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STATISTICAL METHODOLOGY FOR

A COMPARISON OF THE INDIVIDUAL CHARACTERISTICS  
AND DEATH RATES OF DISABLED-WORKER BENEFICIARIES  
ENTITLED IN 1972 AND 1985

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## Abstract

This paper contains the technical details about the statistical methodology used in the article, "A Comparison of the Individual Characteristics and Death Rates of Disabled-Worker Beneficiaries Entitled in 1972 and 1985", published in the Fall 1992 issue of the **Social Security Bulletin**, vol. 55, no. 3. Logistic regression techniques were used to test for differences between the covariate distributions for the 1972 and the 1985 entitlement cohorts. Survival analysis techniques were used to model the death rates of the two cohorts.

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## **Introduction**

This report contains the methodology used in the paper, "A Comparison of the Individual Characteristics and Death Rates of Disabled-Worker Beneficiaries Entitled in 1972 and 1985", [10].

## **Data**

The data for the 1972 entitlement cohort were originally used for the analysis in [1] and [2]. The data consist of a 5-percent random sample of SSDI disabled-workers who were initially entitled to benefits in 1972. Sample selection was based on the two terminal digits of the Social Security Number from the Master Beneficiary Record (MBR) and resulted in a 5-percent random sample of 23,062 persons. From this original sample, 18,816 persons were used in the analysis in [1]. Some 1,006 records were dropped because they did not match any record in the Duration and Termination Study (DTS) file, which was the source of covariates for the study. An additional 29 cases were rejected because of the lack of a sex/race code in both the MBR and DTS files. Records of 2,824 persons whose age at entitlement was 62 or older were omitted because information distinguishing retired workers from disabled workers was not available in this data file. An additional 387 cases were omitted because the date of death occurred in the month of entitlement or there was inconsistent information on key variables. The sample for this analysis was further reduced to 18,807 because 9 of the persons had a recorded date of death earlier than the date of entitlement.

The data for the 1985 entitlement cohort is a 10-percent random sample drawn from the MBR of SSDI disabled-worker beneficiaries who were initially entitled to benefits in 1985. There are 39,333 persons in the original sample. Since the primary diagnosis now appears on the MBR, no other file match was necessary. So that the two cohorts would be comparable, the number was reduced to 34,762 cases using the same rules for exclusion as the 1972 cohort.

### **Logistic Regression**

The differences in covariate distributions between the 1972 and 1985 cohorts were previously discussed one covariate at a time. Because a cohort difference in one covariate may be explained by another covariate, all covariates were analyzed simultaneously in a multiple logistic regression model. For the sake of simplicity, no interaction terms were considered.

The standard logistic regression model, as described in [8], is

$$\ln p/q = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_{23} x_{23} .$$

The dependent variable,  $y$ , is 1 if a beneficiary is in the 1985 cohort and 0 if a beneficiary is in the 1972 cohort. The probability that a beneficiary is in the 1985 cohort, conditional on the values of the covariate values  $x_i$ , is  $p$ ; the probability that a beneficiary is in the 1972 cohort is  $q$  and equals  $1 - p$ .

The independent variables,  $x_i$ , correspond to the covariates; each indicator variable

is either 0 or 1. The variable,  $x_1$ , is 1 if the beneficiary is a female and 0 if the beneficiary is a male; i.e., the reference group is males. The variable,  $x_2$ , is 1 if the beneficiary is black and 0 if the beneficiary is non-black; i.e., the reference group is non-blacks. For the covariate age at entitlement, the reference group is the age group 51-61 years; the variable,  $x_3$ , is 1 if the beneficiary is in the age group 18-34 years and the variable,  $x_4$ , is 1 if the beneficiary is in the age group 35-49 years. For a beneficiary in the age group 50-61 years, both  $x_3$  and  $x_4$  are 0. The reference group for education was chosen to be the unknown category. The indicator variables,  $x_5$  through  $x_8$ , describe the educational level attained at time of entitlement, ranging from 0-8 years to 13 or more years of education. The variable PIA was adjusted to 1989 dollars in the following manner. Since the PIAs for the 1972 cohort were already adjusted to 1985 values for the earlier analysis, they were multiplied by 1.15, as suggested in the Annual Statistical Supplement of the Social Security Bulletin, [6], to bring them in line with those used for the 1985 cohort, which was already in 1989 dollars. The variable PIA has 4 levels; the first level, \$1-\$299, was chosen to be the reference group. The indicator variables,  $x_9$  through  $x_{11}$ , represent the remaining three levels, \$300-\$499, \$500-\$699, and \$700 or more.

The primary diagnosis of the disabling condition has 12 levels. The 269 beneficiaries categorized into the AIDS level have been excluded from this logistic regression analysis, because there were no AIDS cases in 1972. Thus, the total number of beneficiaries used in this analysis is 53,300. The reference category was chosen to be the musculoskeletal group, since there is approximately the same

percentage of beneficiaries in this category in 1972 and in 1985.

Estimation of the parameters was done using LOGIST, the logistic regression procedure in SAS. Table 1 lists the parameter estimates,  $\hat{\beta}_i$ , along with their standard errors and the significance levels. The covariates have different distributions in the 1972 and 1985 cohorts. The multiple logistic regression analysis agrees with the individual analyses done one covariate at a time. A multiple logistic regression analysis was also done including the 269 AIDS cases and a total of 53,569 beneficiaries, but with the AIDS cases dispersed into the other levels of diagnostic groups. The results were essentially the same.

### **Death Rates**

The survival curves for the death rates were estimated using the LIFEREG procedure in SAS. A visual comparison of the estimated survival curve to the Kaplan - Meier curve was made for several different functional forms available in SAS. The underlying distribution which best fit the data was the loglogistic distribution. The survival curve in this case is given by

$$S(t) = \frac{1}{1 + \alpha t^\gamma}$$

where  $\alpha$  and  $\gamma$  are parameters to be estimated.

A survival curve was estimated separately for each primary diagnosis group.

The variables of age, sex, and race were entered as dummy group variables. The groups are described in the body of the paper and are listed in table 2. They were chosen to coincide with the groups in previous papers, [1], [2]. The functional form of the loglogistic survival function with covariates is given by

$$S(\vec{x}, t) = \frac{1}{1 + \left( \frac{t}{e^{\vec{x}'\vec{\beta}}} \right)^{\gamma}}$$

where  $\vec{x}$  is the vector of covariates and  $\vec{\beta}$  is the vector of coefficients. Thus, a positive coefficient,  $\beta_i$ , will create a higher survival curve and thus a lower death rate.

For ease of interpretation, let

$$y = \vec{x}'\vec{\beta} = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9$$

where, in the full model used in this study,

$\beta_0$  is a constant intercept term,

$\beta_1$  measures the effect of the entitlement year cohort on the survival curve,



$\beta_2$  through  $\beta_5$  describe an entitlement year - age group interaction,  $\beta_6$  and  $\beta_7$  describe an entitlement year - sex interaction, and  $\beta_8$  and  $\beta_9$  describe an entitlement year - race interaction.

If an entitlement year - age group interaction is present, then the effect of age group on the survival curve is different for the two entitlement year cohorts, 1972 and 1985. Similarly, if an entitlement year - sex interaction is present, then sex has a different effect on the survival curve for the two cohorts. This model does not contain all possible interaction terms; only the interaction terms of interest, i.e., those interaction terms with entitlement year, were included in this model.

The indicator variables  $x_1$  through  $x_9$  are defined as follows for each individual. Each variable  $x_i$  is 1 where noted in the definition and is 0 otherwise.

$x_1$  is 1 if the entitlement year is 1985,

$x_2$  is 1 if the entitlement year is 1985 and the age group is 50 - 61 years,

$x_3$  is 1 if the entitlement year is 1985 and the age group is 35 - 49 years,

$x_4$  is 1 if the entitlement year is 1972 and the age group is 50 - 61 years,

$x_5$  is 1 if the entitlement year is 1972 and the age group is 35 - 49 years,

$x_6$  is 1 if the entitlement year is 1985 and sex is female,

$x_7$  is 1 if the entitlement year is 1972 and sex is female,

$x_8$  is 1 if the entitlement year is 1985 and race is black, and

$x_9$  is 1 if the entitlement year is 1972 and race is black.

Thus, the reference group for age is the age group 18-34 years, the reference group for sex is males, and the reference group for race is non-blacks. For an individual entitled in either 1985 or 1972 and in the young age group 18-34 years,  $x_2$ ,  $x_3$ ,  $x_4$ , and  $x_5$  are all 0. However,  $x_1 = 1$  if the individual was entitled in 1985. For an individual entitled in either 1985 or 1972 who is male, both  $x_6$  and  $x_7$  are 0; again,  $x_1 = 1$  if the individual was entitled in 1985.

The final models used in this study are either this full model or simplifications of this full model. For example, for the circulatory diagnostic group, none of the interaction terms used in the model could be omitted, and the final model was the full model.

However, for the mental disorders group, a simpler model was suitable, because the entitlement year-sex and entitlement year-race interaction terms could be replaced with terms describing the effect of sex alone and race alone on the survival curve. This model may be described by

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7$$

where

$\beta_0$  through  $\beta_5$  and  $x_1$  through  $x_5$  are defined as in the full model, but  $x_6$  is 1 if the individual is female (regardless of the entitlement year), and  $x_7$  is 1 if the individual is black (regardless of the entitlement year).

Thus,  $\beta_6$  measures the effect of sex on the survival curve, and this effect is the same for the two cohorts in the mental disorders diagnostic group. Similarly,  $\beta_7$  measures the effect of race on the survival curve, and this effect is the same for the two cohorts in this diagnostic group.

Because the main focus of the analysis is the comparison of the two entitlement cohorts, the most complex model estimated allows entitlement year to interact with the age, sex, and race groups. For each primary diagnosis group except for the AIDS group, the coefficients of this model, called the full model, are computed. For the AIDS group, there are no 1972 entitlements. Consequently, the full model for the AIDS group will not contain the entitlement year variable and will have the age, sex, and race groups entered as dummy variables. The LIFEREG procedure also presents a "coefficient  $\chi^2$  test". This test is an approximate  $\chi^2$  statistic for testing that the parameters corresponding to a given variable are zero.

Next, a step down procedure using a likelihood ratio  $\chi^2$  test is used to test several hypotheses which lead to the reduced model. This is done to minimize the variance in the long term projections. The basic step down strategy for the non-AIDS groups is as follows:

- 1) Compute a likelihood ratio  $\chi^2$  statistic to compare the full model to the no interaction model -- the model with the age, sex, race, and entitlement year groups entered additively.
- 2) If the result of the  $\chi^2$  test is statistically significant, compare the full model to three separate models, where each model is missing the interaction of entitlement

year with one of the other variables. If the interaction of one or more variables with entitlement year is not statistically significant, and the overall coefficient  $\chi^2$  test suggests that the variable can be eliminated, then test for the possible elimination of the variable from the model.

3) If the result of the  $\chi^2$  test is not statistically significant, the overall coefficient  $\chi^2$  test is used as a guideline to decide on further likelihood ratio  $\chi^2$  tests to eliminate variables entirely from the model.

For the AIDS group, the initial model contains dummy variables for the age, sex, and race groups entered additively. And so the step down procedure begins at step 3 by attempting to eliminate variables from the model.

## **Results**

The results of the  $\chi^2$  tests, are shown in table 2 which presents the results of each stepdown procedure for each primary diagnosis group. They show a large variation by primary diagnosis. For about half of the primary diagnosis groups -- genitourinary, respiratory, digestive, nervous, congenital, and endocrine -- the interaction between entitlement year and the other variables is eliminated. For all except endocrine, the year of entitlement is not significant, i.e., the genitourinary, respiratory, digestive, nervous, and congenital groups have the same death rate in 1985 as they did in 1972. The reduced model for the congenital group is the simplest of all. Age is the only significant variable for this group. For the genitourinary, digestive, and respiratory groups, age and sex are the only significant variables. For

the nervous group, age, sex, and race are significant.

The entitlement year and sex were important variables in the endocrine group. The positive coefficient for entitlement year of 1985 indicates that the death rate in 1985 is lower than the rate in 1972 for this diagnostic group.

The relationship between year of entitlement and the other variables of age, sex, and race is more complicated for the remaining primary diagnosis groups. In the remaining groups, entitlement year interacts with at least one of the other variables. Because of the complexity of the interaction, the result is most easily interpreted by comparing the survival curves for the different groups. This is done in the main part of the paper.

For the neoplasm group, race is not a significant variable and so it does not appear in the reduced model. Age is significant; however, it does not interact significantly with entitlement year, and so, affects the death rate in the same way in both cohorts. The interaction between entitlement year and sex is significant. For the infectious and mental groups, sex and race are significant, but do not interact with entitlement year. Age is also significant and does interact with entitlement year. Thus, the effect of age on death rates is different for each entitlement year. Sex is a significant variable for the accident group and does not interact with entitlement year. However, there is an interaction between entitlement year and age and race for the accident group. For the musculoskeletal group, all three variables are significant. But, there is only an interaction between entitlement year and race. The circulatory group is the only group where all three variables interact significantly with

entitlement year. For the AIDS group, age is not a significant factor. Sex and race are significant and the signs of the coefficients yield the expected relationships with the death rate.

Table 1: Coefficient Estimates for the Logistic Regression Analysis				
CRITERION	INTERCEPT ONLY	COVARIATES	CHI-SQUARE	
-2 log L	69204.097	58082.103	11121.994	with 23 DF
Score			9865.987	with 23 DF
VARIABLE	PARAMETER ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
Intercept	0.1291	0.0563	5.2646	0.0218
Sex: Female	0.4151	0.0242	295.2418	0.0001
Race: Black	0.3512	0.0285	152.1581	0.0001
Age: Middle	0.1363	0.0248	30.1799	0.0001
Age: Young	0.3872	0.0338	131.4675	0.0001
Ed: 0 - 8 Yrs	-0.4335	0.0403	115.4871	0.0001
Ed: 9 - 11 Yrs	-0.0834	0.0414	4.0588	0.0439
Ed: 12 Yrs	0.2448	0.0399	37.5791	0.0001
Ed: 13 Yrs or more	0.1194	0.0480	6.1825	0.0129
PIA: \$300 - \$499	0.0094	0.0355	0.0699	0.7914
PIA: \$500 - \$699	-0.2747	0.0375	53.7877	0.0001
PIA: \$700 or more	2.0597	0.0484	1811.5824	0.0001
Diag: Circulatory	-0.4425	0.0328	182.3752	0.0001
Diag: Mental	1.0151	0.0382	704.8209	0.0001
Diag: Neoplasms	0.2010	0.0413	23.7178	0.0001
Diag: Other	-0.9849	0.0507	377.1009	0.0001
Diag: Nervous	0.2273	0.0461	24.3086	0.0001
Diag: Respiratory	0.0759	0.0481	2.4971	0.1141
Diag: Accident	-0.4401	0.0487	81.5412	0.0001
Diag: Endocrine	0.1998	0.0573	12.1498	0.0005
Diag: Infectious	0.9060	0.0689	172.8158	0.0001
Diag: Digestive	-0.6132	0.0718	72.9460	0.0001
Diag: Genitourinary	0.2577	0.0998	6.6711	0.0098
Diag: Congenital	-1.2764	0.1349	89.4891	0.0001

Table 2: Likelihood Ratio Chi Square Tests: Infective				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	15.6*
2a	Full	No Age Int.	2	14.1*
2b	Full	No Sex Int.	1	1.2
2c	Full	No Race Int.	1	0.3
3	Full	No Race or Sex Int.	2	1.5

\* Significant at the .05 Level



Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Infective Disabling Condition; Full Model

Noncensored Cases: 303		Censored Cases: 1432			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	7.31	0.58	160.89	0.0001
Entitlement Year	1			1.37	0.2417
1985	1	-0.73	0.62	1.37	0.2417
1972	0	0.00	0.00		
Entitlement: Age	4			37.89	0.0001
85: 50 - 61	1	-1.16	0.28	17.24	0.0001
85: 35 - 49	1	-0.49	0.29	2.84	0.0919
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.87	0.58	10.29	0.0013
72: 35 - 49	1	-2.07	0.59	12.50	0.0004
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			14.18	0.0008
85: Female	1	0.45	0.17	6.87	0.0088
85: Male	0	0.00	0.00		
72: Female	1	0.81	0.30	7.50	0.0062
72: Male	0	0.00	0.00		
Entitlement: Race	2			5.56	0.0620
85: Black	1	-0.39	0.18	4.64	0.0312
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.22	0.23	0.94	0.3328
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.92	0.05		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Infective Disabling Condition; Final Model					
Noncensored Cases: 303		Censored Cases: 1432			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	7.39	0.57	166.18	0.0001
Entitlement Year	1			1.86	0.1726
1985	1	-0.84	0.61	1.86	0.1726
1972	0	0.00	0.00		
Entitlement: Age	4			37.87	0.0001
85: 50 - 61	1	-1.16	0.28	17.34	0.0001
85: 35 - 49	1	-0.50	0.29	2.94	0.0863
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.87	0.58	10.36	0.0013
72: 35 - 49	1	-2.08	0.59	12.60	0.0004
72: 18 - 34	0	0.00	0.00		
Sex	1			13.08	0.0003
Female	1	0.54	0.15	13.08	0.0003
Male	0	0.00	0.00		
Race	1			5.45	0.0196
Black	1	-0.33	0.14	5.45	0.0196
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.92	0.05		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests, Neoplasms				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	11.9*
2a	Full	No Age Int.	2	3.1
2b	Full	No Sex Int.	1	8.1*
2c	Full	No Race Int.	1	0.9
3	Full	No Age or Race Int.	3	3.9
4	No Age or Race Int.	No Race Variable	1	2.7

\* Significant at the .05 level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Neoplasm Disabling Condition; Full Model

Noncensored Cases: 4392		Censored Cases: 862			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	2.79	0.16	311.59	0.0001
Entitlement Year	1			2.03	0.1544
1985	1	0.26	0.18	2.03	0.1544
1972	0	0.00	0.00		
Entitlement: Age	4			38.18	0.0001
85: 50 - 61	1	-0.49	0.09	28.60	0.0001
85: 35 - 49	1	-0.57	0.10	32.48	0.0001
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-0.18	0.16	1.20	0.2734
72: 35 - 49	1	-0.33	0.17	3.59	0.0581
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			57.39	0.0001
85: Female	1	0.22	0.05	20.64	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.49	0.08	36.75	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			3.70	0.1573
85: Black	1	-0.13	0.07	3.70	0.0545
85: Nonblack	0	0.00	0.00		
72: Black	1	0.00	0.12	0.00	0.9800
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.84	0.01		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Neoplasm Disabling Condition; Final Model					
Noncensored Cases: 4392		Censored Cases: 862			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	3.00	0.09	1120.33	0.0001
Entitlement Year	1			0.40	0.5294
1985	1	-0.04	0.06	0.40	0.5294
1972	0	0.00	0.00		
Age	2			35.57	0.0001
50 - 61	1	-0.41	0.08	26.72	0.0001
35 - 49	1	-0.51	0.09	35.47	0.0001
18 - 34	0	0.00	0.00		
Entitlement: Sex	2			56.73	0.0001
85: Female	1	0.22	0.05	20.57	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.49	0.08	36.21	0.0001
72: Male	0	0.00	0.00		
Scale Parameter	1	0.84	0.01		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Endocrine				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	4.1
2	No Int.	No Year Variable	1	5.4*
3	No Int.	No Age Variable	2	3.3
4	No Age Variable	No Age or Race Variable	1	1.7

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Endocrine Disabling Condition; Full Model

Noncensored Cases: 617		Censored Cases: 1298			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	4.43	0.22	412.05	0.0001
Entitlement Year	1			3.40	0.0652
1985	1	0.50	0.27	3.40	0.0652
1972	0	0.00	0.00		
Entitlement: Age	4			7.03	0.1342
85: 50 - 61	1	-0.02	0.17	0.01	0.9113
85: 35 - 49	1	0.23	0.19	1.51	0.2189
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	0.39	0.22	3.05	0.0809
72: 35 - 49	1	0.34	0.25	1.94	0.1636
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			18.35	0.0001
85: Female	1	0.37	0.11	10.87	0.0010
85: Male	0	0.00	0.00		
72: Female	1	0.34	0.12	7.60	0.0058
72: Male	0	0.00	0.00		
Entitlement: Race	2			1.63	0.4427
85: Black	1	0.06	0.13	0.23	0.6304
85: Nonblack	0	0.00	0.00		
72: Black	1	0.17	0.14	1.40	0.2369
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.79	0.03		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Endocrine Disabling Condition; No Interaction

Noncensored Cases: 617		Censored Cases: 1298			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	4.64	0.14	1151.73	0.0001
Entitlement Year	1			5.13	0.0236
1985	1	0.20	0.09	5.13	0.0236
1972	0	0.00	0.00		
Age	2			3.26	0.1960
50 - 61	1	0.14	0.13	1.05	0.3066
35 - 49	1	0.25	0.15	3.01	0.0830
18 - 34	0	0.00	0.00		
Sex	1			18.17	0.0001
Female	1	0.35	0.08	18.17	0.0001
Male	0	0.00	0.00		
Race	1			1.32	0.2515
Black	1	0.11	0.10	1.32	0.2515
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.79	0.03		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Endocrine Disabling Condition; Final Model					
Noncensored Cases: 617		Censored Cases: 1298			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	4.81	0.06	5555.92	0.0001
Entitlement Year	1			5.61	0.0179
1985	1	0.20	0.09	5.61	0.0179
1972	0	0.00	0.00		
Sex	1			18.74	0.0001
Female	1	0.36	0.08	18.74	0.0001
Male	0	0.00	0.00		
Scale Parameter	1	0.79	0.03		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Mental				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	13.4*
2a	Full	No Age Int.	2	13.1*
2b	Full	No Sex Int.	1	0.7
2c	Full	No Race Int.	1	0.0
3	Full	No Race or Sex Int.	2	0.7

\* Significant at the .05 Level



Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Mental Disabling Condition; Full Model

Noncensored Cases: 937		Censored Cases: 9315			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	6.98	0.15	2299.93	0.0001
Entitlement Year	1			3.82	0.0507
1985	1	-0.31	0.16	3.82	0.0507
1972	0	0.00	0.00		
Entitlement: Age	4			271.75	0.0001
85: 50 - 61	1	-1.12	0.10	129.68	0.0001
85: 35 - 49	1	-0.39	0.10	14.18	0.0002
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.72	0.15	131.31	0.0001
72: 35 - 49	1	-0.88	0.16	30.85	0.0001
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			80.30	0.0001
85: Female	1	0.56	0.09	43.01	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.68	0.11	39.60	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			14.15	0.0008
85: Black	1	-0.26	0.10	9.32	0.0023
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.28	0.12	4.89	0.0270
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.78	0.02		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Mental Disabling Condition; Final Model

Noncensored Cases: 937		Censored Cases: 9315			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	6.99	0.14	2380.25	0.0001
Entitlement Year	1			4.47	0.0345
1985	1	-0.32	0.15	4.47	0.0345
1972	0	0.00	0.00		
Entitlement: Age	4			271.28	0.0001
85: 50 - 61	1	-1.12	0.10	131.10	0.0001
85: 35 - 49	1	-0.39	0.10	14.37	0.0051
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.71	0.15	131.15	0.0001
72: 35 - 49	1	-0.87	0.16	30.58	0.0001
72: 18 - 34	0	0.00	0.00		
Sex	1			79.44	0.0001
Female	1	0.62	0.07	79.44	0.0001
Male	0	0.00	0.00		
Race	1			14.26	0.0002
Black	1	-0.27	0.07	14.26	0.0002
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.78	0.02		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Nervous

Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	1.1
2	No Int.	No Year Variable	1	0.1

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Nervous System Disabling Condition; Full Model					
Noncensored Cases: 654			Censored Cases: 3065		
Log Likelihood: -2196.096597					
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.53	0.19	1210.38	0.0001
Entitlement Year	1			0.16	0.6911
1985	1	-0.09	0.24	0.16	0.6911
1972	0	0.00	0.00		
Entitlement: Age	4			97.22	0.0001
85: 50 - 61	1	-1.12	0.17	45.70	0.0001
85: 35 - 49	1	-0.57	0.18	9.51	0.0020
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.17	0.19	38.08	0.0001
72: 35 - 49	1	-0.54	0.21	6.51	0.0107
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			39.83	0.0001
85: Female	1	0.55	0.12	21.19	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.55	0.12	19.37	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			8.38	0.0151
85: Black	1	-0.19	0.15	1.71	0.1905
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.41	0.16	6.69	0.0097
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.87	0.03		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Nervous System Disabling Condition; No Interaction					
Noncensored Cases: 654		Censored Cases: 3065			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.50	0.14	2280.26	0.0001
Entitlement Year	1			0.13	0.7201
1985	1	-0.03	0.08	0.13	0.7201
1972	0	0.00	0.00		
Age	2			97.20	0.0001
50 - 61	1	-1.15	0.13	80.60	0.0001
35 - 49	1	-0.55	0.14	15.68	0.0001
18 - 34	0	0.00	0.00		
Sex	1			40.09	0.0001
Female	1	0.55	0.09	40.09	0.0001
Male	0	0.00	0.00		
Race	1			7.45	0.0063
Black	1	-0.29	0.11	7.45	0.0063
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.87	0.03		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Nervous System Disabling Condition; Final Model					
Noncensored Cases: 654		Censored Cases: 3065			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.49	0.14	2307.57	0.0001
Age	2			97.22	0.0001
50 - 61	1	-1.15	0.13	80.55	0.0001
35 - 49	1	-0.56	0.14	15.60	0.0001
18 - 34	0	0.00	0.00		
Sex	1			40.12	0.0001
Female	1	0.55	0.09	40.12	0.0001
Male	0	0.00	0.00		
Race	1			7.50	0.0062
Black	1	-0.30	0.11	7.50	0.0062
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.87	0.03		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Circulatory				
Number	Model 1	Model 2	DF	Chi Square
1a	Full	No Age Int.	2	19.6*
1b	Full	No Sex Int.	1	22.1*
1c	Full	No Race Int.	1	5.0*

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Circulatory Disabling Condition; Full Model					
Noncensored Cases: 4378		Censored Cases: 7036			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.78	0.19	909.51	0.0001
Entitlement Year	1			6.16	0.0131
1985	1	-0.60	0.24	6.16	0.0131
1972	0	0.00	0.00		
Entitlement: Age	4			78.70	0.0001
85: 50 - 61	1	-0.09	0.15	0.34	0.5613
85: 35 - 49	1	0.09	0.16	0.33	0.5683
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.07	0.19	30.96	0.0001
72: 35 - 49	1	-0.71	0.20	12.88	0.0003
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			233.24	0.0001
85: Female	1	0.32	0.07	24.51	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.71	0.05	209.62	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			40.39	0.0001
85: Black	1	-0.36	0.07	31.26	0.0001
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.17	0.06	9.18	0.0024
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.82	0.01		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Circulatory Disabling Condition; Final Model					
Noncensored Cases: 4378		Censored Cases: 7036			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.78	0.19	909.51	0.0001
Entitlement Year	1			6.16	0.0131
1985	1	-0.60	0.24	6.16	0.0131
1972	0	0.00	0.00		
Entitlement: Age	4			78.70	0.0001
85: 50 - 61	1	-0.09	0.15	0.34	0.5613
85: 35 - 49	1	0.09	0.16	0.33	0.5683
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.07	0.19	30.95	0.0001
72: 35 - 49	1	-0.71	0.20	12.88	0.0003
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			233.24	0.0001
85: Female	1	0.31	0.06	24.51	0.0001
85: Male	0	0.00	0.00		
72: Female	1	0.71	0.05	209.62	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			40.39	0.0001
85: Black	1	-0.36	0.07	31.26	0.0001
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.17	0.06	9.18	0.0024
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.82	0.01		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Respiratory				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	3.8
2	No Int.	No Year or Race Variable	2	3.62

\* Significant at the .05 Level



Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Respiratory Disabling Condition; Full Model

Noncensored Cases: 1230		Censored Cases: 1709			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	6.08	0.46	174.20	0.0001
<u>Entitlement Year</u>	1			2.79	0.0951
1985	1	-1.02	0.61	2.79	0.0951
1972	0	0.00	0.00		
<u>Entitlement: Age</u>	4			27.99	0.0001
85: 50 - 61	1	-0.39	0.40	0.98	0.3233
85: 35 - 49	1	-0.06	0.41	0.02	0.8835
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.39	0.46	9.08	0.0026
72: 35 - 49	1	-1.01	0.47	4.60	0.0320
72: 18 - 34	0	0.00	0.00		
<u>Entitlement: Sex</u>	2			11.14	0.0038
85: Female	1	0.16	0.08	3.87	0.0492
85: Male	0	0.00	0.00		
72: Female	1	0.28	0.10	7.29	0.0069
72: Male	0	0.00	0.00		
<u>Entitlement: Race</u>	2			2.45	0.2933
85: Black	1	-0.16	0.12	1.87	0.1712
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.10	0.13	0.58	0.4459
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.71	0.02		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Respiratory Disabling Condition; No Interaction

Noncensored Cases: 1230		Censored Cases: 1709			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.64	0.31	323.62	0.0001
Entitlement Year	1			1.33	0.2496
1985	1	-0.06	0.06	1.33	0.2496
1972	0	0.00	0.00		
Age	2			26.42	0.0001
50 - 61	1	-0.93	0.31	8.74	0.0031
35 - 49	1	-0.57	0.32	3.15	0.0759
18 - 34	0	0.00	0.00		
Sex	1			10.16	0.0014
Female	1	0.21	0.06	10.16	0.0014
Male	0	0.00	0.00		
Race	1			2.31	0.1287
Black	1	-0.13	0.09	2.31	0.1287
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.72	0.02		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Respiratory Disabling Condition; Final Model					
Noncensored Cases: 1230		Censored Cases: 1709			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.61	0.32	313.36	0.0001
Age	2			25.83	0.0001
50 - 61	1	-0.93	0.32	8.70	0.0032
35 - 49	1	-0.58	0.32	3.20	0.0737
18 - 34	0	0.00	0.00		
Sex	1			9.06	0.0026
Female	1	0.19	0.06	9.06	0.0026
Male	0	0.00	0.00		
Scale Parameter	1	0.72	0.02		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Digestive				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	4.6
2	No Int.	No Year Variable	1	3.0
3	No Year Variable	No Year or Race Variable	1	2.8

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Digestive Disabling Condition; Full Model					
Noncensored Cases: 529		Censored Cases: 528			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.56	0.35	247.46	0.0001
Entitlement Year	1			1.17	0.2787
1985	1	-0.50	0.46	1.17	0.2787
1972	0	0.00	0.00		
Entitlement: Age	4			20.71	0.0004
85: 50 - 61	1	-0.96	0.31	9.61	0.0019
85: 35 - 49	1	-0.64	0.32	3.98	0.0460
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.07	0.36	8.84	0.0030
72: 35 - 49	1	-1.18	0.37	10.07	0.0015
72: 18 - 34	0	0.00	0.00	0.00	
Entitlement: Sex	2			33.68	0.0001
85: Female	1	0.76	0.20	14.15	0.0002
85: Male	0	0.00	0.00	0.00	
72: Female	1	0.78	0.18	19.78	0.0001
72: Male	0	0.00	0.00	0.00	
Entitlement: Race	2			3.97	0.1374
85: Black	1	-0.07	0.28	0.07	0.7917
85: Nonblack	0	0.00	0.00	0.00	
72: Black	1	-0.45	0.23	3.90	0.0483
72: Nonblack	0	0.00	0.00	0.00	
Scale Parameter	1	0.95	0.04		

**Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Digestive Disabling Condition; No Interaction**

Noncensored Cases: 522		Censored Cases: 522			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	5.42	0.24	500.35	0.0001
Entitlement Year	1			2.77	0.0959
1985	1	-0.19	0.12	2.77	0.0959
1972	0	0.00	0.00		
Age	2			17.58	0.0002
50 - 61	1	-1.01	0.24	17.58	0.0001
35 - 49	1	-0.92	0.25	13.51	0.0002
18 - 34	0	0.00	0.00		
Sex	1			35.02	0.0001
Female	1	0.79	0.13	35.02	0.0001
Male	0	0.00	0.00		
Race	1			3.99	0.0458
Black	1	-0.35	0.18	3.99	0.0458
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.96	0.04		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Digestive Disabling Condition; Final Model					
Noncensored Cases: 529		Censored Cases: 528			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.26	0.23	502.97	0.0001
Age	2			15.78	0.0004
50 - 61	1	-0.96	0.24	15.71	0.0001
35 - 49	1	-0.90	0.25	12.90	0.0003
18 - 34	0	0.00	0.00		
Sex	1			34.15	0.0001
Female	1	0.79	0.14	34.15	0.0001
Male	0	0.00	0.00		
Scale Parameter	1	0.97	0.04		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Genitourinary				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	2.0
2	No Int.	No Year or Race Variables	2	0.3

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Genitourinary Disabling Condition; Full Model

		Noncensored Cases: 242		Censored Cases: 369	
Variable	DF	Estimate	Std Err	Chi Sq	PR>Chi
Intercept	1	4.87	0.31	242.42	0.0001
<u>Entitlement Year</u>	1			0.49	0.4845
1985	1	0.27	0.38	0.49	0.4845
1972	0	0.00	0.00		
<u>Entitlement: Age</u>	4			28.23	0.0001
85: 50 - 61	1	-1.00	0.24	17.40	0.0001
85: 35 - 49	1	-0.50	0.25	3.95	0.0470
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-0.83	0.35	5.73	0.0167
72:35 - 49	1	-0.19	0.37	0.26	0.6071
72:18 - 34	0	0.00	0.00		
<u>Entitlement: Sex</u>	2			26.36	0.0001
85: Female	1	0.69	0.20	11.64	0.0006
85: Male	0	0.00	0.00		
72: Female	1	0.99	0.25	14.99	0.0001
72: Male	0	0.00	0.00		
<u>Entitlement: Race</u>	2			0.62	0.7336
85: Black	1	0.02	0.19	0.01	0.9224
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.21	0.26	0.61	0.4347
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.81	0.05		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Genitourinary Disabling Condition; No Interaction					
Noncensored Cases: 242				Censored Cases: 369	
Variable	DF	Estimate	Std Err	Chi Sq	PR>Chi
Intercept	1	5.00	0.21	579.80	0.0001
<u>Entitlement Year</u>	1			0.18	0.6730
1985	1	0.06	0.15	0.18	0.6730
1972	0	0.00	0.00		
<u>Age</u>	2			27.54	0.0001
50 - 61	1	-0.93	0.20	22.71	0.0001
35 - 49	1	-0.38	0.21	3.41	0.0648
18 - 34	0	0.00	0.00		
<u>Sex</u>	1			25.99	0.0001
Female	1	0.82	0.16	25.99	0.0001
Male	0	0.00	0.00		
<u>Race</u>	1			0.16	0.6934
Black	1	-0.06	0.15	0.16	0.6934
Nonblack	0	0.00	0.00		
Intercept	1	0.81	0.05		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Genitourinary Disabling Condition, Final Model					
Noncensored Cases: 242				Censored Cases: 369	
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	5.02	0.18	819.95	0.0001
<u>Age</u>	2			27.73	0.0001
50 - 61	1	-0.92	0.19	22.85	0.0001
35 - 49	1	-0.38	0.21	3.43	0.0642
18 - 34	0	0.00	0.00	18.00	-34.0000
<u>Sex</u>	1			26.58	0.0001
Female	1	0.81	0.16	26.58	0.0001
Male	0	0.00	0.00		
Scale Parameter	1	0.81	0.04		



Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Musculoskeletal				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	12.8*
2a	Full	No Age Int.	2	3.3
2b	Full	No Sex Int.	1	1.6
2c	Full	No Race Int.	1	7.7*
3	Full	No Age or Sex Int.	3	4.6

\* Significant at the .05 Level

**Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Musculoskeletal Disabling Condition; Full Model**

Noncensored Cases: 1054		Censored Cases: 6908			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.66	0.16	1732.19	0.0001
Entitlement Year	1			0.04	0.8482
1985	1	0.05	0.27	0.04	0.8482
1972	0	0.00	0.00		
Entitlement: Age	4			133.19	0.0001
85: 50 - 61	1	-0.85	0.22	14.52	0.0001
85: 35 - 49	1	-0.37	0.24	2.33	0.1272
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.14	0.16	51.06	0.0001
72: 35 - 49	1	-0.43	0.17	6.27	0.0123
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			51.71	0.0001
85: Female	1	0.29	0.09	9.63	0.0019
85: Male	0	0.00	0.00		
72: Female	1	0.43	0.07	42.58	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			13.93	0.0009
85: Black	1	-0.40	0.11	13.92	0.0002
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.01	0.09	0.01	0.9104
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.71	0.02		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Musculoskeletal Disabling Condition; Final Model					
Noncensored Cases: 1054		Censored Cases: 6908			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	6.60	0.14	2390.70	0.0001
Entitlement Year	1			13.64	0.0002
1985	1	0.25	0.07	13.64	0.0002
1972	0	0.00	0.00		
Age	2			130.12	0.0001
50 - 61	1	-1.05	0.13	63.35	0.0001
35 - 49	1	-0.41	0.14	8.72	0.0032
18 - 34	0	0.00	0.00		
Sex	1			49.58	0.0001
Female	1	0.38	0.05	49.58	0.0001
Male	0	0.00	0.00		
Entitlement: Race	2	14.58	0.00		
85: Black	1	-0.42	0.11	14.56	0.0001
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.01	0.09	0.02	0.8899
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.71	0.02		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Congenital				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	4.2
2	No Int.	No Year, Sex, or Race Variable	3	3.1

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Congenital Disabling Condition; Full Model

Noncensored Cases: 58		Censored Cases: 240			
				Log Likelihood: -201.1290187	
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	7.34	0.58	159.37	0.0001
Entitlement Year	1			3.99	0.0457
1985	1	-1.59	0.79	3.99	0.0457
1972	0	0.00	0.00		
Entitlement: Age	4			16.37	0.0026
85: 50 - 61	1	-0.12	0.72	0.03	0.8642
85: 35 - 49	1	1.46	1.24	1.38	0.2399
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.90	0.59	10.42	0.0012
72: 35 - 49	1	-0.50	0.62	0.65	0.4190
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			2.76	0.2512
85: Female	1	0.68	0.75	0.81	0.3682
85: Male	0	0.00	0.00		
72: Female	1	0.58	0.41	1.99	0.1584
72: Male	0	0.00	0.00		
Entitlement: Race	2			0.15	0.9289
85: Black	1	0.17	1.20	0.02	0.8851
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.18	0.51	0.13	0.7219
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	1.05	0.13		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Congenital Disabling Condition; No Interaction					
Noncensored Cases: 58		Censored Cases: 240			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	6.89	0.46	223.19	0.0001
Entitlement Year	1			0.06	0.8009
1985	1	-0.10	0.39	0.06	0.8009
1972	0	0.00	0.00		
Age	2			14.93	0.0006
50 - 61	1	-1.38	0.46	9.03	0.0027
35 - 49	1	0.03	0.51	0.00	0.9601
18 - 34	0	0.00	0.00		
Sex	1			2.68	0.1017
Female	1	0.59	0.36	2.68	0.1017
Male	0	0.00	0.00		
Race	1			0.06	0.8022
Black	1	-0.11	0.46	0.06	0.8022
Nonblack	0	0.00	0.00		
Scale Parameter	1	1.06	0.13		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Congenital Disabling Condition; Final Model					
Noncensored Cases: 58		Censored Cases: 240			
Variable	DF	Estimate	Std Err	Chi Sq	Pr>Chi
Intercept	1	7.00	0.46	233.06	0.0001
Age	2			15.07	0.0005
50 - 61	1	-1.31	0.45	8.30	0.0040
35 - 49	1	0.12	0.52	0.06	0.8105
18 - 34	0	0.00	0.00		
Scale Parameter	1	1.07	0.13		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Accident				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	20.0*
2a	Full	No Age Int.	2	15.8*
2b	Full	No Sex Int.	1	0.1
2c	Full	No Race Int.	1	4.5*

\* Significant at the .05 Level

**Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Accident Disabling Condition; Full Model**

Noncensored Cases: 359		Censored Cases: 2522			
		Log Likelihood: -1316.56647			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	7.51	0.21	1226.03	0.0001
Entitlement Year	1			14.35	0.0002
1985	1	-0.94	0.25	14.35	0.0002
1972	0	0.00	0.00		
Entitlement: Age	4			92.54	0.0001
85: 50 - 61	1	-0.66	0.21	10.06	0.0015
85: 35 - 49	1	-0.20	0.24	0.69	0.4077
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.76	0.21	70.63	0.0001
72: 35 - 49	1	-0.77	0.22	11.98	0.0005
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			11.91	0.0026
85: Female	1	0.51	0.24	4.58	0.0323
85: Male	0	0.00	0.00		
72: Female	1	0.45	0.17	7.46	0.0063
72: Male	0	0.00	0.00		
Entitlement: Race	2			13.95	0.0009
85: Black	1	0.02	0.27	0.01	0.9349
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.63	0.17	13.94	0.0002
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.87	0.04		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Accident Disabling Condition; Final Model					
Noncensored Cases: 359		Censored Cases: 2522			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	7.51	0.21	1228.13	0.0001
Entitlement Year	1			14.37	0.0001
1985	1	-0.93	0.25	14.37	0.0001
1972	0	0.00	0.00		
Entitlement: Age	4			93.21	0.0001
85: 50 - 61	1	-0.66	0.21	10.03	0.0015
85: 35 - 49	1	-0.20	0.24	0.68	0.4109
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.76	0.21	71.28	0.0001
72: 35 - 49	1	-0.77	0.22	12.01	0.0005
72: 18 - 34	0	0.00	0.00		
Sex	1			11.92	0.0006
Female	1	0.47	0.14	11.92	0.0006
Male	0	0.00	0.00		
Entitlement: Race	2			13.92	0.0009
85: Black	1	0.02	0.27	0.01	0.9339
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.63	0.17	13.92	0.0002
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	0.87	0.04		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: Other				
Number	Model 1	Model 2	DF	Chi Square
1	Full	No Int.	4	37.7*
2a	Full	No Age Int.	2	3.6
2b	Full	No Sex Int.	1	23.8*
2c	Full	No Race Int.	1	9.7*

\* Significant at the .05 Level



Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Other Disabling Condition; Full Model

Noncensored Cases: 1527		Censored Cases: 1723			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.72	0.17	1591.90	0.0001
Entitlement Year	1			151.29	0.0001
1985	1	-2.73	0.22	151.29	0.0001
1972	0	0.00	0.00		
Entitlement: Age	4			146.29	0.0001
85: 50 - 61	1	-1.30	0.16	69.66	0.0001
85: 35 - 49	1	-1.04	0.17	36.74	0.0001
85: 18 - 34	0	0.00	0.00		
72: 50 - 61	1	-1.43	0.17	66.86	0.0001
72: 35 - 49	1	-0.85	0.19	19.67	0.0001
72: 18 - 34	0	0.00	0.00		
Entitlement: Sex	2			41.56	0.0001
85: Female	1	-0.05	0.11	0.22	0.6422
85: Male	0	0.00	0.00		
72: Female	1	0.71	0.11	41.34	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			59.85	0.0073
85: Black	1	0.40	0.16	56.73	0.0095
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.24	0.14	3.12	0.0774
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	1.06	0.02		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the Other Disabling Condition; Final Model

Noncensored Cases: 1527		Censored Cases: 1723			
Variable	DF	Estimate	Std Err	Chi Sq	Pr > Chi
Intercept	1	6.71	0.13	2984.29	0.0001
Entitlement Year	1			827.13	0.0001
1985	1	-2.70	0.94	827.13	0.0001
1972	0	0.00	0.00		
Age	4			143.83	0.0001
50 - 61	1	-1.37	0.12	138.10	0.0001
35 - 49	1	-0.94	0.13	54.78	0.0001
18 - 34	0	0.00	0.00		
Entitlement: Sex	2			41.46	0.0001
85: Female	1	-0.06	0.11	0.31	0.5766
85: Male	0	0.00	0.00		
72: Female	1	0.70	0.11	41.15	0.0001
72: Male	0	0.00	0.00		
Entitlement: Race	2			9.16	0.0103
85: Black	1	0.40	0.16	6.51	0.0107
85: Nonblack	0	0.00	0.00		
72: Black	1	-0.22	0.14	2.63	0.1052
72: Nonblack	0	0.00	0.00		
Scale Parameter	1	1.05	0.02		

Table 2(Cont'd): Likelihood Ratio Chi Square Tests: AIDS				
Number	Model 1	Model 2	DF	Chi Square
1	No Int.	No Age Variable	2	0.7

\* Significant at the .05 Level

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the AIDS-85 Disabling Condition; Full Model					
Variable	Noncensored Cases: 244		Censored Cases: 25		Pr > Chi
	DF	Estimate	Std Err	Chi Sq	
Intercept	1	2.25	0.10	490.78	0.0001
Age	2			0.68	0.7116
50 - 61	1	0.22	0.31	0.51	0.4767
35 - 49	1	-0.04	0.14	0.08	0.7802
18 - 34	0	0.00	0.00		
Sex	1			14.95	0.0001
Female	1	0.89	0.23	14.95	0.0001
Male	0	0.00	0.00		
Race	1			4.95	0.0261
Black	1	-0.40	0.18	4.95	0.0261
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.61	0.03		

Table 2(Cont'd): Coefficient Estimates of the Death Survival Curve, for the AIDS-85 Disabling Condition; Final Model					
Variable	Noncensored Cases: 244		Censored Cases: 25		Pr > Chi
	DF	Estimate	Std Err	Chi Sq	
Intercept	1	2.24	0.07	969.91	0.0001
Sex	1			17.45	0.0001
Female	1	0.93	0.22	17.45	0.0001
Male	0	0.00	0.00		
Race	1			5.27	0.0217
Black	1	-0.40	0.18	5.27	0.0217
Nonblack	0	0.00	0.00		
Scale Parameter	1	0.61	0.03		

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