

18. Diabetes mortality In Appalachia

Mortality from diabetes is likely to be underestimated by as much as 50% (Pickle *et al*, 1996). Diabetes is a major risk factor for other diseases such as heart disease and stroke, which are more likely to be coded as the underlying cause of death on the death certificate. Obesity is a major risk factor for diabetes.

Both in the Appalachian region and the non-Appalachian U.S., death rates attributable to diabetes rank ninth among white men and women ages 35 to 64 in Appalachia and eighth among elderly white men and women (Figure. 6 – Section I). Among black men of both age groups diabetes death rates rank eighth. For black women diabetes death rates rank seventh among ages 35 to 64 and fifth among elderly black women.

County –Level Rates of Diabetes Mortality in Appalachia

County level rates of mortality from diabetes are shown on pages 110-113. County-level diabetes death rates range from 4 to 26 death per 100,000 among white men ages 35 to 64, from 49 to 185 deaths per 100,000 among elderly white men, from 20 to 50 deaths per 100,000 among black men ages 35 to 64, from 97 to 486 deaths per 100,000 among elderly black men, 5 to 23 deaths per 100,000 among white women ages 35 to 64, from 51 to 207 deaths per 100,000 among elderly white women, from 16 to 44 deaths per 100,000 among black women ages 35 to 64, and from 107 to 367 deaths per 100,000 among elderly black women.

Geographic patterns are fairly distinct in the distribution of diabetes death rates, although there is significant variation in the geographic distribution of rates among the

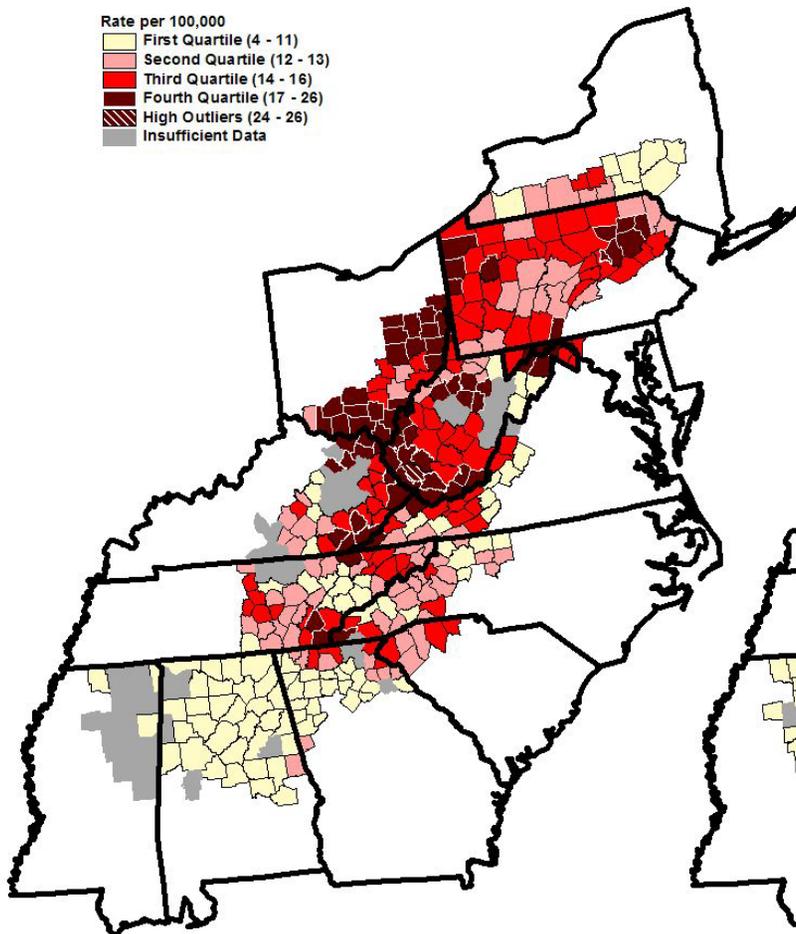
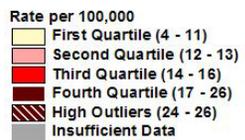
geographic subgroups. In general, high death rates from diabetes are predominant in the central to northern portions of the Appalachian region among all demographic subgroups. Among white men and women of both age groups, high diabetes death rates are predominant in Eastern Ohio, West Virginia, and Pennsylvania with high outliers occurring in several counties in Southern West Virginia for age group 35 to 64. For the most part, the southern Appalachian counties exhibit relatively low rates of diabetes mortality. Several distinct groups of high rate counties occur among the black population groups. For black men ages 35 to 64, high rate counties occur in Southwestern Pennsylvania and in Western North Carolina. Among elderly black men, high rate counties occur primarily in Eastern Alabama, Western South Carolina, Northwestern Pennsylvania, and a large group of high outlier counties occur in South-Central West Virginia. Geographic patterns for black women are very similar to those of black men with the exception of relatively low diabetes death rates in Southwestern Pennsylvania.

County Trends in Diabetes Mortality

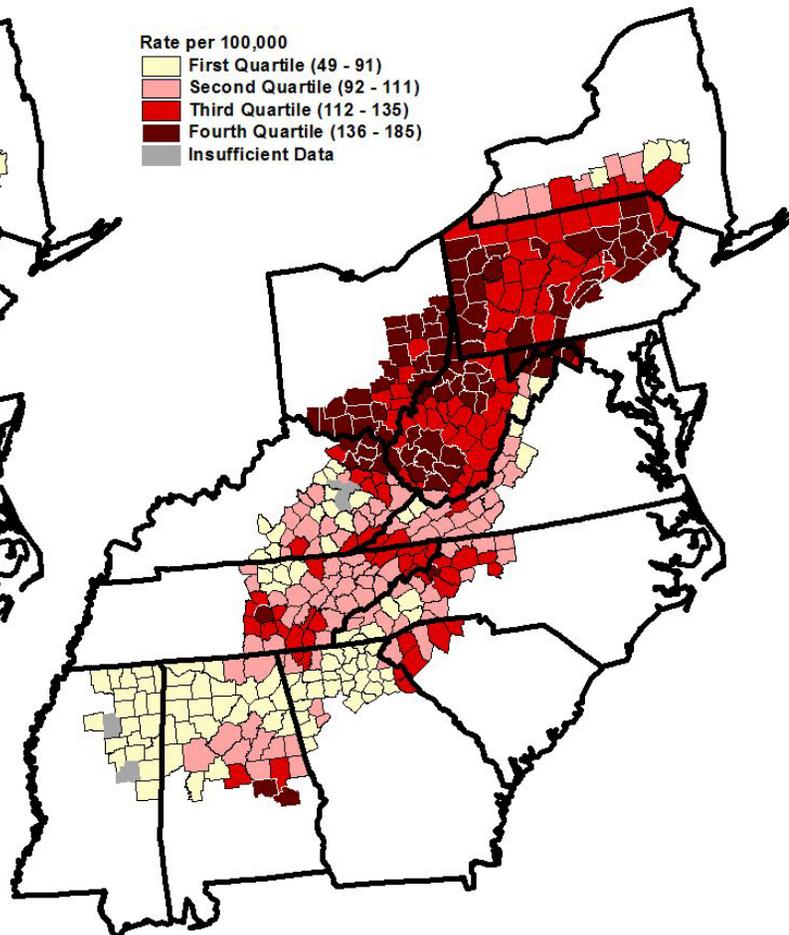
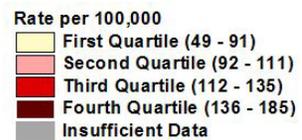
No diabetes mortality trends could be estimated due to insufficient data.

Smoothed Diabetes Death Rate, 1990-1997

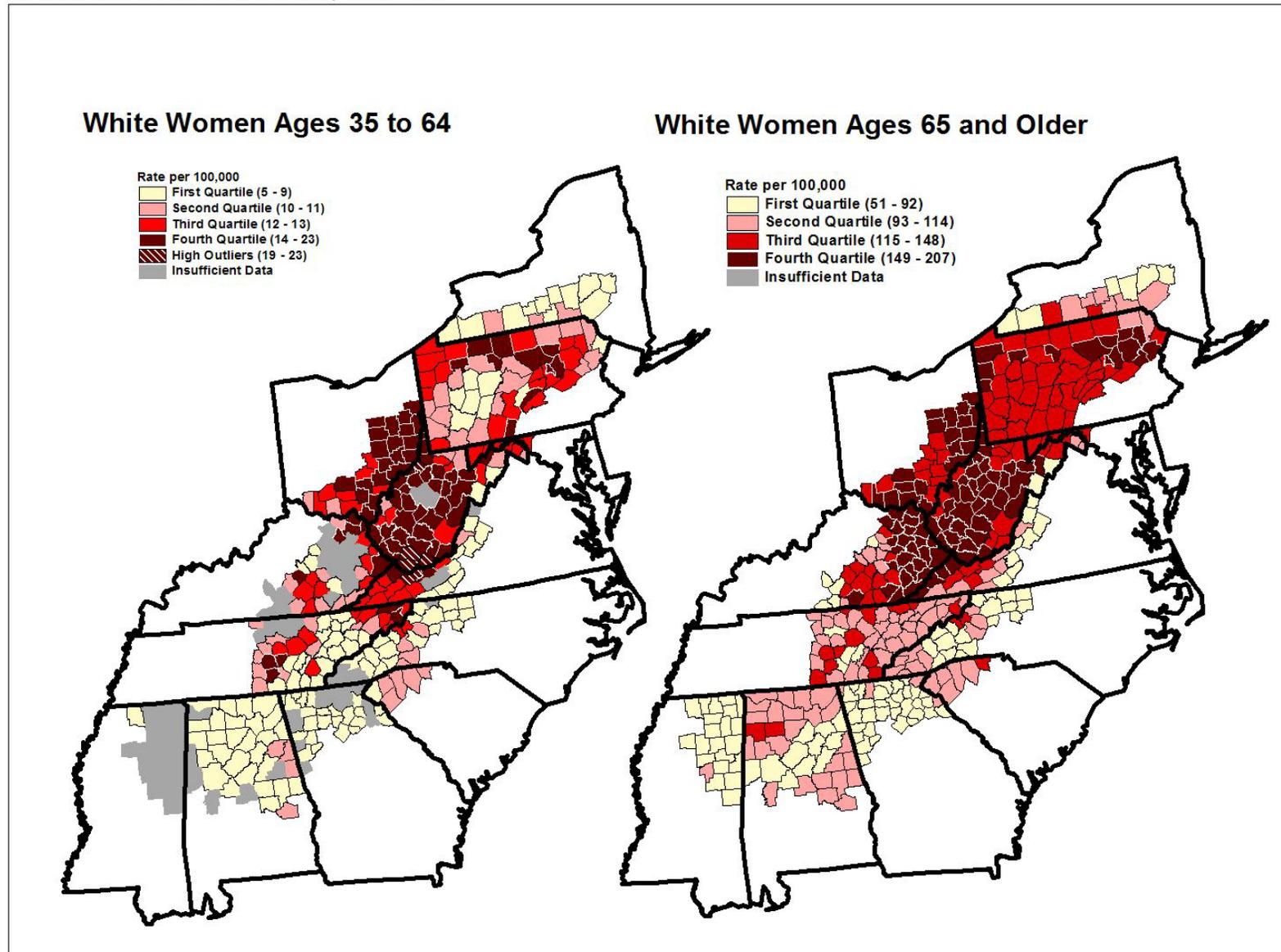
White Men Ages 35 to 64



White Men Ages 65 and Older

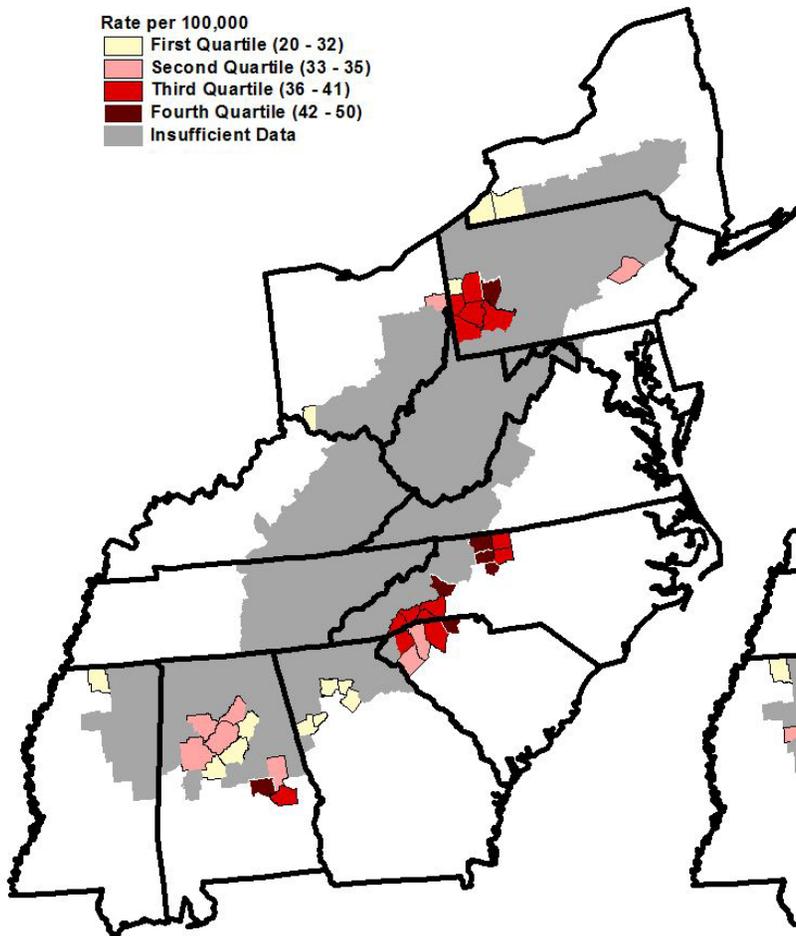
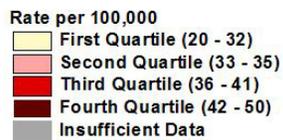


Smoothed Diabetes Death Rate, 1990-1997

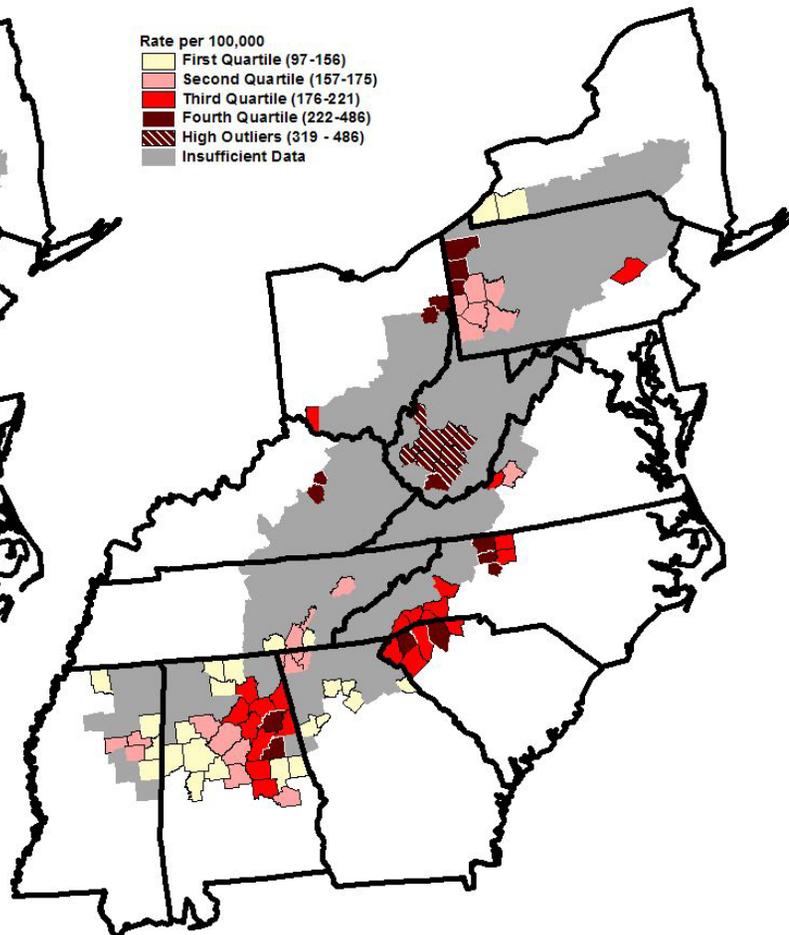


Smoothed Diabetes Death Rate, 1990-1997

Black Men Ages 35 to 64



Black Men Ages 65 and Older



Smoothed Diabetes Death Rate, 1990-1997

