

Lead Exposure: Unseen Risks for Growing Minds



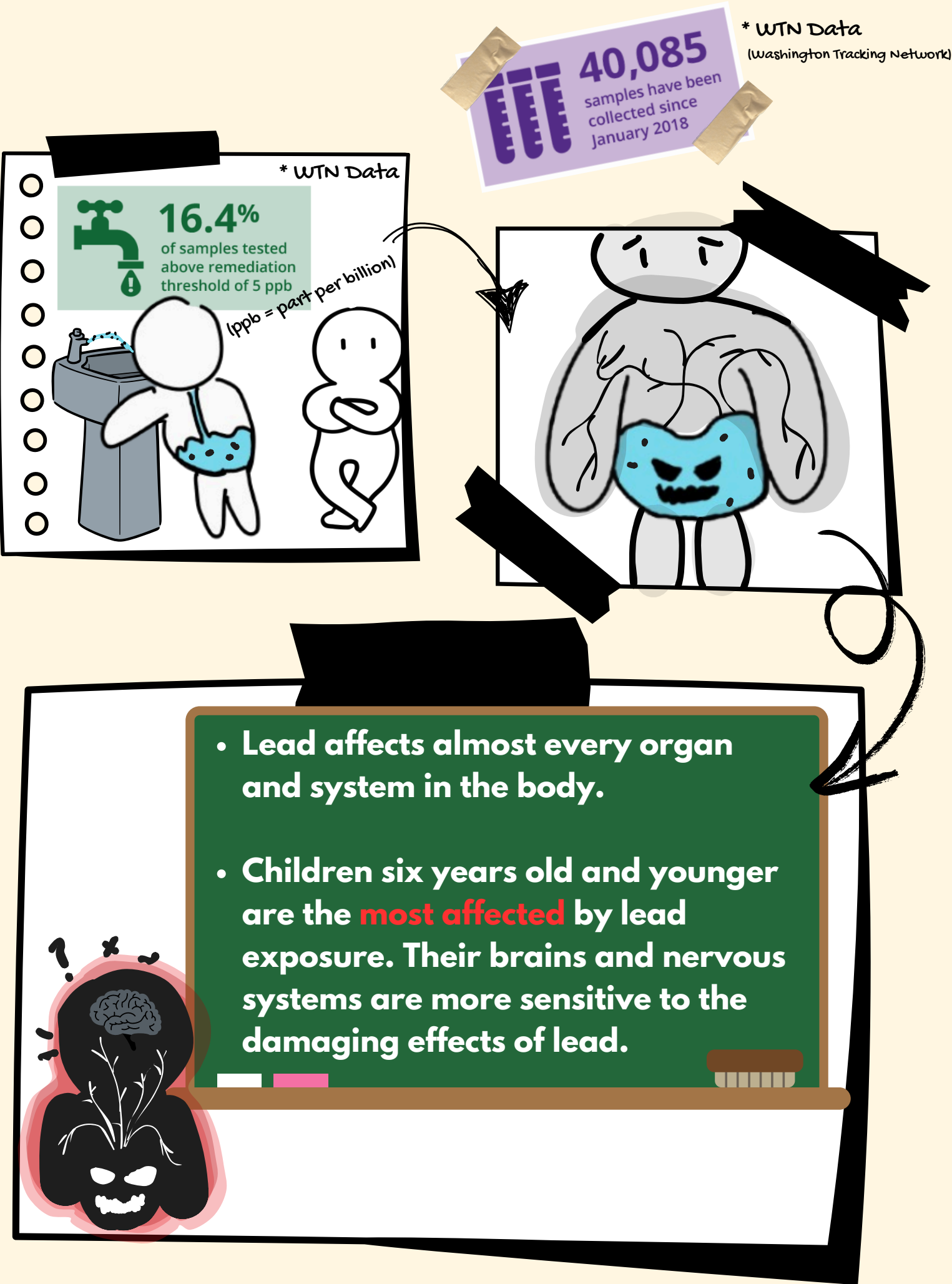
Senul Wickramaratna

THE PROBLEM:

- **Lead exposure** through **drinking water** is a serious concern for children's health.
- This issue is prevalent in many schools even though not widely brought to attention.

This infographic explores:

- the scope of this issue and potential health risks for students
- factors contributing to the exposure
- sources of lead in school **drinking water**
- measures that officials, schools, families, and others can take



This leads to...



Behavior and learning problems

Anemia (lack of **red blood cells**)

Slowed growth

Lower IQ



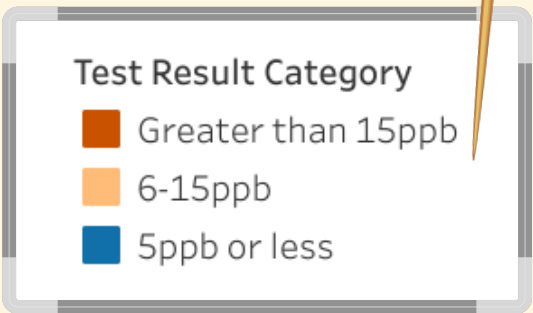
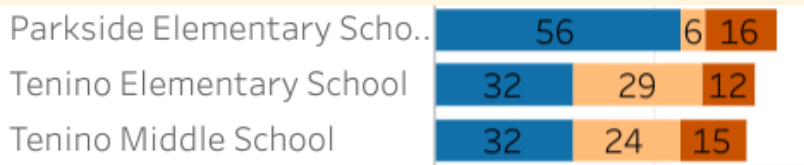
Seizures, comas, and even DEATH...



Is lead exposure in schools harming our children's ability to learn?

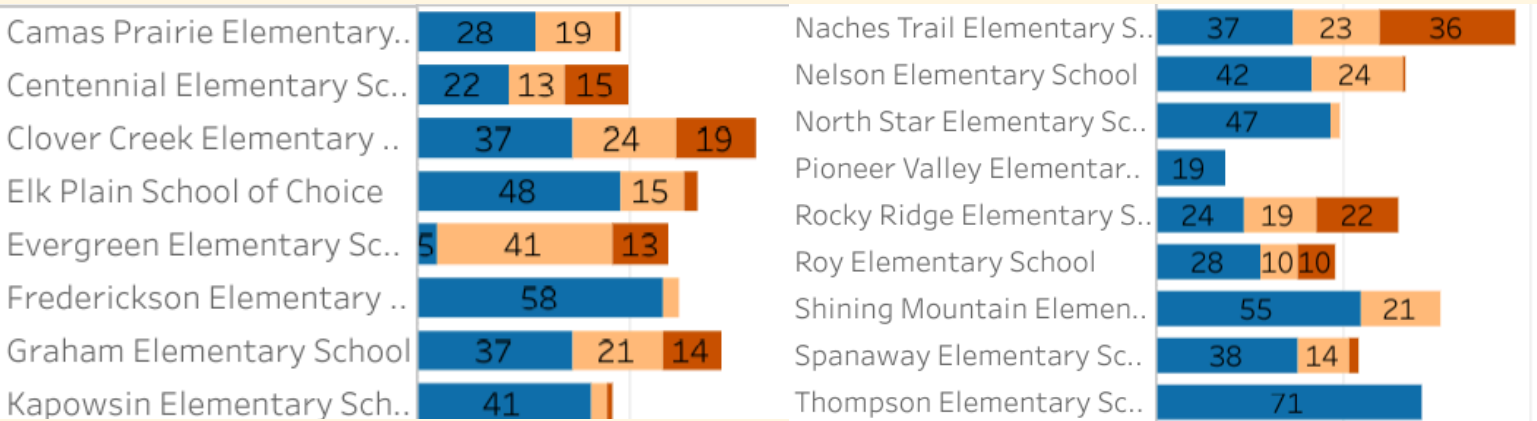
* WTN Data

Tenino School District: **43/222** samples above **15** ppb, & **59/222** samples **6 - 15** ppb (**43%** over 5 ppb)

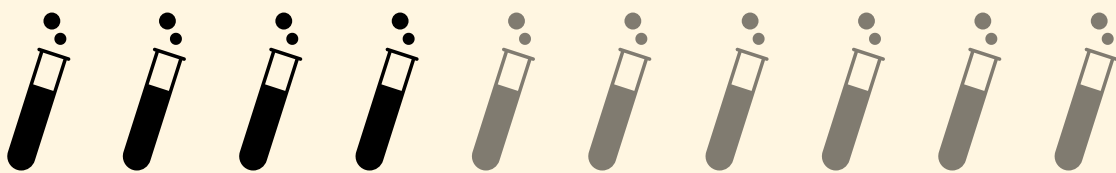


And even in larger school districts...

Bethel School District: **137/1028** samples above **15** ppb, & **254/1028** above **6 - 15** ppb (**40%** over 5 ppb)

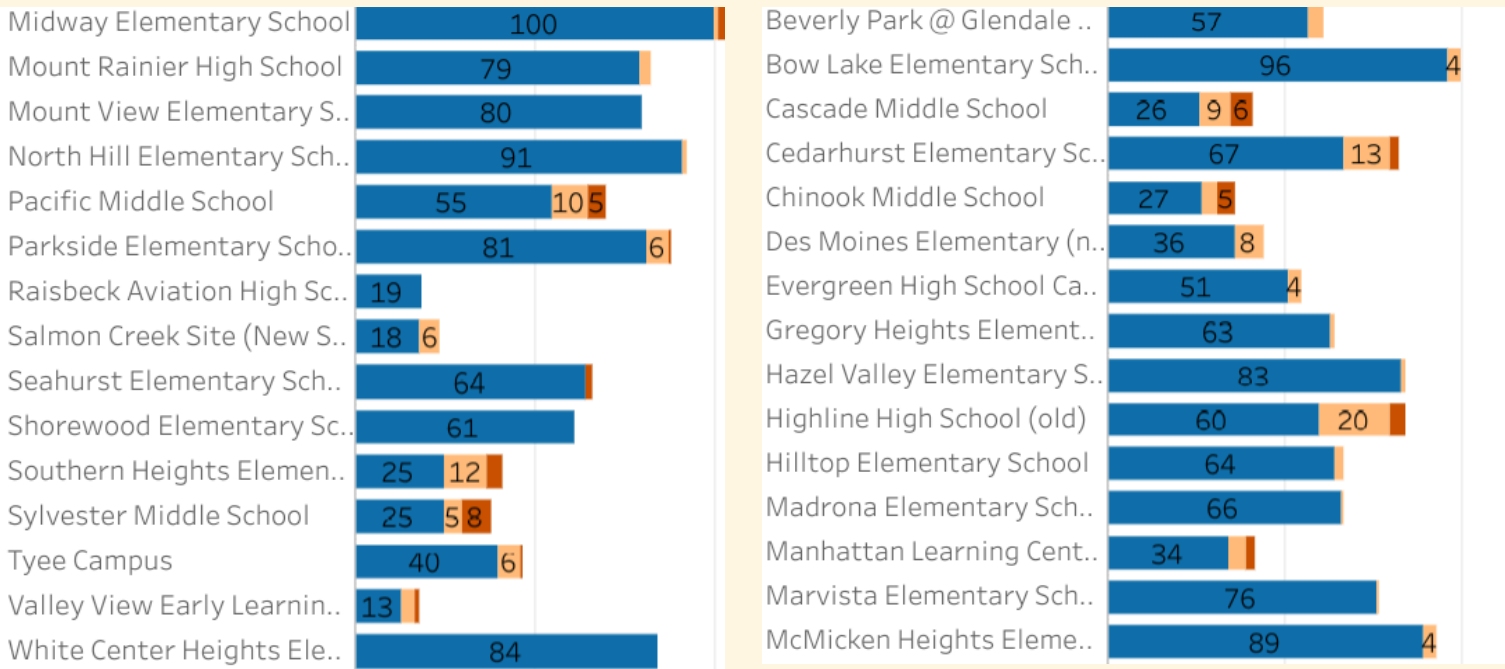


That's **4** in **10.**
(over 5 ppb)



On the other hand, even larger school districts show better sample results...

Highline School District



Hmm... Is it possible that funding is affecting this?

If we take a closer look at a few school districts... * WA State Fiscal Information

Washington has an average **\$17,000** per **FTE (full-time equivalent) Enrollment:**
Dollar per FTE Enrollment is the budget given for one student in a district.

Tenino

3/4 schools sampled

\$13,508

in total expenditures

Bethel

17/34 schools sampled

\$14,439

in total expenditures

Compared to districts that get a **larger budget** per **student** like Highline, we find...

Highline

30/34 schools sampled

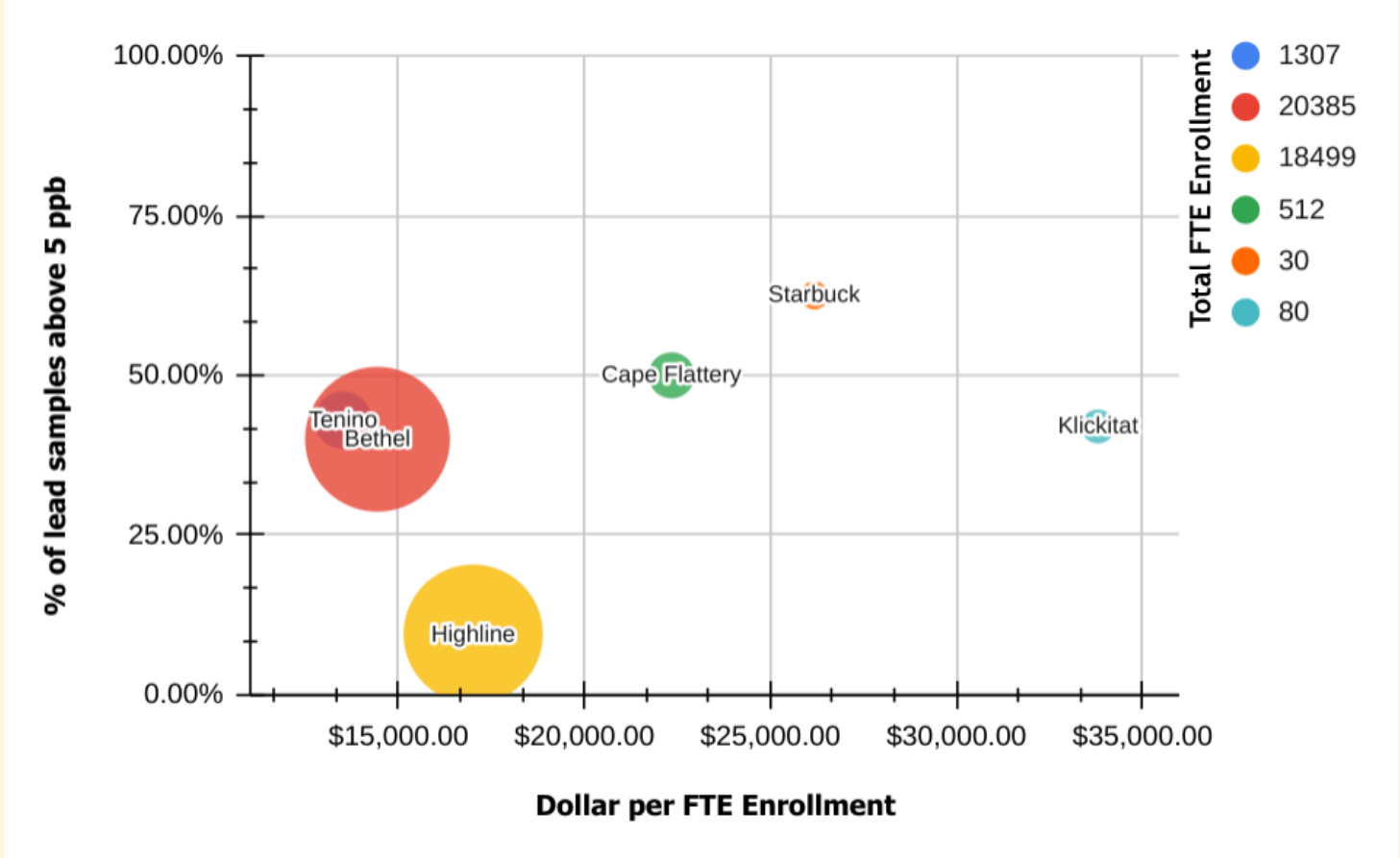
\$17,011

in total expenditures

out of **1,911 samples**,
only **136** were 6-15 ppb, and **45**
above 15 ppb. (**9.5%** above 5 ppb)

Let's examine the correlation between budgets and lead exposure...

* WTN Data Vizualization



What this means:

This bubble chart shows us a “three bears” type of situation

“Too cold!”

School districts with **medium to high enrollment** but a **low dollar per FTE amount** have a **high percentage** of lead samples in drinking water above 5 ppb.

“Just right.”

School districts with **high enrollment** and an **average to high dollar per FTE amount** have a **low percentage** of lead samples in drinking water above 5 ppb.

“Too hot!”

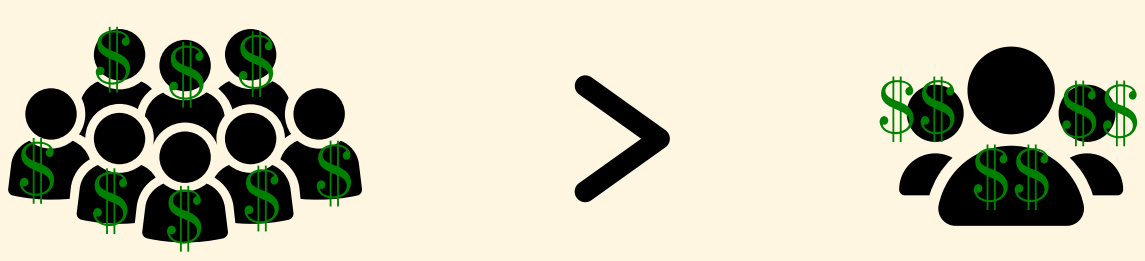
School districts with **low enrollment** and even a **high dollar per FTE amount** have a **high percentage** of lead samples in drinking water above 5 ppb.

This is a result of ECONOMIC DISPARITIES.

This is when certain factors lead to an uneven distribution of money/budgeting.

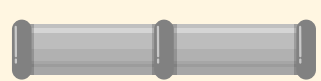
In this case, a **district’s overall budget** is the most significant factor influencing their **lead exposure levels** in drinking water.

While districts with **low enrollment** may receive a **higher dollar amount per FTE**, this figure is per student and totals **very little overall**.



How does lead get into the WATER?

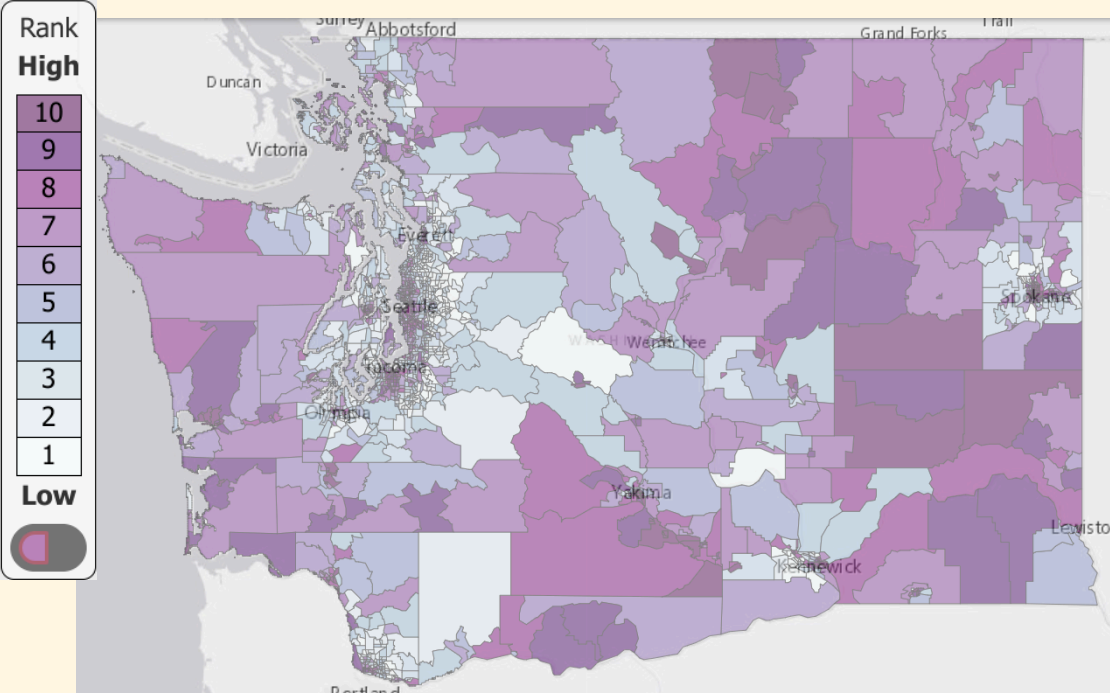
Lead can enter water through plumbing systems and lead-based paint, especially in older school buildings.



- **Older schools** may have lead pipes or fixtures, allowing lead into drinking water, especially if the water is acidic.
- Faucets and drinking fountains can corrode, releasing lead into the water.
- Water sitting in pipes increases lead absorption.



- In schools **built before 1978**, lead paint can deteriorate, creating harmful dust and chips.
- Disturbing lead paint during renovations can release lead dust.



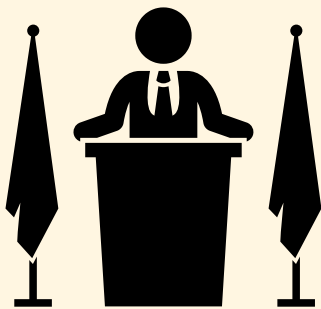
This map shows **lead exposure risk** from buildings with **lead-based paint** in Washington, with **most counties** having a risk level **above five**, which is concerning.

Further inspection shows that the areas with **lower-income** and **older buildings** have the **highest** lead exposure risk.

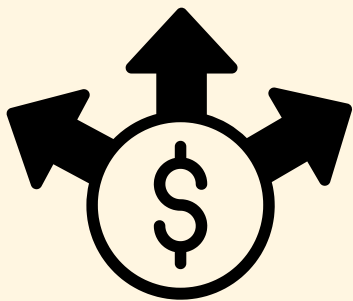
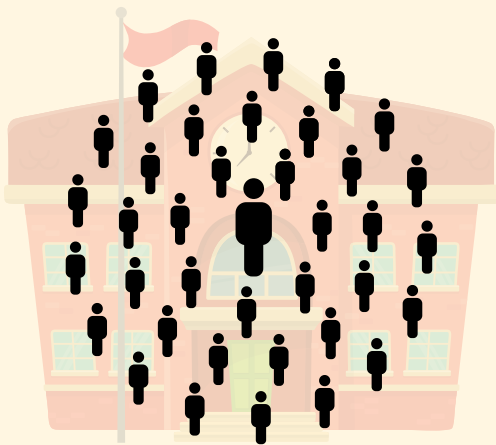
It’s time to take **action**.
What can we do?



Officials,
K-12 Legislature, School Boards, and more:
Let’s change the **budgeting system**.



- **Enrollment Targeted Funding:** Money should be distributed based on **enrollment count**. Low enrollment districts require more dollars per student, while higher enrollment schools need **sufficient** funds per student — **more than they currently receive**, but **less than low enrollment districts** — to effectively manage **overall budgets**.
- **Contingency Funds:** Setting aside contingency funds is important for addressing unexpected **lead-related issues**. These funds should be kept for quick responses to contamination problems, making sure schools are able to act **without disrupting** their overall budgets.



How can proper funding help schools???

1. Budgeting allows for **regular testing** in water and paint to identify contamination early.
2. Funds can be allocated to **replace lead pipes & fixtures** and provide **industrial lead removal water filter systems**, ensuring safe drinking water.
3. Using funds for training on lead safety helps create a safer environment.
4. A contingency budget (**emergency money**) allows quick response to unexpected lead issues.



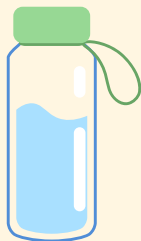
Students, parents, schools, and more:
Let’s raise awareness.

Safe learning in school is what we all want, and lead exposure is a threat to it. By contacting the administration, looking at networks like Washington Tracking Network, and more, you can see if lead is a problem in your school, and do something about it.

Call the National Lead Information center:
(1-800-424-LEAD)

Get in touch with your district board.
Share this information with others.

Something that doesn’t require funding...
And how you can protect yourself?



Using a reusable water bottle can make all the difference.

[See if your school water has lead:](#)

