CHAPTER 6

Cancer of the Stomach

James E. Everhart, M.D., M.P.H.

SEER includes cancers of the gastroesophageal junction and gastric cardia with gastric cancer. Over the period 1979 to 2004, the incidence of cancers of the gastroesophageal junction and cardia approximately doubled, resulting in an increase in the proportion of gastric cancer at these sites from 14.9% in 1979 to 30.4% in 2004. However, for medical care and vital statistics, these sites were included with esophageal cancer.

In 2004, the stomach was the third most common anatomical site for digestive system cancer, after the colon/rectum and the pancreas. Cancer of the stomach, gastric cancer, had an older age distribution than did other GI cancers, with 68 percent of cases having occurred at age 65 years or older (Table 1). Median age of diagnosis was 71 years (http://seer.cancer.gov/csr/1975_2005/results_merged/topic_med_age.pdf). Asians and Hispanics had the highest age-adjusted incidence rates; non-Hispanic whites had the lowest rate. The incidence of gastric cancer, as reflected by mortality rates, has been declining for more than 70 years in the United States. Between 1979 and 2004, the incidence declined more than one-third (Figure 1). During that period, 5-year survival following diagnosis increased by 50 percent.

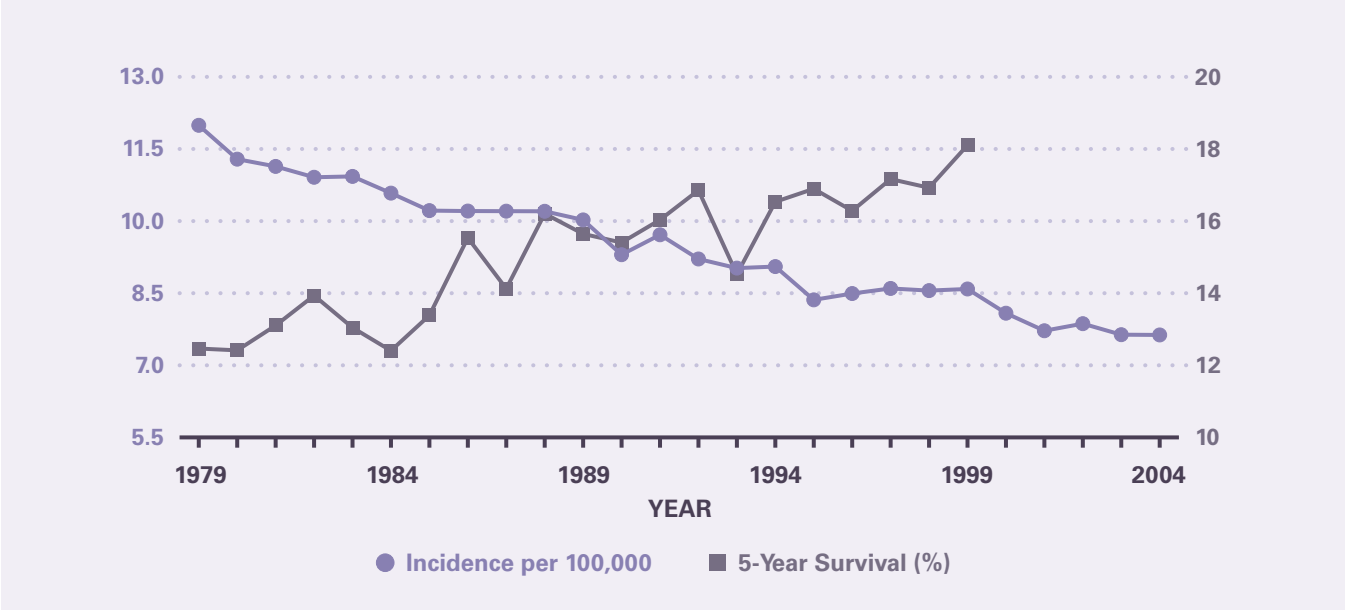
Ambulatory care visits and hospital discharges with gastric cancer were relatively insubstantial (Table 2). Hospitalization rates declined more rapidly than the incidence rate (Figure 2). Because gastric cancer now has somewhat better survival than other digestive system cancers, it was only the fourth leading cause of death among these cancers. Seventy percent of deaths with gastric cancer as the underlying cause occurred at age 65 years or older (Table 3). The large majority of deaths listed gastric cancer as the underlying cause. Age-adjusted mortality rates were more than twice as high among blacks as whites and nearly twice as high among men as women. If cancer of the gastroesophageal junction were included among gastric cancer, the number of deaths would have increased 5.6 percent to 11,883 in 2004. Reflecting the declining incidence rate and longer survival, the age-adjusted mortality rate of gastric cancer declined by 49 percent between 1979 and 2004 (Figure 3), the most rapid decline for any major digestive system cancer.

Table 1. Gastric Cancer: Number of Cases and Incidence Rates by Age, Race/Ethnicity, and Sex, 2004

DEMOGRAPHIC CHARACTERISTICS		Number of Cases	INCIDENCE PER 100,000	
			Unadjusted	Age-Adjusted
AGE (Years)	Under 15	—	—	—
	15–44	1,292	1.1	—
	45–64	6,610	9.4	—
	65+	14,617	42.7	—
RACE/ETHNICITY	Non-Hispanic White	14,224	7.4	6.2
	Non-Hispanic Black	2,727	8.0	11.4
	Hispanic	2,425	6.0	12.3
	Asian/Pacific Islander	1,419	11.5	13.8
	American Indian/Alaska Native	123	6.6	9.1
SEX	Female	8,579	5.9	5.5
	Male	12,888	9.2	11.1
TOTAL		21,519	7.5	—

SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program

Figure 1. Gastric Cancer: Age-Adjusted Incidence Rates and 5-Year Survival Rates, 1979–2004



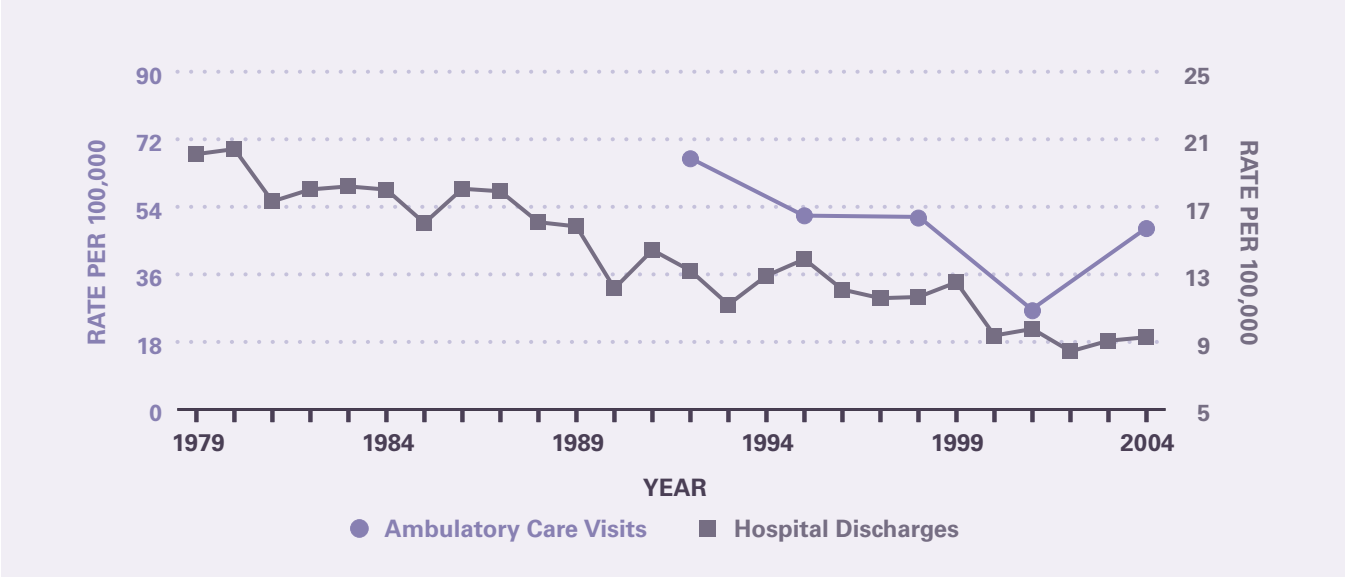
SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program

Table 2. Gastric Cancer: Number and Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With First-Listed and All-Listed Diagnoses by Age, Race, and Sex in the United States, 2004

DEMOGRAPHIC CHARACTERISTICS		AMBULATORY CARE VISITS				HOSPITAL DISCHARGES			
		First-Listed Diagnosis		All-Listed Diagnoses		First-Listed Diagnosis		All-Listed Diagnoses	
		Number in Thousands	Rate per 100,000	Number in Thousands	Rate per 100,000	Number in Thousands	Rate per 100,000	Number in Thousands	Rate per 100,000
AGE (Years)	Under 15	—	—	—	—	—	—	—	—
	15–44	—	—	—	—	1	1	3	2
	45–64	—	—	—	—	5	7	10	14
	65+	—	—	107	295	10	29	19	52
RACE	White	—	—	99	40	11	4	21	8
	Black	—	—	—	—	3	11	6	21
SEX	Female	—	—	—	—	7	4	14	8
	Male	—	—	59	44	9	7	17	13
TOTAL		137	47	141	48	17	6	31	11

SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (3-year average, 2003–2005), and Healthcare Cost and Utilization Project Nationwide Inpatient Sample (HCUP NIS)

Figure 2. Gastric Cancer: Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With All-Listed Diagnoses in the United States, 1979–2004



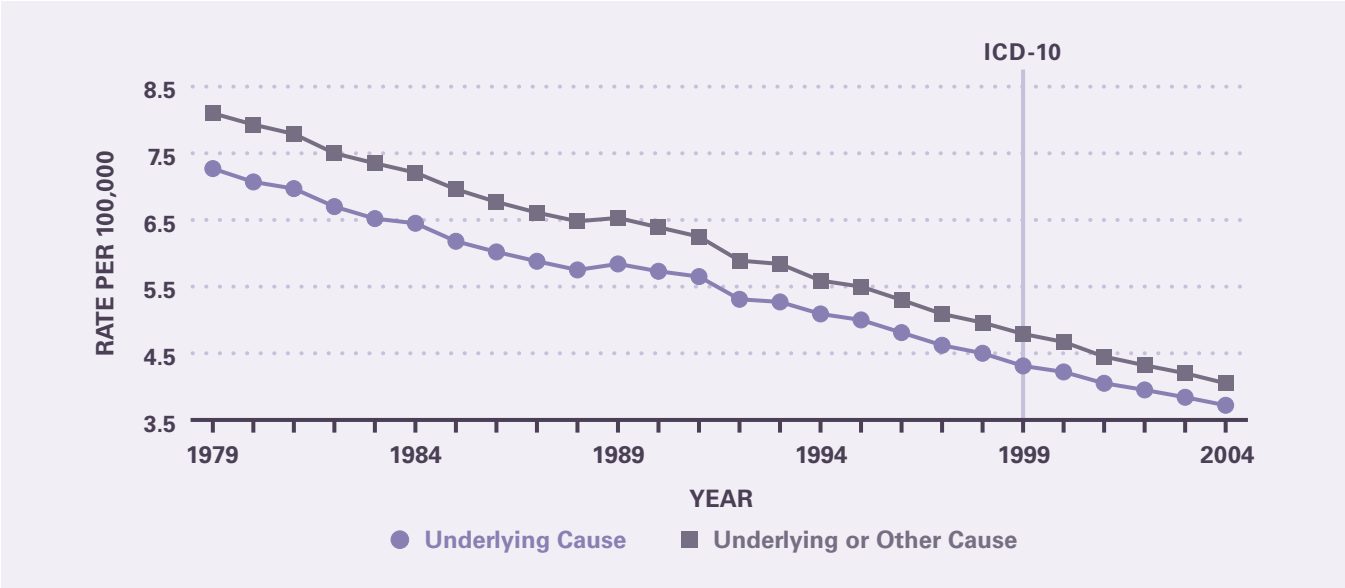
SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (averages 1992–1993, 1994–1996, 1997–1999, 2000–2002, 2003–2005), and National Hospital Discharge Survey (NHDS)

Table 3. Gastric Cancer: Number and Age-Adjusted Rates of Deaths and Years of Potential Life Lost (to Age 75) by Age, Race, and Sex in the United States, 2004

DEMOGRAPHIC CHARACTERISTICS		UNDERLYING CAUSE			UNDERLYING OR OTHER CAUSE	
		Number of Deaths	Rate per 100,000	Years of Potential Life Lost in Thousands	Number of Deaths	Rate per 100,000
AGE (Years)	Under 15	—	—	—	—	—
	15–44	573	0.5	20.7	585	0.5
	45–64	2,809	4.0	51.8	2,942	4.2
	65+	7,871	21.7	11.7	8,734	24.0
RACE	White	8,494	3.3	58.0	9,271	3.6
	Black	2,008	7.5	18.7	2,177	8.1
SEX	Female	4,791	2.8	32.9	5,197	3.0
	Male	6,462	5.2	51.3	7,064	5.7
TOTAL		11,253	3.8	84.2	12,261	4.2

SOURCE: Vital Statistics of the United States

Figure 3. Gastric Cancer: Age-Adjusted Rates of Death in the United States, 1979–2004



SOURCE: Vital Statistics of the United States