What is a Population-Weighted Small Area Estimate?

1. One way to estimate this is to assume that the tobacco using population is evenly distributed throughout the county. This red area covers about 1/5th of the entire county so the estimated number of people using tobacco is estimated at 5, or 1/5th of 25.

2. The flaw in this estimate is that we know for certain that the total population is not evenly distributed throughout the county so it is unlikely that the tobacco using population is so evenly distributed.

3. A data source indicates that the percent of population in this county who use tobacco is 25%, or 25 people.

4. You want to estimate the number of people in this red area that use tobacco.

5. In some cases, the data affects only a certain subset of the population. For example, when estimating the number of people with prostate cancer we can look at not only the distribution of population, but also consider where adult men are located. These kinds of considerations are noted in the Footnotes of the Reports.