## The LOGISTIC Procedure

| Model Information | |
|---|---|
| **Data Set** | WORK.SMOKE |
| **Response Variable (Events)** | y |
| **Response Variable (Trials)** | n |
| **Model** | binary logit |
| **Optimization Technique** | Fisher's scoring |

| | |
|---|---|
| **Number of Observations Read** | 2 |
| **Number of Observations Used** | 2 |
| **Sum of Frequencies Read** | 5375 |
| **Sum of Frequencies Used** | 5375 |

| Response Profile | | |
|---|---|---|
| Ordered Value | Binary Outcome | Total Frequency |
| 1 | Event | 1004 |
| 2 | Nonevent | 4371 |

| Class Level Information | | |
|---|---|---|
| Class | Value | Design Variables |
| s | nosmoke | 0 |
| | smoke | 1 |

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

| Deviance and Pearson Goodness-of-Fit Statistics | | | | |
|---|---|---|---|---|
| Criterion | Value | DF | Value/DF | Pr > ChiSq |
| Deviance | 0.0000 | 0 | . | . |
| Pearson | 0.0000 | 0 | . | . |

**Number of events/trials observations: 2**

## The LOGISTIC Procedure

| Model Fit Statistics | | | |
|---|---|---|---|
| | | Intercept and Covariates | |
| Criterion | Intercept Only | Log Likelihood | Full Log Likelihood |
| AIC | 5178.510 | 5151.390 | 19.242 |
| SC | 5185.100 | 5164.569 | 32.421 |
| -2 Log L | 5176.510 | 5147.390 | 15.242 |

| Testing Global Null Hypothesis: BETA=0 | | | |
|---|---|---|---|
| Test | Chi-Square | DF | Pr > ChiSq |
| Likelihood Ratio | 29.1207 | 1 | <.0001 |
| Score | 27.6766 | 1 | <.0001 |
| Wald | 27.3361 | 1 | <.0001 |

| Type 3 Analysis of Effects | | | |
|---|---|---|---|
| Effect | DF | Wald Chi-Square | Pr > ChiSq |
| s | 1 | 27.3361 | <.0001 |

| Analysis of Maximum Likelihood Estimates | | | | | | |
|---|---|---|---|---|---|---|
| Parameter | | DF | Estimate | Standard Error | Wald Chi-Square | Pr > ChiSq |
| Intercept | | 1 | -1.8266 | 0.0786 | 540.2949 | <.0001 |
| s | smoke | 1 | 0.4592 | 0.0878 | 27.3361 | <.0001 |

| Odds Ratio Estimates | | | |
|---|---|---|---|
| Effect | Point Estimate | 95% Wald Confidence Limits | |
| s smoke vs nosmoke | 1.583 | 1.332 | 1.880 |

| Association of Predicted Probabilities and Observed Responses | | | |
|---|---|---|---|
| Percent Concordant | 21.7 | Somers' D | 0.080 |
| Percent Discordant | 13.7 | Gamma | 0.226 |
| Percent Tied | 64.6 | Tau-a | 0.024 |
| Pairs | 4388484 | c | 0.540 |