| **MODEL** | **SPECIFICATION** | **ASSESSMENT** |
| --- | --- | --- |
| *PS.Y.B.P.V.1*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  No lag  *Logit results reported* | p48 (1.241)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1732.0052 (+161.3629)  Positive predictive value Pr(1 | +) 89.17% (+1.91%)  Negative predictive value Pr(0 | -) 72.76% (-4.48%)  False + rate for true 0 Pr(+ | 0) 58.25% (-12.96%)  False - rate for true 1 Pr(- | 1) 3.16% (+1.45%)  Correctly classified 87.58% (+0.95%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2242 |
| *PS.Y.B.P.SSV.1*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  No lag  *Logit results reported* | p48\_ss (1.592)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1731.9318 (+161.4363)  Positive predictive value Pr(1 | +) 89.20% (+1.94%)  Negative predictive value Pr(0 | -) 72.73% (-4.51%)  False + rate for true 0 Pr(+ | 0) 58.06% (-13.15%)  False - rate for true 1 Pr(- | 1) 3.18% (+1.47%)  Correctly classified 87.60% (+0.97%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2241 |
| *PS.Y.B.P.PP.1*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  No lag  *Logit results reported* | p48\_pp (1.005)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1731.3382 (+162.0299)  Positive predictive value Pr(1 | +) 89.16% (+1.90%)  Negative predictive value Pr(0 | -) 72.64% (-4.60%)  False + rate for true 0 Pr(+ | 0) 58.25% (-12.96%)  False - rate for true 1 Pr(- | 1) 3.18% (+1.47%)  Correctly classified 87.57% (+0.94%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2245 |
| *PS.Q.B.P.V.1*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  No lag  *Logit results reported* | p75 (1.013)\*\*\*  onsite\_insp\_hours (1.003)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -13841.4160 (+1402.007)  Positive predictive value Pr(1 | +) 78.43% (+1.99%)  Negative predictive value Pr(0 | -) 74.40% (-2.29%)  False + rate for true 0 Pr(+ | 0) 31.74% (+0.12%)  False - rate for true 1 Pr(- | 1) 16.91% (+0.06%)  Correctly classified 76.88% (+0.34%)  Mean SD  True 0.5523 0.4973  Predicted 0.5814 0.2881 |
| *PS.Q.B.P.SSV.1*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  No lag  *Logit results reported* | p75\_ss (1.030)\*\*\*  onsite\_insp\_hours (1.003)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -13867.3210 (+1376.102)  Positive predictive value Pr(1 | +) 78.48% (+2.04%)  Negative predictive value Pr(0 | -) 74.42% (-2.27%)  False + rate for true 0 Pr(+ | 0) 31.64% (+0.02%)  False - rate for true 1 Pr(- | 1) 16.92% (+-0.07%)  Correctly classified 76.92% (+0.38%)  Mean SD  True 0.5523 0.4973  Predicted 0.5814 0.2881 |
| *PS.Q.B.P.PP.1*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  No lag  *Logit results reported* | p75\_pp (1.000)\*\*\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -13834.6530 (+1408.770)  Positive predictive value Pr(1 | +) 78.43% (+1.99%)  Negative predictive value Pr(0 | -) 74.55% (-2.14%)  False + rate for true 0 Pr(+ | 0) 31.79% (+0.17%)  False - rate for true 1 Pr(- | 1) 16.77% (-0.08%)  Correctly classified 76.95% (+0.41%)  Mean SD  True 0.5523 0.4973  Predicted 0.5814 0.2874 |
| *PS.Y.B.P.V.2*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Lag 1  *Logit results reported* | p48\_1lag (1.241)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1732.2130 (+161.1551)  Positive predictive value Pr(1 | +) 89.16% (+1.90%)  Negative predictive value Pr(0 | -) 73.08% (-4.16%)  False + rate for true 0 Pr(+ | 0) 58.34% (-12.87%)  False - rate for true 1 Pr(- | 1) 3.10% (+1.39%)  Correctly classified 87.62% (+0.99%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2242 |
| *PS.Y.B.P.SSV.2*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Lag 1  *Logit results reported* | onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1733.5942 (+159.7739)  Positive predictive value Pr(1 | +) 89.17% (+1.91%)  Negative predictive value Pr(0 | -) 72.76% (-4.48%)  False + rate for true 0 Pr(+ | 0) 58.25% (-12.96%)  False - rate for true 1 Pr(- | 1) 3.16% (+1.45%)  Correctly classified 87.58% (+0.95%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2239 |
| *PS.Y.B.P.PP.2*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Lag 1  *Logit results reported* | p48\_pp\_1lag (1.004)\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1733.3994 (+159.9687)  Positive predictive value Pr(1 | +) 89.18% (+1.92%)  Negative predictive value Pr(0 | -) 72.56% (-4.68%)  False + rate for true 0 Pr(+ | 0) 58.15% (-13.06%)  False - rate for true 1 Pr(- | 1) 3.20% (+1.49%)  Correctly classified 87.57% (+0.94%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2241 |
| *PS.Q.B.P.V.2*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Lag 1  *Logit results reported* | p48\_1lag (1.126)\*\*  p75\_1lag (1.012)\*\*\*  onsite\_insp\_hours (1.003)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -12673.8880 (+2569.535)  Positive predictive value Pr(1 | +) 78.71% (+2.27%)  Negative predictive value Pr(0 | -) 73.21% (-3.48%)  False + rate for true 0 Pr(+ | 0) 34.52% (+2.90%)  False - rate for true 1 Pr(- | 1) 15.81% (-1.04%)  Correctly classified 76.76% (+0.22%)  Mean SD  True 0.5523 0.4973  Predicted 0.6026 0.2817 |
| *PS.Q.B.P.SSV.2*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Lag 1  *Logit results reported* | p75\_ss\_1lag (1.027)\*\*\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -12679.1050 (+2564.318)  Positive predictive value Pr(1 | +) 78.72% (+2.28%)  Negative predictive value Pr(0 | -) 73.25% (-3.44%)  False + rate for true 0 Pr(+ | 0) 34.53% (+2.91%)  False - rate for true 1 Pr(- | 1) 15.77% (-1.08%)  Correctly classified 76.78% (+0.24%)  Mean SD  True 0.5523 0.4973  Predicted 0.6026 0.2813 |
| *PS.Q.B.P.PP.2*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Lag 1  *Logit results reported* | p75\_pp\_1lag (1.000)\*\*\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -12701.3010 (+2542.122)  Positive predictive value Pr(1 | +) 78.64% (+2.2%)  Negative predictive value Pr(0 | -) 73.35% (-3.34%)  False + rate for true 0 Pr(+ | 0) 34.73% (+3.11%)  False - rate for true 1 Pr(- | 1) 15.64% (-1.21%)  Correctly classified 76.77% (+0.23%)  Mean SD  True 0.5523 0.4973  Predicted 0.6026 0.2808 |
| *PS.Y.B.P.V.3*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag 4  *Logit results reported* | p48\_c\_4lag (1.083)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1731.2755 (+162.0926)  Positive predictive value Pr(1 | +) 89.20% (+1.94%)  Negative predictive value Pr(0 | -) 73.09% (-4.15%)  False + rate for true 0 Pr(+ | 0) 58.06% (-13.15%)  False - rate for true 1 Pr(- | 1) 3.12% (+1.41%)  Correctly classified 87.65% (+1.02%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2242 |
| *PS.Y.B.P.SSV.3*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag 4  *Logit results reported* | onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1733.4425 (+159.9256)  Positive predictive value Pr(1 | +) 89.18% (+1.92%)  Negative predictive value Pr(0 | -) 72.68% (-4.56%)  False + rate for true 0 Pr(+ | 0) 58.15% (-13.06%)  False - rate for true 1 Pr(- | 1) 3.18% (+1.47%)  Correctly classified 87.58% (+0.95%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2240 |
| *PS.Y.B.P.PP.3*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag 4  *Logit results reported* | p48\_pp\_c\_4lag (1.001)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1732.5149 (+160.8532)  Positive predictive value Pr(1 | +) 89.18% (+1.92%)  Negative predictive value Pr(0 | -) 72.80% (-4.44%)  False + rate for true 0 Pr(+ | 0) 58.15% (-13.06%)  False - rate for true 1 Pr(- | 1) 3.16% (+1.45%)  Correctly classified 87.60% (+0.97%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2242 |
| *PS.Q.B.P.V.3*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag 4  *Logit results reported* | p48\_c\_4lag (1.050)\*  p75\_c\_4lag (1.005)\*\*\*  onsite\_insp\_hours (1.002)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -10596.0090 (+4647.414)  Positive predictive value Pr(1 | +) 79.69% (+3.25%)  Negative predictive value Pr(0 | -) 73.12% (-3.57%)  False + rate for true 0 Pr(+ | 0) 36.15% (+4.53%)  False - rate for true 1 Pr(- | 1) 14.19% (-2.66%)  Correctly classified 77.53% (+0.99%)  Mean SD  True 0.5523 0.4973  Predicted 0.6231 0.2797 |
| *PS.Q.B.P.SSV.3*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag 4  *Logit results reported* | p75\_ss\_c\_4lag (1.012)\*\*\*  onsite\_insp\_hours (1.003)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -10600.0410 (+4643.382)  Positive predictive value Pr(1 | +) 79.77% (+3.33%)  Negative predictive value Pr(0 | -) 73.17% (-3.52%)  False + rate for true 0 Pr(+ | 0) 35.99% (+4.37%)  False - rate for true 1 Pr(- | 1) 14.20% (-2.65%)  Correctly classified 77.59% (+1.05%)  Mean SD  True 0.5523 0.4973  Predicted 0.6231 0.2797 |
| *PS.Q.B.P.PP.3*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag 4  *Logit results reported* | p75\_pp\_c\_4lag (1.000)\*\*\*  onsite\_insp\_hours (1.003)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -10638.3630 (+4605.060)  Positive predictive value Pr(1 | +) 79.61% (+3.17%)  Negative predictive value Pr(0 | -) 73.29% (-3.40%)  False + rate for true 0 Pr(+ | 0) 36.42% (+4.80%)  False - rate for true 1 Pr(- | 1) 14.01% (-2.84%)  Correctly classified 77.54% (+1.00%)  Mean SD  True 0.5523 0.4973  Predicted 0.6231 0.2783 |
| *PS.Y.B.P.V.4*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag From T=0  *Logit results reported* | p48\_c\_lag\_all (1.083)\*\*  onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1728.0521 (+165.3160)  Positive predictive value Pr(1 | +) 89.27% (+2.01%)  Negative predictive value Pr(0 | -) 72.36% (-4.88%)  False + rate for true 0 Pr(+ | 0) 57.58% (-13.63%)  False - rate for true 1 Pr(- | 1) 3.27% (+1.56%)  Correctly classified 87.60% (+0.97%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2245 |
| *PS.Y.B.P.SSV.4*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag From T=0  *Logit results reported* | onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1731.2204 (+162.1477)  Positive predictive value Pr(1 | +) 89.25% (+1.99%)  Negative predictive value Pr(0 | -) 72.31% (-4.93%)  False + rate for true 0 Pr(+ | 0) 57.67% (-13.54%)  False - rate for true 1 Pr(- | 1) 3.27% (+1.56%)  Correctly classified 87.58% (+0.95%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2242 |
| *PS.Y.B.P.PP.4*  PS injury outcome  Mine-year unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag From T=0  *Logit results reported* | onsite\_insp\_hours (1.004)\*\*\*  state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -1730.0970 (+163.2711)  Positive predictive value Pr(1 | +) 89.32% (+2.06%)  Negative predictive value Pr(0 | -) 72.96% (-4.28%)  False + rate for true 0 Pr(+ | 0) 57.29% (-13.92%)  False - rate for true 1 Pr(- | 1) 3.20% (+1.49%)  Correctly classified 87.71% (+1.08%)  Mean SD  True 0.8322 0.3737  Predicted 0.8319 0.2241 |
| *PS.Q.B.P.V.4*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # violations  Cumulative Lag From T=0  *Logit results reported* | p75\_c\_lag\_all (1.000)\*\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -9117.5114 (+6125.912)  Positive predictive value Pr(1 | +) 80.07% (+3.63%)  Negative predictive value Pr(0 | -) 72.30% (-4.39%)  False + rate for true 0 Pr(+ | 0) 36.80% (+5.18%)  False - rate for true 1 Pr(- | 1) 14.07% (-2.78%)  Correctly classified 77.57% (+1.03%)  Mean SD  True 0.5523 0.4973  Predicted 0.6325 0.2779 |
| *PS.Q.B.P.SSV.4*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # sig&sub violations  Cumulative Lag From T=0  *Logit results reported* | p75\_ss\_c\_lag\_all (1.001)\*\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -9116.6002 (+6126.823)  Positive predictive value Pr(1 | +) 80.12% (+3.68%)  Negative predictive value Pr(0 | -) 72.35% (-4.34%)  False + rate for true 0 Pr(+ | 0) 36.70% (+5.08%)  False - rate for true 1 Pr(- | 1) 14.06% (-2.79%)  Correctly classified 77.62% (+1.08%)  Mean SD  True 0.5523 0.4973  Predicted 0.6325 0.2780 |
| *PS.Q.B.P.PP.4*  PS injury outcome  Mine-quarter unit  Binary outcome variable  Part-level violation predictors  Predictors = # penalty points  Cumulative Lag From T=0  *Logit results reported* | P48\_pp\_c\_lag\_all (1.001)\*  onsite\_insp\_hours (1.004)\*\*\*    state fixed effects significant  year fixed effects significant | Bad fit (lfit)  Specification error/missing vars (linktest)  Log pseudo-likelihood -9126.7361 (+6116.687)  Positive predictive value Pr(1 | +) 79.99% (+3.55%)  Negative predictive value Pr(0 | -) 72.21% (-4.48%)  False + rate for true 0 Pr(+ | 0) 36.97% (+5.35%)  False - rate for true 1 Pr(- | 1) 14.10% (-2.75%)  Correctly classified 77.50% (+0.96%)  Mean SD  True 0.5523 0.4973  Predicted 0.6325 0.2779 |