



**Green & Healthy
Homes Initiative®**

Clean and Affordable Energy Conference

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GHHI's opportunity for innovation: healthcare through housing



30M families live in unhealthy homes



Homes with environmental hazards are making their residents sick

14.4M missed days of school each year



Asthma is the top reason students miss school

14.2M missed days of work each year



Collateral burden of sick children is missed days of work for parents and caretakers

\$51B+ spent on asthma



\$31B+ spent on slip & fall injuries



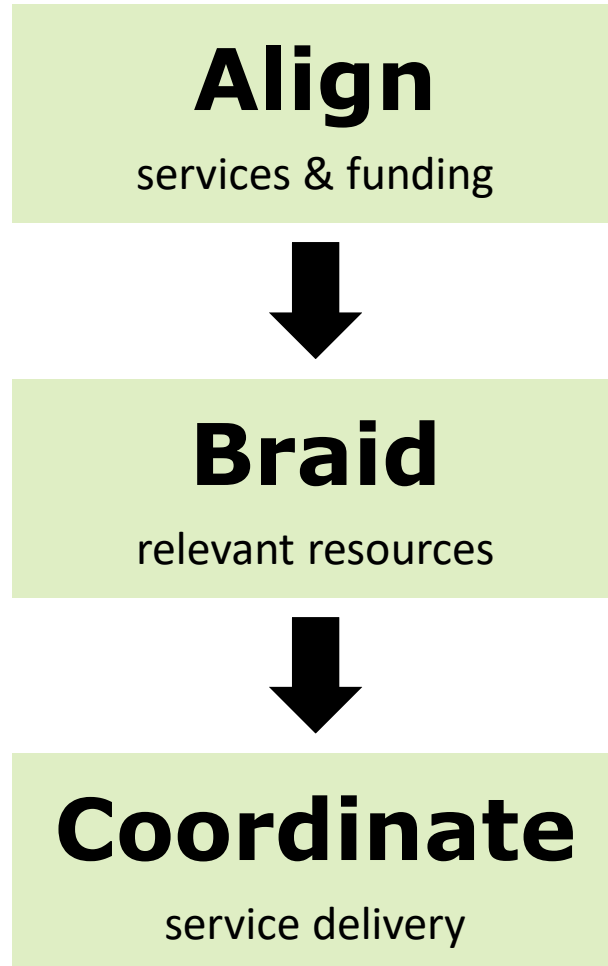
\$43B+ spent on lead poisoning



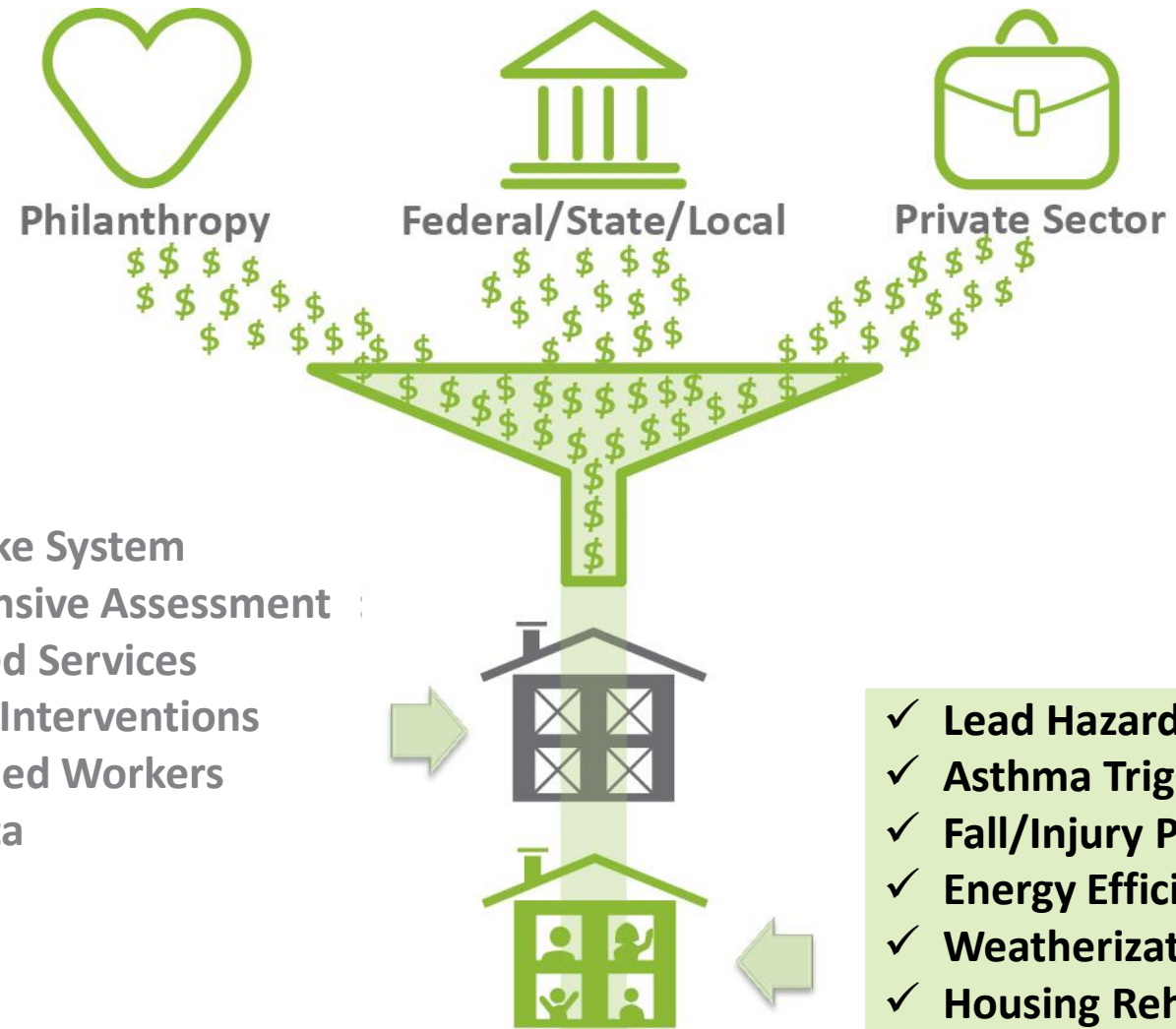
Over \$100B in taxpayer funding is spent each year to address the impact of these hazards

Extremely Low income families spend 20% of monthly income on energy costs VS. 3.5% in other households

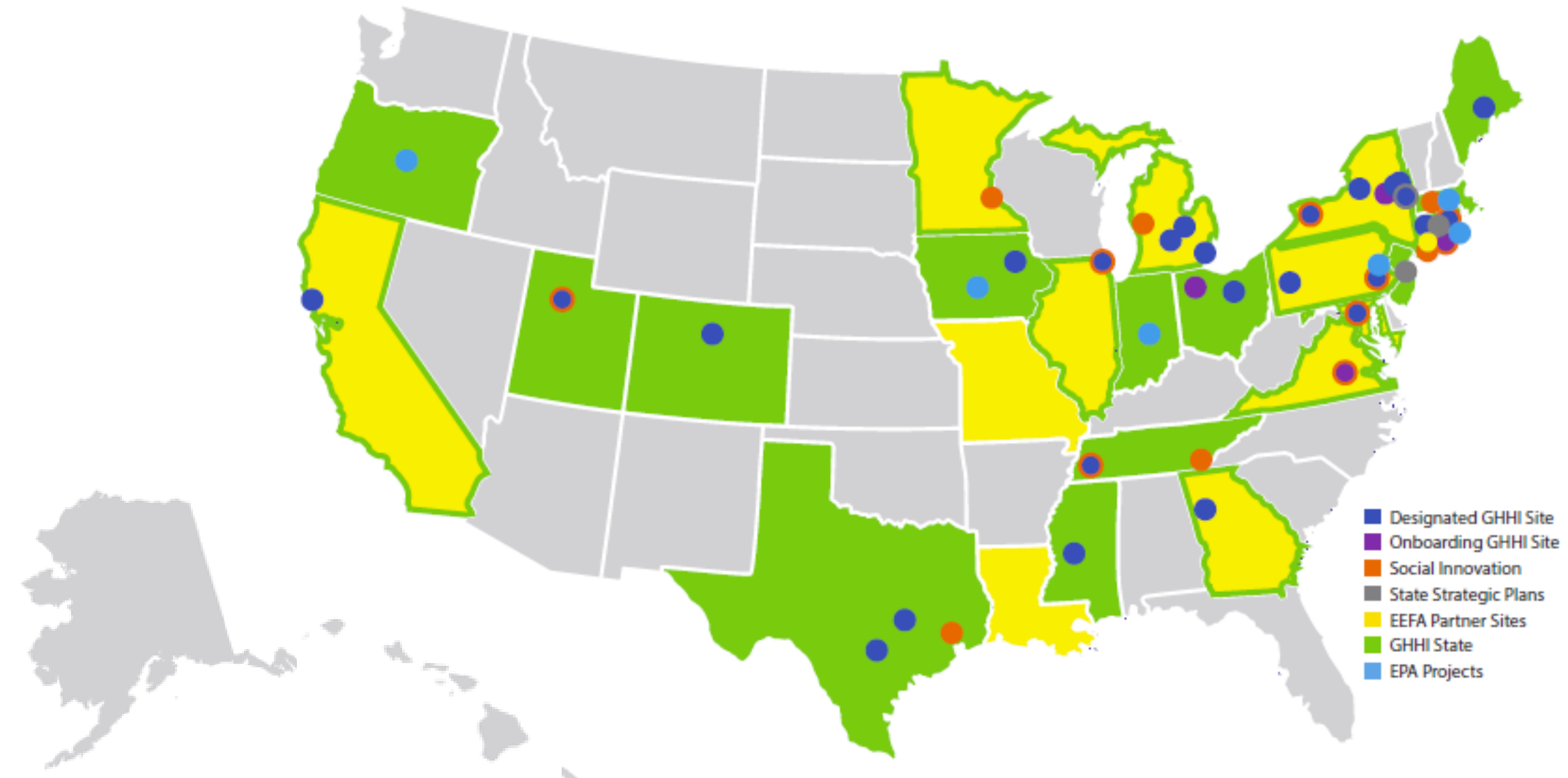




- Single Intake System
- Comprehensive Assessment
- Coordinated Services
- Integrated Interventions
- Cross-Trained Workers
- Shared Data



Scaling Best Practices and Innovation: GHHI's National Work



Cost-Benefit Analysis of Residential Asthma Interventions Using Medicaid Data

Dr. David Salkever, Principal Investigator, University of Maryland Baltimore County

Ruth Ann Norton, President & CEO, Co-Principal Investigator Green & Healthy Homes Initiative

Brendan Brown, Senior Research Associate, Co-Investigator Green & Healthy Homes Initiative

GHHI Maryland Asthma Interventions

Group	Referrals Contacted	Environmental Assessments	Interventions Completed
Overall	1330	362	270
Tier 1	700	144	144
Tier 2	630	218	126

Program Cost by Level of Intensity

Group	Cost/Person	Number Served	Total Cost
Overall	\$2,718.77	270	\$734,067.73
Tier 1	\$661.52	144	\$95,258.58
Tier 2	\$5,088.55	126	\$636,069.35



Overall Medicaid Costs

	Group Total			Per Person				
Group	Baseline* Total Cost	Follow Up** Total Cost	Change (Total Cost)	Baseline* Cost (Mean)	Follow Up** Cost (Mean)	Change (Mean)	Baseline* Cost (Median)	Follow Up** Cost (Median)
Control	\$1,210,057	\$995,435	-\$214,622	\$5,063	\$4,165	-\$898	\$3,165	\$1,927
Treatment (Overall)	\$1,935,183	\$1,538,921	-\$396,262	\$8,097	\$6,439	-\$1,658	\$3,776	\$2,863
Tier 1	\$1,001,088	\$933,248	-\$67,840	\$7,821	\$7,291	-\$530	\$3,856	\$2,702
Tier 2	\$934,065	\$605,616	-\$328,449	\$8,415	\$5,456	-\$2,959	\$3,747	\$3,279

*Represents money spent in 12 months prior to intervention.

**Represents money spent in 12 months post intervention completion.

In practice: using Medicaid/CHIP for housing improvements



- **MARYLAND**: \$14.4 million in CHIP funds for asthma trigger, lead hazard remediation, and resident education
- **MICHIGAN**: \$119 million in CHIP funds for lead hazard remediation and related services; workforce dev.
- **OHIO** (\$5 million)/**INDIANA** (\$3 million): CHIP funds for lead testing and remediation
- **MISSOURI**: Medicaid funding allowable for Asthma resident education; Environmental assessment services
- **OREGON**: Rule 1115 Waiver allowing for flexible services including asthma home visiting resident education
- **RHODE ISLAND**: Rule 1115 Waiver allowing for lead remediation