

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of SMOKING by OUTCOME		
	SMOKING	OUTCOME	
		Control	Case
	No	899 44.95 66.20 89.90	459 22.95 33.80 45.90
	Yes	101 5.05 15.73 10.10	541 27.05 84.27 54.10
	Total	1000 50.00	1000 50.00
			2000 100.00

Statistics for Table of SMOKING by OUTCOME

Statistic	DF	Value	Prob
Chi-Square	1	444.1202	<.0001
Likelihood Ratio Chi-Square	1	476.3716	<.0001
Continuity Adj. Chi-Square	1	442.1038	<.0001
Mantel-Haenszel Chi-Square	1	443.8982	<.0001
Phi Coefficient		0.4712	
Contingency Coefficient		0.4263	
Cramer's V		0.4712	

Fisher's Exact Test	
Cell (1,1) Frequency (F)	899
Left-sided Pr <= F	1.0000
Right-sided Pr >= F	<.0001
Table Probability (P)	<.0001
Two-sided Pr <= P	<.0001

Sample Size = 2000

The FREQ Procedure

Summary Statistics for SMOKING by OUTCOME

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)				
Statistic	Alternative Hypothesis	DF	Value	Prob
1	Nonzero Correlation	1	443.8982	<.0001
2	Row Mean Scores Differ	1	443.8982	<.0001
3	General Association	1	443.8982	<.0001

Common Odds Ratio and Relative Risks				
Statistic	Method	Value	95% Confidence Limits	
Odds Ratio	Mantel-Haenszel	10.4911	8.2496	13.3418
	Logit	10.4911	8.2496	13.3418
Relative Risk (Column 1)	Mantel-Haenszel	4.2080	3.5042	5.0531
	Logit	4.2080	3.5042	5.0531
Relative Risk (Column 2)	Mantel-Haenszel	0.4011	0.3697	0.4352
	Logit	0.4011	0.3697	0.4352

Total Sample Size = 2000

Logistic Model with SMOKING as Predictor Variable

The LOGISTIC Procedure

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

Number of Observations Read	2000
Number of Observations Used	2000

Response Profile		
Ordered Value	OUTCOME	Total Frequency
1	Case	1000
2	Control	1000

Probability modeled is OUTCOME='Case'.

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

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	2774.589	2300.217
SC	2780.190	2311.419
-2 Log L	2772.589	2296.217

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	476.3716	1	<.0001
Score	444.1202	1	<.0001
Wald	367.3132	1	<.0001

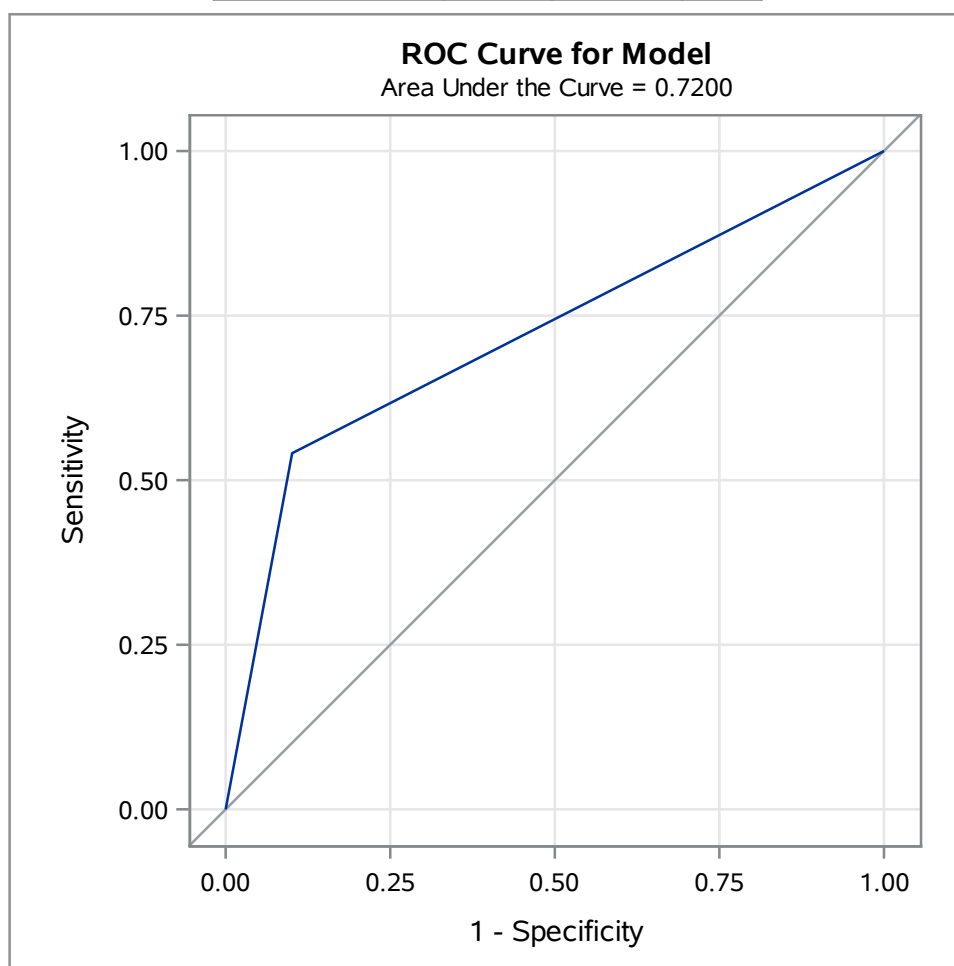
Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.6722	0.0574	137.3131	<.0001
SMOKING	1	2.3503	0.1226	367.3132	<.0001

Logistic Model with SMOKING as Predictor Variable

The LOGISTIC Procedure

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
SMOKING	10.488	8.248	13.338

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	48.6	Somers' D	0.440
Percent Discordant	4.6	Gamma	0.826
Percent Tied	46.7	Tau-a	0.220
Pairs	1000000	c	0.720



Logistic Model with SMOKING as Predictor Variable

The LOGISTIC Procedure

Classification Table									
Prob Level	Correct		Incorrect		Percentages				
	Event	Non- Event	Event	Non- Event	Correct	Sensi- tivity	Speci- ficity	False POS	False NEG
0.000	1000	0	1000	0	50.0	100.0	0.0	50.0	.
0.100	1000	0	1000	0	50.0	100.0	0.0	50.0	.
0.200	1000	0	1000	0	50.0	100.0	0.0	50.0	.
0.300	1000	0	1000	0	50.0	100.0	0.0	50.0	.
0.400	541	899	101	459	72.0	54.1	89.9	15.7	33.8
0.500	541	899	101	459	72.0	54.1	89.9	15.7	33.8
0.600	541	899	101	459	72.0	54.1	89.9	15.7	33.8
0.700	541	899	101	459	72.0	54.1	89.9	15.7	33.8
0.800	541	899	101	459	72.0	54.1	89.9	15.7	33.8
0.900	0	1000	0	1000	50.0	0.0	100.0	.	50.0
1.000	0	1000	0	1000	50.0	0.0	100.0	.	50.0