
Describing the PRAMS Sample Design for SUDAAN, SAS Complex Survey, SPSS Complex Samples Modules, and STATA

CDC PRAMS has performed the following actions while constructing an analysis dataset for external researchers. External researchers may skip this step and proceed directly to SUDAAN/SAS/SPSS/STATA analysis (step II below).

I. Combine the single-year/single-state weighted PRAMS SAS datasets into a single analysis dataset.

- A. Restrict the dataset to respondents only:
IF INQX=1;
- B. Combine the state stratification scheme (variable STRATUMC) and sample year (variable NEST_YR) into a single variable:
 $SUD_NEST = (STRATUMC * 10000) + NEST_YR$;
- C. Sort the dataset by new variable SUD_NEST:
PROC SORT DATA=<pramsdata>; BY SUD_NEST;

II. Describe the PRAMS Sample Design to the analysis software.

A. SUDAAN

- 1. Use the following statements when using SUDAAN modules:
proc crosstab data=<pramsdata> design=strwor;
nest sud_nest;
totcnt totcnt;
samcnt samcnt;
weight wtanal;

B. SAS Complex Survey

- 1. Construct a new SAS dataset describing the population count for each sampling stratum. The new dataset will have one observation per sampling stratum and two variables: SUD_NEST (the sampling stratum) and _TOTAL_ (the population count).

One method for creating this dataset is as follows:

```
Data totals_for_sas;  
Set <pramsdata> (keep= sud_nest totcnt);  
By sud_nest;  
If first.sud_nest;  
_total_=totcnt;  
Keep sud_nest _total_;  
Run;
```

2. Use the following statements when using SAS Complex Survey modules:
proc surveyfreq data=<pramsdata> totals=totals_for_sas;
strata sud_nest;
weight wtanal;

C. SPSS Complex Samples

1. To describe the PRAMS sample design, open your PRAMS dataset and choose Analyze/Complex samples/Prepare for Analysis/Create a plan file.
2. From the “Stage 1: Design Variables” screen:
 - a. Select variable SUD_NEST and move it into the ‘Strata’ box
 - b. Leave the ‘Clusters’ box blank
 - c. Select variable WTANAL and move it into the ‘Sample Weight’ box
3. From the “Stage 1: Estimation Method” screen:
 - a. Choose ‘Equal WOR’
4. From the “Stage 1: Size” screen:
 - a. For ‘Units’, choose ‘Population Sizes’
 - b. Choose the ‘Read values from variable’ box, select variable TOTCNT, and move it into the box
5. From the “Stage 1: Plan Summary” screen:
 - a. Choose ‘No, do not add another stage now’
6. Save the plan file and proceed with appropriate analysis.

D. STATA

Use the following statements when using STATA:

```
svyset fpc totcnt  
svyset pweight wtanal  
svyset strata sud_nest
```