

Blood Lead Levels in Trail Fall 2021

Population Health,
November, 2021



Interior Health
Every person matters

Objective

- * Overview of blood lead levels tested in fall 2021
- * Comparison of mean blood lead levels in 2021 to previous years

Who Was Tested in 2021?

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)



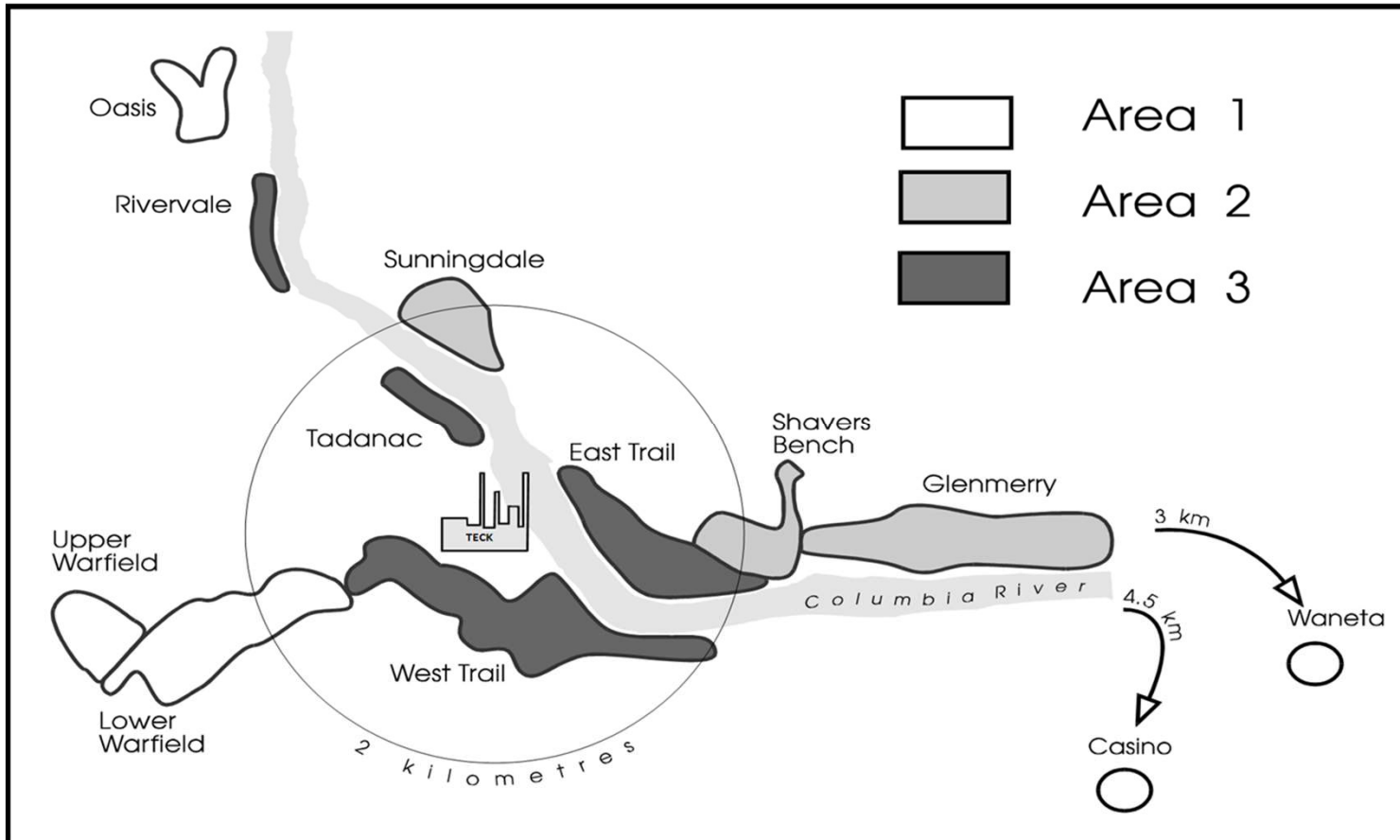
Additional Testing

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			
	2021		2020
Area	Number of Children Contacted	Percent of Children Participated*	Percent of Children Participated
Area 1	50	46% (23)	64% (32)
Area 2	64	64% (41)	74% (53)
Area 3	73	51% (37)	63% (40)
All Participating Areas	187	54% (101)	67% (125)

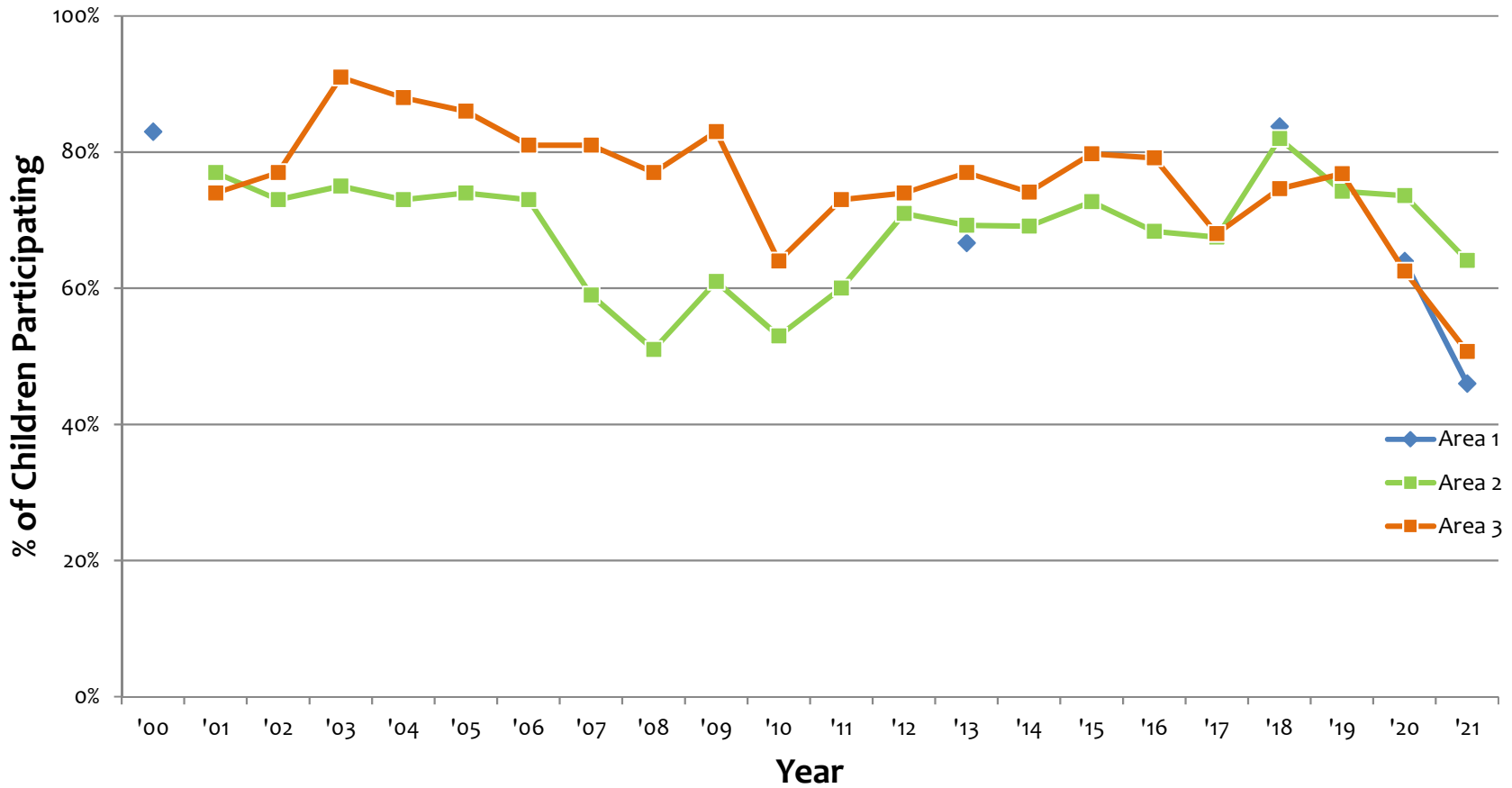
*Blood samples were not obtained from all children who participated

Participation and COVID

Due to an increase in local COVID cases and back to school viral colds during this fall:

- * The clinic experienced a large number of cancellations
- * There are still pending results for children that were unable to attend the clinic
- * Number of clinic days were reduced

Percent Participation by Area

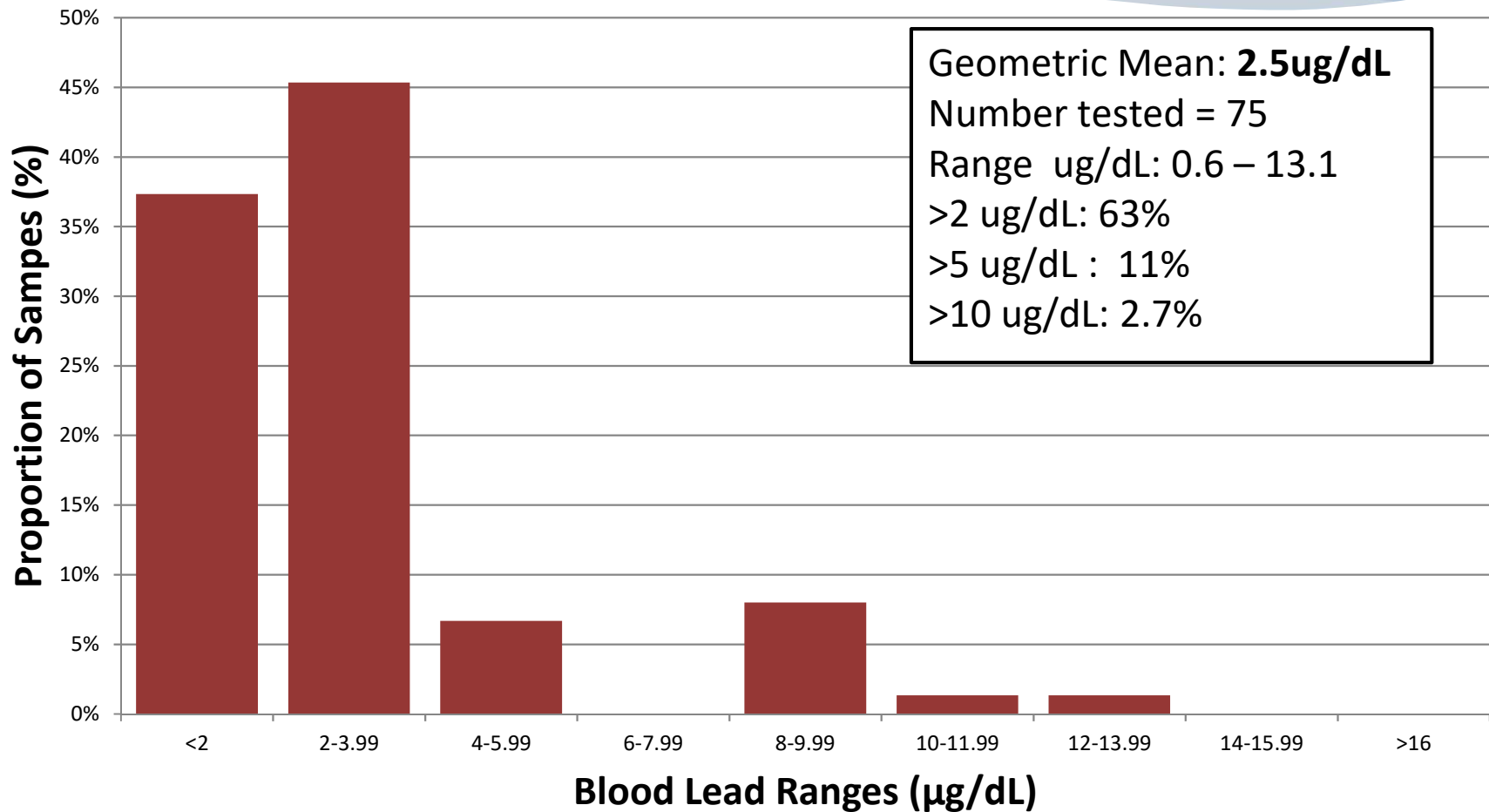


Blood Lead Level Threshold

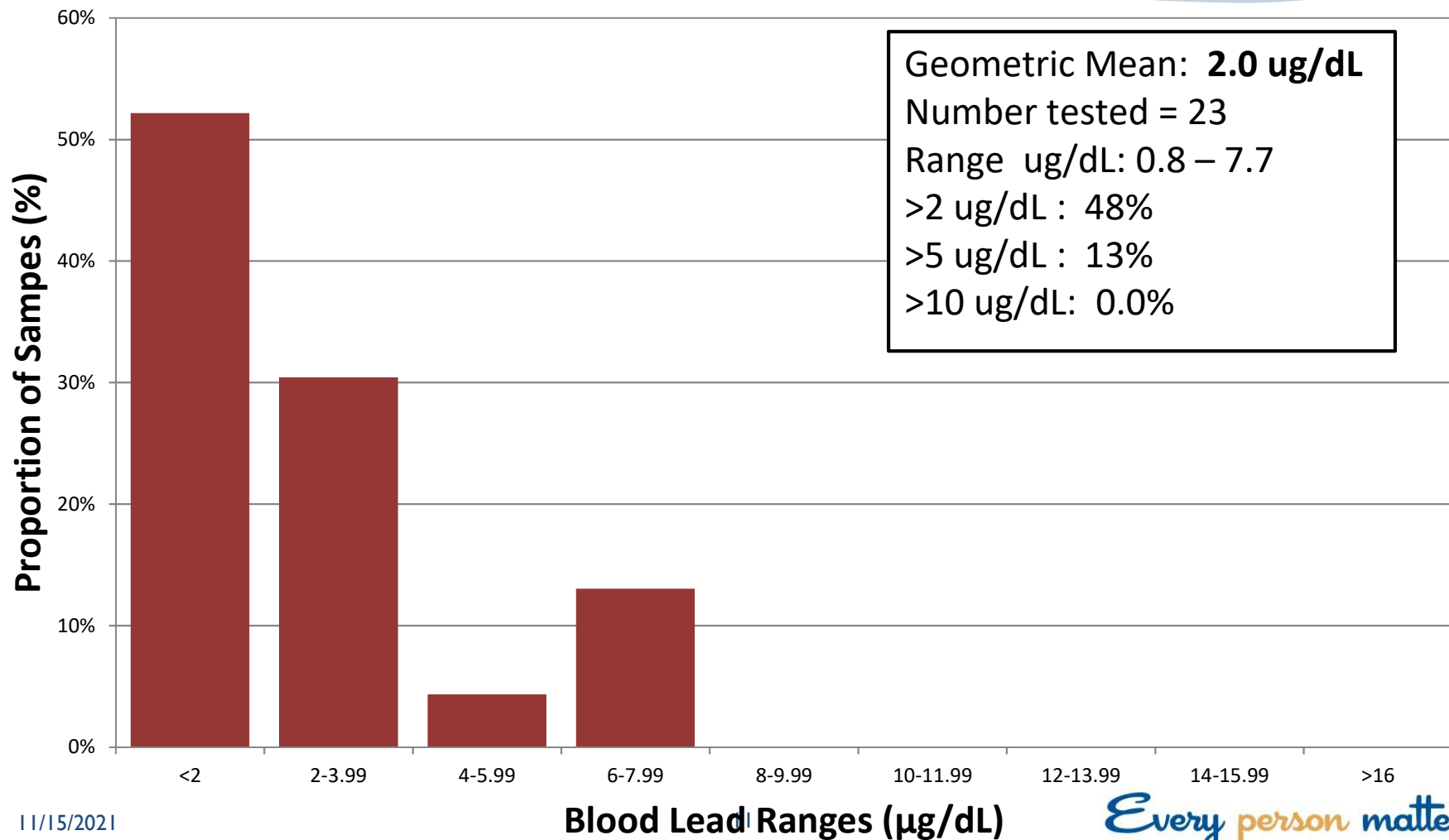
- * There is **no safe blood lead level threshold**
- * Blood lead levels as low as 1-2 $\mu\text{g}/\text{dL}$ are associated with adverse health outcomes particularly in children
- * BLLs in children who live in lead contaminated environments are typically highest between ages 6 to 36 months
- * Canadian 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

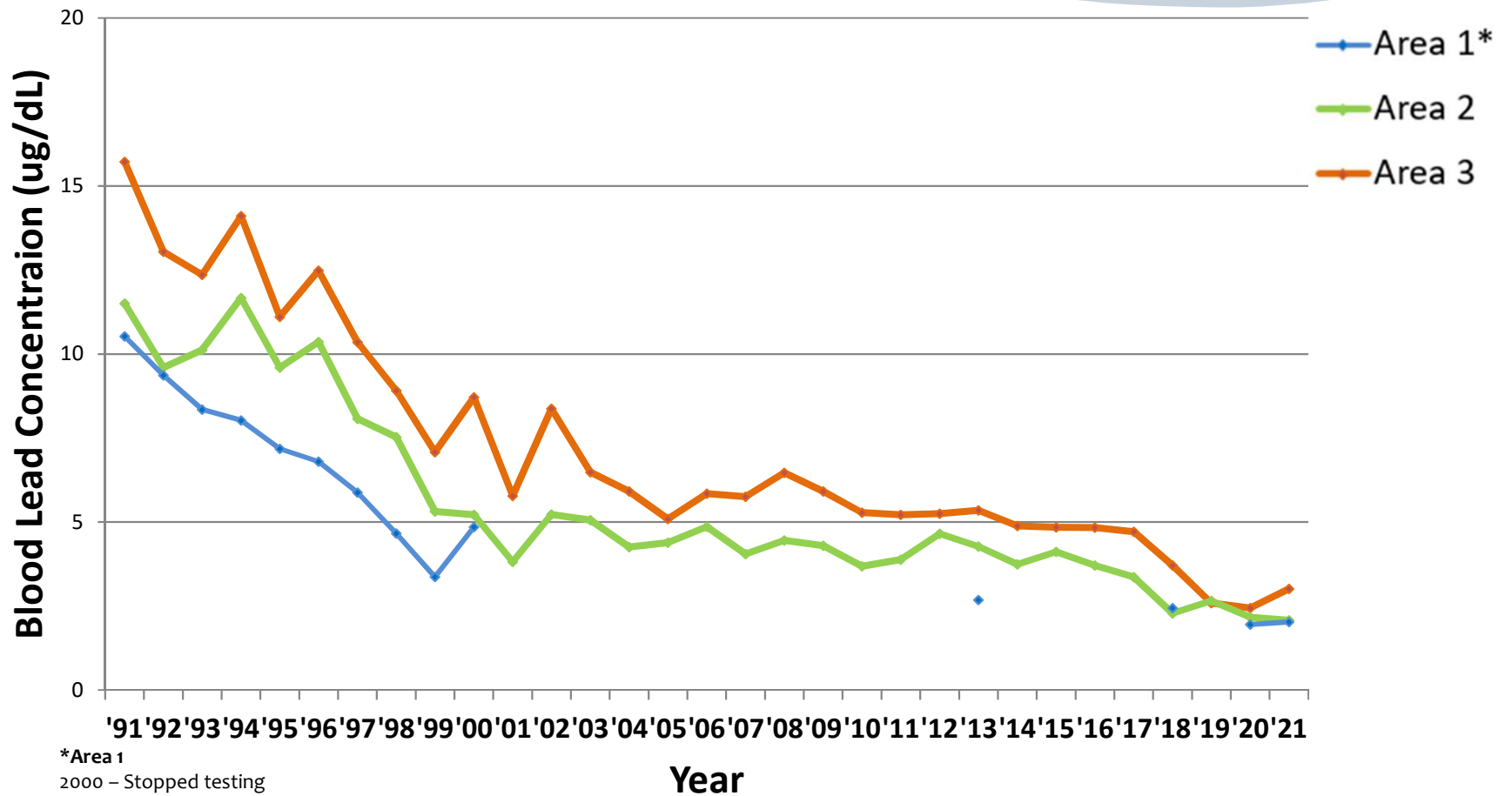
Range of Blood Lead Levels for Areas 2&3, in 2021



Range of Blood Lead Levels for Area I, in 2021



Trend of Blood Lead Geomean by Area Years 1991-2021



*Area 1

2000 – Stopped testing

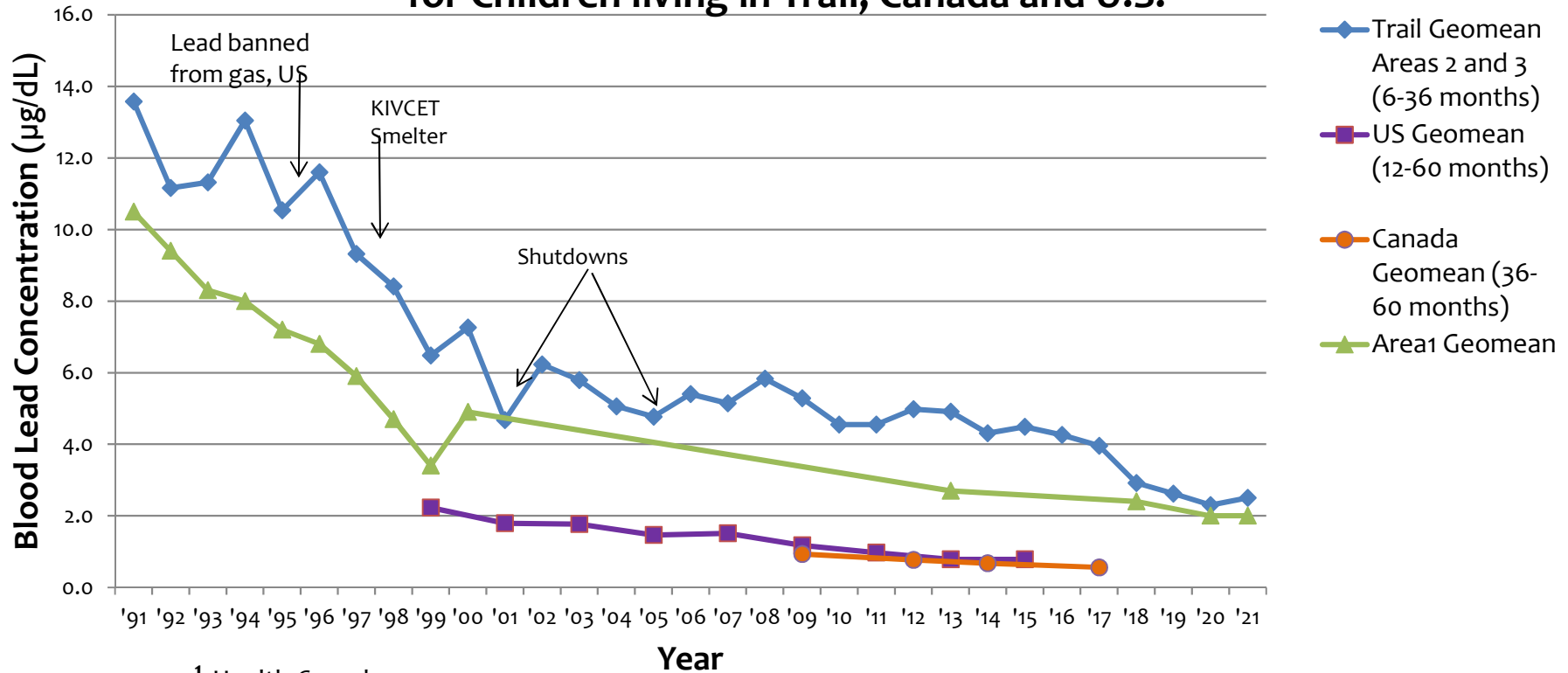
2013 – Rejoined testing with a recommendation to retest every 5 years.

2020 – Rejoined testing with a recommendation to retest every year

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 2021 the participation was 57% for Areas 2 & 3 and 46% for Area 1
- * The children's blood lead geometric mean was at 2.5 $\mu\text{g}/\text{dL}$ in comparison to the previous year's mean at 2.3 $\mu\text{g}/\text{dL}$ (2020) for Areas 2 & 3.
- * For Area 1, the children's blood lead geometric mean remained the same, at 2.0 $\mu\text{g}/\text{dL}$ in 2021 when compared to 2020.
- * The mean blood lead levels continue to demonstrate evidence of exposure to lead in the environment. They are decreasing over time, however there appears to be a plateauing of the decrease this year.

Thank You



11/15/2021

15

Every person matters