

CHAPTER 12

Cancer of the Pancreas

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

In 2004, 71 percent of newly diagnosed pancreatic cancers were among persons age 65 years and older (Table 1). Age at diagnosis was higher than for most other digestive system cancers, with the median being 72 years and 40 percent diagnosed at age 75 years or older (http://seer.cancer.gov/csr/1975_2005/results_merged/topic_med_age.pdf).

Incidence rates were highest among the elderly, non-Hispanic blacks, and males. Age-adjusted incidence was relatively stable from 1979 to 2004, being essentially the same in the first and last year (Figure 1). Survival from pancreatic cancer is the poorest of any major cancer, digestive system or otherwise. Nevertheless, 5-year survival increased modestly from 2 percent among persons diagnosed in 1979 to 3.8 percent among persons diagnosed in 1999.

In 2004, there were an estimated 415,000 ambulatory care visits for pancreatic cancer and 68,000 hospital discharges with a diagnosis of pancreatic cancer (Table 2). Hospitalization rates were highest among the elderly and age-adjusted rates were higher for blacks and males. While ambulatory care visits appear to have increased from 1992 through 2004, hospital discharge rates were stable from 1979 through 2004 (Figure 2).

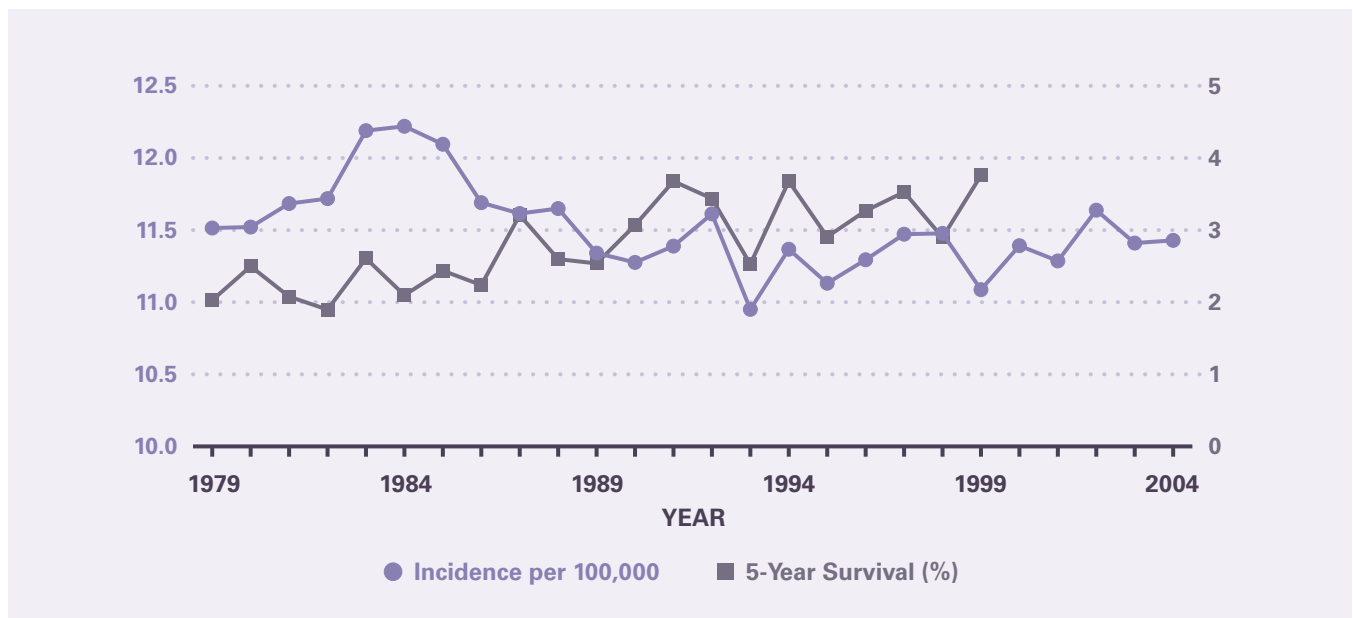
Because of low survival, pancreatic cancer mortality was essentially the same as incidence in 2004. As underlying cause, there were 31,800 deaths in 2004 (third highest of all digestive diseases) and more than 200,000 YPLL prior to age 75 years (also third highest of all digestive diseases) (Table 3). Rates were highest in the oldest age group. Age-adjusted mortality rates were higher for blacks and for males. Death rates for pancreatic cancer remained steady between 1979 and 2004 (Figure 3).

Table 1. Pancreatic 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 | 878 | 0.7 | — |
| | 45–64 | 9,513 | 13.6 | — |
| | 65+ | 21,681 | 63.4 | — |
| RACE/ETHNICITY | Non-Hispanic White | 25,873 | 13.5 | 11.2 |
| | Non-Hispanic Black | 3,614 | 10.6 | 15.2 |
| | Hispanic | 1,929 | 4.8 | 10.4 |
| | Asian/Pacific Islander | 947 | 7.7 | 9.2 |
| | American Indian/Alaska Native | 99 | 5.3 | 8.1 |
| SEX | Female | 15,709 | 10.8 | 10.0 |
| | Male | 14,853 | 10.6 | 12.7 |
| TOTAL | | 30,560 | 10.7 | — |

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

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



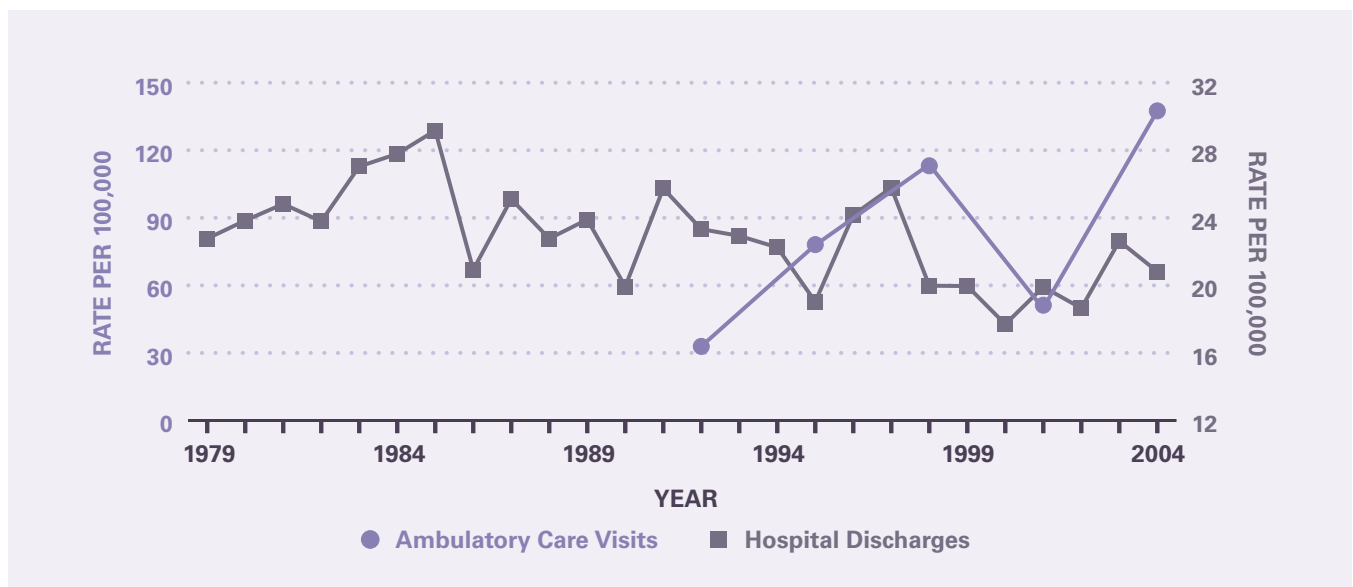
SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program

Table 2. Pancreatic 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 | 2 | 2 |
| | 45–64 | 154 | 218 | 162 | 229 | 12 | 16 | 23 | 33 |
| | 65+ | 230 | 634 | 251 | 690 | 21 | 59 | 43 | 119 |
| RACE | White | 383 | 148 | 409 | 158 | 28 | 11 | 55 | 21 |
| | Black | — | — | — | — | 4 | 15 | 8 | 30 |
| SEX | Female | 214 | 129 | 237 | 144 | 17 | 10 | 34 | 20 |
| | Male | 173 | 124 | 178 | 128 | 17 | 13 | 34 | 26 |
| TOTAL | | 386 | 132 | 415 | 141 | 34 | 12 | 68 | 23 |

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



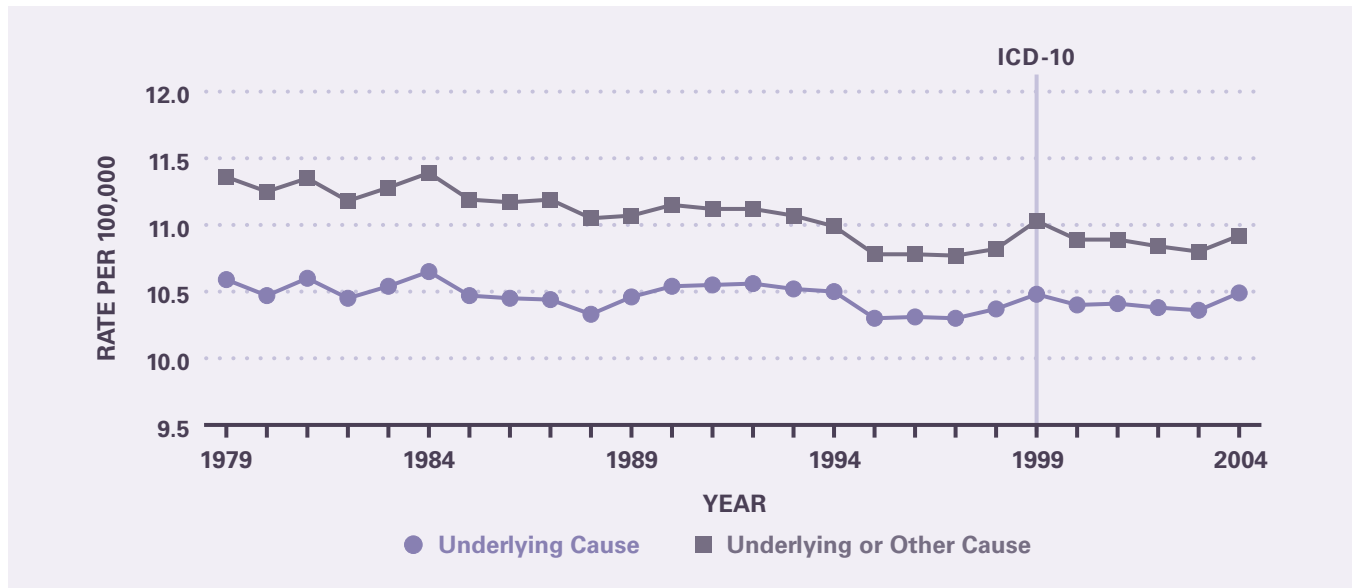
SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (averages 1992–1993, 1994–1996, 1997–1999, 2000–2002, 2003–2005), and National Hospital Discharge Survey (NHDS)

Table 3. Pancreatic 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 | — | — | 1 | 0.0 |
| | 15–44 | 596 | 0.5 | 606 | 0.5 |
| | 45–64 | 8,407 | 11.9 | 8,656 | 12.2 |
| | 65+ | 22,796 | 62.7 | 23,825 | 65.6 |
| RACE | White | 27,247 | 10.5 | 28,323 | 10.9 |
| | Black | 3,681 | 13.7 | 3,848 | 14.3 |
| SEX | Female | 16,004 | 9.2 | 16,602 | 9.6 |
| | Male | 15,796 | 12.4 | 16,487 | 12.9 |
| TOTAL | | 31,800 | 10.8 | 33,089 | 11.3 |

SOURCE: Vital Statistics of the United States

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



SOURCE: Vital Statistics of the United States