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Illinois Department of Public Health

Colorectal Cancer in Illinois: An Overview of Key Statistics

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COLORECTAL CANCER IN ILLINOIS:

AN OVERVIEW OF KEY STATISTICS

Illinois Department of Public Health

Division of Epidemiologic Studies

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COLORECTAL CANCER IN ILLINOIS: AN OVERVIEW OF KEY STATISTICS

PURPOSE

The purpose of this report is to provide a descriptive overview on the incidence and mortality from colorectal cancer (CRC) occurring among Illinois residents. Organs affected by CRC include the colon, rectum, and appendix. More than 95 percent of CRCs are adenocarcinomas (cancers that start in the epithelial cells that line the colon or rectum). The exact cause of CRC is unknown. Common risk factors are obesity, physical inactivity, a diet high in processed meats, heavy alcohol consumption, and long-term smoking. Other risk factors included certain inherited genetic mutations, a personal family history of CRC and/or polyps, a personal history of chronic inflammatory bowel disease, and diabetes mellitus type 2. This report will present data comparing Illinois to the nation as well as CRC incidence and mortality by year, race and ethnicity, age, stage, anatomical subsite and population density. Also, this report highlights CRC screening data. Sufficient medical and epidemiological evidence indicates that colorectal cancer can be prevented or detected through early and routine screening.

DATA SOURCES

Illinois State Cancer Registry:

CRC incidence data from 1995 through 2008 (14 years) were included in this analysis. Data for these years are considered 100 percent complete as measured by the North American Association of Central Cancer Registries (NAACCR). Data for 2008 is the most recent data available at the time this report was written.

Cancer incidence data were collected by the Illinois Department of Public Health, Illinois State Cancer Registry (ISCR), the only source of population-based cancer incidence data for the

state. Identification of cancer cases in the ISCR is dependent upon reporting by hospitals, free-standing clinics, radiation treatment facilities, laboratories and physician offices as mandated by state law. ISCR has agreements with other central registries to send back Illinois cancer data that are identified outside of the state. These registries include Arkansas, California, Florida, Indiana, Iowa, Kentucky, Michigan, Mississippi (through August of 2004), Missouri, North Carolina, Washington, Wisconsin, Wyoming (through February 2008), and the Mayo Clinic in Minnesota (through October 2005). Completeness of out-of-state reporting depends upon the years of operation of these other central registries, the extent of their identification of out-of-state residents, and their standards of quality. For data used in this publication, 5.4 percent of ISCR cases were reported from out-of-state agencies and organizations. However, three states did not report any cancer cases among Illinois residents diagnosed in 2008. This had little impact on the overall cancer incidence rate for Illinois but the rates among some rural counties along the border of Illinois may be affected.

A death certificate clearance process has been employed by ISCR since August 1993. The process involves follow back of cancer deaths in an effort to identify the cases that are not reported to ISCR. On average, between 1995 and 2008, 1.9 percent of reported cases were identified from death certificate clearance. The preparation and release of data used for this report is dependent on the completion of annual reporting by Illinois facilities. Although case reporting is mandated within six months of diagnosis, it has been the ISCR policy to keep database files open for late reporting of cases and to allow for the two- to four-year lag in case identification of Illinois residents from other state central cancer registries. This practice is

consistent with data published nationally. For this report, the database files reflect the status of ISCR as of November 2010.

United States Cancer Statistics (USCS):

National data on cancer incidence were provided by the U.S. Centers for Disease Control and Prevention, National Program of Cancer Registries (NPCR) and the National Cancer Institute in conjunction with the North American Association of Central Cancer Registries (NAACR). NPCR reports official federal statistics on cancer incidence from registries that have high-quality incidence data.

National Center for Health Statistics (NCHS):

Mortality data were provided by the National Cancer Institute, Division of Cancer Control and Population Sciences, Surveillance Research Program, Cancer Statistics Branch (underlying mortality data were provided by the National Center for Health Statistics), and were released in June of 2010. At the time this report was written, mortality data for 2008 were not available. Data presented on cancer mortality will cover 1995 through 2007. SEER Stat version 7.0 was used to create age-adjusted rates per 100,000 for both incidence and mortality.

Illinois Behavioral Risk Factor Surveillance System (BRFSS):

The Illinois Behavioral Risk Factor Surveillance System (BRFSS) is a state-based program that gathers information on risk factors among Illinois adults 18 years of age and older through monthly random-digit-dial telephone surveys. The data collected by the BRFSS include health characteristics, risk factors and preventive behaviors. Illinois screening data were weighted to represent estimates for adults in Illinois. These data can be found at http://app.idph.state.il.us/brfss/default.asp.

RESULTS

COLORECTAL CANCER COMPARED TO OTHER CANCER SITES

Table 1. Total cases and percentage of all cases for the five most commonly diagnosed cancers, all races, Illinois, 2004 - 2008

Male			*Female*		
Cancer Site	*Cases*	*Percent*	*Cancer Site*	*Cases*	*Percent*
Prostate	44,518	27.8%	Breast	43,312	28.2%
Lung and Bronchus	24,395	15.2%	Lung and Bronchus	21,329	13.9%
Colorectal	**17,417**	**10.9%**	**Colorectal**	**17,098**	**11.1%**
Urinary Bladder	10,523	6.6%	Corpus Uteri and Uterus NOS	9,449	6.1%
Non-Hodgkin Lymphoma	6,705	4.2%	Non-Hodgkin Lymphoma	5,856	3.8%
All Sites	160,250	100.0%	All Sites	153,715	100.0%

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010

Table 2. Total cases and percentage of all cases for the five most common causes of cancer death, Illinois, 2004 - 2008

Male			*Female*		
Cancer Site	*Deaths*	*Percent*	*Cancer Site*	*Deaths*	*Percent*
Lung and Bronchus	18,743	30.6%	Lung and Bronchus	15,040	25.2%
Prostate	6,205	10.1%	Breast	9,124	15.3%
Colorectal	**6,151**	**10.0%**	**Colorectal**	**6,288**	**10.5%**
Pancreas	3,440	5.6%	Pancreas	3,663	6.1%
Leukemia	2,631	4.3%	Ovary	3,154	5.3%
All Cases	61,212	100.0%	All Cases	59,743	100.0%

SOURCE: National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch. Underlying mortality data were provided by the National Center for Health Statistic, data as of June 2010.

- In the five years between 2004 and 2008 there were 160,250 men and 153,715 women diagnosed with cancer. Of these, 17,417 men and 17,098 women were diagnosed with colorectal cancer (an average of about 7,000 cases per year in Illinois).
- CRC represented 11 percent of all cancers diagnosed in both men and women between 2004 and 2008.

- CRC was the third most common cancer diagnosis at the time of death in both men and women (after lung and bronchus, prostate and breast respectively).

COLORECTAL CANCER IN ILLINOIS AND NATIONALLY

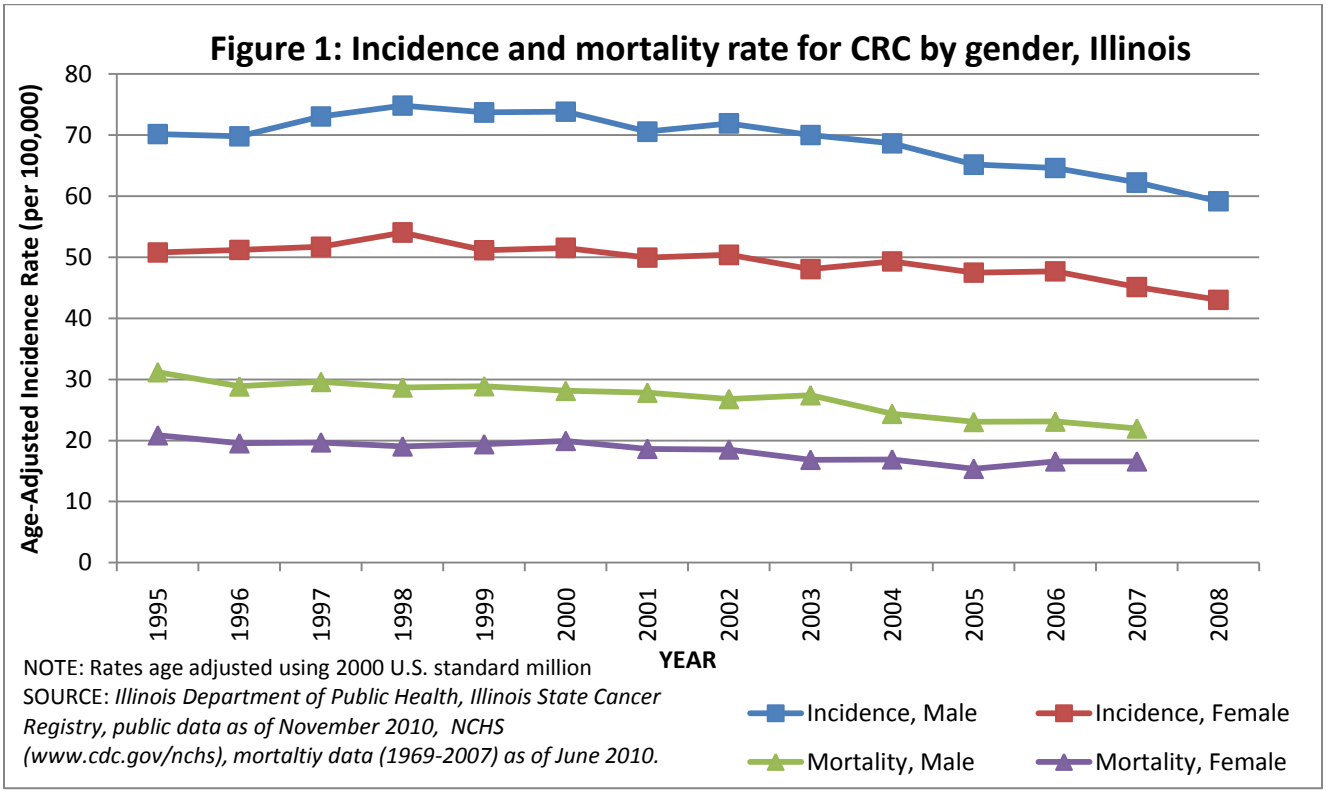
Table 3. Five-year age-adjusted rates (per 100,000) of colorectal cancer, Illinois and Nationally

	Male		*Female*	
	Incidence (2004-2008)	Mortality (2003-2007)	Incidence (2004-2008)	Mortality (2003-2007)
Illinois	63.9	23.9	46.5	16.4
U.S. (NPCR-USCS)	55.6	21.2	41.4	14.9

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010; U.S. Centers for Disease Control and Prevention, National Program of Cancer Registries (NPCR). Data for years 1999-2008 are provided through November 1, 2010 (http://wonder.cdc.gov/cancer.html., Underlying mortality data were provided by the National Center for Health Statistics, June 2010.

- The age-adjusted incidence of CRC was higher in Illinois when compared to the United States. For males and females combined, CRC incidence was 53.9 per 100,000 in Illinois between 2004 and 2008 (47.7 per 100,000 nationally). Compared to other states in the United States, Illinois had the fifth highest CRC incidence rate in the country between 2004 and 2008.
- Compared to the nation, the CRC mortality rate was higher in Illinois for both males and females.
- Males in Illinois and nationally displayed higher rates of CRC incidence and mortality. The age-adjusted incidence of CRC was 1.4 times higher in Illinois males than in females (63.9 and 46.5 cases per 100,000 respectively during 2004 through 2008).

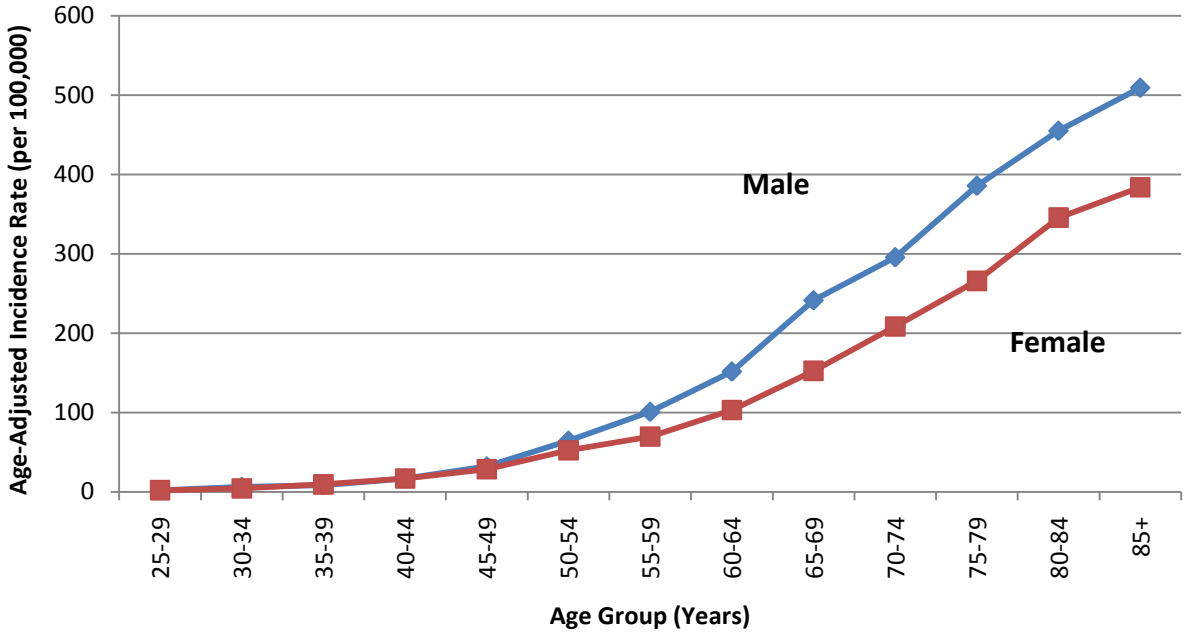
COLORECTAL CANCER TRENDS



- In comparison to women, Illinois men experienced higher CRC incidence and higher CRC mortality throughout the entire time period.
- Between 1995 and 2008 the incidence rate of colorectal cancer decreased in both men and women. During this time period, the incidence rate for men decreased on average 1.34 percent per year. Similarly, on average, the annual percent change in female CRC incidence decreased 1.21 percent per year.
- The mortality rate of colorectal cancer in Illinois also decreased during this time period. The rate of deaths due to colorectal cancer in males declined, on average, 2.61 percent per year between 1995 and 2007. In females the decline was 2.09 percent per year.

COLORECTAL CANCER BY AGE

Figure 2: Age-specific incidence rates of colorecatal cancer, all races, Illinois, 2004-2008

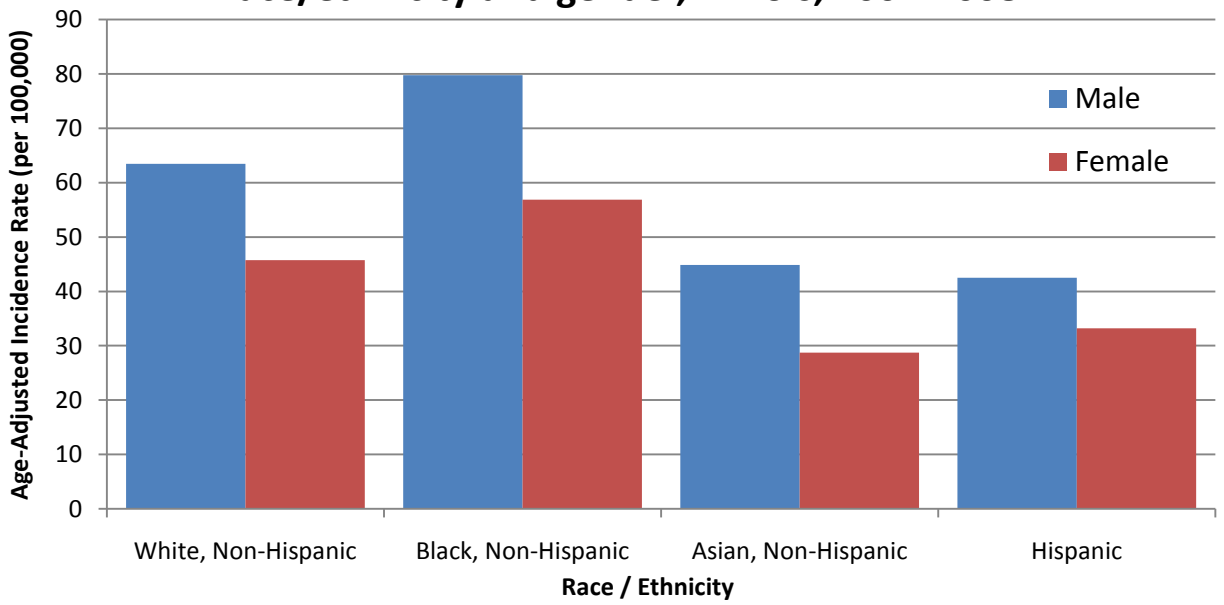


NOTE: Rates age adjusted using 2000 U.S. standard million
SOURCE: *Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010*

- Colorectal cancer rates increased with age in both Illinois men and women. Increases were largest after age 50.
- The oldest age group (85+) had the highest incidence rates within each gender.
- There were 51 cases of CRC in both men and women younger than the age of 25. Because of the small number of cases, data for these age groups were not presented.

COLORECTAL CANCER BY RACE/ETHNICITY

Figure 3: Age-adjusted incidence rates of CRC by race/ethnicity and gender, Illinois, 2004-2008

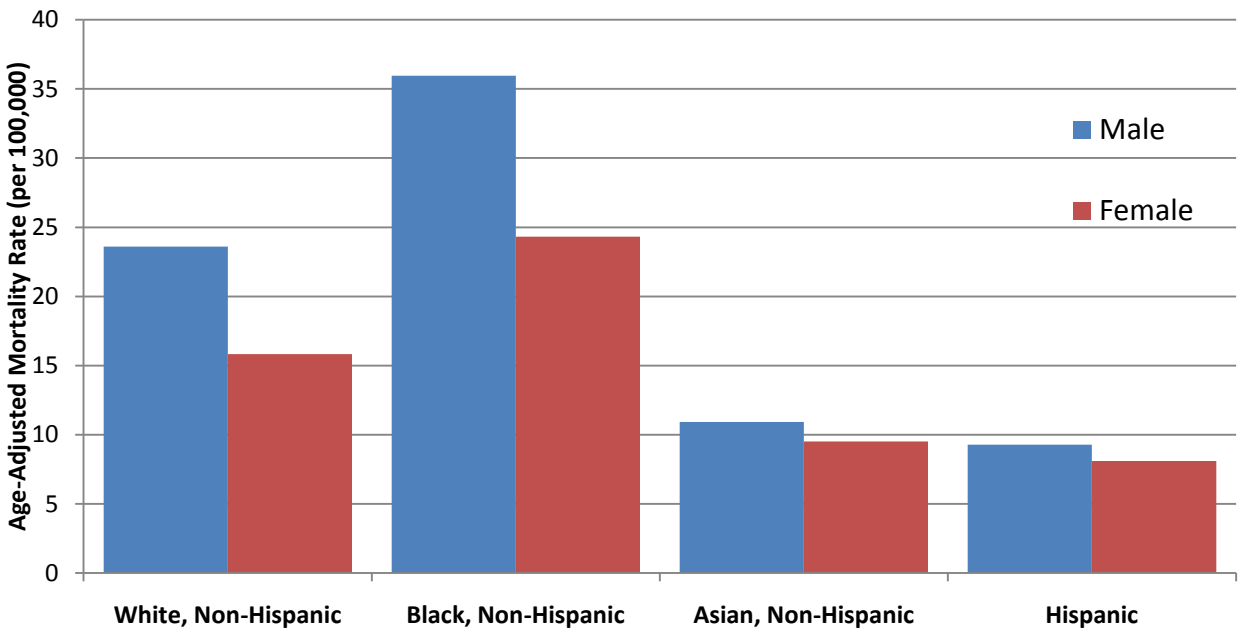


NOTE: Rates age adjusted using 2000 U.S. standard million

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010

- Between 2004 and 2008, for both Illinois men and women, non-Hispanic blacks had the highest rate of colorectal incidence compared to other racial ethnic subgroups. Non-Hispanic Asians and Hispanics had the lowest rates of colorectal incidence in both men and women during this time period.
- The age-adjusted incidence rate of colorectal cancer in non-Hispanic black men during 2004 through 2008 was 1.26 times higher than in non-Hispanic white men, and non-Hispanic black women were 1.24 times higher than their non-Hispanic white counterparts.

Figure 4: Age-adjusted mortality rates of CRC by race/ethnicity and gender, Illinois, 2004-2008



NOTE: Rates age adjusted using 2000 U.S. standard million
SOURCE: Mortality data provided by the National Center for Health Statistics (www.cdc.gov/nchs), June 2010

- Non-Hispanic black men and women had the highest rates of CRC mortality during the time period while Hispanics and non-Hispanic Asians had the lowest.
- The age-adjusted mortality rate of colorectal cancer in non-Hispanic black men during 2004 through 2008 was 1.52 times higher than in non-Hispanic white men, and non-Hispanic black women were 1.54 times higher than their non-Hispanic white counterparts.

COLORECTAL CANCER BY STAGE AT DIAGNOSIS

Table 4: Colorectal cancer incidence rate by stage* within racial/ethnic subgroups, Illinois

Stage at Diagnosis	1995	2001	2008
Early Stage (Localized)	30.3%	35.3%	41.5%
Non-Hispanic White	*31.5%*	*36.2%*	*42.9%*
Non-Hispanic Black	*21.3%*	*29.7%*	*33.6%*
Hispanic	*29.3%*	*32.1%*	*42.2%*
Late Stage (Regional and Distant)	60.3%	56.4%	51.6%
Non-Hispanic White	*59.6%*	*56.0%*	*50.8%*
Non-Hispanic Black	*65.2%*	*59.1%*	*57.2%*
Hispanic	*64.4%*	*59.7%*	*51.2%*
Unstaged	9.4%	8.3%	6.8%
Non-Hispanic White	*8.9%*	*7.8%*	*6.3%*
Non-Hispanic Black	*13.5%*	*11.2%*	*9.3%*
Hispanic	*6.3%*	*8.1%*	*5.9%*

*Local / Regional / Distant

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010

- The majority of new colorectal cases were diagnosed at a late stage (either regional or distant) throughout the time period.
- The percentage of cases diagnosed at a late stage had decreased from 60.3 percent in 1995 to 51.6 percent in 2008. Correspondingly, the percentage of cases diagnosed at an early stage increased from 30.3 percent in 1995 to 41.5 percent in 2008.

- Notwithstanding a higher proportion of unstaged CRC among non-Hispanic blacks, more CRC in this group was diagnosed at a late stage. Late stage CRC also was more frequent among Hispanics than among non-Hispanic whites.

COLORECTAL CANCER INCIDENCE BY SUBSITE

Table 5: Percentage and rate of colorectal cancer incidence by bowel segment, sex, race/ethnicity, and age group, Illinois, 2004-2008

	Proximal Bowel*		Distal Bowel*	
	Row Percentage	Age-adjusted Rate (per 100,000)	Row Percentage	Age-adjusted Rate (per 100,000)
Male	59.4%	35.6	40.60%	25.5
Female	49.1%	22.1	50.90%	22.3
Non-Hispanic White	54.0%	27.9	46.0%	23.4
Non-Hispanic Black	51.3%	30.5	48.7%	30.2
Hispanic	58.6%	19.9	41.4%	15.8
< 50	66.6%	4.32	33.4%	2.2
50-69	61.8%	62.21	38.2%	38.8
70+	54.3%	144.18	45.7%	162.4

*Proximal bowel includes codes C18.0-C18.5. Distal bowel includes C18.6-C18.7, C19.9, and C20.9. The following codes were excluded from this analysis: C18.8 (overlapping segments), C18.9 (colon NOS), an C26.0 (intestinal tract NOS)

SOURCE: *Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010*

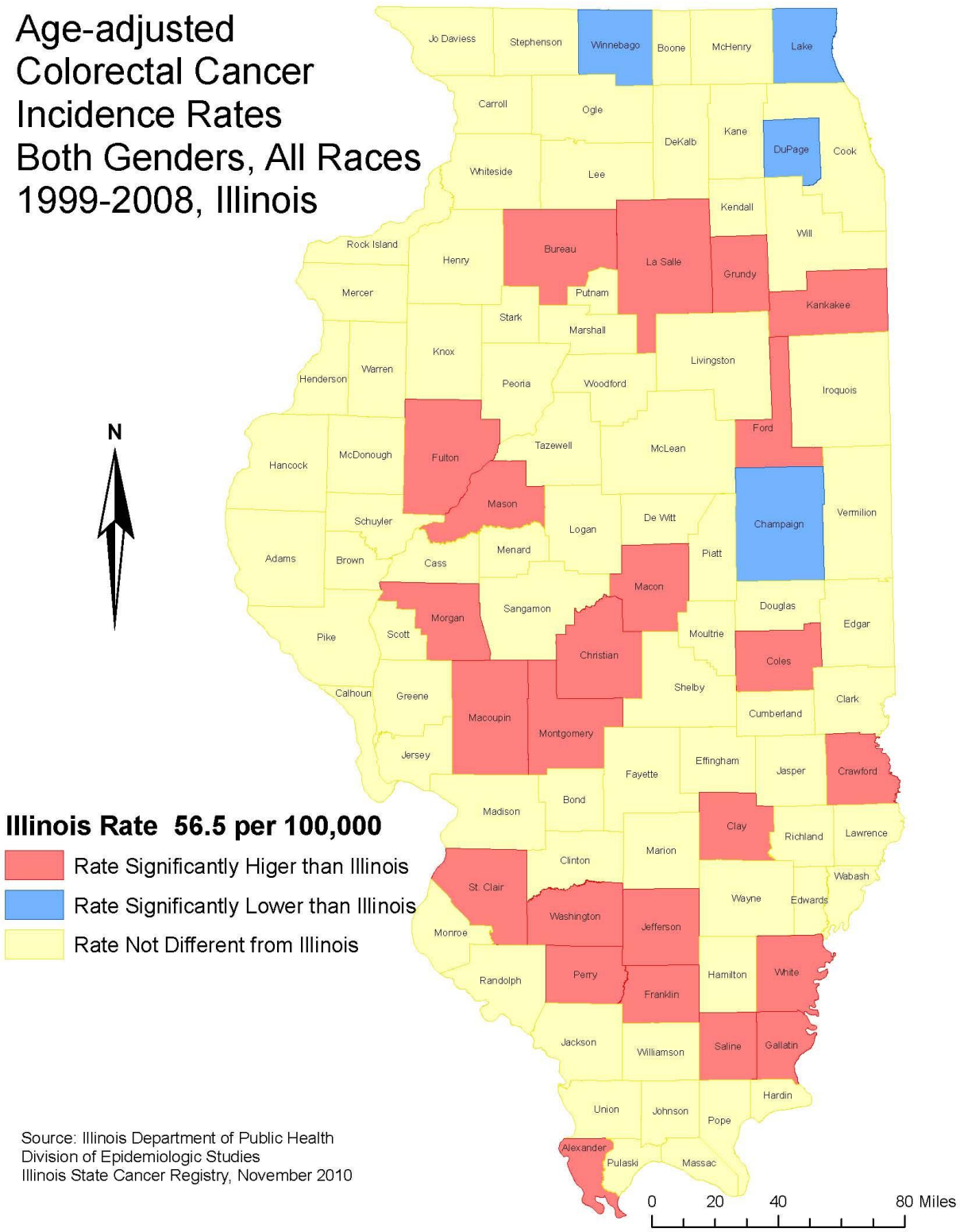
- In this analysis, the colon was divided into two parts: proximal (the ascending through the transverse colon) and distal (descending colon through the rectum).
- The percentage of cases, as well as the age-adjusted incidence rate, was higher for proximal bowel cancer for all subgroups, except females where the percentage and rates were very close to the same.

- Proximal bowel cancer was more common among all age groups, however the 70+ age groups did display a slightly higher rate distal bowel cancer compared to proximal. Distal bowel cancer appears to become more common as age increases.

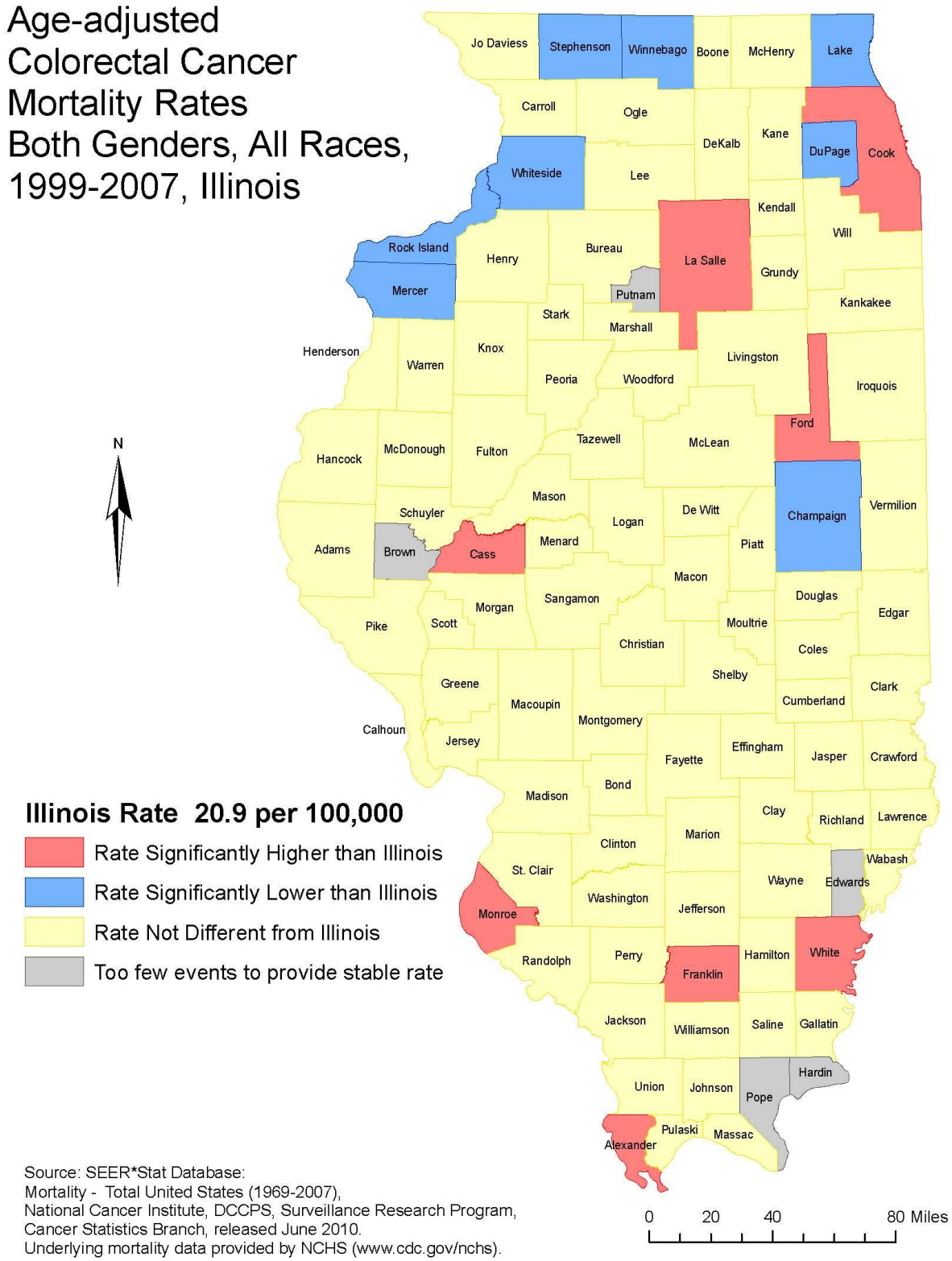
COLORECTAL CANCER BY COUNTY

- High CRC mortality rates were observed in eight counties across Illinois regardless of population density (see Map 1 associated data table).
- High CRC incidence was seen in 24 central and southern counties (see Map 2 and associated data tables).

Map 1 (see Appendix A for data table):



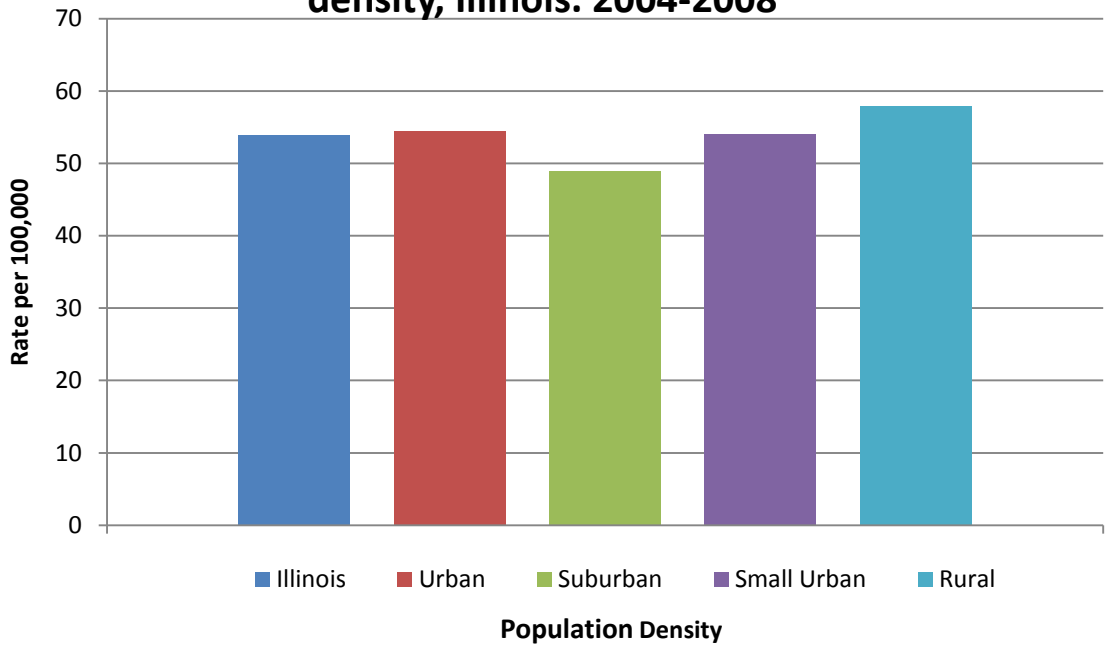
Map 2 (see Appendix A for data table):



Source: SEER*Stat Database:
Mortality - Total United States (1969-2007),
National Cancer Institute, DCCPS, Surveillance Research Program,
Cancer Statistics Branch, released June 2010.
Underlying mortality data provided by NCHS (www.cdc.gov/nchs).

COLORECTAL CANCER BY POPULATION DENSITY

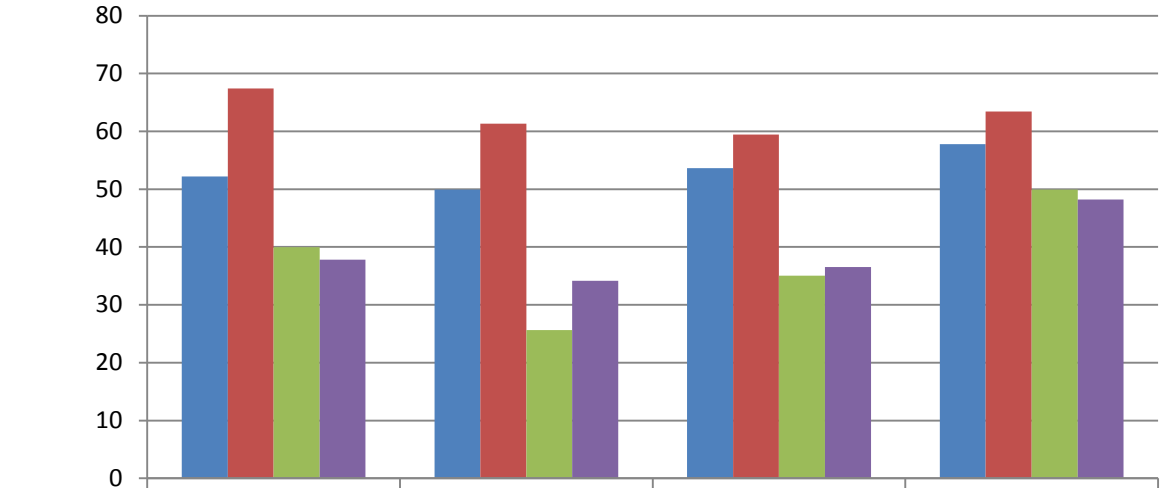
Figure 5: Colorectal cancer incidence by population density, Illinois. 2004-2008



SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010

- The population density groups were developed by ISCR through the use of 1990 census population, rate of growth and modified Beale codes. The urban group solely represents Cook County (Chicago and surrounding cities). The suburban group contains the "Collar Counties" surrounding Cook (Lake, McHenry, DuPage, Kane, and Will). The small urban group contains 13 counties spread across northern, central and southern Illinois. Finally, the rural group contains the remaining 83 counties in Illinois.
- The suburban population group displayed lower colorectal cancer rate compared to the other three population density groups.
- The highest colorectal cancer rate was found in the rural grouping. This rate was significantly higher than the urban, suburban, and small urban groupings.

Figure 6: Colorectal cancer incidence by population density and race/ethnicity, Illinois, 2004-2008



	Urban	Suburban	Small Urban	Rural
NH White	52.2	49.9	53.6	57.8
NH Black	67.4	61.4	59.4	63.4
NH Asian	40.0	25.6	35.1	49.9
Hispanic	37.8	34.2	36.5	48.2

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, public data as of November 2010

- Non-Hispanic white and black Illinoisans experienced significantly higher rates of colorectal cancer than their non-Hispanic Asian and Hispanic counterparts in urban, suburban, and small urban groupings.
- The rural population density group displayed the highest rates of colorectal cancer within three racial/ethnic subgroups (non-Hispanic white, non-Hispanic Asian, and Hispanic).
- Within non-Hispanic blacks, those in the urban group had the highest rates of colorectal cancer.

COLORECTAL CANCER SCREENING

Screening is a proven effective weapon in the fight against colorectal cancer. Screening tests can detect colorectal cancer at an early stage when it is most amenable to treatment. It also can detect, and allow for treatment of, abnormalities in the colon and rectum that have a high likelihood of developing into cancer. When individuals are diagnosed with colorectal cancer in the earliest stage of cancer development they have a 90 percent chance of surviving five years after initially being diagnosed. Compare this to a 12 percent chance of surviving five years after diagnosis when colorectal cancer is identified in the latest stage of development. This is extremely important given that more than half of Illinoisans diagnosed with colorectal cancer are diagnosed when the cancer has spread beyond the colon or rectum, thus drastically reducing their chances of surviving five years past diagnosis.

The U.S. Preventive Services Task Force recommends regular screening for colorectal cancer beginning at age 50. Recommended screening tests include high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy, and individuals should begin use at age 50 years, continuing until age 75 years. People at higher risk of developing colorectal cancer should begin screening at a younger age, and may need to be tested more frequently. The decision to be screened after age 75 should be made on an individual basis.

Beginning at age 50, both men and women should follow one of these testing schedules:

Tests that find polyps and cancer:

- **Flexible sigmoidoscopy,** should be done every five years*, OR

- **Colonoscopy,** every 10 years, OR
- **Double Barium Contract Enema**, every five years*, OR
- **CT colonography** (virtual colonoscopy) every five years *

Test that find primarily cancer:

- **Fecal occult blood test (gFOBT)** should be done every year, OR**
- **Fecal immunochemical test (FIT)** every year, OR**
- **Stool DNA test (sDNA), interval uncertain****

***If this test is positive, a colonoscopy should be done.*

*****The multiple stool take home test should be done. One test, done by a doctor in the office, is not adequate for testing. A colonoscopy should be done if the test is positive.*

Decisions about what test to take should be made in consultation with a physician. Tests that identify both polyps and early cancer are preferred over those that only find only cancer. Also, more invasive tests, such as colonoscopy, are preferred over others because of the test's ability to detect polyps and early cancer throughout the entire colon.

Colorectal Cancer Screening in Illinois:

- The Illinois BRFSS estimated that the percentage of Illinoisans, 50 and older, ever having a blood stool test decreased from 40.1 percent in 2002 to 37.9 percent in 2008. Of the people who reported having a blood stool test in 2008, only 28.6 percent had the screening in the past year.

- It was estimated that in 2008, 68.8 percent of Illinoisans older than the age of 50 had ever had a colonoscopy or sigmoidoscopy, which was a substantial improvement compared to 2002 when 45.1 percent of respondent reported ever having the test. Of the respondents stating that they indeed have had this test, 84.4 percent had it completed less than five years ago and 95.5 percent had it completed less than 10 years ago. Also, 92.2 percent reported having a colonoscopy versus a sigmoidoscopy.
- The 2008 BRFSS percentages of males and females who reported ever having a blood stool test were quite similar, 39.5 percent and 36.5 percent respectively. Illinois men and women also were similar with respect to ever having a colonoscopy or sigmoidoscopy, 60.3 percent and 57.4 percent respectively.
- White and black Illinoisans reported similar rates of CRC screening via blood stool test in 2008 (White = 38.7%; Black = 39.1%). Hispanics, however, were markedly lower at 12.1 percent. Percentages of CRC screening through colonoscopy or sigmoidoscopy also were similar in whites and blacks in 2008 (White = 60.0%; Black = 55.9%). But again, the reported percentages of CRC screening via colonoscopy or sigmoidoscopy in Hispanics (38.8 percent had ever had the test in 2008) were much lower than that of whites or blacks.

SUMMARY

- Colorectal cancer was the third leading cause of new cancers and cancer deaths in both men and women in Illinois between 2004 through 2008.
- The colorectal cancer incidence and mortality rates were higher in Illinois men than in women.

- Illinois' CRC incidence and mortality rates were higher than the United States during 2004 through 2008.
- Over the past 14 years the CRC incidence and mortality rates in Illinois have decreased.
- CRC incidence rates increased with age in both men and women in Illinois, especially after age 50.
- Over the 14-year study period, non-Hispanic Asians and Hispanics displayed the lowest CRC incidence rates. Non-Hispanic blacks and non-Hispanic whites were the first and second highest, respectively, over the entire time period.
- Although the majority of new colorectal cancers were diagnosed in a late stage, this percentage steadily declined over the time period. Nevertheless, 41.5 percent of colorectal cancers were diagnosed at an early stage in 2008.
- CRC rates were highest in rural areas and lowest in suburban areas. CRC incidence rates were highest in the rural areas for three of the four racial/ethnic groups included in this study.
- While the percentages of adults older than age 50 who report ever having a colonoscopy or sigmoidoscopy have increased in recent years, roughly 30 percent of Illinoisans older than age 50 have never had either test performed.

APPENDIX A

Illinois Colorectal Cancer Mortality, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*20.9*	*23,452*	*20.6*	*21.2*
Adams	19.8	172	16.9	23.2
Alexander	31.6	33	21.6	44.9
Bond	20.8	39	14.7	28.5
Boone	25.1	93	20.3	30.8
Brown	*	*	*	*
Bureau	22.7	99	18.4	27.9
Calhoun	27.0	18	15.8	44.1
Carroll	21.9	48	16.0	29.5
Cass	29.2	45	21.2	39.3
Champaign	17.5	233	15.4	19.9
Christian	24.2	101	19.7	29.6
Clark	21.8	46	15.9	29.4
Clay	23.6	43	17.0	32.2
Clinton	21.7	80	17.2	27.0
Coles	22.6	111	18.6	27.3
Cook	21.8	10,024	21.4	22.3
Crawford	26.3	62	20.1	33.9
Cumberland	19.4	24	12.3	29.2
DeKalb	21.9	149	18.5	25.7
DeWitt	21.0	38	14.8	29.0
Douglas	19.8	44	14.4	26.8
DuPage	17.6	1,274	16.7	18.6
Edgar	20.1	50	14.8	26.9
Edwards	*	*	*	*
Effingham	19.7	69	15.3	25.0
Fayette	15.2	37	10.7	21.2
Ford	29.7	55	22.2	39.3
Franklin	28.3	139	23.7	33.7
Fulton	20.3	97	16.4	25.0
Gallatin	24.4	20	14.8	38.9
Greene	22.1	40	15.7	30.6
Grundy	24.0	86	19.2	29.7
Hamilton	26.4	31	17.7	38.5
Hancock	24.2	63	18.5	31.3
Hardin	*	*	*	*
Henderson	19.2	19	11.5	30.6
Henry	23.9	147	20.2	28.3

Illinois Colorectal Cancer Mortality, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*20.9*	*23,452*	*20.6*	*21.2*
Iroquois	23.0	94	18.5	28.4
Jackson	23.4	111	19.2	28.2
Jasper	21.2	25	13.7	31.8
Jefferson	21.4	97	17.3	26.2
Jersey	19.6	45	14.3	26.4
Jo Daviess	16.9	48	12.4	22.7
Johnson	24.6	31	16.7	35.1
Kane	19.4	559	17.8	21.1
Kankakee	17.9	179	15.4	20.8
Kendall	20.2	87	16.1	25.0
Knox	20.4	141	17.1	24.2
Lake	18.7	857	17.4	20.0
La Salle	24.9	324	22.3	27.9
Lawrence	24.8	51	18.2	33.1
Lee	25.9	101	21.0	31.6
Livingston	22.0	101	17.9	27.0
Logan	24.2	82	19.2	30.2
McDonough	22.2	73	17.3	28.1
McHenry	20.1	391	18.1	22.2
McLean	19.0	220	16.6	21.7
Macon	19.9	249	17.5	22.6
Macoupin	21.8	130	18.2	26.1
Madison	21.5	572	19.8	23.3
Marion	22.0	110	18.0	26.7
Marshall	23.8	42	17.1	32.7
Mason	22.6	42	16.2	30.8
Massac	18.9	34	13.0	26.7
Menard	21.8	27	14.3	32.1
Mercer	12.5	24	8.0	18.9
Monroe	28.2	80	22.4	35.2
Montgomery	25.5	92	20.5	31.5
Morgan	21.7	91	17.4	26.8
Moultrie	18.7	32	12.6	26.8
Ogle	20.2	107	16.5	24.4
Peoria	21.0	396	18.9	23.1
Perry	23.6	60	17.9	30.5
Piatt	21.1	39	15.0	29.1
Pike	20.6	47	14.9	27.9
Pope	*	*	*	*

Illinois Colorectal Cancer Mortality, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*20.9*	*23,452*	*20.6*	*21.2*
Pulaski	25.4	21	15.7	39.6
Putnam	*	*	*	*
Randolph	21.6	80	17.1	27.1
Richland	20.3	44	14.6	27.7
Rock Island	17.3	283	15.3	19.4
St. Clair	21.7	521	19.9	23.6
Saline	21.8	73	17.0	27.7
Sangamon	20.6	397	18.6	22.8
Schuyler	25.6	23	16.0	39.5
Scott	30.7	19	18.4	48.6
Shelby	19.3	54	14.4	25.4
Stark	30.0	25	19.1	45.7
Stephenson	16.7	96	13.5	20.5
Tazewell	19.1	265	16.9	21.6
Union	20.2	45	14.7	27.4
Vermilion	20.8	196	17.9	23.9
Wabash	19.4	30	12.9	28.1
Warren	27.8	60	21.1	36.1
Washington	16.9	31	11.4	24.4
Wayne	16.3	37	11.4	22.9
White	31.4	64	23.9	40.8
Whiteside	16.4	118	13.6	19.7
Will	21.1	766	19.6	22.7
Williamson	23.2	171	19.9	27.1
Winnebago	17.4	469	15.9	19.1
Woodford	17.3	68	13.4	22.0

* Too few events to be reported and create a stable rate.
Note: Rates are per 100,000 and age-adjusted to the 2000 U.S. Standard Population (19 age groups - Census P25-1130) standard; Confidence intervals (Tiwari mod) are 95 percent for rates.
Source: SEER*Stat Database: Mortality - Total United States (1969-2007), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released June 2010. Underlying mortality data provided by NCHS (www.cdc.gov/nchs).

Illinois Colorectal Cancer Incidence, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*56.5*	*70,437*	*56.1*	*57.0*
Adams	52.9	478	48.2	58.0
Alexander	74.9	85	59.6	93.1
Bond	63.8	130	53.3	75.9
Boone	57.0	243	50.0	64.7
Brown	60.5	40	43.2	82.7
Bureau	66.0	315	58.8	73.9
Calhoun	51.4	39	36.4	71.5
Carroll	54.8	134	45.9	65.3
Cass	67.9	115	55.9	81.7
Champaign	48.9	734	45.4	52.6
Christian	70.8	317	63.2	79.3
Clark	53.6	121	44.4	64.4
Clay	72.4	139	60.7	85.9
Clinton	63.3	259	55.8	71.5
Coles	66.8	356	60.0	74.2
Cook	56.5	28,641	55.9	57.2
Crawford	81.2	209	70.5	93.2
Cumberland	67.5	91	54.2	83.2
DeKalb	56.8	434	51.5	62.4
DeWitt	55.1	112	45.3	66.6
Douglas	62.7	149	52.9	73.8
DuPage	49.1	4,086	47.6	50.7
Edgar	49.1	126	40.7	58.7
Edwards	64.5	58	48.7	84.3
Effingham	59.8	233	52.3	68.1
Fayette	62.1	162	52.9	72.6
Ford	72.0	144	60.3	85.4
Franklin	72.0	382	64.9	79.8
Fulton	65.0	328	58.1	72.7
Gallatin	75.9	63	57.7	98.4
Greene	66.8	124	55.4	80.0
Grundy	67.3	270	59.5	75.8
Hamilton	56.8	73	44.3	72.1
Hancock	57.0	159	48.4	66.9
Hardin	66.0	43	47.6	90.1
Henderson	56.6	62	43.3	73.1
Henry	57.4	375	51.7	63.6
Iroquois	63.7	272	56.3	72.0
Jackson	60.2	312	53.6	67.3

Illinois Colorectal Cancer Incidence, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*56.5*	*70,437*	*56.1*	*57.0*
Jasper	55.3	70	43.0	70.2
Jefferson	66.3	325	59.3	74.0
Jersey	50.7	130	42.3	60.3
Jo Daviess	56.1	182	48.1	65.1
Johnson	61.5	86	49.1	76.2
Kane	54.1	1,831	51.6	56.7
Kankakee	61.8	691	57.3	66.6
Kendall	55.9	301	49.6	62.7
Knox	56.8	408	51.3	62.7
Lake	50.7	2,768	48.8	52.7
LaSalle	61.1	859	57.1	65.4
Lawrence	58.6	128	48.6	70.1
Lee	59.7	250	52.5	67.6
Livingston	58.8	279	52.0	66.3
Logan	64.8	232	56.6	73.8
McDonough	58.1	201	50.2	66.9
McHenry	54.8	1,263	51.8	58.0
McLean	55.7	728	51.7	60.0
Macon	61.3	828	57.2	65.7
Macoupin	67.5	424	61.2	74.4
Madison	59.5	1,745	56.7	62.3
Marion	60.1	320	53.6	67.2
Marshall	63.2	117	52.1	76.2
Mason	67.9	142	57.1	80.3
Massac	54.0	110	44.3	65.5
Menard	64.0	90	51.3	79.1
Mercer	51.2	111	42.1	61.9
Monroe	61.1	197	52.8	70.3
Montgomery	66.8	260	58.8	75.6
Morgan	64.7	286	57.3	72.8
Moultrie	50.1	96	40.5	61.6
Ogle	53.8	318	48.0	60.1
Peoria	54.9	1,127	51.7	58.3
Perry	66.9	181	57.5	77.6
Piatt	56.4	117	46.7	67.8
Pike	55.6	136	46.4	66.3
Pope	39.9	25	25.7	60.5
Pulaski	50.4	44	36.6	68.1
Putnam	60.5	48	44.5	80.9

Illinois Colorectal Cancer Incidence, Both Genders, All Races, 1999-2007

	Age-adjusted Rate per 100,000	Count	Lower Confidence Interval	Upper Confidence Interval
Illinois	*56.5*	*70,437*	*56.1*	*57.0*
Randolph	56.8	227	49.6	64.8
Richland	63.5	140	53.2	75.3
Rock Island	54.5	965	51.1	58.1
St. Clair	61.6	1,636	58.6	64.6
Saline	69.8	254	61.4	79.2
Sangamon	58.8	1,242	55.6	62.2
Schuyler	58.8	58	44.4	76.9
Scott	62.7	44	45.5	84.9
Shelby	58.8	180	50.5	68.4
Stark	71.2	63	54.4	92.1
Stephenson	52.0	332	46.5	58.0
Tazewell	56.1	864	52.5	60.0
Union	54.5	132	45.4	64.9
Vermilion	60.0	617	55.3	64.9
Wabash	61.5	101	49.9	75.1
Warren	57.0	133	47.6	67.8
Washington	69.2	133	57.8	82.3
Wayne	57.3	137	48.0	68.1
White	68.5	152	57.7	80.8
Whiteside	51.6	394	46.6	57.0
Will	57.8	2,531	55.5	60.2
Williamson	55.2	443	50.1	60.6
Winnebago	52.6	1,579	50.0	55.3
Woodford	49.8	213	43.2	57.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. Standard Population (19 age groups - Census P25-1130) standard; Confidence intervals (Tiwari mod) are 95 percent for rates.
Source: Illinois Department of Public Health, Division of Epidemiologic Studies, Illinois State Cancer Registry, data as of November 2010