Closing the Gap:
Improving Early Childhood Lead Testing



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#2026BHPLearningCollaborative

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Learning Objectives

- Identify effective collaborative practices that strengthen lead testing and screening performance.
- Explore how data-driven quality improvement efforts enhanced lead testing and screening outcomes.
- Apply insights from family interviews to inform future quality improvement efforts for lead testing and screening.



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Lead Safe Screening & Testing
Pilot Program Results

Friday, November 6, 2026
10:20-11:20 a.m.

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Presenters



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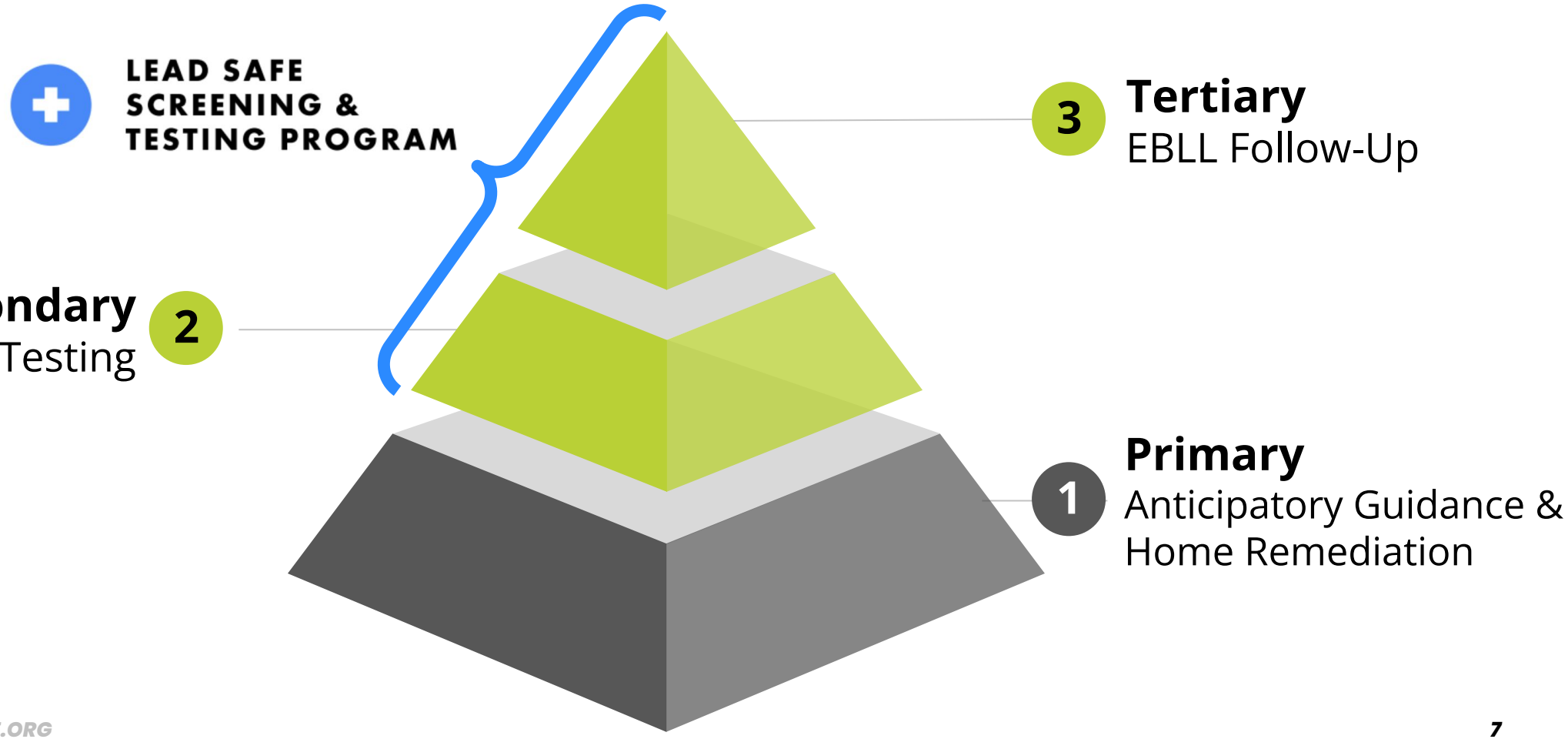
Screening & Testing Pilot Program

Mobilize a multi-sector learning collaborative to:

1. Increase **provider and family awareness** of childhood lead poisoning risks and prevention.
2. Ensure children in Cleveland have a **medical home and are tested** for lead poisoning before their 2nd birthday.
3. Provide **timely follow-up and support** for children with elevated blood lead levels.



Lead Poisoning Prevention: Our Focus



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The Problem

Lead Testing Rates Dropped Over Time

Percentage of Cleveland children under the age of 6 tested for lead poisoning

Test Year	Confirmed Blood Lead Levels, µg/dL (% of kids tested)				Unconfirmed Elevated* (% of kids tested)	Total Kids Tested (% of population)	Estimated Population Under Age 6
	3.5-<5	5.0-<10	10-<45	≥45			
2015	778 (7%)	1,050 (9%)	417 (3.5%)	5 (<0.1%)	305 (2.7%)	11,818 (41%)	29,182
2016	676 (6%)	1,036 (9%)	421 (3.5%)	8 (0.1%)	198 (1.6%)	12,174 (41%)	29,553
2017	663 (6%)	1,030 (9%)	502 (4.2%)	11 (0.1%)	161 (1.3%)	11,951 (40%)	30,022
2018	638 (5%)	825 (7%)	351 (3.0%)	5 (<0.1%)	164 (1.4%)	11,740 (42%)	28,165
2019	533 (5%)	745 (7%)	278 (2.5%)	4 (<0.1%)	101 (0.9%)	11,338 (41%)	27,863
2020	347 (5%)	506 (7%)	201 (2.7%)	1 (<0.1%)	84 (1.1%)	7,563 (28%)	26,830
2021	395 (4%)	552 (6%)	237 (2.7%)	3 (<0.1%)	105 (1.2%)	8,805 (37%)	23,793
2022	401 (5%)	504 (6%)	227 (2.8%)	9 (0.1%)	77 (1.0%)	8,093 (32%)	25,004
2023	450 (6%)	518 (7%)	256 (3.3%)	5 (0.1%)	86 (1.1%)	7,835 (32%)	24,159
Ohio updated the blood lead reference value from 5.0 µg/dL to 3.5 µg/dL starting in 2024							
2024	405 (5%)	509 (6%)	260 (3.2%)	3 (<0.1%)	192 (2.4%)	8,134 (33%)	24,900

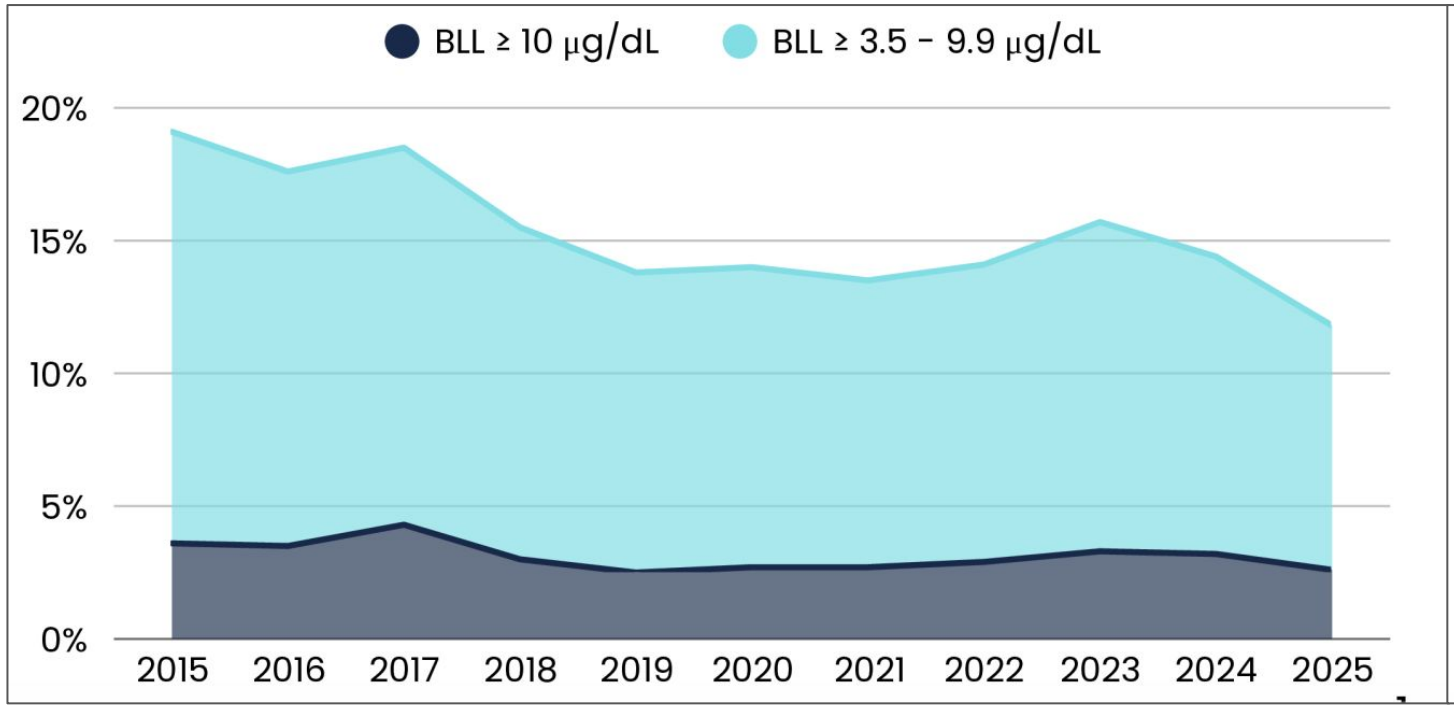
The lead testing rate dropped after the pandemic and hadn't fully recovered yet

https://www.clevelandohio.gov/sites/clevelandohio/files/health/health/health_statistics/Childhood_Lead_Report_2026.pdf

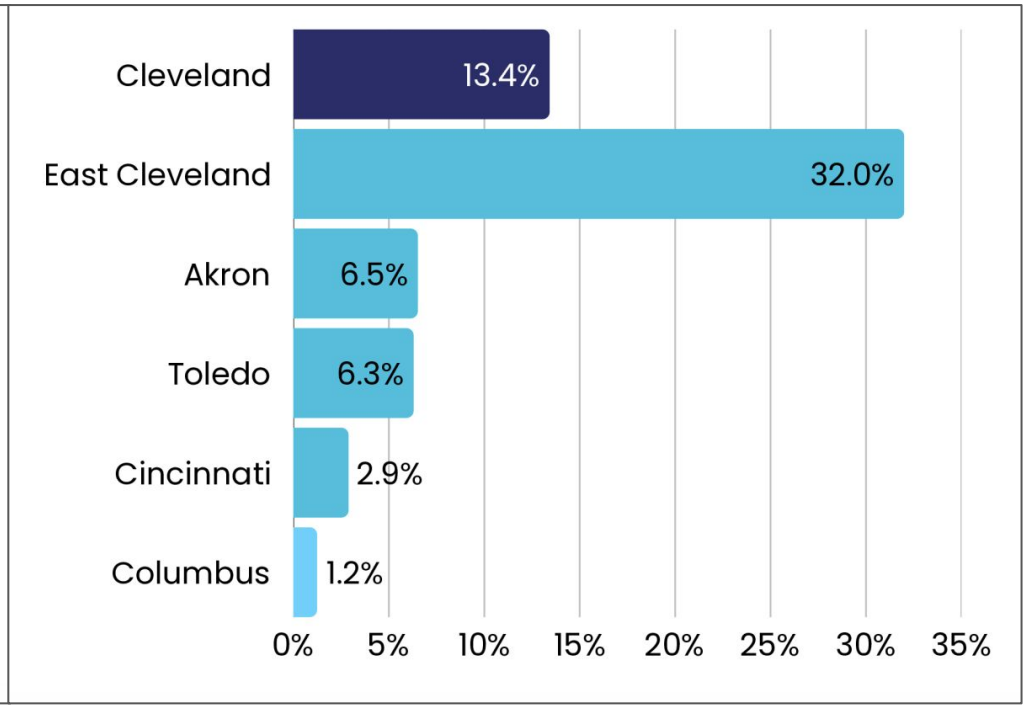
Lead Poisoning is Still a High Risk

Percentage of children under the age of 6 with an elevated blood lead level out of all children tested

Cleveland - 2025



Ohio Comparison Cities – 2024



➔ Down is good, and Cleveland children still have a higher risk of exposure.

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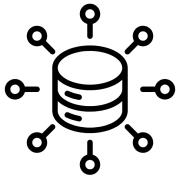
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The Goal

Collective Impact Model



Common Agenda



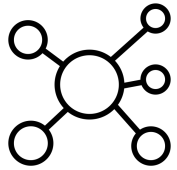
Shared Measurement System



Mutually Reinforcing Activities



Continuous Communication



Backbone Support Organization

Kania, J., & Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review*, *9*(1), 36–41. https://doi.org/10.48558/5900-KN19

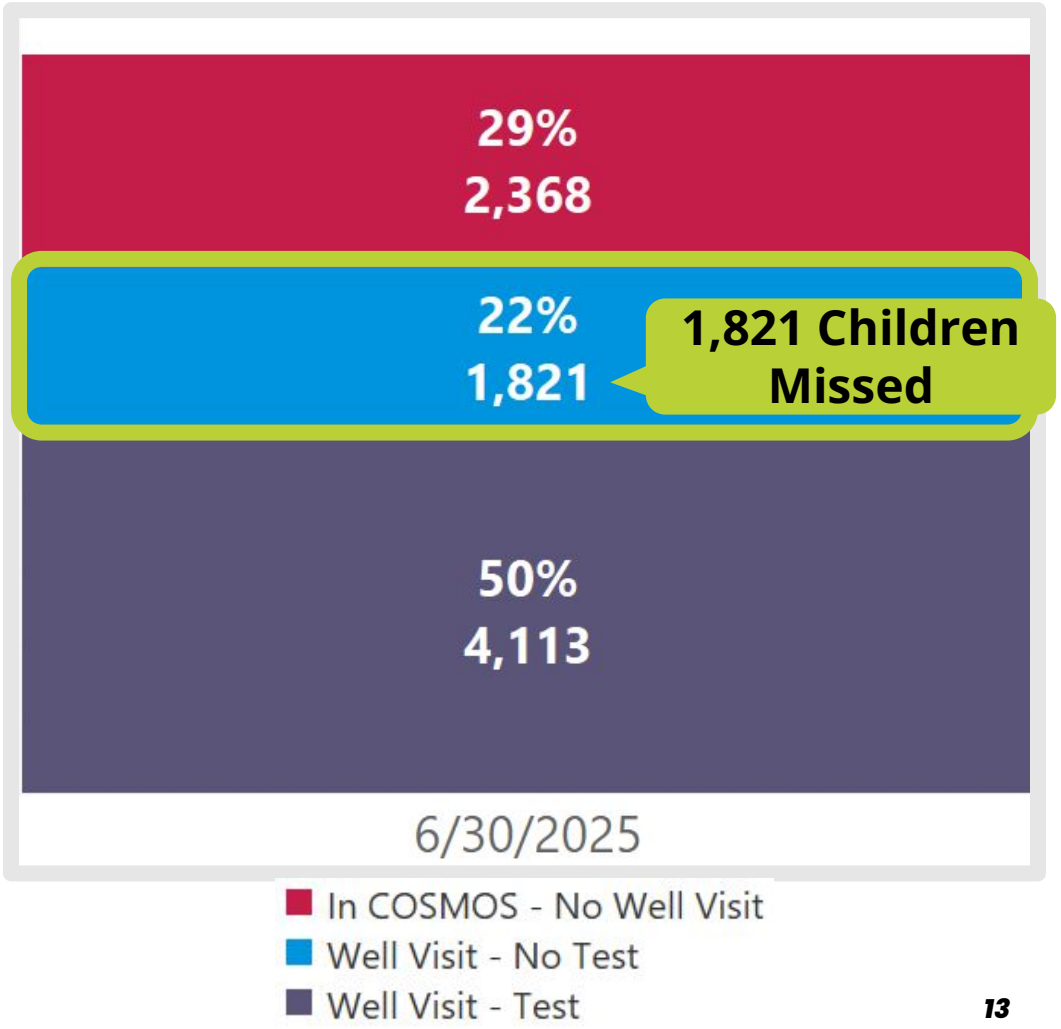
Common Agenda

Increase the percentage of Cleveland children who attend a well visit and receive **at least one lead test before their 2nd birthday** by 10% in one year, from 69% to 79% by June 30, 2026.

- **Why?**
  - Aligns with Ohio law, American Academy of Pediatrics guidelines, HEDIS measure
  - Biggest missed opportunity!
  - Low bar for healthcare providers
- **Data Source**
  - Electronic Health Record
  - Timely – monthly feedback loop

Lead Testing Rate by Encounter Type

June 2025

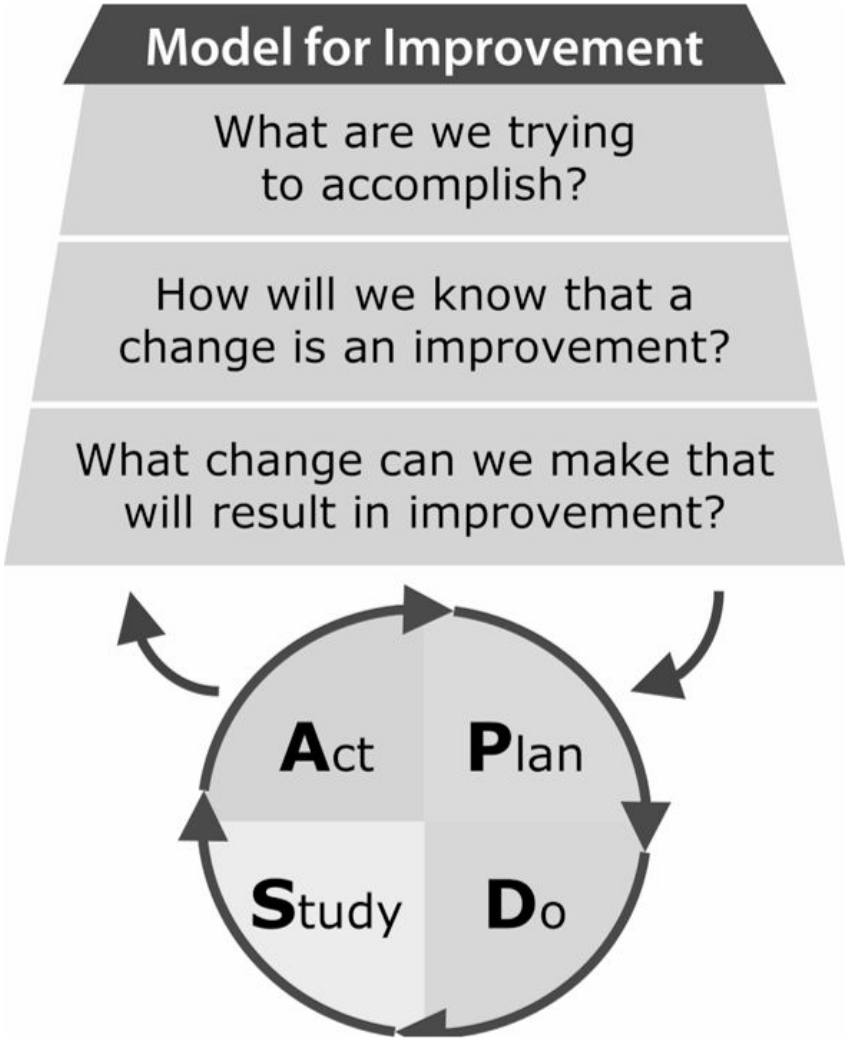


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Our Approach:
Tests of Change

Testing Ideas – Starting Small



https://www.ihi.org/library/model-for-improvement

In-Office Testing

- **Opportunity**: two health systems had shown that conducting a finger prick blood test during a wellness visit increases early detection
- **Many steps to implement:**
  - Leadership approval
  - Health maintenance alert
  - Supply ordering
  - Nurse training
  - Internal data dashboard
  - Nurse manager buy-in to monitor performance and conduct retraining

30 **Clinics transitioned to this best practice**



https://signalcleveland.org/how-five-cleveland-health-systems-collaborated-to-increase-lead-screening-lead-poisoning/

Community-Based Lead Testing

- **Three health systems** supported community-based lead testing in 2025.
- **We studied the results for <u>one</u> health system:**

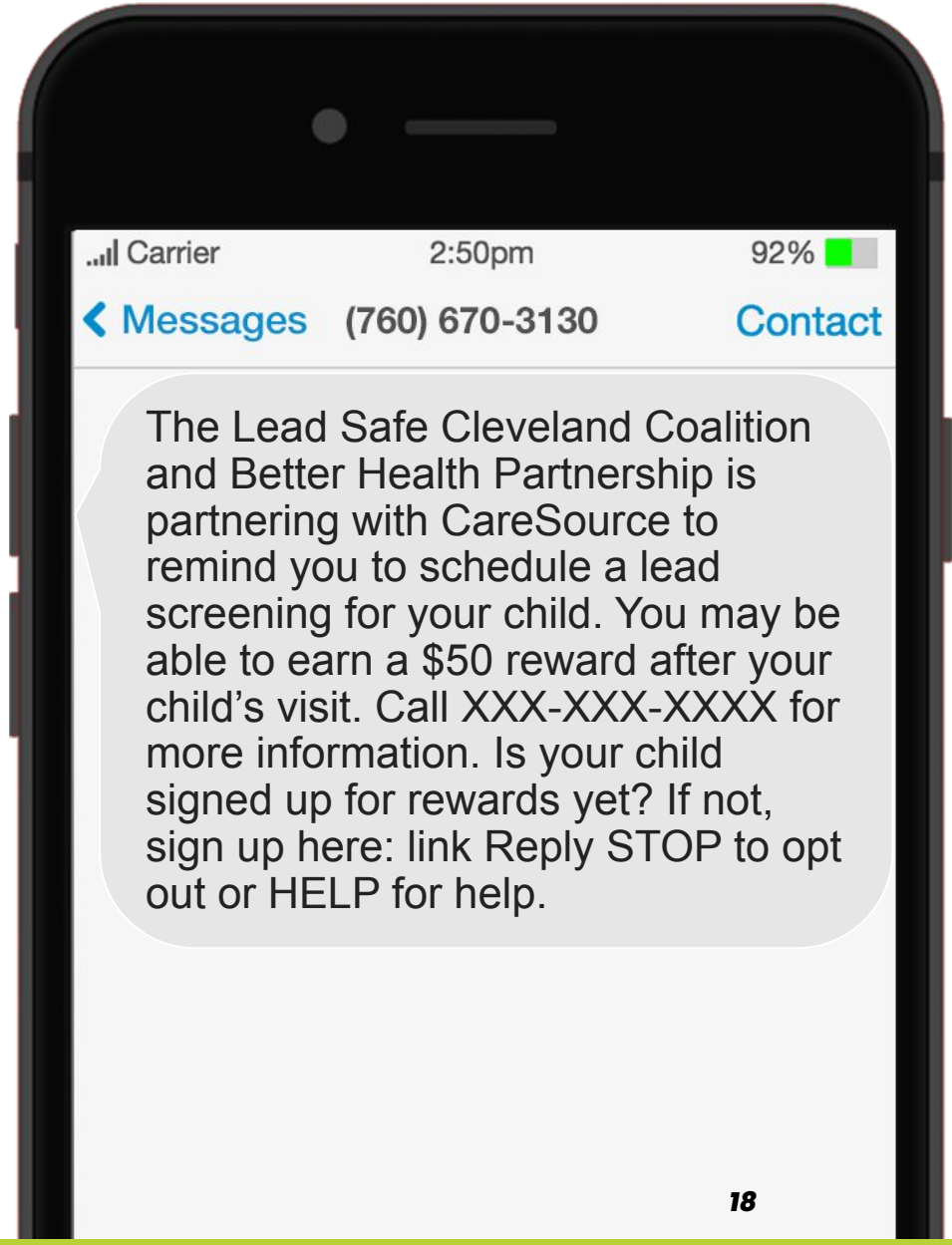
23 community events
- 290 unique children tested (302 tests)
  - 25 (9%) with an Elevated Blood Lead Level (EBLL)
    - 14 (56%) with follow-up venous test completed
      - 3 with confirmed venous EBLL



- **Benefits**: Meets families where they are and raises awareness in a variety of settings
- **Challenges**: Limited reach of high-risk families and difficult to coordinate connection back to pediatric medical home
- **Adapt:** prioritize lead testing at events that reach higher risk families; engage CHWs.

CHW Care Coordination

- Nearly **70 CHWs and supervisors trained** by the Lead Safe Resource Center in January 2026
- Grant-funded reimbursement model and workflow **co-designed in two months**
- CareSource identified nearly **275 children** in Cleveland with a lead screening care gap and sent a **text** to 2 cohorts
- Health systems confirmed 31 children had already tested because there is up to a 90 day lag in reporting
- Remaining children (244) were assigned to a community health worker (CHW) at a Pathways HUB agency
- **About 1 in 4 were reached** by CHWs (58)
  - Cold referrals (173) and ran out of time (42)
- **$86,375 planned disbursement to agencies**



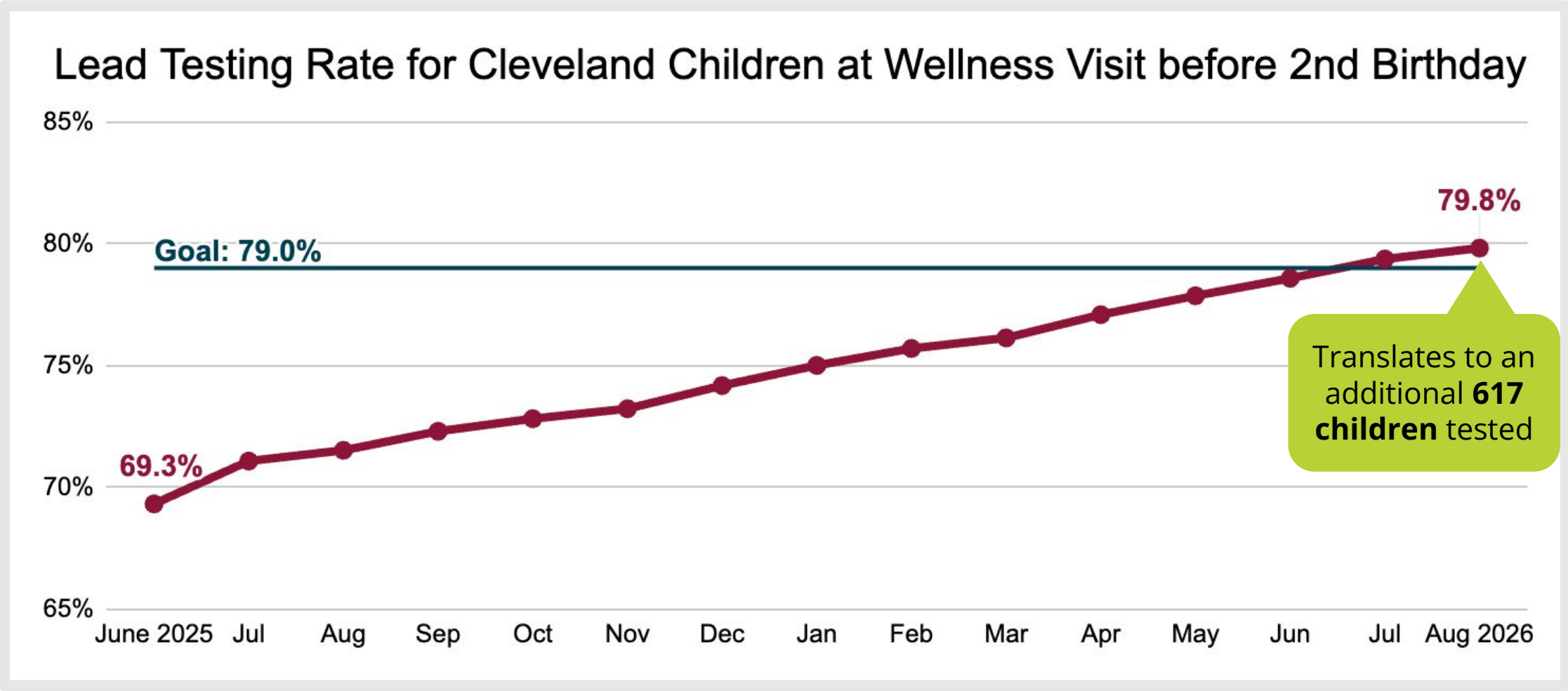
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The Results

Program Aim Achieved in 13 Months

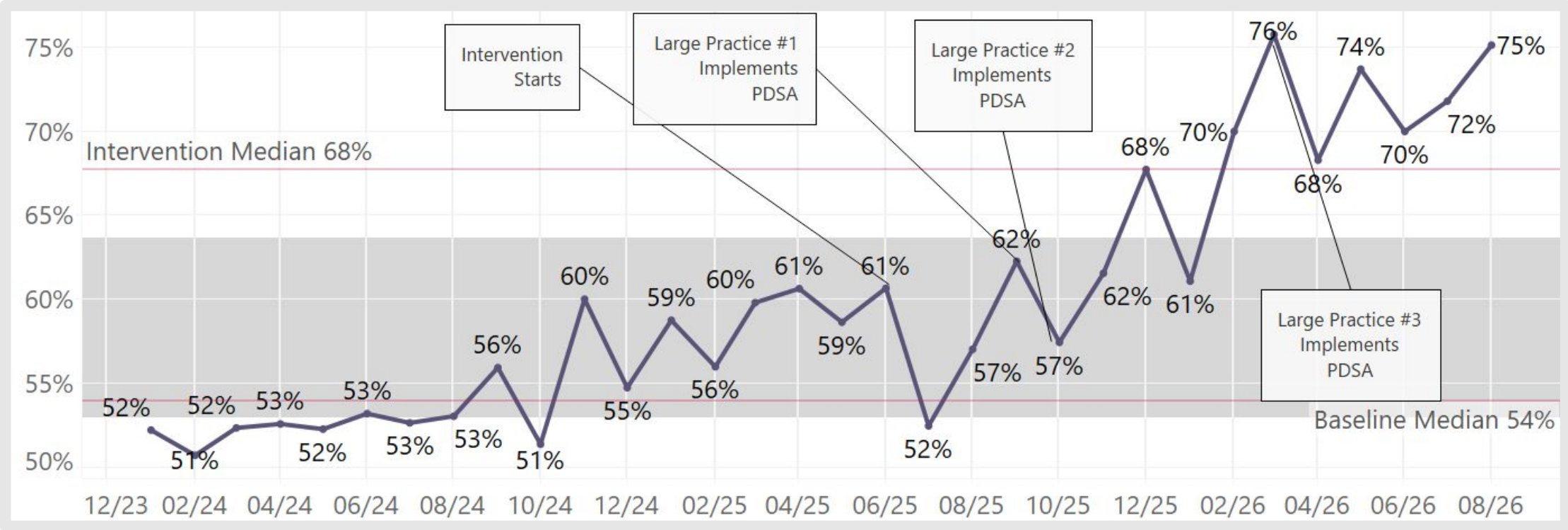


Wellness Visit Lead Testing Rate

Percentage of Cleveland children between the ages of 12-23 months who received their first lead test within 30 days of a wellness visit by month: 2024–2026

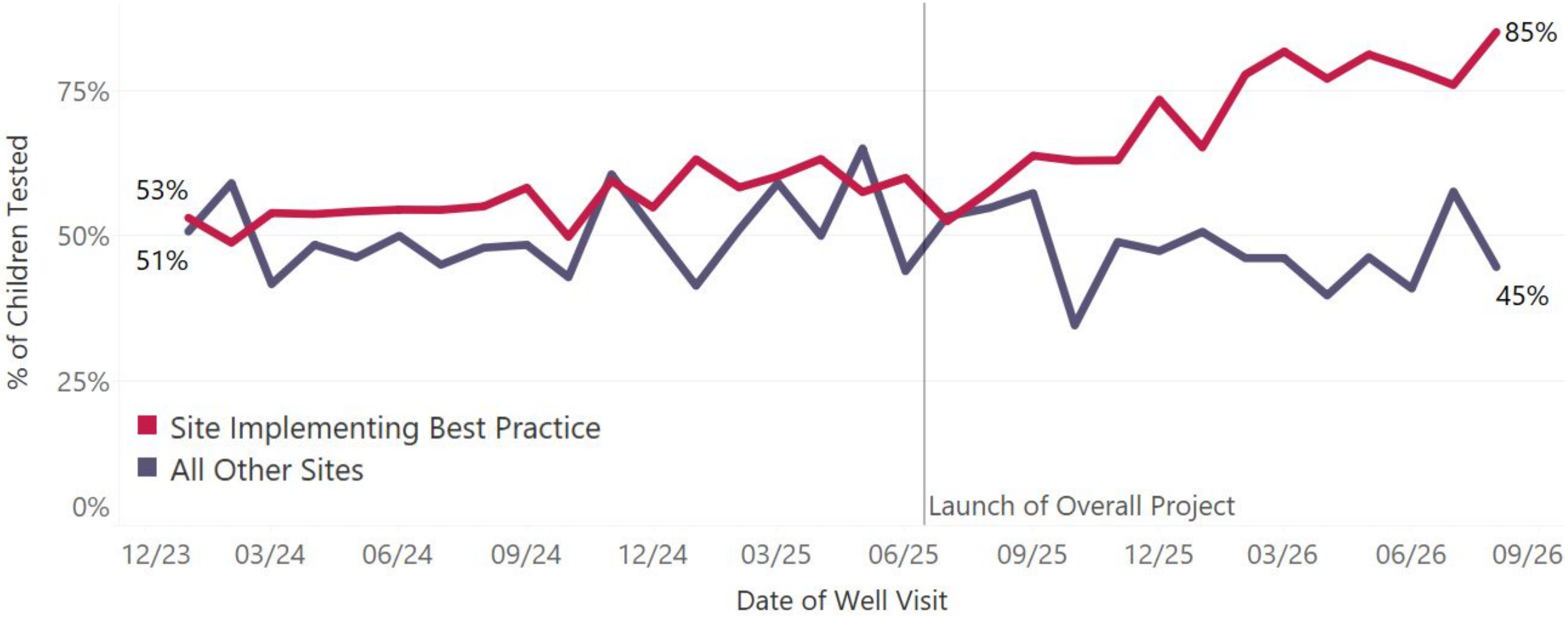
- **Before the Program: 54%** (1/1/2024-6/30/2025)
- **During the Program: 68%** (7/1/2025-9/30/2026)

25.9% Improvement



In-Office Testing is the Best Practice

Percentage of Cleveland children between the ages of 12-23 months who received their first lead test within 30 days of a well visit by month: 2024–2026 - By Site



30 **Clinics transitioned to this best practice since 2/1/2025**

Wellness Visit Lead Testing Rate

Percentage of Cleveland children between the ages of 12-23 months who received their first lead test within 30 days of a wellness visit by Insurance Type, Race & Ethnicity

Insurance Type

	Baseline	Intervention
Commercial	49%	55%
Medicaid	57%	68%
Self-Pay	66%	69%

19.2% Improvement

Race & Ethnicity

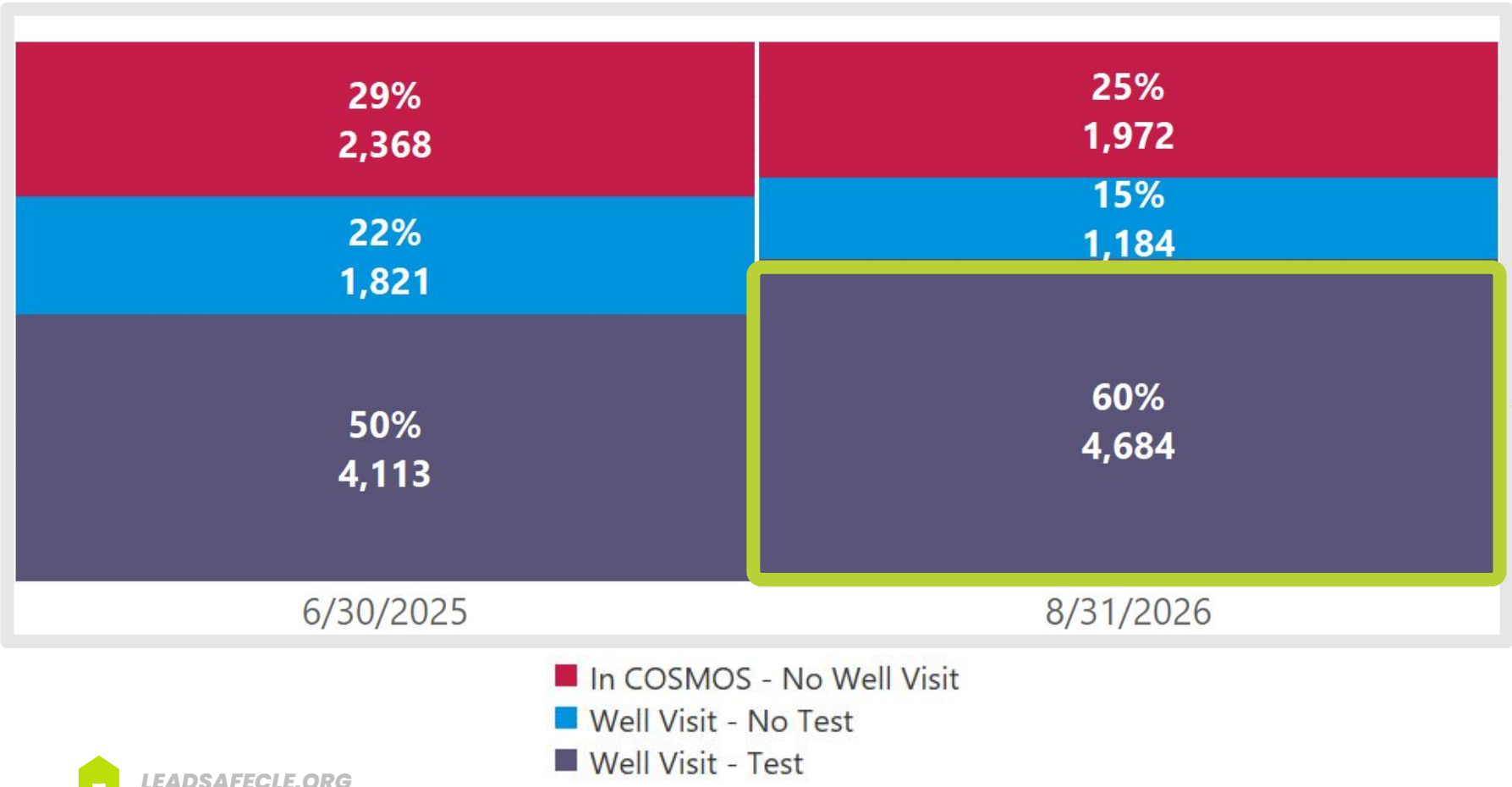
	Baseline	Intervention
Black NH	53%	66%
Latino/ Hispanic	66%	76%
Other	46%	63%
White NH	52%	60%

24.5% Improvement

More Children Seen for a Well Visit + Tested

Lead Testing Rate by Encounter Type

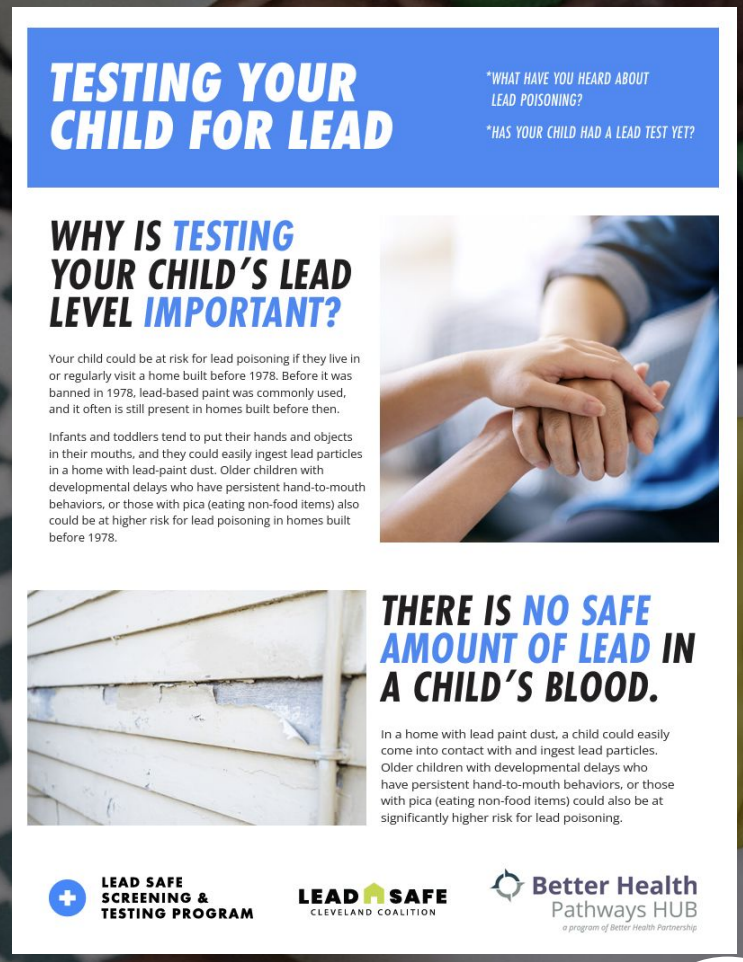
June 2025 and August 2026

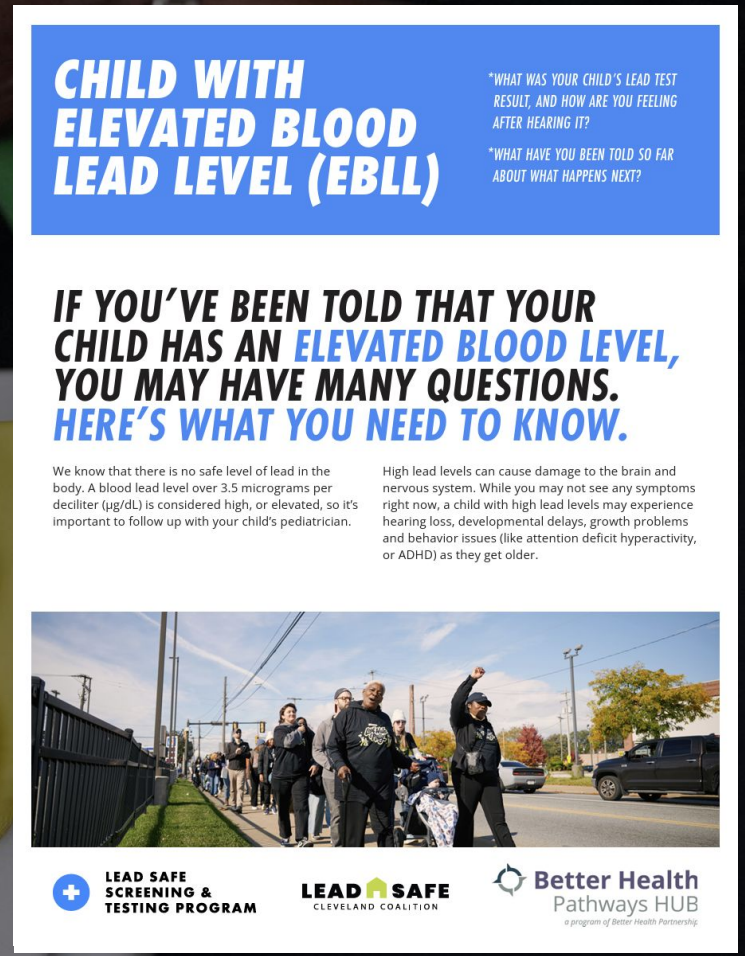


Higher percentage of children attending a well visit *and* tested

New Learning Materials





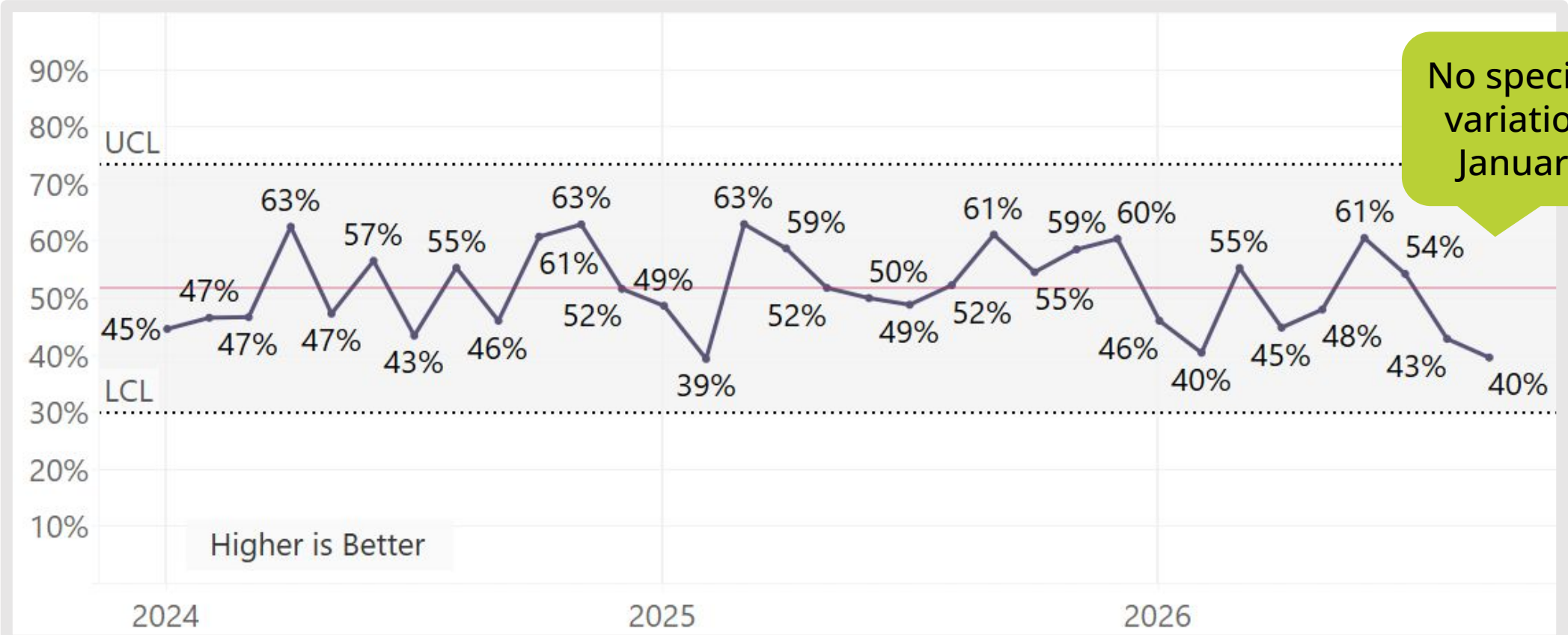


384 Learning pathways completed since 1/1/2026!

155 Using these new materials

EBLL Follow-up hasn't improved from baseline

% of Cleveland Children Promptly Retested after 1st EBLL, by Expiration Month



No special cause variation since January 2024

2024												2025												2026								
Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
33	27	28	30	26	26	33	26	29	48	39	32	36	24	34	27	29	14	21	23	22	24	24	32	29	19	21	13	12	23	32	15	19
74	58	60	48	55	46	76	47	63	79	62	62	74	61	54	46	56	28	43	44	36	44	41	53	63	47	38	29	25	38	59	35	48

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Q&A

In Their Own Words

What parents of children with recent elevated lead levels shared with us



Parent and Partner Perspectives

- **March – July 2026**
- **Phone or Zoom Conversations**
- **30-45 minutes** in length
- Approved by University Hospitals review board as Quality Improvement

- **33 parents** of children with recent elevated blood lead levels
- **3 health systems**
- Shared their views of lead **education**, lead **testing**, and **follow-up** care

- **30 partners** identified by Better Health Partnership
- **21 from health care** settings
- **9 from community organizations** including public health

Characteristic	% (#)
System	
MetroHealth	30.3 (10)
Neighborhood Family Practice	9.1% (3)
UH Rainbow	60.6% (20)
Age of Child	
Less than 1	6% (2)
1- <2 years	**63.6% (21)**
2 or older	12.1% (4)
Unknown	18.2% (6)
Location of last test	
Lab	**70% (23)**
Clinic Room	24.2 (8)
Unknown	6% (2)

Characteristic	% (#)
Most Recent venous test	
Confirmatory after lead filter test	33.3% (11)
Follow-up test for continued monitoring	**66.7% (22)**
Highest recorded blood test	
3.5 - <5 µg/dL	18.2% (6)
5 - <10 µg/dL	45.5% (15)
10+ µg/dL	36.4% (12)
Most recent blood test	
< 3.5 µg/dL	3% (1)
3.5-<5 µg/dL	33.3% (11)
5-<10 µg/dL	30.3% (10)
10+ µg/dL	33.3% (11)
Test month	
Aug - Dec 2025	51.5% (17)
Jan – May 2026	48.5% (16)

Lead Education

Awareness Prior to testing

My oldest son is 23, he had lead poisoning, so I already have some information from back when he had his lead test done. Honestly, that's where most of my information came from. [ID 76]

Awareness Prior to testing

I just started learning about lead, because my children had it. Before then, I had no reason to know about it. I'm in the medical field and still didn't know much about it. [ID 38]

Did not perceive the risk

> My older kids had been tested for lead when they were with the WIC program and they would simply prick their fingers. They had never had a problem with lead. Therefore, I never thought to check the results when (child) was tested. [ID 34]

Did not perceive the risk

> The house is old. I didn’t know that’s bad or that my kids could catch lead. [ID 3]

Did not perceive the risk

> Nobody is really thinking about lead poisoning. We should be more alert. Because once it's high, it takes a while to go down. [ID 12]

Desire for earlier education

Thinking back on my pregnancy, I don't think that was ever even a topic that ever came up.... I think it's something that should be talked about from pregnancy. [ID 2]

Desire for earlier education



I knew basically nothing about preventing lead poisoning. Those early appointments, newborn baby visits - I feel like it should be heavily discussed. Lead is not pushed out as it should be. [ID 23]

Desire for earlier education

> Instead of us having to learn about lead and figure everything out after our child has already had the lead poisoning, I feel like we should be told these things beforehand, maybe when the baby is about 9 months and about to walk. [ID 27]

Parents wanted their doctor to tell them about the dangers and what to do about it.

> If you tell me maybe the poison is going to affect my children from speaking, that is a serious issue**.** **I can't afford seeing my baby not being able to communicate**...I feel like if it's a serious poison... the doctor or anybody could make a parent know what to expect and how to fight it.... **What is the next step?** [ID 74]

> [Doctors] are not passing along all the information that they know, maybe out of concerns for not scaring the parents, but like scare the parents...**Be more serious about it**. Let them know that this has to be taken care of [ID 68]

Most parents want more information and in a way they can understand.

> I feel like for younger parents, they can explain it more. At that moment, I did not understand what was being said or what it meant **so they broke it down until I understood**. [ID 48]

> They try to help me by giving me products and sending information home. But they're sending information for somebody who doesn't understand English well. **I may speak English but when I read, I don't understand it the same way.**

> I have met a lot of parents who have 6- or 7-years-old, where **they felt the doctor never properly would tell them about lead or never thoroughly explained it** to where they would understand that it could be a health risk for their kids. [ID 54]

> Every time they come back with the results, it is the same summary. **They don't say nothing different and they talk like a doctor.** I'm not a doctor so all these big words I don't know nothing about. [ID 27]

Lead Testing and Results

"I didn't think much of the process. They drew his blood and that was it. I never thought anything else would come after that, but then that happened."

Some parents would prefer smoother processes.

> They couldn't find the right vein at first to have the blood work done, so they **had to stick her a few times** in her arm. That's the only thing that I didn't like - that's too much. [ID 82]

> I wish there was **another way** to test than to do blood draws. It's so strenuous on him and me because it's hard to watch your child screaming and crying and you can't do anything. [ID 85]

> I guess there should be a **different way** to do it for kids because they do not like the needles at all and it's hard to get blood sometimes because you have to hold them down literally. [ID 76]

Parents expressed feeling scared and overwhelmed.

"I don't want to see no other kids go through what my son had to go through. That was **scary**." [ID 43]

*I was **very scared**. I didn't know what to do... I don't know, I just made it work. I did all my research; it still didn't calm me down. [12]*

It was **scary** overall because my biggest fear was that my child would be affected by this. It was something I was kind of worried about. It was stressful and overwhelming." (ID 20)

"I was **shocked, scared and felt kind of guilty**. I was thinking I don't know how I missed this and why I didn't call to check the result. I simply didn't think nothing would become of it, as none of my older children had it. [ID 34]

While some appreciate MyChart, most also want to talk to a clinician about results and next steps.

> I would wish people responded like they actually cared and it wasn't just another child with lead poisoning. I wish someone would have cared enough to give us a call about follow-up [ID 23]

> The call was extremely helpful because it calmed me down… I liked it when someone explained it a little bit more to me and was able to answer the questions that I had. [ID 8]

> It really didn't catch me off guard when the doctor called me because I already seen it on MyChart, so that's helpful. I already knew what to expect from the call." [ID 76]

> He explained better than the MyChart message. Because I was scared and worried and he kind of eased that. [ID 53]

Follow-up action

Is the education after an elevated blood lead level result enough?

I think it's partially my doctor's fault because my son was elevated when he was one. Instead of following up, she kind of never brought it up again. I didn't think it would get this high...There should have been more follow-up. [ID 85]

I remember getting a phone call from a nurse telling me his lead count was high, but that's all she said, literally nothing else. No follow up instructions. No follow up appointment....We did not go back to that doctor's office. [ID 23]

If you deny a vaccine, they [doctors] are quick to give you tons and tons of paper work and when it comes to high lead, they did absolutely nothing and said we will wait three months. [ID 18]

Mixed experiences with lead remediation for parents of children with 10+ mg/dL lead level

VS

"

After the inspector found out the source of lead in my house, they called my landlord and told them what needs to be redone. **My landlord had people come out and fix it immediately right after**. [ID 43]

"

I put in a complaint with the city and they are the only people who contacted me but [they] told me they were closing the ticket because I moved. There were entirely too many possible sources for me to...wait for [my landlord] to try and fix it... **I wish there was more legally that could be done to protect more families**.... The problem still exist. I'm not there but that doesn't mean somebody else won't be in the house and have to deal with the problem. [ID 2]

Parents appreciated interactions with CHWs.

> **rapid**

> **Pretty quick**

> ***Called me immediately***

> **Staying on top of it**

Six parents of children with lead levels above 10 mg/dL gave specific examples of ways CHWs provided additional support.

Follow-up for children with <10 mg/dL lead level:

[H]ow do we really narrow down where the issue is coming from without having to bring like professionals in. Even bringing professionals in would be helpful too because we don't know enough about it or where it could be coming from. [ID 59]

I guess he wasn't qualified to get the home tested because his lead levels was not that high to them, so they didn't come...I really didn't like that was their response. [ID 76]

Key recommendations from parents

- Increase earlier lead education and awareness.
- Expand early testing and prevention.
- Improve result communication.
- Provide clearer next steps and ongoing support for families.
- Connect families to community resources as early as possible.

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Q&A

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Audience Discussion:
What's Next?

Future Actions to Strengthen Prevention

Lead Testing: spread in-office testing to remaining clinics that serve Cleveland children

EBLL Follow-Up: Secure braided funding to continue testing CHW care coordination

Education: co-design tests of change in response to family interview findings

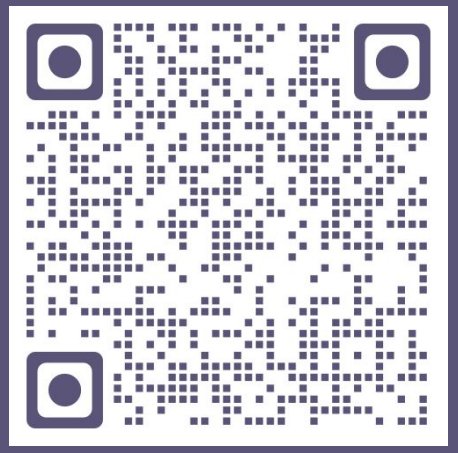
Community Engagement: Build upon partnerships to reach more families

Tabletop Discussion to Close

1. Share your name and what brings you to the Learning Collaborative.
2. What surprised you from what you heard today?
3. Choose a family barrier that resonated with you. What's one way you or your organization could contribute to addressing it?

Thank You!

Please make your way outside for the group photo!



Scan the QR code to take the Morning Survey

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Please complete the Morning Survey with this QR code!

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