

Calculations of Preliminary Remediation Goals (PRGs) for Soil in Nonresidential Areas

U.S. EPA Technical Review Workgroup for Lead, Adult Lead Committee

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Variable	Description of Variable	Units	GSDi and PbBo from Analysis of NHANES 2009-2014	GSDi and PbBo from Analysis of NHANES 2007-2010	GSDi and PbBo from Analysis of NHANES 1999-2004	GSDi and PbBo from Analysis of NHANES III (Phases 1&2)
PbB _{fetal, 0.95}	Target PbB in fetus (e.g., 2-8 µg/dL)	µg/dL	5	5	5	5
R _{fetal/maternal}	Fetal/maternal PbB ratio	--	0.9	0.9	0.9	0.9
BKSF	Biokinetic Slope Factor	µg/dL per µg/day	0.4	0.4	0.4	0.4
GSD _i	Geometric standard deviation PbB	--	1.8	1.7	1.8	2.1
PbB ₀	Baseline PbB	µg/dL	0.6	0.7	1.0	1.5
IR _s	Soil ingestion rate (including soil-derived indoor dust)	g/day	0.050	0.050	0.050	0.050
AF _{s, D}	Absorption fraction (same for soil and dust)	--	0.12	0.12	0.12	0.12
EF _{s, D}	Exposure frequency (same for soil and dust)	days/yr	219	219	219	219
AT _{s, D}	Averaging time (same for soil and dust)	days/yr	365	365	365	365
PRG in Soil for no more than 5% probability that fetal PbB exceeds target PbB		ppm	1,050	1,126	773	97