

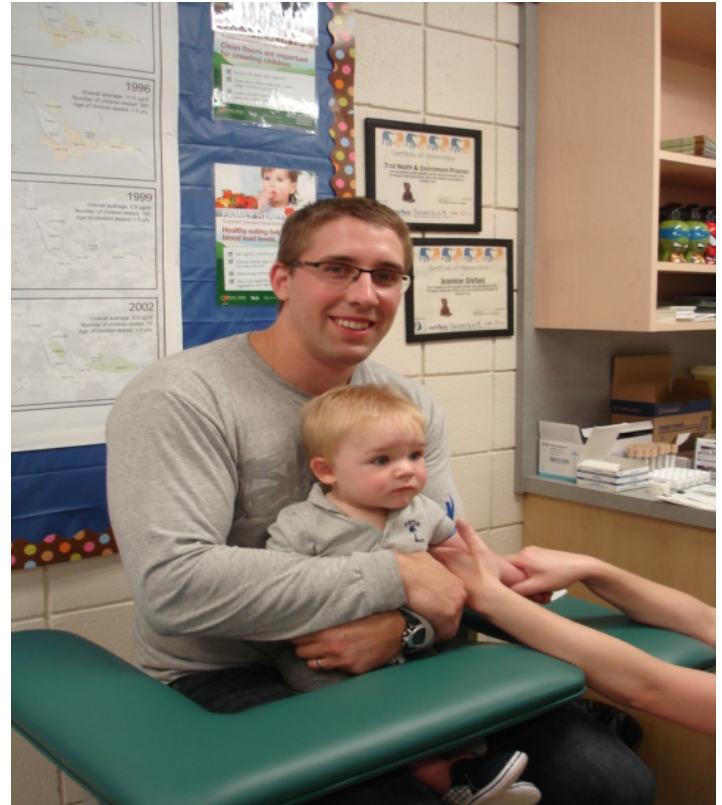
Fall 2015 Blood Lead Results



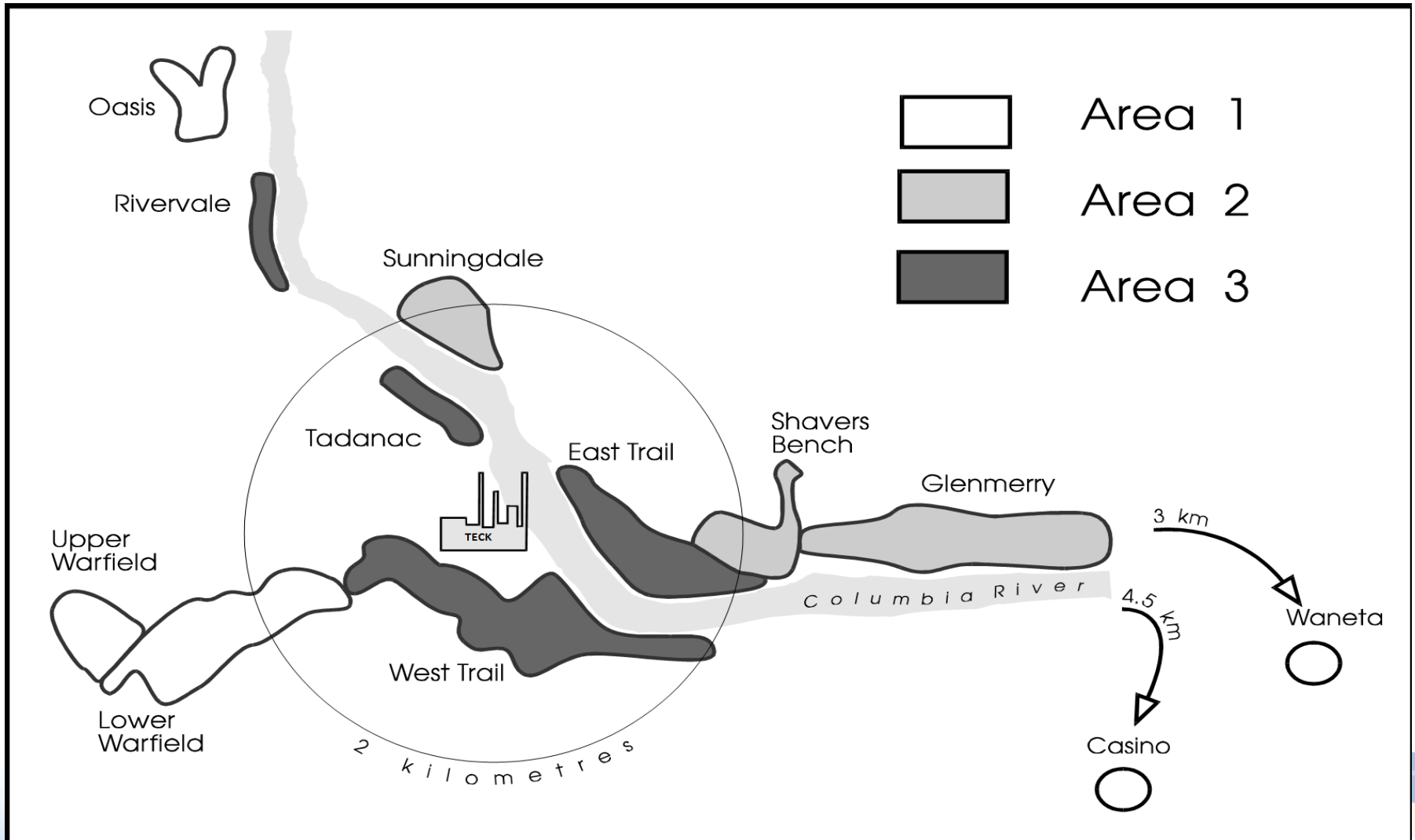
Interior Health
Every person matters

Who Was Tested in 2015?

- Target group:
 - Children aged 6-36 months, living in City of Trail or Rivervale (Area 2/3)
 - This is the group our results reflect
- Also:
 - New to area, up to age 5 years old
 - Previous case management for follow-up
 - Parents who requested testing for their child from any area



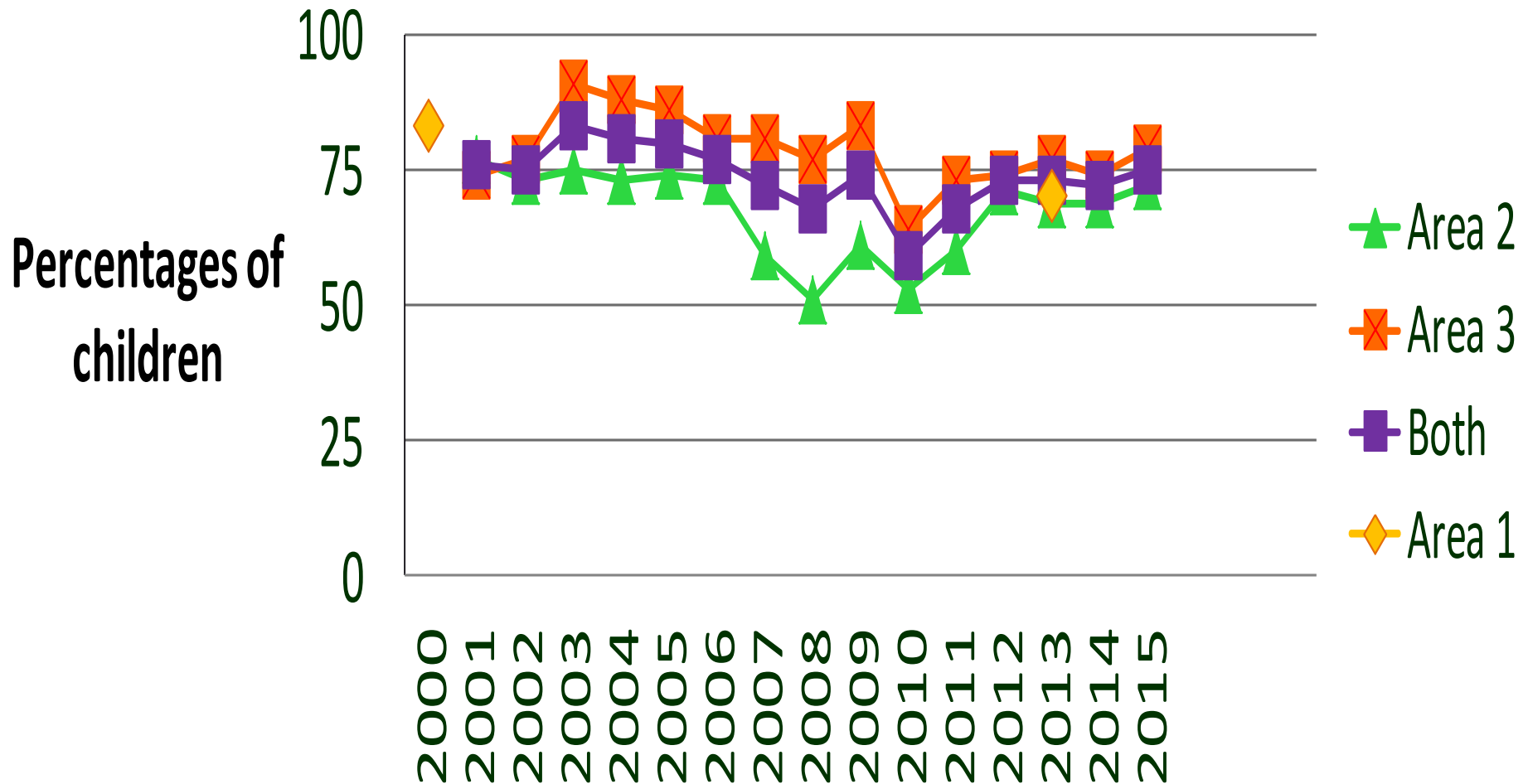
“Areas” & Neighbourhoods



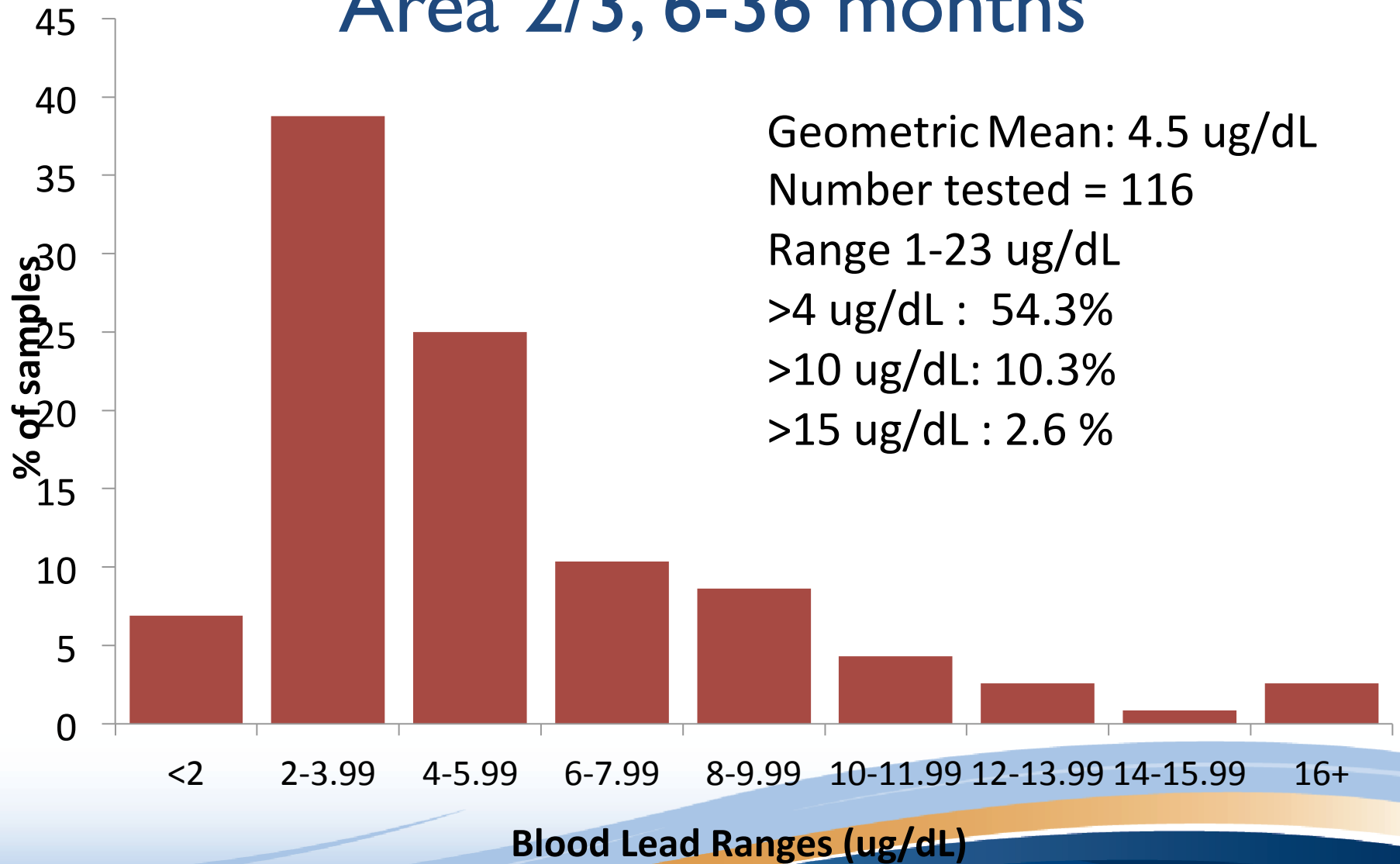
Fall 2015 Total Participation By Target Areas 6-36 months

Participation for 2015				2014
Breakdown by Areas	# Children Contacted	# Children Participating	% Children Participating	
AREA 2 TOTAL	77	56	73%	69% (56)
AREA 3 TOTAL	79	63	80%	74% (63)
AREA 2 & 3	156	119	76%	72% (119)

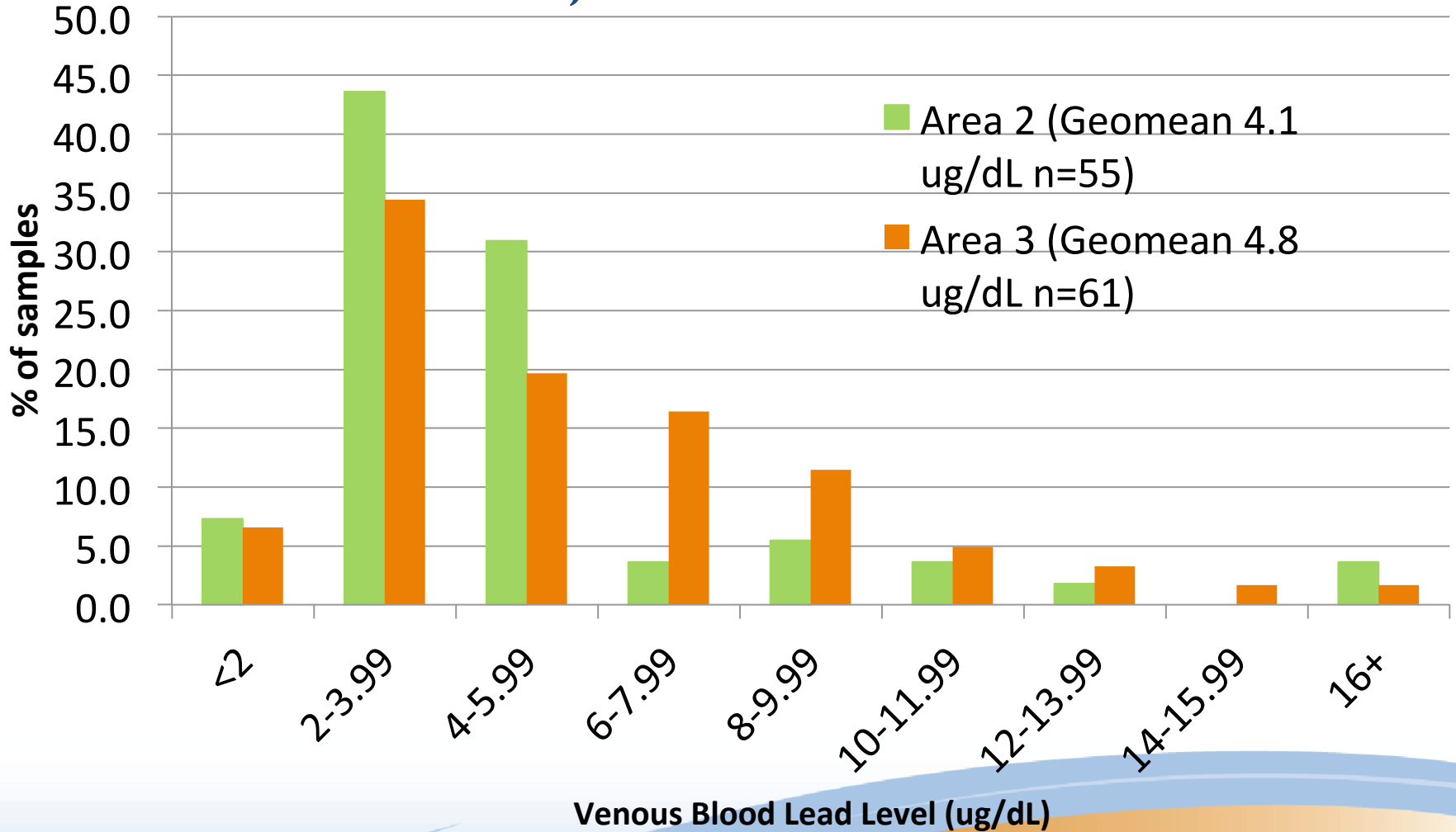
Percentages for participation by area and general trend



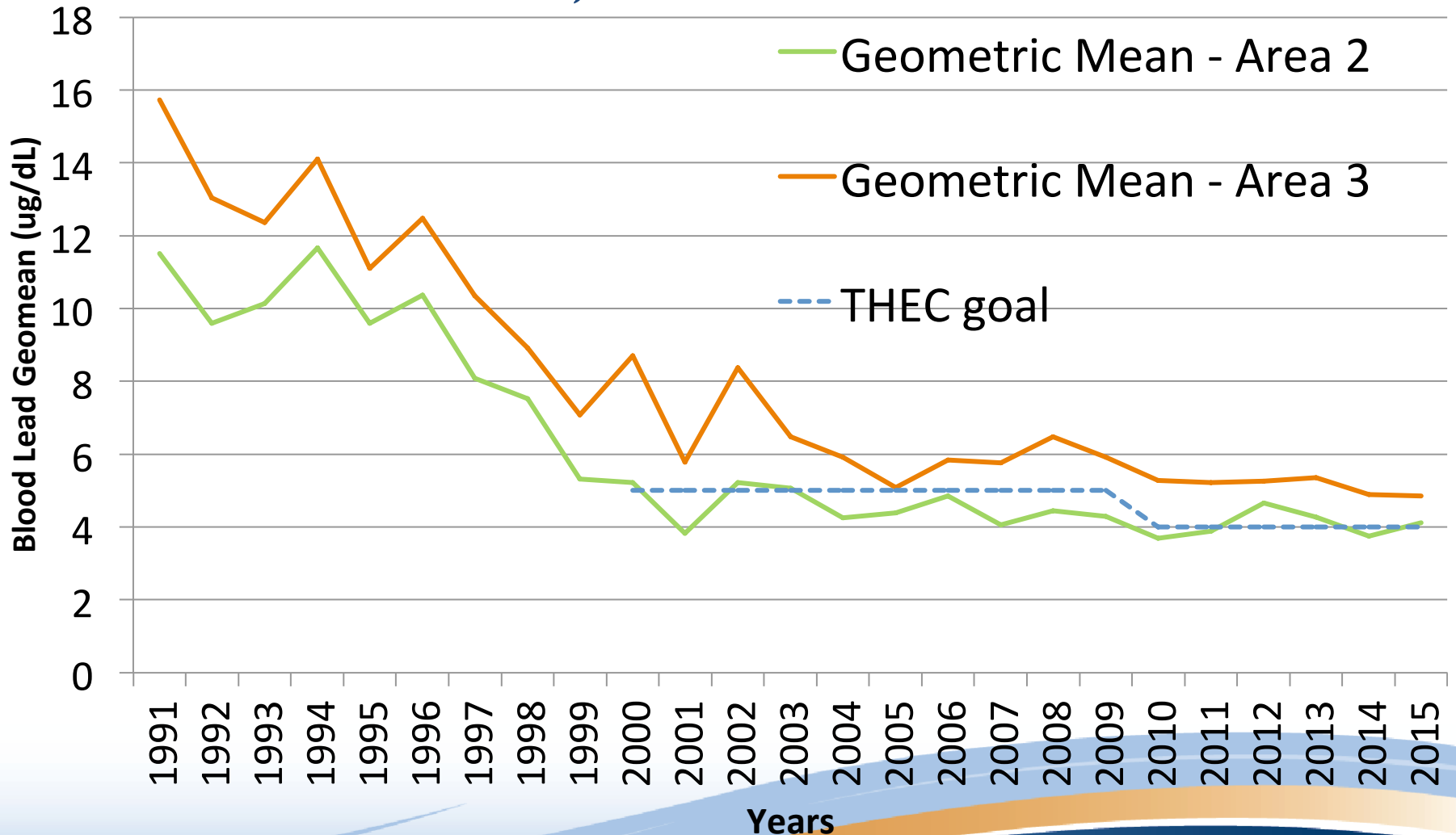
2015 Venous Blood Lead Ranges Area 2/3, 6-36 months



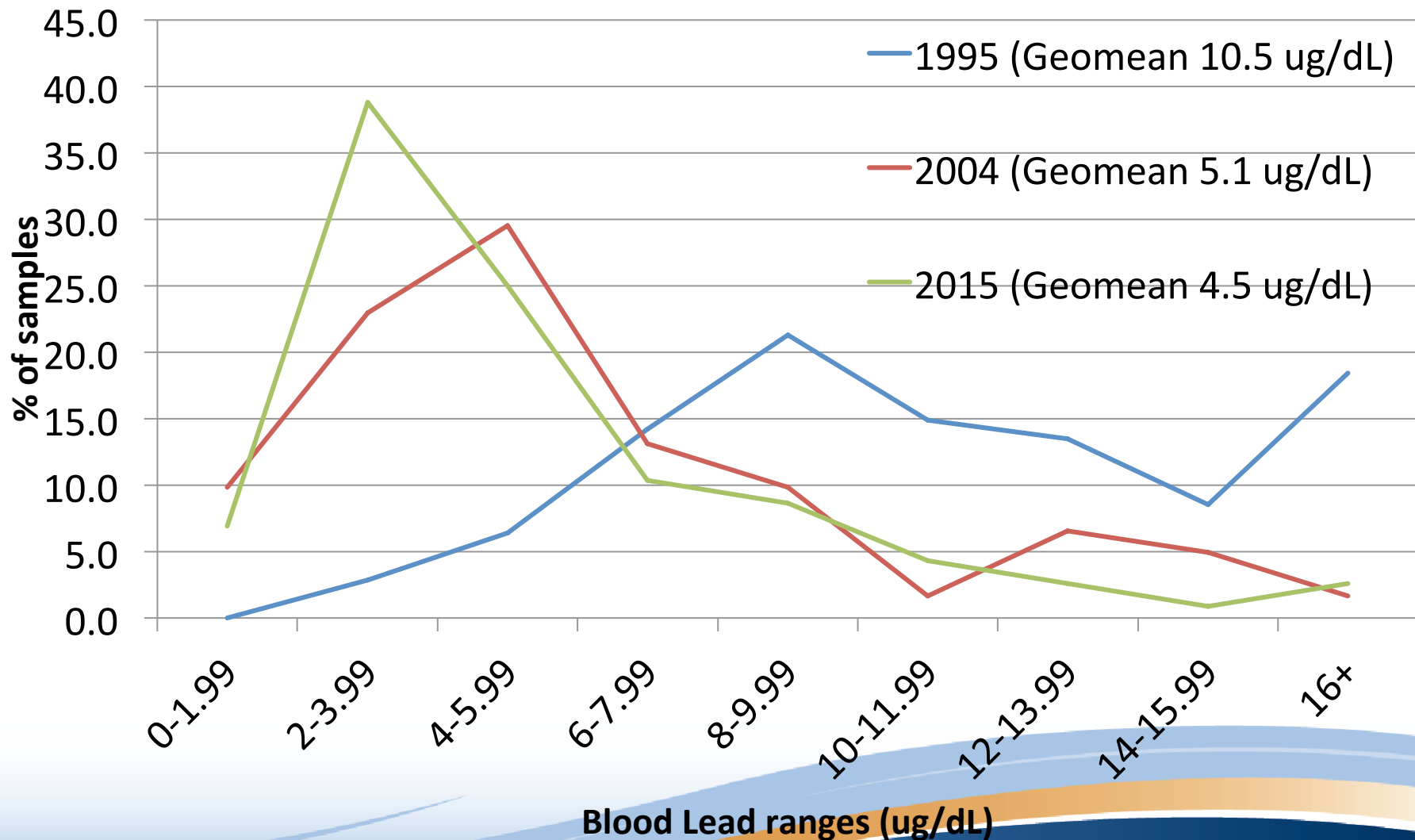
2015 Venous Blood Lead levels by Area, 6-36 months



2015 Venous blood Lead Geomean by Area, 6-36 months

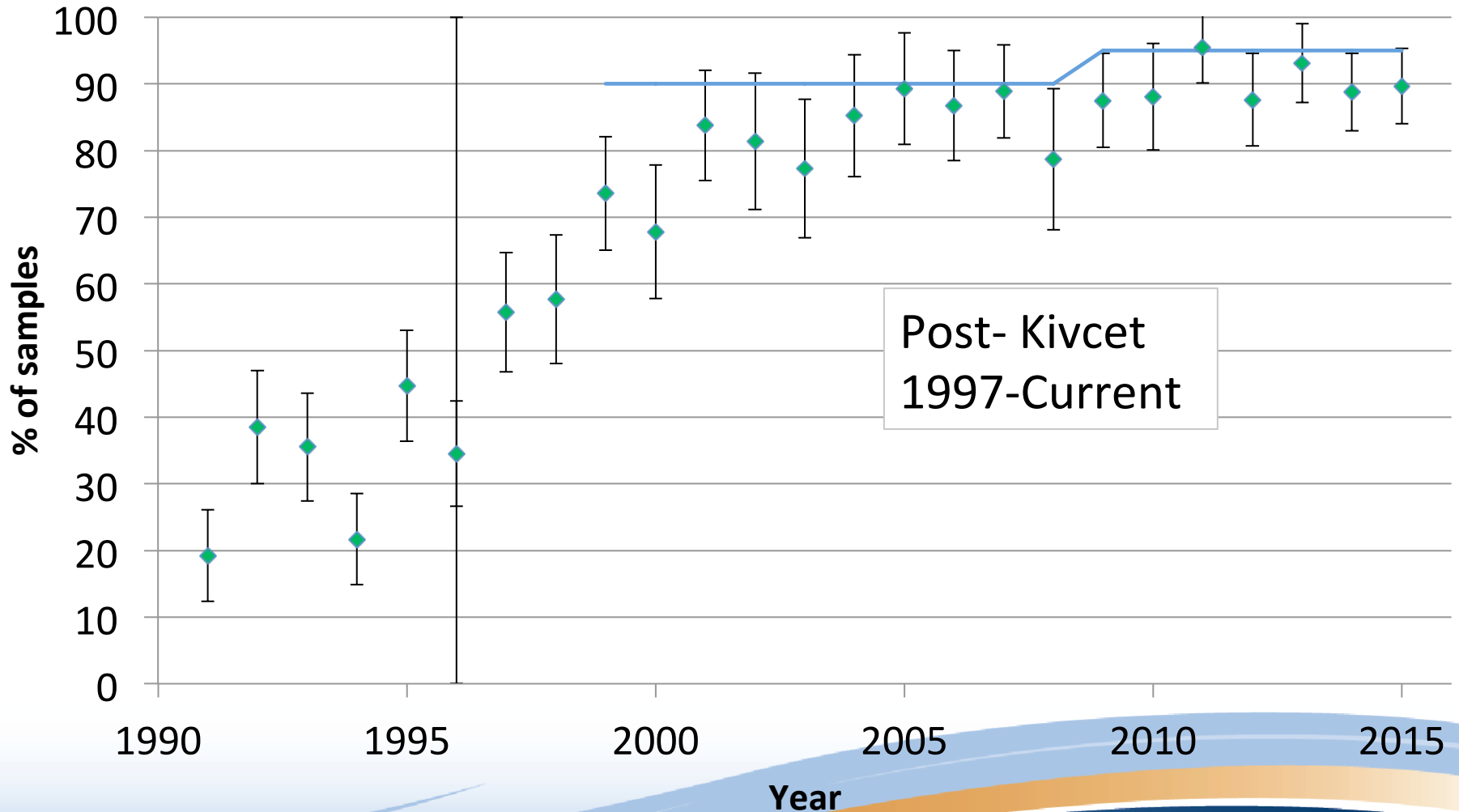


1995, 2004, 2015 Venous Blood Lead Ranges Area 2/3, 6-36 months

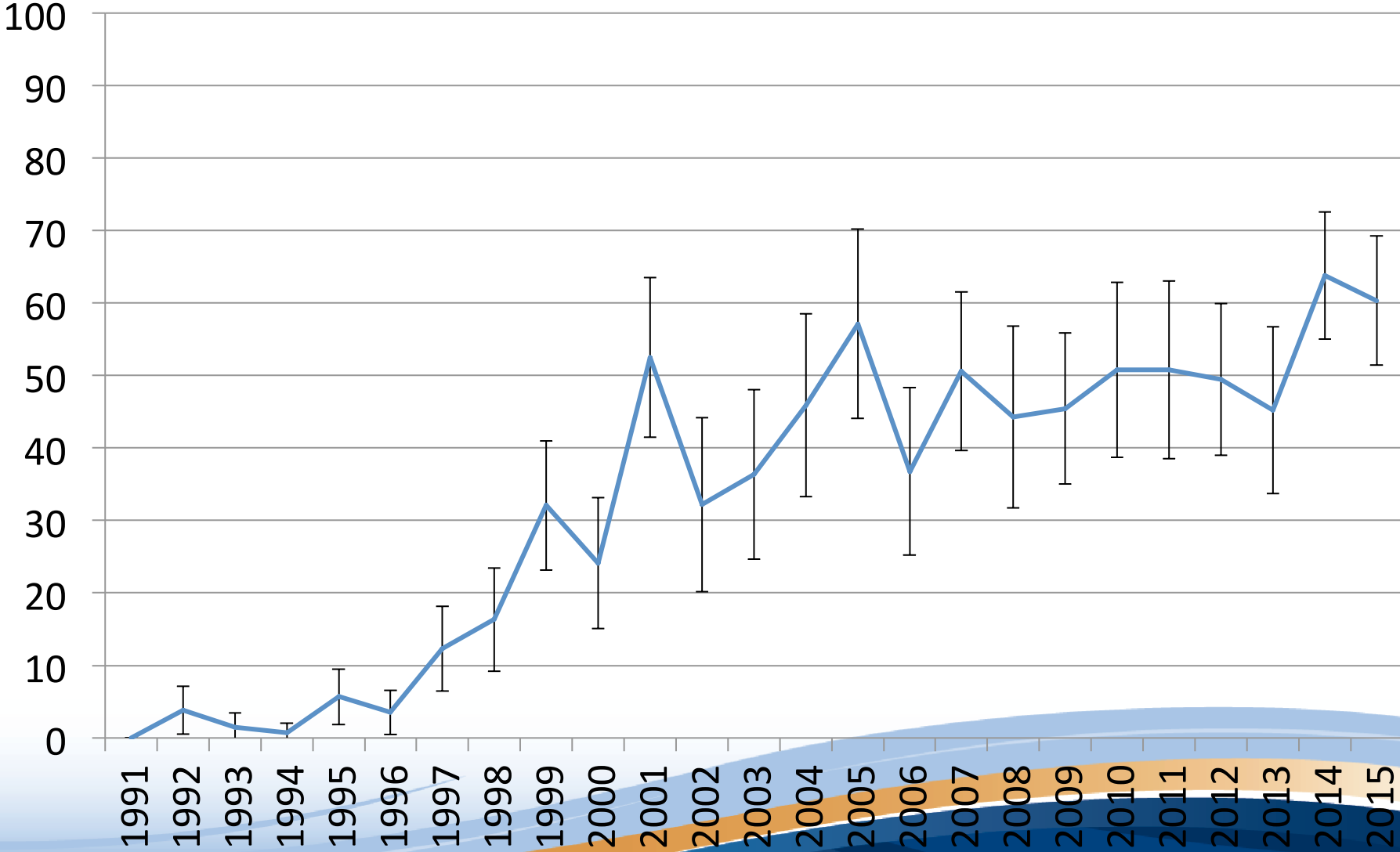


Blood Lead ranges (ug/dL)

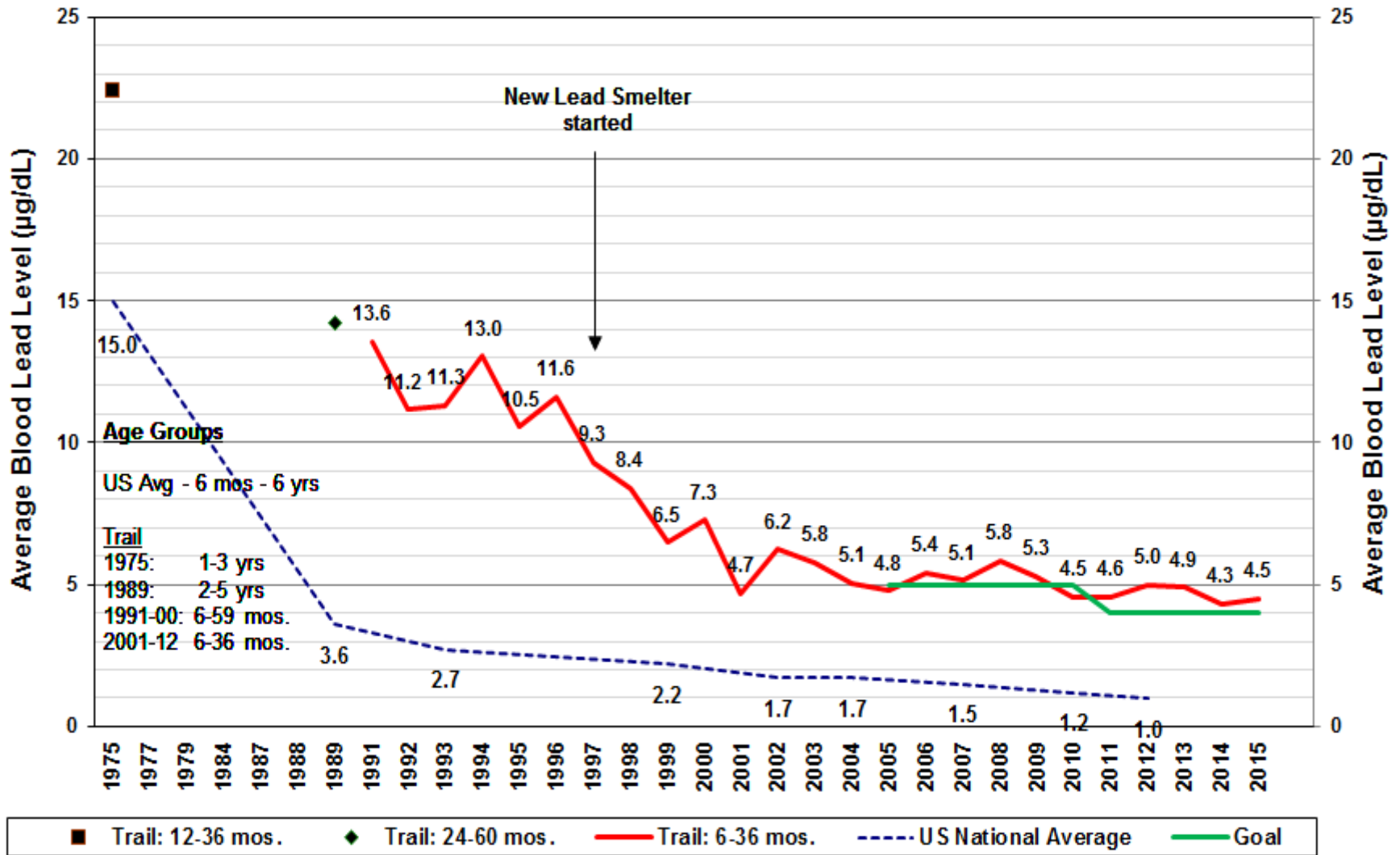
1991-2015% of venous blood lead samples, <10 ug/dL, area 2/3, 6-36 months



Proportion of Venous Samples <5ug/dL



History of Children's Blood Lead Levels in Trail

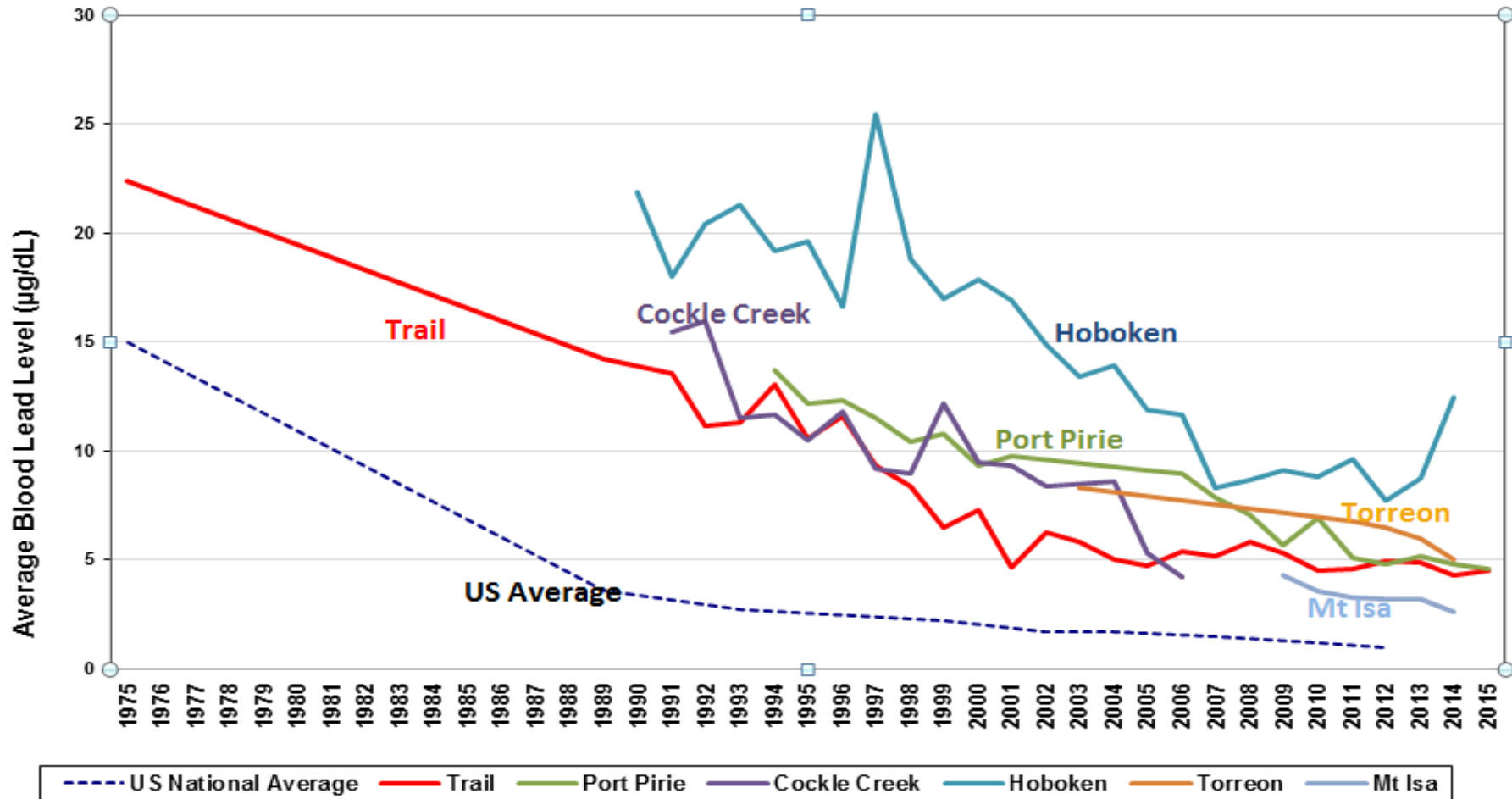


Comparison with other smelter

City/Region	Country	Nature of site	Age of kids tested	Year	Geomean Blood Lead Level (µg/dL)
La Oroya	Peru	Pb smelter closed 2009	< 6 yrs	2011	~10
Hercalaneum	U.S.A.	Primary Pb smelter -closed	< 6 yrs	2003	8.0
Hoboken (Moretusburg)	Belgium	Secondary Pb smelter	2.5-6 yrs	2015	5.6
Torreon	Mexico	Primary Pb smelter	<16 yrs	2014	5.2 avg
Rouyn-Noranda QC	Canada	Primary Cu smelter	6 mos to 5 yrs	1999	5.2
Broken Hill	Australia	Pb mining	1-4 yrs	2014	5.2
Port Pirie	Australia	Primary Pb smelter	<5 yrs	2015	4.6
Trail BC	Canada	Primary Pb smelter	0.5 to 3 yrs	2015	4.5
Belledune, NB	Canada	Pb smelter, industry	3-6 yrs	2005	3.5
Hamilton, ON	Canada	Urban/city centre	< 6 yrs	2008	3.0
Mount Isa	Australia	Primary Pb smelter/mine	1-5 yrs	2014	2.6
Flin Flon, MB	Canada	Closed Cu smelter	0.5 - 6 yrs	2011	1.4
St Johns, Nfld	Canada	Urban	1-5 yrs	2011	1.2
Nation-wide	U.S.A.	Urban/rural (NHANES)	1 to 5 yrs	2012	1.0
Nation-wide	Canada	Urban/rural (CHMS)	3-5 yrs	2013	0.8
Vancouver	Canada	Urban/city centre	2-3 years	1994	5.4
Fraser Health	Canada	Urban/city centre	0-5 years	2014	<2

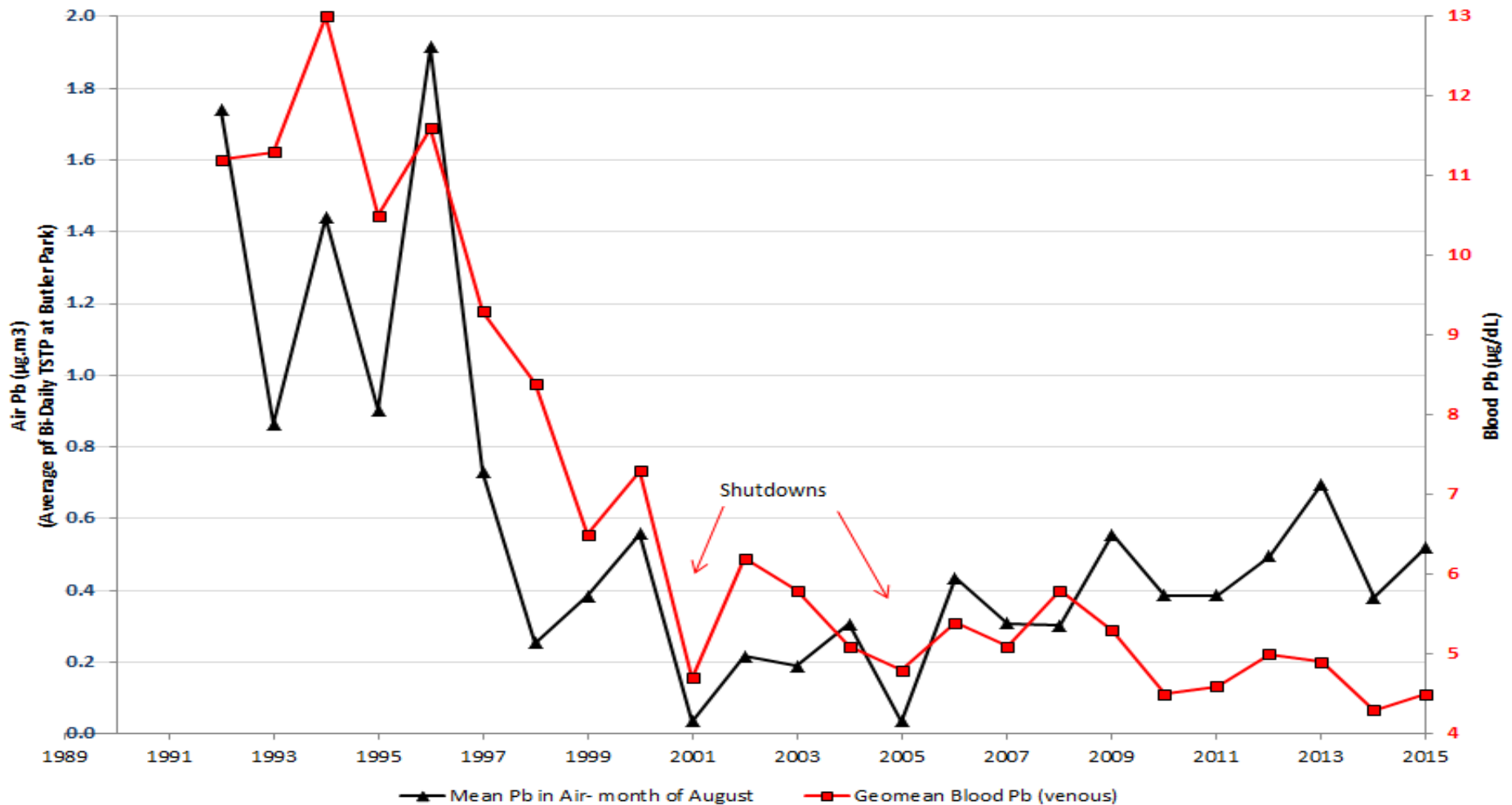
Comparison Smelter BLL

Comparison of Blood Lead Levels at Various Smelters Over Time



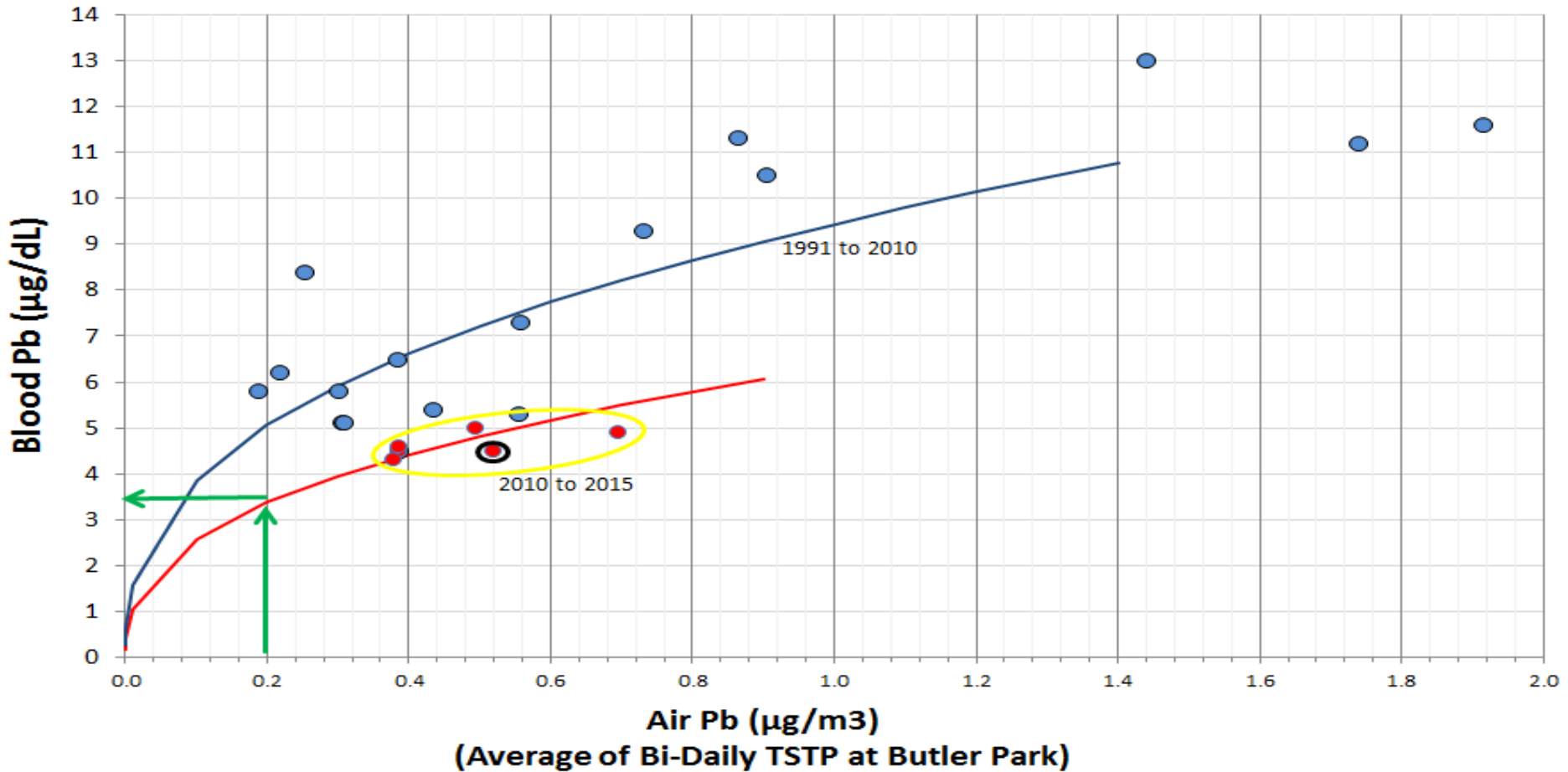
Air Pb / Blood Pb Relationship

Geomean Lead Levels for Trail Children aged 6-36 Months and Air Pb in Month of August



Air Pb / Blood Pb Relationship

Geomean Lead Levels for Trail Children aged 6-36 Months
and Air Pb in Month of August





Concluding Messages

- We continue to have a high level of participation in this voluntary program
- The blood lead results for 2015 are not significantly different from 2014. For example, the 2015 geomean (“average”) of 4.5 micrograms per decilitre is not statistically different from the 2014 result of 4.3
- The 2015 blood lead geomean did not meet the THEC’s 2015 objective of 4.0 micrograms per decilitre. However the greatest benefits of the Fugitive Dust Reduction Program have yet to be realized. The smelter recycle building currently under construction is anticipated to reduce fugitive dust by 25%.

Concluding Messages

- The level of lead in air continues to have a significant influence on blood lead levels. Late summer 2015 conditions were record warm and dry. The level of lead in community air in August 2015 was higher than in August 2014.
- Teck's Fugitive Dust Reduction Program currently offers the greatest opportunity to further reduce lead emissions to achieve our health and environment goals. In combination with our other programs (e.g. soils program, Healthy Families Healthy Homes, home reno support), we are on course to achieve lower blood lead goals in future.

Concluding Messages

- There has been significant improvement in children's blood lead levels over the past 20 years, and Trail is among the world's leading smelter communities in terms of low lead emissions and blood lead levels.
- There is no known threshold below which there is no effect from lead exposure. The lower the better.
- For information regarding lead, its effects, and the robust community supports available in the Trail area, please visit www.thep.ca

