Healthy Homes Initiative Full Partners Meeting

Tuesday, March 18, 2014

1:00 pm – 3:30 pm
Department of Transportation
2800 Berlin Turnpike
Newington, CT

AGENDA:

1. Welcome and Introductions
2. Merging of Subsidized Housing Workgroup - overview
3. Review of accomplishments
    a. Internal DPH Healthy Homes workplan
    b. External Policy group workplan
    c. External Workforce Development group workplan
    d. External Education/Outreach group workplan
    e. Others
4. Strategic Plan – update, input, ideas
5. Partner Updates
6. Next Meeting

Meeting minutes for 3/18/2014 HH Partner's Meeting

Attendees:

Krista Veneziano – DPH, L&HHP	Richard Paoletto, Jr. – Bridgeport	Jody Walker-Smith – CHRO
Mark Aschenbach – DPH, L&HHP	Myrna Reyes – Bridgeport	Terri Trenholm – OSFM
Kim Ploszaj – DPH, L&HHP	Sabine Kuczo – Bridgeport, BLFF	Judy Dicine – OCSA
Errol Roberts – DPH, Tobacco	Leslie Balch – QVHD	Mike Gurecka – NOI
Joan Simpson – DPH, EOHA	Diane Collelo – NEDDH	Chris Corcoran – CCMC LAMPP
Ryan Tetreault – DPH, Private Wells	Richard Lee – Waterbury	Ronald Kraatz – CCMC LAMPP
Mary Margaret Gaudio – UCONN Ext	Joan Bothell - UCONN	Alan Buzzetti – CCMC LAMPP
Yesenia Rivera – The Connection, Inc.		

2. **Merging of Subsidized Housing Work Group (SHWG)** – overview provided by Kim Ploszaj
    - Looked at poisoned children and HQS inspections
    - Deteriorated paint and placing it back intact
    - Feb 2012 convened a subsidized housing workgroup
    - HQS inspections are supposed to be conducted prior to moving it, annually, and during any complaint inspection
    - Goal is to make sure everyone receives quality housing
    - Coincides with the HHI so groups are merged
    - Minutes from the last SHWG will be included in attachments to get a feel of what the group has been working on

3. Review of accomplishments

a. Internal DPH Healthy Homes workplan
b. External Policy group workplan
c. External Workforce Development group workplan
d. External Education/Outreach group workplan
e. Others

- PowerPoint presentation attached that reviews each of the plans listed above
- Plans need to be updated and merged into one large plan because of overlap – Krista to work on this
- Other accomplishment – Tobacco cessation program reports over 5400 units have adopted smoke free policies (slide within presentation gives specific towns where properties are located)

Breakout Session for four working groups:

Policy Workgroup next steps:

Mark Aschenbach – support PMC plus building codes and statute revisions & start compiling a list of funding sources as a leg up on Raised Bill 5505

Education Outreach Workgroup next steps:

Joan Simpson – figure out where educational materials can be used

Subsidized Housing Workgroup next steps:

Review of Notice of Public Hearing for DOH, Plan for the Administration of the HUD Section 8 Housing Choice Voucher Program (attached) – reviewed table of contents and group has feedback. Kim Ploszaj – will email group and ask them to comment from each organization individually.

Workforce Development Workgroup next steps:
Krista – discussed Private Wells and reiterating well water recommended testing time-frames.
Conduct a go-to-meeting with Block Grant contractors to remind them that well water testing is encouraged and supported by State Lab.
There will also be three YouTube videos to go over private well testing: When to test, What to test for, & What the results mean.

4. **Strategic Plan – update, input, ideas**
    - Ran out of time to discuss in detail - Krista will update and this will be discussed at a future meeting

5. **Partner Updates**

Chris Corcoran - CCMC LAMPP is waiting for contracts from State to start work

- April 22nd will be conducting a Grand Rounds at CCMC with faculty and staff (very little time is spent during a doctor's schooling on health and housing)
    - Using HH data generated from assessments conducted by LAMPP staff and contractors and extracted from the CT DPH HH Surveillance System
        - Limited data to homes with children <18 years old reside; approximately 338 assessments, plan and intervention
    - Will discuss hazards found, cost to correct, health implications
- Leslie Balch volunteered that Putting on Airs has an agreement with Yale where a Yale resident goes to the home with a Putting on Airs staff person.

Kim Ploszaj – HH coalitions

- New Haven - starting up, Tina McCarthy is working on this
- Bridgeport – website with monthly topics
- Conducting activities for National Public Health Week with schools and Head Start programs

Mike Gurecka

- Waterbury HH Coalition
    - 3/26 Community wide HH training, two sessions 9am-11am & 1pm-3pm, expecting about 100 per session
    - Working with hospitals, CHCs, VNA, childcare operators…everyone!
- New Opportunities
    - Housing website
    - Health Fair for employees of New Opportunities and will have a HH table
    - 3/22 Walk for Warmth – Weatherization and Health – will provide educational information

Joan Bothell – Children, Youth and Families at Risk, Train-the-Trainer curriculum development for HH

6. **Next Meeting - June 2014**
    - June 19th, 9:00am-12:00pm, DOT Newington

Discussion during the meeting:

Leslie Balch: Needs guidance and policy that's not law because people are inviting her staff into their homes for a HH assessment and asking for assistance and then she is required to issue an order. Possible to request a consultation without enforcement (unless affecting health)?

Judy Dicine: Caution people about what they shall enforce even with invited in voluntarily. Always keep in mind, stick to status first.

Two Raised Bills that should be supported:

Raised Bill 5505 (attached) An Act Concerning a Study of a State-Wide Property Maintenance Code – this drew lots of attention and attention from the Legislators. Another Bill will be drafted to go in next year. Judy needs support and assistance…written testimony in support of this.

PMC will be a better tool to work with but funding is needed for property maintenance.
Need to broaden our scope for funding…blight = property maintenance

Raised Bill 5507 (attached) An Act Concerning the Appointment of Zoning Enforcement Officials, Building Officials and Fire Officials – Requiring any enforcement agency to perform and inspection.

Ronald Kraatz: His program runs outside of enforcement and he likes it that way. He will refer if his staff sees something egregious. **Krista** posed the question: If an assessment is conducted, hazards are found, and property owner drops out of the HUD program what happens to the assessment and the people living in the home with hazards? Ties back to funding. This has been seen in the North East (**Diane Collelo**) with home owner occupied elderly residents. **Krista** with rental dwellings, it is a business, if you cannot maintain a home that is healthy, you should not be allowed to rent that dwelling/dwelling unit out and jeopardize tenant's health.

Mike Gurecka:

Raised Bill 5133 (attached) An Act Concerning the Location of Funding Sources for the Healthy Homes Initiative calls for the Commissioners of Public Health, Housing and Energy and Environmental Protection and Insurance to report on (1) the availability and location of state funds that may be used by homeowners to remediate conditions in housing that are hazardous to human health, and (2) recommendations for any legislation required to locate such funding within a single agency for the purpose of better implementing the Healthy Homes Initiative undertaken by the Department of Public Health.

This bill went from the Public Health Committee, to the Legislative Housing Committee, and now back to the Public Health Committee. We need to keep an eye on it.

Effect of Weatherization Combined with Community Health Worker In-Home Education on Asthma Control (American Journal of Public Health Jan 2014) Objectives: Assessed the benefits of adding weatherization-plus-health interventions to an in-home, community health worker (CHW) education program on asthma control.

Leslie Balch: Need to focus on Health Equity because Health doesn't seem to "sell" well. Watch what the Feds ate doing with funding and why? Access to quality housing and Health Impact Assessments (HIA) could be a selling point.

Mike Gurecka: Feds do have funding but they are unsure where to park it. No one is sure where it is going to land.

Conducting an HIA was discussed, with funding from the Robert Wood Foundation and The Pew Charitable Trusts (announcement attached). Deadline is April 2nd for mini-proposal. If accepted, a full proposal would need to be submitted by June 25th.

Realized that there are existing HIAs (e.g., San Francisco HIA, hearing and indoor noise pollution, Housing locations, Toll booth/incidence of asthma in New Jersey) that can be used to make a case.
Judy Dicine: Safe Streets (Dept of Justice) – Rehabs that have reduced crime.
Ron Kraatz: HH Rating System – connects hazards in the house with likelihood of resident needing medical care services.
Leslie Balch: Boston and New Orleans HIAs
Judy Dicine: Some focus on hoarding and mental health

Joan Simpson: Upcoming Webinars

- Blue-Green Algae (March)
- Consumer Products (May)
- Private Well Testing (Date to be determined - Ryan to work on)

Judy Dicine: Upcoming Trainings

- Director of Health Training – Appeals process for Directors (Thursday 3/27)
- CEHA Housing Training Event – Thursday 5/1

Healthy Homes Full Partners Meeting

3/18/2014

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Merging of Subsidized Housing Workgroup

- DPH identified subsidized housing as a potential issue which coincided with Policy workgroup interests
- Established a workgroup to explore options
- Subsidized housing workgroup will continue to operate
- Will provide updates and meet as part of the large HHI group

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 1:** Increase awareness of home-based hazards, health-related impacts, remedial strategies, and a preventative approach to healthy homes among targeted audiences.
    - **Objective 1** - Promote the connection between health and housing for stakeholders.
      - **Strategy a** - Develop a health and housing data book or factsheet and presentation that conveys Connecticut's housing statistics and related health disparities.

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Objective 1 - Promote the connection between health and housing for stakeholders.

Strategy a - Develop a health and housing data book or factsheet and presentation that conveys Connecticut's housing statistics and related health disparities.

Key Supporting Programs and Policies:				
Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Review existing data book for gaps	Marian and Joan	HHI Advisory Group	Update Annually -June 2011	Publication on website by June 2012 Distribute to policy subcommittee
Finalize Data Book	Marian and Joan	HHI AG	July 2011	
Publish printed version	Lead Program	Lead Program	June 2012	Completed
Distribute to policymakers and grantors	Lead Program	Lead Program	June 2012	Distribution list Grant report deliverable

4 Green denotes objective completed

Internal DPH Healthy Homes

Objective 1 - Promote the connection between health and housing for stakeholders.

Strategy b - Present on Connecticut's housing statistics and related health disparities at events and organizational meetings.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Present HHI accomplishments at Finding Common Ground meeting	HHI members	HHI AG	Nov. 28, 2010	For all action steps, metrics will include: # attendees, type of attendees (target audiences), # presentation or courses, feedback through evaluations, modifications based on feedback
Present HH materials as a module in the Lead Inspector/Risk Assessor refresher training offered each year	Lead	Lead	2-3x/year	2010-completed.
Present HHI to the Executive Leadership Team to ensure management support of initiative across the agency/	Lead	Fran	Sept. 2010	Completed
Asthma Partners offer HH overview as part of training	Putting on Airs sites	Asthma Regional Coordinators	2x/year	
Identify other events and organizational meetings to offer HH presentations	HHI AG	HHI AG-review original planning documents		
Present at meetings and forums identified by HHI AG members	HHI AG	Program designee		

Objective 1 - Promote the connection between health and housing for stakeholders.

Strategy c - Integrate Healthy Homes messages into existing DPH program outreach activities.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Create general HH display for events	Lead	Rhonda W.	June 2011	Completion of design shared with HHI AG. Acquire funding to print it, too.
Compile HH packet (core materials) for general public	Lead	Rhonda and Joan	Commence July 2011	
Develop and print general HH pamphlet	Lead	Rhonda	June 2011	Completion, distribution plan
Periodically review and check with HHI AG on emerging opportunities	HHI AG, external HHI partners	Lead	Quarterly-ongoing	Minutes of meeting, e-mail list serv
Include website addresses on all HHI AG partner materials	HHI AG	HHI AG staff	Ongoing-as needed	Present of website on print materials.
Consider folding in CDC grant activities	Lead	Krista/Fran	Commence July 2011 (pending award notification)	
Review original planning documents and incorporate HHI AG program comments into table	HHI AG	ALL HHI AG members	By Sept. 2011	

Review of Accomplishments

- **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
  - **Objective 1:** Define the components of a healthy home.
    - **Strategy a** - Explore and refine the Housing and Urban Development's and Center for Disease Control's definitions of a Healthy Home to suit the State of Connecticut.
    - **Strategy b** - Review healthy homes pilot program components to determine applicability for statewide scale.
    - **Strategy c** - Gain consensus among partners who work in health and housing.
- Accomplished and implemented in Strategic Plan.

Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 2:** Develop guidelines and practices.
      - **Strategy a** - Develop guidelines and practices for conducting healthy homes assessments for residential dwellings.
      - **Strategy b** - Develop guidelines and practices for preventing home-based hazards.
      - **Strategy c** - Develop guidelines and practices for conducting remedial activities.

Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 3:** Develop and enhance policies.
      - **Strategy a** - Identify and evaluate existing pertinent public health, safety, and housing policies.
      - **Strategy b** - Conduct a gap analysis in order to determine what policies and codes are needed to meet the standards and practices of a healthy home.
      - **Strategy c** - Develop new policies as needed.

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 4:** Enhance enforcement of existing codes.
      - **Strategy a** - Train enforcement officials and inspectors on specific healthy homes approaches and corrective actions that fit under their regulatory authority.

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 3:** Establish and increase adoption of coordinated and effective healthy homes programs and efforts across the state.
    - **Objective 1:** Increase internal coordination across the Department of Public Health's programs to promote the healthy homes approach.
      - **Strategy a** - Maintain the Healthy Homes Team and Healthy Homes Initiative.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Maintain ongoing meetings with HHI AG members at least every 6-12 weeks	HHI AG members	Lead	Every 6-12 weeks	Standing meetings, minutes, summary of accomplishments of HHI AG
Create timeline and mechanism for tracking responsibilities and progress of HHI AG	HHI AG	Lead	August 2011	Updates on charts and workplans
Utilize tracking mechanism at each meeting (e.g., use a standing agenda that can be updated)	HHI AG agreement	Lead-development	August 2011	Provide updates and share with HHI AG members, external partners, and grantors

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 3:** Establish and increase adoption of coordinated and effective healthy homes programs and efforts across the state.
    - **Objective 1:** Increase internal coordination across the Department of Public Health's programs to promote the healthy homes approach.
      - **Strategy b** - Identify additional programs within the Department of Public Health to enhance coordination and integration of healthy homes activities.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Send e-mail to management in RSB and PHI describing activities of HHI AG inviting other programs that may have intersecting work	HHI AG partners	Draft e-mail by Krista V., shared with HHI AG members for distribution	Oct. 2011	Copies of e-mails, responses - summary
Present HHI at a DPH Lunch and Learn	HHI AG	Suzanne Blancaflor	April 2011/Ongoing	Feedback from attendees
Have RSB and PHI HHI partners present o sections within their branches	HHI AG: HEMS, FHS, EHS, DWS, etc.	HHI AG	Oct. 2011	Feedback from attendees – emerging opportunities that may be generated

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 3:** Establish and increase adoption of coordinated and effective healthy homes programs and efforts across the state.
    - **Objective 3:** Increase coordination with external agency partners to
      - **Strategy a** - Develop and disseminate a DPH Strategic Plan Summary briefing document.
      - **Strategy b** - Identify local, state, and regional partners to collaborate and promote a statewide approach to healthy home.
      - **Strategy c** - Form an inter-agency working group and engage partners in developing an "Inter-Agency Action Plan for Healthy and Safe Home Environments." promote healthy homes.
- Completed in June 2011 with publication/dissemination of Strategic Plan

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 3:** Establish and increase adoption of coordinated and effective healthy homes programs and efforts across the state.
    - **Objective 4:** Support local agencies in implementing healthy home programs and services.
      - **Strategy a** - Train local health and housing officials in a healthy homes approach. – Conducted two 2-day Essential for Healthy Homes Practitioner Courses
      - **Strategy b** - Utilize existing funding sources for implementation of healthy homes programs and services. – Public Health and Human Services Block Grant Contracts
      - **Strategy c** - Seek and establish sustainable funding sources for healthy homes implementation. – CDC funding, dried up
      - **Strategy d** - Continually build technical capacity of local officials to carry out healthy homes activities. – Webinar series

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 4:** Develop a healthy homes workforce who has comprehensive knowledge of home hazards and interventions.
    - **Objective 1:** Develop and conduct education and training programs for target professional audiences.
      - **Strategy a** - Develop and deliver an interdisciplinary home hazard training program that will assist existing home-based hazard professionals in expanding their knowledge and capabilities.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Develop a home inspector course	HHI AG, CT DCP Home Inspector Licensing, ASHI, CAHI chapters		Jan-March 2012	Completion and acceptance of course by commission
Market Home Inspector Course	DCP, ASHI, CAHI	Radon	April-June 2012	Utilization of course, feedback, # attendees, CEUs

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 4:** Develop a healthy homes workforce who has comprehensive knowledge of home hazards and interventions.
    - **Objective 1:** Develop and conduct education and training programs for target professional audiences.
      - **Strategy b -** Where appropriate, utilize existing healthy homes trainings for specific audiences or workers.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
ID audiences in CT that would be interested in HH training, and the type of HH training	HHI AG	Lead	July 2011	Lists of target audiences, types of training courses that match their needs
Deliver NCHH training, if funding available or charge for training	HHI, EPA, NCHH, HUD, DECD, DoE	Krista V. Rhonda W.	July-June	Number of courses, audiences targeted, # attendees, dates, feedback

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 4:** Develop a healthy homes workforce who has comprehensive knowledge of home hazards and interventions.
    - **Objective 1:** Develop and conduct education and training programs for target professional audiences.
      - **Strategy c -** Develop a curriculum for vocational/technical schools.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Meeting with SDE, John Woodmansee to determine appropriate curriculum	HHI AG, SDE, J. Woodmansee	J. Simpson	?	Dependent on budget issues

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 4:** Develop a healthy homes workforce who has comprehensive knowledge of home hazards and interventions.
    - **Objective 1:** Develop and conduct education and training programs for target professional audiences.
      - **Strategy d -** Expand content of existing professional training programs to include healthy home concepts.

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Refer back to workplans and ideas expressed to E. Gunn during early interview process to develop action steps for each HHI AG member program	All HHI AG members	Each HHI AG member		
Integrate HH into training structures for public health and housing workforce professionals (consultants, non-profits, ph nurses, realtors, etc.)				
Integrate HH curricula into refreshers for lead and asbestos training provider courses by providing them with notes, and slides on HH for use.				
Continue offering HH module at SCSU Environmental Health Training Program course for undergraduate students				

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 5:** Evaluate outcomes of the strategic plan goals.
  - **Objective 1:** Develop mechanisms for tracking housing conditions, resident behaviors, and program impacts that will assist us in targeting program populations and resources.
    - **Strategy a** - Review available tracking systems, or develop a database system to capture healthy homes assessment findings and interventions.
    - **Strategy b** - Identify existing the Department of Public Health data sets that can be included and used to quantify existing hazards, risks, and geographic locations where services are most needed.
    - **Strategy c** - Generate reports that will quantify the hazards identified during the assessments and measure the impact of the interventions.

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 6:** Identify resources to sustain healthy homes programs.
    - **Objective 1:** Identify sources and acquire funding for sustainable healthy homes programs.
      - **Strategy a** - The Healthy Homes Team will identify funding sources to sustain healthy homes programs.
      - **Strategy b** - The Healthy Homes Team members will seek to increase flexibility of existing grant requirements to allow other home hazards to be addressed.
      - **Strategy c** - Identify and work with key partnerships to leverage funding opportunities.
      - **Strategy d** - Build healthy homes program requirements into existing grant applications. Strategy e - Work toward insurance reimbursement for home assessments.

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Review of Accomplishments

- Internal DPH Healthy Homes workplan
  - **Goal 6:** Identify resources to sustain healthy homes programs.
    - **Objective 2:** Dedicate staff at state level for healthy homes initiative.
      - **Strategy a** - Once funding is allocated or obtained, the Department of Public Health will dedicate one full -time equivalent to the Healthy Homes Initiative to coordinate inter- and intra-agency activities.
      - **Strategy b** - Maintain staff participation from each single-hazard program on the Healthy Homes Team.
      - **Strategy c** - Provide on-going, cross-training among staff of different hazard programs to ensure sustainability of the healthy homes initiative.

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Review of Accomplishments

- External Education/Outreach group workplan
  - **Goal 1:** Increase awareness of home-based hazards, health-related impacts, remedial strategies, and a preventative approach to healthy homes among targeted audiences.
    - **Objective:** Develop and disseminate educational messages and materials on home-based hazards, prevention approaches, and remedial strategies
      - **Strategy:** Identify internal and external partners that provide public education on home-based hazards and work to incorporate healthy homes concepts into existing outreach materials.

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Objective: Develop and disseminate educational messages and materials on home-based hazards, prevention approaches, and remedial strategies

Key Supporting Programs and Policies:
Missing Partners: Do we need any more (members vs. consultants vs. audiences vs. distribution groups)

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
1. Identify workgroup partner activities that can integrate HH public awareness information/materials	Public Awareness Workgroup members	Public Awareness Workgroup members	Yr 1 July – Sept	List of partner activities that will integrate HH P.A. developed
2. Develop key HH public awareness background messages which incorporate the seven HH principals; - Include several points and key references for each HH principal	Public Awareness Workgroup members	Joan /Public Awareness Workgroup members	Yr 1 July - Dec	Key Background Message (s) Developed
3. Identify common partners & audiences; - Identify partners and audiences that the Workgroup members work with currently. - Categorize & prioritize audiences	Public Awareness Workgroup members	Mary, Amy, Hilary, Marian	Yr 1 July-Sept	List of common partners & audiences developed; audiences categorized & prioritized.

Objective: Develop and disseminate educational messages and materials on home-based hazards, prevention approaches, and remedial strategies

4. Develop CORE "package" of public awareness materials (electronic, clearinghouse, hard copies) based on 7 principles;	Public Awareness Workgroup members		Y1 July-Dec	CORE "package" completed
- Research existing HH P.A. materials - Select two favorite PA materials.		Joan – State Mary Beth – Federal Workgroup Members		
-Review list of available materials and determine materials to utilize.		Joan B/Mary-Mgt Marian/workgroup members		
-Catalogue materials by audience/user/language		Dawn		
- Identify gaps and adapt/revise materials as needed		Workgroup members		
5. Conduct P.A. activities identified by workgroup members	Public Awareness Workgroup members	Public Awareness Workgroup members	Yr 1 Jan & ongoing	Number of activities & people reached for each workgroup member activity conducted.
6. Disseminate materials to workgroup member partners for distribution to their partners & clients	Public Awareness Workgroup members	Public Awareness Workgroup members	Yr 2 Jan - Yr 3	Materials distributed to workgroup partners; number of materials distributed by partners tracked.

Review of Accomplishments

- External Policy group workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 1:** Define the components of a healthy home.
      - **Strategy a** – Explore and refine the Housing and Urban Development's and Centers for Disease Control's definitions of a Health Home to suit the State of CT
      - **Strategy b** – Review healthy homes pilot program components to determine applicability for statewide scale
      - **Strategy c** – Gain consensus among partners who work in health and housing

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Objective 1: Define the components of a healthy home.

Key Supporting Programs and Policies:
Missing partners: Department of Public Safety (Building Official and State Fire Marshall), CT Association of Directors of Health, CT Building Officials Association
Workgroup will meet on a regular basis to review action plan progress

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Identify and compile components associated with the definition of Healthy Homes (HH) (Focus on seven principles of HH; e.g. What does it mean to keep it dry?)	HUD, CDC, NCHH, EPA	DPH	1 month (Complete)	Develop and share list with external and internal Healthy Homes work groups
Gain consensus among Healthy Homes Initiative (HHI) internal and external partners	HHI Partners	Work Group #3	2 months (Ongoing)	Agreement among HHI partners that all components associated with each principle are captured
Issue a statement and clearly communicate the components of a HH to all CT partners	DPH and HHI Partners	DPH and HHI Partners, Office of Communications, J. Simpson (web master)	6 months	E-mail and Office of Communications press release issued, posted on HH website + possibly partners' websites
Hold Shareholder Education Meeting(s) to obtain feedback on HH components/elements	DPH and HHI Partners	DPH and HHI committee members	2 months	Hold meeting(s), obtain feedback, reach consensus

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Policy

Review of Accomplishments

- External Policy group workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 2:** Develop Guidelines and Practices
      - Strategy a – Develop guidelines and practices for conducting healthy homes assessments for residential dwellings
      - Strategy b – Develop guidelines and practices for preventing home-based hazards
      - Strategy c – Develop guidelines and practices for conducting remedial activities

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Objective 2: Develop Guidelines and Practices

Key Supporting Programs and Policies:				
Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Review existing inspection or assessment forms available nationally	UCONN Occupational Heath, Center Indoor Environment, CB orgs, CBOA, CAHCEO, CEHA, CADH,CAP, DOE, UI, CLP	DPH and Eileen Gunn	(Ongoing)	Review at least 6 assessment forms Review matrix
Review and analyze gaps in the DPH developed inspection form	Same as above	DPH and HHI partners	4 months (Ongoing)	Discrepancies identified
Determine minimal criteria for HH assessment tool to ensure feasibility of use by partners. Gain consensus on standard protocol(s) for use statewide (relates to data measures in strategic plan)	Same as above	All HHI partners (but primarily workgroups 1 and 2)	9 months (Ongoing)	Adopt assessment tool(s) related to HH components
Compile and review evidence-based healthy homes interventions	CADH, LHD's, Local Housing	TBD	6 months (Ongoing)	# interventions reviewed relating to goals, identify other groups, generate summary document that addresses HH interventions

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Policy

Review of Accomplishments

- External Policy group workplan
  - Goal 2: Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - Objective 3: Develop and enhance policies.
      - Strategy a - Identify and evaluate existing pertinent public health, safety, and housing policies.
      - Strategy b - Conduct a gap analysis in order to determine what policies and codes are needed to meet the standards and practices of a healthy home.
      - Strategy c – Develop New Policies as Needed

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Objective 3: Develop and enhance policies.

Key Supporting Programs and Policies:

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Compile a list of standards and practices in uniform code in state	State's Attorney Office, DPS, DPH, DEP, CCM, CAHCEO, DECD, CHFA, DSS, DCF, CADH, LHD's	Judy Dicine, State's Attorney Office	1 month (Complete)	Final compiled list/all codes collected
Review draft of International Property Maintenance Code components	State's Attorney Office, DPS, DPH, DEP, CCM, CAHCEO, DECD, CHFA, DSS, DCF, CADH, LHD's	Judith Dicine, Marco Palmeri, HHI workgroup	4 months (Ongoing)	Review completed
Categorize identified codes, standards and practices into regulatory and non-regulatory topics	DPS, DPH, DEP, CCM, CAHCEO, DECD, CHFA, DSS, DCF, CADH, LHD's	HHI workgroup 3	4 months (Ongoing)	Final compiled list (regulatory vs non-regulatory components)
Determine what HH components are missing from existing standards – cross check with Definition of HH (task #1)	State's Attorney Office, DPS, DPH, DEP, CCM, CAHCEO, DECD, CHFA, DSS, DCF, CADH, LHD's	HHI Workgroup 3	4 months (Ongoing)	
Define or determine scope of external partners in terms of their ability to accomplish HH-related tasks, duties or initiatives. (Will relate to standards of practice development for workforce development focus area of strategic plan)				
List gaps identified. Prioritize policy development and focus efforts in highest priority items first				

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Policy

Review of Accomplishments

- External Workforce Development group workplan
  - **Goal 2:** Develop and improve policies, guidelines and practices to achieve a healthy and safe home environment.
    - **Objective 4:** Enhance enforcement of existing codes.
      - **Strategy a** - Train enforcement officials and inspectors on specific healthy homes approaches and corrective actions that fit under their regulatory authority.

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Objective 4: Enhance enforcement of existing codes.

Key Supporting Programs and Policies:
Primary partners: PH Workforce Development Committee (K Traugh rep), CEHA (M. Palmeri as representative), CAHCEO (Amy Lehaney as representative), CADH (J. Kertanis), DPH Office of Workforce Development (K. Sullivan or Christopher Stan)

Action Steps:	Partners	Responsible Party	Timeline	Metric/ Indicator of Success
Offer standardized/nationally-recognized courses in Connecticut	NCHH, PH Workforce, CEHA, CAHCEO	DPH, DECD	<1 year - ongoing	# attendees, # courses, feedback from course, analysis using TRAIN
Promote HH Specialist credential offered through NEHA	NEHA, CEHA, CAHCEO	CEHA, CAHCEO, DPH	1 year - ongoing	# HH Specialists in CT
Assess partners and inventory their available educational programs and training structures to identify collaborative opportunities	Healthy Homes Partners Work groups (HHPW)- all of the members	F. Provenzano and K. Traugh using survey monkey	6 months	Assessment completed, results of assessment
Identify subject matter experts	HHPW	F. Provenzano K. Traugh	9 months	Inventory of subject matter experts
Promote and offer webinar series on Healthy Homes Topics	CT Partnerships for Public Health Workforce Development	K. Traugh, F. Provenzano	3 months-ongoing	# and type of Attendees, evaluation of webinar speakers and topics
Integrate healthy homes topics or presentations into partners' training structures	Determined through assessment listed above as an action item	Subcommittee members	<1 year	# commitments from partners, posting of information on CT TRAIN HH link
Develop CT-specific healthy homes training that ties HHI to existing codes and enforcement capabilities	Judy Dicine, DPH HHI Advisory Group	F. Provenzano	1.5-2 years	Development of course materials, and slides

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Workforce Development

Objective 4: Enhance enforcement of existing codes.

Deliver training for CT-specific codes course (referenced above)	CEHA, CAHCEO, DPH, CT Partnership for PH Workforce Development	DPH HHI Advisory Group	2 years	# courses held, # people trained, feedback from course, analysis on TRAIN
Promote and offer Continuing Education Opportunities for NEHA Healthy Homes Specialist designation and enforcement officials	NEHA. CEHA, CAHCEO	Salina Hargrove, Kathi Traugh, Chris Corcoran	Ongoing	Contact hours offered per year, number of CEU opportunities approved by NEHA
Develop evaluation forms to be used for all HH training efforts and technical capacity building events	Subcommittee members	Subcommittee members	Ongoing	Compilation/warehousing of evaluation form results and findings, and their use in planning future events, speakers, topics
Create page on CT TRAIN devoted to Healthy Homes training opportunities	Subcommittees from Healthy Homes Partner Work groups (education and outreach, workforce development)	F. Provenzano R. Wisniewski DPH Office of Workforce Development	July 2011-ongoing	Compilation of courses posted in TRAIN

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Workforce Development

Review of Accomplishments

- Others
  - Tobacco Cessation Program: 23 facilities have adopted a smoke free policy
    - Encompasses over 5455 units
  - Towns:
    - Stamford (2)
    - South Norwalk
    - Newington
    - Norwalk
    - Portland
    - Preston
    - Putnam
    - Ridgefield
    - South Windsor
    - Vernon
    - Somers
    - Bristol
    - Darien
    - East Windsor
    - Fairfield
    - Milford
    - New London (2)
    - Monroe
    - New Haven
    - Hartford
    - Simsbury

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Partner Updates

- See meeting minutes

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Next Meeting

- June 2014
- Will email DOT to determine which dates are available

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General Assembly

Raised Bill No. 5505

February Session, 2014

LCO No. 2080

*02080_____PD_*

Referred to Committee on PLANNING AND DEVELOPMENT

Introduced by:

(PD)

AN ACT CONCERNING A STUDY OF A STATE-WIDE PROPERTY MAINTENANCE CODE.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (*Effective from passage*) The Codes and Standards Committee, in consultation with the State Building Inspector, shall select a nationally recognized model property maintenance code and make recommendations as to which changes, if any, are necessary to adapt such code to the state. Not later than January 15, 2015, said committee shall submit its recommendations in accordance with the provisions of section 11-4a of the general statutes to the joint standing committees of the General Assembly having cognizance of matters relating to local governments, public health and public safety.

This act shall take effect as follows and shall amend the following sections:		
Section 1	*from passage*	New section

Statement of Purpose:

To require the Codes and Standards Committee to recommend state-specific changes to a nationally

recognized model property maintenance code.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]

NOTICE OF PUBLIC HEARING

The State of Connecticut Department of Housing is seeking public comment on The Plan for the Administration of the U.S. Department of Housing and Urban Development Section 8 Housing Choice Voucher Program for SFY 14-15

The Plan for the Administration of the U.S. Department of Housing and Urban Development (HUD) Section 8 Housing Choice Voucher Program is available for public comment. The Plan is a tool for administering and managing the federal Section 8 voucher programs of the State of Connecticut Department of Housing. These programs include the Housing Choice Voucher, both tenant-based and project-based, Family Unification, Mainstream Housing Opportunities Program for Persons with Disabilities and the Veterans Affairs Supportive Housing Programs. A Public Hearing will be held, as listed below, to solicit input into the administration of these programs. All input received will be included as part of The Plan for submission to HUD.

Hartford
11:00 a.m.
April 21, 2014
Department of Housing
4th Floor Conference Room
Room 466
505 Hudson Street
Hartford, CT 06106

State residents are invited to attend the public hearing and provide input/comment on The Plan. Written comments may be sent to Michael C. Santoro, Community Development Specialist, Office of Policy, Research and Housing Support, Department of Housing, 505 Hudson Street, Hartford, CT 06106-7106 or CT.Housing.Plans@ct.gov through the close of business on April 21st, 2014. For copies of The Plan and related documents, please refer to the Department of Housing's website, www.ct.gov/doh under Policy & Research.

Department of Housing programs are administered in a nondiscriminatory manner, consistent with equal employment opportunities, affirmative action, and fair housing requirements. Questions, concerns, complaints or requests for information in alternative formats must be directed to the ADA (504) Coordinator at 860-270-8022. Locations for the public hearings are handicapped accessible.

Publication Date: March 6, 2014

General Assembly

Raised Bill No. 5133

February Session, 2014

LCO No. **429**

Referred to Committee on HOUSING

Introduced by:
(HSG)

AN ACT CONCERNING THE LOCATION OF FUNDING SOURCES FOR THE HEALTHY HOMES INITIATIVE.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (*Effective from passage*) The Commissioner of Public Health, in consultation with the Commissioners of Housing and Energy and Environmental Protection and the Insurance Commissioner, shall, in accordance with the provisions of section 11-4a of the general statutes, submit a report not later than January 2, 2015, to the joint standing committees having cognizance of matters relating to public health, housing, environmental protection and insurance. Such report shall detail (1) the availability and location of state funds that may be used by homeowners to remediate conditions in housing that are hazardous to human health, and (2) recommendations for any legislation required to locate such funding within a single agency for the purpose of better implementing the Healthy Homes Initiative undertaken by the Department of Public Health.

This act shall take effect as follows and shall amend the following sections:		
Section 1	*from passage*	New section

Statement of Purpose:

To require the Commissioner of Public Health to submit a report concerning (1) the availability and location of state funds that may be used to remediate hazardous conditions in housing, and (2) recommendations to centralize such funds within one agency.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]

General Assembly

Raised Bill No. 5507

February Session, 2014

LCO No. **2076**

Referred to Committee on PLANNING AND DEVELOPMENT

Introduced by:
(PD)

AN ACT CONCERNING THE APPOINTMENT OF ZONING ENFORCEMENT OFFICIALS, BUILDING OFFICIALS AND FIRE MARSHALS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Subsection (e) of section 8-3 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2014*):

(e) The **[**zoning commission shall provide for the manner in which the zoning regulations shall be enforced**]** chief executive officer of any town, city or borough shall, in consultation with the commission, appoint an officer to enforce the zoning regulations.

Sec. 2. Section 29-260 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2014*):

(a) The chief executive officer of any town, city or borough **[**, unless other means are already provided,**]** shall appoint an officer to administer the code. **[**for a term of four years and until his successor qualifies and quadrennially thereafter shall so appoint a successor.**]**

Such officer shall be known as the building official. Two or more communities may combine in the appointment of a building official for the purpose of enforcing the provisions of the code in the same manner. **[**The chief executive officer of any town, city or borough, upon the death, disability, dismissal, retirement or revocation of licensure of the building official, may appoint a licensed building official as the acting building official for a single period not to exceed one hundred eighty days.**]**

[(b) Unless otherwise provided by ordinance, charter or special act, a local building official who fails to perform the duties of his office may be dismissed by the local appointing authority and another person shall be appointed in his place, provided, prior to such dismissal, such local building official shall be given an opportunity to be heard in his own defense at a public hearing in accordance with subsection (c) of this section.

(c) No local building official may be dismissed under subsection (b) of this section unless he has been given notice in writing of the specific grounds for such dismissal and an opportunity to be heard in his own defense, personally or by counsel, at a public hearing before the authority having the power of dismissal. Such public hearing shall be held not less than five or more than ten days after such notice. Any person so dismissed may appeal within thirty days following such dismissal to the superior court for the judicial district in which such town, city or borough is located. Service shall be made as in civil process. The court shall review the record of such hearing and if it appears that testimony is necessary for an equitable disposition of the appeal, it may take evidence or appoint a referee or a committee to take such evidence as the court may direct and report the same to the court with his or its findings of fact, which report shall constitute a part of the proceedings upon which the determination of the court shall be made. The court may affirm the action of such authority or may set the same aside if it finds that such authority acted illegally or abused its discretion.**]**

[(d)**]** (b) Each municipality shall become a member of the International Code Council and shall pay the membership fee.

Sec. 3. Section 29-297 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2014*):

(a) The chief executive officer of any town, city or borough, in consultation with the board of fire commissioners or, **[**in the absence of such board, any corresponding authority of each town, city or borough, or, if no such board or corresponding authority exists, the legislative body of each city, the board of selectmen of each town or the warden and burgesses of each borough, or,**]** in the case of an incorporated fire district, with the executive authority of such district, shall appoint a local fire marshal and such deputy fire marshals as may be necessary. In making such appointment, preference shall be given to a member of the regular or volunteer fire department of such municipality. Each local fire marshal shall be sworn to the faithful performance of his or her duties by the clerk of the town, city, borough or fire district. **[**and shall continue to serve in that office until removed for cause.**]** Such clerk shall record his acceptance of the position of local fire marshal and shall report the same in writing to the State Fire Marshal within ten days thereafter, giving the name and address of the local fire marshal and stating the limits of the territory in which the local fire marshal is to serve.

(b) The chief executive officer of any town, city or borough, in consultation with the board of fire commissioners or, **[**in the absence of such board, any corresponding authority of each town, city or borough or, if no such board or corresponding authority exists, the legislative body of each city, the board of selectmen of each town or the warden and burgesses of each borough or,**]** in the case of an incorporated fire district, with the executive authority of such district, may, upon the death, disability, dismissal, retirement or revocation of certification of the local fire marshal, and in the absence of an existing deputy fire marshal, appoint a certified deputy fire marshal as the acting fire

marshal for a period not to exceed one hundred eighty days.

This act shall take effect as follows and shall amend the following sections:		
Section 1	*October 1, 2014*	8-3(e)
Sec. 2	*October 1, 2014*	29-260
Sec. 3	*October 1, 2014*	29-297

Statement of Purpose:

To require the chief executive officers of towns, cities and boroughs to appoint zoning enforcement officials and fire marshals and to eliminate appointment terms for building officials.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]

2014 Call for Proposals

Proposal Deadline: April 2, 2014

Robert Wood Johnson Foundation

HEALTH IMPACT PROJECT

THE PURPOSE

The *Health Impact Project*, a collaboration of the Robert Wood Johnson Foundation (RWJF) and The Pew Charitable Trusts (Pew), promotes the use of Health Impact Assessments (HIAs) and related approaches to help policy-makers in a wide range of fields incorporate health considerations into new policies, programs, plans, and projects, and make decisions that reduce unnecessary health risks, improve health, and decrease costs. This call for proposals (CFP) supports two types of initiatives: 1) HIA demonstration projects that inform a specific decision, with a focus on tribes, states, and territories that have had limited experience with HIAs to date; and 2) HIA program grants that enable organizations with previous HIA experience to develop sustainable HIA programs that integrate HIAs and related approaches in policy-making at the local, state, or tribal level. The *Health Impact Project* also partners with additional funders to support HIAs on specific topics or in a defined state or region. We will provide information regarding the availability of additional funds through periodic announcements to our mailing list and on our website.

BACKGROUND

Public health research continues to deepen our understanding of the powerful influence of social, economic, and environmental policies on our health and wellbeing. For example, transportation projects and land use plans made with health in mind can minimize the risk of traffic injuries, offer better access to healthful foods, and allow people to be more active by including safe routes for pedestrians. Educational policies can improve economic and employment opportunities and thereby lower the risk of many illnesses throughout our lives. Criminal justice programs, such as therapeutic courts, designed to lower corrections costs and reduce recidivism can improve mental health and reduce substance abuse rates.

Finding ways to translate public health research into policy change in other sectors has become one of the most important challenges in the effort to improve Americans' health. Many illnesses could be prevented and many economic costs reduced if legislators, transportation planners, education officials, and other policy-makers had better information and tools to factor health considerations into new laws, regulations, programs, and projects.

Health impact assessments (HIAs) inform real-world decision-making by: providing timely, accurate, and relevant public health data and recommendations; building new collaborations between health professionals and other sectors; and engaging communities, policy-makers, and other stakeholders in a productive dialogue on a proposed policy, program, or project under active consideration. HIAs give federal, tribal, state, and local leaders the information they need to advance smarter policies to prevent

disease and improve health in their communities, and they help communities engage more effectively in decisions that affect them. HIAs have also proven to be a useful way to design new tools and approaches that help other sectors embed and streamline the consideration of health in their own planning and decision-making.

The National Research Council's 2011 report *Improving Health in the United States: The Role of Health Impact Assessment* defines HIA as:

> A systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.

HIAs look at health from a broad perspective, considering the important ways in which social, economic, and environmental conditions can influence health. HIAs use a practical approach that brings together scientific data, health expertise, and stakeholder input to identify the potential health effects of a new proposal and develop recommendations that enhance health benefits and minimize adverse effects and associated costs.

The use of HIAs has gained momentum in the United States, as an increasing number of legislators, federal, state, and local agencies, and community-based organizations seek innovative, effective ways to address the pressing health problems confronting our nation. HIAs have now been completed, or are in progress, in at least 39 states and territories. Many different types of organizations have led HIAs, including local and state health departments, public health institutes, non-health agencies, such as metropolitan planning organizations and housing agencies, tribal organizations, nonprofit community organizations, and universities. However, some states and American Indian and Alaska Native tribes have not yet had experience with HIAs. See the "Selection Criteria" section below for a list of states and territories that have had limited experience with HIAs to date.

HIAs can be applied to a broad range of topics. Decisions related to the built environment—including land use planning, housing, and transportation—have been the most common, but increasingly communities and governments are using HIAs in many other contexts. For example, HIAs have informed decisions about natural resource extraction and energy production, food and agriculture, climate change, and labor issues. Examples from recent practice of innovative applications of HIAs include: a state bill to adopt an independent commission's recommendations for school desegregation; alternatives to address a projected deficit in transit funding; revisions to a state's guidelines for siting and design of schools; a bill to increase funding for treatment alternatives to prison; and a legislative proposal to allow construction of a gambling facility in a rural area.

Issues that may be particularly ripe for HIAs because of their importance to health and relatively low number of HIAs completed to date include:

- education;

- criminal justice;
- energy production, distribution, and pricing;
- fiscal, economic, and labor policy; and
- disaster recovery planning and programs.

The basic steps for completing an HIA are consistent across topics and can be accomplished fairly rapidly (a "rapid" HIA can be completed in a period of weeks), or can involve a more comprehensive process that includes public meetings, extensive stakeholder consultation, and/or collection of new data. Applicants new to HIA are strongly encouraged to familiarize themselves with the steps and process. For more information on HIAs and links to other sites related to HIA, please visit *www.healthimpactproject.org*. To view an interactive map of the topics and locations of HIAs in the United States, visit *www.healthimpactproject.org/hia/us*.

Making health a routine consideration in policymaking: streamlining and sustaining the use of HIAs

Despite the growing momentum in the field, relatively few municipalities, states, and tribes have developed stable, self-supporting programs that make the use of HIAs and related approaches a routine part of decision-making. A number of different models for creating HIA programs have emerged in the United States, such as:

- Formalized inter-agency cooperation and funding agreements, in which a public agency finances a stable HIA program through permit fees, internal budget restructuring, or collaborative agreements with other agencies.
- Regional HIA collaborative groups, where nonprofit community organizations, public health institutes, and public agencies have developed a stable network that collaborates on HIAs, shares resources and expertise, offers university courses, maintains group websites, and provides training and technical expertise.
- Legislation that mandates or supports HIA. The Massachusetts Healthy Transportation Compact is one of the first laws in the United States that requires the conduct of HIAs-- in this case through collaboration between the state health and transportation departments. Legislation to support or require HIAs has been proposed in other states.

We encourage applicants to visit the project website for more detailed examples of successful models and emerging ideas for creating stable, enduring HIA programs.

HIA practitioners have used the basic principles of HIAs to develop new, more streamlined approaches that make it simpler for decision-makers to incorporate health considerations in the policy-making process. For example:

- The Nashville Area Metropolitan Planning Organization adopted new health scoring criteria for selecting and funding transportation projects: 60 of the 100 points on which transportation projects are scored are now based on positive outcomes for air quality, active transportation, injury reduction, and personal health and equity in underserved areas. Seventy percent of the roadway projects adopted under these new criteria included active transportation elements, compared with roughly two percent before the new health-focused criteria were adopted.
- Meridian Township, Michigan has adopted a checklist-based tool that allows new proposed development projects to be evaluated according to health criteria that include access to safe places to exercise and healthy foods, design that facilitates social interaction, and the quality of air and water. Planners work with each developer based on the findings of this brief evaluation to incorporate design elements that will improve health. Over the last 10 years since implementation, this simple approach has resulted in dozens of health-supportive modifications.
- The Los Angeles Department of Public Health is developing a rapid HIA policy analysis procedure that will allow the department to undertake systematic but rapid assessments in response to requests from officials in other departments for information about the health implications of new proposed policies.

These examples highlight the potential for adapting the basic HIA approach to more seamlessly and stably integrate health into the wide range of legislative, planning, and regulatory decisions that HIAs seek to inform.

THE PROJECT

This CFP will support two types of initiatives: Demonstration Projects and Program Grants. There are two stages in the application process: (1) applicants submit a brief proposal that describes the proposed project and includes an estimated budget and, *if invited*; (2) select applicants then submit a full proposal, budget, budget narrative, and other documentation. Please carefully read the description of each opportunity to determine which grant(s) best fits your work:

1. HIA Demonstration Projects

Each grant will support a single HIA intended to inform a specific upcoming decision on a proposed local, tribal, or state policy, project, or program. Through the training and experience gained by the grantee and stakeholders, these projects will build capacity, interest, and demand for HIAs in these states and tribes.

The *Health Impact Project* seeks to produce a balanced portfolio of completed HIAs that build a compelling case to policy-makers regarding the utility and potential applications of HIA. Preference will be given to HIAs proposed in states and tribes that have had limited experience with HIAs to date. See the

"Selection Criteria" section to learn more about the specific organization types, regions, and topics that will receive preference.

The *Health Impact Project* also collaborates with other funders to offer HIA funding within a given state, region, or topic of interest. For more information, see the "Total Awards" section below.

Training and technical assistance for Demonstration Project applicants and grantees

Prior HIA experience is not required for Demonstration Project applicants. We encourage both public health organizations and agencies, and applicants whose primary focus is not health, to apply.

Applicants invited to submit a full proposal are invited to attend an HIA training in Washington, DC on Wednesday, May 28, 2014. More details on the training will be provided with the full proposal invitation. Travel scholarships will be available to invited applicants that wish to attend but would not be able to do so without financial assistance.

Through partnerships with experienced HIA practitioners, the *Health Impact Project* provides tailored HIA training and ongoing technical assistance throughout each Demonstration Project grant. Grantees who have not previously conducted an HIA will be expected to work with a technical assistance provider to organize an on-site training for HIA project staff and relevant stakeholders. Technical assistance includes feedback on draft documents for each step in the HIA process, and may include activities such as helping develop collaborative partnerships with other stakeholders, guidance on communications strategies, or guidance on developing an effective plan for implementing HIA recommendations.

While conducting an HIA, some grantees and partners may identify a specific subject on which more detailed technical assistance would be helpful. The *Health Impact Project* may provide limited additional funds to fill subject area needs identified during the project, such as epidemiological modeling, stakeholder engagement, or air quality analysis. The grantee and technical assistance provider will discuss potential use of these funds with *Health Impact Project* staff.

2. Program Grants

HIA Program Grants will support organizations that have completed one or more prior HIAs to develop and implement tools and approaches that stably integrate the consideration of health in other sectors' decision-making; and implement a plan that establishes the relationships, systems, and funding mechanisms needed to maintain a stable HIA program that endures beyond the conclusion of the grant. Recipients of these grants will:

- Conduct one or more high-quality, successful HIAs that inform decisions important to health;

- Develop and implement innovative tools or approaches that adapt and streamline HIAs in order to stably integrate the consideration of health in non-health sectors' decision-making; and
- Design and implement the systems, relationships, and funding mechanisms needed to establish an HIA program that builds on the foundation and partnerships established through the grantee's HIA work, and endures beyond the completion of grant funding.

Successful HIA program grant applications will not focus heavily on capacity-building activities such as conducting HIA trainings, but instead on actions that will integrate the use of HIAs and related approaches in decision-making in a sustainable manner.

Given that many experienced HIA teams have established strong partnerships in the arena of land use, transportation, and other built environment policies, innovative proposals on those more common topics will be considered. The preference for HIAs proposed in states and tribes that have had limited experience with HIAs to date does not apply to Program Grants.

Program Grantee learning community

The *Health Impact Project* will engage a consultant with expertise in public health, policy, and cross-sector partnerships to provide technical assistance and mentoring to each Program Grantee. Technical assistance may include guidance on the elements of a successful plan, review of draft deliverables, and suggested strategies for interagency collaboration. The consultant will facilitate a learning community among grantees and produce a report that documents and synthesizes lessons learned in terms of promising approaches, successful ways to overcome common barriers, promising ways to sustainably fund HIA programs, and recommendations for other groups seeking to make HIA a routine practice in decisions important to health.

Program Grantees may identify a subject on which more detailed technical assistance would be helpful through the course of an HIA. The *Health Impact Project* may provide limited additional funds to fill subject area needs identified during the project, such as epidemiological modeling, stakeholder engagement, or another sub-discipline, such as air quality analysis. The grantee will discuss potential use of these funds with *Health Impact Project* staff.

TOTAL AWARDS

This call for proposals will fund:

- up to six Demonstration Project grants for up to $100,000 each completed within 18 months; and
- up to five Program Grants for up to $250,000 each completed within 24 months. Program Grants must include $100,000 in matching funds or in-kind support from the grantee or partner organizations.

The *Health Impact Project* also collaborates with funders to support HIAs on specific topics or in a defined state or region. In the last solicitation, for example, the *Health Impact Project* was able to add two Demonstration Projects and three Program Grants to the initial number of grants offered in the CFP. For this CFP, we will provide information regarding the availability of additional funds through periodic announcements to our mailing list and on our website at *www.healthimpactproject.org/project/opportunities*. To receive announcements via the mailing list, please enter your email address in the "Stay Informed" section of the *Health Impact Project* website.

ELIGIBILITY CRITERIA

Eligible applicant organizations include:

- state, tribal, or local agencies;
- tax-exempt educational institutions; or
- tax-exempt organizations as described in Section 501(c)(3) of the Internal Revenue Code and are not private foundations or non-functionally integrated Type III supporting organizations.

Applicant organizations must be located in the United States or its territories at the time of application.

Each proposed HIA must address a local, tribal, or state policy, program, plan, or project in the United States or its territories or a federal decision in which the effects are limited to a specific state, local community, or region.

Consistent with RWJF values, this program embraces diversity and inclusion across multiple dimensions, such as race, ethnicity, gender, age, and disadvantaged socioeconomic status. We strongly encourage applications that will help us expand the perspectives and experiences we bring to our work. We believe that the more we include diverse perspectives and experiences in our work, the better we are able to help all Americans live healthier lives and get the care they need.

Additional eligibility criteria for Program Grant applicants

- Program Grantees will be required to include a minimum of $100,000 in matching funds, either through in-kind contributions or through outside funding sources. This investment demonstrates the commitment on the part of the grantee and partners to integrating the use of HIAs in their institution(s), and developing sustainable funding strategies early on.

  At the time of brief proposal submission, applicants are expected to provide a description of the anticipated match or in-kind contribution. Upon notification that the full proposal is being recommended for funding, all finalists will be required to confirm that matching funds have been secured. For more information on matching funds requirements and how to document matching

contributions, please visit the "Frequently Asked Questions" section on the project website *www.healthimpactproject.org/project/opportunities/faq*.

- At the time of brief proposal submission, Program Grant applicants must have completed one high-quality, successful HIA that achieved valuable results such as influencing the outcome of a decision or developing a collaborative partnership with policy-makers outside the health sector.

SELECTION CRITERIA

All proposals will be screened for eligibility and then assessed by a committee composed of *Health Impact Project* staff, RWJF staff, and external expert reviewers.

Selection criteria for Demonstration Project and Program Grant HIAs

Preference will be given to HIAs in one or more of the following categories:

- HIAs that focus on an innovative topic for which relatively few HIAs have been completed, for example, criminal justice, education, fiscal and economic policy, and disaster recovery. Preference will be given to proposed HIAs on topics other than land use, built environment, or transportation. However, for HIA Program Grant applicants, many experienced HIA teams have established strong partnerships in the arena of land use, transportation, and other built environment policies, and may wish to continue HIA practice on this topic as a way to build the HIA program. Therefore, strong proposals on any topic will also be considered;
- HIAs proposed by a federally recognized U.S. tribe; and
- HIAs proposed in states where there has been limited or no HIA activity, and where there are not any ongoing, systematic efforts to build the field. This includes territories and the following states: Alabama, Arkansas, District of Columbia, Delaware, Hawaii, Idaho, Iowa, Louisiana, Maine, Mississippi, Montana, Nevada, New Jersey, New York, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Virginia, West Virginia, and Wyoming. The preference for HIAs proposed in areas that have had limited experience with HIAs to date does not apply to Program Grants.

Strong HIA proposals will:

- Inform a proposed policy, program, plan, or project (such as proposed legislation, an agency's rulemaking, a permitting process, or an environmental impact statement that will be drafted within the period of the grant). The strongest proposals will address decisions that can be reasonably anticipated within or shortly following the grant period;
- Address a pending policy, program, plan, or project that is important to health and health equity;

- Outline a strong, effective plan for involving stakeholders—including community members and community-based organizations, private-sector stakeholders, policy-makers, and other relevant agencies and organizations—in each step of the HIA. The most promising proposals will demonstrate partnerships with community-based organizations and other stakeholders, and well-defined roles for stakeholders through, for example, advisory or steering committees, as well as a high potential for building new, enduring collaborations and partnerships;
- Demonstrate a strong working relationship between the HIA team and the decision-maker(s), or a well-conceived plan for engaging the decision-maker(s) at each step of the HIA;
- Show commitment to a scientifically sound evaluation of the available evidence, and an impartial appraisal of the risks, benefits, trade-offs, and alternatives involved in the decision, and demonstrate the applicant organization's credibility as a source of information on the decision addressed by the HIA;
- Convey a clear strategy for disseminating the findings and advocating for adoption and implementation of the HIA recommendations, including the planned approach for building support for the HIA findings and recommendations among decision-makers, and the roles that stakeholders and partners will play in dissemination and advocacy;
- Demonstrate a strong history of engagement by the grantee, partners, and community-based organizations on the issue that the HIA addresses, and explain how each will continue to advocate for the recommendations beyond the conclusion of grant funding;
- Demonstrate potential for the HIA to add value to the decision-making process by highlighting health issues that are not already known or may not be immediately obvious, by addressing the potential for differential impacts on vulnerable populations, and by generating health-based recommendations not already under consideration;
- Demonstrate potential for the HIA to build new and enduring partnerships between public health organizations and policy-makers in non-health sectors such that health will be more regularly factored into future decisions; and
- Include an appropriate budget and time line, and a staffing plan that demonstrates adequate resources for all aspects of the proposed HIA and includes involvement of senior leadership in the grantee organization.

Additional selection criteria for Program Grants

In addition to the criteria for all applicants on proposed HIAs, strong Program Grant applications will also:

- Communicate a clear, well-articulated vision for the HIA program, and a realistic plan for building on the applicant's partnerships and HIA experience to institutionalize the use of HIAs and related tools in decision-making in the applicant's state or region, and for funding and sustaining these efforts beyond the conclusion of the grant;
- Outline a clear, feasible plan to create and implement a new tool or approach that integrates the consideration of health in other sectors' decision-making;
- Document the applicant's level of HIA experience. Successful applicants will demonstrate a high potential for developing a sustainable HIA program, but will not yet have established the systems, partnerships, and funding mechanisms needed to do so. Applicants should have successfully completed at least one HIA prior to submitting a proposal. Applicants that have conducted numerous HIAs and have well-established HIA programs will be viewed as less competitive;
- Articulate the applicant's plans for engaging community-based organizations and policy-makers and agencies outside the health sector in the HIA program; and
- Have strong support of and engagement in the project on the part of policy-makers, such as elected officials and leadership in both health and non-health agencies.

EVALUATION AND MONITORING

Grantees are expected to meet Pew requirements for the submission of narrative and financial reports, as well as provide periodic information needed for overall project performance monitoring and management. Pew monitors the grantees' efforts and careful stewardship of grant funds to assure accountability. Grantees will be required to submit narrative and financial reports approximately every six months and at the conclusion of the project.

In addition, HIA project staff will be required to have regular check-in calls with *Health Impact Project* staff and technical assistance providers to give progress updates on their grants; the average frequency of these calls is twice monthly. The *Health Impact Project* staff and technical assistance providers may visit the grantee. Grantees must submit their completed HIA and other deliverables and grant reports according to the schedule outlined in the grant agreement.

An independent research group selected and funded by RWJF may conduct an evaluation of the program. As a condition of accepting funds, we require grantees to participate in the evaluation.

USE OF GRANT FUNDS

Grant funds may be used for project staff salaries and benefits, consultant fees, data collection and analysis, meetings, supplies, project-related travel, and other direct project expenses, including a limited amount of equipment essential to the project and indirect expenses. Grant funds may not be used to subsidize individuals for the costs of their health care, to support clinical trials of unapproved drugs or

devices, to construct or renovate facilities, for lobbying, for political activities, or as a substitute for funds currently being used to support similar activities. Please note two important budget restrictions: 1) Pew limits the amount of indirect costs it will support to no more than 10 percent of salaries and benefits covered directly by the grant; and 2) Pew limits the amount of fringe benefits it will support to no more than 32 percent of the total staff salaries line item.

In addition, no part of the grant can be used to carry on propaganda or otherwise attempt to influence legislation within the meaning of the applicable provisions of the Internal Revenue Code and the Treasury Regulations thereunder. No part of the grant can be used to participate or intervene in any political campaign on behalf of (or in opposition to) any candidate for public office.

HOW TO APPLY

There are two stages in the application process: (1) applicants submit a brief proposal that describes the proposed project and includes an estimated budget and, *if invited*; (2) select applicants then submit a full proposal, budget, budget narrative, and other documentation.

All brief and full proposals must be submitted via the *Health Impact Project* online application system at *http://apply.healthimpactproject.org*. Before beginning an application, interested applicants are strongly encouraged to read the CFP, the "Frequently Asked Questions," and join or listen to the applicant information webinar(s). Information on these resources is available at *www.healthimpactproject.org/project/opportunities*.

Health Impact Project staff will be available by phone and email to address questions that prospective applicants may have after reviewing these materials. Due to the large number of proposals that we are likely to receive, neither Pew nor RWJF are able to provide individual comments on proposals prior to submission. For inquiries related to the CFP requirements or application process, please call (202) 540-6012 or send an email to *healthimpactproject@pewtrusts.org*.

Brief proposals are due April 2, 2014 at 6 p.m. ET. The *Health Impact Project* will notify applicants via email by April 30, 2014, about whether they are invited to submit a full proposal. Full proposals will include a more detailed proposal narrative, budget, and budget narrative. Full proposals are due June 25, 2014 at 6 p.m. ET.

An applicant organization may submit up to two brief proposals total under this solicitation. For example, an applicant may submit two Demonstration Project brief proposals, two Program Grant brief proposals, or one brief proposal for each grant type. However, the *Health Impact Project* will fund no more than one full proposal per organization.

STAFFING

In the application proposal narrative and budget narrative, applicants must provide staffing information that reflects a realistic estimate of the time it will take to complete the steps of an HIA, manage the

project and process, manage relationships and input from partners, advisers, stakeholders, and consultants, complete a high-quality HIA report, disseminate the results and recommendations, and effectively engage decision- makers. Applicants should give consideration to the range of skills that may be required for a successful HIA and/or HIA program, such as expertise in public health, community engagement, communications, and policy experience in the issue that the HIA will address. Based on our experience, the most successful HIA projects have at least 0.5 FTE for one professional staff member to serve as the project coordinator, and also ensure considerable staff time for stakeholder engagement.

For the HIA program grants, strong project management staffing and significant involvement of senior leadership in the grantee organization will be essential. For all applicants, we ask that you carefully define the roles your partners will play, and the time commitment and funding that will be required for their participation.

PROGRAM DIRECTION

Direction and technical assistance for the *Health Impact Project* is provided by The Pew Charitable Trusts at:

Health Impact Project
The Pew Charitable Trusts
901 E Street, NW, 10th Floor
Washington, DC, 20004
Phone: 202-540-6012
Email: *healthimpactproject@pewtrusts.org*
Website: *www.healthimpactproject.org*

Responsible staff members at The Pew Charitable Trusts are:

- Aaron Wernham, MD, MS, *director*
- Kara Blankner, MPH, *manager*

Responsible staff members at the Robert Wood Johnson Foundation are:

- Pamela Russo, MD, MPH, *senior program officer*
- Paul Kuehnert, MS, RN, *team director and senior program officer*
- Tom Andruszewski, *senior grants administrator*

2014 Call for Proposals

Brief Proposal Deadline: April 2, 2014

KEY DATES AND DEADLINES

February 12, 2014
Call for proposals announced.

March 5, 2014
Demonstration Project informational webinar on HIA, the CFP, and application process. Registration is required. Please visit *www.healthimpactproject.org/project/opportunities* for details.

March 6, 2014
Program Grant informational webinar on the CFP and application process. Registration is required. Please visit *www.healthimpactproject.org/project/opportunities* for details.

April 2, 2014 (6 p.m. ET)
Deadline for receipt of brief proposals.*

April 30, 2014
Applicants notified of invitation to submit a full proposal.

May 28, 2014
Optional HIA training in Washington, DC for invited full proposal Demonstration Project applicants.

June 25, 2014 (6 p.m. ET)
Deadline for receipt of full proposals.*

By September 30, 2014
Notification of awards.

**All proposals must be submitted via the online application at http://apply.healthimpactproject.org. All applicants should log in to the system and familiarize themselves with the online submission requirements well before the submission deadline. Staff may not be able to assist all applicants in the final 24 hours before the submission deadline. In fairness to all applicants, we will not accept late or incomplete proposals.*

ABOUT THE ROBERT WOOD JOHNSON FOUNDATION

For more than 40 years the Robert Wood Johnson Foundation has worked to improve the health and health care of all Americans. We are striving to build a national culture of health that will enable all Americans to live longer, healthier lives now and for generations to come.

For more information, visit *www.rwjf.org*. Follow the Foundation on Twitter at *www.rwjf.org/twitter* or on Facebook at *www.rwjf.org/facebook*.

Sign up to receive email alerts on upcoming calls for proposals at *http://my.rwjf.org.*

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ABOUT THE PEW CHARITABLE TRUSTS

The Pew Charitable Trusts is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public and stimulate civic life. We partner with a diverse range of donors, public and private organizations and concerned citizens who share our commitment to fact-based solutions and goal-driven investments to improve society. For more information, visit *www.pewtrusts.org*.

UPCOMING HOUSING TRAINING EVENT

May 1, 2014

Sessions Woods, Burlington, CT

341 Milford Street (Rte 69), Burlington, CT 06013-1550

9:00 am –3:30 pm (Registration at 8:30 am)

Morning refreshments to be served. Lunch is on your own

Come Hear About:

Legal Aspects of Housing Enforcement and Orders

- Judith Dicine, State's Attorney's Office

Implications of Lead Orders for Historical Properties

- Todd Levine, CT Historical Commission

Responding to Asbestos Complaints

- Steve Dahlem, CT DPH Asbestos Program

Moisture and Indoor Environmental Quality

- Marian Heyman, DPH Environmental & Occupational Health Assessment Program

Indoor Environmental Quality

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Effect of Weatherization Combined With Community Health Worker In-Home Education on Asthma Control

Jill Breysse, MHS, CIH, Sherry Dixon, PhD, Joel Gregory, Miriam Philby, David E. Jacobs, PhD, CIH, and James Krieger, MD, MPH

Objectives. We assessed the benefits of adding weatherization-plus-health interventions to an in-home, community health worker (CHW) education program on asthma control.

Methods. We used a quasi-experimental design to compare study group homes (n = 34) receiving CHW education and weatherization-plus-health structural interventions with historical comparison group homes (n = 68) receiving only education. Data were collected in King County, Washington, from October 2009 to September 2010.

Results. Over the 1-year study period, the percentage of study group children with not-well-controlled or very poorly controlled asthma decreased more than the comparison group percentage (100% to 28.8% vs 100% to 51.6%; $P = .04$). Study group caregiver quality-of-life improvements exceeded comparison group improvements ($P = .002$) by 0.7 units, a clinically important difference. The decrease in study home asthma triggers (evidence of mold, water damage, pests, smoking) was marginally greater than the comparison group decrease ($P = .089$). Except for mouse allergen, the percentage of study group allergen floor dust samples at or above the detection limit decreased, although most reductions were not statistically significant.

Conclusions. Combining weatherization and healthy home interventions (e.g., improved ventilation, moisture and mold reduction, carpet replacement, and plumbing repairs) with CHW asthma education significantly improves childhood asthma control. (*Am J Public Health.* 2013;104:e57–e64. doi:10.2105/AJPH.2013.301402)

Asthma is a major public health and environmental justice issue associated with multiple interacting environmental and other factors. Asthma prevalence and morbidity among all US children have increased dramatically in the past 2 decades and remain high.[1] Asthma disproportionately affects disadvantaged populations, who have a higher prevalence of the disease[1–4] and experience more severe impacts.[5–12] Being poor or a person of color is associated with increased rates of sensitization to several asthma-associated allergens.[13–20] Sensitization to airborne allergens is one of the main risk factors for developing asthma and its complications.[21–23]

Disparities in asthma morbidity and allergic sensitization may be due, in part, to disproportionate exposure to indoor environmental asthma triggers associated with substandard housing.[12,24,25] Moisture and dampness, poor ventilation, crowding, residence in multiunit dwellings, deteriorated carpeting, and structural defects can contribute to high levels of indoor asthma triggers.

In its Guide to Community Preventive Services,[26] the US Centers for Disease Control and Prevention (CDC) summarized studies[27–35] showing that home visits, in particular those performed by community health workers (CHWs) and addressing multiple asthma triggers, improve self-management behaviors, reduce exposure to triggers, decrease symptoms and urgent health care use, and increase quality of life. The US Department of Housing and Urban Development (HUD),[36] US Environmental Protection Agency,[37] and CDC[26] recommend home visits, and the National Asthma Education and Prevention Program[38] recommends that home visits be considered, but notes that this area needs more research.

The historical Seattle–King County Healthy Homes II (HH-II) project studied the effectiveness of CHW home visits for controlling asthma.[39] CHWs provided in-home education and helped participants implement action plans that addressed multiple triggers. The study found that the CHW home education program was relatively inexpensive, significantly reduced asthma morbidity and trigger exposure, and improved caregivers' quality of life. The HH-II study also found that adding CHW home visits to clinic-based asthma education yielded a clinically important increase in asthma-symptom-free days and modestly improved caretakers' quality of life.[39] However, the homes of many low-income asthmatic children needed structural interventions beyond the scope of the home visit program.

In this Highline Communities Healthy Homes Project, we used a quasi-experimental design to determine whether adding weatherization-plus-health structural interventions to an existing home CHW home visit program resulted in greater reductions in asthma morbidity and exposure to home asthma triggers than reductions achieved for the historical HH-II comparison group receiving CHW home education visits alone. Over 100 000 homes are weatherized each year,[40] yet we found no studies that examined the impact of weatherization work on resident asthma outcomes.

METHODS

We collected study data in homes of low-income children in the Highline communities in southwest King County, Washington. Enrollment of children and homes occurred between October 2009 and September 2010. Interested families having 1 or more children who used asthma medication during the school day and who had a medical verification of asthma diagnosis were referred by school district nurses to the public health department for phone eligibility screening. Families were eligible if they met the following study and weatherization program requirements:

- currently lived in Highline School District and intended to remain in the same home for at least 1 year;
- spoke English, Spanish, or Vietnamese;
- had 1 or more children with asthma who were 3 to 17 years old at enrollment;
- had not participated in other asthma programs in the past 3 years;
- had a child whose asthma control level met the National Heart, Lung, and Blood Institute (NHLBI)'s 2007 definition of not-well-controlled or very poorly controlled asthma[41];
- resided in a rental property and the owner was willing to participate; and
- were low income as defined by both HUD and weatherization programs (at or below HUD 80% annual median income and 60% of state median income or 200% of federal poverty level).

The county housing authority aided enrollment, using its weatherization permission form to ask whether any household member had respiratory issues and referring potential participants to the public health department. The housing authority sent weatherization application forms to those who passed the phone screening.

Participants drawn from the previous HH-II study served as this study's historical comparison group. Comparison group enrollment occurred between November 2002 and October 2004, with CHW home visits ending in November 2005. CHWs for both the study and comparison groups received the same training and followed similar home visit protocols. Comparison group eligibility criteria (similar to the study group criteria) were as follows: children aged 3 to 14 years with not-well-controlled or very poorly controlled asthma; income below 200% of the 2001 federal poverty threshold or child enrolled in Medicaid; caretaker's primary language English, Spanish, or Vietnamese; and residence in King County, Washington. The HH-II research team recruited comparison group children primarily through community and public health clinics.

Community Health Worker Home Visit Intervention

For both study and comparison groups, a CHW from the public health department obtained informed consent and conducted a baseline assessment of the home environment and a health interview, described elsewhere.[39,42] Over a 1-year period, the CHW made an average of 4 additional home visits to provide education and supplies. For the education component, the CHW worked with each family on a tailored set of actions to reduce asthma triggers, based on standard protocols,[39,42] including tailored educational messages and demonstrations about medical management of asthma and trigger reduction. During the first education visit, the CHW provided allergen-impermeable bedding encasements for the study child's bed, a low-emission vacuum, vacuum bags, a cleaning kit, a peak flow meter so the caregiver could periodically monitor the asthmatic child's breathing, an inhaler spacer if needed, an asthma medication and action plan storage box, and low-literacy educational materials. At the exit visit, approximately 1 year after the first visit, a CHW repeated the home environment assessment and the health interview.

Weatherization-Plus-Health Structural Interventions

County housing authority personnel conducted a weatherization-plus-health audit that determined the scope of structural interventions. The "weatherization" part included diagnostic home air tightness measurements, combustion safety testing, a heating system assessment, and an assessment of moisture-related problems. The housing authority used the US Department of Energy–approved Targeted Residential Analysis Energy Tool (TREAT) software to determine weatherization work specifications, including energy upgrades, related repairs, and health and safety improvements, with work varying in intensity and cost depending on the type of dwelling (apartments vs duplexes or single-family homes).

The "health" part of the audit included an assessment of asthma triggers that could be treated through additional structural interventions beyond routine weatherization, primarily in the bedroom and main play areas of the child with asthma. Weatherization-plus-health interventions performed in at least 35% of the study group homes are listed in Table 1. The median total cost of weatherization-plus-health interventions was $4200 for apartments and $6300 for duplexes or single-family dwellings.

Environmental Measures

In the study and comparison groups, the CHW completed a home environment checklist and an interview with the primary caregiver, both described elsewhere,[39,43] to assess home conditions and identify the presence of 6 asthma triggers: pets, smoking inside the home, cockroaches, rodents, mold, and water damage. At baseline and exit visits, we calculated a "trigger score" for each home, with scores ranging from 0 to 6 depending on the number of triggers identified by methods described elsewhere.[43]

In a subset of study homes, we used a standard HUD method[44] to assess exposure to asthma-related allergens (dust mite, cockroach, and mouse) through floor dust vacuum sampling in the study child's bedroom, living room, and kitchen at baseline and exit visits. We marked an area of approximately 3 sq ft adjacent to upholstered furniture in the living room and adjacent to and slightly under the bed in the child's bedroom, with each area vacuumed for approximately 2 minutes. On bare floors, we sampled more than one 3 sq ft area if needed to collect sufficient dust for analysis. In the kitchen, we sampled the floor perimeter along the base of walls, appliances, and cabinets. Laboratory analysis was by the Multiplex Array for Indoor Allergen (MARIA) method (Indoor Biotechnologies, Charlottesville, VA) for dust mite allergens Der f1 and Der p1, Mite Group 2 (combination of Der f2 and Der p2), cockroach allergen Bla g2, and mouse allergen Mus m1.

Clinical Outcome Measures

Using interview data, we classified each participating child's asthma as well controlled, not well controlled, or very poorly controlled in accordance with NHLBI guidelines.[41] The interview included the Pediatric Asthma Caregiver's Quality of Life Questionnaire score,[45] ranging from 1 to 7, with higher scores indicating better quality of life and a change of 0.5 units being clinically significant. Interview data included use of asthma-related urgent clinical care during the previous 12 months (including an overnight stay in hospital, emergency room visit, or unscheduled clinic visit)

TABLE 1—Most Frequently Performed Weatherization-Plus-Health Structural Interventions: Highline Communities Healthy Homes Project, October 2009–September 2010

Task	Dwellings With Task, %	
	Apartments (n = 11)	Duplexes and Single-Family Dwellings (n = 23)
Install bathroom fan timer(s)	82	87
Replace bathroom fan(s)	64	74
Insulate water pipes	27	78
Replace carpet[a]	91	48
Install CO detector	18	74
Repair or replace ductwork[b]	27	61
Insulate home[c]	18	61
Reduce air infiltration	18	57
Install smoke detector(s)	18	48
Weather-strip door(s)	18	48
Insulate or seal ductwork[d]	0	52
Replace light fixture(s)	18	43
Install CFLs	18	35
Install crawl space vapor barrier	9	35
Repair electrical issue(s)	18	30
Repair plumbing	9	35
Install door sweep	0	35
Replace door(s)	0	35
Replace kitchen range hood	18	26
Replace dryer hood	9	26

Note. CO = carbon monoxide; CFL = compact fluorescent lamp. The table presents interventions performed in at least 35% of study group dwellings. A full list of weatherization-plus-health interventions is available as a supplement to the online version of this article at http://www.ajph.org.

[a]In various homes, carpets were replaced with low-volatile-organic-compound (low-VOC) carpets, laminate flooring, vinyl, refinished hardwood, or a combination of carpet and laminate.

[b]Includes replacing bathroom fan duct, installing passive roof vent, venting kitchen exhaust fan, cleaning dryer duct, installing heat vent, repairing baseboard heater, repairing dryer vent, repairing duct and heating, ventilation, and air conditioning (HVAC), replacing crawlspace duct, replacing duct, venting bathroom fan, and replacing dryer duct, to improve ducts and vents.

[c]Includes insulating attic, walls, ceiling, or crawlspace, or a combination of these locations, all done to prevent air leakage into or out of the home.

[d]Includes insulating HVAC ducts, sealing ducts, and insulating furnace walls, all done to prevent energy leakage from various heating and air conditioning systems.

and self-reported asthma attacks in the previous 3 months.

Statistical Analysis

We used the χ^2 test to determine whether there was a difference in baseline demographic and other characteristics between the study and comparison groups (Table 2). Type of residence was the only significant difference between the 2 groups, with 32% of study group children living in apartments compared with 53% of comparison group children ($P = .049$). Because type of home could influence the type of weatherization-plus-health interventions conducted in a given dwelling, we adjusted for these differences using propensity score weighting, controlling for the differences between the 2 groups; this resulted in an unbiased estimation of the treatment effect. To create the propensity score, we used a logistic regression model to predict the log-odds of being in the study group vs the comparison group. The regression model was based on child's age (3–6 vs ≥ 7 years), apartment versus house, winter (December 21–March 20) data collection period (yes vs no), and year of construction (1940–1959, 1960–1979, or 1980–2009).

We used propensity score weighting for all analyses except for descriptive statistics about the structural interventions (Table 1) and baseline household demographics (Table 2). Although propensity score weighting was unnecessary for within-group comparison of baseline versus exit visit data, we used it for consistency.

For yes-or-no interview questions, we used the McNemar test to test the hypothesis that the percentage of people within each group who answered yes to a question was different at baseline versus exit visit. When all people had the same responses at both times, we could not calculate the P value. We used a logistic model to test whether or not the log-odds of yes answers was different for the study vs comparison groups, controlling for the baseline response for each variable.

For categorical variables with answers representing some order of intensity (e.g., very sure, somewhat sure, not sure at all), we used the Cochran-Mantel-Haenszel row mean score to test whether responses were the same at the baseline and exit visits. For questions involving the number of days, quality-of-life scores, number of visits, and number of triggers, we used the paired t test to test whether there was a significant change in the means from baseline to exit visit. For these same variables, we used the 2-sample t test to determine whether the mean change from baseline to exit visit was significantly different between the study and comparison groups. For all tests, we defined statistical significance as $P < .05$.

We used McNemar's test to determine whether the percentage of allergen samples with concentrations at or above the detection limit (DL) was the same at baseline and exit visits.

RESULTS

The study team enrolled 45 households, of which 34 were retained through the 1-year follow-up visits (76% retention rate). The 34 study households had low annual incomes, and the education of most caregivers was either less than high school or a high school diploma or GED (Table 2). Almost half (47%) of enrolled children were Hispanic, 21% were Vietnamese, and 18% were African American.

TABLE 2—Baseline Household Characteristics: Highline Communities Healthy Homes Project, October 2009–September 2010

Characteristic	Study Group (n = 34), %	Comparison Group (n = 68), %	P[a]
Child's age, y			.327
3–6	41	51	
7–17	59	49	
Dwelling type			.049
Single-family	68	47	
Apartment (≥ 3 units)	32	53	
Caretaker's education			.79
< high school	44	41	
High school graduate or GED	21	21	
Some college	35	35	
College graduate		3	
Child's race/ethnicity			.74
African American	18	16	
Hispanic	47	46	
Other Asian/Pacific Islander	6	10	
Other or unknown	3	7	
Vietnamese	21	12	
White	6	9	
Child's asthma control			.779
Not well controlled	50	53	
Very poorly controlled	50	47	
Child's gender			.253
Male	68	56	
Female	32	44	
Primary language in home			.953
English	50	49	
Spanish	32	35	
Vietnamese	18	16	
Season of data collection			.241
Not winter	71	81	
Winter[b]	29	19	

[a]Based on χ^2 test to determine whether study group baseline characteristics were different from those of the comparison group.
[b]December 21 to March 20.

Fifty percent of households reported English as the primary language, 32% reported Spanish, and 18% reported Vietnamese. The average time between the baseline and exit data collection visits for the study group was 12 months (range = 11–15 months), compared with 14 months (range = 8–24 months) for the comparison group.

Clinical Outcomes

Between baseline and exit visits, the percentage of study group children whose asthma was either not well controlled or very poorly controlled significantly improved, from 100% to 28.8% ($P<.001$; Table 3). The comparison group also had a significant improvement, from 100% to 51.6% ($P<.001$); however, the study group's absolute percentage reduction was significantly greater than that of the comparison group ($P=.04$). Moreover, the study group's improvement in caregivers' quality of life exceeded that observed for comparison group caregivers ($P=.002$) by 0.7 units, a clinically important difference.

For the following measures, the study group showed greater improvement than the comparison group, but the across-group difference in improvement did not reach statistical significance:

1. percentage of children with urgent clinical care visits in the previous 12 months;
2. mean symptom-free days in previous 2 weeks;
3. mean days of limited activity in previous 2 weeks;
4. mean days of rescue medicine use in previous 2 weeks; and
5. mean nights with symptoms in previous 2 weeks.

The improvement in the mean number of asthma attacks in the previous 3 months for the comparison group marginally exceeded that of the study group ($P=.092$).

Asthma Triggers

The percentage of study group homes with visible evidence of mold, and of those with water damage, condensation, leaks, or drips, significantly decreased from baseline to exit (Table 4; $P<.001$ and $P=.01$, respectively). The percentage of study group homes with visible evidence of rodents marginally decreased ($P=.087$). Although the decline in the percentage of homes with indoor smoking was not significant ($P=.128$), a low percentage of caregivers reported indoor smoking at baseline (6.9%), and by the end of the study, no caregivers reported indoor smoking. Although visible signs of cockroach exposure appeared to increase from baseline to exit (14.3% to 25.3%), this increase was not significant ($P=.17$).

Study group improvements in mold and water damage issues significantly exceeded those of the comparison group ($P=.078$ [marginally significant] and 0.029, respectively). The decline in overall exposure of study group children to asthma triggers (baseline and exit trigger scores = 1.8 and 0.8, respectively) was marginally significantly greater than that of comparison group children (baseline and exit trigger scores = 1.2 and 0.7, respectively; $P=.089$).

Allergens

Overall, Bla g2 was infrequently detected in study group homes (n = 16), with median

TABLE 3—Children's Asthma Clinical Outcomes: Highline Communities Healthy Homes Project, October 2009–September 2010

Outcome	Study Group					Comparison Group					Study vs Comparison P^b
	No. of Children	Baseline, % or Mean	Exit, % or Mean	Percentage-Point Change (95% CI)	P^a	No. of Children	Baseline, % or Mean	Exit, % or Mean	Percentage-Point Change (95% CI)	P^a	
Asthma not well controlled or very poorly controlled, %	33	100	28.8	-71.2 (-87.1, -55.2)	< .001	68	100	51.6	-48.4 (-60.7, -36.2)	< .001	.04
Urgent clinical care in previous 12 mo, %	34	93.5	61.8	-31.7 (-47.8, -15.5)	.01	61	89.9	66.2	-23.6 (-36.5, -10.7)	.003	.553
Symptom-free days in previous 2 wk, mean	34	8.4	11.9	3.5 (2.0, 5.0)	< .001	68	8.8	11.8	3.1 (1.7, 4.5)	< .001	.673
Asthma attacks in previous 3 mo, mean	34	1.7	0.9	-0.8 (-1.5, -0.1)	.027	66	3.5	1.2	-2.3 (-4.0, -0.7)	.006	.092
Caretaker's quality of life, mean	34	5.1	6.7	1.6 (1.3, 2.0)	< .001	68	5.3	6.2	0.9 (0.6, 1.2)	< .001	.002
Days activity limited in previous 2 wk, mean	34	3.2	0.5	-2.7 (-3.8, -1.6)	< .001	68	2.5	0.9	-1.6 (-2.6, -0.6)	.002	.139
Days rescue medicine used in previous 2 wk, mean	34	5.7	1.7	-4.0 (-6.1, -2.0)	< .001	68	5.0	2.2	-2.8 (-4.2, -1.4)	< .001	.338
Nights with symptoms in previous 2 wk, mean	34	2.8	0.4	-2.4 (-3.5, -1.3)	< .001	68	2.9	1.2	-1.7 (-2.8, -0.5)	.005	.376

Note. CI = confidence interval.
[a]Based on paired *t* test comparing within-group change from baseline to exit visit.
[b]Based on 2-sample *t* test comparing within-group change across groups or logistic regression comparing exit visit values adjusted for baseline values across groups.

levels at baseline and exit visits less than its DL of 0.196 μg/g. Although Bla g2 was generally less frequently detected at the exit visit (6%, 6%, and 0% ≥ DL in child's bedroom, kitchen, and living room, respectively) than the baseline visit (6%, 19%, and 12% ≥ DL, respectively), these decreases were not significant. Dust mite allergen, particularly Der p1 (the predominant dust mite species in the Seattle area[46]) and Mite Group 2, was detected more frequently than Bla g2. The percentage of Der p1 results equal to or greater than the DL significantly decreased from baseline (75%) to exit visit (44%) in the living room ($P = .059$ [marginally significant]), but there was no significant change in the child's bedroom (75% to 69%). The percentage of Mite Group 2 sample results equal to or greater than the DL significantly decreased between baseline and exit visits in both the child's bedroom (94% to 75%, $P = .083$ [marginally significant]) and the living room (75% to 44%, $P = .025$). Mus m1 showed a significant increase in the percentage of results equal to or greater than the DL in both the kitchen (25% to 62%, $P = .014$) and living room (37% to 81%, $P = .008$); however, the majority of Mus m1 results were very low, with medians at or just above the DL of 0.002 in all locations. A summary of baseline and exit visit allergen concentrations is available as a supplement to the online version of this article at http://www.ajph.org.

DISCUSSION

This study suggests that adding weatherization-plus-health structural interventions to an existing CHW educational asthma home visit program results in greater benefits in asthma control and asthma-related quality of life. There were also improvements in mold, water damage, and child exposure to asthma triggers over and above those found in households receiving CHW education visits alone.

This study complements the Breathe Easy Home (BEH) study, which examined the impact of CHW education and newly constructed asthma-friendly homes and used the same historical comparison group. Similar to our study, the BEH Study found significant improvements in children's asthma control, asthma-symptom-free days, frequency of urgent clinical care visits, and caretakers' quality of life[43];

TABLE 4—Asthma Triggers Found in Homes: Highline Communities Healthy Homes Project, October 2009–September 2010

Outcome	Study Group					Comparison Group					Study vs Comparison P^b
	No. of Homes	Baseline, % or Mean	Exit, % or Mean	Change (95% CI)	P^a	No. of Homes	Baseline, % or Mean	Exit, % or Mean	Change (95% CI)	P^a	
Any pet, %	34	27.1	24.0	-3.2 (-19.2, 12.9)	.729	55	17.2	29.9	12.7 (-1.4, 26.8)	.098	.326
Mold, %	34	53.5	7.0	-46.5 (-63.9, -29.2)	< .001	68	48.7	21.0	-27.7 (-42.1, -13.3)	.001	.078
Cockroaches, %	34	14.3	25.3	11.0 (-4.4, 26.5)	.17	63	13.1	12.0	-1.2 (-13.2, 10.9)	.856	.11
Rodents, %	34	15.6	2.2	-13.4 (-25.3, -1.6)	.087	61	6.7	3.5	-3.2 (-9.7, 3.3)	.371	.424
Smoking inside home, %	34	6.9	0.0	-6.9 (-15.7, 1.9)	.128	65	1.8	3.2	1.4 (-1.5, 4.3)	.419	.998
Water damage, condensation, leaks, or drips, %	34	60.6	24.1	-36.4 (-54.9, -18.0)	.01	68	34.4	4.9	-29.5 (-2.5, -16.6)	< .001	.029
Trigger score,[c] mean	34	1.8	0.8	-1.0 (-1.4, -0.5)	< .001	68	1.2	0.7	-0.5 (-0.8, -0.2)	.001	.089

Note. CI = confidence interval.
[a]Based on McNemar's test to test the hypothesis that the percentage of people within each group who answered yes to a question was different at the baseline vs the exit visit.
[b]Based on a logistic model to test that the log-odds of yes answers in the study group were different from those in the comparison group, controlling for the baseline response for each variable.
[c]The trigger score was 0 to 6, depending on the number of triggers identified.

however, the improvements observed for the BEH group, although greater than those for the historical-education-only group, were not significantly greater. The improvements observed in our current study were generally greater than those observed in the BEH study. For example, the asthma control improvement of the study group versus comparison group was approximately 20% in the current study and 5% in the BEH study. Caregivers' quality of life improved by 0.7 units in the study group over that of the comparison group in the current study, compared with 0.2 units in the BEH study. Improvements in asthma trigger scores, however, were greater in the BEH study than in the current study (score reduction of 0.69 vs 0.5). More research is needed to determine why asthma outcome improvements observed for weatherizing existing homes were greater than those observed for constructing new, asthma-friendly homes.

The types of structural interventions and costs varied considerably depending on the type of dwelling in which the study child resided. Roughly one third of enrolled homes (32%) were apartments in multifamily buildings; the remaining 68% were duplex or single-family dwellings. Additional interventions that supplemented the more routine weatherization repairs, such as carpet replacement and bathroom fan installation, were generally performed both in apartments and in duplexes and single-family dwellings. However, the housing authority could perform only limited weatherization interventions in single apartments of multifamily buildings because they were not treating the whole building. In a routine weatherization program, the housing authority would treat an entire multifamily building if 50% or more of the residents were eligible in terms of income. However, because this study began with enrollment of asthmatic children instead of enrollment of homes needing weatherization, the housing authority could treat only the study child's apartment. The median weatherization cost for duplexes and single-family dwellings ($4181) was nearly twice as high as that for apartments ($2243), whereas median costs for the additional interventions were similar (apartment = $3005; duplex or single-family dwelling = $3103). The small sample size prevented evaluation of the impact of variable intervention intensity on asthma outcomes.

Study group caregivers did not have substantially greater improvements in cleaning activities than the comparison group (data not shown), suggesting that the observed reduction in asthma triggers was more likely related to weatherization improvements and less to caregivers' education and actions. The weatherization improvements may have also yielded the reductions in dust mite allergen levels and reduced moisture and water damage in study group homes.

We observed only a modest decline in visible evidence of rodents and a small increase in visible evidence of cockroaches. Integrated pest management was not a formal part of the weatherization-plus-health interventions. CHWs did emphasize the behavioral components of integrated pest management, including proper food material storage and disposal. CHWs also performed a one-time cleaning training session in homes with visible cockroach problems. The study findings, including the lack of significant improvements in Mus m1 allergen levels, suggest that education and one-time cleaning alone is insufficient to reduce pest-related asthma triggers.

Strengths and Limitations

Study strengths included a high retention rate, the availability of a comparison group, and inclusion of vulnerable populations. Because the work was done in real-world settings, it is probably generalizable to other weatherization programs.

This study also has limitations. Blinding of the study team was not possible. A randomized controlled design was infeasible because the way homes are processed through the weatherization program precludes randomization. The robust findings of this observational study, however, support the conclusion that a package of weatherization-plus-health interventions and education yield greater improvements in asthma control. As with all intervention studies, the placebo effect may account for some of the findings; however, such placebo effects may be considered a useful intervention, yielding health benefits. The small study size and duration did not permit a formal economic analysis, but the greater decline in urgent health care use in the study group, although not significant, suggests that the intervention has the potential to generate health cost savings. If structural interventions are durable, longer-term follow-up might reveal greater health improvements. Because of the small sample size, we could not control for multiple comparisons. It would also be beneficial to study the impact of weatherization alone on child health outcomes. In general, weatherization programs are limited in the types of repairs they can make compared with a more holistic approach that has both weatherization and healthy homes funding.

Conclusions

A comprehensive program combining an intensive CHW in-home education program with structural weatherization-plus-health interventions substantially improved asthma control and caregivers' quality of life and significantly reduced the presence of home asthma triggers. These improvements were significantly greater than those observed in households that received asthma education visits alone. Improved coordination among weatherization and public health programs may result in greater improvements in both the home and the health of children with asthma. ■

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Contributors

J. Breysse, a subgrantee project manager, aided in the overall study design and implementation, oversaw evaluation data collection and analysis, and was the primary author of the article. S. Dixon, the study biostatistician, was responsible for data management and statistical analysis. J. Gregory, the primary grantee project manager, aided in the overall study design and implementation and recruitment of homes, determined the weatherization work to be done and oversaw and documented that work, and collected allergen samples. M. Philby, a subgrantee program manager, oversaw the enrollment of residents, managed the community health worker visits, oversaw health and visual assessment data collection, and managed the health and visual assessment data. D. E. Jacobs, the subgrantee principal investigator, aided in overall study design and contributing to the data interpretation. J. Krieger, a subgrantee co-principal investigator, aided in the study design, data analysis, and interpretation of study findings, and oversaw the provision of comparison group data.

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Human Participant Protection

The University of Washington's human subjects review committee approved this study prior to any data collection.

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