

# Logistic Regression

## Case Processing Summary

| Unweighted cases <sup>a</sup> |                      | N   | Percent |
|-------------------------------|----------------------|-----|---------|
| Selected cases                | Included in Analysis | 249 | 100.0   |
|                               | Missing cases        | 0   | .0      |
|                               | Total                | 249 | 100.0   |
| Unselected cases              |                      | 0   | .0      |
| Total                         |                      | 249 | 100.0   |

a. If weight is in effect, see classification table for the total number of cases.

## Dependent variable Encoding

| Original value | Internal value |
|----------------|----------------|
| No             | 0              |
| Yes            | 1              |

## Block 0: Beginning Block

Classification table<sup>a,b</sup>

| Observed           |     |     | Predicted |     |                    |
|--------------------|-----|-----|-----------|-----|--------------------|
|                    |     |     | RSP       |     | Percentage correct |
|                    |     |     | No        | Yes |                    |
| Step 0             | RSP | No  | 193       | 0   | 100.0              |
|                    |     | Yes | 56        | 0   | .0                 |
| Overall Percentage |     |     |           |     | 77.5               |

a. Constant is included in the model.

b. The cut value is .500

## Variables in the Equation

|        |          | B      | Standard error | Wald   | df | Sig. | Exp(B) |
|--------|----------|--------|----------------|--------|----|------|--------|
| Step 0 | Constant | -1.237 | .152           | 66.454 | 1  | .000 | .290   |

**Variables not in the Equation**

|                    |           |                                | Score  | df | Sig. |
|--------------------|-----------|--------------------------------|--------|----|------|
| Step 0             | Variables | Age                            | 26.050 | 1  | .000 |
|                    |           | Membership_FSWs_association(1) | 22.386 | 1  | .000 |
|                    |           | Self_report_STI(1)             | 15.288 | 1  | .000 |
|                    |           | Currently_diagnosed(1)         | 4.580  | 1  | .032 |
|                    |           | Previous_treatment_STI(1)      | .311   | 1  | .577 |
|                    |           | Temporary_migration_SW(1)      | .063   | 1  | .802 |
| Overall statistics |           |                                | 45.938 | 6  | .000 |

**Block 1: Method = Enter**

**Omnibus Tests of Model Coefficient**

|        |       | Chi-square | df | Sig. |
|--------|-------|------------|----|------|
| Step 1 | Step  | 44.600     | 6  | .000 |
|        | Block | 44.600     | 6  | .000 |
|        | Model | 44.600     | 6  | .000 |

**Model Summary**

| Step | -2 Log likelihood    | Cox & Snell R Square | Nagelkerke R Square |
|------|----------------------|----------------------|---------------------|
| 1    | 220.853 <sup>a</sup> | .164                 | .250                |

a. Estimation terminated at iteration number 5 because parameters estimates changed by less than .001.

**Classification Table<sup>a</sup>**

| Observed           |        | Predicted |     |                    |
|--------------------|--------|-----------|-----|--------------------|
|                    |        | RSP       |     | Percentage correct |
|                    |        | No        | Yes |                    |
| Step 1             | RSP No | 185       | 8   | 95.9               |
|                    | Yes    | 40        | 16  | 28.6               |
| Overall Percentage |        |           |     | 80.7               |

a. The cut value is .500

**Variables in the Equation**

|                     |                                | B      | Standars error | Wald   | df | Sig. |
|---------------------|--------------------------------|--------|----------------|--------|----|------|
| Step 1 <sup>a</sup> | Age                            | .060   | .019           | 9.755  | 1  | .002 |
|                     | Membership_FSWs_association(1) | 1.256  | .402           | 9.774  | 1  | .002 |
|                     | Self_report_STI(1)             | 1.233  | .503           | 6.004  | 1  | .014 |
|                     | Currently_diagnosed(1)         | .257   | .418           | .379   | 1  | .538 |
|                     | Previous_treatment_STI(1)      | .222   | .407           | .297   | 1  | .586 |
|                     | Temporary_migration_SW(1)      | .589   | .398           | 2.190  | 1  | .139 |
|                     | Constant                       | -4.504 | .857           | 27.630 | 1  | .000 |

**Variables in the Equation**

|                     |                                | Exp(B) | 95% C.I. for EXP(B) |       |
|---------------------|--------------------------------|--------|---------------------|-------|
|                     |                                |        | lower               | Upper |
| Step 1 <sup>a</sup> | Age                            | 1.062  | 1.023               | 1.102 |
|                     | Membership_FSWs_association(1) | 3.512  | 1.598               | 7.721 |
|                     | Self_report_STI(1)             | 3.433  | 1.280               | 9.207 |
|                     | Currently_diagnosed(1)         | 1.293  | .570                | 2.935 |
|                     | Previous_treatment_STI(1)      | 1.249  | .562                | 2.775 |
|                     | Temporary_migration_SW(1)      | 1.803  | .826                | 3.935 |
|                     | Constant                       | .011   |                     |       |

a. Variables entered on step 1: Age, Membership\_FSWs\_association, Self\_report\_STI,Currently\_diagnosed, Previous\_treatment\_STI, Temporary\_migration\_SW.