

III.B.4 Premature Stroke Mortality

The regional pattern of premature stroke mortality in the Appalachian region exhibits a very strong north-south gradient and is consistent with the national distribution of premature stroke mortality (see Section II, Figure 9). Counties in the extreme Southern part of the region, which occupy part of the historic ‘Stroke Belt’, have much higher rates of premature stroke mortality than the northern part of the region. A relatively small cluster of high-rate (fourth quartile) counties does appear in the Central part of the region in Eastern Kentucky. However, given the predominance of the ‘Stroke Belt’, premature death rates from stroke in Appalachia tend to occupy the lower end of the national distribution of rates and are represented primarily by 1st through 3rd quartiles.

Statistically significant associations between socioeconomic conditions and premature stroke mortality were difficult to derive due to the relative rarity of premature stroke deaths. As mentioned in III.A.4. unsmoothed rates were used to derive associations with socioeconomic measures and many fewer counties had sufficient numbers of deaths compared to other causes of death examined in this study. There are a few areas for which significant associations are apparent, however these lie primarily on the periphery of the Appalachian boundary among counties in the Southern-most states. One exception is a group of counties in Central Alabama. This group of counties appears to have reasonably favorable socioeconomic conditions with the exception of having high percentages of persons without health insurance.

Figure 41. Associations between Premature Stroke Mortality and Percent Urban Population in the Appalachian Region.

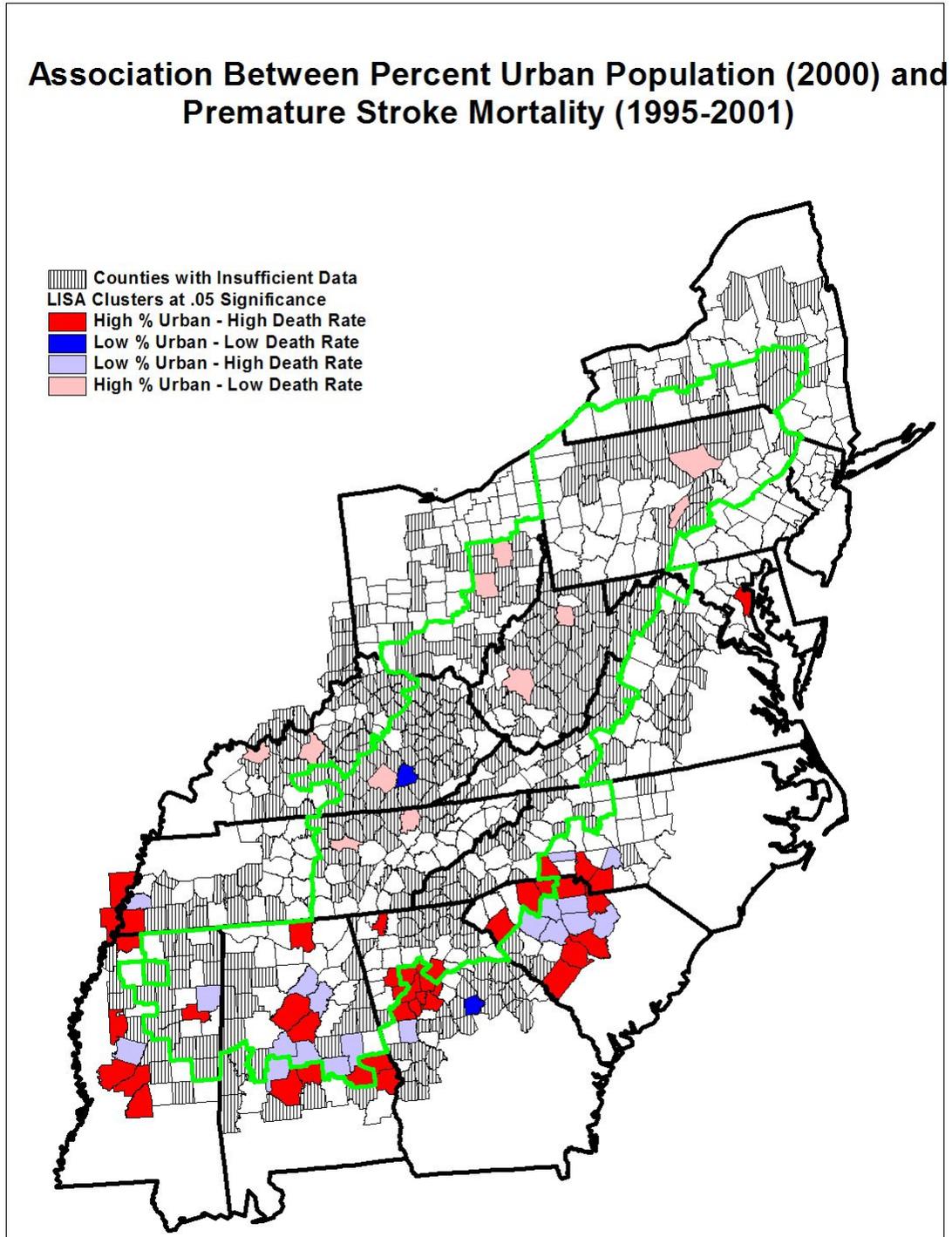


Figure 42. Associations between Premature Stroke Mortality and Median Family Income in the Appalachian Region.

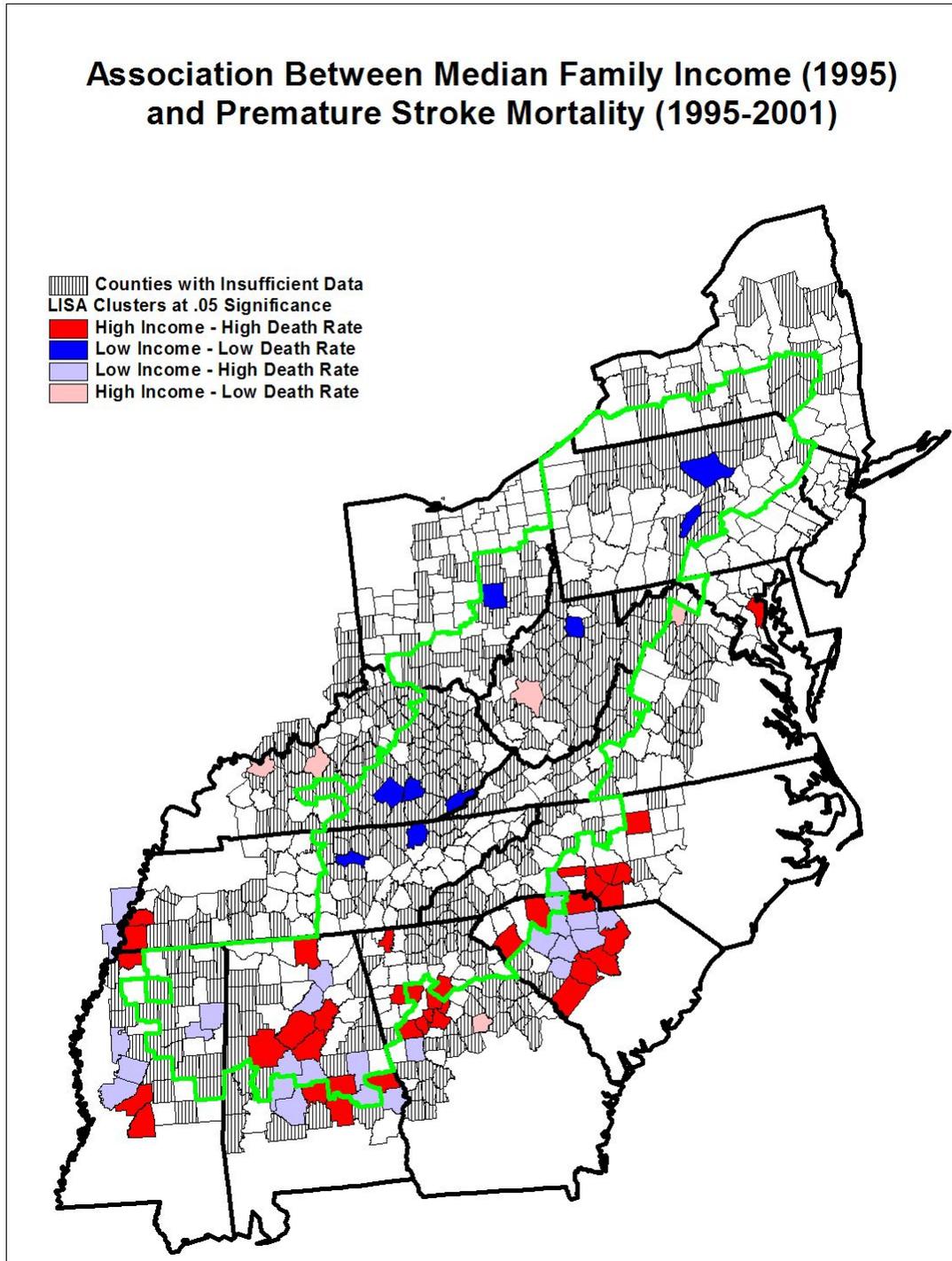


Figure 43. Associations between Premature Stroke Mortality and the Poverty Rate in the Appalachian Region.

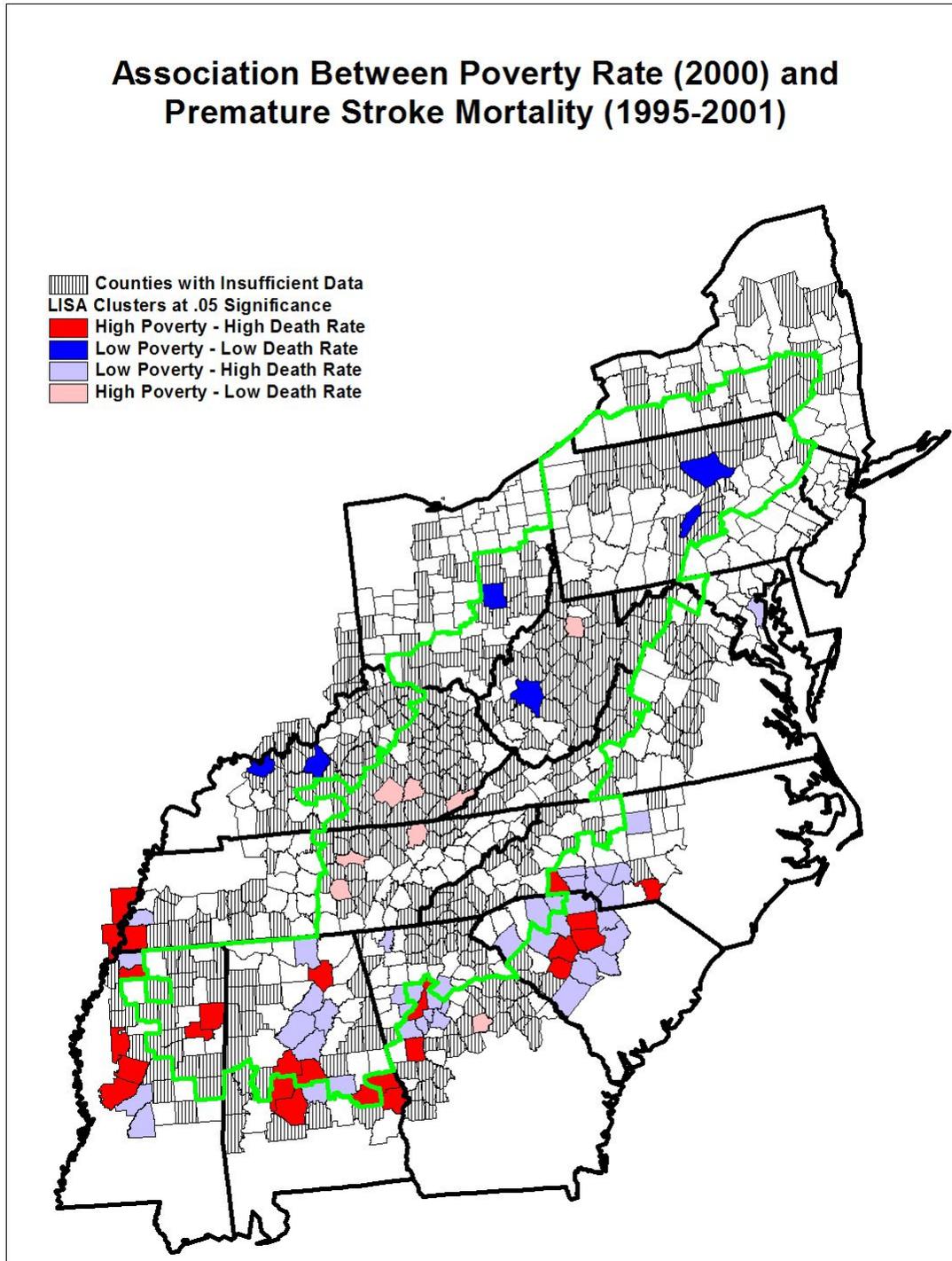


Figure 44. Associations between Premature Stroke Mortality and the Unemployment Rate in the Appalachian Region.

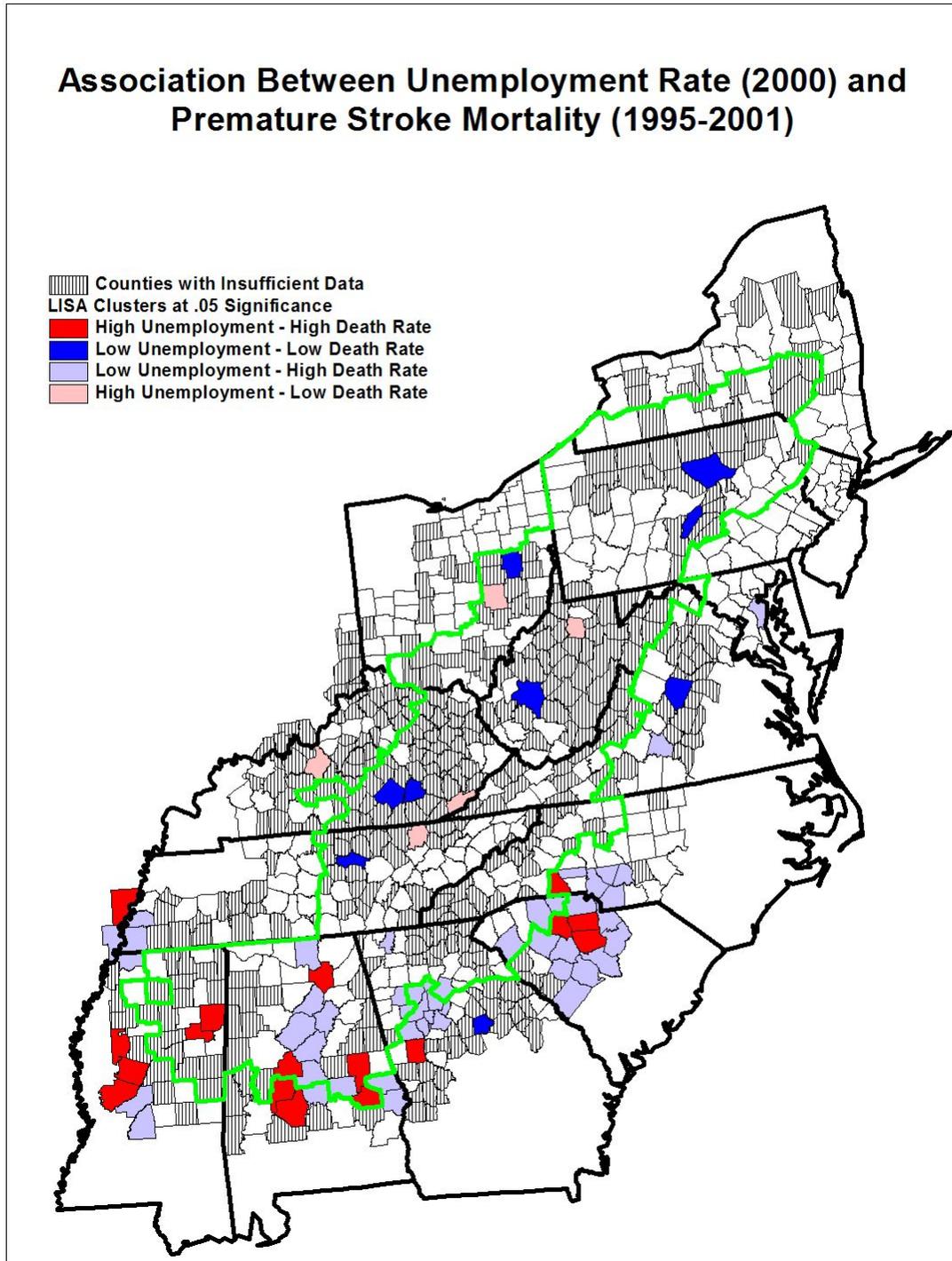


Figure 45. Associations between Premature Stroke Mortality and the Percentage of Persons without Health Insurance in the Appalachian Region.

