

The REG Procedure  
Model: MODEL1  
Dependent Variable: Injury\_Occurred

Number of Observations Read	262893
Number of Observations Used	262893

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	390.03301	39.00330	45465.2	<.0001
Error	262882	225.51891	0.00085787		
Corrected Total	262892	615.55192			

Root MSE	0.02929	R-Square	0.6336
Dependent Mean	0.00235	Adj R-Sq	0.6336
Coeff Var	1247.97222		

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	Variance Inflation
Intercept	1	-5.86668E-7	0.00005723	-0.01	0.9918	0
Heart_Rate_BPM	1	0.00036219	0.00004012	9.03	<.0001	36.64990
Respiratory_Rate_BPM	1	-0.00200	0.00035611	-5.61	<.0001	59.61163
Skin_Temperature_C	1	0.01094	0.00135	8.10	<.0001	2860.87175
Blood_Oxygen_Level_Percent	1	-0.00182	0.00049787	-3.65	0.0003	2742.85746
Impact_Force_Newtons	1	0.00131	0.00002145	60.94	<.0001	8.94112
Cumulative_Fatigue_Index	1	0.41898	0.00531	78.86	<.0001	9.15462
Duration_Minutes	1	0.00031193	0.00004588	6.80	<.0001	8.47816
isHeavyContact	1	-0.07838	0.00254	-30.85	<.0001	1.51904
isMildContact	1	0.00560	0.00208	2.70	0.0070	2.02186
isIntense	1	0.02583	0.00189	13.64	<.0001	1.71098

Collinearity Diagnostics (Intercept adjusted)										
Number	Eigenvalue	Condition Index	Proportion of Variation							
			Heart_Rate_BPM	Respiratory_Rate_BPM	Skin_Temperature_C	Blood_Oxygen_Level_Percent	Impact_Force_Newtons	Cumulative_Fatigue_Index	Duration_Minutes	isHeavyContact
1	7.74753	1.00000	0.00043851	0.00027170	0.00000573	0.00000597	0.00168	0.00165	0.00176	0.002
2	1.00139	2.78151	4.881004E-7	3.095158E-8	1.76122E-10	6.87994E-11	0.00000894	8.014036E-8	0.00000209	0.437
3	0.55285	3.74349	0.00035429	0.00020400	0.00000488	0.00000512	0.00171	0.00092682	0.00122	0.011
4	0.36973	4.57764	0.00083311	0.00036393	0.00000868	0.00000918	0.00585	0.00568	0.00915	0.524
5	0.11495	8.20983	0.00062031	0.00072536	0.00000644	0.00000702	0.07766	0.48670	0.40560	0.002
6	0.10520	8.58173	0.00015040	0.00001162	8.56122E-10	5.54759E-10	0.65061	0.04478	0.38536	0.000347
7	0.07592	10.10170	0.05552	0.02787	0.00032844	0.00034863	0.23855	0.43275	0.16829	0.014
8	0.02267	18.48661	0.77078	0.22608	0.00038635	0.00042452	1.689671E-8	0.00823	0.00342	0.003
9	0.00958	28.43940	0.16778	0.74084	0.00901	0.01011	0.02263	0.01872	0.02365	0.002
10	0.00018030	207.29228	0.00352	0.00363	0.99025	0.98909	0.00130	0.00057363	0.00155	0.001

The LOGISTIC Procedure

Model Information	
Data Set	WORK.COLLEGIATE
Response Variable	Injury_Occurred
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	262893
Number of Observations Used	262893

Response Profile		
Ordered Value	Injury_Occurred	Total Frequency
1	0	262276
2	1	617

Probability modeled is Injury\_Occurred=0.

Model Convergence Status	
Convergence criterion (GCONV=1E-8) satisfied.	

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	8705.968	1307.575
SC	8716.448	1401.890
-2 Log L	8703.968	1289.575

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	7414.3936	8	<.0001
Score	166545.447	8	<.0001
Wald	132.0340	8	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	13.3150	1.4475	84.6130	<.0001
Heart_Rate_BPM	1	-0.00279	0.00288	0.9358	0.3334
Blood_Oxygen_Level_P	1	-0.1196	0.0155	59.7580	<.0001
Impact_Force_Newtons	1	-0.00597	0.00156	14.6472	0.0001
Cumulative_Fatigue_I	1	-1.9031	0.3878	24.0820	<.0001
Duration_Minutes	1	-0.00162	0.00331	0.2401	0.6241
isHeavyContact	1	0.3394	0.1808	3.5222	0.0606
isMildContact	1	-0.0294	0.1506	0.0381	0.8452
isIntense	1	-0.1240	0.1369	0.8207	0.3650

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Heart_Rate_BPM	0.997	0.992	1.003
Blood_Oxygen_Level_P	0.887	0.861	0.915
Impact_Force_Newtons	0.994	0.991	0.997
Cumulative_Fatigue_I	0.149	0.070	0.319
Duration_Minutes	0.998	0.992	1.005
isHeavyContact	1.404	0.985	2.001
isMildContact	0.971	0.723	1.304
isIntense	0.883	0.676	1.155

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	99.9	Somers' D	0.999
Percent Discordant	0.1	Gamma	0.999
Percent Tied	0.0	Tau-a	0.005
Pairs	161824292	c	0.999