Lead Poisoning and Racism in the Time of COVID-19

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t has been 5 years since Flint, Michigan made national headlines for the dangerous levels of lead in its drinking water thanks to Dr Mona Hanna-Attisha's tireless advocacy.1 Despite the attention brought to lead poisoning, this issue continues to plague children in the primary care setting throughout Wisconsin. An overwhelming amount of research confirms what we already knew-there is no amount of lead in the body that is safe.2 Yet, the Environmental Protection Agency currently allows up to 15 parts per billion (ppb) of lead in our drinking water,2 far exceeding the American Academy of Pediatrics' recommendation of 1 ppb.3 Children under the age of 6 years are vulnerable to the effects of lead, negatively altering their development and resulting in lifechanging neurologic, cognitive, and behavioral problems.4 Wisconsin falls short in protecting our children. A 2019 report by the Environment America Research and Policy Center and US Public Interest Research Group Education Fund gave the state of Wisconsin an "F" for its failure

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to provide lead-free drinking water in schools, endangering children's health.⁵

Lead poisoning is especially a problem in Milwaukee, Wisconsin, notorious for being one

Hispanic/Latinx communities as fewer lead screening tests were performed, fewer follow-up visits for patients with elevated blood lead levels were conducted, and people spent more

Lead poisoning is especially a problem in Milwaukee, notorious for being one of the most racially segregated cities in the US.

of the most racially segregated cities in the US.6 There are approximately 70,000 residential lead pipes located throughout Milwaukee, including the north and south sides, that deliver unsafe drinking water to Black and Hispanic/ Latinx communities, respectively. In addition, many of these homes were built before 1978, when lead paint was used.8 This history of housing segregation spans decades, driven by redlining. White flight, and lack of investment in low-income areas, which locked communities of color into certain neighborhoods. 9,10 These racist policies have had pervasive effects to this day. Lead poisoning, among other health issues, disproportionately affects Black and Hispanic/Latinx children relative to their White peers, further contributing to disparities such as the academic achievement gaps demonstrated yearly in the Nation's Report Card. 11,12

The COVID-19 pandemic highlights these racial inequities, worsening Milwaukee's lead poisoning crisis. The pandemic increased the risk of lead poisoning among Black and

time at home.⁴ Because of their ZIP codes, these children are consistently exposed to lead dust and water. These children are often from low-income families and rely on BadgerCare and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) for recommended lead screening, which requires a blood draw at ages 12, 18, and 24 months.¹³ However, WIC and clinic offices have temporarily transitioned to telemedicine or limited office visits, which has been associated with a 34% reduction in lead screening per early Centers for Disease Control and Prevention estimates.¹⁴

One year after the World Health Organization declared COVID-19 a pandemic, we are now looking forward to vaccinations for all, however we must continue to address the immediate threats to children's' health: lead pipes and older homes. Until we address these issues at the source, we are doing a gross disservice to our fellow Wisconsinites, particularly our Black communities. Providing lead-free water and

homes is our chance to demonstrate that Black Lives Matter by reducing racial disparities. In Milwaukee, it was not until 2017 that decisive action was finally started towards replacing lead pipes. As of 2020, approximately only 2,000 pipes have been replaced, significantly behind the Milwaukee Water Works' goal. This is not enough. Lead poisoning is a health problem that can affect generations of Black and Hispanic/Latinx communities due to the lack of upward housing mobility opportunities, which bars these families from escaping these hazardous conditions and perpetuates intergenerational inequity.

We need to take a hard look at why Milwaukee is behind in securing safe drinking water. The root of the issue is longstanding systemic inequity as affluent regions of Wisconsin have had timely replacement of their lead pipes. Prior to 2018, the state counted on residents in these areas to pay for the private side of the lead lateral replacements, an option that low-income Milwaukee residents could not afford. 16,17 Because of this unfortunate reality, the city historically depended more on state and federal funding for lead poisoning relief. According to the City of Milwaukee 2020 Budget in Brief, "While state general purpose tax collections have grown significantly, the shared revenue payment to Milwaukee has decreased."18 With the current funding, it will take roughly 70 years to replace all lead pipes in the city. This is an unacceptable amount of time.15 There is some hope via the Wisconsin Department of Natural Resources' Private Lead Service Line Replacement Program, which provides funding for lead pipe replacement; but with the current devastation of COVID-19, this is still too little. 19 As the state revenue and the city budget take a hit, we are left to reassess funds on an annual basis.20

Just as Dr Mona Hanna-Attisha stood up for Flint, Michigan, physicians who are on the front lines of primary care must continue advocating for government-funded lead paint abatement and lead pipe replacement. The problem of lead poisoning is man-made—exacerbated by inequity—and preventable with enough state and federal funding. Advocacy in recent years has resulted in the creation of several councils, coalitions, and policy changes. However, more

must be done to reverse the decades of lead poisoning on our fellow Wisconsinites and to prevent lead poisoning in the decades to come. Milwaukee declared racism a public health crisis in 2019: it is time we address these issues now with great urgency by increasing funding to end lead poisoning.²¹

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