

# DOE Health & Home Performance Initiative

## Session Objectives:

- Better understand the impact between home performance and health
- Learn from the body of work that has been already done relating to home performance and health
- Gain insights from the barriers involved with home performance and health

# Health and Home Performance Initiative

Identify and leverage substantiated benefits to occupant health from home performance improvement:

- Literature review (National Center for Healthy Housing)
- Roadmap to leverage home performance-health connection to grow industry
- Create consumer marketing directed at stakeholders identified as key to the process



# Literature Review Overview

- **Goal:**

- Investigate impact of home performance measures on resident health

- **Objectives:**

- Build the case for contractors and home performance advocates so they can:
  - Educate home performance clients
  - Educate current funders (utilities, DOE)
  - Educate medical community

# Current Status



- **NCHH has summarized 38 studies so far:**
  - Green rehab-new construction/gen rehab (11)
  - Ventilation (8)
  - Weatherization (6)
  - General energy conservation/heating (3)
  - Insulation (2)
  - Lighting (1)
  - Other housing (moisture/mold/safety) (4)
  - Stand alone air cleaners (3)



# Home Performance Improves Health

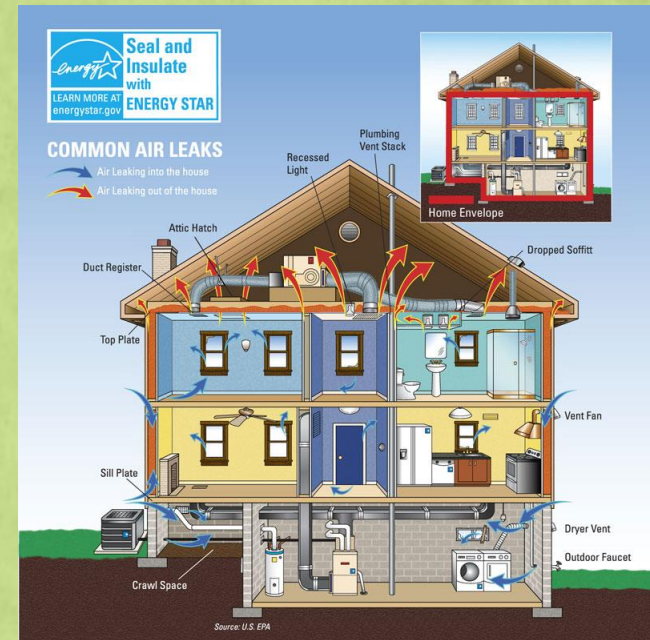
[www.nchh.org](http://www.nchh.org)



#1:

Upgrade packages (air sealing, insulation, & ventilation):

- Resident health improves.
- Concerns re homes being too-tight dispelled by our findings.



# Some evidence of the positive impact of individual activities



#2

## Most research looks at packages of activities:

- In some studies, researchers compared individual activities within a package (e.g., differences in mechanical ventilation).



# Opportunities for Additional Services



#3:

**Other activities Home Performance contractors may consider as add-ons investigated:**

- Examples could include: room air cleaners or low-cost injury prevention services.

# Preliminary Observations

- Most work includes likely ***home performance activity***.
- ***Green renovations*** go beyond standard packages, but ***ventilation upgrades & moisture controls*** arguably have ***greatest health impact***.
  - Exception: No smoking policy studies.
- Studies with ***low-income residents*** made up about ***half*** of the results. Impact is open to discussion.
- Studies included ***multifamily units (all or partial)*** in ***~2/3rds*** of results. Again, impact open to discussion.
- Report includes mix of domestic & foreign studies. Some ***foreign studies have limitations*** due to different housing stock.



# Identifying the Gaps

- The literature review is one step:
  - Find data and evidence to build the case
  - Identify research gaps that should be filled
- Data and evidence just one part – Your help needed
  - What other messaging gaps exist re value of home performance to improve health & take action
  - Simple messaging
    - Stories to reach various audiences

# Stakeholder Engagement

Your feedback has been great,  
AND we need more of it.

- We will be doing outreach in coming months to hear more.
- Let us know your thoughts about this stakeholder engagement.

[HomeHealth@csra.com](mailto:HomeHealth@csra.com)



# *For More Information*

## **Ely Jacobsohn**

Program Manager, Home Performance with ENERGY STAR

202-287-1333

[ely.jacobsohn@ee.doe.gov](mailto:ely.jacobsohn@ee.doe.gov)

[www.energystar.gov/homeperformance](http://www.energystar.gov/homeperformance)

## **Jonathan Cohen**

LEED Green Assoc., Better Buildings Residential Network

202-287-1820

[jonathan.cohen@ee.doe.gov](mailto:jonathan.cohen@ee.doe.gov)

[www.energy.gov/eere/bbrn](http://www.energy.gov/eere/bbrn)

**HomeHealth@csra.com**