name: **<unnamed>**
log: **E:\16GBBACKUPUSB\BACKUP_USB_SEPTEMBER2014\May Baydoun_folder\NHANES_NFL_MORTALITY_PAPER\OUTPUT\DATA_MANAGE**
log type: **smcl**
opened on: **2 Nov 2022, 07:28:21**

```
. 
. ************************************STEP 1: GENERATE DTA FILE FOR LINKED MORTALITY DATA************************
. 
. 
. ******************************************************************************
. * May 2022
. 
. **      PUBLIC-USE LINKED MORTALITY FOLLOW-UP THROUGH DECEMBER 31, 2019 **
. 
. *       The following Stata code can be used to read the fixed-width format ASCII
. *       public-use Linked Mortality Files (LMFs) from a stored location into a
. *       Stata dataset.  Basic frequencies are also produced.
. 
. 
. **NOTE: The format definitions given below will result in procedure output
.         **      showing values that have been grouped as they are shown in the file layout
.         **      documentation.
. 
. 
. **To download and save the public-use LMFs to your hard drive, follow these steps:
. 
. *Step 1: Designate a folder on your hard drive to download the public-use LMF.
.         **       In this example, the data will be saved to: 'C:\PUBLIC USE DATA'
. 
. *Step 2: To download the public-use LMF, go to the web site:
.           **   https://ftp.cdc.gov/pub/health_statistics/nchs/datalinkage/linked_mortality/.
. 
.       **   Right click on the desired survey link and select "Save target as...".
.      **  A "Save As" screen will appear where you will need to select and input
.                ** a location where to save the data file on your hard drive.
. 
.         ** Also note that the "Save as type:" box should read "DAT File (*.dat)".
.                ** This will ensure that the data file is saved to your hard drive in the
.                ** correct format.
. 
.         ** In this example, the data file is saved in the folder, "C:\PUBLIC USE DATA",
.                ** and the data file is saved as "<SURVEY>_MORT_2019_PUBLIC.DAT".
. */
. 
. global SURVEY NHANES_2013_2014     // REPLACE <SURVEY> WITH RELEVANT SURVEY NAME (IN ALL CAPS)

. 
. clear all

. 
. ***************
. *NHANES VERSION*
. ***************
. clear all
```

```
48 .
49 . // DEFINE VALUE LABELS FOR REPORTS
50 . label define premiss .z "Missing"

51 . label define eligfmt 1 "Eligible" 2 "Under age 18, not available for public release" 3 "Ineligible"

52 . label define mortfmt 0 "Assumed alive" 1 "Assumed deceased" .z "Ineligible or under age 18"

53 . label define flagfmt 0 "No - Condition not listed as a multiple cause of death" 1 "Yes - Condition listed as a multipl

54 . label define qtrfmt 1 "January-March" 2 "April-June" 3 "July-September" 4 "October-December" .z "Ineligible, under age

55 . label define dodyfmt .z "Ineligible, under age 18, or assumed alive"

56 . label define ucodfmt 1 "Diseases of heart (I00-I09, I11, I13, I20-I51)"

57 . label define ucodfmt 2 "Malignant neoplasms (C00-C97)"                                          , add

58 . label define ucodfmt 3 "Chronic lower respiratory diseases (J40-J47)"                          , add

59 . label define ucodfmt 4 "Accidents (unintentional injuries) (V01-X59, Y85-Y86)"                 , add

60 . label define ucodfmt 5 "Cerebrovascular diseases (I60-I69)"                                    , add

61 . label define ucodfmt 6 "Alzheimer's disease (G30)"                                             , add

62 . label define ucodfmt 7 "Diabetes mellitus (E10-E14)"                                           , add

63 . label define ucodfmt 8 "Influenza and pneumonia (J09-J18)"                                     , add

64 . label define ucodfmt 9 "Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19, N25-N27)"  , add

65 . label define ucodfmt 10 "All other causes (residual)"                                          , add

66 . label define ucodfmt .z "Ineligible, under age 18, assumed alive, or no cause of death data"   , add

67 .
68 . // READ IN THE FIXED-WIDTH FORMAT ASCII PUBLIC-USE LMF
69 . infix seqn 1-6 eligstat 15 mortstat 16 ucod_leading 17-19 diabetes 20 hyperten 21 permth_int 43-45 permth_exm 46-48 us
   (10,175 observations read)

70 .
71 .
72 . // REPLACE MISSING VALUES TO .z FOR LABELING
73 . replace mortstat = .z if mortstat >=.
   (4,075 real changes made, 4,075 to missing)

74 . replace ucod_leading = .z if ucod_leading >=.
   (9,708 real changes made, 9,708 to missing)

75 . replace diabetes = .z if diabetes >=.
   (9,708 real changes made, 9,708 to missing)

76 . replace hyperten = .z if hyperten >=.
   (9,708 real changes made, 9,708 to missing)
```

```
 77 . replace permth_int = .z if permth_int >=.
   (4,075 real changes made, 4,075 to missing)

 78 . replace permth_exm = .z if permth_exm >=.
   (4,262 real changes made, 4,262 to missing)

 79 .
 80 .
 81 . // DEFINE VARIABLE LABELS
 82 . label var seqn "NHANES Respondent Sequence Number"

 83 . label var eligstat "Eligibility Status for Mortality Follow-up"

 84 . label var mortstat "Final Mortality Status"

 85 . label var ucod_leading "Underlying Cause of Death: Recode"

 86 . label var diabetes "Diabetes flag from Multiple Cause of Death"

 87 . label var hyperten "Hypertension flag from Multiple Cause of Death"

 88 . label var permth_int "Person-Months of Follow-up from NHANES Interview date"

 89 . label var permth_exm "Person-Months of Follow-up from NHANES Mobile Examination Center (MEC) Date"

 90 .
 91 .
 92 . // ASSOCIATE VARIABLES WITH FORMAT VALUES
 93 . label values eligstat eligfmt

 94 . label values mortstat mortfmt

 95 . label values ucod_leading ucodfmt

 96 . label values diabetes flagfmt

 97 . label values hyperten flagfmt

 98 . label value permth_int premiss

 99 . label value permth_exm premiss

100 .
101 .
102 . // DISPLAY OVERALL DESCRIPTION OF FILE
103 . describe

Contains data
 Observations:        10,175
    Variables:             8
```

Variable name	Storage type	Display format	Value label	Variable label
seqn	float	%9.0g		**NHANES Respondent Sequence Number**
eligstat	byte	%46.0g	eligfmt	**Eligibility Status for Mortality Follow-up**
mortstat	byte	%26.0g	mortfmt	**Final Mortality Status**
ucod_leading	float	%71.0g	ucodfmt	**Underlying Cause of Death: Recode**
diabetes	byte	%86.0g	flagfmt	**Diabetes flag from Multiple Cause of Death**
hyperten	byte	%86.0g	flagfmt	**Hypertension flag from Multiple Cause of Death**
permth_int	float	%9.0g	premiss	**Person-Months of Follow-up from NHANES Interview date**
permth_exm	float	%9.0g	premiss	**Person-Months of Follow-up from NHANES Mobile Examination Center (MEC) Da**

```
Sorted by:
     Note: Dataset has changed since last saved.
```

```
104 .
105 .
106 . // ONE-WAY FREQUENCIES (UNWEIGHTED)
107 . tab1 eligstat mortstat ucod_leading diabetes hyperten, missing
```

-> tabulation of eligstat

Eligibility Status for Mortality Follow-up	Freq.	Percent	Cum.
Eligible	6,100	59.95	59.95
Under age 18, not available for public	4,062	39.92	99.87
Ineligible	13	0.13	100.00
Total	10,175	100.00	

-> tabulation of mortstat

Final Mortality Status	Freq.	Percent	Cum.
Assumed alive	5,633	55.36	55.36
Assumed deceased	467	4.59	59.95
Ineligible or under age 18	4,075	40.05	100.00
Total	10,175	100.00	

-> tabulation of ucod_leading

Underlying Cause of Death: Recode	Freq.	Percent	Cum.
Diseases of heart (I00-I09, I11, I13, I	136	1.34	1.34
Malignant neoplasms (C00-C97)	99	0.97	2.31
Chronic lower respiratory diseases (J40	24	0.24	2.55
Accidents (unintentional injuries) (V01	14	0.14	2.68
Cerebrovascular diseases (I60-I69)	28	0.28	2.96
Alzheimer's disease (G30)	17	0.17	3.13
Diabetes mellitus (E10-E14)	21	0.21	3.33
Influenza and pneumonia (J09-J18)	9	0.09	3.42
Nephritis, nephrotic syndrome and nephr	16	0.16	3.58
All other causes (residual)	103	1.01	4.59
Ineligible, under age 18, assumed alive	9,708	95.41	100.00
Total	10,175	100.00	

-> tabulation of diabetes

Diabetes flag from Multiple Cause of Death	Freq.	Percent	Cum.
No - Condition not listed as a multiple	422	4.15	4.15
Yes - Condition listed as a multiple ca	45	0.44	4.59
Assumed alive, under age 18, ineligible	9,708	95.41	100.00
Total	10,175	100.00	

-> tabulation of hyperten

Hypertension flag from Multiple Cause of Death	Freq.	Percent	Cum.
No - Condition not listed as a multiple	384	3.77	3.77
Yes - Condition listed as a multiple ca	83	0.82	4.59
Assumed alive, under age 18, ineligible	9,708	95.41	100.00
Total	10,175	100.00	

```
108 . tab permth_int if permth_int==.z, missing
```

Person-Months of Follow-up from NHANES Interview date	Freq.	Percent	Cum.
Missing	**4,075**	**100.00**	**100.00**
Total	**4,075**	**100.00**	

```
109 . tab permth_exm if permth_exm==.z, missing
```

Person-Months of Follow-up from NHANES Mobile Examination Center (MEC) Date	Freq.	Percent	Cum.
Missing	**4,262**	**100.00**	**100.00**
Total	**4,262**	**100.00**	

```
110 .
111 . // SAVE DATA FILE IN DIRECTORY DESIGNATED AT TOP OF PROGRAM AS **SURVEY**_PUF.DTA
112 . // replace option allows Stata to overwrite an existing .dta file
113 . save ${SURVEY}_PUF, replace
    file NHANES_2013_2014_PUF.dta saved

114 .
115 .
116 . ***********************************STEP 2: MERGE MORTALITY DATASET WITH NFL DATASET*********************************
117 .
118 . use NHANES_2013_2014_PUF,clear

119 . sort seqn

120 . save, replace
    file NHANES_2013_2014_PUF.dta saved

121 .
122 . use SSSNFL_H,clear

123 . sort seqn

124 . save, replace
    file SSSNFL_H.dta saved

125 .
126 . merge seqn using NHANES_2013_2014_PUF
    (you are using old merge syntax; see [D] merge for new syntax)
```

```
127 .
128 . save NHANES_2013_2014_PUF_NFL, replace
    file NHANES_2013_2014_PUF_NFL.dta saved

129 . tab _merge

      _merge |      Freq.     Percent        Cum.
-------------+-----------------------------------
           2 |      8,090       79.51       79.51
           3 |      2,085       20.49      100.00
-------------+-----------------------------------
       Total |     10,175      100.00

130 . capture drop _merge

131 . sort seqn

132 . save, replace
    file NHANES_2013_2014_PUF_NFL.dta saved

133 .
134 . *********************************STEP 3: MERGE DEMOGRAPHICS FILE WITH THE NFL-MORTALITY FILE************************
135 .
136 . use NHANES_2013_2014_PUF_NFL,clear

137 . sort seqn

138 . save, replace
    file NHANES_2013_2014_PUF_NFL.dta saved

139 .
140 .
141 .
142 . use NHANES2013DEMO,clear

143 . sort seqn

144 . save, replace
    file NHANES2013DEMO.dta saved

145 .
146 .
147 . merge seqn using NHANES_2013_2014_PUF_NFL
    (you are using old merge syntax; see [D] merge for new syntax)

148 .
149 . save NHANES_NFL_MORTALITY_PAPER, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

150 .
151 .
152 . *********************************STEP 4: LN TRANSFORM THE NFL VARIABLES, CREATE Z-SCORES AND TERTILES***************
153 .
154 . use NHANES_NFL_MORTALITY_PAPER,clear
```

```
155 .
156 . capture drop LnNFL

157 . gen LnNFL=.
    (10,175 missing values generated)

158 . replace LnNFL=ln(sssnfl)
    (2,071 real changes made)

159 .
160 . capture drop zLnNFL

161 . egen zLnNFL=std(LnNFL)
    (8,104 missing values generated)

162 .
163 . capture drop LnNFLmedian

164 . xtile LnNFLmedian=LnNFL, nq(2)

165 .
166 .
167 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

168 .
169 .
170 . *********************************STEP 5: STSET DATASET USING STUDYTIME AND DEATH OF ALL CAUSES**********************
171 .
172 .
173 . stset permth_exm [pweight=wtssnh2y], failure(mortstat)

    Survival-time data settings

             Failure event: mortstat!=0 & mortstat<.
    Observed time interval: (0, permth_exm]
         Exit on or before: failure
                    Weight: [pweight=wtssnh2y]

    ------------------------------------------------------------------------------
         10,175  total observations
          4,262  event time missing (permth_exm>=.)             PROBABLE ERROR
              1  observation ends on or before enter()
          3,842  weights invalid                                 PROBABLE ERROR
    ------------------------------------------------------------------------------
          2,070  observations remaining, representing
             84  failures in single-record/single-failure data
        146,303  total analysis time at risk and under observation
                                                    At risk from t =         0
                                         Earliest observed entry t =         0
                                              Last observed exit t =        85

174 .
175 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved
```

```
. 
. 
. 
. ********************************STEP 6: RUN PRELIMINARY COX MODELS WITH BASIC DEMOGRAPHICS: AGE, SEX, RACE, PIR*****
. 
. 
. 
. stcox zLnNFL riagendr ridageyr i.ridreth3 dmdeduc2 i.dmdmartl dmdhhsiz indfmpir

        Failure _d: mortstat
  Analysis time _t: permth_exm
            Weight: [pweight=wtssnh2y]

(sum of wgt is 201,352,806.76699)
Iteration 0:   log pseudolikelihood = -1.358e+08
Iteration 1:   log pseudolikelihood = -1.331e+08
Iteration 2:   log pseudolikelihood = -1.296e+08
Iteration 3:   log pseudolikelihood = -1.292e+08
Iteration 4:   log pseudolikelihood = -1.292e+08
Iteration 5:   log pseudolikelihood = -1.292e+08
Refining estimates:
Iteration 0:   log pseudolikelihood = -1.292e+08

Cox regression with Breslow method for ties

No. of subjects = 201,352,807                         Number of obs =  1,924
No. of failures =   7,152,197
Time at risk    = 1.42392e+10
                                                      Wald chi2(16) = 161.03
Log pseudolikelihood = -1.292e+08                     Prob > chi2   = 0.0000
```

_t	Haz. ratio	Robust std. err.	z	P>|z|	[95% conf.	interval]
zLnNFL	1.92408	.2179815	5.78	0.000	1.540953	2.402463
riagendr	.8864334	.2533683	-0.42	0.673	.5062303	1.552187
ridageyr	1.020602	.0129518	1.61	0.108	.9955303	1.046306
ridreth3						
2	.6727278	.5641525	-0.47	0.636	.1300223	3.480653
3	1.982381	.8882414	1.53	0.127	.8237413	4.770713
4	2.256323	1.071733	1.71	0.087	.8893823	5.724192
6	1.498798	.9295474	0.65	0.514	.4444596	5.054221
7	1.211291	.8531496	0.27	0.786	.304594	4.816992
dmdeduc2	1.263872	.1641804	1.80	0.071	.9797822	1.630333
dmdmartl						
2	2.962331	1.548563	2.08	0.038	1.063326	8.252786
3	2.121328	.7400986	2.16	0.031	1.070624	4.203189
4	.6442898	.5744393	-0.49	0.622	.1122438	3.698283
5	1.338344	.6574605	0.59	0.553	.510994	3.505257
6	1.220847	.680992	0.36	0.721	.4091275	3.64304
dmdhhsiz	.9319441	.0995473	-0.66	0.509	.755905	1.14898
indfmpir	.6991036	.1048333	-2.39	0.017	.5210754	.9379561

```
185 .
186 .
187 . stcox LnNFLmedian riagendr ridageyr i.ridreth3 dmdeduc2 i.dmdmartl dmdhhsiz indfmpir

        Failure _d: mortstat
  Analysis time _t: permth_exm
            Weight: [pweight=wtssnh2y]

(sum of wgt is 201,352,806.76699)
Iteration 0:   log pseudolikelihood = -1.358e+08
Iteration 1:   log pseudolikelihood = -1.344e+08
Iteration 2:   log pseudolikelihood = -1.311e+08
Iteration 3:   log pseudolikelihood = -1.308e+08
Iteration 4:   log pseudolikelihood = -1.308e+08
Iteration 5:   log pseudolikelihood = -1.308e+08
Refining estimates:
Iteration 0:   log pseudolikelihood = -1.308e+08

Cox regression with Breslow method for ties

No. of subjects = 201,352,807                         Number of obs =  1,924
No. of failures =   7,152,197
Time at risk    = 1.42392e+10
                                                      Wald chi2(16) = 114.37
Log pseudolikelihood = -1.308e+08                     Prob > chi2   = 0.0000
```

_t	Haz. ratio	Robust std. err.	z	P>|z|	[95% conf.	interval]
LnNFLmedian	2.488295	1.02873	2.20	0.027	1.106602	5.595155
riagendr	.7887871	.237985	-0.79	0.432	.4366603	1.424872
ridageyr	1.033365	.013623	2.49	0.013	1.007006	1.060413
ridreth3						
2	.5547004	.4688028	-0.70	0.486	.1058447	2.90702
3	2.095045	.9257236	1.67	0.094	.8812084	4.980903
4	2.196392	1.027419	1.68	0.093	.878089	5.493907
6	1.326717	.8144938	0.46	0.645	.3983013	4.419216
7	1.718498	1.885708	0.49	0.622	.2000441	14.76293
dmdeduc2	1.281194	.164635	1.93	0.054	.9959434	1.648145
dmdmartl						
2	2.496359	1.196118	1.91	0.056	.9760182	6.38493
3	2.154249	.8028508	2.06	0.039	1.037691	4.472226
4	.5143539	.4693087	-0.73	0.466	.0860212	3.07552
5	1.382412	.657477	0.68	0.496	.5442581	3.511318
6	1.25233	.6946726	0.41	0.685	.4222346	3.714358
dmdhhsiz	.9397773	.1028721	-0.57	0.570	.7583135	1.164665
indfmpir	.6727433	.0959856	-2.78	0.005	.5086297	.8898095

```
188 .
```

```
189 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

190 .
191 .
192 . **********************************STEP 7-10: INCLUDE ADDITIONAL COVARIATES: INSURANCE STATUS, SMOKING, DRUG USE, PHYSIC
    > amin D), measures of BMI, blood pressure, dyslipidemia, hyperglycemia, eGFR, CO-MORBIDITY INDEX, SELF-RATED HEALTH***
193 .
194 . use NHANES_NFL_MORTALITY_PAPER,clear

195 . capture drop _merge

196 . sort seqn

197 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

198 .
199 . **Health insurance**
200 . use HIQ_H,clear

201 . capture drop _merge

202 . sort seqn

203 . save, replace
    file HIQ_H.dta saved

204 .
205 .
206 . **Income measures**
207 . use INQ_H,clear

208 . capture drop _merge

209 . sort seqn

210 . save, replace
    file INQ_H.dta saved

211 .
212 . **Smoking**
213 . use SMQ_H,clear

214 . capture drop _merge

215 . sort seqn

216 . save, replace
    file SMQ_H.dta saved

217 .
218 . **Alcohol use**
219 . use ALQ_H,clear
```

```
220 . capture drop _merge

221 . sort seqn

222 . save, replace
    file ALQ_H.dta saved

223 .
224 .
225 . **Drug use**
226 . use DUQ_H,clear

227 . capture drop _merge

228 . sort seqn

229 . save, replace
    file DUQ_H.dta saved

230 .
231 .
232 . **DIET**
233 . use DR1TOT_H,clear

234 . capture drop _merge

235 . sort seqn

236 . save, replace
    file DR1TOT_H.dta saved

237 .
238 .
239 . use DR2TOT_H,clear

240 . capture drop _merge

241 . sort seqn

242 . save, replace
    file DR2TOT_H.dta saved

243 .
244 .
245 . use DR1TOT_H,clear

246 . merge seqn using DR2TOT_H
    (you are using old merge syntax; see [D] merge for new syntax)

247 . save DR12TOT_H,replace
    file DR12TOT_H.dta saved

248 . capture drop _merge

249 . sort seqn
```

```
250 . save, replace
    file DR12TOT_H.dta saved

251 .
252 .
253 . **BODY MEASURES**
254 . use BMX_H,clear

255 . capture drop _merge

256 . sort seqn

257 . save, replace
    file BMX_H.dta saved

258 .
259 .
260 . **Blood pressure**
261 . use BPX_H,clear

262 . capture drop _merge

263 . sort seqn

264 . save, replace
    file BPX_H.dta saved

265 .
266 . **Albumin and creatinine**
267 . use ALB_CR_H,clear

268 . capture drop _merge

269 . sort seqn

270 . save, replace
    file ALB_CR_H.dta saved

271 .
272 . **BP and Cholesterol medication**
273 . use BPQ_H,clear

274 . capture drop _merge

275 . sort seqn

276 . save, replace
    file BPQ_H.dta saved

277 .
278 . **Depressive symptoms**
279 . use DPQ_H,clear

280 . capture drop _merge
```

```
281 . sort seqn

282 . save, replace
    file DPQ_H.dta saved

283 .
284 . **Self-rated health**
285 . use HSQ_H,clear

286 . capture drop _merge

287 . sort seqn

288 . save, replace
    file HSQ_H.dta saved

289 .
290 . **Co-morbidity index**
291 . use MCQ_H,clear

292 . capture drop _merge

293 . sort seqn

294 . save, replace
    file MCQ_H.dta saved

295 .
296 . **Physical activity**
297 . use PAQ_H,clear

298 . capture drop _merge

299 . sort seqn

300 . save, replace
    file PAQ_H.dta saved

301 .
302 . **Sleep**
303 . use SLQ_H,clear

304 . capture drop _merge

305 . sort seqn

306 . save, replace
    file SLQ_H.dta saved

307 .
308 . **Vitamin B-12**
309 . use VITB12_H,clear

310 . capture drop _merge
```

```
311 . sort seqn

312 . save, replace
    file VITB12_H.dta saved

313 .
314 .
315 . **Folate**
316 . use FOLATE_H,clear

317 . capture drop _merge

318 . sort seqn

319 . save, replace
    file FOLATE_H.dta saved

320 .
321 .
322 . **Vitamin D**
323 . use VID_H,clear

324 . capture drop _merge

325 . sort seqn

326 . save, replace
    file VID_H.dta saved

327 .
328 .
329 . **Lipids and glycated hemoglobin**
330 .
331 . use TRIGLY_H,clear

332 . capture drop _merge

333 . sort seqn

334 . save, replace
    file TRIGLY_H.dta saved

335 .
336 .
337 . use TCHOL_H,clear

338 . capture drop _merge

339 . sort seqn

340 . save, replace
    file TCHOL_H.dta saved

341 .
342 .
```

```
343 . use INS_H,clear

344 . capture drop _merge

345 . sort seqn

346 . save, replace
    file INS_H.dta saved

347 .
348 .
349 . use GHB_H,clear

350 . capture drop _merge

351 . sort seqn

352 . save, replace
    file GHB_H.dta saved

353 .
354 .
355 . use GLU_H,clear

356 . capture drop _merge

357 . sort seqn

358 . save, replace
    file GLU_H.dta saved

359 .
360 . **HIQ_H INQ_H SMQ_H ALQ_H DUQ_H DR12TOT_H BMX_H BPX_H ALB_CR_H BPQ_H DPQ_H HSQ_H MCQ_H PAQ_H SLQ_H FOLATE_H VITB12_H V
361 . **TRIGLY_H TCHOL_H INS_H GHB_H GLU_H
362 .
363 .
364 . use NHANES_NFL_MORTALITY_PAPER,clear

365 . merge seqn using HIQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

366 . capture drop _merge

367 . sort seqn

368 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

369 . merge seqn using INQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

370 . capture drop _merge

371 . sort seqn
```

```
372 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

373 . merge seqn using SMQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

374 . capture drop _merge

375 . sort seqn

376 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

377 . merge seqn using ALQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

378 . capture drop _merge

379 . sort seqn

380 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

381 . merge seqn using DUQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

382 . capture drop _merge

383 . sort seqn

384 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

385 . merge seqn using DR12TOT_H
    (you are using old merge syntax; see [D] merge for new syntax)

386 . capture drop _merge

387 . sort seqn

388 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

389 . merge seqn using BMX_H
    (you are using old merge syntax; see [D] merge for new syntax)

390 . capture drop _merge

391 . sort seqn

392 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

393 . merge seqn using BPX_H
    (you are using old merge syntax; see [D] merge for new syntax)
```

```
394 . capture drop _merge

395 . sort seqn

396 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

397 . merge seqn using ALB_CR_H
    (you are using old merge syntax; see [D] merge for new syntax)

398 . capture drop _merge

399 . sort seqn

400 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

401 . merge seqn using BPQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

402 . capture drop _merge

403 . sort seqn

404 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

405 . merge seqn using DPQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

406 . capture drop _merge

407 . sort seqn

408 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

409 . merge seqn using HSQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

410 . capture drop _merge

411 . sort seqn

412 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

413 . merge seqn using MCQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

414 . capture drop _merge

415 . sort seqn

416 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved
```

```
417 . merge seqn using PAQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

418 . capture drop _merge

419 . sort seqn

420 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

421 . merge seqn using SLQ_H
    (you are using old merge syntax; see [D] merge for new syntax)

422 . capture drop _merge

423 . sort seqn

424 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

425 . merge seqn using FOLATE_H
    (you are using old merge syntax; see [D] merge for new syntax)

426 . capture drop _merge

427 . sort seqn

428 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

429 . merge seqn using VITB12_H
    (you are using old merge syntax; see [D] merge for new syntax)

430 . capture drop _merge

431 . sort seqn

432 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

433 . merge seqn using VID_H
    (you are using old merge syntax; see [D] merge for new syntax)

434 . capture drop _merge

435 . sort seqn

436 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

437 . merge seqn using TRIGLY_H
    (you are using old merge syntax; see [D] merge for new syntax)

438 . capture drop _merge
```

```
439 . sort seqn

440 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

441 . merge seqn using TCHOL_H
    (you are using old merge syntax; see [D] merge for new syntax)

442 . capture drop _merge

443 . sort seqn

444 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

445 . merge seqn using INS_H
    (you are using old merge syntax; see [D] merge for new syntax)

446 . capture drop _merge

447 . sort seqn

448 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

449 . merge seqn using GHB_H
    (you are using old merge syntax; see [D] merge for new syntax)

450 . capture drop _merge

451 . sort seqn

452 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

453 . merge seqn using GLU_H
    (you are using old merge syntax; see [D] merge for new syntax)

454 . capture drop _merge

455 . sort seqn

456 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

457 .
458 . capture rename seqn-lbdglusi,upper

459 .
460 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

461 .
462 . **************************SOCIO-DEMOGRAPHIC VARIABLES**************************************************
463 .
```

```
. **AGE*
.
. capture drop AGE

. gen AGE=RIDAGEYR

.
. su AGE, det
```

AGE

Percentiles		Smallest		
1%	**0**	**0**		
5%	**1**	**0**		
10%	**3**	**0**	Obs	**10,175**
25%	**10**	**0**	Sum of wgt.	**10,175**
50%	**26**		Mean	**31.48413**
		Largest	Std. dev.	**24.42165**
75%	**52**	**80**		
90%	**68**	**80**	Variance	**596.4171**
95%	**75**	**80**	Skewness	**.4382973**
99%	**80**	**80**	Kurtosis	**1.906333**

```
. histogram AGE
(bin=40, start=0, width=2)

.
. **SEX**
.
. capture drop SEX

. gen SEX=RIAGENDR

.
. tab SEX
```

SEX	Freq.	Percent	Cum.
1	**5,003**	**49.17**	**49.17**
2	**5,172**	**50.83**	**100.00**
Total	**10,175**	**100.00**	

```
.
.
. **RACE/ETHNICITY**
.
. **0: Non-Hispanic White, 1:Non-Hispanic Black, 2:Mexican American or other Hispanic, and 3:Other race/ethnicities
.
.
. capture drop RACE_ETHN

. gen RACE_ETHN=.
(10,175 missing values generated)
```

```
487 . replace RACE_ETHN=0 if RIDRETH3==3
    (3,674 real changes made)

488 . replace RACE_ETHN=1 if RIDRETH3==4
    (2,267 real changes made)

489 . replace RACE_ETHN=2 if RIDRETH3==1 | RIDRETH3==2
    (2,690 real changes made)

490 . replace RACE_ETHN=3 if RIDRETH3~=. & RACE_ETHN==.
    (1,544 real changes made)

491 .
492 . tab RACE_ETHN
```

RACE_ETHN	Freq.	Percent	Cum.
0	**3,674**	**36.11**	**36.11**
1	**2,267**	**22.28**	**58.39**
2	**2,690**	**26.44**	**84.83**
3	**1,544**	**15.17**	**100.00**
Total	**10,175**	**100.00**	

```
493 .
494 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

495 .
496 .
497 . **MARITAL STATUS**
498 . tab DMDMARTL, missing
```

Marital status	Freq.	Percent	Cum.
1	**2,965**	**29.14**	**29.14**
2	**436**	**4.29**	**33.43**
3	**659**	**6.48**	**39.90**
4	**177**	**1.74**	**41.64**
5	**1,112**	**10.93**	**52.57**
6	**417**	**4.10**	**56.67**
77	**2**	**0.02**	**56.69**
99	**1**	**0.01**	**56.70**
.	**4,406**	**43.30**	**100.00**
Total	**10,175**	**100.00**	

```
499 .
500 . capture drop MARRIED_LIVP

501 . gen MARRIED_LIVP=.
    (10,175 missing values generated)

502 . replace MARRIED_LIVP=1 if DMDMARTL == 1 | DMDMARTL == 6
    (3,382 real changes made)
```

```
503 . replace MARRIED_LIVP=2 if DMDMARTL == 2 | DMDMARTL == 3 | DMDMARTL == 4 | DMDMARTL == 5
(2,384 real changes made)

504 .
505 . tab MARRIED_LIVP, missing
```

MARRIED_LIVP	Freq.	Percent	Cum.
1	3,382	33.24	33.24
2	2,384	23.43	56.67
.	4,409	43.33	100.00
Total	10,175	100.00	

```
506 .
507 .
508 . **HOUSEHOLD SIZE**
509 .
510 . capture drop HOUSEHOLDSIZE

511 . gen HOUSEHOLDSIZE=DMDHHSIZ

512 . su HOUSEHOLDSIZE
```

Variable	Obs	Mean	Std. dev.	Min	Max
HOUSEHOLDS~E	10,175	3.874693	1.722184	1	7

```
513 .
514 .
515 . **POVERTY INCOME RATIO**
516 .
517 . tab INDFMPIR, missing
```

Ratio of family income to poverty	Freq.	Percent	Cum.
0	105	1.03	1.03
.01	10	0.10	1.13
.02	30	0.29	1.43
.03	29	0.29	1.71
.04	14	0.14	1.85
.05	7	0.07	1.92
.06	11	0.11	2.02
.07	25	0.25	2.27
.08	5	0.05	2.32
.09	12	0.12	2.44
.1	11	0.11	2.55
.11	12	0.12	2.66
.12	7	0.07	2.73
.13	23	0.23	2.96
.14	4	0.04	3.00
.15	3	0.03	3.03
.16	7	0.07	3.10
.17	14	0.14	3.23
.18	16	0.16	3.39
.19	6	0.06	3.45
.2	13	0.13	3.58
.21	14	0.14	3.71
.22	5	0.05	3.76
.23	1	0.01	3.77
.24	6	0.06	3.83
.25	19	0.19	4.02
.26	24	0.24	4.26

.27	3	0.03	4.29
.28	14	0.14	4.42
.29	31	0.30	4.73
.3	20	0.20	4.92
.31	33	0.32	5.25
.32	17	0.17	5.42
.33	12	0.12	5.53
.34	20	0.20	5.73
.35	46	0.45	6.18
.36	35	0.34	6.53
.37	7	0.07	6.59
.38	25	0.25	6.84
.39	8	0.08	6.92
.4	15	0.15	7.07
.41	12	0.12	7.18
.42	34	0.33	7.52
.43	19	0.19	7.71
.44	12	0.12	7.82
.45	34	0.33	8.16
.46	19	0.19	8.34
.47	51	0.50	8.85
.48	28	0.28	9.12
.49	12	0.12	9.24
.5	28	0.28	9.51
.51	61	0.60	10.11
.52	25	0.25	10.36
.53	10	0.10	10.46
.54	77	0.76	11.21
.55	20	0.20	11.41
.56	51	0.50	11.91
.57	42	0.41	12.32
.58	19	0.19	12.51
.59	30	0.29	12.81
.6	7	0.07	12.87
.61	46	0.45	13.33
.62	5	0.05	13.38
.63	74	0.73	14.10
.64	59	0.58	14.68
.65	38	0.37	15.06
.66	13	0.13	15.18
.67	33	0.32	15.51
.68	26	0.26	15.76
.69	38	0.37	16.14
.7	53	0.52	16.66
.71	31	0.30	16.96
.72	71	0.70	17.66
.73	54	0.53	18.19
.74	15	0.15	18.34
.75	23	0.23	18.57
.76	58	0.57	19.14
.77	43	0.42	19.56
.78	38	0.37	19.93
.79	8	0.08	20.01
.8	22	0.22	20.23
.81	15	0.15	20.37
.82	33	0.32	20.70
.83	30	0.29	20.99
.84	65	0.64	21.63
.85	38	0.37	22.00
.86	65	0.64	22.64
.87	45	0.44	23.09
.88	43	0.42	23.51
.89	23	0.23	23.73
.9	50	0.49	24.23
.91	36	0.35	24.58
.92	31	0.30	24.88
.93	33	0.32	25.21

.94	22	0.22	25.43
.95	33	0.32	25.75
.96	19	0.19	25.94
.97	32	0.31	26.25
.98	30	0.29	26.55
.99	10	0.10	26.64
1	24	0.24	26.88
1.01	37	0.36	27.24
1.02	73	0.72	27.96
1.03	43	0.42	28.38
1.04	55	0.54	28.92
1.05	29	0.29	29.21
1.06	57	0.56	29.77
1.07	58	0.57	30.34
1.08	23	0.23	30.57
1.09	42	0.41	30.98
1.1	10	0.10	31.08
1.11	33	0.32	31.40
1.12	16	0.16	31.56
1.13	45	0.44	32.00
1.14	36	0.35	32.35
1.15	15	0.15	32.50
1.16	46	0.45	32.95
1.17	10	0.10	33.05
1.18	15	0.15	33.20
1.19	11	0.11	33.31
1.2	44	0.43	33.74
1.21	27	0.27	34.00
1.22	42	0.41	34.42
1.23	31	0.30	34.72
1.24	10	0.10	34.82
1.25	35	0.34	35.16
1.26	36	0.35	35.52
1.27	151	1.48	37.00
1.28	31	0.30	37.31
1.29	60	0.59	37.90
1.3	10	0.10	38.00
1.31	30	0.29	38.29
1.32	5	0.05	38.34
1.33	25	0.25	38.58
1.34	24	0.24	38.82
1.35	5	0.05	38.87
1.36	18	0.18	39.05
1.37	18	0.18	39.22
1.38	24	0.24	39.46
1.39	20	0.20	39.66
1.4	15	0.15	39.80
1.41	2	0.02	39.82
1.42	28	0.28	40.10
1.43	53	0.52	40.62
1.44	15	0.15	40.77
1.45	32	0.31	41.08
1.46	25	0.25	41.33
1.47	38	0.37	41.70
1.48	6	0.06	41.76
1.49	17	0.17	41.93
1.5	12	0.12	42.04
1.51	18	0.18	42.22
1.52	55	0.54	42.76
1.53	18	0.18	42.94
1.54	49	0.48	43.42
1.55	13	0.13	43.55
1.56	22	0.22	43.76
1.57	13	0.13	43.89
1.58	29	0.29	44.18
1.59	27	0.27	44.44
1.6	2	0.02	44.46

1.61	38	0.37	44.84
1.62	14	0.14	44.97
1.63	20	0.20	45.17
1.64	13	0.13	45.30
1.65	20	0.20	45.49
1.66	1	0.01	45.50
1.67	9	0.09	45.59
1.68	34	0.33	45.93
1.69	1	0.01	45.94
1.7	21	0.21	46.14
1.71	25	0.25	46.39
1.72	23	0.23	46.61
1.74	36	0.35	46.97
1.75	5	0.05	47.02
1.76	6	0.06	47.08
1.77	26	0.26	47.33
1.78	16	0.16	47.49
1.79	25	0.25	47.73
1.8	5	0.05	47.78
1.81	39	0.38	48.17
1.82	15	0.15	48.31
1.83	7	0.07	48.38
1.84	9	0.09	48.47
1.85	2	0.02	48.49
1.86	6	0.06	48.55
1.87	2	0.02	48.57
1.88	10	0.10	48.67
1.89	28	0.28	48.94
1.9	1	0.01	48.95
1.91	52	0.51	49.46
1.92	15	0.15	49.61
1.93	33	0.32	49.94
1.94	6	0.06	50.00
1.95	8	0.08	50.07
1.96	1	0.01	50.08
1.97	24	0.24	50.32
1.98	1	0.01	50.33
1.99	12	0.12	50.45
2	10	0.10	50.55
2.01	2	0.02	50.57
2.02	26	0.26	50.82
2.03	12	0.12	50.94
2.04	10	0.10	51.04
2.05	21	0.21	51.24
2.06	12	0.12	51.36
2.07	3	0.03	51.39
2.08	1	0.01	51.40
2.09	7	0.07	51.47
2.1	30	0.29	51.76
2.11	10	0.10	51.86
2.12	33	0.32	52.19
2.13	7	0.07	52.26
2.14	17	0.17	52.42
2.15	47	0.46	52.88
2.16	4	0.04	52.92
2.17	1	0.01	52.93
2.18	35	0.34	53.28
2.19	33	0.32	53.60
2.2	16	0.16	53.76
2.21	5	0.05	53.81
2.22	25	0.25	54.05
2.23	25	0.25	54.30
2.24	6	0.06	54.36
2.25	18	0.18	54.54
2.26	19	0.19	54.72
2.27	27	0.27	54.99
2.29	8	0.08	55.07

2.3	18	0.18	55.24
2.31	19	0.19	55.43
2.32	11	0.11	55.54
2.33	13	0.13	55.67
2.34	16	0.16	55.82
2.35	4	0.04	55.86
2.36	20	0.20	56.06
2.37	5	0.05	56.11
2.38	7	0.07	56.18
2.39	15	0.15	56.32
2.4	5	0.05	56.37
2.41	4	0.04	56.41
2.42	18	0.18	56.59
2.43	9	0.09	56.68
2.44	8	0.08	56.76
2.45	5	0.05	56.81
2.46	8	0.08	56.88
2.47	4	0.04	56.92
2.48	4	0.04	56.96
2.49	8	0.08	57.04
2.5	8	0.08	57.12
2.51	16	0.16	57.28
2.52	29	0.29	57.56
2.53	40	0.39	57.96
2.54	24	0.24	58.19
2.55	12	0.12	58.31
2.56	20	0.20	58.51
2.57	15	0.15	58.65
2.58	36	0.35	59.01
2.59	7	0.07	59.08
2.6	5	0.05	59.13
2.61	19	0.19	59.31
2.62	2	0.02	59.33
2.63	17	0.17	59.50
2.64	3	0.03	59.53
2.65	6	0.06	59.59
2.66	14	0.14	59.72
2.67	9	0.09	59.81
2.68	8	0.08	59.89
2.69	27	0.27	60.16
2.71	3	0.03	60.19
2.72	4	0.04	60.23
2.73	21	0.21	60.43
2.74	8	0.08	60.51
2.76	5	0.05	60.56
2.77	4	0.04	60.60
2.78	14	0.14	60.74
2.79	3	0.03	60.77
2.8	1	0.01	60.78
2.81	6	0.06	60.84
2.82	26	0.26	61.09
2.83	6	0.06	61.15
2.84	2	0.02	61.17
2.85	6	0.06	61.23
2.86	7	0.07	61.30
2.87	25	0.25	61.54
2.89	6	0.06	61.60
2.9	36	0.35	61.96
2.91	1	0.01	61.97
2.92	1	0.01	61.98
2.93	2	0.02	62.00
2.94	28	0.28	62.27
2.96	5	0.05	62.32
2.97	17	0.17	62.49
2.98	2	0.02	62.51
3	20	0.20	62.70
3.02	4	0.04	62.74

3.03	20	0.20	62.94
3.05	28	0.28	63.21
3.06	1	0.01	63.22
3.07	22	0.22	63.44
3.08	6	0.06	63.50
3.09	25	0.25	63.74
3.1	14	0.14	63.88
3.11	1	0.01	63.89
3.12	2	0.02	63.91
3.13	16	0.16	64.07
3.14	27	0.27	64.33
3.16	1	0.01	64.34
3.17	37	0.36	64.71
3.18	42	0.41	65.12
3.2	4	0.04	65.16
3.22	49	0.48	65.64
3.23	5	0.05	65.69
3.24	8	0.08	65.77
3.26	19	0.19	65.96
3.27	5	0.05	66.00
3.28	21	0.21	66.21
3.3	7	0.07	66.28
3.31	9	0.09	66.37
3.33	22	0.22	66.58
3.34	2	0.02	66.60
3.35	17	0.17	66.77
3.36	4	0.04	66.81
3.37	19	0.19	67.00
3.38	3	0.03	67.03
3.39	2	0.02	67.05
3.4	27	0.27	67.31
3.43	15	0.15	67.46
3.44	7	0.07	67.53
3.45	21	0.21	67.73
3.46	5	0.05	67.78
3.48	39	0.38	68.17
3.49	2	0.02	68.19
3.5	15	0.15	68.33
3.51	3	0.03	68.36
3.53	10	0.10	68.46
3.54	14	0.14	68.60
3.55	5	0.05	68.65
3.56	11	0.11	68.76
3.57	5	0.05	68.81
3.58	31	0.30	69.11
3.6	10	0.10	69.21
3.61	15	0.15	69.36
3.62	1	0.01	69.37
3.63	38	0.37	69.74
3.64	2	0.02	69.76
3.65	3	0.03	69.79
3.66	4	0.04	69.83
3.67	4	0.04	69.87
3.68	3	0.03	69.90
3.69	3	0.03	69.93
3.7	1	0.01	69.94
3.72	3	0.03	69.97
3.74	6	0.06	70.02
3.75	3	0.03	70.05
3.76	1	0.01	70.06
3.77	13	0.13	70.19
3.79	29	0.29	70.48
3.8	2	0.02	70.50
3.81	31	0.30	70.80
3.82	33	0.32	71.13
3.83	3	0.03	71.15
3.84	24	0.24	71.39

3.86	8	0.08	71.47
3.87	26	0.26	71.72
3.88	1	0.01	71.73
3.89	8	0.08	71.81
3.9	3	0.03	71.84
3.91	2	0.02	71.86
3.92	17	0.17	72.03
3.93	11	0.11	72.14
3.94	7	0.07	72.21
3.95	2	0.02	72.23
3.96	15	0.15	72.37
3.97	3	0.03	72.40
3.98	4	0.04	72.44
3.99	1	0.01	72.45
4	2	0.02	72.47
4.03	7	0.07	72.54
4.04	18	0.18	72.72
4.05	2	0.02	72.74
4.06	8	0.08	72.82
4.07	9	0.09	72.90
4.09	1	0.01	72.91
4.1	18	0.18	73.09
4.11	5	0.05	73.14
4.12	6	0.06	73.20
4.13	15	0.15	73.35
4.14	3	0.03	73.38
4.16	15	0.15	73.52
4.17	4	0.04	73.56
4.18	4	0.04	73.60
4.19	66	0.65	74.25
4.2	2	0.02	74.27
4.25	43	0.42	74.69
4.26	3	0.03	74.72
4.28	16	0.16	74.88
4.3	27	0.27	75.14
4.32	3	0.03	75.17
4.35	38	0.37	75.55
4.36	2	0.02	75.57
4.38	6	0.06	75.63
4.4	6	0.06	75.69
4.42	3	0.03	75.71
4.43	3	0.03	75.74
4.44	2	0.02	75.76
4.45	13	0.13	75.89
4.46	2	0.02	75.91
4.48	9	0.09	76.00
4.5	2	0.02	76.02
4.51	14	0.14	76.16
4.53	10	0.10	76.26
4.54	1	0.01	76.27
4.55	10	0.10	76.36
4.58	2	0.02	76.38
4.61	38	0.37	76.76
4.63	1	0.01	76.77
4.64	9	0.09	76.86
4.66	2	0.02	76.87
4.67	27	0.27	77.14
4.69	9	0.09	77.23
4.7	3	0.03	77.26
4.71	5	0.05	77.31
4.72	12	0.12	77.43
4.77	20	0.20	77.62
4.79	4	0.04	77.66
4.8	2	0.02	77.68
4.81	3	0.03	77.71
4.82	4	0.04	77.75
4.83	1	0.01	77.76

4.84	**22**	**0.22**	**77.98**
4.86	**8**	**0.08**	**78.05**
4.87	**1**	**0.01**	**78.06**
4.88	**10**	**0.10**	**78.16**
4.9	**9**	**0.09**	**78.25**
4.92	**3**	**0.03**	**78.28**
4.93	**5**	**0.05**	**78.33**
4.96	**1**	**0.01**	**78.34**
4.97	**2**	**0.02**	**78.36**
4.99	**1**	**0.01**	**78.37**
5	**1,416**	**13.92**	**92.29**
.	**785**	**7.71**	**100.00**
Total	**10,175**	**100.00**	

```
518 .
519 . capture drop PIR

520 . gen PIR=.
    (10,175 missing values generated)

521 . replace PIR=1 if INDFMPIR <1
    (2,711 real changes made)

522 . replace PIR=2 if INDFMPIR>=1 & INDFMPIR<2
    (2,422 real changes made)

523 . replace PIR=3 if INDFMPIR>=2 & INDFMPIR ~=.
    (4,257 real changes made)

524 .
525 . tab PIR, missing
```

PIR	Freq.	Percent	Cum.
1	**2,711**	**26.64**	**26.64**
2	**2,422**	**23.80**	**50.45**
3	**4,257**	**41.84**	**92.29**
.	**785**	**7.71**	**100.00**
Total	**10,175**	**100.00**	

```
526 .
527 .
528 . **EDUCATION, YEARS**
529 .
530 . **Less than 9th grade
531 . **9-11th grade (Includes 12th grade with no diploma)
532 . **High school graduate/GED or equivalent
533 . **Some college or AA degree
534 . **College graduate or above
535 .
536 .
537 . tab DMDEDUC2, missing
```

Education level - Adults 20+	Freq.	Percent	Cum.
1	**455**	**4.47**	**4.47**
2	**791**	**7.77**	**12.25**
3	**1,303**	**12.81**	**25.05**
4	**1,770**	**17.40**	**42.45**
5	**1,443**	**14.18**	**56.63**
7	**2**	**0.02**	**56.65**
9	**5**	**0.05**	**56.70**
.	**4,406**	**43.30**	**100.00**

Total	**10,175**	**100.00**

```
538 .
539 . capture drop EDUCATION

540 . gen EDUCATION=DMDEDUC2
    (4,406 missing values generated)

541 . replace EDUCATION=. if (DMDEDUC2==9 | DMDEDUC2==7)
    (7 real changes made, 7 to missing)

542 .
543 . tab EDUCATION, missing
```

EDUCATION	Freq.	Percent	Cum.
1	**455**	**4.47**	**4.47**
2	**791**	**7.77**	**12.25**
3	**1,303**	**12.81**	**25.05**
4	**1,770**	**17.40**	**42.45**
5	**1,443**	**14.18**	**56.63**
.	**4,413**	**43.37**	**100.00**
Total	**10,175**	**100.00**	

```
544 . su EDUCATION
```

Variable	Obs	Mean	Std. dev.	Min	Max
EDUCATION	**5,762**	**3.512843**	**1.224465**	**1**	**5**

```
545 .
546 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

547 .
548 .
549 . **************************SMOKING*********************************************************************
550 .
551 . tab SMQ020, missing
```

Smoked at least 100 cigarettes in life	Freq.	Percent	Cum.
1	**2,579**	**25.35**	**25.35**
2	**3,532**	**34.71**	**60.06**
9	**2**	**0.02**	**60.08**
.	**4,062**	**39.92**	**100.00**
Total	**10,175**	**100.00**	

```
552 . tab SMQ040, missing
```

Do you now smoke cigarettes	Freq.	Percent	Cum.
1	**992**	**9.75**	**9.75**
2	**240**	**2.36**	**12.11**
3	**1,347**	**13.24**	**25.35**
.	**7,596**	**74.65**	**100.00**
Total	**10,175**	**100.00**	

```
553 .
554 . capture drop SMOKE

555 . gen SMOKE=.
    (10,175 missing values generated)

556 . replace SMOKE=1 if SMQ020==2
    (3,532 real changes made)

557 . replace SMOKE=2 if SMQ020==1 & SMQ040==3
    (1,347 real changes made)

558 . replace SMOKE=3 if SMQ020==1 & (SMQ040==1|SMQ040==2)
    (1,232 real changes made)

559 .
560 . tab SMOKE, missing
```

SMOKE	Freq.	Percent	Cum.
1	**3,532**	**34.71**	**34.71**
2	**1,347**	**13.24**	**47.95**
3	**1,232**	**12.11**	**60.06**
.	**4,064**	**39.94**	**100.00**
Total	**10,175**	**100.00**	

```
561 .
562 .
563 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

564 .
565 .
566 .
567 . *************************ALCOHOL, GRAMS ********************************************************************
568 .
569 . tab ALQ101, missing
```

Had at least 12 alcohol drinks/1 yr?	Freq.	Percent	Cum.
1	**3,790**	**37.25**	**37.25**
2	**1,623**	**15.95**	**53.20**
9	**8**	**0.08**	**53.28**
.	**4,754**	**46.72**	**100.00**
Total	**10,175**	**100.00**	

```
570 .
571 . capture drop ALCOHOL
```

```
572 . gen ALCOHOL=.
    (10,175 missing values generated)

573 . replace ALCOHOL=1 if (ALQ101==1)
    (3,790 real changes made)

574 . replace ALCOHOL=2 if (ALQ101==2)
    (1,623 real changes made)

575 .
576 . tab ALCOHOL, missing
```

ALCOHOL	Freq.	Percent	Cum.
1	**3,790**	**37.25**	**37.25**
2	**1,623**	**15.95**	**53.20**
.	**4,762**	**46.80**	**100.00**
Total	**10,175**	**100.00**	

```
577 .
578 .
579 . ****************************EVER DRUG USE*********************************************************************
580 . tab1 DUQ200 DUQ240 DUQ290 DUQ330
```

-> tabulation of DUQ200

Ever used marijuana or hashish	Freq.	Percent	Cum.
1	**1,991**	**53.80**	**53.80**
2	**1,699**	**45.91**	**99.70**
7	**6**	**0.16**	**99.86**
9	**5**	**0.14**	**100.00**
Total	**3,701**	**100.00**	

-> tabulation of DUQ240

Ever used cocaine/heroin/methamphetamine	Freq.	Percent	Cum.
1	**723**	**15.93**	**15.93**
2	**3,800**	**83.70**	**99.63**
7	**10**	**0.22**	**99.85**
9	**7**	**0.15**	**100.00**
Total	**4,540**	**100.00**	

-> tabulation of DUQ290

Ever used heroin	Freq.	Percent	Cum.
1	**110**	**15.21**	**15.21**
2	**611**	**84.51**	**99.72**
9	**2**	**0.28**	**100.00**
Total	**723**	**100.00**	

-> tabulation of DUQ330

Ever used methampheta mine	Freq.	Percent	Cum.
1	284	39.28	39.28
2	439	60.72	100.00
Total	723	100.00	

```
581 .
582 . capture drop DUQ200r DUQ240r DUQ290r DUQ330r

583 .
584 .
585 . foreach x of varlist DUQ200 DUQ240 DUQ290 DUQ330 {
  2.         gen `x'r=`x' if `x'~=7 & `x'~=9
  3. }
(6,485 missing values generated)
(5,652 missing values generated)
(9,454 missing values generated)
(9,452 missing values generated)

586 .
587 . tab1  DUQ200r DUQ240r DUQ290r DUQ330r
```

-> tabulation of DUQ200r

DUQ200r	Freq.	Percent	Cum.
1	1,991	53.96	53.96
2	1,699	46.04	100.00
Total	3,690	100.00	

-> tabulation of DUQ240r

DUQ240r	Freq.	Percent	Cum.
1	723	15.98	15.98
2	3,800	84.02	100.00
Total	4,523	100.00	

-> tabulation of DUQ290r

DUQ290r	Freq.	Percent	Cum.
1	110	15.26	15.26
2	611	84.74	100.00
Total	721	100.00	

-> tabulation of DUQ330r

DUQ330r	Freq.	Percent	Cum.
1	284	39.28	39.28
2	439	60.72	100.00
Total	723	100.00	

```
588 .
589 .
590 .
591 . capture drop DRUG_USER_EVER

592 . gen DRUG_USER_EVER=.
    (10,175 missing values generated)

593 . replace DRUG_USER_EVER=1 if DUQ200r==1 | DUQ240r==1 | DUQ290r==1 | DUQ330r==1
    (2,130 real changes made)

594 . replace DRUG_USER_EVER=0 if DRUG_USER_EVER~=1
    (8,045 real changes made)

595 .
596 . tab DRUG_USER_EVER
```

DRUG_USER_EVER	Freq.	Percent	Cum.
0	**8,045**	**79.07**	**79.07**
1	**2,130**	**20.93**	**100.00**
Total	**10,175**	**100.00**	

```
597 .
598 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

599 .
600 .
601 . **************************** ENERGEY INTAKE*****************************************
602 .
603 . ****************************DASH DIET SCORE*****************************************************************
604 .
605 . /*DASH component 1-8 scores*/
606 .
607 . /*use "H:\MANUSCRIPTS_2018_2019\MANSCRIPT_12_DASH_MORTALITY\DATA\FULL_DASH_DIET_DATASET_MORTALITY_LINKED_B_G.dta"*/
608 .
609 . /*Energy -- kcal*/
610 .
611 . summ DR1TKCAL
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TKCAL	**8,531**	**1964.539**	**984.4931**	**117**	**12108**

```
612 . summ DR2TKCAL
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TKCAL	**7,453**	**1839.988**	**883.9725**	**0**	**10591**

```
613 .
614 . capture drop DR12TKCAL
```

```
615 . gen DR12TKCAL=(DR1TKCAL+DR2TKCAL)/2
    (2,726 missing values generated)

616 .
617 . su DR12TKCAL
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR12TKCAL	**7,449**	**1904.067**	**803.862**	**96.5**	**10025**

```
618 .
619 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

620 .
621 .
622 . /*Saturated fat -- grams*/
623 .
624 . summ DR1TSFAT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TSFAT	**8,531**	**24.76425**	**15.88331**	**0**	**177.467**

```
625 . summ DR2TSFAT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TSFAT	**7,453**	**23.02986**	**15.24631**	**0**	**259.21**

```
626 .
627 .
628 . capture drop DR12TSFAT

629 . gen DR12TSFAT=(DR1TSFAT+DR2TSFAT)/2
    (2,726 missing values generated)

630 .
631 . su DR12TSFAT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR12TSFAT	**7,449**	**23.94156**	**12.84116**	**.6**	**190.057**

```
632 .
633 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

634 .
635 .
636 . capture drop SAT_FAT_DASH

637 . gen SAT_FAT_DASH=.
    (10,175 missing values generated)
```

```
638 . replace SAT_FAT_DASH=(DR12TSFAT*9)/DR12TKCAL*100
    (7,449 real changes made)

639 .
640 . summ SAT_FAT_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
SAT_FAT_DASH	**7,449**	**11.25617**	**3.33631**	**1.698113**	**32.18073**

```
641 .
642 . capture drop SAT_FAT_DASH_BR

643 . gen SAT_FAT_DASH_BR=.
    (10,175 missing values generated)

644 . replace SAT_FAT_DASH_BR=1 if SAT_FAT_DASH <=6
    (324 real changes made)

645 . replace SAT_FAT_DASH_BR=0.5 if (SAT_FAT_DASH >6 & SAT_FAT_DASH<=11)
    (3,339 real changes made)

646 . replace SAT_FAT_DASH_BR=0 if (SAT_FAT_DASH>11 & SAT_FAT_DASH~=.)
    (3,786 real changes made)

647 .
648 . tab SAT_FAT_DASH_BR, missing
```

SAT_FAT_DASH_BR	Freq.	Percent	Cum.
0	**3,786**	**37.21**	**37.21**
.5	**3,339**	**32.82**	**70.02**
1	**324**	**3.18**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
649 .
650 .
651 . /*Total fat -- grams*/
652 .
653 . summ DR1TTFAT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TTFAT	**8,531**	**75.0988**	**45.50421**	**0**	**548.38**

```
654 . summ DR2TTFAT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TTFAT	**7,453**	**69.12929**	**40.95999**	**0**	**530.22**

```
655 .
```

```
656 . capture drop DR12TTFAT

657 . gen DR12TTFAT=(DR1TTFAT+DR2TTFAT)/2
    (2,726 missing values generated)

658 .
659 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

660 .
661 .
662 . capture drop TOT_FAT_DASH

663 . gen TOT_FAT_DASH=.
    (10,175 missing values generated)

664 . replace TOT_FAT_DASH=(DR12TTFAT*9)/DR12TKCAL*100
    (7,449 real changes made)

665 .
666 . summ TOT_FAT_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
TOT_FAT_DASH	**7,449**	**33.78169**	**6.991296**	**6.877359**	**68.0814**

```
667 .
668 . capture drop TOT_FAT_DASH_BR

669 . gen TOT_FAT_DASH_BR=.
    (10,175 missing values generated)

670 . replace TOT_FAT_DASH_BR=1 if TOT_FAT_DASH <=27
    (1,162 real changes made)

671 . replace TOT_FAT_DASH_BR=0.5 if (TOT_FAT_DASH >27 & TOT_FAT_DASH<=32)
    (1,857 real changes made)

672 . replace TOT_FAT_DASH_BR=0 if (TOT_FAT_DASH >32 & TOT_FAT_DASH ~=.)
    (4,430 real changes made)

673 .
674 . tab TOT_FAT_DASH_BR, missing
```

TOT_FAT_DASH_BR	Freq.	Percent	Cum.
0	**4,430**	**43.54**	**43.54**
.5	**1,857**	**18.25**	**61.79**
1	**1,162**	**11.42**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
675 .
```

```
676 .
677 . /*Protein -- grams*/
678 .
679 . summ DR1TPROT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TPROT	**8,531**	**74.53671**	**44.72318**	**0**	**869.49**

```
680 . summ DR2TPROT
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TPROT	**7,453**	**73.4317**	**41.44096**	**0**	**474.19**

```
681 .
682 . capture drop DR12TPROT

683 . gen DR12TPROT=(DR1TPROT+DR2TPROT)/2
    (2,726 missing values generated)

684 .
685 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

686 .
687 . capture drop PROT_DASH

688 . gen PROT_DASH=.
    (10,175 missing values generated)

689 . replace PROT_DASH=(DR12TPROT*4)/DR12TKCAL*100
    (7,449 real changes made)

690 .
691 . summ PROT_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
PROT_DASH	**7,449**	**15.65494**	**4.445737**	**2.021305**	**56.15414**

```
692 .
693 . capture drop PROT_DASH_BR

694 . gen PROT_DASH_BR=.
    (10,175 missing values generated)

695 . replace PROT_DASH_BR=1 if PROT_DASH >=18 & PROT_DASH~=.
    (1,816 real changes made)

696 . replace PROT_DASH_BR=0.5 if (PROT_DASH <18 & PROT_DASH>=16.5)
    (852 real changes made)

697 . replace PROT_DASH_BR=0 if (PROT_DASH <16.5 & PROT_DASH ~=.)
    (4,781 real changes made)
```

```
698 .
699 . tab PROT_DASH_BR, missing
```

PROT_DASH_BR	Freq.	Percent	Cum.
0	**4,781**	**46.99**	**46.99**
.5	**852**	**8.37**	**55.36**
1	**1,816**	**17.85**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
700 .
701 .
702 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

703 .
704 . /*Cholesterol -- mg*/
705 .
706 . summ DR1TCHOL
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TCHOL	**8,531**	**262.3687**	**233.5791**	**0**	**3515**

```
707 . summ DR2TCHOL
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TCHOL	**7,453**	**251.3217**	**217.941**	**0**	**2666**

```
708 .
709 . capture drop DR12TCHOL

710 . gen DR12TCHOL=(DR1TCHOL+DR2TCHOL)/2
    (2,726 missing values generated)

711 .
712 .
713 .
714 . capture drop CHOL_DASH

715 . gen CHOL_DASH=.
    (10,175 missing values generated)

716 . replace CHOL_DASH=(DR12TCHOL/DR12TKCAL)*1000
    (7,449 real changes made)

717 .
718 . summ CHOL_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
CHOL_DASH	**7,449**	**133.6302**	**77.58005**	**0**	**721.2176**

```
719 .
720 . capture drop CHOL_DASH_BR

721 . gen CHOL_DASH_BR=.
    (10,175 missing values generated)

722 . replace CHOL_DASH_BR=1 if CHOL_DASH <=71.4
    (1,394 real changes made)

723 . replace CHOL_DASH_BR=0.5 if (CHOL_DASH >71.4 & CHOL_DASH<=107.1)
    (1,888 real changes made)

724 . replace CHOL_DASH_BR=0 if (CHOL_DASH >107.1) & CHOL_DASH ~=.
    (4,167 real changes made)

725 .
726 . tab CHOL_DASH_BR, missing
```

CHOL_DASH_BR	Freq.	Percent	Cum.
0	**4,167**	**40.95**	**40.95**
.5	**1,888**	**18.56**	**59.51**
1	**1,394**	**13.70**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
727 .
728 . /*Fiber -- g*/
729 .
730 . summ DR1TFIBE
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TFIBE	**8,531**	**15.27804**	**10.13266**	**0**	**136.3**

```
731 . summ DR2TFIBE
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TFIBE	**7,453**	**15.42759**	**10.22192**	**0**	**134.8**

```
732 .
733 .
734 . capture drop DR12TFIBE

735 . gen DR12TFIBE=(DR1TFIBE+DR2TFIBE)/2
    (2,726 missing values generated)

736 .
737 .
738 . capture drop FIB_DASH

739 . gen FIB_DASH=.
    (10,175 missing values generated)
```

```
740 . replace FIB_DASH=(DR12TFIBE/DR12TKCAL)*1000
    (7,449 real changes made)

741 .
742 . summ FIB_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
FIB_DASH	**7,449**	**8.250123**	**3.735244**	**0**	**41.61869**

```
743 .
744 . capture drop FIB_DASH_BR

745 . gen FIB_DASH_BR=.
    (10,175 missing values generated)

746 . replace FIB_DASH_BR=1 if FIB_DASH >=14.8 & FIB_DASH ~=.
    (376 real changes made)

747 . replace FIB_DASH_BR=0.5 if (FIB_DASH <14.8 & FIB_DASH>=9.5)
    (1,811 real changes made)

748 . replace FIB_DASH_BR=0 if (FIB_DASH <9.5 & FIB_DASH ~=.)
    (5,262 real changes made)

749 .
750 . tab FIB_DASH_BR, missing
```

FIB_DASH_BR	Freq.	Percent	Cum.
0	**5,262**	**51.71**	**51.71**
.5	**1,811**	**17.80**	**69.51**
1	**376**	**3.70**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
751 .
752 . /*Magnesium -- mg*/
753 .
754 . summ DR1TMAGN
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TMAGN	**8,531**	**264.4613**	**149.0214**	**0**	**2725**

```
755 . summ DR2TMAGN
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TMAGN	**7,453**	**260.2704**	**141.3616**	**0**	**1912**

```
756 .
757 .
758 . capture drop DR12TMAGN
```

```
759 . gen DR12TMAGN=(DR1TMAGN+DR2TMAGN)/2
    (2,726 missing values generated)

760 .
761 .
762 .
763 . capture drop MAG_DASH

764 . gen MAG_DASH=.
    (10,175 missing values generated)

765 . replace MAG_DASH=(DR12TMAGN/DR12TKCAL)*1000
    (7,449 real changes made)

766 .
767 . summ MAG_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
MAG_DASH	**7,449**	**141.2791**	**44.08901**	**28.81041**	**539.4514**

```
768 .
769 . capture drop MAG_DASH_BR

770 . gen MAG_DASH_BR=.
    (10,175 missing values generated)

771 . replace MAG_DASH_BR=1 if MAG_DASH >=238 & MAG_DASH ~=.
    (269 real changes made)

772 . replace MAG_DASH_BR=0.5 if (MAG_DASH <238 & MAG_DASH>=158)
    (1,783 real changes made)

773 . replace MAG_DASH_BR=0 if (MAG_DASH <158)
    (5,397 real changes made)

774 .
775 . tab MAG_DASH_BR, missing
```

MAG_DASH_BR	Freq.	Percent	Cum.
0	**5,397**	**53.04**	**53.04**
.5	**1,783**	**17.52**	**70.57**
1	**269**	**2.64**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
776 .
777 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

778 .
779 . /*Calcium -- mg*/
780 .
```

```
781 . summ DR1TCALC
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TCALC	**8,531**	**934.2482**	**578.0352**	**6**	**7337**

```
782 . summ DR2TCALC
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TCALC	**7,453**	**933.9057**	**596.7542**	**0**	**11164**

```
783 .
784 .
785 . capture drop DR12TCALC

786 . gen DR12TCALC=(DR1TCALC+DR2TCALC)/2
    (2,726 missing values generated)

787 .
788 . capture drop CAL_DASH

789 . gen CAL_DASH=.
    (10,175 missing values generated)

790 . replace CAL_DASH=(DR2TCALC/DR12TKCAL)*1000
    (7,449 real changes made)

791 .
792 .
793 . capture drop CAL_DASH

794 . gen CAL_DASH=.
    (10,175 missing values generated)

795 . replace CAL_DASH=(DR12TCALC/DR12TKCAL)*1000
    (7,449 real changes made)

796 .
797 . summ CAL_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
CAL_DASH	**7,449**	**514.6868**	**218.827**	**52.19553**	**2379.53**

```
798 .
799 . capture drop CAL_DASH_BR

800 . gen CAL_DASH_BR=.
    (10,175 missing values generated)

801 . replace CAL_DASH_BR=1 if CAL_DASH >=590 & CAL_DASH ~=.
    (2,295 real changes made)

802 . replace CAL_DASH_BR=0.5 if (CAL_DASH <590 & CAL_DASH>=402)
    (2,655 real changes made)
```

```
803 . replace CAL_DASH_BR=0 if (CAL_DASH <402)
    (2,499 real changes made)

804 .
805 . tab CAL_DASH_BR, missing
```

CAL_DASH_BR	Freq.	Percent	Cum.
0	**2,499**	**24.56**	**24.56**
.5	**2,655**	**26.09**	**50.65**
1	**2,295**	**22.56**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
806 .
807 .
808 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

809 .
810 . /*Potassium -- mg*/
811 .
812 . summ DR1TPOTA
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TPOTA	**8,531**	**2358.753**	**1214.393**	**68**	**15876**

```
813 . summ DR2TPOTA
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TPOTA	**7,453**	**2354.313**	**1186.952**	**0**	**19663**

```
814 .
815 .
816 . capture drop DR12TPOTA

817 . gen DR12TPOTA=(DR1TPOTA+DR2TPOTA)/2
    (2,726 missing values generated)

818 .
819 .
820 .
821 . capture drop POT_DASH

822 . gen POT_DASH=.
    (10,175 missing values generated)

823 . replace POT_DASH=(DR12TPOTA*1000/DR12TKCAL)
    (7,449 real changes made)

824 .
825 . summ POT_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
POT_DASH	**7,449**	**1280.659**	**372.5777**	**392.7966**	**4360.613**

```
826 .
827 . capture drop POT_DASH_BR

828 . gen POT_DASH_BR=.
    (10,175 missing values generated)

829 . replace POT_DASH_BR=1 if POT_DASH >=2238 & POT_DASH ~=.
    (149 real changes made)

830 . replace POT_DASH_BR=0.5 if (POT_DASH <2238 & POT_DASH>=1534)
    (1,441 real changes made)

831 . replace POT_DASH_BR=0 if (POT_DASH <1534)
    (5,859 real changes made)

832 .
833 . tab POT_DASH_BR, missing
```

POT_DASH_BR	Freq.	Percent	Cum.
0	**5,859**	**57.58**	**57.58**
.5	**1,441**	**14.16**	**71.74**
1	**149**	**1.46**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
834 .
835 .
836 . /*Sodium*/
837 .
838 . summ DR1TSODI
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR1TSODI	**8,531**	**3178.13**	**1818.145**	**17**	**21399**

```
839 . summ DR2TSODI
```

Variable	Obs	Mean	Std. dev.	Min	Max
DR2TSODI	**7,453**	**3051.957**	**1689.761**	**0**	**20683**

```
840 .
841 .
842 .
843 . capture drop DR12TSODI

844 . gen DR12TSODI=(DR1TSODI+DR2TSODI)/2
    (2,726 missing values generated)

845 .
846 .
847 . capture drop SOD_DASH
```

```
848 . gen SOD_DASH=.
    (10,175 missing values generated)

849 . replace SOD_DASH=(DR12TSODI/DR12TKCAL)*1000
    (7,449 real changes made)

850 .
851 .
852 . summ SOD_DASH
```

Variable	Obs	Mean	Std. dev.	Min	Max
SOD_DASH	**7,449**	**1636.255**	**468.0715**	**189.589**	**8515.513**

```
853 .
854 . capture drop SOD_DASH_BR

855 . gen SOD_DASH_BR=.
    (10,175 missing values generated)

856 . replace SOD_DASH_BR=1 if SOD_DASH <=1143
    (666 real changes made)

857 . replace SOD_DASH_BR=0.5 if (SOD_DASH >1143 & SOD_DASH<=1286)
    (652 real changes made)

858 . replace SOD_DASH_BR=0 if (SOD_DASH >1286) &  SOD_DASH ~=.
    (6,131 real changes made)

859 .
860 . tab SOD_DASH_BR, missing
```

SOD_DASH_BR	Freq.	Percent	Cum.
0	**6,131**	**60.26**	**60.26**
.5	**652**	**6.41**	**66.66**
1	**666**	**6.55**	**73.21**
.	**2,726**	**26.79**	**100.00**
Total	**10,175**	**100.00**	

```
861 .
862 . /*DASH total score*/
863 .
864 . capture drop DASH_TOTAL_SCORE

865 . gen DASH_TOTAL_SCORE = SAT_FAT_DASH_BR+TOT_FAT_DASH_BR+PROT_DASH_BR+CHOL_DASH_BR+FIB_DASH_BR+MAG_DASH_BR+CAL_DASH_BR+P
    (2,726 missing values generated)

866 .
867 . tab DASH_TOTAL_SCORE
```

DASH_TOTAL_SCORE	Freq.	Percent	Cum.
0	**276**	**3.71**	**3.71**
.5	**700**	**9.40**	**13.10**
1	**1,035**	**13.89**	**27.00**
1.5	**1,154**	**15.49**	**42.49**
2	**1,044**	**14.02**	**56.50**
2.5	**854**	**11.46**	**67.97**
3	**786**	**10.55**	**78.52**
3.5	**567**	**7.61**	**86.13**
4	**380**	**5.10**	**91.23**
4.5	**262**	**3.52**	**94.75**
5	**145**	**1.95**	**96.70**
5.5	**121**	**1.62**	**98.32**

6	**50**	**0.67**	**98.99**
6.5	**34**	**0.46**	**99.45**
7	**26**	**0.35**	**99.80**
7.5	**11**	**0.15**	**99.95**
8	**2**	**0.03**	**99.97**
8.5	**1**	**0.01**	**99.99**
9	**1**	**0.01**	**100.00**
Total	**7,449**	**100.00**	

```
868 .
869 . capture drop DASH_TOTAL_SCORE_BR

870 . gen DASH_TOTAL_SCORE_BR=.
    (10,175 missing values generated)

871 . replace DASH_TOTAL_SCORE_BR=1 if DASH_TOTAL_SCORE<4.5
    (6,796 real changes made)

872 . replace DASH_TOTAL_SCORE_BR=0 if DASH_TOTAL_SCORE>=4.5 & DASH_TOTAL_SCORE ~=.
    (653 real changes made)

873 .
874 . tab DASH_TOTAL_SCORE_BR
```

DASH_TOTAL_SCORE_BR	Freq.	Percent	Cum.
0	**653**	**8.77**	**8.77**
1	**6,796**	**91.23**	**100.00**
Total	**7,449**	**100.00**	

```
875 .
876 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

877 .
878 .
879 .
880 . ****************************PHYSICAL ACTIVITY: MODERATE OR VIGOROUS, WORK OR RECREATIONAL*****************************
881 .
882 . capture rename paq605-paq772c, upper

883 .
884 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

885 .
886 .
887 . tab PAQ605, missing
```

Vigorous work activity	Freq.	Percent	Cum.
1	**1,172**	**11.52**	**11.52**
2	**5,975**	**58.72**	**70.24**
7	**1**	**0.01**	**70.25**
.	**3,027**	**29.75**	**100.00**
Total	**10,175**	**100.00**	

888 . tab PAQ620, missing

Moderate work activity	Freq.	Percent	Cum.
1	2,308	22.68	22.68
2	4,837	47.54	70.22
7	1	0.01	70.23
9	2	0.02	70.25
.	3,027	29.75	100.00
Total	10,175	100.00	

889 . tab PAQ635, missing

Walk or bicycle	Freq.	Percent	Cum.
1	2,047	20.12	20.12
2	5,099	50.11	70.23
9	1	0.01	70.24
.	3,028	29.76	100.00
Total	10,175	100.00	

890 . tab PAQ650, missing

Vigorous recreational activities	Freq.	Percent	Cum.
1	2,059	20.24	20.24
2	5,087	50.00	70.23
9	1	0.01	70.24
.	3,028	29.76	100.00
Total	10,175	100.00	

891 . tab PAQ665, missing

Moderate recreational activities	Freq.	Percent	Cum.
1	3,059	30.06	30.06
2	4,084	40.14	70.20
9	2	0.02	70.22
.	3,030	29.78	100.00
Total	10,175	100.00	

892 .

```
893 . capture drop PHYSICAL

894 . gen PHYSICAL=.
    (10,175 missing values generated)

895 . replace PHYSICAL=1 if (PAQ605==1 | PAQ620==1 | PAQ650==1 | PAQ665==1 | PAQ635)
    (10,175 real changes made)

896 . replace PHYSICAL=0 if PAQ605==2 & PAQ620==2 & PAQ650==2 & PAQ665==2 & PAQ635==2
    (1,697 real changes made)

897 .
898 . tab1 PAQ670 PAQ655 PAQ640 PAQ625 PAQ610
```

-> tabulation of PAQ670

Days moderate recreational activities	Freq.	Percent	Cum.
1	415	13.57	13.57
2	603	19.71	33.28
3	732	23.93	57.21
4	318	10.40	67.60
5	537	17.55	85.16
6	105	3.43	88.59
7	346	11.31	99.90
99	3	0.10	100.00
Total	3,059	100.00	

-> tabulation of PAQ655

Days vigorous recreational activities	Freq.	Percent	Cum.
1	218	10.59	10.59
2	388	18.85	29.45
3	493	23.96	53.40
4	295	14.33	67.74
5	417	20.26	88.00
6	112	5.44	93.44
7	133	6.46	99.90
99	2	0.10	100.00
Total	2,058	100.00	

-> tabulation of PAQ640

Number of days walk or bicycle	Freq.	Percent	Cum.
1	115	5.62	5.62
2	209	10.21	15.83
3	263	12.85	28.68
4	162	7.91	36.59
5	563	27.50	64.09
6	108	5.28	69.37
7	627	30.63	100.00
Total	2,047	100.00	

-> tabulation of PAQ625

Number of days moderate work	Freq.	Percent	Cum.
1	**181**	**7.85**	**7.85**
2	**299**	**12.96**	**20.81**
3	**374**	**16.21**	**37.02**
4	**241**	**10.45**	**47.46**
5	**747**	**32.38**	**79.84**
6	**146**	**6.33**	**86.17**
7	**315**	**13.65**	**99.83**
77	**1**	**0.04**	**99.87**
99	**3**	**0.13**	**100.00**
Total	**2,307**	**100.00**	

-> tabulation of PAQ610

Number of days vigorous work	Freq.	Percent	Cum.
1	**130**	**11.09**	**11.09**
2	**166**	**14.16**	**25.26**
3	**183**	**15.61**	**40.87**
4	**110**	**9.39**	**50.26**
5	**373**	**31.83**	**82.08**
6	**100**	**8.53**	**90.61**
7	**109**	**9.30**	**99.91**
99	**1**	**0.09**	**100.00**
Total	**1,172**	**100.00**	

```
899 .
900 . foreach x of varlist PAQ670 PAQ655 PAQ640 PAQ625 PAQ610 {
  2.         gen `x'r=`x' if `x'~=77 & `x'~=99
  3. }
(7,119 missing values generated)
(8,119 missing values generated)
(8,128 missing values generated)
(7,872 missing values generated)
(9,004 missing values generated)

901 .
902 . save, replace
file NHANES_NFL_MORTALITY_PAPER.dta saved

903 .
904 .
905 . describe PAQ* PAD*
```

Variable name	Storage type	Display format	Value label	Variable label
PAQ605	double	%10.0g		**Vigorous work activity**
PAQ610	double	%10.0g		**Number of days vigorous work**
PAQ620	double	%10.0g		**Moderate work activity**
PAQ625	double	%10.0g		**Number of days moderate work**
PAQ635	double	%10.0g		**Walk or bicycle**
PAQ640	double	%10.0g		**Number of days walk or bicycle**
PAQ650	double	%10.0g		**Vigorous recreational activities**
PAQ655	double	%10.0g		**Days vigorous recreational activities**
PAQ665	double	%10.0g		**Moderate recreational activities**
PAQ670	double	%10.0g		**Days moderate recreational activities**
PAQ706	double	%10.0g		**Days physically active at least 60 min.**
PAQ710	double	%10.0g		**Hours watch TV or videos past 30 days**
PAQ715	double	%10.0g		**Hours use computer past 30 days**
PAQ722	double	%10.0g		**Any physical activities past 7 days**
PAQ724A	double	%10.0g		**Physical activity aerobics**
PAQ724B	double	%10.0g		**Physical activity baseball**
PAQ724C	double	%10.0g		**Physical activity basketball**
PAQ724D	double	%10.0g		**Physical activity bike riding**
PAQ724E	double	%10.0g		**Physical activity cheerleading**
PAQ724F	double	%10.0g		**Physical activity dance**
PAQ724G	double	%10.0g		**Physical activity field hockey**
PAQ724H	double	%10.0g		**Physical activity football**
PAQ724I	double	%10.0g		**Physical activity golf**
PAQ724J	double	%10.0g		**Physical activity gymnastics**
PAQ724K	double	%10.0g		**Physical activity hiking**
PAQ724L	double	%10.0g		**Physical activity ice hockey**
PAQ724M	double	%10.0g		**Physical activity ice skating**
PAQ724N	double	%10.0g		**Physical activity jumping rope**
PAQ724O	double	%10.0g		**Physical activity lacrosse**
PAQ724P	double	%10.0g		**Physical activity martial arts**
PAQ724Q	double	%10.0g		**Physical activity playing games**
PAQ724R	double	%10.0g		**Physical activity roller blading**
PAQ724S	double	%10.0g		**Physical activity running**
PAQ724T	double	%10.0g		**Physical activity scooter riding**
PAQ724U	double	%10.0g		**Physical activity skateboarding**
PAQ724V	double	%10.0g		**Physical activity soccer**
PAQ724W	double	%10.0g		**Physical activity swimming**
PAQ724X	double	%10.0g		**Physical activity tennis**
PAQ724Y	double	%10.0g		**Physical activity track & field**
PAQ724Z	double	%10.0g		**Physical activity volleyball**
PAQ724AA	double	%10.0g		**Physical activity walking**
PAQ724AB	double	%10.0g		**Physical activity wrestling**
PAQ724AC	double	%10.0g		**Physical activity frisbee**
PAQ724AD	double	%10.0g		**Physical activity backyard games**
PAQ724AE	double	%10.0g		**Physical activity trampoline**
PAQ724AF	double	%10.0g		**Physical activity horseback riding**
PAQ724CM	double	%10.0g		**Physical activity other**
PAQ731	double	%10.0g		**Days played active video games**
PAQ677	double	%10.0g		**Past wk # days cardiovascular exercise**
PAQ678	double	%10.0g		**Past wk # days strengthened muscles**
PAQ740	double	%10.0g		**Use school facilities at lunch**
PAQ742	double	%10.0g		**Use school facilities for physical activ**
PAQ744	double	%10.0g		**Have PE during school days?**
PAQ746	double	%10.0g		**How often do you have PE or gym?**
PAQ748	double	%10.0g		**How long is the PE or gym class?**
PAQ755	double	%10.0g		**Participate in school sports?**
PAQ759A	double	%10.0g		**Participate in baseball**
PAQ759B	double	%10.0g		**Participate in basketball**
PAQ759C	double	%10.0g		**Participate in bocce ball**
PAQ759D	double	%10.0g		**Participate in cheerleading**
PAQ759E	double	%10.0g		**Participate in football**
PAQ759F	double	%10.0g		**Participate in golf**
PAQ759G	double	%10.0g		**Participate in gymnastics**
PAQ759H	double	%10.0g		**Participate in hockey**

PAQ759I	double	%10.0g	**Participate in lacrosse**
PAQ759J	double	%10.0g	**Participate in soccer**
PAQ759K	double	%10.0g	**Participate in swimming/diving**
PAQ759L	double	%10.0g	**Participate in tennis**
PAQ759M	double	%10.0g	**Participate in track and field**
PAQ759N	double	%10.0g	**Participate in volleyball**
PAQ759O	double	%10.0g	**Participate in wrestling**
PAQ759P	double	%10.0g	**Participate in other specify**
PAQ759Q	double	%10.0g	**Participate in dance**
PAQ759R	double	%10.0g	**Participate in frisbee**
PAQ759S	double	%10.0g	**Participate in running**
PAQ759T	double	%10.0g	**Participate in trampoline**
PAQ759U	double	%10.0g	**Participate in martial arts**
PAQ759V	double	%10.0g	**Participate in walking**
PAQ762	double	%10.0g	**Do you have recess during school?**
PAQ764	double	%10.0g	**How often do you have recess?**
PAQ766	double	%10.0g	**How long is the recess period?**
PAQ679	double	%10.0g	**How much exercise for good health**
PAQ750	double	%10.0g	**Enjoy participating in PE or recess**
PAQ770	double	%10.0g	**Receive physical fitness award past yr**
PAQ772A	double	%10.0g	**Fitness award Fitnessgram**
PAQ772B	double	%10.0g	**Fitness award President's Challenge**
PAQ772C	double	%10.0g	**Fitness award other specify**
PAQ670r	float	%9.0g	
PAQ655r	float	%9.0g	
PAQ640r	float	%9.0g	
PAQ625r	float	%9.0g	
PAQ610r	float	%9.0g	
PAD615	double	%10.0g	**Minutes vigorous-intensity work**
PAD630	double	%10.0g	**Minutes moderate-intensity work**
PAD645	double	%10.0g	**Minutes walk/bicycle for transportation**
PAD660	double	%10.0g	**Minutes vigorous recreational activities**
PAD675	double	%10.0g	**Minutes moderate recreational activities**
PAD680	double	%10.0g	**Minutes sedentary activity**
PAD733	double	%10.0g	**Minutes play active video games**

```
906 .
907 .
908 . **PAD615          double  %10.0g               Minutes vigorous-intensity work
909 . **PAD630          double  %10.0g               Minutes moderate-intensity work
910 . **PAD645          double  %10.0g               Minutes walk/bicycle for transportation
911 . **PAD660          double  %10.0g               Minutes vigorous recreational activities
912 . **PAD675          double  %10.0g               Minutes moderate recreational activities
913 . **PAD680          double  %10.0g               Minutes sedentary activity
914 . **PAD733          double  %10.0g               Minutes play active video games
915 .
916 . su PAD615 PAD630 PAD645 PAD660 PAD675 PAD680 PAD733
```

Variable	Obs	Mean	Std. dev.	Min	Max
PAD615	**1,168**	**187.5086**	**433.8161**	**10**	**9999**
PAD630	**2,299**	**152.8164**	**379.6938**	**10**	**9999**
PAD645	**2,043**	**71.95839**	**387.5661**	**10**	**9999**
PAD660	**2,055**	**91.97129**	**383.0116**	**10**	**9999**
PAD675	**3,056**	**63.2091**	**59.69457**	**10**	**900**
PAD680	**7,139**	**478.549**	**644.3079**	**0**	**9999**
PAD733	**798**	**106.1241**	**499.8816**	**5**	**9999**

```
917 .
918 . tab1 PAD615 PAD630 PAD645 PAD660 PAD675 PAD680 PAD733
```

-> tabulation of PAD615

Minutes vigorous-intensity work	Freq.	Percent	Cum.
10	46	3.94	3.94
12	3	0.26	4.20
15	32	2.74	6.93
20	27	2.31	9.25
21	1	0.09	9.33
25	2	0.17	9.50
30	91	7.79	17.29
35	2	0.17	17.47
40	10	0.86	18.32
45	20	1.71	20.03
60	197	16.87	36.90
75	1	0.09	36.99
90	22	1.88	38.87
120	212	18.15	57.02
130	1	0.09	57.11
160	1	0.09	57.19
180	135	11.56	68.75
240	136	11.64	80.39
300	53	4.54	84.93
360	60	5.14	90.07
420	12	1.03	91.10
480	64	5.48	96.58
540	13	1.11	97.69
600	15	1.28	98.97
660	3	0.26	99.23
720	5	0.43	99.66
840	1	0.09	99.74
1080	1	0.09	99.83
9999	2	0.17	100.00
Total	1,168	100.00	

-> tabulation of PAD630

Minutes moderate-intensity work	Freq.	Percent	Cum.
10	104	4.52	4.52
12	1	0.04	4.57
15	82	3.57	8.13
16	2	0.09	8.22
19	1	0.04	8.26
20	98	4.26	12.53
25	9	0.39	12.92
29	1	0.04	12.96
30	247	10.74	23.71
31	1	0.04	23.75
35	1	0.04	23.79
40	20	0.87	24.66
45	40	1.74	26.40
50	1	0.04	26.45
55	2	0.09	26.53
60	439	19.10	45.63
65	1	0.04	45.67
70	1	0.04	45.72

80	2	0.09	45.80
90	46	2.00	47.80
120	421	18.31	66.12
150	3	0.13	66.25
160	1	0.04	66.29
180	207	9.00	75.29
240	263	11.44	86.73
300	84	3.65	90.39
360	76	3.31	93.69
420	29	1.26	94.95
480	78	3.39	98.35
540	6	0.26	98.61
600	18	0.78	99.39
660	1	0.04	99.43
720	9	0.39	99.83
900	1	0.04	99.87
9999	3	0.13	100.00
Total	2,299	100.00	

-> tabulation of PAD645

Minutes walk/bicycle for transportation	Freq.	Percent	Cum.
10	239	11.70	11.70
11	2	0.10	11.80
12	5	0.24	12.04
13	3	0.15	12.19
14	3	0.15	12.33
15	176	8.61	20.95
16	1	0.05	21.00
18	1	0.05	21.05
20	275	13.46	34.51
22	1	0.05	34.56
25	34	1.66	36.22
27	1	0.05	36.27
30	393	19.24	55.51
35	9	0.44	55.95
37	1	0.05	56.00
40	62	3.03	59.03
45	74	3.62	62.65
46	1	0.05	62.70
50	7	0.34	63.04
60	369	18.06	81.11
90	42	2.06	83.16
95	1	0.05	83.21
115	1	0.05	83.26
120	193	9.45	92.71
130	1	0.05	92.76
180	66	3.23	95.99
240	43	2.10	98.09
300	12	0.59	98.68
360	8	0.39	99.07
420	3	0.15	99.22
480	7	0.34	99.56
600	2	0.10	99.66
720	2	0.10	99.76
840	2	0.10	99.85
9999	3	0.15	100.00
Total	2,043	100.00	

-> tabulation of PAD660

Minutes vigorous recreational activities	Freq.	Percent	Cum.
10	38	1.85	1.85
11	1	0.05	1.90
12	2	0.10	2.00
14	2	0.10	2.09
15	39	1.90	3.99
18	1	0.05	4.04
20	73	3.55	7.59
25	17	0.83	8.42
29	1	0.05	8.47
30	287	13.97	22.43
31	1	0.05	22.48
35	8	0.39	22.87
40	57	2.77	25.64
44	1	0.05	25.69
45	160	7.79	33.48
46	1	0.05	33.53
47	3	0.15	33.67
50	13	0.63	34.31
55	2	0.10	34.40
60	600	29.20	63.60
70	4	0.19	63.80
72	1	0.05	63.84
75	12	0.58	64.43
80	4	0.19	64.62
85	1	0.05	64.67
90	163	7.93	72.60
105	2	0.10	72.70
115	1	0.05	72.75
120	369	17.96	90.71
150	6	0.29	91.00
180	116	5.64	96.64
240	44	2.14	98.78
270	1	0.05	98.83
300	13	0.63	99.46
330	1	0.05	99.51
360	5	0.24	99.76
480	1	0.05	99.81
600	1	0.05	99.85
9999	3	0.15	100.00
Total	2,055	100.00	

-> tabulation of PAD675

Minutes moderate recreational activities	Freq.	Percent	Cum.
10	95	3.11	3.11
12	2	0.07	3.17
13	1	0.03	3.21
15	138	4.52	7.72
16	1	0.03	7.76
20	252	8.25	16.00
22	1	0.03	16.03
25	37	1.21	17.24
30	695	22.74	39.99

35	16	0.52	40.51
39	1	0.03	40.54
40	65	2.13	42.67
45	190	6.22	48.89
50	24	0.79	49.67
53	1	0.03	49.71
55	2	0.07	49.77
60	892	29.19	78.96
65	1	0.03	78.99
70	7	0.23	79.22
75	5	0.16	79.38
80	2	0.07	79.45
85	1	0.03	79.48
90	106	3.47	82.95
100	1	0.03	82.98
115	1	0.03	83.02
120	318	10.41	93.42
135	1	0.03	93.46
150	7	0.23	93.68
180	90	2.95	96.63
210	1	0.03	96.66
240	64	2.09	98.76
300	19	0.62	99.38
360	6	0.20	99.57
420	2	0.07	99.64
480	8	0.26	99.90
540	1	0.03	99.93
600	1	0.03	99.97
900	1	0.03	100.00
Total	3,056	100.00	

-> tabulation of PAD680

Minutes sedentary activity	Freq.	Percent	Cum.
0	1	0.01	0.01
1	2	0.03	0.04
5	2	0.03	0.07
10	1	0.01	0.08
15	4	0.06	0.14
20	4	0.06	0.20
25	1	0.01	0.21
30	14	0.20	0.41
45	2	0.03	0.43
60	116	1.62	2.06
81	1	0.01	2.07
90	11	0.15	2.23
105	1	0.01	2.24
120	372	5.21	7.45
150	3	0.04	7.49
180	435	6.09	13.59
240	620	8.68	22.27
300	584	8.18	30.45
360	694	9.72	40.17
420	363	5.08	45.26
480	1,604	22.47	67.73
490	1	0.01	67.74
540	476	6.67	74.41
600	868	12.16	86.57
660	158	2.21	88.78
720	448	6.28	95.06
780	63	0.88	95.94
840	104	1.46	97.39
900	74	1.04	98.43

960	54	0.76	99.19
1020	8	0.11	99.30
1080	17	0.24	99.54
1140	1	0.01	99.55
1200	2	0.03	99.58
7777	1	0.01	99.59
9999	29	0.41	100.00
Total	7,139	100.00	

-> tabulation of PAD733

Minutes play active video games	Freq.	Percent	Cum.
5	2	0.25	0.25
10	10	1.25	1.50
15	10	1.25	2.76
20	20	2.51	5.26
25	1	0.13	5.39
30	137	17.17	22.56
35	1	0.13	22.68
40	5	0.63	23.31
45	16	2.01	25.31
49	1	0.13	25.44
60	329	41.23	66.67
90	13	1.63	68.30
120	170	21.30	89.60
180	54	6.77	96.37
240	19	2.38	98.75
300	1	0.13	98.87
360	3	0.38	99.25
420	2	0.25	99.50
480	1	0.13	99.62
600	1	0.13	99.75
9999	2	0.25	100.00
Total	798	100.00	

```
919 .
920 .
921 . foreach x of varlist PAD615 PAD630 PAD645 PAD660 PAD675 PAD680 PAD733 {
      2.         capture drop `x'r
      3. }

922 .
923 .
924 . foreach x of varlist PAD615 PAD630 PAD645 PAD660 PAD675 PAD680 PAD733 {
      2.         gen `x'r=`x' if `x'~=9999
      3. }
    (9,009 missing values generated)
    (7,879 missing values generated)
    (8,135 missing values generated)
    (8,123 missing values generated)
    (7,119 missing values generated)
    (3,065 missing values generated)
    (9,379 missing values generated)
```

```
925 .
926 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

927 .
928 . **PAQ605          double  %10.0g                Vigorous work activity
929 . **PAQ610          double  %10.0g                Number of days vigorous work
930 . **PAQ620          double  %10.0g                Moderate work activity
931 . **PAQ625          double  %10.0g                Number of days moderate work
932 . **PAQ635          double  %10.0g                Walk or bicycle
933 . **PAQ640          double  %10.0g                Number of days walk or bicycle
934 . **PAQ650          double  %10.0g                Vigorous recreational activities
935 . **PAQ655          double  %10.0g                Days vigorous recreational activities
936 . **PAQ665          double  %10.0g                Moderate recreational activities
937 . **PAQ670          double  %10.0g                Days moderate recreational activities
938 . **PAQ706          double  %10.0g                Days physically active at least 60 min.
939 . **PAQ710          double  %10.0g                Hours watch TV or videos past 30 days
940 . **PAQ715          double  %10.0g                Hours use computer past 30 days
941 . **PAQ722          double  %10.0g                Any physical activities past 7 days
942 .
943 .
944 . su PAQ605 PAQ610 PAQ620 PAQ625 PAQ635 PAQ640 PAQ650 PAQ655 PAQ665 PAQ670 PAQ706 PAQ710 PAQ715 PAQ722
```

Variable	Obs	Mean	Std. dev.	Min	Max
PAQ605	**7,148**	**1.836738**	**.3752659**	**1**	**7**
PAQ610	**1,172**	**4.076792**	**3.304771**	**1**	**99**
PAQ620	**7,148**	**1.679771**	**.4874233**	**1**	**9**
PAQ625	**2,307**	**4.358474**	**4.137308**	**1**	**99**
PAQ635	**7,147**	**1.714566**	**.4602464**	**1**	**9**
PAQ640	**2,047**	**4.798241**	**1.910468**	**1**	**7**
PAQ650	**7,147**	**1.712887**	**.4610255**	**1**	**9**
PAQ655	**2,058**	**3.663265**	**3.407621**	**1**	**99**
PAQ665	**7,145**	**1.573828**	**.510158**	**1**	**9**
PAQ670	**3,059**	**3.636156**	**3.507445**	**1**	**99**
PAQ706	**2,989**	**5.802275**	**5.276052**	**0**	**99**
PAQ710	**9,448**	**2.516406**	**2.592166**	**0**	**99**
PAQ715	**9,448**	**3.160457**	**3.160951**	**0**	**8**
PAQ722	**2,707**	**1.19505**	**.4216138**	**1**	**9**

```
945 .
946 . foreach x of varlist PAQ605 PAQ610 PAQ620 PAQ625 PAQ635 PAQ640 PAQ650 PAQ655 PAQ665 PAQ670 PAQ706 PAQ710 PAQ715 PAQ722
      2.         capture drop `x'r
      3. }

947 .
948 .
949 .
950 .
951 .
952 . foreach x of varlist PAQ605 PAQ610 PAQ620 PAQ625 PAQ635 PAQ640 PAQ650 PAQ655 PAQ665 PAQ670 PAQ706 PAQ710 PAQ715 PAQ722
      2.         gen `x'r=`x' if `x'~=9 | `x'~=99
      3. }
    (3,027 missing values generated)
    (9,003 missing values generated)
    (3,027 missing values generated)
    (7,868 missing values generated)
    (3,028 missing values generated)
    (8,128 missing values generated)
    (3,028 missing values generated)
    (8,117 missing values generated)
    (3,030 missing values generated)
    (7,116 missing values generated)
    (7,186 missing values generated)
    (727 missing values generated)
```

```
    (727 missing values generated)
    (7,468 missing values generated)

953 .
954 . save, replace
    file NHANES_NFL_MORTALITY_PAPER.dta saved

955 .
956 . *Walking MET-min/week - use median time of each category*
957 . capture drop walkperday

958 . gen walkperday = PAD645r
    (8,135 missing values generated)

959 . label var walkperday "walking minutes per day"

960 .
961 . *Frequency of Walking (no days per week) - use median time of each category*
962 . capture drop walkperweek

963 . gen walkperweek = PAQ640r
    (8,128 missing values generated)

964 . label var walkperweek "walking days per week"

965 .
966 . *Calculate walking MET-min/week*
967 . capture drop walkMETmin

968 . gen walkMETmin = 3.3 * walkperday * walkperweek
    (8,135 missing values generated)

969 . label var walkMETmin "MET-min per week walking"

970 .
971 . *Moderate exercise MET-min/week*
972 . capture drop modperday

973 . gen modperday = (PAD630r+PAD675r)
    (9,053 missing values generated)

974 . label var modperday "moderate exercise minutes per day"

975 .
976 . *Frequency of moderate exercise (no days per week)*
977 . capture drop modperweek

978 . gen modperweek =  (PAQ625r+PAQ670r)
    (9,048 missing values generated)

979 . label var modperweek "moderate exercise days per week"

980 .
981 . *Calculate moderate exercise MET-min/week*
982 . capture drop modMETmin
```

```
 983 . gen modMETmin = 4.0 * modperday * modperweek
     (9,053 missing values generated)

 984 . label var modMETmin "MET-min per week moderate exercise"

 985 .
 986 . *Vigorous exercise MET-min/week*
 987 . capture drop vigperday

 988 . gen vigperday = (PAD615r+PAD660r)
     (9,782 missing values generated)

 989 . label var vigperday "vigorous exercise minutes per day"

 990 .
 991 . *Frequency of vigorous exercise (no days per week)*
 992 . capture drop vigperweek

 993 . gen vigperweek = (PAQ610r+PAQ655r)
     (9,781 missing values generated)

 994 . label var vigperweek "vigorous exercise days per week"

 995 .
 996 . *Calculate vigorous exercise MET-min/week*
 997 . capture drop vigMETmin

 998 . gen vigMETmin = 8.0 * vigperday * vigperweek
     (9,782 missing values generated)

 999 . label var vigMETmin "MET-min per week vigorous exercise"

1000 .
1001 .
1002 . ****Calculate TOTAL MET-min per week*******
1003 . capture drop METmin

1004 . order modMETmin, before(vigMETmin)

1005 . order walkMETmin, before(modMETmin)

1006 . egen METmin = rowtotal(walkMETmin-vigMETmin)

1007 . label var METmin "MET-min per week total exercise" // missing values exist - consider imputation

1008 .
1009 .
1010 . capture drop PHYSICAL_days_average

1011 . gen PHYSICAL_days_average=METmin

1012 .
1013 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved
```

```
1014 .
1015 .
1016 . ****SELF-RATED HEALTH**
1017 . tab HSD010, missing
```

General health condition	Freq.	Percent	Cum.
1	641	6.30	6.30
2	1,826	17.95	24.25
3	2,605	25.60	49.85
4	1,186	11.66	61.50
5	208	2.04	63.55
9	1	0.01	63.56
.	3,708	36.44	100.00
Total	10,175	100.00	

```
1018 .
1019 . capture drop SELF_RATED_HEALTH

1020 . gen SELF_RATED_HEALTH=.
     (10,175 missing values generated)

1021 . replace SELF_RATED_HEALTH=1 if HSD010>=1 & HSD010<=3
     (5,072 real changes made)

1022 . replace SELF_RATED_HEALTH=2 if HSD010>=4 & HSD010<=5
     (1,394 real changes made)

1023 .
1024 . tab SELF_RATED_HEALTH, missing
```

SELF_RATED_ HEALTH	Freq.	Percent	Cum.
1	5,072	49.85	49.85
2	1,394	13.70	63.55
.	3,709	36.45	100.00
Total	10,175	100.00	

```
1025 .
1026 . **CO-MORBIDITY INDEX**
1027 . tab MCQ160B
```

Ever told had congestive heart failure	Freq.	Percent	Cum.
1	182	3.15	3.15
2	5,579	96.71	99.86
9	8	0.14	100.00
Total	5,769	100.00	

1028 . tab MCQ160C

Ever told you had coronary heart disease	Freq.	Percent	Cum.
1	232	4.02	4.02
2	5,519	95.67	99.69
9	18	0.31	100.00
Total	5,769	100.00	

1029 . tab MCQ160D

Ever told you had angina/angina pectoris	Freq.	Percent	Cum.
1	136	2.36	2.36
2	5,625	97.50	99.86
9	8	0.14	100.00
Total	5,769	100.00	

1030 . tab MCQ160E

Ever told you had heart attack	Freq.	Percent	Cum.
1	230	3.99	3.99
2	5,536	95.96	99.95
9	3	0.05	100.00
Total	5,769	100.00	

1031 . tab MCQ160F

Ever told you had a stroke	Freq.	Percent	Cum.
1	202	3.50	3.50
2	5,562	96.41	99.91
9	5	0.09	100.00
Total	5,769	100.00	

1032 . tab MCQ220

Ever told you had cancer or malignancy	Freq.	Percent	Cum.
1	547	9.48	9.48
2	5,222	90.52	100.00
Total	5,769	100.00	

```
. 
. describe MCQ160B MCQ160C MCQ160D MCQ160E MCQ160F MCQ220

Variable      Storage   Display    Value
    name         type    format    label      Variable label
------------------------------------------------------------------------------------------------------------------------
MCQ160B         double  %10.0g                Ever told had congestive heart failure
MCQ160C         double  %10.0g                Ever told you had coronary heart disease
MCQ160D         double  %10.0g                Ever told you had angina/angina pectoris
MCQ160E         double  %10.0g                Ever told you had heart attack
MCQ160F         double  %10.0g                Ever told you had a stroke
MCQ220          double  %10.0g                Ever told you had cancer or malignancy

. 
. **MCQ160B         double  %10.0g                Ever told had congestive heart failure
. **MCQ160C         double  %10.0g                Ever told you had coronary heart disease
. **MCQ160D         double  %10.0g                Ever told you had angina/angina pectoris
. **MCQ160E         double  %10.0g                Ever told you had heart attack
. **MCQ160F         double  %10.0g                Ever told you had a stroke
. **MCQ220          double  %10.0g                Ever told you had cancer or malignancy
. 
. 
. capture drop CVD_CANCER_HISTORY

. gen CVD_CANCER_HISTORY=.
(10,175 missing values generated)

. replace CVD_CANCER_HISTORY=1 if (MCQ160B==1 | MCQ160C==1 | MCQ160D==1 | MCQ160E==1 | MCQ160F==1 | MCQ220==1)
(1,021 real changes made)

. replace CVD_CANCER_HISTORY=0 if CVD_CANCER_HISTORY==.
(9,154 real changes made)

. 
. tab CVD_CANCER_HISTORY

CVD_CANCER_ |
    HISTORY |      Freq.     Percent        Cum.
------------+-----------------------------------
          0 |      9,154       89.97       89.97
          1 |      1,021       10.03      100.00
------------+-----------------------------------
      Total |     10,175      100.00

. 
. 
. ***************************BODY MASS INDEX*********************************************************************
. 
. 
. capture drop BMI

. gen BMI=BMXBMI
(1,120 missing values generated)

. 
```

```
1058 . su BMI
```

Variable	Obs	Mean	Std. dev.	Min	Max
BMI	**9,055**	**25.67824**	**7.955137**	**12.1**	**82.9**

```
1059 . histogram BMI
     (bin=39, start=12.1, width=1.8153846)

1060 .
1061 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1062 .
1063 .
1064 . ***************************SBP and DBP*************************************************************
1065 .
1066 . capture drop SBP

1067 . gen SBP=(BPXSY1+BPXSY2+BPXSY3)/3
     (3,201 missing values generated)

1068 .
1069 . capture drop DBP

1070 . gen DBP=(BPXDI1+BPXDI2+BPXDI3)/3
     (3,201 missing values generated)

1071 .
1072 . su SBP DBP
```

Variable	Obs	Mean	Std. dev.	Min	Max
SBP	**6,974**	**117.8005**	**17.52939**	**64.66666**	**228.6667**
DBP	**6,974**	**65.17532**	**14.78382**	**0**	**116.6667**

```
1073 .
1074 . histogram SBP
     (bin=38, start=64.666664, width=4.3157897)

1075 . histogram DBP
     (bin=38, start=0, width=3.0701754)

1076 .
1077 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1078 .
1079 . ************************** TOTAL CHOLESTEROL, MMOL/L*************************************************
1080 .
1081 . capture drop TOTALCHOLESTEROLSI

1082 . gen TOTALCHOLESTEROLSI=LBDTCSI
     (2,551 missing values generated)
```

```
1083 .
1084 .
1085 . su TOTALCHOLESTEROLSI

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
TOTALCHOLE~I |      7,624     4.64272    1.059131       1.78      21.02

1086 . histogram TOTALCHOLESTEROLSI
(bin=38, start=1.78, width=.5063158)

1087 .
1088 . save, replace
file NHANES_NFL_MORTALITY_PAPER.dta saved

1089 .
1090 .
1091 . **************************HBA1C*********************************************************************
1092 .
1093 . capture drop HBA1C

1094 . gen HBA1C=LBXGH
(3,532 missing values generated)

1095 .
1096 . histogram HBA1C
(bin=38, start=3.5, width=.36842105)

1097 .
1098 . save,replace
file NHANES_NFL_MORTALITY_PAPER.dta saved

1099 .
1100 . **************************URINARY ALBUMIN:CREATININE RATIO*****************************************
1101 .
1102 .
1103 . capture drop ACR

1104 . gen ACR=URDACT if URDACT<1000
(2,178 missing values generated)

1105 .
1106 . capture drop LnACR

1107 . gen LnACR=ln(ACR)
(2,178 missing values generated)

1108 .
1109 . su LnACR

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
       LnACR |      7,997     2.287459    1.019772  -1.560648   6.886481

1110 . histogram LnACR
(bin=39, start=-1.5606477, width=.21659304)
```

```
1111 .
1112 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1113 .
1114 .
1115 . ****************************NUTRITIONAL BIOMARKERS*************************************************************
1116 .
1117 . **PLASMA 25(OH)D3, NMOL/L**
1118 .
1119 . capture drop VitaminD_serum

1120 . gen VitaminD_serum=LBXVD3MS
     (1,732 missing values generated)

1121 .
1122 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1123 .
1124 . **RBC FOLATE, NMOL/L**
1125 .
1126 . capture drop folate_RBCSI

1127 . gen folate_RBCSI=LBDRFOSI
     (1,715 missing values generated)

1128 .
1129 . su folate_RBCSI

    Variable |        Obs        Mean    Std. dev.       Min        Max
-------------+---------------------------------------------------------
folate_RBCSI |      8,460    1181.695    499.4187        114       6750

1130 . histogram folate_RBCSI
     (bin=39, start=114, width=170.15385)

1131 .
1132 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1133 .
1134 .
1135 . **PLASMA B-12, PMOL/L**
1136 . capture drop vitaminb12_serumsi

1137 . gen vitaminb12_serumsi=LBDB12
     (4,728 missing values generated)

1138 .
1139 . save, replace
     file NHANES_NFL_MORTALITY_PAPER.dta saved

1140 .
1141 . capture log close
```