TABLE 1

U 012

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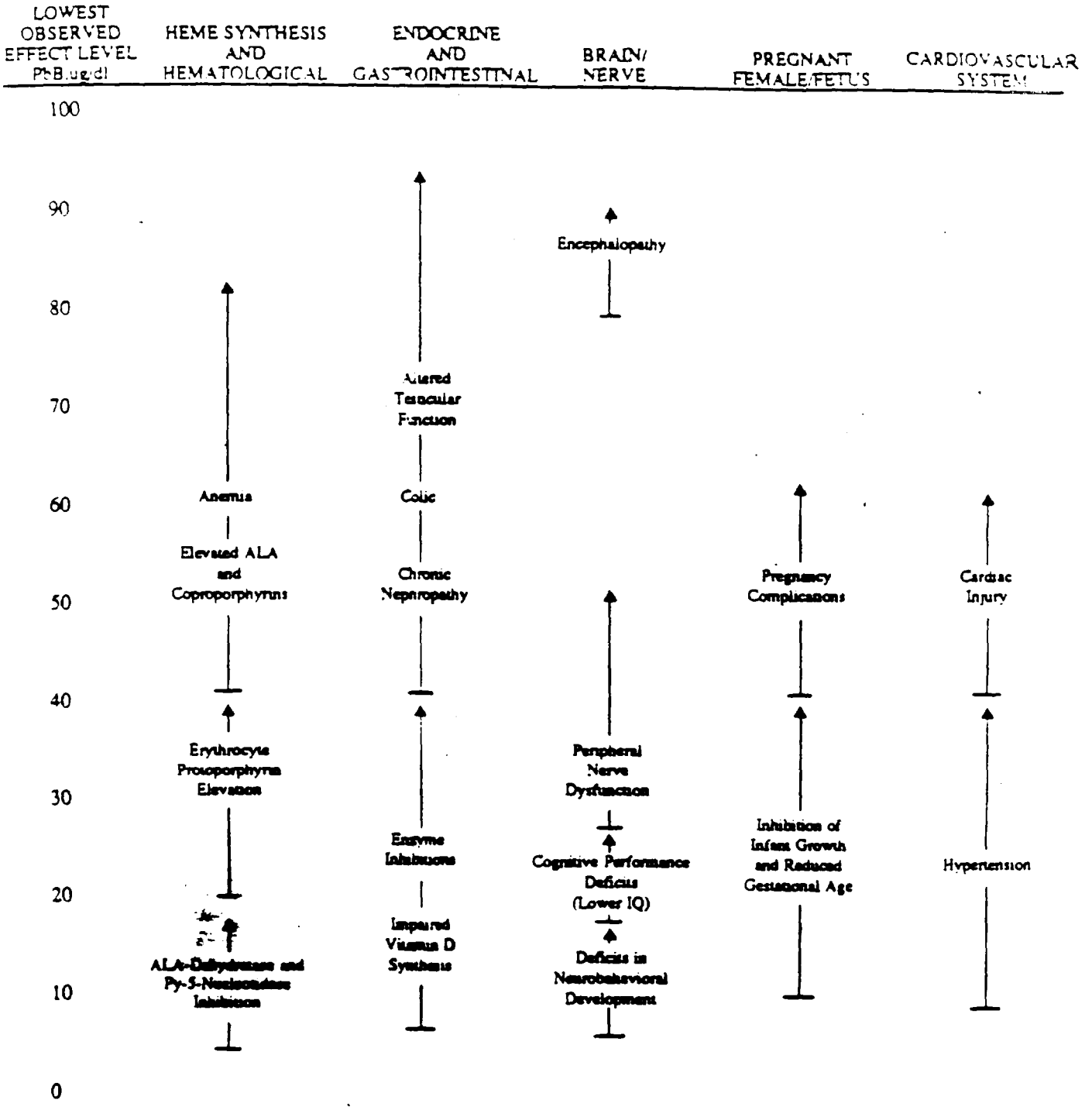
Summary of Lowest Observed Effect Levels For Lead-Induced Health Effects in Children and Adults



Adapted from U.S. EPA (1986a) with modifications according to ATSDR (1988a)

TABLE 2

SUMMARY OF RECENT STUDIES ON THE ASSOCIATION OF PRENATAL LEAD EXPOSURE WITH SELECTED FETAL OUTCOMES[1]

Reference	N	PbB Measure		Gestational Age	Birth Weight
		Source	Average ug/dL		
Ernhart et al. (1985a, 1986)	185	maternal/del	6.5	0	0
	162	cord	5.8	0	0
Bellinger et al. (1984)	216	cord	6.5	+	–[a]
Needleman et al. (1984)	4354	cord	6.5	0	0
Bornschein et al. (1989)	202	maternal/pre	7.6	0	–*
Dietrich et al. (1989)	185	maternal/pre	8.3	–*	–*
Wolf et al. (1987)	182	infant/post-natal	10.8		–*
McMichael et al. (1986)	749	maternal/del	11.0	–*	+
		cord	10.0	–*	+
Moore et al. (1982)	236	maternal/del	14.0 g.m.	–*	0
		cord	12.0 g.m.	–*	0
Rothenberg et al. (1989)	51	maternal/pre	15.0		
		maternal/del	15.4	0	–*
		cord	13.8		
Graziano et al. (1989)	907	maternal (prospect.)	17.1 g.m.		0
	639	maternal (retrosp.)	15.9 g.m.	0[b]	
Ward et al. (1987)	100	placental Pb	2.35 pg/g	–	–*

Symbols: 0, no evident relationship; +, positive relationship; –, negative relationship; *, statistically significant at $p<0.05$; g.m., geometric mean.

[a]Birth weight showed no relationship, but the trend in percentage of small-for-gestational-age infants was nearly statistically significant at $p<0.05$.

[b]Rate of spontaneous abortions.

[1]From: U.S. EPA 1989a.

Figure 1

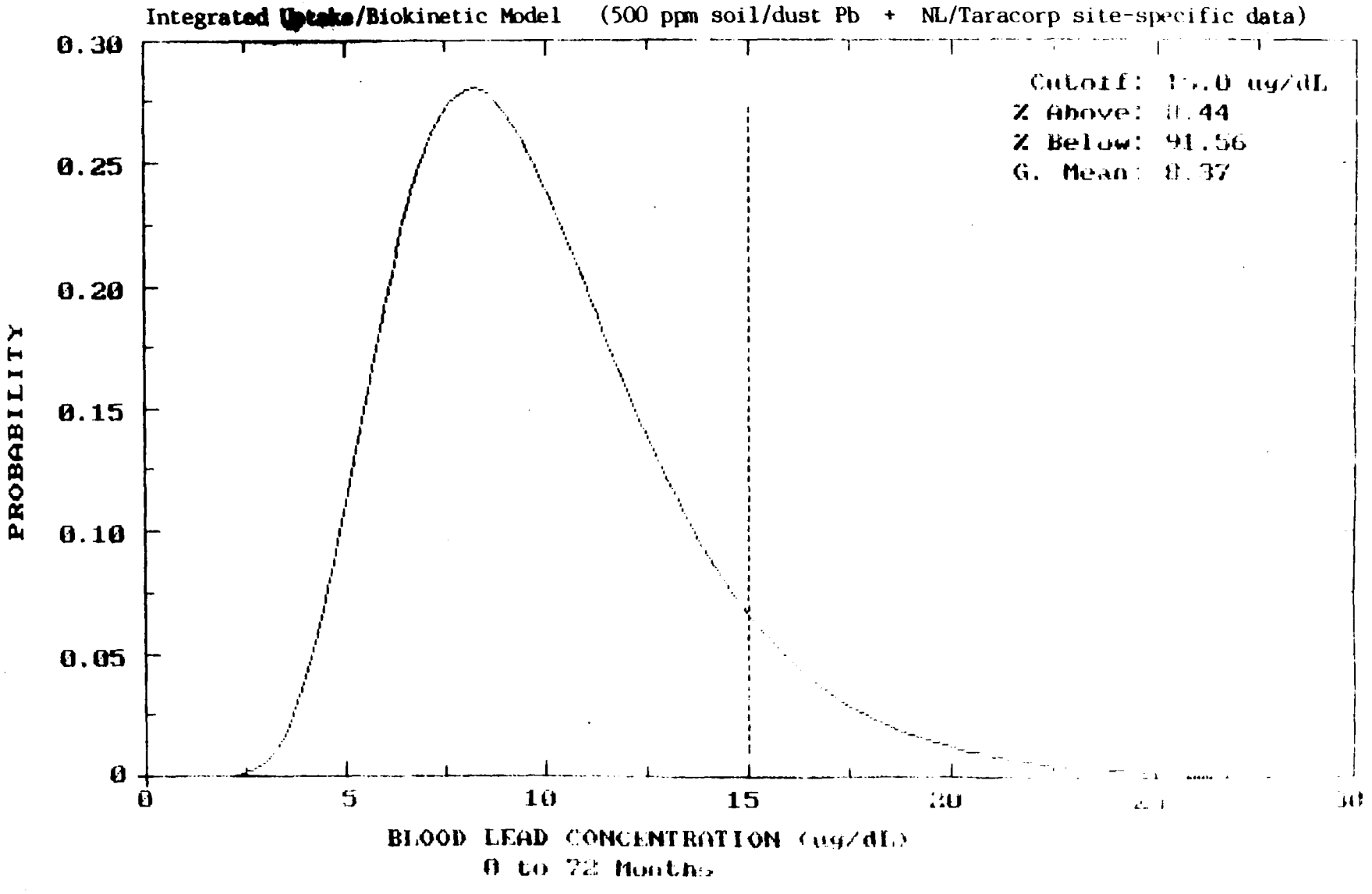
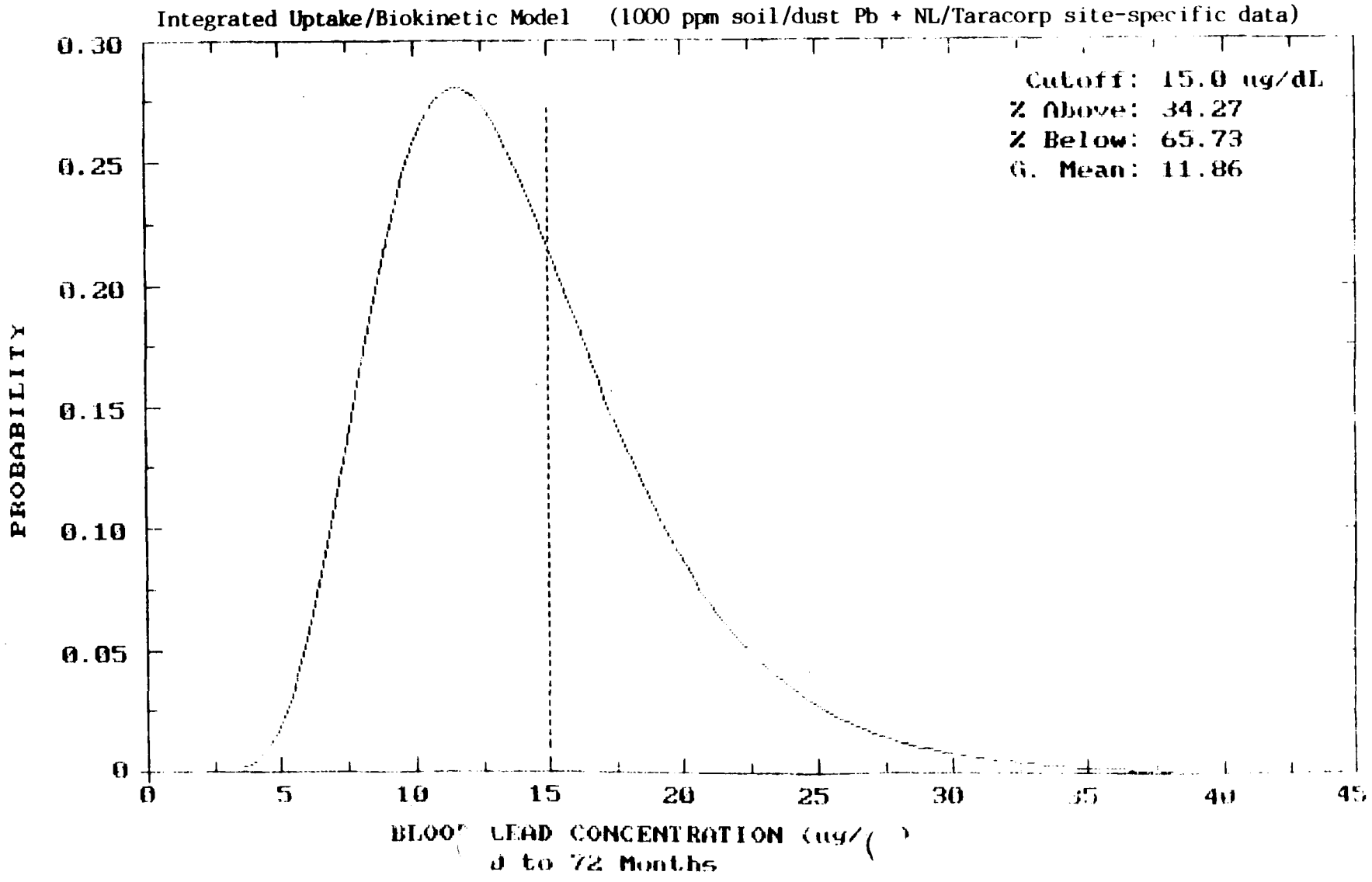

Integrated Uptake/Biokinetic Model (500 ppm soil/dust Pb + NL/Taracorp site-specific data)
Cutoff: 15.0 ug/dL
% Above: 8.44
% Below: 91.56
G. Mean: 8.37
PROBABILITY
0.30
0.25
0.20
0.15
0.10
0.05
0
0
5
10
15
20
BLOOD LEAD CONCENTRATION (ug/dL)
0 to 72 Months

Figure 2


Integrated Uptake/Biokinetic Model (1000 ppm soil/dust Pb + NL/Taracorp site-specific data)
Cutoff: 15.0 ug/dL
% Above: 34.27
% Below: 65.73
G. Mean: 11.86
PROBABILITY
0.30
0.25
0.20
0.15
0.10
0.05
0
0
5
10
15
20
25
30
35
40
45
BLOOD LEAD CONCENTRATION (ug/dL)
0 to 72 Months