

Lead Testing in Children

Testing Volume and the COVID-19 Pandemic

? How did the volume of pediatric lead testing change during the COVID-19 pandemic?

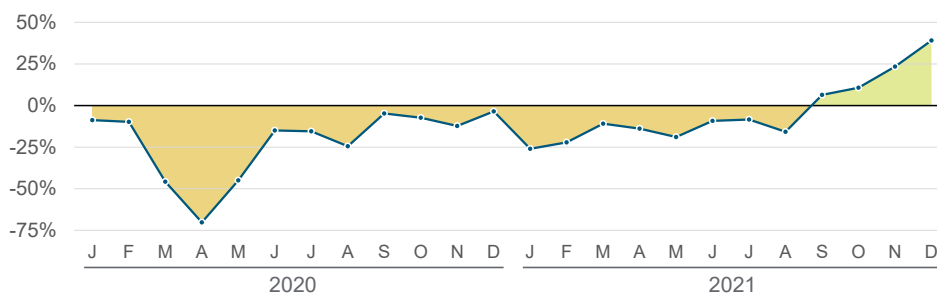
Background

As part of routine healthcare, the Centers for Disease Control and Prevention recommends pediatric blood lead testing because of lead's effect on brain development. The COVID-19 pandemic affected the delivery of routine healthcare, but the effect of the pandemic on blood lead testing has not been assessed.

Methods and Results

Monthly volumes of pediatric (<6 years of age) lead testing during 2020 and 2021 were compared with those of 2019 (before the pandemic). Data was analyzed by community factors including race/ethnicity, poverty rates, and old housing stock (ie, predating the ban on lead-based paint).

Change in pediatric lead testing volume from same month in 2019

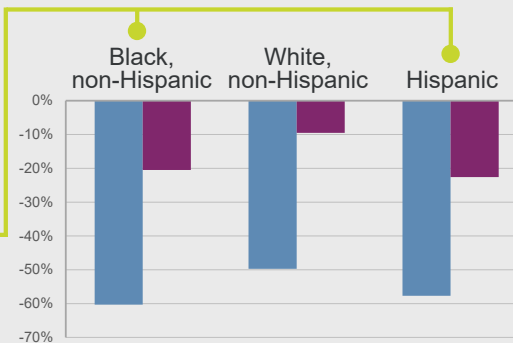


Pediatric lead testing fell sharply at the beginning of the pandemic and fully rebounded in September 2021.

Testing shortfalls by communities' predominant race/ethnicity

Testing volume **fell more in 2020** and **remained lower in 2021** for communities at greater risk of lead toxicity, including those with^a

- predominantly Black and Hispanic populations
- more poverty
- more old housing stock



Change in March-May testing volume from 2019 to

■ 2020 ■ 2021

^aBased on patient zip code and census data.
P<.01 for all comparisons.

→ Pediatric lead testing substantially declined early in the pandemic and then gradually rebounded in 2021. However, the rebound was less apparent in Black and Hispanic communities and those with oldest housing and higher poverty.

1. Kaufman HW, Niles JK, Brewster RCL, et al. Impact of the COVID-19 pandemic on blood lead testing in children in the United States. *Popul Health Manag.* 2024 Apr 8. doi: 10.1089/pop.2023.0298

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