1	2.2%	<1	1.1%	5	3.3%	<1	2.3%	0	0.0%	83	0.8%
Colon and Rectum	5,164	10.9%	11	14.0%	8	14.4%	<1	13.0%	1	15.6%	2	12.1%	16	9.8%	2	9.3%	4	24.3%	1,161	11.2%
Corpus Uterus	1,484	3.1%	2	2.2%	<1	1.1%	<1	4.3%	0	0.0%	<1	2.2%	5	3.3%	<1	2.3%	<1	2.7%	337	3.3%
Esophagus	582	1.2%	<1	0.7%	<1	0.7%	0	0.0%	<1	2.2%	<1	1.1%	1	0.9%	<1	1.2%	<1	1.4%	111	1.1%
Hodgkin's Lymphoma	288	0.6%	2	2.0%	<1	0.7%	0	0.0%	0	0.0%	<1	2.2%	4	2.4%	<1	1.2%	<1	1.4%	53	0.5%
Kidney and Renal Pelvis	1,542	3.3%	2	2.7%	1	1.8%	0	0.0%	<1	4.4%	1	5.5%	8	4.9%	<1	1.2%	<1	2.7%	293	2.8%
Larynx	467	1.0%	<1	0.2%	<1	1.4%	0	0.0%	0	0.0%	<1	1.1%	2	1.3%	<1	3.5%	<1	2.7%	86	0.8%
Leukemias	1,169	2.5%	3	3.2%	<1	1.1%	<1	8.7%	<1	4.4%	1	6.6%	7	4.1%	<1	2.3%	<1	2.7%	169	1.6%
Liver and IBD[5]	499	1.1%	2	2.5%	2	3.9%	0	0.0%	<1	2.2%	<1	2.2%	5	3.1%	0	0.0%	0	0.0%	52	0.5%
Lung and Bronchus	7,931	16.7%	9	11.5%	8	13.7%	1	21.7%	2	17.8%	1	7.7%	15	9.6%	2	12.8%	2	13.5%	1,323	12.7%
Melanoma of the Skin	1,531	3.2%	2	2.0%	0	0.0%	<1	8.7%	<1	2.2%	<1	2.2%	2	1.0%	<1	1.2%	<1	2.7%	686	6.6%
Multiple Myeloma	543	1.1%	<1	0.2%	1	2.5%	0	0.0%	0	0.0%	<1	3.3%	2	1.1%	0	0.0%	<1	1.4%	89	0.9%
Non-Hodgkin's Lymphoma	1,938	4.1%	4	5.5%	4	6.7%	0	0.0%	0	0.0%	1	6.6%	9	5.6%	1	5.8%	<1	2.7%	422	4.1%
Oral Cavity and Pharynx	1,042	2.2%	<1	1.0%	2	3.5%	<1	4.3%	0	0.0%	<1	2.2%	3	1.8%	<1	4.7%	<1	4.1%	170	1.6%
Ovary	702	1.5%	2	2.0%	<1	0.7%	0	0.0%	<1	4.4%	<1	1.1%	3	1.6%	<1	2.3%	0	0.0%	129	1.2%
Pancreas	1,234	2.6%	2	2.7%	1	2.5%	0	0.0%	<1	4.4%	<1	4.4%	3	2.0%	<1	3.5%	0	0.0%	164	1.6%
Prostate	6,039	12.7%	13	15.7%	7	12.6%	<1	8.7%	1	11.1%	3	15.4%	17	10.6%	2	9.3%	1	6.8%	1,879	18.1%
Stomach	629	1.3%	3	3.5%	1	2.5%	0	0.0%	<1	4.4%	<1	3.3%	3	1.9%	<1	3.5%	<1	1.4%	122	1.2%
Testis	241	0.5%	<1	1.0%	0	0.0%	0	0.0%	<1	2.2%	0	0.0%	2	1.3%	0	0.0%	0	0.0%	64	0.6%
Thyroid	860	1.8%	2	2.0%	1	2.1%	<1	8.7%	<1	2.2%	<1	2.2%	5	3.4%	<1	3.5%	<1	1.4%	217	2.1%
Other Sites/Types	3,642	7.7%	6	7.2%	6	10.9%	<1	17.4%	<1	4.4%	1	7.7%	16	9.9%	2	9.3%	<1	5.4%	652	6.3%

[1] Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2010.
[2] Ethnicity was determined by the source reporting the case; the NAACCR algorithm for coding ethnicity was not applied.
[3] Ethnicity is unknown for 17.9% of invasive cancer cases in Ohio from 2003-2007.
[4] CNS = Central Nervous System.
[5] IBD = Intrahepatic Bile Duct.
Note: NOS = Not Otherwise Specified.

Appendix X
Technical Notes

Age-Adjusted Rate—A summary rate that is a weighted average of age-specific rates, where the weights represent the age distribution of a standard population (direct adjustment). The incidence and mortality rates presented in this report were standardized to the age distribution of the 2000 U.S. Standard Population. Under the direct method, the population was first divided into 19 five-year age groups, i.e., <1, 1-4, 5-9, 10-14…85+, and the age-specific rate was calculated for each age group. Each age-specific rate was then multiplied by the standard population proportion for the respective age group and summed to give an overall age-adjusted rate. Rates are presented as the number of cases per 100,000 persons per year. Age-adjustment allows for the comparison of rates between populations with different age distributions.

Age-Specific Rate—The number of cases or deaths in a specified age group (e.g., 50-54 years), per unit of population in that age group, over a specified time period.

Average Annual Number—The number of cases or deaths diagnosed per year, on average, for the time period of interest (e.g., 2003-2007). Average annual numbers are calculated by summing the number of cases or deaths for a given time period, dividing by the number of years that comprise the time period and rounding to the nearest whole number.

Bridging of Racial Categories—A method used in the 2000 U.S. Census of Population to account for multiple race categories. The 31 race categories collected in the census were bridged to four categories: white; black or African American; American Indian or Alaskan Native; and Asian or Pacific Islander. The latter two categories (American Indian or Alaskan Native and Asian or Pacific Islander) and all other non-white and non-black races were grouped as "additional races" in this report due to the small number of cancer cases diagnosed among these racial categories.

Cancer Case—All primary malignancies diagnosed among Ohio residents from 2003-2007 and reported to the OCISS. Cases were categorized according to the International Classification of Diseases for Oncology, Third Edition (ICD-O-3), World Health Organization, Geneva, Switzerland, 2000. Data are presented for 24 cancer site/type groupings created in the manner of the SEER Program at the National Cancer Institute. Case counts represent the number of primary cancers reported to the OCISS, not the number of persons; one person may be diagnosed with more than one primary tumor (e.g., lung cancer and melanoma of the skin) and therefore counted as more than one case. Cancer cases were categorized as *in situ* or invasive, and only invasive cases, with the addition of *in situ* bladder cancer, were used in the calculation of incidence rates.

Case Completeness—The estimated percent of case completeness was calculated by dividing the observed cancer incidence rate by the expected cancer incidence rate. The expected cancer incidence rate was generated by multiplying the 2003-2007 cancer incidence-to-mortality rate ratio from the SEER Program by the 2003-2007 Ohio age-adjusted cancer mortality rate.

County—Ohio county of residence at the time of diagnosis.

Incidence—The number of new cases diagnosed during a specified time period (e.g., 2003-2007).

Invasive Cancer—A malignant tumor that has infiltrated the organ in which the tumor originated. Invasive cancers consist of those diagnosed at the localized, regional, distant and unstaged/unknown stages.

Mortality—The number of deaths during a specified time period (e.g., 2003-2007). Deaths for 2003-2007 were coded using the International Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10), World Health Organization, Geneva, Switzerland, 1992.

Population-based—Data are collected for an entire population (i.e., the State of Ohio) versus a segment or sample of the population. The OCISS is a population-based cancer surveillance system.

Rate—The number of cases or deaths per unit of population (e.g., per 100,000 persons), over a specified time period (e.g., 2003-2007). Rates may be unstable and are not presented when the case count for 2003-2007 is less than five.

Stage at Diagnosis—The degree to which a tumor has spread from its site of origin at the time of diagnosis. Cancer stage is often related to survival and is used to select appropriate treatment. Patients with early stage disease often have better long-term survival, and detecting cancers at an early stage may lead to a reduction in mortality. The stages presented in this report, in the order of increasing spread, are *in situ*, localized, regional, and distant. In addition, 15 percent of cancers in 2003-2007 were reported as unstaged or with an unknown stage at diagnosis. *In situ* and localized tumors are referred to as early stage tumors, and regional and distant tumors are termed late stage. Cancers diagnosed at the localized, regional, distant and unstaged/unknown stages are categorized as invasive.

> ***In situ***—Noninvasive cancer that has not penetrated surrounding tissue.
>
> **Localized**—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.