Subject: Calculating Under 5 Mortality Rate by Region
Posted by mesaunders@email.wm.edu on Mon, 09 Jul 2018 17:18:06 GMT
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I'm trying to calculate the U5 Mortality rates for Nigeria (2003, 2008, 2013) using the 1990 DHS regional boundaries (Northwest, Northeast, Southwest, Southeast).

I've gone through the process of using GIS to get the 1990 boundaries merged based on the DHS cluster data and then merging it to the birth recodes for each year, but I'm unsure
if using "by(sreg90)" was the proper way to calculate the rates by region.

How can I check the rates to make sure they are representative and correct?
Do I need to use population weighting since I'm completing calculations by region and not by country?

Any suggestions would be greatly appreciated.

Stata code:

```
gen hypage=(v008-b3)
gen survivelength=.
replace survivelength=hypage
replace survivelength=b7 if b5==0
gen dead=(b5==0)

gen n_region=sreg90

/*
tab n_region

  n_region |      Freq.     Percent        Cum.
------------+-----------------------------------
         1 |      2,378       39.44       39.44
         2 |      1,665       27.62       67.06
         3 |      1,173       19.46       86.52
         4 |        813       13.48      100.00
------------+-----------------------------------
     Total |      6,029      100.00


tab sreg90

 regions as |
    used in |
   1990 dhs |
    survey |      Freq.     Percent        Cum.
------------+-----------------------------------
```

```
 north east |      2,378       39.44       39.44
 north west |      1,665       27.62       67.06
 south east |      1,173       19.46       86.52
 south west |        813       13.48      100.00
------------+-----------------------------------
      Total |      6,029      100.00

*/

table survivelength dead if hypage <60, int(0,1,3,6,12,24,36,48,60)failure by(sreg90)

/*
           Beg.                    Cum.       Std.
  Interval     Total   Deaths   Lost    Failure     Error     [95% Conf. Int.]
 ------------------------------------------------------------ -------------------
sreg90 1
    0    1     2378      128     25     0.0541    0.0047     0.0457    0.0640
    1    3     2225       29     76     0.0667    0.0051     0.0573    0.0775
    3    6     2120       33    123     0.0816    0.0057     0.0712    0.0935
    6   12     1964       59    253     0.1111    0.0067     0.0987    0.1249
   12   24     1652       95    395     0.1692    0.0085     0.1532    0.1865
   24   36     1162       26    369     0.1913    0.0093     0.1738    0.2103
   36   48      767       19    404     0.2185    0.0109     0.1980    0.2407
   48   60      344        4    340     0.2364    0.0139     0.2106    0.2649
sreg90 2
    0    1     1665       75     17     0.0453    0.0051     0.0363    0.0564
    1    3     1573       12     67     0.0527    0.0055     0.0429    0.0646
    3    6     1494       18     98     0.0645    0.0061     0.0536    0.0776
    6   12     1378       36    164     0.0905    0.0073     0.0772    0.1059
   12   24     1178       45    286     0.1300    0.0091     0.1134    0.1490
   24   36      847       31    265     0.1678    0.0109     0.1476    0.1904
   36   48      551        9    284     0.1861    0.0123     0.1634    0.2115
   48   60      258        3    255     0.2048    0.0160     0.1754    0.2384
sreg90 3
    0    1     1173       63     11     0.0540    0.0066     0.0424    0.0685
    1    3     1099        9     35     0.0618    0.0071     0.0494    0.0773
    3    6     1055       16     66     0.0765    0.0078     0.0625    0.0935
    6   12      973       25    127     0.1019    0.0091     0.0854    0.1213
   12   24      821       25    193     0.1329    0.0107     0.1134    0.1555
   24   36      603        7    219     0.1452    0.0115     0.1242    0.1694
   36   48      377        2    207     0.1514    0.0123     0.1291    0.1773
   48   60      168        1    167     0.1615    0.0157     0.1333    0.1950
sreg90 4
    0    1      813       30      4     0.0370    0.0066     0.0260    0.0525
    1    3      779        3     42     0.0408    0.0070     0.0292    0.0569
    3    6      734        9     52     0.0530    0.0080     0.0394    0.0711
    6   12      673       14     91     0.0741    0.0096     0.0575    0.0954
   12   24      568       10    141     0.0927    0.0111     0.0733    0.1170
```

```
  24   36     417      5   127    0.1056   0.0123   0.0839   0.1324
  36   48     285      1   149    0.1098   0.0130   0.0870   0.1381
  48   60     135      1   134    0.1229   0.0182   0.0917   0.1638
 ------------------------------------------------------------ ----------

*/
```