**. glm dv if sample\_pp == 1, family(poisson) link(log) vce(cl mineid) exposure(hours) eform**

Iteration 0: log pseudolikelihood = -5266.84

Iteration 1: log pseudolikelihood = -4869.8221

Iteration 2: log pseudolikelihood = -4869.0583

Iteration 3: log pseudolikelihood = -4869.0583

Generalized linear models No. of obs = 3,333

Optimization : ML Residual df = 3,332

Scale parameter = 1

Deviance = 4667.670298 (1/df) Deviance = 1.400861

Pearson = 5200.360349 (1/df) Pearson = 1.560732

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

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

AIC = 2.922327

Log pseudolikelihood = -4869.058294 BIC = -22360.27

(Std. Err. adjusted for 727 clusters in mineid)

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

| Robust

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

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

\_cons | 8.46e-06 2.87e-07 -344.53 0.000 7.92e-06 9.04e-06

ln(hours) | 1 (exposure)

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

. estat gof

Deviance goodness-of-fit = 4667.67

Prob > chi2(3332) = 0.0000

Pearson goodness-of-fit = 5200.36

Prob > chi2(3332) = 0.0000

**. glm dv if sample\_pp == 1, family(nbinomial) link(log) vce(cl mineid) exposure(hours) eform**

Iteration 0: log pseudolikelihood = -4864.103

Iteration 1: log pseudolikelihood = -4832.2076

Iteration 2: log pseudolikelihood = -4832.1884

Iteration 3: log pseudolikelihood = -4832.1884

Generalized linear models No. of obs = 3,333

Optimization : ML Residual df = 3,332

Scale parameter = 1

Deviance = 2091.599941 (1/df) Deviance = .6277311

Pearson = 2258.917316 (1/df) Pearson = .6779464

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

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

AIC = 2.900203

Log pseudolikelihood = -4832.188414 BIC = -24936.34

(Std. Err. adjusted for 727 clusters in mineid)

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

| Robust

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

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

\_cons | 8.77e-06 2.36e-07 -432.35 0.000 8.32e-06 9.24e-06

ln(hours) | 1 (exposure)

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

**. nbreg dv if sample\_pp == 1, vce(cl mineid) exposure(hours) irr**

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -4869.0583

Iteration 1: log pseudolikelihood = -4869.0583

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -4833.1956

Iteration 1: log pseudolikelihood = -4642.8135

Iteration 2: log pseudolikelihood = -4639.576

Iteration 3: log pseudolikelihood = -4639.57

Iteration 4: log pseudolikelihood = -4639.57

Fitting full model:

Iteration 0: log pseudolikelihood = -4639.57

Iteration 1: log pseudolikelihood = -4639.57

Negative binomial regression Number of obs = 3,333

Wald chi2(0) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -4639.57 Pseudo R2 = 0.0000

(Std. Err. adjusted for 727 clusters in mineid)

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

| Robust

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

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

\_cons | 8.67e-06 2.36e-07 -428.85 0.000 8.22e-06 9.15e-06

ln(hours) | 1 (exposure)

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

/lnalpha | -1.341963 .1095478 -1.556673 -1.127253

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

alpha | .2613322 .0286284 .2108364 .3239218

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

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

Variable | Obs Mean Std. Dev. Min Max

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

dv | 6,253 1.881017 3.268911 0 37

c\_pp\_null\_~t | 6,253 1.585486 2.35544 .000555 24.42215