

BLOOD LEAD
COMPARISON
STATISTICS

1st Quarter
(Jan., Feb., Mar.)
1982

 **Lead Industries Association, Inc.**
292 Madison Ave., New York, N.Y. 10017

CYWI 3-000842

LIA is pleased to present the following summary of biological monitoring data provided by members of the lead industry. These summaries should enable individual companies to compare their results with companies in the same industry sector as well as with the lead industry as a whole.

Total Number of Companies Responding	<u>17</u>
Total Number of Plant Sites	<u>58</u>
Total Number of Individuals Sampled	<u>9096</u>
Total Number of Individual Tests:	
a. Blood Leads (PbB)	<u>12,944</u>
b. Zinc Protoporphyrin (ZPP)	<u>7,650</u>
c. Hemoglobin (Hb)	<u>4,961</u>

CYWI 3-000843

Primary Smelting and Refining

Sites: 7

of individuals sampled: 3031

Month	Number of Samples	PbB (ug/100g)		% of Samples in Each PbB (ug/100g)									ZPP (ug/100g)	Hb gm%
		Mean ($\bar{x}$)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#		
Jan	1266	43.3	12.3	7.2	13.3	22.4	30.5	20.0	5.9	6	-	1142	128	56.4
Feb	1263	41.3	11.9	8.1	13.9	23.1	30.0	20.0	4.7	5	-	1058	502	61.4
Mar	1538	41.2	12.5	9.3	14.0	21.7	30.2	19.7	4.3	5	.1	1411	637	63.8

Secondary Lead Smelters

Sites: 6

of individuals sampled: 109

Month	Number of Samples	PbB (ug/100g)		% of Samples in Each PbB (ug/100g)									ZPP (ug/100g)	Hb gm%
		Mean ($\bar{x}$)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#		
Jan	204	38.8	14.7	15.7	12.3	18.6	28.4	19.1	3.9	2.0	-	106	106	30.7
Feb	187	37.8	14.1	14.4	12.3	20.3	33.7	16.0	3.2	-	-	104	35.3	-
Mar	133	38.3	13.8	9.0	17.3	24.8	25.6	18.0	5.3	-	-	79	41.6	-

Oxide and Chemical Manufacturing

Sites: 6

of individuals sampled: 194

Month	Number of Samples	PbB (ug/100g)		% of Samples in Each PbB (ug/100g)									ZPP (ug/100g)	Hb gm%
		Mean ($\bar{x}$)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#		
Jan	115	45.2	14.1	2.6	9.6	34.3	28.1	21.7	9.6	6.1	-	102	115	62.5
Feb	61	45.2	11.8	3.3	8.2	19.7	27.9	31.1	8.2	1.6	-	46	61	72.3
Mar	139	40.7	20.5	23.7	10.1	12.2	15.8	15.8	13.0	7.9	1.4	128	93	70.8

Battery Manufacturing

Sites: 27

of individuals sampled: 4204

Month	Number of Samples	PbB (ug/100g)		% of Samples in Each PbB (ug/100g)									ZPP (ug/100g)	Hb gm%
		Mean ($\bar{x}$)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#		
Jan	2175	41.9	11.7	3.6	13.1	21.9	34.8	21.1	4.9	.4	-	697	923	140.6
Feb	2087	42.1	11.9	4.3	11.9	21.9	32.8	23.4	5.2	.4	-	755	936	116.2
Mar	2139	42.0	11.8	4.2	11.5	21.5	36.0	22.3	3.9	.3	.14	398	878	122.1

Other

Sites: 12

of individuals sampled: 1256

Month	Number of Samples	PbB (ug/100g)		% of Samples in Each PbB (ug/100g)									ZPP (ug/100g)	Hb gm%
		Mean ($\bar{x}$)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#		
Jan	457	27.8	14.0	35.4	23.4	18.2	17.1	6.3	1.5	-	-	332	122	38.2
Feb	446	26.2	13.6	40.6	24.7	15.0	12.8	5.8	1.1	-	-	375	76	33.0
Mar	534	28.1	13.2	40.3	24.5	18.5	12.4	5.6	.4	.2	-	441	94	40.3

CYWI 3-000844

In the process of compiling the data for the Blood Lead Comparison Program, we discovered that the six month summaries did not have the proper number of blood samples recorded. This was due to a misunderstanding about how the six month summaries should be calculated. We have now corrected the computer program involved and provide you with the following revised six month summaries for:

2nd & 3rd Quarter 1981
3rd & 4th Quarter 1981

2nd and 3rd Quarter 1981

Ind. Sect.	Number of Samples	PbB (ug/100g)		Samples in Each PbB (ug/100g)										ZPP (ug/100g)	Hb gm%
		Mean (X)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#	X		
Prim.	5019	37.5	13.5	10.5	17.0	28.4	24.5	16.3	3.1	.2	.1	#	3547	951	
												X	43.5	15.8	
Sec.	694	33.6	14.0	18.7	22.2	24.2	20.0	12.4	1.9	.4	-	#	484	267	
												X	39.6	15.2	
Oxide & Chem.	427	37.0	14.6	15.1	15.2	23.0	25.5	16.2	4.5	.5	-	#	263	234	
												X	95.0	15.2	
Batt.	4669	34.3	14.0	16.2	22.0	26.4	21.5	10.5	2.8	.4	.2	#	284	3441	
												X	81.3	14.7	
Other	1574	23.1	13.9	14.0	20.3	11.0	7.4	5.0	2.0	.3	-	#	1234	236	
												X	37.5	15.4	

3rd and 4th Quarter 1981

Ind. Sect.	Number of Samples	PbB (ug/100g)		Samples in Each PbB (ug/100g)										ZPP (ug/100g)	Hb gm%
		Mean (X)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#	X		
Prim.	3580	38.3	13.1	8.3	16.9	30.2	23.3	16.5	4.2	.4	.1	#	3000	1244	
												X	43.5	15.9	
Sec.	689	34.4	14.6	17.3	22.8	24.2	18.3	12.8	4.1	.6	-	#	486	191	
												X	39.7	15.4	
Oxide & Chem.	388	36.2	14.9	17.1	16.8	23.5	21.6	14.9	4.9	1.0	-	#	286	208	
												X	88.7	15.6	
Batt.	5280	37.8	13.6	9.9	19.1	25.9	25.0	15.2	4.2	.5	.2	#	1024	3609	
												X	156.3	14.6	
Other	2032	23.8	13.2	18.4	24.4	13.2	8.8	3.7	1.3	.1	.0	#	1579	341	
												X	30.9	14.7	

4th Quarter 1981 and 1st Quarter 1982

Ind. Sect.	Number of Samples	PbB (ug/100g)		Samples in Each PbB (ug/100g)										ZPP (ug/100g)	Hb gm%
		Mean (X)	S.D.*	<20	20-30	30-40	40-50	50-60	60-70	70-80	>80	#	X		
Prim.	3505	38.9	12.3	5.9	16.2	30.9	26.1	16.8	3.8	.2	.1	#	2865	1314	
												X	54.8	15.8	
Sec.	666	33.3	13.7	18.8	21.3	26.6	20.4	10.6	1.9	.3	-	#	469	124	
												X	35.0	15.4	
Oxide & Chem.	365	37.7	17.0	18.6	14.8	24.4	17.3	12.9	7.7	3.8	.5	#	307	213	
												X	83.5	15.3	
Batt.	5804	37.8	12.2	7.6	18.8	27.9	28.4	14.4	2.6	.2	.1	#	1867	2809	
												X	96.7	14.5	
Other	2251	22.8	11.2	17.2	28.3	14.9	7.5	1.9	.2	.0	-	#	1931	271	
												X	29.8	14.7	

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