

Executive Summary

Mold, cockroaches, and dust mites trigger 4.6 million cases of asthma at a cost of \$3.5 billion per year. Hazards that lead to falls, poisonings, and burns make homes the second most common location of unintentional fatal injuries in the United States and result in \$222 billion in annual direct costs. Lead-based paint and other toxins in the environment that cause lead poisoning, cancer, and neurobehavioral disorders result in another \$52.9 billion in annual costs. These hazards disproportionately impact children, the poor, minorities, and the elderly, yet also have straight-forward fixes.

A large body of evidence confirms the cost-effectiveness of numerous healthy housing upgrades; however, only a few government programs – and virtually no private health insurance plans – finance such upgrades for low-income households and other vulnerable populations. Governmental programs attack problems like lead-based paint, radon, and injury risks *individually*, but often operate in "silos," even though it is more cost-effective to address all health and safety hazards at once via a "whole-house approach."

In response, the National Center for Healthy Housing (NCHH) and its sister organization, the Alliance for Healthy Homes, convened 40 of the leading national organizations in housing, health, the environment, public policy, and other fields in the country's first *National Healthy Housing Policy Summit*. Over 100 additional participants observed the proceedings. NCHH tasked the "G-40" with identifying a set of concreted, realistic, and achievable policy-related actions they could pursue collaboratively, which would improve the health and safety of housing without compromising housing affordability. Their recommendations will ultimately form a *National Healthy Housing Action Plan (Action Plan)*, which will guide subsequent collective action.

Senator Jack Reed (D., R.I.) kicked off the summit by detailing two targeted bills he plans to introduce, with the groups' support, that will break down federal bureaucratic silos and begin moving federal programs towards a more holistic approach to home health and safety hazard remediation. Former U.S. Surgeon General Dr. Joycelyn Elders keynoted the event, inspiring all of the participants to take seize this unique moment in time to take immediate action to safeguard families from healthy and safety hazards in their homes.

Leaders of innovative local healthy housing programs from Washington, Massachusetts, North Carolina, and California then seeded the group's deliberations by demonstrating how they launched successful model programs to control a range of health and safety problems, including asthma triggers. The Seattle-King County Health Department, for example, trained community health workers to conduct home visits to assess low-income children's exposure to asthma

triggers. The workers then taught the family basic asthma trigger reduction skills, helped them access other programs to fix the problems, and promoted healthy choices and use of primary care. The program measurably decreased asthma symptoms, cut urgent health care use 40%-70%, and raised several quality of life measures.

The Greensboro Housing Coalition took city council members on a bus tour to show them the dangerous conditions in which so many low-income renters were forced to live. This prompted passage of their Rental Unit Certificate of Occupancy ordinance; a strong, mandatory inspection program of all rental housing that has gone after slumlords and cut the number of substandard units from 2,156 to 744.

Residents of a low-income housing complex slated for demolition and replacement with highend condos teamed with the San Francisco Department of Public Health to have a novel Health Impact Assessment conducted on the developer's plans. By quantifying the negative health impacts of forcing the tenants out, the advocates persuaded the city to require the developer to build new, healthier replacement housing as a condition for approving the condo project.

Through a facilitated dialogue, the G-40 developed a comprehensive set of possible actions to include in an initial *Action Plan*, including:

National Collaboration/Partnership-Building Options, such as:

- Forming a National Safe and Healthy Housing Coalition
- Beginning a Dialogue with Home and Health Insurers, Major Employers, and the Center for Medicaid Services

Federal Legislative Options, such as:

- Supporting Senator Jack Reed's Two Healthy Housing Bills
- Advocating for Funding/Appropriations for Current Healthy Housing Programs
- Adding a Healthy Housing Component to Healthcare Reform or Energy Legislation
- Supporting the Community Building Code Administration Grant Act of 2008

Federal Regulatory/Administrative Options, such as:

- Leveraging Current Federal Programs through Formal Interagency Agreements
- Adding a Healthy Housing Inspection Requirement to Federally-Backed Mortgages
- Enforcing the Human Health Components of the National Environmental Policy Act across All Federal Agency Environmental Impact Statements
- Expanding Efforts to "Green" HUD-Owned/Assisted Housing into Healthy Housing

The participants also identified four types of tools that are needed to support the *Action Plan*:

Definitional Tools, such as a Case Statement and Data Sheets for Policymakers

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	Informational Tools, such as a College Healthy Housing Curriculum
	Financial Tools, such as a Method for Monetizing and Covering the Cost of Healthy
	Homes Upgrades
	Policy Tools , such as a Model Healthy Housing Local Action Toolkit

The attendees closed the meeting by agreeing to evaluate all of the recommendations proffered, putting the most promising and doable strategies into an *Action Plan* and then rolling up their sleeves to pursue the highest priority elements of the plan together.

Introduction

Early battles among community activists, housing professionals, and government agencies over the best policies to reduce childhood lead poisoning slowed needed action for several years. Yet when they finally coalesced around practical, cost-effective interventions, they cut childhood lead poisoning rates. The *National Healthy Housing Policy Summit*, held May 7, 2009, sought to sidestep similar roadblocks by beginning a collaborative process to craft an ambitious but achievable *National Healthy Housing Action Plan* that will dramatically improve the homes and communities in the United States.

Healthy housing takes a comprehensive approach to controlling and preventing major housing hazards that cause:

- Asthma, allergies, and other respiratory illnesses
- Lead poisoning, cancer, and other adverse effects of chemical exposure, and
- Falls, fires, and other unintentional injuries.

Numerous government and private-sector programs attack the hazards that cause these health problems *individually*, but the "whole-house" approach of addressing them together has proven to be more efficient, effective, *and* less costly. Despite these advantages, most stakeholders have yet to make healthy housing a major priority for several reasons:

- Lack of understanding of its key elements
- Limited dissemination of information, assessment tools, and best practices
- Lack of widespread advocacy or grassroots support, and
- Little funding, jurisdictional disputes, and other obstacles.

To that end, the National Center for Healthy Housing (NCHH) and its sister organization, the Alliance for Healthy Homes, brought together for the first time leaders from a "Group of 40" (G-40) key national organizations in housing, public health, environmental health, energy efficiency, tenant rights, and green building. The overarching goal of the National Healthy Housing Summit was to identify a set of realistic and achievable policy-related actions for organizations to pursue collaboratively offering the greatest potential for improving the health and safety of housing without compromising affordability. In addition to the G-40, over 100 participants joined the event to observe the proceedings (see Appendix 1 for participant list).

To help guide the summit discussion, NCHH provided the participants with four briefing papers:

- Addressing Asthma Triggers in the Home: A Business Case for the Health and Housing Sectors
- Creating Healthier Housing though Building Codes
- Integrating Energy Efficiency and Healthy Housing
- Financing Healthy Housing

Distinguishing the National Healthy Housing Policy Summit from other gatherings, NCHH secured – prior to the summit – commitments from 15 groups on actions they can take now, including delivering healthy housing training to their members, launching a healthy housing demonstration project, and actively supporting pending healthy housing federal legislation.

These briefing papers, the summit presentations, the participant commitments, and the complete Summit proceedings may be found at www.nchh.org/Policy/Policy-Summit.aspx.

Two Pending Federal Bills Will Promote Healthy Housing



U.S. Senator Jack Reed (D., RI) opened the summit by recounting the success our nation has had in reducing childhood lead levels 85% since the early '90s, largely due to the *Lead-Based Paint Poisoning Prevention Act*, the federal Lead Hazard Reduction Demonstration Project, and other federal initiatives that he has championed along with Senators Kit Bond (R, Mo.) and Barbara Mikulski (D, Md.). He then unveiled two landmark bills that he plans to introduce shortly, ¹ both of which have strong prospects for passage with the support of

groups around the summit table:

- The Healthy Housing Council Act calls for HUD, EPA, CDC, and other federal agencies to coordinate existing programs and to seek input from a diverse group of housing, health, energy, and environmental experts from state and local government, nonprofits, and the private sector. According to Senator Reed, "The Healthy Housing Council Act will help us ensure that an affordable, decent, and healthy home is not just the American dream, but the American promise."
- The Safe and Healthy Housing Act proposes the first multi-pronged federal response to the healthy housing problem through expanded national outreach efforts, improved research, grant funding, and federal capacity building.

Now Is the Time

Dr. Joycelyn Elders commended the "G-40" for coming together for the first time to tackle

healthy housing policy challenges. Dr. Elders told participants that "millions of children, elderly, the poor – the most vulnerable among us – live in housing that literally makes them sick. But they can't do what you have the power to do: join forces not just to *propose but implement* solutions that can reverberate nationwide." She also stated that we are at a unique place in our nation's public health history. Congress and the administration have set high health policy goals. Now's the time to make healthy housing an equally important public policy priority.



Former U.S. Surgeon General and NCHH Board Member Dr. Joycelyn Elders keynoted the summit.

The Broad Scope of the Problem

Dr. David Jacobs, NCHH Research Director, made a sobering case to the attendees on why they need to take bold action:

- Of the 21.8 million people with asthma in the U.S., approximately 4.6 million cases (21%) are attributable to dampness and mold exposure in the home at a cost of \$3.5 billion.²
- Home-based radon is the leading cause of lung cancer among nonsmokers³ and kills more people than drunk driving.⁴

¹ See www.nchh.org/Policy/National-Policy/Federal-Healthy-Housing-Bills.aspx.

² Mudarri D and Fisk WJ. 2007. Public Health and Economic Impact of Dampness and Mold. Indoor Air. Vol 17 Issue 226 – 235.

³ Committee on Health Risks of Exposure to Radiation (BEIR VI). 1999. Health Effects of Exposure to Radon. Washington, DC: The National Academies Press.

- Most unintentional injuries, such as broken hips from falls and hot water scalding, occur at home⁵ and result in \$222 billion in direct medical expenses annually.⁶
- Environmental tobacco smoke (from the home and other places) causes 3,000 deaths a year in U.S. non-smokers.⁷
- Every 13 seconds, a poison control center receives a call about a potential poison exposure, 90+% of which occur in the home.⁸

Unhealthy housing is unequally distributed. In 2005, 6% of all U.S. residents and 14% of low-income renters lived in homes with severe or moderate physical problems. Low-income minority renters in non-metropolitan areas have a higher incidence of housing quality problems compared to other renters or homeowners. 10

Dr. Wilhelmine Miller, Associate Director of the Robert Wood Johnson Foundation *Commission to Build a Healthier America* (Commission), noted that healthcare is not the most important factor in building a healthier America and that addressing America's health shortfalls will require a new direction and a counter-intuitive, unconventional, evidence-built and consensus-based process. In a recent report, the Commission evaluated the impacts of social factors on health and the potential for non-medical interventions to improve population health and reduce health disparities. ¹¹ Key Commission recommendations included the following:

- Housing and neighborhood infrastructure and transportation projects, new buildings, and renovations should be given a "health impact rating," and projects with the best scores should be rewarded financially or offered incentives. Health impact assessments and a relevant policy framework are relatively new tools in the U.S. but are being increasingly implemented in various communities, particularly those with persistent health disparities.
- Public and private funders should invest in an array of healthy community demonstration projects that evaluate the impact of different health-promoting policies and programs in sectors other than health care and traditional public health interventions.

Many Workable Solutions Have Proven Effective

NCHH, the World Health Organization, the U.S. Department of Housing and Urban Development, the U.S. Centers for Disease Control and Prevention, and others have studied scores of interventions thoroughly and shown that many workable and cost-effective solutions reduce exposures and produce *significant* improvements in health:

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⁴ U.S. Environmental Protection Agency. 2003. EPA Assessment of Risks from Radon in Homes. EPA 402-R-03-003. Washington, DC: U.S. Environmental Protection Agency. Available at www.epa.gov/radon/pdfs/402-r-03-003.pdf.

⁵ Phelan, et al. 2005. Residential Injuries in US Children and Adolescents. Pub Health Reports 120: 63-70.

⁶ Runyan, C. W., & Casteel, C. 2004. The State of Home Safety in America: Facts about Unintentional Injuries in the Home. Washington, DC. Home Safety Council.

⁷ U.S. Environmental Protection Agency. 1992. Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders.

⁸ Watson WA, Litovitz TL, Klein-Schwartz W, Rodgers GC Jr, Youniss J, Reid N, *et al.* 2004. 2003 Annual Report of the American Association of Poison Control Centers Toxic Exposures Surveillance System. Am J Emerg Med 22(5):335–404.

⁹U.S. Census Bureau. 2006. Current Housing Reports, Series H150/05, American Housing Survey for the United States: 2005. Washington, DC. U.S. Government Printing Office.

¹⁰ Joint Center for Housing Studies of Harvard University. 2004. The State of the Nation's Housing: 2004. Cambridge, MA: President and Fellows of Harvard College.

¹¹ See www.commissiononhealth.org.

- Smoke alarms decrease the risk of death in a home fire by 40 to 50%. 12
- Home-based interventions designed to reduce multiple asthma triggers decrease exposure, asthma symptoms and acute health care use, and improve quality of life. 13
- Lead hazard control in housing can reduce dust lead levels by 78 to 95%. 14
- Integrated pest management reduced severe asthma from 37% to 9%, lowered insecticides in the air, removed insecticides from maternal blood, and was more effective than routine spraying.¹⁵

Healthy housing proponents around the country have demonstrated that these practices not only prevent and reduce health problems, but also can be implemented affordably and practically. Leaders from Washington State, Massachusetts, North Carolina, and California explained how they launched successful model programs to control asthma and a range of additional health and safety problems:

The Role of Health Care and Health Professionals

Laurie Stillman, Director of the Public Health Policy Center at The Medical Foundation, explained to the conferees how a comprehensive asthma trigger control program could significantly reduce asthma episodes, lost work/school days, and rescue medication use while improving quality of life when it included:

Seattle-King County Community Healthy Worker Program:

- Conducted home visits to assess exposure to asthma triggers
- Taught self-management and asthma trigger reduction skills
- Provided advocacy and referrals to other housing, health, food, furniture, and jobs programs, and
- Promoted healthy choices and use of primary care.
- A home health assessment by a nurse or community health worker
- Parent and child education
- Basic items, like airtight food containers, cleaning supplies, and a vacuum, and
- More advanced home interventions, such as moisture/mold control, improved ventilation, integrated pest management, sealing of cracks and openings, and intensive cleaning/replacement of carpets and other surfaces.

In its report *Investing in Best Practices for Asthma: A Business Case for Education and Environmental Interventions*, the Asthma Regional Council and the University of Massachusetts at Lowell summarize how such environmental interventions – tailored to the patient's asthma profile and exposures – are cost-competitive with, and often more cost-effective than, traditional medication-only approach.

Seattle Healthy Homes Project: Dr. James Krieger, Chief of the Chronic Disease and Injury Prevention Section at the Seattle-King County Health Department, recounted the success Seattle

¹² Ahrens M. 2004. US Experience with Smoke Alarms and Other Fire Detection/Alarm Equipment. Quincy, MA: National Fire Protection Association. Available at http://fire.state.nv.us.

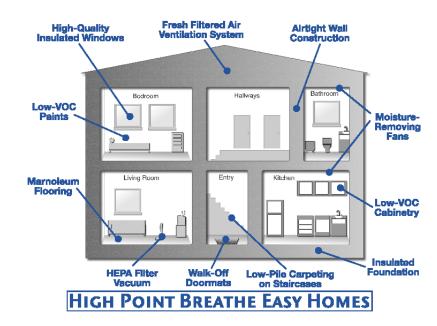
¹³ Krieger, *et al.* 2009 (forthcoming). Housing Interventions and Control of Indoor Biologic Agents: A Review of the Evidence.

¹⁴ Dixon SL, Wilson, JW, Clark CS, Galke WA, Succop PA, Chen M. 2005. Effectiveness of Lead-Hazard Control Interventions on Dust Lead Loadings: Findings from the Evaluation of the HUD Lead-Based Paint Hazard Control Grant Program: Environ. Res. 98. 303–314.

¹⁵ Sandel M, Batcheller A, Richman I, Hendrick E, Troxell-Dorgan A, Reid M, *et al.* July 1, 2005. Can Integrated Pest Management Impact Urban Children with Asthma? Boston University School of Medicine, Department of Pediatrics.

has had in reducing asthma among low-income children through its *Healthy Homes Project*. By recruiting and training community health workers (CHWs) from the targeted neighborhoods (who also had personal experience with asthma) to deliver the services, they measurably decreased asthma symptoms, cut urgent health care utilization 40 to 70%, and raised several quality-of-life measures.

Seattle's subsequent *Build Green/Breathe Easy Program* invested an average of \$6,500 per unit in 35 units of rehabbed Hope VI housing to



improve heating, cooling, air filtration, ventilation, and insulation while minimizing condensation, chemical off-gassing, and carpet-based irritants. By combining the interventions with a smoking ban, added green space, more outdoor recreation, safer sidewalks, and other healthy features, they decreased asthma symptom days by five days and cut occupants' use of urgent care 67%.

Massachusetts Medicaid Asthma Disparity Project: Dr. Mohamed Ally oversees the medical care of 155,000 Medicaid recipients through 18,000 providers as Senior Medical Director of Network Health, a Medicaid managed-care organization. Because one in four of his enrollees

had asthma (double the statewide average), he helped develop an *Asthma Health Disparity Project* focusing on Hispanic-Americans through a Robert Wood Johnson Foundation grant. However, when the project's robust public education and media

After one year, emergency department visits showed a four-fold decrease and inpatient treatment dropped more than three-fold.

outreach yielded little benefit, his team learned from residents, health care providers, and local officials that cockroach remediation was by far their biggest unmet need.

In response, they hired nurses and CHWs to conduct five home visits over six months that included intensive education, medication compliance, a home environmental assessment, an evaluation of each participant, supplies to prevent pest entry, and advocacy materials for participants to pursue structural or environmental fixes with the landlord or housing department to address pests and related triggers. After one year, emergency department visits showed a four-fold decrease and inpatient treatment dropped more than three-fold.

Incorporating Health into Housing and Community Planning

Mr. Stockton Williams is the Director of Green Economy Initiatives at Living Cities, a consortium of banks, foundations, and insurance companies. Living Cities historically has supported organizations that conduct affordable housing and community development projects, but is now beginning to leverage opportunities to address health in a systemic and strategic manner by investing in organizations with innovative community-level approaches. Mr. Williams noted that a multi-dimensional view in defining communities as a place, practice, or people is an important element in healthy homes. The broader community scale also provides

opportunities to engage multiple partners and conduct larger initiatives with more impact to elevate the healthy housing agenda.

Greensboro Proactive Code Enforcement Program: Beth McKee-Huger, Executive Director of the Greensboro Housing Coalition, sparked the development of Greensboro's Rental Unit Certificate of Occupancy (RUCO) ordinance, a proactive and systematic inspection of all rental housing to expose substandard conditions. The Coalition launched a bus tour in 2004 to show City Council members and other community leaders, first-hand, the dangerous housing conditions in which residents were living. Up until then, housing code enforcement was spotty and reactive, responding mostly to complaints. Community groups didn't work together, most renters didn't know how to file complaints or get help, and landlord penalties were light.

Since passage of the ordinance in 2004:

- Greensboro has inspected all rental properties, issuing 32,604 RUCOs.
- Published the names of the Top 10 Worst Landlords with the most code violation cases in a local newspaper.
- Cut the number of substandard units from 2,156 to 744.

The new ordinance and enforcement program has also helped close the gap between asthma hospitalizations for minorities tied to substandard housing versus White residents. Effective January 1, 2009, it is illegal for a landlord to rent a unit in Greensboro without a RUCO.

San Francisco Health Impact Assessment: Dr. Rajiv Bhatia, Director of Occupational and Environmental Health in the San Francisco Department of Public Health, demonstrated how outside environmental factors, such as traffic, noise, air pollution, segregated housing, and lack of green space impact heart disease, hypertension, sleep disturbance, respiratory disease, asthma, delayed lung growth, and premature mortality. He proffered a cutting-edge response: Health Impact Assessments (HIAs). He noted that federal and state laws already require Environmental Impact Statements, which call for evaluating impacts of major projects, policies, and plans on *human* health, not just the environment.

Dr. Bhatia cited an inspiring example of the community transformation that HIAs can drive. The tenants of Trinity Plaza Apartments challenged the demolition and redevelopment of 360 rent-controlled units into 6,000 high-end condominiums because of its human-health impacts, especially displacement, crowding, substandard conditions, loss of employment, and a change in schools. The tenants persuaded the city's Department of Public Health to quantify and document these adverse health effects. The Planning Department required the developer to submit a "no displacement" project alternative. This prompted the developer to commit to building full replacement rent-controlled housing for all 360 households, and it helped the community to secure additional community mitigation funds.

From its two-year community planning process the Health Department designed a Healthy Development Measurement Tool, an indicator system with more than 100 community-level measures of health, including overcrowded conditions, traffic, noise, air quality, pedestrian injuries, liquor stores, fast food restaurants, grocery stores and pollution. It provides a menu of best practices for policies, strategies, and design, a developer's checklist, and supportive health evidence.

Identifying the Initial Building Blocks of a National Healthy Housing Action Plan

Following the presentations, the G-40 joined experts from many fields in discussing a large set of national policy options which *could* serve as the foundation for building a *National Healthy Housing Action Plan*. They framed the major challenges and opportunities, with the following questions:

- 1) How can we take the summit's work to the next step by creating an ongoing dialogue/coalition, reach consensus on the most promising courses of action, and begin taking collective action?
- 2) How can we convince health care payers to invest in environmental interventions when their best practices, models, and compensation focus on traditional medical management?
- 3) How do we persuade developers, property managers, and building owners to do likewise when the benefits are primarily medical?
- 4) How can we take advantage of the growing momentum on major energy and health care legislation?
- 5) Even if we could do the above, how do we build the nationwide infrastructure and workforce to carry out such programs?

In response, the participants developed a comprehensive set of potential options, the most specific and promising of which are included below. For a complete list of all 55 policy ideas, please see the complete meeting proceedings available here: www.nchh.org/Policy/Policy-Summit.aspx.

National Collaboration/Partnership-Building Options:

- Form a National Safe and Healthy Housing Coalition: Virtually no national solutions will get off the ground without first having a viable coalition to advocate for them. Recruit the summit's "G-40" and other key stakeholders to form a coalition, continue "busting silos" where they work only on single issues, and define a crosscutting agenda including the items below. First responders and home safety groups should be included in the Coalition, as well as associations of building owners and property managers, juvenile justice and education reform advocates, pediatricians, and other physicians.
- Engage the Home Insurance Industry: Insurance companies, through groups like the Institute for Business and Home Safety, should be among the strongest supporters of healthier housing codes, better enforcement, and risk-based premiums that encourage health and safety repairs, because they can prevent billions in claims.
- Begin a Dialogue with Health Insurers, Major Employers, and CMS: Commercial health plans, large self-insured companies, Medicare, and Medicaid collectively spend billions annually to treat housing-related illnesses and injuries. Insurance brokers advise many employers on the best plan to choose. Urge CMS, health plans, brokers and self-insured employers to initiate demonstration projects with their members and changes in coverage policies.
- Approach the Congressional Black Caucus: Seek interest, expertise, and assistance in developing a federal legislative/regulatory agenda that would reduce health and housing disparities in communities of color.

State/Local Collaboration/Partnership-Building Options:

- **Build Local Coalitions:** Help bring together the major stakeholders to advocate with local and state government officials for the integration of healthy housing into codes and inspection programs, create integrated housing and health programs, launch demonstration programs, and promote model healthy housing additions to zoning and land-use policies.
- Bring Local Attorneys and Physicians Together to Better Enforce Existing Housing and Health Codes: Physicians and attorneys in Boston have worked closely with the city housing and health departments for 15 years to promote joint rather than separate efforts to identify and remediate housing and health problems using a "whole house" approach that emphasizes fixes. Law schools should be engaged in this effort to promote legal/medical partnerships for housing among law students and faculty.

Federal Legislative Options:

- Work Collectively to Pass Senator Jack Reed's Two Healthy Housing Bills: Twelve organizational participants of the summit have already signaled their support.
- Advocate for Sustainable Funding/Appropriations of Current Healthy Housing Programs: These would include several programs administered by HUD, CDC, EPA, the Department of Energy, and the Department of Agriculture (see https://www.nchh.org/Policy/National-Policy/Federal-Appropriations.aspx).
- Restore Cuts to Housing Choice Vouchers: Research shows that families who move into private-sector housing with vouchers experience significant health improvements. Previous Congresses and the prior Administration cut 170,000 Section 8 vouchers over the past several years. The FY10 President's Budget includes \$1.77 billion over the 2009 enacted levels for the Housing Choice Voucher Program. The House Appropriations Committee has passed a budget with a similar level of funding.
- Add a Healthy Housing Component to Planned Healthcare Reform Legislation: Given
 that diabetes, asthma, unintentional injuries, and other major health problems account for a
 large share of health care expenses and that cost-effective healthy housing solutions are
 available, Congress should include them as part of the prevention, standard coverage, and/or
 reimbursement section of a health reform bill.
- Identify and Address Unintended Negative Consequences of Current Federal Laws: No comprehensive analysis has been conducted of the many federal programs that have unintended negative impacts on healthy housing. For example, Title X of the Housing and Community Development Act excludes zero-bedroom units from lead-paint requirements, yet hundreds of thousands of low-income families live in single-room occupancy units. Similarly, the weatherization program requires a cost benefit calculation for all energy measures, typically disqualifying window replacement; yet windows in older homes are a key contributor to lead dust and lead poisoning.
- Support the "Community Building Code Administration Grant Act of 2008": Systematic code enforcement in rental housing is a rarity in this country largely due to a lack of local capacity, including financial resources. This bill would authorize HUD to distribute up to \$20 million in competitive grants to local building code enforcement departments annually, particularly those collaborating with health departments and other groups.
- Add Healthy Housing Considerations to Pending Energy Legislation: The House has
 passed and the Senate is considering major energy/climate change legislation that includes

- large, comprehensive programs to promote energy efficiency in new and existing homes. Congress should consider adding a healthy housing component to this legislation (e.g., by expanding the list of allowable home safety repairs under the Weatherization Assistance Program).
- Tie Adoption of a Healthy Housing Code/Program to a Federal Funding Stream: To receive \$3 billion in new Energy Efficiency Block Grants, DOE requires that states initiate an effort to adopt the 2009 International Energy Efficiency Code. Similarly, HUD could require or incentivize state adoption of the International Property Maintenance Code in conjunction with receiving federal funds.

Federal Regulatory/Administrative Options:

- Leverage Current Federal Programs through Formal Interagency Agreements: We can deliver several *current* healthy housing services at once rather than singularly through interagency agreements that eliminate silos and promote collaboration across federal agencies (e.g., by bringing Weatherization Assistance managers together with HUD's Office of Healthy Housing and Lead Hazard Control to explore how a portion of Weatherization stimulus funds could be used to train weatherization contractors in healthy homes).
- Add a Healthy Housing Inspection Requirement to Federally-Backed Mortgages: Mortgages backed by FHA and VA, and those acquired by Freddie Mac and Fannie Mae, impose numerous safety requirements but ignore others and most healthy housing conditions. Seek a federal regulation or policy to add a healthy homes inspection (currently averaging \$300) to federally-backed mortgages. Simultaneously work with the banking and mortgage trade groups to promote a voluntary healthy homes inspection.
- Include Healthy Housing in the Department of Labor's New Green Jobs Training Programs: The stimulus bill provides the Department of Labor with \$500 million for green jobs training programs and \$250 million to promote green jobs in the healthcare sector, mostly through competitive grants. It may have the statutory flexibility to add healthy housing training, such as lead remediation, radon mitigation, and integrated pest management. Healthy housing advocates and experts should also team with green job providers and trainers to apply for these funds jointly.
- Seek HUD Regulatory/Policy Change on Homes It Resells "As Is": HUD could set standards, provide up-front disclosures and/or grant funds to meet healthy housing criteria before HUD-owned homes are placed on the market for purchase by the public.
- Enforce the Human Health Components of NEPA across All Federal Agency EISs: Urge a policy clarification, applicable government-wide, that the National Environmental Policy Act's requirements for assessing human health impacts of major federal actions calls for a "Health Impact Assessment" along the lines of San Francisco's approach.
- Expand Recent Efforts to "Green" HUD-Owned and Assisted Housing into Healthy Housing: Efforts are underway to implement a consistent set of green measures across HUD's programs. For these programs, HUD should ensure that its green criteria incorporate a comprehensive set of health and safety measures.
- Consider Revitalizing and Linking to Existing Executive Orders: EO 12898 on
 Environmental Justice directed federal agencies to develop and implement strategies for their
 programs and policies that reduce the disproportional harmful environmental health impacts
 on minority or low-income populations as well as ensuring that the affected communities
 have input in the decision-making process regarding environmental issues in their
 communities. EO 13045 Executive Order on Children's Environmental Health and Safety

- directed all federal agencies to take into account the special risks and disproportionate impact that standards and safeguards have on children. Advocates should meet with the relevant White House staff to revitalize and link healthy housing to these Executive Orders.
- Advocate with HUD to Issue a Uniform Integrated Pest Management (IPM) Policy: HUD should develop a prescriptive and directive IPM policy at the federal level that can be adopted at the local level. This policy should be accompanied by federal dollars for localities to train IPM operators.

Tools for Implementing a National Healthy Housing Action Plan

Beyond identifying a staggering number of policy options, the summit participants also identified four broad categories of tools for development in advance or as part of the *Action Plan*:

- 1) Definitional tools should be designed to clearly communicate specific components of the healthy housing agenda. The definitional tools could be created and disseminated in multiple formats, including codes, standards, voluntary programs, and educational materials.
- 2) Informational tools should be designed to garner support and clearly articulate the importance of healthy housing to a variety of audiences, including homebuyers, high school students, renters, building managers, and public health agencies.
- 3) Financial tools should be designed to leverage existing resources or propose new and innovative funding streams, such as renewable energy credits.
- 4) Policy tools should be designed for effective implementation of healthy housing interventions at national, state, and local levels.

Definitional Tools:

• Develop a Case Statement, Data Sheets, Briefing Memos, and Other Tools for Policymakers: Federal, state, and local legislators and regulators need information in a concise and useful form to consider making the types of policy changes discussed here.

Informational Tools:

- Conduct a National Education and Outreach Campaign: Educate the public on the healthy housing agenda and its favorable cost-benefits.
- **Develop a Model K-12 and College Healthy Housing Curriculum:** The Home Safety Council's Home Literacy Project for younger children and their parents could serve as a model.
- Train Housing Code Enforcement Personnel in Healthy Housing: Few housing code officials have been sufficiently trained on healthy housing issues (e.g., Integrated Pest Management vs. traditional extermination), and they can have a significant impact simply by fully enforcing *current* code requirements.

Financial Tools:

• Enforce and Strengthen State/Local Housing/Building Codes: State and local building codes are often the only mechanism for reaching unassisted low-income housing. Thus, amendments would have a very wide effect in each community. The Massachusetts "opt-in code" should be reviewed as a model for healthy housing code enforcement. This incentive offers state funds to communities that adopt and enforce the state energy code and demonstrate an additional 20% improvement over baseline. In addition, many current codes already address a range of health and safety issues, but they are not adequately enforced.

Monetize Healthy Housing Intervention Savings to Finance the Interventions: Many
public entities and private companies are financing energy efficiency improvements to major
institutions like schools and government buildings by monetizing the savings in energy costs
and financing the retrofits through future reductions in utility bills. Engage a panel of experts
to draft a White Paper on applying this model to healthy housing.

Policy Tools:

- **Design a Model Healthy Housing Local Action Toolkit:** It can guide the formation and agenda of local "Healthy Housing/Community Policy Councils" (akin to local Food Policy Councils) of builders, planners, public health officials, insurers, and other key stakeholders.
- Show the Connection between Strong Housing Code Enforcement in Reducing Crime: Create Geographic Information System maps overlaying high crime areas and areas with the highest number of substandard housing units and code violations.
- Rank Major City/State Housing Codes for Health, Enforcement Effectiveness, and Compliance Rates via a Report Card: This can be a cost-effective way to prompt lagging municipalities to update their codes.
- Define the Costs and Benefits of the Most Promising Healthy Homes Interventions: Policymakers and others need convincing, with hard data, on which healthy housing strategies are most worth investing in.

Wrap-Up

Dr. Thomas Vernon, Jr., Chair of the NCHH Board of Directors, pointed out that a key challenge is to broadly communicate the healthy housing message to a wider audience. Strategies are needed to incorporate home environmental interventions into the health care system to ensure that cost-savings are equally shared between payers and patients. We also need to engage banks, insurance companies, large employers, the transportation sector, and other key groups to leverage opportunities on a much broader scale. At the same time, regulations have a demonstrated track record of success and are still needed. For example, mandatory child seat restraints, bicycle helmets, smoking bans, and immunization have made a tremendously positive impact on the health status of Americans.

Dr. Megan Sandel, Vice Chair of the Alliance for Healthy Homes Board of Directors, noted that a healthy, safe, and affordable home is the best medical intervention for many of her patients. However, as a physician, she is unable to undertake this effort in isolation. Clinicians must extensively collaborate with the public health, housing, insurance, weatherization, and other sectors to assure healthy and safe housing for their patients.

Next Steps

The proceedings of the Policy Summit will be distributed to the participants. They and other key stakeholders should vet the extensive list of recommendations for the best national policy options to pursue. Their truncated list will then be merged with the list of organizational commitments to create a draft *National Healthy Housing Action Plan*, which will bring meaningful change nationwide. All interested organizations would then have another opportunity to further refine the draft plan. After reaching a rough consensus on a realistic set of short- and mid-term actions, the organizations would be asked to identify those elements they would actively support and in what ways.

Get Involved

Join this growing effort to make healthy housing a national priority. Contact Rebecca Morley, NCHH Executive Director, at rmorley@nchh.org.

Summit Sponsors

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The U.S. Centers for Disease Control and Prevention

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