

APPENDIX D1

**SUMMARIES OF INTERIM DUST-LEAD LOADING DATA
FROM THE NATIONAL SURVEY OF LEAD AND ALLERGENS IN HOUSING,
(NSLAH), WHERE IMPUTED DATA ARE EXCLUDED**

Summaries of Interim Dust-Lead Loading Data from the National Survey of Lead and Allergens in Housing (NSLAH), Where Imputed Data Are Excluded

This appendix presents descriptive statistics of average household dust-lead loadings for floors and window sills from the §403 risk analysis and from the interim NSLAH dust-lead loading data where imputed data values calculated based on the methods presented in Appendix C are omitted. These summaries complement the summary tables and boxplots presented in Tables 3-4 through 3-11b and Figures 3-1 through 3-6 in the main body of this report, which included imputed household averages for housing units having no dust-lead loading data.

The statistics on the interim NSLAH data are provided in this appendix under five different approaches to handling sample results that fall below the instrument's detection limit. As noted in Table 3-1, the interim NSLAH database reported dust-lead amounts as they were measured by the analytical instruments, regardless of whether these amounts were below the instrument's detection limit. While using these actual reported lead amounts rather than a censored result based on the detection limit can lead to more accurate portrayals of the actual lead amounts in the samples, some of these reported amounts are zero or below. This can cause problems in the risk analysis, as the empirical model takes natural logarithms of the household averages, and logarithms can only be taken on positive values. Therefore, the descriptive statistics of the interim NSLAH data are presented in this appendix under five approaches to handling not-detected values associated with individual sample analyses:

- No adjustment (i.e., using data as reported in the database)
- Replacing the value with zero
- Replacing the value with the detection limit (LOD) divided by two
- Replacing the value with the detection limit divided by the square root of two
- Replacing the value with the detection limit

Replacement with zero introduces the greatest amount of negative bias (i.e., underestimation), while replacement with the detection limit introduces the greatest amount of positive bias. The detection limit divided by the square root of two is an efficient estimator of the true amount when the data are lognormally distributed, while the detection limit divided by two is recommended when the distribution is highly skewed. Results are presented under these different approaches to illustrate the impact that any one approach has on the characterized distribution.

The following tables appearing in this appendix are associated with the specified tables in Chapter 3 of the report:

- Tables D1-1 and D1-2: national estimates complementing Tables 3-4 and 3-5

- Tables D1-3 and D1-4: estimates by housing age category, complementing Tables 3-6 and 3-7
- Tables D1-5 and D1-6: estimates by Census region, complementing Tables 3-8 and 3-9
- Tables D1-7a through D1-8b: estimates by combinations of Census region and housing age category, complementing Tables 3-10a through 3-11b.

The following boxplots appearing in this appendix are associated with the specified boxplots in Chapter 3 of the report:

- Figures D1-1 and D1-2: national estimates complementing Figures 3-1 and 3-2
- Figures D1-3 and D1-4: estimates by housing age category, complementing Figures 3-3 and 3-4
- Figures D1-5 and D1-6: estimates by Census region, complementing Figures 3-5 and 3-6.

While Tables D1-1 through D1-4 and Figures D1-1 through D1-2 contain interim NSLAH data summaries under all five approaches to handling not-detected values, the remaining tables and figures in this appendix present interim NSLAH data summaries only for the two approaches (no adjustment; replace by one-half of the level of detection) most likely to be used in the supplemental risk analysis and considered in the interim NSLAH data summaries presented in Chapter 3.

Table D1-1. Descriptive Statistics of Area-Weighted Average Floor Wipe Dust-Lead Loadings for Households, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Surveyed Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
§403 Risk Analysis (HUD Natl. Survey)		284	16.5	6.27	3.49	0.508	2.65	5.32	12.2	375
Interim NSLAH	No adjustment	624	10.4	1.21	4.56	-1.23	0.300	1.03	2.30	5940
	Replaced by 0	417	10.1	1.95	3.89	0.00	0.00	0.500	2.00	5940
	Replaced by LOD/2	697	10.8	1.80	2.76	0.750	0.950	1.31	2.46	5950
	Replaced by LOD/%2	697	11.1	2.21	2.50	1.06	1.25	1.68	2.84	5950
	Replaced by LOD	697	11.4	2.73	2.29	1.50	1.60	2.10	3.20	5950

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with floor dust-lead data are used to calculate the remaining statistics).

Table D1-2. Descriptive Statistics of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings for Households, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Surveyed Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
§403 Risk Analysis (HUD Natl. Survey)		284	550	23.0	15.8	0.0118	4.35	19.5	198	43700
Interim NSLAH	No adjustment	649	140	13.6	8.05	-9.43	2.71	11.0	50.3	11100
	Replaced by 0	563	139	20.2	6.72	0.00	1.94	10.8	50.1	11100
	Replaced by LOD/2	665	140	14.9	6.71	0.445	3.09	11.1	50.1	11100
	Replaced by LOD/%2	665	141	16.2	6.22	0.629	3.75	11.6	50.3	11100
	Replaced by LOD	665	141	17.6	5.77	0.889	4.39	12.1	50.3	11100

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with window sill dust-lead data are used to calculate the remaining statistics).

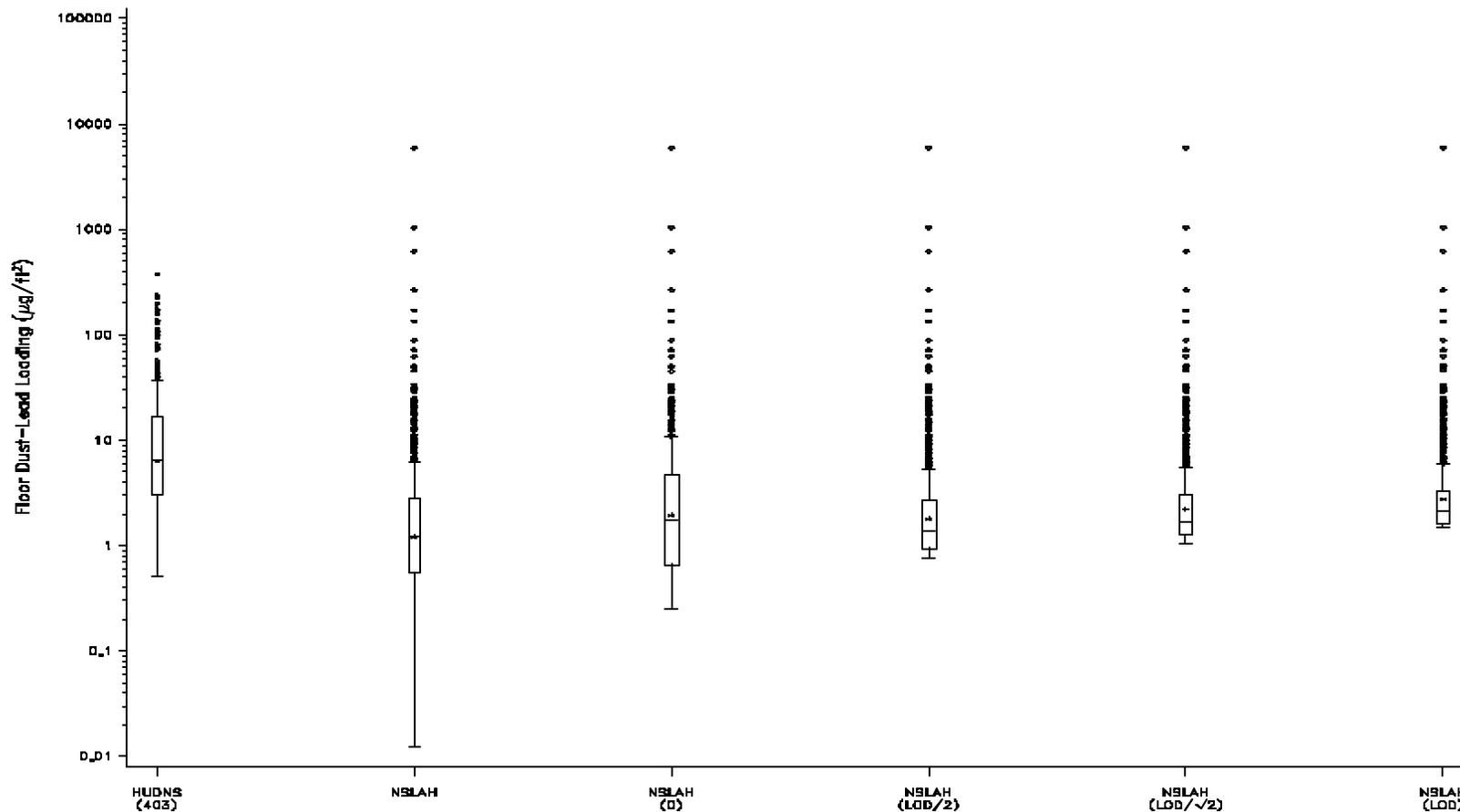


Figure D1-1. Boxplots of Area-Weighted Average Floor Wipe Dust-Lead Loadings ($\mu\text{g}/\text{ft}^2$) As Observed in the §403 Risk Analysis (Using HUD National Survey Data) and in the NSLAH (under 5 approaches to handling not-detected values) (imputed data omitted for the NSLAH)

(Note: Dust-lead loadings from the HUD National Survey have been converted to wipe-equivalents in the §403 risk analysis using the methods documented in the §403 risk analysis report. See text for definitions of labels along the horizontal axis.)

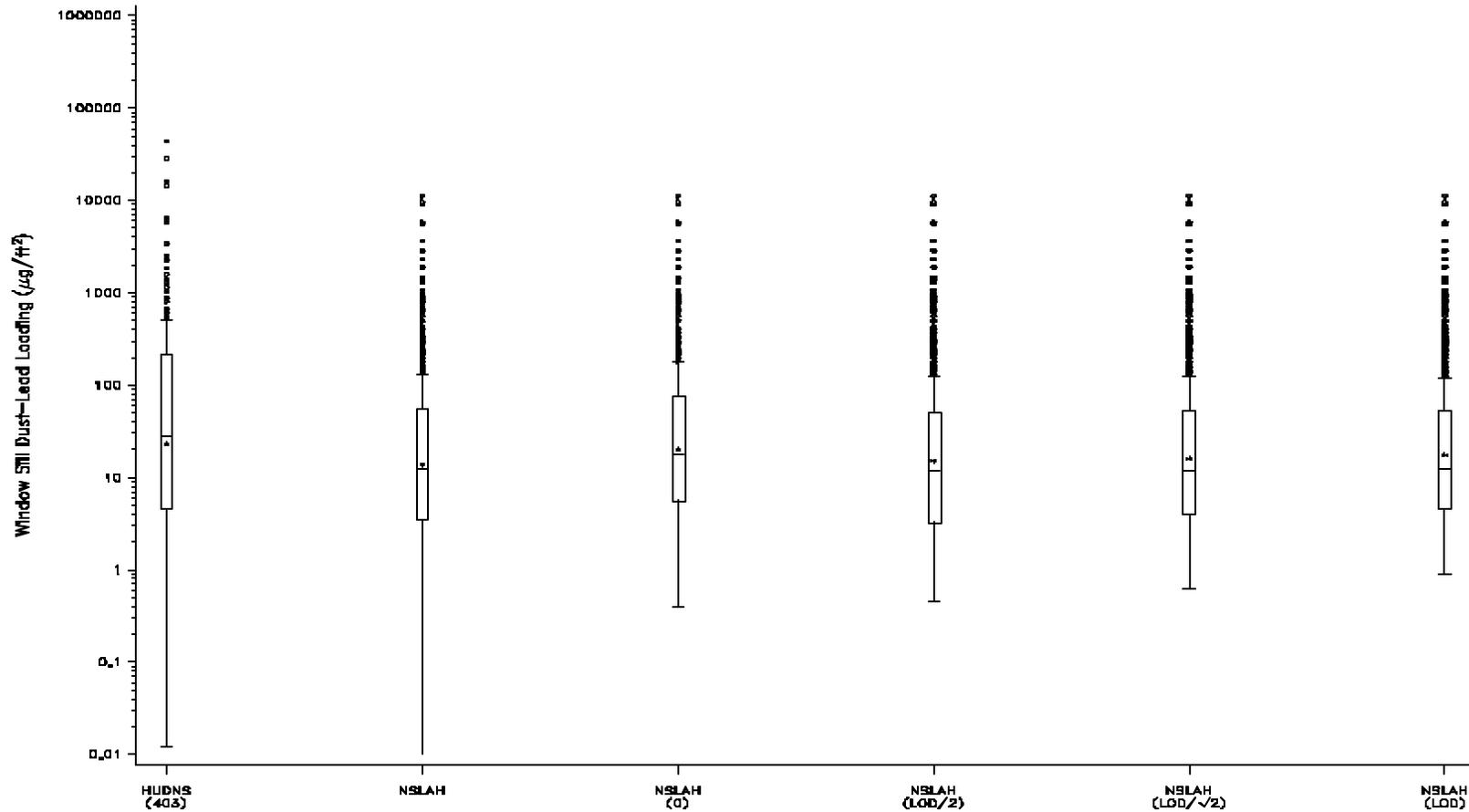


Figure D1-2. Boxplots of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings ($\mu\text{g}/\text{ft}^2$) As Observed in the §403 Risk Analysis (Using HUD National Survey Data) and in the NSLAH (under 5 approaches to handling not-detected values) (imputed data omitted for the NSLAH)

(Note: Dust-lead loadings from the HUD National Survey have been converted to wipe-equivalents in the §403 risk analysis using the methods documented in the §403 risk analysis report. See text for definitions of labels along the horizontal axis.)

Table D1-3. Descriptive Statistics of Area-Weighted Average Floor Wipe Dust-Lead Loadings for Households, Presented by Housing Age Category, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Units with Positive Averages	Arithmetic Mean	Geo-metric Mean ²	Geo-metric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Units Built Prior to 1940										
§403 Risk Analysis (HUD Natl. Survey)		77	47.9	22.6	3.63	0.991	8.84	17.7	79.7	375
Interim NSLAH	No adjustment	110	36.9	3.66	4.49	-0.600	1.30	2.42	9.25	5940
	Replaced by 0	97	36.6	4.12	4.64	0.00	0.750	2.20	9.25	5940
	Replaced by LOD/2	113	37.0	3.92	3.94	0.750	1.45	2.71	9.25	5950
	Replaced by LOD/%2	113	37.2	4.36	3.62	1.06	1.68	3.05	9.27	5950
	Replaced by LOD	113	37.5	4.89	3.34	1.50	2.00	3.40	9.38	5950
Units Built from 1940 - 1959										
§403 Risk Analysis (HUD Natl. Survey)		87	18.1	8.74	3.34	0.508	4.07	7.81	22.4	171
Interim NSLAH	No adjustment	132	4.10	1.88	3.58	-0.720	0.719	1.77	3.66	71.0
	Replaced by 0	96	3.75	2.38	3.33	0.00	0.00	1.40	3.40	71.0
	Replaced by LOD/2	143	4.37	2.29	2.64	0.750	1.05	1.98	3.55	71.0
	Replaced by LOD/%2	143	4.63	2.70	2.37	1.06	1.37	2.22	3.92	71.0
	Replaced by LOD	143	4.99	3.22	2.15	1.50	1.77	2.52	4.83	71.0
Units Built from 1960-1977 (1960 - 1979 for the §403 risk analysis)										
§403 Risk Analysis (HUD Natl. Survey)		120	6.74	4.14	2.45	0.657	2.25	3.62	7.59	106
Interim NSLAH	No adjustment	173	1.51	0.905	3.52	-0.733	0.206	0.880	1.70	28.5
	Replaced by 0	107	1.20	1.32	2.69	0.00	0.00	0.400	1.38	28.6
	Replaced by LOD/2	198	1.96	1.45	1.94	0.750	0.900	1.20	1.94	28.8
	Replaced by LOD/%2	198	2.28	1.83	1.76	1.06	1.24	1.53	2.19	28.8
	Replaced by LOD	198	2.73	2.32	1.63	1.50	1.60	1.98	2.76	28.9

Table D1-3. (cont.)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Units Built After 1977 (after 1979 for the §403 risk analysis)										
§403 Risk Analysis (HUD Natl. Survey)		28	4.16	3.14	2.06	1.06	1.76	2.84	5.66	12.9
Interim NSLAH	No adjustment	149	1.20	0.542	3.35	-1.05	0.146	0.400	1.07	265
	Replaced by 0	72	0.949	0.959	2.53	0.00	0.00	0.00	0.500	265
	Replaced by LOD/2	178	1.71	1.14	1.72	0.750	0.750	1.00	1.35	265
	Replaced by LOD/%2	178	2.03	1.49	1.59	1.06	1.06	1.34	1.72	265
	Replaced by LOD	178	2.47	1.96	1.50	1.50	1.50	1.70	2.25	265
NSLAH Units with Unspecified Year-Built Indicator										
Interim NSLAH	No adjustment	60	31.9	1.30	6.49	-1.23	0.300	1.24	2.50	1040
	Replaced by 0	45	31.7	2.17	5.44	0.00	0.00	0.660	2.20	1040
	Replaced by LOD/2	65	32.3	2.11	3.82	0.750	1.00	1.40	2.53	1040
	Replaced by LOD/%2	65	32.6	2.53	3.51	1.06	1.38	1.84	2.75	1040
	Replaced by LOD	65	32.9	3.08	3.24	1.50	1.70	2.22	3.10	1040

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with floor dust-lead data are used to calculate the remaining statistics).

Table D1-4. Descriptive Statistics of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings for Households, Presented by Housing Age Category, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Units with Positive Averages	Arithmetic Mean	Geo-metric Mean ²	Geo-metric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Units Built Prior to 1940										
§403 Risk Analysis (HUD Natl. Survey)		77	2060	168	16.7	0.0155	35.6	198	1220	43700
Interim NSLAH	No adjustment	109	400	72.9	6.62	-0.152	21.1	78.2	284	11100
	Replaced by 0	107	400	76.3	6.35	0.00	21.1	78.2	284	11100
	Replaced by LOD/2	110	400	72.2	6.47	1.03	21.1	78.2	284	11100
	Replaced by LOD/%2	110	400	73.3	6.30	1.46	21.1	78.2	284	11100
	Replaced by LOD	110	400	74.7	6.12	2.06	21.1	78.2	284	11100
Units Built from 1940 - 1959										
§403 Risk Analysis (HUD Natl. Survey)		87	285	22.0	10.7	0.0118	6.47	19.1	107	16100
Interim NSLAH	No adjustment	136	130	22.7	6.91	-1.73	6.35	21.0	69.1	3630
	Replaced by 0	122	129	30.3	5.90	0.00	5.53	19.5	68.4	3630
	Replaced by LOD/2	137	130	24.2	6.04	0.923	6.10	21.5	69.6	3630
	Replaced by LOD/%2	137	130	25.7	5.64	1.31	6.48	21.7	70.1	3630
	Replaced by LOD	137	131	27.5	5.27	1.66	7.56	21.9	70.9	3630
Units Built from 1960-1977 (1960 - 1979 for the §403 risk analysis)										
§403 Risk Analysis (HUD Natl. Survey)		120	184	16.2	14.6	0.0164	2.05	16.6	217	5790
Interim NSLAH	No adjustment	183	37.3	9.78	4.89	-2.32	2.82	8.03	25.4	1390
	Replaced by 0	163	36.3	12.1	4.47	0.00	2.07	6.95	21.5	1390
	Replaced by LOD/2	189	37.6	10.4	4.31	1.02	3.06	7.86	26.4	1390
	Replaced by LOD/%2	189	38.1	11.2	4.05	1.36	3.60	8.29	26.5	1390
	Replaced by LOD	189	38.8	12.3	3.82	1.47	4.20	8.83	27.5	1390

Table D1-4. (cont.)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Units Built After 1977 (after 1979 for the §403 risk analysis)										
§403 Risk Analysis (HUD Natl. Survey)		28	83.0	8.17	9.94	0.0164	2.58	8.11	57.8	1590
Interim NSLAH	No adjustment	160	15.6	3.26	5.32	-9.43	0.916	2.80	8.17	426
	Replaced by 0	115	14.8	5.40	4.38	0.00	0.00	1.71	7.29	409
	Replaced by LOD/2	166	16.0	4.25	3.80	0.445	1.69	3.33	8.50	427
	Replaced by LOD/%2	166	16.5	4.95	3.50	0.629	2.07	4.01	9.48	434
	Replaced by LOD	166	17.3	5.83	3.25	0.889	2.61	4.80	10.0	445
NSLAH Units with Unspecified Year-Built Indicator										
Interim NSLAH	No adjustment	61	379	38.5	7.55	-0.629	14.3	36.4	116	9030
	Replaced by 0	56	379	54.2	5.45	0.00	14.3	36.4	116	9030
	Replaced by LOD/2	63	379	38.9	6.91	0.720	17.7	36.4	116	9030
	Replaced by LOD/%2	63	379	40.4	6.53	1.02	18.8	36.4	116	9030
	Replaced by LOD	63	380	42.1	6.19	1.44	18.8	36.4	116	9030

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with window sill dust-lead data are used to calculate the remaining statistics).

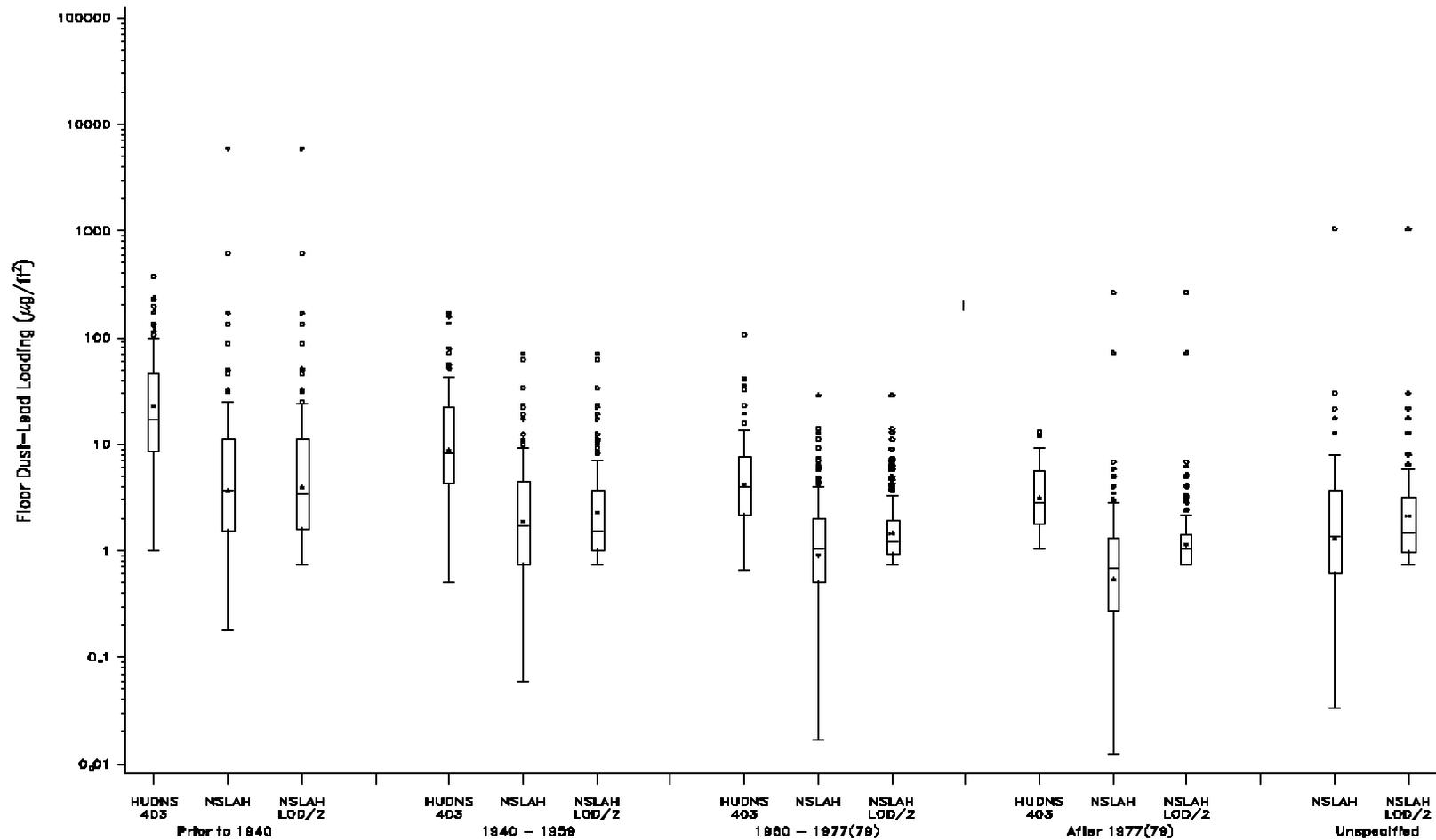


Figure D1-3. Boxplots of Area-Weighted Average Floor Wipe Dust-Lead Loadings ($\mu\text{g}/\text{ft}^2$), by Housing Age Category, As Observed in the §403 Risk Analysis (Using HUD National Survey Data) and in the NSLAH (under 2 approaches to handling not-detected values) (imputed data omitted for the NSLAH)

(Note: Dust-lead loadings from the HUD National Survey have been converted to wipe-equivalents in the §403 risk analysis using the methods documented in the §403 risk analysis report. See text for definitions of labels along the horizontal axis.)

Table D1-5. Descriptive Statistics of Area-Weighted Average Floor Wipe Dust-Lead Loadings for Households, Presented by Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Surveyed Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Northeast										
§403 Risk Analysis (HUD Natl. Survey)		53	35.6	14.9	3.95	0.632	4.79	11.0	76.3	375
Interim NSLAH	No adjustment	103	10.0	2.28	4.42	-0.620	0.800	1.90	6.00	617
	Replaced by LOD/2	109	10.3	2.90	3.15	0.750	1.20	2.13	6.00	617
Midwest										
§403 Risk Analysis (HUD Natl. Survey)		73	14.7	6.32	3.26	0.508	2.83	6.32	11.0	173
Interim NSLAH	No adjustment	135	14.6	1.31	5.74	-0.733	0.283	1.16	2.48	1040
	Replaced by LOD/2	149	14.9	2.00	3.34	0.750	0.760	1.29	3.15	1040
South										
§403 Risk Analysis (HUD Natl. Survey)		134	13.3	5.01	3.28	0.735	2.00	3.89	10.0	236
Interim NSLAH	No adjustment	230	2.58	0.962	3.92	-1.05	0.253	0.900	1.76	265
	Replaced by LOD/2	260	3.00	1.53	2.22	0.750	0.970	1.20	1.89	265
West										
§403 Risk Analysis (HUD Natl. Survey)		52	9.81	4.97	2.75	1.06	2.65	4.01	8.43	197
Interim NSLAH	No adjustment	156	19.0	0.927	3.68	-1.23	0.250	0.760	1.62	5940
	Replaced by LOD/2	179	19.5	1.44	2.31	0.750	0.780	1.20	1.88	5950

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with floor dust-lead data are used to calculate the remaining statistics).

Table D1-6. Descriptive Statistics of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings for Households, Presented by Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data (imputed data omitted for the NSLAH)

Study	How Not-Detected and Negative Data were Handled	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$) ¹								
		# Surveyed Units with Positive Averages	Arithmetic Mean	Geometric Mean ²	Geometric Std. Dev. ²	Minimum	25 th Percentile	Median	75 th Percentile	Maximum
Northeast										
§403 Risk Analysis (HUD Natl. Survey)		53	1440	92.2	16.1	0.0155	15.3	173	335	14600
Interim NSLAH	No adjustment	106	170	21.0	7.93	-1.89	5.94	14.6	89.5	5530
	Replaced by LOD/2	108	170	22.1	6.99	0.578	5.94	14.8	90.0	5530
Midwest										
§403 Risk Analysis (HUD Natl. Survey)		73	564	48.5	13.2	0.0706	7.76	83.0	309	43700
Interim NSLAH	No adjustment	143	216	19.9	7.13	-2.32	4.00	16.0	54.9	9630
	Replaced by LOD/2	148	216	20.5	6.37	1.12	4.67	15.7	56.1	9630
South										
§403 Risk Analysis (HUD Natl. Survey)		134	432	19.6	12.4	0.118	4.60	15.0	127	28400
Interim NSLAH	No adjustment	231	121	12.4	8.68	-9.43	2.33	10.2	53.8	11100
	Replaced by LOD/2	237	121	14.2	6.77	0.646	2.88	10.3	53.8	11100
West										
§403 Risk Analysis (HUD Natl. Survey)		52	62.2	4.45	12.7	0.0118	1.68	5.40	28.0	1400
Interim NSLAH	No adjustment	169	55.3	6.96	6.80	-0.115	1.74	6.08	25.6	3630
	Replaced by LOD/2	172	55.3	7.93	5.68	0.445	2.18	6.26	25.5	3630

¹ All statistics are calculated by weighting each household by its sampling weight.

² Only household averages greater than zero are used to calculate this value (data for all units with window sill dust-lead data are used to calculate the remaining statistics).

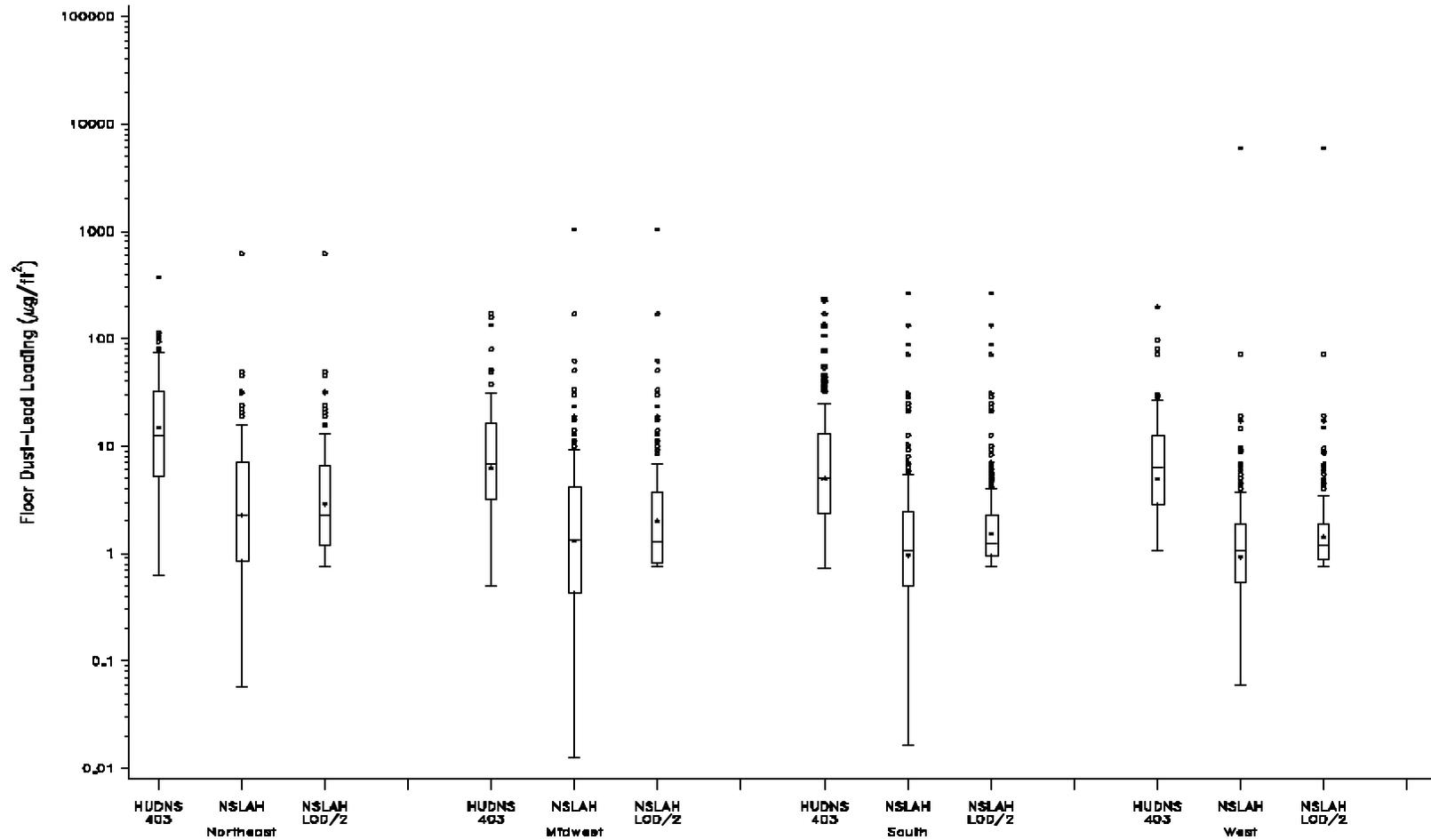


Figure D1-5. Boxplots of Area-Weighted Average Floor Wipe Dust-Lead Loadings ($\mu\text{g}/\text{ft}^2$), by Census Region, Observed in the §403 Risk Analysis (Using HUD National Survey Data) and in the NSLAH (under 2 approaches to handling not-detected values) (imputed data omitted for the NSLAH)

(Note: Dust-lead loadings from the HUD National Survey have been converted to wipe-equivalents in the §403 risk analysis using the methods documented in the §403 risk analysis report. See text for definitions of labels along the horizontal axis.)

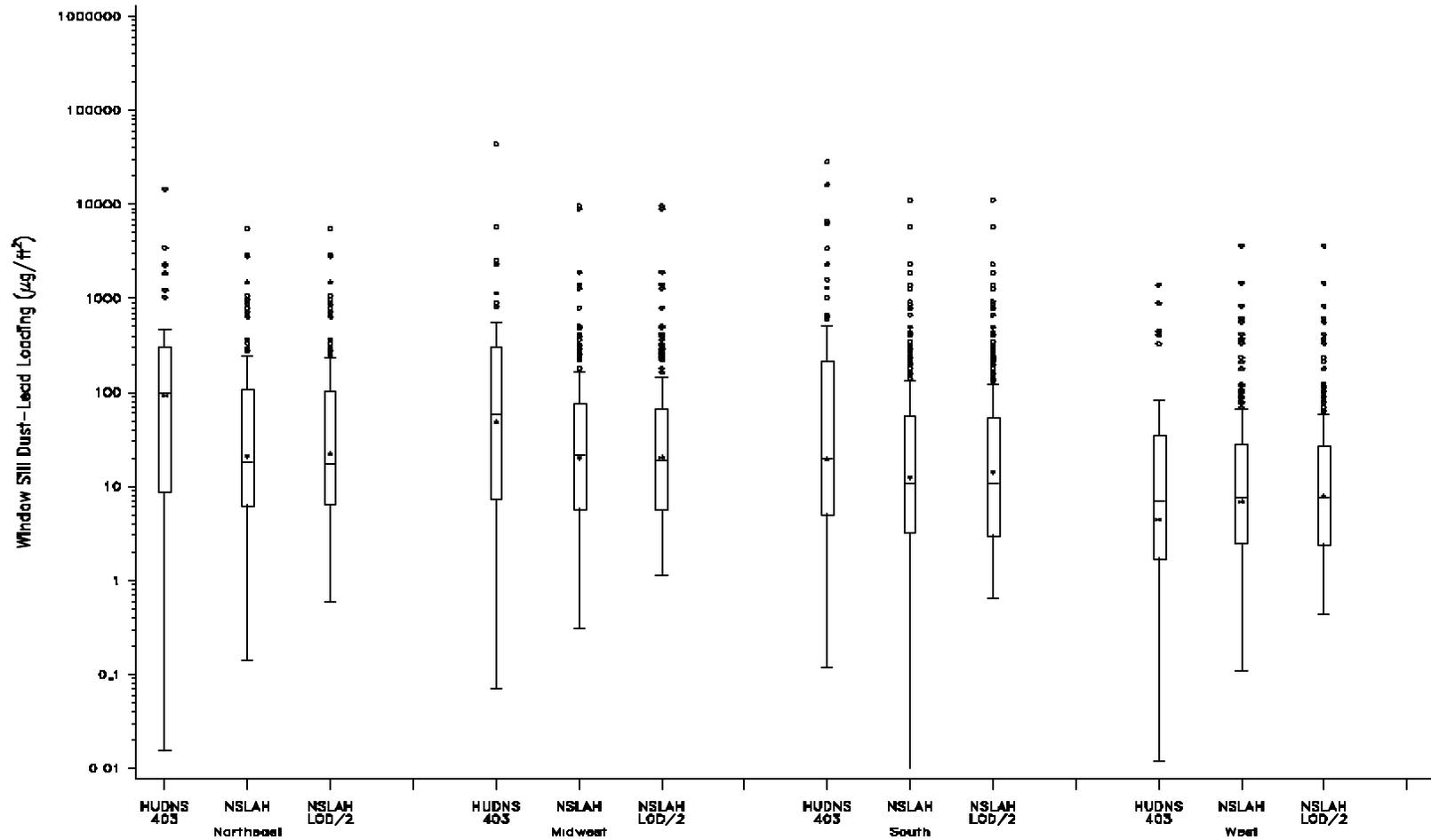


Figure D1-6. Boxplots of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings ($\mu\text{g}/\text{ft}^2$), by Census Region, As Observed in the §403 Risk Analysis (Using HUD National Survey Data) and in the NSLAH (under 2 approaches to handling not-detected values) (imputed data omitted for the NSLAH)

(Note: Dust-lead loadings from the HUD National Survey have been converted to wipe-equivalents in the §403 risk analysis using the methods documented in the §403 risk analysis report. See text for definitions of labels along the horizontal axis.)

Table D1-7a. Descriptive Statistics of Area-Weighted Average Floor Wipe Dust-Lead Loadings for Households, Presented by Housing Age and Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data Where No Adjustments Were Made to Not-Detected Results (imputed data omitted for the NSLAH)

Census Region	Study	Housing Age Category	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$)				
			# Surveyed Units	Arithmetic Mean	Geometric Mean	Geometric Std. Dev.	Median
Northeast	§403 Risk Anal.	Prior to 1940	26	63.5	36.5	3.39	76.3
	Interim NSLAH		41	23.7	5.02	4.31	4.20
	§403 Risk Anal.	1940 - 1959	17	13.2	8.84	2.54	7.81
	Interim NSLAH		21	3.75	2.37	3.36	2.38
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	10	7.00	4.73	2.23	4.76
	Interim NSLAH		19	3.34	1.72	3.76	1.46
	Interim NSLAH	After 1977	15	1.12	0.714	2.78	0.867
Midwest	§403 Risk Anal.	Prior to 1940	19	31.3	14.7	3.01	8.94
	Interim NSLAH		32	7.78	2.42	4.26	1.97
	§403 Risk Anal.	1940 - 1959	21	15.8	6.69	3.95	5.79
	Interim NSLAH		35	5.48	2.05	4.16	1.59
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	29	6.33	4.58	2.35	4.44
	Interim NSLAH		32	1.52	0.737	4.77	1.12
	§403 Risk Anal.	After 1977 (1979 for §403)	4	3.32	2.77	1.83	2.80
	Interim NSLAH		25	0.913	0.545	3.86	0.320
South	§403 Risk Anal.	Prior to 1940	19	50.7	20.8	4.01	19.0
	Interim NSLAH		26	11.0	3.66	3.93	2.74
	§403 Risk Anal.	1940 - 1959	33	25.4	10.3	3.91	10.0
	Interim NSLAH		42	3.66	1.63	3.40	1.77
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	64	8.06	4.13	2.74	3.39
	Interim NSLAH		69	1.16	0.814	3.09	0.880
	§403 Risk Anal.	After 1977 (1979 for §403)	18	4.19	3.16	2.05	2.84
	Interim NSLAH		70	1.04	0.543	3.13	0.480
West	§403 Risk Anal.	Prior to 1940	13	34.9	16.2	3.51	17.2
	Interim NSLAH		11	264	3.84	6.17	2.30
	§403 Risk Anal.	1940 - 1959	16	14.6	9.04	2.46	7.47
	Interim NSLAH		34	2.73	1.59	2.91	1.24
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	17	4.50	3.53	2.03	3.35
	Interim NSLAH		53	1.16	0.937	2.46	0.880
	§403 Risk Anal.	After 1977 (1979 for §403)	6	4.60	3.36	2.21	3.00
	Interim NSLAH		39	1.75	0.454	3.67	0.270

Table D1-7b.

Descriptive Statistics of Area-Weighted Average Floor Wipe Dust-Lead Loadings for Households, Presented by Housing Age and Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data Where Not-Detected Results Were Replaced by LOD/2 (imputed data omitted for the NSLAH)

Census Region	Study	Housing Age Category	Area-Weighted Average Floor Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$)				
			# Surveyed Units	Arithmetic Mean	Geometric Mean	Geometric Std. Dev.	Median
Northeast	§403 Risk Anal.	Prior to 1940	26	63.5	36.5	3.39	76.3
	Interim NSLAH		41	23.8	5.47	3.91	4.35
	§403 Risk Anal.	1940 - 1959	17	13.2	8.84	2.54	7.81
	Interim NSLAH		23	4.03	2.86	2.23	2.40
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	10	7.00	4.73	2.23	4.76
	Interim NSLAH		21	3.58	2.16	2.60	1.68
	Interim NSLAH	After 1977	16	1.68	1.43	1.72	1.29
Midwest	§403 Risk Anal.	Prior to 1940	19	31.3	14.7	3.01	8.94
	Interim NSLAH		35	8.09	2.70	3.23	2.19
	§403 Risk Anal.	1940 - 1959	21	15.8	6.69	3.95	5.79
	Interim NSLAH		36	5.80	2.57	3.20	1.53
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	29	6.33	4.58	2.35	4.44
	Interim NSLAH		37	2.00	1.50	2.03	1.20
	§403 Risk Anal.	After 1977 (1979 for §403)	4	3.32	2.77	1.83	2.80
	Interim NSLAH		30	1.31	1.09	1.67	0.938
South	§403 Risk Anal.	Prior to 1940	19	50.7	20.8	4.01	19.0
	Interim NSLAH		26	11.1	3.87	3.76	2.70
	§403 Risk Anal.	1940 - 1959	33	25.4	10.3	3.91	10.0
	Interim NSLAH		48	3.94	1.99	2.35	1.54
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	64	8.06	4.13	2.74	3.39
	Interim NSLAH		79	1.67	1.30	1.74	1.16
	§403 Risk Anal.	After 1977 (1979 for §403)	18	4.19	3.16	2.05	2.84
	Interim NSLAH		82	1.54	1.13	1.57	1.06
West	§403 Risk Anal.	Prior to 1940	13	34.9	16.2	3.51	17.2
	Interim NSLAH		11	264	4.03	5.91	2.19
	§403 Risk Anal.	1940 - 1959	16	14.6	9.04	2.46	7.47
	Interim NSLAH		36	2.94	1.88	2.32	1.38
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	17	4.50	3.53	2.03	3.35
	Interim NSLAH		61	1.62	1.39	1.66	1.26
	§403 Risk Anal.	After 1977 (1979 for §403)	6	4.60	3.36	2.21	3.00
	Interim NSLAH		50	2.34	1.07	1.95	0.900

Table D1-8a. Descriptive Statistics of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings for Households, Presented by Housing Age and Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data Where No Adjustments Were Made to Not-Detected Results (imputed data omitted for the NSLAH)

Census Region	Study	Housing Age Category	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$)				
			# Surveyed Units	Arithmetic Mean	Geometric Mean	Geometric Std. Dev.	Median
Northeast	§403 Risk Anal.	Prior to 1940	26	2700	265	15.8	176
	Interim NSLAH		39	395	95.9	6.37	91.7
	§403 Risk Anal.	1940 - 1959	17	98.5	32.6	5.55	50.7
	Interim NSLAH		23	62.7	20.1	4.31	18.5
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	10	499	38.9	20.8	217
	Interim NSLAH		20	13.9	7.88	2.67	6.49
	Interim NSLAH	After 1977	16	18.3	3.28	5.69	2.06
Midwest	§403 Risk Anal.	Prior to 1940	19	1660	435	5.79	542
	Interim NSLAH		35	355	64.3	6.13	60.1
	§403 Risk Anal.	1940 - 1959	21	98.2	17.7	11.6	17.4
	Interim NSLAH		34	103	18.9	6.38	16.0
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	29	223	20.9	11.6	48.3
	Interim NSLAH		33	27.9	9.94	4.75	9.54
	§403 Risk Anal.	After 1977 (1979 for §403)	4	62.5	27.5	6.78	83.0
	Interim NSLAH		30	21.0	6.57	3.64	5.86
South	§403 Risk Anal.	Prior to 1940	19	2450	64.0	23.1	24.4
	Interim NSLAH		25	606	105	5.95	115
	§403 Risk Anal.	1940 - 1959	33	657	38.9	9.93	26.2
	Interim NSLAH		43	164	27.1	9.13	27.3
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	64	149	24.0	12.6	32.0
	Interim NSLAH		73	59.1	12.9	5.98	10.3
	§403 Risk Anal.	After 1977 (1979 for §403)	18	112	9.09	8.60	7.58
	Interim NSLAH		68	18.4	3.37	6.20	3.62
West	§403 Risk Anal.	Prior to 1940	13	125	11.5	14.7	7.05
	Interim NSLAH		10	49.5	14.2	5.44	17.1
	§403 Risk Anal.	1940 - 1959	16	107	7.35	13.2	6.96
	Interim NSLAH		36	188	26.3	7.34	33.4
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	17	58.7	3.83	11.5	4.35
	Interim NSLAH		57	25.7	7.00	4.25	4.74
	§403 Risk Anal.	After 1977 (1979 for §403)	6	9.66	2.65	11.6	5.94
	Interim NSLAH		46	5.21	1.79	3.92	1.39

Table D1-8b.

Descriptive Statistics of Area-Weighted Average Window Sill Wipe Dust-Lead Loadings for Households, Presented by Housing Age and Census Region, As Reported in the §403 Risk Analysis Versus the Interim NSLAH Data Where Not-Detected Results Were Replaced by LOD/2 (imputed data omitted for the NSLAH)

Census Region	Study	Housing Age Category	Area-Weighted Average Window Sill Dust-Lead Loading ($\mu\text{g}/\text{ft}^2$)				
			# Surveyed Units	Arithmetic Mean	Geometric Mean	Geometric Std. Dev.	Median
Northeast	§403 Risk Anal.	Prior to 1940	26	2700	265	15.8	176
	Interim NSLAH		40	395	86.8	6.95	91.7
	§403 Risk Anal.	1940 - 1959	17	98.5	32.6	5.55	50.7
	Interim NSLAH		23	62.7	19.6	4.49	18.9
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	10	499	38.9	20.8	217
	Interim NSLAH		21	14.7	8.39	2.55	7.37
	Interim NSLAH	After 1977	16	18.6	4.80	3.80	3.73
Midwest	§403 Risk Anal.	Prior to 1940	19	1660	435	5.79	542
	Interim NSLAH		35	355	67.3	5.61	60.1
	§403 Risk Anal.	1940 - 1959	21	98.2	17.7	11.6	17.4
	Interim NSLAH		35	104	19.9	5.51	15.7
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	29	223	20.9	11.6	48.3
	Interim NSLAH		37	28.4	10.3	3.81	9.54
	§403 Risk Anal.	After 1977 (1979 for §403)	4	62.5	27.5	6.78	83.0
	Interim NSLAH		30	21.4	7.01	3.54	6.20
South	§403 Risk Anal.	Prior to 1940	19	2450	64.0	23.1	24.4
	Interim NSLAH		25	606	105	5.94	115
	§403 Risk Anal.	1940 - 1959	33	657	38.9	9.93	26.2
	Interim NSLAH		43	165	31.8	7.16	27.3
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	64	149	24.0	12.6	32.0
	Interim NSLAH		74	59.4	13.9	5.32	12.6
	§403 Risk Anal.	After 1977 (1979 for §403)	18	112	9.09	8.60	7.58
	Interim NSLAH		72	19.0	4.63	3.93	3.62
West	§403 Risk Anal.	Prior to 1940	13	125	11.5	14.7	7.05
	Interim NSLAH		10	49.8	15.9	4.41	17.2
	§403 Risk Anal.	1940 - 1959	16	107	7.35	13.2	6.96
	Interim NSLAH		36	188	27.9	6.61	33.3
	§403 Risk Anal.	1960 -1977 (1960-79 for §403)	17	58.7	3.83	11.5	4.35
	Interim NSLAH		57	25.5	7.39	3.92	6.26
	§403 Risk Anal.	After 1977 (1979 for §403)	6	9.66	2.65	11.6	5.94
	Interim NSLAH		48	5.32	2.35	3.01	1.68