
Subject: Calculating Sampling Errors at the State Level
Posted by [amaustin](#) on Wed, 05 Aug 2015 15:56:47 GMT

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Are state-level sampling errors available for the 2013 Nigerian DHS? While the published reports document National, Urban/Rural, and Regional estimates for the sampling errors they do not go down to the state level.

Thank you!

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [Bridgette-DHS](#) on Fri, 07 Aug 2015 14:16:50 GMT

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Following is a response from Senior DHS Sampling Specialist, Ruilin Ren:

It is true that the appendix C (estimation of sampling errors) in the final report of Nigeria DHS 2013 did not provide sampling errors at the state level, because it's a lot of tables.

We do not have the state level sampling errors in house either. However, it is true that the survey was designed to allow break down to state levels, so data users can calculate the sampling errors at the state level if they need to.

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [amaustin](#) on Fri, 07 Aug 2015 14:28:23 GMT

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Thank you!

So using the SAS proc surveyfreq procedure should work for calculating sampling errors at the state level?

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [Bridgette-DHS](#) on Fri, 14 Aug 2015 13:24:48 GMT

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Following is a response from Senior DHS Sampling Specialist, Ruilin Ren:

Yes, you can use the PROC SURVEYFREQ to calculate the sampling errors for simple proportions at the state level. You need to declare the survey parameters such as CLUSTER and STRATUM. I will suggest you use PROC SURVEYMEANS which calculates the sampling errors for means, proportions and ratios.

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [amaustin](#) on Fri, 14 Aug 2015 13:28:26 GMT
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Thank you!

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [Hassen](#) on Sun, 06 May 2018 04:25:26 GMT
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Thank you all!!

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [PRB](#) on Fri, 14 Dec 2018 21:32:21 GMT
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Hello, I am surprised to read that PROC SURVEYFREQ would calculate the sampling errors appropriately. Some (or many?) of the country reports have an appendix "ESTIMATES OF SAMPLING ERRORS" which outlines the complex calculations used to calculate the sampling errors, including that DHS staff wrote a special program to run a bootstrap to calculate the SEs. So are you saying that the SAS survey PROCS can replicate that same program? I apologize for doubting, I just want to be sure I understand correctly.

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [Bridgette-DHS](#) on Wed, 02 Jan 2019 17:12:23 GMT
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Please see the following response from our Senior Sampling Statistician, Ruilin Ren:

The SAS PROC SURVEYMEANS can calculate sampling errors for simple indicators such as means, proportions, and ratios. But it cannot calculate complex rates such as for the TFR, CMR and MMR. ICF developed SAS codes for the sampling errors presented in appendix B, which used the PROC SURVEYMEANS for simple indicators. For TFR, CMR and MMR, a special code was developed using Jackknife. Though the PROC SURVEYFREQ can also calculate sampling errors for proportions, but it is not used in the ICF's code for sampling errors. You can specify the variance estimation method in PROC SURVEYMEANS including Bootstrap and Jackknife, but again it is for simple indicators. ICF codes did not use replicate method for simple indicators.

Subject: Re: Calculating Sampling Errors at the State Level
Posted by [PRB](#) on Wed, 02 Jan 2019 19:07:00 GMT
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Thanks!
