

Blood Lead and Urine Arsenic Levels in Anaconda, MT Exposure Investigation: Anaconda EI II

ATSDR Exposure Investigations (EI) Generic Information Collection Request
OMB No. 0923-0048

Attachment 2: Supporting Statement Part B

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ATTACHMENTS

Attachments:

1. Supporting Statement A
2. Supporting Statement B
3. Anaconda, MT EI Parental Permission/Assent/Consent Forms
 - a. Privacy Act Statement
 - b. Adult Consent Form for Blood and Urine Testing
 - c. Parental Permission Form for Blood and Urine Testing: Children younger than 18 years of age
 - d. Assent Form for Blood and Urine Testing: Children between 7 and 17 years of age
4. Anaconda, MT EI Questionnaire
5. Anaconda, MT EI Research Determination
6. Anaconda, MT EI Sample Results Letter
7. Example of Prior EI Final Report
8. Privacy Impact Assessment Form
9. Anaconda EI Protocol

B. Collections of Information Employing Statistical Methods

This is no statistical methodology used for this investigation. Section B.1 of the submission (below) describes how the data will be collected.

B.1. Respondent Universe and Sampling Methods

Since the Agency for Toxic Substances and Disease Registry (ATSDR) does not use the exposure investigation (EI) results to generalize or estimate the total exposed population, the respondent universe and statistical methods for determining sample size are not a factor.

Past zinc smelting activity in the city of Anaconda resulted in lead and arsenic contamination in the soil and attic dust throughout the Anaconda area. EPA listed the site on the National Priority List (NPL) in 1983 and is in the process of remediating soil within the Anaconda area. The purpose of the Anaconda, MT EI is to sample blood lead and urine arsenic levels in residents in the Anaconda area.

Anaconda residents (191 participants) were tested for blood lead and urine arsenic in September 2018. Given high interest in the testing, an additional round of follow-up testing is planned to test those on a waiting list and to recruit additional young children and women of childbearing age since these vulnerable groups were underrepresented in the original testing group. The results of the testing will be used to identify participants that may be recommended for follow-up that may include recommending case management (lead) and education regarding environmental exposure.

B.2. Procedures for the Collection of Information

Although all members of the community are eligible for inclusion, young children and women who are pregnant or of childbearing age are most susceptible to the effects of elevated BLL and these groups were underrepresented during the September 2018 testing event. Recruitment for the EI follow-up testing will include:

1. Testing a maximum of 300 participants for blood lead and urine arsenic levels, with a minimum of 50 appointments reserved for the testing of young children.
2. Contacting people on the waiting list from the first testing event and offering them testing.
3. Recruiting young children and women of childbearing age by:

- Having the ADLC health department reach out to the local Head Start program and offer testing to young children and their families at the Head Start facility. The testing will be conducted at the Head Start facility on one of the testing days. Young children from the area daycares will be provided with the Anaconda EI fact sheet and will be offered testing at the Head Start facility.
 - Providing the Lincoln Primary School with the Anaconda EI fact sheet to disseminate information on the testing event.
4. Obtaining assistance from the Montana Department of Public Health and Human Services (MDPHHS) and the Anaconda Deer Lodge County (ADLC) Health Department including distributing recruitment materials (fact sheets and posters) and providing information on the EI on their social media accounts, specifically aimed at young children and their families.
 5. Providing participants with a urine collection kit that will include instructions on how to obtain a first-morning urine sample, freeze it and transport it to the blood-collection location. ATSDR personnel will provide the urine kits to participants and obtain consent to participate in the EI at that time (Attachment 3). All questions regarding participation in the EI will be answered.

On the day of the blood collection, participants will bring their frozen urine sample and will provide it to ATSDR personnel. A questionnaire will be administered (Attachment 4) and blood will be collected from participants. Blood samples will be obtained using certified phlebotomists at the blood collection center. ATSDR personnel will pack and ship all blood and urine samples overnight to the National Center for Environmental Health/Division of Laboratory Sciences (NCEH/DLS) for analysis. For arsenic, total urinary arsenic (creatinine- and specific gravity-adjusted, as appropriate) and speciated arsenic will be analyzed.

Quality Control Procedures

Prior to the interviews, the EI team is trained on the site-specific questions to be asked (e.g., the purpose of each question, how to capture answers, place for comments, etc.). The list of questions and individual's answers are stored in a secure database or locked filing cabinet.

Each participant is given information regarding the name of the EI, a telephone number to answer questions, and the address of the ATSDR website where they can find more information about the EI (Attachment 3). Each participant receives a copy of their personal results (sample results letters provided in Attachment 6). Individual results will be protected to the full extent provided by law and will not be shared publicly in any published reports.

B.3. Methods to Maximize Response Rates and Deal with Non-response

A waiting list of approximately 200 people has been compiled with community members that were unable to be tested during the September 2018 event. Additional young children and their families will be recruited from Head Start, the preschool and the elementary school in Anaconda since these groups were underrepresented during the September 2018 testing event. Fact sheets and posters will be distributed to specifically target these groups throughout the community by MCPHHS and the ADLC health department.

Community interest in the testing is high given the remedial efforts being undertaken by EPA in the community (remediating residential soil and attic dust). Given the high interest, it is anticipated that the goal of 300 participants will be met. Even without 100% participation, we can interpret results because we are providing participants an individual result and are not attempting to determine population level exposures.

B.4. Test of Procedures or Methods to be Undertaken

The EI team will use the questions provided in Attachment 4.

B.5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

Statistical calculations are not used to determine participation in EIs.