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Subject: Re: Sampling Error In Light of DHS Analytical Report 46

Posted by [Bridgette-DHS](#) on Wed, 20 Jan 2021 20:03:08 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

The relevant numbers for calculating the standard errors are the number of births (the most recent birth in the past five years) and the number of neonatal deaths, which are the denominator and numerator of the NNMR. The design effect (the reduction in effective sample size due to the sampling design) plays a role, in the direction of increasing the standard error. If you are using logit regression in Stata with svyset and svy, then your standard errors and confidence intervals are being calculated correctly.

The population numbers have nothing to do with the standard errors. The number of births in the sample is proportional to the number of women in the sample, but otherwise the number of women is not relevant to the calculation.

If you have a larger sample, you have more power, and are more likely to detect a difference that exists in the population. In general, if you do not get statistical significance, it MAY be because you don't have a large enough sample. It may be because of measurement error or reporting error, or because the relationship simply does not exist in the population. Those are pretty much the only explanations.