**. glm dv, family(poisson) link(log) vce(cl mineid) exposure(hours) eform**

Iteration 0: log pseudolikelihood = -10403.696

Iteration 1: log pseudolikelihood = -9571.6889

Iteration 2: log pseudolikelihood = -9569.6224

Iteration 3: log pseudolikelihood = -9569.6223

Generalized linear models No. of obs = 6,253

Optimization : ML Residual df = 6,252

Scale parameter = 1

Deviance = 9564.378845 (1/df) Deviance = 1.529811

Pearson = 11313.67441 (1/df) Pearson = 1.809609

Variance function: V(u) = u [Poisson]

Link function : g(u) = ln(u) [Log]

AIC = 3.06113

Log pseudolikelihood = -9569.622269 BIC = -45083.21

(Std. Err. adjusted for 1,238 clusters in mineid)

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

| Robust

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

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

\_cons | .0000103 3.13e-07 -377.89 0.000 9.69e-06 .0000109

ln(hours) | 1 (exposure)

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

**. estat gof**

Deviance goodness-of-fit = 9564.379

Prob > chi2(6252) = 0.0000

Pearson goodness-of-fit = 11313.67

Prob > chi2(6252) = 0.0000

**. glm dv, family(nbinomial) link(log) vce(cl mineid) exposure(hours) eform**

Iteration 0: log pseudolikelihood = -9289.8451

Iteration 1: log pseudolikelihood = -9243.3399

Iteration 2: log pseudolikelihood = -9243.32

Iteration 3: log pseudolikelihood = -9243.32

Generalized linear models No. of obs = 6,253

Optimization : ML Residual df = 6,252

Scale parameter = 1

Deviance = 4172.877676 (1/df) Deviance = .6674468

Pearson = 4767.148604 (1/df) Pearson = .7624998

Variance function: V(u) = u+(1)u^2 [Neg. Binomial]

Link function : g(u) = ln(u) [Log]

AIC = 2.956763

Log pseudolikelihood = -9243.320013 BIC = -50474.71

(Std. Err. adjusted for 1,238 clusters in mineid)

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

| Robust

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

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

\_cons | .000011 2.41e-07 -521.67 0.000 .0000105 .0000115

ln(hours) | 1 (exposure)

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

**. nbreg dv, vce(cl mineid) exposure(hours) irr**

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -9569.6223

Iteration 1: log pseudolikelihood = -9569.6223

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -9249.9658

Iteration 1: log pseudolikelihood = -8971.6355

Iteration 2: log pseudolikelihood = -8961.958

Iteration 3: log pseudolikelihood = -8961.9317

Iteration 4: log pseudolikelihood = -8961.9317

Fitting full model:

Iteration 0: log pseudolikelihood = -8961.9317

Iteration 1: log pseudolikelihood = -8961.9317

Negative binomial regression Number of obs = 6,253

Wald chi2(0) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -8961.9317 Pseudo R2 = 0.0000

(Std. Err. adjusted for 1,238 clusters in mineid)

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

| Robust

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

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

\_cons | .0000108 2.45e-07 -505.30 0.000 .0000103 .0000113

ln(hours) | 1 (exposure)

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

/lnalpha | -1.115699 .0832504 -1.278867 -.9525312

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

alpha | .3276861 .02728 .2783525 .3857633

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

**. summ dv c\_null\_yhat**

Variable | Obs Mean Std. Dev. Min Max

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

dv | 6,253 1.881017 3.268911 0 37

c\_null\_yhat | 6,253 1.975549 2.934928 .0006916 30.43051