



Lead Model

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Table K-1 IEUBK Site-Specific Inputs

Parameter	Value	Rationale
Alternative Dietary Values		
Home Grown Fruits Concentration	0.05 ug/g	One-half MDL for blueberry sample
Fish from Fishing Concentration	0.0155 ug/g	Mean concentration in sculpin from Red Devil Creek
Game animals from hunting concentration	0.0007 ug/g	Calculated moose concentration based on mean green alder bark concentration
Home grown fruits factor	2%	Calculated based on berry ingestion rate (7 grams) adjusted by body weight (15 kg) divided by the 95 th percentile fruit ingestion rate (21.4 g/kg-d)
Fish from fishing factor	70%	Calculated based on fish ingestion rate based on total ingestion rate for total game (fish, moose, beaver and grouse)
Game animals from hunting factor	30%	Calculated based on moose, beaver and grouse ingestion rate divided by total game ingestion rate
Water Consumption		
Drinking Water Concentration	0.324 µg/L	Mean concentration in groundwater
Soil and Dust Exposure		
Outdoor soil lead concentration	39.6 µg/g	Mean soil concentration

LEAD MODEL FOR WINDOWS Version 1.1

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Model Version: 1.1 Build11

User Name:

Date:

Site Name:

Operable Unit:

Run Mode: Research
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***** Air *****

Indoor Air Pb Concentration: 30.000 percent of outdoor.

Other Air Parameters:

Age	Time Outdoors (hours)	Ventilation Rate (m ³ /day)	Lung Absorption (%)	Outdoor Air Pb Conc (µg Pb/m ³)
.5-1	1.000	2.000	32.000	0.100
1-2	2.000	3.000	32.000	0.100
2-3	3.000	5.000	32.000	0.100
3-4	4.000	5.000	32.000	0.100
4-5	4.000	5.000	32.000	0.100
5-6	4.000	7.000	32.000	0.100
6-7	4.000	7.000	32.000	0.100

***** Diet *****

Age Diet Intake(µg/day)

.5-1	2.389
1-2	2.201
2-3	2.427
3-4	2.350
4-5	2.276
5-6	2.399
6-7	2.624

Alternative Dietary Values

Home grown fruits concentration: 0.050 µg/g

Home grown vegetables concentration: 0.000 µg/g

Fish from fishing concentration: 0.015 µg/g

Game animals from hunting concentration: 0.001 µg/g

Home grown fruits factor: 2.000 % of all fruits

Home grown vegetables factor: 0.000 % of all vegetables

Fish from fishing factor: 70.000 % of all meat

Game animals from hunting factor: 30.000 % of all meat

***** Drinking Water *****

Water Consumption:

Age Water (L/day)

.5-1	0.200
1-2	0.500
2-3	0.520
3-4	0.530
4-5	0.550
5-6	0.580
6-7	0.590

Drinking Water Concentration: 0.324 µg Pb/L

***** Soil & Dust *****

Multiple Source Analysis Used

Average multiple source concentration: 37.720 µg/g

Mass fraction of outdoor soil to indoor dust conversion factor: 0.700

Outdoor airborne lead to indoor household dust lead concentration: 100.000

Use alternate indoor dust Pb sources? No

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
.5-1	39.600	37.720
1-2	39.600	37.720
2-3	39.600	37.720
3-4	39.600	37.720
4-5	39.600	37.720
5-6	39.600	37.720
6-7	39.600	37.720

***** Alternate Intake *****

Age	Alternate (µg Pb/day)
.5-1	0.000
1-2	0.000
2-3	0.000
3-4	0.000
4-5	0.000
5-6	0.000
6-7	0.000

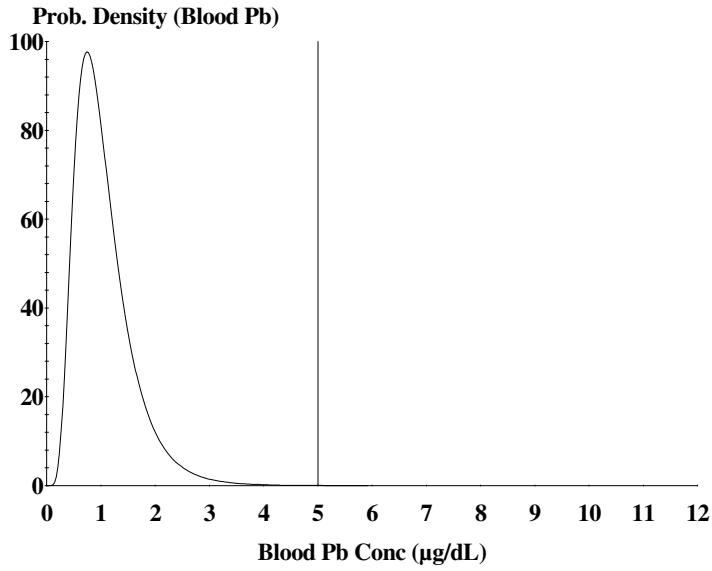
***** Maternal Contribution: Infant Model *****

Maternal Blood Concentration: 1.000 µg Pb/dL

CALCULATED BLOOD LEAD AND LEAD UPTAKES:

Year	Air (µg/day)	Diet (µg/day)	Alternate (µg/day)	Water (µg/day)
.5-1	0.021	1.166	0.000	0.032
1-2	0.034	1.075	0.000	0.079
2-3	0.062	1.189	0.000	0.083
3-4	0.067	1.155	0.000	0.084
4-5	0.067	1.123	0.000	0.088
5-6	0.093	1.186	0.000	0.093
6-7	0.093	1.298	0.000	0.095

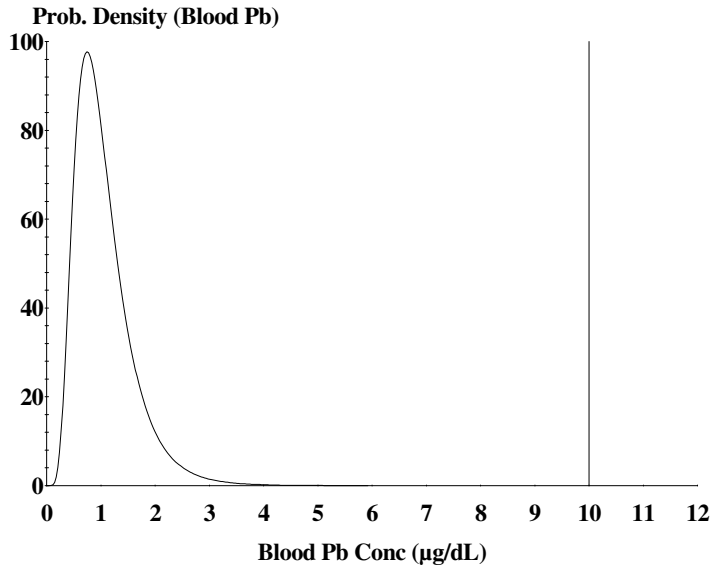
Year	Soil+Dust (µg/day)	Total (µg/day)	Blood (µg/dL)
.5-1	0.960	2.178	1.2
1-2	1.526	2.715	1.2
2-3	1.530	2.863	1.1
3-4	1.535	2.841	1.0
4-5	1.142	2.420	0.9
5-6	1.030	2.402	0.8
6-7	0.973	2.459	0.7



Cutoff = 5.000 µg/dl
Geo Mean = 0.968
GSD = 1.600
% Above = 0.024
% Below = 99.976

Age Range = 0 to 84 months

Run Mode = Research



Cutoff = 10.000 µg/dl
Geo Mean = 0.968
GSD = 1.600
% Above = 0.000
% Below = 100.000

Age Range = 0 to 84 months

Run Mode = Research