

Testing for lead poisoning in children down during pandemic, raising alarms among health officials

By **Dylan Miettinen** - December 10, 2020



Children walk past peeling lead paint. Children ingest lead paint and lead paint dust, resulting in lead poisoning, which causes irreversible brain and central nervous system damage. Photo by Spencer Platt/Getty Images.

Fewer Minnesota children have received lead tests during the pandemic, which could have lifelong consequences for them — and carry a heavy societal cost.

During the two decades before the pandemic, Minnesota saw an increase in tests for childhood lead exposure and a decrease in the number of children with elevated levels of lead in their blood.

This year, however, between March and May, 42% fewer blood tests were performed on children compared to the same time period last year, according to data from the Minnesota Department of Health (MDH).

The same was true of [routine vaccinations](#) at the beginning of the pandemic.

The downward trend worries health experts. Stephanie Yendell, senior epidemiology supervisor with MDH, said it's important to catch lead exposure early, especially in young children, because it can lead to learning and behavioral problems and damage to the brain and other parts of the nervous system. An increase in lead poisoning could also exacerbate already existing health disparities.

“Our ongoing concern is that there are kids out there going undiagnosed — especially the kids most at risk, those whose families may not have the resources to still make it into the pediatrician,” Yendell said.

At the beginning of the pandemic, many families opted to skip doctor visits or do them over Zoom, meaning they weren't getting blood tests for lead exposure, said Lisa Smestad, a lead

specialist with the Minneapolis Health Department. Other measures — like in-home visits or in-person educational outreach — ceased as well.

April saw the most dramatic decline, when providers, clinicians and nonprofits conducted 57% fewer lead tests for children than in April 2019.

This downward trend was similar across the Upper Midwest, Northeast and parts of the West Coast, according to *Kaiser Health News*.

Although testing numbers ticked back up during the summer months, it wasn't what was hoped for, Yendell said. What she didn't see was a rebound effect of identifying children with elevated blood lead levels missed during the earlier months of the pandemic.

 A Flourish chart

The most dangerous place to be

And, the closure of schools and daycares meant that children were isolated at the place where they were most exposed to lead: the home.

Experts say that lead paint found on windows in older homes is the primary culprit, though it can also be found on “rustic” or “shabby chic” home decor, imported spices and some pottery.

Children most susceptible to lead poisoning are those under 6 and who live in older houses with lead-based paint used before 1978, according to the [Centers for Disease Control and Prevention](#). As many as 500,000 children under 6 in the U.S. have exposure to high levels of lead, though that may be an undercount due to lack of widespread testing.

Yendell said that the pandemic complicates the situation for those who can't take time off work or who have lost jobs and can't replace windows or repaint.

“Parents might be a little more distracted when working from home, and those hand-to-mouth activities take just seconds with lead dust,” Smestad said, referring to the danger of children putting lead paint chips and other objects with lead paint dust in their mouths.

The consequences of childhood lead exposure are long term and multifaceted. Lead poisoning can lead to damage of the impulse control areas of the brain, which are crucial for development. Lead exposure can also cause hearing and speech problems in children. It's also been [linked to violent crime](#), rates of [school suspensions and incarceration](#), [teen pregnancy and tobacco use](#).

 A Flourish chart

Without the vital blood tests, a lack of early intervention — which [could otherwise mitigate further damage caused](#) by lead exposure — means the effects may not be discovered until a child is struggling with learning or behavioral issues.

“Blood lead level testing is such a window-in-time thing. It's like a needle in the haystack. If you test a child in summer, they may have a different result than in the winter, and the same can be said if a child moves houses,” Smestad said. “But you won't know unless you test.”

Reshifting goals amid the pandemic

Though children receive blood tests in pediatric settings, health care organizations also offer them at health fairs and other community events, all of which are no longer viable options.

Rachelle Menanteau Peleska, director of education and outreach at Sustainable Resources Center, a nonprofit that aims to create healthy home environments, said that the organization has had to get creative.

Instead of tabling at Cinco de Mayo, for example, the SRC has paired with food distribution centers to offer and advertise lead assessments. In-person and in-home visits are now online presentations and virtual home visits.

“Our objective is to make the families we work with comfortable. We’ve done virtual home assessments to identify lead hazards and have even asked folks to show us their windows and window sills over FaceTime,” Menanteau Peleska said.

SRC also held a Halloween event in which children came in costumes and received pumpkins in exchange for lead tests, and have distributed [coloring books](#) with lead poisoning prevention messages and the distinctive “Leadie Eddie” mascot.

Yendell said they can pinpoint outreach for testing in certain neighborhoods with older housing stock — where lead paint is more prevalent — or to clinics across the state that reported dramatic dips in testing numbers. Still, without the blood lead tests, it’s difficult to know who exactly was missed, she said.

The SRC has used social media to encourage blood lead level testing, as has the Minneapolis Department of Health.

Smestad said the city of Minneapolis is anticipating a bump in lead poisonings in the coming year as a result of the decrease in testing. The city is planning more home inspections and looking to fill a targeted outreach position, too.

Prevention — identifying dwellings with lead paint and eliminating it before a child’s family moves in — is an important lesson of the pandemic, Yendell said.

“An ideal outcome would be to invest in families and invest in housing in the first place so that kids don’t have lead exposure to detect during those blood tests,” she said.

Dylan Miettinen

Dylan Miettinen is a Reformer intern. A fourth-year student at the University of Minnesota, he was born and raised in Omaha, Neb. He currently serves as the editor-in-chief of the campus newspaper, the Minnesota Daily. He’s also worked for CNN, the Minnesota Media and Publishing Association and the Fiction/Non/Fiction podcast.