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**ROBERT L. COWLES**

Wisconsin State Senator  
2nd Senate District

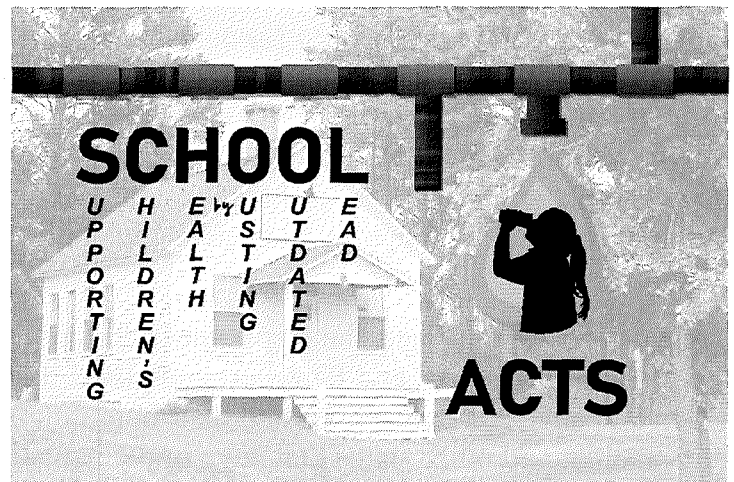
**Testimony on 2019 Assembly Bill 475**

Senator Robert Cowles

Assembly Committee on Energy and Utilities – February 4, 2020

Thank you, Chairman Kuglitsch and Committee Members, for holding a hearing and allowing me to testify on 2019 Assembly Bill 475. This bill tackles lead in the drinking water of daycares, group homes, and summer camps by requiring testing as a component of licensure and, if necessary, ensuring that contaminated water sources be taken offline and replaced with clean water sources to guarantee that we’re promoting reasonable measures to protect children’s health.

Overexposure to lead can be bad for anyone’s health, but children are particularly susceptible to negative health consequences from the consumption of lead. These health outcomes from lead have lasting impacts not only on the children, but on the entire community as the children’s development can be stunted, impacting both their physical and mental growth. Numerous studies, including a 2014 report by our state’s Department of Health Services, have found increased behavioral issues such as juvenile delinquency, teen pregnancy, truancy or dropping out, and even gun violence correlated to an overexposure to lead as a child. By introducing the Supporting Children’s Health by Ousting Outdated Lead Acts, SCHOOL Acts for short, we’re looking to give our youth a brighter future by reducing lead exposure and giving parents and guardians the peace-of-mind that their kids will drink clean, safe water when they leave the house in the morning.



Wisconsin has been given an ‘F’ in 2017 and 2019 by a third-party interest group for failing to address the issue of lead in schools and other places frequented by children. Local efforts in Madison, Rock County, and Waukesha County have all shown that the issue of lead in schools varies in severity, and while often the scope of the problem is very manageable, lead laden water has impacted all three of those communities and likely many other communities throughout the state.

Following a nation-leading effort last session known as the Leading on Lead Act which provided options to local governments to tackle residential lead laterals, legislation that I’m sure many members of this Committee remember, these two bills are an effort to prevent Wisconsin’s youth from any future lead water poisoning when they leave the home. 2017 Wisconsin Act 137 had advocates from both sides of the aisle that helped the Leading on Lead Act become law. We hope to expand off of last session’s successes and once again show that providing clean drinking water, especially to children, can lead to bipartisan laws to address these nonpartisan problems.

Assembly Bill 475, one part of the SCHOOL Acts, was modified by Assembly Substitute Amendment 1 after we worked to incorporate stakeholder feedback. I'll be testifying on the bill as amended. This legislation requires that drinking water sources used by children in daycare centers, daycare provider buildings (which are only licensed if they receive state funding), group homes, and recreational and educational camps test for lead as a condition of licensure. Tests that show lead contamination above the federal action level of 15 parts-per-billion (ppb) will not prevent licensure so long as contaminated sources are taken offline, clean sources of potable water are provided, and efforts are made to ensure the long-term delivery of clean drinking water.

Drinking water sources with high lead levels may be addressed in one of two ways. First, the entity may choose to remediate. This may include, as specified in the legislation, filtration through a point-of-source or point-of-entry device, or taking the source offline permanently if other sources without high levels of lead are available. As an alternative, the entity may choose to provide bottled water throughout the license cycle to children.

If any test shows 5 ppb of lead or less, testing in future licensing cycles is not required. This 5 ppb level matches the federal standard for bottled water, and tests below 5 ppb can have higher levels of uncertainty in the test results making levels below 5 ppb harder to reliably achieve. Testing methods and laboratories are also specified in Assembly Bill 475, preventing the burdensome costs and lengthy delays of rulemaking.

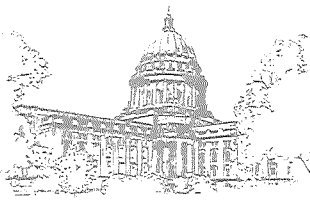
As an alternative to testing, only for daycare providers and as recommended by Department of Health Services (DHS), these entities may choose to do a plumbing assessment completed by a qualified professional who inspects the exposed portions of the lateral, pipes, and fixtures for lead to comply with the requirements in Assembly Bill 475. The presence of lead would trigger actions similar to tests above 15 ppb, and no presence of lead would exempt the facility from all future testing requirements similar to tests below 5 ppb. A flow chart illustrating this process has been provided with the testimony.

The legislation also directs the Department of Agriculture, Trade and Consumer Protection, Department of Children and Families, and others to seek federal funding to assist with the costs of testing and any remedial actions and distribute funding equitably. Numerous sources of federal funds are available, and other states that have implemented similar testing protocols have regularly seen grant awards exceeding \$1 million. In fact, DHS was able to tell us just yesterday that they've received a grant of just short of \$1 million for testing in daycares.

Finally, while not anticipated to be necessary, if a daycare, group home, or camp chooses to undertake more extensive remedial efforts, they may choose to apply for a low interest loan from Board of Commissioners of Public Lands by working with a local unit of government.

A quick survey of the certified labs under the Department of Natural Resources shows lead tests are not prohibitively expensive, costing around \$20 to \$40 for a test. Additionally, a Brita water filter that can be attached to a faucet will cost about \$20 to \$30. Since a filter removes 99% of lead in water, if attached before the first round of testing, even someone concerned that they may have lead in their facility should have full compliance with the bill and will never have to test again. In short, for about \$50 or less, the facility would provide clean water and protect children's health.

Assembly Bill 475 prescribes reasonable measures to protect children's health when they leave the home. By ensuring the delivery of clean water without revoking licenses or placing a heavy financial burden on small businesses, we can protect children's health while eliminating the problem of lead laden water in daycares, group homes, and camps.



# STATE SENATOR LaTonya Johnson

WISCONSIN STATE SENATE

6<sup>TH</sup> DISTRICT

**Assembly Committee on Energy and Utilities  
Testimony on Assembly Bill 475  
February 4, 2020**

Good morning members of the committee,

Toxic lead exposure in Wisconsin's children is a public health crisis. A 2016 Wisconsin Department of Health Services (DHS) report found that 5.0% of tested children under 6-years-old statewide had elevated blood lead levels. Flint, Michigan's rate of 4.9% in 2015 was declared a state of emergency. My hometown, Milwaukee, found a rate of lead poisoning at 10.8% of tested children under 6, including 13.2% for African American children. Other Wisconsin communities with significantly higher rates of lead poisoning than Flint include Watertown, Lafayette County, Rock County, Buffalo County, and Sheboygan County, ranging from 5.75% to 8.4%.

Lead poisoning is extremely harmful to young children, who absorb lead faster than adults. Lead poisoning can hurt a child's brain and nervous system and slow down growth and development. Exposure to lead can also affect almost every organ and system in a child's body. Further problems include learning or behavior problems, liver and kidney damage, and hearing loss. Extreme cases of lead poisoning may even cause seizures, coma, or death. The effects of lead exposure cannot be corrected, so it is imperative that we eliminate lead from facilities that care for children to prevent lead exposures before it occurs.

Substitute Amendment 1 to Assembly Bill 475 (AB 475) requires important lead testing requirements for state-regulated facilities that care for infants and children outside the home. The bill requires child care centers, child care providers, and recreational and educational camps to test for lead in drinking water and to provide potable water if lead contamination is found in order to obtain, renew, or continue a camp or child care center license or child care provider certification.

Given the high rates of childhood lead exposures across our state, it is critical that parents can feel safe sending their children to licensed facilities and care providers.

According to the DHS, our state would save \$7 billion if we made sure no Wisconsin kids are lead poisoned. This includes savings in medical care, special education, and even crime reduction among adults and youth.

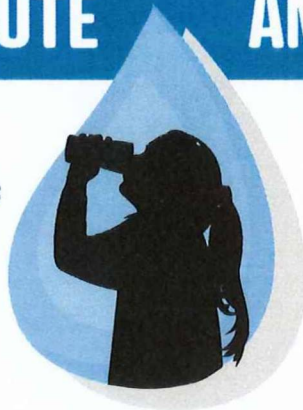
AB 475 is common sense legislation that protects our state's most precious resources—it's children—and I hope that we can pass it without delay. I would like to thank my co-authors, Senator Cowles, Representative Thiesfeldt, Representative Taylor, and Representative Kitchens for their work on this bill and thank you, committee members, for your consideration of this proposal.

# SENATE SUBSTITUTE

# AMENDMENT 1 TO SENATE BILL 424

ASA1 to AB 475

## Overview of the Process for Daycare Centers and Providers, Group Homes, and Summer Camps



Within **SIX MONTHS** prior to submitting for licensure, test drinking water sources used by children.  
*Submit test results with licensure*

Depending upon results (per sample point)

>15 ppb

Immediately remove source from service and provide alternative sources of potable water, and choose:

Remediate (may include filtration or disconnection of the source permanently if other sources are available)

5 to 15 ppb

Compliant for this cycle, but must test again in the next license cycle

Provide clean water from external sources throughout the license cycle

<5 ppb

Exempt from future testing

OR, for daycare providers only, within **SIX MONTHS** prior to submitting for licensure, complete a plumbing assessment by a qualified professional.  
*Submit test results with licensure*

Depending upon results

Presence of lead

Complete steps similar to results >15 ppb

No presence of lead

Exempt from future testing similar to results <5 ppb



**Testimony to the Assembly Committee on Energy and Utilities on Assembly Bill 475, relating to testing for lead in drinking water in facilities used for recreational and education camps and child care**

**Key Message: While we appreciate that the bill is being amended to provide some funding, we are not convinced the funding is adequate. We need a more stable funding source**

**February 4, 2020**

**For the leaders of the Wisconsin Child Care Administrators Association (WCCAA) and the Milwaukee Child Care Alliance (MCCA), our top priority is always the health and well-being of the children at our centers. We strive day in and day out to make this a reality, despite chronic underfunding by the state for the Early Care and Education field.**

**WCCAA, MCCA, and its members are in favor of eliminating lead from the drinking water in the state, including at child care centers and educational camps. We appreciate that the bill's authors have identified some funding sources for the bill. But it is not at all clear that these sources will provide the funding necessary to truly address the problem across the state. The state is now facing a budget surplus. Why not use some of that surplus money to ensure clean water in our child care centers?**

**Some points to consider:**

To test the water in a program, a center will need to hire a water specialist to draw the water samples and send them to a lab for testing. Cost will vary. The only cost that is included in this Bill is the cost for the lab testing, which does not include the water specialist who will need to draw the water for the test. This is a DNR requirement.

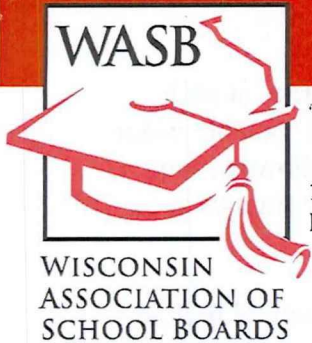
If lead shows up in the water, over the municipal level, centers will need to change out lead pipes in their building or use bottled water for drinking and food prep, or a combination of both. This will be very costly to programs who already are struggling with a tight budget. In some cases, if the expenses to remediate this problem run high, it could force a center to close. Funding **must** be available to help with this cost. Programs must also be given a sufficient timeframe in order to rectify a problem.

If high levels of lead show up in a program's water test, the DNR will help with remediation. But the DNR will be doing many follow up water tests, until they are satisfied the lead levels have dropped. The DNR can give you more specifics on this, but it will result in hiring a water specialist to draw the water test and sending the samples to a lab. More expenses for a child care program. Again, more and stable funding **must** be tied to this Bill.

Another concern is if a child care center rents the building they are in. What power will they have to force the landlord to comply with this bill?

**Any child care program having a private well is already doing lead testing of their water per DNR recommendations.**

Joan Beck, WCCAA President, [jbeck@willowschristianchildscarecenter.com](mailto:jbeck@willowschristianchildscarecenter.com)  
Christine Larson Salerno, MCCA Chair, [clarson@ymcamke.org](mailto:clarson@ymcamke.org)



"Leadership in Public School Governance"

JOHN H. ASHLEY, EXECUTIVE DIRECTOR

122 W. WASHINGTON AVENUE, MADISON, WI 53703  
PHONE: 608-257-2622 FAX: 608-257-8386

TO: Members, Assembly Committee on Energy & Utilities  
FROM: Dan Rossmiller, WASB Government Relations Director  
DATE: February 4, 2020  
RE: ASSEMBLY BILL 476, relating to lead testing of potable water sources in certain schools; providing loans for lead remediation in certain schools; and providing an exception to referendum restrictions for lead remediation.

Thank you for the opportunity to share thoughts and comments about Assembly Bill 476. I am here to speak for information.

The Wisconsin Association of School Boards (WASB) and its 421 member school boards take the matter of student health, safety and well-being seriously. Lead contamination of drinking water is a serious matter. Children are particularly susceptible to negative health consequences of the ingestion of lead.

My member school boards are also mindful that there are costs associated with detecting and remediating of environmental hazards such as lead and other harmful substances and that it may be difficult for some schools to bear those costs, if they should prove to be substantial.

I want you to be aware that WASB members have adopted a permanent resolution in support of legislation requiring the state and federal governments to provide for **and fund** mandated environmental hazard inspections for school facilities and remediation services when contamination is found.

The bill before you today would address lead in school drinking water by requiring testing and, if necessary, requiring that contaminated water sources be taken offline and replaced with clean water sources. However, the bill provides no state funding for this purpose and leaves it to schools and communities to address the costs associated with these mandates, which are largely unknown. That resolution, adopted by WASB members several years ago, prevents our association from endorsing this bill.

Nevertheless, the WASB appreciates that the bill attempts to minimize potential costs by providing flexibility regarding how schools are to address lead contamination when it is found.

The authors listened carefully to several suggestions the WASB made about how to improve the bill and the version before you today in the form of a substitute amendment reflects several of those suggested changes.

For example, the substitute amendment requires a school board to identify all water sources at each school and determine whether the water source must be tested under the bill and label all potable water sources that are not tested and that are accessible to pupils as “not for drinking.” This allows school boards flexibility to designate and post some water sources as “not for drinking.” These sources need not be tested under the substitute amendment.

The substitute amendment also provides that the testing requirements do not apply to a school building in which pupils are not regularly present and that is not used to prepare food or provide water for pupil consumption.

The substitute amendment further requires the DPI, in consultation with the DHS and DNR, to seek federal funding to assist school boards, operators of independent charter schools and governing bodies of private voucher schools with paying for the costs of complying with the testing and remediation requirements established under this bill. Any such federal funding obtained for this purpose must be distributed equitably among those school boards, charter operators, and voucher school governing bodies that are eligible for such funding.

Finally, the substitute amendment changes the frequency of required testing from once every three years to once every five years, which is in line with proposed federal regulations requiring public water systems to test the water coming into school buildings over a similar five-year cycle. (The proposed EPA regulation requires public water supplies to test the water going into 20 percent of the schools served by the water utility each year.)

This bill treats lead contamination as the serious health hazard it is and requires schools to act swiftly and decisively when lead contamination is found to exceed a specified threshold level. Under the bill, if any source of drinking water, such as a drinking fountain, is found to contain lead levels above the federal action standard of 15 parts-per-billion, that water source must be taken offline and, if necessary, alternative sources of drinking water must be provided.

Additionally, a remediation plan must be developed, posted online or made available for examination upon request, and submitted to DPI within six months.

To ensure transparency, the bill requires that the results of all tests conducted on drinking water sources must be posted on the school or district’s website.

We are concerned that this could cause confusion, particularly in larger school districts with multiple schools, due to the sheer numbers of results. The WASB suggests that this provision be amended to require website posting/notice of only those test results that show a concentration of lead a school is required to remediate (or intends to remediate even if not required to do so) by this legislation. Our goal in making this suggestion is not to hide results but to make it easier for the public to identify the most problematic sources within school buildings.

However, our biggest concern is that under substitute amendment, as under the original bill, if remediation efforts are necessary and cannot be absorbed in the school district’s current budget, the district would be allowed under the bill to go to a special referendum. While we appreciate that a school district would be allowed to exceed the current limit and ask more than two referendum questions in one year, if necessary, for the exclusive purpose of addressing lead remediation, an unanswered question is what a school district is to do if district voters turn down the referendums.

Finally, we note that while the bill does not directly provide state funding, it would allow schools to finance remediation through a School Trust Fund Loan from the Board of Commissioners of Public Lands (BCPL).

The bill, however, is silent regarding the priority assigned to how these loans are awarded or allocated. It is our understanding that it may be problematic for the Legislature to try to impose restrictions on the BCPL as the BCPL is a constitutionally authorized body. Therefore, we would ask the BCPL, in awarding these loans, to assign priority to the greatest extent possible to districts with the highest lead concentrations first and to districts with relatively lower per pupil spending levels or per capita income levels second. The Legislative Audit Bureau could be asked to monitor this prioritization requirement should it be added to the bill.

One concern we raised in the Senate hearing on the companion bill has to do with the possibility that schools districts with relatively lower concentrations of lead in their drinking water that are not required under the bill (or substitute amendment) to take remediation actions but that might wish to take action and are readily able to pass a referendum might be able to effectively crowd out districts that would be legally required under this bill to take remediation actions. This is one reason the WASB believes BCPL loans should prioritize loans according to the degree of lead contamination found to the extent possible.

Thank you for your consideration of these comments.





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**Written Testimony of Megan Severson  
State Director, Wisconsin Environment**

**Assembly Bills 475 and 476, "Protecting Children from Lead in Drinking Water"**

**Committee on Energy and Utilities**

**Wisconsin State Assembly**

**February 4, 2020**

Members of the Assembly Committee on Energy and Utilities:

Thank you for the opportunity to testify in support of AB475 and AB476. I am sharing this testimony today on behalf of Wisconsin Environment and our thousands of members statewide. We are a member-funded, non-partisan advocacy organization operating at both the state and national level, and we work to protect the places we love and champion the environmental values we all share.

Thank you for considering the urgent issue of lead in our children's drinking water. Lead is a powerful neurotoxin that can irreversibly damage how kids learn, grow and behave, even at low levels. Public health experts and agencies, from the American Academy of Pediatrics to the CDC, now agree: there is no safe level of lead for our children.<sup>1</sup>

Passing AB475 and AB476 as written would improve state laws to require testing and remediation of drinking water in our schools, daycares and summer camps. We appreciate that the bills require action when lead levels exceed "a concentration considered safe for drinking." Meanwhile, we do not support Assembly Substitute Amendment 1, which would tie the definition of lead contamination to the federal action level, which, currently set at 15 parts per billion (ppb), is too high to protect children from exposure. This federal action level is set to limit corrosion in plumbing rather than to protect public health. As stated previously, experts agree that there is no safe level of lead exposure for children.

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<sup>1</sup> See for instance: Centers for Disease Control and Prevention, "Lead" (webpage), September 2016, <https://www.cdc.gov/nceh/lead/>; and the American Academy of Pediatrics, "Lead Exposure in Children" (webpage), 2016, accessible at <https://www.aap.org/en-us/advocacy-andpolicy/aap-health-initiatives/lead-exposure/Pages/Lead-Exposure-in-Children.aspx>.

Across Wisconsin, lead-bearing fixtures, pipes and plumbing are contaminating the water our children drink, including in schools and child care facilities. Most schools and pre-schools still have fountains or faucets that contain lead — and wherever there is lead, there is a risk of water contamination. Schools and daycares from Middleton to Wausau to Janesville to Wisconsin Rapids to Milwaukee have reported lead-contaminated drinking water.

**State Policies Are Currently Failing to Protect Kids from Lead at School**

Our recent *Get the Lead Out* report gave Wisconsin’s policies an “F” for failing to protect children from lead exposure where they learn and play.<sup>2</sup> The report found that, across the board, Wisconsin still lacks comprehensive measures to detect, disclose and remove lead from school drinking water. Requiring testing and lead remediation in schools and daycares were among the report’s top recommendations.

All of our children deserve safe drinking water. Yet we have constructed systems that deliver water to their fountains and faucets laced with lead. And wherever there is lead, there is an ever-present risk of corrosion and contamination.

Schools, child care centers and summer camps — where our kids learn and play every day — are the perfect place to focus on prevention and remediation efforts, particularly when faced with limited financial resources.

Thank you for the opportunity to provide testimony today.

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<sup>2</sup> Wisconsin Environment Research & Policy Center and WISPIRG Foundation, *Get the Lead Out*, March 2019, <https://wisconsinenvironment.org/sites/environment/files/reports/WIE%20GetTheLeadOut%20Mar19%20%281%29.pdf>.



State of Wisconsin  
Department of Health Services

Tony Evers, Governor  
Andrea Palm, Secretary-designee

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**TO:** Assembly Committee on Energy and Utilities

**FROM:** Lisa Olson, Legislative Director

**DATE:** February 4, 2020

**RE:** Assembly Bill 476, relating to: lead testing of potable water sources in certain schools; providing loans for lead remediation in certain schools; and providing an exception to referendum restrictions for lead remediation & Assembly Bill 475, relating to: testing for lead in drinking water in facilities used for recreational and educational camps and child care

Chairman Kuglitsch and committee members, thank you for the opportunity to submit written testimony on Assembly Bill (AB) 475 and Assembly Bill 476. The Department would like to provide testimony for information only on both bills to share the lessons that we have learned about assessing for, and responding to, risks from lead in drinking water.

Accelerating efforts towards eliminating childhood lead poisoning in Wisconsin is a major priority for our Department and for Governor Evers. We appreciate that both AB 475 and AB 476 focus on this important issue and seek to protect children in Wisconsin by addressing lead in drinking water.

Both bills would establish testing requirements to characterize the risks of lead in drinking water at the places where Wisconsin children grow, learn, and play. For any risk assessment of a hazardous substance, we believe it is critical that the assessment yields reliable, actionable data. While testing for some water contaminants like nitrate and bacteria is relatively straightforward, assessing the risks of lead in drinking water can be challenging, complex, and costly.

Lead levels in water are affected by many factors, including materials present in the plumbing system, water temperatures, water use, and disturbances of the water system. This means that water lead levels can fluctuate unpredictably. For these reasons, reaching conclusions about the health risks associated with a particular water source based on a single test result is challenging.

The best approach for assessing the risk of lead in water will vary by size and type of facility. Larger schools and child care facilities are less likely to have a lead service line, so plumbing components, especially fixtures and drinking water outlets, may be a more likely source of lead. In smaller facilities and family child care providers, where a lead service line is likely present, the collection of a single water test is unlikely to yield reliable, actionable data.

For that reason, DHS recommends a plumbing assessment at these smaller facilities in lieu of testing. The results of an assessment may provide sufficient information to inform remediation measures for protecting health without needing to collect additional data. We are therefore appreciative of the bill authors including a plumbing assessment as an option for child care facilities under AB 475. Additionally, the Department will be able to factor in variables such as building size and age when developing technical guidance and model plans on lead testing for school districts and child care providers. The requirement to



**TO:** Assembly Committee on Energy & Utilities  
**FROM:** Heather Paradis, MD, Medical Director, Community Services, Children's Wisconsin  
**DATE:** Tuesday, February 4, 2020  
**RE:** Support for AB 475 & AB 476—School and child care lead testing

Good afternoon, Chairman Kuglitsch and members of the committee. My name is Dr. Heather Paradis and I am a practicing pediatrician and the Medical Director of Community Services at Children's Wisconsin (Children's). Thank you for holding this hearing today and allowing me this opportunity to testify today in support of both AB 475 and AB 476 regarding school and child care lead testing.

As many of you know, Children's is the state's only independent health care system dedicated solely to the health and well-being of children. We serve children and families in every county across the state, with inpatient hospitals in Milwaukee and the Fox Valley and more than 30 primary, specialty and urgent care clinics. We care for every part of a child's health, from critical care to routine checkups, and focusing on all aspects of pediatric well-being by providing a multitude of ancillary services and programs.

Lead remains a significant public health issue in our communities across the state. Despite great public health gains in childhood lead poisoning throughout the late 1970s to early 2000s, recent progress has plateaued despite increasing evidence that even low levels of exposure cause lifelong harm. As a primary care pediatrician, I see firsthand the effects lead poisoning can have on a child's health and well-being, including learning difficulties, developmental delays and behavioral issues. There is no "natural" level of lead that comes from our diet or nature; therefore, any detectable level of lead in a person's bloodstream is there as environmental contamination. When it comes to lead and children, no level can be considered "safe." While much of Wisconsin's lead poisoning continues to stem from degrading paint sources, efforts to protect our water supply and identify other potential significant sources of lead on a case-by-case basis are critical to reducing incidence of this harmful condition.

At Children's, we are dedicated to providing the best care for children and we have implemented measures to increase testing and identification of children in need of care. We follow Wisconsin Lead Poisoning Prevention Program guidelines and recommendations for testing, including enhanced testing for children who live in areas with elevated lead poisoning risk, including children covered by Medicaid and those residing in the cities of Milwaukee and Racine. We have equipped each of our Primary Care sites with point-of-care instruments, so lead results are immediately known and shared with both families and the local health department at the time of testing. Lead testing compliance is one of our internal quality metrics for Primary Care, Children's Community Health Plan and the Care4Kids program serving children in out-of-home care. Unfortunately, Children's continues to see far too many children who are hospitalized for chelation therapy due to lead poisoning. This is an issue that we can't ignore, and that needs continued focus and attention to address.

Eliminating the lead risk in our community will continue to take committed and coordinated action by community, health and government entities. We are thankful that city and state officials are looking at this as a public health issue and we encourage and support focused efforts and resources on lead poisoning prevention, including increased testing efforts. AB 475 and AB 476 put in place a process for our schools and child care settings to test water sources for lead. Implementing standardized lead testing and remediation at locations where children spend much of their time will help prevent lead

Health Effects of Lead  
Testimony presented by Elizabeth J. Neary, MD, MS, FAAP  
Adjunct Clinical Assistant Professor of Pediatrics  
UW School of Medicine and Public Health  
Assembly Committee on Energy and Utilities  
February 4, 2020

Dear Chairman Kuglitsch and Members of the Committee:

I appear before you in support of Assembly Bills 475 and 476.

As a pediatrician, I am deeply concerned about the exposure of children to lead and its devastating health effects on the developing brain. I commend Chairman Kuglitsch for his leadership on passing 2017 Wisconsin Act 137 related to lead service line replacement and for continuing to protect our children from lead poisoning. This is so important as there is no national mandate to test drinking water of daycares, camps and schools. Only nine states and the District of Columbia have established standards for testing drinking water, so again Wisconsin can "Lead on Lead."

Lead is toxic to all cells, but especially the developing brain. Its damage is long-lasting and it can even affect the next generation. The health effects can be seen in all age groups, but are particularly devastating to the brains of young children and the developing fetus.

The 2 main sources of lead poisoning in the US are lead paint in older homes and lead in drinking water. The lead service line is the main contributor to lead in drinking water.

Lead poisoning is 100% preventable.

New research has shown evidence of damage to the brain at very low blood lead levels. There is NO safe level of lead in the blood. (Ref 3, 4)

- 1) Lead in a liquid form is more easily absorbed than in a solid form.
- 2) Young children can absorb lead more easily than adults. Children absorb 40-50 % of a dose, whereas the average adult absorbs about 10%.
- 3) Formula fed infants under 6 months are at the highest risk of lead poisoning because of their small size, their rapidly developing brain and the fact that their entire diet consists of formula made from contaminated water
- 4) Some lead is excreted, but the vast majority of lead remains in the body. It is stored in the bones in the same way as calcium. Later in life, this reservoir of lead in the bones can be released back to the blood. (Examples- when bones are broken, during pregnancy and at menopause.) During pregnancy, calcium from a mother's bones is released to the blood and contributes to the skeleton of their developing

fetus. Lead stored in the bones can do the same. So, a lead poisoned child of today can poison their developing fetus in the future.

In adults, lead can damage the heart, kidneys and brain, resulting in elevated blood pressure and possibly age-related cognitive decline. (Ref 4)

In pregnant women, lead can lead to miscarriage and lower birth weight infants. (Ref 4)

The effects of lead are most severe in the young child and developing fetus because they are in rapid state of growth and development. 85-95% of brain development occurs before age five. Lead is a potent neurotoxin that damages the young brain permanently. It disrupts the formation of the delicate circuitry of the brain. Lead poisoning results in impaired hearing, lower IQ scores, and behavioral issues, including hyperactivity, aggressiveness, impulsivity and learning problems. It is not surprising that research studies show that children exposed to lead have lower 4<sup>th</sup> grade math and reading scores, lower high school graduation rates, and increased incarceration rates. The cascading effects of early exposure to lead extend to adult life, affecting job prospects, mental health and overall economic prosperity. (Refs 1,3,5)

For every dollar spent on controlling lead hazards, there would be a \$17-\$221 ROI, taking into account the following: health benefits, increased IQ, higher lifetime earnings, tax revenue, reduced spending on special education and reduced criminal activity. (Refs 1,6)

The real solution to lead poisoning is primary prevention, that is, reducing or eliminating sources of lead in the environment of children BEFORE exposure occurs. There is no treatment to reverse the developmental effects once exposure has occurred. (Chelation is used for very high levels, but it cannot reverse the damage that has already occurred.) By mandating testing, we can identify water with elevated lead and protect our children.

You as legislators have the opportunity to have a far greater impact on prevention of lead poisoning than we do as physicians. Thank you for taking these steps to improve the health of the children of Wisconsin.

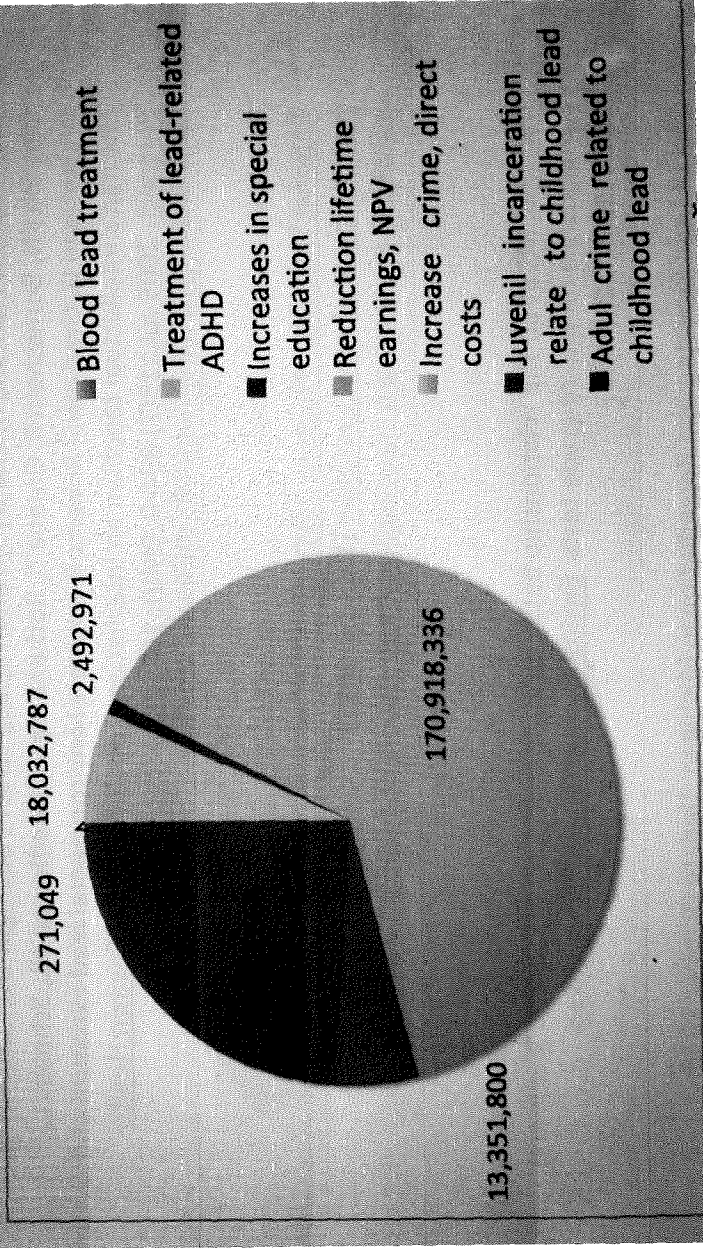
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7. Dr. Bruce Lanphear... "Little Things Matter" Watch this for a visual representation of how the impact of lead affects the intelligence of the population  
<https://www.youtube.com/watch?v=E6KoMAbz1Bw>

The following pie chart is from Reference 6 (Michigan data) which demonstrates the real costs to society of lead poisoning.. including treatment, special education, lost lifetime earnings, costs associated with crimes and incarceration costs.

**Figure 2: Summary of Costs Associated with Lead Exposure, 2014 Snapshot Estimate**







**Testimony of Carly Michiels**  
**Government Relations Director**  
**Assembly Bill 475 relating to lead testing in childcare facilities and camps**  
**Assembly Bill 476 relating to lead testing in schools**  
**February 4, 2020**

Thank you for the opportunity to testify on Assembly Bill (AB) 475 and AB 476 both relating to lead testing in schools and childcare facilities. Clean Wisconsin is a non-profit environmental advocacy organization focused on clean water, clean air, and clean energy issues. We were founded almost fifty years ago and have over 20,000 members and supporters around the state. We have been working on water pollution issues in Wisconsin since our founding, and while some of the particulars have changed Wisconsin remains a state with abundant water resources but also abundant challenges in restoring and protecting those waters. Clean Wisconsin employs scientists, policy experts, and legal staff to bring all the tools at our disposal to protect and improve both our air and water resources.

We appreciate the authors, Senator Cowles and Representative Thiesfeldt prioritizing lead contamination through these bipartisan bills that focus on testing for lead in drinking water during the Year of Clean Drinking Water. It continues to surprise me that there is no requirement for the places where kids spend most of their time – in school, at day care, and at summer camp – to test the drinking water for lead. These bills call attention to the harmful nature of lead contamination to our youngest Wisconsinites.

It is important to note that there is no safe level of lead exposure. The current standard – or more accurately – the action limit of 15 parts per billion (ppb) is a technology-based standard set in 1991 as a measure of the effectiveness of corrosion control. 15 ppb is not a health-based standard and the federal Environmental Protection Agency (EPA) identifies this as a common misperception among the public. In fact, the EPA has consistently emphasized that the health-based maximum contaminant level goal for lead is zero and that there is no safe level of lead exposure.

In Wisconsin 6% of kids have tested positive for lead poisoning, higher than the national average. Lead can have harmful impacts, with long-term consequences especially among children. According to The Department of Health Services (DHS), low to moderate levels of lead exposure can have a life-long effect on neurological and cognitive development, health and behavior, like aggression and violence, and learning and school performance. It can affect memory, fine motor skills, result in reproductive problems, artery, kidney and heart damage, and can affect children's ability to learn, speak, or understand words. The Department of Natural Resources (DNR) has estimated there are 192,000 lead service lines remaining in the state, at a cost of \$2 billion to replace. Lead contamination in drinking water contributes to high lead blood levels in many communities across Wisconsin and is 100% preventable.

- AB 475 requires lead testing of drinking water sources as a condition of licensure for day care centers, day care providers, group homes, and summer camps. Like the school testing bill, if levels are above the federal action limit of 15 ppb the contaminated sources must be taken offline. Under this bill, if there is contamination, testing must continue until the lead levels are shown to be not higher than 5 ppb, an alternative permanent external source is established, or a plumbing assessment is conducted that shows no presence of lead.



- AB 476 requires schools to test for lead in drinking water sources and if there is any source found to be above the federal action limit of 15 ppb it must be taken offline and a clean source of water must be provided. Additionally, testing is then required until lead levels are not higher than 5 ppb. An important part of this bill is public disclosure of test results and remediation plans if a source tests above the limit. This ensures that there is transparency and residents can remain aware and informed on the safety of drinking water in schools.

There has been increased bipartisan attention on addressing lead pollution in Wisconsin. These bills are an important step forward and we thank the authors for their hard-work and the committee for hearing the bill today. Clean Wisconsin will continue to support research-based protections and all efforts to limit and eliminate sources of lead contamination.

Everyone seems to agree that we need to come together to address lead contamination in drinking water in Wisconsin, as there is much work yet to be done on this issue. We support AB 475 and 476 and thank the authors and those already in support of the bills.

Thank you.