

**G11: Appendix on Bivariate Relationships Between Blood Lead  
and Potential Lead Exposure Predictor Variables**

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\theta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\theta^0$ s.e. ( $\theta^0$ )	$\theta^1$ s.e. ( $\theta^1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.99 (0.0545)	0.08 (0.0205)	--	0.3550	0.0668	-183.73	205
Log-Additive	5.93 (0.2722)	0.30 (0.0932)	--	0.3512	0.0767	-182.64	205
Alternate Log-Additive	7.37 (0.4378)	0.53 (0.1573)	--	0.3558	0.0647	-183.95	205
Active Uptake	5.93 (0.2721)	0.30 (0.0932)	4.9E115 (0.000)	0.3547	0.0767	-182.64	205

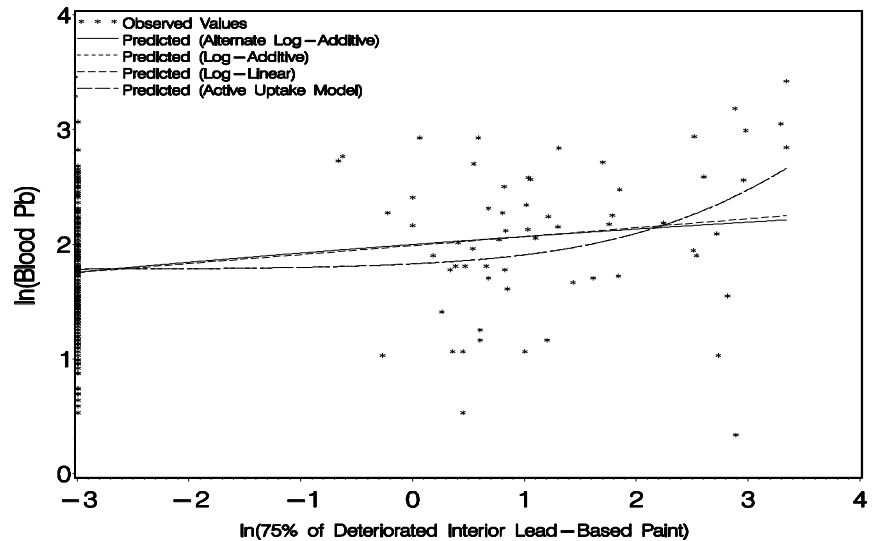
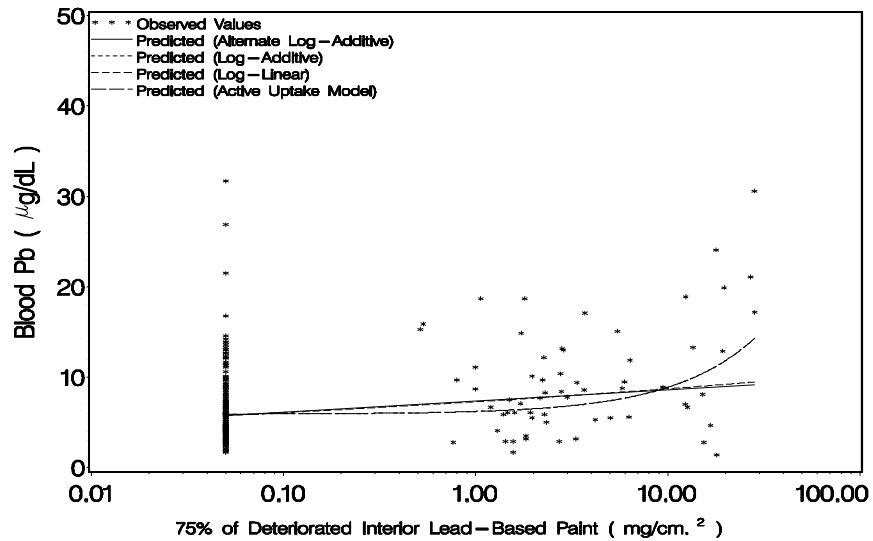


Figure G11-1. Bivariate Relationship Between Blood-Lead Concentration and the 75th Percentile of Deteriorated Interior Lead-Based Paint.

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\theta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\theta^0$ s.e. ( $\theta^0$ )	$\theta^1$ s.e. ( $\theta^1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.89 (0.0459)	0.03 (0.0167)	--	0.3733	0.0187	-188.88	205
Log-Additive	6.04 (0.3015)	0.08 (0.0410)	--	0.3722	0.0215	-188.58	205
Alternate Log-Additive	6.62 (0.3140)	0.21 (0.1125)	--	0.3733	0.0186	-188.89	205
Active Uptake	6.04 (29.1731)	0.08 (0.8766)	6.8E8 (3.7E15)	0.3759	0.0215	-188.59	205

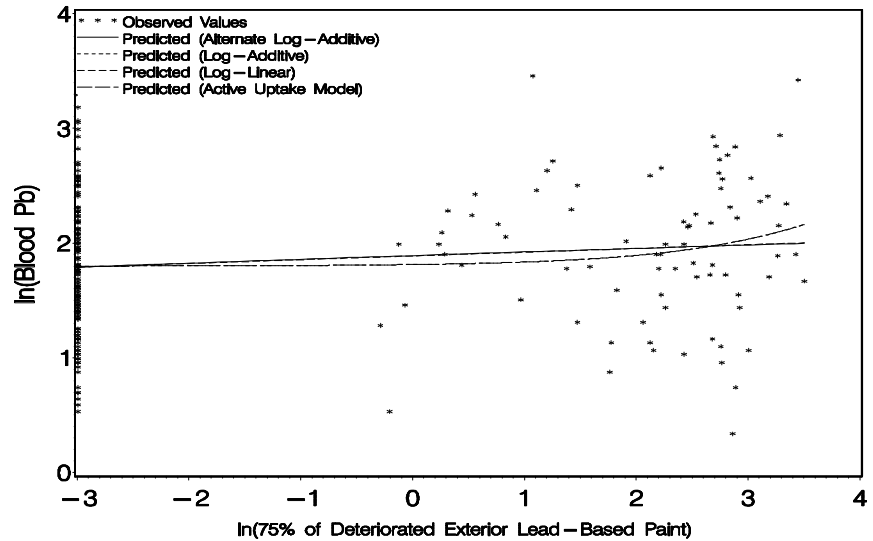
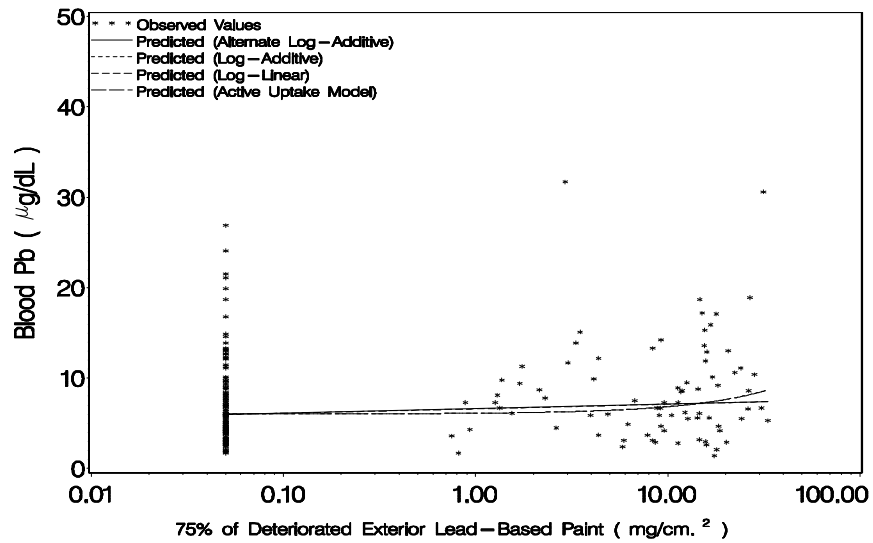


Figure G11-2. Bivariate Relationship Between Blood-Lead Concentration and the 75th Percentile of Deteriorated Exterior Lead-Based Paint.

Statistical Model	Parameter Estimates and (Associated Standard Errors)			<sup>2</sup>	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	<sup>0</sup> s.e. ( <sub>0</sub> )	<sup>1</sup> s.e. ( <sub>1</sub> )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.38 (0.1130)	0.17 (0.0365)	--	0.3433	0.0959	-173.22	197
Log-Additive	6.37 (0.2807)	0.00 (0.0006)	--	0.3741	0.0148	-181.68	197
Alternate Log-Additive	3.60 (0.6354)	1.02 (0.2343)	--	0.3452	0.0909	-173.76	197
Active Uptake	6.58 (1.3665)	0.31 (0.1902)	13.22 (3.5208)	0.3407	0.1119	-171.47	197

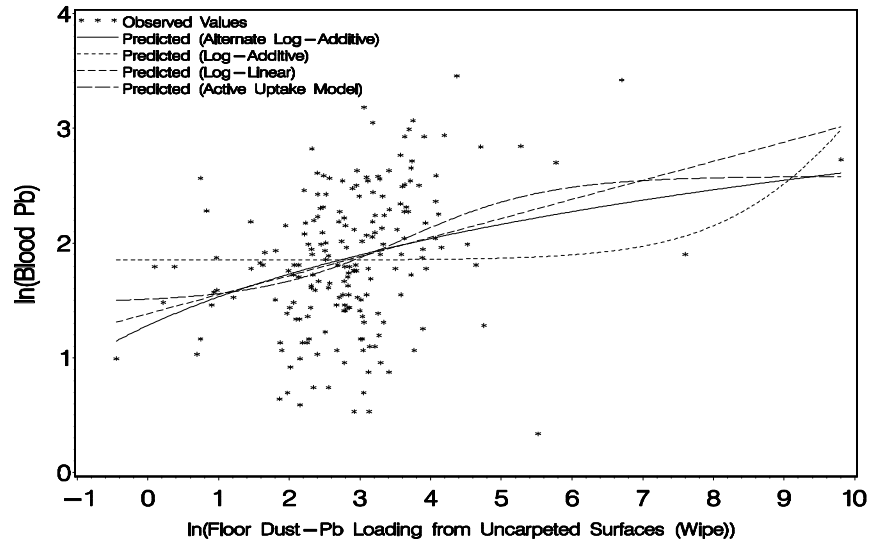
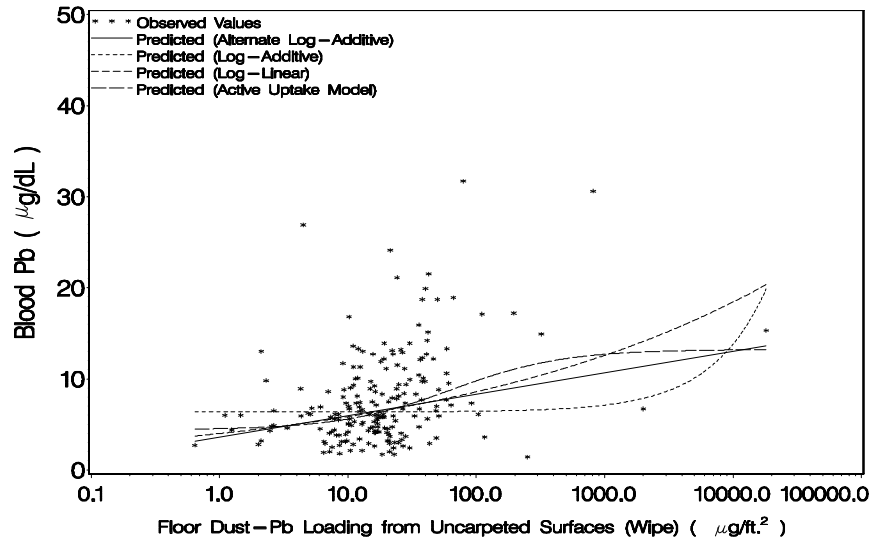


Figure G11-3. Bivariate Relationship Between Blood-Lead Concentration and Floor Dust-Lead Loading from Uncarpeted Surfaces (Wipe Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\theta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\theta^0$ s.e. ( $\theta^0$ )	$\theta^1$ s.e. ( $\theta^1$ )	$\theta^{HSP}$ s.e. ( $\theta^{HSP}$ )				
Log-Linear	1.63 (0.0636)	0.12 (0.0254)	--	0.3451	0.0928	-180.83	205
Log-Additive	6.23 (0.2751)	0.01 (0.0031)	--	0.3708	0.0252	-188.20	205
Alternate Log-Additive	5.40 (0.3133)	0.55 (0.1350)	--	0.3515	0.0760	-182.71	205
Active Uptake	7.40 (1.2816)	0.60 (0.3635)	12.68 (2.8613)	0.3351	0.1277	-176.81	205

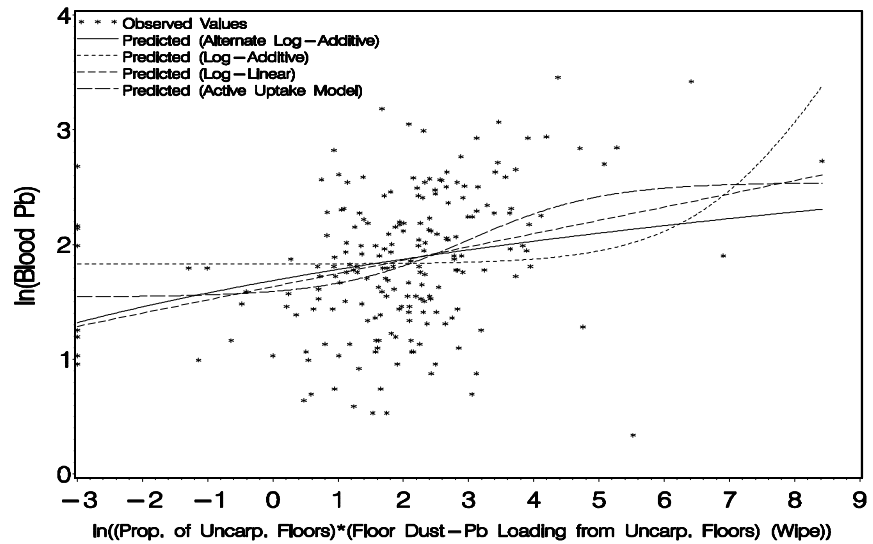
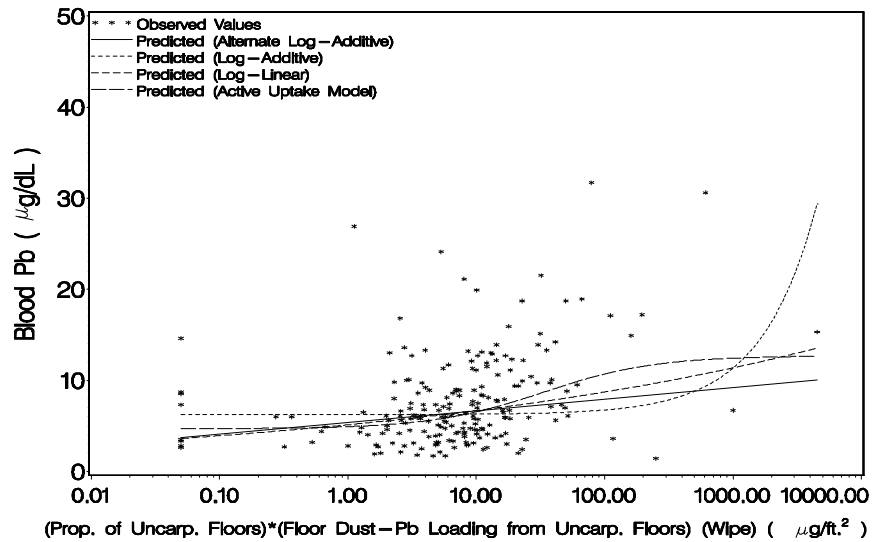


Figure G11-4. Bivariate Relationship Between Blood-Lead Concentration and (Proportion of Uncarpeted Floors Samples)\*(Floor Dust-Lead Loading from Uncarpeted Floors) (Wipe Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			<sup>2</sup>	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	<sup>0</sup> s.e. ( <sub>0</sub> )	<sup>1</sup> s.e. ( <sub>1</sub> )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.56 (0.1066)	0.10 (0.0385)	--	0.3363	0.0368	-155.47	179
Log-Additive	6.16 (0.2734)	0.00 (0.0002)	--	0.3492	0.00	-158.82	179
Alternate Log-Additive	4.29 (0.6156)	0.76 (0.2481)	--	0.3334	0.0453	-154.67	179
Active Uptake	15.00 (0.0000)	0.00 (0.0012)	10.44 (0.7862)	0.3532	0.00	-158.83	179

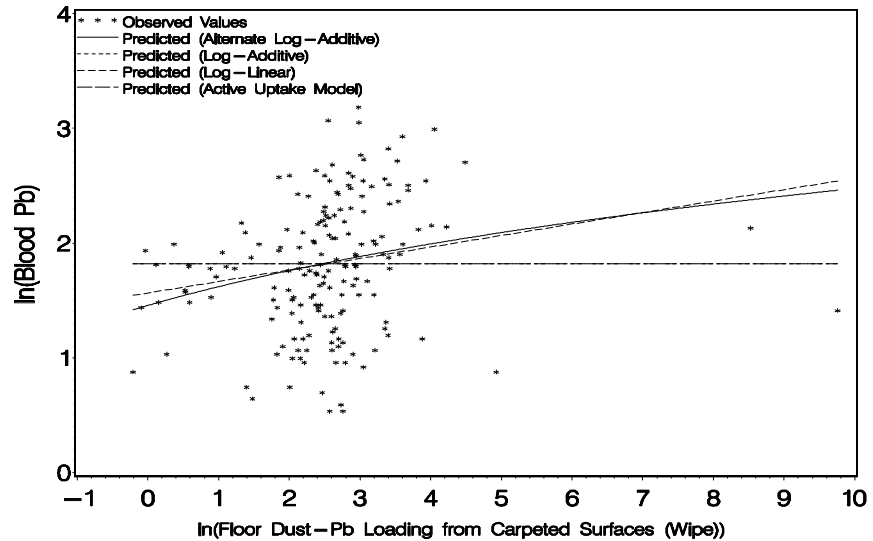
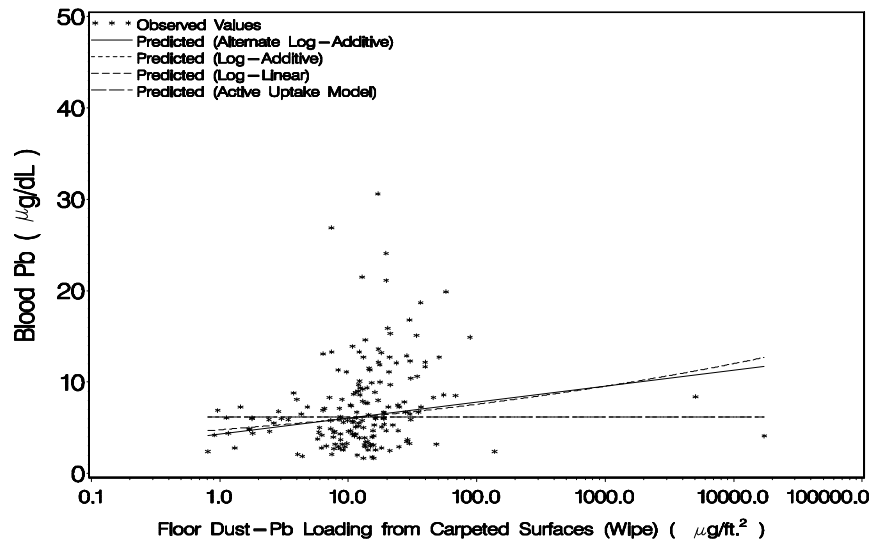


Figure G11-5. Bivariate Relationship Between Blood-Lead Concentration and Floor Dust-Lead Loading from Carpeted Surfaces (Wipe Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			<sup>2</sup>	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	<sup>0</sup> s.e. ( <sup>0</sup> )	<sup>1</sup> s.e. ( <sup>1</sup> )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.85 (0.0511)	0.00 (0.0217)	--	0.3804	0.00	-190.81	205
Log-Additive	6.38 (0.2764)	0.00 (0.0004)	--	0.3804	0.00	-190.81	205
Alternate Log-Additive	6.38 (0.3262)	0.00 (0.1384)	--	0.3804	0.00	-190.81	205
Active Uptake	16.22 (0.0000)	0.00 (0.0028)	10.52 (0.7520)	0.3842	0.00	-190.82	205

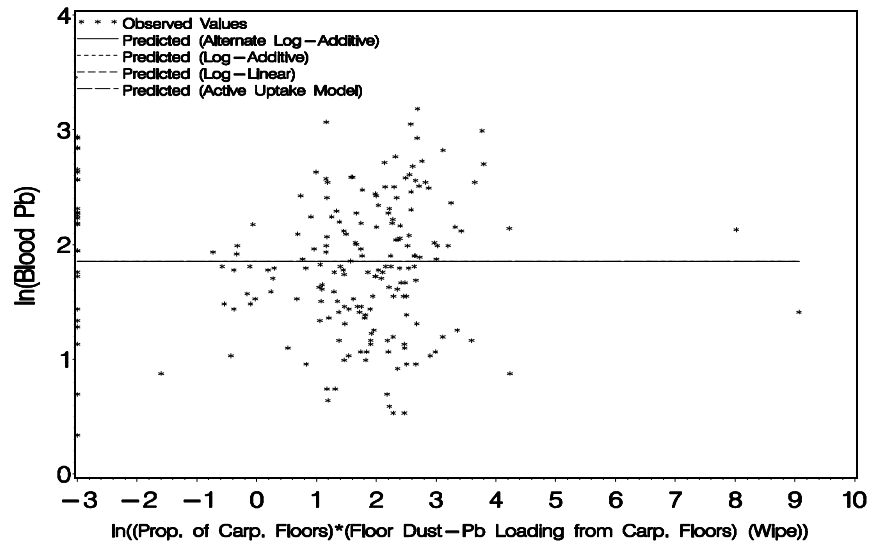
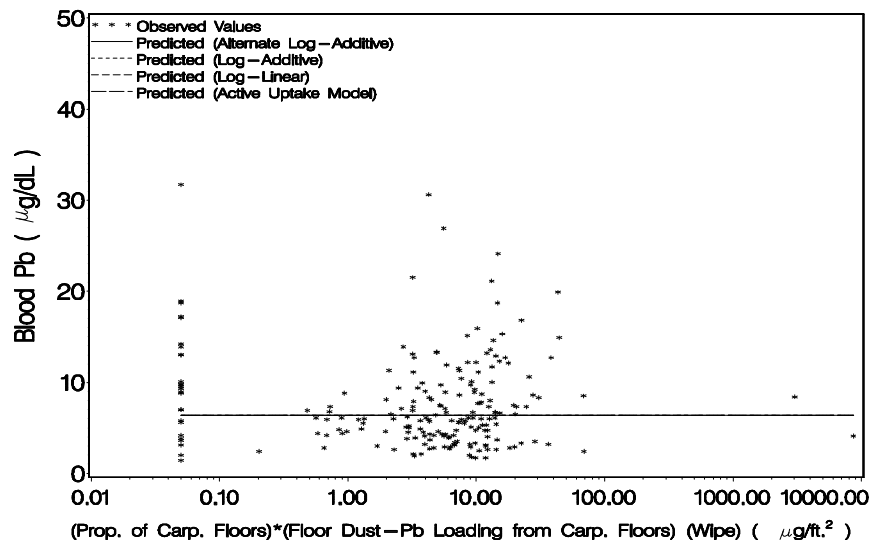


Figure G11-6. Bivariate Relationship Between Blood-Lead Concentration and (Proportion of Carpeted Floors Sampled)\*(Floor Dust Lead-Loading from Carpeted Floors (Wipe Samples)).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\theta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\theta^0$ s.e. ( $\theta^0$ )	$\theta^1$ s.e. ( $\theta^1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.04 (0.1658)	0.15 (0.0304)	--	0.3409	0.1144	-171.65	196
Log-Additive	5.58 (0.2956)	0.00 (0.0005)	--	0.3525	0.0845	-174.91	196
Alternate Log-Additive	2.36 (0.8614)	0.77 (0.1731)	--	0.3476	0.0971	-173.56	196
Active Uptake	7.42 (1.2696)	0.02 (0.0144)	12.63 (3.0407)	0.3369	0.1339	-169.48	196

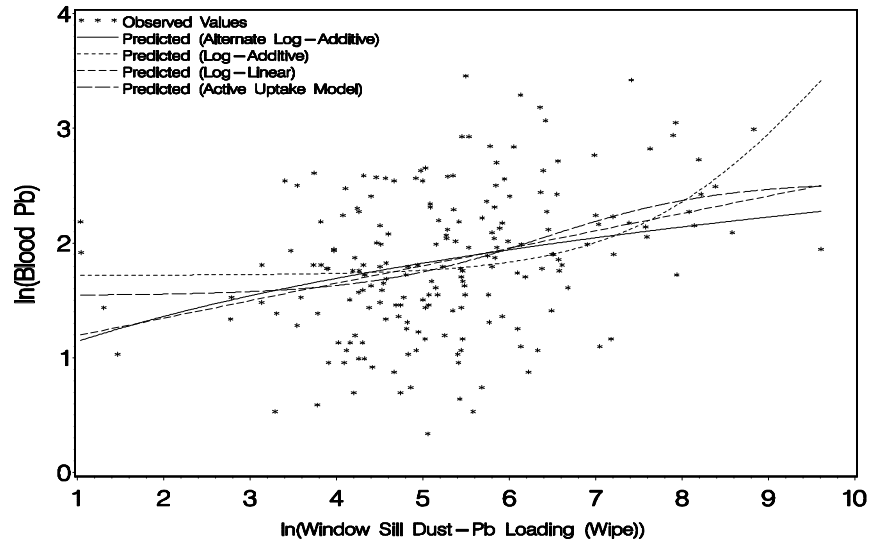
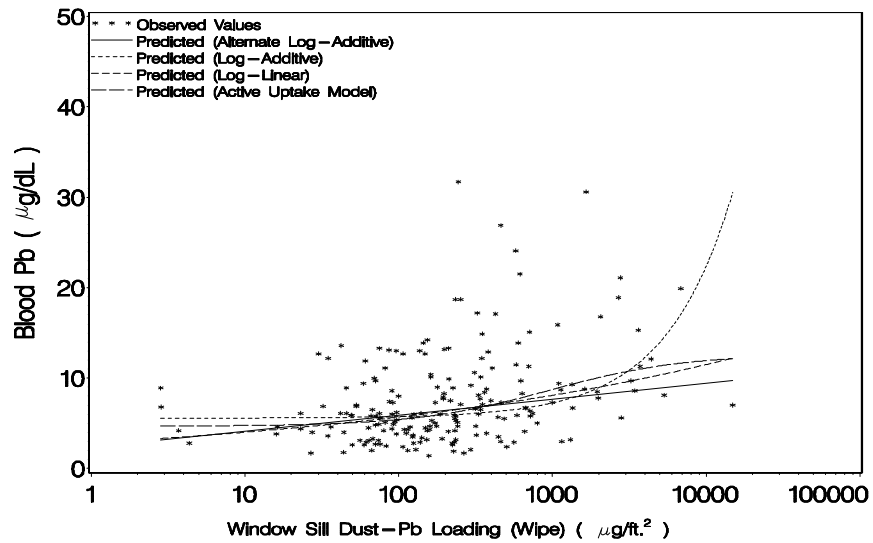


Figure G11-7. Bivariate Relationship Between Blood-Lead Concentration and Window Sill Dust-Lead Loading (Wipe Samples).



Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\theta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\theta^0$ s.e. ( $\theta^0$ )	$\theta^1$ s.e. ( $\theta^1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.17 (0.1600)	0.08 (0.0183)	--	0.3533	0.0929	-168.85	189
Log-Additive	5.85 (0.2927)	0.00 (0.0000)	--	0.3676	0.0561	-172.61	189
Alternate Log-Additive	2.45 (0.8881)	0.47 (0.1123)	--	0.3550	0.0884	-169.31	189
Active Uptake	11.69 (2.6346)	0.00 (0.0014)	8.89 (1.1742)	0.3568	0.0938	-168.77	189

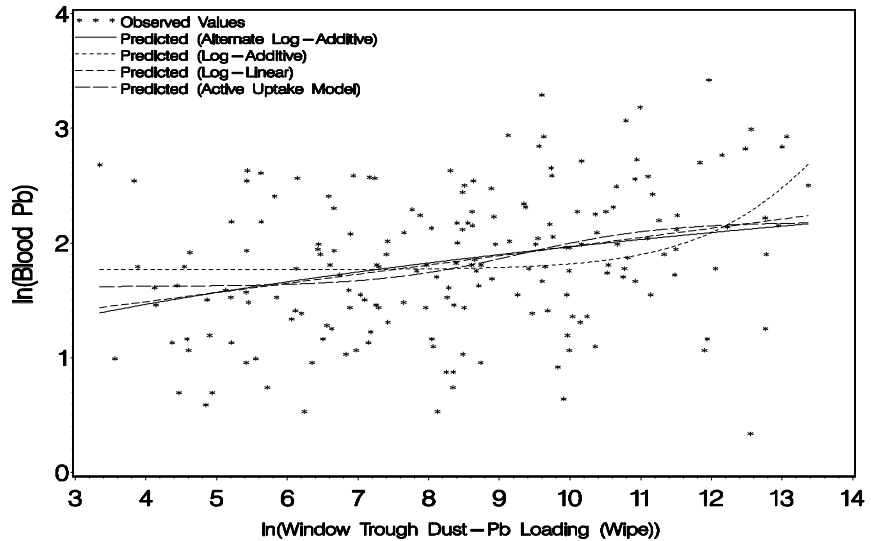
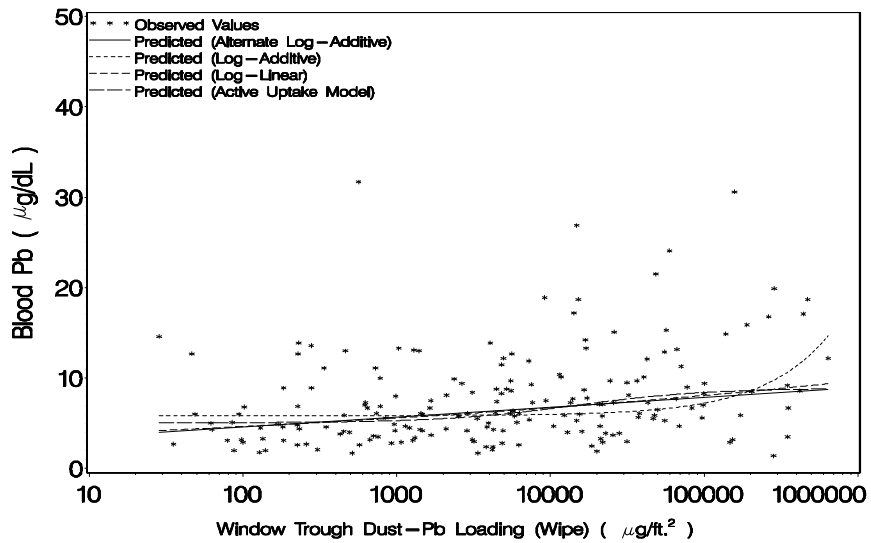


Figure G11-8. Bivariate Relationship Between Blood-Lead Concentration and Window Well Dust-Lead Loading (Wipe Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			<sup>2</sup>	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	<sup>0</sup> s.e. ( <sup>0</sup> )	<sup>1</sup> s.e. ( <sup>1</sup> )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.56 (0.0726)	0.10 (0.0205)	--	0.3383	0.1186	-168.27	193
Log-Additive	6.32 (0.2830)	0.00 (0.0002)	--	0.3769	0.0182	-178.68	193
Alternate Log-Additive	4.59 (0.3635)	0.68 (0.1285)	--	0.3375	0.1207	-168.04	193
Active Uptake	7.58 (2.3187)	1.38 (0.8114)	8.63 (0.8053)	0.3417	0.1190	-168.23	193

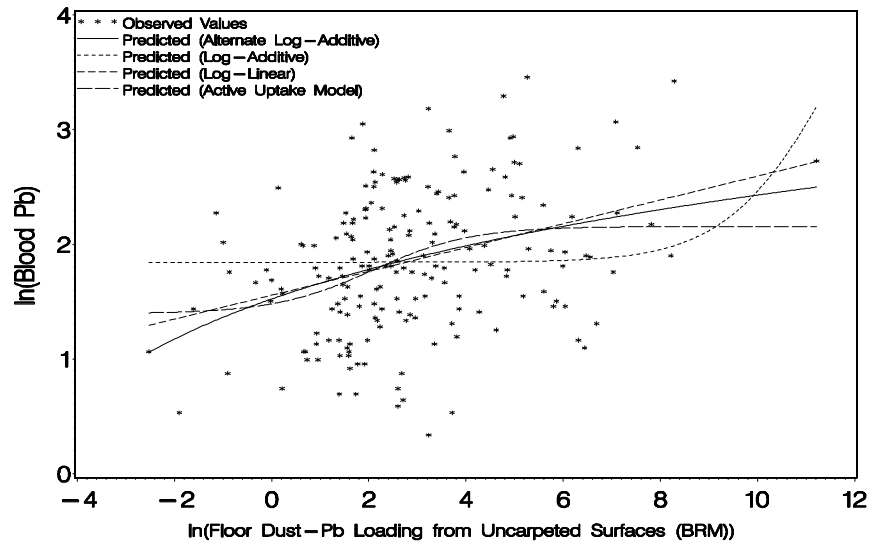
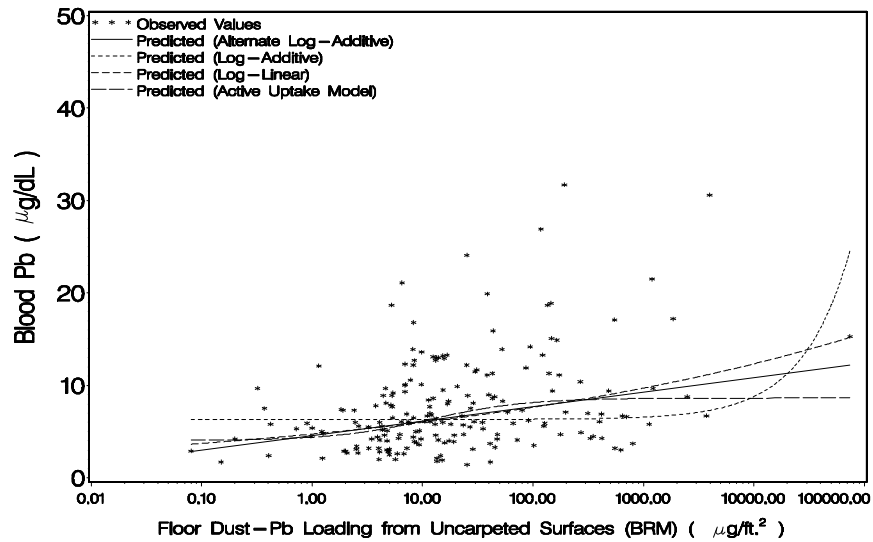


Figure G11-9. Bivariate Relationship Between Blood-Lead Concentration and Floor Dust-Lead Loading from Uncarpeted Surfaces (BRM Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\beta^2$	$R^2$	Estimated Log-Likelihood	Number of Observations
	$\beta_0$ s.e. ( $\beta_0$ )	$\beta_1$ s.e. ( $\beta_1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.71 (0.0508)	0.08 (0.0164)	--	0.3435	0.0970	-180.35	205
Log-Additive	6.18 (0.2713)	0.00 (0.0009)	--	0.3651	0.0402	-186.61	205
Alternate Log-Additive	5.68 (0.2715)	0.44 (0.1007)	--	0.3467	0.0886	-181.30	205
Active Uptake	10.90 (2.4049)	1.58 (1.1784)	8.93 (0.9558)	0.3455	0.1008	-179.93	205

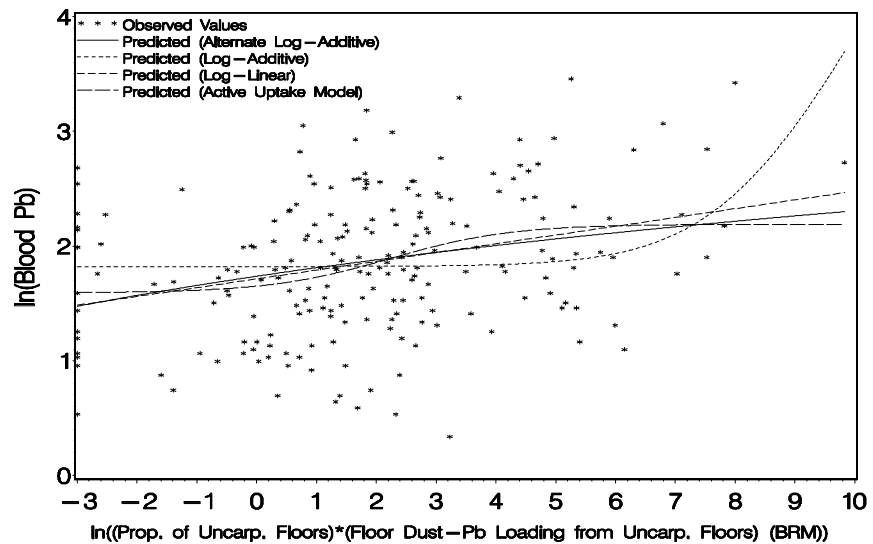
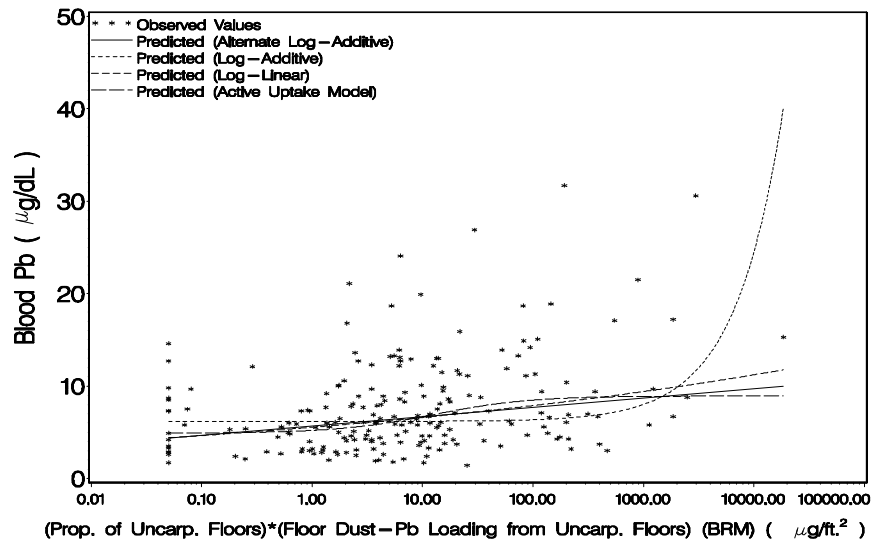


Figure G11-10. Bivariate Relationship Between Blood-Lead Concentration and (Proportion of Uncarpeted Floors Samples)\*(Floor Dust-Lead Loading from Uncarpeted Floors)(BRM Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			$\beta^2$	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	$\beta^0$ s.e. ( $\beta^0$ )	$\beta^1$ s.e. ( $\beta^1$ )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.20 (0.1530)	0.11 (0.0265)	--	0.3203	0.0923	-151.08	179
Log-Additive	6.06 (0.2848)	0.00 (0.0001)	--	0.3498	0.0085	-158.99	179
Alternate Log-Additive	2.46 (0.8656)	0.69 (0.1658)	--	0.3204	0.0920	-151.11	179
Active Uptake	9.11 (2.0871)	0.03 (0.0259)	9.34 (1.4739)	0.3197	0.1042	-149.91	179

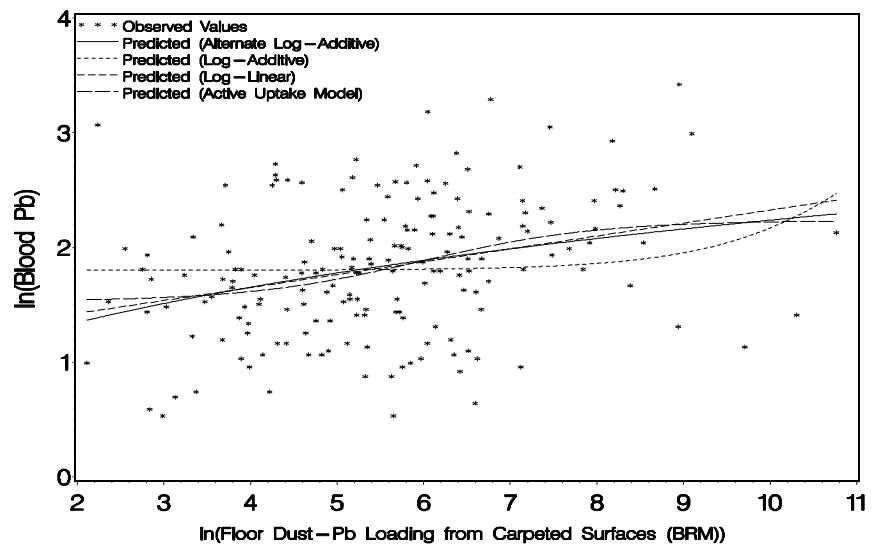
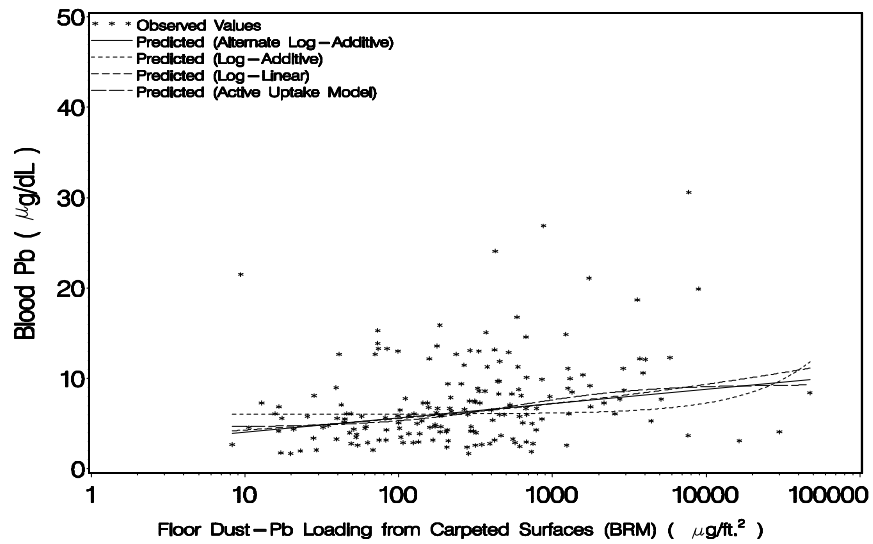


Figure G11-11. Bivariate Relationship Between Blood-Lead Concentration and Floor Dust-Lead Loading from Carpeted Surfaces (BRM Samples).

Statistical Model	Parameter Estimates and (Associated Standard Errors)			<sup>2</sup>	R <sup>2</sup>	Estimated Log-Likelihood	Number of Observations
	<sup>0</sup> s.e. ( <sub>0</sub> )	<sup>1</sup> s.e. ( <sub>1</sub> )	$\theta_{HSP}$ s.e. ( $\theta_{HSP}$ )				
Log-Linear	1.85 (0.0679)	0.00 (0.0137)	--	0.3804	0.0000	-190.81	205
Log-Additive	6.32 (0.2836)	0.00 (0.0001)	--	0.3795	0.0025	-190.56	205
Alternate Log-Additive	6.38 (0.4336)	0.00 (0.0876)	--	0.3804	0.0000	-190.81	205
Active Uptake	15.43 (6.6736)	0.02 (0.0398)	9.37 (2.5211)	0.3720	0.0317	-187.52	205

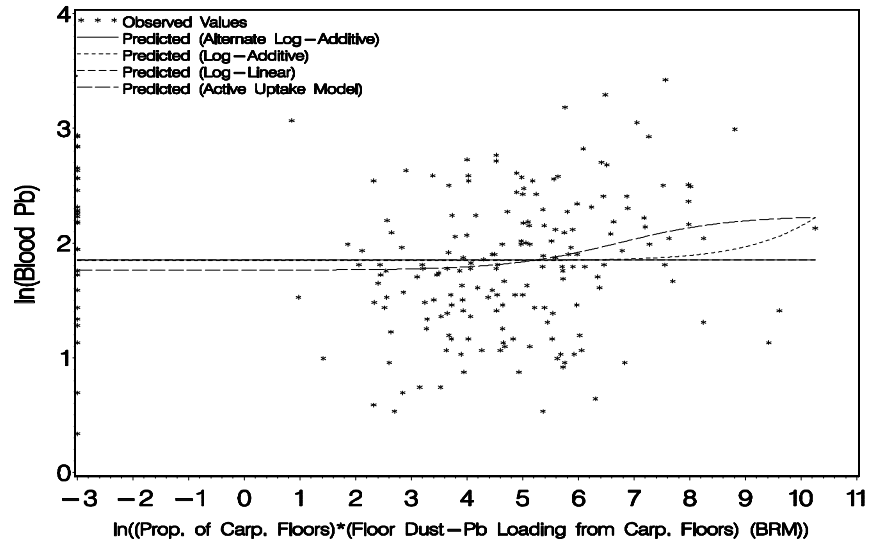
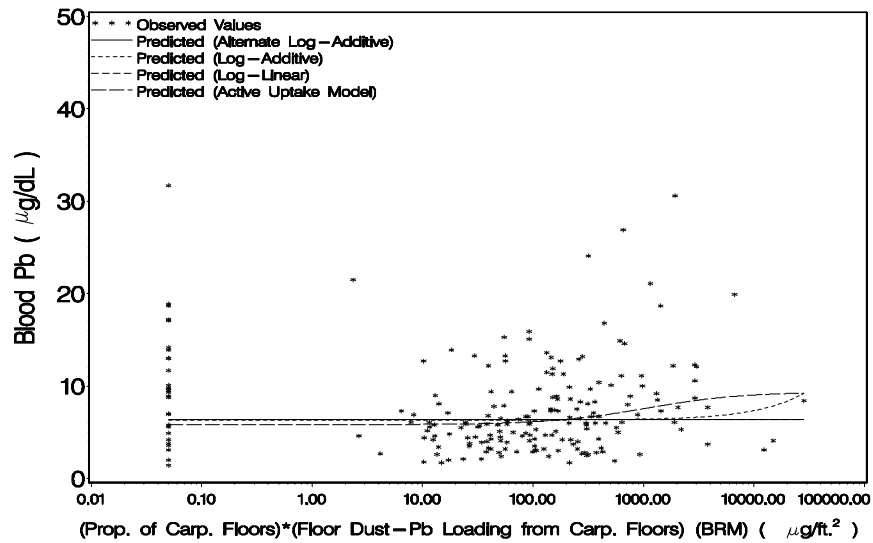


Figure G11-12. Bivariate Relationship Between Blood-Lead Concentration and (Proportion of Carpeted Floors Sampled)\*(Floor Dust-Lead Loading from Carpeted Floors)(BRM Samples).