

CASCADE COUNTY BLOOD LEAD LEVEL STUDY

FREQUENTLY ASKED QUESTIONS

Participants

A total of 71 participants were tested. Thirty-nine were children aged 0-5 years, 12 participants were aged 6-17 years, and 20 were adults. Twenty-seven residents of Black Eagle were tested. Of these Black Eagle residents, four were aged 0-5 years, five were aged 6-17 years, and 18 were adults.

At the Black Eagle clinics, a total of 28 participants were tested, including 12 participants on September 17, 2013 and 16 participants on September 26, 2013. Twenty-six participants were tested at City-County Health Department, and 17 participants were tested during home visits.

Results

As individual results were received, a nurse gave every family a courtesy phone call explaining the result of each capillary test. These results were recorded, along with information from the participant, and/or their parent/guardian, pertaining to their dwelling, lifestyle choices, and possible exposure to lead. Due to insufficient specimens for four of the participants, blood lead level results were obtained for only 67 participants.

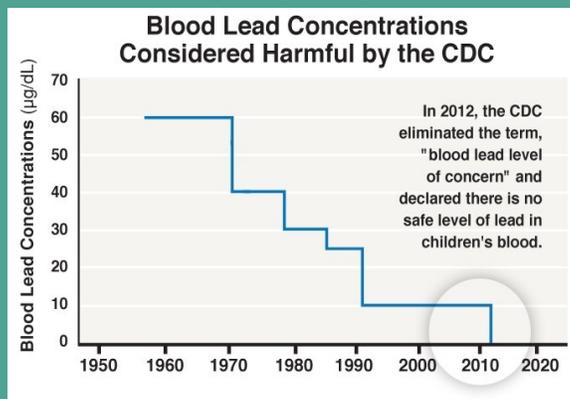
Process

The Cascade City-County Health Department started and completed a county-wide Blood Lead Level Study primarily focused on children enrolled in Medicaid. However, media promotion and public education brought in additional children and adults who were also tested. Several measures were taken to inform the public of this Blood Lead Level Study and the opportunity to have a lead screening completed free of charge:

1. Educational letters were sent to 2,578 families based on Medicaid enrollment files; fact sheets and informative letters from the City-County Health Department were included in these packets.
2. Flyers were sent out with water bills to families in Black Eagle.
3. All families from Black Eagle on the Medicaid enrollment file and 255 individuals from Cascade County whose letters were returned due to incorrect address were contacted and informed of the study by phone.
4. A short commercial for the study was aired on local television stations featuring a nurse from City-County Health Department.

Two community clinics were held to provide a walk-in opportunity to participate in this Blood Lead Level Study. They were located in Black Eagle, MT on September 17, 2013 and September 26, 2013. Additional appointments were either set up in the home or at City-County Health Department. Walk-in participants were also accepted at City-County Health Department.

Each participant received a gift card for \$5 as a thank you for being involved in the study. Several giveaway prizes were also purchased, and participants were selected through a drawing for each item. They included five \$25 Wal-Mart gift cards, three iPod shuffles, and one iPad. The drawing took place on November 8, 2013, and the winners were notified that day. The prizes were either picked up by the participants or delivered to them.



Results

Of these 67 individuals, 7.3 µg/dL was the highest blood lead level; this result belonged to an adult resident of Black Eagle. This was the only result in the study that exceeded the current CDC blood lead reference value of 5 µg/dL. The next highest blood lead result, 3.8 µg/dL, belonged to a young child living outside of Black Eagle. The highest blood lead result for a child resident of Black Eagle was 1.5 µg/dL. Among all results, 25.4% had a detectable level of lead in the sample provided based on a detection limit 1 µg/dL. For children less than six years of age, the average blood lead level was 0.74 µg/dL. Average blood lead levels for older children and adults were also below 1 µg/dL, as summarized below.

Age Group	Sample Size	Number of Non-Detects	Percent Non-Detects	Minimum (µg/dL)	Maximum (µg/dL)	GM (µg/dL)	GSD (µg/dL)
Child (0-5)	35	26	74%	<1	3.8	0.74	2
Child (6-17)	12	11	92%	<1	1.5	0.55	1.4
Adult (18+)	20	13	65%	<1	7.3	0.87	2.3

Values below the detection limit treated as half of the detection limit or 0.5 µg/dL

GM: Geometric mean

GSD: Geometric standard deviation

Cascade County	Total # of Participants	Reference ≥ 5 µg/dL	Detectable ≥ 1 µg/dL
Total	67	1 (1.5%)	17 (25.4%)
Child (0-5)	35	0	9 (25.7%)
Child (6-17)	12	0	1 (8.3%)
Adult (18+)	20	1 (5%)	7 (35%)
Sex			
Male	37	1 (2.7%)	14 (37.8%)
Female	30	0	3 (10%)
Race			
White	61	1 (1.6%)	15 (24.6%)
Other/Unknown	6	0	2 (33.3%)

Black Eagle	Total # of Participants	Reference ≥ 5 µg/dL	Detectable ≥ 1 µg/dL
Total	27	1 (3.7%)	7 (25.9%)
Child (0-5)	4	0	0
Child (6-17)	5	0	1 (20%)
Adult (18+)	18	1 (5.6%)	6 (33.3%)