

Blood Lead Levels in Trail Fall 2020

Population Health,
November, 2020



Interior Health
Every person matters

Objective

- * Overview of blood lead levels tested in fall 2020
- * Comparison of mean blood lead levels in 2020 to previous years

Who Was Tested in 2020?

Target Group

- * Children aged 6-36 months, living in City of Trail or Rivervale (Area 2/3)
- * Children aged 6-36 months living in Warfield, Oasis, Casino and Waneta (Area 1)



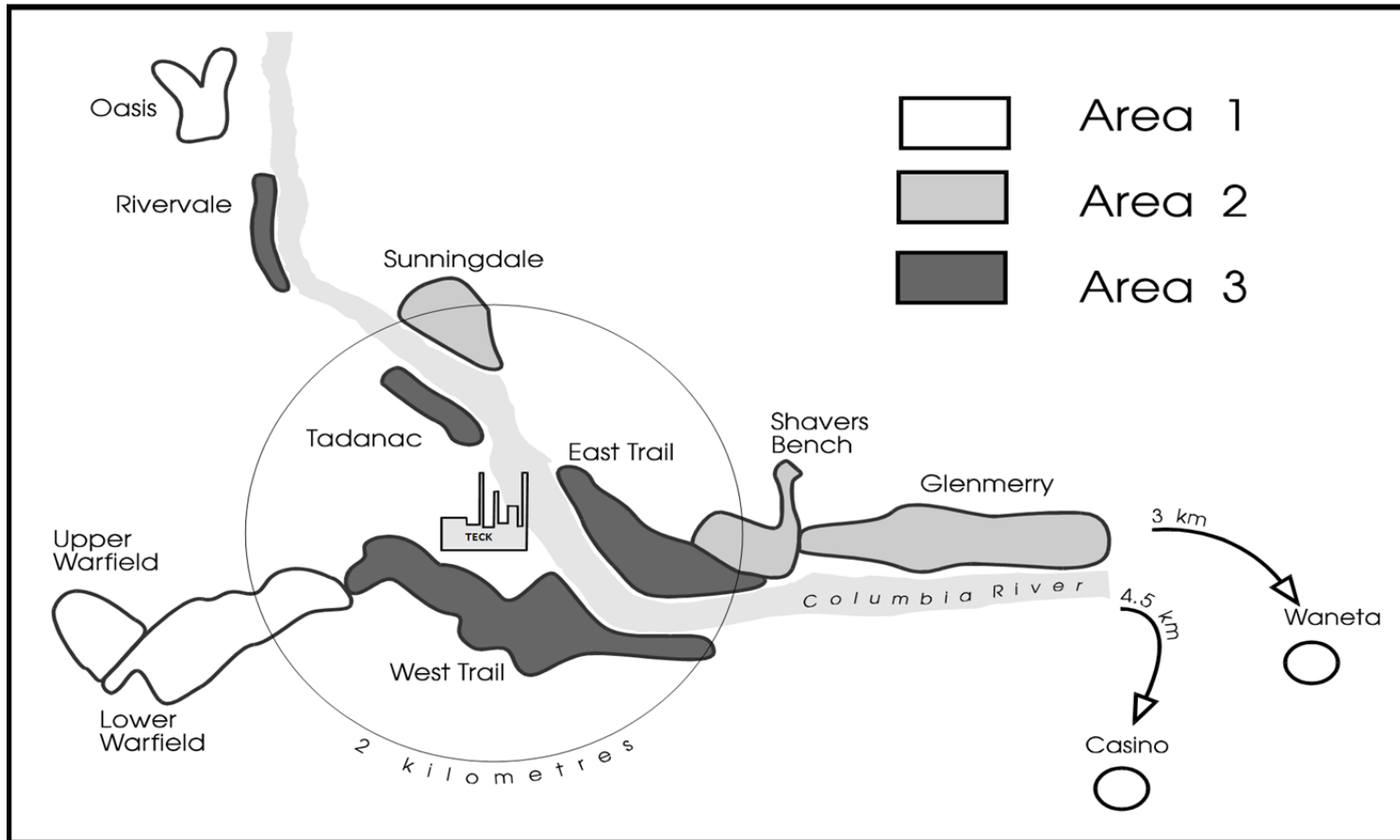
Additional Testing

These results do not contribute to the yearly analysis

- * Children new to the area, up to the age of 5 years old
- * Children with previous enhanced support follow up who are now over 36 months old
- * Children whose parents requested testing for their child from outside target area and age range



“Areas” & Neighbourhoods

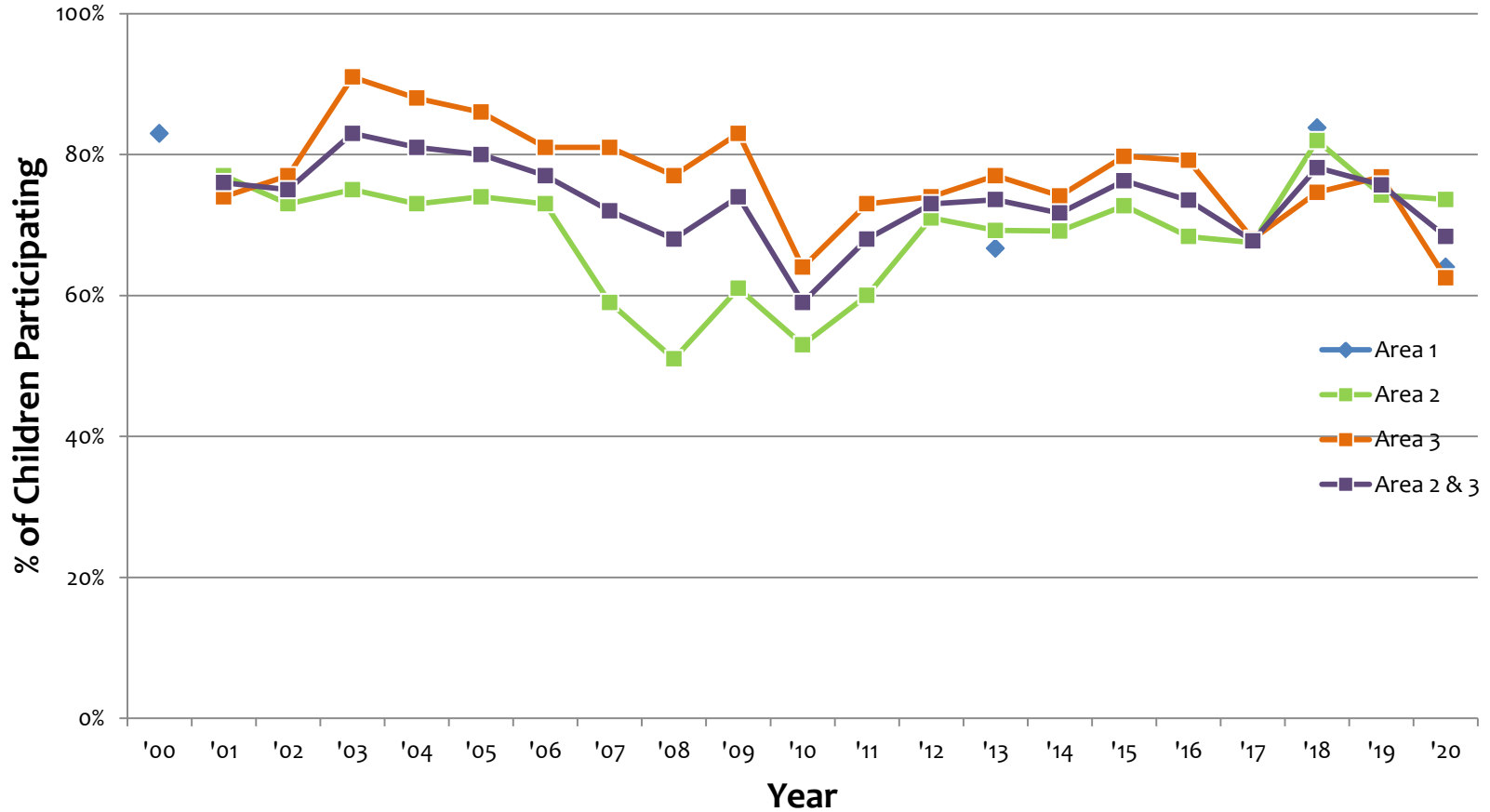


Participation By Target Areas 6-36 Months

Children Participating in Blood Lead Level Testing By Areas			
	2020		2019
Area	Number of Children Contacted	Percent of Children Participated*	Percent of Children Participated
Area 1	50	64% (32)	N/A
Area 2	72	74% (53)	74% (49)
Area 3	64	63% (40)	75% (63)
All Participating Areas	186	67% (125)	75% (112)

*Blood samples were not obtained from all children who participated

Percent Participation by Area

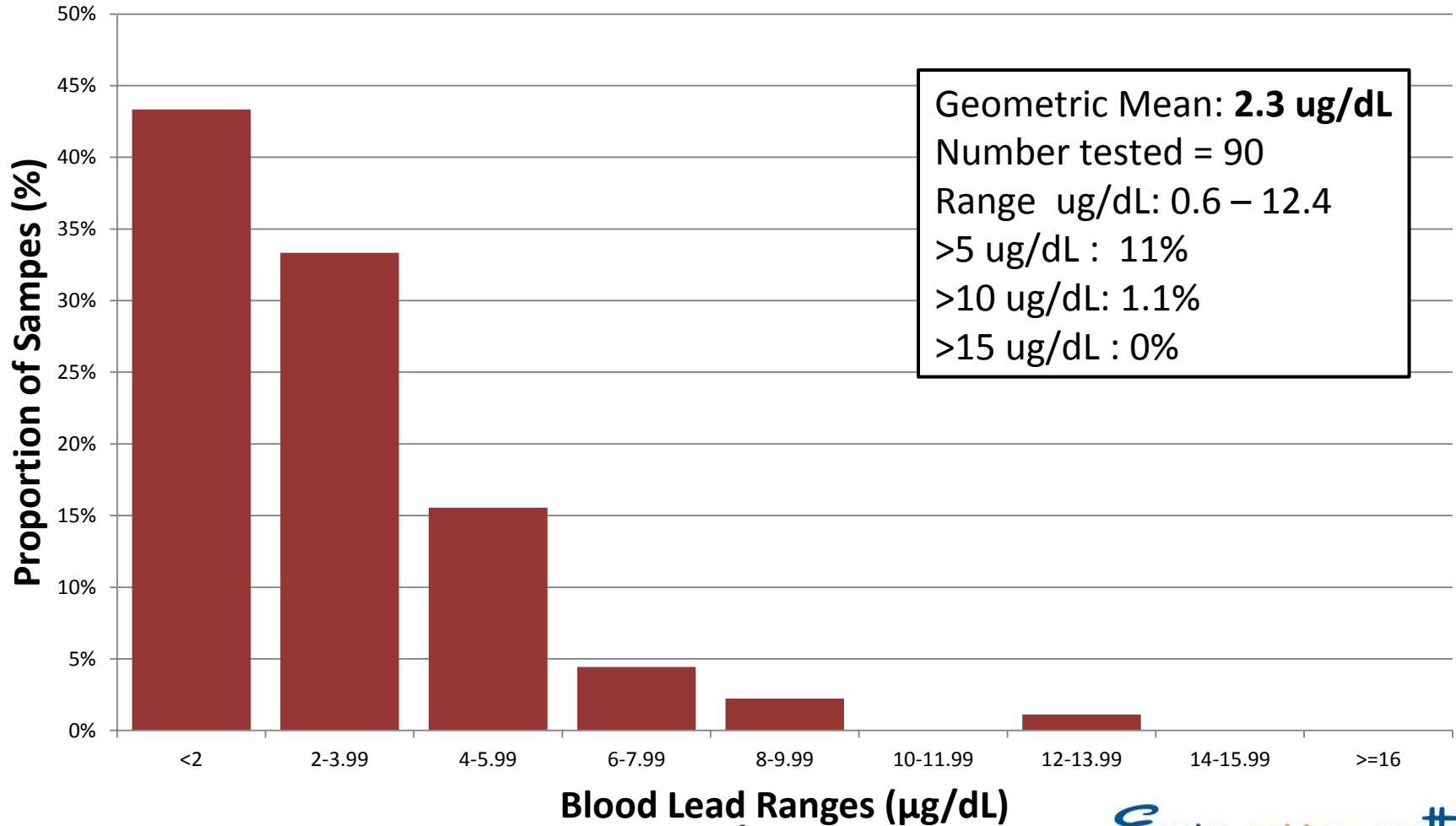


Blood Lead Level Threshold

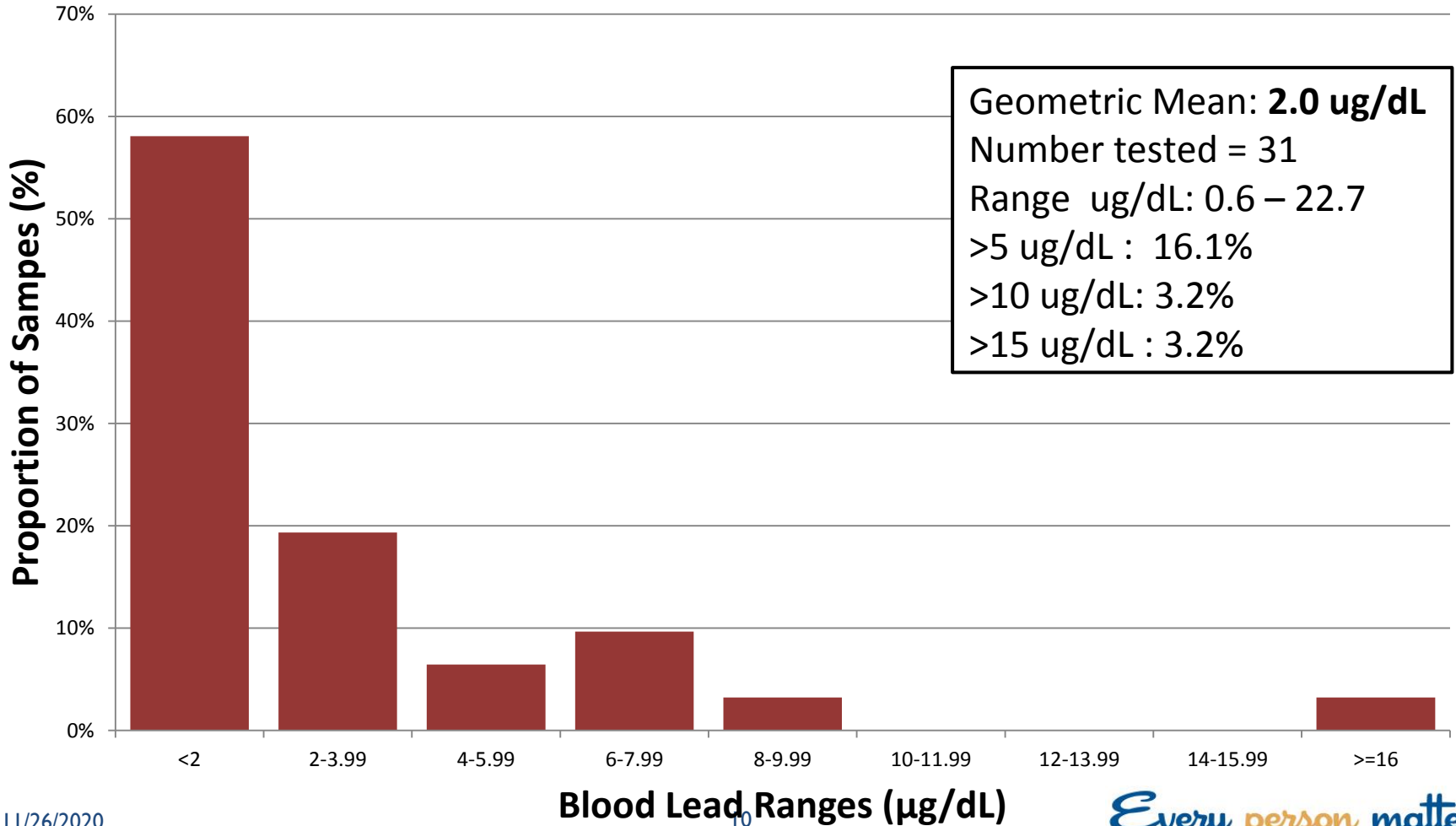
- * There is **no safe blood lead level threshold**
- * Blood lead levels of 1-2 $\mu\text{g}/\text{dL}$ are associated with adverse health outcomes particularly in children
- * BLLs in children who live in lead contaminated environments is typically highest between ages 6 to 36 months
- * Canadian children 3-5 years old had geomean blood lead levels at 0.56 $\mu\text{g}/\text{dL}$ in 2017 **

**note that Trail children's geomean reflects ages 6-36 months

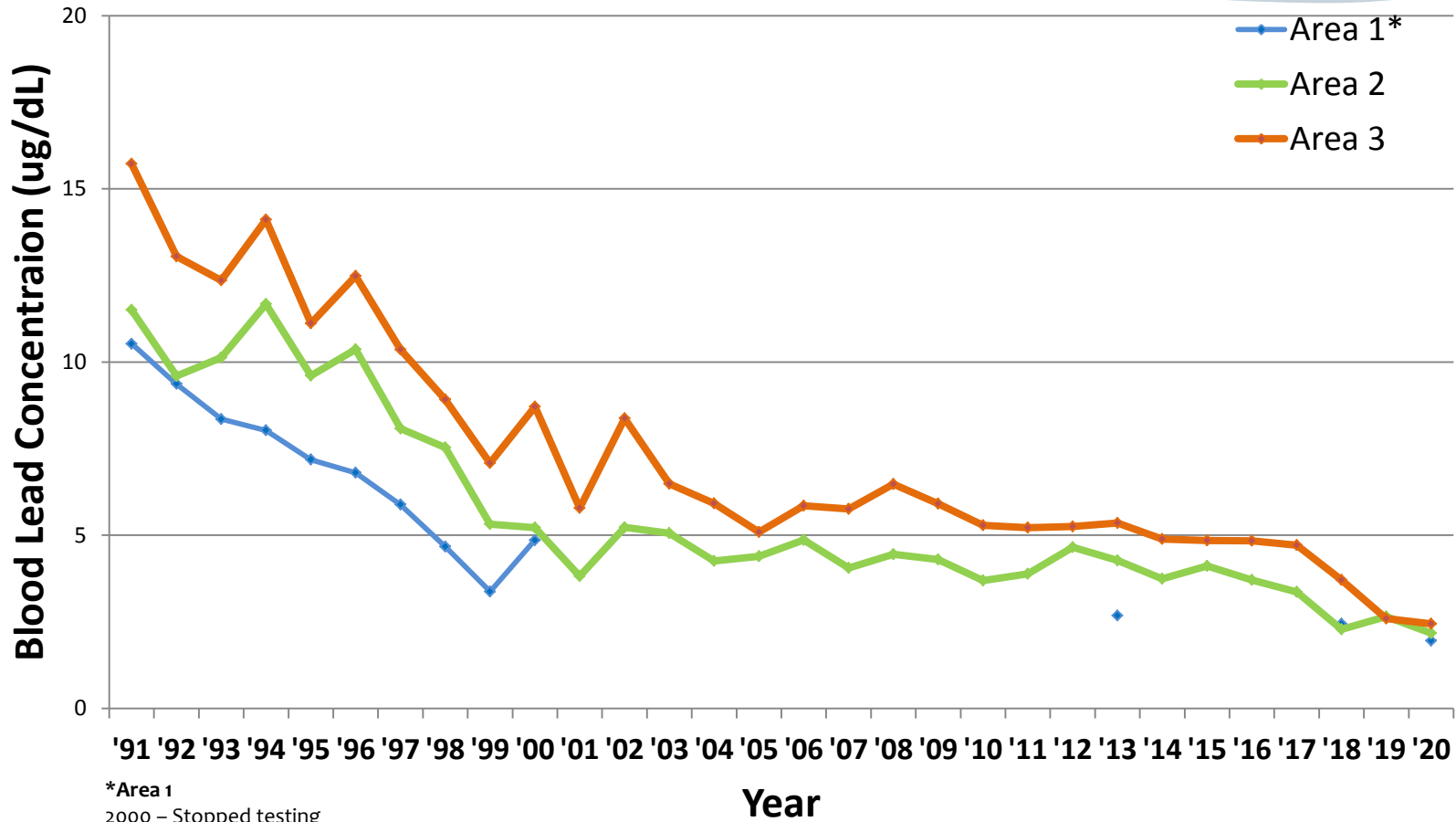
Range of Blood Lead Levels for Areas 2&3



Range of Blood Lead Levels for Areas I



Trend of Blood Lead Geomean by Area Years 1991-2020



*Area 1

2000 – Stopped testing

2013 – Rejoined testing with a recommendation to retest every 5 years.

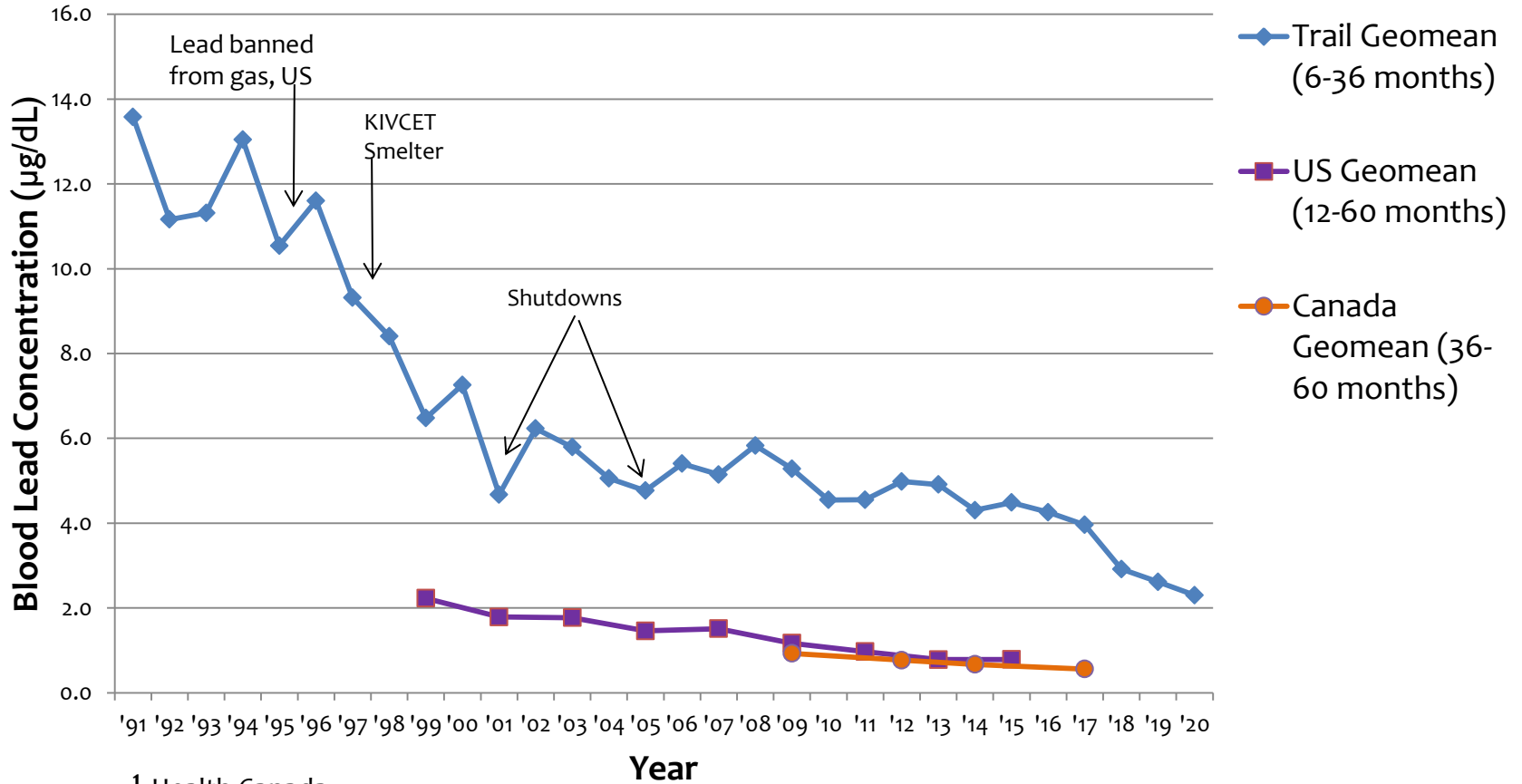
2020 – Rejoined testing with a recommendation to retest every year

Year

Blood Lead Levels

Trail, Canada & U.S. Data

**Mean Blood Lead Levels
for Children living in Trail, Canada and U.S.**



¹ Health Canada

² US Centre for Disease Control

Concluding Messages

- * In 2020 the participation was 68% for Areas 2 & 3 and 64% for Area 1
- * The children's blood lead geometric mean was at 2.3 $\mu\text{g}/\text{dL}$ in comparison to the previous year's mean at 2.6 $\mu\text{g}/\text{dL}$ (2019) for Areas 2 & 3.
- * Similarly for Area 1, blood lead geometric mean was at 2.0 $\mu\text{g}/\text{dL}$ in 2020 in comparison to 2.4 $\mu\text{g}/\text{dL}$ in 2018.
- * The mean blood lead levels are decreasing over time, but continue to demonstrate evidence of exposure to lead in the environment

Thank You

