

Estimating Children's Soil and Dust Ingestion Rates for Exposure Science
Informational Webinar
Question and Answers
June 18, 2020

Question: During the talk can it be clarified if children can or cannot be observed in natural environments? For example, could children be observed at a day care playground conducting their normal activities?

Answer: Children's normal activities without influence or interference can be observed for the study. Any submissions proposing projects that may involve human subjects research must include a Human Subjects Research Statement (HSRS; described in Section IV.C.6.c of this solicitation). If the project involves human subjects research, it will be subject to an additional level of review prior to funding decisions being made as described in Sections V.D and V.F of this solicitation.

Question: The activity patterns method for estimating soil ingestion requires observations of children's normal behaviors to understand children's exposures. Are these types of observations (of children in their normal environments, conducting their normal behaviors, which may or may not include soil ingestion behavior) acceptable activities under the grant?

Answer: The normal and natural activities of children can be observed for the study.

Question: The exposure factors handbook addresses the quantity of soil and dust ingested and does not provide estimates of chemical exposure due to this soil ingestion. Can you restate the goal of this RFA - is it 1) to establish estimates for soil and dust ingestion or 2) to establish estimates soil and dust ingestion AND chemical exposure due to this soil and dust ingestion? Will a proposal be more competitive if it includes both estimation of soil and dust ingested AND quantity of chemical ingested?

Answer: The primary goal of this RFA is to establish estimates for soil and dust ingestion rates. The study should be enhanced by new or existing knowledge or data about the chemicals contained in the soil and dust. The information can lead to chemical exposure estimates, but it is not required. Applications are evaluated for overall quality of proposed research according to the Peer Review and Relevancy Review Criteria stated in the RFA.

Question: The RFA mentions pica behavior several times. Is pica a required component of the proposed research? Is it simply if the researchers can adequately address this will be a plus?

Answer: Applications may or may not investigate pica or pica-like behavior. Applications are evaluated for overall quality of proposed research according to the Peer Review and Relevancy Review Criteria stated in the RFA.

Question: In reality, the sorption of dust or soil on kid's hands not only leads to the ingestion of chemicals but also cause dermal absorption because chemicals on dust and soil may penetrate through the skin. Do you want us to tease them apart and to focus only on the ingestion part, or it is okay for us to consider the total amount of chemicals entering the kids' bodies?

Answer: The research scope of this RFA only covers soil and dust ingestion. Applications may choose to address total amount of chemical exposure through different pathways such as dermal or inhalation as long as it is a supplementary or supportive component to the main research scope that is soil and dust ingestion.

Question: Is inhalation considered in this proposal or only ingestion exposure?

Answer: The primary goal and research scope of this RFA is soil and dust ingestion. Inhalation is not. Please refer to the above Q & A.

Question: Does the potential funding amount include IDC? If so, what IDC rate should be used?

Answer: The total grant amount covers all budget items including IDC. The RFA states where to look for budget information including IDC in the Section IV.C.7.

Question: Is drinking water exposure to Pb via LSL or plumbing to be considered part of the possible ingestion pathways?

Answer: The research scope of this RFA only covers soil and dust ingestion. Applications may choose to address total amount of chemical exposure through different pathways such as dermal or inhalation as long as it is a supplementary or supportive component to the main research scope that is soil and dust ingestion.

Question: I suspect that estimates of indoor exposure due to dust ingestion may be a proxy for another exposure route. Thus, is it essential to clarify/quantify dust ingestion or exposures that could be related to dust ingestion?

Answer: Ingestion of indoor dusts is within the primary goal and scope of the RFA. Analysis of indoor dusts as proxy for consumer chemicals present in a household is not. The two research topics are clearly related and may be included in an application as long as it supports the primary research goal of quantifying ingestion of indoor dusts.

Question: Is determination of bioavailability of toxic materials in soil relevant to this proposal?

Answer: Bioavailability is related but not within the scope of this RFA.

Question: Could you tell us what indirect rate should be used?

Answer: The total grant amount covers all budget items including IDC. The RFA states where to look for budget information including IDC in the Section IV.C.7.

Question: Is a comparison between blood lead levels and bioaccessibility methods appropriate?

Answer: As long as they are used to estimate soil and dust ingestion rate for children.

Question: Is non-targeted analysis an appropriate focus?

Answer: Yes. The RFA states that a novel approach such as non-targeted analysis to estimate soil and dust ingestion rate for children is encouraged.

Question: May you explain quality assurance?

Answer: Quality Assurance Statement (QAS) is a required component of application package. Please refer to the RFA Section IV.C.6.b for detailed information regarding QAS.