

“Finding Common Ground”

Meeting Summary

June 30th and July 1st, 2008

Meeting Purpose and Scope

The purpose of the meeting entitled “Finding Common Ground” was to convene leaders in housing, health, and related fields to identify key opportunities and mechanisms (e.g., regulation, education, and training) through which adverse health outcomes from housing can be dramatically reduced. The Centers for Disease Control and Prevention (CDC) asked meeting participants to provide guidance on how to implement the evidence set forth in the December 2007 Expert Panel Meeting. The Expert Panel Meeting identified interventions with sufficient evidence of their benefits on resident health and safety to support widespread implementation. The scope of Finding Common Ground focused on the existing housing stock, particularly renter-occupied housing.

The goals of the meeting were the following:

1. Discuss the scientific evidence showing housing as a determinant of health;
2. Provide examples of best practices that improve health-related housing problems;
3. Reach consensus on 3-5 key housing problems where interventions should improve health; and
4. Develop a consensus proposal to address the problems identified above, based on evidence-based interventions that are effective.

List of Handouts Provided to Participants:

1. Summary Table Evidence of Housing Intervention Effectiveness on Health (Prepared by the National Center for Healthy Housing);
2. Quantifying Disease from Inadequate Housing (Prepared by the World Health Organization);
3. Summary of Two Key Institute of Medicine Reports Regarding Asthma, Indoor Air Quality, Damp Indoor Spaces, and Mold (Prepared by the National Center for Healthy Housing);
4. Relationships between Interior and Exterior Problems Based on American Housing Survey Data (Prepared by the National Center for Healthy Housing);
5. Standards, Codes, Regulation, and Other Controls (Prepared by the University of Warwick, England); and
6. Laws, Rules, and Code for Healthier Homes: Review of Approaches Impacting Existing Homes (Prepared by the National Center for Healthy Housing).

Summary of Presentations

Numerous presentations took place at the meeting to ensure that all meeting participants were grounded in common knowledge about the connections between housing and health, and to highlight various best practices in the United States and abroad. Meeting presentations included:

- An overview of the Centers for Disease Control and Prevention's goals for the Finding Common Ground meeting: Dr. Pam Meyer, CDC;
- An explanation of the Centers for Disease Control and Prevention's re-organization into healthy housing and healthy homes teams: Dr. Mary Jean Brown, CDC;
- The results of the December 2007 Expert Panel on the scientific evidence base for various healthy housing interventions: Dr. Dave Jacobs, National Center for Healthy Housing;
- The development and implementation of England's Housing Health and Safety Rating System: David Ormandy, University of Warwick, England;
- A review of the connections between poor housing and negative health effects: Dr. Jerome Paulson, Mid-Atlanta Center for Children's Health and the Environment;
- An overview of the International Code Council code development process: Wayne Jewell, City of Southfield, MI; and
- Jurisdictional examples of best practices and innovative efforts in the move from Childhood Lead Poisoning Prevention Programs to Healthy Homes Programs: Karla Johnson, Marion County Health Department and Madeline Shea, Baltimore Healthy Homes Program.

Concerns with and Recommended Changes to the Expert Panel Summary Table

Meeting participants reviewed a summary of the December 2007 Expert Panel Meeting Findings (See Appendix A and www.centerforhealthyhousing.org/html/healthy_homes_expert_panel_mtg.htm).

Given their professional knowledge and experience with various healthy housing interventions, participants worked in break-out groups to answer the following questions:

1. What was missing from the list of interventions provided in the summary table from the Expert Panel that should be added to "sufficient evidence" category?
2. Which, if any, of the interventions should be moved from one category to another?

Interventions Missing from Summary Table

- Removal of moldy items (was on the original December 2007 list for sufficient evidence, but was not found on the summary table);
- Use of ventilation, both whole-house ventilation and source ventilation;

- Removal of carpet and the replacement with cleanable, smooth surfaces;
- Use of qualified professionals to conduct renovation and rehabilitation; and
- Reduce use of stoves for heat.

Interventions identified as needing further review, modification, or potential reclassification:

- Handrails and improved lighting should be disaggregated from other fall prevention interventions and included in the “sufficient evidence” category;
- Moisture sources in “sufficient evidence” category should be disaggregated (e.g., soil sources vs. water intrusion) since controls and interventions vary considerably depending on the moisture source;
- Pre-set safe water temperature hot water heaters in “sufficient evidence” category needs to be reconsidered in light of risk of legionnaires disease and blending devices mandated by International Residential Code;
- Interventions to reduce exposure to particulates and volatile organic compounds (particularly formaldehyde) should be reconsidered for the “sufficient evidence” category, given widespread implementation of these interventions in the LEED for Homes Program;
- CO alarms were included under the term “alarms” in the sufficient evidence column on the summary table. However, participants felt that CO and smoke alarms should be disaggregated and listed explicitly. Another commenter thought that carbon monoxide alarms should be reviewed because of a concern that the alarm technology was not sufficient to require the use of the devices.

Interventions Considered as Possible Areas of Common Ground

Each break-out group was asked to identify possible areas of “common ground” by identifying up to 10 interventions on which they could agree as important opportunities to improve public health.

Interventions identified as important in at least one of the three break-out sessions included the following:

- Ventilation – both source ventilation and whole house ventilation
- Radon mitigation
- Lead hazard control and lead-safe work practices
- Integrated pest management
- Moisture control and mold removal
- CO detection and control
- Smoking bans and environmental tobacco smoke
- Active humidity control

- Water temperature control
- Smooth and cleanable surfaces in houses
- Failing septic systems – training wastewater personnel
- Asthma interventions
- Training and education – both for professionals and homeowners
- Use of green building and weatherization activities to implement ventilation interventions
- Fall prevention

Interventions Identified as Priorities

Given the extensive list of interventions identified as important, each meeting participant voted on priority interventions based on three different criteria: importance, impact, and feasibility. Table 1 displays the results of this voting process. The group reviewed a summary of the six interventions that were supported by at least two of the break-out groups. This summary is included in Appendix B and reflects the changes made as a result of the group discussion.

Table 1: Number of votes for intervention priorities by importance, impact, and feasibility.

Intervention	Importance	Impact	Feasibility	Total
Fall prevention	12	14	14	40
Proactive Lead Hazard Control*	13	13	7	33
Moisture/Mold Control	11	10	4	25
Integrated Pest Management*	11	7	6	24
Radon Mitigation*	8	7	7	22
Ban environmental tobacco smoke in multi-family housing*	6	7	8	21
Use of CO Alarms*	4	5	10	19
Improved Ventilation*	7	4	5	16
Use of Smoke Alarms	3	4	8	15
Preventive Maintenance (not	5	4	4	13

identified by a group)				
Non-public water supply protection	0	0	0	0
Lead – Do No Harm Approach*	0	0	0	0
Improved Septic	0	0	0	0
Remove moldy items	0	0	0	0
* Described in more detail in Appendix B.				

Strategies for Implementation

Once the groups identified these priorities, small groups generated strategies for implementing three holistic topical areas:

- Safety (including falls, carbon monoxide alarms, and smoke alarms);
- Contaminants (including radon, environmental tobacco smoke, lead hazard control, integrated pest management); and
- Moisture and ventilation.

The strategies resulting from these break-out discussions are described below. These strategies reflect the variety of ideas generated in the small group discussion. They do not reflect strategies on which the full group reached consensus. These ideas will be presented at the National Healthy Homes Conference and the Healthy Housing Policy Summit in September 2008 for further discussion. Based on these discussions, CDC will circulate a document containing key priorities and strategies. Then Meeting participants from the “Finding Common Ground” meeting will have additional opportunities to comment on and possibly support the proposed strategies.

I. Safety:

Potential Strategies to Implement Fall Prevention Interventions:

- Identify low-cost safety interventions for stairs (e.g., improving treads, adding handrails, improving lighting);
- Promote grab bars (need to be installed for individuals at the appropriate height and location), seats in showers or tubs, and anti-slip pads;
- Promote window guards and catches; and

- Collaborate with property insurers to identify how high-morbidity issues such as falls have an impact on liability issues in rental housing and to respond appropriately.

Potential Strategy to Implement CO and Fire Prevention Interventions:

- Install CO and smoke alarms in existing housing.

II. Contaminants:

Potential Strategies to Implement Environmental Tobacco Smoke Interventions:

- Promote cost-saving and maintenance benefits to property owners;
- Utilize insurers (both health and housing insurers) to provide incentives;
- Get the health care lobby to put influence on public housing programs;
- Advertise smoke-free housing; and
- Identify ways to retrofit units for containment so that second-hand smoke does not leak to neighboring units.

Potential Strategies to Implement Radon Interventions:

- Promote active sub-slab depressurization (ASD) as a system to help with a variety of contaminants including radon and volatile organic compounds found in the soil;
- Promote ASD to Brownfield redevelopment and other high-contaminant areas of concern;
- Require radon testing at the point of sale (either require the 2-day test or the 90-day test and require its completion somewhere during the sale time frame);
- Provide technical assistance for contractors that do radon home testing and ASD installment;
- Investigate opportunities to collaborate with EPA's state indoor radon grant; and
- Bring other key partners to the table, including the American Lung Association and the American Cancer Society.

Potential Strategies to Implement Lead Hazard Control Interventions:

- Change the International Property Maintenance Code to include lead-safe work practices (such as those included in the new EPA renovation, repair, and painting regulation).

- Provide tax credits for weatherization conducted in a lead-safe manner;
- Mandate lead dust testing at the time of sale or rental of property (The workgroup did not identify whether this mandate should come from the local or federal level); and
- Provide additional homeowner education.

III. **Moisture and Ventilation**

Potential Strategies to Implement Moisture Interventions:

- Identify and control the sources of moisture (e.g., leaky plumbing/pipes, envelope or roof leaks, floors, and to some degree occupant uses);
- Fix plumbing and roofing leaks; and
- Promote widespread adoption and enforcement of maintenance codes.

Potential Strategies to Implement Ventilation Interventions:

- Utilize source ventilation;
- Improve fans to ensure they are vented to the outside, deliver the appropriate amount of air, and are quiet; and
- Adopt ASHRAE 62.2.

Additional Strategies Identified to Aid in Implementation of Priority Interventions:

- Promote awareness so that people understand the risks of poor ventilation and moisture and the potential benefits of adopting policies to improve maintenance;
- Adopt and enforce codes more broadly;
- Increase code enforcement staff;
- Provide funding for training and education for the public and repair contractors;
- Develop good practice guidelines;
- Work with tax assessor's offices to improve property value ratings based on healthy housing improvements; and
- Research flexible spending accounts as a potential model for healthy housing issues.

Meeting Outcomes

Three main outcomes will be produced from this meeting:

1. The findings of the meeting will be presented at the National Healthy Homes Conference on September 15th-17th.
2. The ideas and strategies identified at this meeting will be brought to the September 2008 Policy Summit being held by the National Center for Healthy Housing. The summit aims to reach out to other key partners in the environment, energy, and housing sectors to have a cross-disciplinary discussion to move this work forward.
3. A report detailing the combined results from the Expert Panel, the Finding Common Ground Meeting, the September 2008 National Healthy Homes Conference, and the September 2008 Policy Summit. This report will include
 - The health impact of housing;
 - The evidence-based effective interventions;
 - A research agenda; and
 - Existing and recommended policies and actions for implementation.

CDC's goal is that the various agencies represented at each of these key meetings will support a common agenda to support the creation of healthy affordable housing for all families in the United States.

Appendices

Appendix A: Summary Table Evidence of Housing Intervention Effectiveness on Health

Appendix B: Description of Interventions for Existing Housing