

## APPENDIX G-3.

### Neurology Analysis Tables Occupation and Diabetic Class Removed from Final Model

This appendix contains results of exposure analyses after occupation and diabetic class have been removed from those final dioxin models (Models 2 through 6) that contained occupation or diabetic class. These analyses are performed to investigate the relationship of the dependent variable to dioxin without removing any effects due to occupation or diabetic class. The format of these tables closely parallels the adjusted panels of Chapter 11 tables. A summary of the tables found in this appendix follows.

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**Table G-3-1.**  
**Analysis of Hereditary and Degenerative Diseases**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
<b>Analysis Results for Log<sub>e</sub> (Initial Dioxin)<sup>a</sup></b>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
504	0.91 (0.65,1.27)	0.566	AGE (p=0.294) DRKYR*INS (p=0.015)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>			
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>
Comparison	1,043		
Background RH	366	1.08 (0.66,1.78)	0.764
Low RH	254	1.00 (0.55,1.83)	0.999
High RH	250	0.87 (0.44,1.69)	0.674
Low plus High RH	504	0.94 (0.58,1.52)	0.792

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-1. (Continued)**  
**Analysis of Hereditary and Degenerative Diseases**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for $\text{Log}_2$ (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	890	0.87 (0.71,1.06)	0.165	AGE (p=0.831)
5	890	0.89 (0.75,1.05)	0.166	AGE (p=0.798)
6 <sup>c</sup>	869	0.84 (0.70,1.01)	0.069	AGE (p=0.615) DRKYR (p=0.242)

<sup>a</sup> Model 4:  $\text{Log}_2$  (lipid-adjusted current dioxin + 1).  
 Model 5:  $\text{Log}_2$  (whole-weight current dioxin + 1).  
 Model 6:  $\text{Log}_2$  (whole-weight current dioxin + 1), adjusted for  $\text{log}_2$  total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for  $\text{log}_2$  total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-2.**  
**Analysis of Peripheral Disorders**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
Analysis Results for Log <sub>e</sub> (Initial Dioxin) <sup>a</sup>			
n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
517	1.08 (0.90,1.29)	0.398	AGE (p=0.059) RACE (p=0.122)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
Dioxin Category	n	Adj. Relative Risk (95% C.I.) <sup>ab</sup>	p-Value	Covariate Remarks
Comparison	1,059			DC (p=0.064) AGE*INS (p=0.018)
Background RH	370	0.92 (0.66,1.28)	0.621	
Low RH	260	1.01 (0.71,1.45)	0.937	
High RH	257	1.10 (0.76,1.59)	0.618	
Low plus High RH	517	1.05 (0.79,1.40)	0.718	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin >10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin >10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-2. (Continued)**  
**Analysis of Peripheral Disorders**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	867	1.14 (1.00,1.30)**	0.049**	CURR*DRKYR (p=0.001) AGE (p<0.001) RACE (p=0.139) INS (p=0.072) DC*DRKYR (p=0.053)
5	867	1.12 (1.00,1.25)**	0.043**	CURR*DRKYR (p=0.012) AGE (p<0.001) RACE (p=0.151) INS (p=0.046)
6 <sup>c</sup>	867	1.14 (1.01,1.29)**	0.027**	CURR*DRKYR (p=0.012) AGE (p<0.001) RACE (p=0.135) INS (p=0.047)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1);  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

\*\* Log<sub>2</sub> (current dioxin + 1)-by-covariate interaction (p≤0.05); adjusted relative risk, confidence interval, and p-value derived after deletion of this interaction; refer to Appendix Table G-4-1 for further analysis of this interaction.

**Table G-3-3.**  
**Analysis of Other Neurological Disorders**  
**Occupation Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
Analysis Results for Log <sub>e</sub> (Initial Dioxin) <sup>a</sup>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
516	1.21 (1.03,1.42)	0.022	AGE (p<0.001)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,056			AGE (p<0.001) RACE (p<0.001)
Background RH	370	0.74 (0.53,1.01)	0.061	
Low RH	259	1.06 (0.76,1.48)	0.747	
High RH	257	1.69 (1.21,2.36)	0.002	
Low plus High RH	516	1.32 (1.02,1.71)	0.034	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-3. (Continued)**  
**Analysis of Other Neurological Disorders**  
**Occupation Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for $\text{Log}_2$ (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	886	1.24 (1.10,1.39)	<0.001	AGE (p<0.001) RACE (p<0.001)
5	886	1.17 (1.05,1.29)	0.003	AGE (p<0.001) RACE (p<0.001)
6 <sup>c</sup>	885	1.24 (1.11,1.39)	0.001	AGE (p<0.001) RACE (p<0.001)

<sup>a</sup> Model 4:  $\text{Log}_2$  (lipid-adjusted current dioxin + 1).  
 Model 5:  $\text{Log}_2$  (whole-weight current dioxin + 1).  
 Model 6:  $\text{Log}_2$  (whole-weight current dioxin + 1), adjusted for  $\text{log}_2$  total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for  $\text{log}_2$  total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-4.**  
**Analysis of Speech**  
**Occupation Removed from Final Model**

a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	890	1.43 (0.78,2.60)	0.266	AGE (p=0.049)
5	890	1.37 (0.79,2.37)	0.269	AGE (p=0.051)
6 <sup>c</sup>	889	1.39 (0.77,2.51)	0.286	AGE (p=0.051)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-5.  
Analysis of Neck Range of Motion  
Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
Analysis Results for Log <sub>e</sub> (Initial Dioxin) <sup>a</sup>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
516	1.08 (0.88,1.32)	0.484	AGE (p<0.001)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,062			AGE (p<0.001)
Background RH	373	0.95 (0.66,1.37)	0.785	
Low RH	260	1.05 (0.70,1.56)	0.816	
High RH	256	1.38 (0.90,2.12)	0.140	
Low plus High RH	516	1.18 (0.86,1.63)	0.307	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin >10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin >10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-5. (Continued)**  
**Analysis of Neck Range of Motion**  
**Occupation and Diabetic Class Removed from Final Model**

<b>c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Model<sup>a</sup></b>	<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>			
	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	869	1.16 (1.00,1.35)	0.049	AGE (p<0.001) DRKYR (p=0.843) INS (p=0.168)
5	869	1.14 (1.00,1.29)	0.045	AGE (p<0.001) DRKYR (p=0.851) INS (p=0.165)
6 <sup>c</sup>	868	1.13 (0.99,1.30)	0.075	AGE (p<0.001) DRKYR (p=0.852) INS (p=0.164)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-6.**  
**Analysis of Cranial Nerve Index without Range of Motion**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
Analysis Results for Log <sub>e</sub> (Initial Dioxin) <sup>a</sup>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
515	1.16 (0.84,1.59)	0.368	AGE (p=0.140)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,058			AGE (p=0.003) INS (p=0.050)
Background RH	372	1.17 (0.64,2.17)	0.608	
Low RH	259	1.47 (0.77,2.79)	0.245	
High RH	256	1.42 (0.70,2.88)	0.329	
Low plus High RH	515	1.45 (0.85,2.46)	0.175	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-6. (Continued)**  
**Analysis of Cranial Nerve Index without Range of Motion**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	887	1.09 (0.87,1.36)	0.468	AGE (p=0.144) INS (p=0.301)
5	887	1.06 (0.87,1.28)	0.583	AGE (p=0.157) INS (p=0.302)
6 <sup>c</sup>	886	1.05 (0.85,1.29)	0.650	AGE (p=0.162) INS (p=0.301)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-7.  
Analysis of Pin Prick  
Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
Analysis Results for Log <sub>2</sub> (Initial Dioxin) <sup>a</sup>			
n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
491	1.03 (0.78,1.37)	0.833	AGE (p=0.183)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>			
Dioxin Category	n	Adj. Relative Risk (95% C.I.) <sup>ab</sup>	p-Value
Comparison	1,013		
Background RH	361	0.87 (0.49,1.55)	0.634
Low RH	245	1.22 (0.69,2.13)	0.494
High RH	246	0.98 (0.52,1.85)	0.957
Low plus High RH	491	1.11 (0.70,1.76)	0.667

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin >10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin >10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-7. (Continued)**  
**Analysis of Pin Prick**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Model <sup>a</sup>	n	Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)		
		Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	852	1.30 (1.06,1.59)	0.014	AGE (p<0.001)
5	852	1.26 (1.05,1.52)	0.013	AGE (p<0.001)
6 <sup>c</sup>	851	1.28 (1.05,1.57)	0.014	AGE (p<0.001)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-8.**  
**Analysis of Light Touch**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>				
<b>Model<sup>a</sup></b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	852	1.22 (0.98,1.51)	0.079	AGE (p=0.002)
5	852	1.21 (1.00,1.47)	0.049	AGE (p=0.002)
6 <sup>c</sup>	851	1.19 (0.96,1.46)	0.108	AGE (p=0.002)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-9.**  
**Analysis of Patellar Reflex**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
<b>Analysis Results for Log<sub>e</sub> (Initial Dioxin)<sup>a</sup></b>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
504	1.18 (0.70,1.99)	0.541	AGE (p=0.030) DRKYR (p=0.078)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,041			AGE (p<0.001) DRKYR (p=0.131)
Background RH	364	0.11 (0.01,0.78)	0.028	
Low RH	254	0.49 (0.17,1.42)	0.187	
High RH	250	0.76 (0.28,2.05)	0.590	
Low plus High RH	504	0.61 (0.28,1.32)	0.207	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-9. (Continued)**  
**Analysis of Patellar Reflex**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for $\text{Log}_2$ (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	868	1.56 (1.01,2.41)	0.050	AGE (p=0.013) DRKYR (p=0.053)
5	868	1.43 (0.96,2.13)	0.081	AGE (p=0.016) DRKYR (p=0.053)
6 <sup>c</sup>	867	1.60 (1.04,2.46)	0.034	AGE (p=0.010) DRKYR (p=0.062)

<sup>a</sup> Model 4:  $\text{Log}_2$  (lipid-adjusted current dioxin + 1).  
 Model 5:  $\text{Log}_2$  (whole-weight current dioxin + 1).  
 Model 6:  $\text{Log}_2$  (whole-weight current dioxin + 1), adjusted for  $\text{log}_2$  total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for  $\text{log}_2$  total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-10.**  
**Analysis of Achilles Reflex**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
<b>Analysis Results for Log<sub>2</sub> (Initial Dioxin)<sup>a</sup></b>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
503	1.09 (0.86,1.37)**	0.484**	INIT*DRKYR (p=0.032) AGE (p=0.010) INS (p=0.088)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

\*\* Log<sub>2</sub> (initial dioxin)-by-covariate interaction (0.01 < p ≤ 0.05); adjusted relative risk, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table G-4-2 for further analysis of this interaction.

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,041			DXCAT*DRKYR (p=0.008) AGE*DRKYR (p=0.006)
Background RH	364	1.04 (0.68,1.59)**	0.865**	
Low RH	253	1.06 (0.67,1.68)**	0.805**	
High RH	250	1.16 (0.71,1.88)**	0.561**	
Low plus High RH	503	1.10 (0.76,1.59)**	0.603**	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

\*\* Categorized dioxin-by-covariate interaction (p ≤ 0.05); adjusted relative risk, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table G-4-2 for further analysis of this interaction.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-10. (Continued)**  
**Analysis of Achilles Reflex**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Analysis Results for $\text{Log}_2$ (Current Dioxin + 1)				
Model <sup>a</sup>	n	Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	867	1.11 (0.94,1.31)	0.204	AGE (p<0.001) DRKYR (p=0.722)
5	867	1.09 (0.95,1.26)	0.231	AGE (p<0.001) DRKYR (p=0.711)
6 <sup>c</sup>	866	1.09 (0.93,1.27)	0.300	AGE (p<0.001) DRKYR (p=0.710)

<sup>a</sup> Model 4:  $\text{Log}_2$  (lipid-adjusted current dioxin + 1).  
 Model 5:  $\text{Log}_2$  (whole-weight current dioxin + 1).  
 Model 6:  $\text{Log}_2$  (whole-weight current dioxin + 1), adjusted for  $\text{log}_2$  total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for  $\text{log}_2$  total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-11.**  
**Analysis of Biceps Reflex**  
**Occupation Removed from Final Model**

<b>a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>				
<b>Model<sup>a</sup></b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	890	1.26 (0.73,2.16)	0.415	AGE (p=0.014)
5	890	1.14 (0.70,1.86)	0.599	AGE (p=0.017)
6 <sup>c</sup>	889	1.39 (0.80,2.39)	0.243	AGE (p=0.011)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-12.**  
**Analysis of Babinski Reflex**  
**Occupation Removed from Final Model**

<b>a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>				
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>ab</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
Comparison	1,061			AGE (p=0.051)
Background RH	373	0.66 (0.13,3.25)	0.607	
Low RH	260	0.52 (0.06,4.34)	0.544	
High RH	257	--	--	
Low plus High RH	517	0.30 (0.04,2.56)	0.273	

<sup>a</sup> Relative risk and confidence interval relative to Comparisons.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

--: Adjusted relative risk, confidence interval, and p-value not presented due to the sparse number of abnormalities.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

<b>b) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>				
<b>Model<sup>a</sup></b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	890	0.47 (0.19,1.15)	0.104	AGE (p=0.240)
5	890	0.64 (0.37,1.10)	0.152	AGE (p=0.232)
6 <sup>c</sup>	889	0.64 (0.36,1.13)	0.180	AGE (p=0.225)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).

Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).

Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-13.**  
**Analysis of Vibrotactile Threshold Measurement of Right Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED						
Initial Dioxin Category Summary Statistics			Analysis Results for Log <sub>2</sub> (Initial Dioxin) <sup>b</sup>			
Initial Dioxin	n	Adj. Mean <sup>ab</sup>	R <sup>2</sup>	Adj. Slope (Std. Error) <sup>c</sup>	p-Value	Covariate Remarks
Low	171	16.17**	0.146	0.0438 (0.0382)**	0.252**	INIT*HVMET (p=0.006) AGE (p<0.001)
Medium	167	22.33**				DRKYR (p=0.103)
High	165	18.43**				PWTOOL (p=0.196)

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>c</sup> Slope and standard error based on natural logarithm of vibrotactile threshold measurement of right great toe versus log<sub>2</sub> (initial dioxin).

\*\* Log<sub>2</sub> (initial dioxin)-by-covariate interaction (p≤0.05); adjusted mean, adjusted slope, standard error, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table G-4-3 for further analysis of this interaction.

**Table G-3-13. (Continued)**  
**Analysis of Vibrotactile Threshold Measurement of Right Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>					
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Mean<sup>ab</sup></b>	<b>Difference of Adj. Mean vs. Comparisons (95% C.I.)<sup>c</sup></b>	<b>p-Value<sup>d</sup></b>	<b>Covariate Remarks</b>
Comparison	1,041	17.48**			DXCAT*DRKYR (p=0.002) AGE (p<0.001) INS (p=0.576) HVMET (p=0.297)
Background RH	366	15.70**	-1.78--**	0.103**	
Low RH	253	17.47**	-0.01--**	0.994**	
High RH	250	19.29**	1.81--**	0.195**	
Low plus High RH	503	18.36**	0.88--**	0.402**	

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>c</sup> Difference of adjusted means after transformation to original scale; confidence interval on difference of adjusted means not presented because analysis was performed on natural logarithm scale.

<sup>d</sup> P-value is based on difference of means on natural logarithm scale.

\*\* Categorized dioxin-by-covariate interaction ( $p \leq 0.05$ ); adjusted mean, difference of adjusted means, confidence interval, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table G-4-3 for further analysis of this interaction.

Note: RH = Ranch Hand.

Comparison: Current Dioxin  $\leq$  10 ppt.

Background (Ranch Hand): Current Dioxin  $\leq$  10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin  $\leq$  143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-13. (Continued)**  
**Analysis of Vibrotactile Threshold Measurement of Right Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED							
Model <sup>b</sup>	Current Dioxin Category Adjusted Mean <sup>a</sup> (n)			Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)			
	Low	Medium	High	R <sup>2</sup>	Adj. Slope (Std. Error) <sup>c</sup>	p-Value	Covariate Remarks
4	14.90** (291)	18.33** (292)	19.71** (286)	0.158	0.0609 (0.0261)**	0.020**	CURR*DRKYR (p<0.001) CURR*HVMET (p=0.006) AGE (p<0.001) PWTOOL (p=0.421)
5	14.86** (295)	18.61** (289)	19.37** (285)	0.156	0.0498 (0.0222)**	0.025**	CURR*DRKYR (p=0.001) CURR*HVMET (p=0.021) AGE (p<0.001) PWTOOL (p=0.419)
6 <sup>d</sup>	14.95** (294)	18.68** (289)	19.55** (285)	0.155	0.0463 (0.0242)**	0.056**	CURR*DRKYR (p=0.001) CURR*HVMET (p=0.040) AGE (p<0.001) PWTOOL (p=0.409)

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).

Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).

Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>c</sup> Slope and standard error based on natural logarithm of vibrotactile threshold measurement of right great toe versus log<sub>2</sub> (current dioxin + 1).

<sup>d</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariates Remarks" column.

\*\* Log<sub>2</sub> (current dioxin + 1)-by-covariate interactions (p≤0.05); adjusted mean, adjusted slope, standard error, and p-value derived from a model fitted after deletion of these interactions; refer to Appendix Table G-4-3 for further analysis of these interactions.

**Table G-3-14.**  
**Analysis of Vibrotactile Threshold Measurement of Left Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED						
Initial Dioxin Category Summary Statistics			Analysis Results for Log <sub>2</sub> (Initial Dioxin) <sup>b</sup>			
Initial Dioxin	n	Adj. Mean <sup>ab</sup>	R <sup>2</sup>	Adj. Slope (Std. Error) <sup>c</sup>	p-Value	Covariate Remarks
Low	173	17.08**	0.179	0.0123 (0.0373)**	0.742**	INIT*HVMET (p=0.040)
Medium	172	18.11**				AGE (p<0.001)
High	170	17.21**				RACE (p=0.135) PWTOOL (p=0.020)

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>c</sup> Slope and standard error based on natural logarithm of vibrotactile threshold measurement of left great toe versus log<sub>2</sub> (initial dioxin).

\*\* Log<sub>2</sub> (initial dioxin)-by-covariate interaction (0.01 < p ≤ 0.05); adjusted mean, adjusted slope, standard error, and p-value derived from a model fitted after deletion of this interaction; refer to Appendix Table G-4-4 for further analysis of this interaction.

**Table G-3-14. (Continued)**  
**Analysis of Vibrotactile Threshold Measurement of Left Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

<b>b) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY — ADJUSTED</b>					
<b>Dioxin Category</b>	<b>n</b>	<b>Adj. Mean<sup>ab</sup></b>	<b>Difference of Adj. Mean vs. Comparisons (95% C.I.)<sup>c</sup></b>	<b>p-Value<sup>d</sup></b>	<b>Covariate Remarks</b>
Comparison	1,042	16.00			AGE (p<0.001) RACE (p=0.306) DRKYR*INS (p=0.014)
Background RH	366	15.00	-1.00--	0.319	
Low RH	253	16.64	0.64--	0.600	
High RH	250	17.89	1.89--	0.137	
Low plus High RH	503	17.25	1.25--	0.192	

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>c</sup> Difference of adjusted means after transformation to original scale; confidence interval on difference of adjusted means not presented because analysis was performed on natural logarithm scale.

<sup>d</sup> P-value is based on difference of means on natural logarithm scale.

Note: RH = Ranch Hand.

Comparison: Current Dioxin ≤ 10 ppt.

Background (Ranch Hand): Current Dioxin ≤ 10 ppt.

Low (Ranch Hand): Current Dioxin > 10 ppt, 10 ppt < Initial Dioxin ≤ 143 ppt.

High (Ranch Hand): Current Dioxin > 10 ppt, Initial Dioxin > 143 ppt.

**Table G-3-14. (Continued)**  
**Analysis of Vibrotactile Threshold Measurement of Left Great Toe (microns)**  
**Occupation and Diabetic Class Removed from Final Model**

c) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED							
Model <sup>b</sup>	Current Dioxin Category Adjusted Mean <sup>a</sup> (n)			Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)			
	Low	Medium	High	R <sup>2</sup>	Adj. Slope (Std. Error) <sup>c</sup>	p-Value	Covariate Remarks
4	16.32** (291)	19.62** (292)	20.46** (286)	0.193	0.0547 (0.0257)**	0.034**	CURR*DRKYR (p=0.003) CURR*PWTOOL (p=0.039) AGE (p<0.001) HVMET (p=0.092)
5	16.29** (295)	19.53** (289)	20.49** (285)	0.193	0.0422 (0.0218)**	0.054**	CURR*DRKYR (p=0.001) CURR*PWTOOL (p=0.040) AGE (p<0.001) HVMET (p=0.085)
6 <sup>d</sup>	16.15** (294)	19.49** (289)	20.70** (285)	0.194	0.0454 (0.0238)**	0.057**	CURR*DRKYR (p=0.001) CURR*PWTOOL (p=0.036) AGE (p<0.001) HVMET (p=0.097)

<sup>a</sup> Transformed from natural logarithm scale.

<sup>b</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>c</sup> Slope and standard error based on natural logarithm of vibrotactile threshold measurement of left great toe versus log<sub>2</sub> (current dioxin + 1).

<sup>d</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariates Remarks" column.

\*\* Log<sub>2</sub> (current dioxin + 1)-by-covariate interactions (p≤0.05); adjusted mean, adjusted slope, standard error, and p-value derived from a model fitted after deletion of these interactions; refer to Appendix Table G-4-4 for further analysis of these interactions.

**Table G-3-15.**  
**Analysis of Tremor**  
**Occupation and Diabetic Class Removed from Final Model**

<b>a) MODEL 2: RANCH HANDS — INITIAL DIOXIN — ADJUSTED</b>			
<b>Analysis Results for Log<sub>2</sub> (Initial Dioxin)<sup>a</sup></b>			
<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
517	1.42 (0.93,2.16)	0.113	AGE (p=0.090)

<sup>a</sup> Adjusted for percent body fat at the time of duty in SEA, change in percent body fat from the time of duty in SEA to the date of the blood draw for dioxin, and covariates specified under "Covariate Remarks" column.

<sup>b</sup> Relative risk for a twofold increase in initial dioxin.

<b>b) MODEL 4: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>				
<b>Model<sup>a</sup></b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	870	0.96 (0.72,1.28)**	0.793**	CURR*AGE (p=0.028) DRKYR (p=0.746)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

\*\* Log<sub>2</sub> (current dioxin + 1)-by-covariate interaction (0.01 < p ≤ 0.05); adjusted relative risk, confidence interval, and p-value derived after deletion of this interaction; refer to Appendix Table G-4-5 for further analysis of this interaction.

**Table G-3-16.**  
**Analysis of Gait**  
**Occupation and Diabetic Class Removed from Final Model**

a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED				
Model <sup>a</sup>	n	Analysis Results for Log <sub>2</sub> (Current Dioxin + 1)		
		Adj. Relative Risk (95% C.I.) <sup>b</sup>	p-Value	Covariate Remarks
4	890	1.05 (0.81,1.36)	0.705	AGE (p=0.113) INS (p=0.743)
5	890	1.05 (0.84,1.31)	0.648	AGE (p=0.111) INS (p=0.744)
6 <sup>c</sup>	889	1.04 (0.82,1.33)	0.730	AGE (p=0.117) INS (p=0.746)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.

**Table G-3-17.**  
**Analysis of Central Nervous System (CNS) Index**  
**Occupation Removed from Final Model**

<b>a) MODELS 4, 5, AND 6: RANCH HANDS — CURRENT DIOXIN — ADJUSTED</b>				
<b>Analysis Results for Log<sub>2</sub> (Current Dioxin + 1)</b>				
<b>Model<sup>a</sup></b>	<b>n</b>	<b>Adj. Relative Risk (95% C.I.)<sup>b</sup></b>	<b>p-Value</b>	<b>Covariate Remarks</b>
4	889	1.04 (0.85,1.27)	0.689	AGE (p=0.074) INS (p=0.394)
5	889	1.06 (0.89,1.26)	0.504	AGE (p=0.066) INS (p=0.397)
6 <sup>c</sup>	888	1.02 (0.84,1.22)	0.867	AGE (p=0.088) INS (p=0.392)

<sup>a</sup> Model 4: Log<sub>2</sub> (lipid-adjusted current dioxin + 1).  
 Model 5: Log<sub>2</sub> (whole-weight current dioxin + 1).  
 Model 6: Log<sub>2</sub> (whole-weight current dioxin + 1), adjusted for log<sub>2</sub> total lipids.

<sup>b</sup> Relative risk for a twofold increase in current dioxin.

<sup>c</sup> Adjusted for log<sub>2</sub> total lipids in addition to covariates specified under "Covariate Remarks" column.