

# Highlights of Federal Guidance and Strategies Supporting Residential Asthma Interventions

Colorado Summit on Pediatric Home  
Asthma Interventions  
Children's Hospital Colorado  
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# To Review

- National Asthma Education and Prevention Program (NHLBI, 2007)
- Guide to Community Preventive Services (CDC, 2008)
- Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities (2012)
- Advancing Healthy Housing: A Strategy for Action (2013)

# National Asthma Education and Prevention Program (NAEPP) Guidelines for the Diagnosis and Management of Asthma

Effective asthma care must be comprehensive and include four key components:

- Assess and monitor asthma severity and patient ability to manage and control
- Educate to improve self-management skills of the patient and their family
- Reduce environmental exposures that worsen asthma
- Use appropriate medications



# NAEPP Guidelines: Education for self-management

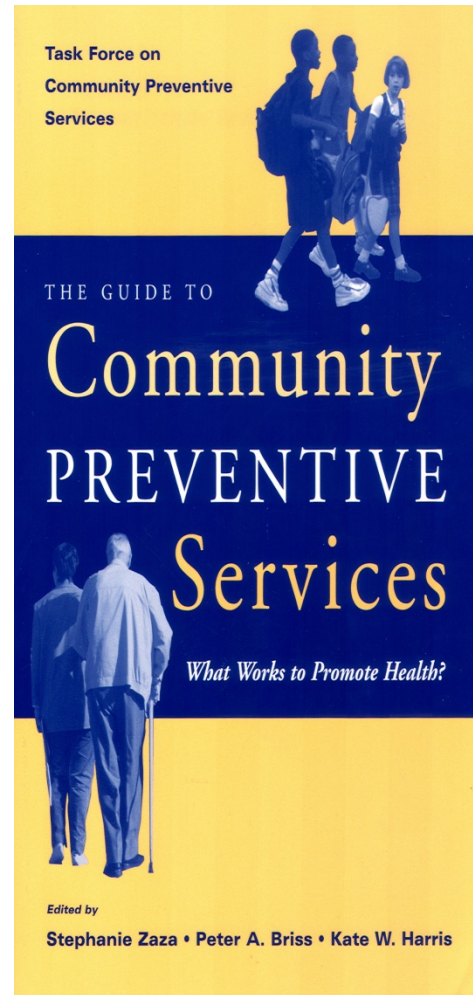
- Asthma Self-Management Education at Multiple Points of Care:
  - clinic, ED, pharmacy, schools, homes
- Tools for Asthma Self-Management:
  - asthma action plans
- Establish and Maintain a Partnership:
  - health literacy and cultural sensitivity
- Provider Education:
  - implementing guidelines, communication techniques, clinical decision support, systems-based intervention

# NAEPP Guidelines: Recommendations on in-Home Control of Asthma Triggers

- Evaluate the potential role of allergens and irritants
  - Identify allergen and pollutants/irritant exposures
  - Persistent asthma: use skin or *in vitro* testing to assess sensitivity to perennial indoor allergens
- Advise patients to reduce exposure to allergens and pollutants/irritants
  - Multifaceted allergen control educational programs provided in the home setting can help patients reduce exposure to cockroach, dust-mite, and rodent allergens and, consequently, improve asthma control.

# The Guide to Community Preventive Services

- Established by HHS in 1996 and administered by the CDC
- Directed by the Task Force on Community Preventive Services (non-federal organization)
- Conducts rigorous systematic reviews of evidence for community interventions
- Conducted a review of home-based, multi-trigger, multi-component interventions with an environmental focus to improve asthma control in children and adolescents (completed: 2008)
- <http://www.thecommunityguide.org>



# Community Guide Conclusions (1)

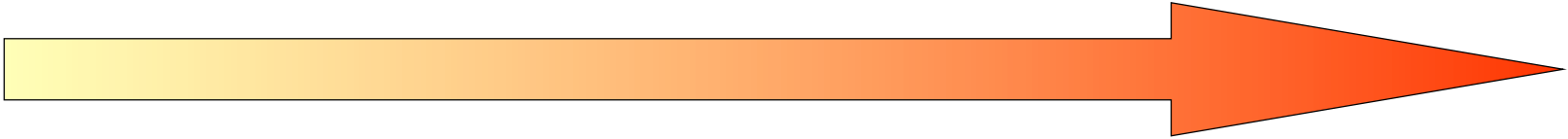
- For children and adolescents:
  - Multi-component, multi-trigger home-based environmental interventions are effective in improving overall quality of life and productivity in children with asthma.
  - The benefits of these interventions can match or exceed their program costs
- For adults:
  - The effectiveness of these interventions are inconclusive due to the small # of studies and inconsistent results.

# Community Guide Conclusions (2)

- Home-based: at least one home visit conducted by someone with training or experience
- Multi-component: at least two components (asthma-related education, self-management, env. remediation, social services, coordinated care), including at least one environmental component:
  - Environmental Assessment
  - Environmental Remediation
  - Environmental Education
- Multi-trigger: targets two or more potential asthma triggers



# Environmental Remediation Intensity



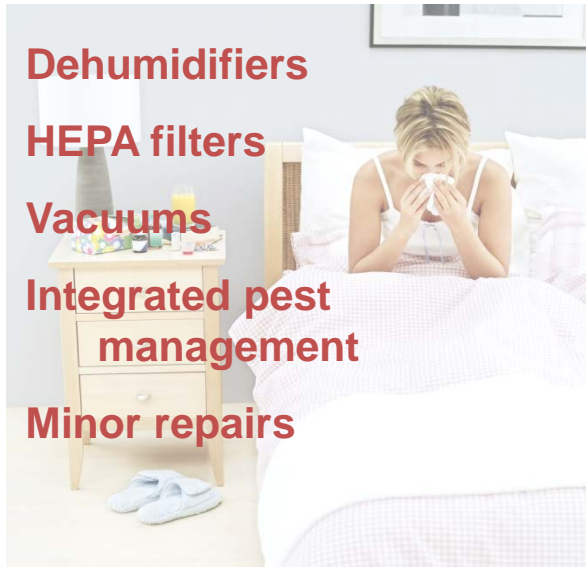
## Minor

Environmental  
assessment  
Pillow and mattress  
covers



## Moderate

Dehumidifiers  
HEPA filters  
Vacuums  
Integrated pest  
management  
Minor repairs



## Major

New form of HVAC  
Insulation  
Re-roofing  
Removal of water damaged  
materials



May, 2012

[www.epa.gov/childrenstaskforce](http://www.epa.gov/childrenstaskforce)

## President's Task Force on Environmental Health Risks and Safety Risks to Children



Coordinated Federal Action Plan  
to Reduce Racial and Ethnic  
Asthma Disparities

# Asthma Disparities Action Plan Received a High Level Launch (May 31, 2012)

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# President's Task Force on Environmental Health Risks and Safety Risks to Children

## Organization:

- Cabinet level, inter-agency task force co-chaired by the EPA Administrator and DHHS Secretary

## TF Mission:

- Identify priority issues of environmental health and safety risks to children that can best be addressed through interagency efforts
- Recommend and implement interagency actions
- Communicate to federal, state, and local decision makers information to protect children from risks

## Priority Areas:

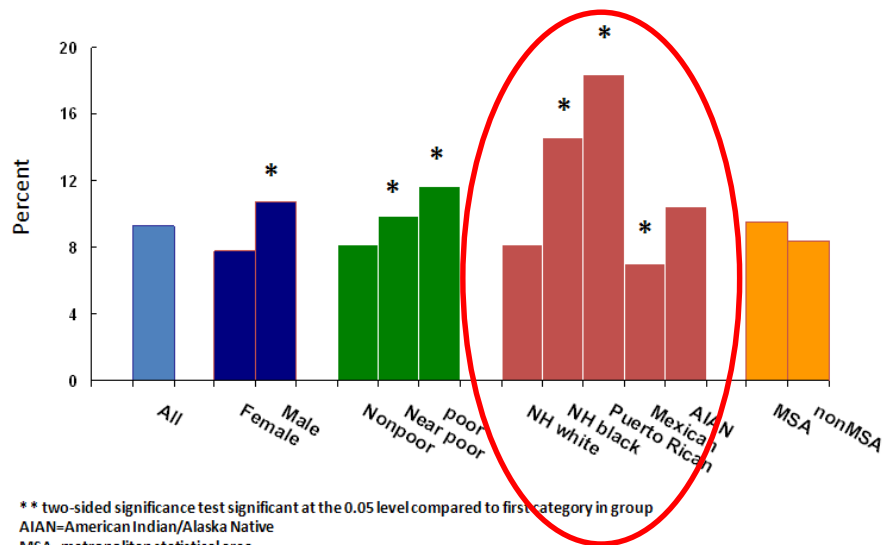
- Asthma Disparities
- Settings where children live, learn, and play (e.g., healthy homes)



# Why Asthma Disparities?

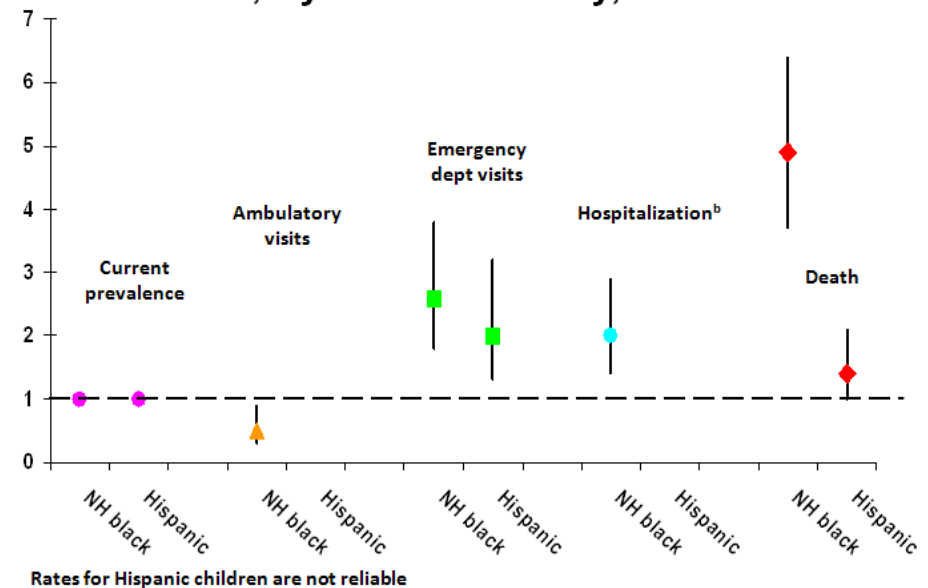
## Minority children have a greater asthma burden than white children

Current Asthma Prevalence among Children by demographic characteristics: 2006-2008



Data Source: CDC/NCHS: National Health Interview Survey (NHIS)

Disparities in outcomes among children with asthma, by race/ethnicity, 2003-2004

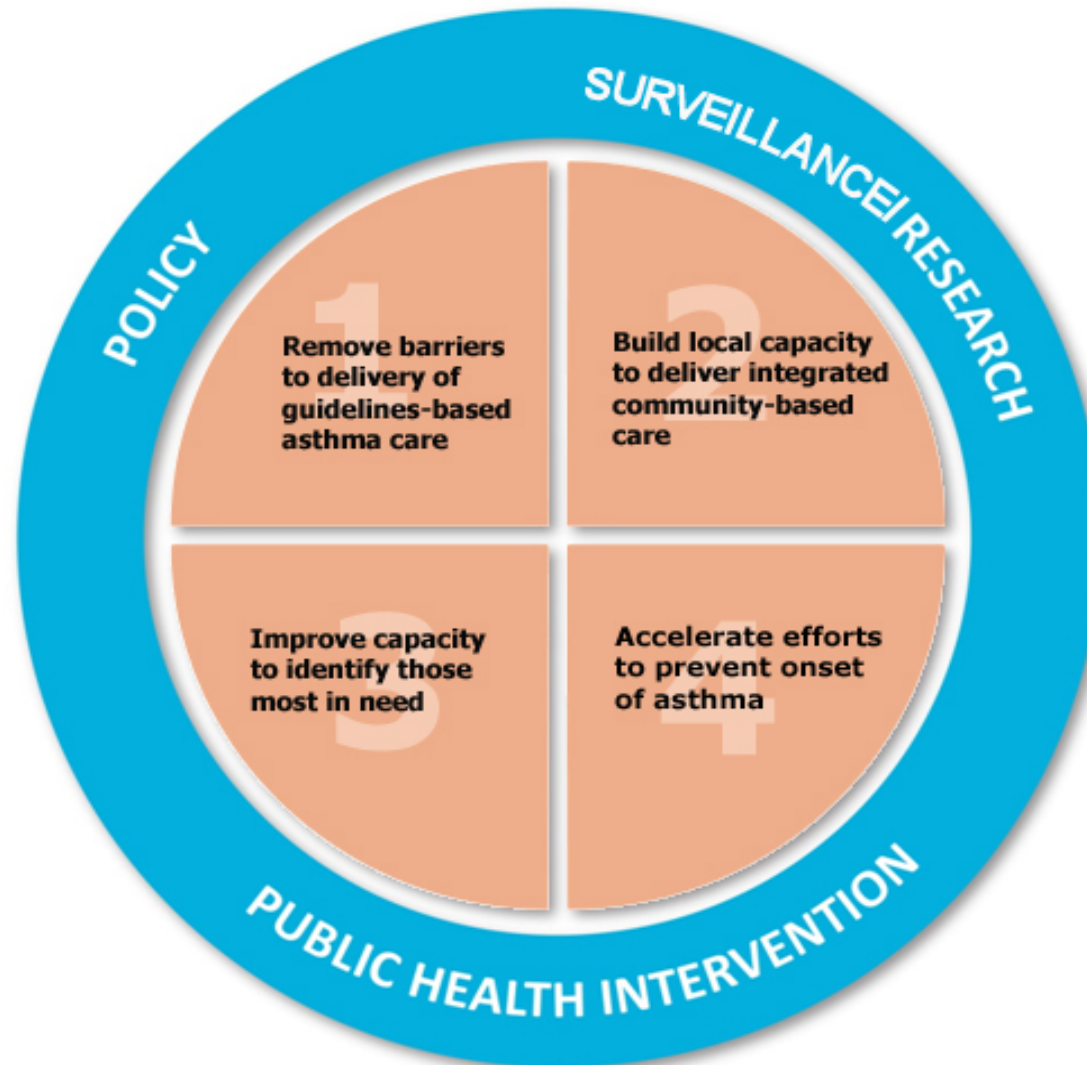


# Focus of the Action Plan to Reduce Racial and Ethnic Asthma Disparities

The focus of the plan is on: *“preventable factors that contribute to disparities in the burden of asthma”*, including:

- Barriers to the implementation of guidelines-based asthma care:
  - Medical care factors
  - Physical and psychosocial environmental factors
- Lack of local capacity to deliver community-based, integrated, comprehensive asthma care
- Gaps in capacity to identify and reach children most at risk

# Taking Action: Four Key Strategies



# Strategy 1: Reduce barriers to the implementation of guidelines-based asthma management

## Priority Actions:

- 1.1 Explore strategies to expand access to asthma care services
  - including: patient education, home interventions, medications, subspecialty services when needed
- 1.2 In health care settings, coordinate existing federal programs in underserved communities to improve the quality of asthma care
- 1.3 In homes, reduce environmental exposures
- 1.4 In schools and child care settings, implement asthma care services and reduce environmental exposures

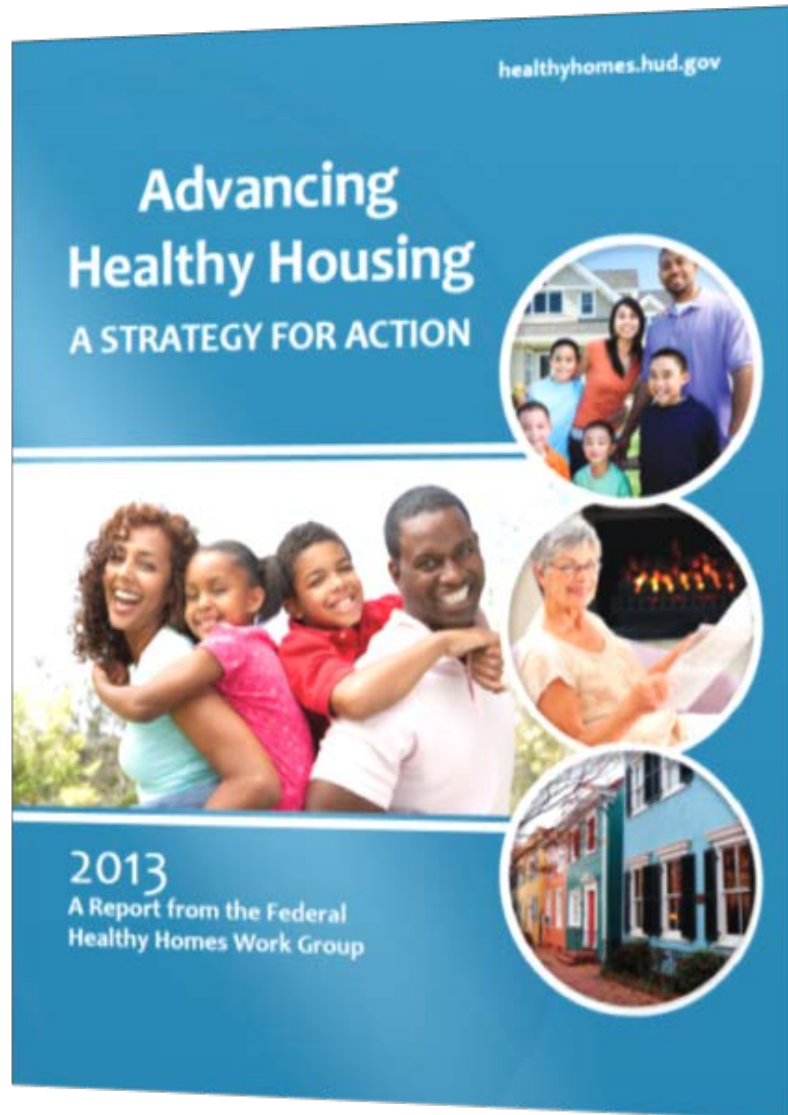


## Strategy 2: Enhance local capacity to deliver integrated, comprehensive care

### Priority Actions:

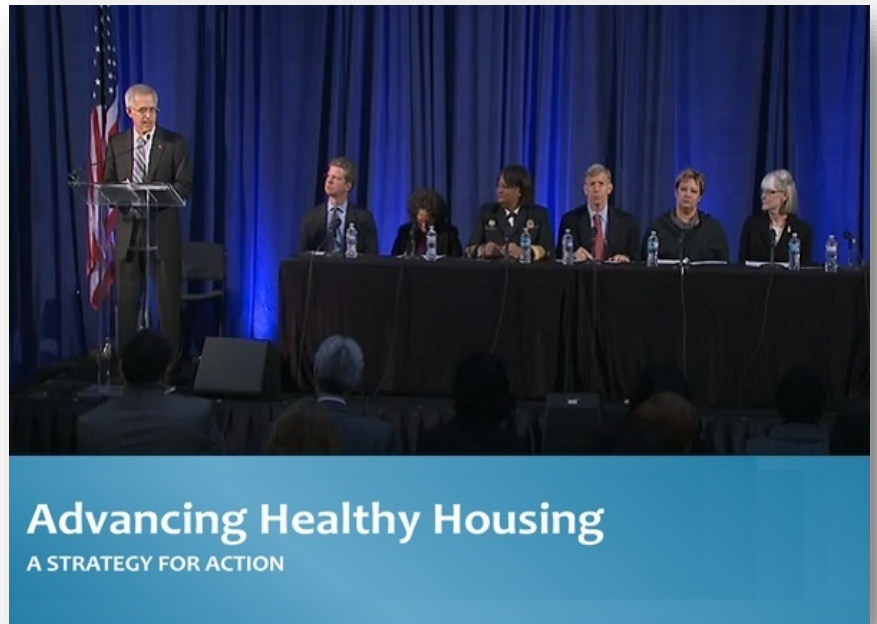
- 2.1 Promote cross-sector partnerships among federally supported, community-based programs targeting children with a high burden of asthma.
  - (e.g., tobacco control, obesity prevention, radon, healthy homes, weatherization, lead hazard control)
- 2.3 Conduct research to evaluate models of partnerships that empower communities to identify and target disparate populations and provide comprehensive, integrated care at the community level.

# Advancing Healthy Housing: A Strategy for Action



# Advancing Healthy Housing: A Strategy for Action

- Released on Feb. 4, 2013 by the President's Task Force on Env. Health/Safety Risks to Children
- Interagency press event with Cabinet-level support
  - HUD Secretary
    - Shaun Donovan
  - EPA Administrator (former)
    - Lisa Jackson
  - U.S. Surgeon General (former)
    - Dr. Regina Benjamin
  - Deputy Secretary of Energy
    - Daniel Poneman
  - Council on Environmental Quality Chair
    - Nancy Sutley



# Healthy Homes Strategy: Vision, Goals and Characteristics

1

Overarching  
Vision

5

Goals



8

Healthy  
Homes  
Characteristics

## Healthy Homes Strategy: Priority Actions of Particular Relevance for Summit

- ❖ Strengthen federal efforts to reduce public health risks in housing.
- ❖ Support pilot projects to incorporate healthy homes concepts into existing federal programs.
- ❖ Strategically target healthy homes activities to support the needs of underserved populations.
- ❖ Acknowledge and incorporate work promoting approaches that support health equity.
- ❖ Encourage pilots or demonstration programs that advance healthy housing.

# Thank you!

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Acknowledgments: Thanks to Dr. Alisa Smith (EPA) and Chris Trent (HUD) for their contributions to this presentation.

The Federal Action Plan to Reduce Asthma Disparities is available at: [www.epa.gov/childrenstaskforce](http://www.epa.gov/childrenstaskforce)

The Healthy Homes Strategy for Action is available at:  
[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/healthy\\_homes/advhh](http://portal.hud.gov/hudportal/HUD?src=/program_offices/healthy_homes/advhh)

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