

Human Health Risk Assessment (HHRA) - Flin Flon / Creighton Technical Advisory Committee (TAC)

February 4, 2013

Attendance

MB Conservation:	Kevin Jacobs, Cristal Huculak
MB Health:	Lawrence Elliott, Randy Gesell, Susan Roberecki
MB IEM:	Cal Liske
MB Water Stewardship:	None
SK MOE:	George Bihun
SK Health:	James Irvine, Dr. Khakatla
Health Canada:	Paul Partridge
HBMS:	Alan Hair, David Clarry, Ian Cooper, Shirley Neault
Intrinsic Environmental:	Elliot Sigal, Adam Safruk
Facilitator:	Sheldon McLeod
Observers:	None
AECOM:	None
Goss Gilroy:	Blair Jackson, Tim Dugaf
Habitat Health Impact:	None

Introduction

- The agenda was reviewed and accepted.
- The notes from the August 1st meeting were previously reviewed, approved and uploaded to the website. The action items from the previous meeting were updated.
- Effective February 11, Dr. Lawrence Elliott has accepted a new position with the Winnipeg Health Authority. Dr. Randy Gesell, formerly the Medical Officer of Health for the Burntwood RHA, will be covering the newly named Northern RHA for the time being. Randy will replace Lawrence on this committee.

Preliminary Results of Testing Activities

- Goss Gilroy was tasked with completing the follow-up blood lead study.
 - The methods used for the study were the same as those used for the 2009 study.
 - Environmental sampling at participating households was added to the study. This was often seen as a perk for participating, so helped to increase overall numbers.
 - The opportunity to participate in the study was offered to any household with children in the target age range.
 - The target for participating children was 200; 118 actually participated.
 - Despite the perk for participating, the wide-spread advertising and the broad opportunity to participate, most of the community is not concerned. If they participated in 2009, the low results found then led parents to feel that there was no need to subject their children to more testing.
- Significantly lower blood lead levels were observed overall and across every category (age, gender, region).
 - Two samples were below the detection limit (last time none were).
 - Fewer samples were at or above the follow-up level of 5µg/dL.
 - No samples were at or above 10µg/dL.

Question: Were there any children who participated in both studies?

Response: Some of the children in the 2009 study would now be too old to participate. Approximately half of the original group of participants continued to qualify for the second study. There has not been any direct examination of individual results, so that privacy could be maintained.

Question: Have statistical confidence intervals been analyzed?
Response: Yes

Question: How does the geometric mean observed in this study compare to those observed in other Canadian or American studies?
Response: The results of this study are well below those in the US dataset. There is no Canadian data available for comparison.

Comment: A recent Montreal study found similar levels.
Response: Noted

Question: What are the next steps?
Response: The data needs further examination to check for influence factors such as associations with the environmental data collected.

- The environmental sampling component was completed at 93 households.
 - The samples were collected at the time of the interview.
 - Ten to twenty cores of soil were collected to a depth of 2.5 cm.
 - Indoor wipe samples were collected from each kitchen and one other hard floor surface in the home.
 - Water samples were collected at various intervals so that the influence of each part of the piping system could be checked (e.g. faucet plumbing versus service lines into the home).
 - An XRF scan of indoor and outdoor paint to check for lead content was completed.
- The results indicate:
 - Four households had soil concentrations in excess of the provisional trigger concentration that was established in the HHRA.
 - All dust samples were below the U.S. Department of Housing and Urban Development guideline.
 - All flushed water samples were below the CCME guideline.
 - Eight households had painted surfaces containing lead-based paint.
- None of the children sent for follow-up were from homes with elevated environmental results.
- All participants have received their individual results. Children with elevated blood lead levels were called directly by study team members.

Question: Is there a hypothesis for the reduction? Was it the hand washing campaign or the improved air quality following the shutdown of the Smelter?

Response: Although there was high awareness of Mighty Bubble and the hand washing campaign, there is little apparent correlation to reduced blood lead levels. It is looking like the reduction is due to the improved air quality. This conclusion was reached because there is no definitive link to any of the other environmental sampling.

Next Steps

- The statistical model and comparisons need to be finalized. Then the report can be prepared.
- The report will next need to be reviewed by the TAC.
- The last step is to determine how to present the results to the community.

Community Advisory Committee Meeting

- The timing for informing the CAC of the results and obtaining their input into how to tell the community was discussed.
 - It was agreed that the CAC meeting tentatively scheduled for February 25 could proceed if the meeting is in camera (see action 13-01).

NEXT MEETING: March 5, 2013

#	Action	Responsibility	Target Date	Status
12-05	Circulate blood lead study status report to the TAC as an FYI prior to providing to the CAC	Goss Gilroy	2012-09-17	2012-08-01, new 2013-02-04, Complete
13-01	Canvass the CAC for agreement re an in camera meeting	Sheldon	2013-02-06	2013-02-04, new