

Technical Review Workgroup (TRW) – Lead (Pb) 2022 Accomplishments

The Lead TRW's goal is to develop, maintain, support, and promote consistent application and improvement of the best science in the field of human health risk assessment for lead (Pb) and other metals

Technical Support

One of the fundamental roles and responsibilities of the Lead TRW is to provide technical support to state, federal, tribal, non-governmental and international groups regarding the application of lead risk assessment tools. Furthermore, the Lead TRW promotes the application of best use of available scientific information concerning risk assessment methods in soil and soil-like (e.g., floodplains) media at affected sites.

The Lead TRW members are technically diverse, experienced and highly trained professionals in lead risk assessment and provided expert assistance in sometimes complex risk assessment scenarios.

The Lead TRW responded to 53 hotline requests from state, federal, international and non-governmental sources. The requests ranged from subjects such as the use of the Integrated Exposure Uptake Biokinetic Model (IEUBK) for Lead in Children in various residential exposure scenarios to the application of lead risk assessment guidance.

The Lead TRW provided technical recommendations for 2 complex Superfund sites in response to consultation requests from EPA Regional Offices.

Communication, Training and Outreach

The Lead TRW provided training on the IEUBK at the 2022 Joint OLEM Human Health Regional Risk Assessors/Ecological Risk Assessors Forum at the Region 5 office in Chicago, IL.

The Lead TRW members convened a sub-workgroup to provide risk communication support and tools for community involvement coordinators regarding the IEUBK model.

In November 2022, a virtual planning meeting was held. The meeting discussed continued support for the OSRTI Superfund Residential Lead Sites-Handbook, Supplemental Guidance for Assessing Risk to Lead in Urban Environments, Training for the IEUBK model to state risk assessors and continued support for the AALM.

Guidance Documents

The Lead TRW continues to refine and update national technical documentation regarding the application of scientific tools and best practices for lead risk assessment.

The Lead TRW provided scientific and experienced revisions in support of updating the chapters on sampling and risk assessment for the Office of Superfund Remediation and Technology Innovation's 2003 *Superfund Residential Lead Sites-Handbook*.

Members developed a standard operating procedure for updating the maternal blood lead at birth variable for the IEUBK and the maternal baseline blood lead concentration and geometric standard deviation variables of the Adult Lead Methodology (ALM). These variables are based on the most recent two-year cycles of the National Health and Nutrition Examination Survey. The updates account for the changes in baseline blood lead concentrations in women 17 – 45 years of age.

The Lead TRW continues its ongoing support to provide site information and beta testing of the EPA's Office of Research and Development's All Ages Lead Model (AALM). The development of the draft AALM tool is an outgrowth of the IEUBK. It can evaluate lead exposure from birth to 90 years of age and allows for the assessment of intermittent exposures as short as one day, a limitation of the IEUBK and ALM.

Technical Review Workgroup for Metals and Asbestos

Lead Committee

Full Members

Region 1

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Region 10

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