

# 2013 Georgia Youth Tobacco Survey Sample Description and Weighting Procedures

## Site: Georgia Public High schools

### SAMPLE DESCRIPTION:

All regular public schools in Georgia containing grades 9, 10, 11 or 12 were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample of students in grades 9-12.

**School Level** - The first-stage sampling frame consisted of all public schools containing any of grades 9-12. Schools were selected with probability proportional to school enrollment size.

**Class Level** - The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All 2nd period classes in the selected schools were included in the sampling frame. All students in the selected classes were eligible to participate in the survey.

### OVERALL RESPONSE RATES:

**Schools** - 70.00 %      35 of the 50 sampled schools participated.

**Students**- 89.56.17 %    1776 of the 1983 sampled students completed usable questionnaires

**Overall response rate** -  $70.00\% * 89.56\% = 62.69\%$

### WEIGHTING:

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3 * f4$$

W1 = the inverse of the probability of selecting the school

W2 = the inverse of the probability of selecting the classroom within the school

f1 = a school-level nonresponse adjustment factor calculated by school size category (small, medium, large).

f2= a class adjustment factor calculated by school

f3 = a student-level nonresponse adjustment factor calculated by class

f4 = a post stratification adjustment factor calculated by gender, race and grade.

### USE OF THE WEIGHTED RESULTS:

The weighted results can be used to make important inferences concerning tobacco use risk behaviors of all regular public school students in grades 9 through 12 in Georgia.