Subject: Re: Computing Newborn Mortality Proportions
Posted by Bridgette-DHS on Fri, 10 Jan 2020 14:48:32 GMT
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

A rate is inherently a calculation for a group, not for an individual case. If you want to use individual-level characteristics (those of the child, such as sex, or of the mother, such as her level of education) as predictors of child mortality, you can use the individual-level data for children in the KR or BR files, with a binary outcome. Neonatal mortality is easiest. A child died in the first month if b7 (imputed age in months at death) is 0. (You do not need to take b5 into account, because b7 is coded NA if the child survived.) Construct a binary outcome: died=1 if b7=0 and otherwise died=0. Then to a logit regression of died on the predictors of interest. For an infant death, define died=1 if b7<12, and otherwise died=0. For anything past month 0, you need to take account of potential censoring, because a child born in the past year, say, has not had full exposure to the risk of an infant death.

Alternatively you can calculate the rates for small subpopulations, identified by the predictors, and try to make sense of the differences between the rates for boys and girls, for example, but this is statistically inefficient and clumsy. I strongly recommend the use of individual-level logit regression to analyze child mortality.