Sarcoidosis (ICD-9 Code 135)

Sarcoidosis (ICD-9 code 135) is a multi-system disease of unknown etiology with a marked predilection for the lung. However, any organ system or tissue can be involved, including the heart, skin, eyes, nervous system, liver, kidneys, etc. The hallmark of the disease is the histological finding of non-caseating granulomas in the affected tissue. The condition is diagnosed by excluding other pathological states that can present with similar histological findings, such as mycobacterial and fungal infections, hypersensitivity reactions of the lung, and chronic beryllium disease [Newman et al. 1997]. In fact, some of these other conditions may at times be misclassified as sarcoidosis. Such misclassifications might increase the apparent incidence of sarcoidosis and influence its geographic distribution.

Infectious agents have been etiologically implicated, but never confirmed as causative, in sarcoidosis. It is well known that certain racial and ethnic groups have higher incidence of the disease; there is a three-fold higher incidence for blacks compared to whites in the United States [Rybicki et al. 1997]. In addition, incidence rates vary substantially by country, including a high incidence of sarcoidosis in Scandinavia, suggesting either an ethnic or environmental component to the cause of the disease. Sarcoidosis often presents with chest x-ray findings of bilateral hilar adenopathy with or without parenchymal/interstitial markings. In many of these cases, the disease and the chest x-ray findings resolve over time, even without treatment. In a small percentage of patients, the disease progresses despite medical therapy. Death from sarcoidosis usually results from pulmonary and/or cardiac involvement.

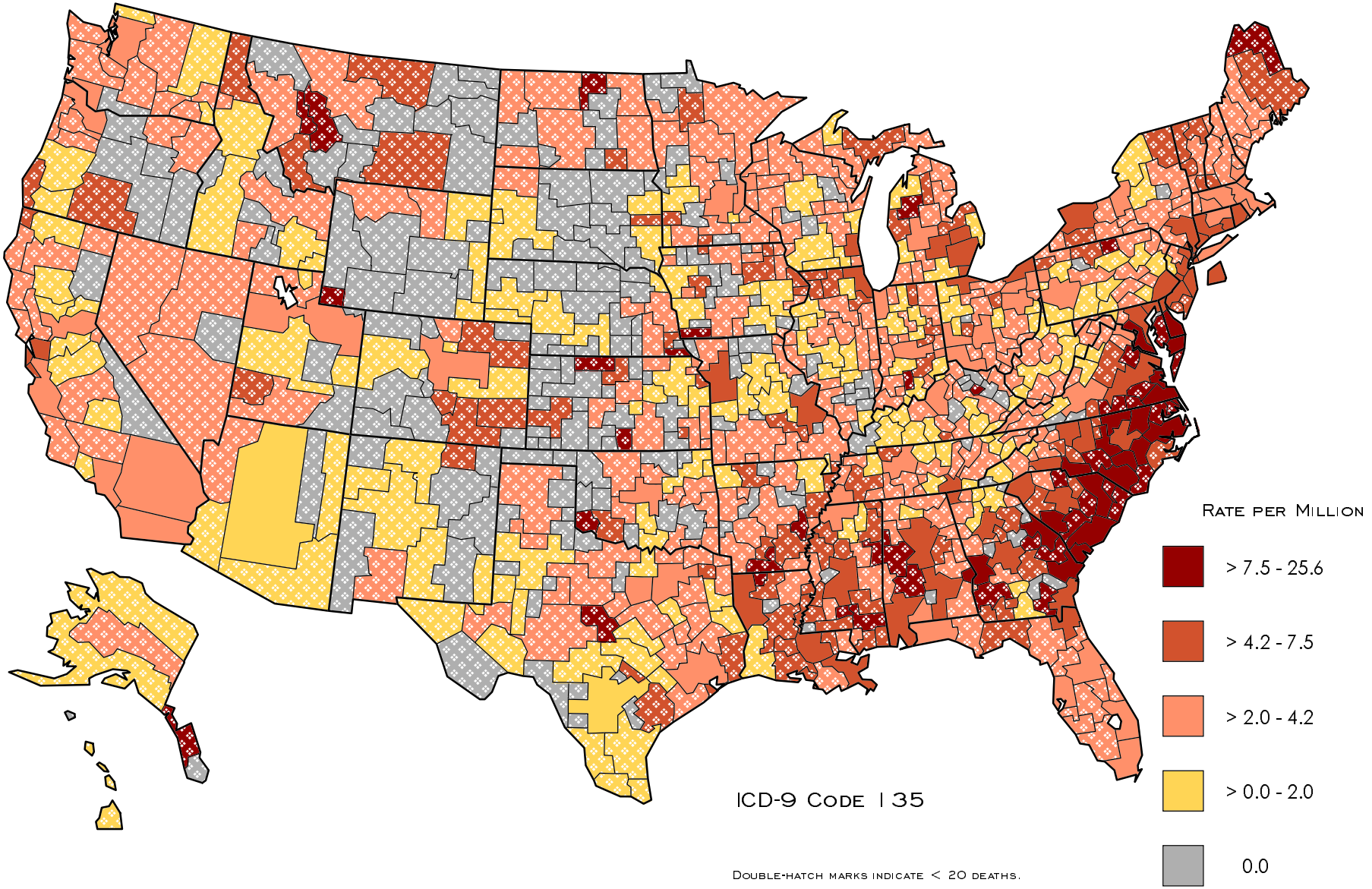
References

Newman LS, Rose CS, Maier LA [1997]. Sarcoidosis. N Engl J Med 336:1224-1234.
Rybicki BA, Major M, Popovich J Jr, Maliarik MJ, Iannuzzi MC [1997]. Racial differences in sarcoidosis incidence: a 5-year study in a health maintenance organization. Am J Epidemiol 145:234-241.

Sarcoidosis

Age-Adjusted Death Rates by HSA

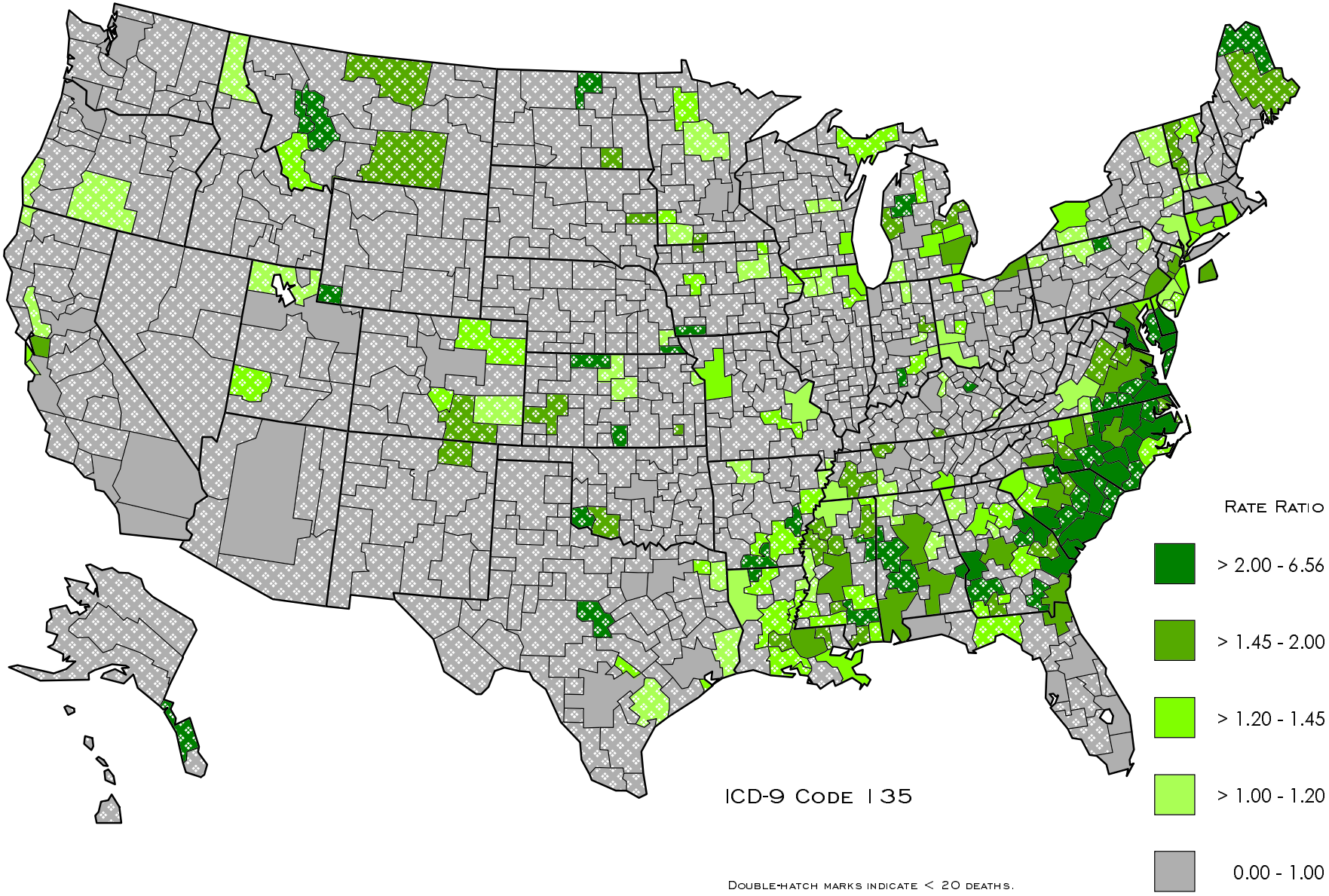
U.S. Residents 15 Years of Age and Older, 1982-1993



Sarcoidosis

Death Rates of Each HSA Compared with U.S. Rate

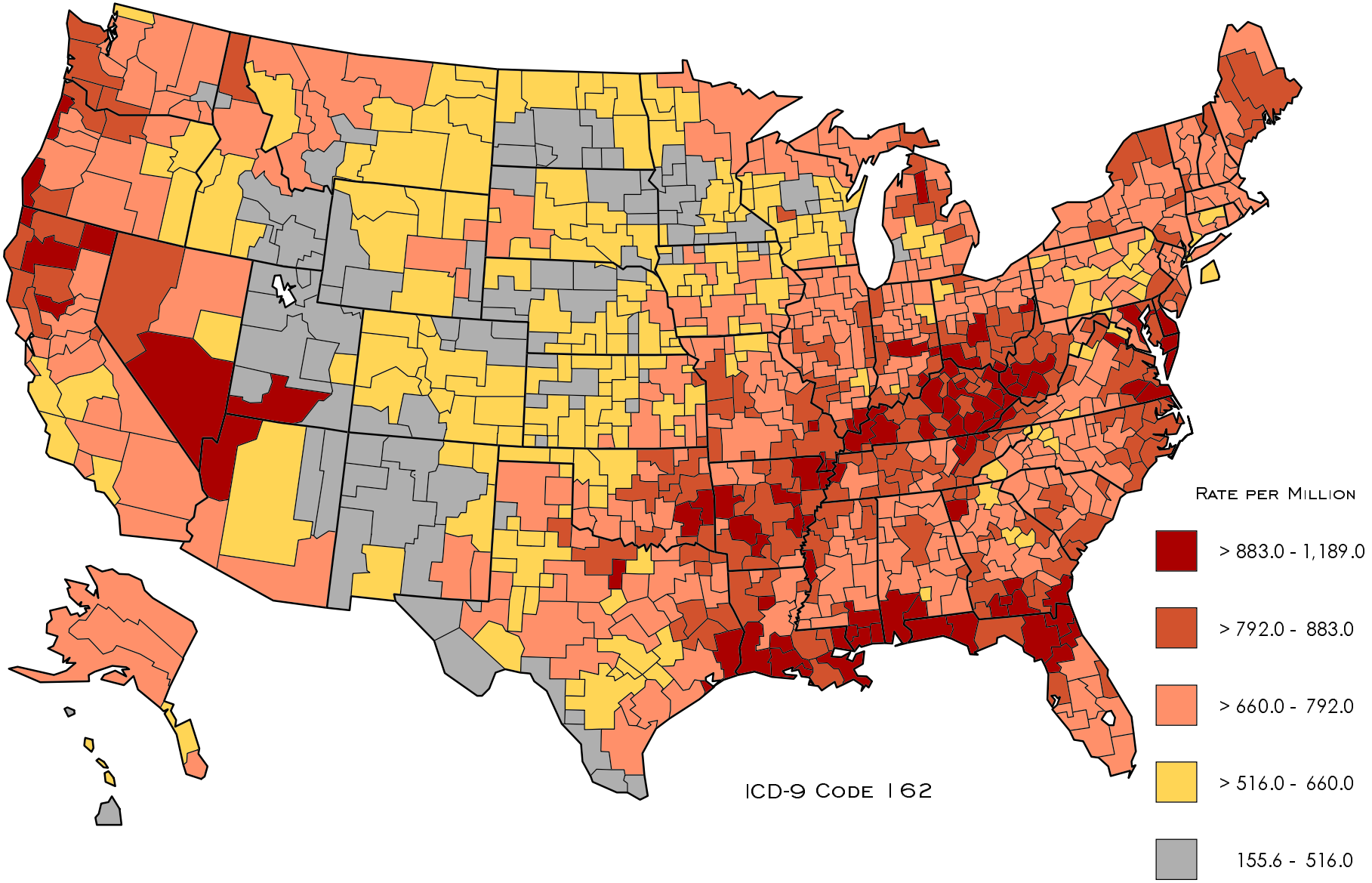
U.S. Residents 15 Years of Age and Older, 1982-1993



Lung Cancer

Age-Adjusted Death Rates by HSA

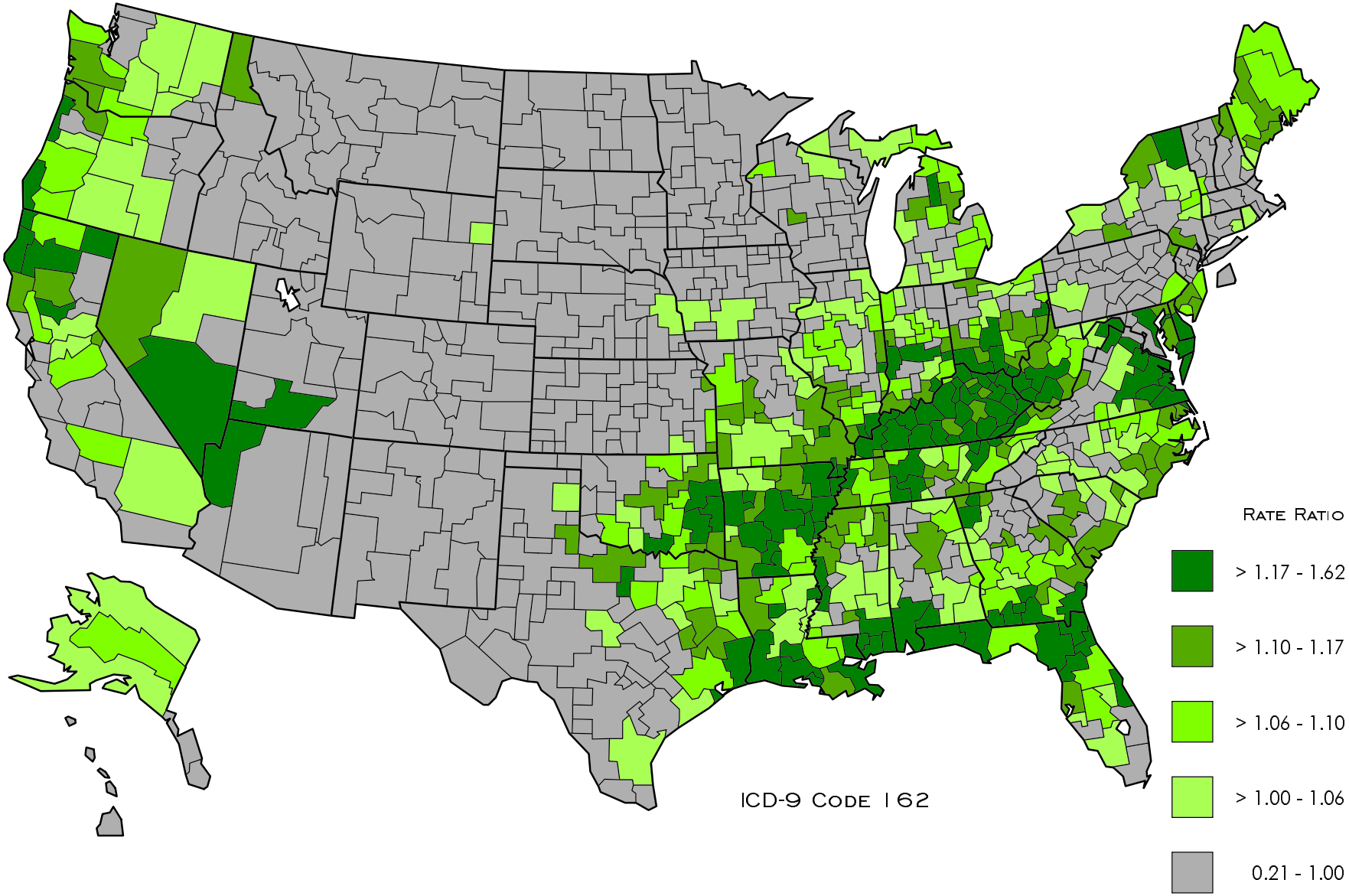
U.S. Residents 15 Years of Age and Older, 1982-1993



Lung Cancer

Death Rates of Each HSA Compared with U.S. Rate

U.S. Residents 15 Years of Age and Older, 1982-1993



Lung Cancer (ICD-9 Code 162)

Malignant neoplasms of trachea, bronchus, and lung (ICD-9 code 162) are caused primarily by cigarette smoking, but certain occupational and environmental exposures also represent well known causes. Occupational carcinogens causing lung cancer include arsenic, asbestos, chloromethyl ethers, chromium, polycyclic aromatic hydrocarbons, ionizing radiation, nickel, and vinyl chloride [Blot and Fraumeni 1996]. Silica was recently designated as a human carcinogen [IARC 1997], and occupational exposure to several other industrial exposures, including acrylonitrile and beryllium, have also been associated with lung cancer excess. Radon gas has been reported to increase the risk of lung cancer among underground miners, with risk quantitatively related to the inhalation of radon daughter products [Samet 1989]. It has been estimated that, in the United States in 1985, cigarette smoking accounted for 90 percent of lung cancer in males and nearly 80 percent in females [Surgeon General 1989]. Several studies have observed that, particularly among males, lung cancer is inversely related to socioeconomic status as measured by income or education level [Blot and Fraumeni 1996]. For example, British mortality data have revealed a two-fold difference in mortality between low and high social class [Registrar General 1978].

The estimated population attributable risk of lung cancer due to occupation was 9.2 percent based on hospital data from nine U.S. metropolitan areas [Morabia et al. 1992]. In another study, the estimated population attributable risk due to occupational exposures was between 4.6 percent and 9.2 percent after adjustment for smoking [Vineis and Simonato 1991].

References

Blot WJ, Fraumeni JF, Jr. [1996]. Cancers of the lung and pleura. In: Schottenfeld D, Fraumeni JF, Jr., eds. Cancer epidemiology and prevention. 2nd ed. Oxford: Oxford University Press, pp. 637-665.

IARC (International Agency for Research on Cancer) [1997]. IARC monographs on the evaluation of carcinogenic risks to humans: silica, some silicates, coal dust and para-armid fibrils. 68:41-242.

Morabia A, Markowitz S, Garibaldi K, Wynder EL [1992]. Lung cancer and occupation: results of a multicenter case-control study. Br J Ind Med 49:721-727.

Registrar General [1978]. Occupational mortality. Decennial supplement for England and Wales, 1970-1972. London: HMSO.

Samet JM [1989]. Radon and lung cancer. J Natl Cancer Inst 81:745-757.

USDHHS (U.S. Department of Health and Human Services) [1989]. Reducing the health consequences of smoking: 25 years of progress. DHHS Pub. No. (CDC) 89-8411, pp. 121-188.

Vineis P, Simonato L [1991]. Proportion of lung and bladder cancers in males resulting from occupation: a systematic approach. Arch Environ Health 46:6-15.