

APPENDIX J-4.

Interaction Tables for the Dermatologic Assessment Occupation Removed from Final Model

This appendix contains results of exposure analyses of interactions between covariates and dioxin after occupation has been removed from those final dioxin models (Models 2 through 6) that contained occupation. These tables are supplements to tables in Appendix J-3, which are main effects results with occupation removed from the model. Results are presented for separate strata of the covariate and include sample sizes, percent abnormal, relative risks, confidence intervals, and p-values. Chapter 7, Statistical Methods, provides further details on the analytical approaches used in the interaction analyses. The analysis model, covariate involved in the interaction, and a reference to the analysis table in Chapter 14 are given in the heading of each subtable. A summary of the interactions described in this appendix follows.

Appendix J-4 Table	Chapter 14 Table	Appendix J-3 Table	Dependent Variable	Model	Covariate
J-4-1	14-11	J-3-6	Other Abnormalities	2	Presence of Pre-SEA Acne
J-4-2	14-12	J-3-7	Dermatology Index	3	Age

**Table J-4-1.
Interaction Table for Other Abnormalities
Occupation Removed from Final Model**

a) MODEL 2: RANCH HANDS – INITIAL DIOXIN – ADJUSTED (Initial Dioxin-by-Presence of Pre-SEA Acne: Tables 14-11 and J-3-6)					
Initial Dioxin Category Summary Statistics				Analysis Results for Log₂ (Initial Dioxin)	
Stratum	Initial Dioxin	n	Percent Abnormal	Adjusted Relative Risk (95% C.I.)^a	p-Value
No Pre-SEA Acne	Low	159	84.9	0.94 (0.77,1.15)	0.556
	Medium	154	85.7		
	High	157	80.3		
Pre-SEA Acne	Low	15	73.3	1.67 (0.95,2.92)	0.072
	Medium	19	57.9		
	High	16	87.5		

^a Relative risk for a twofold increase in initial dioxin.

Note: Low = 39-98 ppt; Medium = >98-232 ppt; High = >232 ppt.

Table J-4-2.
Interaction Table for Dermatology Index
Occupation Removed from Final Model

a) MODEL 3: RANCH HANDS AND COMPARISONS BY DIOXIN CATEGORY – ADJUSTED (Dioxin Category-by-Age: Tables 14-12 and J-3-7)					
Stratum	Dioxin Category	n	Percent Abnormal	Adjusted Relative Risk (95% C.I.)	p-Value
Born ≥ 1942	Comparison	454	43.0		
	Background RH	128	50.0	1.44 (0.97,2.16)	0.073
	Low RH	85	50.6	1.31 (0.82,2.10)	0.260
	High RH	154	44.2	1.05 (0.72,1.52)	0.817
	Low plus High RH	239	46.4	1.13 (0.82,1.56)	0.442
Born < 1942	Comparison	608	46.2		
	Background RH	246	45.1	1.00 (0.74,1.35)	0.999
	Low RH	175	35.4	0.62 (0.43,0.87)	0.007
	High RH	106	38.7	0.70 (0.45,1.07)	0.098
	Low plus High RH	281	36.7	0.65 (0.48,0.87)	0.003

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.