CaSP
Catalysts for Science Policy
University of Wisconsin – Madison

To: The Office of Governor Evers
From: Catalysts for Science Policy
University of Wisconsin-Madison
Date: January 18, 2019
Re: Childhood Lead Poisoning in Wisconsin

STATEMENT OF ISSUE:

In 2016, rates of elevated blood lead levels in children 1-2 years old in Wisconsin increased to 4.87% (DHS 2016), matching the 2014 crisis levels of Flint, Michigan (4.9%, NCBI 2016). Over 200,000 Wisconsin children were poisoned by exposure to lead from 1996-2016. Limited housing options place the majority of burden on low income families in urban areas of the state. **In accordance with the Healthy Communities Initiative**, the Wisconsin state government is poised to take significant strides to support families and children affected by unsafe lead exposure.

BACKGROUND:

Lead poisoning in children causes permanent health issues including brain damage. These issues manifest as delayed mental development, reduced IQ, behavioral problems, and stunted growth. Lead poisoning increases the need for health care and special education, increases crime rates, and decreases lifetime earning potential. Furthermore, lead exposure is dangerous for pregnant women, as it has been associated with fetal death and reduced birth weight. The financial burden of this health crisis falls on taxpayers. For context, costs associated with elevated blood lead levels in Michigan were estimated to have totaled $270 million in 2014.

Despite policies currently in place, Wisconsin children are insufficiently screened and treated for lead poisoning. The Wisconsin Childhood Lead Poisoning Prevention Program (WCLPPP), the agency responsible for these shortcomings, has been fraught with highly publicized systemic issues. Consequently, federal funding for this issue has continually decreased since 2012, culminating in a February 2018 "stop work order" from the U.S. Department of Housing and Urban Development grant that had been funding Milwaukee's Lead Hazard Reduction program.

CHALLENGES:

Low income families bear the brunt of this issue, and current methods of remediation are largely inaccessible to this population. Environmental lead hazards exist at much higher rates in low-income urban areas including Grant, Dodge, Marquette, Racine, and Milwaukee; the prevalence of poisoning in Milwaukee alone comprises nearly 60% of state-wide poisoning incidents. There are multiple barriers sustaining this disparity:

1. Low-income parents are already pressed for time and resources. Even if the dangers of lead poisoning are articulated to the community, an additional uninsured visit with a pediatrician or a follow-up action plan to remove the hazard may be untenable.

2. Lead-based paint is the primary source of lead exposure (DHS, 2016). Remediation requires residents to vacate the premises for an extended period of time. Such renovations are cost-prohibitive to both landlords and tenants.
3. Contaminated water from lead-based pipes is the second most common source of exposure. A program in Milwaukee to replace pipes shared by the homeowner and the city is also cost-prohibitive; only 1% of affected homes have been addressed.

POLICY OPTIONS:

Option 1: Communicate the importance of lead screening by amending the language of Wisconsin Statute 254.158 such that the lead screening recommendations stipulated in this statute are "required" rather than optional.

- **Advantages:** Increase compliance with federal standards.
- **Disadvantages:** Enforcement would require additional public health resources.

Option 2: Incorporate required lead screening with the regular vaccination schedule, such as the DTap booster.

- **Advantages:** Provide specific mechanism for more efficient implementation of required federal screening standards, as in Option 1. Lead screening is already required and covered by Medicaid, so this option comes at no additional cost to parents.
- **Disadvantages:** Does not specifically address the source of lead poisoning and places responsibility on the family of the victim.

Option 3: Design a pilot, state-run primary prevention program based on the success of the New York State pilot program implemented in 2007 (NCCH 2008). New public health legislation would allow local health departments in high-risk counties, as designated by the Secretary of Health, to collaborate with and receive funding from the Wisconsin Department of Health Services to address lead exposure.

- **Advantages:** Concentrating on the source of exposure is the only way to prevent lead poisoning, which, extrapolating from the 2016 report, will affect 1,981 additional children in this year alone. An overwhelming majority, 67.8%, will be African American or Hispanic children. Removing exposure will eventually remove the need for funding.
- **Disadvantages:** Requires new legislation and immediate investment of resources; implementation will be slower than options 1 or 2.

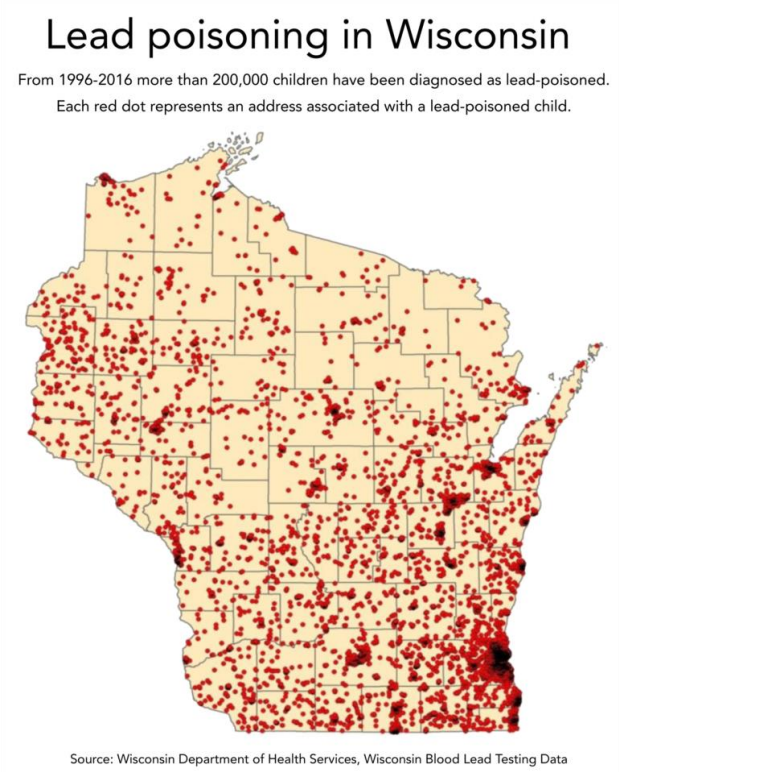
POLICY RECOMMENDATION:

The naming of Andrea Palm as Secretary of Health, a veteran of New York state health policy, along with newly-appointed Milwaukee Health Commissioner Jeanette Kowalik, who prioritizes lead abatement, suggests opportune timing for the implementation of Option 3.

REFERENCES:

https://www.dhs.wisconsin.gov/publications/p01202-16.pdf
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4985856/
https://nchh.org/resource-library/nysdoh_early-lessons-learned_2008.pdf
https://www.dhs.wisconsin.gov/publications/p01202-16.pdf
https://pubs.acs.org/doi/abs/10.1021/es4034952

APPENDIX:



CURRENT POLICIES & LIMITATIONS:

There are several policies in place intended to prevent and detect childhood lead poisoning. Federal policy requires that all children under the age of six are tested, and that every child on Medicaid is tested at 12 and 24 months of age. Furthermore, every child in high-risk areas, including Milwaukee and Racine, are required to be tested at 12, 18, and 24 months of age. Wisconsin law states that if a child under 6 is confirmed to have elevated blood lead levels, the health department is obligated to investigate the child's residence and to arrange for reduction or elimination of any imminent hazard.

The Wisconsin Childhood Lead Poisoning Prevention Program (WCLPPP) has been consistently fraught personnel issues resulting in incompetency and public distrust. The Wisconsin Department of Health Services published a 2016 report summarizing the failures of the WCLPPP initiatives, and a 2018 report from the Milwaukee Health Department confirmed the continued underperformance of this agency at both primary and secondary prevention. Only 42% of Medicaid-enrolled children received the appropriate testing at both one and two years of age, and the majority of children are were only tested once. In addition, thousands of families were not notified of their child's elevated blood level results.