Michael Johnson, Sarjinder Singh and Stephen Sedory* (kfsas00@tamuk.edu). Efficient Use of the Negative Hypergeometric Distribution in Randomized Response Sampling.

Many questions, whose answers are of interest to sociologists and government policy makers, are sensitive, and people being surveyed are often hesitant to respond, or are reluctant to respond truthfully. Randomized response techniques are methods to estimate, through face to face surveys, such things as the proportion of persons in a population who are members of a (sensitive) subgroup, while, at the same time protecting the individual’s privacy. In this talk we look briefly at a few common methods, give an indication of how these methods work, and then look at a newly proposed estimator, based on the negative hypergeometric distribution, that turns out to be more efficient than several standard estimators. (Received September 15, 2014)