The Agency for Toxic Substances and Disease Registry (ATSDR) Director, Dr. Patrick Breysse would like to schedule a call with the RA to 1) Introduce himself and 2) discuss the ATSDR's role in evaluating health concerns at Anaconda.

Background

In May of 2017 the editor of the Montana Standard, David McCumber petitioned the ATSDR to conduct a public-health study over concerns related to a perceived elevated incidence of neurodegenerative and autoimmune diseases (including MS) in Butte (see attached "McCumber petition letter.docx). ATSDR's director, Dr. Patrick Breysse, responded in a letter that because of "the lack of a link between MS and arsenic and lead" as well as a lack of data for comparison purposes, ATSDR did not plan to do such a study.

http://mtstandard.com/news/local/epa-regional-boss-agrees-to-push-for-new-anaconda-health/article_1f2c32dc-663c-5b8f-9437-b167241824a2.html.

ATSDR has however, conducted a Public Health Assessment for the Anaconda Smelter Site in 1987 and a "Site Review and Update" in 1992. In 2007 ATSDR authored a Health Consultation that evaluated the residential soil arsenic action level.

David Dorian (ATSDR/Region 8 liaison collocated in EPA building) had a conference call with the Dr. Breysse on 11/29/17 to discuss the R8 Administrator's reported advocacy for a health study in Anaconda and a potential role for ATSDR along with state partners in the Montana

Dr. Breysse offered to identify ways that ATSDR, as a public health agency established by CERCLA, to answer the chemical exposure questions raised by the Anaconda community. ATSDR regularly performs Exposure Investigations (EI) at Superfund sites (including Colorado Smelter recently in Region 8); however, biological monitoring (i.e., direct measurement of a chemical in blood or urine) of arsenic is challenging because it elutes quickly from the body.

ATSDR recently developed a statistically valid approach to using urine arsenic testing in coordination with environmental samples. Dr. Breysse is prepared to discuss ATSDR leading an EI. Blood lead would likely be included. The biomedical monitoring has greater relevance if environmental media (e.g., soil, dust, tap water) are sampled simultaneously. In general, ATSDR looks to EPA to perform the environmental media sampling. ATSDR funds the Montana Department of Health and Human Services (MTDHHS) to conduct health evaluations, and ATSDR would work collaboratively with the state on all work at Anaconda.

ATSDR Exposure Investigations:
-Sometimes, critical data needed for a health assessment or consultation are missing or not available. In such cases, ATSDR may conduct an exposure investigation. Exposure investigations involve the collection and analysis of environmental contamination data and biologic tests (when appropriate). The goal is to determine whether people have been exposed to hazardous substances. An exposure investigation is one approach used to better characterize past, current, and possible future human exposures to hazardous substances and to evaluate both existing and possible exposure-related health effects.
-Exposure investigations may include

- *Biomedical testing (urine and blood samples), which can show current and possibly past exposure to a contaminant, or*
- *Environmental testing of soil, water, or air. Testing is done where people live, spend time, play, or might come in contact with contamination*

-Exposure dose reconstruction analyses use environmental sampling and computer models to estimate contamination levels that people may have been exposed to in the past, or may be exposed to in the future. Modeling helps in estimating potential exposures and assisting in conclusions on how exposures might affect a person's health.
-Typically for Pb exposure investigations, testing is offered to children 12-72 months old, and women of childbearing age.

The EPA/ATSDR Exposure Investigation would only look at contaminants and health effects related to the contaminants associated with the smelter. David Dorian (ATSDR) and Charlie Partridge (EPA) conducted a conference call with the Montana Health Department during the week of Nov.27, 2017. Montana mentioned that Anaconda-Deer Lodge County conducted a Community Needs Assessment/Community Health Improvement Plan in 2013. Revising that report may be a mechanism for assessing the other (i.e., non-chemical exposure) health concerns raised by the community.

ATSDR would like to discuss the feasibility of EPA directing/conducting the collection of the environmental data to coincide with the collection of biological samples. Further, the ability for ATSDR to conduct the study may depend on the willingness of the PRP to provide funding.

Potential Concerns:

1) ATSDR conducting this study in Anaconda after declining to conduct a similar health study in Butte will likely cause some backlash in Butte. The Agencies should be prepared to to conduct a similar study in Butte if a study is conducted in Anaconda.
2) The ATSDR Exposure Investigation protocol will not determine if there is an increased incidence of cancer and neurodegenerative and auto immune diseases in Anaconda and will therefore not be fully responsive to the communities concerns. These type of information, if available and obtainable may be provided by a MT Health Department investigation.
3) ATSDR Exposure Investigation Arsenic protocol is new and would need to be reviewed by EPA.

Additional Information:
See McCumber petition letter.
See Dr. Breysse's response to McCumber.

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