| **MODEL** | **SPECIFICATION** | **ASSESSMENT** |
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| *PS.Y.C.P.V.1*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  No lag  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75 (1.001)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3082 (0.2736 – 0.3470)  Log pseudo-likelihood -16731.7660 (+657.8820)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6458 15.8994 0.0035 156.3208 |
| *PS.Y.C.P.SSV.1*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  No lag  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss (1.001)\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3077 (0.2734 – 0.3462)  Log pseudo-likelihood -16724.0740 (+665.5740)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6751 16.0345 0.0036 172.7317 |
| *PS.Y.C.P.PP.1*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  No lag  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp (1.000)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3094 (0.2743 – 0.3490)  Log pseudo-likelihood -16742.6420 (+647.0060)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.4982 14.9893 0.0035 135.7110 |
| *PS.Q.C.P.V.1*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  No lag  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75 (1.003)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3650 (0.3202 – 0.4159)  Log pseudo-likelihood -45955.1060 (+2582.2560)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.4507 3.7945 0.0001 46.8787 |
| *PS.Q.C.P.SSV.1*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  No lag  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss (1.007)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3652 (0.3204 – 0.4161)  Log pseudo-likelihood -45936.8850 (+2600.4770)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.4536 3.8105 0.0000 51.5789 |
| *PS.Q.C.P.PP.1*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  No lag  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp (1.000)\*\*\*  onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3648 (0.3201 – 0.4157)  Log pseudo-likelihood -45973.6730 (+2563.6890)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.4316 3.6579 0.0000 45.2261 |
| *PS.Y.C.P.V.2*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Lag 1  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_1lag (1.001)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3091 (0.2745 – 0.3479)  Log pseudo-likelihood -16735.7840 (+653.8640)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6272 15.7479 0.0035 147.1036 |
| *PS.Y.C.P.SSV.2*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Lag 1  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss\_1lag (1.003)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3083 (0.2741 – 0.3468)  Log pseudo-likelihood -16727.4110 (+662.2370)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6593 15.9075 0.0036 166.6452 |
| *PS.Y.C.P.PP.2*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Lag 1  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp\_1lag (1.000)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3099 (0.2748 – 0.3494)  Log pseudo-likelihood -16744.3440 (+645.3040)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.4975 14.9660 0.0035 126.6184 |
| *PS.Q.C.P.V.2*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Lag 1  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_1lag (1.002)\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3602 (0.3157 – 0.4109)  Log pseudo-likelihood -43663.6770 (+4873.6850)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.5690 3.8061 0.0001 42.6074 |
| *PS.Q.C.P.SSV.2*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Lag 1  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss\_1lag (1.004)\*\*  onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3607 (0.3162 – 0.4115)  Log pseudo-likelihood -43659.4190 (+4877.9430)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.5696 3.8043 0.0000 41.4913 |
| *PS.Q.C.P.PP.2*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Lag 1  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp\_1lag (1.000)\*\*\*  onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3594 (0.3150 – 0.4102)  Log pseudo-likelihood -43667.0400 (+4870.3220)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.5563 3.7224 0.0000 40.4815 |
| *PS.Y.C.P.V.3*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag 4  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_c\_4lag (1.001)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3100 (0.2754 – 0.3489)  Log pseudo-likelihood -16739.5690 (+650.0790)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6111 15.6328 0.0035 144.4476 |
| *PS.Y.C.P.SSV.3*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag 4  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss\_c\_4lag (1.001)\*\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3095 (0.2752 – 0.3480)  Log pseudo-likelihood -16733.0430 (+656.6050)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.6485 15.8243 0.0036 154.8290 |
| *PS.Y.C.P.PP.3*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag 4  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp\_c\_4lag (1.000)\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3103 (0.2753 – 0.3498)  Log pseudo-likelihood -16745.6900 (+643.9580)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.4979 14.9557 0.0035 124.2906 |
| *PS.Q.C.P.V.3*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag 4  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_c\_4lag (1.000)\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3490 (0.3035 – 0.4014)  Log pseudo-likelihood -38716.2460 (+9821.1160)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.7492 3.9382 0.0001 39.8591 |
| *PS.Q.C.P.SSV.3*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag 4  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_ss\_c\_4lag (1.002)\*\*  onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3496 (0.3039 – 0.4022)  Log pseudo-likelihood -38707.1130 (+9830.2490)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.7535 3.9606 0.0000 39.8085 |
| *PS.Q.C.P.PP.3*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag 4  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp\_c\_4lag (1.000)\*\*  onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3478 (0.3023 – 0.4001)  Log pseudo-likelihood -38719.0730 (+9818.2890)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.7332 3.8359 0.0001 38.1626 |
| *PS.Y.C.P.V.4*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag From T=0  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | mine\_time (1.011)\*  onsite\_insp\_hours (1.000)\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3129 (0.2782 – 0.3520)  Log pseudo-likelihood -16755.7360 (+633.9120)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.5101 14.9735 0.0035 128.9332 |
| *PS.Y.C.P.SSV.4*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag From T=0  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | mine\_time (1.011)\*  onsite\_insp\_hours (1.000)\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3128 (0.2780 – 0.3518)  Log pseudo-likelihood -16755.6420 (+634.0060)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.5068 14.9597 0.0035 128.3153 |
| *PS.Y.C.P.PP.4*  PS injury outcome  Mine-year unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag From T=0  *poisson run (bad fit)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | p75\_pp\_c\_4lag (1.000)\*\*  onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Red flag (lrtest yeilds no p-value)  Alpha 0.3130 (0.2783 – 0.3521)  Log pseudo-likelihood -16755.8820 (+633.7660)  Mean SD Min Max  True 9.9767 14.8533 0 200  Predicted 10.5136 14.9908 0.0035 127.4639 |
| *PS.Q.C.P.V.4*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag From T=0  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | onsite\_insp\_hours (1.000)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3386 (0.2889 – 0.3968)  Log pseudo-likelihood -34208.9330 (+14328.430)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.9496 4.0791 0.0000 37.0099 |
| *PS.Q.C.P.SSV.4*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag From T=0  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | onsite\_insp\_hours (1.000)\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3384 (0.2888 – 0.3964)  Log pseudo-likelihood -34208.1070 (+14329.250)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.9487 4.0749 0.0000 36.7958 |
| *PS.Q.C.P.PP.4*  PS injury outcome  Mine-quarter unit  Count outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag From T=0  *poisson run (bad fit, overdispersed)*  *nbreg - GLM run (inferior log likelihood)*  *nbreg results reported* | onsite\_insp\_hours (0.999)\*\*\*  state fixed effects significant  year fixed effects significant | Overdispersed (lrtest)  Alpha 0.3383 (0.2885 – 0.3965)  Log pseudo-likelihood -34207.9260 (+14329.440)  Mean SD Min Max  True 2.1777 3.8517 0 71  Predicted 2.9498 4.0814 0.0000 36.7108 |