

2-7-2022

Hoosier Public Health: Reinvigorating Indiana Lead Law Using a Lens for Health Equity

Cassidy Segura Clouse

Indiana University McKinney School of Law, ckclouse@indiana.edu

Follow this and additional works at: <https://www.repository.law.indiana.edu/ijlse>



Part of the [Law Commons](#)

Publication Citation

Cassidy Segura Clouse, Comment, Hoosier Public Health: Reinvigorating Indiana Lead Law Using a Lens for Health Equity, 10 Ind. J.L. & Soc. Equal. 291 (2022).

This Comment is brought to you for free and open access by the Maurer Law Journals at Digital Repository @ Maurer Law. It has been accepted for inclusion in Indiana Journal of Law and Social Equality by an authorized editor of Digital Repository @ Maurer Law. For more information, please contact rvaughan@indiana.edu.



JEROME HALL LAW LIBRARY

INDIANA UNIVERSITY
Maurer School of Law
Bloomington

Hoosier Public Health: Reinvigorating Indiana Lead Law Using a Lens for Health Equity

Cassidy Segura Clouse*

Introduction.....	1
I. LAW AS A STRUCTURAL DETERMINANT OF HEALTH.....	5
A. <i>Using a Health Equity Lens to Alter Public Health Law Environments: The Health in All Policies and Health Justice Frameworks</i>	5
B. <i>Indiana’s Public Health System</i>	9
C. <i>The Inadequacy of Lead Laws in Indiana</i>	12
i. <i>Federal Backdrop of Lead Regulation</i>	12
ii. <i>State Statutory Lead Law</i>	14
iii. <i>State Administrative Lead Law</i>	16
iv. <i>Local Lead Law</i>	17
II. THE STORY OF LEAD AT WEST CALUMET	19
A. <i>West Calumet as a Case Study for Lead Inequities</i>	19
B. <i>West Calumet and Similar Stories in Context</i>	21
C. <i>Analyzing Public Health Laws for Equity</i>	23
III. MOVING FORWARD: WAYS TO EQUITABLY ELIMINATE PREVENTABLE LEAD POISONING	26
A. <i>Indiana as Fertile Ground for Equitable Health Policies</i>	26
B. <i>Proposed Policy Changes and Enforcement Actions</i>	28
i. <i>Executive Action</i>	28
ii. <i>Legislative Action</i>	29
iii. <i>Agency Action</i>	30
iv. <i>Administrative Challenge for Nonenforcement</i>	31
v. <i>Claims Against the Government</i>	32
vi. <i>Claims Against Private Landlords</i>	35
C. <i>Public Policy Considerations</i>	36
D. <i>Financing and Feasibility</i>	38
CONCLUSION.....	40

INTRODUCTION

That the preservation of public health is one of the duties devolving upon the State, as a sovereign power, cannot be successfully controverted. In fact, among all of the objects sought to be secured by governmental laws, none is more important than the preservation of public health; and an imperative obligation rests upon the State, through its proper instrumentalities or agencies, to take all necessary steps to promote this object. This duty finds ample support in the police power, which is inherent in the State and one which the latter cannot

* J.D. Candidate, Indiana University Robert H. McKinney School of Law, 2022.

*surrender.*¹

Although physicians by the 1920s widely acknowledged the harmful and preventable effects of lead poisoning, it was not regulated until the 1970s and has never been adequately addressed.² Today, an estimated 3.6 million homes have children living among lead paint hazards, and an estimated 500,000 children nationwide have elevated blood-lead levels (EBLLs) of over 5 micrograms of lead per deciliter of blood (ug/dL).³ Other common sources of lead poisoning are leaded water pipes, such as what caused the environmental disaster in Flint, Michigan,⁴ and lead contained in soil, leftover from industrial lead manufacturing plants and the bygone days when lead was used in gasoline.⁵ When lead enters the bloodstream, it is deposited in bones, teeth, and, most dangerously, the soft tissue of vital organs such as the kidneys, liver, heart, and brain.⁶ And although circulating blood-lead levels can generally be reduced to “safe” levels after one year of case management, it remains a dangerous toxin. Deposited lead can be released from bones in times of physiological stress, such as during pregnancy and nursing, where it can be passed to babies in utero and through breastmilk.⁷

Researchers across disciplines have shown that lead poisoning (1) decreases attention;⁸ (2) increases impulsivity, instances of behavioral disorders, later criminal, and socially deviant behavior;⁹ (3) whittles away at grey matter in the

¹ *Blue v. Beach*, 56 N.E. 89, 92 (Ind. 1900).

² See GERALD MARKOWITZ & DAVID ROSNER, *LEAD WARS: THE POLITICS OF SCIENCE AND THE FATE OF AMERICA'S CHILDREN* 6–7, 28, 52 (2013).

³ Marissa Hauptman, Rebecca Bruccoleri & Alan D. Woolf, *An Update on Childhood Lead Poisoning*, 18(3) *CLINICAL PEDIATRIC EMERGENCY MED.* 1, 1 (2017).

⁴ *Basic Information About Lead in Drinking Water*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water> [<https://perma.cc/Z9QE-YY3N>] (last accessed December 31, 2021).

⁵ *EPA Takes Final Step in Phaseout of Leaded Gasoline*, U.S. ENV'T PROT. AGENCY: EPA'S WEB ARCHIVE (Jan. 29, 1996), <https://archive.epa.gov/epa/aboutepa/epa-takes-final-step-phaseout-leaded-gasoline.html> [<https://perma.cc/T8RB-TVZA>]; *Lead in Soil*, CTRS. FOR DISEASE CONTROL AND PREVENTION (March 29, 2021), <https://www.cdc.gov/nceh/lead/prevention/sources/soil.htm> [<https://perma.cc/8S24-H3VS>].

⁶ AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, *CASE STUDIES IN ENVIRONMENTAL MEDICINE (CSEM): LEAD TOXICITY* 64, 66 (2017). Although blood lead levels are the most common and effective measure of ongoing lead exposure, a better measure of long-term lead in the body resulting from exposures is the “total body burden” of lead. *Id.* at 66, 112–113.

⁷ *Id.* at 15, 50. Maternal exposure to lead causes DNA methylation, resulting in intergenerational effects; lead exposure can be traced from grandchildren who have never been exposed to lead. *Id.*; see also Arko Nicole Heredia, Marie-Claude Senut, Susan Land, Kurt Hollocher, Xiangyi Lu, Mary O. Dereski & Douglas M. Rudenl, *Multigenerational Epigenetic Inheritance in Humans: DNA Methylation Changes Associated with Maternal Exposure to Lead Can Be Transmitted to the Grandchildren*, *SCI. REPS.*, Sept. 2015, at 6.

⁸ See, e.g., Maryam Daneshparvar, Seyed-Ali Mostafavi, Maryam Zare Jeddi, Masud Yunesian, Alireza Mesdaghinia, Amir Hossein Mahvi & Shahin Akhondzadeh, *The Role of Lead Exposure on Attention-Deficit/Hyperactivity Disorder in Children: A Systematic Review*, 11 *IRANIAN J. PSYCHIATRY* 1, 12 (2016).

⁹ See, e.g., James J. Feigenbaum & Christopher Muller, *Lead Exposure and Violent Crime in the Early Twentieth Century*, 62 *EXPL. IN ECON. HIST.* 51, 53, 78 (2016) (correlating historical lead water pipe use with a twenty-four percent higher homicide rate); see also Stephen B. Billings & Kevin T. Schnepel, *Life After Lead: Effects of Early Interventions for Children Exposed to Lead*, 10 *AM. ECON. J.: APPLIED ECON.* 315, 331, 339–40 (2018) (finding significant decreases in anti-social behaviors after EBLL intervention and estimating a 1.4:1 benefit-cost ratio).

brain, decreasing IQ and problem-solving skills;¹⁰ and (4) reduces the child's health quality across the child's life span due to increased risk of long-term health implications, such as liver failure and heart disease.¹¹ These consequences profoundly affect the lives of people poisoned by lead, the lives of their families, and affect society at large in the form of additional fiscal, public health, and shared quality of life burdens.¹²

Some positive regulatory steps have been taken. Indiana has laws on the books regulating lead paint use,¹³ offering services for children found to have EBLs,¹⁴ and imposing mandatory abatement procedures that subject non-compliant property owners to prosecution.¹⁵ But in practice, less than 12% of Hoosier children are tested for lead poisoning each year.¹⁶ Even with this abysmal probability of detection, 607 children under age seven had one EBL test result and 196 had confirmed EBLs in 2019.¹⁷ These rates hold true even though testing rates have trended upward over the past five years and even though Indiana uses the outdated 10 ug/dL standard for classifying a blood lead level as "elevated."¹⁸ The CDC has recommended a 5 ug/dL reference value since 2012 and a 3.5 ug/dL reference value since 2021.¹⁹ Indiana is in the bottom third of states for confirmed

¹⁰ See, e.g., Aaron Reuben, Avshalom Caspi, Daniel W. Belsky, Jonathan Broadbent, Honalee Harrington, Karen Sugden, Renate M. Houts, Sandhya Ramrakha, Richie Poulton & Terrie E. Moffitt, *Association of Childhood Blood Lead Levels with Cognitive Function and Socioeconomic Status at Age 38 Years and with IQ Change and Socioeconomic Mobility Between Childhood and Adulthood*, 317 JAMA 1244, 1249 (2017) (finding that each additional 5 ug/dL of lead in blood is associated with a 1.61-point decrease in IQ).

¹¹ See, e.g., Bruce P. Lanphear, Stephen Rauch, Peggy Auinger, Ryan W. Allen & Richard W. Hornung, *Low-Level Lead Exposure and Mortality in U.S. Adults: A Population-Based Cohort Study*, 3 LANCET: PUB. HEALTH e177, e182 (2018) (concluding that when accounting for BLLs under 5 ug/dL, "about 400,000 [deaths] are attributable to lead exposure, an estimate that is about ten times larger than the current one).

¹² See, e.g., Peter Muennig, *The Social Costs of Childhood Lead Exposure in the Post-Lead Regulation Era*, 163 ARCHIVES PEDIATRIC & ADOLESCENT MED. 844, 846-48 (2009).

¹³ See, e.g., IND. CODE § 16-41-39.8-6 (2021).

¹⁴ *Id.* § 16-41-39.4-1(b).

¹⁵ 410 IND. ADMIN. CODE. 29-4-3 (2019).

¹⁶ See IND. ADVISORY COMM. TO THE U.S. COMM'N ON CIV. RIGHTS, ENVIRONMENTAL INJUSTICE: LEAD POISONING IN INDIANA 20 (2020) [hereinafter CIVIL RIGHTS];

¹⁷ IND. DEP'T OF HEALTH, LEAD & HEALTHY HOMES DIV., 2019 CHILDHOOD LEAD SURVEILLANCE REPORT 7 (2019), <https://www.in.gov/health/files/2019-Lead-Report.pdf> [<https://perma.cc/56ZP-N5LS>] [hereinafter 2019 LEAD REPORT]. Although the 2020 report has been released, the 2019 report will be referenced here and throughout due to testing obstacles posed by the ongoing COVID-19 pandemic. See IND. DEP'T OF HEALTH, LEAD & HEALTHY HOMES DIV., 2020 CHILDHOOD LEAD SURVEILLANCE REPORT 3 (2020), <https://www.in.gov/health/files/2020-Annual-Lead-Report-FINAL.pdf> [<https://perma.cc/L9X9-V993>].

¹⁸ See 2019 LEAD REPORT, *supra* note 17, at 7-8. Bizarrely, the highest-risk areas, like East Chicago, Indiana, have shown a downward trend in testing since 2008. CIVIL RIGHTS, *supra* note 16, at 21; see also Heidi Beidinger-Burnett, Lacey Ahern, Michelle Ngai, Gabriel Filippelli & Matthew Sisk, *Inconsistent Screening for Lead Endangers Vulnerable Children: Policy Lessons from South Bend and Saint Joseph County, Indiana, USA*, 40 J. PUB. HEALTH POL'Y. 103, 108 (2019) (identifying inconsistent lead screening rates rather than CDC-recommended universal testing as a contributing factor to the high number of children with EBLs in the area).

¹⁹ *Blood Lead Reference Value*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Dec. 30, 2020), <https://www.cdc.gov/nceh/lead/data/blood-lead-reference-value.htm> [<https://perma.cc/8BP6-M92E>]; *CDC Updates Blood Lead Reference Value for Children*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Oct. 28, 2021), <https://www.cdc.gov/media/releases/2021/p1028-blood-lead.html> [<https://perma.cc/4VGR-LZ9F>].

EBLLs and the tenth percentile for percent of children tested.²⁰ This poor testing history is particularly concerning because nearly 60% of Indiana’s housing stock was built before 1980, when lead paint was almost certainly used in the home.²¹ 196 Hoosier children tested in 2019 had confirmed EBLs over 10 ug/dL.²² This statistic includes the children in the West Calumet Housing Complex in East Chicago, Indiana, now designated a federal Superfund site.²³ There, an estimated 40% of children in 1998 through at least 2011 had EBLs in excess of 30 ug/dL—eight times the threshold concentration that would trigger case management services using CDC standards.²⁴ Some analyses estimate that up to 76% of children with actionable EBLs are never identified in Indiana.²⁵

Indiana is no stranger to residential lead poisoning, and it is not a problem that has disappeared with time. Today problems persist—and they persist inequitably. Although Indiana’s population is 85% White,²⁶ 63% of the children with EBLs in 2019 were non-White.²⁷ And although Medicaid requires all 120,000 children on Indiana’s health plan—a population disproportionately composed of Black and Hispanic children—to be tested at twelve and twenty-four months, Indiana regularly tests fewer than 40,000.²⁸ The situation is so dire that the Indiana Advisory Committee to the U.S. Commission on Civil Rights focused its 2020 report entirely on the issue, stating that “Indiana has a troubling history with caring for and protecting non-[W]hite residents from lead poisoning.”²⁹

Using an oft-forgone equity lens, this Article will examine the disconnect between science, black-letter law, and the nonenforcement of life-changing regulations. Part I will examine law as a structural determinant of health, reviewing the history and status of lead law in Indiana. Part II will highlight the acute result of chronic governmental apathy at the West Calumet Housing Complex in East Chicago, Indiana. Part III will explore pragmatic pathways to enforcement and more responsive policy to reduce the incidence of childhood lead poisoning in

²⁰ CDC National Childhood Blood Lead Surveillance Data, CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/nceh/lead/data/national.htm> [<https://perma.cc/SY44-T32Y>] (last visited July 29, 2021) (click “National Surveillance Data table” to download spreadsheet).

²¹ 2019 LEAD REPORT, *supra* note 17, at 4.

²² *Id.* at 7.

²³ See SHRIVER CTR. ON POVERTY L. & EARTHJUSTICE, POISONOUS HOMES: THE FIGHT FOR ENVIRONMENTAL JUSTICE IN FEDERALLY ASSISTED HOUSING 4–5 (2020), https://www.povertylaw.org/wp-content/uploads/2020/06/environmental_justice_report_final-rev2.pdf [<https://perma.cc/7T47-5YUE>] [hereinafter POISONOUS HOMES]. A Superfund site is a toxic waste dump identified for cleanup under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). See *What Is Superfund?*, U.S. ENV’T PROT. AGENCY (Nov. 30, 2018), <https://www.epa.gov/superfund/what-superfund> [<https://perma.cc/V9SK-LD7Y>].

²⁴ POISONOUS HOMES, *supra* note 23, at 43; see *infra* Section I.C.3. for a discussion of case management services available in Indiana.

²⁵ CIVIL RIGHTS, *supra* note 16, at 22.

²⁶ *QuickFacts: Indiana*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/IN/POP010220#POP010220> [<https://perma.cc/CC3U-3PZ5>] (last accessed Jan. 5, 2021).

²⁷ 2019 LEAD REPORT, *supra* note 17, at 9.

²⁸ CIVIL RIGHTS, *supra* note 16, at 22–23, 27.

²⁹ *Id.* at 3.

Indiana.

I. LAW AS A STRUCTURAL DETERMINANT OF HEALTH

*We have to stop and think about how these negative conditions came into being. They are not accidents and they are not acts of God Deliberate policies made in the past created the segregation that we have and the concentration of poor people in public housing that we have. The good news is, because they were humanly made and they reflect the implementation of specific policies, they can also be reversed if we have the will and the commitment to make changes and develop a different model of giving individuals opportunity.*³⁰

Structural and social determinants of health create a “complex feedback loop”—where inequity exists in one, it exists in the other.³¹ Structural determinants of health may include “the form of governance, macroeconomic policies, social policies, public policies, and culture/societal values.”³² There are “two important ways that law interacts with social determinants: (1) law helps structure and perpetuate the social conditions that we describe as ‘social determinants,’ and (2) law acts as a mechanism or mediator through which social structures are transformed into levels and distributions of health.”³³

A. Using a Health Equity Lens to Alter Public Health Law Environments: The Health in All Policies and Health Justice Frameworks

Because law is a structural determinant of health, as the structure changes, so too can health outcomes.³⁴ Multiple theories and considerations may guide the inquiry into potential levers of change for equitable public health laws. The Health in All Policies (HiaP) and health justice frameworks are especially applicable here. The World Health Organization has defined HiaP as:

[A]n approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity. It improves accountability of policymakers for health impacts at all levels of policy-making. It includes an emphasis on the consequences of public policies on health

³⁰ David R. Williams, *Unnatural Causes . . . Is Inequality Making Us Sick?*, PBS 7–8 (2008), <https://unnaturalcauses.org/assets/uploads/file/davidwilliams.pdf> [<https://perma.cc/UL7B-HKRR>] (edited interview transcript). “Mr. Williams is the Norman Professor of Public Health and professor of African and African American Studies and of Sociology at Harvard University. He was the executive director of the Robert Wood Johnson Foundation Commission to Build a Healthier America.” *Id.* at 1.

³¹ Raj C. Shah & Sarah R. Kamensky, *Health in All Policies for Government: Promise, Progress, and Pitfalls to Achieving Health Equity*, 69 DEPAUL L. REV. 757, 759 (2020).

³² *Id.* at 760 (footnote omitted).

³³ Scott Burris, *From Health Care Law to the Social Determinants of Health: A Public Health Law Research Perspective*, 159 U. PA. L. REV. 1649, 1655–56 (2011).

³⁴ *Id.*; see Shah & Kamensky, *supra* note 31, at 760.

systems, determinants of health and well-being.³⁵

HiaP undergirded the formation of the Federal Partnership for Sustainable Communities,³⁶ which is an interagency partnership between the Department of Housing and Urban Development, the Environmental Protection Agency, and the Department of Transportation to ensure policies are acting in synergy with each other to serve communities better and to use federal tax dollars more efficiently.³⁷

A primary benefit of HiaP is that it is inherently nonpartisan.³⁸ It is a lens through which policy of any kind may be viewed, and it explicitly calls for a diversity of stakeholders across sectors to consider health implications of proposed legislation, policy, and regulation.³⁹ Theories supporting HiaP make it clear that effective policy-making relies on a confluence of shared vision, political support, and proper infrastructure to implement the policy.⁴⁰ Although conceptual frameworks for adoption are just that,⁴¹ WHO has identified six key HiaP components: (1) establishing the need and priorities for HiaP; (2) framing planned action; (3) identifying supportive structures and processes; (4) facilitating assessment and engagement; (5) ensuring monitoring, evaluation, and reporting; and (6) building capacity.⁴²

Enabling statutes alone are insufficient to ensure public health improvements if they are not accompanied by adequate resources for enforcement.⁴³ For this reason, public health systems should not be viewed as siloed into hospitals and primary care interventions.⁴⁴ Rather, public health systems should be viewed as an interconnected web of government agencies and community stakeholders with “governmental public health infrastructure” at its center.⁴⁵

Health justice is another framework that may guide a public health law equity analysis. Health justice is an offshoot of a capabilities approach to health equity, which, at its core, posits that equity is achieved when everyone has an equal opportunity for health.⁴⁶ “The capabilities approach ‘makes [it] clear that [securing a right] involves affirmative material and institutional support, not simply a failure

³⁵ WORLD HEALTH ORG., HEALTH IN ALL POLICIES: HELSINKI STATEMENT. FRAMEWORK FOR COUNTRY ACTION 2 (2014), https://apps.who.int/iris/bitstream/handle/10665/112636/9789241506908_eng.pdf?sequence=1 [<https://perma.cc/RG9K-XYVV>].

³⁶ Shah & Kamensky, *supra* note 31, at 761–62.

³⁷ PARTNERSHIP FOR SUSTAINABLE COMMUNITIES, OBAMA WHITE HOUSE, (2010), <https://obamawhitehouse.archives.gov/sites/default/files/uploads/SCP-Fact-Sheet.pdf> [<https://perma.cc/52K8-Y32V>].

³⁸ INST. OF MED., FOR THE PUBLIC’S HEALTH: REVITALIZING LAW AND POLICY TO MEET NEW CHALLENGES 88 (2011).

³⁹ *See id.* at 88, 90.

⁴⁰ *See* Shah & Kamensky, *supra* note 31, at 764–65.

⁴¹ *Id.* at 766.

⁴² WORLD HEALTH ORG., *supra* note 35, at 10–12.

⁴³ *See* INST. OF MED., *supra* note 38, at 16.

⁴⁴ *Id.* at 17.

⁴⁵ *Id.*

⁴⁶ Emily A. Benfer, *Health Justice: A Framework (and Call to Action) for the Elimination of Health Inequity and Social Injustice*, 65 AM. U. L. REV. 275, 337 (2015).

to impede.”⁴⁷ Health justice takes this a step further by presenting a relatively “new jurisprudential and legislative framework” to advance health equity and social justice goals.⁴⁸ It requires that considerations of “social determinants of health . . . be integrated into policy-making and judicial decision-making processes,”⁴⁹ which, in so many words, sounds strikingly similar to the HiaP framework.

As an authoritative voice in the field of housing and health justice, Professor Emily Benfer’s⁵⁰ work on health justice has already been at least theoretically applied to lead policy in Illinois⁵¹ and to federal responses to lead Superfund sites spurred by the multi-layered mishandling of lead hazards in East Chicago, Indiana.⁵² Benfer recommends four policies to protect the most at-risk individuals from the harmful and inequitable effects of decades of public health neglect: (1) adopting primary prevention policies (such as proactive lead hazard inspections); (2) engaging traditionally marginalized communities in the development of prevention policies; (3) increasing funding and better leveraging existing funding to implement policies; and (4) ensuring far greater enforcement and accountability.⁵³

B. Indiana’s Public Health System

Because Indiana is a “home rule” state, most public health power is vested at the local, rather than state, level through statutory enactments.⁵⁴ Local health executive boards are empowered to adopt reasonable rules, including, but expressly not limited to, concerns like public health nuisances, water pollution, pests, communicable diseases, food service and quality, and public facilities.⁵⁵ The establishment of policies, budgets, and duties of officers and employees are all left to decisions by the local boards of health and other local governmental entities.⁵⁶ Counties are statutorily required to have a local health department⁵⁷ that is managed by a local board of health.⁵⁸ A board of health is a statutorily bipartisan entity composed of seven appointed members with no more than four allowed to be from the same political party.⁵⁹ Local health departments are funded through

⁴⁷ *Id.* at 336 (quoting Martha C. Nussbaum, *Capabilities as Fundamental Entitlements: Sen and Social Justice*, 9 FEMINIST ECON. 33, 38 (2003)).

⁴⁸ *Id.* at 277.

⁴⁹ *Id.* at 337.

⁵⁰ *Emily Benfer: Visiting Professor of Law*, WAKE FOREST L., <https://law.wfu.edu/faculty/profile/benfere/> [<https://perma.cc/K5GJ-XB28>].

⁵¹ *See* Benfer, *supra* note 46, at 342 (describing the Illinois legislature’s health justice analysis in amending nuisance laws).

⁵² *See generally* POISONOUS HOMES, *supra* note 23 (describing lead hazards and federal action in East Chicago, Indiana).

⁵³ *See generally* Benfer, *supra* note 46.

⁵⁴ *See* Richard Briffault, Nestor M. Davidson, Paul A. Diller, Sarah Fox & Laurie Reynolds, *Principles of Home Rule for the Twenty-First Century*, NAT’L LEAGUE OF CITIES 10–12 (Feb. 12, 2020).

⁵⁵ IND. CODE § 16-19-3-4 (2014).

⁵⁶ *Id.* §§ 16-20-1-3, -5, -9.

⁵⁷ *Id.* § 16-20-2-2(a).

⁵⁸ *Id.* § 16-20-2-3.

⁵⁹ *Id.* § 16-20-2-4.

property taxes as set by the county's fiscal body.⁶⁰

Although the Indiana State Department of Health (ISDH) has generally restricted powers at the local level, it does have the option to step into those localities' shoes and exercise all rights and duties afforded to the locality if (1) the locality is shirking its duty to prevent the spread of communicable or infectious disease or (2) a public health emergency exists.⁶¹ This theoretically could lead to better, more narrowly tailored public health policy and implementation. But the World Health Organization has noted that localization of public health can have negative consequences: "Subject to local circumstances, the delegation of public health functions to the local level may create the risk that these functions will not be performed, a risk which may be exacerbated by lack of resources."⁶² The limited nature of ISDH oversight, the absence of guiding public health principles that are focused on equity, and the seeming lack of political will to legislate such guidance can result in ineffective implementation of public health measures.⁶³

Indiana's historical shortcomings in population health have not been remediated in the modern day. In 1946, ISDH (then the State Board of Health) issued a report on the state's public health. After identifying that Indiana ranked thirty-seventh nationally for public health, it concluded that: "Here is a paradox. Here is one of the nation's wealthiest states apathetic to the health of its citizens, able to provide but reluctant to act. Here is Indiana."⁶⁴ Today, Indiana ranks thirty-sixth in health outcomes overall, thirty-fifth in physical health, and thirty-second in social and economic health factors.⁶⁵ These outcomes are impressive considering that Indiana lags in forty-eighth place for health funding, spending only fifty-five dollars per person.⁶⁶ The state ranks forty-second for residential segregation,⁶⁷ which is disappointing but unsurprising given Indiana's tarnished past with anti-integration efforts⁶⁸ and the lasting impact of mid-twentieth-century Home Owners' Loan Corporation redline maps on residents' health outcomes today.⁶⁹

⁶⁰ *Id.* §§ 16-20-2-17, -18 (detailing the set statutory rate for local health department funding; Tippecanoe County is the only legislated rate at sixteen cents per \$10,000 in property taxes, or \$0.0000016 per dollar).

⁶¹ *Id.* § 16-19-3-12(a).

⁶² WORLD HEALTH ORG., *ADVANCING THE RIGHT TO HEALTH: THE VITAL ROLE OF LAW*, 28, 40, 82 (2017), <https://apps.who.int/iris/bitstream/handle/10665/252815/9789241511384-eng.pdf?sequence=1&isAllowed=y> [<https://perma.cc/R3K3-L8YM>].

⁶³ *Id.* at 60.

⁶⁴ IND. STATE BD. HEALTH, *PUBLIC HEALTH IN IND.* 3, 19 (1946), <https://collections.nlm.nih.gov/ext/dw/31421640R/PDF/31421640R.pdf> [<https://perma.cc/22YW-MXMD>].

⁶⁵ AM.'S HEALTH RANKINGS, *INDIANA* 2, 5 (2020), <https://www.americashealthrankings.org/api/v1/render/pdf/%2Fcharts%2Fstate-page-extended%2Freport%2F2020-annual-report%2Fstate%2FIN/as/AHR-2020-annual-report-IN-full.pdf?params=mode%3Dfull> [<https://perma.cc/2EKP-TUCM>].

⁶⁶ *Id.* at 2.

⁶⁷ *Id.*

⁶⁸ See RICHARD B. PIERCE, *POLITE PROTEST: THE POLITICAL ECONOMY OF RACE IN INDIANAPOLIS, 1920–1970* 55 (2005) ("Indianapolis fought school desegregation with a ferocity rarely matched by any other northern city").

⁶⁹ See T.D. Weathers, T.G.J. Leech, L.K. Staten, E.A. Adams, J.T. Colbert & K.F. Comer, *Worlds Apart: Gaps in Life Expectancy in the Indianapolis Metro Area* (July 15, 2015), https://www.savi.org/wp-content/uploads/2020/09/Worlds_Apart_Gaps_in_Life_Expectancy.pdf [<https://perma.cc/7SPG-6KB7>]; see generally RICHARD ROTHSTEIN, *THE COLOR OF LAW* (2017). Life expectancy patterns by zip code can be

In its 2018-2021 State Health Assessment, ISDH identified four public health flagship priorities: improve birth outcomes, address the opioid epidemic, reduce rates of chronic disease, and improve the public health infrastructure.⁷⁰ Strong public health educational institutions and collaborative data collection were among the state's strengths, but weaknesses include insufficient public health staff and local leadership, poor emphasis on social determinants of health and the return on investments in public health, and legislative action occurring without ISDH input or knowledge.⁷¹ Furthermore, frequent ISDH commissioner and staff turnover, uncertain public health funding resulting in competition for resources between entities, population mistrust of government, and an uncertain status of health law at the state and local levels all threaten effective public health administration.⁷²

In recognition of the immense task of restructuring an entire public health law regime to achieve more efficient and equitable results, this Article will focus only on revitalizing lead law in Indiana.⁷³

C. The Inadequacy of Lead Laws in Indiana

i. Federal Backdrop of Lead Regulation

No federal lead law endorses a plan for primary prevention nor complete abatement.⁷⁴ This means that under the federal regime, not only do children first have to be poisoned by lead in their environment before it will be addressed, but even when it is addressed, it will not be eliminated from their surroundings.⁷⁵ Cornerstone statutes like the Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act) have the stated purpose to *only* serve as transitional measures, not as solutions to the “vast problem of childhood exposure to hazardous amounts of lead from residential lead-based paint.”⁷⁶ Furthermore, there are widespread implementation issues from agencies

tracked onto the redline patterns of mid-1900s HOLC maps of Indianapolis, evidencing the *de jure* segregation that persists in Indianapolis still today. Sarah Bowman, *The White River: Boundaries of 'Redlining' Maps Still Etched in Indianapolis Neighborhoods*, INDYSTAR (May 2, 2020, 6:33 PM), <https://www.indystar.com/in-depth/news/environment/2020/05/02/redlined-indianapolis-areas-still-see-poverty-poor-health/3017810001/> [https://perma.cc/E7FL-QGKR].

⁷⁰ INDIANA STATE DEP'T OF HEALTH, INDIANA STATE HEALTH ASSESSMENT AND IMPROVEMENT PLAN 38 (2018), https://www.in.gov/isdh/files/Indiana_State_Health_Plan_I-SHIP.pdf [https://perma.cc/98C9-7BLB] [hereinafter STATE HEALTH ASSESSMENT]. Note that this report was finalized before the COVID-19 pandemic, which undoubtedly shifted priorities and drew needed resources away from these four priorities.

⁷¹ *Id.* at 68–69.

⁷² *Id.* at 70–71.

⁷³ See generally Benfer, *supra* note 46; Emily A. Benfer, Seema Mohapatra, Lindsay F. Wiley & Ruqaijah Yearby, *Health Justice Strategies to Combat the Pandemic: Eliminating Discrimination, Poverty, and Health Disparities During and After COVID-19*, 19 YALE J. HEALTH POL'Y, L. & ETHICS 122, 129 (2020).

⁷⁴ Hope Kerpelman, *Let Them Eat Paint: Childhood Lead Paint Poisoning as the Denial of Constitutional and Civil Rights*, 51 COLUM. HUM. RTS. L. REV. 828, 849 (2020).

⁷⁵ *Id.* at 851. Abatement is the elimination of lead hazards while remediation or renovation is the temporary reduction of hazards. See *Lead Abatement Versus Lead RRP*, U.S. ENV'T PROT. AGENCY, <https://www.epa.gov/lead/lead-abatement-versus-lead-rrp> [https://perma.cc/36BR-NUBR] (last visited Mar. 12, 2021).

⁷⁶ Kerpelman, *supra* note 74, at 849 n.83 (quoting S. REP. NO. 102-332 at 136 (1992)).

that are resistant to enforce potentially costly regulations.⁷⁷

Another major barrier is that most federal lead poisoning law is applicable only to federally assisted or traditional public housing,⁷⁸ and even these statutes are riddled with exemptions from applicability.⁷⁹ For example, statutes often do not provide private rights of action for enforcement.⁸⁰ Even in the uncommon circumstance where a private right of action is available, it would not provide a cause of action for harm caused to the *child* of the adult renter.⁸¹ Statutes that do apply generally are founded upon principles of disclosure,⁸² but in overburdened housing markets, and particularly for low-income residents with restrained bargaining power and fewer housing alternatives, these disclosures accomplish little.⁸³ Families in this situation are left with two options: either expose their children to environmental hazards through homelessness, or expose their children to environmental hazards through substandard housing.

This is not to say that no positive movement has occurred at the federal level. As discussed in Part III, there is some dedicated funding available to high-risk areas to remediate lead hazards.⁸⁴ Beyond residential remediation, funds made available through the historic infrastructure package passed in late 2021 should provide relief to outdated and overburdened community infrastructure that is contributing to childhood lead poisoning.⁸⁵ Furthermore, revisions to the EPA Lead and Copper Rule made great strides in closing gaps created by the federal government's historical resistance in enacting statutes, promulgating regulations,

⁷⁷ See *id.* at 853–55.

⁷⁸ *Id.* at 853, 851, n. 87 (“One of the only exceptions to this characterization is Section 1018 of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (now codified at 42 U.S.C. § 4852d (2012)), which only requires disclosure [to all renters] of potential hazards, and does not require abatement.”) (citing Emily A. Benfer, *Contaminated Childhood: How the United States Failed to Prevent the Chronic Lead Poisoning of Low-Income Children and Communities of Color*, 41 HARV. ENV'T. L. REV. 493, 496 (2017)).

⁷⁹ See *id.* at 854.

⁸⁰ *Id.* at 851–52.

⁸¹ *Id.* at 852.

⁸² See *id.* at 853–55.

⁸³ See NAT'L LOW INCOME HOUS. COAL., THE GAP: A SHORTAGE OF AFFORDABLE HOMES 8–9 (2020), https://reports.nlihc.org/sites/default/files/gap/Gap-Report_2020.pdf [<https://perma.cc/WEF2-7PYT>] (concluding that no state has an adequate supply of rental housing for extremely low-income renters, only one state has an adequate supply for households below 50% of area median income, and only thirty-two states have an adequate supply for households below 80% of area median income).

⁸⁴ The Lead-Based Paint Capital Fund Program is available to public housing authorities for public housing and awards up to \$31 million in grants each year. *Lead-Based Paint*, U.S. DEP'T OF HOUS. & URB. DEV. *Capital Fund Program (LBPCF)*, https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy20_LBPCF [<https://perma.cc/3EHZ-B8AC>]. The Lead Hazard Reduction Grant Program is available to units of local government for privately-owned rental and owner-occupied homes and awards up to \$275 million in grants each year. *Lead Hazard Reduction Grant Program*, U.S. DEP'T OF HOUS. & URB. DEV., https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy20_lhr [<https://perma.cc/WH9Y-B4FP>].

⁸⁵ See Brian Howey, *Biden Infrastructure Bill Will Bring Nearly \$9 Billion to Indiana*, SOUTH BEND TRIBUNE (Nov. 14, 2021), <https://www.southbendtribune.com/story/opinion/2021/11/14/long-term-commitment-improve-indianas-nations-infrastructure/6390451001/> [<https://perma.cc/3NB8-D6CP>] (Indiana will receive \$791 million over five years to replace leaded service lines).

and enforcing either.⁸⁶

ii. State Statutory Lead Law

There are two chapters in Indiana's Code that specifically address lead. The chapter addressing childhood lead poisoning was enacted in 1992.⁸⁷ The chapter addressing lead-based paint activities was enacted in 1997.⁸⁸ The paint chapter mainly establishes the need for licensure for contractors and inspectors;⁸⁹ training program requirements;⁹⁰ a database to track lead-based paint activities;⁹¹ powers for ISDH to inspect, enjoin, and sanction⁹² violations; and the creation of a trust fund.⁹³ It does not apply to owner-occupied housing⁹⁴ and expressly "may not be construed as requiring the abatement of lead-based paint hazards in a child occupied facility or target housing."⁹⁵ These limitations significantly hinder the potential for any meaningful result under this chapter and could even result in greater hazards to downstream owners of a property that has undergone lead-unsafe renovations.

Fortunately, the State's childhood lead poisoning prevention chapter provides for greater opportunities. As a baseline protection, it allows for state and local enforcement of the federal law banning the sale of lead paint and puts other consumer protection measures in place.⁹⁶ It establishes internal reporting requirements and civil penalties for violations not made in good faith,⁹⁷ a Childhood Lead Poisoning Prevention Trust Fund,⁹⁸ and requires that ISDH deliver a detailed

⁸⁶ *But see* Emily A. Benfer, Emily Coffey, Allyson E. Gold, Mona Hanna-Attisha, Bruce Lanphear, Helen Y. Li, Ruth Ann Norton, David Rosner & Kate Walz, *Health Justice Strategies to Eradicate Lead Poisoning: An Urgent Call to Action to Safeguard Future Generations*, 19 YALE J. HEALTH POL'Y L. & ETHICS 146, 172 (2020).

⁸⁷ *See* IND. CODE § 16-41-39.4 *et seq.* (1993).

⁸⁸ *Id.* § 16-41-39.8-1 *et seq.* (2009). Statutes cited for this Chapter indicate 2009 enactment because the original chapter, IND. CODE § 13-17-14 *et seq.* (1997), was repealed and moved in the code. The two are substantively equivalent efforts to codify federal lead-safe practices, 40 C.F.R. § 645, into Indiana law.

⁸⁹ *See* § 16-41-39.8-3. Rather than license fees going into the ISDH fund to further the goals of lead-safe practices and remediation of childhood lead poisoning, the fees are deposited in the general fund. *See* H.B. 1001, 121st Gen. Assemb., 1st Reg. Sess. (Ind. 2019) (state budget bill).

⁹⁰ *Id.* § 16-41-39.8-4.

⁹¹ *Id.* § 16-41-39.8-8.

⁹² *Id.* §§ 16-41-39.8-10 to -12.

⁹³ *Id.* § 16-41-39.8-7. Ironically, the only lead appropriations made by the Indiana General Assembly in 2019 were for the Lead Accreditation Program—which were not drawn from the general fund but from the Lead Trust Fund. *2019-2021 As-Passed Budget*, IND. STATE BUDGET AGENCY, <https://www.in.gov/sba/2784.htm> (line-item spreadsheet available by clicking "Detailed Budget Data (Excel Format)") (last visited Feb. 28, 2021).

⁹⁴ *Id.* § 16-41-39.8-1. It does apply to owner- or family-occupied housing if a child resides there who is both younger than six and has previously been identified as having an EBLL, but as discussed above, in practice this leaves nearly every owner-occupied home exempt from the lead-safe work practices. *Id.*

⁹⁵ *See* 410 IND. ADMIN. CODE 32-1-9 (2017) (child-occupied facility includes preschools, kindergartens, and day cares); § 32-1-78 (target housing is housing constructed before 1978, exclusive of housing for the elderly or for individuals with disabilities).

⁹⁶ *Id.* § 16-41-39.4-7 (referencing 15 U.S.C. § 1261(q)(1)).

⁹⁷ *Id.* § 16-41-39.4-3. The data is shared among and between local, state, and federal agencies. *Id.* § 16-41-39.4-4(a).

⁹⁸ *Id.* § 16-41-39.4-3.1(a), (c)(1)-(3). The fund is meant to support outreach and prevention activities and consists of civil penalties, gifts, and appropriations from the general assembly. This is a sister fund to the

annual report of county-specific information to the general assembly.⁹⁹ A now-expired provision created a lead-safe housing advisory council composed of a broad range of stakeholders tasked with developing primary prevention programs, lead-safe work practices, funding mechanisms for abatement and interim controls, and recommending needed additional rules.¹⁰⁰ Critically, it also grants ISDH the authority to promulgate rules to give effect to the chapter. For example, ISDH *may* determine the magnitude of lead poisoning in Indiana, develop a database of children with lead poisoning, coordinate detection activities with local health departments, and provide consumer alerts and education, but it “*shall* establish reporting, monitoring, and preventative procedures to protect from lead poisoning.”¹⁰¹ Likewise, although ISDH *may* adopt rules to implement the chapter, it *shall* adopt rules for the case management of a child with lead poisoning.¹⁰²

iii. State Administrative Lead Law

Pursuant to the statutory regime constructed by the legislature, ISDH has promulgated rules regarding lead poisoning reporting, monitoring, and preventative procedures¹⁰³ and the lead-based paint program.¹⁰⁴ Under the article on lead poisoning prevention, “[l]ocal health officers shall ensure the provision of case management to all children less than seven (7) years of age in their jurisdictions.”¹⁰⁵ Case management¹⁰⁶ is defined as: the process of providing, overseeing, and coordinating lead poisoning services, including, but not limited to, the following: (1) outreach and identification of children with EBLs;¹⁰⁷ (2) child case management service planning and resource identification;¹⁰⁸ (3) child case management implementation and coordination;¹⁰⁹ and (4) monitoring of child case management service delivery, program advocacy, and program evaluation.¹¹⁰

Included in outreach and identification is the local health officers’ mandate to

lead trust fund established by IND. CODE § 16-41-39.8-7(f)(1)-(2) (2011), which is to be used to administer the licensing chapter and cover costs related to implementing 40 C.F.R. § 745.

⁹⁹ *Id.* § 16-41-39.4-5(a)-(b). However, even the statutory reporting requirements that are supposed to include the child’s race seem not to be enforced, as 27% of the children tested in 2019 had an unknown race and 36% an unknown ethnicity. 2019 LEAD REPORT, *supra* note 17, at 9.

¹⁰⁰ *Id.* § 16-41-39.4-6 (expired by its own terms in 2011).

¹⁰¹ *Id.* § 16-41-39.4-2 (emphasis added).

¹⁰² *Id.* § 16-41-39.4-1.

¹⁰³ See 410 IND. ADMIN. CODE 29 *et seq.* (2019).

¹⁰⁴ *Id.* § 32 *et seq.*

¹⁰⁵ *Id.* § 29-2-1. Cases may be closed if the problem has been referred, resolved, or administrative barriers prevent continued case management services. *Id.* at 29-2-2. Test results must be reported to ISDH within one week with a good-faith effort to collect enumerated test information, lest a civil penalty be imposed. *Id.* at 29-3-1.

¹⁰⁶ *Id.* § 29-1-4.

¹⁰⁷ *Id.* § 29-1-19.

¹⁰⁸ *Id.* § 29-1-7.

¹⁰⁹ *Id.* § 29-1-6; see also IND. STATE DEPT’ OF HEALTH, CHILDHOOD BLOOD LEAD LEVEL CARE AND ACTION CASE MANAGEMENT GUIDELINES (2020), https://www.in.gov/health/files/New-IN-Rainbow-Chart-Oct-2020-FINAL_SLH_Online.pdf [<https://perma.cc/R95A-SGPR>] (guidance from ISDH to local health departments for triggering BLLs for services).

¹¹⁰ § 29-1-18.

determine the magnitude of lead poisoning in their jurisdiction by, among other things, “[e]nsuring blood lead testing of children at risk for lead poisoning.”¹¹¹ A child is at risk if she meets one of eight criteria, including living in a home built before 1978 or in a geographic area that increases the risk of lead exposure, being an immigrant who has recently lived abroad, being a member of a minority group, or receiving Medicaid.¹¹²

Local health officers have the legal authority to achieve these administrative mandates. Upon due notice, they may “[e]nter upon and inspect private property” for lead hazards and “[o]rder what is reasonable and necessary to prevent lead poisoning or remediate lead hazards.”¹¹³ If an inspection does identify lead hazards, health officer action is no longer discretionary. They “must provide a complete standard risk assessment report . . . to the property owner,” which “shall include orders for the property owner” to develop and implement a schedule of remediation work to be completed in no more than 180 days.¹¹⁴ If a property owner fails to remediate as ordered, local health officers “shall refer all case documentation to the appropriate legal staff in the jurisdiction of the local health department to pursue legal action.”¹¹⁵

iv. Local Lead Law

Municipalities are uniquely—and perhaps best—positioned to address lead poisoning in home-rule states.¹¹⁶ Local governments have more flexibility to respond to changing legal, economic, and environmental circumstances than state or federal governments.¹¹⁷ A 2013 study analyzed the impacts of relatively new local laws that went beyond the norm of secondary intervention and sought to achieve primary prevention of lead poisoning in young children.¹¹⁸ All of the eight jurisdictions examined had key constructive structural components: defined target housing, inspection triggers, identified inspection type, and repair standards.¹¹⁹ These characteristics all go to the key legal structures of implementation, enforcement, and evaluation.¹²⁰

This flexibility may be exercised with programs not based on formal, legal mandates. The risk of lead poisoning is so high in Marion County that some plumbing services direct their marketing to that effect.¹²¹ However, the only

¹¹¹ *Id.* § 29-1-19(5)(A).

¹¹² *Id.* § 29-1-2.

¹¹³ *Id.* § 29-4-1.

¹¹⁴ *Id.* § 29-4-2.

¹¹⁵ *Id.* § 29-4-3.

¹¹⁶ See Katrina S. Korfmacher & Michael L. Hanley, *Are Local Laws the Key to Ending Childhood Lead Poisoning?*, 38 J. HEALTH POL. POL'Y L. 757, 757 (2013).

¹¹⁷ See *id.* at 751, 814 fig.1.

¹¹⁸ See *id.* at 762–63.

¹¹⁹ *Id.* at 771.

¹²⁰ *Id.*

¹²¹ See Dan Dark, *Indianapolis Lead Danger Zones*, HOPE PLUMBING (April 17, 2016) <https://www.hopeplumbing.com/blog/2016/april/indianapolis-lead-danger-zones/> [<https://perma.cc/U7AM-T443>].

ordinances pertaining to lead simply prohibit the use of lead-based paints,¹²² accomplishing no more than what state and federal law already require.¹²³ In 2019, the Marion County Health Department reported that a majority of the 297 voluntarily participating area schools had lead-contaminated water.¹²⁴ The result of the initiative is admirable—all participating schools passed re-testing after corrective actions were taken.¹²⁵ But to achieve this result, sixty-eight schools had to decommission their problematic water fixtures.¹²⁶ The Marion County Health Department has since partnered with the NAACP of Greater Indianapolis and two major school districts to offer blood lead testing of students at school.¹²⁷

II. THE STORY OF LEAD AT WEST CALUMET

A. West Calumet as a Case Study for Lead Inequities

The travesty of lead poisoning in the West Calumet Housing Complex (“WCHC”), with its combination of high-level health mismanagement, finger-pointing, and environmental injustice, has been documented in news reports and scholarly articles alike.¹²⁸ Emerging in the wake of the Flint, Michigan, water crisis, the calamity of the event further jeopardized many people’s trust in the government’s ability to protect residents from environmental harm.¹²⁹ A word of caution is in order: although the West Calumet story is a shockingly acute result of a confluence of structural failures, it should not be viewed so as to overshadow the chronic issue of childhood lead poisoning throughout Indiana and the rest of the country.¹³⁰

In 1966, the East Chicago Housing Authority looked for “vacant areas surrounded by industries, and undesirable residential areas” for the siting of public

¹²² Marion County, Ind., CODE OF ORDINANCES § 2-537-31(25) (1991).

¹²³ However, the outcry from this long-unknown danger sparked legislative action. Beginning on July 1, 2020, all school administrations were directed to test their water for lead before January 1, 2023, and in Lake County every two years after that. IND. CODE § 16-41-21.1-3(a), (c) (2020).

¹²⁴ Julia Deng, *Parents Demand Legislative Action Protecting Children from Lead Poisoning*, WISHTV (Jan. 29, 2020, 4:37 AM), <https://www.wishtv.com/news/parents-demand-legislative-action-protecting-children-from-lead-poisoning/>.

¹²⁵ MARION COUNTY PUBLIC HEALTH DEPARTMENT, REPORT ON LEAD IN SCHOOL DRINKING WATER 10 (Jan. 2019), <https://drive.google.com/file/d/10c10BLP2qTvzo3ewH7k9lAn1JyGQOTV0/view> [<https://perma.cc/H6F3-8Y7G>].

¹²⁶ *Id.* at 11–22.

¹²⁷ Erica Irish, *Marion County Health Department Will Offer Free Lead Screenings Through Indianapolis Schools*, WFYI (Sept. 26, 2019), <https://www.wfyi.org/news/articles/marion-county-health-department-will-offer-free-lead-screenings-through-indianapolis-schools> [<https://perma.cc/VN4T-TLC3>]. A bill was proposed in the 2021 legislative session that would have prospectively required schools to use lead-free products in their potable water systems, but it was never given a hearing. H.B. 1087, 122nd Leg., 1st Reg. Sess. (Ind. 2021).

¹²⁸ See Reed, *infra* note 196.

¹²⁹ See generally Colleen Healy Boufides, Lance Gable & Peter D. Jacobson, *Learning from the Flint Water Crisis: Restoring and Improving Public Health Practice, Accountability, and Trust*, 47 J. L. MED. & ETHICS 23 (2019).

¹³⁰ See CIVIL RIGHTS, *supra* note 16, at 44.

housing.¹³¹ The WCHC opened in 1972 and was built on the site of one lead refinery and downwind of another.¹³² Even though ISDH and the EPA identified lead contaminants in the area in 1985,¹³³ an elementary school was nonetheless constructed nearby in the late 1990s.¹³⁴ By 1998, 30% of children under six in the WCHC had EBLs.¹³⁵ The EPA declared the WCHC and surrounding areas a Superfund site in 2009.¹³⁶ Five years later, the EPA, the Department of Justice, the State of Indiana, and the corporations responsible for the contamination entered into a joint consent decree.¹³⁷ But it was not until two years later in 2016 that WCHC residents were finally notified of the lead contamination in their community.¹³⁸

No further government action immediately materialized.¹³⁹ Efforts to move families out of the poisoned complex did not develop for another year, and when they did, the decision to relocate families entirely out of the city of East Chicago was made without any consultation with the residents themselves.¹⁴⁰ Given the imposed severance of community ties, resistance to moving developed.¹⁴¹ The mayor of East Chicago, a 23.9% White community,¹⁴² pled for then-Governor Pence to declare an emergency and allocate funds to begin remedying the environmental disaster, but Pence declined.¹⁴³ This decision was striking because Pence immediately responded in 2016 when a comparatively mild lead issue arose in Greentown, a 97% White community, and was remediated in a matter of months.¹⁴⁴ Some critics have described the State's disparate responses as examples of environmental racism,¹⁴⁵ but the important takeaway for purposes of this Article is that Indiana has shown

¹³¹ POISONOUS HOMES, *supra* note 23, at 11, 43 (quoting *Public Housing Sites Are Scarce*, CHI. TRIB. (Oct. 6, 1966), <https://chicagotribune.newspapers.com/> [<https://perma.cc/HJW8-37SQ>]) (seventy percent of CERCLA or Superfund sites are within one mile of HUD-assisted housing developments).

¹³² U.S. DEP'T OF HOUS. & URBAN DEV., OFF. OF THE INSPECTOR GENERAL, 2019OE-0003, CONTAMINATED SITES POSE POTENTIAL HEALTH RISKS TO RESIDENTS AT HUD-FUNDED PROPERTIES 1 (2021) [hereinafter INSPECTOR GENERAL].

¹³³ *See id.* at 9.

¹³⁴ *See* POISONOUS HOMES, *supra* note 23, at 43.

¹³⁵ INSPECTOR GENERAL, *supra* note 132, at 9.

¹³⁶ *Id.*

¹³⁷ POISONOUS HOMES, *supra* note 23, at 43. The consent decree binds parties and their successors to financial liability for cleanup costs without requiring those parties to admit fault. It also sets forth a remediation action plan. Consent Decree at 1, U.S. v. Atl. Richfield Co. (N.D. Ind. 2014) (No. 2:14-cv-312), <https://semspub.epa.gov/work/05/919701.pdf> [<https://perma.cc/2CVT-BU4R>].

¹³⁸ POISONOUS HOMES, *supra* note 23, at 43.

¹³⁹ *See id.*

¹⁴⁰ *See id.* at 45.

¹⁴¹ *See id.*

¹⁴² *QuickFacts East Chicago City, Indiana*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/fact/table/eastchicagocityindiana/SBO050212> [<https://perma.cc/7SZB-STJF>] (last visited Mar. 1, 2021).

¹⁴³ Craig Lyons, *Pence Disaster Relief Denial Leaves Legislators Scrambling to Help East Chicago*, CHI. TRIB. (Jan. 19, 2017), <https://www.chicagotribune.com/suburbs/post-tribune/ct-ptb-east-chicago-disaster-request-denied-st-0119-20170119-story.html> [<https://perma.cc/VP2J-NX96?type=image>].

¹⁴⁴ *See* John Halstead, *Mike Pence's Environmental Racism*, HUFFINGTON POST, https://www.huffpost.com/entry/mike-pences-environmental_b_14084084 [<https://perma.cc/YM48-X5M8>] (Jan. 15, 2018); *see generally* Lyons, *supra* note 143 (detailing Pence's denial of East Chicago's request for disaster relief).

¹⁴⁵ Halstead, *supra* note 144.

the capacity and ability to effectively respond—at least where there is the political will to do so. In March 2017, the newly elected Governor, Eric Holcomb, issued an executive order declaring a disaster emergency and detailing the relief efforts of eight state agencies, including relocation assistance, demolition of the toxic Housing Complex, expanded testing and case management services, and renovation of a nearby vacant school so dislocated residents could resume classes.¹⁴⁶

B. West Calumet and Similar Stories in Context

The story of West Calumet is far from unique.¹⁴⁷ Across the country, 77,000 families live within one mile of Superfund sites and other polluted areas that are just below the threshold toxicity to trigger federal intervention.¹⁴⁸ One hearing the story of East Chicago cannot help but draw parallels between it and the story of Flint, Michigan. Both cities are poor, mostly minority, disenfranchised communities located in states of relative wealth.¹⁴⁹ Disturbingly, in both cities, the governments failed to warn residents of known hazards.¹⁵⁰ And neither city has seen true justice for the irreversible harms caused.

In Flint, a \$600 million settlement has been reached between harmed residents and the multiple levels of government and officials responsible.¹⁵¹ Additionally, criminal charges have been filed against nine government officials, including Michigan's former governor and health director.¹⁵² There are some distinctions to be drawn between the two situations—the hazards in Flint were the result of an affirmative decision by the county council, while the hazards in East Chicago were the result of decades of missed opportunities to intervene¹⁵³—but both cases represent clear instances of environmental injustice and the failure of elected officials to fulfill their most basic duties.¹⁵⁴

Although no criminal charges have been brought in Indiana, the parties responsible for managing the East Chicago lead emergency have not escaped legal

¹⁴⁶ Ind. Exec. Order No. 17-13, Ind. Reg. (Feb. 9, 2017), <http://iac.iga.in.gov/iac/20170215-IR-GOV170089EOA.xml.html> [<https://perma.cc/T27K-6NLU>].

¹⁴⁷ See POISONOUS HOMES, *supra* note 23, at 11.

¹⁴⁸ See *id.*

¹⁴⁹ Yessenia Funes, *A Water Crisis Like Flint's is Unfolding in East Chicago*, COLORLINES (Mar. 16, 2017, 1:40 PM), <https://www.colorlines.com/articles/water-crisis-flints-unfolding-east-chicago> [<https://perma.cc/N4SU-8DKE>].

¹⁵⁰ See *id.*

¹⁵¹ Alexander Collingsworth, *The Flint Water Settlement and Implications of the Michigan Supreme Court's Reaffirmation of State Constitutional Tort Claims*, GEO. L.: GEO. ENV'T L. REV. (Dec. 1, 2020), <https://www.law.georgetown.edu/environmental-law-review/blog/the-flint-water-settlement-and-implications-of-the-michigan-supreme-courts-reaffirmation-of-state-constitutional-tort-claims/>.

¹⁵² *Nine Indicted on Criminal Charges in Flint Water Crisis Investigation*, MICHIGAN.GOV (Jan. 14, 2021), https://www.michigan.gov/ag/0,4534,7-359-82917_97602_97604-549541--,00.html [<https://perma.cc/FFV2-H2C5>].

¹⁵³ See INSPECTOR GENERAL, *supra* note 132, at 9.

¹⁵⁴ See, e.g., Luis Ferré-Sadurní & J. David Goodman, *New York Public Housing Set to Get Federal Monitor and \$1 Billion in Repairs*, N.Y. TIMES (May 31, 2018), <https://www.nytimes.com/2018/05/31/nyregion/nycha-federal-monitor-repairs.html?action=click&module=RelatedCoverage&pgtype=Article®ion=Footer> [<https://perma.cc/8Y7P-9Z2X>].

challenge. *G.J.2 v. Indiana State Department of Health* is an action brought by 314 individual plaintiffs against every level of government involved in the WCHC, including local entities, state and federal agencies, and the State itself.¹⁵⁵ The trial court denied the East Chicago Housing Authority's motion to dismiss,¹⁵⁶ and on interlocutory appeal¹⁵⁷ the court of appeals affirmed this decision.¹⁵⁸ The Indiana Court of Appeals held that the plaintiffs had pled a plausible claim for intentional infliction of emotional distress for several reasons. First, it could not be said as a matter of law that the decision to not inform residents of the lead hazards in their environment was a discretionary function, immunizing the government from liability.¹⁵⁹ Second, the claim was not barred by a statute of limitation because the plaintiff-residents only became aware of a reasonable probability of harm when they received a letter advising them of lead contamination in 2016, not when the area was formally designated as a Superfund site in 2009.¹⁶⁰ Third, the court noted that, among other things, "a civilized society should not be expected to tolerate 'a government standing silent while knowingly exposing its most-vulnerable citizens to toxic substances when reasonable alternatives [exist].'"¹⁶¹ While this case is ongoing, the court's procedural signal shows a recognition that there are colorable claims arising out of the mishandling of East Chicago's long-term lead problem—which is no small feat under the Indiana Tort Claims Act.¹⁶²

C. Analyzing Public Health Laws for Equity

The Network for Public Health Law was established in 2014 by the Robert Wood Johnson Foundation to assist public health professionals navigate the governing law by providing legal expertise and resources.¹⁶³ The Network for Public Health developed an analytical tool for public health law stakeholders to assess equity in public health law.¹⁶⁴ This framework may be used to guide an assessment of the State of Indiana's response to the WCHC crisis and the long-term chronic issue of childhood lead poisoning generally. To do so, the framework's guiding questions will be answered in turn.

¹⁵⁵ See *G.J.2 v. Ind. State Dep't of Health*, No. 45D05-1803-CT-000003 (Ind. Lake Super. Ct. Mar. 13, 2018) (Westlaw).

¹⁵⁶ Order Denying Motion to Dismiss at 1, *G.J.2*, No. 45D05-1803-CT-000003 (Lake Super. Ct. Aug. 17, 2018).

¹⁵⁷ Order Received from the Court of Appeals, *G.J.2*, No. 45D05-1803-CT-000003 (Lake Super. Ct. Apr. 29, 2019) (directing the trial court to certify the record for interlocutory appeal).

¹⁵⁸ Memorandum Received from the Court of Appeals, *G.J.2*, No. 45D05-1803-CT-000003 (Lake Super. Ct. Aug. 10, 2020); Order Affirming Trial Court's Denial of Motion to Dismiss on Interlocutory Appeal, *State v. Alvarez*, 150 N.E.3d 206 (Ind. Ct. App. 2020) (No. 19A-CT-587).

¹⁵⁹ *Alvarez*, 150 N.E.3d at 215.

¹⁶⁰ See *id.* at 216–17.

¹⁶¹ *Id.* at 219 (quoting Appellees' Br. at 19).

¹⁶² See *infra* note 224 discussion and accompanying text.

¹⁶³ Caty Schmitter & Jennifer A. Bernstein, *Priorities in Public Health Law: A Practice-Based Analysis of Trends in the Legal Needs of Public Health Professionals*, 23 ANNALS HEALTH L. 87, 89 (2014).

¹⁶⁴ Dawn Hunter, *Evaluating Equity in Public Health Laws and Policies—A Critical Tool at a Critical Time*, NETWORK FOR PUB. HEALTH LAW (August 13, 2020), <https://www.networkforphl.org/news-insights/evaluating-equity-in-public-health-laws-and-policies-a-critical-tool-at-a-critical-time/>.

i. What is the Issue and How Does the Law or Policy Address It?

ISDH is mandated to “establish reporting, monitoring, and preventative procedures” to protect children from lead poisoning, but the legislature has granted it wide discretion in choosing the mechanism with which to do that.¹⁶⁵ ISDH has promulgated a strong black-letter framework¹⁶⁶ but has failed to adequately see it into fruition. The data that ISDH does collect on childhood lead poisoning is mandated to be reported to the general assembly annually,¹⁶⁷ but the small annual sample size¹⁶⁸ might provide the legislature with little actionable information, resulting in an unknown number of Hoosiers with untested, untreated lead poisoning.

ii. How are Community Voices Included in Identifying and Defining the Issue and Deciding What Law or Policy Approach to Take?

If the handling of lead in East Chicago is any indication, community voices were only included as an afterthought.¹⁶⁹ And if fifty years of lead regulation have shown anything, it is that the solution must be far more than mere individual behavioral interventions. Fostering an environment of trust and collaboration is one of Indiana’s identified health opportunities and will be an important step in including community voices in lead abatement policies moving forward.¹⁷⁰

iii. What is the Historical Context of the Issue?

The federal lead remediation policies of the 1970s were never meant to be a solution but a stopgap measure.¹⁷¹ Unfortunately, “big” regulatory wins resulted in diminishing political will to continue pursuing remediation strategies.¹⁷² Furthermore, lead companies helped develop many of the awareness materials required to be distributed by new federal and state regulations, which placed the onus of responsibility on “ghetto” mothers rather than the polluting industry.¹⁷³

¹⁶⁵ IND. CODE § 16-41-39.4-2 (2021).

¹⁶⁶ See 410 IND. ADMIN. CODE 29-4-1 (2019).

¹⁶⁷ § 16-41-39.4-5.

¹⁶⁸ See 2019 LEAD REPORT at 7 (reporting that only 77,807 children were tested in 2019).

¹⁶⁹ POISONOUS HOMES, *supra* note 23.

¹⁷⁰ STATE HEALTH ASSESSMENT, *supra* note 70, at 60.

¹⁷¹ See Kerpelman, *supra* note 73, at 852.

¹⁷² See James Franklin Johnson & M. Ronald Buckley, *Multi-Level Organizational Moral Disengagement: Directions for Future Investigation*, 130 J. OF BUS. ETHICS 291, 292–93 (2015) (discussing cognitive reconstruction mechanisms such as moral licensing and moral disengagement that resolve moral dilemmas, both on individual and organizational levels, by diminishing the causal link between unethical actions and outcomes).

¹⁷³ See MARKOWITZ & ROSNER, *supra* note 2, at 28, 52; Ellen K. Silbergeld, *Preventing Lead Poisoning in Children*, 18 ANN. REV. PUB. HEALTH 187, 191, 198 (1997) (discussing the waning political will after the “ghettoization” of lead poisoning pre-1970 and the re-ghettoization in the 1980s after lead was being phased out of gasoline).

iv. How Does the Law or Policy Impact Different Population Groups?

For families who can afford to have greater housing choices, they can choose to live in new or remodeled properties that are lead safe because of the federal and state bans on the use of lead paint in homes.¹⁷⁴ For families who have fewer housing choices, rather than facing the difficult choice of a roof and lead exposure or no roof at all, families should at least be able to take comfort that within their limited housing options they will not be poisoned by lead.¹⁷⁵

v. What Are the Known or Expected Outcomes of a Given Law or Policy?

As discussed in question one, Indiana's black-letter law provides strong protections, at least for children who have an EBLL over 10 ug/dL. The expected outcome of rules with "shall" rather than "may" language is enforcement, but it is no question that the mandatory laws are sparsely enforced.¹⁷⁶ Furthermore, the current mandatory remediation rule could have a perverse effect on low-income families who own their homes, causing them to avoid lead testing to circumvent the perceived unaffordable personal expense of remediation.

vi. What Other Options Can Achieve the Same or Similar Outcome?

If impacted individuals can be identified and connected, there are multiple financial assistance programs to aid in remediation.¹⁷⁷ If more children were tested, more case management services should be rendered, and more families would be connected to ISDH services and lead remediation financial assistance. A critical starting point is to sufficiently fund local health departments to enforce existing regulations and encourage families to take advantage of existing help. Currently, Indiana allocates zero dollars to the lead poisoning prevention program, placing the difficult choice on local health departments to prioritize some health initiatives while allowing others to fall by the wayside.¹⁷⁸

¹⁷⁴ *But see* Suzette Hackney, *High Lead levels Were Found in Our School Water—But Not Where You Would Think*, INDYSTAR (Jan. 26, 2020), <https://www.indystar.com/story/opinion/columnists/suzette-hackney/2020/01/26/marion-county-schools-have-lead-problem-suzette-hackney-writes/4540282002/> [<https://perma.cc/6CA5-FTNP>] (high lead levels widely found in Indianapolis school water lines). *See generally* *Lead Sampling Program: Phase II (2019-Current)*, IN.GOV, <https://www.in.gov/ifa/lead-sampling-program/phase-ii-2019-current/> [<https://perma.cc/NU7D-PZ3P>] (last visited Jan. 8, 2021) (state grants available from federal funds for schools to perform a voluntary drinking water risk assessment).

¹⁷⁵ Alix Winter & Robert Sampson, *Is Lead Exposure a Form of Housing Inequality?* HARV. JOINT CTR. FOR HOUS. STUDIES OF HARV. UNIV. (Jan. 2, 2020), <https://www.jchs.harvard.edu/blog/is-lead-exposure-a-form-of-housing-inequality> [<https://perma.cc/S8P2-PT9Z>].

¹⁷⁶ *See supra* Part I (discussing reporting and case management services).

¹⁷⁷ Outside of the case management services outlined in 410 IND. ADMIN. CODE 29-1-6 (2019), Indiana has \$3 million in CHIP funding through 2022 available to children on Medicaid for services and remediation. Ind. Fam. and Soc. Servs. Admin., *News Release: Indiana to Establish New Health Services Initiative for Enhanced Lead Testing and Abatement* (Oct. 18, 2017), <https://www.in.gov/fssa/files/chip-lead.pdf> [<https://perma.cc/A3TR-L5Q6>].

¹⁷⁸ CIVIL RIGHTS, *supra* note 16, at 34.

vii. Can the Solution Be Successfully Sustained?

Unequivocally, yes. The issue of lead is unique in that after it is abated, it is solved for good.¹⁷⁹ The bare legal infrastructure is there; it only needs staff and application. As analyzed in Part III, the net financial impact of lead remediation is overwhelmingly money well spent.

III. MOVING FORWARD: WAYS TO EQUITABLY ELIMINATE PREVENTABLE LEAD POISONING

A. Indiana as Fertile Ground for Equitable Health Policies

As home to the Richard M. Fairbanks School of Public Health,¹⁸⁰ IU Health Medical Center, the Paul H. O'Neill School of Public and Environmental Affairs,¹⁸¹ and top law programs for health law and government service at the IU McKinney School of Law¹⁸²—all within walking distance of the statehouse—Indiana is uniquely positioned to create a task force to guide its pursuit of an equity-centered, Health in All Policies (HiaP) approach to its governance. Because lead policy already has significant legal infrastructure, it is an ideal pilot topic.

Indiana is positioned between local and federal governments that have both recently endorsed an equity-centered approach to governance across sectors. In June 2020, the Indianapolis City-County Council unanimously passed a resolution declaring racism to be a public health crisis.¹⁸³ The resolution made clear purposive and directive statements to all government entities to review policies and procedures for implicit or explicit racial biases, utilize all available tools to eliminate demographic disparities in key indicators of success, and to collect data “with the intention of incorporating racial equity into the analysis of governmental action and strengthening the city’s commitment to analyze and address racial disparities.”¹⁸⁴ This is consistent with President Biden’s environmental justice

¹⁷⁹ This is in contrast to remediation, which only punts the issue a few decades ahead.

¹⁸⁰ *Master’s Degrees*, IND. UNIV., <https://fsph.iupui.edu/academics/masters/index.html> [https://perma.cc/6235-VUUG] (last visited Jan. 8, 2022) (ranked among the best public health graduate schools in the country).

¹⁸¹ *About Us: Rankings*, IND. UNIV., <https://oneill.indiana.edu/about/rankings.html> [https://perma.cc/LPE6-Z82T] (last visited Mar. 1, 2021) (ranked first in the nation for the Master of Public Affairs program and second in the world for Public Administration).

¹⁸² *About Us: Recognition & Accolades*, IND. UNIV., <https://mckinneylaw.iu.edu/about/recognition.html#:~:text=U.S.%20News%20and%20World%20Report,the%20part%2Dtime%20law%20program> [https://perma.cc/CS4W-8NR5] (last visited Nov. 29, 2020).

¹⁸³ Sam Quinn., *Indy Council Passes Resolution Declaring Racism a Public Health Crisis*, THE IND. LAW. (June 9, 2020), <https://www.theindianlawyer.com/articles/indy-council-passes-resolution-declaring-racism-a-public-health-crisis>; see generally Maya Rodriguez, *More States, Communities Declaring Racism a Public Health Emergency*, DENVER7 (Mar. 11, 2021), <https://www.thedenverchannel.com/news/national/more-states-communities-declaring-racism-a-public-health-emergency> (as of March 2021, approximately 180 cities and counties across the nation, along with seven states, have made such declarations).

¹⁸⁴ Indianapolis, Ind., Special Resolution No. 18, 2020 (June 10, 2020), https://www.indy.gov/api/v1/indy_proposal_document?content_type=application%2Fpdf&id=17024&name=PROP20-182&type=1 [https://perma.cc/7BDA-R8RC].

executive order directing all agencies to review recent regulations for consistency with the stated goals of “protect[ing] our public health” and “advanc[ing] environmental justice,” adopting a form of environment in all policies approach to governance.¹⁸⁵ This is demonstrated by the administration’s inclusion of more than \$50 billion for water infrastructure investments in the infrastructure bill passed in late 2021, with \$15 billion reserved exclusively for replacing lead service lines across the country.¹⁸⁶ Also at the national level, the Center for Disease Control recently published a revised version of the Ten Essential Public Health Services, which now centers on issues of equity in all public health practices, including policy development, implementation, and enforcement.¹⁸⁷

B. Proposed Policy Changes and Enforcement Actions

i. Executive Action

With both local and federal trends on the side of equity and HiaP, the governor could issue an executive order for health to be considered in all agency actions—in environment, transportation, housing, veteran’s affairs, and more—to achieve more equitable outcomes. A more realistic and immediately needed action, however, would be to propose a budget to the general assembly that includes funding to local health departments for lead testing and case management at 3.5 ug/dL and to property owners to help offset the cost of lead remediation. Indiana does use the Lead Trust Fund to fund the Lead Accreditation Program for about \$30,000 each year,¹⁸⁸ but the last time Indiana made use of the dedicated Childhood Lead Poisoning Prevention Fund was in 2011 with a \$30,000 allocation.¹⁸⁹ However, it is unfair to place the onus of budget shortfalls wholly on the governor and Budget Agency, as the request for funds to support childhood lead poisoning prevention activities must first be proposed by ISDH before it can be considered or evaluated.¹⁹⁰

In August of 2021, Governor Holcomb convened a public health commission that is tasked with “a comprehensive review and evaluation of its existing public health system resulting in recommendations for improved efficiency and efficacy to better promote the health and safety of Hoosiers,” especially as it relates to

¹⁸⁵ Exec. Order No. 13999, 86 Fed. Reg. 7032 (Jan. 27, 2021).

¹⁸⁶ *Water Infrastructure Investments*, U.S. ENV’T PROT. AGENCY, <https://www.epa.gov/infrastructure/water-infrastructure-investments> [<https://perma.cc/9DWM-4UJ7>] (last visited Jan. 8, 2021).

¹⁸⁷ *10 Essential Public Health Services*, CTR. FOR DISEASE CONTROL AND MANAGEMENT, <https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html> [<https://perma.cc/8ZT9-JSVV>] (last visited March 12, 2021).

¹⁸⁸ *See, e.g.*, STATE OF IND., *2019-2020 As-Passed Budget*, <https://www.in.gov/sba/2784.htm> [<https://perma.cc/RVA5-ZJJK>] (last visited March 1, 2021) (line-item budget spreadsheet available by clicking on “Detailed Budget Data”).

¹⁸⁹ STATE OF IND., *2011-2013 As Passed Budget*, <https://www.in.gov/sba/2572.htm> [<https://perma.cc/437V-7YDR>] (last visited March 1, 2021) (line-item budget spreadsheet available by clicking on “Detailed Budget Data”).

¹⁹⁰ STATE OF IND., *The Budget Process*, <https://www.in.gov/sba/2372.htm> [<https://perma.cc/LG5Q-RZAB>] (last visited March 1, 2021).

management of communicable disease.¹⁹¹ The fifteen-member interdisciplinary commission will meet monthly over the course of one year, culminating in a written report to the Governor on December 31, 2022.¹⁹² Importantly, the Executive Order instructs the commission to identify ways to promote health equity, address funding challenges, and improve the delivery of health services across the state.¹⁹³ Thus, the commission is implicitly instructed to approach its task with health justice and HiaP as the modes of analysis. There may be little focus in this high-level evaluation on specific issues like lead poisoning, but it is nonetheless a ray of light in an otherwise bleak public health landscape.

ii. Legislative Action

There have been many calls for legislative reforms that could move Indiana closer to effective and equitable lead poisoning prevention outcomes. A broad suggestion is for Indiana to adopt a state-level scheme that mirrors the federal CERCLA laws, which will allow the State to address contamination at those sites that are poisoning people but fall just short of qualifying as a Superfund site.¹⁹⁴ Similar to the current authorizations for the governor to declare a state of emergency,¹⁹⁵ the general assembly could authorize an interdisciplinary emergency response to environmental disasters such as what occurred in East Chicago.¹⁹⁶ To take steps to prevent chemical contamination from arising to the level of an emergency, the State could adopt policy to create a multi-agency task force to review the efficacy of current rules to implement state and federal laws and suggest any needed rule or enforcement changes.¹⁹⁷ Either in conjunction with a task force or by a separate mandate to ISDH and other involved agencies, statutes could require better community outreach and education—including codifying the duty of state and local government officials to warn of known environmental hazards.¹⁹⁸ Other statutes could be passed that would raise funds via chemical environmental risk taxes for testing, case management, and remediation activities.¹⁹⁹ Professor Carlton Waterhouse, an expert in environmental justice,²⁰⁰ also advocates that the

¹⁹¹ Ind. Exec. Order No. 21-21, Ind. Reg. (Aug. 18, 2021).

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ Carlton M. Waterhouse & Ravay Smith, *The Lingering Life of Lead Pollution: An Environmental Justice Challenge for Indiana*, 49 IND. L. REV. 99, 115 (2015).

¹⁹⁵ IND. CODE § 10-14-3-12 (2021).

¹⁹⁶ Hannah Reed, *Indiana's Public Health is in Jeopardy: Lessons to Learn from Toxic Chemical Contamination in East Chicago*, 15 IND. HEALTH L. REV. 109, 137 (2018) (Michigan enacted such legislation in 2016).

¹⁹⁷ *Id.*

¹⁹⁸ *Id.* at 138.

¹⁹⁹ *Id.* at 135.

²⁰⁰ Carlton Waterhouse, HOWARD UNIV. SCH. L., <http://law.howard.edu/faculty-staff/carlton-waterhouse> [<https://perma.cc/7WG7-FDSH>] (last visited Mar. 1, 2021). He is currently serving as the Deputy Assistant Administrator for Land and Emergency Management in the EPA's Office of Land and Emergency Management. *EPA Announces Additional Biden-Harris Appointees*, ENVIR. PROT. AGENCY (Feb. 2, 2021) <https://www.epa.gov/newsreleases/epa-announces-additional-biden-harris-appointees-0> [<https://perma.cc/V85R-7R3M>].

Childhood Lead Poisoning Prevention Fund language be broadened to allow the use of funds for remediation and abatement.²⁰¹

iii. Agency Action

Enforcement of the existing Administrative Code alone would offer significant improvements in public health protection over current practices. Beyond that, Indiana's Administrative Code already mandates a renewal of most administrative rules seven years after their effective date, requiring a publication in the Indiana Register and public comment period before it can be readopted.²⁰² Advocates could leverage this provision to push for the adoption of HiaP into Indiana administrative rules on a wide scale or for more action-centered, equitable lead policies for a more directed approach. Unquestionably, the blood lead reference value to trigger case-management intervention must be amended to reflect the 2021 CDC 3.5 ug/dL Guidelines. Indiana's numbers indicate there is a sizeable population of children—disproportionately minority groups—who are currently receiving absolutely no lead-related case-management services whatsoever.²⁰³ When the Case Management Rule was readopted in 2019 with the 10 ug/dL standard, ISDH identified fiscal concerns as the reason for maintaining the outdated benchmark while also acknowledging that there is no safe level of lead and that local health departments have had no issue complying with the rule.²⁰⁴ As analyzed below, ISDH has a very strong case to make to the Budget Agency and the General Assembly for adequate funding. There is hope on this point. ISDH was considering lowering the blood lead reference value to 5 ug/dL when the CDC announced the new 3.5 ug/dL guideline, which may encourage Indiana to comply with federal guidelines for the first time in a decade.²⁰⁵ Furthermore, ISDH was allocated a lump sum in the 2021-2023 budget bill to address health issues, of which it has allocated \$50 million to address lead-related issues.²⁰⁶

iv. Administrative Challenge for Nonenforcement

The Indiana Administrative Orders and Procedures Act (AOPA) governs legal

²⁰¹ Waterhouse & Smith, *supra* note 194, at 114.

²⁰² See IND. CODE § 4-22-2.5-2, 3 (1996). Some exceptions to this requirement include rules adopted by the Department of Revenue and certain environmental rules. *Id.* § 4-22-2.5-1(1), (3). Other excepted rules are those required by federal programs. *Id.* § 4-22-2.5-1.

²⁰³ See Muennig, *supra* note 12.

²⁰⁴ The annual lead report shows that not all children with confirmed EBLIS receive case management services, running counter to the assertion of easy compliance. 2019 LEAD REPORT, *supra* note 17, at 8. Recall that only 12% of all children in Indiana ever receive blood lead testing and fewer than half of children on Medicaid are tested, even though federal law mandates that all Medicaid recipients under twenty-four months old receive a screening. CIVIL RIGHTS, *supra* note 16, at 22–23.

²⁰⁵ Rebecca Thiele, *Indiana Has a Chance to Help More Kids With Lead Poisoning Than Ever Before*, IND. PUBLIC RADIO (Nov. 11, 2021), <https://indianapublicradio.org/news/2021/11/indiana-has-a-chance-to-help-more-kids-with-lead-poisoning-than-ever-before/> [<https://perma.cc/WG6R-NW8Q>].

²⁰⁶ *Id.*

challenges against agency adjudicative actions,²⁰⁷ but the failure to enforce an agency's own rules is best characterized as a rulemaking action. A diligent search turns up little case law on this point. Perhaps instructive is *Chicagoland Christian Village v. Sullivan*, a 1996 case from the Indiana Court of Appeals. There, an agency began implementing a new policy that ran counter to the rule on the books.²⁰⁸ The plaintiffs challenged this policy change as having the effect of a moratorium—a rule change—which to be effective should have been promulgated by the agency according to the procedures outlined in Indiana Code section 4-22-2-3(b).²⁰⁹ The court agreed, holding that because the change was expressly described as an administrative policy by the agency, it was a rule and therefore invalid and unenforceable.²¹⁰ Although ISDH has not made such an explicit policy change, there must be a final line of nonenforcement or under-enforcement that amounts to a final action,²¹¹ lest the ability to challenge agency (in)action through administrative and then judicial review be merely illusory.

v. Claims Against the Government

The first issue is one of standing to confer jurisdiction over a case. Unlike the United States Constitution, the Indiana Constitution has no Article III, Section 2 “case or controversy” requirement, although it does have an Article 3, Section 1 “distribution of powers provision” that serves to restrain the judiciary.²¹² Although the Indiana Supreme Court “respects the separation of powers, [it does] not permit excessive formalism to prevent necessary judicial involvement. Where an actual controversy exists [it] will not shirk [its] duty to resolve it.”²¹³

Generally, only plaintiffs who have a personal stake in the outcome of litigation and who have or would have suffered injury will have standing; an interest of the general public is usually insufficient to confer standing.²¹⁴ An example of a plaintiff with traditional standing could be someone (or their child) who had a confirmed EBLL but did not receive any portion of the case-management services that are mandated to be provided by Title 410, Article 29 of the Indiana Administrative Code²¹⁵ or who, based on the uncompromising language of “outreach and identification” services, was at risk for lead poisoning but never received

²⁰⁷ § 4-21.5-2-0.1(a); § 4-21.5-5-1.

²⁰⁸ See *Chicagoland Christian Village v. Sullivan*, 671 N.E.2d 174, 175 (Ind. Ct. App. 1996).

²⁰⁹ *Id.* at 176–77.

²¹⁰ *Id.* at 177.

²¹¹ See Jeffrey D. Clafin, Karon Arnold-Hatleli & Peter M. Racher, *Administrative Law: When Agencies Don't Play by the Rules*, 24 IND. L. REV. 523, 526 (1991).

²¹² *State ex rel. Cittadine v. Ind. Dep't of Transp.*, 790 N.E.2d 978, 979 (Ind. 2003).

²¹³ *Id.* (quoting *Ind. Dep't of Env't Mgmt. v. Chem. Waste Mgmt., Inc.*, 643 N.E.2d 331, 337 (Ind. 1994)).

²¹⁴ *Id.* (citations omitted).

²¹⁵ See *Reed*, *supra* note 196, at 128–29 (suggesting legal liability for the poisoning at the East Calumet Housing Complex for Indiana Department of Environmental Management's grossly negligent actions and the East Chicago Housing Authority's knowing placement of the complex on a lead-contaminated site and failure to provide timely replacement housing); see also *Benton v. City of Oakland City*, 721 N.E.2d 224, 230, 232–34 (Ind. 1999) (holding that duty to warn of known dangers is part of a government's common law duty of ordinary care, which has only three exceptions to liability).

testing.²¹⁶ However, the public standing doctrine gives plaintiffs the ability to bring suit to enforce a public duty even where the normal standing requirements are not met.²¹⁷ A plaintiff can establish standing to enforce a public right so long as she is a citizen, even if the plaintiff is not a public officer, but she must be able to establish some direct injury above and beyond that of the general public.²¹⁸ “A public right is one that is common to all members of the general public,” where, even if all community members are not affected, it “affects the interests of the community at large.”²¹⁹

Once plaintiffs establish standing, they must still comply with the Public Lawsuit Act.²²⁰ Most significantly, these statutes require that plaintiffs first post bond at the outset of the suit²²¹ and exhaust all available administrative remedies before pursuing litigation.²²² If the suit seeks a declaratory judgment, then the plaintiff must also comply with the Indiana Declaratory Judgment Act by having a “substantial present interest in the relief sought . . . [for] a real or actual controversy.”²²³ This second requirement essentially bars declaratory relief in public standing suits because a plaintiff is not likely to rely on public standing if she has the requisite particularized interest for ordinary standing.

If a suit sounds in tort, plaintiffs will have to deal with statutory restrictions. The Indiana Tort Claims Act poses no small barrier—there are twenty-four enumerated exceptions from tort liability, including the immunity from suit for the failure to enforce a law.²²⁴ If the suit instead seeks a writ of mandamus²²⁵ to enforce acts that the law specifically requires or a duty resulting from the government entity’s position of power, then the plaintiff must (1) have a clear and unquestioned

²¹⁶ See 410 IND. ADMIN. CODE 29-1-19 (2019) (“‘Outreach and identification’ means . . . (5) Determining the magnitude of lead poisoning in the local health officer’s jurisdictions through activities including, *but not limited to*, the following: (A) Ensuring blood lead testing of children at risk for lead poisoning.”) (emphasis added); see also *Id.* § 29-1-2 (including in the definition of an “at-risk” child a child that is an immigrant or refugee, a member of a minority group, a Medicaid recipient, or “lives in a geographic area that increases the child’s probability of exposure to lead.”).

²¹⁷ See Jon Laramore, *Justice Dickson’s Thirty-Year Influence on Indiana Constitutional Law*, 50 IND. L. REV. 49, 61 (2016) (citing *State ex rel. Cittadine v. Ind. Dep’t of Transp.*, 790 N.E.2d 978, 979–80 (Ind. 2003)).

²¹⁸ *State ex rel. Cittadine*, 790 N.E.2d at 980 (citing *Hamilton v. State ex rel. Bates*, 3 Ind. 452, 458 (1852)). Additionally, taxpayer standing is a form of public standing that can be established where an express constitutional limit on expenditures has been exceeded. See *Horner v. Curry*, 125 N.E.3d 584, 596 (Ind. 2019).

²¹⁹ *Vanhawk v. Town of Culver*, 137 N.E.3d 258, 268 (Ind. Ct. App. 2019) (quoting Restatement (Second) of Torts § 821B, cmt. g (Am. L. Inst. 1979) (definition with respect to public nuisance claims); see also *State ex rel. Steinke v. Coriden*, 831 N.E.2d 751, 755 (Ind. Ct. App. 2005) (citations omitted) (acknowledging that the Indiana Supreme Court has never defined “public right” but identifying examples of when a public right had been found).

²²⁰ *State ex rel. Cittadine*, 790 N.E.2d at 983.

²²¹ See *id.*; see also IND. CODE § 34-13-5-7 (1998).

²²² § 34-13-5-11. *But see* *Ahles v. Orr*, 456 N.E.2d 425, 426 (Ind. Ct. App. 1983) (“Well recognized exceptions to the general rule requiring exhaustion of administrative remedies exist where the administrative remedy is inadequate or would be futile.”).

²²³ *State ex rel. Cittadine*, 790 N.E.2d at 984 (quoting *Morris v. City of Evansville*, 390 N.E.2d 184, 186 (Ind. Ct. App. 1979)); see § 34-14-1-2.

²²⁴ See § 34-13-3-3(8). *But see* *State v. Alvarez*, 150 N.E.3d 206, 212 (Ind. Ct. App. 2020) (claiming a prima facie cause of action for intentional infliction of emotional distress).

²²⁵ See Ind. R. P. For Original Acts 1.

right to the right allegedly violated, (2) show a clear legal duty to perform the identified function, and (3) must not seek to control a discretionary action.²²⁶ If successful, all properly named defendants shall perform the mandate issued by the court on threat of fine, imprisonment, or both.²²⁷ As an example, in the unique case of *State ex rel. Horne v. Beil*, a local board of health sought a writ of mandamus against the local school trustees to enforce the board's order to require the vaccination of school children against smallpox.²²⁸ The court held that just as it was the board of health's duty to enforce all rules and regulations of the state board of health in its jurisdiction, it was the duty of the school trustees to enforce the Board of Health's order to exclude children who could not produce certification of vaccination.²²⁹

vi. Claims Against Private Landlords

Indiana has basic protections for renters, including a nonwaivable duty for landlords to provide safe, habitable premises that comply with all health and housing codes.²³⁰ If landlords fail to meet these obligations in a reasonable time after receiving adequate notice, tenants may enforce their rights in a court of general jurisdiction and obtain relief in the form of an injunction, actual and consequential damages, and attorney's fees and court costs.²³¹ The duty imposed on landlords to remediate lead hazards could create an additional possibility for private tort claims.²³² Ideally, the local health department would enforce its duty to refer housing violations to the appropriate legal staff to pursue legal action,²³³ but its chronic underfunding may result in its attention being drawn to more apparently immediate issues.²³⁴ While a private litigation approach could provide relief to insulated impacted families, it is not a systemic solution, and it is unrealistic to believe that the most at-risk families will have the resources to bring such a claim.

C. Public Policy Considerations

Undergirding this discussion is the policy consideration of who should bear the burden of misdeeds not directly attributable to any currently involved party. Should landlords be forced to pay for costly abatement at the risk of running them

²²⁶ *Murray v. Hamilton Cnty. Sheriff's Dep't*, 690 N.E.2d 335, 338–39 (Ind. Ct. App. 1997).

²²⁷ IND. CODE § 34-27-3-4 (1998).

²²⁸ *State ex rel. Horne*, 60 N.E. 672, 672 (Ind. 1901).

²²⁹ *Id.* at 673–74.

²³⁰ IND. CODE § 32-31-8-5 (2002); *see also* *Rainbow Realty Grp., Inc. v. Carter*, 131 N.E.3d 168 (Ind. 2019) (holding that purchasers in a rent-to-buy agreement for an uninhabitable house were protected by the statute because the agreement, not in form but in function, was a residential lease).

²³¹ § 32-31-8-6 (2002).

²³² *See id.*

²³³ 410 IND. ADMIN. CODE 29-4-2 (2019); § 29-4-3.

²³⁴ *See generally* STATE HEALTH ASSESSMENT, *supra* note 70 (identifying chronic underfunding and uncertain funding as a barrier to progress addressing the four flagship priorities).

out of business, out of state, or raising already unaffordable rent prices? Should tenants be forced to find a residence that is less risky but further out of budget? Should tenants accept the probability of lead poisoning as a necessary evil of having a roof, or become homeless? Should government entities be forced to allocate funds for remediation from already stretched thin budgets?

Indiana's landlord-tenant statute already provides tenants a cause of action if landlords fail to comply with all health and housing codes or to provide a clean, *safe*, and habitable space.²³⁵ But there are several practical considerations as to the effects of this important law. If lead is found in a home, do tenants remain bound to the lease so long as a landlord is taking some steps toward remediation? Must tenants remain in the home during remediation, or is the landlord responsible for paying for temporary relocation costs? Alternatively, if the lease becomes void because a landlord does not take steps toward remediation, are the tenants evicted? Can the tenants be retaliatorily evicted for raising the issue?²³⁶

Several preliminary answers emerge from these pressing questions. First, on its face, it is morally worse to allow lead to poison generations of children—never detected, never treated, never remediated—into perpetuity in the name of saving a landlord, even an innocent one, from the one-time cost of remediation. This is recognized by the existence of the administrative rule that mandates the owner of a property to remediate lead-based hazards in the home once they are detected.²³⁷ There are no exceptions to the rule, including for economic burdens or for no-fault owners.²³⁸ Critics of a policy that places the economic burden of lead remediation on landlords, many of whom are individual owners with only few properties, would argue that this could run landlords out of business and out of state. But this is to advocate for a perverse result, enabling landlords to easily shirk their legal and moral responsibility to provide safe, healthy housing. Rather, Indiana should adopt policies that disincentivise current and would-be landlords from doing business in the state if they are unable or unwilling to provide lead-free housing.

Furthermore, federal funding for remediation is available to mitigate the burdens on both landlords and tenants.²³⁹ ISDH is a recipient of the federal Lead Hazard Reduction Grant, which covers the cost of lead remediation so long as it is in an owner-occupied home or the landlord pledges to rent to low-income renters for two years.²⁴⁰ As between two innocent parties suffering from the malfeasance of companies that never made their harms whole, it is reasonable to ask the

²³⁵ § 32-31-8-5; *see also Rainbow Realty*, 131 N.E.3d at 175 (Ind. 2019) (holding that the statute's protections extended to rent-to-buy purchasers because the property was a "dwelling" under the chapter and the contract was, not in form, but in function a residential lease).

²³⁶ *See* § 32-31-8.5-2, S.E.A. 148, 121st Leg., 1st Reg. Sess. (Ind. 2020) (enacted following a legislative override of the Governor's veto of legislation that prohibits local regulation of the landlord-tenant relationship).

²³⁷ 410 IND. ADMIN. CODE 29-4-3.

²³⁸ *Id.*

²³⁹ *See Rental Assistance Demonstration*, U.S. DEP'T OF HOUS. & URBAN DEV., <https://www.hud.gov/rad> (last visited Feb. 21, 2021) (landlords of legacy HUD housing programs, like those who accept Section 8 vouchers, may apply to public housing authorities for funds to address deferred maintenance).

²⁴⁰ *Lead Protection Program*, IND. HOUS. & CMTY. DEV. AUTH., <https://www.in.gov/ihcda/4068.htm> [<https://perma.cc/AAY3-THQ2>] (last visited Mar. 1, 2021).

government to bear the burden of righting a long-unremedied wrong, particularly where it is in the best position to hold the responsible parties—lead refineries and paint companies—legally and financially accountable.

D. Financing and Feasibility

The fair but time-worn response to any proposed socially advantageous program is this: Where is the funding? Indiana ended 2019 with a budget surplus of \$2.27 billion.²⁴¹ Even during a global pandemic, Governor Holcomb's proposed 2021-2023 budget included no direct relief to Hoosiers, but did include one-time expenses to pay down debt for hospital and prison construction, build a swine barn at the State Fairgrounds, and expand broadband in rural areas.²⁴² What purpose does a surplus serve if not to support public health during a health emergency?²⁴³ The Governor's office clearly recognizes the value of long-term savings, even over urgent short-term needs. This principle is well-matched to the fiscal analyses for lead abatement, which should prompt Indiana's executive branch to prioritize lead abatement investments. Not only does it make sense financially, but there is a clear human element at play that could make even a large, one-time lead abatement expenditure a popular political move.

The financial burdens on Indiana taxpayers are far greater from perpetually unremedied lead hazards than from the one-time abatement of lead hazards.²⁴⁴ Undetected and unremedied EBLs in children result in myriad burdens that can follow them throughout their lives.²⁴⁵ These include lowered IQ scores and resulting lowered lifetime earnings, short-term and long-term health problems, and higher rates of involvement in the criminal justice system starting from a young age.²⁴⁶ Indiana taxpayers are subsequently burdened with reduced tax income, greater education costs in the form of special education classes and IEPs, greater healthcare expenditures, and greater law enforcement and incarceration costs.²⁴⁷

To date, advocacy for expanded testing and remediation measures have been unsuccessful due to budgetary concerns.²⁴⁸ However, these concerns are unfounded when comparing short-term to long-term benefits. Health and housing justice

²⁴¹ Chris Watts, *Indiana Finishes 2019 with Historic Surplus-and Human Capital Deficits?*, INSIDE IND. BUS. (July 24, 2019, 7:00 AM), <https://www.insideindianabusiness.com/story/40826348/indiana-finishes-2019-with-historic-surplus-and-human-capital-deficits> [<https://perma.cc/GMW4-TWUH>].

²⁴² Brandon Smith, *Holcomb's Proposed Budget Spends One-Time Money to Pay Down Debt, Not Direct Relief*, WFYI INDIANAPOLIS (Jan. 13, 2021), <https://www.wfyi.org/news/articles/holcombs-proposed-budget-spends-one-time-money-to-pay-down-debt-not-direct-relief> [<https://perma.cc/EU3Y-3GWR>].

²⁴³ See Ind. Exec. Order No. 21-34, Ind. Reg. (Dec. 29, 2021) (extending, for the twenty-third time, the public health emergency for the Covid-19 outbreak).

²⁴⁴ CIVIL RIGHTS, *supra* note 16, at 32; PEW TRUSTS, 10 POLICIES TO PREVENT AND RESPOND TO CHILDHOOD LEAD EXPOSURE: AN ASSESSMENT OF THE RISKS COMMUNITIES FACE AND KEY FEDERAL, STATE, AND LOCAL SOLUTIONS 1, 102–06 (Aug. 2017), https://www.pewtrusts.org/-/media/assets/2017/08/hip_childhood_lead_poisoning_report.pdf [<https://perma.cc/86WG-6EKR>].

²⁴⁵ PEW TRUSTS, *supra* note 244, at 103.

²⁴⁶ *Id.* at 102.

²⁴⁷ See *id.* at 102–08.

²⁴⁸ See IND. STATE DEP'T OF HEALTH, READOPTION REV. (Oct. 21, 2019), <https://www.in.gov/isdh/files/Lead%20Rule%20Readoption.pdf> [<https://perma.cc/3F8M-RZCR>].

professor Emily Benfer estimates from her research that each cohort of children poisoned costs a cumulative \$262 million each year, of which \$50 million is shouldered by Indiana taxpayers.²⁴⁹ She further estimates that it would cost Indiana between \$62–89 million to perform risk assessments for targeted homes—a one-time expense—resulting in \$173–200 million in cumulative annual savings.²⁵⁰ From national projections, research funded by the Robert Wood Johnson Foundation estimates that expanded remediation measures, lead-safe work practices enforcement, and lead service line replacements would have a net benefit to the tune of \$93.3 million for *only one cohort of children born in one year*.²⁵¹ This sum accounts for the collective burden on private, federal, state, and local budgets for “costs of reduced lifetime productivity; increased health care, education, and social assistance spending; and premature mortality” as offset by the expected cost of repairs and oversight.²⁵² Of course, many variables go into this calculation, but the base rate return on investment to achieve these goals is an impressive 140% for lead testing and abatement and 310% for lead code enforcement.²⁵³

Even if Indiana fully funded the expansion of preliminary testing and case management services, the investment into remediation does not need to fall solely on Indiana taxpayers. In addition to the federal lead-specific remediation funds available to landlords and homeowners discussed above, which are made available via an approved application for funds from a state government entity, federal loan programs like the FHA 203(k) rehab mortgage insurance program allows the owner of an owner-occupied home to obtain a loan, either as a purchase or refinance, to rehabilitate the home.²⁵⁴ A relatively small state investment to provide one-time cash incentives to landlords and homeowners who take advantage of already accessible federal funds could be an effective “carrot,”²⁵⁵ rather than relying solely on the current and unsuccessful mandatory remediation “stick.”²⁵⁶ Furthermore, Indiana Health Coverage Programs will reimburse providers for all case management services,²⁵⁷ consistent with the federal mandate that all children on

²⁴⁹ CIVIL RIGHTS, *supra* note 16, at 31. The cumulative total is a sum of medical and behavioral interventions, lost parental wages, and lost potential earnings by lead poisoned children. *Id.*

²⁵⁰ *Id.* at 32.

²⁵¹ *Indiana*, VALUE OF LEAD PREVENTION, <http://valueofleadprevention.org/calculations.php?state=Indiana> [<https://perma.cc/H2JW-RGSR>] (Select banner titled “Calculate Intervention Impacts, then scroll to “Net Benefit”) (last visited Feb. 5, 2021).

²⁵² *Id.*

²⁵³ *Id.*

²⁵⁴ *203(k) Rehab Mortgage Insurance*, U.S. DEP’T OF HOUSING & URBAN DEV., https://www.hud.gov/program_offices/housing/sfh/203k/203k—df [<https://perma.cc/2EJH-9ZAE>] (last visited Mar. 1, 2021).

²⁵⁵ *See* HOUS. AUTH. OF THE CITY OF EVANSVILLE, LANDLORD INCENTIVE LETTER (Feb. 2021) (on file with Housing Authority of the City of Evansville) (explaining that the public housing authority in Evansville, Indiana has creatively used CARES Act funding to incentivize landlords with one-time cash incentives to join the federal RAD program); *see also* U.S. DEP’T OF HOUS. & URBAN DEV., *supra* note 239.

²⁵⁶ 410 IND. ADMIN. CODE 29-4-3 (2019).

²⁵⁷ *IHCP Updates Policy Regarding Lead Targeted Case Management Policy*, IND. HEALTH COVERAGE PROGRAMS (July 5, 2019), <http://provider.indianamedicaid.com/ihcp/Bulletins/BT201936.pdf> [<https://perma.cc/77PU-BT6S>].

Medicaid receive blood lead testing and services.²⁵⁸

CONCLUSION

Indiana's current public health law paradigm does not position public health entities for success, nor does it protect generations of children from the harmful—and wholly preventable—effects of lead poisoning. The lack of guiding equity principles in Indiana's public health laws leaves entities underfunded,²⁵⁹ under structured, and underutilized. Administration of law at the local level has many advantages: an ability to tailor programs to the unique needs of localities, the creation and administration of rules by people intimately familiar with the issues, and closer oversight over the use of funds. However, without a focus on equity, a push for collaboration between and within sectors, adequate legal and financial resources, and mechanisms in place for assessment and accountability, generations of children poisoned by lead may never be connected to life-changing services. The epidemic of childhood lead poisoning is so well-historied and well-researched that pragmatic policy options abound. With science, ethics, and economic efficiency on the side of expanded childhood lead poisoning prevention efforts, current momentum to adopt such policies should be memorialized in law and funded with long-term enforcement in mind.

²⁵⁸ *Coverage of Blood Lead Testing for Children Enrolled in Medicaid and the Children's Health Insurance Program*, CTR FOR MEDICARE AND MEDICAID SERV. 2 (Nov. 20, 2016), <https://www.medicaid.gov/federal-policy-guidance/downloads/cib113016.pdf> [https://perma.cc/A8EK-QLDF].

²⁵⁹ Jill Sheridan, *Public Health Funding Report Finds Indiana Behind*, WFYI INDIANAPOLIS (Apr. 24, 2019), <https://www.wfyi.org/news/articles/public-health-funding-report-finds-indiana-behind#:~:text=Indiana%20increased%20public%20health%20spending,the%20possible%20impact%20on%20states> [https://perma.cc/T2GV-5EMT].