

The Age of Lead: Metropolitan Development, Environmental Health, and Inner City Underdevelopment

This research project was focused on unearthing the social, economic, political and environmental contexts of lead exposure in Baltimore from the 1920s to the 1970s. Lead exposure has large effects, especially on children, interfering with cognitive development and seriously limiting the life chances of individuals and their communities. It has been a pervasive and long-lasting material, widely used in paint and gasoline, among other things, and has remained in the environment – in old paint, dust and soil – despite being banned from use in many products decades ago.

I had many research questions going in to my research, but two critical questions my research addressed were these:

1. *What was the extent of child lead paint poisoning before the late 1940s, when it became a major public health issue?*

Or more specifically: Did deteriorating housing expose children to lead paint poisoning before the late 1940s. It is an important question, not only because the effects of child lead exposure are so serious (and so knowing its past prevalence is important), but also because it can reveal a lot about the social history of housing. The answer to this question has been controversial among historians of lead. On one hand, lead was in use in paint and other products well before the 1950s – in fact, well before 1900. On the other hand, there has been scant evidence that children were being poisoned in houses due to deteriorating paint and plaster before about 1948. It is simply not something that has shown up in the documents that historians have looked at so far. So lead historians have been faced with a common historical research problem: Does the lack of evidence for something in the past mean it did not happen, or just that it was not recorded (or preserved) for some reason? Before beginning my History Project funded research I had already found one document that made me think that deteriorating housing was a problem for children: a *Baltimore Sun* article from the 1920s detailing a child poisoned from peeling lead paint in an old home.

To find out more, I decided to look into the actual medical records of children poisoned by lead. This entailed working with two different archives (not to mention Institutional Review Board approval). I first had to identify possible patients, which I did by looking into the records of a pediatrician whose notes on many types of diseases, including child lead poisoning, were archived at the Alan Mason Chesney Medical Archives of Johns Hopkins. Using his notes on child lead poisoning patients, I was able to request the medical records of these patients from Johns Hopkins Hospital Medical Records collection. With the generous help of workers there, I found several dozen records of children diagnosed with lead poisoning between the 1920s and early 1940s. Some records did not detail how the lead poisoning happened. Some were clearly not related to deteriorating housing. But several were – about 10% of all the records and an even higher percentage of those where there was an indication of what had caused lead poisoning. It is not a large sample size, but it certainly indicates that deteriorating housing was a problem for child lead poisoning. Even more telling was that the social workers who wrote medical notes on these children did not seem at all surprised that deteriorating housing was a source of lead poisoning. In short, deteriorating paint and plaster was probably a significant, if not dominant, cause of child lead poisoning even before the late 1940s.

The records also suggested to me one reason why historians have not come across much information on this before. Investigating home conditions was the province of female social workers at the time and it may have been that their findings were not accorded as much respect. Later, public health departments began investigating the conditions of homes with regard to lead paint. But public health departments did not do much of that before the 1940s. In one case of child lead poisoning, for example, the Baltimore Public Health Department was highly dismissive of a social worker's finding that a house

had deteriorating lead paint. Despite providing the BCHD with a *chemical test* showing the paint contained lead, the BCHD dismissed the social worker's concern based on a (male) public health inspector's *visual inspection* of the paint.

In addition to examining medical records, I also found an interesting survey on the condition of school buildings in Baltimore from the 1920s during a research trip to the Enoch Pratt Library. Many of the schools had peeling paint and, not surprisingly, those in the poorest areas and those that were for African-Americans were in the worst conditions. Oddly, historians of lead have never discussed school conditions (to my knowledge). It may be that the most critical period for lead exposure has passed by the time children are of school age (the research is still out on critical periods), but there is little doubt that exposure to young school age children would be detrimental. It is still not clear to me if Baltimore schools used lead paint at the time, but it is very possible (schools in other places certainly did). This may be an over-looked source of child lead exposure in the 20th century.

2. Why did the housing stock of post-war Baltimore deteriorate, exposing many children to hazard lead paint?

Although my research revealed that deteriorating housing was a source of lead exposure before World War II, there is little doubt that housing deterioration increased in post-war Baltimore. There was a spike in child lead poisoning in the 1950s that resulted (in part) from this deterioration as researchers at the time and since understood. It struck me, though, that there was little in the way of explanation as to *why* housing deteriorated so badly in the city in the 1950s. After all, this was not a time of economic hardship. It was the "Golden Age" of American capitalism. Of course, it was also the Golden Age of the suburbs. Many descriptions of urban America imply that suburbanization and inner city deterioration went hand-in-hand. Perhaps, but why? It seemed to me a relationship that was more asserted than explained. I wanted to know more, especially in regard to housing deterioration and lead paint.

Government documents from the Enoch Pratt Library and the Langsdale Collection at the University of Baltimore, along with newspaper coverage, suggest some reasons. One is that a combination of factors led to a highly unstable housing market in the inner city. That lack of stability was a disincentive to owners to maintain their houses, led to speculative buying, which was also not conducive to housing maintenance, and led to a devaluation of housing, which allowed the spread of slumlord-style housing management. The factors that were critical to this were: 1) The massive expansion of the suburban housing market; 2) exclusion of blacks from the suburban housing market; 3) lending discrimination against inner city housing, and against blacks; 4) the association of declining property values with proximity to black homes or housing integration. What these factors all led to was white flight from neighborhoods as blacks moved in or close to them. This, as I said, led to disinvestment, speculation, and (a self-fulfilling prophecy) declining property values. Basically, whites had the ability to move to suburbia (because it was expansive and subsidized through government housing policy), and they believed they needed to in order to save some of their housing investment (among other reasons for moving, both racial and non-racial). Blacks in the inner city, however, could not move to suburbia, and they had very limited options for lending. This created a captive housing market, one especially vulnerable to slumlords.

I found many additional documents that will inform other aspects of this project as well, including the way inner city children were exposed to leaded gas pollution from commuter traffic, the efficacy of health code enforcement policies, and the way public health officials understood lead risks. I would like to thank the History Project and the Institute for New Economic Thinking for their generous support of this research.