Getting the Lead Out
The Rhode Island Lead Paint Trials
and Their Impact on Children’s Health

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THE COST OF BEING POOR: POVERTY, LEAD POISONING,
AND POLICY IMPLEMENTATION
By J. W. Richardson, 222 pp, $119.95.

DECEIT AND DENIAL: THE DEADLY POLITICS
OF INDUSTRIAL POLLUTION
By G. E. Markowitz and D. Rosner, 428 pp, $21.95.

OLD PAINT: A MEDICAL HISTORY OF CHILDHOOD LEAD-PAINT
POISONING IN THE UNITED STATES TO 1980
By P. C. English, 254 pp, $57.98.

BRUSH WITH DEATH: A SOCIAL HISTORY OF LEAD POISONING
By C. Warren, 384 pp, $25.

LIKE MANY PEDIATRICIANS, I FIRST ENCOUNTERED THE
medical nightmare called childhood lead poisoning
during internship. Twenty years or so ago, I cared
for dozens of children whose futures had been hijacked by a stealthy toxin lurking in the walls of their homes.

All of those patients had sustained enough physical damage from lead poisoning to warrant lengthy courses of chelating agents. I can still hear the yelps of these kids as they endured additional batteries of painful, deep intramuscular injections. Perhaps the most frustrating aspect of this enterprise was that once their medical course was completed, these children returned to the same lead-infested homes in which their troubles had begun. Soon enough, many were discovered to have what we wistfully called a “lead relapse” and readmitted for another round of medication.

As my attending physician, Julian J. Chisolm, an expert in lead poisoning, explained, “there are two excellent ways for children to acquire brain damage: the first is to hit their heads hard against a stationary or moving object; the second, much slower, is to ingest lead paint.”

Childhood lead poisoning is a centuries-old scourge that refuses to retire, even though it has declined significantly since the 1970s, when the US government began phasing out leaded gasoline and prohibited the manufacture of lead paint.

Lead is toxic to all humans but is especially damaging to children, who absorb lead at 5 times the rate of adults and whose brains are still developing. In the United States today, 400,000 individuals, or 2% of all children 5 years or younger, have ingested enough lead to yield significant harm in the form of learning disabilities, lower intelligence scores, behavioral and gastrointestinal problems, and—at higher levels—seizures, encephalopathy, and death. Millions more are at risk for developing these health conditions.

Sadly, as Jeanita Richardson demonstrates in The Cost of Being Poor: Poverty, Lead Poisoning, and Policy Implementation, the effects of lead paint are most severely felt by the poorest, youngest, and most disenfranchised. Sixteen percent of impoverished minority children have elevated blood lead levels, typically because they live in older, less well-maintained homes in which lead paint coats deteriorate into chips, flakes, or dust. Toddlers in particular, because they tend to explore the world primarily through their mouths, are at risk for ingesting or inhaling lead. The costs are enormous. A 2002 study estimated the economic impact of lead poisoning in the United States to be $43 billion per year.

Finding an entity to pay for the huge health burden lead products have imposed on humankind has proven rather difficult. Initially, lawyers representing lead-poisoned children went after slumlords, with only spotty success. In many of these suits, property owners prevailed by blaming parents of lead-poisoned children for inadequately supervising their charges or keeping unkempt homes; others denied culpability because they did not actually apply the paint in these decades-old homes. Adding to this defense, beginning in the 1980s, many property owners hired expensive legal counsel to incorporate each home they owned as separate companies to avoid or attenuate lawsuits initiated by their tenants.

As Richardson explains, public health departments and government agencies during this period were stymied in their attempts to carry out lead abatement in lead-tainted homes, because if abatement is performed incorrectly or on the cheap (for example, sanding down lead-tainted walls), the lead be-
comes even more bioavailable and thus more dangerous. Definitive abatement, they complained, was simply too expensive.

Going after individual lead paint manufacturers for restitution represented the legal equivalent of finding the Holy Grail. After all, years after multiple coats of paint are applied to a surface, it is impossible to prove which lead paint product actually caused a child’s lead poisoning. For decades these companies repelled litigation by insisting that their products were safe as long as they were well maintained or painted over with newer, less-toxic products. They also claimed that there was great uncertainty among the medical community over the hazardous effects of lead paint during the first half of the early 20th century, when the product was most widely sold.⁶

In fact, as Christian Warren explains in Brush With Death: A Social History of Lead Poisoning, lead’s toxic effects have been understood by physicians for quite some time. One critical moment occurred in 1904, when the Australian physician James Lockhart Gibson reported the link between lead poisoning and “painted railings and walls.”⁷ In 1913, Henry Thomas and Kenneth Blackfan at the Johns Hopkins Hospital began a series of influential studies describing severe encephalopathy among young children known to gnaw at their cribs.⁸ According to Warren, between 1920 and the mid 1960s, hundreds of reports appeared in the medical literature delineating the health risks posed to children by lead paint.

Since the 1970s, there has been a veritable explosion of clinical revelations, such as the studies by Herbert Needleman and others of the University of Pittsburgh, demonstrating that even extremely low levels of lead in children yield neurotoxic damage in the developing brain.⁹-¹¹

More recently, neurobiologists have discovered that low levels of lead alter signal transduction and synaptic strengthening, which are critical to the development of such tasks as learning, memory, and attention.¹² All this knowledge now serves as the evidence base for the US Centers for Disease Control and Prevention’s 2005 edict that no amount of lead is tolerable or safe in the bodies of children.¹³

The legal landscape finally began to change in 1999, when the attorney general of Rhode Island, Sheldon Whitehouse (who was elected as the US senator in 2006 from that state), initiated a lawsuit against 7 major companies that had manufactured lead paint—Sherwin Williams, NL Industries, American Cyanamid, ConAgra Grocery Products, Millennium Holdings, Dupont, and Atlantic Richfield. The suit was based on one of the oldest public health legal doctrines of, primarily, impoverished minority children.⁴

Yet, as we are finding out in more and more legal battles involving corporations that produce hazardous materials, getting to the bottom of these industrial-strength poisonous messes often requires digging through the detritus of the companies themselves. This is the path taken by Gerald Markowitz and David Rosner in their book Deceit and Denial: The Deadly Politics of Industrial Pollution. In 1996, Markowitz and Rosner received a phone call from the New York City Law Department asking if they would like to explore a roomful of boxes consisting of internal memoranda, files, and meeting minutes from the LIA that the city acquired in preparing for its suit against the lead paint manufacturers.

According to internal memoranda unearthed by these scholars, the lead industry demonstrated a clear understanding that lead paint was a “slow, cumulative poison” as early as the first decade of the 1900s. From that point to well until the 1960s, LIA minutes record many discussions about the mounting medical literature documenting their product’s deadly grip and about underwriting research designed to refute or obfuscate such reports.

During this same period, the industry continued to manufacture and market lead paint as a safe, sanitary product for covering the walls, doorjams, furniture, and windowsills of children’s nurseries, bedrooms, and schoolhouses. Indeed, the paint manufacturers often aimed marketing strategies at children, with coloring books, puppets, and other “kid-friendly” giveaways featuring cartoon characters such as “the Dutch Boy” explaining how to brighten their drab, “gloomy” rooms with lead paint. Millions of US children responded to these time-honored advertising techniques by begging their parents to purchase buckets of the stuff.

Peter English, a pediatrician and medical historian, began researching the history of childhood lead poisoning while preparing an affidavit submitted on behalf of the Lead Industries Association (LIA) when New York City initiated a lawsuit against the LIA in 1999.¹⁵ The book he published in 2001, Old Paint: A Medical History of Childhood Lead-Paint Poisoning in the United States to 1980, closely parallels the lead industry’s legal positions and ignores many of the scientific studies that challenge his view.

For example, English argues that while physicians began to explore the risks of lead paint beginning in the early 1900s, its effects were far from completely understood until well after the 1950s. Once the toxic nature of lead did become clear, he insists, the lead paint industry “met this hazard head on.” In subsequent chapters, English unconvincingly explains the childhood lead poisoning epidemic of the 1960s as essentially a social phenomenon resulting from “white flight” out of American cities, leaving behind blighted housing in which walls and windows finished with lead paint were improperly cared for by slumlords or tenants. Soon enough, eroded paint began to enter the bodies of, primarily, impoverished minority children.

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Based on the testimony of Markowitz and Rosner, the Rhode Island lawsuit argued that the industry had understood the dangers of its products for nearly a century. Although the first case resulted in a hung jury in 2003, a second trial, under Whitehouse’s successor, attorney general Patrick Lynch, began in fall 2005. In February of 2006, a jury found 3 of the lead paint companies (Sherwin Williams, NL Industries, and Millennium Holdings) guilty. Du Pont settled early in the proceedings for $12 million, and Atlantic Richfield was dropped from the suit because it had produced lead paint for a shorter period of time and there was less evidence of its activities. ConAgra was dismissed on a summary judgment because they had sold their products primarily along the West Coast. American Cyanamid was severed from the trial and will be tried at a later date.

The Rhode Island legal team learned valuable lessons from the Master Settlement Agreement generated by the Big Tobacco case of 1996, in which huge checks were (and are) simply written to state governments and then typically used to fill budgetary holes rather than paying for tobacco prevention or cessation programs. Instead of asking for past damages for those children already poisoned, the Rhode Island suit argued that the companies found guilty should bear the financial responsibility of preventing the poisoning of future generations by underwriting the costs of abating these homes of deadly lead (about $15 500 per home).

Since at least 240 000 homes in Rhode Island contain lead paint, the cost faced by these companies could be as much as $4 billion. Similar lawsuits are pending in Ohio, California, New Jersey, Milwaukee, and St Louis, and that does not even begin to account for dozens of other cities and state attorneys general offices across the nation considering their own public-nuisance cases against the lead paint industry.

Today, 24 million homes in the United States still contain lead paint that was applied during the first half of the 20th century. Approximately 4 million have 1 or more children living in them. If successful, the settlements for lead abatement in these homes could constitute the largest cash award in US legal history and prevent new cases of lead poisoning, asthma, cancer, and developmental disabilities.

On February 26, 2007, in response to an appeal by the lead paint companies, Rhode Island Superior Court judge Michael A. Silverstein upheld the 2006 jury’s verdict in a 197-page decision calling for a special master to be appointed, under his direction, to supervise lead abatement in these homes. In response, the paint manufacturers’ attorneys filed an appeal to Rhode Island’s Supreme Court on April 16, 2007, a move guaranteed to further delay cleaning up the mess.

Tragically, for our nation’s poorest children, the story is far from finished. Every year, lead paint robs thousands of their brain power, spirits, and futures. When, the historian in me asks, will this seemingly endless saga actually be relegated to history?

REFERENCES

6. Thomas HM, Blackfan KD. Recurrent meningitis, due to lead in a child of five years. AJDC. 1914;8:377-380.