



**Statistics/Data Analysis** **10.1** Copyright 1984-2008  
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Notes:

1. (/m# option or -set memory-) 10.00 MB allocated to data
2. (/v# option or -set maxvar-) 5000 maximum variables

running N:\APPS\Stata10\sysprofile.do ...

```

1 . do "\\cdc\private\L722\evo2\My Web Sites\tutorials4\Nhanes\Downloads\
> Continuous\age_adj_prev.do"

2 . *****pgm: age_adj_prev.do*****
3 .
4 . use "C:\NHANES\Data\analysis_data.dta", clear

5 .
6 . ***create variable codes*****
7 . gen     age=1 if ridageyr >=20 & ridageyr <40
    (17384 missing values generated)

8 . replace age=2 if ridageyr >=40 & ridageyr <60
    (2965 real changes made)

9 . replace age=3 if ridageyr >=60 & ridageyr <.
    (3706 real changes made)

10 .
11 . *create variable for proportions to standardize age
12 . gen     std_wgt=.3966 if age==1
    (17384 missing values generated)

13 . replace std_wgt=.3718 if age==2
    (2965 real changes made)

14 . replace std_wgt=.2316 if age==3

15 .
16 . gen     race=1 if ridreth1==3
    (13031 missing values generated)
    
```

```
17 . replace race=2 if ridreth1==4
    (4909 real changes made)

18 . replace race=3 if ridreth1==1
    (6169 real changes made)

19 . replace race=4 if ridreth1==2 | ridreth1==5
    (1953 real changes made)

20 .
21 . *code to define mean blood pressure measures
22 .
23 . gen n_sbp= !missing(bpxsy1)+ !missing(bpxsy2)+ !missing(bpxsy3)+ !m
    > issing(bpxsy4)

24 . gen n_dbp= !missing(bpxdi1)+ !missing(bpxdi2)+ !missing(bpxdi3)+ !m
    > issing(bpxdi4)

25 .
26 . replace bpxdi1=. if bpxdi1==0
    (141 real changes made, 141 to missing)

27 . replace bpxdi2=. if bpxdi2==0
    (128 real changes made, 128 to missing)

28 . replace bpxdi3=. if bpxdi3==0
    (126 real changes made, 126 to missing)

29 . replace bpxdi4=. if bpxdi4==0
    (80 real changes made, 80 to missing)

30 .
31 . egen mean_sbp = rowmean(bpxsy1 bpxsy2 bpxsy3 bpxsy4)
    (5952 missing values generated)

32 . egen mean_dbp = rowmean(bpxdi1 bpxdi2 bpxdi3 bpxdi4)
    (6074 missing values generated)

33 .
34 . gen hbp_trt=1 if bpq050a==1
    (18752 missing values generated)

35 . replace hbp_trt=0 if hbp_trt !=1 & (bpq020==1 | bpq020==2)
    (10212 real changes made)

36 .
37 . gen sbp140=1 if mean_sbp>=140 & mean_sbp<. & ((n_sbp >0 & n_sbp <.)
    > & (n_dbp >0 & n_dbp <.)
    (18930 missing values generated)

38 . replace sbp140=0 if sbp140 !=1 & ((n_sbp >0 & n_sbp <.) & (n_dbp >0
    > & n_dbp <.)

39 .
```

```
40 . gen dbp90=1 if mean_dbp>=90 & mean_dbp<. & ((n_sbp >0 & n_sbp <.) &
> (n_dbp >0 & n_dbp <.)
(20423 missing values generated)

41 . replace dbp90=0 if dbp90 !=1 & ((n_sbp >0 & n_sbp <.) & (n_dbp >0 &
> n_dbp <.)
(14471 real changes made)

42 .
43 . gen hbp=1 if (hbp_trt==1 | sbp140==1 | dbp90==1) & ((hbp_trt>=0 & h
> bp_trt<.) & (sbp140>=0 & sbp140<.) & (dbp90>=0 & dbp90<.)
(17803 missing values generated)

44 . replace hbp=2 if hbp !=1 & ((hbp_trt>=0 & hbp_trt<.) & (sbp140>=0 &
> sbp140<.) & (dbp90>=0 & dbp90<.)
(7884 real changes made)

45 .
46 . gen hbpx=100 if hbp==1
(17803 missing values generated)

47 . replace hbpx=0 if hbp==2
(7884 real changes made)

48 .
49 . ****format variables*****
50 . label define agefmt 1 "20-39"

51 . label define agefmt 2 "40-59", add

52 . label define agefmt 3 "60+", add

53 .
54 . label define racefmt 1 "NH White",

55 . label define racefmt 2 "NH Black", add

56 . label define racefmt 3 "Mex American", add

57 . label define racefmt 4 "Other race/ethn", add

58 .
59 . label define sexfmt 1 "male"

60 . label define sexfmt 2 "female", add

61 .
62 . label values age agefmt

63 . label values riagendr sexfmt

64 . label values race racefmt

65 .
66 . log using "c:\NHANES\log\adjprev.log", replace
```

---

```
log: c:\NHANES\log\adjprev.log
log type: text
15 Oct 2008, 12:37:17
```

```
67 .
68 . ****specify survey design variables****
69 . svyset sdmvpsu [pweight=wtmec4yr], strata(sdmvstra) vce(linearized)
```

```

    pweight: wtmec4yr
      VCE: linearized
Single unit: missing
  Strata 1: sdmvstra
    SU 1: sdmvpsu
    FPC 1: <zero>

```

```
70 .
71 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean ridageyr, over(ra
> ce)
(running mean on estimation sample)
```

Survey: Mean estimation

```

Number of strata =      28      Number of obs   =      21004
Number of PSUs   =      57      Population size =  278652243
                                   Subpop. no. obs =    9471
                                   Subpop. size   =  198419259
                                   Design df     =    29

```

```

_subpop_1: race = NH White
_subpop_2: race = NH Black
_subpop_3: race = Mex American
_subpop_4: race = Other race/ethn

```

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>ridageyr</b>				
_subpop_1	47.83663	.376492	47.06662	48.60665
_subpop_2	43.43103	.4551979	42.50005	44.36201
_subpop_3	37.95156	.6370793	36.64859	39.25453
_subpop_4	42.68304	.8063441	41.03388	44.3322

```
72 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean ridageyr, over(ri
> agendr)
(running mean on estimation sample)
```

Survey: Mean estimation

```

Number of strata =      28      Number of obs   =      21004
Number of PSUs   =      57      Population size =  278652243
                                   Subpop. no. obs =    9471
                                   Subpop. size   =  198419259
                                   Design df     =    29

```

```

male: riagendr = male
female: riagendr = female

```

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>ridageyr</b>				
female	45.23593	.3529394	44.51409	45.95777
	46.86465	.3894445	46.06814	47.66115

```
73 .
74 . *age adjusted
75 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, stdize(age)
    > stdweight(std_wgt)
    (running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =      28      Number of obs   =      8960
Number of PSUs   =      57      Population size =  189834912
N. of std strata =       3      Subpop. no. obs =   8960
                                   Subpop. size   =  189834912
                                   Design df      =       29
```

	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
hbpx	29.34329	.8380512	27.62928	31.0573

```
76 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, stdize(age)
    > stdweight(std_wgt) over(riagendr)
    (running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =      28      Number of obs   =      8960
Number of PSUs   =      57      Population size =  189834912
N. of std strata =       3      Subpop. no. obs =   8960
                                   Subpop. size   =  189834912
                                   Design df      =       29
```

```
male: riagendr = male
female: riagendr = female
```

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>hbpx</b>				
male	28.32774	1.208328	25.85643	30.79904
female	29.97058	.71261	28.51313	31.42803

```
77 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, stdize(age)
    > stdweight(std_wgt) over(race)
    (running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =      28      Number of obs   =      8960
Number of PSUs   =      57      Population size =  189834912
N. of std strata =       3      Subpop. no. obs =   8960
                                   Subpop. size   =  189834912
                                   Design df      =       29
```

```
_subpop_1: race = NH White
_subpop_2: race = NH Black
_subpop_3: race = Mex American
Other race/ethn
```



	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
hbpx	29.163	.9816776	27.15524	31.17075

83 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, over(riagen > dr)  
 (running mean on estimation sample)

Survey: Mean estimation

Number of strata = 28      Number of obs = 19673  
 Number of PSUs = 57      Population size = 270067896  
                          Subpop. no. obs = 8960  
                          Subpop. size = 189834912  
                          Design df = 29

male: riagendr = male  
 female: riagendr = female

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>hbpx</b>				
male	27.27205	1.221283	24.77425	29.76986
female	30.9091	1.068973	28.7228	33.09539

84 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, over(race)  
 (running mean on estimation sample)

Survey: Mean estimation

Number of strata = 28      Number of obs = 19673  
 Number of PSUs = 57      Population size = 270067896  
                          Subpop. no. obs = 8960  
                          Subpop. size = 189834912  
                          Design df = 29

\_subpop\_1: race = NH White  
 \_subpop\_2: race = NH Black  
 \_subpop\_3: race = Mex American  
 \_subpop\_4: race = Other race/ethn

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>hbpx</b>				
_subpop_1	29.6593	1.155505	27.29603	32.02257
_subpop_2	36.95625	1.51299	33.86183	40.05066
_subpop_3	17.14118	1.218031	14.65002	19.63233
	25.86597	2.295632	21.17087	30.56106

```
85 . svy, subpop(if ridageyr >=20 & ridageyr <.): mean hbpx, over(riagen
> dr race)
(running mean on estimation sample)
```

Survey: Mean estimation

```
Number of strata =      28      Number of obs   =      19673
Number of PSUs   =      57      Population size =    270067896
                                   Subpop. no. obs =      8960
                                   Subpop. size   =    189834912
                                   Design df     =       29
```

```
Over: riagendr race
_subpop_1: male NH White
_subpop_2: male NH Black
_subpop_3: male Mex American
_subpop_4: male Other race/ethn
_subpop_5: female NH White
_subpop_6: female NH Black
_subpop_7: female Mex American
_subpop_8: female Other race/ethn
```

Over	Linearized			
	Mean	Std. Err.	[95% Conf. Interval]	
<b>hbpx</b>				
_subpop_1	27.75207	1.298662	25.09601	30.40813
_subpop_2	35.3589	1.543478	32.20213	38.51567
_subpop_3	17.2746	1.692196	13.81367	20.73553
_subpop_4	23.06553	2.843264	17.25041	28.88066
_subpop_5	31.46358	1.343947	28.7149	34.21225
_subpop_6	38.27635	2.136529	33.90666	42.64604
_subpop_7	17.00213	1.507995	13.91793	20.08632
_subpop_8	28.13741	3.1949	21.6031	34.67171

```
86 .
87 . log close
    log: c:\NHANES\log\adjprev.log
    log type: text
          15 Oct 2008, 12:37:34
```

```
88 .
89 .
90 .
91 .
    end of do-file
```

```
92 .
```