

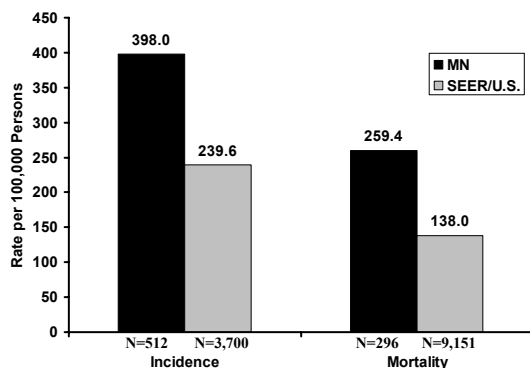
**CANCER RATES AMONG AMERICAN INDIANS
IN MINNESOTA**

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According to the 2000 Census, an estimated 3 million American Indians and Alaska Natives (AI/ANs) live in the United States, including 62,673 in Minnesota. Although AI/ANs account for less than 1% of the U.S. population, they experience a disproportionate burden of many chronic diseases, especially diabetes and heart disease, as well as injuries. National data have indicated that AI/ANs have an overall lower cancer risk than other racial and ethnic groups. However, a recent report from the Centers for Disease Control and Prevention showed large geographic variations in cancer mortality among AI/ANs and demonstrated that Northern Plains Indians have mortality rates for several common cancers that are about twice those among Southwestern Indians. Incidence data from the Minnesota Cancer Surveillance System (MCSS) and mortality data from the Minnesota Center for Health Statistics confirm that AI/ANs in Minnesota suffer a disproportionate burden of cancer.

Over the 5-year period 1996-2000, the overall cancer incidence rate among AI/ANs in Minnesota was 66% higher and cancer mortality was 88% higher than among AI/ANs represented in national data (Figure 1). The risk of developing and dying from lung cancer in Minnesota AI/ANs was more than 2 times higher compared to national data (Table 1). Likewise, colorectal cancer incidence and mortality rates among AI/ANs in Minnesota were twice as high as among AI/ANs in national data. The incidence rate of breast cancer among AI/AN women in Minnesota was 14% lower than among AI/AN women represented in national data, but their mortality rate was 62% higher. Prostate cancer incidence and mortality rates among AI/AN men in Minnesota were 2 times higher than among AI/AN men represented in national data.

Figure 1. Cancer Incidence and Mortality Rates Among American Indians, Minnesota and SEER/U.S., 1996-2000*



*Age-adjusted to the 2000 U.S. standard population; includes Hispanic American Indians.
Source: Minnesota Cancer Surveillance System (MCSS) and SEER Cancer Statistics Review, 1975-2000.
N=Number of newly diagnosed cancers cases and cancer deaths

National cancer incidence rates for AI/ANs are based on data from the 12 geographic regions of the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute, which represents about 21% of AI/ANs in the United States; however, 75% of AI/ANs in the 12 SEER regions come from New Mexico, California, and Alaska. As a result, SEER incidence rates for the AI/AN population are strongly influenced by the cancer rates among these 3 states and may present a biased picture of the cancer burden among AI/ANs nationwide. Since a national cancer registry does not exist, incidence rates for this population in the United States as a whole are not available.

The reasons for these disparities in cancer among AI/ANs are not well understood. The higher rates of cancer among AI/ANs in Minnesota compared to national data for AI/ANs may be associated in part with the elevated prevalence of smoking in this population. AI/ANs report the highest prevalence of current smoking among the major racial and ethnic groups in the United States; however, cigarette smoking among AI/ANs is highest among Northern Plains Indians and lowest among those living in the Southwest. Data for Minnesota are consistent with the national picture of cigarette smoking. Based on data from the Minnesota Behavioral Risk Factor Surveillance System for 1996-2000, American Indians were more than twice as likely as other racial and ethnic groups to report that they currently smoke.

Table 1. Incidence and Mortality Rates Among American Indians for the Most Common Cancer Sites, Minnesota and SEER/U.S., 1996-2000

Type of Cancer	Incidence ^a		Mortality ^a	
	MN	SEER ^b	MN	U.S.
All Cancer Sites Combined	398.0 (359.8, 440.2)	239.6 (231.3, 248.2)	259.4 (227.3, 295.9)	138.0 (135.0, 144.1)
Lung and Bronchus	88.9 (71.5, 110.3)	33.1 (29.9, 36.5)	89.4 (71.3, 111.7)	37.2 (35.7, 38.8)
Colon and Rectum	68.6 (51.9, 89.6)	34.7 (31.5, 38.2)	36.5 (24.6, 52.9)	14.7 (13.7, 15.8)
Breast (female)	49.9 (34.3, 72.2)	58.0 (53.0, 63.4)	24.1 (12.9, 42.9)	14.9 (13.7, 16.2)
Prostate	125.1 (88.9, 175.2)	53.6 (47.3, 60.8)	46.2 (24.5, 83.4)	21.9 (19.7, 24.2)

^a Rate per 100,000 persons, (95% confidence interval), age-adjusted to the 2000 U.S. standard population.
^b SEER (Surveillance, Epidemiology and End Results program) 12 regions
Source: Minnesota Cancer Surveillance System (MCSS) and SEER Cancer Statistics Review, 1975-2000.

Complete and accurate assessment of racial and ethnic differences in cancer risk in Minnesota is limited by several factors, including unknown accuracy of population estimates, incomplete or inaccurate reporting of race and ethnicity on medical records and death certificates, and the relatively small size of populations of color. The MCSS is working to address the issue of race misclassification on medical records by performing linkages of tumor registry data with data from the Indian Health Service. Such linkages will likely result in an increase in cancer rates for AI/ANs in Minnesota as cancer patients whose race/ethnicity previously was unknown or misreported are identified as American Indians.

Health disparities in underserved and minority populations are of critical concern for medical and public health professionals. Cancer Plan Minnesota, a statewide initiative to develop a comprehensive cancer control plan, is making strides to further understand and address these issues; a Health Disparities Committee has been charged specifically with providing a framework for action to reduce inequities in the burden of cancer among all Minnesotans. To participate or to learn more about Cancer Plan Minnesota, visit www.cancerplanmn.org, email compccancer@health.state.mn.us, or call Elizabeth Moe, project coordinator, at (612) 676-5220.

Additional information on Minnesota cancer rates by race and ethnicity can be found in "Minnesota Cancer Facts and Figures 2003," a joint publication of the American Cancer Society, the MCSS, and Cancer Plan Minnesota. This report is available on the Internet at www.cancerplanmn.org.

CLINICALLY DIAGNOSED CANCERS

The MCSS still intends to begin collecting clinically-diagnosed cancers, but the timeline has shifted. The current plan is to have the rule change in place by January 2005, and then work retrospectively to collect clinically-diagnosed cancers from 2004 forward. All registries should already be accessioning clinically-diagnosed cases, since it is required for approved cancer registries by the American College of Surgeons.

MCSS NOTES

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<http://www.health.state.mn.us/divs/hpcd/cdee/mcss/MCSSNotes.html>

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REGISTRY DATA, SOFTWARE SYSTEM CHANGES AND THE MCSS

Elaine Collins, R.H.I.A., C.T.R.

The creation, collection, and reporting of accurate and useful cancer data is an enterprise with many active participants and multiple inter-related partnerships. As a central registry, the Minnesota Cancer Surveillance System's (MCSS) primary partnerships are with its reporting entities, the pathology laboratories and facility cancer registries that submit information about Minnesota cancer patients to the MCSS. The MCSS in turn reports data to other entities, such as cancer researchers, the Centers for Disease Control and Prevention, and the citizens of Minnesota through its biennial legislative report. Our task is to ensure that reporting entities are cognizant of the national reporting standards implemented by the MCSS, to collect data conforming to those standards, and to report out standardized data. All agencies reporting to the MCSS, whether pathology laboratory, hospital registry, or physician office, share a similar task, to ensure that the data they collect and report conform to established standards.

The MCSS has not specified that hospital registries use a specific software program to collect and transmit their data; ideally any program used would be transparent, it would not leave its fingerprint upon the data transmitted. The MCSS is in the position of being able to review data submissions formatted by multiple software systems, and has accepted the necessity of an approval process when data standards change or registries change vendors. The MCSS informs vendors of MCSS data requirements when national standards change; and on behalf of the reporting registries, the MCSS has also spoken directly with software representatives regarding data formatting and transmission problems. In addition, the MCSS is in the process of testing a set of edits which will be required to be applied and resolved by the hospital registry for all reportable records before data transmission. Regardless of the service MCSS provides to the vendors and hospital registries to ensure accurate data transmission, the primary partnership is between the vendor and the client registry, and the responsibility for knowledgeable, timely, and accurate data collection and reporting to the MCSS rests with the hospital registry.

To ensure that their reported data meet required standards, registrars must: 1) verify that their software systems allow and facilitate accurate coding of all required data elements; 2) understand the translation of their coded data into the NAACCR reporting format currently in use; 3) regularly review their data files before submission; and 4) bring any problems to the attention of their software vendors. Registrars are also responsible for ensuring that data converted from one software system to another, or one software version to another within the same system, maintain their integrity. This requires that registrars undertake a detailed comparison of case data before and after conversion, based on a thorough understanding of their data system and the impact that changes in data standards may have, and again bring any problems to the attention of their software vendors. MCSS staff are available to consult with hospital registrars on the details of data standards and reporting formats.

CONSTANCE PERCY DISTINGUISHED SERVICE AWARD

MCSS's Jane Braun was awarded the 2004 Constance Percy Distinguished Service award by the Board of Directors of the North American Association of Central Cancer Registries. This prestigious award, announced during the annual NAACCR Conference held June 8-10 in Salt Lake City, recognizes an individual "who contributed exceptional volunteer service to NAACCR during the past 12 months or sustained current and long-term contributions to the organization." The award is named in honor of Connie Percy, co-editor of ICD-O-3, who died in March 2004 after many years of outstanding service to cancer registration and the SEER program. Several MCSS colleagues and many friends from cancer registries throughout North America were on hand to applaud this well deserved honor.