

Methods for Calculating the Uninsured Estimates for Harris County

State, CMSA and Harris County Estimates

The State of Texas, Houston-Galveston-Brazoria Consolidated Metropolitan Statistical Area (HGB-CMSA), and Harris County estimates of the uninsured were determined using a “direct method” with individual weighting. The Current Population Survey (CPS) March 2003 Supplement data set contains weights assigned to each individual listed, based on their demographic characteristics. When these weights are summed, the total reflects the estimated population of the state.

The CPS data has geographical identifiers that allow us to disaggregate the HGB-CMSA and Harris County samples. The weights for the total number of individuals in each area were summed for each of the selected categories. Weights were then summed for those who were uninsured. The sum for the uninsured was divided by the total sum to estimate the percent uninsured.

Subcounty, Census Tract Estimates

Subcounty estimates were made using the weighted HGB-CMSA sample in order to minimize error due to small numbers. Reviews of the literature on estimating the number of uninsured and statistical testing to minimize potential error were used to select the estimation variables. The overall estimates were based on race-ethnicity and age categories. The race and ethnic groups selected were Hispanic (including “other” categories), White non-Hispanic, and Black. Estimates were developed for each race or ethnic group by three age categories – ages 0 to 17, ages 18 to 34, and ages 35 to 64 – for a total of nine parameters.

The probability of being insured for each of the nine parameters was determined. The population for each race-ethnicity and age category was pulled from the census tract level file of the U.S. Census2000 SF3. The probabilities of being insured were applied to these numbers and the total number of insured was estimated for each census tract. From these estimates, the total number of uninsured and the percent uninsured were estimated.

The analysis is developed using the insured sample. It is larger and serves to minimize error that might be due to sample cell sizes.