
Highlights from the Report on the Status of Cancer in Illinois

Comparisons of cancer trends for Illinois with those observed for the nation¹ have been presented in the Illinois Cancer Statistics Review Epidemiologic Report Series.² More recently, a comprehensive evaluation of the Illinois data relative to the national reports was conducted and will be available as an Epidemiologic Report Series document titled "The Status of Cancer in Illinois: Incidence 1990 to 1996, Mortality 1990 to 1997." This newsletter article presents a synthesis of findings from that report.

First, Illinois cancer incidence data for 1990 to 1996 obtained from the Illinois State Cancer Registry are compared with those from the Surveillance, Epidemiology, and End Results (SEER) program, which currently represents the national gauge for cancer incidence in the United States. Next, the patterns of cancer incidence among Illinois' race/ethnic groups are described.

Figure 1 shows Illinois and SEER average annual age-adjusted rates and estimated average annual percentage changes (APC) during the 1990 to 1996 time period for all sites and for the top 15 cancer incidence sites. The same 15 cancer sites appeared for both Illinois and SEER with slight differences in rank. The direction of APCs or trends also was the same with the exception of female breast cancer. SEER female breast cancer incidence showed an increase of 0.1 percent per year for 1990 to 1996, whereas Illinois's APC indicated a decrease of 0.6 percent per year during the same time period. Both changes, however, were not statistically significant suggesting a leveling off of female breast cancer, which had dramatically risen in previous decades.

All sites cancer incidence for Illinois was shown to decrease by 1.1 percent per year from 1990 to 1996, whereas nationally a decline of 1.0 percent per year was reported. Neither national nor Illinois decreases were statistically significant.

Like the nation, decreases in cancers of the prostate, lung and bronchus, colon and rectum, corpus and uterus NOS, urinary bladder, ovary, leukemias, oral cavity and pharynx, cervix, pancreas and stomach were observed for Illinois. SEER identified significant declining trends for lung and bronchus, colon and rectum, urinary bladder, ovary, leukemias, oral cavity and pharynx, pancreas and stomach. Although declines for all of these sites also were apparent for Illinois, APCs were statistically significant for only colon and rectum, leukemias, and oral cavity and pharynx. A statistically significant decrease in invasive cervical cancer was observed in Illinois but not in the SEER areas. Decreases in APCs for cancers of the prostate and corpus and uterus NOS were not statistically significant in Illinois or for SEER.

Increases in non-Hodgkin's lymphomas, melanomas of the skin, and kidney and renal pelvis were apparent for both Illinois and SEER cancer incidence rate trends. The cancer incidence increases for melanomas and for kidney and renal pelvis were statistically significant for SEER but only melanomas significantly increased in Illinois. Non-Hodgkin's lymphomas did not significantly increase in either Illinois or SEER areas.

Table 1 shows the average annual age-adjusted incidence rates during 1990 to 1996 for all cancer sites and the top five sites for whites, blacks, Asian/other races and Hispanics by sex group in Illinois. Black males have the highest cancer incidence rates among all race/ethnic sex groups. Both males and females of Asian/other races and Hispanic race/ethnicity have lower all sites cancer incidence rates than their white and black counterparts.

For males, prostate, lung and bronchus, and colon and rectum are among the top five cancer incidence sites for all race/ethnic groups. The remaining two of the five top sites for white and Hispanic males were urinary bladder and non-Hodgkin's lymphomas. Stomach was among the five for both black and Asian/other races males. Liver and intrahepatic bile duct appeared among the top five sites only for Asian/other races males and oral cavity and pharynx was observed only for black males in Illinois.

Breast, lung and bronchus, colon and rectum, cervix, and corpus and uterus NOS, in that order, were the top five sites for females of black, Asian/other race and Hispanic race/ethnicity in Illinois. For white females, ovary replaced cervix among the top five sites. White females in Illinois had the highest breast cancer incidence rates followed by black females. Breast cancer incidence rates for females of Asian/other races and Hispanic groups in Illinois were considerably lower than their white or black counterparts. Invasive cervical cancer incidence rates were notably higher for black and Hispanic females than for Asian/other race females.

Overall, incidence rates for lung and bronchus, and colon and rectum were considerably lower for Asian/other race and Hispanic females than those observed for white and black females. White females had the highest cancer rates for corpus and uterus NOS of all four race/ethnic female groups in Illinois. A more detailed evaluation of the status of cancer incidence as well as cancer mortality in Illinois will be accessible on the Web site, www.idph.state.il.us/about/epi/index.htm. A hard copy of the report also may be obtained by contacting the Illinois Department of Public Health, Division of Epidemiologic Studies, 605 W. Jefferson St., Springfield, IL 62761; 217-785-1873.

References

1. Wingo PA, Ries LA, Giovino GA, Miller DS, Rosenberg HM, Shopland DR, Thun MJ, Edwards BK. Annual report to the nation on the status of cancer 1973-1996, with a special section on lung cancer and tobacco smoking. *J Natl Cancer Inst* 1999;91:675-690.
2. Dolecek TA, Howe HL, Snodgrass JL. Illinois Cancer Statistics Review: Incidence 1986 to 1996, Mortality 1986 to 1997. *Epidemiologic Report Series* 99:1. Springfield, Ill.: Illinois Department of Public Health, January 1999.

Table 1.
Cancer Incidence Rates* for All Sites and the Top Five Sites by Race/Ethnic Group and Sex Illinois, 1990 to 1996

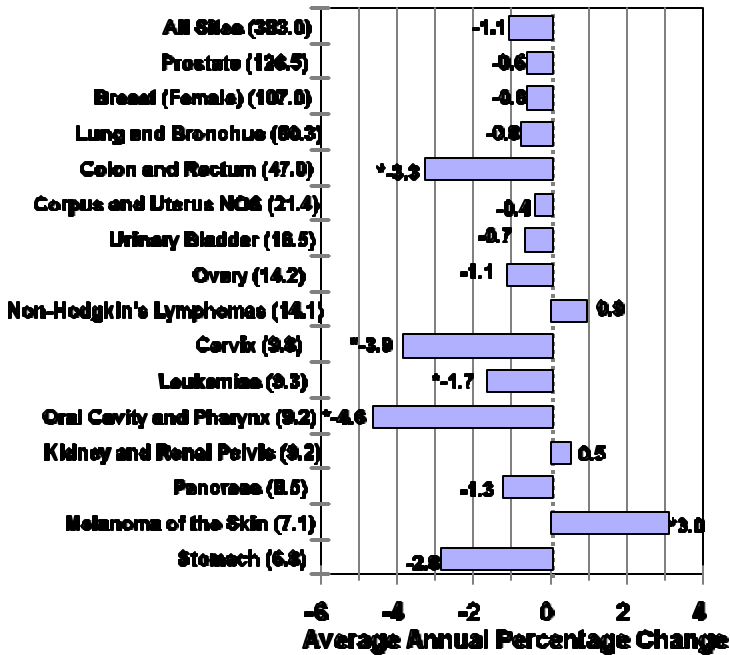
		Males			
	Whites	Rate	Blacks	Rate	
All Sites		441.8	All Sites	550.0	
Prostate		120.1	Prostate	174.9	
Lung and Bronchus		80.8	Lung and Bronchus	117.9	
Colon and Rectum		56.2	Colon and Rectum	58.6	
Urinary Bladder		30.7	Oral Cavity and Pharynx	22.3	
Non-Hodgkin's Lymphomas		17.4	Stomach	17.9	
		Rate	Hispanics	Rate	
All Sites	Asian/Other Races	252.6	All Sites	280.5	
Prostate		55.4	Prostate	82.5	
Lung and Bronchus		40.3	Lung and Bronchus	37.0	
Colon and Rectum		37.1	Colon and Rectum	30.2	
Stomach		15.7	Non-Hodgkin's Lymphomas	14.9	
Liver and Intrahepatic Bile Duct		13.7	Urinary Bladder	13.3	

		Females			
	Whites	Rate	Blacks	Rate	
All Sites		338.4	All Sites	332.3	
Breast		108.7	Breast	93.6	
Lung and Bronchus		41.9	Lung and Bronchus	49.4	
Colon and Rectum		39.3	Colon and Rectum	44.1	
Corpus and Uterus NOS		22.7	Cervix	17.3	
Ovary		15.0	Corpus and Uterus NOS	14.0	
		Rate	Hispanics	Rate	
All Sites	Asian/Other Races	195.7	All Sites	250.6	
Breast		55.6	Breast	68.9	
Colon and Rectum		25.1	Colon and Rectum	26.6	
Lung and Bronchus		16.4	Lung and Bronchus	21.9	
Cervix		10.8	Cervix	18.4	
Corpus and Uterus NOS		9.9	Corpus and Uterus NOS	13.3	

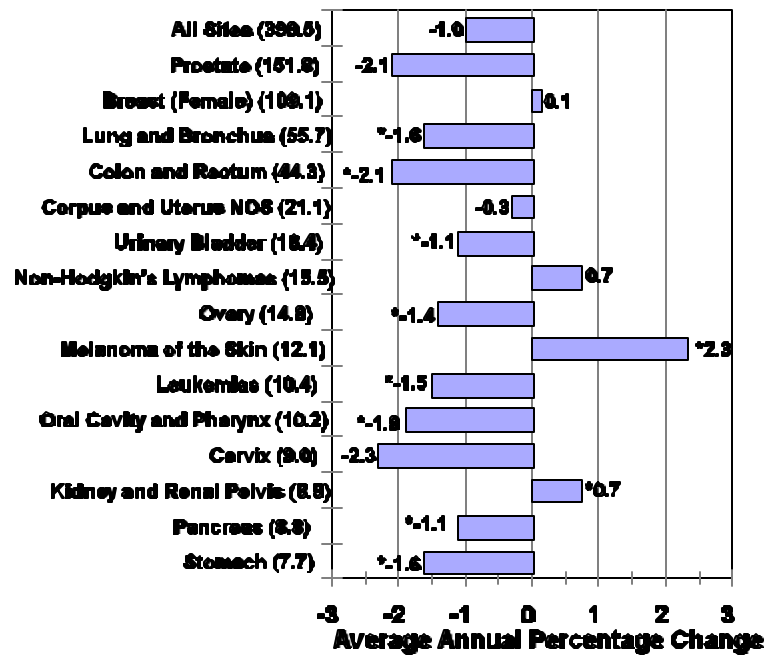
*Rates are per 100,000 and age-adjusted to the 1970 U.S. standard million population.

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, January 1999.

Illinois Cancer Incidence, 1990 to 1996
All Sites and Top 16 Cancer Sites



SEER Cancer Incidence, 1990 to 1996
All Sites and the Top 15 Cancer Sites



Note: Number in parenthesis after site is the average annual age-adjusted incidence rate, 1990 to 1996 expressed per 100,000 and adjusted to the U.S. 1970 standard million population. *Indicates statistical significance at $p < 0.05$

Figure 1. Annual Percent Change (APC) and Average Annual Age-Adjusted Cancer Incidence Rates (1990 to 1996) in Illinois and in the Surveillance, Epidemiology and End Results (SEER) Program for All Cancer Sites and the Top 15 Cancer Sites.

SOURCE: Illinois Department of Public Health, Illinois State Cancer Registry, January 1999.