

S U D A A N

Software for the Statistical Analysis of Correlated Data
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Release 9.0.1

Number of zero responses : 2515
 Number of non-zero responses : 1304

Independence parameters have converged in 7 iterations

Number of observations read : 7397 Weighted count:267014588
 Number of observations skipped : 13607
 (WEIGHT variable nonpositive)
 Observations in subpopulation : 4059 Weighted count:187943376
 Observations used in the analysis : 3819 Weighted count:187943376
 Denominator degrees of freedom : 29

Maximum number of estimable parameters for the model is 8

File ANALYSIS_DATA contains 57 Clusters
 57 clusters were used to fit the model
 Maximum cluster size is 96 records
 Minimum cluster size is 32 records

Sample and Population Counts for Response Variable HYPER
 0: Sample Count 2515 Population Count 134326549
 1: Sample Count 1304 Population Count 53616826

R-Square for dependent variable HYPER (Cox & Snell, 1989): 0.237050

-2 * Normalized Log-Likelihood with Intercepts Only : 4566.55
 -2 * Normalized Log-Likelihood Full Model : 3533.27
 Approximate Chi-Square (-2 * Log-L Ratio) : 1033.28
 Degrees of Freedom : 7

Note: The approximate Chi-Square is not adjusted for clustering.
 Refer to hypothesis test table for adjusted test.

Frequencies and Values for CLASS Variables
by: Gender.

```
-----  
Gender          Frequency      Value  
-----  
Ordered  
  Position:  
  1              3602          1  
Ordered  
  Position:  
  2              3795          2  
-----
```

Frequencies and Values for CLASS Variables
by: Age Group.

```
-----  
Age Group      Frequency      Value  
-----  
Ordered  
  Position:  
  1              1442          1  
Ordered  
  Position:  
  2              1243          2  
Ordered  
  Position:  
  3              1374          3  
-----
```

Frequencies and Values for CLASS Variables
by: Indicates if have High Cholesterol.

Indicates if have High Cholesterol	Frequency	Value

Ordered Position:		
1	5877	0
Ordered Position:		
2	1075	1

Frequencies and Values for CLASS Variables
by: BMI groups, lean, overweight, obese.

```
-----  
BMI groups,  
  lean,  
  overweigh-  
  t, obese      Frequency      Value  
-----  
Ordered  
  Position:  
  1              3924          1  
Ordered  
  Position:  
  2              1843          2  
Ordered  
  Position:  
  3              1465          3  
-----
```

Variance Estimation Method: Taylor Series (WR)
 SE Method: Robust (Binder, 1983)
 Working Correlations: Independent
 Link Function: Logit
 Response variable HYPER: Indicates if have hypertension
 For Subpopulation: RIDAGEYR >= 20
 Multiple Logistic Regression: Odds of Hypertension
 by: Independent Variables and Effects.

```

-----
Independent
  Variables and      Beta      Lower 95%
  Effects           Coeff.    SE Beta   Limit Beta
-----
Intercept           -2.12     0.62     -3.38
Gender
  Male              -0.06     0.10     -0.27
  Female            0.00     0.00     0.00
Age Group
  20-39 yrs        -1.27     0.15     -1.58
  40-59 yrs         0.00     0.00     0.00
  60 + yrs          1.66     0.14     1.39
Indicates if have
  High Cholesterol
  not high
  cholesterol       -0.25     0.11     -0.48
  high cholesterol  0.00     0.00     0.00
BMI groups, lean,
  overweight, obese
  BMI<25            -0.40     0.13     -0.66
  25<=BMI<30       0.00     0.00     0.00
  BMI>=30           0.78     0.12     0.53
LOGTRIG             0.25     0.11     0.03
-----
  
```

Variance Estimation Method: Taylor Series (WR)
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 Response variable HYPER: Indicates if have hypertension
 For Subpopulation: RIDAGEYR >= 20
 Multiple Logistic Regression: Odds of Hypertension
 by: Independent Variables and Effects.

Independent Variables and Effects	Upper 95% Limit Beta	T-Test B=0	P-value T-Test B=0
Intercept	-0.85	-3.42	0.0019
Gender			
Male	0.14	-0.61	0.5446
Female	0.00	.	.
Age Group			
20-39 yrs	-0.96	-8.39	0.0000
40-59 yrs	0.00	.	.
60 + yrs	1.94	12.31	0.0000
Indicates if have High Cholesterol not high cholesterol	-0.03	-2.31	0.0280
high cholesterol	0.00	.	.
BMI groups, lean, overweight, obese			
BMI<25	-0.14	-3.09	0.0044
25<=BMI<30	0.00	.	.
BMI>=30	1.03	6.38	0.0000
LOGTRIG	0.47	2.30	0.0287

Variance Estimation Method: Taylor Series (WR)
SE Method: Robust (Binder, 1983)
Working Correlations: Independent
Link Function: Logit
Response variable HYPER: Indicates if have hypertension
For Subpopulation: RIDAGEYR >= 20
Multiple Logistic Regression: Odds of Hypertension
by: Contrast.

Contrast	Degrees of Freedom	S_waite Adj DF	S_waite Adj F	P-value S_waite Adj F
OVERALL MODEL	8	5.55	83.66	0.0000
MODEL MINUS				
INTERCEPT	7	4.78	68.37	0.0000
INTERCEPT
RIAGENDR	1	1.00	0.38	0.5446
AGE	2	1.88	173.93	0.0000
HICHOL	1	1.00	5.35	0.0280
BMIGRP	2	1.96	45.67	0.0000
LOGTRIG	1	1.00	5.30	0.0287

Variance Estimation Method: Taylor Series (WR)
 SE Method: Robust (Binder, 1983)
 Working Correlations: Independent
 Link Function: Logit
 Response variable HYPER: Indicates if have hypertension
 For Subpopulation: RIDAGEYR >= 20
 Multiple Logistic Regression: Odds of Hypertension
 by: Contrast.

```

-----
Contrast
      S_waite      P-value
      Adj ChiSq   S_waite
                   ChiSq      Wald F   Wald F
-----
OVERALL MODEL          464.53    0.0000    106.89    0.0000
MODEL MINUS
  INTERCEPT          326.91    0.0000    108.16    0.0000
INTERCEPT              .         .         .         .
RIAGENDR                0.38    0.5400     0.38    0.5446
AGE                    327.13    0.0000    231.30    0.0000
HICHOL                  5.35    0.0209     5.35    0.0280
BMIGRP                 89.64    0.0000    52.20    0.0000
LOGTRIG                 5.30    0.0215     5.30    0.0287
-----
  
```

Variance Estimation Method: Taylor Series (WR)
 SE Method: Robust (Binder, 1983)
 Working Correlations: Independent
 Link Function: Logit
 Response variable HYPER: Indicates if have hypertension
 For Subpopulation: RIDAGEYR >= 20
 Multiple Logistic Regression: Odds of Hypertension
 by: Independent Variables and Effects.

Independent Variables and Effects	Odds Ratio	Lower 95% Limit OR	Upper 95% Limit OR
Intercept	0.12	0.03	0.43
Gender			
Male	0.94	0.76	1.16
Female	1.00	1.00	1.00
Age Group			
20-39 yrs	0.28	0.21	0.38
40-59 yrs	1.00	1.00	1.00
60 + yrs	5.27	4.00	6.94
Indicates if have High Cholesterol not high cholesterol	0.78	0.62	0.97
high cholesterol	1.00	1.00	1.00
BMI groups, lean, overweight, obese			
BMI<25	0.67	0.51	0.87
25<=BMI<30	1.00	1.00	1.00
BMI>=30	2.18	1.70	2.80
LOGTRIG	1.29	1.03	1.61