. capture noisily svy,subpop(age\_35\_59): cloglog dead `base\_vars', eform nolog

(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata = 339 Number of obs = 3867306

Number of PSUs = 678 Population size = 3126764081

Subpop. no. of obs = 2632391

Subpop. size = 2207963432

Design df = 339

F( 5, 335) = 69.22

Prob > F = 0.0000

---------------------------------------------------------------------------------------

| Linearized

dead | exp(b) Std. Err. t P>|t| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

dur\_cat |

1.75-3.00 Yrs | .9718402 .0642388 -0.43 0.666 .8533529 1.106779

3.25-5.00 Yrs | .9178399 .0627192 -1.25 0.210 .8024038 1.049883

5.25-9.75 Yrs | 1.053362 .0723074 0.76 0.449 .9203185 1.205639

|

sex |

Female | .6058854 .0286656 -10.59 0.000 .5520448 .6649772

|

xspd2 |

Serious Psy Distress | 3.334962 .2585889 15.53 0.000 2.86321 3.88444

|

\_cons | .0010092 .0000522 -133.50 0.000 .0009116 .0011172

---------------------------------------------------------------------------------------

. est store m1

.

. margins, at(xspd2= (1 2))

Predictive margins Number of obs = 3867306

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

2.\_at : xspd2 = 2

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0026309 .0001803 14.59 0.000 .0022774 .0029843

2 | .0007897 .0000208 37.88 0.000 .0007488 .0008305

------------------------------------------------------------------------------

. margins, dydx( xspd2)

Average marginal effects Number of obs = 3867306

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0018412 .000185 9.96 0.000 .0014787 .0022037

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. capture noisily svy,subpop(age\_35\_59): cloglog dead `base\_smk', eform nolog

(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata = 339 Number of obs = 3856992

Number of PSUs = 678 Population size = 3118483439

Subpop. no. of obs = 2622077

Subpop. size = 2199682789

Design df = 339

F( 7, 333) = 79.49

Prob > F = 0.0000

---------------------------------------------------------------------------------------

| Linearized

dead | exp(b) Std. Err. t P>|t| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

dur\_cat |

1.75-3.00 Yrs | .9656133 .0638203 -0.53 0.597 .8478972 1.099672

3.25-5.00 Yrs | .9129892 .062244 -1.34 0.183 .7984103 1.044011

5.25-9.75 Yrs | 1.054554 .0724414 0.77 0.440 .9212704 1.207121

|

sex |

Female | .6465464 .0304438 -9.26 0.000 .5893533 .7092896

|

xspd2 |

Serious Psy Distress | 2.751545 .2184201 12.75 0.000 2.353777 3.216531

|

xsmoke |

Current Smoker | 2.424306 .139588 15.38 0.000 2.164716 2.715026

Former Smoker | 1.616169 .1115524 6.96 0.000 1.41099 1.851184

|

\_cons | .0006524 .0000382 -125.19 0.000 .0005814 .0007321

---------------------------------------------------------------------------------------

. est store m2

.

. margins, at(xsmoke= (1 2 3) xspd2= (1 2))

Predictive margins Number of obs = 3852319

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

xsmoke = 1

2.\_at : xspd2 = 1

xsmoke = 2

3.\_at : xspd2 = 1

xsmoke = 3

4.\_at : xspd2 = 2

xsmoke = 1

5.\_at : xspd2 = 2

xsmoke = 2

6.\_at : xspd2 = 2

xsmoke = 3

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0034826 .0002478 14.05 0.000 .0029968 .0039683

2 | .0023231 .000194 11.97 0.000 .0019428 .0027034

3 | .0014381 .0001208 11.90 0.000 .0012013 .0016748

4 | .0012672 .000051 24.84 0.000 .0011672 .0013671

5 | .0008449 .0000432 19.57 0.000 .0007603 .0009296

6 | .0005229 .0000228 22.95 0.000 .0004782 .0005675

------------------------------------------------------------------------------

. margins, dydx( xspd2 xsmoke)

Average marginal effects Number of obs = 3852319

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2 1.xsmoke 2.xsmoke

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0013773 .0001575 8.74 0.000 .0010685 .001686

|

xsmoke |

Current Smoker | .0007826 .000056 13.98 0.000 .0006729 .0008923

Former Smoker | .0003386 .0000523 6.48 0.000 .0002362 .0004411

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. capture noisily svy,subpop(age\_35\_59): cloglog dead `base\_dis', eform nolog

(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata = 339 Number of obs = 3854263

Number of PSUs = 678 Population size = 3116412104

Subpop. no. of obs = 2619348

Subpop. size = 2197611455

Design df = 339

F( 6, 334) = 157.44

Prob > F = 0.0000

---------------------------------------------------------------------------------------

| Linearized

dead | exp(b) Std. Err. t P>|t| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

dur\_cat |

1.75-3.00 Yrs | 1.001093 .0666738 0.02 0.987 .8781738 1.141217

3.25-5.00 Yrs | .974333 .0666071 -0.38 0.704 .8517445 1.114565

5.25-9.75 Yrs | 1.157388 .0787773 2.15 0.032 1.012359 1.323193

|

sex |

Female | .5730947 .0271947 -11.73 0.000 .5220235 .6291623

|

xspd2 |

Serious Psy Distress | 2.387583 .1928357 10.78 0.000 2.036873 2.798678

|

chronic1p |

1+ Condition | 3.177246 .1519104 24.18 0.000 2.892061 3.490553

|

\_cons | .0005791 .0000329 -131.11 0.000 .0005178 .0006476

---------------------------------------------------------------------------------------

. est store m3

.

. margins, at(chronic1p= (1 2) xspd2= (1 2))

Predictive margins Number of obs = 3838055

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

chronic1p = 1

2.\_at : xspd2 = 1

chronic1p = 2

3.\_at : xspd2 = 2

chronic1p = 1

4.\_at : xspd2 = 2

chronic1p = 2

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0035213 .0002514 14.01 0.000 .0030285 .004014

2 | .0011097 .0000919 12.08 0.000 .0009297 .0012898

3 | .0014765 .0000498 29.67 0.000 .0013789 .001574

4 | .000465 .0000173 26.86 0.000 .000431 .0004989

------------------------------------------------------------------------------

. margins, dydx( xspd2 chronic1p)

Average marginal effects Number of obs = 3838055

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2 1.chronic1p

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0012333 .000158 7.81 0.000 .0009237 .0015429

|

chronic1p |

1+ Condition | .0010514 .0000512 20.54 0.000 .0009511 .0011517

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. capture noisily svy,subpop(age\_35\_59): cloglog dead `base\_s\_d', eform nolog

(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata = 339 Number of obs = 3844097

Number of PSUs = 678 Population size = 3108222236

Subpop. no. of obs = 2609182

Subpop. size = 2189421586

Design df = 339

F( 8, 332) = 148.44

Prob > F = 0.0000

---------------------------------------------------------------------------------------

| Linearized

dead | exp(b) Std. Err. t P>|t| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

dur\_cat |

1.75-3.00 Yrs | .9915654 .0660679 -0.13 0.899 .8697666 1.13042

3.25-5.00 Yrs | .964216 .0656349 -0.54 0.593 .843383 1.102361

5.25-9.75 Yrs | 1.149762 .0782873 2.05 0.041 1.005639 1.31454

|

sex |

Female | .6044352 .0285233 -10.67 0.000 .5508554 .6632265

|

xspd2 |

Serious Psy Distress | 1.992794 .1645685 8.35 0.000 1.694014 2.344272

|

xsmoke |

Current Smoker | 2.299592 .1339705 14.29 0.000 2.050612 2.578802

Former Smoker | 1.442084 .1006216 5.25 0.000 1.257144 1.654231

|

chronic1p |

1+ Condition | 3.072247 .1473038 23.41 0.000 2.795746 3.376095

|

\_cons | .0004016 .0000248 -126.71 0.000 .0003556 .0004534

---------------------------------------------------------------------------------------

. est store m4

.

. margins, at(xsmoke= (1 2 3) xspd2= (1 2))

Predictive margins Number of obs = 3823390

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

xsmoke = 1

2.\_at : xspd2 = 1

xsmoke = 2

3.\_at : xspd2 = 1

xsmoke = 3

4.\_at : xspd2 = 2

xsmoke = 1

5.\_at : xspd2 = 2

xsmoke = 2

6.\_at : xspd2 = 2

xsmoke = 3

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0028025 .0002103 13.32 0.000 .0023902 .0032147

2 | .0017587 .0001519 11.58 0.000 .001461 .0020564

3 | .00122 .0001052 11.60 0.000 .0010139 .0014261

4 | .0014076 .0000563 24.99 0.000 .0012973 .001518

5 | .0008831 .0000461 19.14 0.000 .0007926 .0009735

6 | .0006125 .0000274 22.35 0.000 .0005588 .0006662

------------------------------------------------------------------------------

. margins, at(chronic1p= (1 2) xspd2= (1 2))

Predictive margins Number of obs = 3823390

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

chronic1p = 1

2.\_at : xspd2 = 1

chronic1p = 2

3.\_at : xspd2 = 2

chronic1p = 1

4.\_at : xspd2 = 2

chronic1p = 2

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0028587 .0002108 13.56 0.000 .0024455 .0032719

2 | .0009316 .0000783 11.90 0.000 .0007781 .0010851

3 | .0014358 .0000489 29.39 0.000 .00134 .0015315

4 | .0004676 .0000173 27.03 0.000 .0004337 .0005015

------------------------------------------------------------------------------

. margins, dydx( xspd2 xsmoke chronic1p)

Average marginal effects Number of obs = 3823390

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2 1.xsmoke 2.xsmoke 1.chronic1p

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0008693 .0001346 6.46 0.000 .0006054 .0011331

|

xsmoke |

Current Smoker | .0008239 .0000621 13.27 0.000 .0007023 .0009456

Former Smoker | .0002804 .0000561 5.00 0.000 .0001704 .0003904

|

chronic1p |

1+ Condition | .0010002 .0000502 19.93 0.000 .0009019 .0010986

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. capture noisily svy,subpop(age\_35\_59): cloglog dead `base\_s\_d\_s', eform nolog

(running cloglog on estimation sample)

Survey: Complementary log-log regression

Number of strata = 339 Number of obs = 3827243

Number of PSUs = 678 Population size = 3095529216

Subpop. no. of obs = 2592328

Subpop. size = 2176728566

Design df = 339

F( 16, 324) = 99.60

Prob > F = 0.0000

---------------------------------------------------------------------------------------

| Linearized

dead | exp(b) Std. Err. t P>|t| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

dur\_cat |

1.75-3.00 Yrs | 1.001903 .0669998 0.03 0.977 .8784151 1.142751

3.25-5.00 Yrs | .9622554 .0656653 -0.56 0.573 .8413861 1.100488

5.25-9.75 Yrs | 1.15844 .0796306 2.14 0.033 1.011935 1.326155

|

sex |

Female | .5787156 .0279981 -11.31 0.000 .5261829 .636493

|

xspd2 |

Serious Psy Distress | 1.595386 .1298616 5.74 0.000 1.35935 1.872408

|

xsmoke |

Current Smoker | 1.961788 .1150936 11.49 0.000 1.747974 2.201755

Former Smoker | 1.480845 .1038309 5.60 0.000 1.290069 1.699833

|

chronic1p |

1+ Condition | 2.952256 .1408061 22.70 0.000 2.687887 3.242627

|

marital |

Div/Sep | 1.732355 .0902847 10.54 0.000 1.563565 1.919365

Widow | 2.273347 .3163119 5.90 0.000 1.729043 2.988999

Never Married | 1.727365 .1033942 9.13 0.000 1.535507 1.943197

|

educ\_cat |

High Scool Grad. | .6629595 .0343978 -7.92 0.000 .5986375 .7341927

College Grad/Higher | .4698066 .0364714 -9.73 0.000 .4032765 .5473124

|

racehisp |

Hispanic | .9477974 .0749325 -0.68 0.498 .8112948 1.107267

NH Black | 1.49285 .0870282 6.87 0.000 1.331117 1.674234

NH Other | .7051073 .1169058 -2.11 0.036 .5088872 .9769873

|

\_cons | .0005273 .0000438 -90.86 0.000 .0004478 .0006209

---------------------------------------------------------------------------------------

. est store m5

. margins, at(xsmoke= (1 2 3) xspd2= (1 2))

Predictive margins Number of obs = 3798024

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

xsmoke = 1

2.\_at : xspd2 = 1

xsmoke = 2

3.\_at : xspd2 = 1

xsmoke = 3

4.\_at : xspd2 = 2

xsmoke = 1

5.\_at : xspd2 = 2

xsmoke = 2

6.\_at : xspd2 = 2

xsmoke = 3

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .002132 .0001612 13.23 0.000 .0018161 .0024479

2 | .0016101 .0001385 11.62 0.000 .0013386 .0018815

3 | .0010877 .0000926 11.74 0.000 .0009062 .0012693

4 | .0013373 .0000562 23.80 0.000 .0012271 .0014474

5 | .0010097 .0000549 18.40 0.000 .0009022 .0011173

6 | .000682 .0000321 21.25 0.000 .0006191 .0007449

------------------------------------------------------------------------------

. margins, at(chronic1p= (1 2) xspd2= (1 2))

Predictive margins Number of obs = 3798024

Model VCE : Linearized

Expression : Pr(dead), predict()

1.\_at : xspd2 = 1

chronic1p = 1

2.\_at : xspd2 = 1

chronic1p = 2

3.\_at : xspd2 = 2

chronic1p = 1

4.\_at : xspd2 = 2

chronic1p = 2

------------------------------------------------------------------------------

| Delta-method

| Margin Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_at |

1 | .0023649 .0001735 13.63 0.000 .0020249 .0027049

2 | .000802 .0000665 12.06 0.000 .0006717 .0009323

3 | .0014833 .0000509 29.11 0.000 .0013835 .0015832

4 | .0005028 .0000197 25.56 0.000 .0004642 .0005414

------------------------------------------------------------------------------

. margins, dydx(xspd2 xsmoke chronic1p)

Average marginal effects Number of obs = 3798024

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2 1.xsmoke 2.xsmoke 1.chronic1p

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0005618 .0001161 4.84 0.000 .0003342 .0007894

|

xsmoke |

Current Smoker | .0006729 .0000615 10.94 0.000 .0005523 .0007934

Former Smoker | .0003365 .0000636 5.29 0.000 .0002118 .0004613

|

chronic1p |

1+ Condition | .0010041 .0000512 19.63 0.000 .0009038 .0011044

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. margins, dydx(xsmoke chronic1p xspd2)

Average marginal effects Number of obs = 3798024

Model VCE : Linearized

Expression : Pr(dead), predict()

dy/dx w.r.t. : 1.xspd2 1.xsmoke 2.xsmoke 1.chronic1p

---------------------------------------------------------------------------------------

| Delta-method

| dy/dx Std. Err. z P>|z| [95% Conf. Interval]

----------------------+----------------------------------------------------------------

xspd2 |

Serious Psy Distress | .0005618 .0001161 4.84 0.000 .0003342 .0007894

|

xsmoke |

Current Smoker | .0006729 .0000615 10.94 0.000 .0005523 .0007934

Former Smoker | .0003365 .0000636 5.29 0.000 .0002118 .0004613

|

chronic1p |

1+ Condition | .0010041 .0000512 19.63 0.000 .0009038 .0011044

---------------------------------------------------------------------------------------

Note: dy/dx for factor levels is the discrete change from the base level.

.

. estout m1 m2 m3 m4 m5 using "E:\Stata\_mortality\models\_ages35\_59.txt", replace ///

> cells("b(fmt(%5.2f) star) ci(par([ , ]) fmt(%6.2f))" ) eform ///

> stats(N\_sub, fmt(%12.0gc) labels("PY of obs")) ///

> collabels("RR" "95% CI") drop(\_cons) style(fixed)