

NIS-4 Analyses Sample SAS Syntax

This syntax was tested using SAS version 9.4

Because of the complex sample design and use of paired jackknife replicate weighting (JK2):
You MUST use the weights when working with NIS-4 data.

Data File

The data file in your NDACAN NIS-4 #147 dataset is named DS_147.sas7bdat.

The SAS library in which the DS_147 file is placed for the syntax examples is named *work*.

A formats file DS_147f.sas is also included to label your dataset.

Frequencies

The example syntax below uses the SURVEYFREQ procedure to obtain frequencies (incidence estimates) for variable PAH (Physical Abuse: Harm Standard). It will output frequency, weighted frequency, standard deviation of weighted frequency, percent, and standard error of percent. Missing data are deleted casewise by default.

```
proc surveyfreq data = work.DS_147 varmethod=jackknife;  
table PAH;  
repweights CHAWT1-CHAWT62 / df=62 jkcoeffs=1;  
weight CHAWT;  
run;
```

For more information, including instructions to change your syntax or output options, see The SURVEYFREQ procedure in the **Resources** section below.

Cross Tabulations

The example syntax below uses the SURVEYFREQ procedure to obtain cross tabulations (subgroup incidence estimates) for variable PAH (Physical Abuse: Harm Standard) by variable CHSEX (Child Sex). It will output frequency, weighted frequency (incidence estimate), standard deviation of weighted frequency, percent, and standard error of percent. Missing data are deleted casewise by default.

```
proc surveyfreq data = work.ds_147 varmethod=jackknife;  
table PAH * CHSEX;  
repweights CHAWT1-CHAWT62 / df=62 jkcoeffs=1;  
weight CHAWT;  
run;
```

For more information, including instructions to change your syntax or output options, see The SURVEYFREQ procedure in the **Resources** section below.

Rates

The formula below calculates rates for overall incidence per 1,000 children. This can be done and recorded in your software package, in MS Excel, or manually.

$$\text{Rate} = (\text{weighted frequency estimate}) / (\text{population denominator})$$

Table 2-1. *Population Totals for Computing Rates per 1,000 for All Maltreated Children and for Specific Subgroups* in the [NIS-4 PUF Manual \(User's Guide\)](#) lists the available population denominators, variables 537 to 560 in the [Codebook](#). For overall incidence use ALLPOP (Population Total for All Maltreated Children) as the population denominator. For cross tabulation subgroup calculations, use the appropriate census denominator variable in the data file.

Logistic Regression

The example syntax below uses the SURVEYLOGISTIC procedure to run a bivariate logistic regression analysis. It will output the intercept, estimate, and standard error, with chi-square test statistics and p values; odds ratio point estimates with confidence intervals; model fit statistics; and probability of association statistics. Missing data are deleted casewise by default.

```
proc surveylogistic data=work.ds_147 varmethod=jackknife;
model PAH(descending) = CHSEX;
repweights CHAWT1-CHAWT62 / df=62 jkcoeffs=1;
weight CHAWT;
run;
```

For more information, including instructions to change your syntax or output options, see The SURVEYLOGISTIC procedure in the **Resources** section below.

Resources

SAS Institute Inc. (2009). The SURVEYFREQ procedure. In *SAS/STAT 9.2 User's Guide* (2nd ed.). Cary, NC: SAS Institute Inc. Retrieved from https://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#surveyfreq_toc.htm

SAS Institute Inc. (2009). The SURVEYLOGISTIC procedure. In *SAS/STAT 9.2 User's Guide* (2nd ed.). Cary, NC: SAS Institute Inc. Retrieved from https://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug_surveylogistic_sect001.htm

Lee, E. S., Forthofer, R. N., & Lorimor, R. J. (1989). *Analyzing complex survey data*. Sage University papers series 71: Quantitative applications in the social sciences. Sage.

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