

Data Set 5: IQ and Lead Exposure

Data are measured from children in two consecutive years, and the children were living close to a lead smelter. LEAD is blood lead level group [1 = *low lead level* (blood lead levels < 40 micrograms/100 mL in both years); 2 = *medium lead level* (blood lead levels \geq 40 micrograms/100 mL in exactly one of two years); 3 = *high lead level* (blood lead level \geq 40 micrograms/100 mL in both years)]. Age is age in years. Sex is sex of subject (1 = male; 2 = female). YEAR1 is blood lead level in first year, and YEAR2 is blood lead level in second year. IQV is measured verbal IQ score. IQP is measured performance IQ score. IQF is measured full IQ score.

Data are from "Neuropsychological Dysfunction in Children with Chronic Low-Level Lead Absorption," by P. J. Landrigan, R. H. Whitworth, R.W. Baloh, N. W. Staehling, W. F. Barthel, and B. F. Rosenblum, *Lancet*, Vol. 1, Issue 7909.

STATDISK: Data set name is IQ and Lead Exposure.
 Minitab: Worksheet name for males is IQLEAD.MTW.
 Excel: Workbook name for males is IQLEAD.XLS.
 TI-83/84 Plus: App name is IQLEAD and the file names are the same as for text files.
 Text file names: LEAD, IQAGE, IQSEX, YEAR1, YEAR2, IQV, IQP, IQF

LEAD	AGE	SEX	YEAR1	YEAR2	IQV	IQP	IQF
1	11	1	25	18	61	85	70
1	9	1	31	28	82	90	85
1	11	1	30	29	70	107	86
1	6	1	29	30	72	85	76
1	11	1	2	34	72	100	84
1	6	1	29	25	95	97	96
1	6	1	25	24	89	101	94
1	15	2	24	15	57	64	56
1	7	2	24	16	116	111	115
1	7	1	31	24	95	100	97
1	13	2	21	19	82	76	77
1	10	2	29	27	116	136	128
1	12	1	32	29	99	100	99
1	12	1	36	32	74	90	80
1	15	1	30	25	100	135	118
1	10	1	29	23	72	104	86
1	15	1	28	28	126	149	141
1	9	2	28	19	80	99	88
1	8	1	34	22	86	107	96
1	11	1	21	22	94	99	96
1	7	1	35	27	100	113	107
1	11	2	39	38	72	104	86
1	6	1	36	31	63	101	80
1	6	1	19	25	101	111	107
1	9	1	29	24	85	118	101
1	13	2	1	24	85	99	91
1	9	2	22	20	124	122	125
1	6	1	23	18	105	87	96
1	13	1	21	18	81	118	99
1	6	1	32	26	87	113	99
1	12	2	26	27	100	128	115
1	8	2	20	24	91	121	106
1	9	1	2	22	99	111	105
1	7	2	36	31	89	104	96
1	12	1	24	34	57	51	50
1	6	2	38	37	99	100	99
1	9	2	14	25	58	113	85
1	14	2	18	20	97	82	88
1	15	1	24	16	94	146	120
1	14	1	20	21	82	107	93
1	9	2	33	34	92	83	87
1	7	2	36	27	89	108	98
1	12	2	18	22	69	93	78
1	8	1	31	26	87	114	100
1	7	1	33	30	97	113	105
1	15	2	27	33	82	94	87
1	6	2	28	26	85	106	94
1	14	2	24	23	89	92	89
1	7	1	30	23	85	79	80
1	13	1	24	23	92	129	111
1	12	1	29	24	95	114	104
1	6	1	38	31	76	99	85
1	7	1	31	39	80	110	94
1	9	1	28	32	66	90	75
1	12	2	22	23	67	85	73
1	15	1	22	16	63	94	76
1	10	1	27	28	87	127	107
1	9	1	24	33	79	101	88
1	13	2	36	34	82	99	89
1	12	2	10	38	82	113	96
1	6	2	30	21	70	80	72

(continued)