

Cancer in Rural Illinois, 1990-2010
Incidence, Mortality, Staging, and Access to Care
April 2014

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Acknowledgments

This report would not have been possible without the input, feedback, and support of the Collaboration to Reduce Lung Cancer Disparities Steering Committee, which in addition to four of the report's authors, includes Sandra Puczynski, PhD and Susan Ryherd, MEd from the Southern Illinois University School of Medicine Center for Clinical Research, Kim Sanders, MPH, MBA and Ruth Heitkamp, RN, MSPH at the Southern Illinois University School of Medicine Center for Rural Health and Social Service Development, and Woody Thorne, MEd, and Diane Land, MPH, CHES of Southern Illinois Healthcare.

Additionally, sincerest thanks is due to Tiefu Shen, PhD, MD, Division Chief of the Illinois Department of Public Health's Division of Epidemiologic Sciences and his staff at the Illinois State Cancer Registry for their valuable, detailed, and critical guidance and feedback on the report.

This publication was supported, in part, by an American Cancer Society-Illinois Division grant.

Suggested Citation

Zahnd WE, Mueller GS, Garner K, Jenkins WD, Steward DE. Cancer in Rural Illinois, 1990-2010 Incidence, Mortality, Staging, and Access to Care. Springfield, IL: Center for Clinical Research, Southern Illinois University School of Medicine; April 2014.

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Executive Summary

This report intends to summarize the cancer burden in the three rural regions of Illinois by presenting cancer incidence and mortality rates and staging data using the most recently and publicly available data as provided by the Illinois State Cancer Registry and the National Center for Health Statistics. Additionally, this report aims to identify access to care disparities that may exist in rural regions of the state using data provided by the Area Health Resource File and the Illinois Bureau of the Financial and Professional Regulation.

Incidence Highlights

- The Southern, Central, and Northern Rural regions experienced 12.9%, 6.2%, and 9.2% increases in cancer incidence rates respectively from 1991 to 2010.
- For all rural regions, lung and bronchus cancer surpassed colorectal cancer as the second most incident cancer in women between 1991 and 2010.
- Between 2006 and 2010, the Southern Rural region had colorectal and lung cancer incidence rates that exceeded the state rate for males, females, and both genders combined. The melanoma incidence rate for both genders combined exceeded the state rate.
- The Central Rural region had esophageal cancer, colorectal cancer, lung cancer, bladder cancer, and melanoma incidence rates that exceeded the state rate between 2006 and 2010. Colorectal and lung and bronchus cancer incidence exceeded the state rates for both genders separately as well.
- The Northern Rural region had a melanoma incidence rate that exceeded the state rate between 2006 and 2010.

Mortality Highlights

- The Southern, Central, and Northern Rural regions experienced 8.4%, 10.8%, and 11.5% decreases in cancer mortality rates, respectively, between 1990 and 2010. These decreases were less pronounced than the decreases experienced in urban regions.
- The lung and bronchus cancer mortality rate between 2006 and 2010 for all rural regions exceeded the state rate.
- Colorectal, bone, and nervous system cancer mortality rates in the Southern Rural region also exceeded the state mortality rates for each cancer respectively between 2006 and 2010.
- Between 2006 and 2010 in the Central Rural region, esophageal and kidney cancer mortality rates also exceeded state mortality rates.
- In the Northern Rural region, melanoma and kidney cancer mortality rates exceeded the state mortality rates in 2006 and 2010.
- Cancer has surpassed heart disease as the number one cause of death in Northern Rural women.

Staging Highlights

- Generally speaking, a smaller percentage of cancers in rural regions were diagnosed at a localized stage compared to the urban regions or the state as a whole.
- More than ten percent of cancers diagnosed in Southern Rural females were unstaged.

Access Highlights

- All rural regions had far less access to cancer specialists compared to urban areas (e.g. the central rural region has no colorectal surgeon).

Introduction and Demographic Background

The goal of this report is to describe the cancer burden in three rural regions in Illinois. This report will characterize the cancer incidence, mortality, and access to care burden experienced in three rural regions through comparisons to designated urban regions in Illinois and the state as a whole using the most recent data from the Illinois State Cancer Registry, the National Center for Health Statistics, the Area Health Resource File, and the Illinois Department of Financial and Professional Regulation.

Counties are designated rural or urban based upon the dichotomization used by the Illinois Department of Public Health's Behavioral Risk Factor Surveillance System (Illinois BRFSS). Rural counties are divided into three geographic regions of somewhat similar population size (Figure 1).

These rural regions are roughly demarcated by Interstates 74 and 70. Rural counties north of Interstate 74 were categorized as "Northern rural". Rural counties south of Interstate 74, but north of Interstate 70 were categorized as "Central Rural". Counties south of Interstate 70 were designated "Southern Rural". Urban counties were categorized similarly to the Illinois BRFSS stratification: Small Urban, Cook County, and the Collar Counties (counties immediately adjacent to Cook County).

16.9% of Illinois residents live in a rural county. There are demographic differences among the three rural regions (Table 1). The Southern Rural region is poorer than the central and northern rural regions. The Northern Rural region has fewer residents with less than a high school education and more Hispanic residents compared to other rural regions. Of the rural regions, the Central Rural region is the least densely populated. All rural regions have a higher percentage of residents over age of 65 compared to the urban county groupings. All urban county groupings are more ethnically diverse and more educated than the rural regions.

Figure 1: Designated Regions of Illinois

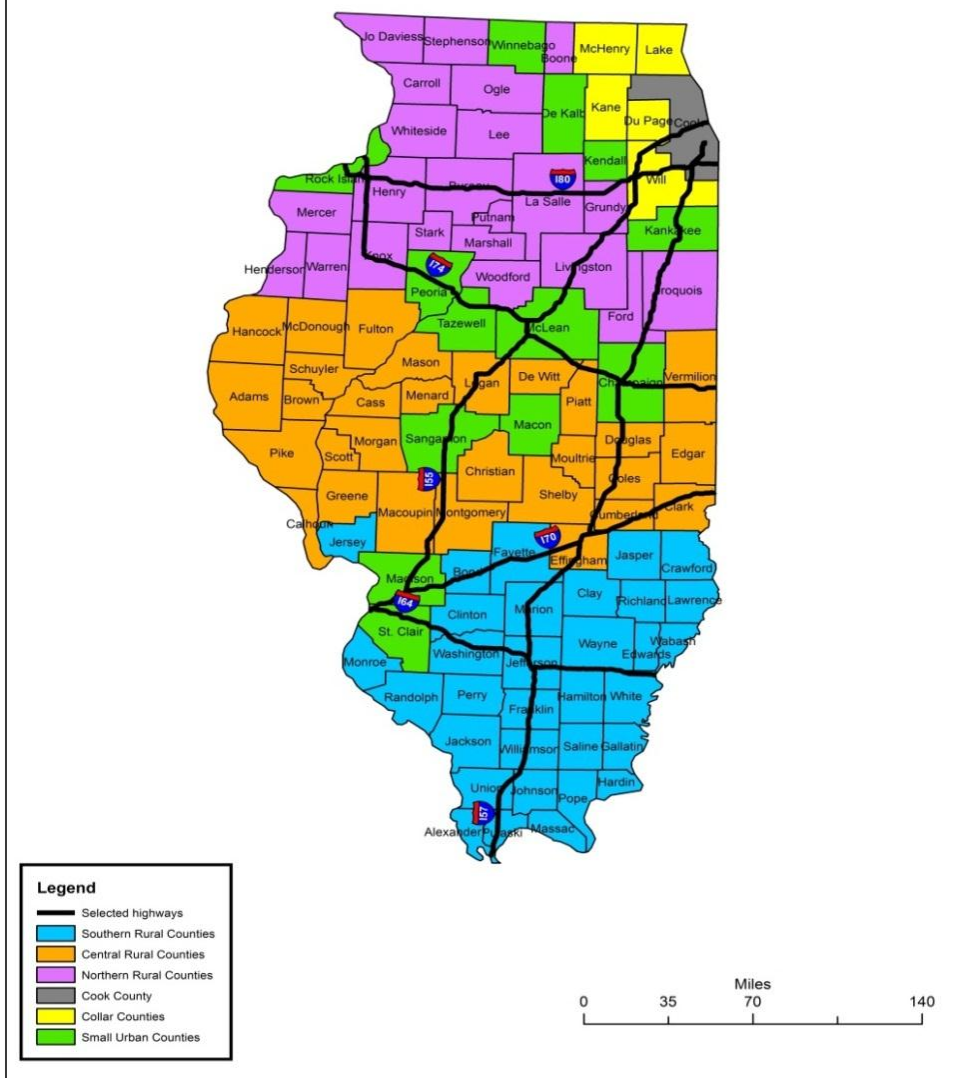


Table 1: Population Estimates of Designated Regions

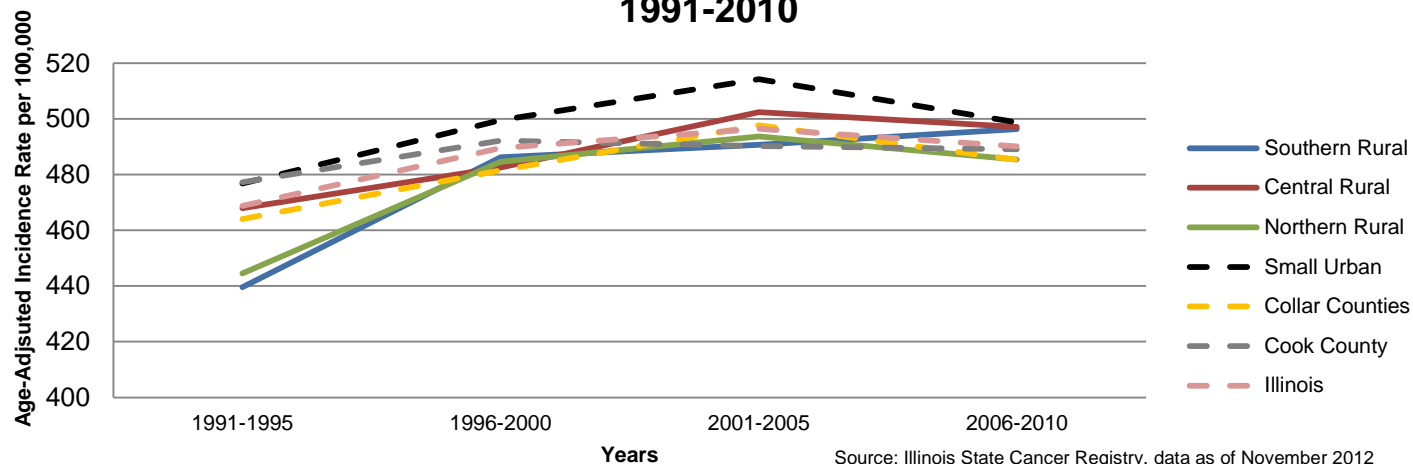
| | Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|--|-----------------------|----------------------|-----------------------|--------------------|------------------------|--------------------|-----------------|
| # of Counties | 32 | 29 | 22 | 13 | 5 | 1 | 102 |
| Population† | 679,172 | 731,019 | 770,187 | 2,320,269 | 3,143,257 | 5,231,351 | 12,875,255 |
| Population per square mile† | 50.8 | 45.3 | 57.0 | 262.5 | 1150.8 | 5495.1 | 231.1 |
| Race†‡ | | | | | | | |
| Non-Hispanic White | 92.0% | 94.0% | 94.9% | 81.6% | 84.1% | 65.9% | 77.9% |
| Non-Hispanic Black | 5.5% | 3.9% | 2.7% | 13.0% | 6.8% | 24.8% | 14.8% |
| Hispanic | 2.2% | 2.5% | 7.3% | 6.2% | 18.5% | 24.6% | 16.3% |
| Age* | | | | | | | |
| Aged 65+ | 16.6% | 16.9% | 16.8% | 13.1% | 10.5% | 12.0% | 13.2% |
| Poverty* | | | | | | | |
| % Living below 100% of the poverty level | 15.7% | 14.6% | 11.2% | 15.0% | 8.1% | 16.9% | 13.7% |
| % Living below 200% of the poverty level | 36.3% | 34.9% | 29.5% | 31.6% | 21.2% | 35.2% | 30.8% |
| Education (aged 25+)* | | | | | | | |
| Population aged 25+ | 467,709 | 497,084 | 530,603 | 1,496,761 | 2,010,973 | 3,456,817 | 8,314,454 |
| Less than a high school education | 13.6% | 12.3% | 11.9% | 10.2% | 10.6% | 15.9% | 12.7% |
| High school education or GED | 33.8% | 38.7% | 37.5% | 30.2% | 22.9% | 24.2% | 27.0% |
| Some College or Associate's Degree | 35.0% | 31.6% | 33.1% | 32.1% | 28.0% | 25.7% | 28.8% |
| Bachelor's degree | 11.3% | 11.7% | 11.8% | 17.3% | 24.1% | 20.7% | 19.3% |
| Graduate or Professional Degree | 6.3% | 5.7% | 5.8% | 10.1% | 14.3% | 13.6% | 11.8% |

† 2012 Population estimates from the U.S. Census Bureau

‡ Race data may be above or below 100% due to estimate methodology that includes multi-racial individuals in each racial group with which they identify.

* Data from the American Community Survey 2008-2012 5 year estimates

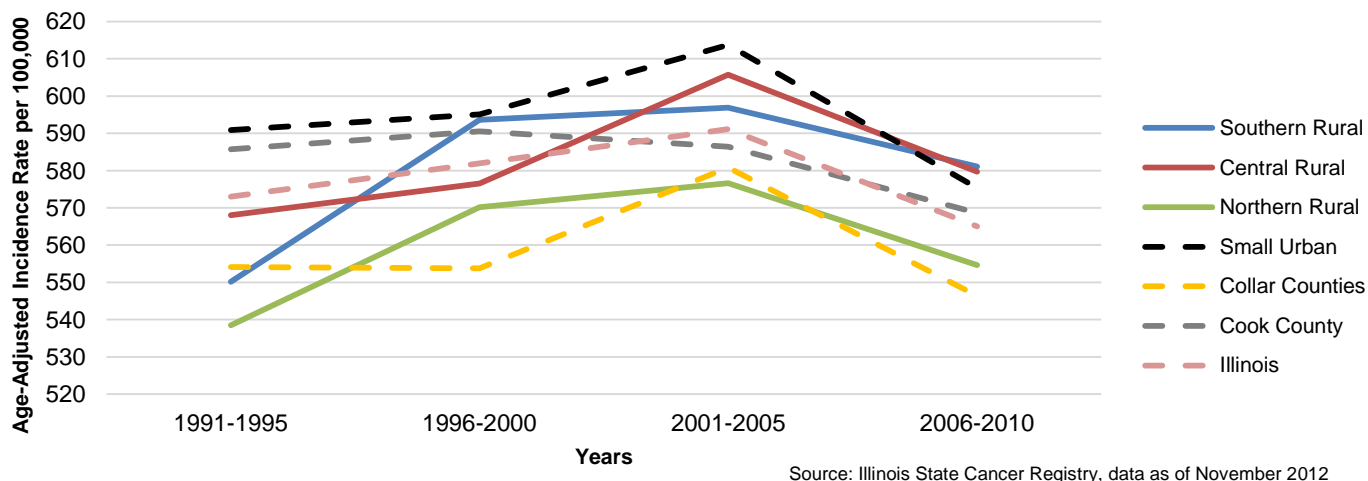
Graph 1: All Cancer Incidence by Geography, Both Genders, 1991-2010



Male Incidence

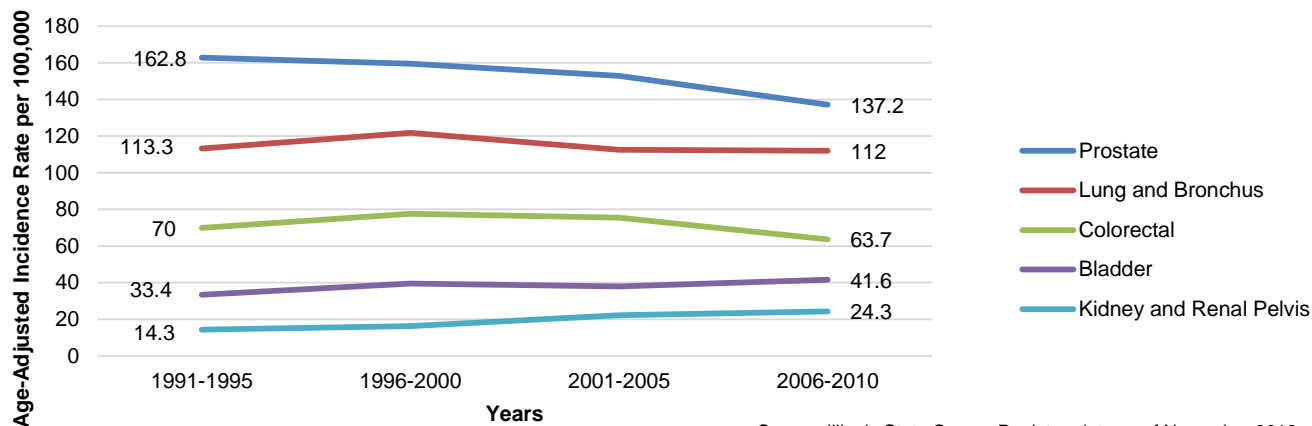
During the most recent interval (2006-2010), the overall age-adjusted male cancer incidence rates in the Southern Rural and Central Rural regions, 581.1 and 579.7 per 100,000, respectively, exceeded the state rate (565.0 per 100,000). Between the 1991-1995 and 2006-2010 intervals, the Southern, Central, and Northern Rural regions experienced 5.6%, 2.1%, and 3.0% increases, respectively, in cancer incidence (Graph 2). In the Southern Rural region, colon and rectum and lung and bronchus cancer rates exceeded the state rate. In the Central Rural region, colon and rectum cancer, lung and bronchus cancer, bladder cancer incidence rates exceeded the state rate for each cancer respectively. In the Northern Rural region, melanoma incidence exceeded the state rate. In all three rural regions, prostate and stomach cancer incidence rates were lower than the state rate, and in both the Central and Northern Rural regions, liver cancer incidence rates were below the state rate. Lung and bronchus cancer incidence rates in the Southern and Central Rural regions were higher than in the Northern Rural region, the Collar Counties, and Cook County. See tables in Appendix 2 for cancer incidence by site and designated region for all year intervals.

Graph 2: Male Cancer Incidence by Geography, 1991-2010

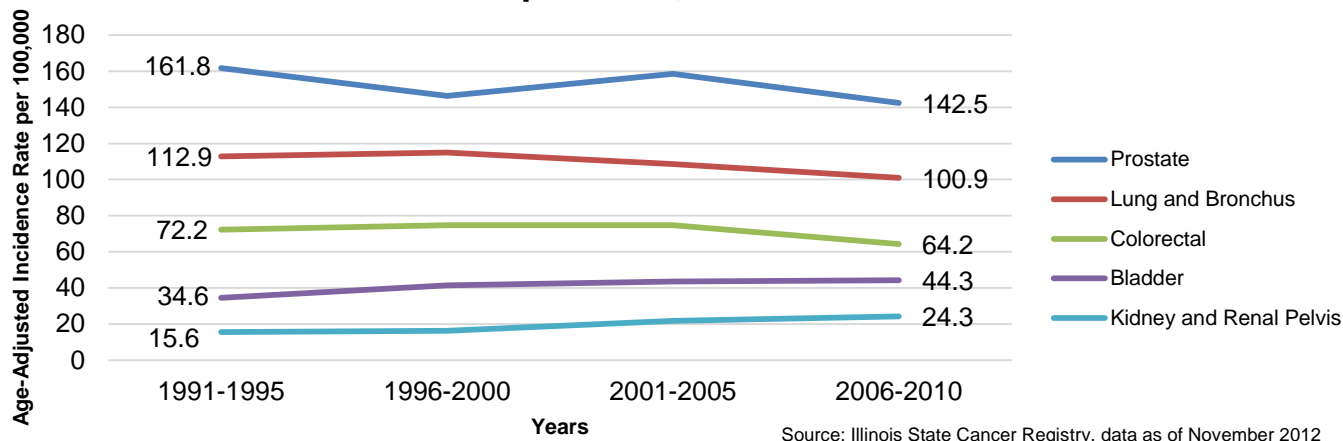


The top 5 male cancers are shown in Graphs 3-5 for Southern, Central, and Northern Rural regions respectively. Between 2006 and 2010, these cancers accounted for more than 60% of all male cancers in each rural region. Prostate cancer had the highest incidence in all rural regions. Between the 1991-1995 and the 2006-2010 intervals, lung and bronchus and colon and rectum cancers either remained stable or decrease slightly. Meanwhile bladder and kidney and renal pelvis cancers increased in all rural regions.

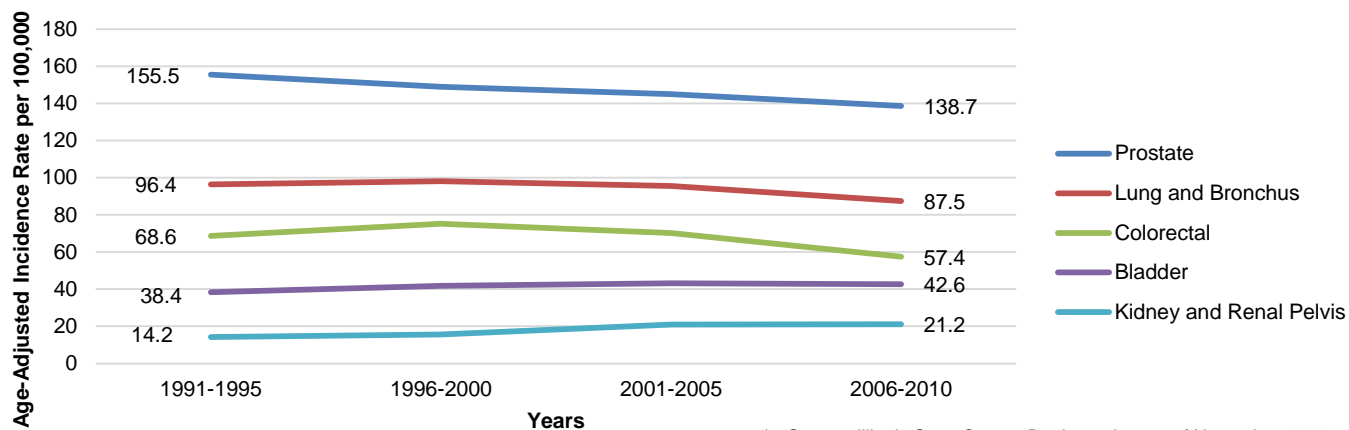
Graph 3: Southern Rural Region Male Cancer Incidence, Top 5 Sites, 1991-2010



Graph 4: Central Rural Region Male Cancer Incidence, Top 5 Sites, 1991-2010



Graph 5: Northern Rural Region Male Cancer Incidence, Top 5 Sites, 1991-2010

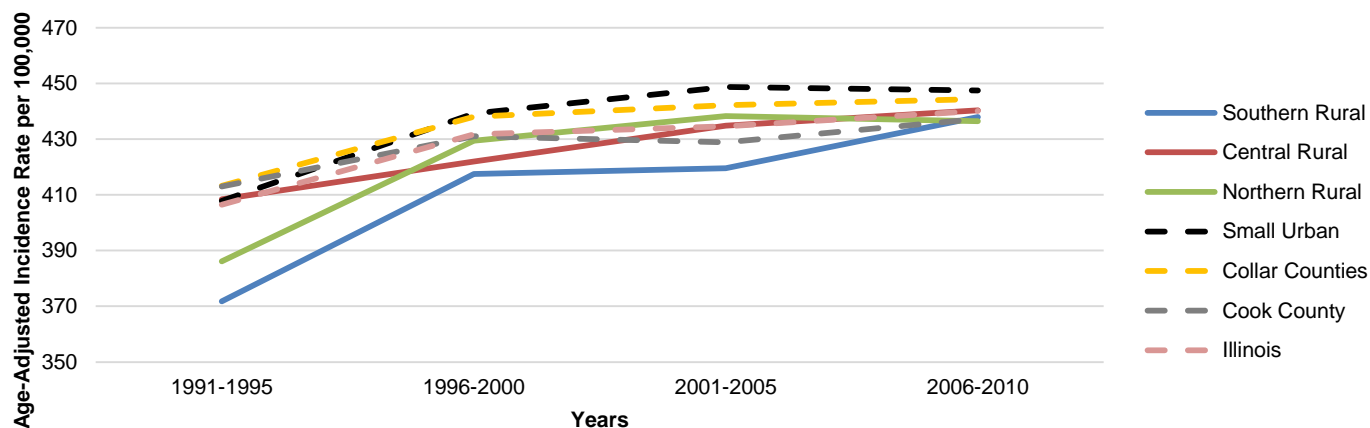


Source: Illinois State Cancer Registry, data as of November 2012

Female Incidence

During the most recent interval (2006-2010), the female age-adjusted cancer incidence rates for Southern, Central, and Northern Rural regions were 438.0, 440.4, and 436.5 per 100,000, respectively. Between the 1991-1995 and the 2006-2010 intervals, the Southern, Central, and Northern Rural regions female cancer incidence rates increased 17.8%, 7.9%, and 13.1% respectively (Graph 6). During the 2006 to 2010 interval, the colon and rectum and lung and bronchus cancer incidence rates in the Southern Rural region exceeded the state rate. In the Central Rural region, colon and rectum cancer, lung and bronchus cancer, and melanoma rates exceeded the state incidence rate. In the Northern Rural region, melanoma incidence rates exceeded the state rate during this time. In all rural regions, the stomach and pancreatic cancer incidence rates were lower than the state rate, and in the Southern and Central rural Regions, the breast cancer incidence rates were lower than the state rate. See tables in Appendix 3 for cancer incidence by site and designated region for all year intervals.

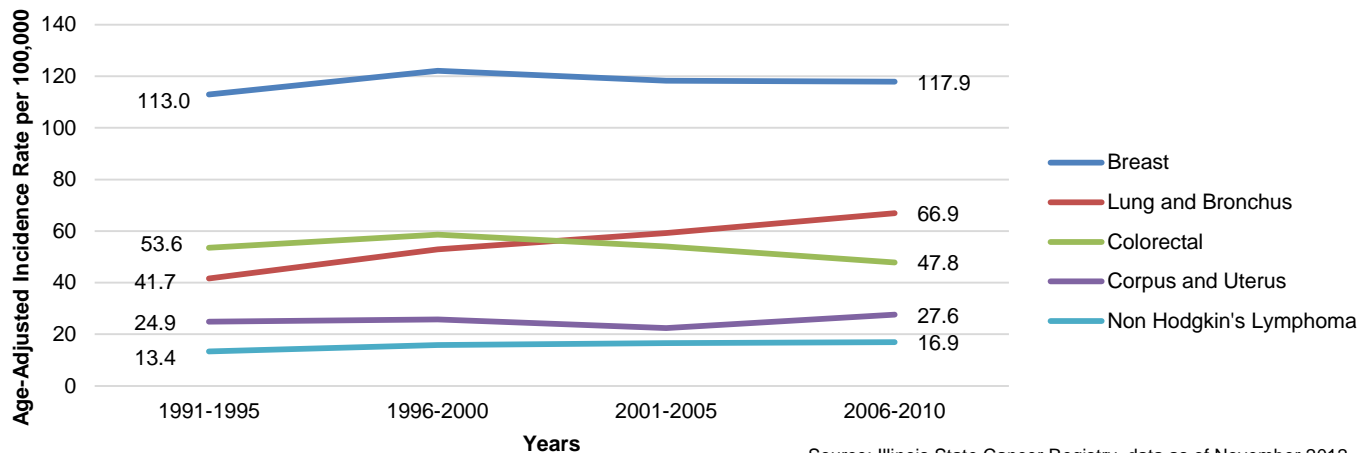
Graph 6: Female Cancer Incidence by Geography, 1991-2010



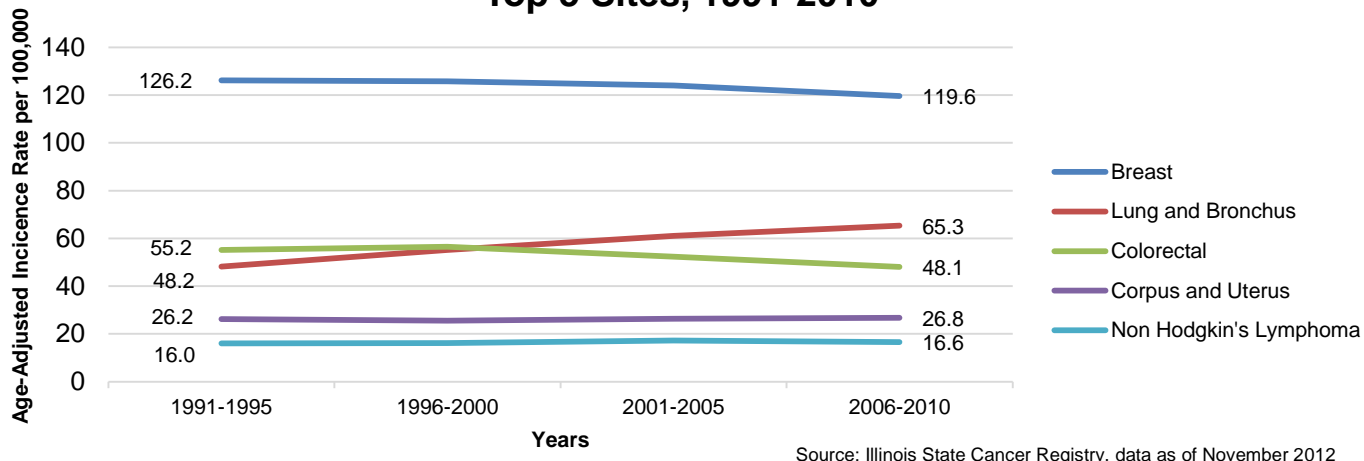
Source: Illinois State Cancer Registry, data as of November 2012

The top 5 female cancers are shown in Graphs 7-9. Between 2006 and 2010, these cancers accounted for greater than 60% of female cancers in all rural regions. Breast cancer had the highest incidence in all regions. Between the 1991-1995 and the 2006-2010 intervals, lung and bronchus cancer surpassed colorectal cancer as the second most incident cancer in women. Corpus and uterus cancer and Non-Hodgkin's lymphoma incidence rates remained relatively constant over time in the Central and Northern Rural regions, while Non-Hodgkin's lymphoma increased in the Southern Rural region.

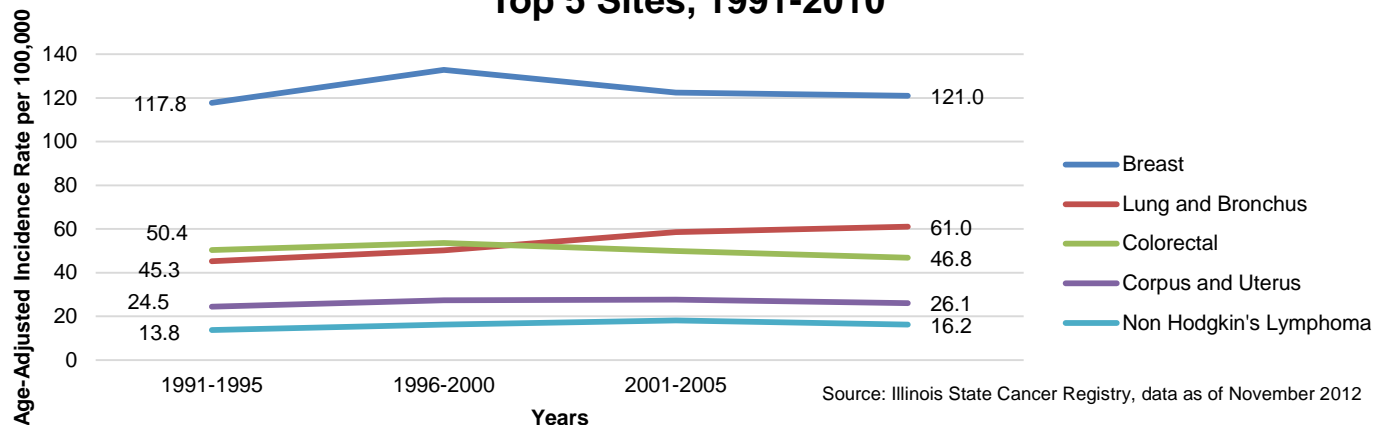
Graph 7: Southern Rural Region Female Cancer Incidence, Top 5 Sites, 1991-2010



Graph 8: Central Rural Region Female Cancer Incidence, Top 5 Sites, 1991-2010



Graph 9: Northern Rural Region Female Cancer Incidence, Top 5 Sites, 1991-2010



Cancer Mortality

All Cancer Mortality

Table 2: Change in Cancer Mortality by Geography, 1990-2010

(National data from 1991-2010)

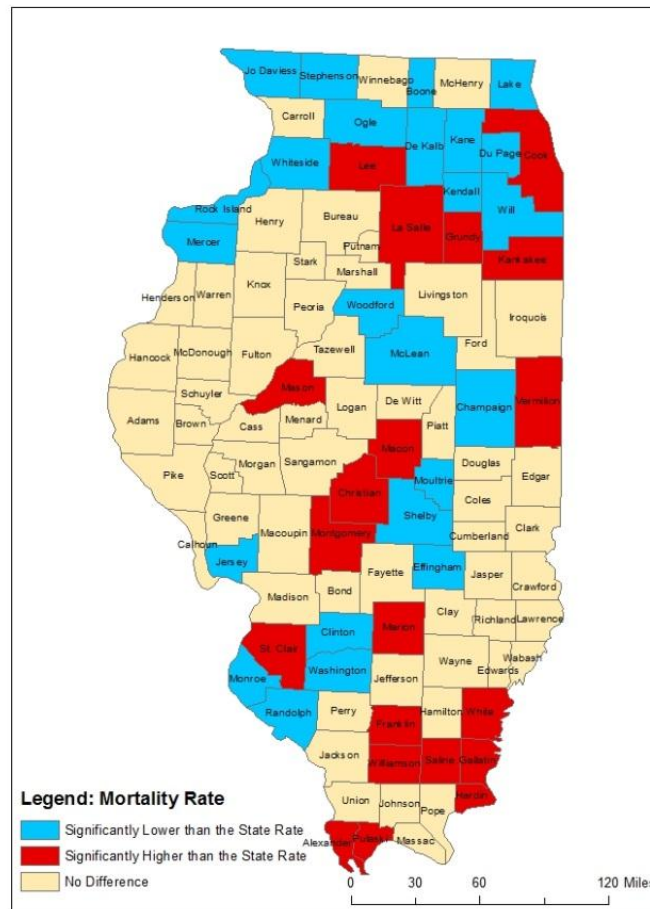
| | All | Male | Female |
|------------------|--------|--------|--------|
| National * | -20% | N/A | N/A |
| Illinois † | -17.5% | -23.0% | -13.4% |
| Southern Rural† | -8.4% | -14.0% | -7.6% |
| Central Rural† | -10.8% | -16.4% | -7.1% |
| Northern Rural† | -11.5% | -18.5% | -5.8% |
| Small Urban† | -11.8% | -20.7% | -10.8% |
| Collar Counties† | -18.8% | -24.1% | -15.1% |
| Cook County† | -20.4% | -25.7% | -16.2% |

*Source: Siegel R, Ma J, Zou Z, Jemal A. Cancer Statistics, 2014.

CA Cancer J Clin. 2014;64:9-29.

†Source: Calculated from underlying mortality data provided by NCHS (www.cdc.gov/nchs)

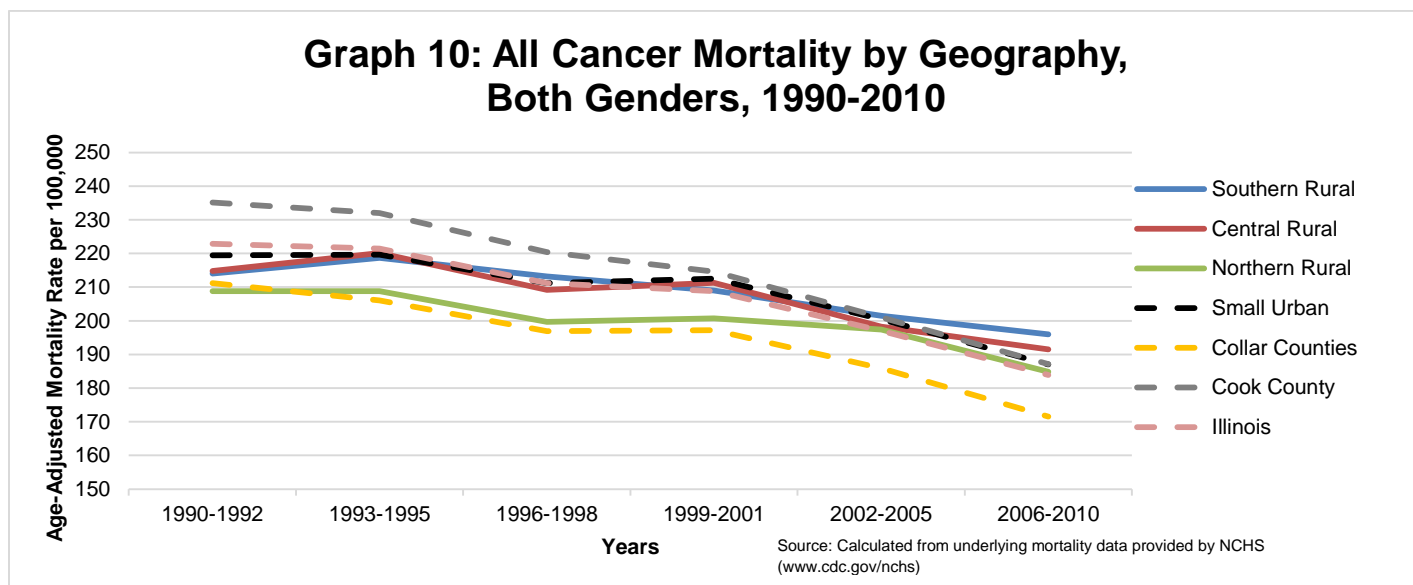
Figure 3: Illinois Cancer Mortality by County, All Sites, 1990-2010



Source: Calculated from underlying mortality data provided by NCHS (www.cdc.gov/nchs)

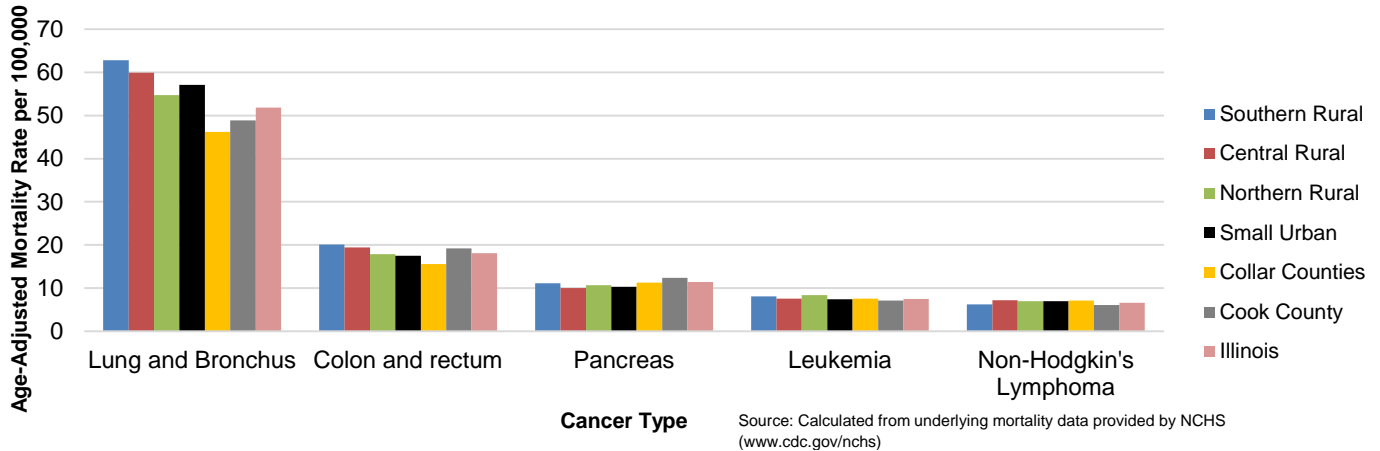
During the 2006 to 2010 interval, cancer accounted for 22.3%, 23.5%, and 23.8% of deaths in the Southern, Central, and Northern Rural regions, respectively. Between 1990 and 2010, many rural counties had cancer mortality rates that exceeded the state rate (See Figure 3). These included nine southern rural, four central rural, and three northern rural counties. Four southern rural, four central rural, and seven northern rural counties had cancer mortality rates that were lower than the state cancer mortality rate for this time.

Cancer mortality has declined over the years for all regions, but the rural regions did not experience the same declines as the state as a whole or the designated urban regions (See Table 2 and Graph 10). Of the three rural regions, the Southern Rural region saw the smallest decrease in cancer mortality (8.4%).



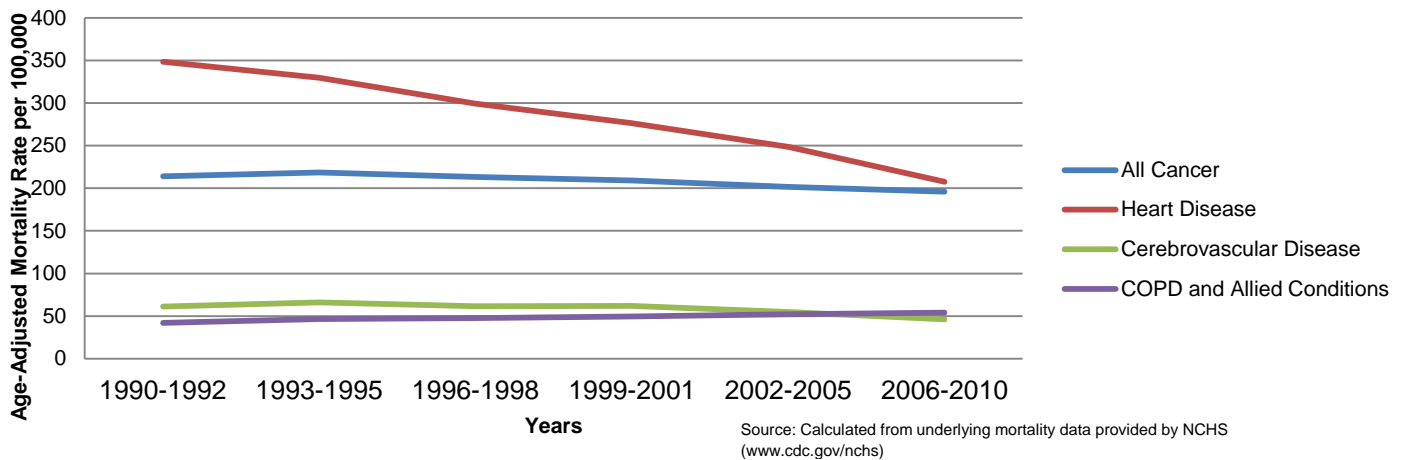
Between 2006 and 2010, the all cancer mortality rates in the Southern (196.0 per 100,000) and Central (191.5 per 100,000) Rural regions exceeded the state rate (183.9 per 100,000). The rates for the top 5 causes of cancer death are displayed in Graph 11. The lung and bronchus cancer mortality rate between 2006 and 2010 for all rural regions exceeded the state rate. The lung and bronchus cancer mortality rate for the Southern Rural region exceeded the Northern Rural region and all of the urban regions. Each rural region had different specific cancer mortality rates that exceeded the state rate between 2006 and 2010. Colorectal, bone, and nervous system cancer mortality rates in the Southern Rural region also exceeded the state mortality rates for each cancer respectively. In the Central Rural region, esophageal and kidney cancer mortality rates also exceeded state mortality rates. In the Northern Rural region, melanoma and kidney cancer mortality rates exceeded the state mortality rates. Stomach cancer mortality rates were lower in all rural areas than the state rate. In the Central and Northern Rural regions, liver cancer mortality rates were lower than the state rate, and in the Northern Rural region, pancreatic cancer mortality was lower than the state rate. See Appendix 5 for specific cancer mortality rates for all designated rural and urban regions for all year intervals from 1990 to 2010.

Graph 11: Cancer Mortality Rates by Cancer Type and Geography, 2006-2010

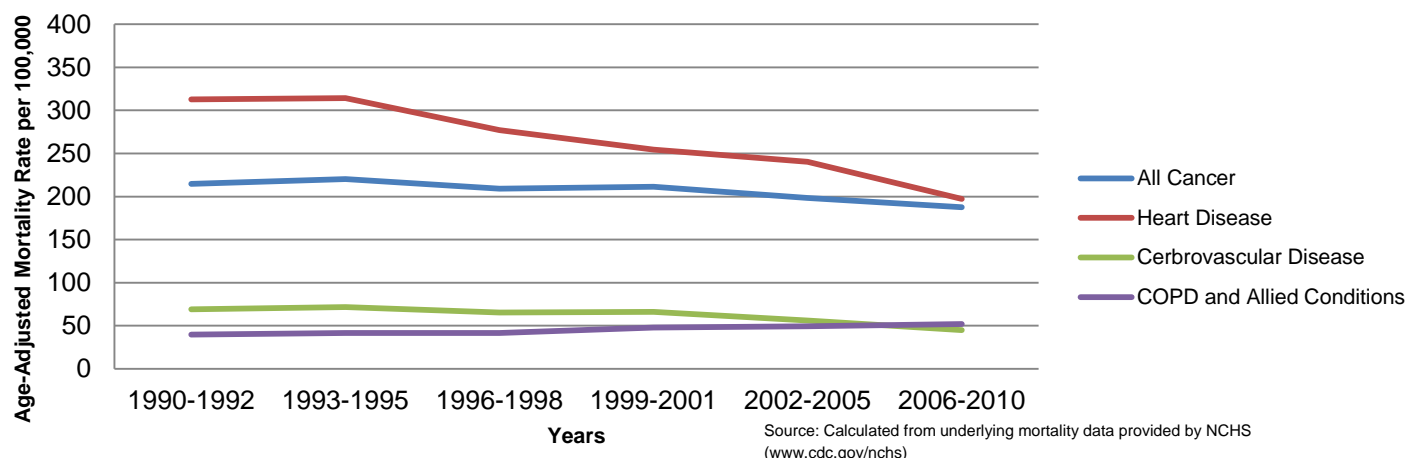


Between 1990 and 2010, cancer mortality rates declined between 8.4% and 11.5% in the Southern, Central and Northern Rural regions (Graphs 12-14). During this same period, mortality due to heart disease decreased 40.3 %, 35.7%, and 36.8% for the Southern, Central, and Northern Rural regions respectively. Rates of mortality due to heart disease and cancer have nearly converged for all rural regions.

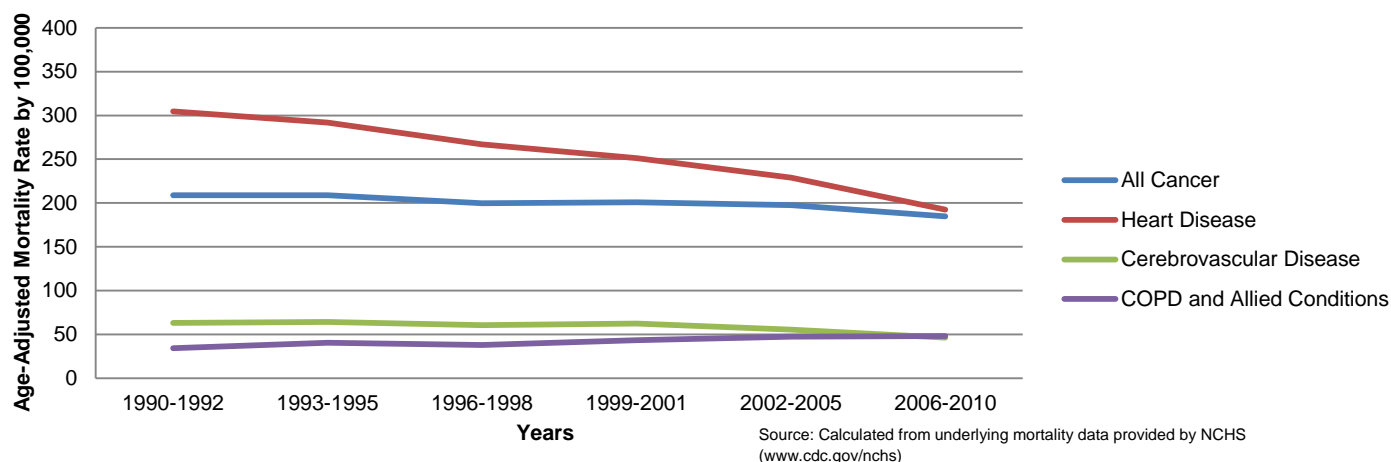
Graph 12: Southern Rural Region Mortality by Cause, 1990-2010



Graph 13: Central Rural Region Mortality by Cause, 1990-2010



Graph 14: Northern Rural Region Mortality by Cause, 1990-2010

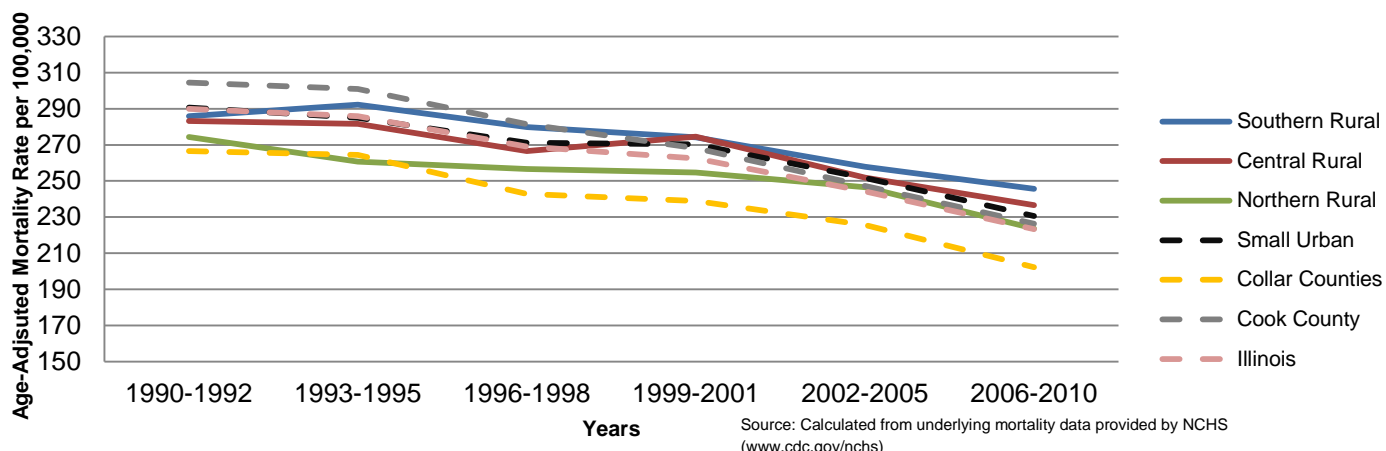


Male Cancer Mortality

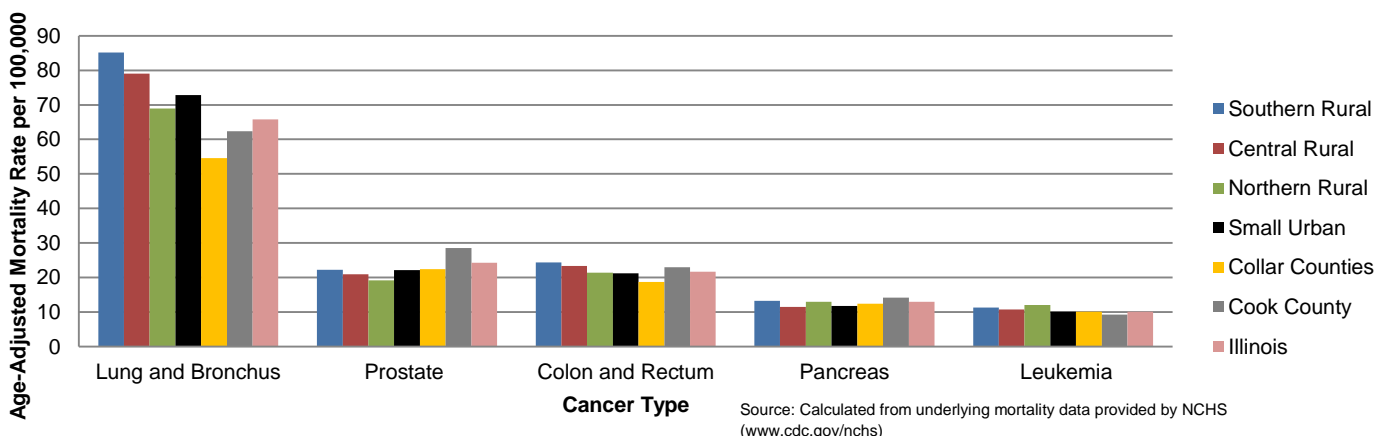
Between 2006 and 2010, the all cancer mortality rates in the Southern (245.7 per 100,000) and Central (236.7 per 100,000) Rural regions exceeded the state rate (223.3 per 100,000). The all cancer mortality rate in the Southern Rural region also exceeded the rate in the Northern Rural region. Cancer mortality rates for males decreased in all designated regions and the state as a whole between 1990 and 2010. However, decreases in the rural regions were not as pronounced as the urban regions and the state as a whole. Cancer mortality rates decreased 14.0%, 16.4%, and 18.5% for the Southern, Central and Northern rural regions respectively (Table 2 and Graph 15). The rates for the top 5 causes of male cancer death are displayed in Graph 16. Between 2006 and 2010, overall cancer mortality rates in the Southern and Central Rural regions exceeded the state rate. Additionally, the lung and bronchus cancer mortality rates in the Southern and Central Rural regions exceed mortality rates of the Northern Rural region, the Collar Counties, Cook County, and the state as a whole. Nervous system cancer mortality in the Southern Rural region exceeded the state mortality rate in males for that time interval as well. In the Southern and Central Rural regions, stomach cancer mortality was lower than the state rate, while in the Central and Northern Rural regions, prostate cancer mortality rates were

lower than the state rate. See Appendix 6 for specific male cancer mortality rates for all designated rural and urban regions for all year intervals from 1990 to 2010.

Graph 15: Male All Cancer Mortality by Geography, 1990-2010

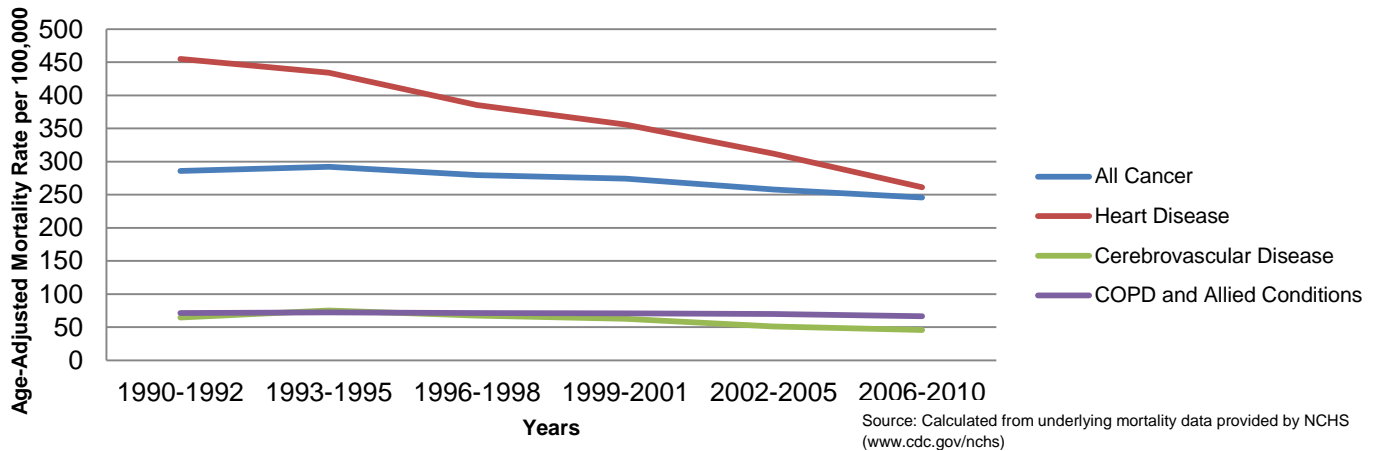


Graph 16: Male Cancer Mortality by Type and Geography, 2006-2010

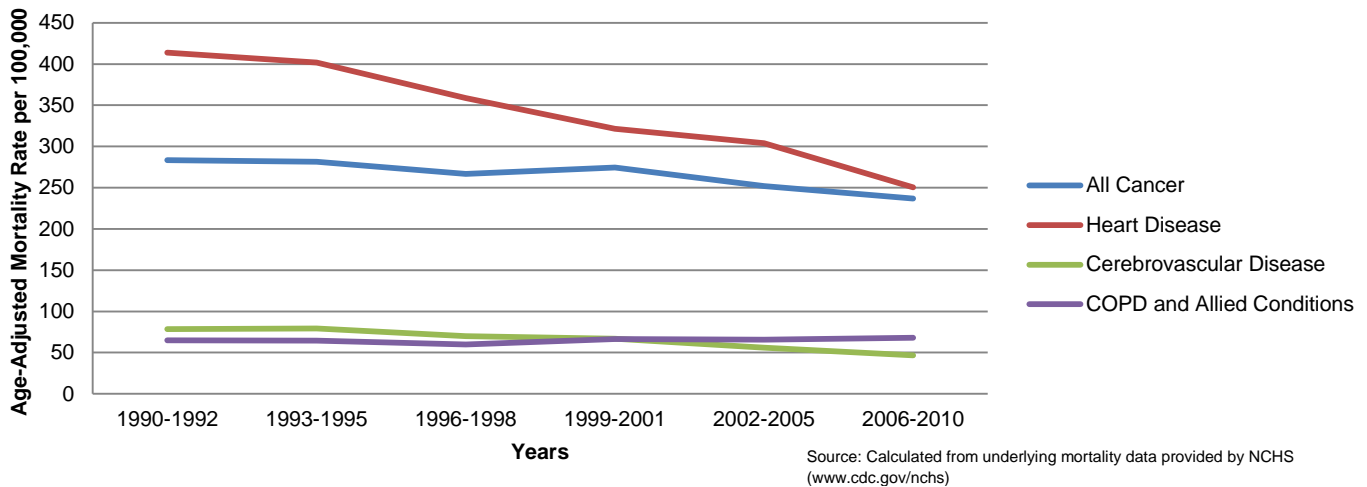


Between 1990 and 2010, cancer mortality rates declined between 14.0% and 18.5% in the Southern, Central and Northern Rural regions (Graphs 17-19). During this same period, mortality due to heart disease decreased 42.5%, 39.5%, and 39.1% for the Southern, Central, and Northern Rural regions respectively. Rates of mortality due to heart disease and cancer have nearly converged for all rural regions.

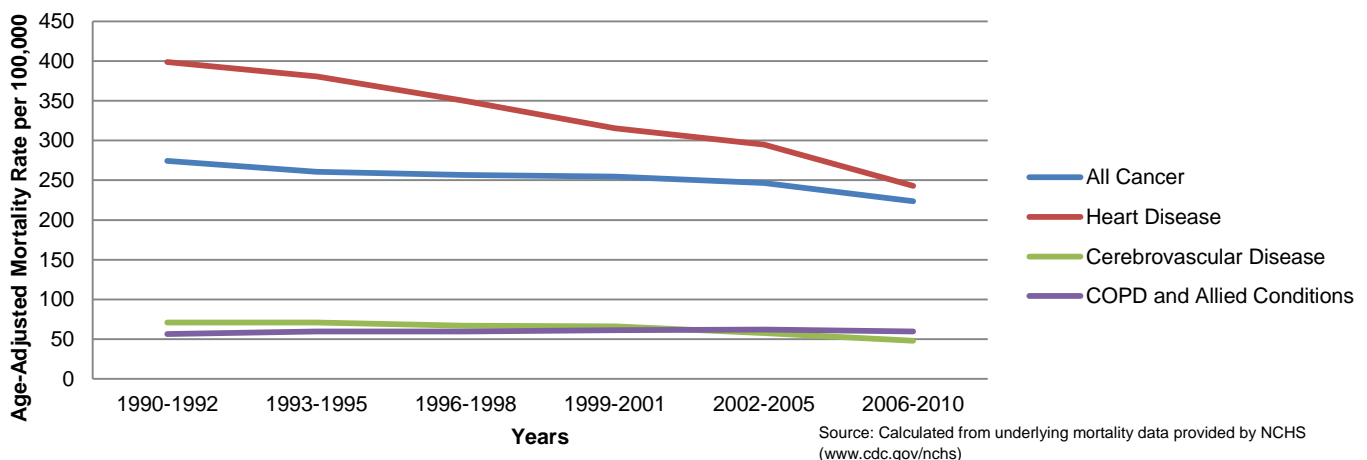
Graph 17: Southern Rural Region Male Mortality by Cause, 1990-2010



Graph 18: Central Rural Region Male Mortality by Cause, 1990-2010



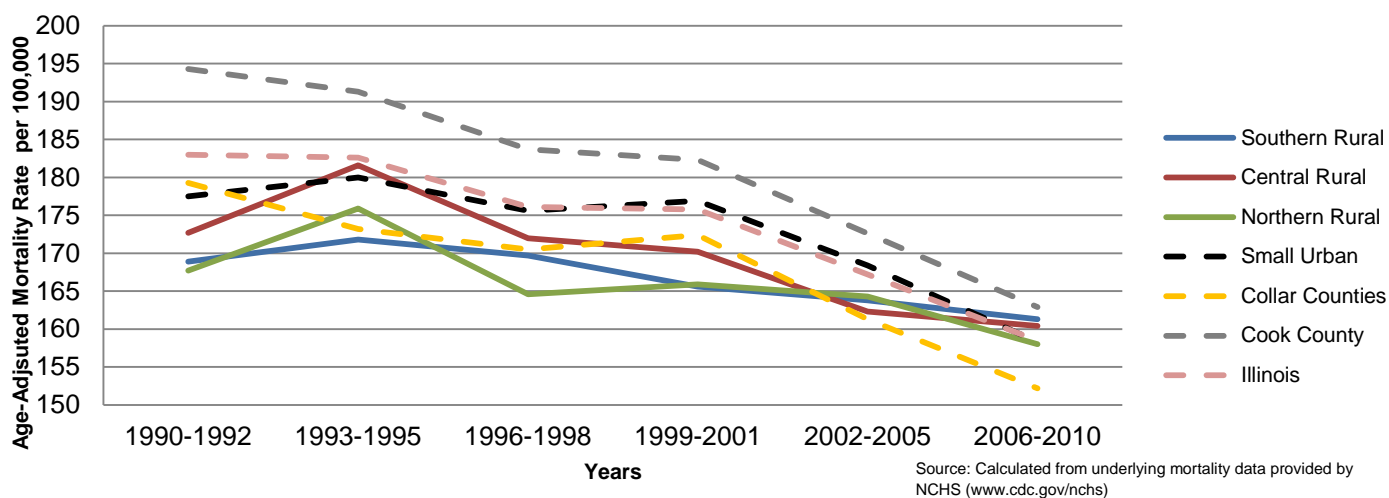
Graph 19: Northern Rural Region Male Mortality by Cause, 1990-2010



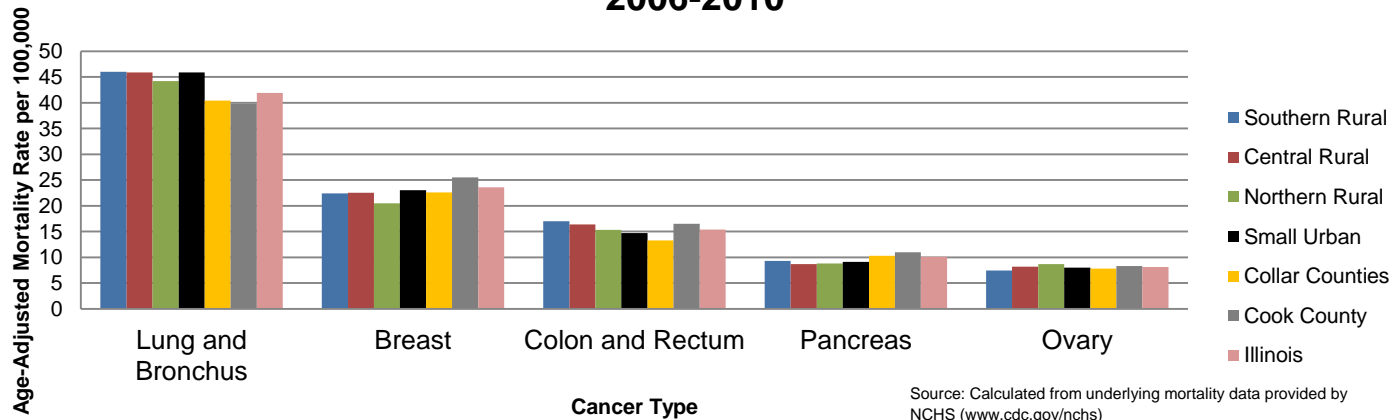
Female Cancer Mortality

Cancer mortality rates for females decreased in all designated regions and the state as a whole between 1990 and 2010. However, decreases in the rural regions were not as pronounced as the urban regions and the state as a whole. Cancer mortality rates decreased 7.6%, 7.1%, and 5.8% for the Southern, Central and Northern Rural regions respectively (Table 2 and Graph 20). The rates for the top 5 causes of female cancer death are displayed in Graph 21. Between 2006 and 2010, lung and bronchus cancer mortality rates in the Southern and Central Rural regions exceeded the mortality rates in the Collar Counties, Cook County, and the state as a whole. Stomach cancer mortality rates in the Central and Northern Rural regions were lower than the state rate, and the breast cancer mortality rate in the Northern Rural region was also lower than the state rate. See Appendix 7 for specific female cancer mortality rates for all designated rural and urban regions for all year intervals from 1990 to 2010.

Graph 20: Female All Cancer Mortality by Geography, 1990-2010

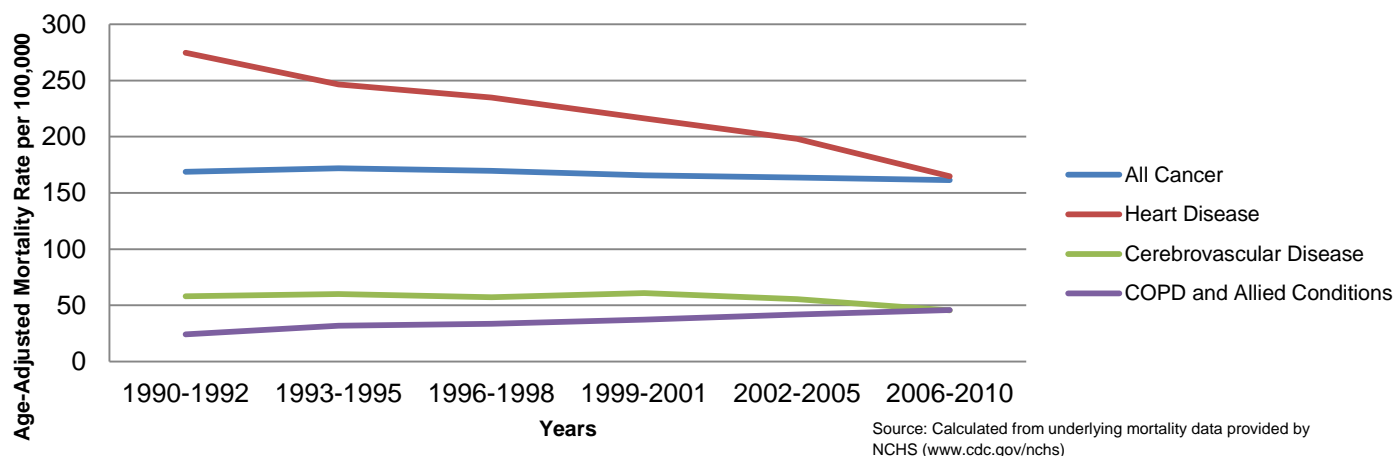


Graph 21: Female Cancer Mortality by Type and Geography, 2006-2010

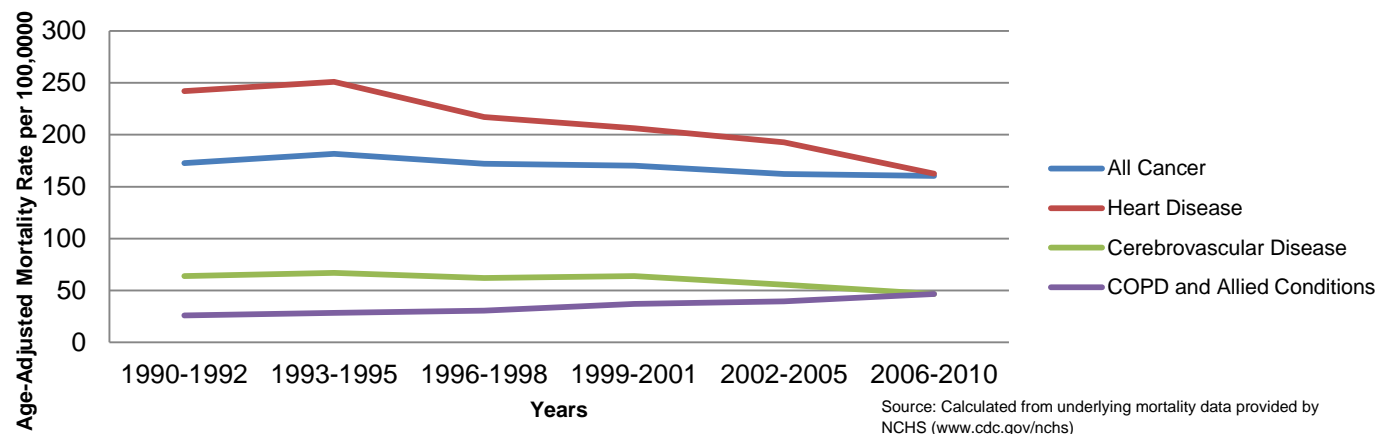


Between 1990 and 2010, female cancer mortality rates declined ranged from 5.8% to 7.6% in the rural regions (Graphs 22-24). By contrast, during this same period, mortality due to heart disease decreased 40.0%, 32.8%, and 36.2% for the Southern, Central, and Northern Rural regions respectively. Rates of mortality due to heart disease and cancer have nearly converged for the Southern and Central Rural regions. Cancer has surpassed heart disease as the number one cause of death in Northern Rural women.

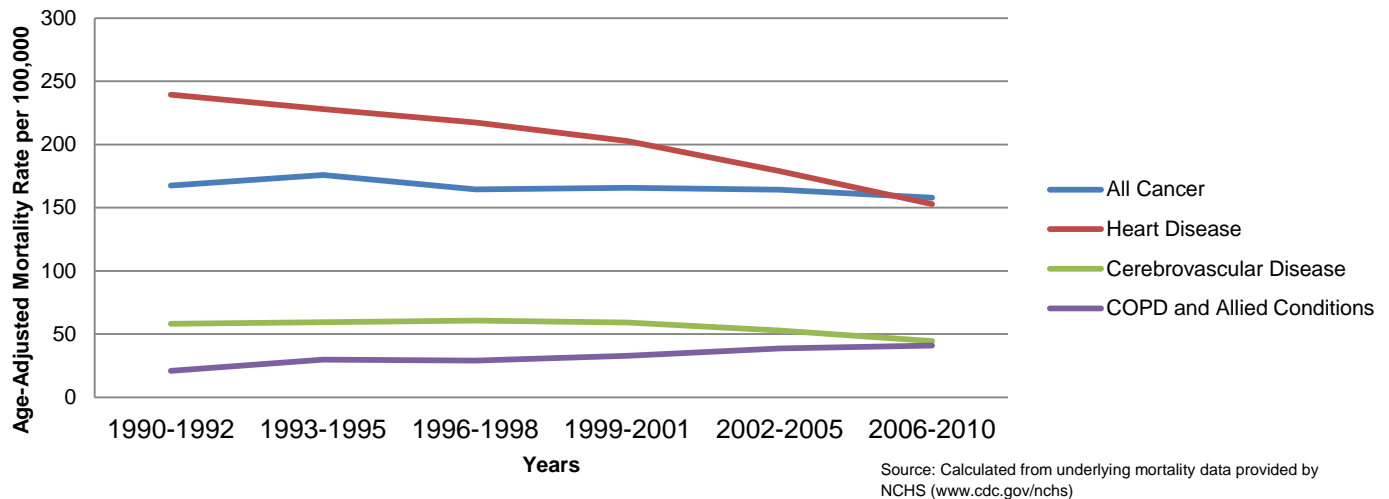
Graphs 22: Southern Rural Region Female Mortality by Cause, 1990-2010



Graph 23: Central Rural Region Female Mortality by Cause, 1990-2010



Graph 24: Northern Rural Region Female Mortality by Cause, 1990-2010



Cancer Staging

In rural regions, between 44.3% and 45.6% cancers are diagnosed in the local stages of the disease while just over a fourth of cancers were diagnosed at distant stages between 2006 and 2010 (Table 3). In the Southern, Central, and Northern Rural regions, 9.1%, 7.3%, and 8.4% of cancers were unstaged respectively. The small urban region had a somewhat similar distribution, but the urban regions had a lower percentage of unstaged cancers than the Southern and Northern Rural regions. In males, 45.0% to 47.0% of cancers diagnosed in rural regions were localized, a smaller percentage than the Collar Counties, Cook County, and the state as a whole (Graph 25). In females, the percentage of cancers diagnosed at a localized stage was smaller in the respective rural regions than in all other regions except for Cook County (Graph 26). More than ten percent of cancers diagnosed in Southern Rural females were unstaged.

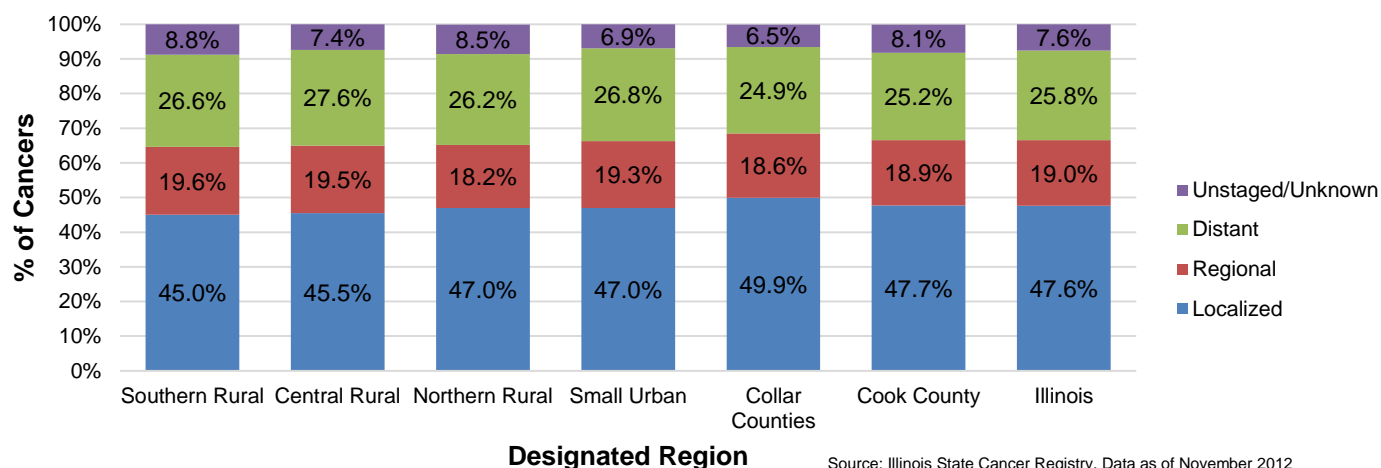
Table 3: Malignant Cancer by Stage and Geography, 2006-2010

| | Percent Localized | Percent Regional | Percent Distant | Percent Unknown/unstaged |
|-----------------|-------------------|------------------|-----------------|--------------------------|
| Southern Rural | 44.3% | 21.1% | 25.6% | 9.1% |
| Central Rural | 44.8% | 21.7% | 26.2% | 7.3% |
| Northern Rural | 45.6% | 20.6% | 25.4% | 8.4% |
| Small Urban | 46.3% | 21.4% | 25.6% | 6.6% |
| Collar Counties | 48.2% | 21.7% | 23.8% | 6.3% |
| Cook County | 45.1% | 22.1% | 25.1% | 7.8% |
| Illinois | 46.0% | 21.7% | 25.0% | 7.4% |

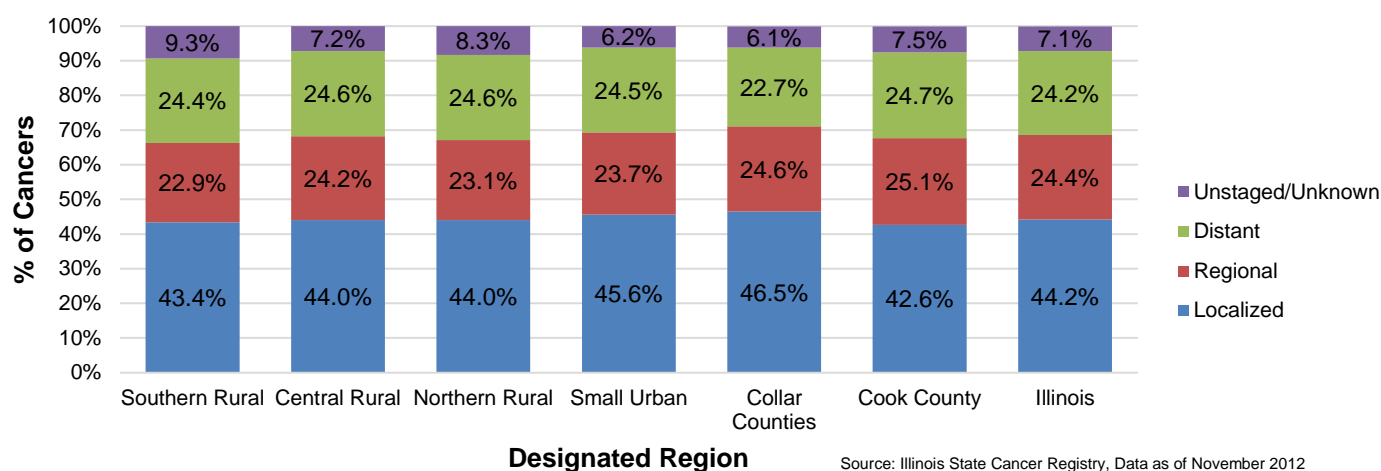
*Data do not include in situ bladder cases

Source: Illinois State Cancer Registry, data as of November 2012

Graph 25: Male Cancer Staging by Geography, 2006-2010



Graph 26: Female Cancer Staging by Geography, 2006-2010



Access Disparities

The percentage of residents under the age of 65 without health insurance was similar across the rural regions. All rural regions had access to general practitioners similar to that of the urban regions and the state as a whole (Table 4). However, all regions experience less access to specialists who diagnosis and treat cancer patients. For example, the Southern Rural region has half the access to medical oncologists (1.3 per 100,000) as any other region that has at least 2.6 medical oncologists per 100,000. The Central Rural region is the only region without a colorectal surgeon.

Table 4: Access to Care

| | Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|--|-----------------------|----------------------|-----------------------|--------------------|------------------------|--------------------|-----------------|
| Health Insurance † | | | | | | | |
| % Uninsured (under age 65) | 12.6% | 12.4% | 12.2% | 12.0% | 11.8% | 23.2% | 14.8% |
| Physician Access | | | | | | | |
| # of General Practitioners* | 217 | 207 | 219 | 827 | 856 | 1643 | 3969 |
| General Practitioners per 100,000* | 31.8 | 28.2 | 28.3 | 35.7 | 27.3 | 31.4 | 30.8 |
| # of General Surgeons* | 56 | 35 | 44 | 235 | 266 | 747 | 1383 |
| General Surgeons per 100,000* | 8.2 | 4.8 | 5.7 | 10.1 | 8.5 | 14.3 | 10.7 |
| # of Medical Oncologists‡ | 9 | 19 | 22 | 68 | 84 | 212 | 521 |
| Medical Oncologists per 100,000‡ | 1.3 | 2.6 | 2.8 | 2.9 | 2.7 | 4.1 | 4.0 |
| # of Radiation Oncologists* | 4 | 7 | 6 | 28 | 45 | 108 | 198 |
| Radiation Oncologists per 100,000* | 0.6 | 1.0 | 0.8 | 1.2 | 1.4 | 2.1 | 1.5 |
| # of Urologists* | 13 | 10 | 9 | 80 | 92 | 235 | 439 |
| Urologists per 100,000* | 1.9 | 1.4 | 1.2 | 3.4 | 2.9 | 4.5 | 3.4 |
| # of Obstetricians/Gynecologists* | 47 | 32 | 31 | 250 | 379 | 965 | 1704 |
| Obstetricians/Gynecologists per 100,000* | 6.9 | 4.4 | 4.0 | 10.8 | 12.1 | 18.5 | 13.3 |
| # of Dermatologists* | 5 | 6 | 5 | 62 | 114 | 270 | 462 |
| Dermatologists per 100,000* | 0.7 | 0.8 | 0.6 | 2.7 | 3.6 | 5.2 | 3.6 |
| # of Gastroenterologists* | 5 | 4 | 13 | 85 | 142 | 291 | 540 |
| Gastroenterologists per 100,000* | 0.7 | 0.5 | 1.7 | 3.7 | 4.5 | 5.6 | 4.2 |

| | Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|----------------------------------|---------------------------|--------------------------|---------------------------|------------------------|----------------------------|------------------------|-----------------|
| # of Colorectal surgeons* | 1 | 0 | 2 | 17 | 12 | 30 | 62 |
| Colorectal surgeons per 100,000* | 0.2 | 0 | 0.3 | 0.7 | 0.4 | 0.6 | 0.5 |
| # of thoracic surgeons | 4 | 3 | 2 | 36 | 36 | 93 | 174 |
| Thoracic surgeons per 100,000* | 0.6 | 0.4 | 0.3 | 1.6 | 1.1 | 1.8 | 1.4 |

†Data from the 2011 Small Area Health Insurance Estimates from the U.S. Census Bureau

‡ Data from the Illinois Department of Financial and Professional Regulation.

*Data from the 2012-2013 Area Health Resource File from the Health Resource and Services Administration

Appendix 1: Designated Regions Incidence Rates, Both Genders

| <i>Illinois Age-Adjusted Incidence Rates, Both Genders, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 468.8 (467.0-470.6) | 489.5 (487.7-491.3) | 496.5 (494.7-498.2) | 490.1 (488.4-491.8) |
| Oral Cavity and Pharynx | 10.6 (10.3-10.8) | 11.0 (10.8-11.3) | 10.8 (10.5-11.0) | 11.3 (11.1-11.6) |
| Esophagus | 5.2 (5.0-5.4) | 5.5 (5.4-5.7) | 5.4 (5.3-5.6) | 5.2 (5.1-5.4) |
| Stomach | 8.5 (8.2-8.7) | 8.2 (7.9-8.4) | 7.8 (7.6-8.0) | 7.5 (7.3-7.7) |
| Colorectal | 59.2 (58.5-59.8) | 60.7 (60.1-61.4) | 57.8 (57.2-58.4) | 50.4 (49.9-51.0) |
| Liver | 3.0 (2.9-3.2) | 4.3 (4.1-4.4) | 4.9 (4.7-5.1) | 5.7 (5.6-5.9) |
| Pancreas | 10.4 (10.1-10.7) | 12.0 (11.7-12.2) | 12.7 (12.4-13.0) | 13 (12.8-13.3) |
| Lung and Bronchus | 70.9 (70.2-71.6) | 73.5 (72.8-74.2) | 72.9 (72.3-73.6) | 70.9 (70.3-71.6) |
| Bone | 0.8 (0.8-0.9) | 0.9 (0.8-1.0) | 0.9 (0.8-1.0) | 0.9 (0.8-0.9) |
| Melanoma | 8.6 (8.4-8.9) | 11.5 (11.2-11.7) | 14.2 (13.9-14.5) | 17.0 (16.7-17.3) |
| Bladder | 20.5 (20.1-20.9) | 22.4 (22.0-22.8) | 23.3 (22.9-23.7) | 22.2 (21.9-22.6) |
| Kidney | 11.0 (10.8-11.3) | 12.8 (12.5-13.1) | 15.5 (15.2-15.8) | 17.1 (16.8-17.4) |
| Nervous System | 6.4 (6.2-6.6) | 6.5 (6.2-6.7) | 6.4 (6.2-6.6) | 6.6 (6.4-6.8) |
| Hodgkin's lymphoma | 2.7 (2.6-2.9) | 2.9 (2.8-3.0) | 2.9 (2.8-3.1) | 3.0 (2.8-3.1) |
| Non-Hodgkin's lymphoma | 17.6 (17.3-18.0) | 19.4 (19.1-19.8) | 19.9 (19.6-20.3) | 19.7 (19.3-20.0) |
| Myeloma | 5.6 (5.4-5.8) | 6.0 (5.9-6.2) | 6.4 (6.2-6.6) | 5.9 (5.8-6.1) |
| Leukemia | 12.0 (11.8-12.3) | 13.2 (12.9-13.5) | 14.1 (13.8-14.4) | 12.8 (12.6-13.1) |
| All other sites | 43.9 (43.4-44.5) | 44.5 (44.0-45.1) | 51.8 (51.3-52.4) | 54.8 (54.2-55.3) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

This table provides the comparative incidence rates for the subsequent tables in this appendix.

Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers* | 439.6 (433.0-446.3) | 486.2 (479.4-493.1) | 490.7 (483.9-497.6) | 496.3 (489.6-503.1) |
| Oral Cavity and Pharynx | 8.6 (7.7-9.6) | 9.8 (8.9-10.9) | 10.7 (9.7-11.8) | 12.2 (11.1-13.3) |
| Esophagus | 3.7 (3.1-4.4) | 4.9 (4.2-5.6) | 4.7 (4.0-5.4) | 4.9 (4.3-5.6) |
| Stomach | 5.0 (4.3-5.7) | 5.5 (4.8-6.3) | 5.5 (4.8-6.3) | 5.0 (4.3-5.7) |
| Colorectal | 60.2 (57.8-62.6) | 66.4 (63.9-68.9) | 63.5 (61.1-65.9) | 54.8 (52.6-57.1) |
| Liver | 1.7 (1.3-2.1) | 3.0 (2.5-3.5) | 3.9 (3.3-4.5) | 5.1 (4.5-5.8) |
| Pancreas | 9.3 (8.3-10.3) | 11.4 (10.3-12.4) | 10.9 (9.9-11.9) | 12.0 (11.0-13.0) |
| Lung and Bronchus | 72.0 (69.3-74.7) | 82.2 (79.4-85.0) | 81.6 (78.8-84.3) | 86.0 (83.2-88.8) |
| Bone | 0.5 (0.3-0.8) | 0.7 (0.5-1.1) | 0.8 (0.6-1.2) | 1.0 (0.7-1.4) |
| Melanoma | 10.4 (9.3-11.5) | 12.3 (11.2-13.4) | 16.7 (15.4-18.0) | 20.4 (19.0-21.8) |
| Bladder | 18.4 (17.1-19.8) | 22.0 (20.6-23.4) | 21.9 (20.5-23.4) | 23.1 (21.7-24.6) |
| Kidney | 10.6 (9.5-11.6) | 12.9 (11.8-14.1) | 16.1 (14.9-17.4) | 18.5 (17.2-19.8) |
| Nervous System | 6.8 (5.9-7.7) | 7.1 (6.2-8.0) | 6.5 (5.7-7.3) | 7.7 (6.8-8.6) |
| Hodgkin's lymphoma | 2.4 (1.9-2.9) | 2.1 (1.6-2.6) | 2.3 (1.8-2.9) | 2.5 (2.0-3.0) |
| Non-Hodgkin's lymphoma | 16.0 (14.8-17.4) | 18.6 (17.3-20.0) | 20.2 (18.8-21.6) | 19.1 (17.8-20.4) |
| Myeloma | 4.8 (4.1-5.5) | 5.4 (4.7-6.1) | 5.7 (5.0-6.4) | 5.2 (4.5-5.9) |
| Leukemia | 11.2 (10.2-12.3) | 13.7 (12.6-14.9) | 14.0 (12.9-15.2) | 12.9 (11.8-14.1) |
| All other sites | 40.5 (38.5-42.5) | 42.8 (40.8-44.9) | 48.7 (46.5-50.9) | 54.0 (51.7-56.3) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Central Rural Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| All Invasive Cancers* | 467.9 (461.4-474.4) | 482.6 (476.1-489.2) | 502.4 (495.8-509.1) | 497.1 (490.6-503.6) |
| Oral Cavity and Pharynx | 10.8 (9.9-11.9) | 10.8 (9.9-11.9) | 11.1 (10.1-12.1) | 12.6 (11.6-13.7) |
| Esophagus | 4.7 (4.1-5.4) | 5.2 (4.6-5.9) | 5.8 (5.1-6.5) | 6.1 (5.4-6.9) |
| Stomach | 5.1 (4.4-5.8) | 5.2 (4.5-5.9) | 5.1 (4.5-5.8) | 4.8 (4.2-5.4) |
| Colorectal | 62.3 (60.0-64.6) | 64.3 (62.0-66.7) | 62.0 (59.7-64.3) | 55.4 (53.3-57.6) |
| Liver | 1.7 (1.3-2.1) | 2.8 (2.3-3.3) | 3.4 (2.9-4.0) | 4.7 (4.1-5.4) |
| Pancreas | 9.6 (8.7-10.5) | 11.8 (10.8-12.8) | 12.4 (11.4-13.5) | 11.3 (10.3-12.3) |
| Lung and Bronchus | 75.1 (72.5-77.7) | 80.0 (77.4-82.6) | 80.9 (78.3-83.6) | 80.2 (77.7-82.8) |
| Bone | 1.1 (0.8-1.4) | 0.7 (0.5-1.0) | 0.7 (0.5-1.0) | 0.8 (0.6-1.1) |
| Melanoma | 11.0 (10.0-12.0) | 14.0 (12.9-15.2) | 17.5 (16.3-18.8) | 20.0 (18.7-21.4) |
| Bladder | 19.4 (18.2-20.7) | 23.1 (21.7-24.5) | 24.3 (22.9-25.7) | 24.2 (22.9-25.7) |
| Kidney | 12.0 (11.0-13.1) | 13.2 (12.2-14.4) | 15.6 (14.4-16.8) | 18.3 (17.1-19.6) |
| Nervous System | 6.3 (5.5-7.1) | 6.4 (5.6-7.2) | 6.8 (6.0-7.6) | 6.9 (6.1-7.7) |
| Hodgkin's lymphoma | 2.6 (2.1-3.1) | 3.1 (2.6-3.7) | 2.7 (2.2-3.3) | 2.9 (2.4-3.5) |
| Non-Hodgkin's lymphoma | 18.0 (16.7-19.3) | 19.0 (17.7-20.4) | 20.2 (18.9-21.5) | 19.8 (18.5-21.1) |
| Myeloma | 5.3 (4.7-6.0) | 5.7 (5.0-6.4) | 6.4 (5.6-7.1) | 5.2 (4.5-5.8) |
| Leukemia | 13.5 (12.5-14.7) | 13.6 (12.5-14.7) | 14.7 (13.6-15.9) | 13.5 (12.4-14.6) |
| All other sites | 41.8 (39.9-43.8) | 42 (40.1-44.0) | 48.8 (46.7-50.9) | 54.0 (51.8-56.2) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Northern Rural Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers* | 444.5 (438.1-450.9) | 484.6 (478.0-491.1) | 493.7 (487.2-500.2) | 485.4 (479.1-491.7) |
| Oral Cavity and Pharynx | 9.9 (8.9-10.9) | 11.4 (10.4-12.5) | 11.1 (10.2-12.1) | 11.5 (10.5-12.5) |
| Esophagus | 4.5 (3.8-5.1) | 5.7 (5.0-6.4) | 6.0 (5.3-6.7) | 5.6 (4.9-6.2) |
| Stomach | 5.9 (5.2-6.7) | 6.6 (5.9-7.4) | 5.5 (4.8-6.2) | 5.2 (4.6-5.9) |
| Colorectal | 58.4 (56.2-60.7) | 63.3 (61.0-65.6) | 58.9 (56.8-61.2) | 51.6 (49.6-53.7) |
| Liver | 2.3 (1.9-2.8) | 3.1 (2.6-3.6) | 3.7 (3.2-4.3) | 4.5 (3.9-5.1) |
| Pancreas | 9.5 (8.6-10.4) | 10.7 (9.8-11.7) | 11.4 (10.4-12.4) | 11.9 (10.9-12.9) |
| Lung and Bronchus | 66.7 (64.2-69.1) | 70.1 (67.6-72.6) | 74.2 (71.8-76.7) | 72.2 (69.9-74.6) |
| Bone | 1.0 (0.7-1.3) | 1.0 (0.8-1.4) | 0.9 (0.6-1.2) | 1.2 (0.9-1.5) |
| Melanoma | 10.2 (9.2-11.2) | 16.2 (15.0-17.5) | 17.6 (16.4-18.9) | 21.8 (20.5-23.3) |
| Bladder | 21.2 (19.9-22.6) | 23.9 (22.5-25.4) | 24.4 (23-25.8) | 23.9 (22.6-25.3) |
| Kidney | 10.9 (9.9-11.9) | 12.5 (11.5-13.6) | 16.1 (14.9-17.3) | 16.6 (15.5-17.8) |
| Nervous System | 6.5 (5.8-7.4) | 6.9 (6.1-7.7) | 7.1 (6.3-8.0) | 6.3 (5.5-7.0) |
| Hodgkin's lymphoma | 2.9 (2.4-3.4) | 3.2 (2.6-3.7) | 3.3 (2.7-3.9) | 3.5 (2.9-4.1) |
| Non-Hodgkin's lymphoma | 15.9 (14.7-17.1) | 19.9 (18.6-21.2) | 21.2 (19.9-22.6) | 20.2 (18.9-21.5) |
| Myeloma | 4.8 (4.1-5.4) | 5.5 (4.8-6.2) | 6.0 (5.3-6.7) | 5.4 (4.8-6.1) |
| Leukemia | 12.7 (11.6-13.8) | 13.2 (12.2-14.3) | 15.1 (14.0-16.3) | 13.9 (12.9-15.0) |
| All other sites | 42.3 (40.4-44.3) | 43.6 (41.6-45.6) | 50.1 (48.1-52.2) | 54.3 (52.2-56.5) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Small Urban Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| All Invasive Cancers* | 476.8 (472.5-481.0) | 499.5 (495.3-503.8) | 514.3 (510.1-518.5) | 498.7 (494.7-502.8) |
| Oral Cavity and Pharynx | 10.5 (9.9-11.1) | 11.0 (10.4-11.7) | 11.5 (10.9-12.2) | 11.8 (11.2-12.5) |
| Esophagus | 5.0 (4.6-5.4) | 5.1 (4.6-5.5) | 5.7 (5.3-6.2) | 5.8 (5.4-6.2) |
| Stomach | 6.8 (6.3-7.3) | 6.2 (5.8-6.7) | 6.1 (5.6-6.5) | 6.0 (5.5-6.4) |
| Colorectal | 59.9 (58.4-61.4) | 61.6 (60.2-63.1) | 57.1 (55.7-58.5) | 50.3 (49.0-51.6) |
| Liver | 2.3 (2.0-2.6) | 3.2 (2.9-3.6) | 4.3 (3.9-4.6) | 4.9 (4.5-5.3) |
| Pancreas | 9.9 (9.3-10.6) | 11.5 (10.8-12.1) | 12.0 (11.3-12.6) | 11.8 (11.2-12.4) |
| Lung and Bronchus | 75.4 (73.7-77.1) | 80.4 (78.7-82.1) | 79.6 (77.9-81.2) | 77.8 (76.2-79.4) |
| Bone | 0.7 (0.6-0.9) | 0.9 (0.7-1.1) | 0.8 (0.7-1.0) | 0.9 (0.7-1.0) |
| Melanoma | 9.1 (8.5-9.7) | 13.6 (12.9-14.3) | 17.9 (17.1-18.7) | 21.2 (20.4-22.1) |
| Bladder | 21.1 (20.2-22.0) | 23.4 (22.5-24.4) | 24.5 (23.6-25.5) | 23.3 (22.4-24.2) |
| Kidney | 11.2 (10.5-11.8) | 14.0 (13.3-14.7) | 17.3 (16.6-18.1) | 19.1 (18.3-19.9) |
| Nervous System | 5.9 (5.4-6.4) | 6.6 (6.1-7.1) | 6.6 (6.1-7.1) | 6.9 (6.5-7.4) |
| Hodgkin's lymphoma | 2.5 (2.2-2.9) | 2.9 (2.5-3.2) | 3.0 (2.7-3.3) | 2.7 (2.4-3.0) |
| Non-Hodgkin's lymphoma | 18.0 (17.1-18.8) | 19.6 (18.8-20.5) | 20.6 (19.8-21.5) | 19.8 (19.0-20.6) |
| Myeloma | 5.9 (5.4-6.3) | 6.0 (5.6-6.5) | 6.1 (5.6-6.5) | 5.8 (5.4-6.2) |
| Leukemia | 12.7 (12.0-13.4) | 13.3 (12.6-14.0) | 14.7 (14.0-15.4) | 13.3 (12.6-13.9) |
| All other sites | 42.1 (40.9-43.4) | 43.4 (42.2-44.7) | 52.9 (51.5-54.2) | 56.1 (54.7-57.4) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

| <i>Collar Counties Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010</i> | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 464.0 (459.5-468.5) | 481.5 (477.3-485.8) | 497.7 (493.6-501.7) | 485.3 (481.6-489.0) |
| Oral Cavity and Pharynx | 9.3 (8.7-9.9) | 9.8 (9.2-10.4) | 10.5 (9.9-11.0) | 10.1 (9.6-10.6) |
| Esophagus | 4.2 (3.8-4.6) | 4.7 (4.3-5.1) | 5.1 (4.7-5.5) | 5.0 (4.6-5.4) |
| Stomach | 8.7 (8.1-9.3) | 7.6 (7.0-8.1) | 7.3 (6.8-7.8) | 7.3 (6.9-7.8) |
| Colorectal | 57.5 (55.9-59.1) | 56.9 (55.5-58.5) | 54.9 (53.5-56.3) | 44.9 (43.8-46.1) |
| Liver | 2.7 (2.4-3.1) | 3.9 (3.5-4.3) | 4.5 (4.1-4.9) | 4.9 (4.5-5.3) |
| Pancreas | 10.3 (9.6-11.0) | 11.5 (10.8-12.2) | 12.5 (11.8-13.1) | 13.3 (12.7-13.9) |
| Lung and Bronchus | 65.5 (63.8-67.2) | 67.0 (65.4-68.6) | 67.4 (65.9-68.9) | 64.9 (63.5-66.3) |
| Bone | 0.9 (0.7-1.1) | 0.9 (0.7-1.0) | 1.0 (0.8-1.2) | 0.8 (0.7-1.0) |
| Melanoma | 10.3 (9.6-10.9) | 13.7 (13.0-14.4) | 15.7 (15.0-16.4) | 18.0 (17.3-18.7) |
| Bladder | 22.0 (21.0-23.0) | 23.4 (22.5-24.4) | 25.9 (25.0-26.9) | 24.4 (23.6-25.3) |
| Kidney | 11.1 (10.4-11.8) | 12.8 (12.1-13.5) | 15.3 (14.6-16.0) | 16.5 (15.9-17.2) |
| Nervous System | 7.0 (6.5-7.5) | 7.1 (6.6-7.6) | 7.2 (6.8-7.7) | 7.2 (6.7-7.6) |
| Hodgkin's lymphoma | 3.1 (2.8-3.4) | 3.1 (2.8-3.4) | 3.3 (3.0-3.6) | 3.3 (3.0-3.6) |
| Non-Hodgkin's lymphoma | 18.1 (17.2-19.0) | 19.8 (18.9-20.6) | 20.6 (19.8-21.4) | 21.2 (20.5-22.0) |
| Myeloma | 5.0 (4.5-5.4) | 5.4 (5.0-5.9) | 5.9 (5.4-6.3) | 5.4 (5.1-5.9) |
| Leukemia | 11.5 (10.8-12.2) | 13.8 (13.1-14.5) | 14.8 (14.2-15.5) | 12.9 (12.3-13.5) |
| All other sites | 41.8 (40.5-43.1) | 43.5 (42.2-44.7) | 53.9 (52.6-55.2) | 56.0 (54.7-57.2) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Cook County Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| All Invasive Cancers* | 477.3 (474.5-480.0) | 492.2 (489.4-494.9) | 490.3 (487.6-493.0) | 489.1 (486.4-491.8) |
| Oral Cavity and Pharynx | 11.5 (11.1-11.9) | 11.7 (11.3-12.2) | 10.6 (10.2-11.0) | 11.5 (11.1-12.0) |
| Esophagus | 6.2 (5.9-6.5) | 6.3 (6.0-6.6) | 5.5 (5.2-5.8) | 5.0 (4.8-5.3) |
| Stomach | 10.8 (10.4-11.2) | 10.5 (10.1-10.9) | 10.2 (9.8-10.6) | 9.7 (9.3-10.1) |
| Colorectal | 59.1 (58.1-60.0) | 59.9 (59.0-60.9) | 57.6 (56.7-58.5) | 51.7 (50.8-52.6) |
| Liver | 4.0 (3.8-4.3) | 5.6 (5.3-5.9) | 6.1 (5.8-6.4) | 7.2 (6.9-7.5) |
| Pancreas | 11.2 (10.7-11.6) | 12.8 (12.4-13.2) | 13.8 (13.4-14.3) | 14.2 (13.8-14.7) |
| Lung and Bronchus | 71.3 (70.3-72.4) | 71.9 (70.9-73.0) | 70.1 (69.1-71.1) | 67.2 (66.2-68.3) |
| Bone | 0.8 (0.7-1.0) | 0.9 (0.8-1.0) | 0.9 (0.8-1.0) | 0.9 (0.7-1.0) |
| Melanoma | 6.8 (6.5-7.2) | 8.2 (7.9-8.6) | 10.4 (10.0-10.8) | 12.6 (12.2-13.0) |
| Bladder | 20.1 (19.6-20.7) | 21.2 (20.6-21.8) | 21.4 (20.9-22.0) | 19.8 (19.2-20.3) |
| Kidney | 11.0 (10.5-11.4) | 12.3 (11.9-12.8) | 14.7 (14.2-15.2) | 16.2 (15.7-16.7) |
| Nervous System | 6.3 (6.0-6.6) | 6.0 (5.7-6.3) | 5.8 (5.5-6.1) | 6.0 (5.7-6.3) |
| Hodgkin's lymphoma | 2.7 (2.5-2.9) | 2.8 (2.6-3.1) | 2.8 (2.6-3.0) | 2.9 (2.7-3.1) |
| Non-Hodgkin's lymphoma | 17.8 (17.3-18.4) | 19.4 (18.9-20.0) | 19.1 (18.6-19.7) | 18.7 (18.2-19.3) |
| Myeloma | 6.0 (5.7-6.3) | 6.6 (6.3-6.9) | 7.0 (6.6-7.3) | 6.6 (6.3-7.0) |
| Leukemia | 11.7 (11.3-12.1) | 12.8 (12.4-13.3) | 13.1 (12.7-13.6) | 12.3 (11.8-12.7) |
| All other sites | 46.7 (45.9-47.6) | 46.5 (45.7-47.4) | 52.0 (51.1-52.9) | 54.0 (53.1-54.9) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Appendix 2: Designated Regions Incidence Rates, Male

| <i>Illinois Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers | 573.3 (570.2-576.5) | 581.9 (578.9-584.9) | 591.1 (588.1-594.1) | 565.0 (562.2-567.7) |
| Oral Cavity and Pharynx | 16.2 (15.7-16.7) | 16.8 (16.3-17.3) | 16.4 (15.9-16.9) | 17.0 (16.5-17.4) |
| Esophagus | 9.1 (8.7-9.5) | 9.8 (9.4-10.2) | 9.5 (9.2-9.9) | 9.2 (8.9-9.6) |
| Stomach | 12.4 (12.0-12.9) | 11.9 (11.5-12.3) | 11.1 (10.7-11.5) | 10.3 (9.9-10.7) |
| Colorectal | 71.2 (70.1-72.3) | 72.4 (71.3-73.5) | 68.7 (67.7-69.7) | 58.9 (58.0-59.8) |
| Liver | 4.7 (4.4-5.0) | 6.6 (6.3-6.9) | 7.8 (7.5-8.2) | 9.1 (8.8-9.5) |
| Pancreas | 11.9 (11.5-12.4) | 13.6 (13.2-14.1) | 14.6 (14.1-15.0) | 14.8 (14.4-15.3) |
| Lung and Bronchus | 102.1 (100.8-103.4) | 100.5 (99.2-101.8) | 94.2 (93.0-95.4) | 86.4 (85.3-87.5) |
| Bone | 0.9 (0.8-1.0) | 1.1 (0.9-1.2) | 1 (0.9-1.1) | 1.0 (0.9-1.1) |
| Melanoma | 10.7 (10.3-11.1) | 14.7 (14.2-15.2) | 18.1 (17.6-18.6) | 21.3 (20.7-21.8) |
| Prostate | 171.1 (169.4-172.8) | 162.8 (161.2-164.4) | 163.4 (161.9-165.0) | 153.7 (152.2-155.1) |
| Testis | 4.5 (4.3-4.8) | 5.0 (4.7-5.2) | 5.3 (5.0-5.5) | 5.6 (5.3-5.8) |
| Bladder | 36.5 (35.7-37.3) | 39.4 (38.7-40.2) | 41.2 (40.4-42.0) | 39.1 (38.4-39.9) |
| Kidney | 15.4 (14.9-16.0) | 17.3 (16.8-17.9) | 21.3 (20.8-21.9) | 23.0 (22.4-23.5) |
| Nervous System | 7.7 (7.4-8.1) | 7.8 (7.4-8.1) | 7.5 (7.2-7.8) | 7.6 (7.3-7.9) |
| Hodgkin's lymphoma | 3.2 (3.0-3.4) | 3.4 (3.2-3.6) | 3.3 (3.1-3.6) | 3.3 (3.1-3.5) |
| Non-Hodgkin's lymphoma | 21.0 (20.4-21.6) | 23.5 (22.9-24.1) | 24.2 (23.6-24.8) | 23.9 (23.3-24.5) |
| Myeloma | 6.8 (6.4-7.1) | 7.3 (6.9-7.6) | 7.7 (7.4-8.1) | 7.4 (7.1-7.7) |
| Leukemia | 15.8 (15.3-16.3) | 17.2 (16.7-17.7) | 18.4 (17.9-18.9) | 16.7 (16.2-17.2) |
| All other sites | 50.6 (49.7-51.5) | 49.6 (48.7-50.4) | 56.0 (55.1-56.9) | 55.5 (54.7-56.4) |

This table provides the comparative incidence rates for the subsequent tables in this appendix.

Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 550.2 (539.0-561.5) | 593.6 (582.2-605.1) | 596.9 (585.6-608.2) | 581.1 (570.3-591.9) |
| Oral Cavity and Pharynx | 12.9 (11.2-14.7) | 15.1 (13.3-17.0) | 16.7 (14.9-18.6) | 18.4 (16.6-20.4) |
| Esophagus | 6.6 (5.4-7.9) | 9.1 (7.7-10.6) | 7.9 (6.7-9.3) | 8.9 (7.7-10.3) |
| Stomach | 7.4 (6.1-8.7) | 7.4 (6.2-8.8) | 8.1 (6.9-9.5) | 7.1 (6.0-8.4) |
| Colorectal | 70.0 (66.0-74.1) | 77.6 (73.5-81.9) | 75.6 (71.6-79.7) | 63.7 (60.1-67.3) |
| Liver | 2.3 (1.7-3.1) | 3.7 (2.9-4.7) | 6.0 (4.9-7.2) | 8.6 (7.3-9.9) |
| Pancreas | 11.0 (9.5-12.7) | 13.5 (11.8-15.3) | 13.7 (12.0-15.5) | 14.8 (13.1-16.5) |
| Lung and Bronchus | 113.3 (108.2-118.5) | 121.8 (116.7-127.0) | 112.6 (107.8-117.6) | 112.0 (107.3-116.8) |
| Bone | 0.6 (0.3-1.0) | 0.9 (0.5-1.4) | 0.8 (0.4-1.2) | 1.0 (0.6-1.5) |
| Melanoma | 11.3 (9.7-13.0) | 15.5 (13.7-17.4) | 21.3 (19.2-23.5) | 26.2 (23.9-28.5) |
| Prostate | 162.8 (156.8-169.0) | 159.6 (153.7-165.5) | 153.0 (147.3-158.7) | 137.2 (132.0-142.4) |
| Testis | 3.9 (3.0-4.8) | 5.1 (4.1-6.2) | 5.5 (4.5-6.7) | 5.5 (4.4-6.7) |
| Bladder | 33.4 (30.7-36.3) | 39.6 (36.7-42.6) | 37.9 (35.1-40.8) | 41.6 (38.7-44.5) |
| Kidney | 14.3 (12.5-16.2) | 16.3 (14.5-18.3) | 22.3 (20.2-24.6) | 24.3 (22.2-26.6) |
| Nervous System | 8.4 (7.1-9.9) | 8.8 (7.4-10.3) | 7.8 (6.6-9.2) | 8.5 (7.2-9.9) |
| Hodgkin's lymphoma | 3.1 (2.3-4.0) | 2.1 (1.5-2.8) | 2.6 (1.9-3.4) | 2.8 (2.1-3.6) |
| Non-Hodgkin's lymphoma | 19.2 (17.1-21.4) | 22.0 (19.8-24.2) | 24.8 (22.5-27.1) | 21.6 (19.6-23.7) |
| Myeloma | 5.7 (4.6-7.0) | 6.9 (5.8-8.2) | 7.4 (6.2-8.7) | 6.3 (5.2-7.5) |
| Leukemia | 15.3 (13.5-17.2) | 18.5 (16.5-20.6) | 18.6 (16.6-20.6) | 16.0 (14.2-17.9) |
| All other sites | 47.8 (44.5-51.2) | 48.8 (45.6-52.2) | 53.6 (50.3-57.1) | 55.1 (51.8-58.5) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Central Rural Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 568.0 (557.2-578.9) | 576.5 (565.8-587.3) | 605.7 (594.9-616.6) | 579.7 (569.4-590.1) |
| Oral Cavity and Pharynx | 17.2 (15.3-19.2) | 17.6 (15.8-19.6) | 17.2 (15.4-19.0) | 18.6 (16.8-20.6) |
| Esophagus | 8.8 (7.5-10.3) | 9.8 (8.5-11.3) | 10.4 (9.1-11.9) | 11.0 (9.6-12.5) |
| Stomach | 7.1 (5.9-8.4) | 7.9 (6.7-9.2) | 8.3 (7.0-9.6) | 6.8 (5.7-7.9) |
| Colorectal | 72.2 (68.4-76.2) | 74.8 (71.0-78.8) | 74.8 (71.0-78.6) | 64.2 (60.8-67.7) |
| Liver | 2.4 (1.7-3.1) | 4.2 (3.4-5.2) | 5.4 (4.4-6.4) | 7.3 (6.2-8.5) |
| Pancreas | 11.0 (9.6-12.6) | 13.6 (12.0-15.3) | 14.2 (12.6-15.9) | 13.1 (11.6-14.7) |
| Lung and Bronchus | 112.9 (108.1-117.7) | 115.0 (110.3-119.8) | 108.6 (104.0-113.2) | 100.9 (96.7-105.3) |
| Bone | 1.2 (0.7-1.7) | 0.8 (0.5-1.3) | 0.5 (0.3-0.9) | 0.8 (0.4-1.2) |
| Melanoma | 13.4 (11.7-15.1) | 17.0 (15.2-18.9) | 21.5 (19.5-23.6) | 24.7 (22.6-27.0) |
| Prostate | 161.8 (156.1-167.6) | 146.3 (141.0-151.7) | 158.5 (153.1-164.1) | 142.5 (137.5-147.6) |
| Testis | 4.3 (3.4-5.3) | 4.9 (4.0-6.0) | 5.5 (4.5-6.6) | 6.0 (4.9-7.2) |
| Bladder | 34.6 (31.9-37.3) | 41.5 (38.6-44.4) | 43.5 (40.6-46.4) | 44.3 (41.5-47.2) |
| Kidney | 15.6 (13.9-17.5) | 16.2 (14.5-18.1) | 21.8 (19.7-23.9) | 24.3 (22.2-26.5) |
| Nervous System | 7.7 (6.5-9.1) | 7.5 (6.3-8.8) | 7.4 (6.2-8.7) | 6.9 (5.8-8.1) |
| Hodgkin's lymphoma | 3.2 (2.4-4.0) | 3.5 (2.7-4.4) | 3.2 (2.4-4.0) | 3.4 (2.6-4.4) |
| Non-Hodgkin's lymphoma | 20.7 (18.7-22.8) | 22.3 (20.2-24.5) | 24.0 (21.9-26.3) | 23.8 (21.7-25.9) |
| Myeloma | 6.7 (5.5-7.9) | 7.3 (6.2-8.6) | 8.1 (6.9-9.4) | 6.7 (5.7-7.9) |
| Leukemia | 17.7 (15.8-19.7) | 17.2 (15.4-19.1) | 19.3 (17.4-21.3) | 18.2 (16.4-20.1) |
| All other sites | 48.5 (45.4-51.8) | 47.4 (44.3-50.5) | 52.0 (48.9-55.3) | 54.8 (51.6-58.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Northern Rural Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 538.5 (528.0-549.2) | 570.2 (559.6-581.0) | 576.6 (566.2-587.1) | 554.6 (544.8-564.5) |
| Oral Cavity and Pharynx | 15.5 (13.7-17.4) | 17.3 (15.5-19.2) | 16.1 (14.4-17.9) | 17.0 (15.3-18.7) |
| Esophagus | 8.3 (7.0-9.6) | 10.7 (9.3-12.2) | 11.3 (9.9-12.8) | 9.9 (8.6-11.2) |
| Stomach | 8.3 (7.1-9.7) | 10.2 (8.8-11.6) | 8.5 (7.3-9.8) | 7.4 (6.3-8.6) |
| Colorectal | 68.6(64.9-72.5) | 75.2 (71.3-79.1) | 70.3 (66.7-74.0) | 57.4 (54.2-60.6) |
| Liver | 3.4 (2.6-4.2) | 4.4 (3.5-5.4) | 5.3 (4.3-6.3) | 6.5 (5.5-7.6) |
| Pancreas | 11.2 (9.7-12.8) | 11.4 (9.9-13.0) | 13.1 (11.6-14.7) | 14.2 (12.6-15.8) |
| Lung and Bronchus | 96.4 (91.9-100.9) | 98.2 (93.8-102.7) | 95.5 (91.4-99.8) | 87.5 (83.7-91.5) |
| Bone | 1.1 (0.7-1.6) | 1.4 (1.0-2.0) | 1.0 (0.6-1.5) | 1.3 (0.8-1.8) |
| Melanoma | 12.5 (10.9-14.2) | 20.3 (18.3-22.4) | 21.2 (19.2-23.2) | 25.8 (23.7-28.0) |
| Prostate | 155.5 (149.8-161.2) | 148.9 (143.5-154.3) | 145.1 (140.0-150.4) | 138.7 (133.9-143.6) |
| Testis | 5.1 (4.1-6.2) | 6.1 (5.0-7.3) | 5.7 (4.7-6.9) | 6.8 (5.7-8.1) |
| Bladder | 38.4 (35.6-41.3) | 41.8 (39.0-44.8) | 43.2 (40.4-46.2) | 42.6 (39.9-45.4) |
| Kidney | 14.2 (12.5-16.0) | 15.6 (13.9-17.4) | 20.9 (19.0-22.9) | 21.2 (19.3-23.2) |
| Nervous System | 7.9 (6.7-9.3) | 7.9 (6.7-9.3) | 7.4 (6.2-8.6) | 7.0 (5.9-8.3) |
| Hodgkin's lymphoma | 3.1 (2.3-4.0) | 3.3 (2.5-4.2) | 3.9 (3.1-4.9) | 4.0 (3.1-4.9) |
| Non-Hodgkin's lymphoma | 18.6 (16.6-20.6) | 24.7 (22.5-27.0) | 25.0 (22.9-27.3) | 25.2 (23.1-27.4) |
| Myeloma | 5.7 (4.7-6.9) | 6.5 (5.4-7.7) | 7.9 (6.7-9.1) | 7.3 (6.2-8.5) |
| Leukemia | 16.8 (15.0-18.8) | 17.5 (15.7-19.4) | 20.7 (18.7-22.7) | 18.1 (16.3-20.0) |
| All other sites | 46.8 (43.7-50.0) | 47.5 (44.5-50.6) | 53.3 (50.2-56.6) | 55.9 (52.8-59.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Small Urban Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 590.9 (583.5-598.3) | 595.1 (588.0-602.3) | 613.7 (606.6-620.7) | 575.3 (568.8-581.9) |
| Oral Cavity and Pharynx | 16.8 (15.6-18.0) | 17.0 (15.8-18.2) | 17.3 (16.2-18.5) | 17.7 (16.6-18.9) |
| Esophagus | 9.1 (8.2-10.1) | 9.0 (8.2-9.9) | 10.1 (9.2-11.0) | 10.6 (9.7-11.5) |
| Stomach | 10.2 (9.3-11.3) | 9.2 (8.3-10.1) | 8.8 (8.0-9.7) | 8.3 (7.5-9.1) |
| Colorectal | 71.7 (69.1-74.3) | 72.2 (69.7-74.7) | 66.8 (64.5-69.2) | 59.2 (57.1-61.3) |
| Liver | 3.3 (2.8-3.8) | 5.2 (4.5-5.9) | 7.0 (6.3-7.8) | 7.6 (6.9-8.3) |
| Pancreas | 11.6 (10.6-12.6) | 14.2 (13.1-15.4) | 13.9 (12.9-15.0) | 13.6 (12.6-14.6) |
| Lung and Bronchus | 108.7 (105.6-111.9) | 110.2 (107.2-113.4) | 104.7 (101.8-107.7) | 95.1 (92.5-97.8) |
| Bone | 0.8 (0.6-1.1) | 1.2 (0.9-1.5) | 0.9 (0.7-1.2) | 1.0 (0.7-1.3) |
| Melanoma | 11.0 (10.0-12.0) | 17.4 (16.3-18.7) | 22.1 (20.8-23.5) | 25.5 (24.2-26.9) |
| Prostate | 185.9 (181.7-190.0) | 164.2 (160.5-168.0) | 169.3 (165.7-173.1) | 145.9 (142.7-149.1) |
| Testis | 4.8 (4.3-5.5) | 4.8 (4.2-5.4) | 5.3 (4.7-5.9) | 5.5 (4.9-6.1) |
| Bladder | 38.5 (36.6-40.4) | 42.0 (40.1-44.0) | 43.7 (41.8-45.6) | 41.5 (39.7-43.3) |
| Kidney | 15.0 (13.9-16.2) | 19.3 (18.0-20.6) | 23.7 (22.3-25.1) | 25.5 (24.1-26.8) |
| Nervous System | 7.1 (6.4-7.9) | 8.1 (7.3-8.9) | 7.7 (6.9-8.5) | 8.2 (7.6-9.0) |
| Hodgkin's lymphoma | 3.0 (2.5-3.5) | 3.3 (2.8-3.8) | 3.5 (3.1-4.1) | 3.0 (2.5-3.5) |
| Non-Hodgkin's lymphoma | 21.5 (20.1-22.9) | 23.3 (21.9-24.8) | 24.6 (23.2-26.0) | 24.7 (23.4-26.1) |
| Myeloma | 6.8 (6.1-7.7) | 7.5 (6.7-8.4) | 7.3 (6.6-8.1) | 7.8 (7.0-8.6) |
| Leukemia | 16.3 (15.1-17.6) | 17.3 (16.1-18.6) | 19.2 (18.0-20.5) | 17.8 (16.6-18.9) |
| All other sites | 47.6 (45.5-49.7) | 48.3 (46.3-50.4) | 56.5 (54.4-58.6) | 56.1 (54.0-58.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Collar Counties Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 554.1 (546.2-562.0) | 553.8 (546.7-561.0) | 580.8 (574.0-587.6) | 546.4 (540.4-552.4) |
| Oral Cavity and Pharynx | 13.2 (12.1-14.4) | 13.9 (12.8-15.0) | 15.3 (14.3-16.3) | 14.9 (14.0-15.9) |
| Esophagus | 7.0 (6.2-7.9) | 8.3 (7.4-9.2) | 8.8 (8.0-9.7) | 8.7 (7.9-9.5) |
| Stomach | 12.8 (11.6-14.0) | 10.8 (9.8-11.8) | 10.3 (9.4-11.2) | 9.8 (9.0-10.6) |
| Colorectal | 69.9 (67.1-72.8) | 67.9 (65.3-70.5) | 65.3 (63.1-67.7) | 52.3 (50.5-54.2) |
| Liver | 4.3 (3.7-5.0) | 5.9 (5.2-6.7) | 7.3 (6.6-8.1) | 7.7 (7.0-8.4) |
| Pancreas | 11.3 (10.2-12.4) | 13.2 (12.1-14.4) | 14.8 (13.7-15.9) | 15.1 (14.1-16.1) |
| Lung and Bronchus | 89.7 (86.6-92.9) | 86.5 (83.6-89.4) | 81.5 (78.9-84.2) | 75.2 (72.9-77.5) |
| Bone | 1.1 (0.8-1.4) | 1.0 (0.8-1.3) | 1.1 (0.9-1.4) | 1.0 (0.7-1.2) |
| Melanoma | 13.1 (12.0-14.2) | 17.0 (15.8-18.2) | 19.7 (18.5-20.9) | 22.4 (21.2-23.6) |
| Prostate | 168.8 (164.3-173.3) | 158.0 (154.1-161.8) | 162.2 (158.7-165.8) | 151.7 (148.6-154.8) |
| Testis | 5.5 (4.9-6.1) | 5.9 (5.3-6.5) | 5.9 (5.4-6.5) | 6.2 (5.7-6.8) |
| Bladder | 39.6 (37.5-41.8) | 40.3 (38.4-42.4) | 45.9 (44.0-48.0) | 42.0 (40.3-43.8) |
| Kidney | 15.6 (14.3-16.9) | 17.6 (16.3-18.8) | 21.8 (20.5-23.1) | 22.3 (21.2-23.5) |
| Nervous System | 8.6 (7.7-9.5) | 7.9 (7.2-8.7) | 8.4 (7.7-9.2) | 8.4 (7.7-9.1) |
| Hodgkin's lymphoma | 3.5 (3.0-4.0) | 3.4 (3.0-3.9) | 3.4 (2.9-3.8) | 3.6 (3.1-4.0) |
| Non-Hodgkin's lymphoma | 21.2 (19.8-22.8) | 23.8 (22.4-25.3) | 24.8 (23.4-26.2) | 25.5 (24.2-26.8) |
| Myeloma | 6.2 (5.3-7.0) | 6.3 (5.6-7.1) | 7.1 (6.3-7.8) | 6.6 (6.0-7.3) |
| Leukemia | 15.5 (14.2-16.8) | 18.1 (16.9-19.5) | 19.2 (18.0-20.5) | 16.8 (15.8-17.9) |
| All other sites | 46.2 (44.0-48.5) | 47.0 (45.0-49.1) | 56.6 (54.5-58.7) | 55.2 (53.3-57.2) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

| Cook County Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010 | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers | 585.7 (580.9-590.5) | 590.5 (585.8-595.3) | 586.4 (581.7-591.0) | 568.6 (564.1-573.1) |
| Oral Cavity and Pharynx | 17.7 (16.9-18.5) | 18.0 (17.2-18.9) | 16.6 (15.9-17.4) | 17.5 (16.7-18.2) |
| Esophagus | 10.5 (9.9-11.2) | 10.9 (10.3-11.6) | 9.5 (9.0-10.1) | 8.6 (8.0-9.1) |
| Stomach | 16.0 (15.2-16.8) | 15.4 (14.7-16.2) | 14.1 (13.4-14.9) | 13.4 (12.7-14.1) |
| Colorectal | 72.3 (70.5-74.0) | 72.7 (71.0-74.4) | 68.7 (67.1-70.3) | 61.1 (59.6-62.8) |
| Liver | 6.6 (6.1-7.1) | 8.9 (8.4-9.5) | 9.9 (9.3-10.5) | 11.8 (11.2-12.5) |
| Pancreas | 12.8 (12.1-13.5) | 14.1 (13.4-14.9) | 15.4 (14.7-16.2) | 16.0 (15.2-16.7) |
| Lung and Bronchus | 101.9 (99.9-103.9) | 96.9 (95.0-98.9) | 89.9 (88.1-91.7) | 81.3 (79.6-83.1) |
| Bone | 0.9 (0.7-1.0) | 1.0 (0.8-1.2) | 1.1 (0.9-1.3) | 0.9 (0.8-1.1) |
| Melanoma | 8.8 (8.2-9.3) | 10.9 (10.3-11.6) | 13.7 (13.0-14.4) | 16.3 (15.6-17.1) |
| Prostate | 171.4 (168.8-174.1) | 169.8 (167.3-172.3) | 166.9 (164.5-169.4) | 166.4 (164.0-168.8) |
| Testis | 4.0 (3.7-4.4) | 4.4 (4.1-4.8) | 4.8 (4.4-5.2) | 5.0 (4.6-5.4) |
| Bladder | 35.3 (34.1-36.5) | 37.2 (36.0-38.4) | 37.8 (36.6-39.0) | 34.3 (33.2-35.5) |
| Kidney | 16.0 (15.2-16.8) | 17.2 (16.4-18.0) | 20.1 (19.2-20.9) | 22.0 (21.2-22.9) |
| Nervous System | 7.6 (7.1-8.1) | 7.4 (6.9-8.0) | 7.0 (6.6-7.5) | 7.0 (6.5-7.5) |
| Hodgkin's lymphoma | 3.2 (2.9-3.5) | 3.5 (3.2-3.9) | 3.3 (3.0-3.7) | 3.3 (2.9-3.6) |
| Non-Hodgkin's lymphoma | 21.6 (20.7-22.5) | 23.8 (22.9-24.7) | 23.5 (22.6-24.4) | 22.9 (22.0-23.8) |
| Myeloma | 7.4 (6.8-7.9) | 7.7 (7.2-8.3) | 8.1 (7.6-8.7) | 8.0 (7.4-8.5) |
| Leukemia | 15.1 (14.4-15.9) | 16.5 (15.7-17.3) | 17.0 (16.2-17.8) | 15.7 (14.9-16.4) |
| All other sites | 55.2 (53.8-56.7) | 52.5 (51.1-53.9) | 57.5 (56.1-59.0) | 55.8 (54.4-57.2) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Appendix 3: Designated Region Incidence Rates, Female

| <i>Illinois Cancer Incidence Rates per 100,000, Female, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers | 406.5(404.3-408.8) | 431.7 (429.4-433.9) | 434.6 (432.4-436.8) | 440.1 (437.9-442.3) |
| Oral Cavity and Pharynx | 6.1 (5.8-6.4) | 6.4 (6.1-6.7) | 6.1 (5.9-6.4) | 6.5 (6.2-6.8) |
| Esophagus | 2.3 (2.1-2.5) | 2.3 (2.1-2.4) | 2.3 (2.1-2.4) | 2.1 (2.0-2.3) |
| Stomach | 5.7 (5.4-5.9) | 5.4 (5.2-5.7) | 5.4 (5.1-5.6) | 5.3 (5.1-5.6) |
| Colorectal | 50.9 (50.1-51.6) | 52.3 (51.6-53.1) | 49.7 (48.9-50.4) | 43.9 (43.2-44.6) |
| Liver | 1.8 (1.6-1.9) | 2.4 (2.3-2.6) | 2.6 (2.4-2.8) | 2.9 (2.8-3.1) |
| Pancreas | 9.2 (8.8-9.5) | 10.6 (10.3-11.0) | 11.2 (10.8-11.5) | 11.5 (11.2-11.8) |
| Lung and Bronchus | 49.4 (48.6-50.1) | 54.9 (54.1-55.7) | 58.1 (57.3-58.9) | 60.1 (59.3-60.9) |
| Bone | 0.8 (0.7-0.9) | 0.7 (0.7-0.8) | 0.8 (0.7-0.9) | 0.8 (0.7-0.9) |
| Melanoma | 7.2 (6.9-7.5) | 9.2 (8.9-9.5) | 11.5 (11.2-11.9) | 14.2 (13.8-14.6) |
| Breast-invasive only | 128.6 (127.4-129.9) | 134.7 (133.4-135.9) | 125.7 (124.6-126.9) | 126.1 (125.0-127.3) |
| Cervix | 11.9 (11.5-12.3) | 11.6 (11.2-12.0) | 9.3 (9.0-9.6) | 8.5 (8.2-8.9) |
| Uterus | 24.6 (24.1-25.2) | 25.5 (24.9-26.0) | 25.9 (25.3-26.4) | 27.8 (27.3-28.4) |
| Ovary | 15.3 (14.9-15.8) | 14.6 (14.2-15.0) | 13.6 (13.2-14.0) | 12.7 (12.3-13.0) |
| Bladder | 9.5 (9.2-9.9) | 10.5 (10.2-10.9) | 10.6 (10.3-11.0) | 10.0 (9.7-10.3) |
| Kidney | 7.8 (7.5-8.1) | 9.3 (9.0-9.7) | 11.0 (10.6-11.3) | 12.4 (12.0-12.7) |
| Nervous System | 5.2 (5.0-5.5) | 5.4 (5.2-5.7) | 5.6 (5.3-5.8) | 5.7 (5.5-6.0) |
| Hodgkin's lymphoma | 2.3 (2.1-2.5) | 2.5 (2.3-2.6) | 2.6 (2.4-2.7) | 2.7 (2.5-2.8) |
| Non-Hodgkin's lymphoma | 14.9 (14.5-15.3) | 16.3 (15.9-16.8) | 16.6 (16.2-17.1) | 16.4 (16.0-16.8) |
| Myeloma | 4.7 (4.5-4.9) | 5.2 (4.9-5.4) | 5.4 (5.2-5.7) | 4.8 (4.6-5.1) |
| Leukemia | 9.4 (9.0-9.7) | 10.4 (10.0-10.7) | 11.0 (10.6-11.3) | 9.9 (9.6-10.2) |
| All other sites | 39.2 (38.5-39.9) | 41.4 (40.7-42.1) | 49.9 (49.2-50.7) | 55.7 (54.9-56.5) |

This table provides the comparative incidence rates for the subsequent tables in this appendix.

Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 371.8 (363.4-380.3) | 417.5 (408.7-426.4) | 419.6 (410.8-428.4) | 438.0 (429.1-447.0) |
| Oral Cavity and Pharynx | 5.3 (4.3-6.3) | 5.6 (4.6-6.6) | 5.4 (4.5-6.5) | 6.5 (5.4-7.7) |
| Esophagus | 1.5 (1.0-2.0) | 1.6 (1.1-2.1) | 2.0 (1.5-2.7) | 1.6 (1.1-2.1) |
| Stomach | 3.2 (2.5-3.9) | 4.1 (3.3-4.9) | 3.5 (2.8-4.3) | 3.2 (2.5-4.0) |
| Colorectal | 53.6 (50.6-56.6) | 58.6 (55.5-61.8) | 54.1 (51.1-57.1) | 47.8 (45.0-50.7) |
| Liver | 1.2 (0.8-1.7) | 2.4 (1.8-3.1) | 2.1 (1.5-2.7) | 2.1 (1.6-2.8) |
| Pancreas | 7.9 (6.8-9.2) | 9.6 (8.3-10.8) | 8.7 (7.5-9.9) | 9.5 (8.4-10.8) |
| Lung and Bronchus | 41.7 (39.0-44.5) | 52.9 (49.9-56.0) | 59.3 (56.1-62.5) | 66.9 (63.5-70.3) |
| Bone | 0.5 (0.2-0.9) | 0.6 (0.3-1.0) | 0.9 (0.5-1.4) | 1.1 (0.6-1.6) |
| Melanoma | 9.9 (8.5-11.4) | 9.8 (8.4-11.3) | 13.4 (11.7-15.1) | 16.2 (14.4-18.1) |
| Breast-invasive only | 113.0 (108.2-117.9) | 122.1 (117.3-127.1) | 118.3 (113.6-123.1) | 117.9 (113.2-122.6) |
| Cervix | 12.4 (10.8-14.2) | 14.3 (12.6-16.1) | 11.1 (9.6-12.7) | 8.4 (7.1-9.9) |
| Uterus and Corpus | 24.9 (22.8-27.2) | 25.8 (23.7-28.1) | 22.4 (20.4-24.5) | 27.6 (25.3-29.9) |
| Ovary | 12.9 (11.3-14.5) | 13.7 (12.2-15.4) | 12.1 (10.6-13.7) | 11.3 (10.0-12.8) |
| Bladder | 7.6 (6.5-8.8) | 9.0 (7.9-10.3) | 10.4 (9.1-11.7) | 9.2 (8.0-10.4) |
| Kidney | 7.6 (6.5-8.9) | 10.4 (9.1-11.9) | 11.1 (9.8-12.6) | 13.6 (12.0-15.2) |
| Nervous System | 5.5 (4.5-6.6) | 5.6 (4.6-6.7) | 5.4 (4.4-6.5) | 7.0 (5.8-8.2) |
| Hodgkin's lymphoma | 1.8 (1.3-2.5) | 2.1 (1.5-2.9) | 2.0 (1.4-2.7) | 2.2 (1.5-2.9) |
| Non-Hodgkin's lymphoma | 13.4 (11.9-15.1) | 15.8 (14.1-17.5) | 16.6 (14.9-18.4) | 16.9 (15.2-18.6) |
| Myeloma | 4.2 (3.4-5.1) | 4.3 (3.5-5.2) | 4.5 (3.6-5.4) | 4.2 (3.5-5.2) |
| Leukemia | 8.2 (7.0-9.5) | 10.5 (9.1-11.9) | 10.9 (9.5-12.4) | 10.4 (9.1-11.8) |
| All other sites | 35.5 (33.0-38.1) | 38.8 (36.2-41.5) | 45.5 (42.6-48.5) | 54.5 (51.4-57.8) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Central Rural Region Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 408.4 (400.0-416.8) | 422.0 (413.6-430.5) | 434.9 (426.4-443.5) | 440.4 (431.9-449.0) |
| Oral Cavity and Pharynx | 5.7 (4.8-6.8) | 5.4 (4.5-6.4) | 6.0(5.0-7.0) | 7.2 (6.1-8.3) |
| Esophagus | 1.4 (1.0-1.8) | 1.6 (1.2-2.2) | 2.0 (1.5-2.6) | 2.1 (1.5-2.7) |
| Stomach | 3.6 (2.9-4.3) | 3.1 (2.5-3.9) | 2.8 (2.1-3.5) | 3.1 (2.4-3.8) |
| Colorectal | 55.2 (52.3-58.2) | 56.5 (53.6-59.4) | 52.3 (49.5-55.2) | 48.1 (45.5-50.9) |
| Liver | 1.2 (0.8-1.6) | 1.7 (1.2-2.2) | 1.7 (1.3-2.3) | 2.5 (1.9-3.2) |
| Pancreas | 8.3 (7.2-9.5) | 10.2 (9.0-11.5) | 10.9 (9.6-12.2) | 9.7 (8.5-10.9) |
| Lung and Bronchus | 48.2 (45.4-51.0) | 55.1 (52.1-58.1) | 61.0 (58.0-64.2) | 65.3 (62.1-68.5) |
| Bone | 1.0 (0.6-1.4) | 0.7 (0.3-1.1) | 0.9 (0.5-1.4) | 0.9 (0.5-1.4) |
| Melanoma | 9.4 (8.1-10.9) | 11.8 (10.3-13.3) | 15.1 (13.4-16.9) | 16.9 (15.2-18.8) |
| Breast-invasive only | 126.2 (121.5-131.1) | 125.8 (121.1-130.5) | 124.0 (119.4-128.7) | 119.6 (115.4-124.5) |
| Cervix | 11.7 (10.2-13.3) | 11.2(9.7-12.8) | 8.8 (7.5-10.2) | 7.8 (6.5-9.1) |
| Uterus and Corpus | 26.2 (24.1-28.4) | 25.6 (23.6-27.7) | 26.4(24.3-28.6) | 26.8 (24.8-29.0) |
| Ovary | 16.9 (15.2-18.7) | 14.7 (13.2-16.4) | 12.0 (10.7-13.5) | 12.8 (11.4-14.3) |
| Bladder | 8.6 (7.5-9.8) | 10.1 (8.9-11.3) | 10.2 (9.0-11.5) | 9.5 (8.3-10.7) |
| Kidney | 9.6 (8.4-11.0) | 10.9 (9.6-12.3) | 10.4 (9.1-11.8) | 13.3 (11.8-14.9) |
| Nervous System | 5.0 (4.1-6.0) | 5.3 (4.4-6.4) | 6.3 (5.3-7.5) | 7.0 (5.9-8.2) |
| Hodgkin's lymphoma | 2.1 (1.5-2.8) | 2.8 (2.1-3.6) | 2.3 (1.6-3.0) | 2.4 (1.7-3.1) |
| Non-Hodgkin's lymphoma | 16.0 (14.4-17.6) | 16.2 (14.6-17.9) | 17.2 (15.6-18.9) | 16.6 (15.1-18.3) |
| Myeloma | 4.3 (3.6-5.2) | 4.5(3.7-5.3) | 5.1 (4.3-6.0) | 3.9 (3.2-4.7) |
| Leukemia | 10.4(9.1-11.7) | 10.7 (9.4-12.1) | 11.3 (10.0-12.7) | 9.7 (8.4-11.0) |
| All other sites | 37.4 (34.9-40.0) | 38.3 (35.8-40.9) | 48.2 (45.4-51.2) | 55.2 (52.1-58.3) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Northern Rural Region Cancer Incidence Rates per 100,000, Female, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 386.1 (377.9-394.3) | 429.5 (421.0 -438.0) | 438.3 (429.9-446.8) | 436.5 (428.3-444.9) |
| Oral Cavity and Pharynx | 5.2 (4.3-6.2) | 6.3 (5.3-7.4) | 6.6 (5.6-7.7) | 6.6 (5.6-7.6) |
| Esophagus | 1.5 (1.1-2.0) | 1.8 (1.3-2.4) | 1.7 (1.3-2.3) | 2.0 (1.5-2.6) |
| Stomach | 4.0 (3.3-4.9) | 4.0 (3.3-4.8) | 3.1 (2.4-3.8) | 3.5 (2.8-4.2) |
| Colorectal | 50.4 (47.6-53.2) | 53.6 (50.9-56.5) | 49.9 (47.2-52.6) | 46.8 (44.2-49.5) |
| Liver | 1.7 (1.2-2.3) | 1.9 (1.4-2.5) | 2.4 (1.8-3.1) | 2.6 (2.0-3.2) |
| Pancreas | 8.1 (7.0- 9.3) | 10.1 (8.9-11.4) | 10.0 (8.8-11.2) | 9.9 (8.7-11.1) |
| Lung and Bronchus | 45.3 (42.6-48.2) | 50.2 (47.4-53.1) | 58.5 (55.5-61.5) | 61.0 (58.1-64.0) |
| Bone | 1.0 (0.6-1.5) | 0.7 (0.4-1.1) | 0.8 (0.5-1.3) | 1.1 (0.7-1.6) |
| Melanoma | 8.6 (7.3-9.9) | 13.3 (11.8-15.0) | 15.2 (13.6-17.0) | 19.2 (17.4-21.1) |
| Breast-invasive only | 117.8 (113.2-122.4) | 132.8 (128.0-137.7) | 122.4 (117.9-127.0) | 121.0 (116.7-125.5) |
| Cervix | 9.6 (8.3-11.1) | 11.5 (10.0-13.1) | 10.6 (9.2-12.2) | 7.8 (6.6-9.1) |
| Uterus and Corpus | 24.5 (22.5-26.6) | 27.3 (25.2-29.5) | 27.7 (25.6-29.8) | 26.1 (24.1-28.1) |
| Ovary | 16.3 (14.6-18.1) | 14.2 (12.7-15.8) | 15.0 (13.4-16.6) | 12.8 (11.5-14.3) |
| Bladder | 8.8 (7.7-10.1) | 10.9 (9.7-12.3) | 10.4 (9.2-11.7) | 9.5 (8.4-10.7) |
| Kidney | 8.4 (7.2-9.7) | 9.9 (8.6-11.2) | 12.1 (10.7-13.5) | 12.8 (11.5-14.3) |
| Nervous System | 5.5 (4.5-6.5) | 6.0 (5.0-7.1) | 6.8 (5.8-8.0) | 5.5 (4.6-6.5) |
| Hodgkin's lymphoma | 2.6 (2.0-3.4) | 3.0 (2.2-3.8) | 2.8 (2.0-3.6) | 3.2 (2.4-4.1) |
| Non-Hodgkin's lymphoma | 13.8 (12.3-15.4) | 16.2 (14.6-17.8) | 18.1 (16.4-19.8) | 16.2 (14.7-17.8) |
| Myeloma | 4.0 (3.2-4.8) | 4.7 (3.9-5.6) | 4.6 (3.8-5.5) | 4.0 (3.3-4.8) |
| Leukemia | 9.6 (8.4-11.0) | 10.0 (8.7-11.3) | 10.9 (9.6-12.2) | 10.7 (9.4-12.0) |
| All other sites | 39.3 (36.8-42.0) | 41.1(38.5-43.8) | 49.0 (46.1-51.9) | 54.3 (51.3-57.4) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

| <i>Small Urban Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010</i> | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers | 407.9 (402.6-413.2) | 439.2 (433.8-444.6) | 448.8 (443.5-454.1) | 447.5 (442.3-452.7) |
| Oral Cavity and Pharynx | 5.5 (4.9-6.1) | 6.2 (5.6-6.9) | 6.8 (6.2-7.5) | 6.8 (6.1-7.4) |
| Esophagus | 1.9 (1.6-2.3) | 2.0 (1.7-2.4) | 2.3 (1.9-2.6) | 2.1 (1.7-2.4) |
| Stomach | 4.4 (3.9-5.0) | 4.1 (3.6-4.6) | 4.0 (3.5-4.5) | 4.1 (3.7-4.6) |
| Colorectal | 51.8 (50.0-53.7) | 54.1 (52.3-56.0) | 49.7 (48.0-51.4) | 43.4 (41.9-45.0) |
| Liver | 1.5 (1.2-1.8) | 1.7 (1.4-2.1) | 2.1 (1.8-2.5) | 2.7 (2.3-3.1) |
| Pancreas | 8.7 (7.9-9.4) | 9.4 (8.7-10.2) | 10.4 (9.6-11.2) | 10.4 (9.6-11.2) |
| Lung and Bronchus | 52.2 (50.4-54.1) | 60.0 (58.0-62.0) | 62.0 (60.1-64.0) | 65.8 (63.9-67.8) |
| Bone | 0.7 (0.5-0.9) | 0.7 (0.5-0.9) | 0.7 (0.5-1.0) | 0.8 (0.6-1.0) |
| Melanoma | 7.8 (7.1-8.6) | 10.8 (10.0-11.7) | 15.1 (14.1-16.1) | 18.8 (17.7-19.9) |
| Breast-invasive only | 129.5 (126.5-132.6) | 137.1 (134.1-140.2) | 130.0 (127.2-132.9) | 125.6 (122.9-128.4) |
| Cervix | 10.3 (9.5-11.2) | 10.6 (9.7-11.5) | 8.9 (8.1-9.7) | 8.0 (7.3-8.8) |
| Uterus and Corpus | 24.7 (23.4-26.0) | 26.3 (25.0-27.7) | 25.9 (24.6-27.2) | 26.7 (25.4-27.9) |
| Ovary | 15.2 (14.2-16.2) | 15.1 (14.1-16.2) | 13.6 (12.7-14.5) | 12.1 (11.3-13.0) |
| Bladder | 9.3 (8.5-10.1) | 10.5 (9.7-11.3) | 11.0 (10.2-11.8) | 9.9 (9.2-10.7) |
| Kidney | 8.4 (7.7-9.2) | 10.1 (9.3-11.0) | 12.4 (11.5-13.3) | 13.9 (13.1-14.9) |
| Nervous System | 4.8 (4.3-5.4) | 5.3 (4.7-6.0) | 5.7 (5.1-6.4) | 5.9 (5.3-6.5) |
| Hodgkin's lymphoma | 2.2 (1.8-2.6) | 2.5 (2.1-2.9) | 2.5 (2.1-2.9) | 2.6 (2.2-3.0) |
| Non-Hodgkin's lymphoma | 15.1 (14.1-16.2) | 16.8 (15.7-17.8) | 17.6 (16.5-18.6) | 16.0 (15.0-16.9) |
| Myeloma | 5.2 (4.6-5.8) | 5.0 (4.4-5.6) | 5.2 (4.6-5.8) | 4.3 (3.8-4.8) |
| Leukemia | 10.2 (9.4-11.1) | 10.4 (9.6-11.2) | 11.5 (10.7-12.4) | 10.0 (9.2-10.7) |
| All other sites | 38.5 (36.9-40.1) | 40.5 (38.9-42.1) | 51.5 (49.7-53.4) | 57.8 (56.0-59.7) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Collar Counties Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| All Invasive Cancers | 413.2 (407.6-418.8) | 438.1 (432.8-443.5) | 442.2 (437.2-447.3) | 444.4 (439.7-449.2) |
| Oral Cavity and Pharynx | 6.0 (5.4-6.7) | 6.5 (5.8-7.1) | 6.4 (5.8-7.0) | 5.8 (5.3-6.4) |
| Esophagus | 2.1 (1.7-2.5) | 2.0 (1.6-2.3) | 2.2 (1.9-2.6) | 2.1 (1.8-2.4) |
| Stomach | 5.7 (5.1-6.4) | 5.2 (4.6-5.8) | 5.0 (4.5-5.6) | 5.4 (4.9-5.9) |
| Colorectal | 48.7 (46.8-50.7) | 49.0 (47.2-50.8) | 46.7 (45.0-48.4) | 39.2 (37.8-40.6) |
| Liver | 1.4 (1.1-1.8) | 2.3 (1.9-2.7) | 2.3 (2.0-2.7) | 2.6 (2.2-2.9) |
| Pancreas | 9.2 (8.4-10.1) | 10.1 (9.3-10.9) | 10.5 (9.7-11.3) | 11.8 (11.0-12.6) |
| Lung and Bronchus | 49.2 (47.3-51.2) | 54.0 (52.1-56.0) | 57.7 (55.8-59.6) | 57.7 (56.0-59.5) |
| Bone | 0.7 (0.5-0.9) | 0.7 (0.5-0.9) | 0.9 (0.7-1.2) | 0.7 (0.5-0.9) |
| Melanoma | 8.2 (7.5-9.0) | 11.5 (10.6-12.3) | 12.8 (12.0-13.7) | 15.1 (14.3-16.0) |
| Breast-invasive only | 138.1 (134.9-141.3) | 144.2 (141.2-147.3) | 131.3 (128.6-134.0) | 133.1 (130.5-135.6) |
| Cervix | 8.8 (8.1-9.6) | 9.1 (8.3-9.8) | 7.3 (6.7-8.0) | 6.4 (5.9-7.0) |
| Uterus and Corpus | 26.1 (24.7-27.5) | 25.6 (24.3-26.9) | 27.1 (25.9-28.4) | 28.9 (27.7-30.1) |
| Ovary | 15.6 (14.5-16.7) | 14.5 (13.5-15.5) | 13.6 (12.8-14.5) | 12.8 (12.0-13.6) |
| Bladder | 10.0 (9.1-10.9) | 11.3 (10.5-12.2) | 11.4 (10.6-12.2) | 11.5 (10.7-12.3) |
| Kidney | 7.6 (6.9-8.4) | 9.0 (8.3-9.8) | 10.1 (9.3-10.9) | 11.7 (11.0-12.5) |
| Nervous System | 5.6 (5.0-6.3) | 6.4 (5.8-7.0) | 6.3 (5.7-6.9) | 6.1 (5.5-6.6) |
| Hodgkin's lymphoma | 2.6 (2.2-3.0) | 2.8 (2.4-3.3) | 3.3 (2.9-3.7) | 3.0 (2.6-3.4) |
| Non-Hodgkin's lymphoma | 15.7 (14.7-16.9) | 16.8 (15.7-17.8) | 17.2 (16.2-18.2) | 18.0 (17.0-18.9) |
| Myeloma | 4.1 (3.6-4.7) | 4.8 (4.2-5.4) | 4.9 (4.4-5.4) | 4.5 (4.1-5.0) |
| Leukemia | 8.5 (7.7-9.3) | 10.7 (9.9-11.6) | 11.6 (10.8-12.5) | 9.8 (9.1-10.6) |
| All other sites | 39.3 (37.6-41.0) | 41.9 (40.3-43.6) | 53.7 (51.9-55.4) | 58.4 (56.7-60.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Cook County Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers | 413.0 (409.6-416.4) | 431.1 (427.1-434.6) | 428.9 (425.5-432.3) | 437.3 (433.9-440.8) |
| Oral Cavity and Pharynx | 6.7 (6.3-7.1) | 6.7 (6.3-7.2) | 5.8 (5.4-6.2) | 6.7 (6.3-7.1) |
| Esophagus | 3.0 (2.7-3.3) | 2.8 (2.6-3.1) | 2.5 (2.3-2.8) | 2.4 (2.1-2.6) |
| Stomach | 7.3 (6.9-7.7) | 7.0 (6.6-7.5) | 7.3 (6.9-7.8) | 7.0 (6.5-7.4) |
| Colorectal | 50.4 (49.2-51.5) | 51.0 (49.9-52.2) | 49.8 (48.7-51.0) | 44.9 (43.8-5) |
| Liver | 2.2 (2.0-2.5) | 3.1 (2.8-3.4) | 3.2 (2.9-3.5) | 3.6 (3.3-3.9) |
| Pancreas | 9.9 (9.4-10.4) | 11.8 (11.2-12.3) | 12.6 (12.0-13.2) | 12.8 (12.3-13.4) |
| Lung and Bronchus | 50.7 (49.5-51.9) | 54.7 (53.5-55.9) | 56.5 (55.3-57.7) | 57.6 (56.4-58.8) |
| Bone | 0.8 (0.7-1.0) | 0.8 (0.7-1.0) | 0.7 (0.6-0.9) | 0.8 (0.7-1.0) |
| Melanoma | 5.5 (5.1-5.9) | 6.4 (6.0-6.8) | 8.1 (7.7-8.6) | 10.3 (9.8-10.8) |
| Breast-invasive only | 129.3 (127.3-131.2) | 133.2 (131.2-135.1) | 123.5 (121.7-125.4) | 125.6 (123.8-127.5) |
| Cervix | 14.1 (13.4-14.7) | 13.1 (12.5-13.7) | 10.3 (9.7-10.8) | 10.4 (9.8-10.9) |
| Uterus and Corpus | 23.9 (23.1-24.7) | 24.8 (24.0-25.7) | 25.5 (24.7-26.3) | 28.4 (27.5-29.3) |
| Ovary | 15.2 (14.6-15.9) | 14.6 (14.0-15.3) | 13.7 (13.1-14.3) | 13.0 (12.4-13.6) |
| Bladder | 10.1 (9.6-10.6) | 10.6 (10.0-11.1) | 10.3 (9.8-10.8) | 9.7 (9.2-10.3) |
| Kidney | 7.3 (6.9-7.8) | 8.7 (8.2-9.2) | 10.7 (10.2-11.3) | 11.6 (11.1-12.2) |
| Nervous System | 5.3 (4.9-5.7) | 4.9 (4.6-5.3) | 4.9 (4.5-5.2) | 5.2 (4.8-5.6) |
| Hodgkin's lymphoma | 2.3 (2.0-2.6) | 2.2 (2.0-2.5) | 2.3 (2.1-2.6) | 2.6 (2.3-2.9) |
| Non-Hodgkin's lymphoma | 14.7 (14.1-15.4) | 16.1 (15.4-16.8) | 15.8 (15.1-16.4) | 15.6 (15.0-16.3) |
| Myeloma | 5.0 (4.6-5.3) | 5.8 (5.4-6.2) | 6.1 (5.7-6.5) | 5.7 (5.3-6.1) |
| Leukemia | 9.2 (8.7-9.7) | 10.3 (9.8-10.8) | 10.5 (9.9-11.0) | 9.7 (9.2-10.2) |
| All other sites | 40.3 (39.3-41.4) | 42.6 (41.5-43.7) | 48.9 (47.7-50.0) | 53.9 (52.7-55.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Appendix 4: All Cancer Age-Adjusted Incidence (1991-2010) and Mortality (1990-2010) Rates per 100,000 by County

These data are graphically displayed in Maps 2 and 3 of the report.

| | All Cancer Incidence (95% CI)* | All Cancer Mortality (95% CI)† |
|-----------------|--------------------------------|--------------------------------|
| Illinois | 486.6 (485.5-487.5) | 203.8 (203.3-204.4) |
| <i>County</i> | | |
| Adams | 478.6 (468.1-489.3) | 206.8 (200.2-213.5) |
| Alexander | 462.4 (434.9-490.6) | 242.9 (223.9-263.2) |
| Bond | 490.4 (468.7-512.7) | 202.5 (189.1-216.6) |
| Boone | 461.6 (446.8-476.6) | 185.9 (176.6-195.6) |
| Brown | 459.7 (424.5-424.5) | 186.7 (165.1-210.4) |
| Bureau | 478.1 (463.8-492.6) | 196.7 (188.1-205.7) |
| Calhoun | 459.4 (423.8-496.5) | 196.4 (174.8-220.2) |
| Carroll | 494.0 (473.2-515.2) | 211.5 (198.6-225.0) |
| Cass | 489.1 (465.1-513.8) | 217.3 (202.0-233.5) |
| Champaign | 483.1 (475.1-491.1) | 187.2 (182.3-192.2) |
| Christian | 532.1 (516.8-547.7) | 220.8 (211.4-230.6) |
| Clark | 481.2 (460.3-502.7) | 192.7 (180.1-206.0) |
| Clay | 490.6 (467.9-513.8) | 203.5 (189.8-218.1) |
| Clinton | 479.3 (464.0-494.8) | 190.0 (180.7-199.7) |
| Coles | 483.7 (470.5-497.0) | 204.6 (196.3-213.1) |
| Cook | 487.4 (486.0-488.8) | 211.4 (210.6-212.3) |
| Crawford | 497.6 (478.0-517.5) | 195.1 (183.4-207.3) |
| Cumberland | 493.1 (466.4-520.6) | 192.4 (176.5-209.4) |
| De Kalb | 469.1 (458.1-480.2) | 185.6 (178.8-192.5) |
| De Witt | 480.0 (458.6-501.8) | 216.9 (203.2-231.3) |
| Douglas | 484.1 (464.1-504.6) | 196.9 (184.6-209.8) |
| Du Page | 477.9 (474.5-481.4) | 182.2 (180.0-184.3) |
| Edgar | 481.2 (461.9-500.9) | 203.9 (191.9-216.5) |
| Edwards | 489.5 (457.3-522.7) | 211.2 (191.4-232.6) |
| Effingham | 501.1 (484.9-517.6) | 188.6 (179.0-198.6) |
| Fayette | 453.3 (435.0-472.1) | 195.7 (184.2-207.8) |
| Ford | 493.5 (470.5-517.1) | 203.4 (189.5-218.0) |
| Franklin | 531.5 (511.5-551.8) | 240.6 (231.5-249.9) |
| Fulton | 502.2 (488.0-516.6) | 206.6 (198.0-215.5) |
| Gallatin | 523.1 (488.5-558.9) | 240.8 (218.8-264.6) |
| Greene | 509.3 (486.1-533.0) | 218.7 (204.4-233.9) |
| Grundy | 523.1 (507.1-539.3) | 215.6 (205.5-226.0) |
| Hamilton | 433.4 (406.6-461.1) | 200.7 (183.6-219.1) |
| Hancock | 484.7 (465.9-503.8) | 197.2 (185.9-209.0) |
| Hardin | 433.9 (398.4-471.0) | 233.5 (208.6-260.7) |
| Henderson | 452.0 (423.3-481.5) | 195.9 (177.8-215.5) |
| Henry | 481.0 (468.7-493.4) | 198.2 (190.7-205.9) |
| Iroquois | 472.2 (457.1-487.6) | 199.3 (189.9-209.0) |
| Jackson | 458.5 (445.4-471.7) | 195.7 (187.5-204.2) |
| Jasper | 481.0 (453.7-509.1) | 194.3 (177.8-212.0) |

| | All Cancer Incidence (95% CI)* | All Cancer Mortality (95% CI)† |
|-------------|--------------------------------|--------------------------------|
| Jefferson | 490.2 (475.9-504.7) | 203.8 (195.0-212.9) |
| Jersey | 428.0 (409.8-446.6) | 185.5 (173.9-197.7) |
| Jo Daviess | 470.5 (453.1-488.3) | 184.4 (174.0-195.3) |
| Johnson | 498.1 (472.3-524.5) | 205.1 (189.0-222.4) |
| Kane | 466.4 (461.2-471.6) | 185.5 (182.2-188.8) |
| Kankakee | 517.3 (507.7-526.9) | 222.6 (216.5-228.8) |
| Kendall | 479.7 (466.1-493.5) | 181.0 (172.4-189.9) |
| Knox | 468.9 (457.5-480.5) | 198.2 (191.2-205.5) |
| La Salle | 504.5 (495.9-513.1) | 212.3 (207.0-217.6) |
| Lake | 487.9 (483.6-492.2) | 191.7 (189.0-194.5) |
| Lawrence | 482.0 (460.9-503.5) | 207.7 (194.6-221.5) |
| Lee | 494.2 (479.0-509.6) | 218.3 (208.6-228.4) |
| Livingston | 486.0 (471.7-500.6) | 198.4 (189.7-207.5) |
| Logan | 484.0 (467.7-500.5) | 205.8 (195.7-216.2) |
| Macon | 539.3 (530.5-548.3) | 213.0 (207.7-218.5) |
| Macoupin | 490.1 (477.5-502.7) | 200.0 (192.4-207.9) |
| Madison | 489.2 (483.4-495.0) | 208.1 (204.4-211.8) |
| Marion | 524.7 (510.5-539.1) | 215.3 (206.6-224.3) |
| Marshall | 483.3 (460.1-507.1) | 201.2 (187.0-216.2) |
| Mason | 512.0 (489.8-534.7) | 221.9 (208.0-236.6) |
| Massac | 488.4 (466.5-510.7) | 204.9 (191.4-219.2) |
| McDonough | 479.1 (462.5-495.9) | 196.4 (186.3-206.9) |
| McHenry | 499.8 (492.9-506.6) | 206.8 (202.3-211.3) |
| McLean | 483.7 (475.1-492.3) | 189.6 (184.3-194.9) |
| Menard | 476.2 (450.7-502.3) | 205.1 (188.9-222.3) |
| Mercer | 461.2 (440.6-482.3) | 180.7 (168.3-193.7) |
| Monroe | 466.4 (449.3-483.9) | 184.7 (174.2-195.7) |
| Montgomery | 506.1 (489.9-522.5) | 225.2 (214.9-235.8) |
| Morgan | 476.2 (461.6-491.0) | 200.3 (191.3-209.7) |
| Moultrie | 450.1 (428.2-472.5) | 184.8 (171.6-198.8) |
| Ogle | 456.0 (443.5-468.6) | 192.0 (184.2-200.1) |
| Peoria | 519.1 (512.0-526.2) | 208.2 (203.9-212.6) |
| Perry | 458.8 (440.6-477.4) | 206.0 (194.4-218.2) |
| Piatt | 482.6 (461.0-504.7) | 191.1 (178.1-204.8) |
| Pike | 449.7 (430.1-469.7) | 192.4 (180.4-205.1) |
| Pope | 331.7 (299.4-365.6) | 181.3 (158.2-207.2) |
| Pulaski | 470.2 (438.1-503.4) | 240.4 (218.6-263.8) |
| Putnam | 506.2 (470.3-543.4) | 214.6 (192.1-239.1) |
| Randolph | 468.7 (453.6-484.1) | 193.3 (184.0-202.9) |
| Richland | 474.7 (453.7-496.1) | 194.3 (181.6-207.7) |
| Rock Island | 495.3 (487.8-502.8) | 194.8 (190.3-199.3) |
| Saline | 486.7 (470.1-503.5) | 234.2 (223.3-245.5) |
| Sangamon | 495.8 (489.0-502.6) | 205.9 (201.7-210.3) |
| Schuyler | 412.0 (383.7-441.2) | 195.8 (177.5-215.7) |
| Scott | 437.0 (401.9-473.4) | 199.3 (177.1-223.8) |
| Shelby | 444.8 (427.7-462.3) | 189.7 (179.1-200.8) |
| St. Clair | 503.6 (497.5-509.7) | 224.7 (220.8-228.7) |

| | All Cancer Incidence (95% CI)* | All Cancer Mortality (95% CI)† |
|------------|--------------------------------|--------------------------------|
| Stark | 471.1 (438.1-505.3) | 195.2 (175.2-217.0) |
| Stephenson | 432.6 (420.8-444.5) | 187.8 (180.3-195.4) |
| Tazewell | 514.3 (506.1-522.6) | 204.2 (199.1-209.3) |
| Union | 442.3 (423.2-461.8) | 203.5 (191.3-216.5) |
| Vermilion | 513.9 (503.9-523.9) | 219.5 (213.2-225.9) |
| Wabash | 473.2 (449.1-497.9) | 208.1 (193.0-224.2) |
| Warren | 450.5 (430.9-470.5) | 196.7 (184.4-209.7) |
| Washington | 483.9 (461.5-506.7) | 182.4 (169.4-196.2) |
| Wayne | 448.6 (428.9-468.6) | 193.0 (180.8-205.8) |
| White | 474.1 (453.3-495.4) | 220.4 (207.1-234.3) |
| Whiteside | 472.4(461.1-483.7) | 189.7 (182.9-196.7) |
| Will | 493.4(488.6-498.3) | 196.3 (193.2-199.4) |
| Williamson | 495.0 (483.7-506.3) | 218.7 (211.6-226.1) |
| Winnebago | 480.7 (475.0-486.3) | 203.0 (199.4-206.6) |
| Woodford | 468.6 (453.7-483.9) | 174.5 (165.7-183.6) |

*Source: Illinois State Cancer Registry, Data as of November 2012

†Source: Calculated from underlying mortality data provided by NCHS (www.cdc.gov/nchs)

Appendix 5: Designated Regions Mortality Rates, Both Genders

| <i>Illinois Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 222.9 (221.3-224.6) | 221.4 (219.8-222.9) | 211.2 (209.7-212.7) | 208.8 (207.3-210.3) | 197.0 (195.8-198.2) | 183.9 (182.9-185.0) |
| Oral Cavity and Pharynx | 3.7 (3.5-3.9) | 3.2 (3.0-3.4) | 3.0 (2.8-3.2) | 2.6 (2.4-2.8) | 2.5 (2.4-2.7) | 2.4 (2.3-2.5) |
| Esophagus | 4.7 (4.4-4.9) | 4.7 (4.5-5.0) | 4.8 (4.6-5.1) | 4.7 (4.5-5.0) | 4.6 (4.4-4.8) | 4.6 (4.4-4.7) |
| Stomach | 6.1 (5.8-6.4) | 5.9 (5.6-6.1) | 5.2 (5.0-5.5) | 4.9 (4.6-5.1) | 4.5 (4.3-4.7) | 3.8 (3.7-4.0) |
| Colorectal | 26.8 (26.3-27.4) | 22.1 (21.6-22.6) | 23.2 (22.7-23.7) | 23.0 (22.5-23.4) | 20.5 (20.1-20.9) | 18.1 (17.7-18.4) |
| Liver | 3.4 (3.2-3.6) | 3.8 (3.6-4.0) | 4.0 (3.8-4.2) | 3.8 (3.6-4.0) | 3.8 (3.7-4.0) | 4.0 (3.8-4.1) |
| Pancreas | 11.3 (10.9-11.6) | 10.7 (10.3-11.0) | 11.0 (10.7-11.4) | 11.4 (11.0-11.7) | 11.3 (11.0-11.6) | 11.4 (11.1-11.6) |
| Lung and Bronchus | 58.7 (57.8-59.5) | 60.4 (59.6-61.2) | 58.1 (57.3-58.9) | 56.8 (56.0-57.6) | 55.1 (54.4-55.8) | 51.8 (51.2-52.4) |
| Bone | 0.4 (0.3-0.5) | 0.5 (0.4-0.6) | 0.4 (0.4-0.5) | 0.4 (0.4-0.5) | 0.4 (0.4-0.5) | 0.4 (0.4-0.4) |
| Melanoma | 2.3 (2.2-2.5) | 2.4 (2.2-2.6) | 2.4 (2.3-2.6) | 2.3 (2.1-2.4) | 2.5 (2.4-2.7) | 2.5 (2.4-2.6) |
| Bladder | 4.6 (4.3-4.8) | 4.5 (4.3-4.7) | 4.4 (4.2-4.6) | 4.5 (4.3-4.7) | 4.4 (4.2-4.6) | 4.5 (4.3-4.7) |
| Kidney | 4.5 (4.3-4.7) | 4.8 (4.5-5.0) | 4.5 (4.2-4.7) | 4.5 (4.3-4.8) | 4.4 (4.2-4.6) | 4.2 (4.0-4.3) |
| Nervous System | 4.6 (4.4-4.8) | 4.4 (4.2-4.7) | 4.1 (3.9-4.3) | 4.4 (4.2-4.6) | 3.9 (3.7-4.0) | 4.0 (3.8-4.1) |
| Hodgkin's lymphoma | 0.6 (0.5-0.7) | 0.5 (0.5-0.6) | 0.5 (0.4-0.6) | 0.5 (0.4-0.5) | 0.4 (0.4-0.5) | 0.4 (0.3-0.4) |
| Non-Hodgkin's lymphoma | 8.4 (8.1-8.7) | 9.0 (8.7-9.3) | 8.9 (8.6-9.2) | 8.5 (8.2-8.8) | 7.6 (7.3-7.8) | 6.6 (6.4-6.8) |
| Myeloma | 3.8 (3.6-4.0) | 4.1 (3.8-4.3) | 3.9 (3.7-4.1) | 4.0 (3.8-4.3) | 3.8 (3.6-4.0) | 3.5 (3.3-3.6) |
| Leukemia | 8.6 (8.2-8.9) | 8.4 (8.1-8.7) | 8.0 (7.7-8.3) | 8.2 (7.9-8.5) | 7.9 (7.7-8.2) | 7.5 (7.3-7.7) |

This table provides the comparative incidence rates for the subsequent tables in this appendix.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Southern Rural Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 214.0 (208.1-220.0) | 218.7 (212.8-224.7) | 213.2 (207.5-219.1) | 209.0 (203.3-214.7) | 201.5 (196.8-206.4) | 196.0 (191.8-200.2) |
| Oral Cavity and Pharynx | 3.4 (2.7-4.3) | 3.0 (2.3-3.8) | 3.0 (2.4-3.9) | 2.7 (2.1-3.5) | 2.3 (1.8-2.9) | 2.7 (2.2-3.3) |
| Esophagus | 3.6 (2.8-4.4) | 4.2 (3.4-5.2) | 4.4 (3.6-5.3) | 4.4 (3.6-5.3) | 4.8 (4.1-5.7) | 4.1 (3.5-4.8) |
| Stomach | 4.0 (3.3-4.9) | 3.4 (2.7-4.2) | 3.7 (3.0-4.6) | 3.3 (2.6-4.1) | 2.8 (2.3-3.5) | 2.6 (2.2-3.2) |
| Colorectal | 28.1 (26.0-30.4) | 27.1 (25.1-29.2) | 25.1 (23.2-27.2) | 24.4 (22.5-26.4) | 22.3 (20.8-24.0) | 20.1 (18.8-21.5) |
| Liver | 3.6 (2.8-4.4) | 3.9 (3.2-4.8) | 4.1 (3.3-5.0) | 3.4 (2.7-4.2) | 3.6 (3.0-4.3) | 4.2 (3.6-4.9) |
| Pancreas | 9.5 (8.3-10.8) | 9.4 (8.2-10.7) | 10.6 (9.3-11.9) | 10.5 (9.2-11.8) | 10.1 (9.0-11.2) | 11.1 (10.1-12.2) |
| Lung and Bronchus | 62.6 (59.4-65.9) | 64.8 (61.6-68.1) | 63.8 (60.7-67.1) | 60.7 (57.7-63.9) | 60.9 (58.3-63.6) | 62.8 (60.4-65.2) |
| Bone | ** | 1.1 (0.7-1.6) | 0.7 (0.4-1.1) | 0.6 (0.3-1.0) | 0.8 (0.5-1.1) | 0.8 (0.5-1.1) |
| Melanoma | 2.5 (1.9-3.3) | 3.3 (2.5-4.1) | 2.6 (2.0-3.3) | 3.1 (2.4-3.9) | 2.7 (2.2-3.4) | 2.4 (2.0-3.0) |
| Bladder | 4.2 (3.5-5.1) | 4.3 (3.5-5.2) | 4.6 (3.8-5.6) | 5.1 (4.3-6.1) | 4.0 (3.3-4.7) | 4.5 (3.9-5.2) |
| Kidney | 4.6 (3.7-5.5) | 5.4 (4.5-6.4) | 4.3 (3.5-5.2) | 4.3 (3.5-5.3) | 5.1 (4.3-5.9) | 4.9 (4.2-5.6) |
| Nervous System | 4.6 (3.7-5.6) | 6.2 (5.2-7.4) | 5.5 (4.6-6.6) | 5.6 (4.7-6.7) | 4.5 (3.8-5.4) | 5.3 (4.6-6.0) |
| Hodgkin's lymphoma | 0.7 (0.4-1.1) | ** | 0.4 (0.2-0.8) | 0.7 (0.4-1.1) | 0.5 (0.3-0.9) | 0.4 (0.2-0.6) |
| Non-Hodgkin's lymphoma | 8.2 (7.1-9.5) | 8.6 (7.4-9.8) | 7.8 (6.8-9.0) | 8.9 (7.7-10.1) | 8.5 (7.6-9.6) | 6.2 (5.4-7.0) |
| Myeloma | 3.4 (2.7-4.3) | 3.4 (2.8-4.3) | 3.1 (2.5-3.9) | 3.5 (2.8-4.4) | 3.9 (3.3-4.7) | 3.2 (2.7-3.8) |
| Leukemia | 8.3 (7.2-9.5) | 9.2 (8.0-10.5) | 7.8 (6.8-9.0) | 8.3 (7.2-9.5) | 8.6 (7.6-9.6) | 8.1 (7.2-9.0) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

*All Invasive Cancers rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Central Rural Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010

| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| All Invasive Cancers* | 214.8 (209.2-220.6) | 220.1 (214.4-225.9) | 209.2 (203.7-214.7) | 211.3 (205.8-216.9) | 198.2 (193.6-202.8) | 191.5 (187.5-195.5) |
| Oral Cavity and Pharynx | 3.7 (3.0-4.6) | 3.0 (2.4-3.8) | 2.9 (2.2-3.6) | 2.3 (1.8-3.0) | 2.7 (2.2-3.3) | 2.1 (1.7-2.5) |
| Esophagus | 3.4 (2.7-4.2) | 4.0 (3.2-4.9) | 4.2 (3.5-5.1) | 4.5 (3.7-5.4) | 4.3 (3.7-5.1) | 5.5 (4.8-6.2) |
| Stomach | 3.6 (2.9-4.4) | 4.0 (3.3-4.9) | 3.2 (2.5-3.9) | 3.2 (2.5-4.0) | 3.2 (2.7-3.9) | 2.2 (1.8-2.7) |
| Colorectal | 27.1 (25.1-29.2) | 27.2 (25.2-29.2) | 20.5 (18.9-22.3) | 23.2 (21.4-25.1) | 21.5 (20.0-23.0) | 19.4 (18.2-20.7) |
| Liver | 3.2 (2.5-3.9) | 3.0 (2.3-3.7) | 3.0 (2.3-3.7) | 3.5 (2.8-4.3) | 2.8 (2.3-3.4) | 3.4 (2.9-4.0) |
| Pancreas | 10.4 (9.2-11.7) | 9.6 (8.5-10.9) | 9.9 (8.7-11.1) | 11.0 (9.8-12.3) | 10.7 (9.7-11.9) | 10.0 (9.1-10.9) |
| Lung and Bronchus | 58.2 (55.3-61.2) | 63.3 (60.3-66.5) | 62.6 (59.6-65.7) | 63.0 (60.0-66.1) | 59.1 (56.6-61.7) | 59.9 (57.6-62.2) |
| Bone | 0.6 (0.3-1.0) | 0.7 (0.4-1.2) | ** | 0.5 (0.3-0.9) | 0.4 (0.2-0.7) | 0.4 (0.2-0.6) |
| Melanoma | 3.3 (2.6-4.2) | 2.8 (2.2-3.6) | 2.7 (2.1-3.5) | 3.2 (2.5-4.0) | 3.2 (2.6-3.9) | 3.0 (2.5-3.6) |
| Bladder | 4.3 (3.6-5.2) | 4.3 (3.5-5.1) | 4.0 (3.3-4.8) | 4.6 (3.8-5.4) | 5.1 (4.4-5.8) | 4.5 (3.9-5.2) |
| Kidney | 5.4 (4.5-6.4) | 5.5 (4.7-6.5) | 4.1 (3.3-4.9) | 5.2 (4.3-6.2) | 5.0 (4.3-5.8) | 5.1 (4.4-5.8) |
| Nervous System | 4.3 (3.5-5.2) | 4.4 (3.6-5.3) | 5.1 (4.3-6.1) | 4.4 (3.6-5.3) | 4.3 (3.6-5.1) | 4.1 (3.5-4.7) |
| Hodgkin's lymphoma | 0.4 (0.2-0.8) | ** | 0.5 (0.3-0.9) | 0.5 (0.3-0.9) | 0.4 (0.2-0.7) | 0.4 (0.2-0.6) |
| Non-Hodgkin's lymphoma | 8.8 (7.7-10.0) | 10.5 (9.3-11.9) | 9.2 (8.1-10.5) | 9.0 (7.9-10.2) | 8.2 (7.3-9.2) | 7.2 (6.5-8.1) |
| Myeloma | 3.4 (2.8-4.2) | 4.3 (3.6-5.2) | 3.8 (3.1-4.6) | 4.1 (3.4-4.9) | 4.0 (3.4-4.7) | 3.1 (2.6-3.7) |
| Leukemia | 9.1 (8.0-10.4) | 8.9 (7.8-10.1) | 8.1 (7.0-9.3) | 8.9 (7.8-10.1) | 8.1 (7.2-9.1) | 7.6 (6.8-8.5) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| Northern Rural Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010 | | | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 208.8 (203.2-214.6) | 208.8 (203.3-214.5) | 199.7 (194.4-205.2) | 200.7 (195.4-206.0) | 197.4 (192.9-202.0) | 184.8 (181.1-188.7) |
| Oral Cavity and Pharynx | 2.2 (1.7-2.9) | 2.5 (2.0-3.3) | 2.8 (2.2-3.6) | 2.1 (1.6 -2.7) | 2.3 (1.8 -2.8) | 2.4 (2.0-2.9) |
| Esophagus | 3.9 (3.2-4.8) | 4.3 (3.5-5.2) | 5.0 (4.1-5.9) | 5.4 (4.6-6.4) | 5.1 (4.4-5.9) | 5.0 (4.4-5.6) |
| Stomach | 3.8 (3.1-4.6) | 3.5 (2.8-4.3) | 4.0 (3.3-4.9) | 3.3 (2.7-4.1) | 2.9 (2.4-3.5) | 2.5 (2.1-3.0) |
| Colorectal | 25.1 (23.1-27.1) | 23.5 (21.7-25.4) | 23.6 (21.8-25.5) | 22.9 (21.2-24.8) | 21.6 (20.1-23.1) | 17.9 (16.8-19.1) |
| Liver | 2.7 (2.1 -3.5) | 2.7 (2.1-3.4) | 3.3 (2.7-4.1) | 2.4 (1.8-3.0) | 2.8 (2.3-3.3) | 2.8 (2.3-3.3) |
| Pancreas | 9.7 (8.5-11.0) | 10.6 (9.4-11.9) | 9.0 (7.9-10.2) | 10.0 (8.8-11.2) | 10.1 (9.1-11.2) | 10.7 (9.8-11.7) |
| Lung and Bronchus | 55.7 (52.8-58.8) | 55.3 (52.4-58.2) | 55.1 (52.4-58.0) | 56.0 (53.2-58.9) | 57.7 (55.3-60.2) | 54.7 (52.6 -56.8) |
| Bone | ** | 0.7 (0.4-1.1) | 0.5 (0.3-0.9) | 0.7 (0.4-1.1) | 0.5 (0.3-0.8) | 0.4 (0.2-0.6) |
| Melanoma | 2.6 (2.0-3.4) | 3.1 (2.4-3.9) | 2.9 (2.2-3.6) | 2.7 (2.1-3.4) | 3.7 (3.1-4.4) | 3.4 (2.9-4.0) |
| Bladder | 4.2 (3.5-5.1) | 4.2 (3.4-5.0) | 5.1 (4.3-6.0) | 4.1 (3.4 -4.9) | 4.3 (3.7-5.0) | 4.8 (4.2-5.4) |
| Kidney | 5.1 (4.2-6.0) | 4.6 (3.8 -5.5) | 4.5 (3.8 -5.4) | 4.8 (4.0-5.7) | 4.6 (4.0-5.4) | 5.1 (4.5-5.8) |
| Nervous System | 4.9 (4.1-5.9) | 5.0 (4.2-6.0) | 3.8 (3.1-4.7) | 4.8 (4.0-5.7) | 4.7 (4.0-5.5) | 4.4 (3.8-5.0) |
| Hodgkin's lymphoma | 0.6 (0.3-1.0) | 0.8 (0.5-1.3) | 0.7 (0.4-1.2) | ** | 0.5 (0.3 -0.8) | 0.5 (0.3-0.8) |
| Non-Hodgkin's lymphoma | 8.0 (6.9-9.2) | 8.5 (7.4-9.7) | 8.9 (7.8-10.1) | 9.0 (7.9-10.2) | 7.3 (6.5-8.2) | 7.0 (6.3-7.8) |
| Myeloma | 4.1 (3.3-4.9) | 3.0 (2.4 -3.7) | 3.4 (2.7-4.2) | 3.6 (3.0-4.4) | 3.7 (3.2-4.4) | 3.4 (2.9-3.9) |
| Leukemia | 9.8 (8.6-11.1) | 8.7 (7.6-9.9) | 7.1 (6.2 -8.2) | 8.2 (7.1-9.3) | 8.0 (7.1-8.9) | 8.4 (7.6-9.3) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| Small Urban Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010 | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 219.4 (215.6-223.2) | 219.6 (216.0-223.4) | 211.2 (207.6-214.8) | 212.5 (209.0-216.1) | 200.4 (197.5-203.4) | 187.0 (184.6-189.5) |
| Oral Cavity and Pharynx | 3.4 (2.9-3.9) | 2.8 (2.4-3.3) | 2.8 (2.4-3.2) | 2.7 (2.3-3.1) | 2.8 (2.4-3.1) | 2.6 (2.3-2.9) |
| Esophagus | 4.2 (3.7-4.8) | 4.5 (4.0-5.0) | 4.4 (3.9-4.9) | 4.4 (3.9-4.9) | 5.0 (4.6-5.5) | 5.2 (4.8-5.6) |
| Stomach | 4.5 (4.0-5.1) | 5.0 (4.5-5.6) | 3.9 (3.4-4.4) | 3.8 (3.4-4.4) | 3.4 (3.0-3.8) | 2.7 (2.4-3.0) |
| Colorectal | 26.1 (24.8-27.4) | 26.1 (24.9-27.4) | 22.6 (21.5-23.8) | 21.5 (20.4-22.6) | 19.1 (18.2-20.1) | 17.5 (16.8-18.3) |
| Liver | 2.5 (2.1-2.9) | 2.7 (2.3-3.1) | 3.0 (2.6-3.5) | 2.9 (2.5-3.3) | 3.3 (2.9-3.7) | 3.4 (3.1-3.7) |
| Pancreas | 10.5 (9.6-11.3) | 9.9 (9.1-10.7) | 10.5 (9.7-11.3) | 11.5 (10.7-12.3) | 10.5 (9.8-11.1) | 10.3 (9.7-10.9) |
| Lung and Bronchus | 60.2 (58.3-62.2) | 63.3 (61.3-65.3) | 62.4 (60.5-64.4) | 62.4 (60.5-64.3) | 60.2 (58.6-61.8) | 57.1 (55.7-58.4) |
| Bone | 0.5 (0.3-0.7) | 0.3 (0.2-0.5) | 0.4 (0.3-0.6) | 0.3 (0.2-0.5) | 0.4 (0.2-0.5) | 0.4 (0.3-0.5) |
| Melanoma | 2.6 (2.2-3.1) | 2.3 (1.9-2.7) | 2.7 (2.3-3.1) | 2.3 (2.0-2.7) | 2.7 (2.4-3.1) | 2.6 (2.4-3.0) |
| Bladder | 4.5 (4.0-5.1) | 4.8 (4.3-5.4) | 4.6 (4.0-5.1) | 4.5 (4.0-5.1) | 4.7 (4.2-5.1) | 5.0 (4.6-5.4) |
| Kidney | 4.4 (3.9-5.0) | 4.9 (4.4-5.5) | 5.2 (4.7-5.8) | 4.6 (4.1-5.1) | 4.4 (4.0-4.9) | 4.6 (4.2-5.0) |
| Nervous System | 4.4 (3.9-5.0) | 4.4 (3.9-5.0) | 4.2 (3.7-4.7) | 5.0 (4.4-5.5) | 4.2 (3.8-4.6) | 4.6 (4.2-5.0) |
| Hodgkin's lymphoma | 0.5 (0.4-0.8) | 0.5 (0.3-0.7) | 0.6 (0.4-0.8) | 0.5 (0.3-0.7) | 0.5 (0.3-0.6) | 0.4 (0.3-0.5) |
| Non-Hodgkin's lymphoma | 9.0 (8.3-9.8) | 9.3 (8.6-10.1) | 8.7 (8.0-9.5) | 8.9 (8.1-9.6) | 8.2 (7.6-8.8) | 7.0 (6.5-7.5) |
| Myeloma | 4.1 (3.6-4.6) | 4.3 (3.8-4.9) | 4.3 (3.8-4.8) | 4.3 (3.8-4.8) | 3.9 (3.5-4.4) | 3.3 (2.9-3.6) |
| Leukemia | 8.7 (7.9-9.5) | 8.7 (8.0-9.5) | 8.6 (7.9-9.3) | 7.7 (7.0-8.4) | 8.1 (7.5-8.7) | 7.4 (6.9-7.9) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Collar Counties Cancer Mortality Rates per 100,000, Both Genders, 1990-2010</i> | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 211.2 (207.1-215.4) | 206.0 (202.1-209.9) | 196.9 (193.3-200.6) | 197.2 (193.7-200.7) | 185.9 (183.1-188.8) | 171.5 (169.2-173.8) |
| Oral Cavity and Pharynx | 2.7 (2.2-3.2) | 3.0 (2.5-3.5) | 2.5 (2.1-2.9) | 2.1 (1.7-2.4) | 2.3 (2.0-2.6) | 2.2 (1.9-2.4) |
| Esophagus | 3.9 (3.4-4.5) | 4.2 (3.7-4.8) | 4.3 (3.8-4.9) | 4.5 (4.0-5.1) | 4.4 (4.0-4.8) | 4.4 (4.0-4.8) |
| Stomach | 6.5 (5.7-7.2) | 6.0 (5.4-6.7) | 4.7 (4.1-5.3) | 4.4 (3.9-4.9) | 4.0 (3.6-4.5) | 3.6 (3.3-3.9) |
| Colorectal | 21.0 (19.7-22.4) | 22.6 (21.3-23.9) | 21.2 (20.0-22.4) | 21.0 (19.9-22.2) | 18.4 (17.5-19.3) | 15.6 (14.9-16.3) |
| Liver | 2.9 (2.4-3.4) | 3.4 (2.9-3.9) | 3.5 (3.0-4.0) | 3.2 (2.8-3.7) | 3.5 (3.1-3.9) | 3.3 (3.0-3.6) |
| Pancreas | 11.4 (10.4-12.4) | 10.3 (9.4-11.2) | 10.1 (9.3-11.0) | 11.0 (10.2-11.9) | 11.3 (10.6-12.0) | 11.3 (10.7-11.9) |
| Lung and Bronchus | 54.7 (52.6-56.8) | 55.2 (53.3-57.3) | 52.5 (50.6-54.4) | 52.1 (50.3-53.9) | 50.8 (49.3-52.3) | 46.2 (45.0-47.4) |
| Bone | 0.3 (0.2-0.5) | 0.4 (0.3-0.6) | 0.5 (0.3-0.7) | 0.3 (0.2-0.5) | 0.4 (0.3-0.6) | 0.3 (0.2-0.4) |
| Melanoma | 2.3 (1.9-2.8) | 2.5 (2.1-3.0) | 2.4 (2.0-2.8) | 2.5 (2.1-2.9) | 2.8 (2.5-3.2) | 2.9 (2.6-3.2) |
| Bladder | 4.7 (4.1-5.4) | 4.5 (4.0-5.2) | 4.5 (3.9-5.1) | 4.1 (3.6-4.6) | 4.4 (4.0-4.9) | 4.2 (3.8-4.6) |
| Kidney | 4.5 (3.9-5.1) | 4.2 (3.6-4.8) | 4.2 (3.6-4.7) | 4.8 (4.2-5.4) | 4.2 (3.8-4.6) | 3.8 (3.4-4.1) |
| Nervous System | 5.2 (4.6-5.9) | 4.5 (4.0-5.1) | 4.5 (4.0-5.0) | 4.8 (4.2-5.3) | 3.9 (3.5-4.3) | 4.2 (3.9-4.6) |
| Hodgkin's lymphoma | 0.4 (0.2-0.6) | 0.6 (0.4-0.8) | 0.5 (0.3-0.7) | 0.6 (0.4-0.8) | 0.4 (0.3-0.6) | 0.3 (0.3-0.5) |
| Non-Hodgkin's lymphoma | 7.8 (7.0-8.7) | 9.0 (8.2-9.9) | 9.0 (8.3-9.8) | 8.9 (8.1-9.7) | 7.5 (6.9-8.1) | 7.1 (6.7-7.6) |
| Myeloma | 3.2 (2.7-3.7) | 3.6 (3.1-4.1) | 3.3 (2.8-3.8) | 3.8 (3.3-4.3) | 3.3 (3.0-3.7) | 3.3 (3.0-3.7) |
| Leukemia | 8.0 (7.2-8.8) | 7.3 (6.6-8.1) | 7.5 (6.8-8.2) | 8.6 (7.9-9.4) | 8.7 (8.1-9.3) | 7.6 (7.1-8.1) |

Cells in blue indicate mortality rates significantly lower than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Cook County Cancer Mortality Rates per 100,000, Both Genders, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 235.1 (232.6-237.6) | 232.0 (229.5-234.5) | 220.4 (218.1-222.9) | 214.6 (212.3-216.9) | 201.0 (199.0-203.0) | 187.1 (185.5-188.8) |
| Oral Cavity and Pharynx | 4.6 (4.3-5.0) | 3.7 (3.4-4.0) | 3.4 (3.1-3.7) | 2.9 (2.6-3.2) | 2.7 (2.5-2.9) | 2.5 (2.3-2.7) |
| Esophagus | 5.7 (5.3-6.1) | 5.4 (5.0-5.8) | 5.4 (5.1-5.8) | 5.1 (4.7-5.4) | 4.5 (4.3-4.8) | 4.3 (4.1-4.6) |
| Stomach | 8.0 (7.5-8.5) | 7.4 (7.0-7.9) | 6.9 (6.4-7.3) | 6.4 (6.0-6.8) | 6.0 (5.7-6.3) | 5.3 (5.0-5.6) |
| Colorectal | 28.3 (27.5-29.2) | 26.2 (25.4-27.0) | 23.8 (23.0-24.6) | 21.5 (20.7-22.2) | 21.4 (20.8-22.1) | 19.2 (18.6-19.7) |
| Liver | 4.3 (4.0-4.7) | 4.8 (4.5-5.2) | 4.9 (4.6-5.3) | 4.8 (4.5-5.2) | 4.7 (4.4-5.0) | 4.9 (4.7-5.2) |
| Pancreas | 12.4 (11.8-13.0) | 11.6 (11.1-12.2) | 12.3 (11.7-12.8) | 12.0 (11.5-12.6) | 12.4 (11.9-12.9) | 12.4 (12.0-12.9) |
| Lung and Bronchus | 59.7 (58.5-61.0) | 61.1 (59.9-62.4) | 57.8 (56.5-59.0) | 55.2 (54.0-56.4) | 53.1 (52.1-54.2) | 48.9 (48.1-49.8) |
| Bone | 0.4 (0.3-0.5) | 0.5 (0.4-0.6) | 0.4 (0.3-0.6) | 0.4 (0.3-0.6) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) |
| Melanoma | 2.0 (1.7-2.2) | 2.1 (1.8-2.3) | 2.2 (1.9-2.4) | 1.8 (1.6-2.0) | 2.0 (1.8-2.2) | 2.0 (1.8-2.1) |
| Bladder | 4.7 (4.3-5.1) | 4.5 (4.2-4.9) | 4.2 (3.9-4.5) | 4.6 (4.3-4.9) | 4.3 (4.0-4.6) | 4.4 (4.1-4.7) |
| Kidney | 4.3 (4.0-4.7) | 4.8 (4.4-5.1) | 4.4 (4.0-4.7) | 4.3 (4.0-4.7) | 4.3 (4.0-4.6) | 3.8 (3.6-4.0) |
| Nervous System | 4.5 (4.1-4.8) | 4.1 (3.8-4.5) | 3.6 (3.3-4.0) | 3.8 (3.5-4.1) | 3.4 (3.2-3.7) | 3.3 (3.1-3.6) |
| Hodgkin's lymphoma | 0.7 (0.6-0.9) | 0.6 (0.5-0.7) | 0.5 (0.4-0.6) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.4 (0.3-0.4) |
| Non-Hodgkin's lymphoma | 8.3 (7.8-8.8) | 8.9 (8.4-9.4) | 8.9 (8.4-9.4) | 7.9 (7.5-8.4) | 7.1 (6.8-7.5) | 6.1 (5.8-6.4) |
| Myeloma | 3.9 (3.6-4.3) | 4.4 (4.1-4.8) | 4.3 (3.9-4.6) | 4.2 (3.9-4.5) | 3.9 (3.7-4.2) | 3.8 (3.6-4.0) |
| Leukemia | 8.4 (8.0-8.9) | 8.4 (7.9-8.9) | 8.2 (7.7-8.6) | 8.2 (7.8-8.7) | 7.3 (7.0-7.7) | 7.1 (6.8-7.4) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Appendix 6: Designated Regions Mortality Rates, Male

| <i>Illinois Cancer Mortality Rates per 100,000, Male, 1990-2010</i> | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 290.0 (287.0-293.1) | 285.8 (282.9-288.8) | 269.0 (266.3-271.8) | 262.5 (259.9-265.2) | 244.3 (242.1-246.5) | 223.3 (221.5-225.1) |
| Oral Cavity and Pharynx | 5.9 (5.5-6.4) | 5.2 (4.8-5.6) | 5.0 (4.6-5.3) | 4.1 (3.8-4.5) | 4.0 (3.7-4.2) | 3.5 (3.3-3.7) |
| Esophagus | 8.2 (7.7-8.7) | 8.3 (7.9-8.8) | 8.6 (8.1-9.1) | 8.5 (8.0-9.0) | 8.3 (7.9-8.7) | 8.3 (7.9-8.6) |
| Stomach | 9.0 (8.5-9.6) | 8.3 (7.8-8.8) | 7.9 (7.4-8.3) | 6.8 (6.4-7.2) | 6.4 (6.0-6.7) | 5.2 (5.0-5.5) |
| Colorectal | 34.3 (33.3-35.4) | 31.9 (31.0-32.9) | 29.1 (28.1-30.0) | 28.3 (27.5-29.2) | 25.6 (24.9-26.3) | 21.7 (21.1-22.3) |
| Liver | 5.1 (4.7-5.5) | 5.6 (5.3-6.1) | 6.0 (5.6-6.4) | 5.6 (5.2-5.9) | 6.0 (5.6-6.3) | 6.3 (6.0-6.6) |
| Pancreas | 13.2 (12.6-13.9) | 12.6 (12.0-13.3) | 12.8 (12.2-13.4) | 12.9 (12.4-13.5) | 13.3 (12.8-13.8) | 13.0 (12.5-13.4) |
| Lung and Bronchus | 90.8 (89.1-92.4) | 89.8 (88.2-91.4) | 83.0 (81.5-84.5) | 79.6 (78.2-81.1) | 73.4 (72.3-74.6) | 65.8 (64.9-66.8) |
| Bone | 0.5 (0.4-0.6) | 0.6 (0.5-0.8) | 0.5 (0.4-0.7) | 0.5 (0.4-0.6) | 0.5 (0.4-0.6) | 0.5 (0.4-0.6) |
| Melanoma | 3.2 (2.9-3.5) | 3.3 (3.0-3.6) | 3.4 (3.1-3.8) | 3.2 (3.0-3.5) | 3.6 (3.4-3.9) | 3.7 (3.5-3.9) |
| Prostate | 39.8 (38.6-41.0) | 38.8 (37.7-40.0) | 35.8 (34.7-36.9) | 32.7 (31.7-33.7) | 27.7 (27.0-28.5) | 24.3 (23.6-24.9) |
| Testis | 0.2 (0.2-0.3) | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) | 0.2 (0.2-0.3) | 0.2 (0.2-0.3) | 0.3 (0.2-0.3) |
| Bladder | 8.3 (7.8-8.9) | 8.4 (7.9-9.0) | 7.7 (7.2-8.2) | 7.8 (7.3-8.3) | 7.7 (7.3-8.1) | 7.9 (7.5-8.2) |
| Kidney | 6.5 (6.0-6.9) | 6.8 (6.4-7.3) | 6.5 (6.1-7.0) | 6.5 (6.1-6.9) | 6.6 (6.2-6.9) | 5.9 (5.6-6.2) |
| Nervous System | 5.7 (5.3-6.1) | 5.4 (5.1-5.8) | 5.2 (4.9-5.6) | 5.4 (5.1-5.8) | 4.6 (4.3-4.9) | 4.9 (4.6-5.1) |
| Hodgkin's lymphoma | 0.8 (0.6-0.9) | 0.6 (0.5-0.7) | 0.7 (0.6-0.9) | 0.6 (0.5-0.8) | 0.6 (0.5-0.7) | 0.5 (0.4-0.5) |
| Non-Hodgkin's lymphoma | 10.9 (10.3-11.5) | 11.3 (10.7-11.9) | 11.2 (10.7-11.8) | 11.0 (10.4-11.5) | 9.5 (9.1-10.0) | 8.5 (8.1-8.9) |
| Myeloma | 4.6 (4.2-5.0) | 4.9 (4.5-5.2) | 4.8 (4.4-5.1) | 4.8 (4.5-5.2) | 4.6 (4.3-4.9) | 4.5 (4.2-4.8) |
| Leukemia | 11.2 (10.6-11.8) | 11.7 (11.1-12.3) | 10.7 (10.2-11.3) | 10.9 (10.3-11.4) | 11.0 (10.5-11.5) | 10.1 (9.7-10.5) |

This table provides the comparative incidence rates for the subsequent tables in this appendix.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Southern Rural Region Cancer Mortality Rates per 100,000, Male, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 285.8 (275.2-296.8) | 292.3 (281.7-303.2) | 279.8 (269.5-290.3) | 274.2 (264.2-284.5) | 257.9 (249.6-266.4) | 245.7 (238.7-253.0) |
| Oral Cavity and Pharynx | 5.7 (4.3-7.5) | 5.0 (3.7-6.5) | 5.1 (3.8-6.6) | 4.5 (3.3-5.9) | 3.4 (2.5-4.5) | 4.3 (3.4-5.3) |
| Esophagus | 6.5 (5.0-8.4) | 7.5 (5.9-9.4) | 7.9 (6.3-9.9) | 8.2 (6.6-10.2) | 8.7 (7.3-10.4) | 7.3 (6.1-8.6) |
| Stomach | 5.2 (3.9-6.9) | 4.3 (3.1-5.8) | 5.7 (4.3-7.4) | 4.3 (3.1-5.8) | 3.8 (2.8-4.9) | 3.3 (2.6-4.3) |
| Colorectal | 35.0 (31.3-39.0) | 34.6 (31.0-38.5) | 28.7 (25.5-32.2) | 29.6 (26.4-33.1) | 28.1 (25.4-31.1) | 24.4 (22.2-26.7) |
| Liver | 3.5 (2.4-5.0) | 5.3 (4.0-6.9) | 5.4 (4.0-7.0) | 5.2 (3.9-6.7) | 5.1 (4.0-6.4) | 6.6 (5.5-7.9) |
| Pancreas | 10.8 (8.8-13.2) | 10.8 (8.8-13.0) | 12.0 (10.0-14.4) | 11.3 (9.3-13.5) | 13.0 (11.2-15.0) | 13.2 (11.6-15.0) |
| Lung and Bronchus | 102.5 (96.3-109.1) | 104.8 (98.5-111.3) | 98.9 (92.9-105.1) | 93.3 (87.5-99.3) | 86.9 (82.1-91.8) | 85.2 (81.1-89.5) |
| Bone | ** | 1.5 (0.8-2.4) | ** | ** | ** | 1.0 (0.6-1.6) |
| Melanoma | 3.5 (2.4-5.0) | 3.9 (2.8-5.3) | 3.9 (2.7-5.3) | 4.6 (3.4-6.1) | 3.8 (2.8-4.9) | 3.6 (2.8-4.6) |
| Prostate | 34.7 (30.9-38.8) | 34.9 (31.2-38.9) | 31.5 (28.0-35.3) | 31.0 (27.6-34.7) | 26.6 (23.9-29.6) | 22.2 (20.0-24.5) |
| Testis | ** | ** | ** | ** | ** | ** |
| Bladder | 8.1 (6.4-10.2) | 8.1 (6.4-10.2) | 7.8 (6.2-9.8) | 9.0 (7.3-11.1) | 6.9 (5.6-8.5) | 8.0 (6.8-9.4) |
| Kidney | 7.3 (5.7-9.2) | 6.8 (5.3-8.7) | 6.0 (4.5-7.7) | 6.0 (4.6-7.7) | 8.0 (6.6-9.7) | 6.8 (5.7-8.2) |
| Nervous System | 5.6 (4.3-7.3) | 7.3 (5.7-9.2) | 7.7 (6.1-9.6) | 6.4 (4.9-8.1) | 5.3 (4.2-6.7) | 6.4 (5.3-7.7) |
| Hodgkin's lymphoma | ** | ** | ** | 1.1 (0.5-1.9) | 1.0 (0.5-1.7) | ** |
| Non-Hodgkin's lymphoma | 10.8 (8.8-13.1) | 10.9 (9.0-13.2) | 10.8 (8.9-13.0) | 12.9 (10.8-15.2) | 10.8 (9.1-12.7) | 6.9 (5.7-8.2) |
| Myeloma | 3.9 (2.8-5.4) | 3.5 (2.5-4.9) | 4.1 (2.9-5.5) | 4.9 (3.6-6.4) | 4.6 (3.6-5.9) | 4.1 (3.3-5.2) |
| Leukemia | 11.0 (8.9-13.3) | 12.6 (10.5-15.1) | 11.3 (9.3-13.6) | 11.6 (9.6-13.9) | 11.5 (9.7-13.4) | 11.3 (9.8-13.0) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Central Rural Region Cancer Mortality Rates per 100,000, Male, 1990-2010 | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 283.3 (273.2-293.7) | 281.6 (271.6-291.8) | 266.6 (257.0-276.4) | 274.5 (264.9-284.4) | 251.9 (244.0-260.0) | 236.7 (230.0-243.5) |
| Oral Cavity and Pharynx | 6.1 (4.7-7.8) | 4.6 (3.4-6.0) | 4.4 (3.3-5.9) | 4.0 (2.9-5.3) | 4.0 (3.1-5.2) | 2.8 (2.1-3.6) |
| Esophagus | 6.3 (4.9-8.1) | 7.2 (5.7-9.0) | 8.2 (6.6-10.0) | 8.4 (6.8-10.3) | 8.0 (6.7-9.5) | 9.9 (8.6-11.3) |
| Stomach | 6.0 (4.6-7.8) | 4.7 (3.5-6.2) | 4.5 (3.3-6.0) | 4.3 (3.2-5.7) | 4.9 (3.9-6.2) | 2.7 (2.0-3.6) |
| Colorectal | 33.0 (29.6-36.8) | 29.2 (26.0-32.6) | 29.1 (26.0-32.5) | 29.5 (26.4-32.9) | 27.1 (24.5-29.8) | 23.3 (21.2-25.5) |
| Liver | 4.6 (3.4-6.1) | 4.0 (2.9-5.4) | 3.7 (2.6-5.0) | 7.0 (5.5-8.7) | 3.8 (2.9-5.0) | 5.0 (4.1-6.1) |
| Pancreas | 11.5 (9.6-13.8) | 11.7 (9.7-13.9) | 11.1 (9.2-13.2) | 11.7 (9.8-13.9) | 12.4 (10.7-14.3) | 11.5 (10.0-13.1) |
| Lung and Bronchus | 96.4 (90.7-102.5) | 96.0 (90.3-102.0) | 93.8 (88.2-99.7) | 94.0 (88.5-99.8) | 81.2 (76.8-85.8) | 79.0 (75.2-83.0) |
| Bone | ** | ** | ** | ** | ** | ** |
| Melanoma | 4.2 (3.1-5.7) | 3.6 (2.5-4.9) | 4.0 (2.9-5.4) | 4.6 (3.5-6.1) | 5.2 (4.1-6.5) | 4.5 (3.7-5.6) |
| Prostate | 36.6 (33.0-40.6) | 35.5 (31.9-39.3) | 33.7 (30.3-37.4) | 28.9 (25.8-32.3) | 24.9 (22.4-27.6) | 20.9 (18.9-23.0) |
| Testis | ** | ** | ** | ** | ** | ** |
| Bladder | 7.8 (6.2-9.8) | 7.5 (5.9-9.3) | 6.7 (5.3-8.5) | 8.7 (7.0-10.6) | 8.2 (6.8-9.8) | 8.3 (7.1-9.7) |
| Kidney | 7.4 (5.8-9.2) | 7.5 (5.9-9.3) | 5.8 (4.5-7.4) | 6.9 (5.4-8.6) | 6.9 (5.7-8.4) | 6.9 (5.8-8.2) |
| Nervous System | 4.9 (3.7-6.5) | 5.5 (4.2-7.1) | 6.4 (5.0-8.1) | 5.4 (4.1-7.0) | 4.6 (3.5-5.8) | 4.5 (3.6-5.6) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 11.0 (9.1-13.3) | 12.4 (10.3-14.7) | 11.7 (9.8-14.0) | 11.2 (9.3-13.3) | 9.9 (8.4-11.7) | 9.3 (8.0-10.7) |
| Myeloma | 4.6 (3.4-6.1) | 4.5 (3.3-5.9) | 3.8 (2.8-5.2) | 5.5 (4.2-7.0) | 4.7 (3.7-5.9) | 4.4 (3.5-5.4) |
| Leukemia | 12.2 (10.2-14.6) | 12.2 (10.2-14.5) | 11.6 (9.7-13.9) | 10.7 (8.9-12.9) | 11.6 (9.9-13.5) | 10.7 (9.3-12.2) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| <i>Northern Rural Region Cancer Mortality Rates per 100,000, Male, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 274.4 (264.3-284.8) | 260.8 (251.2-270.7) | 256.7 (247.3-266.4) | 254.6 (245.5-264.0) | 246.5 (238.8-254.3) | 223.6 (217.3-230.0) |
| Oral Cavity and Pharynx | 3.4 (2.4-4.7) | 4.3 (3.1-5.7) | 4.7 (3.5-6.1) | 2.9 (2.0-4.1) | 3.2 (2.4-4.2) | 3.7 (3.0-4.6) |
| Esophagus | 7.7 (6.1-9.5) | 8.4 (6.8-10.3) | 8.4 (6.8-10.3) | 11.0 (9.2-13.1) | 9.9 (8.4-11.5) | 9.4 (8.1-10.7) |
| Stomach | 5.8 (4.4-7.5) | 4.2 (3.1-5.6) | 5.9 (4.6-7.6) | 5.1 (3.9-6.6) | 4.4 (3.4-5.6) | 3.3 (2.6-4.1) |
| Colorectal | 32.9 (29.5-36.7) | 26.1 (23.2-29.4) | 30.7 (27.5-34.1) | 27.2 (24.3-30.4) | 28.1 (25.6-30.9) | 21.4 (19.5-23.5) |
| Liver | 3.8 (2.7-5.3) | 3.5 (2.5-4.8) | 4.4 (3.3-5.8) | 3.3 (2.3-4.5) | 4.1 (3.2-5.2) | 4.2 (3.4-5.1) |
| Pancreas | 13.0 (10.8-15.4) | 11.9 (10.0-14.2) | 10.1 (8.3-12.1) | 10.7 (8.9-12.8) | 11.8 (10.2-13.6) | 13.0 (11.6-14.6) |
| Lung and Bronchus | 85.6 (80.1-91.3) | 83.1 (77.8-88.6) | 79.8 (74.6-85.1) | 79.7 (74.7-85.0) | 76.1 (71.9-80.4) | 68.9 (65.5-72.5) |
| Bone | ** | ** | ** | ** | ** | ** |
| Melanoma | 3.2 (2.2-4.5) | 3.9 (2.8-5.3) | 3.9 (2.8-5.3) | 3.7 (2.7-5.0) | 5.5 (4.4-6.8) | 4.4 (3.5-5.4) |
| Prostate | 38.5 (34.7-42.7) | 33.6 (30.1-37.5) | 33.3 (29.9-37.1) | 29.5 (26.4-32.9) | 26.6 (24.1-29.3) | 19.2 (17.3-21.2) |
| Testis | ** | ** | ** | ** | ** | ** |
| Bladder | 8.3 (6.6-10.3) | 8.6 (6.9-10.6) | 8.5 (6.8-10.5) | 7.3 (5.8-9.0) | 8.2 (6.8-9.7) | 8.5 (7.3-9.8) |
| Kidney | 7.5 (5.9-9.4) | 6.2 (4.8-7.9) | 5.9 (4.5-7.5) | 6.7 (5.3-8.3) | 6.6 (5.4-7.9) | 6.6 (5.5-7.8) |
| Nervous System | 6.6 (5.1-8.3) | 6.0 (4.6-7.6) | 4.8 (3.6-6.3) | 5.5 (4.2-7.0) | 5.2 (4.1-6.4) | 4.9 (4.0-6.0) |
| Hodgkin's lymphoma | ** | ** | 1.2 (0.6-2.1) | ** | 0.7 (0.3-1.2) | 0.7 (0.4-1.2) |
| Non-Hodgkin's lymphoma | 10.9 (9.0-13.1) | 9.9 (8.1-12.0) | 11.0 (9.1-13.2) | 11.6 (9.7-13.7) | 8.9 (7.5-10.5) | 9.7 (8.4-11.2) |
| Myeloma | 4.5 (3.3-6.0) | 3.4 (2.4-4.6) | 3.7 (2.7-5.0) | 4.1 (3.0-5.4) | 4.8 (3.8-6.0) | 4.6 (3.7-5.6) |
| Leukemia | 13.2 (11.0-15.6) | 13.3 (11.2-15.7) | 10.0 (8.2-12.0) | 11.4 (9.5-13.6) | 10.8 (9.2-12.6) | 12.0 (10.5-13.5) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Small Urban Cancer Mortality Rates per 100,000, Male, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 290.6 (283.5-297.8) | 285.0 (278.2-291.9) | 271.2 (264.7-277.8) | 270.2 (263.9-276.7) | 251.6 (246.4-256.8) | 230.5 (226.3-234.7) |
| Oral Cavity and Pharynx | 5.3 (4.4-6.3) | 4.4 (3.6-5.3) | 4.7 (3.9-5.6) | 4.1 (3.4-5.0) | 4.4 (3.7-5.1) | 3.7 (3.2-4.3) |
| Esophagus | 7.6 (6.5-8.8) | 9.0 (7.9-10.3) | 7.9 (6.9-9.1) | 7.4 (6.4-8.5) | 9.0 (8.1-10.0) | 9.7 (8.8-10.6) |
| Stomach | 6.8 (5.7-7.9) | 7.2 (6.1-8.4) | 6.0 (5.0-7.0) | 5.6 (4.7-6.6) | 4.8 (4.1-5.5) | 4.1 (3.5-4.7) |
| Colorectal | 34.7 (32.3-37.3) | 32.0 (29.7-34.4) | 28.3 (26.2-30.5) | 26.3 (24.3-28.4) | 23.6 (22.0-25.2) | 21.2 (20.0-22.5) |
| Liver | 3.6 (2.8-4.5) | 3.5 (2.8-4.3) | 4.8 (4.0-5.7) | 4.0 (3.3-4.8) | 5.5 (4.8-6.3) | 5.6 (5.0-6.3) |
| Pancreas | 12.1 (10.7-13.6) | 11.8 (10.5-13.2) | 13.0 (11.6-14.5) | 14.5 (13.1-16.1) | 12.1 (11.0-13.3) | 11.8 (10.9-12.8) |
| Lung and Bronchus | 95.8 (91.8-99.8) | 93.4 (89.7-97.3) | 90.0 (86.4-93.8) | 86.9 (83.4-90.6) | 81.6 (78.8-84.6) | 72.8 (70.4-75.2) |
| Bone | 0.5 (0.3-0.9) | ** | 0.6 (0.3-0.9) | 0.4 (0.2-0.7) | 0.4 (0.2-0.6) | 0.6 (0.4-0.8) |
| Melanoma | 3.9 (3.1-4.8) | 3.2 (2.5-4.0) | 3.6 (2.9-4.4) | 3.1 (2.5-3.9) | 3.6 (3.0-4.2) | 4.1 (3.6-4.7) |
| Prostate | 37.5 (34.8-40.3) | 38.8 (36.1-41.7) | 32.2 (29.8-34.6) | 32.3 (30.0-34.7) | 26.9 (25.2-28.8) | 22.1 (20.7-23.5) |
| Testis | ** | ** | ** | ** | ** | 0.2 (0.1-0.4) |
| Bladder | 7.9 (6.7-9.3) | 9.1 (7.8-10.4) | 8.0 (6.9-9.3) | 8.3 (7.2-9.5) | 7.9 (7.0-8.9) | 8.9 (8.1-9.8) |
| Kidney | 6.4 (5.4-7.5) | 6.6 (5.6-7.7) | 7.9 (6.9-9.1) | 6.9 (6.0-8.0) | 6.3 (5.6-7.2) | 6.8 (6.1-7.5) |
| Nervous System | 6.0 (5.1-7.0) | 5.2 (4.4-6.2) | 5.4 (4.5-6.3) | 6.3 (5.4-7.3) | 5.0 (4.3-5.7) | 5.7 (5.0-6.3) |
| Hodgkin's lymphoma | 0.8 (0.5-1.2) | 0.5 (0.3-0.8) | 1.0 (0.6-1.4) | 0.7 (0.4-1.1) | 0.6 (0.4-1.0) | 0.5 (0.3-0.8) |
| Non-Hodgkin's lymphoma | 12.0 (10.6-13.6) | 12.0 (10.6-13.5) | 11.3 (10.0-12.6) | 11.5 (10.2-12.9) | 10.5 (9.5-11.7) | 9.0 (8.2-9.9) |
| Myeloma | 5.2 (4.3-6.2) | 5.1 (4.2-6.0) | 5.5 (4.6-6.5) | 5.0 (4.2-5.9) | 5.0 (4.3-5.8) | 4.6 (4.0-5.2) |
| Leukemia | 11.8 (10.4-13.3) | 11.9 (10.5-13.3) | 11.3 (10.0-12.8) | 10.5 (9.2-11.8) | 11.3 (10.2-12.4) | 10.1 (9.2-11.1) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Collar Counties Cancer Mortality Rates per 100,000, Male, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 266.6 (258.8-274.5) | 264.5 (257.1-272.0) | 242.9 (236.3-249.7) | 239.0 (232.8-245.4) | 225.7 (220.7-230.7) | 202.3 (198.5-206.3) |
| Oral Cavity and Pharynx | 4.8 (3.8-6.0) | 4.5 (3.6-5.5) | 3.9 (3.1-4.7) | 3.1 (2.5-3.8) | 3.5 (2.9-4.1) | 3.1 (2.7-3.6) |
| Esophagus | 6.2 (5.1-7.4) | 7.1 (6.0-8.3) | 7.8 (6.7-9.1) | 7.5 (6.5-8.7) | 7.6 (6.7-8.5) | 7.7 (7.0-8.5) |
| Stomach | 10.1 (8.7-11.8) | 9.4 (8.0-10.9) | 6.9 (5.8-8.1) | 5.8 (4.9-6.9) | 5.9 (5.1-6.7) | 4.9 (4.3-5.5) |
| Colorectal | 29.4 (26.9-32.2) | 29.4 (27.0-32.1) | 27.2 (25.0-29.6) | 25.2 (23.2-27.3) | 23.1 (21.5-24.7) | 18.7 (17.5-19.9) |
| Liver | 4.4 (3.5-5.4) | 5.0 (4.0-6.1) | 5.5 (4.6-6.5) | 4.9 (4.0-5.8) | 5.5 (4.7-6.3) | 5.4 (4.8-6.0) |
| Pancreas | 12.7 (11.1-14.4) | 11.8 (10.3-13.3) | 11.4 (10.1-12.9) | 13.0 (11.6-14.5) | 13.9 (12.7-15.1) | 12.4 (11.5-13.4) |
| Lung and Bronchus | 77.8 (73.8-81.9) | 78.6 (74.8-82.6) | 70.9 (67.4-74.5) | 67.4 (64.1-70.7) | 63.6 (61.0-66.2) | 54.6 (52.6-56.6) |
| Bone | ** | 0.8 (0.5-1.3) | 0.6 (0.3-1.0) | 0.6 (0.3-0.9) | 0.4 (0.2-0.6) | 0.4 (0.3-0.6) |
| Melanoma | 3.4 (2.6-4.3) | 3.7 (3.0-4.6) | 3.2 (2.6-4.0) | 3.8 (3.1-4.6) | 4.1 (3.5-4.8) | 4.0 (3.5-4.6) |
| Prostate | 38.9 (35.7-42.3) | 37.6 (34.5-40.8) | 33.6 (30.9-36.4) | 30.5 (28.1-33.1) | 25.0 (23.3-26.9) | 22.4 (21.1-23.8) |
| Testis | ** | ** | ** | ** | 0.2 (0.1-0.4) | 0.3 (0.2-0.4) |
| Bladder | 8.6 (7.2-10.2) | 9.2 (7.8-10.8) | 7.8 (6.6-9.2) | 6.5 (5.5-7.7) | 7.8 (6.8-8.8) | 7.0 (6.3-7.8) |
| Kidney | 6.7 (5.6-8.0) | 5.9 (4.9-7.1) | 6.2 (5.2-7.4) | 6.8 (5.8-7.9) | 6.4 (5.6-7.2) | 5.5 (4.9-6.2) |
| Nervous System | 6.2 (5.2-7.4) | 5.3 (4.4-6.3) | 4.8 (4.0-5.7) | 5.9 (5.0-6.9) | 4.8 (4.2-5.5) | 5.2 (4.6-5.8) |
| Hodgkin's lymphoma | 0.4 (0.2-0.8) | 0.6 (0.3-1.0) | 0.6 (0.3-1.0) | 0.6 (0.4-1.0) | 0.5 (0.3-0.8) | 0.4 (0.2-0.6) |
| Non-Hodgkin's lymphoma | 10.0 (8.6-11.6) | 11.4 (9.8-13.0) | 11.1 (9.7-12.6) | 10.7 (9.5-12.1) | 9.3 (8.3-10.4) | 9.4 (8.6-10.3) |
| Myeloma | 3.5 (2.7-4.5) | 4.6 (3.7-5.7) | 3.6 (2.9-4.5) | 4.5 (3.7-5.4) | 3.9 (3.2-4.5) | 4.1 (3.6-4.7) |
| Leukemia | 10.3 (8.8-11.9) | 10.2 (8.8-11.7) | 9.6 (8.3-11.0) | 11.9 (10.5-13.4) | 12.2 (11.0-13.4) | 10.1 (9.2-11.0) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Cook County Cancer Mortality Rates per 100,000, Male, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 304.4 (299.6-309.1) | 300.9 (296.3-305.5) | 281.4 (277.1-285.8) | 268.1 (263.9-272.3) | 247.2 (243.8-250.7) | 226.3 (223.4-229.2) |
| Oral Cavity and Pharynx | 7.2 (6.5-7.9) | 6.1 (5.5-6.8) | 5.7 (5.1-6.3) | 4.8 (4.3-5.4) | 4.3 (3.9-4.8) | 3.7 (3.3-4.0) |
| Esophagus | 9.9 (9.1-10.7) | 9.0 (8.2-9.8) | 9.6 (8.8-10.4) | 9.2 (8.4-10.0) | 8.0 (7.4-8.6) | 7.7 (7.2-8.2) |
| Stomach | 11.6 (10.7-12.5) | 10.8 (10.0-11.7) | 10.5 (9.7-11.4) | 9.1 (8.3-9.9) | 8.5 (7.9-9.2) | 7.4 (6.8-7.9) |
| Colorectal | 36.5 (34.8-38.2) | 33.6 (32.1-35.2) | 29.9 (28.5-31.4) | 30.5 (29.1-32.0) | 26.5 (25.4-27.7) | 23.0 (22.1-24.0) |
| Liver | 6.6 (5.9-7.3) | 7.7 (7.0-8.4) | 7.7 (7.0-8.5) | 7.0 (6.4-7.7) | 7.5 (6.9-8.1) | 9.5 (8.9-10.1) |
| Pancreas | 14.8 (13.8-15.9) | 13.9 (13.0-15.0) | 14.2 (13.2-15.2) | 13.3 (12.4-14.2) | 14.2 (13.3-15.0) | 14.2 (13.5-14.9) |
| Lung and Bronchus | 91.4 (88.9-94.0) | 90.6 (88.1-93.1) | 81.2 (78.9-83.5) | 77.1 (74.9-79.4) | 70.6 (68.8-72.4) | 62.4 (60.9-63.9) |
| Bone | 0.6 (0.4-2.0) | 0.5 (0.4-0.7) | 0.5 (0.3-0.7) | 0.4 (0.3-0.6) | 0.4 (0.3-0.6) | 0.5 (0.4-0.6) |
| Melanoma | 2.6 (2.2-3.1) | 3.0 (2.6-3.5) | 3.2 (2.8-3.7) | 2.5 (2.1-2.9) | 2.8 (2.4-3.1) | 3.0 (2.7-3.4) |
| Prostate | 43.0 (41.1-45.0) | 41.7 (39.8-43.5) | 40.0 (38.2-41.8) | 35.4 (33.8-37.1) | 30.4 (29.1-31.7) | 28.5 (27.4-29.6) |
| Testis | 0.2 (0.1-0.3) | 0.2 (0.1-0.3) | ** | 0.3 (0.2-0.4) | 0.2 (0.1-0.3) | 0.3 (0.2-0.4) |
| Bladder | 8.6 (7.7-9.4) | 8.2 (7.4-9.0) | 7.4 (6.6-8.1) | 7.7 (7.0-8.5) | 7.5 (6.9-8.1) | 7.6 (7.0-8.2) |
| Kidney | 6.0 (5.3-6.6) | 7.3 (6.6-8.0) | 6.4 (5.8-7.1) | 6.3 (5.6-6.9) | 6.5 (5.9-7.1) | 5.3 (4.8-5.7) |
| Nervous System | 5.4 (4.9-6.0) | 5.3 (4.7-5.9) | 4.8 (4.3-5.4) | 4.7 (4.2-5.2) | 4.1 (3.7-4.6) | 4.2 (3.8-4.6) |
| Hodgkin's lymphoma | 0.9 (0.7-1.2) | 0.7 (0.5-0.9) | 0.7 (0.5-0.9) | 0.6 (0.4-0.8) | 0.5 (0.4-0.7) | 0.4 (0.3-0.5) |
| Non-Hodgkin's lymphoma | 10.7 (9.8-11.6) | 11.3 (10.4-12.2) | 11.4 (10.6-12.3) | 10.3 (9.5-11.2) | 9.1 (8.4-9.7) | 7.7 (7.2-8.3) |
| Myeloma | 4.7 (4.1-5.3) | 5.5 (4.9-6.1) | 5.4 (4.8-6.0) | 5.0 (4.4-5.6) | 4.6 (4.1-5.1) | 4.8 (4.3-5.2) |
| Leukemia | 10.6 (9.8-11.5) | 11.5 (10.7-12.5) | 10.7 (9.9-11.6) | 10.5 (9.7-11.4) | 10.2 (9.5-10.9) | 9.3 (8.7-9.9) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

Appendix 7: Designated Regions Mortality Rates, Females

| <i>Illinois Cancer Mortality Rates per 100,000, Female, 1990-2010</i> | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 183.0 (181.0-184.9) | 182.6 (180.7-184.5) | 176.1 (174.3-178.0) | 175.8 (174.0-177.6) | 167.2 (165.7-168.8) | 158.5 (157.2-159.8) |
| Oral Cavity and Pharynx | 2.1 (1.9-2.3) | 1.7 (1.5-1.9) | 1.5 (1.4-1.7) | 1.3 (1.2-1.5) | 1.4 (1.3-1.5) | 1.5 (1.3-1.6) |
| Esophagus | 2.1 (1.9-2.3) | 2.1 (1.9-2.3) | 2.0 (1.8-2.2) | 1.9 (1.7-2.1) | 1.9 (1.7-2.0) | 1.8 (1.6-1.9) |
| Stomach | 4.1 (3.8-4.4) | 4.2 (3.9-4.5) | 3.5 (3.2-3.7) | 3.5 (3.2-3.8) | 3.1 (2.9-3.4) | 2.8 (2.6-2.9) |
| Colorectal | 22.0 (21.4-22.7) | 21.3 (20.7-21.9) | 19.4 (18.8-20.0) | 19.3 (18.7-19.9) | 17.0 (16.6-17.5) | 15.4 (15.0-15.8) |
| Liver | 2.3 (2.1-2.5) | 2.5 (2.3-2.8) | 2.4 (2.2-2.7) | 3.4 (3.1-3.6) | 2.1 (1.9-2.3) | 2.1 (1.9-2.2) |
| Pancreas | 9.8 (9.4-10.3) | 9.2 (8.8-9.6) | 9.6 (9.2-10.1) | 10.1 (9.6-10.5) | 9.9 (9.5-10.2) | 10.1 (9.7-10.4) |
| Lung and Bronchus | 37.2 (36.4-38.1) | 40.4 (39.5-41.3) | 41.3 (40.4-42.2) | 41.1 (40.2-42.0) | 42.3 (41.5-43.1) | 41.9 (41.3-42.6) |
| Bone | 0.3 (0.2-0.4) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.3 (0.3-0.4) | 0.4 (0.3-0.5) | 0.3 (0.3-0.4) |
| Melanoma | 1.7 (1.5-1.9) | 1.7 (1.5-1.9) | 1.6 (1.4-1.8) | 1.6 (1.4-1.8) | 1.7 (1.6-1.9) | 1.6 (1.5-1.8) |
| Breast | 35.7 (34.8-36.5) | 33.3 (32.5-34.1) | 30.8 (30.1-31.6) | 28.6 (27.8-29.3) | 26.2 (25.6-26.8) | 23.6 (23.1-24.1) |
| Ovary | 9.8 (9.4-10.3) | 9.3 (8.9-9.7) | 9.3 (8.9-9.8) | 8.9 (8.5-9.3) | 8.9 (8.6-9.3) | 8.1 (7.8-8.4) |
| Cervix | 3.8 (3.5-4.1) | 3.4 (3.2-3.7) | 3.4 (3.2-3.7) | 3.1 (2.9-3.4) | 2.9 (2.7-3.1) | 2.6 (2.4-2.8) |
| Corpus Uteri | 4.5 (4.2-4.8) | 4.5 (4.2-4.8) | 4.4 (4.2-4.7) | 4.6 (4.3-4.9) | 4.4 (4.2-4.7) | 4.8 (4.6-5.0) |
| Bladder | 2.5 (2.2-2.7) | 2.2 (2.0-2.4) | 2.5 (2.3-2.7) | 2.5 (2.3-2.7) | 2.4 (2.2-2.6) | 2.3 (2.2-2.5) |
| Kidney | 3.1 (2.9-3.4) | 3.3 (3.1-3.6) | 3.0 (2.7-3.2) | 3.1 (2.9-3.4) | 2.8 (2.6-3.0) | 2.8 (2.7-3.0) |
| Nervous System | 3.7 (3.4-3.9) | 3.7 (3.4-4.0) | 3.2 (3.0-3.5) | 3.6 (3.3-3.9) | 3.3 (3.1-3.5) | 3.3 (3.1-3.5) |
| Hodgkin's lymphoma | 0.4 (0.4-0.6) | 0.5 (0.4-0.6) | 0.4 (0.3-0.5) | 0.4 (0.3-0.5) | 0.4 (0.3-0.4) | 0.3 (0.3-0.4) |
| Non-Hodgkin's lymphoma | 6.5 (6.1-6.9) | 7.4 (7.0-7.8) | 7.2 (6.8-7.5) | 6.7 (6.3-7.0) | 6.2 (5.9-6.5) | 5.3 (5.0-5.5) |
| Myeloma | 3.3 (3.0-3.6) | 3.5 (3.3-3.8) | 3.4 (3.1-3.6) | 3.5 (3.3-3.8) | 3.3 (3.1-3.5) | 2.8 (2.6-2.9) |
| Leukemia | 6.9 (6.5-7.3) | 6.3 (6.0-6.7) | 6.3 (6.0-6.7) | 6.5 (6.2-6.9) | 5.9 (5.6-6.2) | 5.7 (5.5-5.9) |

This table provides the comparative incidence rates for the subsequent tables in this appendix.

| <i>Southern Rural Region Cancer Mortality Rates per 100,000, Female, 1990-2010</i> | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 168.9 (161.9-176.2) | 171.8 (164.7-179.0) | 169.7 (162.8-176.8) | 165.6 (158.8-172.6) | 163.8 (158.0-169.8) | 161.3 (156.1-166.6) |
| Oral Cavity and Pharynx | 1.7 (1.1-2.6) | 1.5 (0.9-2.3) | 1.4 (0.9-2.2) | 1.2 (0.7-1.9) | 1.4 (0.9-2.0) | 1.3 (0.8-1.8) |
| Esophagus | 1.2 (0.7-2.0) | 1.6 (1.0-2.4) | 1.6 (1.0-2.5) | 1.4 (0.8-2.2) | 1.7 (1.1-2.5) | 1.5 (1.1-2.1) |
| Stomach | 3.2 (2.3-4.3) | 2.6 (1.8-3.6) | 2.3 (1.6-3.3) | 2.6 (1.8-3.6) | 2.1 (1.5-2.9) | 2.0 (1.5-2.7) |
| Colorectal | 23.3 (20.8-26.0) | 22.1 (19.7-24.7) | 22.3 (19.9-24.9) | 20.7 (18.4-23.2) | 18.1 (16.3-20.1) | 17.0 (15.4-18.8) |
| Liver | 2.4 (1.6-3.4) | 2.9 (2.1-3.9) | 3.3 (2.4-4.4) | 2.1 (1.4-3.1) | 2.3 (1.6-3.1) | 2.2 (1.6-2.9) |
| Pancreas | 8.2 (6.8-9.8) | 8.4 (6.9-10.1) | 9.3 (7.8-11.0) | 9.5 (7.9-11.2) | 7.9 (6.7-9.3) | 9.3 (8.1-10.6) |
| Lung and Bronchus | 35.2 (32.0-38.7) | 36.0 (32.8-39.4) | 38.6 (35.4-42.1) | 37.1 (33.9-40.5) | 42.3 (39.3-45.4) | 46.0 (43.3-48.9) |
| Bone | ** | 0.8 (0.4-1.4) | 0.7 (0.3-1.3) | ** | 0.8 (0.4-1.3) | 0.7 (0.4-1.2) |
| Melanoma | 1.6 (1.0-2.4) | 2.9 (2.0-4.1) | 1.4 (0.8-2.3) | 1.9 (1.3-2.9) | 1.7 (1.2-2.5) | 1.5 (1.0-2.2) |
| Breast | 28.8 (25.8-32.1) | 26.4 (23.6-29.5) | 27.4 (24.5-30.5) | 26.9 (24.2-30.0) | 25.0 (22.7-27.4) | 22.4 (20.5-24.5) |
| Ovary | 8.9 (7.4-10.7) | 8.2 (6.7-9.9) | 7.7 (6.3-9.4) | 7.8 (6.4-9.5) | 8.4 (7.1-9.9) | 7.4 (6.3-8.6) |
| Cervix | 4.3 (3.2-5.8) | 4.5 (3.4-6.0) | 4.8 (3.6-6.3) | 3.6 (2.5-4.9) | 3.8 (2.9-5.0) | 2.9 (2.2-3.8) |
| Corpus Uteri | 4.4 (3.3-5.7) | 3.8 (2.8-5.0) | 4.3 (3.3-5.6) | 5.2 (4.1-6.6) | 3.0 (2.3-4.0) | 3.7 (3.0-4.6) |
| Bladder | 2.1 (1.4-3.0) | 2.0 (1.4-2.9) | 2.8 (2.0-3.8) | 2.6 (1.9-3.5) | 2.2 (1.6-2.9) | 2.2 (1.6-2.8) |
| Kidney | 2.4 (1.7-3.4) | 4.1 (3.1-5.4) | 3.2 (2.3-4.3) | 3.0 (2.2-4.2) | 2.7 (2.0-3.5) | 3.4 (2.7-4.3) |
| Nervous System | 3.6 (2.6-4.9) | 5.5 (4.2-7.0) | 3.9 (2.8-5.2) | 4.8 (3.6-6.2) | 3.8 (2.9-4.9) | 4.3 (3.4-5.3) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 6.2 (4.9-7.6) | 6.9 (5.6-8.4) | 7.1 (5.8-8.6) | 5.8 (4.6-7.2) | 6.9 (5.8-8.2) | 5.6 (4.7-6.6) |
| Myeloma | 3.0 (2.2-4.1) | 3.4 (2.5-4.6) | 2.5 (1.7-3.4) | 2.4 (1.7-3.4) | 3.4 (2.7-4.4) | 2.6 (2.0-3.3) |
| Leukemia | 6.6 (5.3-8.2) | 7.1 (5.7-8.7) | 5.7 (4.5-7.1) | 6.2 (5.0-7.7) | 6.8 (5.6-8.1) | 5.6 (4.7-6.6) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Central Rural Region Cancer Mortality Rates per 100,000, Female, 1990-2010 | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 172.7 (165.8-179.7) | 181.6 (174.7-188.8) | 172.0 (165.3-178.9) | 170.2 (163.6-177.0) | 162.3 (156.8-168.1) | 160.4 (155.5-165.5) |
| Oral Cavity and Pharynx | 1.8 (1.2-2.7) | 1.8 (1.2-2.6) | 1.7 (1.1-2.6) | 1.1 (0.6-1.8) | 1.5 (1.0-2.2) | 1.4 (1.0-1.9) |
| Esophagus | 1.2 (0.7-1.9) | 1.4 (0.9-2.2) | 1.0 (0.6-1.7) | 1.4 (0.8-2.1) | 1.5 (1.0-2.1) | 2.0 (1.4-2.6) |
| Stomach | 2.0 (1.4-2.9) | 3.3 (2.4-4.4) | 2.2 (1.5-3.1) | 2.4 (1.6-3.3) | 1.9 (1.4-2.6) | 1.8 (1.3-2.4) |
| Colorectal | 23.2 (20.9-25.8) | 22.3 (20.1-24.8) | 20.7 (18.5-23.0) | 18.7 (16.6-21.0) | 17.5(15.8-19.4) | 16.4 (14.9-18.1) |
| Liver | 2.1 (1.4-3.0) | 2.3 (1.6-3.2) | 2.5 (1.7-3.5) | 1.9 (1.3-2.7) | 1.8 (1.3-2.5) | 2.0 (1.5-2.7) |
| Pancreas | 9.4 (7.9-11.1) | 8.4 (6.9-10.0) | 8.8 (7.4-10.5) | 10.4 (8.8-12.2) | 9.5 (8.2-10.9) | 8.7 (7.6-10.0) |
| Lung and Bronchus | 31.6 (28.7-34.7) | 40.5 (37.2-44.0) | 40.3 (37.0-43.7) | 40.9 (37.7-44.4) | 42.9 (40.0-45.9) | 45.9 (43.3-48.7) |
| Bone | ** | 0.9 (0.5-1.7) | ** | ** | ** | 0.4 (0.2-0.7) |
| Melanoma | 2.6 (1.8-3.7) | 2.2 (1.4-3.2) | 1.6 (1.0-2.5) | 2.1 (1.4-3.1) | 1.6 (1.1-2.3) | 2.0 (1.4-2.7) |
| Breast | 32.3 (29.3-35.6) | 29.9 (27.0-33.0) | 28.4 (25.6-31.3) | 22.8 (20.4-25.5) | 22.8 (20.7-25.0) | 22.5 (20.7-24.5) |
| Ovary | 10.1 (8.5-11.9) | 10.4 (8.7-12.2) | 11.3 (9.6-13.2) | 8.0 (6.7-9.7) | 8.6 (7.4-10.1) | 8.2 (7.1-9.5) |
| Cervix | 2.9 (2.0-4.1) | 2.2 (1.4-3.2) | 3.4 (2.4-4.6) | 3.1 (2.2-4.3) | 1.9 (1.3-2.7) | 2.2 (1.6-3.0) |
| Corpus Uteri | 3.6 (2.6-4.7) | 4.0 (3.1-5.2) | 4.2 (3.2-5.4) | 4.1 (3.1-5.3) | 3.0 (2.3-3.9) | 4.5 (3.7-5.5) |
| Bladder | 2.4 (1.7-3.3) | 2.3 (1.6-3.2) | 2.4 (1.7-3.3) | 2.0 (1.4-2.8) | 3.0 (2.4-3.9) | 1.9 (1.5-2.6) |
| Kidney | 4.0 (3.0-5.3) | 4.2 (3.2-5.5) | 2.8 (2.0-3.8) | 3.9 (2.9-5.1) | 3.5 (2.7-4.5) | 3.4 (2.7-4.3) |
| Nervous System | 3.8 (2.8-5.1) | 3.6 (2.6-4.8) | 4.0 (3.0-5.2) | 3.6 (2.7-4.8) | 4.1 (3.2-5.2) | 3.7 (2.9-4.6) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 7.2 (6.0-8.7) | 9.2 (7.7-10.9) | 7.5 (6.1-9.0) | 7.5 (6.2-9.1) | 6.9 (5.9-8.2) | 5.7 (4.8-6.7) |
| Myeloma | 2.8 (2.0-3.8) | 4.2 (3.2-5.4) | 3.7 (2.8-4.9) | 3.1 (2.3-4.1) | 3.4 (2.6-4.3) | 2.2 (1.6-2.8) |
| Leukemia | 6.8 (5.5-8.2) | 6.7 (5.5-8.2) | 5.9 (4.7-7.3) | 7.5 (6.2-9.0) | 5.9 (4.9-7.1) | 5.3 (4.5-6.3) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Northern Rural Region Cancer Mortality Rates per 100,000, Female, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 167.7 (160.9-174.7) | 175.9 (169.1-182.9) | 164.6 (158.1-171.3) | 165.9 (159.5-172.6) | 164.3 (158.8-170.0) | 158.0 (153.3-162.9) |
| Oral Cavity and Pharynx | 1.3 (0.8-2.1) | 1.2 (0.7-2.0) | 1.4 (0.8-2.1) | 1.3 (0.8-2.0) | 1.3 (0.9-1.9) | 1.3 (0.9-1.8) |
| Esophagus | 1.1 (0.6-1.9) | 1.2 (0.7-2.0) | 2.3 (1.6-3.3) | 1.2 (0.7-1.9) | 1.2 (0.8-1.8) | 1.5 (1.1-2.0) |
| Stomach | 2.3 (1.6-3.2) | 2.9 (2.1-3.9) | 2.5 (1.8-3.5) | 2.1 (1.5-3.0) | 1.9 (1.3-2.6) | 1.8 (1.3-2.4) |
| Colorectal | 19.6 (17.4-22.0) | 20.9 (18.7-23.3) | 19.0 (16.9-21.3) | 19.5 (17.4-21.7) | 17.0 (15.4-18.9) | 15.3 (13.8-16.8) |
| Liver | 2.1 (1.4-3.1) | 2.1 (1.4-3.1) | 2.4 (1.7-3.4) | 1.6 (1.0-2.3) | 1.7 (1.2-2.3) | 1.6 (1.1-2.1) |
| Pancreas | 7.4 (6.1-9.0) | 9.5 (8.0-11.2) | 8.1 (6.7-9.6) | 9.2 (7.8-10.8) | 8.7 (7.5-10.1) | 8.8 (7.8-10.0) |
| Lung and Bronchus | 34.1 (31.0-37.4) | 35.0 (31.9-38.2) | 38.1 (35.0-41.5) | 39.2 (36.0-42.5) | 44.1 (41.2-47.1) | 44.2 (41.7-46.8) |
| Bone | ** | ** | ** | ** | ** | ** |
| Melanoma | 2.3 (1.5-3.3) | 2.6 (1.8-3.7) | 2.1 (1.4-3.1) | 2.0 (1.3-2.9) | 2.3 (1.7-3.1) | 2.6 (2.0-3.3) |
| Breast | 33.2 (30.1-36.6) | 29.3 (26.5-32.4) | 27.1 (24.4-30.0) | 25.0 (22.4-27.7) | 22.7 (20.7-25.0) | 20.5 (18.8-22.3) |
| Ovary | 8.9 (7.4-10.6) | 10.8 (9.2-12.7) | 8.5 (7.1-10.1) | 9.6 (8.1-11.4) | 8.9 (7.6-10.3) | 8.7 (7.6-9.9) |
| Cervix | 2.8 (1.9-3.9) | 2.6 (1.8-3.6) | 2.3 (1.5-3.4) | 3.2 (2.3-4.4) | 3.0 (2.2-4.0) | 2.5 (1.9-3.2) |
| Corpus Uteri | 4.6 (3.6-5.9) | 5.0 (4.0-6.3) | 3.3 (2.5-4.4) | 4.3 (3.4-5.6) | 4.3 (3.4-5.3) | 4.7 (3.9-5.6) |
| Bladder | 1.8 (1.2-2.6) | 1.5 (1.0-2.2) | 3.1 (2.3-4.1) | 2.0 (1.4-2.8) | 1.9 (1.4-2.6) | 2.2 (1.7-2.8) |
| Kidney | 3.6 (2.6-4.8) | 3.3 (2.4-4.4) | 3.4 (2.5-4.4) | 3.3 (2.5-4.4) | 3.0 (2.4-3.9) | 3.7 (3.0-4.6) |
| Nervous System | 3.6 (2.6-4.9) | 4.3 (3.2-5.6) | 3.1 (2.3-4.3) | 4.3 (3.2-5.5) | 4.2 (3.4-5.3) | 3.9 (3.1-4.8) |
| Hodgkin's lymphoma | ** | 0.8 (0.4-1.5) | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 5.9 (4.7-7.3) | 7.4 (6.0-8.9) | 7.7 (6.3-9.2) | 7.0 (5.8-8.5) | 5.8 (4.9-7.0) | 5.1 (4.3-6.0) |
| Myeloma | 3.7 (2.8-4.8) | 2.7 (2.0-3.8) | 3.2 (2.4-4.3) | 3.2 (2.4-4.2) | 3.0 (2.3-3.8) | 2.6 (2.0-3.3) |
| Leukemia | 7.6 (6.2-9.2) | 5.8 (4.6-7.2) | 5.3 (4.2-6.7) | 6.2 (5.0-7.6) | 6.0 (5.0-7.1) | 6.0 (5.1-7.0) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

Small Urban Cancer Mortality Rates per 100,000, Female, 1990-2010

| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers* | 177.5 (173.0-182.1) | 180.0 (175.6-184.5) | 175.6 (171.3-180.0) | 176.9 (172.6-181.2) | 168.4 (164.8-172.0) | 158.3 (155.3-161.3) |
| Oral Cavity and Pharynx | 1.9 (1.5-2.5) | 1.6 (1.2-2.0) | 1.3 (0.9-1.7) | 1.5 (1.2-2.0) | 1.5 (1.2-1.9) | 1.6 (1.3-2.0) |
| Esophagus | 1.8 (1.4-2.3) | 1.2 (0.9-1.7) | 1.6 (1.2-2.1) | 1.9 (1.5-2.4) | 1.9 (1.6-2.3) | 1.7 (1.4-2.1) |
| Stomach | 2.9 (2.3-3.5) | 3.6 (3.0-4.2) | 2.6 (2.1-3.2) | 2.6 (2.1-3.2) | 2.5 (2.1-2.9) | 1.7 (1.4-2.0) |
| Colorectal | 20.7 (19.2-22.3) | 22.3 (20.8-23.9) | 19.1 (17.7-20.6) | 18.3 (17.0-19.7) | 16.1 (15.1-17.2) | 14.7 (13.8-15.6) |
| Liver | 2.4 (1.9-2.9) | 1.9 (1.5-2.5) | 1.8 (1.4-2.3) | 2.0 (1.5-2.5) | 1.5 (1.2-1.9) | 1.5 (1.2-1.8) |
| Pancreas | 9.2 (8.2-10.3) | 8.3 (7.4-9.2) | 8.7 (7.8-9.7) | 9.2 (8.2-10.2) | 9.2 (8.4-10.1) | 9.1 (8.4-9.9) |
| Lung and Bronchus | 36.3 (34.3-38.4) | 42.1 (40.0-44.3) | 43.9 (41.8-46.2) | 45.9 (43.7-48.1) | 45.2 (43.4-47.1) | 45.9 (44.3-47.5) |
| Bone | 0.4 (0.2-0.7) | 0.4 (0.2-0.7) | 0.3 (0.1-0.5) | 0.3 (0.2-0.5) | 0.3 (0.2-0.5) | 0.3 (0.1-0.4) |
| Melanoma | 1.7 (1.3-2.2) | 1.7 (1.3-2.2) | 2.0 (1.6-2.6) | 1.8 (1.4-2.2) | 2.3 (1.9-2.7) | 1.6 (1.3-1.9) |
| Breast | 36.2 (34.2-38.4) | 31.3 (29.5-33.2) | 30.5 (28.7-32.4) | 27.5 (25.8-29.2) | 25.5 (24.2-27.0) | 23.0 (21.9-24.2) |
| Ovary | 10.1 (9.0-11.2) | 8.9 (7.9-9.9) | 8.8 (7.8-9.8) | 9.9 (8.9-11.0) | 8.9 (8.1-9.7) | 8.0 (7.3-8.7) |
| Cervix | 3.5 (2.9-4.3) | 3.7 (3.0-4.4) | 3.3 (2.7-4.0) | 2.7 (2.2-3.3) | 2.5 (2.0-2.9) | 2.7 (2.3-3.1) |
| Corpus Uteri | 3.9 (3.3-4.7) | 4.0 (3.4-4.8) | 4.2 (3.6-4.9) | 4.5 (3.8-5.2) | 4.1 (3.6-4.7) | 4.5 (4.0-5.1) |
| Bladder | 2.7 (2.2-3.3) | 2.3 (1.9-2.9) | 2.7 (2.2-3.2) | 2.2 (1.8-2.7) | 2.5 (2.1-3.0) | 2.4 (2.1-2.8) |
| Kidney | 3.1 (2.6-3.8) | 3.8 (3.1-4.5) | 3.4 (2.8-4.0) | 2.9 (2.4-3.6) | 3.0 (2.6-3.5) | 2.9 (2.5-3.3) |
| Nervous System | 3.1 (2.5-3.8) | 3.7 (3.1-4.4) | 3.2 (2.6-3.9) | 3.9 (3.2-4.6) | 3.5 (3.0-4.1) | 3.7 (3.2-4.2) |
| Hodgkin's lymphoma | 0.3 (0.2-0.6) | 0.4 (0.2-0.7) | 0.4 (0.2-0.6) | 0.3 (0.2-0.6) | 0.4 (0.2-0.6) | 0.3 (0.2-0.5) |
| Non-Hodgkin's lymphoma | 7.0 (6.1-7.9) | 7.5 (6.7-8.5) | 6.9 (6.0-7.8) | 7.0 (6.2-7.9) | 6.7 (6.0-7.4) | 5.5 (5.0-6.1) |
| Myeloma | 3.4 (2.8-4.1) | 3.8 (3.2-4.5) | 3.5 (2.9-4.2) | 3.8 (3.2-4.5) | 3.3 (2.8- 3.9) | 2.3 (2.0- 2.7) |
| Leukemia | 6.8 (6.0-7.7) | 6.8 (5.9-7.7) | 7.0 (6.2-7.9) | 5.7 (5.0-6.6) | 6.0 (5.4- 6.8) | 5.6 (5.1- 6.2) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Collar Counties Cancer Mortality Rates per 100,000, Female, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 179.3 (174.4-184.3) | 173.2 (168.5-177.9) | 170.5 (166.1-175.0) | 172.4 (168.1-176.8) | 161.3 (157.8-164.7) | 152.2 (149.4-155.1) |
| Oral Cavity and Pharynx | 1.3 (0.9-1.8) | 1.8 (1.3-2.3) | 1.3 (1.0-1.8) | 1.2 (0.8-1.6) | 1.3 (1.0-1.6) | 1.4 (1.1-1.7) |
| Esophagus | 2.1 (1.6-2.8) | 2.1 (1.6-2.7) | 1.8 (1.3-2.3) | 2.2 (1.8-2.8) | 1.9 (1.6-2.3) | 1.8 (1.5-2.1) |
| Stomach | 4.0 (3.3-4.8) | 4.0 (3.3-4.8) | 3.2 (2.7-3.9) | 3.3 (2.8-4.0) | 2.8 (2.4-3.3) | 2.6 (2.3-3.1) |
| Colorectal | 20.3 (18.7-22.0) | 18.3 (16.8-19.8) | 17.5 (16.1-18.9) | 18.1 (16.7-19.5) | 15.2 (14.2-16.3) | 13.3 (12.5-14.2) |
| Liver | 1.8 (1.3-2.3) | 2.2 (1.7-2.8) | 1.9 (1.5-2.5) | 2.0 (1.6-2.6) | 1.9 (1.5-2.3) | 1.6 (1.4-2.0) |
| Pancreas | 10.3 (9.2-11.6) | 8.9 (7.9-10.0) | 8.8 (7.8-9.8) | 9.6 (8.6-10.6) | 9.2 (8.3-10.0) | 10.3 (9.6-11.1) |
| Lung and Bronchus | 39.4 (37.1-41.8) | 39.9 (37.7-42.2) | 40.3 (38.2-42.6) | 41.8 (39.7-44.0) | 42.0 (40.2-43.8) | 40.4 (38.9-41.9) |
| Bone | 0.4 (0.2-0.7) | ** | 0.3 (0.2-0.6) | ** | 0.4 (0.2-0.6) | 0.3 (0.2-0.4) |
| Melanoma | 1.5 (1.1-2.1) | 1.6 (1.2-2.1) | 1.7 (1.3-2.2) | 1.6 (1.2-2.1) | 1.8 (1.5-2.2) | 2.1 (1.8-2.4) |
| Breast | 36.9 (34.7-39.2) | 33.2 (31.2-35.3) | 30.9 (29.0-32.8) | 28.6 (26.9-30.4) | 26.0 (24.6-27.4) | 22.6 (21.5-23.7) |
| Ovary | 10.0 (8.9-11.3) | 9.6 (8.5-10.7) | 9.8 (8.8-10.9) | 8.1 (7.2-9.1) | 8.8 (8.0-9.7) | 7.8 (7.2-8.5) |
| Cervix | 2.6 (2.1-3.3) | 2.2 (1.7-2.8) | 2.4 (1.9-2.9) | 1.8 (1.4-2.3) | 2.1 (1.7-2.5) | 1.7 (1.4-2.0) |
| Corpus Uteri | 3.7 (3.0-4.5) | 3.9 (3.3-4.7) | 4.2 (3.5-4.9) | 4.4 (3.8-5.2) | 4.2 (3.7-4.8) | 4.3 (3.8-4.8) |
| Bladder | 2.4 (1.8-3.0) | 1.9 (1.5-2.5) | 2.5 (2.0-3.1) | 2.4 (2.0-3.0) | 2.2 (1.8-2.6) | 2.4 (2.0-2.7) |
| Kidney | 2.9 (2.3-3.6) | 3.1 (2.5-3.8) | 2.7 (2.2-3.3) | 3.3 (2.8-4.0) | 2.5 (2.1-3.0) | 2.4 (2.0-2.7) |
| Nervous System | 4.3 (3.6-5.1) | 3.8 (3.2-4.6) | 4.1 (3.4-4.8) | 3.8 (3.2-4.5) | 3.2 (2.8-3.7) | 3.5 (3.0-3.9) |
| Hodgkin's lymphoma | 0.3 (0.2-0.6) | 0.5 (0.3-0.8) | 0.3 (0.2-0.6) | 0.5 (0.3-0.7) | 0.4 (0.3-0.6) | 0.3 (0.2-0.5) |
| Non-Hodgkin's lymphoma | 6.2 (5.3-7.2) | 7.8 (6.8-8.8) | 7.6 (6.7-8.6) | 7.5 (6.6-8.5) | 6.2 (5.5-6.9) | 5.5 (5.0-6.1) |
| Myeloma | 2.8 (2.3-3.5) | 2.9 (2.3-3.5) | 3.1 (2.5-3.7) | 3.4 (2.8-4.1) | 2.9 (2.4-3.4) | 2.8 (2.4-3.2) |
| Leukemia | 6.3 (5.5-7.3) | 5.5 (4.7-6.4) | 6.0 (5.2-6.9) | 6.5 (5.7-7.4) | 6.4 (5.7-7.1) | 6.0 (5.4-6.6) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

| Cook County Cancer Mortality Rates per 100,000, Female, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 194.3 (191.3-197.4) | 191.3 (188.4-194.3) | 183.7 (180.8-186.5) | 182.3 (179.5-185.2) | 172.6(170.3-175.0) | 162.9 (160.9-165.0) |
| Oral Cavity and Pharynx | 2.7 (2.3-3.1) | 1.8 (1.5-2.1) | 1.7 (1.5-2.1) | 1.4 (1.2-1.7) | 1.4 (1.2-1.6) | 1.5 (1.3-1.7) |
| Esophagus | 2.6 (2.3-3.0) | 2.7 (2.4-3.1) | 2.4 (2.1-2.8) | 2.1 (1.8-2.4) | 2.0 (1.8-2.3) | 1.9 (1.6-2.1) |
| Stomach | 5.6 (5.1-6.1) | 5.3 (4.8-5.8) | 4.5 (4.1-5.0) | 4.5 (4.1-5.0) | 4.2(3.9-4.6) | 3.8(3.5-4.1) |
| Colorectal | 23.3 (22.3-24.4) | 21.7 (20.8-22.7) | 19.8 (18.9-20.7) | 20.2 (19.3-21.2) | 18.0(17.3-18.8) | 16.5(15.9-17.2) |
| Liver | 2.7 (2.4-3.1) | 2.9 (2.6-3.3) | 2.8 (2.5 3.2) | 3.1 (2.7-3.5) | 3.9 (3.5-4.2) | 2.7 (2.4-3.0) |
| Pancreas | 10.7 (10.0-11.4) | 10.1 (9.4-10.7) | 10.8 (10.2-11.6) | 11.0 (10.3-11.7) | 11.1(10.5-11.7) | 11.0(10.5-11.6) |
| Lung and Bronchus | 39.2 (37.8-40.5) | 41.8 (40.4-43.2) | 42.1 (40.7 43.5) | 40.2 (38.9-41.6) | 41.2(40.1-42.4) | 39.8(38.7-40.8) |
| Bone | 0.3 (0.2-0.4) | 0.4 (0.3-0.6) | 0.4 (0.3-0.6) | 0.4 (0.3-0.6) | 0.4 (0.3-0.5) | 0.3(0.2-0.4) |
| Melanoma | 1.5 (1.2-1.8) | 1.4 (1.2-1.7) | 1.4 (1.1-1.6) | 1.3 (1.1-1.6) | 1.4 (1.2-1.6) | 1.2 (1.1-1.4) |
| Breast | 37.4 (36.0-38.7) | 36.4 (35.1-37.7) | 32.9 (31.6-34.1) | 31.0(29.8-32.2) | 28.1(27.1-29.1) | 25.5(24.7-26.4) |
| Ovary | 9.8 (9.1-10.5) | 9.1 (8.4-9.7) | 9.6 (8.9-10.3) | 9.1 (8.4-9.7) | 9.2 (8.6-9.7) | 8.3 (7.8-8.8) |
| Cervix | 4.7 (4.2-5.2) | 4.1 (3.6-4.5) | 4.0 (3.5-4.4) | 4.0 (3.5-4.4) | 3.5 (3.1-3.8) | 3.2 (2.9-3.5) |
| Corpus Uteri | 5.2 (4.7-5.7) | 5.1 (4.6-5.6) | 4.9 (4.4-5.4) | 4.8 (4.4-5.3) | 5.2 (4.8-5.6) | 5.5 (5.1-5.9) |
| Bladder | 2.6 (2.3-3.0) | 2.4 (2.1-2.8) | 2.3 (2.0-2.6) | 2.8 (2.5-3.2) | 2.5 (2.2-2.8) | 2.4 (2.2-2.7) |
| Kidney | 3.1 (2.7-3.5) | 3.0 (2.6-3.4) | 2.9 (2.5-3.2) | 3.0 (2.7-3.4) | 2.7 (2.4-3.0) | 2.7 (2.4-3.0) |
| Nervous System | 3.7 (3.3-4.1) | 3.3 (3.0-3.7) | 2.7 (2.4-3.1) | 3.1 (2.7-3.5) | 2.9 (2.6-3.3) | 2.7 (2.4-3.0) |
| Hodgkin's lymphoma | 0.5 (0.4-0.7) | 0.5 (0.4-0.7) | 0.3 (0.2-0.5) | 0.3 (0.2-0.5) | 0.3 (0.2-0.5) | 0.3 (0.2-0.4) |
| Non-Hodgkin's lymphoma | 6.5 (5.9-7.0) | 7.1 (6.5-7.7) | 7.0 (6.5-7.6) | 6.2 (5.7-6.7) | 5.9 (5.4-6.3) | 5.0 (4.6-5.4) |
| Myeloma | 3.4 (3.1-3.9) | 3.7 (3.3-4.1) | 3.5 (3.1-3.9) | 3.7 (3.4-4.2) | 3.5 (3.1-3.8) | 3.2 (2.9-3.5) |
| Leukemia | 7.0 (6.5-7.6) | 6.4 (5.9-7.0) | 6.6 (6.1-7.1) | 6.7 (6.2-7.3) | 5.5 (5.1-5.9) | 5.6 (5.2-6.0) |

Cells in orange indicate mortality rates significantly higher than the state rate. Cells in blue indicate mortality rates significantly lower than the state rate.

** Statistic not displayed due to fewer than 10 cases.

Appendix 8: Technical Notes

Data Sources and Coding

Cancer Incidence Data, Coding and Calculation: Cancer incidence data are from the Illinois Department of Public Health, Illinois State Cancer Registry (ISCR), the only source of population-based cancer incidence data for the state (IDPH). Newly diagnosed cancer cases from Illinois residents are reported to ISCR from many potential sources: Illinois health care facilities where the cancer is diagnosed and treated, central cancer registries and facilities outside of Illinois, and death certifications.

All cases diagnosed between 1991 and 2009 were reported with *The International Classification of Diseases for Oncology* version 3 (ICD-O-3) codes (Fritz et al, 2000). Cases diagnosed in 2010 utilized the ICD-O-3/WHO 2008 coding scheme (WHO). Cancer sites in this report were grouped according to the site group definitions established by the National Cancer Institute's (NCI) Surveillance Epidemiology and End Results (SEER) program (Young et al, 2000).

For this report, the ISCR county-level public dataset was used to calculate age-adjusted incidence rates (IDPH). Data used for calculation in this report are as of November 2012. The county-level dataset aggregates data in 5 year increments. The 1991-1995, 1996-2000, 2001-2005, and 2006-2010 increments were used in this report.

Population estimates were obtained from the SEER program based on the United States Bureau of Census population estimates (NCI). Rates are expressed per 100,000 population. Age-adjustment was performed based upon the 8 "age at diagnosis" group coding displayed in the public dataset and were calculated to the 2000 U.S. standard million population. Rates are rounded to the nearest tenth. Lower and upper confidence intervals were computed at the 95 percent level using Tiwari method (Tiwari, 2006). Rates were calculated only for invasive cancers with the exception of *in situ* bladder cancer. All incidence rate computations were performed using SAS version 9.3.

Cancer Mortality Data, Coding, and Calculation:

The SEER program of the NCI was the source of information on cancer mortality for the years 1900 through 2010. The underlying cause of death was provided by the National Center for Health Statistics. Data presented are as of September 2013. Mortality databases that have county-level attributes can only be analyzed for a minimum of 3 year groupings (NCI). The most recent available data are grouped as a 5 year group. The second most recent data is grouped at 3, 4, or 5 year groupings. Earlier groups are grouped at 3 year groups. Thus, the data are presented in the following year increments: 1990-1992, 1993-1995, 1996-1998, 1999-2001, 2002-2005, and 2006-2010. This is the closest comparison that can be made between available incidence and mortality data. Underlying cause of death was coded using the *International Classification of Diseases (ICD-10)* (WHO, 2008).

The SEER*Stat software package was used to calculate mortality rates. Rates are expressed per 100,000 population (SEER). Age-adjustment of rates was calculated adjusting to the 2000 U.S. standard million population. Rates are rounded to the nearest tenth and presented with the lower and upper confidence interval computed at the 95 percent level using Tiwari method (Tiwari, 2006).

Cancer Staging Data, Coding, and Calculation:

Cancer staging data was obtained from the Illinois State Cancer Registry county-level publicly available dataset (IDPH). Stage of cancer at diagnosis was coded using the SEER summary stage –localized, regional, distant metastases/systemic disease, and unknown/unstaged/unspecified (Young et al, 2000). Percentages of cancer diagnosed at each summary stage were calculated.

Significant Differences Between Cancer Incidence and Mortality Rates:

Significant differences in cancer incidence and mortality as noted in the text and subsequent appendices are determined by confidence interval overlaps. If a confidence interval of a given cancer incidence rate or mortality rate did not overlap with a same incidence or mortality rate of another geographic region, it was noted to be significant different than that incidence or mortality rate.

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World Health Organization. (2008). *ICD-10: International statistical classification of diseases and related health problems (10th Rev. ed.)*. New York, NY.

Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Mortality - All COD, Aggregated With State, Total U.S. (1969-2010) <Katrina/Rita Population Adjustment>, National Cancer Institute, DCCPS, Surveillance Research Program, Surveillance Systems Branch, released April 2013. Underlying mortality data provided by NCHS (www.cdc.gov/nchs).

Cancer in Rural Illinois, 1990-2010
Incidence, Mortality, Staging, and Access Disparities:
Delta Region Supplement

Executive Summary

This supplementary report intends to summarize the cancer burden in the Delta Region of Illinois by presenting cancer incidence and mortality rates and staging data using the most recently and publicly available data as provided by the Illinois State Cancer Registry and the National Center for Health Statistics. Additionally, this report aims to identify cancer risk factors, screening, and access to care disparities that may exist in the Delta Region using data provided by the Illinois Behavioral Risk Factor Surveillance System, the Area Health Resource File, and the Illinois Bureau of the Financial and Professional Regulation. This report also provides comparisons between the Delta Region, other rural areas in Illinois, urban regions in the state, and Illinois as a whole.

Incidence Highlights

- The Delta Region's incidence rates for colorectal cancer, lung and bronchus cancer, and melanoma were significantly higher than the state's rates between 2006 and 2010.
- Both lung and bronchus cancer and melanoma incidence rates for males in the Delta Region exceeded the state rate between 2006 and 2010.
- Kidney and renal pelvis cancer incidence increased 86.6% for males in the Delta region between the 1991-1995 and 2006-2010 intervals.
- In the Delta region, female cancer incidence increased 16.8% between the 1991-1995 and 2006-2010 intervals.
- The female lung and bronchus cancer incidence rate in the Delta region exceeded the state rate between 2006 and 2010 and is the second leading cause of cancer among women in the region, surpassing colorectal cancer.

Mortality Highlights

- Cancer mortality in the Delta Region decreased 7.9% between 1990 and 2010, a smaller decrease than the 15.5% decrease seen statewide.
- Cancer mortality and mortality due to heart disease have nearly converged. 2006-2010 age adjusted mortality rates were 216.7 and 205.7 per 100,000 for heart disease and cancer, respectively.
- Between 2006 and 2010, lung and bronchus and colorectal cancer mortalities were significantly higher in the Delta Region compared to the state as a whole. This was true for both males and females.
- Between 1990 and 2010, cancer mortality among females in the Delta Region increased 0.9% while all other rural regions, the small urban region, and the state of Illinois as a whole experienced decreases in cancer mortality.

Staging Highlights

- 9.9% of cancer diagnosed in the Delta Region between 2006 and 2010 were unstaged.

Access Highlights

- A higher percentage of Delta Region residents are smokers compared to the state as a whole (23.3% vs. 18.6%).
- The obesity rate in the Delta Region is higher than the state as a whole (37.5% vs. 27.7%).
- The Delta Region has a ratio of general practitioners comparable to urban areas, but has less access to specialists who work with cancer patients

Introduction and Background

The goal of this report is to describe the cancer burden in the Delta Region of Illinois as a supplement to the “Cancer in Rural Illinois” report. In 2000, Congress established the Delta Regional Authority (DRA), a federal-state partnership in 10 states. The southernmost sixteen counties in Illinois are included in this designation. DRA counties have shorter life expectancies, higher poverty, and more chronic health problems than the nation (DRA).

This report will characterize the cancer incidence, mortality, and access to care burden experienced in this region through comparisons to the adjacent “Non-Delta Southern Rural” region, other rural regions, and urban regions in Illinois. Counties were designated rural or urban based upon the dichotomization used by the Illinois Department of Public Health’s Behavioral Risk Factor Surveillance System (Illinois BRFSS). Rural counties were divided into three geographic regions of somewhat similar population size (Figure 1). These rural regions are roughly demarcated by interstates 74 and 70.

Rural counties north of Interstate 74 were categorized as “Northern Rural”. Rural counties south of Interstate 74, but north of Interstate 70 were categorized as “Central Rural”. Counties south of Interstate 70 were designated “Southern Rural”, but for the purposes of this supplementary report, these were dichotomized into Delta Region and Non-Delta Southern Rural counties. Urban counties were categorized similarly to the Illinois BRFSS stratification: Small Urban, Cook County, and the Collar Counties (counties immediately adjacent to Cook County).

There are demographic and socioeconomic differences among the rural regions. In particular, the Delta Region is poorer, has more residents with less than a high school education, and has a greater percentage of residents living in poverty compared to the other rural regions, including the adjacent Non-Delta Southern Rural Region (Table 1). All rural regions have a higher percentage of residents over age of 65 compared to the urban designations and are far less densely populated than the urban regions. All urban regions are more ethnically diverse and more educated than the rural regions.

Figure 1: Designated Regions of Illinois

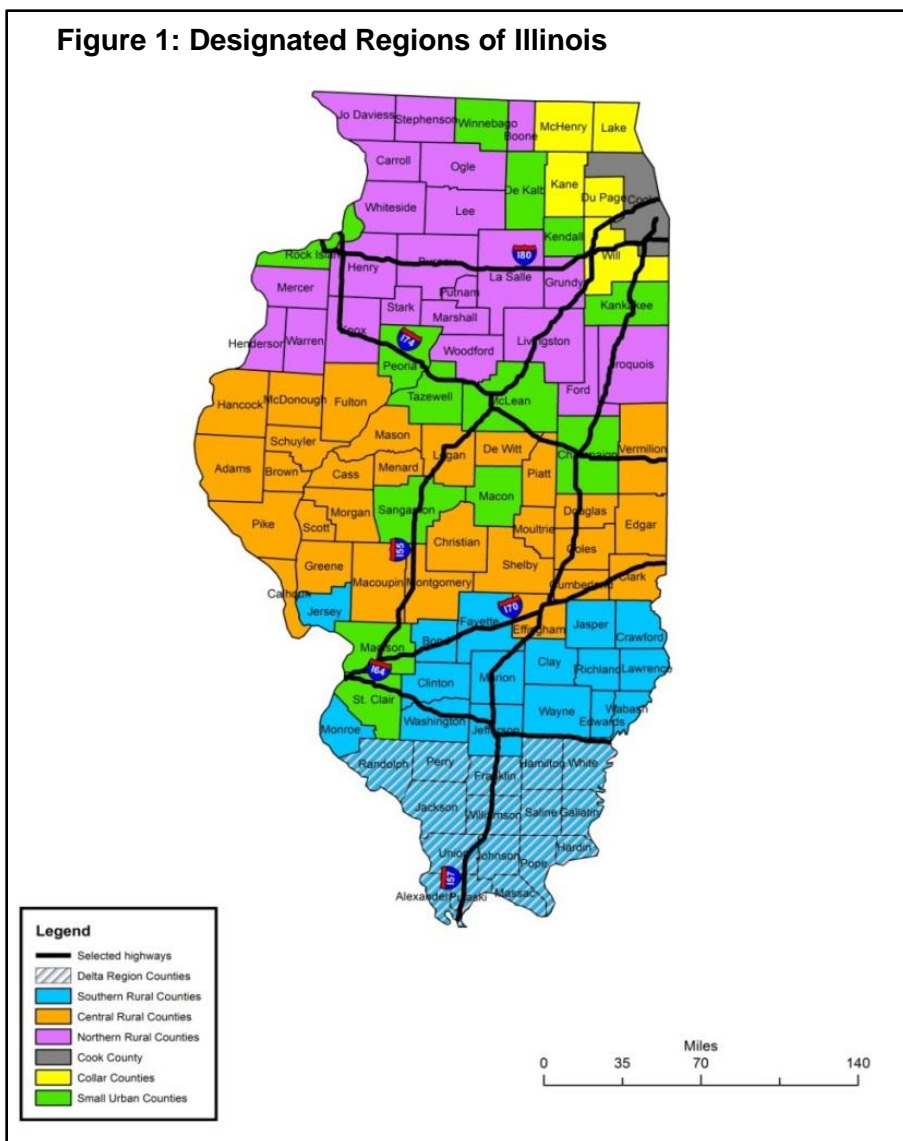


Table 1: Population Estimates of Designated Regions

| | Delta Region | Non- Delta Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|---|-------------------------|--|--------------------------|---------------------------|------------------------|----------------------------|------------------------|-----------------|
| # of Counties | 16 | 16 | 29 | 22 | 13 | 5 | 1 | 102 |
| Population† | 342,397 | 336,775 | 731,019 | 770,187 | 2,320,269 | 3,143,257 | 5,231,351 | 12,875,255 |
| Population per square mile† | 56.7 | 45.9 | 45.3 | 57.0 | 262.5 | 1150.8 | 5495.1 | 231.1 |
| Race†‡ | | | | | | | | |
| Non- Hispanic White | 89.5% | 94.5% | 94.0% | 94.9% | 81.6% | 84.1% | 65.9% | 77.9% |
| Non- Hispanic Black | 7.4% | 3.5% | 3.9% | 2.7% | 13.0% | 6.8% | 24.8% | 14.8% |
| Hispanic | 2.6% | 1.9% | 2.5% | 7.3% | 6.2% | 18.5% | 24.6% | 16.3% |
| Age* | | | | | | | | |
| Aged 65+ | 16.6% | 16.6% | 16.9% | 16.8% | 13.1% | 10.5% | 12.0% | 13.2% |
| Poverty* | | | | | | | | |
| % Living below 100% of the poverty level | 19.1% | 12.3% | 14.6% | 11.2% | 15.0% | 8.1% | 16.9% | 13.7% |
| % Living below 200% of the poverty level | 45.4% | 32.2% | 34.9% | 29.5% | 31.6% | 21.2% | 35.2% | 30.8% |
| Education (aged 25+)* | | | | | | | | |
| Population aged 25+ | 232,868 | 234,841 | 497,084 | 530,603 | 1,496,761 | 2,010,973 | 3,456,817 | 8,314,454 |
| Less than a high school education | 14.6% | 12.6% | 12.3% | 11.9% | 10.2% | 10.6% | 15.9% | 12.7% |
| High school education or GED | 32.2% | 35.3% | 38.7% | 37.5% | 30.2% | 22.9% | 24.2% | 27.0% |
| Some College or Associate's Degree | 34.6% | 35.3% | 31.6% | 33.1% | 32.1% | 28.0% | 25.7% | 28.8% |
| Bachelor's degree | 11.5% | 11.1% | 11.7% | 11.8% | 17.3% | 24.1% | 20.7% | 19.3% |
| Graduate or Professional Degree | 7.1% | 5.6% | 5.7% | 5.8% | 10.1% | 14.3% | 13.6% | 11.8% |

† 2012 Population Estimates from the U.S. Census Bureau

‡ Race data may be above or below 100% due to estimate methodology that includes multi-racial individuals in each racial group with which they identify

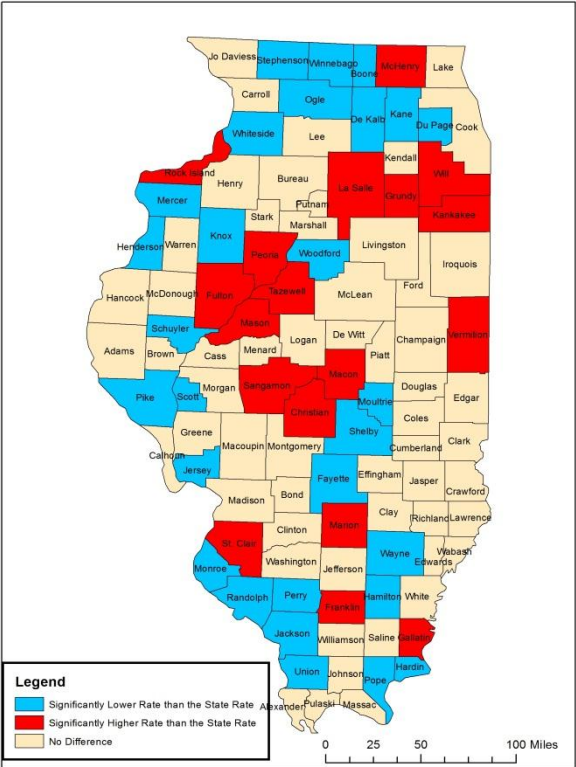
*data from the American Community Survey 2008-2012 5 year estimates

Cancer Incidence

Overall Incidence

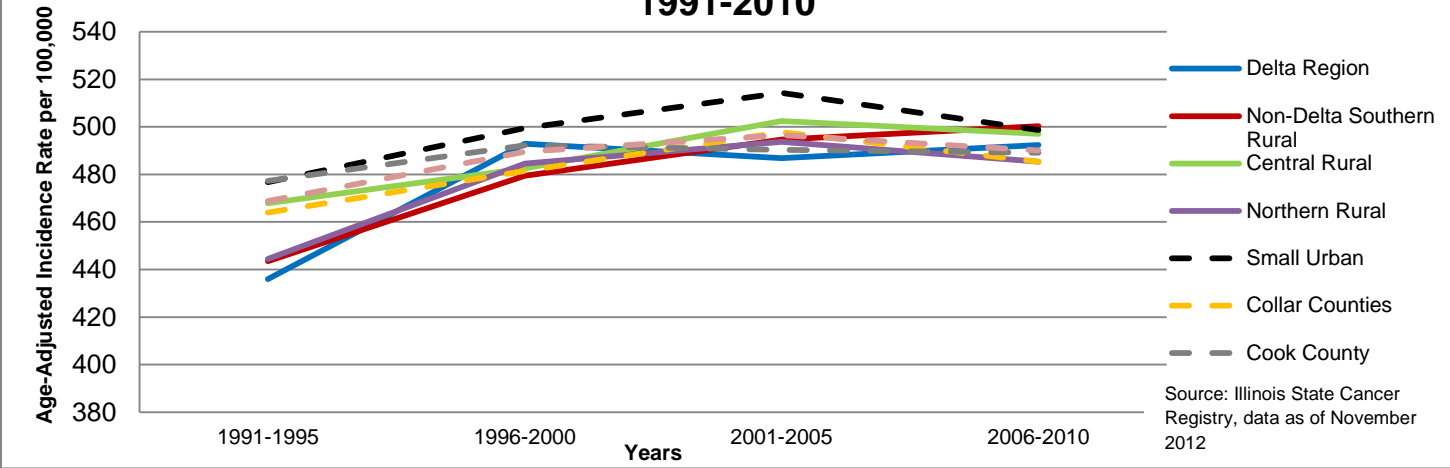
Overall, Delta Region cancer incidence was roughly the same as other rural regions and the state of Illinois as a whole during the 2006-2010 interval. Examining cancer incidence over a twenty year period (1991-2010), two counties within the Delta Region (Franklin and Gallatin) had overall cancer incidence that exceeded the state rate (Figure 2). However, seven counties within the Delta Region had overall cancer incidence rates that were significantly lower than the state rate. The Delta Region saw larger increases in cancer incidence compared to other designated regions, increasing 12.9% between 1991 and 2010 (Graph 1). The Delta Region’s incidence rates for melanoma, colorectal cancer, lung and bronchus cancer were significantly higher than the state’s rates between 2006 and 2010. Lung and bronchus cancer rates in the Delta Region during this time also exceeded rates in the Non-Delta Southern Rural, the Central Rural, Northern Rural regions. Stomach cancer rates were lower for the Delta Region than the state rate. See tables in Supplementary Appendix 1 for cancer incidence by site and designated region for all year intervals.

Figure 2: Illinois Cancer Incidence by County, All Sites, 1991-2010



Source: Illinois State Cancer Registry, data as of November 2012

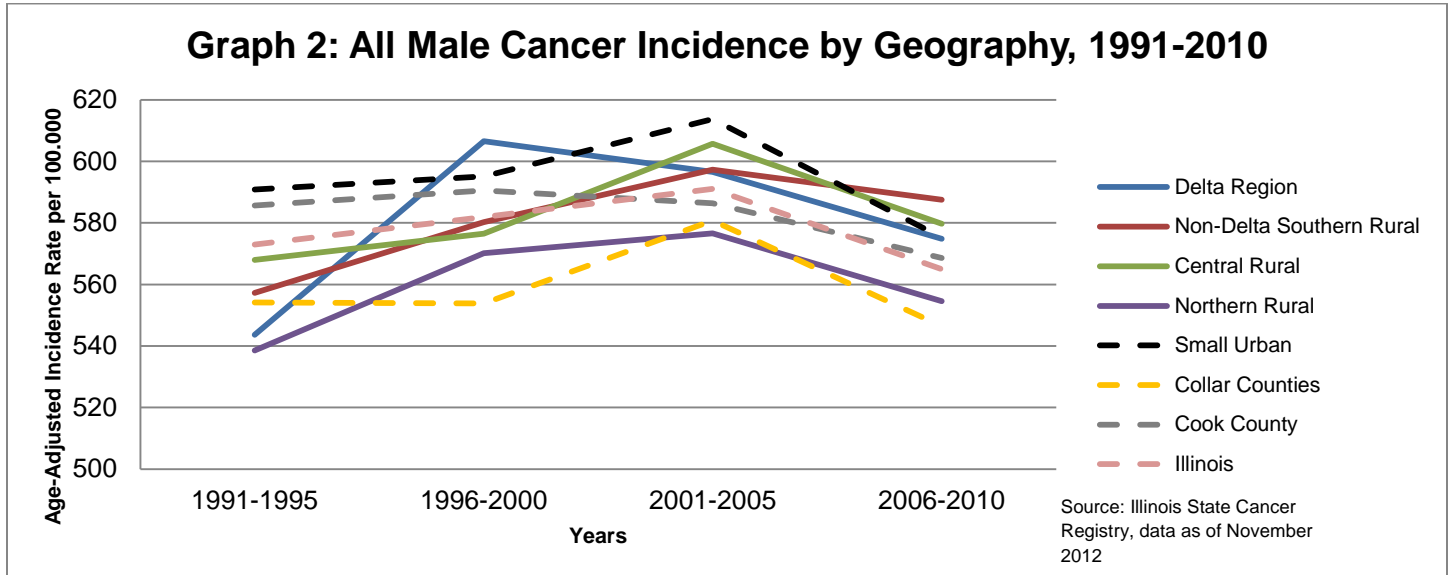
Graph 1: All Cancer Incidence by Geography, Both Genders, 1991-2010



Source: Illinois State Cancer Registry, data as of November 2012

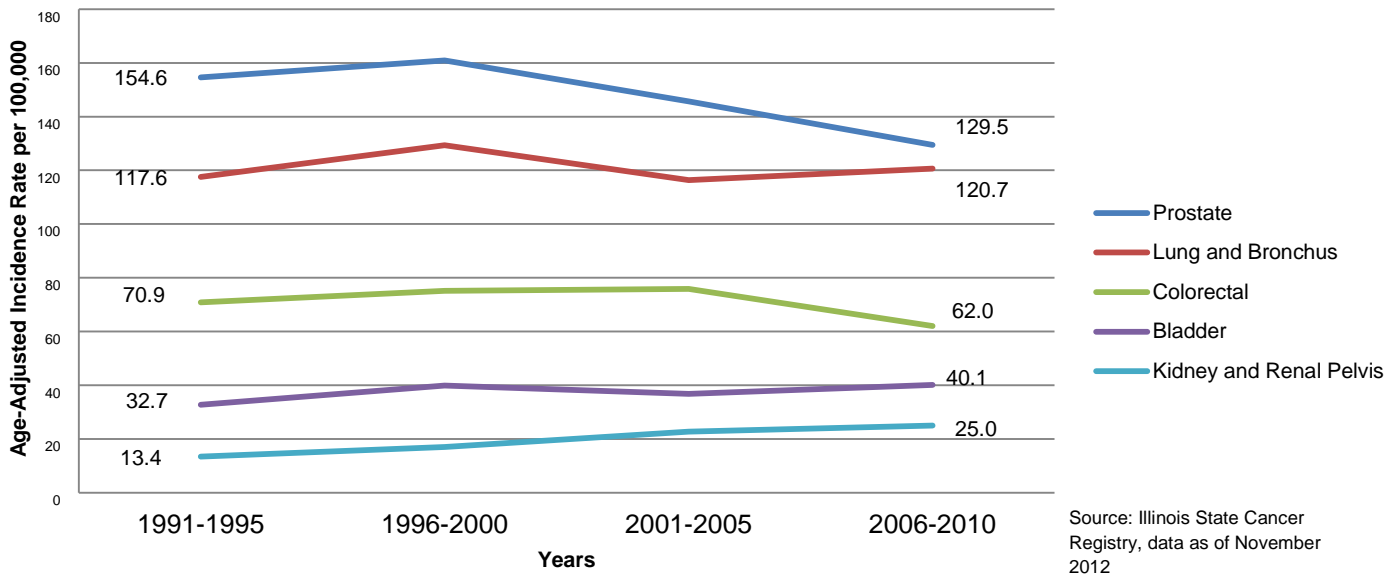
Male Incidence

In 2006-2010 time period, the overall age adjusted male cancer incidence rate for the Delta Region was 574.8 per 100,000, a 5.7% increase in incidence since the 1991-1995 interval (Graph 2). Both lung and bronchus cancer and melanoma incidence rates exceeded the state rate for the most recent interval. Lung cancer rates exceeded those of the Non-Delta Southern, Central, and Northern Rural regions between 2006 and 2010 as well. However, stomach cancer, prostate cancer, and Non-Hodgkin's lymphoma rates were significantly lower in the Delta Region than in the state as whole.



The top five cancers for Delta Region males are shown in Graph 3. Between 2006 and 2010, these five cancers accounted for 65.7% of all cancers in the Region. Prostate cancer had the highest incidence rate and has decreased slightly since the 1991-1995 interval. Lung and bronchus cancer rates were relatively stable, but remain significantly higher than incidence rates in the state as a whole and the Northern Rural region. Bladder cancer incidence increased slightly during this time, and kidney and renal pelvis cancer incidence increased 86.6%. See tables in Supplementary Appendix 2 for male cancer incidence by site and designated region for all year intervals.

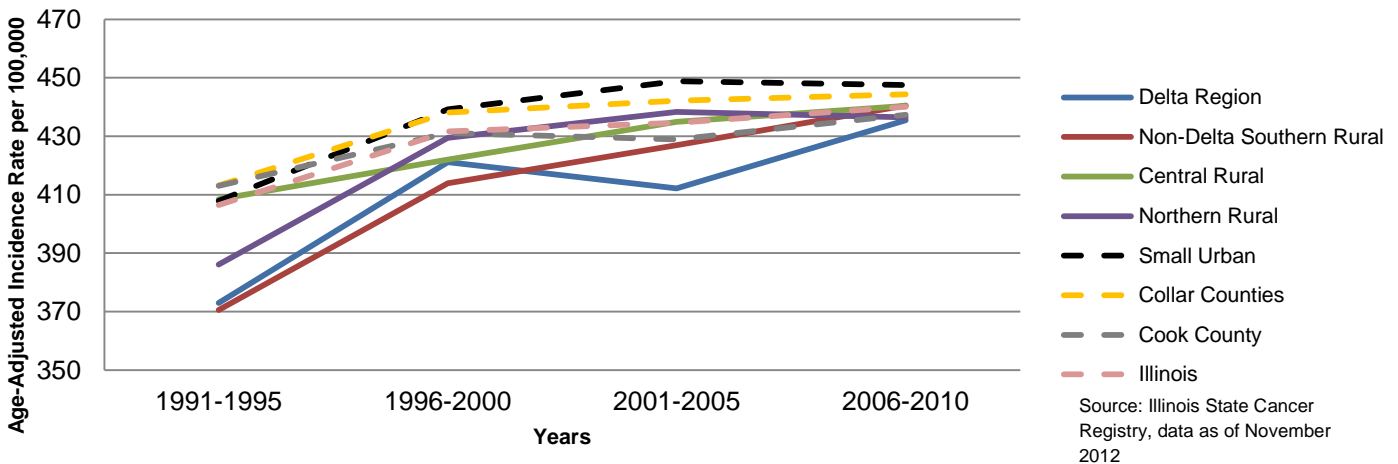
Graph 3: Delta Region Male Cancer Incidence, Top Five Sites, 1991-2010



Female Incidence

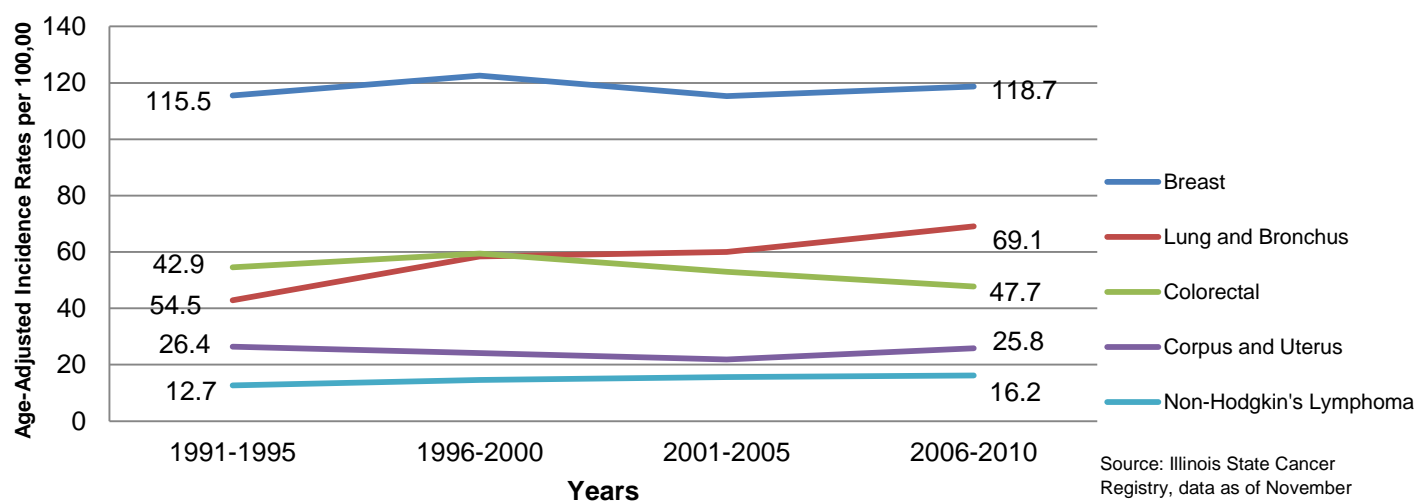
From 2006 to 2010, the overall age-adjusted cancer incidence for females in the Delta region was 435.5 per 100,000. This is 16.8% increase in cancer incidence since the 1991-1995 interval (Graph 4). Between 2006 and 2010, lung and bronchus cancer rates in the Delta region exceeded the state rate as well as the Northern Rural rate. However, Delta Region female stomach, pancreas, and bladder cancer rates were lower than the state rate between 2006 and 2010.

Graph 4: All Female Cancer Incidence by Geography, 1991-2010



The five cancers with the highest incidence for Delta Region females are shown in Graph 5. Between 2006 and 2010, these five cancers accounted for 63.7% of all cancer cases. Invasive breast cancer had the highest incidence and has stayed relatively stable since 1991. From the 1991-1995 to the 2006-2010 time period, lung cancer incidence increased 61.1%, surpassing colorectal cancer as the second most common cancer among females. Colorectal cancer and Non-Hodgkin's lymphoma rates increased slightly. Corpus and Uterus cancer stayed stable during this time. See tables in Supplementary Appendix 3 for female cancer incidence by site and designated region for all year intervals.

Graph 5: Delta Region Female Cancer Incidence, Top Five Sites, 1991-2010



Cancer Mortality

Overall Mortality

On average between 2006 and 2010, the Delta Region had 901 cancer deaths per year. This was roughly 23 percent of the total number of deaths for the region during this time. Between 1990 and 2010, the age-adjusted cancer mortality rate in the Delta Region was 203.8 per 100,000. Half of the counties in the region had mortality rates in significant excess of the state rate, while only one county, Randolph, had a mortality rate significantly lower than the state rate (Figure 3).

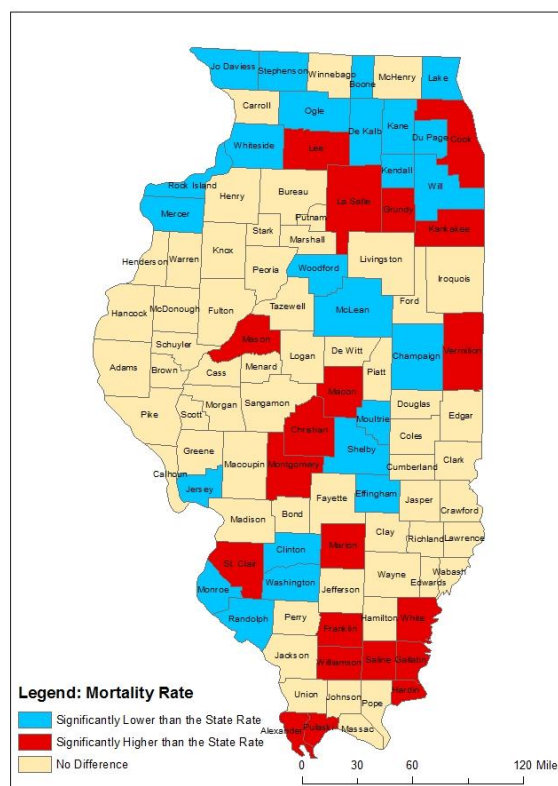
Table 2: Change in Cancer Mortality by Geography, 1990-2010
(National data from 1991-2010)

| | All | Male | Female |
|---------------------------|--------|--------|--------|
| National * | -20% | N/A | N/A |
| Illinois † | -17.5% | -23.0% | -13.4% |
| Delta Region† | -7.4% | -16.3% | +0.9% |
| Non-Delta Southern Rural† | -9.2% | -10.9% | -9.8% |
| Central Rural† | -10.8% | -16.4% | -7.1% |
| Northern Rural† | -11.5% | -18.5% | -5.8% |
| Small Urban† | -11.8% | -20.7% | -10.8% |
| Collar Counties† | -18.8% | -24.1% | -15.1% |
| Cook County† | -20.5% | -25.7% | -16.2% |

*Source: Siegel R, Ma J, Zou Z, Jemal A. Cancer Statistics, 2014. CA Cancer J Clin. 2014;64:9-29.

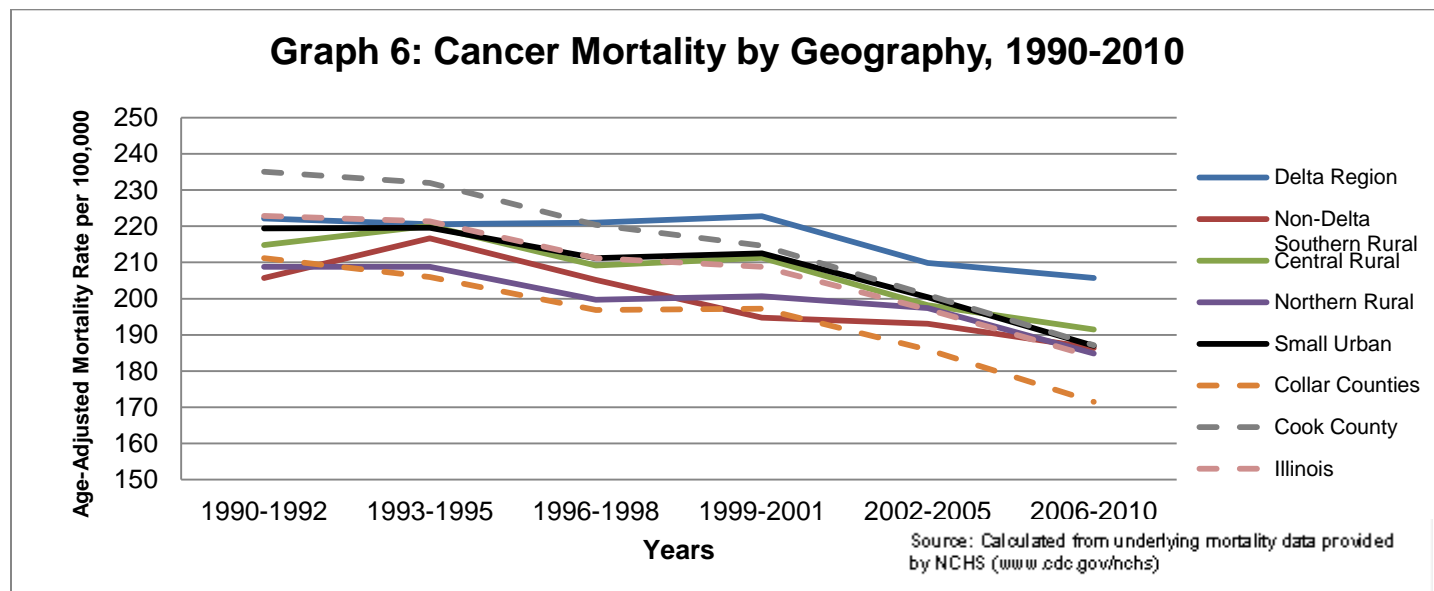
†Source: Calculated from underlying mortality data provided by NCHS (www.cdc.gov/nchs)

Figure 3: Illinois Cancer Mortality by County, All Sites, 1990-2010



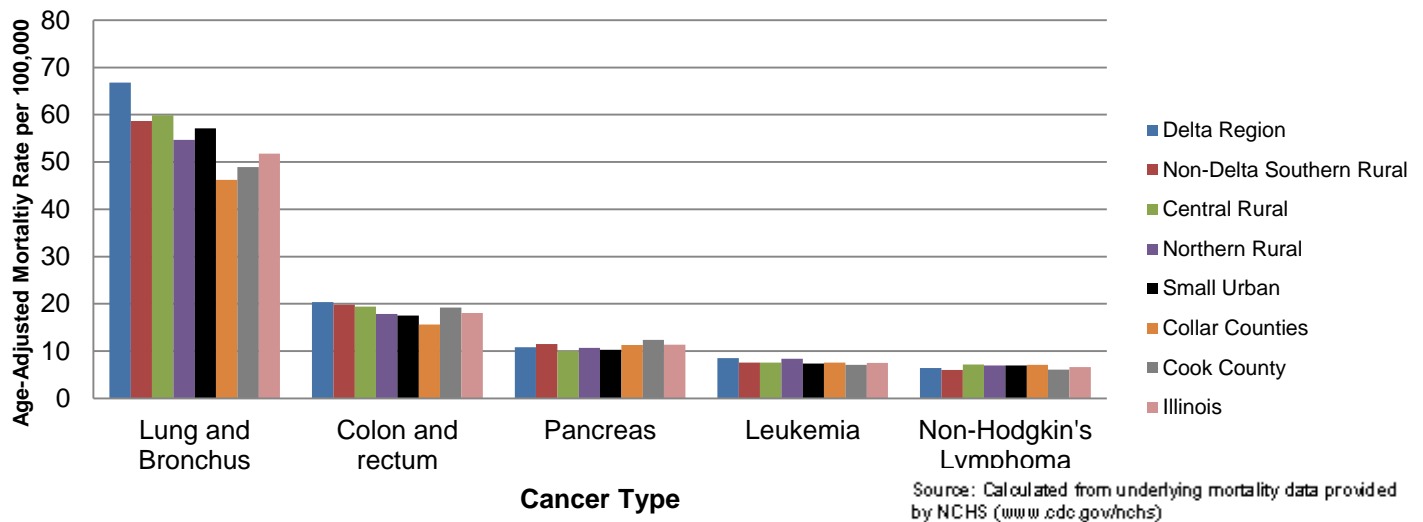
Source: Calculated from underlying mortality data provided by NCHS (www.cdc.gov/nchs)

Cancer mortality rates have declined over the years for all regions, but the Delta Region did not experience the same decreases as other regions (See Table 2 and Graph 6). The Delta Region experienced an 8.0% decrease in cancer mortality between 1990 and 2010. This cancer mortality decrease was smaller than the decrease seen in the Non-Delta Southern Rural counties (10.2%) and all other designated regions (which ranged from 12.2% to 20.5%).



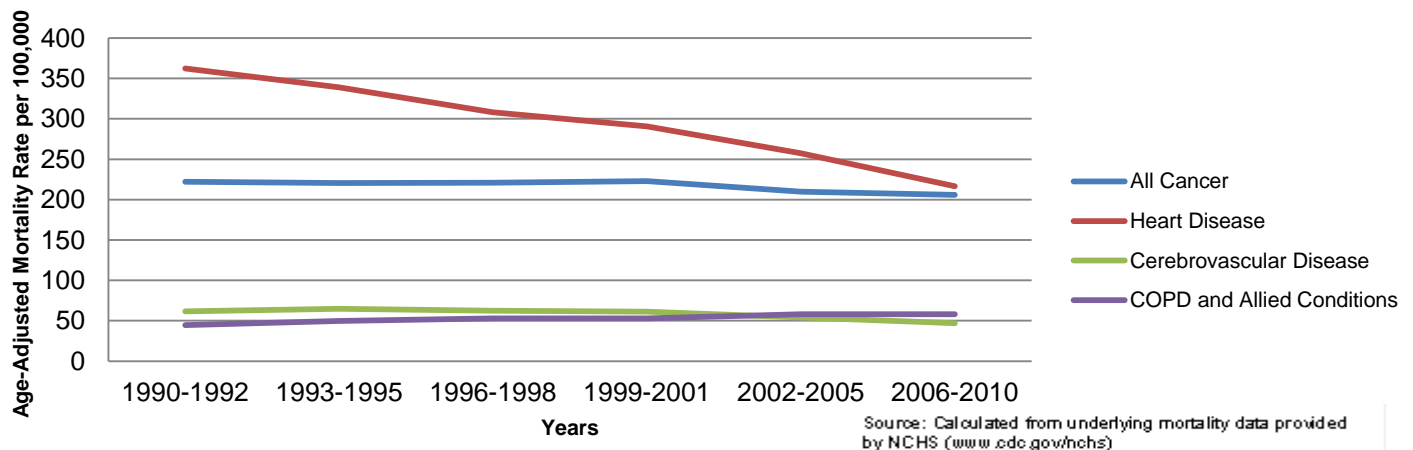
Between 2006 and 2010, the cancer mortality rate in the Delta Region (205.7 per 100,000) exceeded of all designated rural and urban regions, including the Non-Delta Southern Rural region (186.3 per 100,000). The rates for the top 5 causes of cancer death are displayed in Graph 7. Delta Region cancer mortality rates for four specific sites exceeded the state rate: oral cavity and pharynx, colorectal, lung and bronchus, and nervous system cancers. Delta Region lung and bronchus cancer mortality showed the greatest disparity, as mortality rates in the Delta Region were significantly higher than all other rural regions and all urban regions, even exceeding the neighboring Non-Delta Southern Rural region by 13.6%. See tables in Supplementary Appendix 4 for mortality rates by cancer site in the Delta and Non-Delta Southern Rural regions and tables in Appendix 5 of the overall “Cancer in the Rural Illinois” for mortality rates by cancer site for Illinois and other designated regions.

**Graph 7: Cancer Mortality Rates
by Cancer Type and Geography, 2006-2010**



In the Delta Region, the age-adjusted cancer mortality rate declined just 8.0% between 1990 and 2010 while heart disease mortality declined 59.8% during that time (Graph 8). In fact, Delta Region deaths due to heart disease and cancer have nearly converged, with 2006-2010 age-adjusted mortality rates of 216.7 and 205.7 per 100,000 for heart disease and cancer, respectively.

**Graph 8: Delta Region Mortality by Cause,
1990-2010**



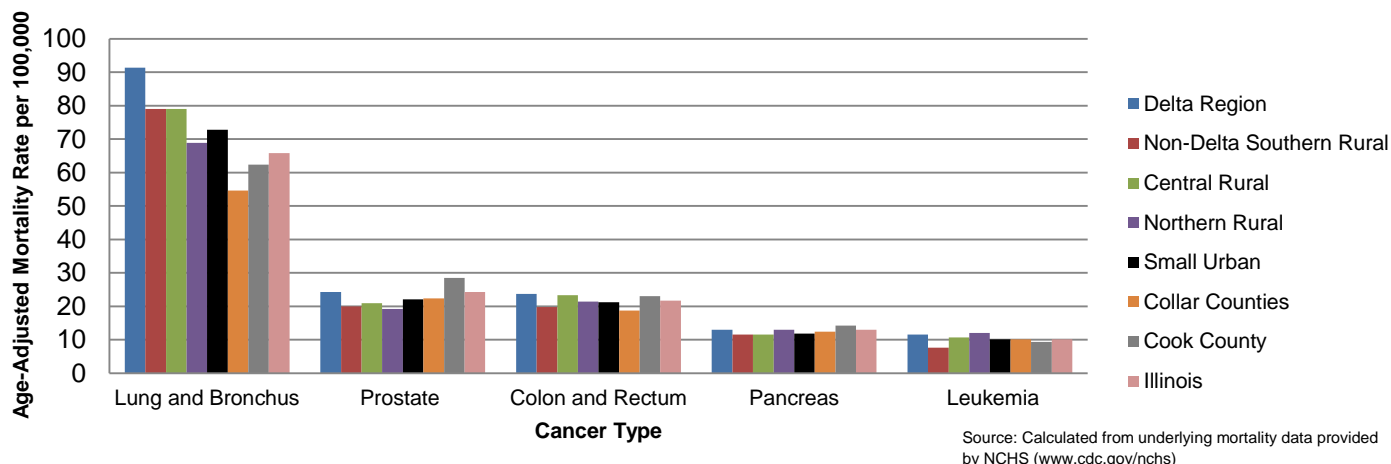
Male Mortality

Cancer mortality for males decreased in all designated regions and the state as a whole between 1990 and 2010. However, decreases in the Delta Region (19.4%) were not as pronounced as some of the other designated regions, although the magnitude of mortality decrease did exceed that of the adjacent Non-Delta Southern Rural region (10.9%). The state as a whole experienced a 29.8% decrease in male cancer mortality between 1990 and 2010.

The rates for the top 5 causes of male cancer death between 2006 and 2010 are displayed in Graph 9. Of these, lung and bronchus cancer in the Delta Region exceeded all other designated regions and the state,

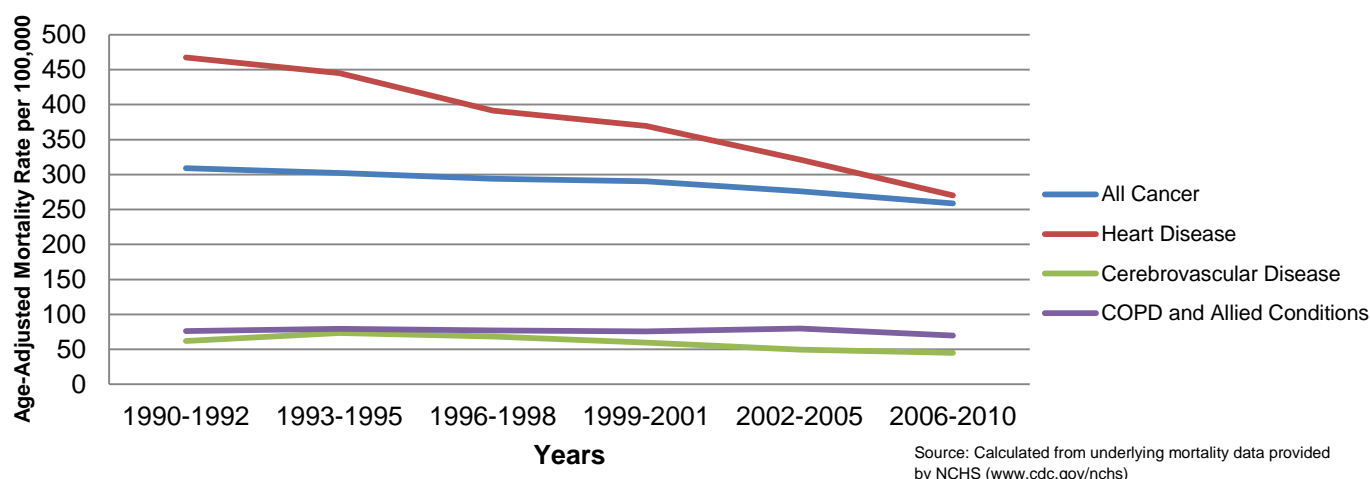
while the other four causes of cancer death did not significantly differ from the other designated regions. However, mortality due to oral cavity and pharynx cancer in Delta Region males (6.2 per 100,000) exceeded the mortality rates of all other designated regions and the state. The stomach cancer mortality rate in Delta Region males was less than the state rate. See tables in Supplementary Appendix 5 for male mortality rates by cancer site in the Delta and Non-Delta Southern Rural Regions and tables in Appendix 6 of the overall “Cancer in Rural Illinois” for male mortality rates by cancer site for Illinois and other designated regions.

Graph 9: Male Cancer Mortality by Type and Geography, 2006-2010



In the Delta Region, male cancer mortality declined 19.4% between 1990 and 2010 while heart disease mortality decreased 57.8%. In fact, Delta region male mortalities due to heart disease and cancer have nearly converged, with 2006-2010 mortality rates of 270.1 and 258.9 per 100,000 for heart disease and cancer, respectively (Graph 10).

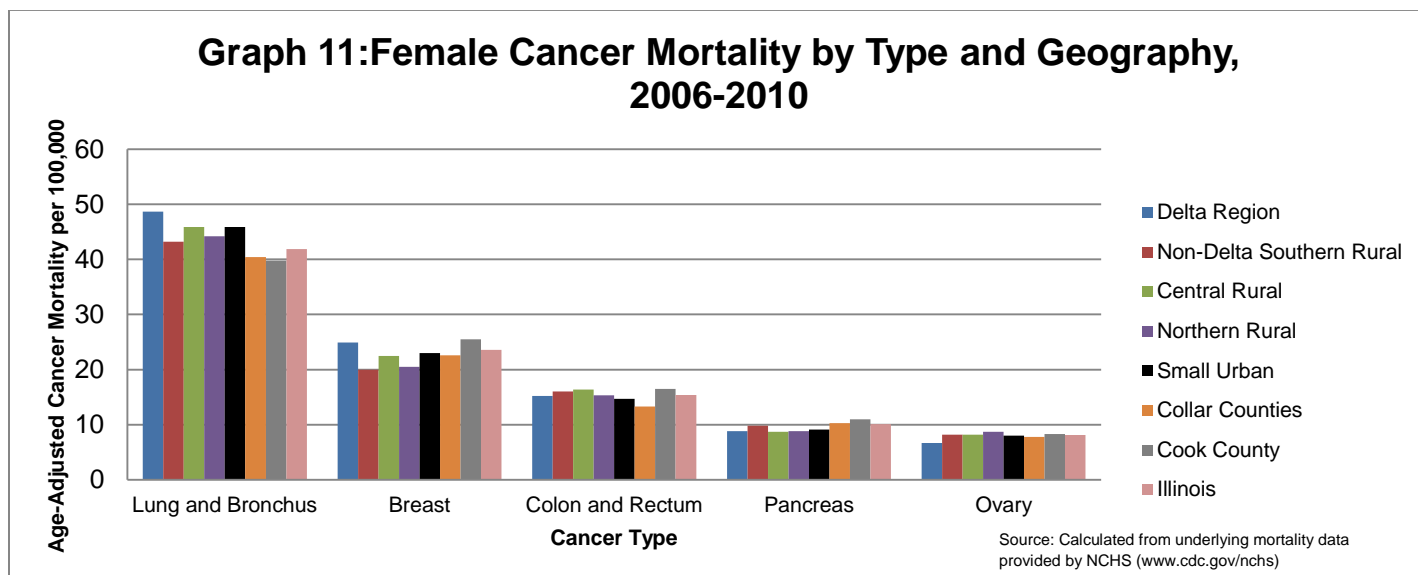
Graph 10: Delta Region Male Mortality by Cause, 1990-2010



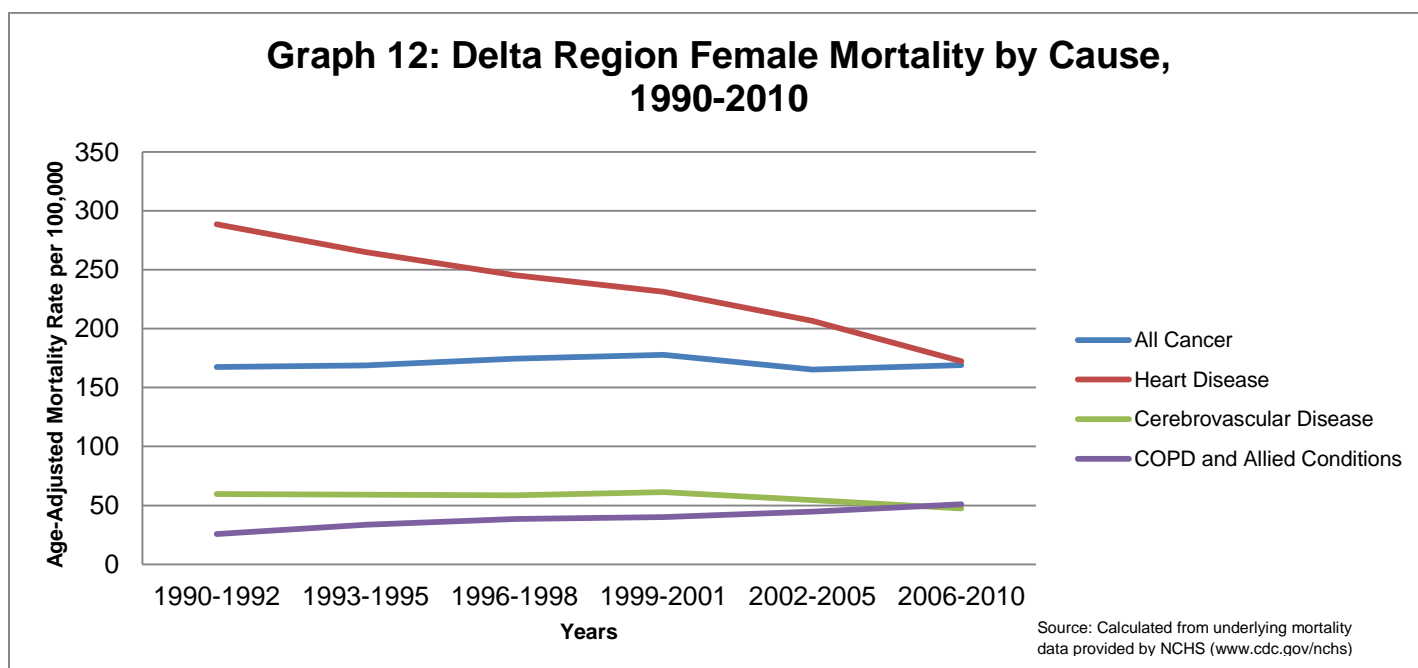
Female Mortality

Cancer mortality rates for females actually increased very slightly (0.9%) for the Delta Region between 1990 and 2010, but decreased by at least 6.1% for all other rural regions and urban regions. In Illinois as a whole, female cancer mortality decreased 15.5% during this time period.

The rates for the top 5 causes of female cancer death between 2006 and 2010 are displayed in Graph 11. Female lung and bronchus cancer mortality rate in the Delta Region exceeded the state rate, but did not significantly exceed the state rate for other cancer mortalities. Corpus and uterus cancer mortality rate was significantly lower than the state rate.



In the Delta Region, female cancer mortality increased 0.9% between 1990 and 2010, while mortality due to heart disease decreased 60%. In fact, Delta region female deaths due to heart disease and cancer have nearly converged, with 2006-2010 mortality rates of 172.5 and 169.1 per 100,000 for heart disease and cancer, respectively (Graph 12).



Cancer Staging

In the Delta Region, just over 44 percent of cancers are diagnosed in the local stages of the disease while 45.8% of cancer is diagnosed at the regional or distant stages between 2006 and 2010 (Table 3). The remaining nearly 10% of cancer cases were unstaged at diagnosis. A similar distribution was seen across all rural regions and the small urban region, but the Central and Northern Rural regions had a lower percentage of

unstaged cancers. In males, 44.6% of cancers diagnosed in the Delta Region were localized, a smaller percentage than other designated regions in the state and the state as a whole (Graph 13). In females, 10.2% of cancers diagnosed in the Delta Region were unstaged, higher than any other rural region or any urban region (Graph 14).

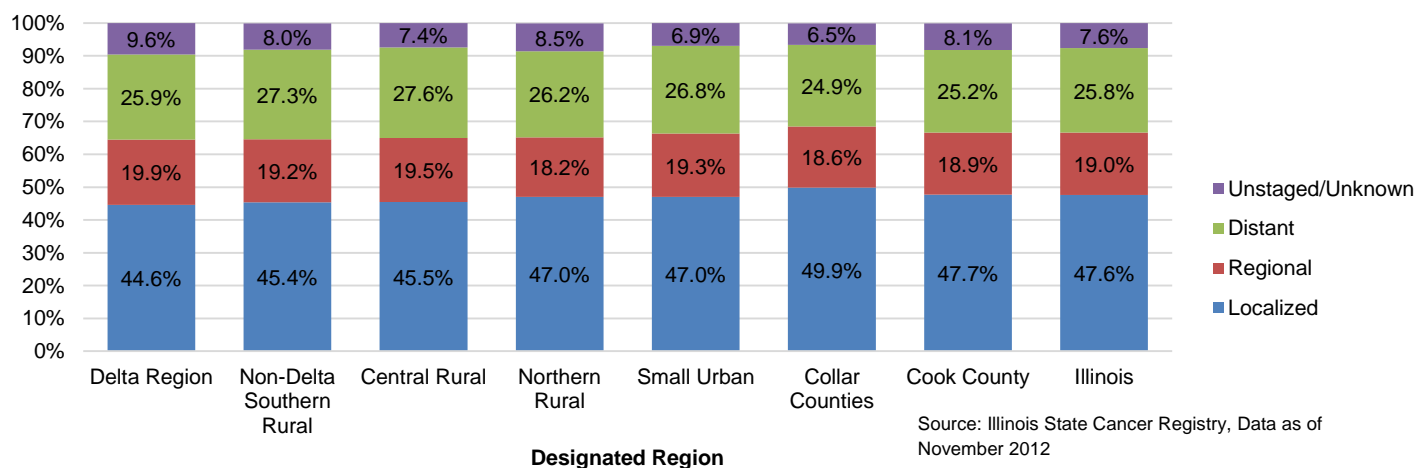
Table 3: Malignant Cancer by Stage and Geography, 2006-2010

| | Percent Localized | Percent Regional | Percent Distant | Percent Unknown/unstaged |
|--------------------------|--------------------------|-------------------------|------------------------|---------------------------------|
| Delta Region | 44.3% | 21.4% | 24.4% | 9.9% |
| Non-Delta Southern Rural | 44.3% | 20.8% | 26.7% | 8.2% |
| Central Rural | 44.8% | 21.7% | 26.2% | 7.3% |
| Northern Rural | 45.6% | 20.6% | 25.4% | 8.4% |
| Small Urban | 46.3% | 21.4% | 25.6% | 6.6% |
| Collar Counties | 48.2% | 21.7% | 23.8% | 6.3% |
| Cook County | 45.1% | 22.1% | 25.1% | 7.8% |
| Illinois | 46.0% | 21.7% | 25.0% | 7.4% |

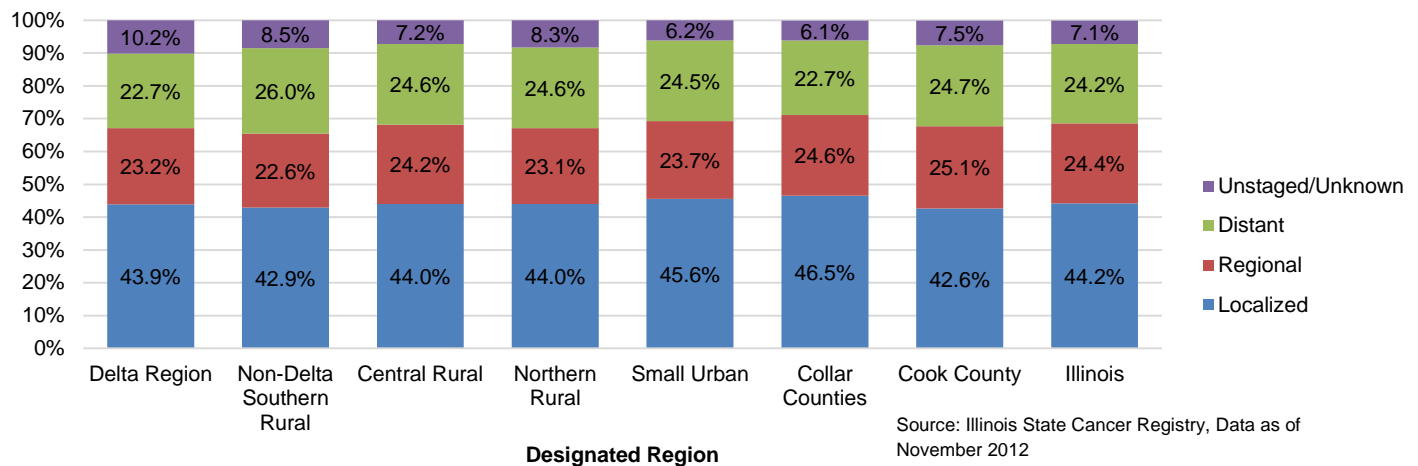
*Data do not include in situ bladder cases

Source: Illinois State Cancer Registry, data as of November 2012

Graph 13: Male Cancer by Stage and Geography, 2006-2010



Graph 14: Female Cancer by Stage and Geography, 2006-2010



Risk Factor, Screening Behavior, and Access Disparities

Table 4: Cancer Screening and Risk Factor Prevalence in the Delta Region

Data from the Illinois Behavioral Risk Factors Surveillance System (BRFSS) 2012 survey indicated that cancer screening rates in the Delta Region were very similar to the state as a whole (Table 4). However, risk factors for cancer such as obesity (37.5% vs. 27.7%, respectively) and smoking (23.3% vs. 18.6%, respectively) were higher than in the state as a whole.

The percentage of Delta Region residents under the age of 65 who are uninsured is slightly higher than other rural regions. Also, while this region has a rate of general practitioners per 100,000 that exceeds all regions, they have a less access to specialists who diagnosis and treat patients with cancer than the urban regions, as detailed in Table 5. Generally speaking, the Delta Region's access disparities are comparable to other rural regions in Illinois. However, the Delta Region and the Non-Delta Southern Rural Region have the lowest level of access to radiation oncologists in the state (0.6 radiation oncologists per 100,000). Also, the Delta Region is one of only two regions without a colorectal surgeon.

| 2012 BRFSS Survey Question* | Percent Delta Region | Percent Illinois |
|---|----------------------|------------------|
| Had Mammogram (women 40+ years old) | | |
| Yes | 91.6% | 91.9% |
| Last Mammogram (women 40+ year old) | | |
| ≤1 year | 61.1% | 61.2% |
| > year | 38.9% | 38.8% |
| Ever Had a Pap Smear | | |
| Yes | 91.0% | 91.5% |
| How long since your last Pap Smear | | |
| ≤1 year | 61.4% | 70.0% |
| > year | 38.6% | 30.0% |
| Had Colonoscopy/Sigmoidoscopy (50+ years old) | | |
| Yes | 74.2% | 64.1% |
| Had home blood stool test (50+ years old) | | |
| Yes | 33.5% | 31.8% |
| Smoking | | |
| Current Smoker | 23.3% | 18.6% |
| Former Smoker | 27.7% | 24.4% |
| Non-Smoker | 49.5% | 57.0% |
| Last Smoked Regularly | | |
| < 5 years ago | 42.4% | 30.5% |
| >5 years ago | 57.6% | 69.5% |
| Weight | | |
| Underweight/Normal | 31.9% | 36.9% |
| Overweight | 30.6% | 35.4% |
| Obese | 37.5% | 27.7% |

*Data from Bruce Steiner Illinois BRFSS office (personal communication, November 2013)

Table 5: Access to Care by Geography

| | Delta Region | Non-Delta Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|--|---------------------|---------------------------------|----------------------|-----------------------|--------------------|------------------------|--------------------|-----------------|
| Health Insurance † | | | | | | | | |
| % Uninsured (under age 65) | 13.4% | 11.8% | 12.4% | 12.2% | 12.0% | 11.8% | 23.2% | 14.8% |
| Physician Access | | | | | | | | |
| # of General Practitioners* | 149 | 68 | 207 | 219 | 827 | 856 | 1643 | 3969 |
| General Practitioners per 100,000* | 43.3 | 20.1 | 28.2 | 28.3 | 35.7 | 27.3 | 31.4 | 30.8 |
| # of General Surgeons* | 22 | 16 | 35 | 44 | 235 | 266 | 747 | 1383 |
| General Surgeons per 100,000* | 6.4 | 8.9 | 4.8 | 5.7 | 10.1 | 8.5 | 14.3 | 10.7 |
| # of Medical Oncologists‡ | 5 | 4 | 19 | 22 | 68 | 84 | 212 | 521 |
| Medical Oncologists per 100,000‡ | 1.5 | 1.2 | 2.6 | 2.8 | 2.9 | 2.7 | 4.1 | 4.0 |
| # of Radiation Oncologists* | 2 | 2 | 7 | 6 | 28 | 45 | 108 | 198 |
| Radiation Oncologists per 100,000* | 0.6 | 0.6 | 1.0 | 0.8 | 1.2 | 1.4 | 2.1 | 1.5 |
| # of Urologists* | 7 | 6 | 10 | 9 | 80 | 92 | 235 | 439 |
| Urologists per 100,000* | 2.0 | 1.8 | 1.4 | 1.2 | 3.4 | 2.9 | 4.5 | 3.4 |
| # of Obstetricians/Gynecologists* | 22 | 25 | 32 | 31 | 250 | 379 | 965 | 1704 |
| Obstetricians/Gynecologists per 100,000* | 6.4 | 7.4 | 4.4 | 4.0 | 10.8 | 12.1 | 18.5 | 13.3 |
| # of Dermatologists* | 3 | 2 | 6 | 5 | 62 | 114 | 270 | 462 |
| Dermatologists per 100,000* | 0.9 | 0.6 | 0.8 | 0.7 | 2.7 | 3.6 | 5.2 | 3.6 |
| # of Gastroenterologists* | 4 | 1 | 4 | 13 | 85 | 142 | 291 | 540 |
| Gastroenterologists per 100,000* | 1.2 | 0.3 | 0.5 | 1.7 | 3.7 | 4.5 | 5.6 | 4.2 |
| # of Colorectal surgeons* | 0 | 1 | 0 | 2 | 17 | 12 | 30 | 62 |

| | Delta Region | Non- Delta Southern Rural | Central Rural | Northern Rural | Small Urban | Collar Counties | Cook County | Illinois |
|----------------------------------|-------------------------|--|--------------------------|---------------------------|------------------------|----------------------------|------------------------|-----------------|
| Colorectal surgeons per 100,000* | 0 | 0.3 | 0 | 0.3 | 0.7 | 0.4 | 0.6 | 0.5 |
| # of thoracic surgeons | 3 | 1 | 3 | 2 | 36 | 36 | 93 | 174 |
| Thoracic surgeons per 100,000* | 0.9 | 0.3 | 0.4 | 0.3 | 1.6 | 1.1 | 1.8 | 1.4 |

†Data from the 2011 Small Area Health Insurance Estimates from the U.S. Census Bureau

‡ Data from the Illinois Department of Financial and Professional Regulation.

*Data from the 2012-2013 Area Health Resource File from the Health Resource and Services Administration

Supplemental Appendix 1: Southern Rural Regions Incidence Rates, Both Genders

See Appendix 1 for corresponding rates for the state, other rural regions, and urban regions.

| <i>Delta Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 436.0 (426.8-445.3) | 492.9 (483.3-502.7) | 486.9 (477.3-496.5) | 492.4 (482.9-502.0) |
| Oral Cavity and Pharynx | 8.1 (6.9-9.5) | 9.5 (8.2-11.0) | 11.2 (9.8-12.8) | 13.0 (11.4-14.6) |
| Esophagus | 3.9 (3.1-4.9) | 5.0 (4.1-6.0) | 4.4 (3.6-5.4) | 4.6 (3.8-5.6) |
| Stomach | 4.8 (3.9-5.8) | 5.8 (4.8-6.9) | 6.1 (5.1-7.2) | 4.5 (3.6-5.4) |
| Colorectal | 60.8 (57.4-64.2) | 65.5 (62.1-69.0) | 62.9 (59.5-66.3) | 54.3 (51.2-57.5) |
| Liver | 1.4 (0.9-1.9) | 3.2 (2.5-4.1) | 3.8 (3.0-4.7) | 4.7 (3.8-5.7) |
| Pancreas | 8.6 (7.3-9.9) | 11.9 (10.4-13.4) | 10.6 (9.3-12.1) | 11.8 (10.4-13.3) |
| Lung and Bronchus | 74.3 (70.5-78.2) | 88.3 (84.2-92.4) | 83.6 (79.8-87.6) | 90.8 (86.8-94.9) |
| Bone | 0.6 (0.3-1.1) | 0.8 (0.4-1.3) | 0.8 (0.4-1.3) | 1.0 (0.6-1.5) |
| Melanoma | 10.1 (8.6-11.6) | 12.6 (11.0-14.3) | 15.6 (13.9-17.5) | 20.1 (18.2-22.2) |
| Bladder | 18.0 (16.2-19.9) | 22.2 (20.2-24.2) | 21.6 (19.7-23.7) | 21.9 (20.0-23.9) |
| Kidney and Renal Pelvis | 9.7 (8.3-11.1) | 13.4 (11.8-15.0) | 16.6 (14.8-18.5) | 18.4 (16.6-20.3) |
| Nervous System | 6.0 (4.9-7.1) | 7.6 (6.4-8.9) | 6.7 (5.5-7.9) | 7.4 (6.2-8.6) |
| Hodgkin's lymphoma | 2.5 (1.8-3.2) | 2.1 (1.5-2.8) | 2.2 (1.6-3.0) | 2.8 (2.1-3.6) |
| Non-Hodgkin's lymphoma | 15.2 (13.5-17.1) | 18.1 (16.3-20.0) | 20.4 (18.5-22.4) | 18.0 (16.2-19.8) |
| Myeloma | 4.9 (4.0-6.0) | 5.9 (4.9-7.0) | 5.8 (4.8-6.8) | 5.4 (4.5-6.5) |
| Leukemia | 10.0 (8.6-11.4) | 13.2 (11.7-14.9) | 13.7 (12.1-15.3) | 13.0 (11.5-14.6) |
| All other sites | 41.0 (38.2-43.8) | 43.0 (40.2-46.0) | 47.6 (44.7-50.7) | 52.3 (49.2-55.5) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Non-Delta Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Both Genders, 1991-2010

| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
|-------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| All Invasive Cancers* | 443.5 (434.0-453.1) | 479.5 (469.7-489.3) | 494.6 (484.9-504.4) | 500.3 (490.7-510.0) |
| Oral Cavity and Pharynx | 9.2 (7.8-10.6) | 10.1 (8.7-11.6) | 10.3 (8.9-11.7) | 11.4 (10.0-12.9) |
| Esophagus | 3.5 (2.7-4.4) | 4.8 (3.9-5.8) | 4.9 (4.0-6.0) | 5.2 (4.3-6.2) |
| Stomach | 5.2 (4.2-6.2) | 5.2 (4.2-6.3) | 4.9 (4.0-5.9) | 5.5 (4.6-6.6) |
| Colorectal | 59.6 (56.2-63.1) | 67.4 (63.8-71.0) | 64.1 (60.7-67.6) | 55.4 (52.2-58.6) |
| Liver | 2.0 (1.4-2.7) | 2.7 (2.1-3.5) | 3.9 (3.1-4.8) | 5.6 (4.6-6.6) |
| Pancreas | 10.0 (8.7-11.5) | 10.8 (9.4-12.3) | 11.1 (9.7-12.6) | 12.2 (10.7-13.7) |
| Lung and Bronchus | 69.6 (65.9-73.4) | 75.9 (72.1-79.8) | 79.4 (75.6-83.3) | 81.0 (77.3-84.9) |
| Bone | 0.4 (0.2-0.8) | 0.7 (0.4-1.1) | 0.8 (0.4-1.3) | 1.0 (0.6-1.5) |
| Melanoma | 10.7 (9.2-12.4) | 11.9 (10.4-13.6) | 17.8 (16.0-19.8) | 20.7 (18.7-22.7) |
| Bladder | 18.9 (17.0-20.9) | 21.8 (19.8-23.8) | 22.2 (20.3-24.3) | 24.4 (22.4-26.5) |
| Kidney and Renal Pelvis | 11.5 (10.0-13.2) | 12.5 (10.9-14.1) | 15.7 (14.0-17.4) | 18.6 (16.8-20.5) |
| Nervous System | 7.6 (6.4-9.0) | 6.5 (5.3-7.7) | 6.3 (5.2-7.5) | 8.0 (6.8-9.3) |
| Hodgkin's lymphoma | 2.3 (1.7-3.1) | 2.0 (1.4-2.7) | 2.4 (1.7-3.2) | 2.1 (1.4-2.8) |
| Non-Hodgkin's lymphoma | 16.9 (15.1-18.8) | 19.2 (17.2-21.2) | 20.0 (18.0-22.0) | 20.2 (18.3-22.2) |
| Myeloma | 4.6 (3.7-5.6) | 4.8 (3.9-5.8) | 5.6 (4.6-6.6) | 4.9 (4.0-5.9) |
| Leukemia | 12.5 (10.9-14.1) | 14.2 (12.6-15.9) | 14.3 (12.7-16.1) | 12.8 (11.3-14.5) |
| All other sites | 40.0 (37.2-43.0) | 42.5 (39.7-45.5) | 49.7 (46.6-52.9) | 55.8 (52.5-59.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Supplemental Appendix 2: Southern Rural Regions Incidence Rates, Male

See Appendix 2 for corresponding rates for the state, other rural regions, and urban regions.

| <i>Delta Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 543.6 (528.0-559.4) | 606.64 (590.5-623.0) | 596.6 (580.8-612.6) | 574.8 (559.7-590.1) |
| Oral Cavity and Pharynx | 12.8 (10.5-15.3) | 15.9 (13.3-18.6) | 18.2 (15.6-21.1) | 18.9 (16.2-21.7) |
| Esophagus | 6.7 (5.1-8.6) | 9.1 (7.2-11.2) | 7.1 (5.5-8.9) | 8.6 (6.9-10.5) |
| Stomach | 6.9 (5.3-8.8) | 8.3 (6.5-10.3) | 8.7 (6.9-10.8) | 6.1 (4.6-7.8) |
| Colorectal | 70.9 (65.3-76.7) | 75.1 (69.4-81.0) | 75.8 (70.2-81.6) | 62.0 (57.1-67.1) |
| Liver | 2.0 (1.1-3.0) | 4.3 (3.0-5.8) | 6.1 (4.6-7.8) | 7.5 (5.9-9.3) |
| Pancreas | 10.8 (8.7-13.2) | 13.5 (11.2-16.0) | 13.7 (11.4-16.2) | 15.0 (12.7-17.6) |
| Lung and Bronchus | 117.6 (110.4-125.0) | 129.4 (122.0-137.0) | 116.4 (109.5-123.5) | 120.7 (113.8-127.8) |
| Bone | 0.4 (0.1-0.9) | 1.0 (0.5-1.8) | 0.7 (0.2-1.3) | 1.1 (0.5-1.9) |
| Melanoma | 10.8 (8.7-13.2) | 16.1 (13.5-18.8) | 21.1 (18.2-24.2) | 25.4 (22.3-28.8) |
| Prostate | 154.6 (146.5-163.0) | 160.9 (152.6-169.4) | 145.7 (138.0-153.6) | 129.5 (122.5-136.7) |
| Testis | 3.2 (2.1-4.5) | 4.8 (3.4-6.3) | 6.0 (4.5-7.8) | 5.1 (3.7-6.8) |
| Bladder | 32.7 (29.0-36.7) | 39.9 (35.9-44.2) | 36.8 (32.9-40.9) | 40.1 (36.2-44.3) |
| Kidney and Renal Pelvis | 13.4 (11.0-16.0) | 17.0 (14.4-19.9) | 22.7 (19.7-25.9) | 25.0 (21.9-28.3) |
| Nervous System | 7.4 (5.6-9.3) | 9.2 (7.3-11.3) | 8.3 (6.5-10.3) | 8.3 (6.5-10.3) |
| Hodgkin's lymphoma | 3.3 (2.2-4.6) | 2.2 (1.3-3.2) | 3.1 (2.0-4.4) | 3.2 (2.2-4.5) |
| Non-Hodgkin's lymphoma | 18.5 (15.7-21.6) | 22.5 (19.5-25.7) | 26.5 (23.2-29.9) | 19.7 (17.0-22.7) |
| Myeloma | 6.8 (5.1-8.6) | 8.3 (6.5-10.3) | 7.2 (5.6-9.1) | 6.0 (4.5-7.6) |
| Leukemia | 14.5 (12.1-17.2) | 18.5 (15.7-21.5) | 19.0 (16.3-22.0) | 16.2 (13.7-18.9) |
| All other sites | 49.3 (44.7-54.2) | 49.8 (45.3-54.6) | 52.7 (48.1-57.5) | 54.5 (49.9-59.3) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Non-Delta Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Male, 1991-2010</i> | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 557.3 (541.2-573.6) | 580.3 (564.3-596.6) | 597.3 (581.4-613.4) | 587.5 (572.2-603.0) |
| Oral Cavity and Pharynx | 12.9 (10.5-15.5) | 14.2 (11.8-16.8) | 15.2 (12.8-17.8) | 18.0 (15.4-20.8) |
| Esophagus | 6.4 (4.8-8.3) | 9.1 (7.2-11.2) | 8.8 (7.0-10.8) | 9.3 (7.5-11.4) |
| Stomach | 7.8 (6.0-9.8) | 6.5 (4.9-8.4) | 7.5 (5.8-9.4) | 8.2 (6.5-10.1) |
| Colorectal | 69.1 (63.5-74.9) | 80.2 (74.3-86.4) | 75.4 (69.8-81.2) | 65.3 (60.2-70.5) |
| Liver | 2.7 (1.7-4.0) | 3.2 (2.1-4.5) | 5.8 (4.3-7.5) | 9.8 (7.9-11.8) |
| Pancreas | 11.2 (9.0-13.7) | 13.5 (11.1-16.1) | 13.7 (11.4-16.2) | 14.5 (12.2-17.0) |
| Lung and Bronchus | 108.8 (101.8-116.1) | 114.0 (107.0-121.3) | 108.7 (102.0-115.6) | 103.3 (97.0-109.9) |
| Bone | ** | ** | ** | ** |
| Melanoma | 11.7 (9.4-14.2) | 15.0 (12.5-17.7) | 21.5 (18.5-24.6) | 26.9 (23.7-30.4) |
| Prostate | 171.4 (162.6-180.3) | 158.3 (150.0-166.8) | 160.5 (152.3-168.9) | 144.8 (137.4-152.5) |
| Testis | 4.7 (3.3-6.3) | 5.5 (4.0-7.2) | 5.0 (3.6-6.6) | 5.9 (4.4-7.7) |
| Bladder | 34.2 (30.3-38.3) | 39.2 (35.1-43.5) | 39.1 (35.1-43.3) | 43.0 (38.9-47.3) |
| Kidney and Renal Pelvis | 15.3 (12.7-18.1) | 15.6 (13.1-18.4) | 21.9 (18.9-25.0) | 23.7 (20.7-26.9) |
| Nervous System | 9.5 (7.5-11.8) | 8.4 (6.6-10.5) | 7.3 (5.6-9.2) | 8.6 (6.8-10.7) |
| Hodgkin's lymphoma | 2.9 (1.8-4.2) | 2.0 (1.2-3.1) | 2.2 (1.3-3.3) | 2.4 (1.4-3.5) |
| Non-Hodgkin's lymphoma | 19.9 (16.9-23.1) | 21.5 (18.5-24.8) | 23.1 (20.1-26.4) | 23.4 (20.4-26.6) |
| Myeloma | 4.7 (3.3-6.3) | 5.5 (4.1-7.2) | 7.5 (5.8-9.4) | 6.7 (5.1-8.4) |
| Leukemia | 16.1 (13.5-19.0) | 18.6 (15.7-21.6) | 18.1 (15.4-21.0) | 15.8 (13.3-18.5) |
| All other sites | 46.4 (41.8-51.2) | 47.8 (43.3-52.6) | 54.7 (49.9-59.6) | 55.8 (51.1-60.7) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Supplemental Appendix 3: Southern Rural Regions Incidence Rates, Female

See Appendix 3 for corresponding rates for the state, other rural regions, and urban regions

| <i>Delta Region Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010</i> | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 373.0 (361.2-385.0) | 421.1 (408.8-433.6) | 412.2 (400.0-424.5) | 435.5 (423.0-448.2) |
| Oral Cavity and Pharynx | 4.3 (3.1-5.7) | 4.6 (3.4-5.9) | 4.8 (3.6-6.3) | 7.6 (6.0-9.4) |
| Esophagus | 1.6 (0.9-2.4) | 1.7 (1.0-2.5) | 2.3 (1.5-3.3) | 1.4 (0.8-2.2) |
| Stomach | 3.2 (2.2-4.2) | 3.9 (2.9-5.0) | 4.1 (3.0-5.3) | 3.1 (2.2-4.2) |
| Colorectal | 54.5 (50.3-58.9) | 59.4 (55.1-63.9) | 53.0 (48.8-57.2) | 47.7 (43.8-51.8) |
| Liver | 1.0 (0.5-1.5) | 2.4 (1.6-3.4) | 1.9 (1.2-2.8) | 2.2 (1.5-3.2) |
| Pancreas | 6.6 (5.2-8.2) | 10.3 (8.6-12.2) | 8.4 (6.8-10.1) | 8.9 (7.3-10.7) |
| Lung and Bronchus | 42.9 (39.0-46.9) | 58.4 (53.9-62.9) | 60.0 (55.6-64.6) | 69.1 (64.3-74.0) |
| Bone | 0.9 (0.4-1.6) | 0.6 (0.2-1.3) | 1.0 (0.4-1.8) | 1.0 (0.4-1.9) |
| Melanoma | 9.8 (7.9-11.9) | 9.9 (8.0-12.0) | 11.5 (9.5-13.8) | 16.4 (13.9-19.1) |
| Breast-invasive only | 115.5 (108.8-122.3) | 122.6 (115.9-129.6) | 115.3 (108.8-122.0) | 118.7 (112.2-125.5) |
| Cervix | 13.4 (11.0-15.9) | 14.3 (11.9-16.9) | 11.7 (9.5-14.1) | 8.9 (6.9-11.0) |
| Corpus and Uterus | 26.4 (23.3-29.7) | 24.1 (21.2-27.2) | 21.9 (19.1-24.8) | 25.8 (22.8-28.9) |
| Ovary | 12.9 (10.8-15.2) | 13.3 (11.1-15.6) | 12.6 (10.5-14.8) | 11.8 (9.9-14.0) |
| Bladder | 7.7 (6.2-9.4) | 9.4 (7.7-11.2) | 10.7 (8.9-12.7) | 7.9 (6.4-9.6) |
| Kidney and Renal Pelvis | 7.0 (5.5-8.8) | 10.7 (8.8-12.8) | 11.4 (9.4-13.6) | 12.8 (10.7-15.0) |
| Nervous System | 4.8 (3.5-6.3) | 6.4 (4.9-8.0) | 5.2 (3.8-6.7) | 6.5 (5.0-8.2) |
| Hodgkin's lymphoma | 1.8 (1.0-2.7) | 2.2 (1.3-3.3) | 1.4 (0.7-2.3) | 2.4 (1.5-3.5) |
| Non-Hodgkin's lymphoma | 12.7 (10.7-15.0) | 14.6 (12.5-16.9) | 15.6 (13.4-18.0) | 16.2 (14.0-18.7) |
| Myeloma | 3.8 (2.8-5.1) | 4.2 (3.1-5.5) | 4.7 (3.6-6.1) | 5.0 (3.8-6.4) |
| Leukemia | 6.9 (5.4-8.5) | 9.8 (8.0-11.8) | 10.0 (8.2-12.0) | 10.4 (8.6-12.4) |
| All other sites | 35.5 (32.0-39.2) | 38.5 (34.9-42.4) | 44.8 (40.8-49.1) | 51.6 (47.3-56.1) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| <i>Non-Delta Southern Rural Region Age-Adjusted Incidence Rates per 100,000, Female, 1991-2010</i> | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1991-1995 Rate (95% CI) | 1996-2000 Rate (95% CI) | 2001-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 370.6 (358.6-382.8) | 413.9 (401.5-426.5) | 426.9 (414.3-439.6) | 440.5 (427.9-453.3) |
| Oral Cavity and Pharynx | 6.3 (4.8-8.0) | 6.7 (5.1-8.4) | 6.1 (4.6-7.7) | 5.4 (4.0-6.9) |
| Esophagus | 1.3 (0.7-2.0) | 1.5 (0.9-2.3) | 1.7 (1.0-2.7) | 1.8 (1.1-2.6) |
| Stomach | 3.2 (2.2-4.3) | 4.3 (3.1-5.6) | 2.9 (2.0-4.0) | 3.2 (2.3-4.3) |
| Colorectal | 52.6 (48.4-57.0) | 57.9 (53.5-62.5) | 55.2 (51.0-59.6) | 47.9 (43.9-52.0) |
| Liver | 1.5 (0.8-2.3) | 2.4 (1.6-3.4) | 2.3 (1.5-3.2) | 2.0 (1.3-2.9) |
| Pancreas | 9.4 (7.6-11.3) | 8.8 (7.1-10.5) | 9.0 (7.4-10.8) | 10.2 (8.5-12.1) |
| Lung and Bronchus | 40.5 (36.7-44.5) | 47.2 (43.2-51.4) | 58.6 (54.1-63.2) | 64.5 (59.9-69.2) |
| Bone | ** | ** | ** | 1.1 (0.5-1.9) |
| Melanoma | 10.1 (8.1-12.3) | 9.7 (7.8-11.8) | 15.2 (12.8-17.8) | 16.1 (13.5-18.8) |
| Breast-invasive only | 110.3 (103.5-117.2) | 121.7 (114.8-128.8) | 121.2 (114.4-128.1) | 116.9 (110.3-123.6) |
| Cervix | 11.5 (9.2-13.9) | 14.4 (12.0-17.1) | 10.5 (8.5-12.8) | 8.1 (6.3-10.1) |
| Corpus and Uterus | 23.3 (20.4-26.5) | 27.6 (24.5-31.0) | 23.0 (20.1-26.0) | 29.3 (26.0-32.7) |
| Ovary | 12.8 (10.6-15.2) | 14.2 (12.0-16.7) | 11.6 (9.6-13.8) | 11.0 (9.0-13.0) |
| Bladder | 7.5 (6.0-9.1) | 8.7 (7.1-10.4) | 10.0 (8.3-12.0) | 10.4 (8.7-12.3) |
| Kidney and Renal Pelvis | 8.3 (6.6-10.2) | 10.1 (8.2-12.2) | 10.9 (9.0-13.0) | 14.4 (12.2-16.7) |
| Nervous System | 6.2 (4.6-8.0) | 4.8 (3.5-6.3) | 5.6 (4.2-7.3) | 7.5 (5.8-9.3) |
| Hodgkin's lymphoma | 1.9 (1.1-3.0) | 2.1 (1.2-3.1) | 2.6 (1.6-3.8) | 1.9 (1.1-2.9) |
| Non-Hodgkin's lymphoma | 14.2 (12.0-16.6) | 16.9 (14.5-19.5) | 17.6 (15.1-20.2) | 17.6 (15.2-20.1) |
| Myeloma | 4.7 (3.5-6.0) | 4.4 (3.2-5.7) | 4.2 (3.1-5.5) | 3.6 (2.6-4.7) |
| Leukemia | 9.6 (7.8-11.6) | 11.2 (9.2-13.3) | 11.9 (9.9-14.0) | 10.4 (8.6-12.4) |
| All other sites | 35.5 (31.9-39.3) | 39.1 (35.3-43.0) | 46.3 (42.2-50.6) | 57.6 (52.9-62.4) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Supplemental Appendix 4: Southern Rural Regions Mortality Rates, Both Genders

See Appendix 4 for corresponding rates for the state, other rural regions, and urban regions

| <i>Delta Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010</i> | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 222.2 (213.8-230.8) | 220.6 (212.4-229.1) | 221.0 (212.8-229.4) | 222.8 (214.6-231.2) | 209.9 (203.0-216.9) | 205.7 (199.6-211.8) |
| Oral Cavity and Pharynx | 3.6 (2.6-5.0) | 3.4 (2.5-4.6) | 2.6 (1.8-3.7) | 2.5 (1.7-3.6) | 2.3 (1.6-3.1) | 3.7 (2.9-4.6) |
| Esophagus | 4.0 (2.9-5.4) | 4.6 (3.4-6.0) | 4.1 (3.0-5.4) | 5.4 (4.2-6.9) | 4.5 (3.5-5.6) | 4.3 (3.5-5.3) |
| Stomach | 4.8 (3.7-6.2) | 2.9 (2.0-4.1) | 4.1 (3.1-5.4) | 3.0 (2.1-4.1) | 3.3 (2.5-4.2) | 2.5 (1.8-3.2) |
| Colorectal | 30.1 (27.1-33.3) | 27.5 (24.7-30.6) | 25.9 (23.2-28.9) | 25.5 (22.8-28.4) | 24.0 (21.7-26.4) | 20.4 (18.6-22.4) |
| Liver | 3.1 (2.1-4.2) | 3.8 (2.9-5.1) | 5.1 (3.9-6.6) | 3.5 (2.5-4.7) | 3.9 (3.0-4.9) | 5.0 (4.1-6.1) |
| Pancreas | 8.7 (7.2-10.6) | 9.1 (7.5-10.9) | 10.8 (9.1-12.8) | 11.5 (9.7-13.6) | 10.1 (8.7-11.7) | 10.8 (9.5-12.3) |
| Lung and Bronchus | 68.7 (64.1-73.6) | 65.6 (61.1-70.4) | 68.9 (64.3-73.7) | 65.9 (61.4-70.5) | 65.5 (61.7-69.5) | 66.8 (63.4-70.3) |
| Bone | ** | 1.5 (0.9-2.4) | 0.9 (0.5-1.6) | ** | 0.9 (0.5-1.5) | 1.0 (0.6-1.5) |
| Melanoma | 2.4 (1.6-3.5) | 3.5 (2.5-4.7) | 2.8 (1.9-4.0) | 2.7 (1.8-3.8) | 2.6 (1.8-3.5) | 2.5 (1.8-3.3) |
| Bladder | 4.7 (3.6-6.0) | 3.5 (2.6-4.7) | 4.5 (3.4-5.8) | 5.1 (3.9-6.5) | 4.3 (3.4-5.4) | 5.4 (4.5-6.5) |
| Kidney and Renal Pelvis | 5.0 (3.8-6.4) | 5.9 (4.6-7.5) | 4.3 (3.2-5.7) | 4.6 (3.5-6.0) | 5.0 (3.9-6.2) | 5.1 (4.1-6.1) |
| Nervous System | 3.8 (2.8-5.1) | 5.9 (4.6-7.5) | 5.9 (4.6-7.6) | 6.5 (5.1-8.2) | 5.0 (4.0-6.3) | 5.3 (4.4-6.5) |
| Hodgkin's lymphoma | 0.9 (0.4-1.7) | ** | ** | 0.8 (0.4-1.6) | 0.7 (0.3-1.3) | 0.5 (0.2-1.0) |
| Non-Hodgkin's lymphoma | 7.9 (6.4-9.7) | 7.7 (6.2-9.4) | 9.4 (7.7-11.2) | 9.7 (8.1-11.6) | 8.5 (7.2-10.0) | 6.4 (5.3-7.5) |
| Myeloma | 3.8 (2.8-5.0) | 3.6 (2.6-4.8) | 2.8 (2.0-3.9) | 4.3 (3.2-5.6) | 4.2 (3.3-5.3) | 2.9 (2.2-3.7) |
| Leukemia | 7.7 (6.2-9.4) | 9.5 (7.9-11.4) | 8.1 (6.6-9.8) | 8.9 (7.3-10.6) | 8.9 (7.6-10.5) | 8.5 (7.3-9.8) |

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

| Non-Delta Southern Rural Region Cancer Mortality Rates per 100,000, Both Genders, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 205.2 (196.9- 213.7) | 216.7 (208.3- 225.3) | 205.2 (197.2- 213.5) | 194.7 (186.9- 202.7) | 193.1 (186.4- 199.9) | 186.3 (180.6- 192.2) |
| Oral Cavity and Pharynx | 3.2 (2.3- 4.5) | 2.5 (1.7- 3.7) | 3.5 (2.5- 4.8) | 2.9 (2.0- 4.0) | 2.4 (1.7- 3.3) | 1.7 (1.2- 2.4) |
| Esophagus | 3.1 (2.1- 4.3) | 3.9 (2.8- 5.2) | 4.7 (3.6- 6.2) | 3.4 (2.4- 4.6) | 5.2 (4.1- 6.5) | 3.9 (3.2- 4.9) |
| Stomach | 3.2 (2.3- 4.4) | 3.9 (2.8- 5.2) | 3.3 (2.3- 4.5) | 3.6 (2.6- 4.9) | 2.4 (1.7- 3.3) | 2.8 (2.1- 3.7) |
| Colorectal | 26.0 (23.1- 29.2) | 26.6 (23.8- 29.7) | 24.3 (21.6- 27.2) | 19.3 (16.9- 21.9) | 20.7 (18.6- 23.0) | 19.8 (18.0- 21.8) |
| Liver | 2.5 (1.7- 3.7) | 4.0 (2.9- 5.3) | 3.0 (2.1- 4.2) | 3.3 (2.4- 4.5) | 4.3 (3.3- 5.4) | 4.5 (3.7- 5.5) |
| Pancreas | 10.3 (8.5- 12.3) | 9.8 (8.1- 11.8) | 10.3 (8.6- 12.3) | 9.4 (7.7- 11.3) | 10.0 (8.6- 11.6) | 11.5 (10.1- 13.0) |
| Lung and Bronchus | 56.0 (51.7- 60.6) | 64.0 (59.5- 68.8) | 58.6 (54.3- 63.1) | 55.4 (51.3- 59.8) | 56.2 (52.7- 60.0) | 58.7 (55.5- 62.1) |
| Bone | ** | ** | ** | ** | ** | 0.6 (0.3- 1.1) |
| Melanoma | 2.6 (1.7- 3.8) | 3.0 (2.0- 4.2) | 2.3 (1.5- 3.5) | 3.5 (2.5- 4.8) | 2.9 (2.1- 3.8) | 2.4 (1.8- 3.2) |
| Bladder | 3.8 (2.8- 5.1) | 5.2 (4.0- 6.6) | 4.8 (3.7- 6.2) | 5.2 (4.0- 6.6) | 3.6 (2.8- 4.7) | 3.6 (2.9- 4.5) |
| Kidney and Renal Pelvis | 4.1 (3.0- 5.5) | 4.8 (3.6- 6.3) | 4.2 (3.1- 5.6) | 4.0 (3.0- 5.4) | 5.1 (4.1- 6.4) | 4.7 (3.8- 5.7) |
| Nervous System | 5.4 (4.1- 7.0) | 6.6 (5.1- 8.3) | 5.1 (3.8- 6.6) | 4.6 (3.5- 6.1) | 4.0 (3.1- 5.2) | 5.2 (4.2- 6.3) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 8.5 (6.9- 10.4) | 9.5 (7.8- 11.5) | 8.3 (6.7- 10.1) | 7.9 (6.5- 9.7) | 8.6 (7.3- 10.1) | 6.0 (5.0- 7.1) |
| Myeloma | 3.1 (2.1- 4.3) | 3.3 (2.4- 4.5) | 3.5 (2.5- 4.7) | 2.7 (1.9- 3.8) | 3.7 (2.8- 4.7) | 3.6 (2.8- 4.5) |
| Leukemia | 8.5 (6.9- 10.4) | 8.8 (7.2- 10.7) | 7.7 (6.2- 9.4) | 7.7 (6.3- 9.5) | 8.2 (6.9- 9.7) | 7.6 (6.5- 8.9) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Supplemental Appendix 5: Southern Rural Regions Mortality Rates, Male

See Appendix 5 for corresponding rates for the state, other rural regions, and urban regions

| <i>Delta Region Cancer Mortality Rates per 100,000, Male, 1990-2010</i> | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 309.5 (294.0-325.5) | 302.4 (287.3-318.0) | 293.8 (279.0-309.1) | 290.5 (276.1-305.5) | 276.3 (264.2-288.8) | 258.9 (248.6-269.5) |
| Oral Cavity and Pharynx | 6.4 (4.3-9.1) | 5.8 (3.9-8.2) | 4.9 (3.1-7.2) | 4.3 (2.7-6.4) | 3.6 (2.4-5.3) | 6.2 (4.8-8.0) |
| Esophagus | 7.2 (5.0-10.0) | 7.7 (5.5-10.5) | 7.4 (5.3-10.2) | 9.8 (7.3-12.8) | 8.2 (6.2-10.6) | 7.4 (5.8-9.3) |
| Stomach | 6.8 (4.7-9.6) | 2.9 (1.6-4.8) | 7.1 (5.0-9.8) | 4.0 (2.5-6.1) | 4.0 (2.6-5.7) | 2.6 (1.7-3.9) |
| Colorectal | 36.8(31.6-42.6) | 36.6 (31.4-42.3) | 30.8 (26.1-36.1) | 31.8 (27.1-37.1) | 30.5 (26.6-34.9) | 23.7 (20.6-27.1) |
| Liver | 4.0 (2.4-6.3) | 5.5 (3.6-7.9) | 7.5 (5.3-10.3) | 5.5 (3.7-7.9) | 5.6 (4.0-7.6) | 7.6 (6.0-9.6) |
| Pancreas | 9.9 (7.3-13.1) | 10.4 (7.8-13.6) | 12.8 (9.9-16.3) | 11.4 (8.7-14.6) | 12.5 (10.1-15.4) | 13.0 (10.8-15.5) |
| Lung and Bronchus | 113.7 (104.5-123.4) | 110.3 (101.4-119.8) | 104.5 (95.9-113.7) | 100.7 (92.4-109.6) | 94.3 (87.4-101.7) | 91.4 (85.4-97.7) |
| Bone | ** | 2.3 (1.2-4.0) | ** | ** | ** | ** |
| Melanoma | 3.5 (2.0-5.6) | 4.2 (2.6-6.4) | 4.4 (2.8-6.7) | 4.2 (2.6-6.3) | 3.6 (2.4-5.3) | 3.8 (2.6-5.3) |
| Prostate | 37.0 (31.6-43.1) | 37.9 (32.5-43.9) | 32.7 (27.8-38.2) | 31.1 (26.3-36.4) | 28.9 (24.9-33.4) | 24.3 (21.1-27.9) |
| Testis | ** | ** | ** | ** | ** | ** |
| Bladder | 10.1 (7.3-13.5) | 7.0 (4.8-9.9) | 7.1 (5.0-9.9) | 7.8 (5.5-10.6) | 8.1 (6.0-10.5) | 9.8 (7.9-12.1) |
| Kidney and Renal Pelvis | 7.9 (5.7-10.8) | 8.5 (6.1-11.5) | 6.4 (4.4-9.0) | 5.8 (3.9-8.3) | 7.7 (5.9-10.0) | 7.3 (5.7-9.4) |
| Nervous System | 4.7 (3.0-6.9) | 6.9 (4.8-9.6) | 8.4 (6.0-11.3) | 7.1 (5.0-9.8) | 6.0 (4.4-8.1) | 6.7 (5.1-8.6) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 10.8 (8.1-14.2) | 9.7 (7.2-12.9) | 12.5 (9.6-16.1) | 14.5 (11.4-18.2) | 11.4 (9.1-14.2) | 6.5 (5.0-8.3) |
| Myeloma | 5.5 (3.7-8.0) | 4.1 (2.5-6.4) | 3.3 (1.9-5.3) | 6.5 (4.5-9.0) | 5.0 (3.5-6.9) | 3.8 (2.6-5.3) |
| Leukemia | 11.0 (8.2-14.5) | 14.0 (10.9-17.8) | 12.0 (9.1-15.4) | 12.8 (9.8-16.3) | 12.7 (10.2-15.7) | 11.5 (9.4-13.9) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

| <i>Non-Delta Southern Rural Region Cancer Mortality Rates per 100,000, Male, 1990-2010</i> | | | | | | |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 261.3 (246.9-276.4) | 281.9 (267.1-297.3) | 265.4 (251.3-280.1) | 257.6 (243.8-271.9) | 239.4 (228.1-251.2) | 232.7 (222.9-242.7) |
| Oral Cavity and Pharynx | 5.0 (3.2-7.6) | 4.1 (2.5-6.3) | 5.3 (3.5-7.7) | 4.6 (3.0-6.9) | 3.1 (2.0-4.7) | 2.4 (1.5-3.6) |
| Esophagus | 5.8 (3.9-8.4) | 7.3 (5.1-10.2) | 8.4 (6.1-11.4) | 6.6 (4.6-9.3) | 9.3 (7.2-11.9) | 7.2 (5.6-9.2) |
| Stomach | 3.5 (2.0-5.7) | 5.7 (3.8-8.2) | 4.2 (2.6-6.5) | 4.6 (2.9-6.9) | 3.6 (2.3-5.3) | 4.1 (2.9-5.6) |
| Colorectal | 33.0 (28.0-38.7) | 32.6 (27.7-38.1) | 26.6 (22.3-31.5) | 27.4 (23.1-32.4) | 25.7 (22.0-29.8) | 20.2 (17.4-23.3) |
| Liver | 3.0 (1.6-5.1) | 5.1 (3.3-7.5) | 3.2 (1.9-5.2) | 4.8 (3.1-7.2) | 4.5 (3.1-6.4) | 5.6 (4.2-7.3) |
| Pancreas | 11.9 (8.9-15.5) | 11.1 (8.3-14.5) | 11.2 (8.5-14.6) | 11.2 (8.5-14.5) | 13.4 (10.8-16.4) | 13.5 (11.3-16.1) |
| Lung and Bronchus | 90.9 (82.6-99.8) | 99.1 (90.5-108.3) | 93.1 (84.9-101.9) | 85.7 (77.9-94.1) | 79.3 (72.9-86.1) | 79.0 (73.4-84.9) |
| Bone | ** | ** | ** | ** | ** | ** |
| Melanoma | 3.6 (2.0-5.8) | 3.6 (2.1-5.7) | 3.3 (1.9-5.3) | 5.0 (3.3-7.3) | 3.9 (2.6-5.6) | 3.4 (2.3-4.8) |
| Prostate | 32.3(27.2-38.1) | 31.9 (27.0-37.5) | 30.3 (25.6-35.7) | 30.9 (26.2-36.3) | 24.4 (20.7-28.4) | 20.0 (17.2-23.2) |
| Testis | ** | ** | ** | ** | ** | ** |
| Bladder | 6.2 (4.1-8.9) | 9.2 (6.7-12.5) | 8.6 (6.1-11.6) | 10.3 (7.7-13.6) | 5.8 (4.2-8.0) | 6.2 (4.7-8.1) |
| Kidney and Renal Pelvis | 6.5 (4.4-9.3) | 5.1 (3.3-7.5) | 5.5 (3.6-8.0) | 6.2 (4.2-8.7) | 8.3 (6.3-10.7) | 6.4 (4.9-8.2) |
| Nervous System | 6.7 (4.6-9.4) | 7.7 (5.4-10.6) | 7.0 (4.8-9.7) | 5.6 (3.7-8.0) | 4.6 (3.1-6.5) | 6.1 (4.6-8.0) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 10.7 (8.0-14.1) | 12.2 (9.2-15.7) | 9.1 (6.7-12.1) | 11.1 (8.4-14.4) | 10.2 (8.0-12.9) | 7.2 (5.6-9.2) |
| Myeloma | 2.3 (1.2-4.1) | 2.9 (1.6-4.8) | 4.9 (3.2-7.3) | 3.2 (1.8-5.1) | 4.2 (2.9-6.1) | 4.5 (3.2-6.2) |
| Leukemia | 10.9 (8.1-14.4) | 11.2 (8.4-14.7) | 10.6 (7.9-13.9) | 10.4 (7.8-13.6) | 10.1 (7.9-12.8) | 11.1 (9.0-13.5) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

Supplemental Appendix 6: Southern Rural Regions Mortality Rates, Female

See Appendix 6 for corresponding rates for the state, other rural regions, and urban regions

| <i>Delta Region Cancer Mortality Rates per 100,000, Female, 1990-2010</i> | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 167.6 (157.9-177.7) | 168.5 (158.9-178.6) | 174.6 (164.8-184.9) | 177.8 (168.0-188.0) | 165.2 (157.0-173.8) | 169.1 (161.6-176.9) |
| Oral Cavity and Pharynx | 1.7 (0.9-3.2) | 1.5 (0.8- 2.8) | ** | ** | 1.0 (0.5-1.9) | 1.5 (0.9-2.4) |
| Esophagus | 1.6 (0.7-3.0) | 2.0 (1.1- 3.4) | ** | 1.9 (1.0- 3.4) | 1.6 (0.9-2.7) | 1.9 (1.1-2.9) |
| Stomach | 3.4 (2.2-5.1) | 2.8 (1.7- 4.4) | 2.0 (1.1- 3.5) | 2.2 (1.3- 3.6) | 2.8 (1.9-4.1) | 2.3 (1.5-3.4) |
| Colorectal | 25.5 (21.9-29.5) | 21.8 (18.5- 25.5) | 22.6 (19.3- 26.3) | 21.3 (18.1- 25.0) | 19.1 (16.5-22.1) | 15.2 (13.0-17.6) |
| Liver | 2.6 (1.5-4.2) | 2.7 (1.7- 4.2) | 3.7 (2.4- 5.6) | 2.1 (1.2-3.6) | 2.3 (1.4-3.5) | 2.7 (1.9-3.9) |
| Pancreas | 7.7(5.9-10.1) | 7.8 (5.9- 10.2) | 9.1 (7.1- 11.7) | 11.2 (8.9-14.1) | 8.3 (6.6-10.4) | 8.8 (7.2-10.7) |
| Lung and Bronchus | 38.5 (33.9-43.7) | 33.7 (29.5- 38.5) | 43.7 (38.8- 49.0) | 40.9 (36.2-46.0) | 44.7 (40.4-49.3) | 48.7 (44.8-53.0) |
| Bone | ** | | ** | ** | ** | ** |
| Melanoma | 1.4 (0.7-2.5) | 3.0 (1.8- 4.8) | 1.4 (0.7- 2.8) | 1.6 (0.8-2.9) | 1.6 (0.9-2.8) | 1.6 (0.8-2.6) |
| Breast | 27.4 (23.4-31.9) | 27.0 (23.1- 31.3) | 26.7 (22.8- 31.1) | 28.4 (24.5-32.7) | 23.5 (20.4-27.0) | 24.9 (22.0-28.1) |
| Ovary | 7.5 (5.7-9.8) | 7.9 (6.0- 10.4) | 7.8 (5.8- 10.3) | 7.9 (5.9-10.3) | 8.0 (6.3-10.1) | 6.7 (5.2-8.4) |
| Cervix | 3.8 (2.4-5.8) | 4.7 (3.2- 6.9) | 6.2 (4.3- 8.6) | 4.7 (3.1-6.9) | 3.1 (2.0-4.7) | 2.4 (1.4-3.6) |
| Corpus Uteri | 3.4 (2.2-5.1) | 4.2 (2.8- 6.1) | 4.3 (2.9- 6.2) | 4.7 (3.2-6.6) | 3.3 (2.3-4.7) | 3.1 (2.2-4.4) |
| Bladder | 2.0 (1.1-3.3) | 1.6 (0.8- 3.0) | 2.9 (1.8- 4.5) | 3.1 (2.0- 4.6) | 2.1 (1.3-3.2) | 2.5 (1.7-3.6) |
| Kidney and Renal Pelvis | 2.6 (1.6-4.1) | 3.8 (2.5- 5.6) | 3.1(1.9- 4.8) | 3.8 (2.5-5.6) | 2.6 (1.7-4.0) | 3.3 (2.3-4.5) |
| Nervous System | 3.0 (1.8-4.7) | 5.2 (3.5- 7.5) | 4.2 (2.7- 6.2) | 5.7 (4.0- 7.9) | 4.1 (2.9-5.8) | 4.1 (3.0-5.6) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 5.3 (3.8-7.4) | 6.2 (4.5- 8.4) | 7.0 (5.3- 9.3) | 6.1 (4.5-8.3) | 6.5 (5.0-8.5) | 6.1 (4.7-7.7) |
| Myeloma | 2.5 (1.5-3.9) | 3.4 (2.1- 5.2) | 2.5 (1.5- 4.0) | 2.6 (1.6-4.2) | 3.5 (2.4-5.0) | 2.3 (1.5-3.3) |
| Leukemia | 6.1 (4.4- 8.4) | 6.7 (5.0- 8.9) | 5.6 (3.9- 7.8) | 6.5 (4.8-8.7) | 6.4 (4.9-8.2) | 6.1 (4.8-7.7) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

| Non-Delta Southern Rural Region Cancer Mortality Rates per 100,000, Female, 1990-2010 | | | | | | |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | 1990-1992 Rate (95% CI) | 1993-1995 Rate (95% CI) | 1996-1998 Rate (95% CI) | 1999-2001 Rate (95% CI) | 2002-2005 Rate (95% CI) | 2006-2010 Rate (95% CI) |
| All Invasive Cancers* | 170.1 (159.9-180.9) | 175.2 (165.1-185.9) | 164.7 (155.1-174.9) | 152.8 (143.6-162.5) | 162.4 (154.2-170.9) | 153.5 (146.5-160.9) |
| Oral Cavity and Pharynx | 1.8 (1.0-3.1) | ** | 2.0 (1.0-3.4) | ** | 1.8 (1.0-2.9) | 1.0 (0.5-1.9) |
| Esophagus | ** | ** | 2.0 (1.1-3.5) | ** | 1.8 (1.0-3.0) | 1.2 (0.7-2.0) |
| Stomach | 2.9 (1.8-4.6) | 2.4 (1.4-4.0) | 2.7 (1.6-4.3) | 3.1 (1.8-4.8) | 1.4 (0.8-2.4) | 1.8 (1.1-2.8) |
| Colorectal | 21.0 (17.6-24.8) | 22.4 (19.0-26.3) | 22.0 (18.6-25.8) | 20.1 (17.0-23.8) | 17.1 (14.6-19.9) | 16.0 (13.8-18.4) |
| Liver | 2.2 (1.2-3.7) | 3.1 (1.9-4.8) | 2.8 (1.7-4.4) | 2.1 (1.2-3.6) | 2.2 (1.4-3.4) | 1.6 (1.0-2.6) |
| Pancreas | 8.7 (6.7-11.3) | 9.0 (6.8-11.7) | 9.4 (7.3-12.0) | 7.6 (5.8-10.0) | 7.5 (5.8-9.5) | 9.8 (8.2-11.8) |
| Lung and Bronchus | 31.6 (27.2-36.6) | 38.5 (33.8-43.6) | 33.3 (29.1-38.1) | 33.1 (28.8-37.8) | 39.9 (35.9-44.2) | 43.2 (39.5-47.2) |
| Bone | ** | ** | ** | ** | ** | ** |
| Melanoma | 1.7 (0.9-3.2) | 2.8 (1.5-4.6) | ** | 2.3 (1.3-3.9) | 1.8 (1.0-2.9) | 1.5 (0.9-2.5) |
| Breast | 30.4 (25.9-35.4) | 25.8 (21.8-30.3) | 28.1 (24.0-32.6) | 25.5 (21.6-29.8) | 26.4 (23.1-30.1) | 20.0 (17.4-22.8) |
| Ovary | 10.3 (7.9-13.3) | 8.4 (6.4-11.0) | 7.7 (5.7-10.2) | 7.7 (5.7-10.2) | 8.8 (6.9-11.0) | 8.2 (6.6-10.0) |
| Cervix | 4.8 (3.1-7.2) | 4.3 (2.7-6.5) | 3.3 (1.9-5.3) | 2.4 (1.3-4.1) | 4.5 (3.1-6.4) | 3.4 (2.4-4.8) |
| Corpus Uteri | 2.5 (1.4-4.1) | 3.3 (2.1-5.0) | 4.4 (3.0-6.3) | 1.7 (0.8-3.1) | 2.8 (1.8-4.1) | 4.4 (3.2-5.8) |
| Bladder | 2.3 (1.3-3.8) | 2.5 (1.5-3.9) | 2.6 (1.6-4.2) | 2.0 (1.2-3.4) | 2.3 (1.4-3.5) | 1.9 (1.2-2.8) |
| Kidney and Renal Pelvis | 2.2 (1.2-3.7) | 4.5 (3.0-6.5) | 3.3 (2.0-5.1) | 2.3 (1.2-3.9) | 2.7 (1.7-4.0) | 3.5 (2.5-4.8) |
| Nervous System | 4.3 (2.8-6.4) | 5.7 (3.9-8.1) | 3.6 (2.2-5.5) | 3.8 (2.4-5.7) | 3.5 (2.3-5.1) | 4.4 (3.2-5.8) |
| Hodgkin's lymphoma | ** | ** | ** | ** | ** | ** |
| Non-Hodgkin's lymphoma | 7.0 (5.1-9.4) | 7.6 (5.7-10.1) | 7.2 (5.4-9.5) | 5.4 (3.8-7.5) | 7.2 (5.6-9.2) | 5.1 (3.9-6.6) |
| Myeloma | 3.6 (2.3-5.5) | 3.5 (2.3-5.3) | 2.5 (1.5-3.9) | 2.2 (1.3-3.7) | 3.4 (2.3-4.9) | 2.9 (2.0-4.0) |
| Leukemia | 7.1 (5.2-9.5) | 7.5 (5.5-10.1) | 5.8 (4.1-8.0) | 5.8 (4.2-8.0) | 7.2 (5.5-9.2) | 5.0 (3.8-6.5) |

*All Invasive Cancer Rate includes rates for cancers of the breast, cervix, corpus and uterus, ovary, prostate, and testis. For these cancer specific rates, please see the male and female tables respectively.

Cells highlighted in blue indicate cancer rates that are significantly lower than the state rate; cells highlighted in orange indicate cancer rates that are significantly higher than the state rate.

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