III.B.2 Premature Heart Disease Mortality

The regional north-south gradient observed for premature all-cause mortality is less pronounced for premature heart disease mortality. Relatively low rates of mortality are still evident in the Northern counties however, the counties in the Central part of the region in Eastern Kentucky, Southern Ohio and West Virginia, are more predominantly represented among high rates. High rate counties are also evident in Eastern Mississippi and Alabama. Appalachian counties are primarily represented by the mid-to-upper range values of the national distribution of rates of premature heart disease mortality, ranging primarily from the 2nd through 4th quartiles.

Statistically significant associations between socioeconomic conditions and premature heart disease mortality are found consistently in three distinct parts of the region; the extreme Northern counties in Pennsylvania and New York, Central counties in Eastern Kentucky, Southern Ohio and West Virginia, and Southern counties in Mississippi and Alabama. (see Figures 31-35). In this case, there appear to be three key indicators of socioeconomic condition that differentiate the Central and Southern counties from those in the Northern part of the region; the poverty rate, the unemployment rate, and the percentage of persons without health insurance. The majority of the northern counties have low rates of poverty, unemployment, and low percentages of persons without health insurance when compared to the regional average. Conversely, the counties in the Central and Southern parts of the region have generally high rates of poverty and unemployment, and high percentages of persons without health insurance. The regions are generally comparable on both the percent urban population and income levels.

Figure 31. Associations between Premature Heart Disease Mortality and Percent Urban Population in the Appalachian Region.

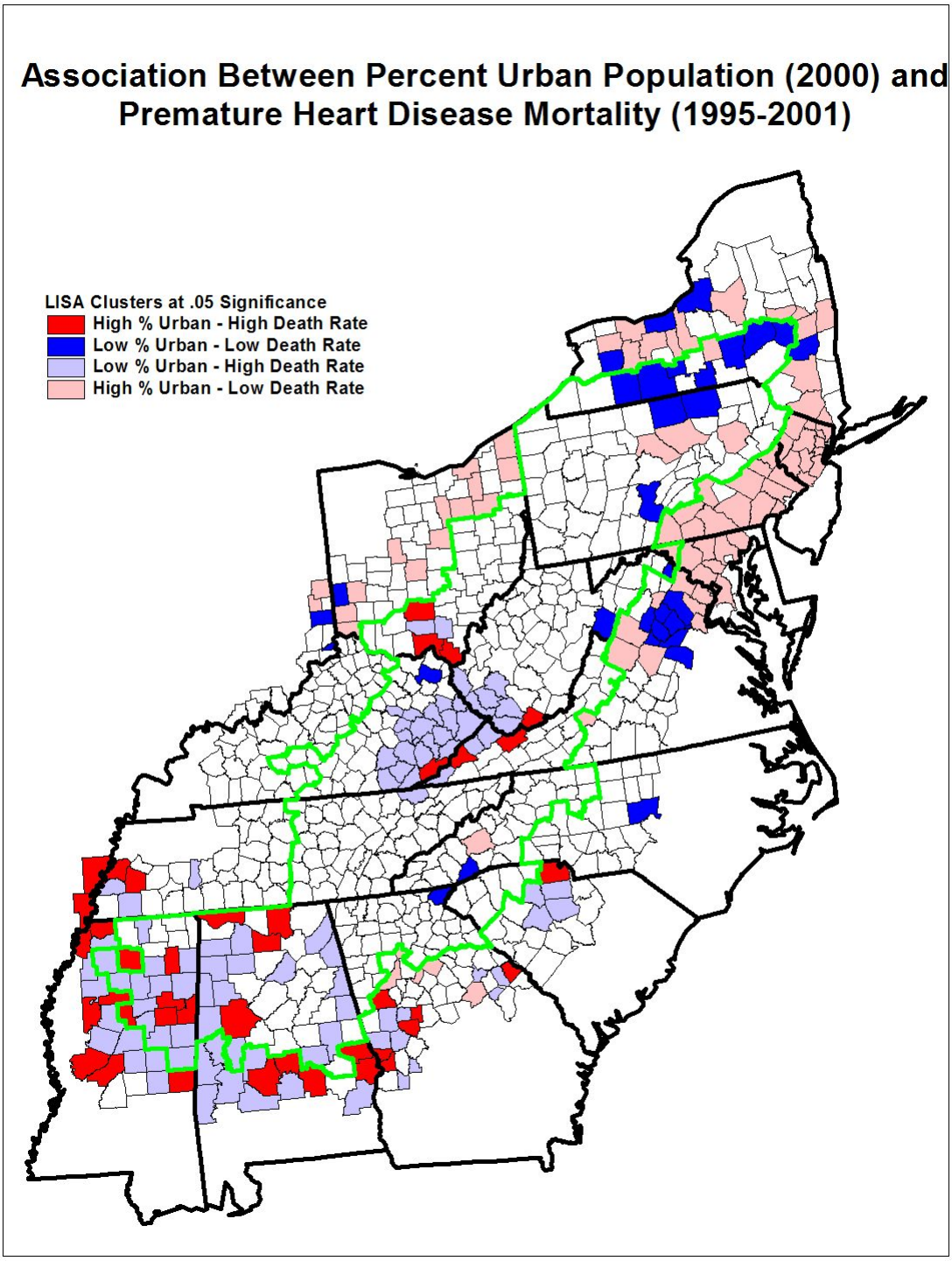

Figure 32. Associations between Premature Heart Disease Mortality and Median Family Income in the Appalachian Region.

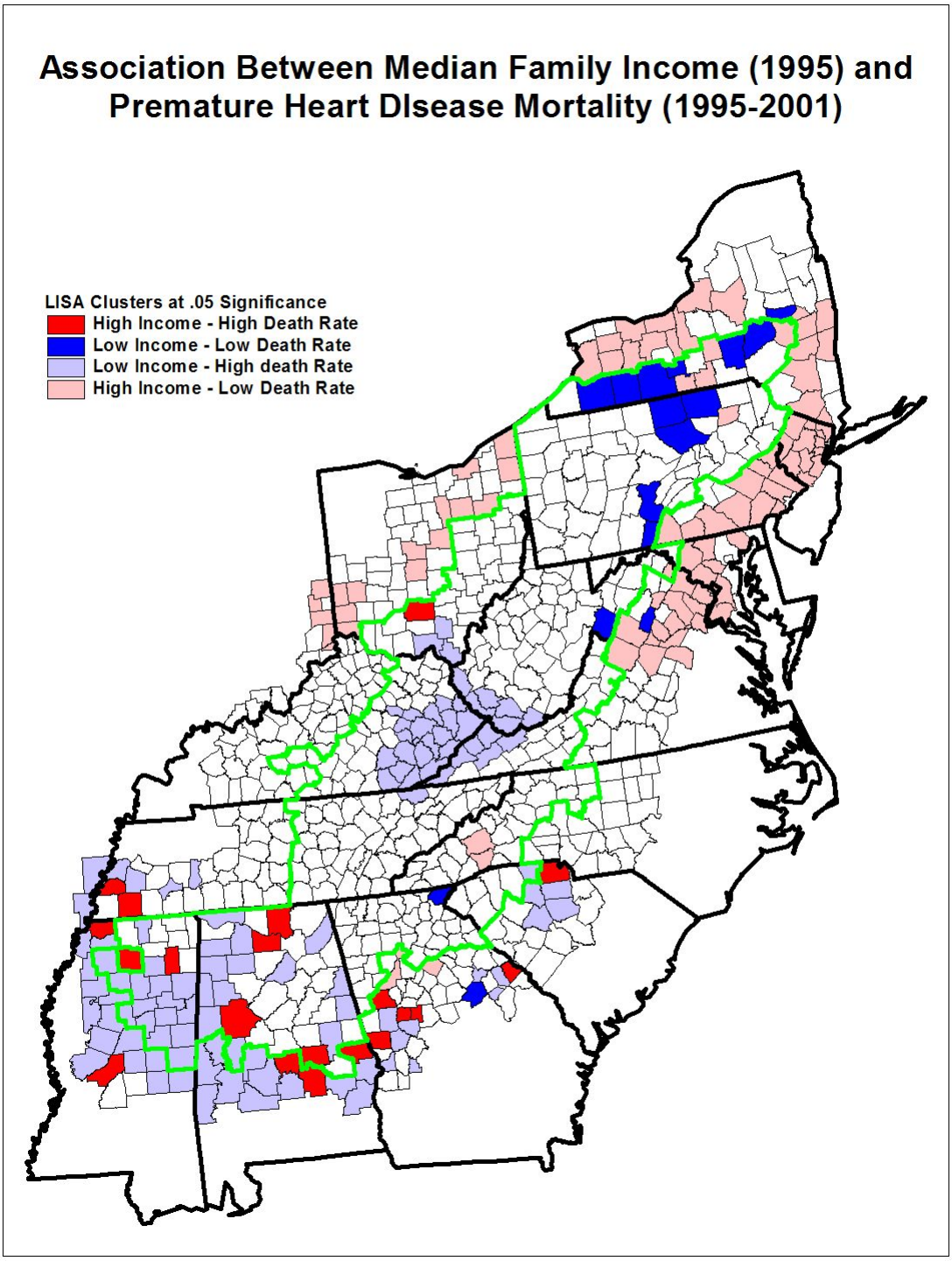

Figure 33. Associations between Premature Heart Disease Mortality and the Poverty Rate in the Appalachian Region.

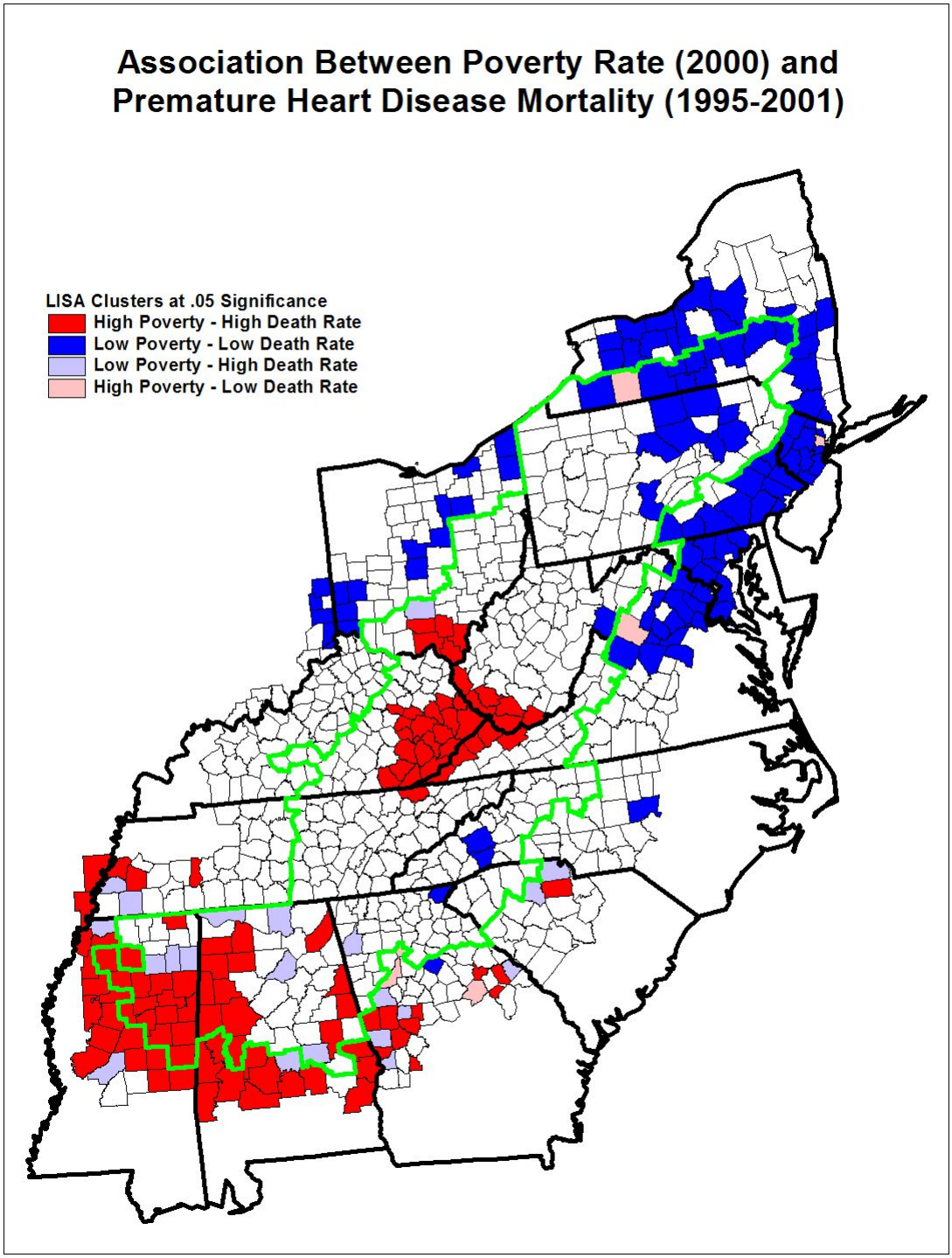

Figure 34. Associations between Premature Heart Disease Mortality and the Unemployment Rate in the Appalachian Region.

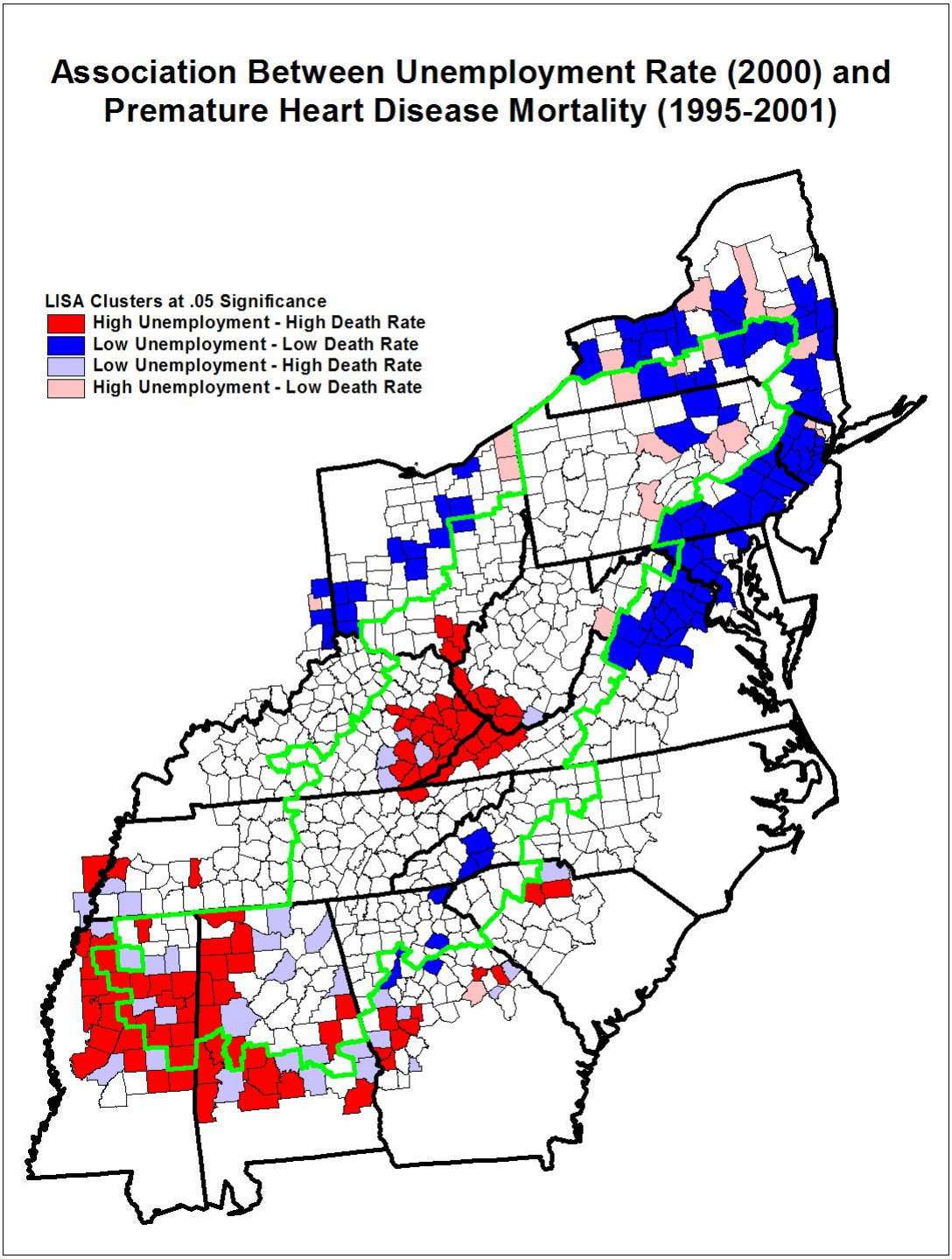
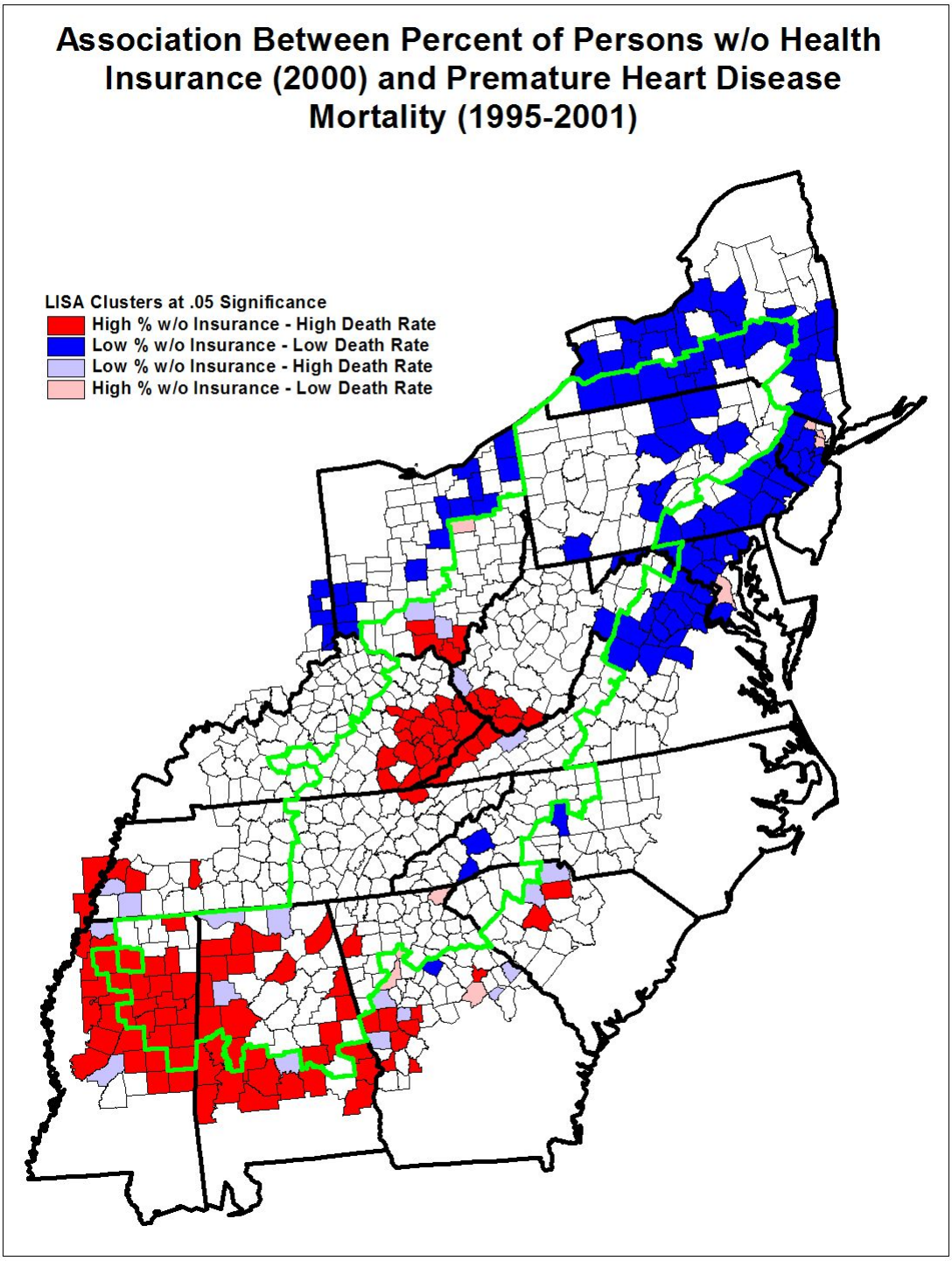
Figure 35. Associations between Premature Heart Disease Mortality and the Percentage of Persons without Health Insurance in the Appalachian Region.