

Why We Need to Be Invested in this Work

Nancy Ibrahim, Executive Director
Esperanza Community Housing Corporation



Why We Need to Be Invested in this Work

Matthew E. Ammon, Director
Office of Lead Hazard Control and Healthy Homes
U.S. Department of Housing and Urban Development





California Asthma Forum: Federal Efforts to Address Asthma

Matthew Ammon, Director

Office of Lead Hazard Control and Healthy Homes (OLHCHH)

U.S. Department of Housing and Urban Development (HUD)

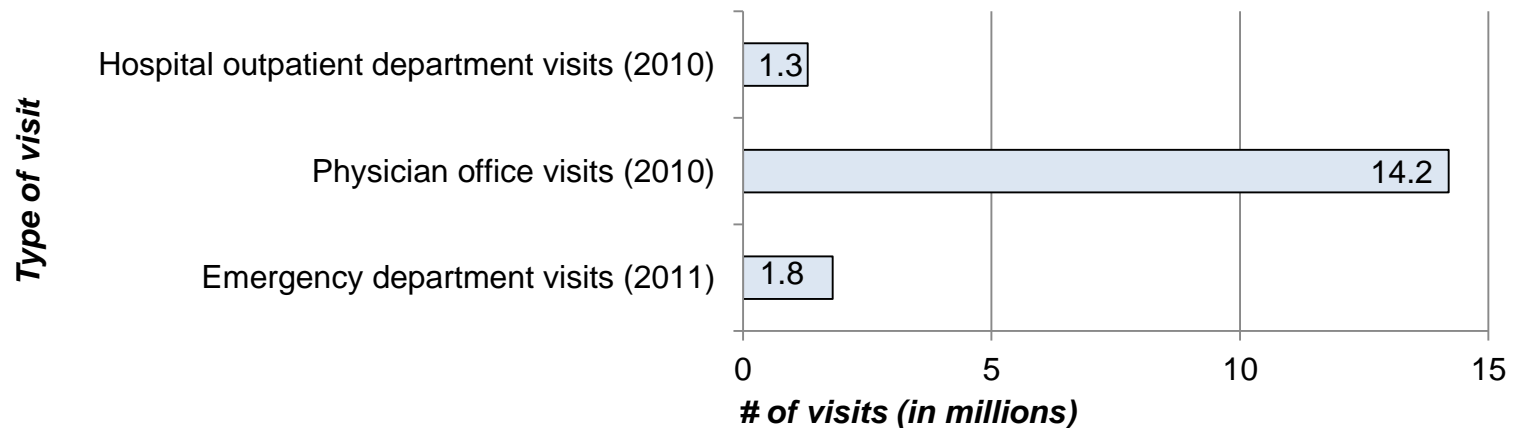


Asthma Prevalence

- Asthma:
 - affects over 6 million children (8.3% of all children) and 16 million adults (7.0% of all adults)
 - is a health and economic burden to individuals, their families, and societies

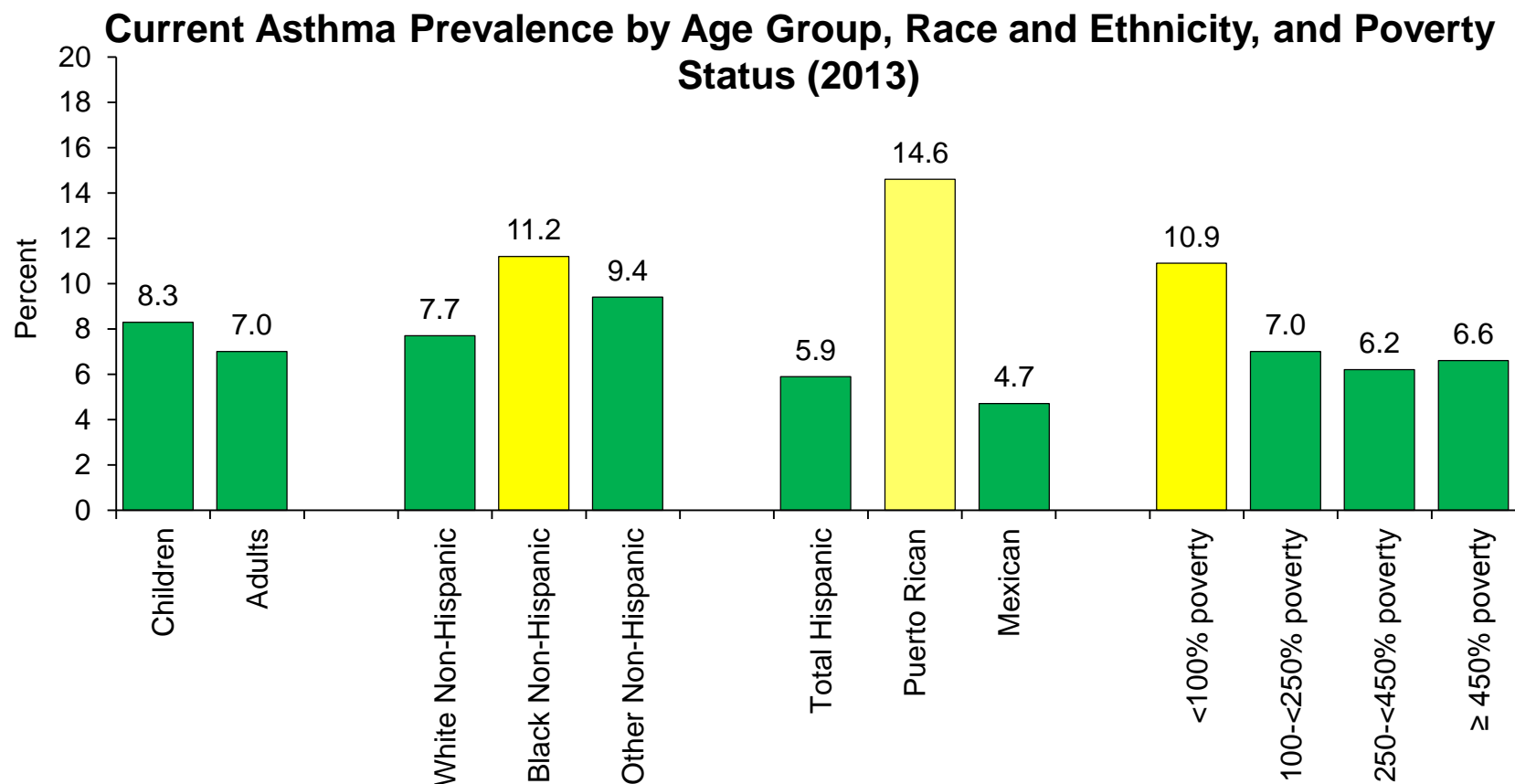


Number of Healthcare Visits with Asthma as the Primary Diagnosis (in millions)



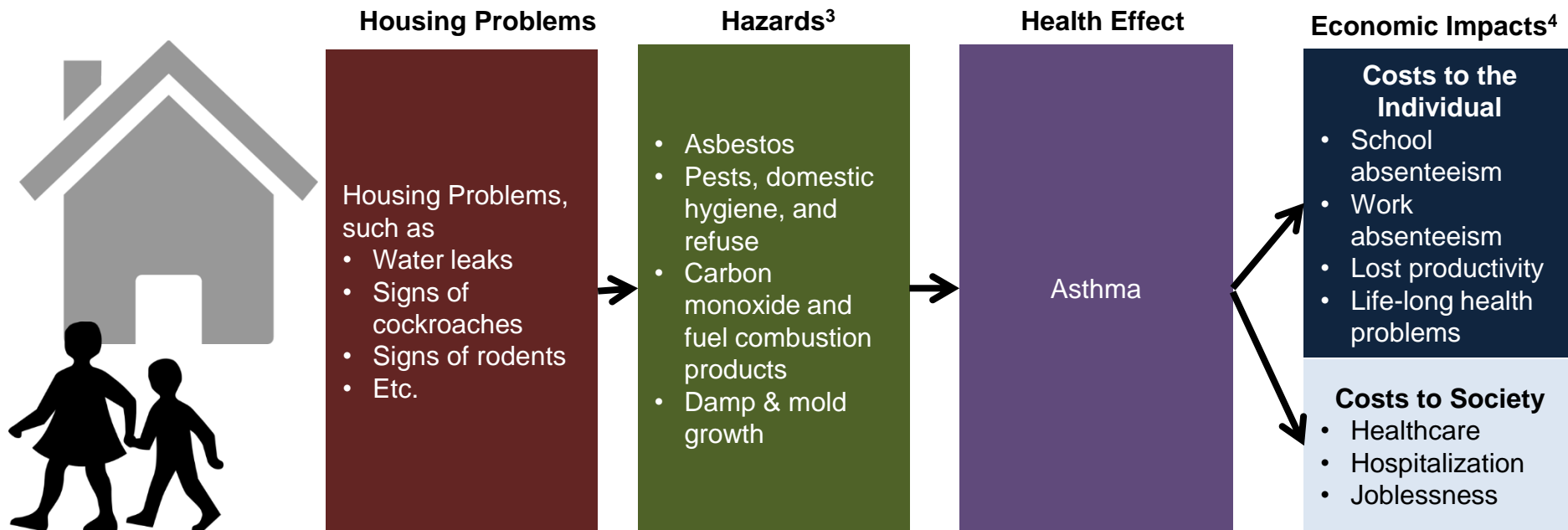
Disproportionate Impact

- Asthma is more common in low income and some minority households.



The Link Between Housing Quality and Asthma

- Approximately 40% of diagnosed asthma among children is believed to be attributable to residential exposures.¹
- The economic impact of asthma due to dampness and mold in the home is \$3.5 billion per year.²



1. (Lanphear, Aligne, et al. 2001; Lanphear, Kahn, et al. 2001)

2. (Mudarri & Fisk, 2007)

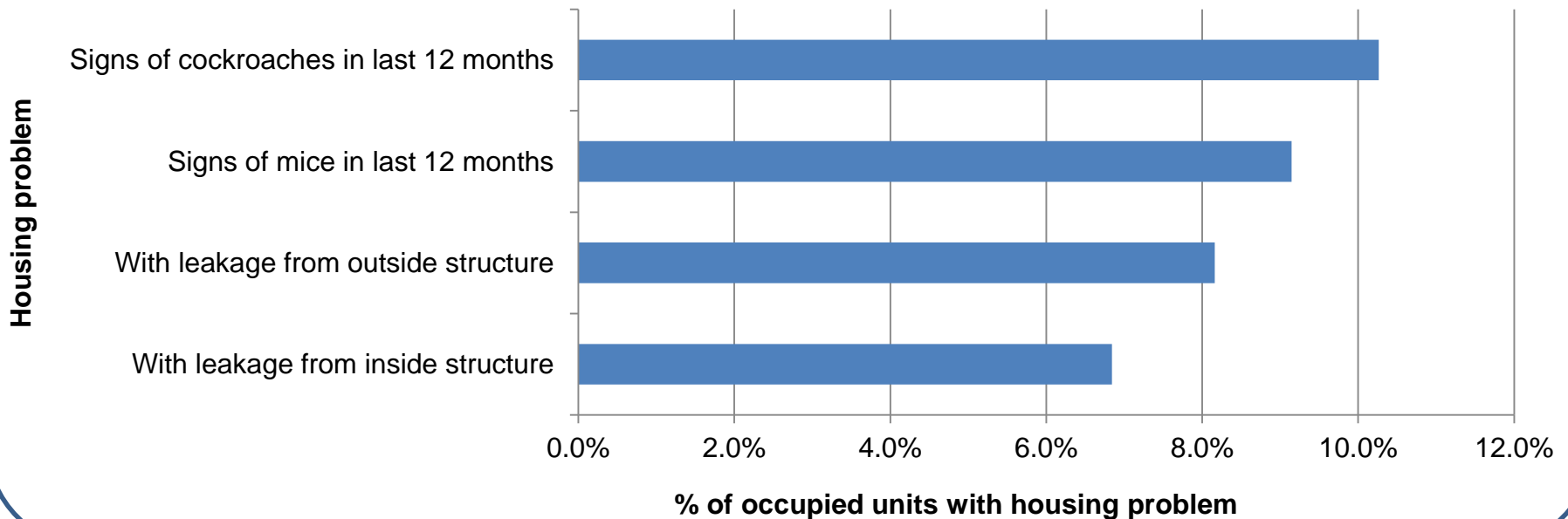
3. (OLHCHH, 2014, Healthy Homes Rating System Operating Guidance)

4. (EPA, 2015; CDC, 2014; Barnett & Numagambetov, 2002-2007)

American Housing Survey

- The American Housing Survey (AHS) estimates the number of housing problems in American households, including those related to asthma.
- The chart below shows the most common asthma-related housing problems.

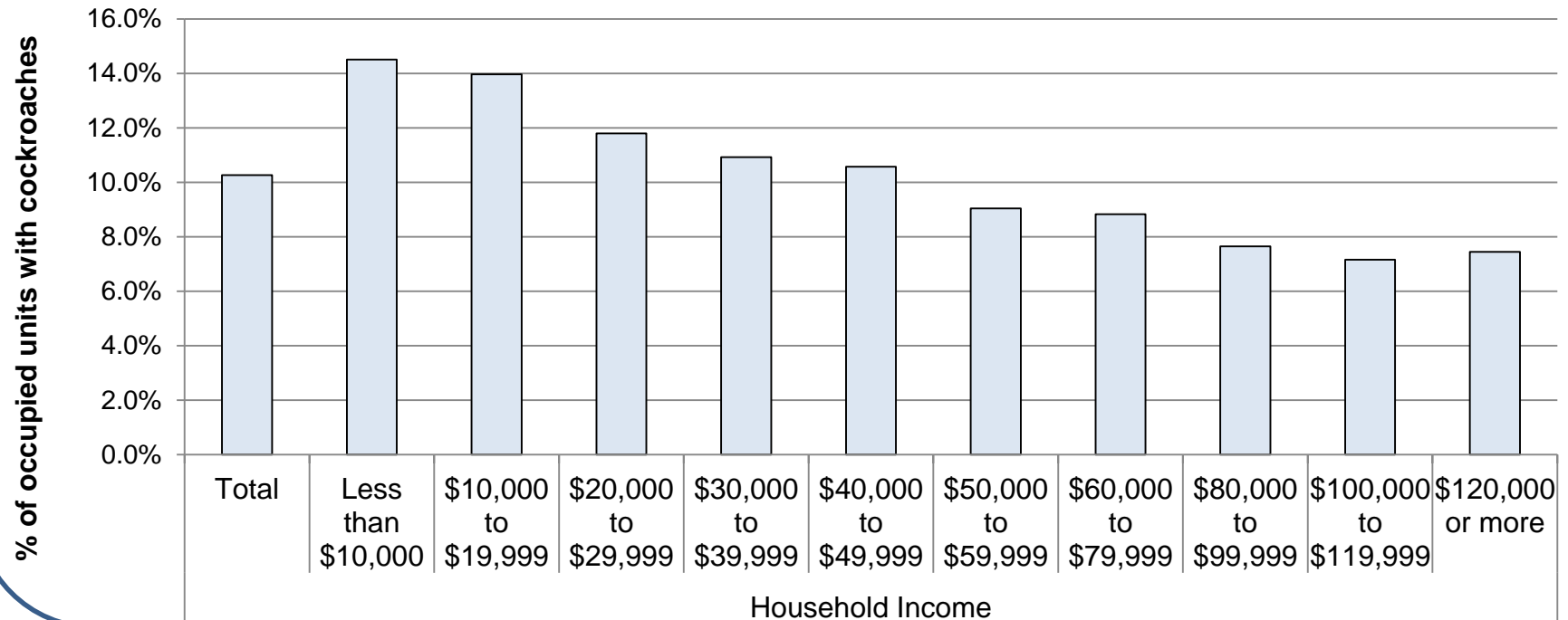
The Most Common Asthma-Related Housing Problems (AHS, 2013)



American Housing Survey (Cont.)

- Some asthma-related housing problems—such as signs of cockroaches—are more common in low-income households.

Signs of cockroaches in last 12 months



What Does OLHCHH Do to Address Asthma and Other Home-Related Health Problems?

- Interventions: Our Lead and Healthy Homes grantees conduct assessments and interventions to address lead and multiple health hazards in homes, including asthma hazards.
- Research: Our technical studies grants support research involving numerous healthy housing issues, including asthma.
- Outreach: Our Outreach team gives presentations and creates publications to educate the general public about making homes safe and healthy.
- Smoke-free housing: We work with other offices in HUD to encourage smoke-free public and multifamily housing.
- Asthma summits: We hold asthma summits and encourage local entities to hold summits and promote insurance reimbursement for asthma home assessments and interventions.

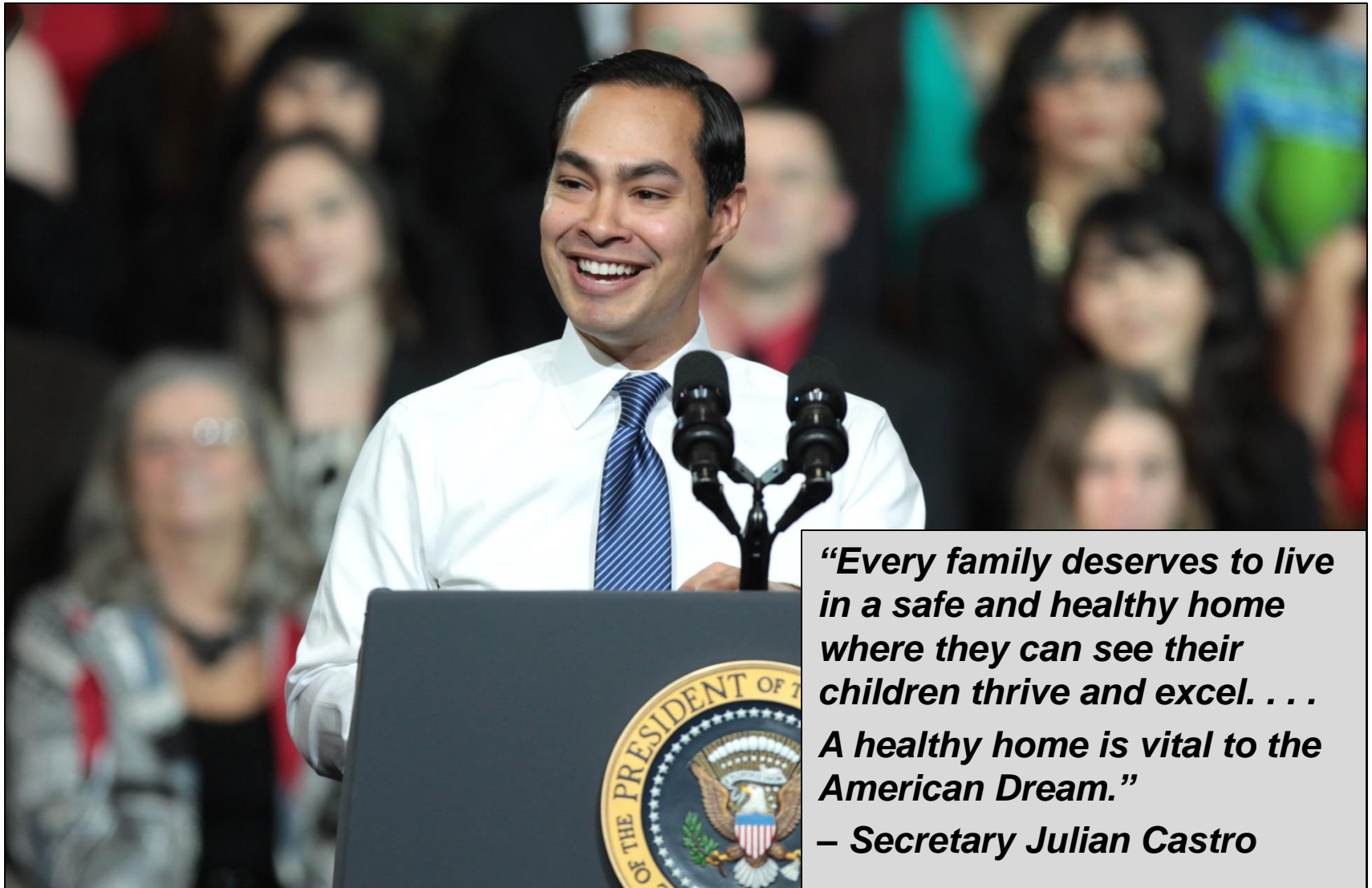


Why Does Our Work Matter?

- It helps children and other vulnerable populations reach their full potential by
 - Preventing asthma and other illnesses and diseases;
 - Lowering healthcare costs;
 - Increasing school and work performance; and
 - Decreasing the number of school and work days missed due to injuries and diseases.
- It frees up family expenses that would have been spent on healthcare for other critical needs, such as rent or nutritious food.
- It saves money and lives.
 - Studies have shown that lead and healthy homes Interventions are *effective* and are more *cost-effective* than conventional maintenance.



HUD's Secretary on Healthy Homes



“Every family deserves to live in a safe and healthy home where they can see their children thrive and excel. . . .

A healthy home is vital to the American Dream.”

– Secretary Julian Castro

Return on Asthma Investments

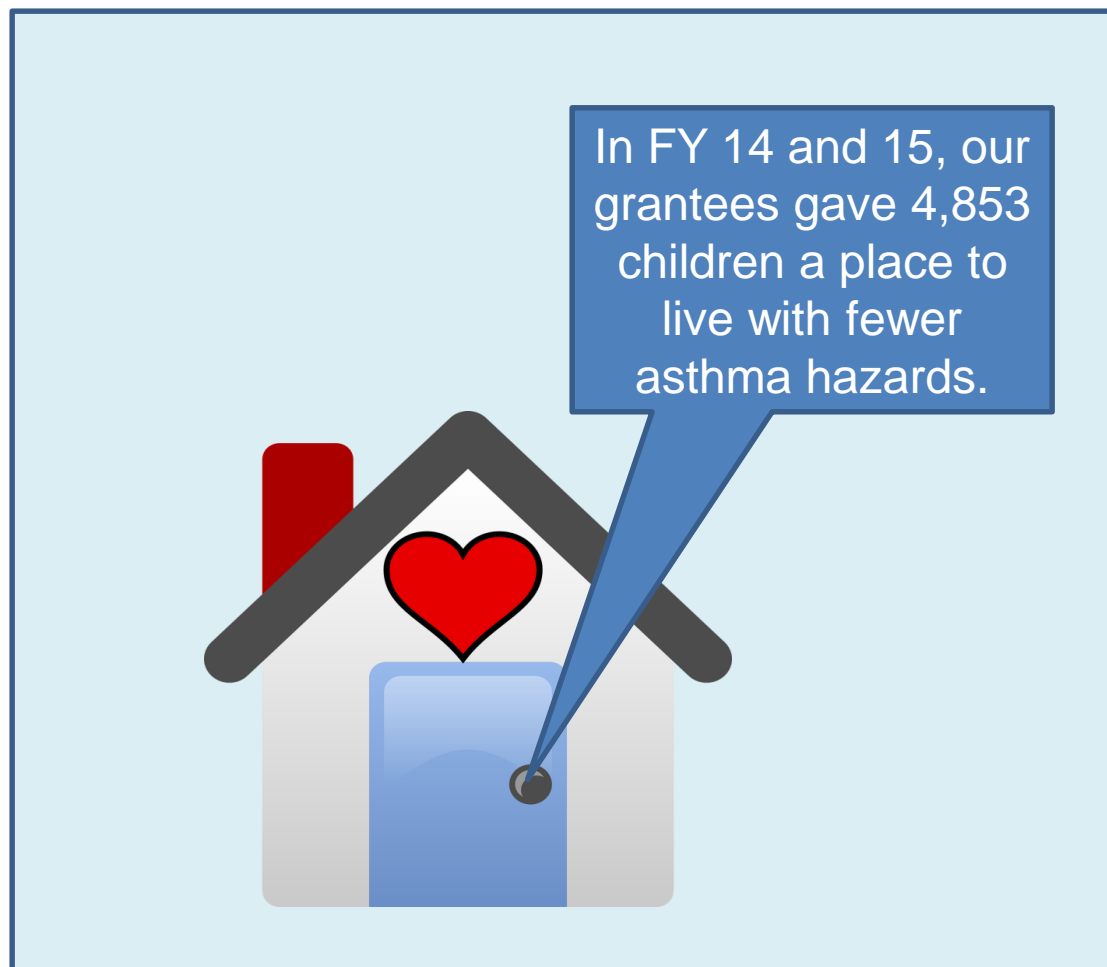
For every \$1 spent on **asthma reduction** programs...

...there is a return of between \$5.30 and \$14.00.¹



Interventions by our Lead Hazard Control Grantees

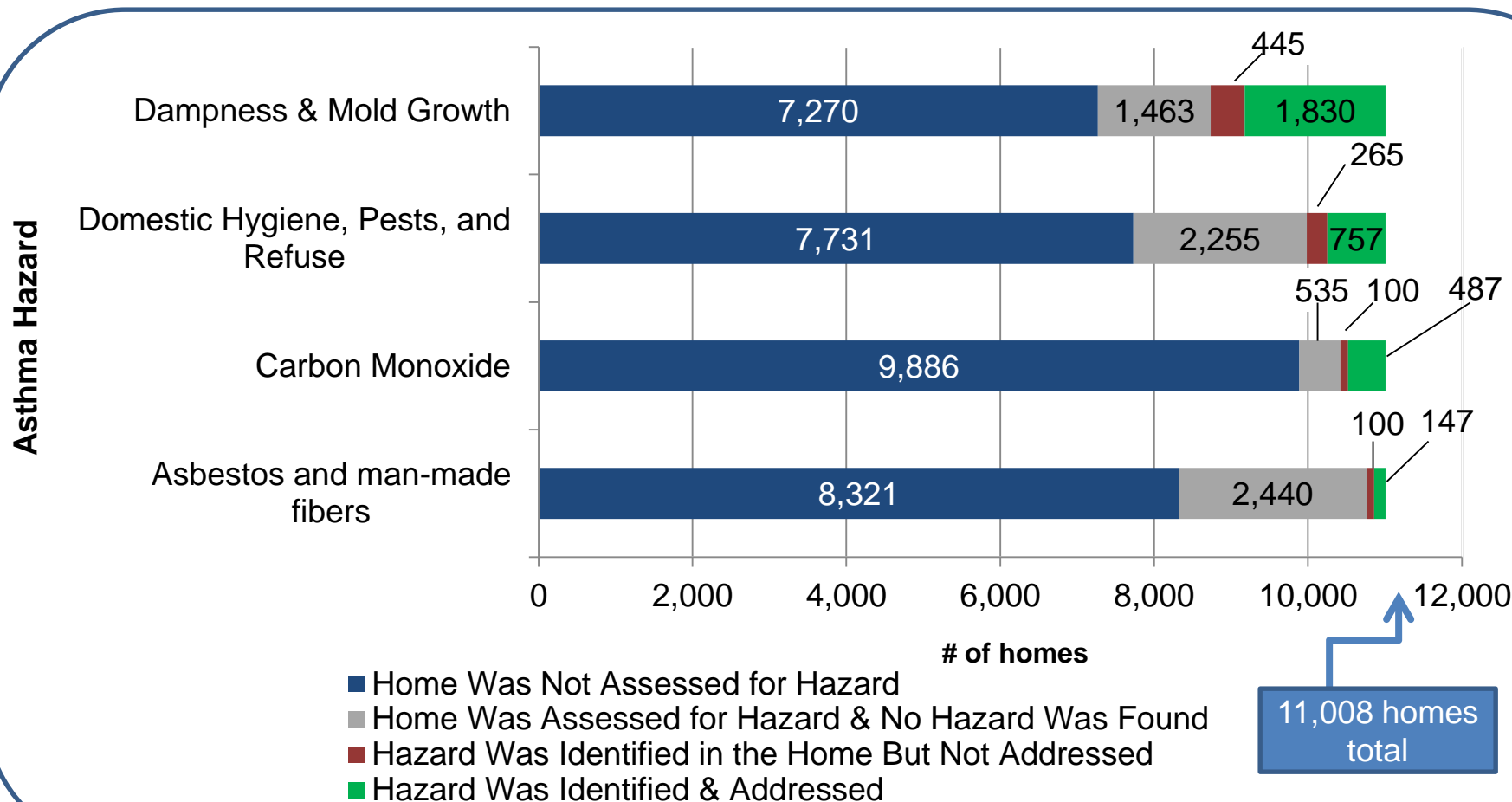
- Our grantees addressed asthma hazards¹ in 2,716 homes (out of 11,008 homes that our grantees made lead-safe in FY 14-15²)
- 4,853 children under 18 lived in homes where our grantees addressed asthma hazards in FY 14-15²



1. See next slide for a list of the most common asthma hazards addressed by our grantees.
2. As of 9/1/2015; based on a data pull for OLHCHH's Healthy Homes Grant Management System (10/1/2013 through 9/1/2015)

Interventions by our Lead Hazard Control Grantees

- Our grantees made 11,008 homes lead-safe in FY 14 and FY 15¹.
- In many of those homes, our grantees addressed asthma hazards.
- The four most common asthma hazards addressed are shown below.



1. As of 9/1/2015; based on a data pull for OLHCHH's Healthy Homes Grant Management System (10/1/2013 through 9/1/2015)

Highlights of Federal Guidance and Strategies Supporting Residential Asthma Interventions

Support for Home-Based Asthma Interventions

- National Asthma Education and Prevention Program Guidelines (NHLBI, 2007)
- Guide to Community Preventive Services (CDC, 2008)
- Federal Action Plan to Reduce Racial and Ethnic Asthma Disparities (2012)

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

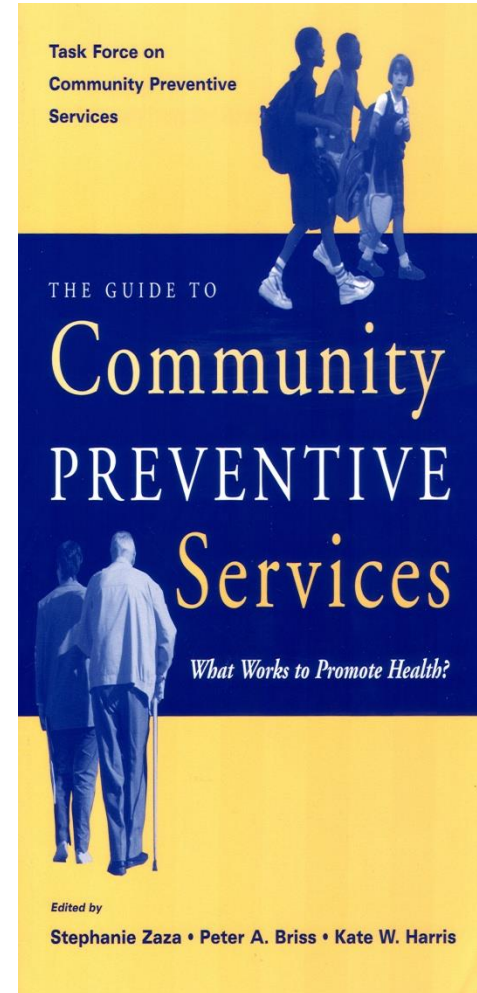


NAEPP Guidelines: Recommendations on in-Home Control of Asthma Triggers

- 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
- Directed by the Community Preventive Services Task Force (non-federal organization)
- Conducts rigorous systematic reviews of evidence for community interventions (with CDC involvement)
- 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.

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

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



Coordinated Federal Action Plan
to Reduce Racial and Ethnic
Asthma Disparities

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

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

Our Challenge!

We know that home-based interventions can improve the health of children with asthma, improve the quality of life of caregivers, and reduce healthcare costs.

How do we develop sustainable systems to deliver effective home-based interventions to the children who could most benefit from them?

Thank you!

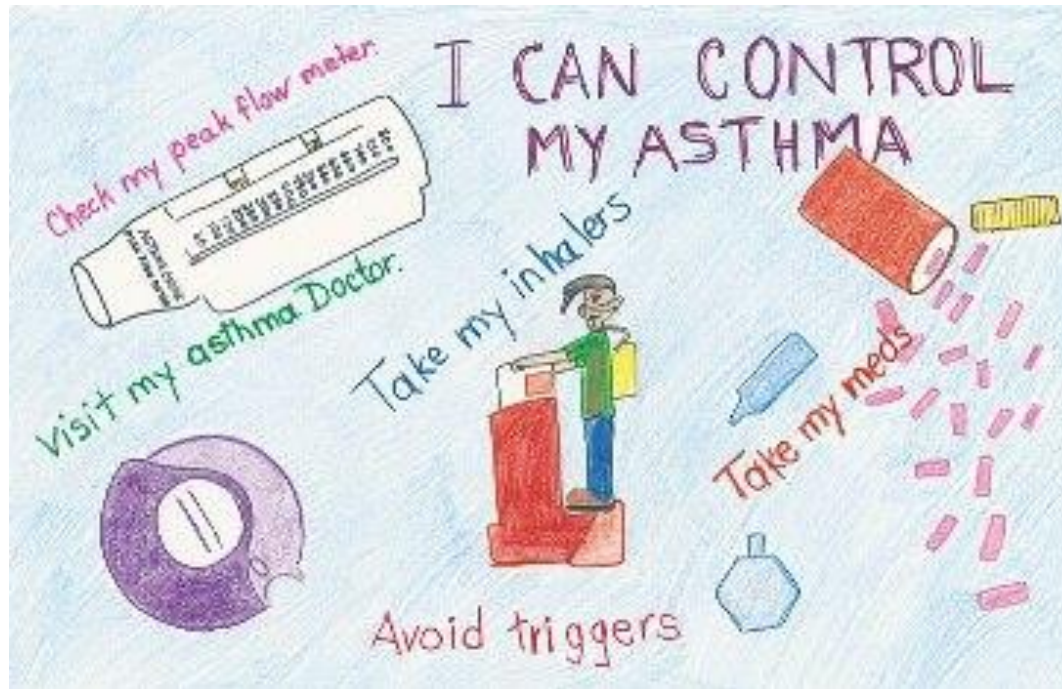
Matthew.E.Ammon@hud.gov

Why We Need to Be Invested in this Work

Meredith Milet, Epidemiologist, California Breathing
Environmental Health Investigations Branch
California Department of Public Health



The Burden of Asthma in California



Meredith Milet, MPH
Epidemiologist, California Breathing
California Department of Public Health

California Forum on Sustainable In-Home Asthma Management
September 10, 2015

How widespread is asthma in California?

Population
38.8 Million

14% of Children and Adults
Diagnosed with Asthma

or

Children with
asthma
1.2 Million

1 in 7

Adults with
asthma
3.9 Million

What is the impact of asthma on people who have it?

Some degree of activity limitation:

63% of children with current asthma

Difficulty sleeping because of symptoms:

32% of children with current asthma

Missed work or usual activities because of asthma:

11.8 million days per year (adults)

Missed school or day care because of asthma:

1.2 million days per year (children)

Asthma-Related Emergency Department Visits:

70,842 in 2013 among children

Asthma-Related Hospitalizations:

9,754 in 2013 among children

Deaths due to Asthma:

12 in 2013 among children



What are the costs associated with asthma?

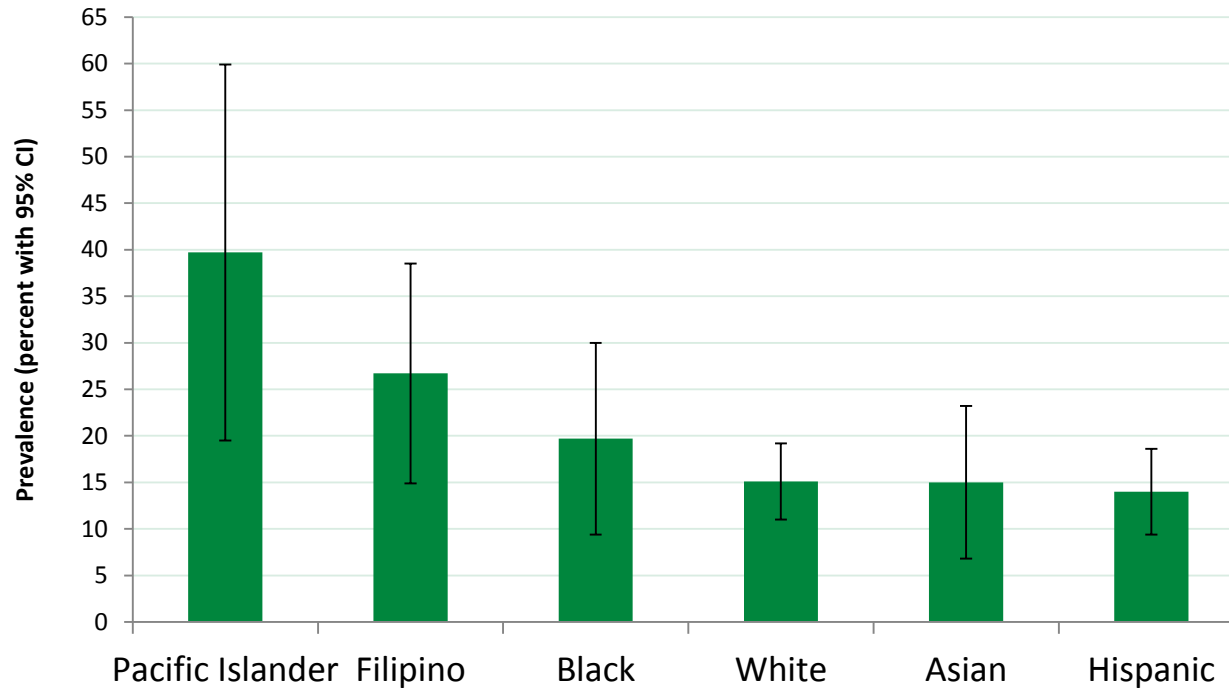


\$11.3 billion in California
(including: \$9.6 billion direct health care
and \$1.5 billion work and school days lost)

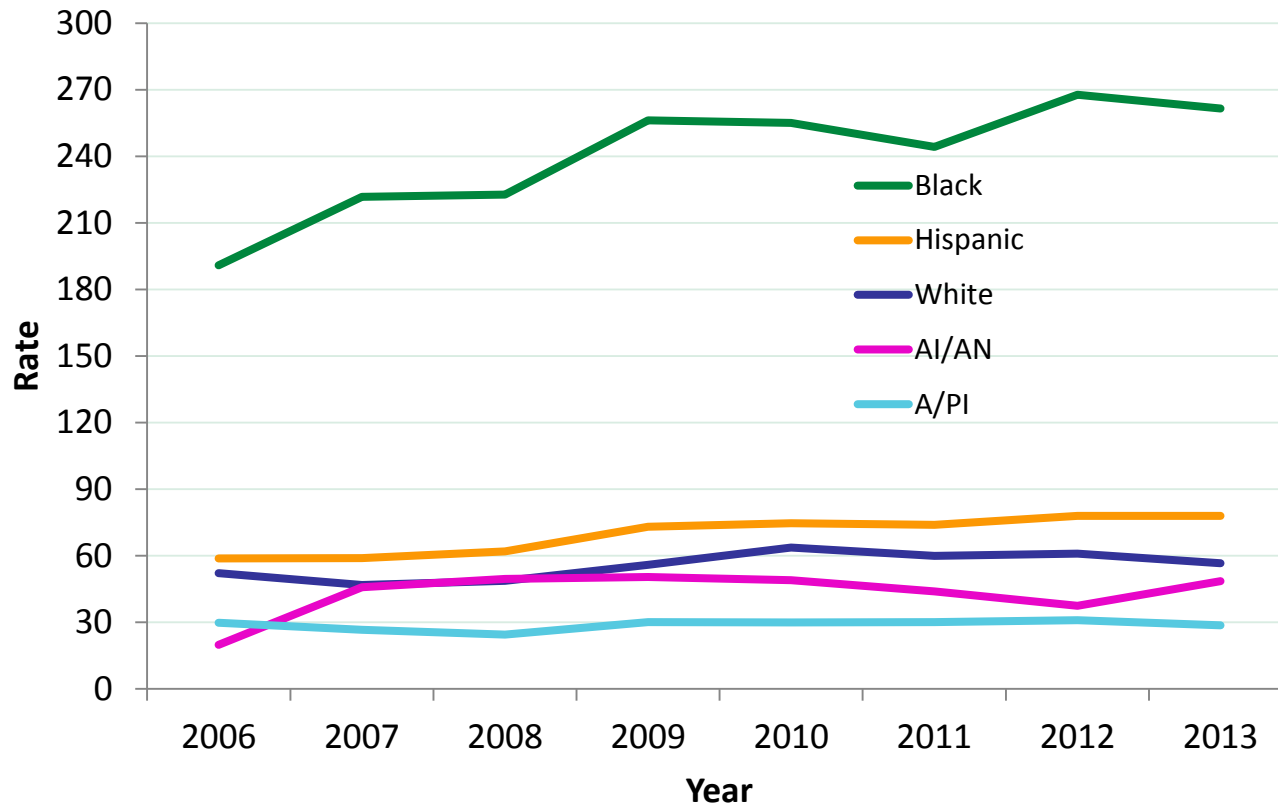
Medi-Cal covered
-58% of asthma ED visits
-66% of asthma hospitalizations
among children in 2013

Who is more likely to suffer from asthma?

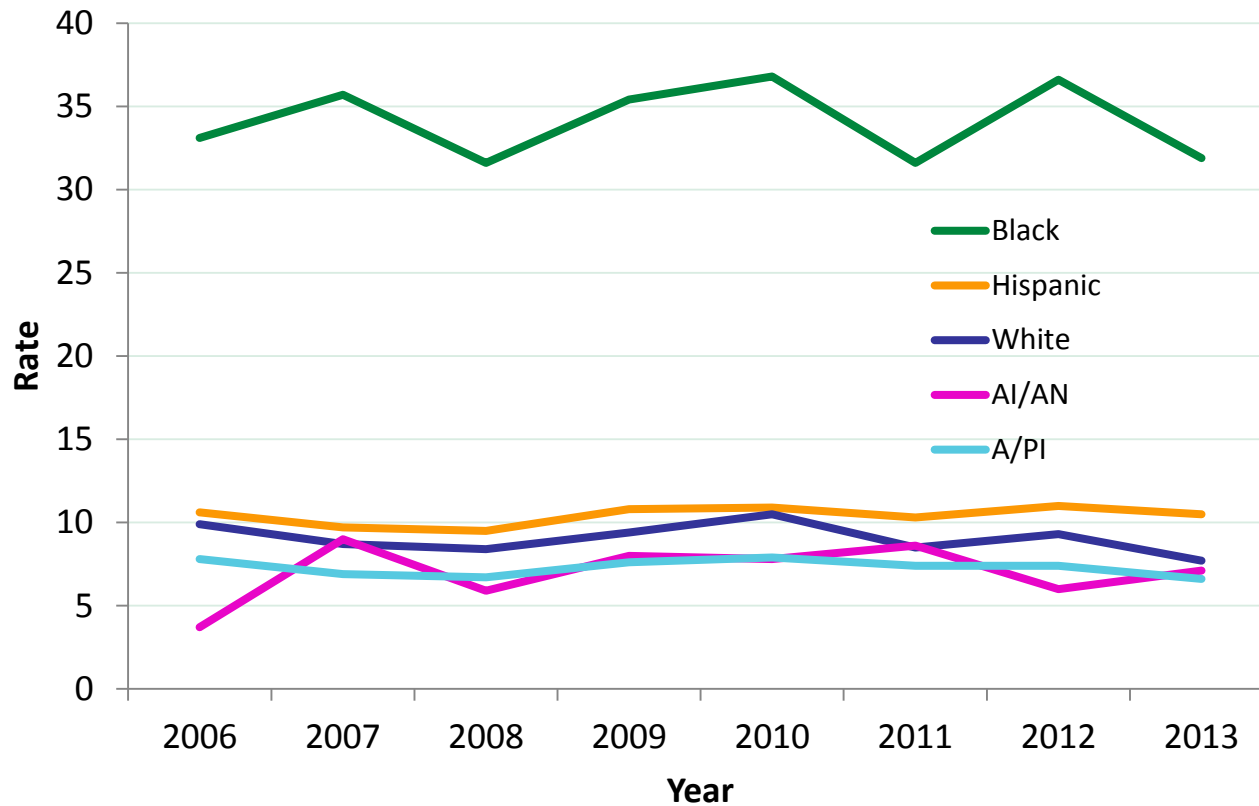
Lifetime Asthma Prevalence Among Children,
by Race/Ethnicity, California 2014



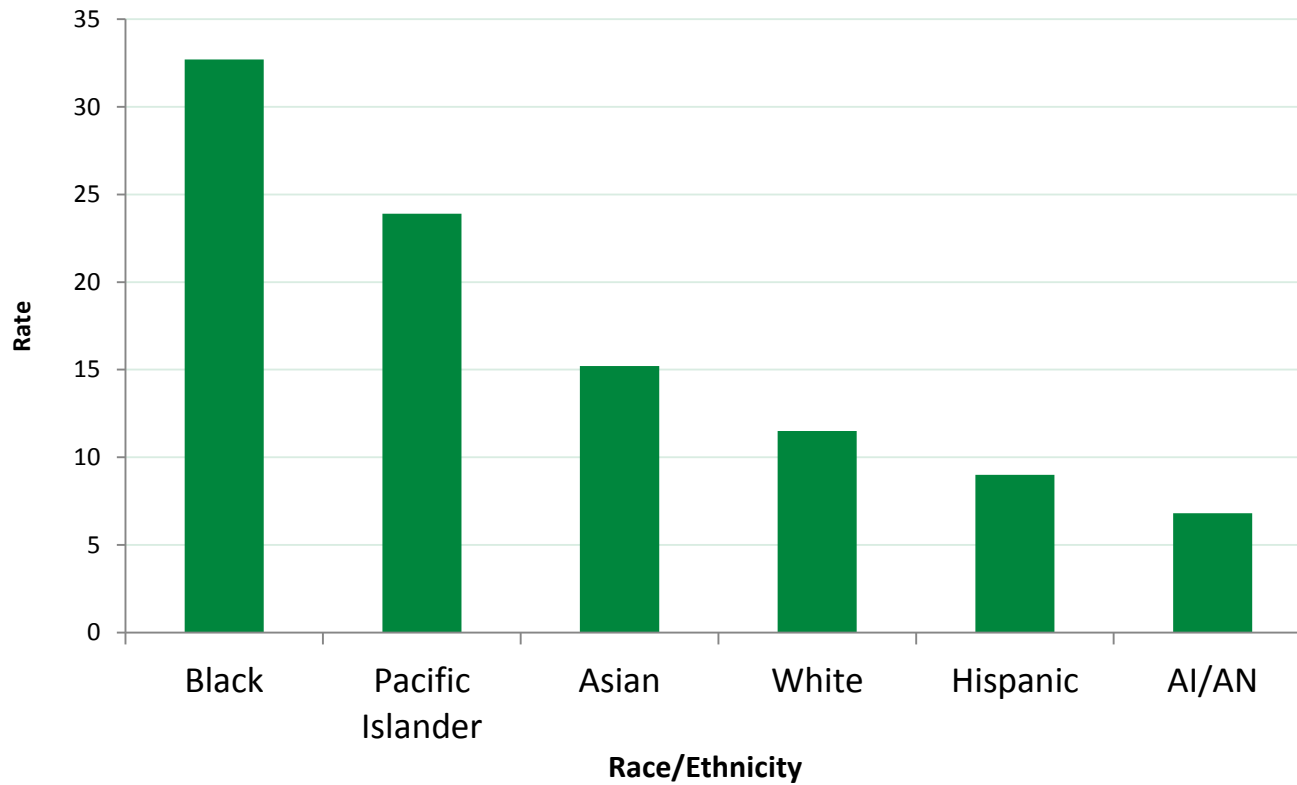
Age-Adjusted Asthma ED Visits per 10,000 California Residents, Children Age 0-17, by Race/Ethnicity, 2006-2013



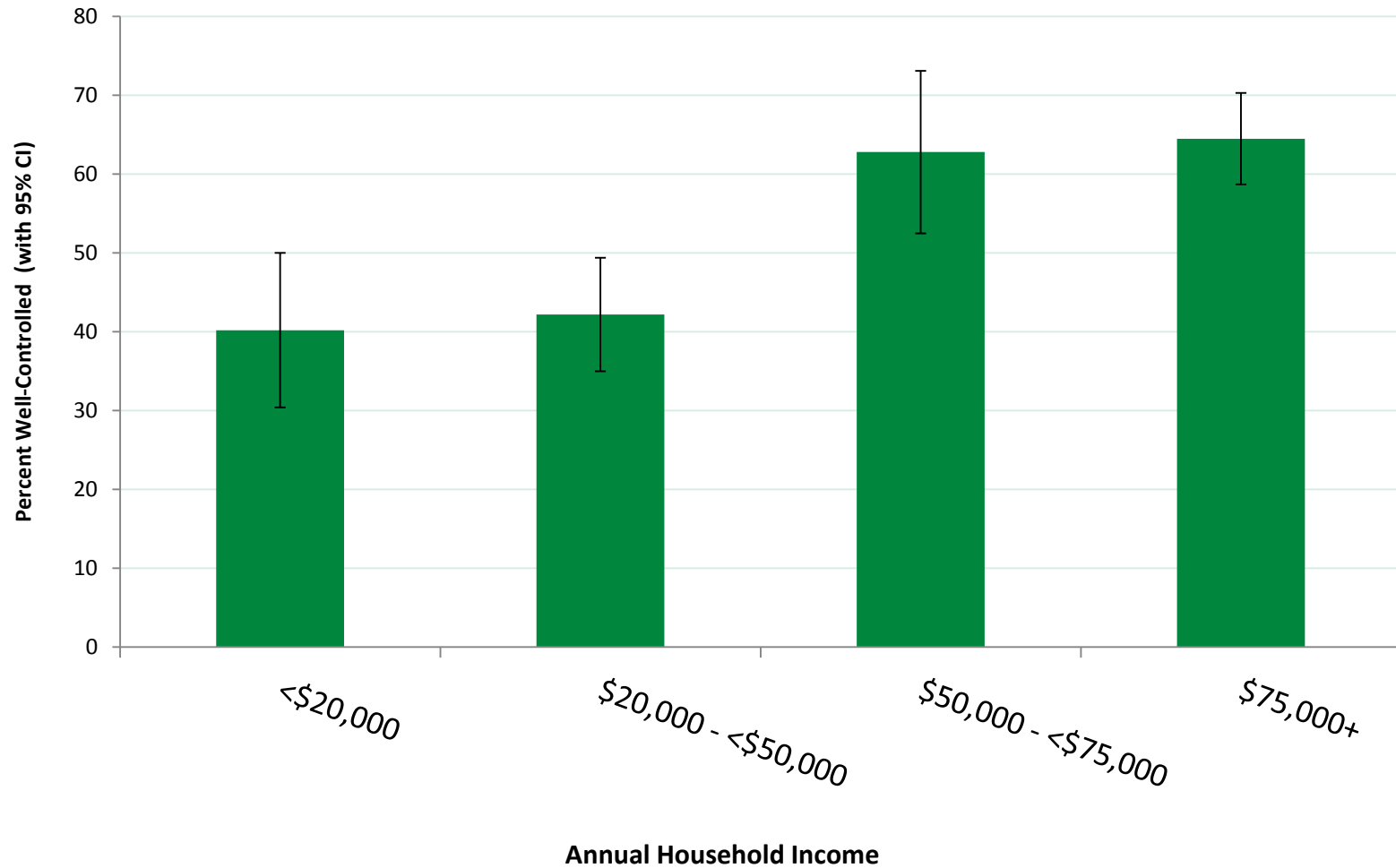
Age-Adjusted Asthma Hospitalizations per 10,000 California Residents, Children Age 0-17, by Race/Ethnicity, 2006-2013



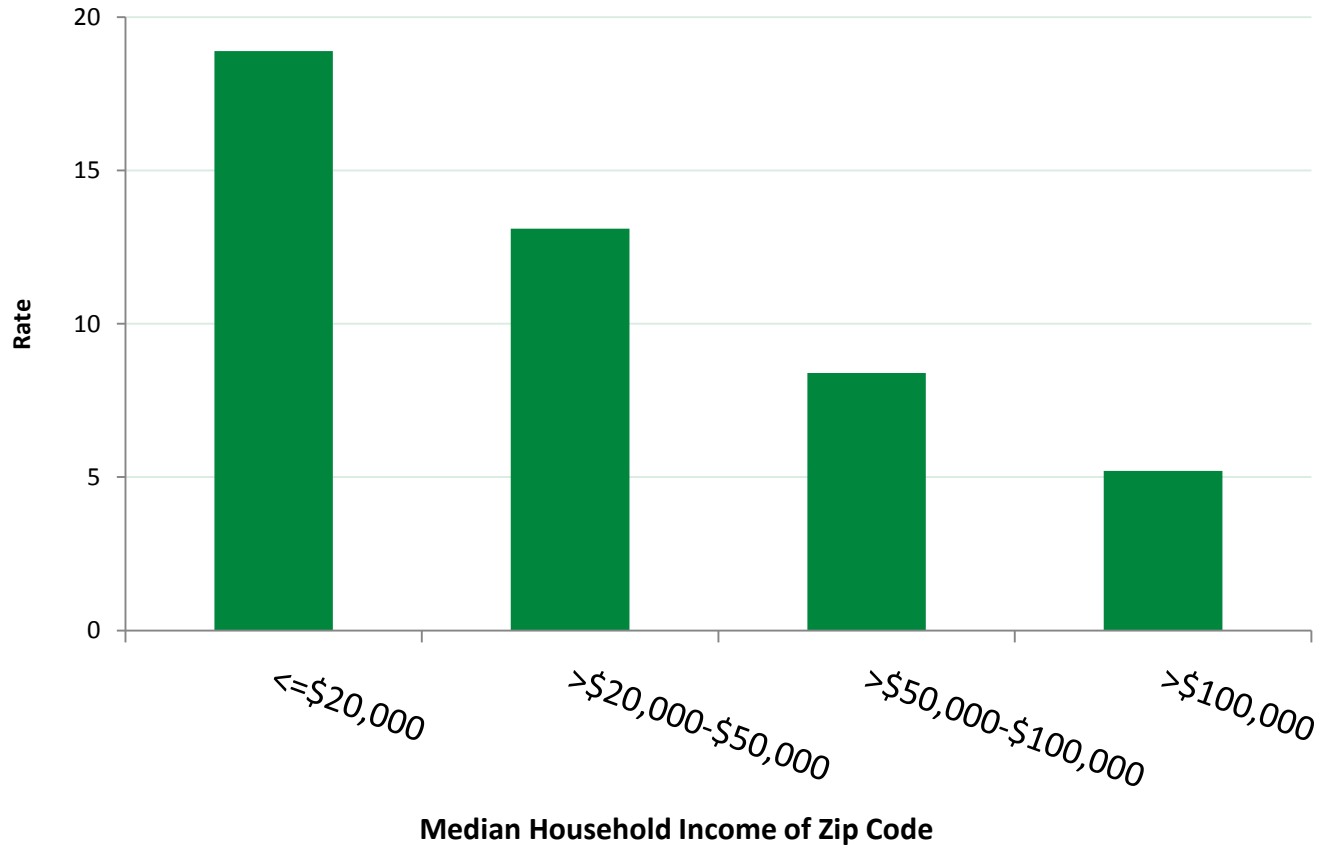
Age-Adjusted Asthma Deaths per 1,000,000 California Residents All Ages, by Race/Ethnicity, 2003-2009 Aggregated



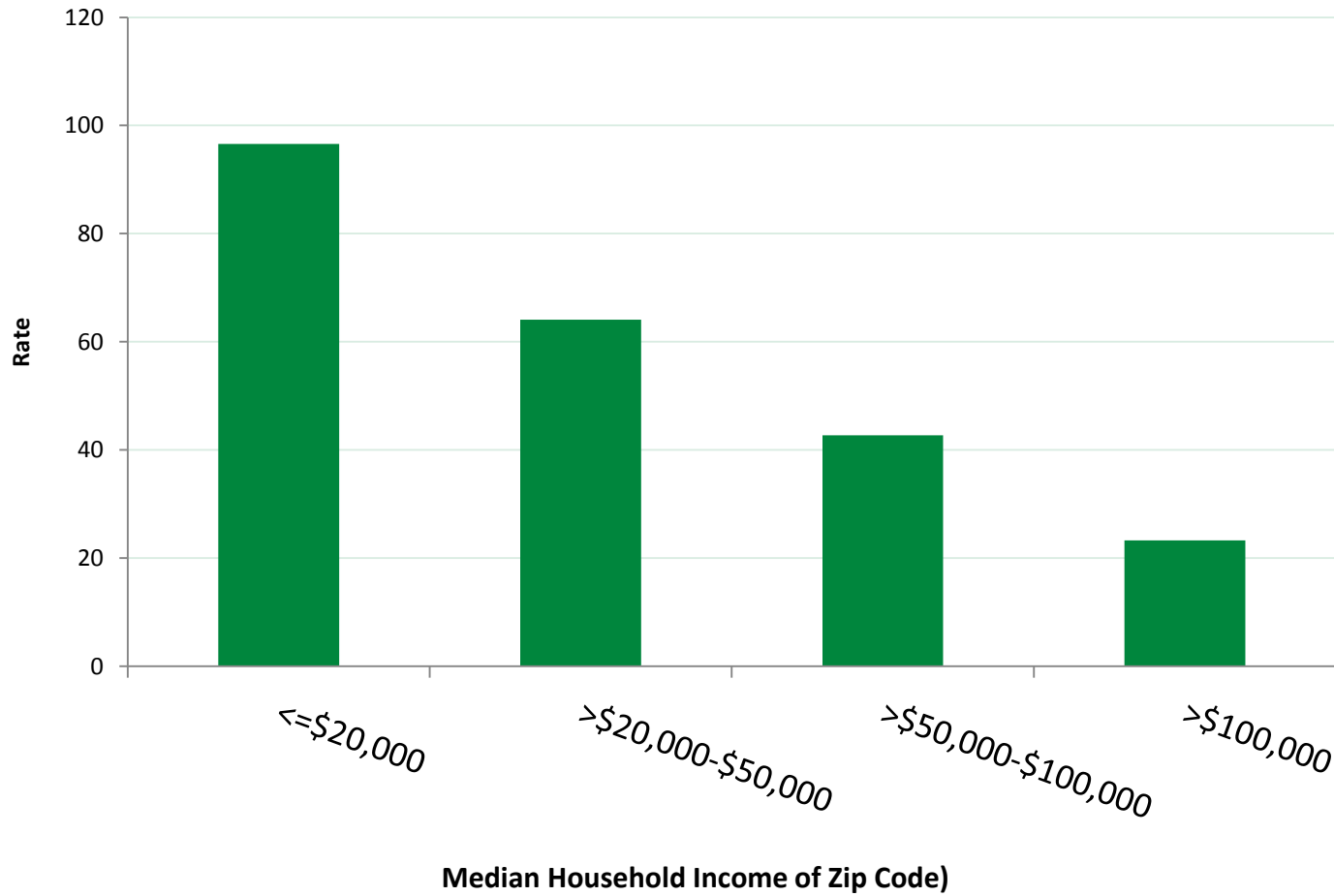
Percent with Well-Controlled Asthma Among Adults with Current Asthma, by Annual Household Income, California 2006-2009



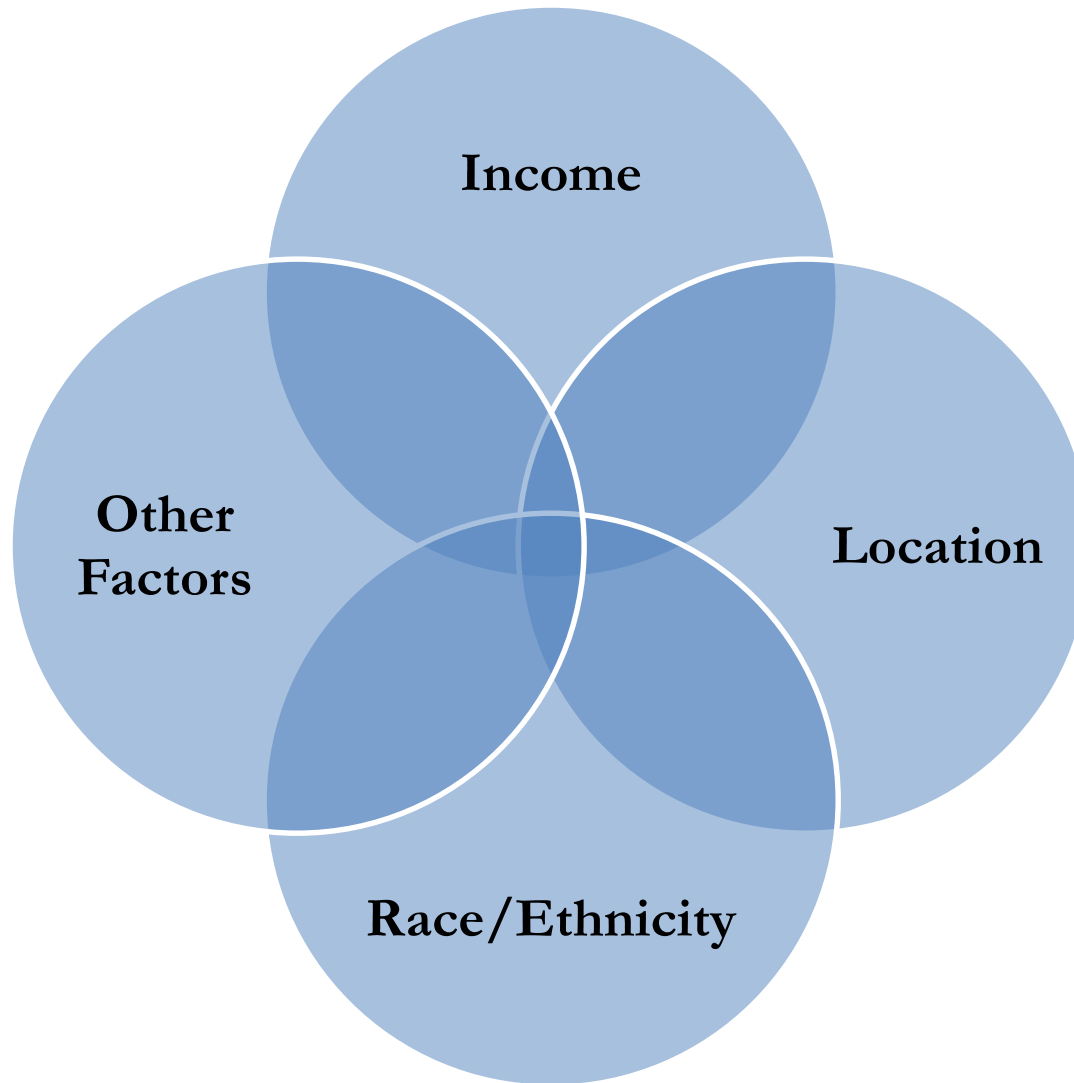
Age-Adjusted Asthma Hospitalizations per 10,000 California Residents by Median Household Income in Zip Code, 2009



Age-Adjusted Asthma ED Visits per 10,000 California Residents by Median Household Income in Zip Code, 2009



Interaction Between High Risk Characteristics



How can we explain asthma inequities?

- Indoor air pollutants
- Deteriorated housing
- Tobacco smoke
- Outdoor air pollutants
- Traffic volume
- Industrial pollutants
- Unequal access to care
- Mold
- Pesticides
- Specific occupations
- Racism
- Cultural and language barriers
- Stress
- Lack of social support
- Built environment
- Obesity
- ...

Are children with asthma getting the care they need?

Poorly controlled asthma:

- 1 in 5

No routine asthma checkup in the past year:

- 24%

Proper use of controller medications:

- 36%

Ever been taught to use a peak flow meter:

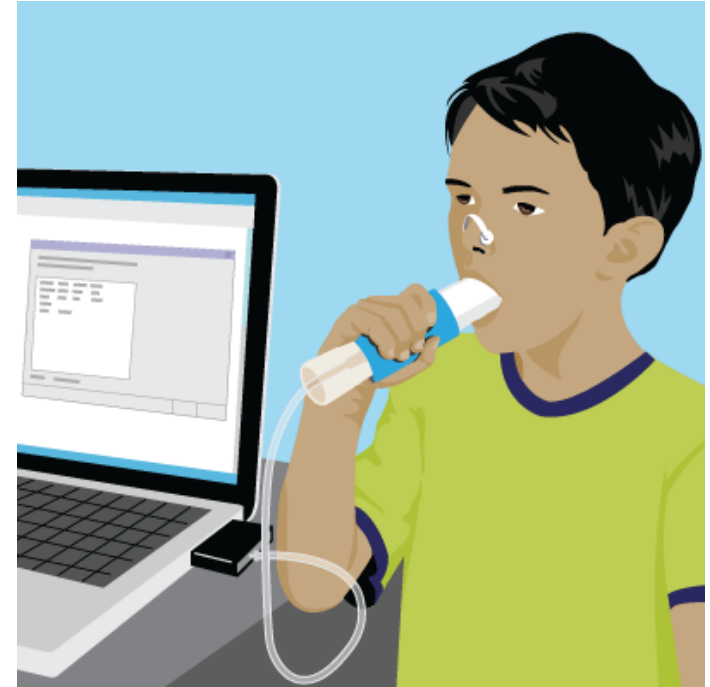
- 42%

Given an asthma action plan:

- 45%

Advised to change their environment:

- 44%

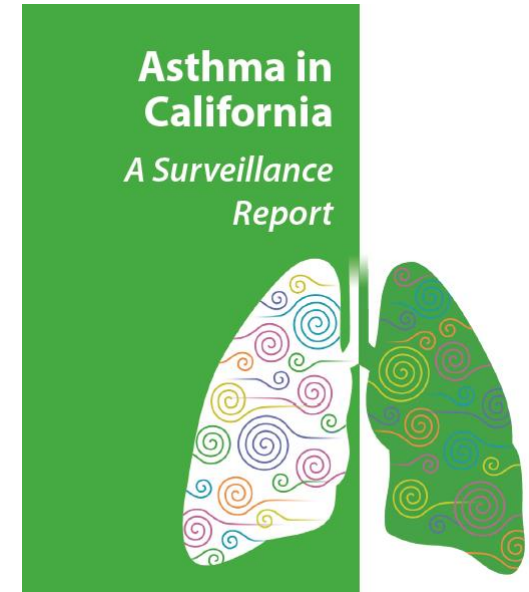


Where can you get asthma data?

- www.californiabreathing.org
- www.cehtp.org
- <https://chhs.data.ca.gov>

THANK YOU!!!

Meredith.Milet@cdph.ca.gov

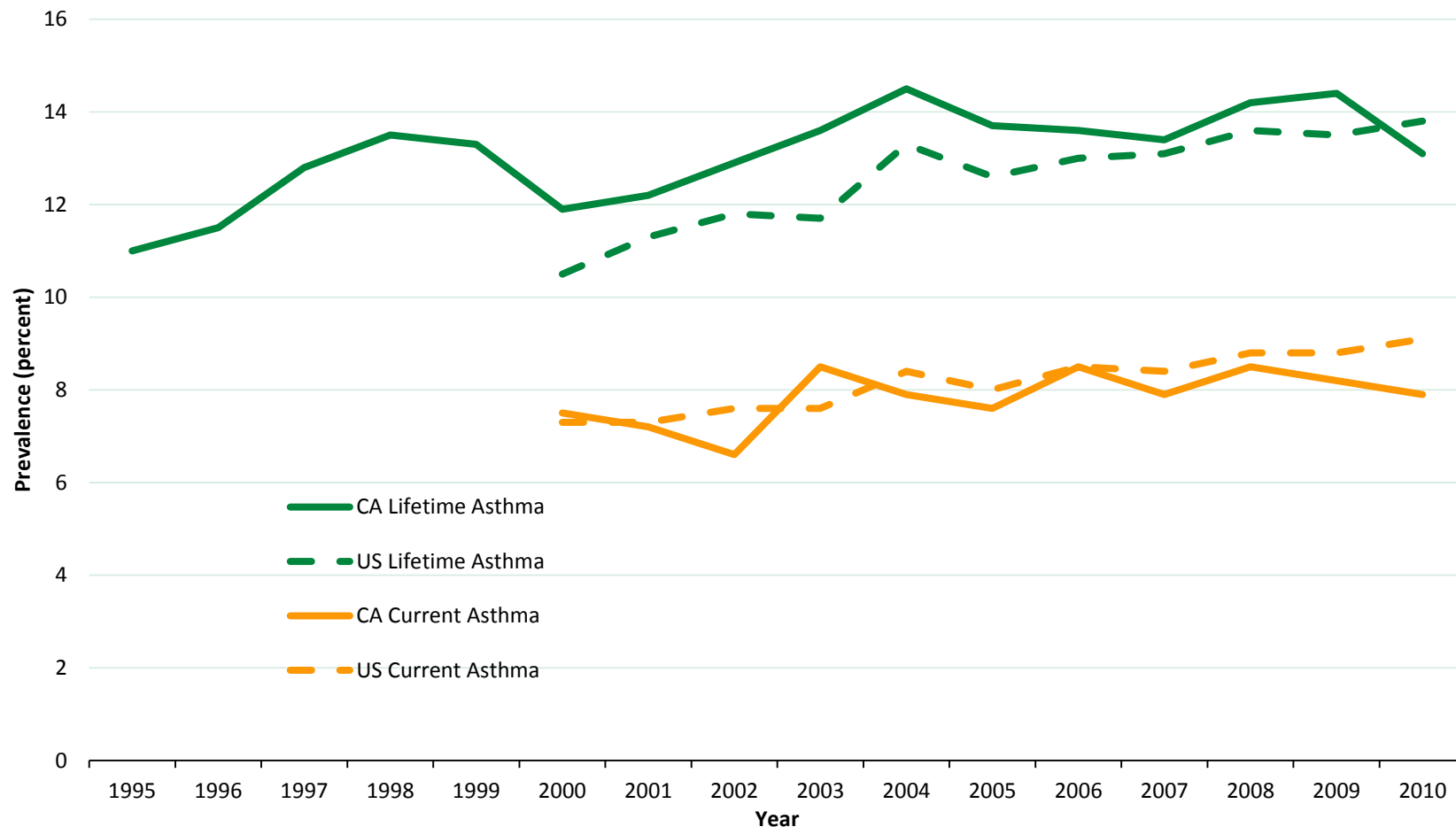


Extra Slides to Address
Possible Questions:

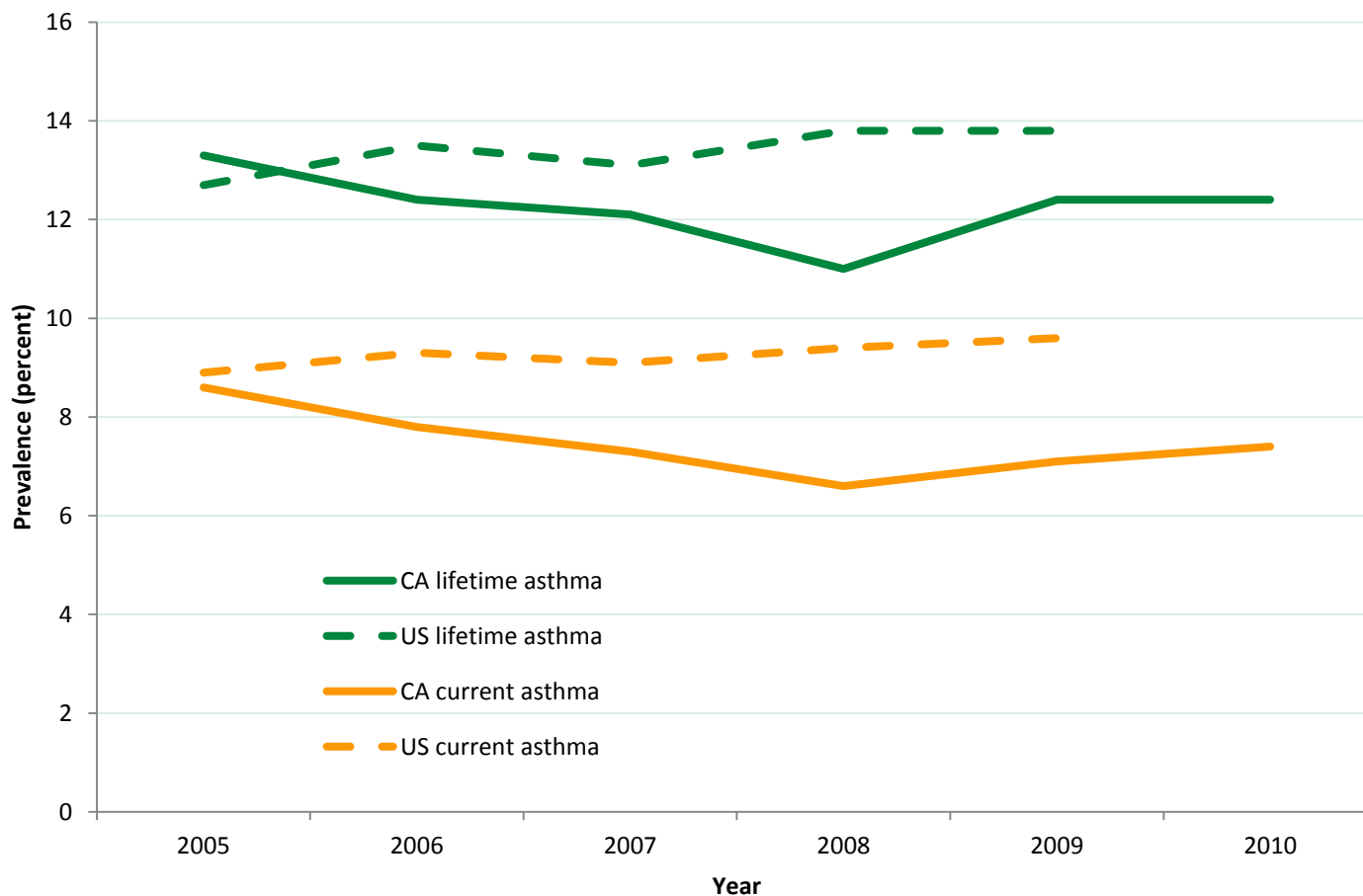
Estimated Annual Incidence Rate of Asthma (per 1,000 People), by Age, California 2006-2009

Age	Rate	(95% CI)	Estimated Number of New Cases Per Year
Adults (18+ years)	4.3	(2.8-5.9)	93,150
Children (0-17 years)	10.7	(5.4-16.0)	96,550

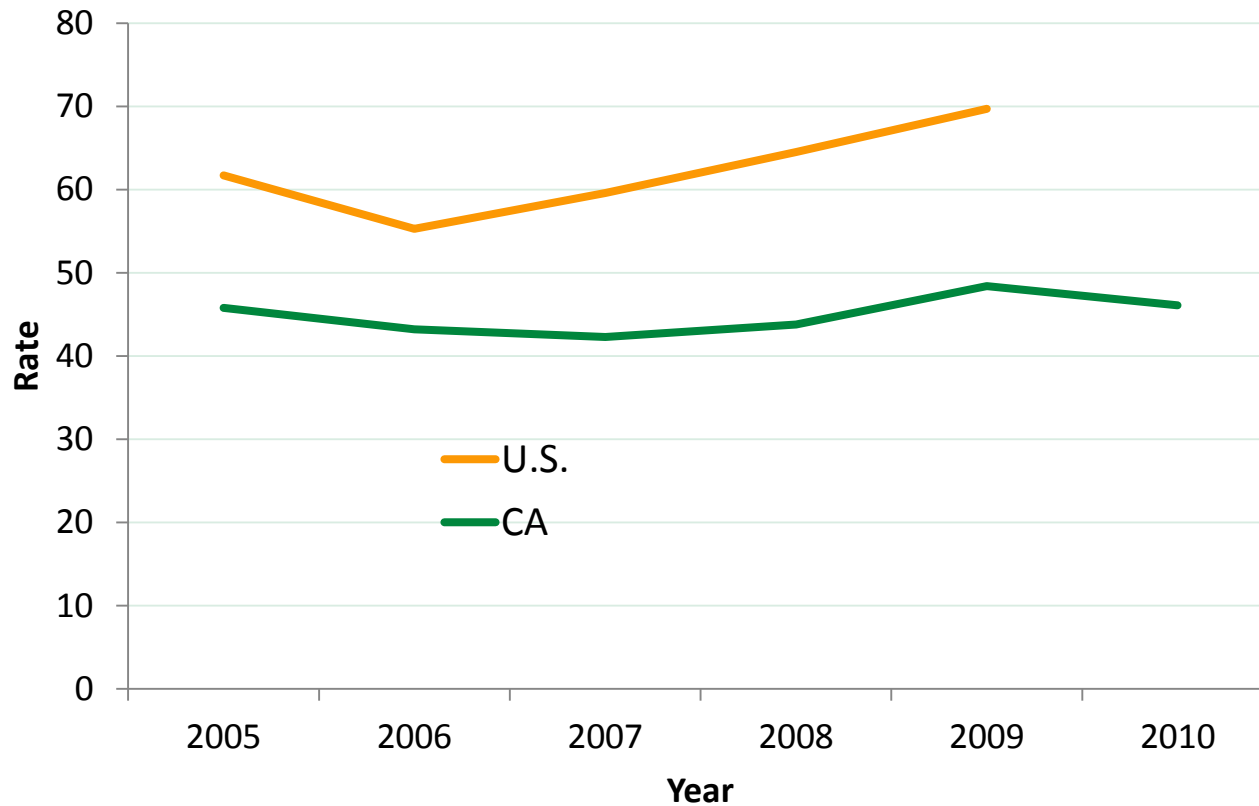
Lifetime and Current Asthma Prevalence Among Adults, California and the U.S. 1995-2010



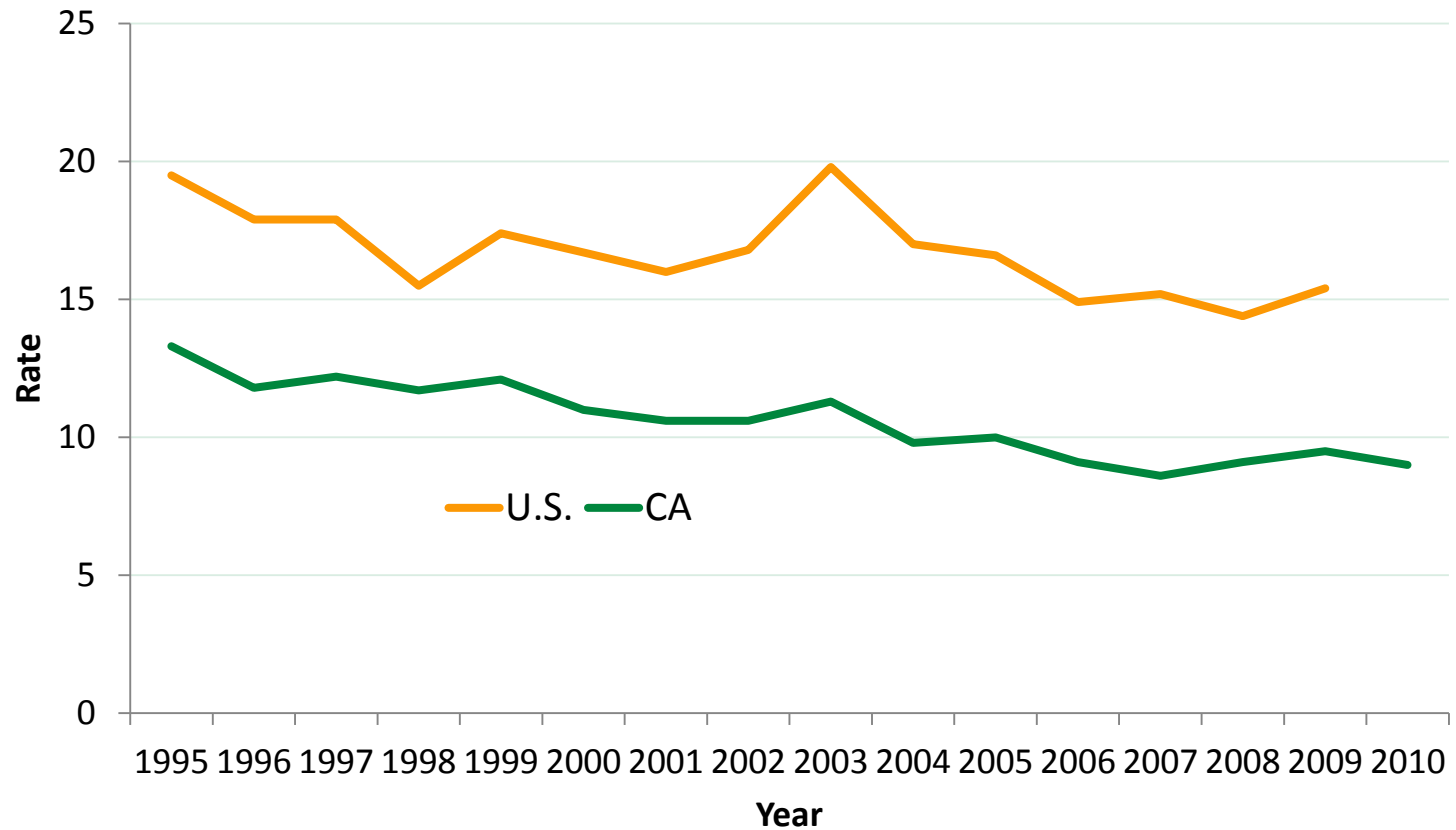
Lifetime and Current Asthma Prevalence Among Children, California and the U.S. 2005-2010



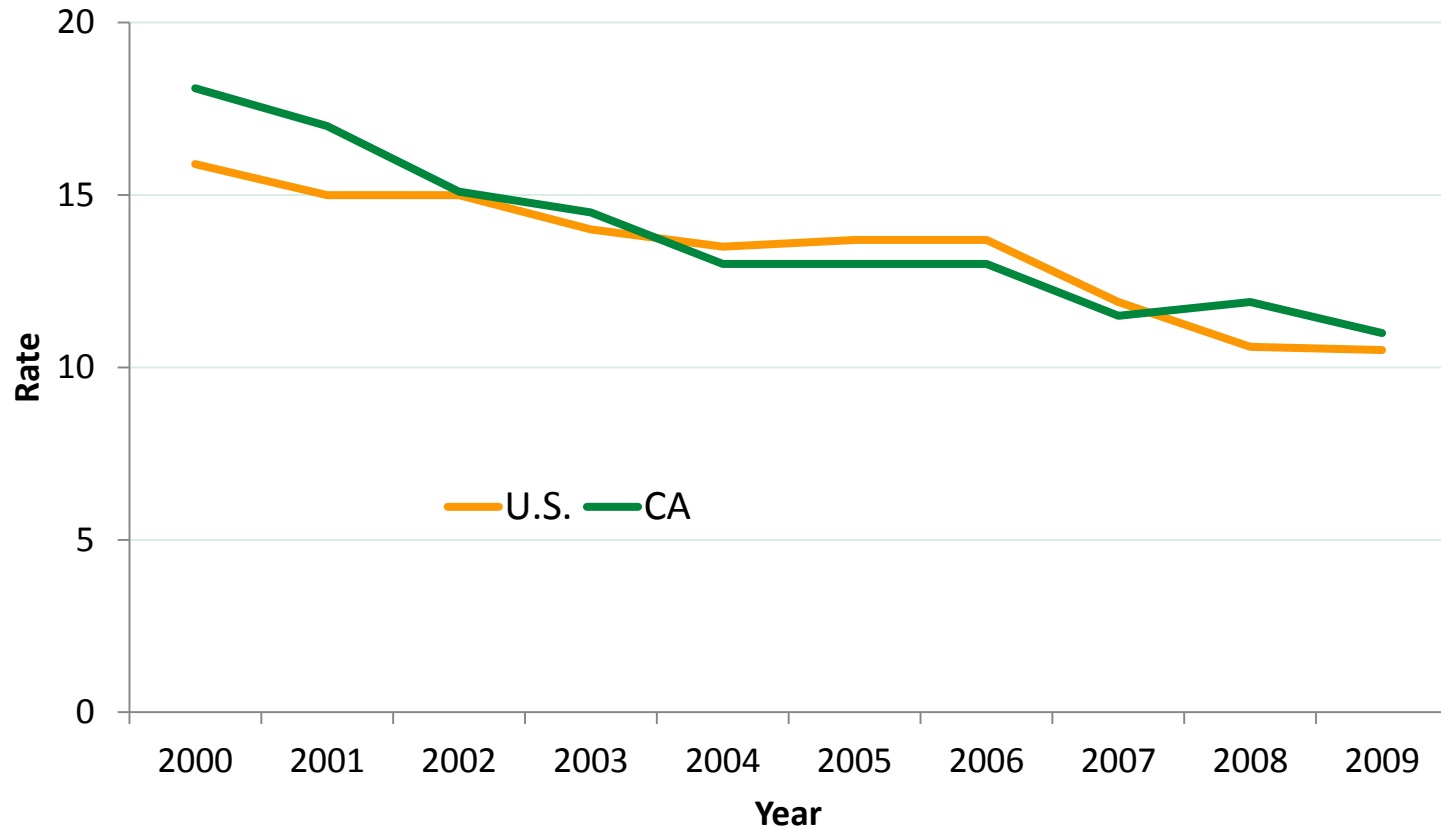
Age-Adjusted Asthma ED Visits per 10,000 Residents, California and the U.S., 2005-2010



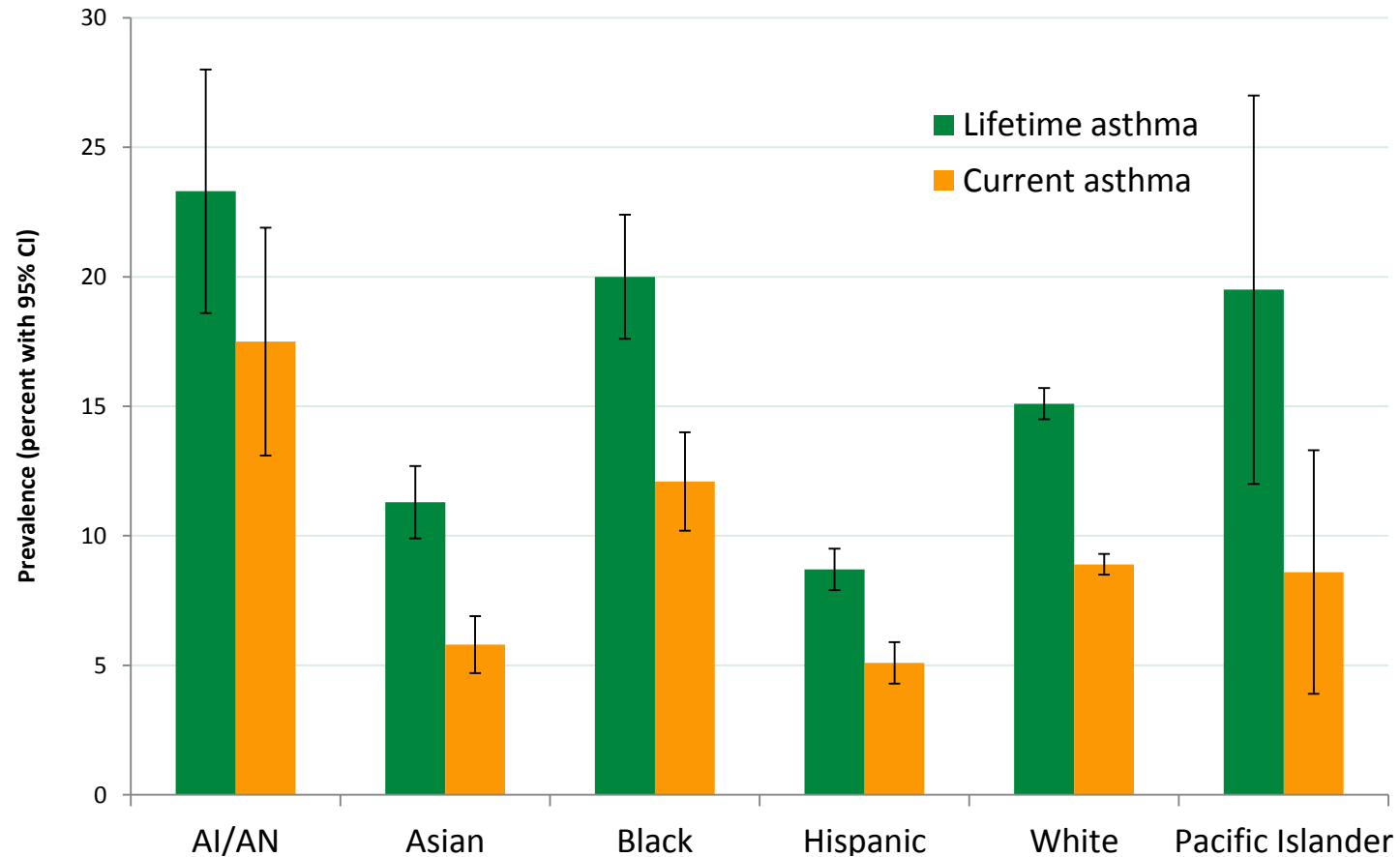
Age-Adjusted Asthma Hospitalizations per 10,000 Residents, California and the U.S., 1995-2010



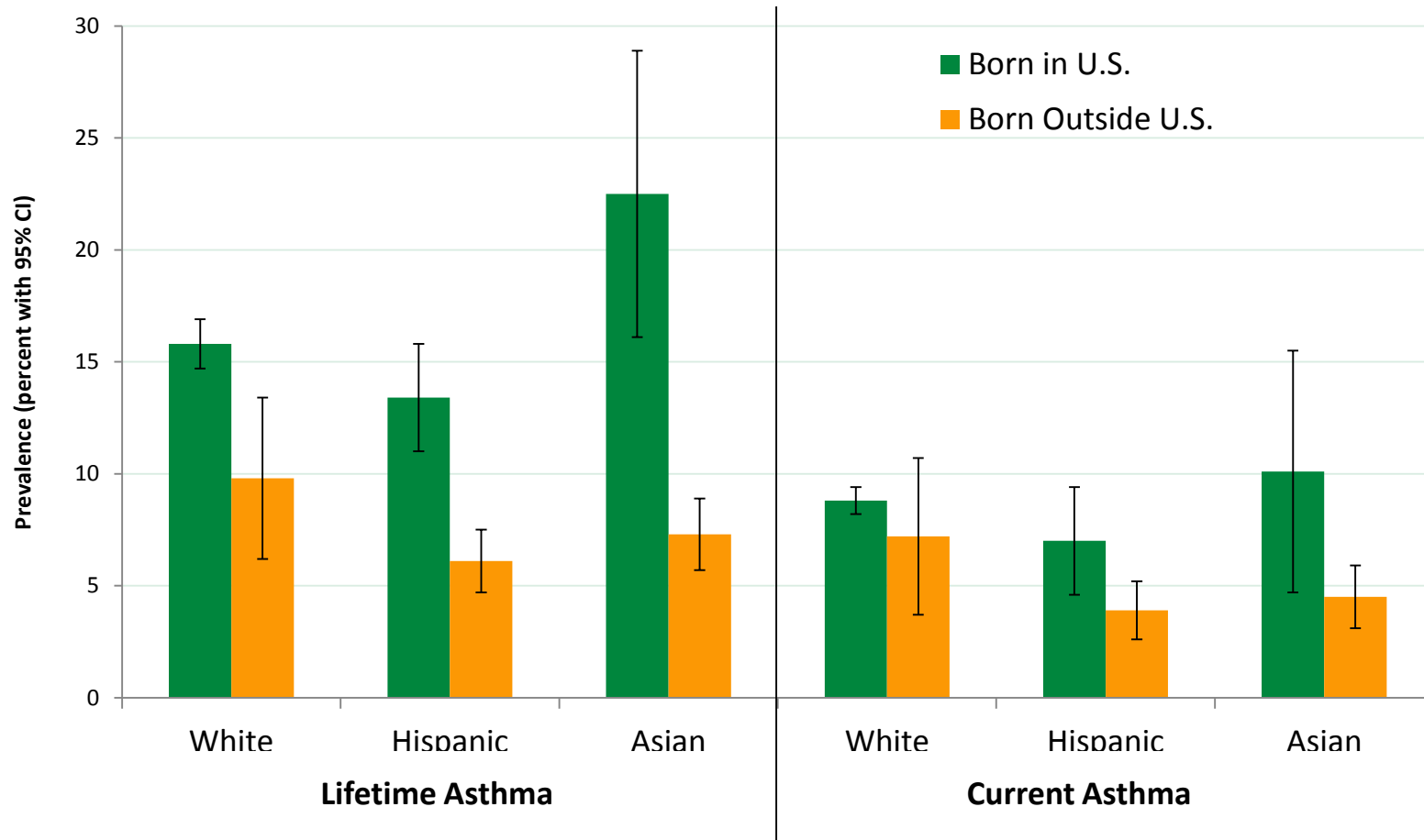
Age-Adjusted Asthma Deaths per 1,000,000 Residents, California and the U.S., 2000-2009



Lifetime and Current Asthma Prevalence Among Adults, by Race/Ethnicity, California 2007 and 2009 Combined



Lifetime and Current Asthma Prevalence among Adults, by Race/Ethnicity and Country of Birth, California 2009



Why We Need to Be Invested in this Work

Dr. Robert Gilchick, Director
Child and Adolescent Health Program and Policy
Maternal Child and Adolescent Health Programs
Los Angeles County Department of Health





Asthma in Los Angeles County: Local Perspective and Response

Robert Gilchick, MD, MPH

Director, Child and Adolescent Health Program and Policy
Maternal, Child and Adolescent Health Programs
Los Angeles County Department of Public Health

California Forum on Sustainable
In-Home Asthma Management
September 10, 2015



Impact of Asthma in LA County

- In Los Angeles County, approximately 1,221,000 people have been diagnosed with asthma¹
- About 214,000 (9%) children ages 0-17 have asthma²
- In 2012, almost 21,000 children went to the emergency room and 3,174 were hospitalized³
- This translates to nearly \$61m in hospitalization costs with an expected 70% of those costs coming from Medi-Cal or Medicare¹

Indirect costs:

Children with asthma have more missed school days. Parents with children with asthma miss more work.

1. California Health Interview Survey (CHIS) 2011-2012

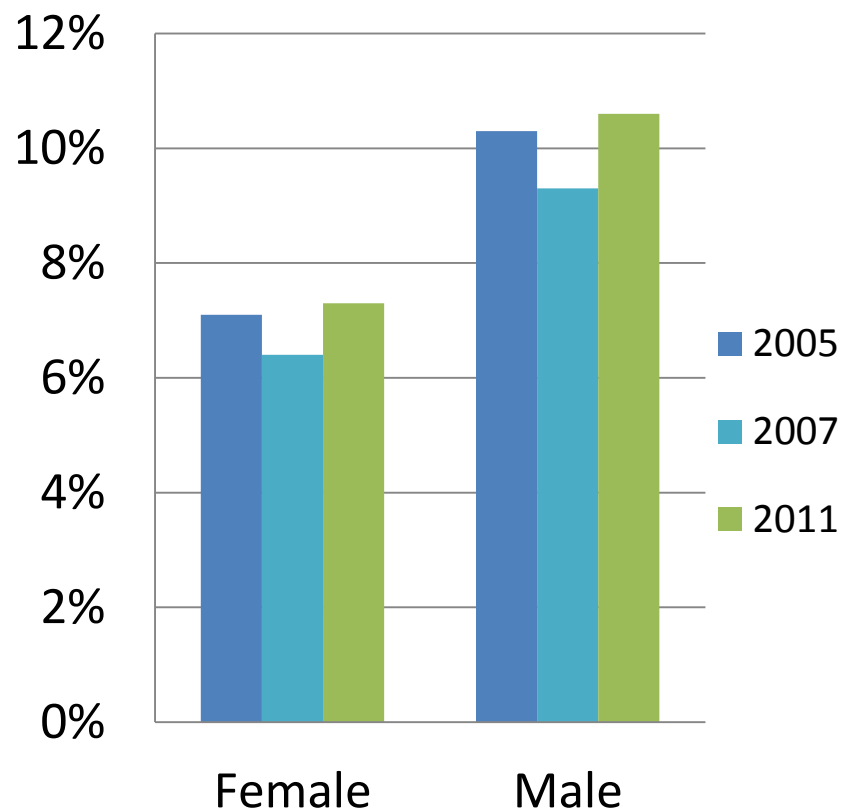
2. Los Angeles Health Survey 2011

3. Office of Statewide Health Planning and Development (OSHPD), 2012

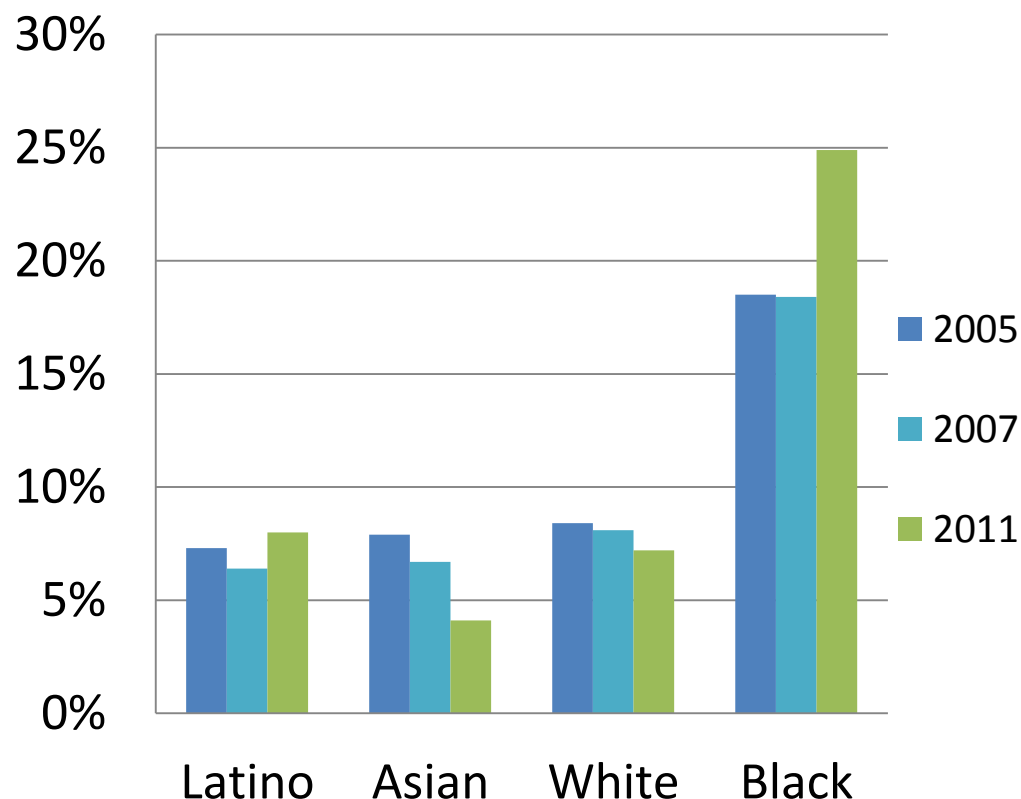


Prevalence of Childhood Asthma* in L.A. County

by Gender, 2005-2011



by Race/Ethnicity,
2005-2011



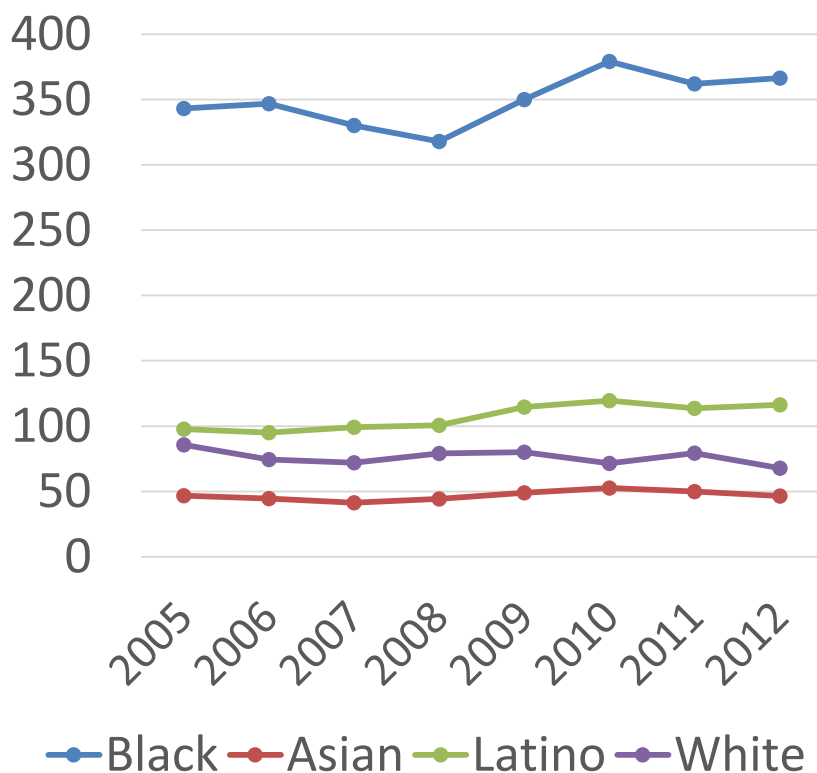
Source: LA County Health Survey

*Percent of Children (0-17 years old) With Current Prevalence of Asthma (Ever Diagnosed with Asthma AND Either Currently Still Has Asthma and/or Had an Asthma Attack in the past 12 months)

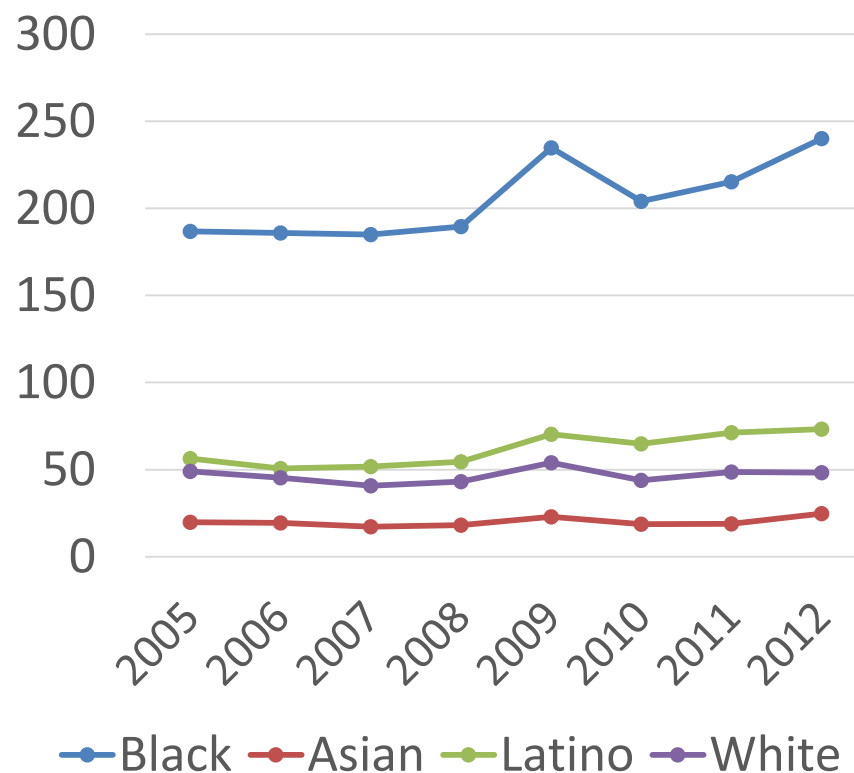
Asthma Emergency Department Visits, L.A. County

(Age Adjusted Rates per 10,000 Population)

0-4 years



5-17 years

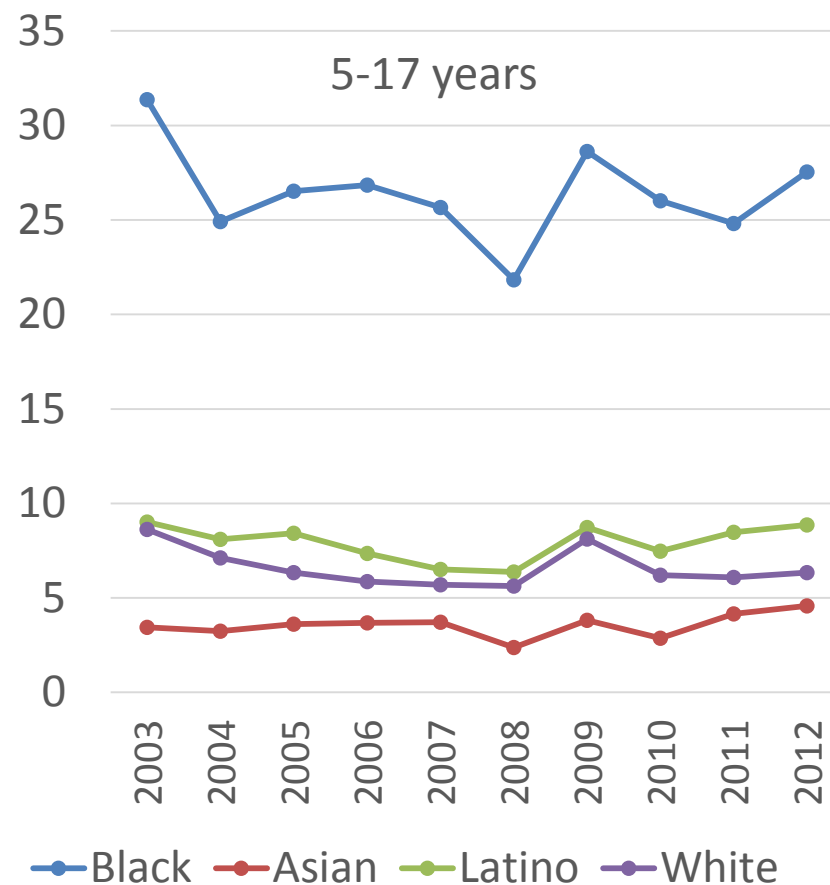
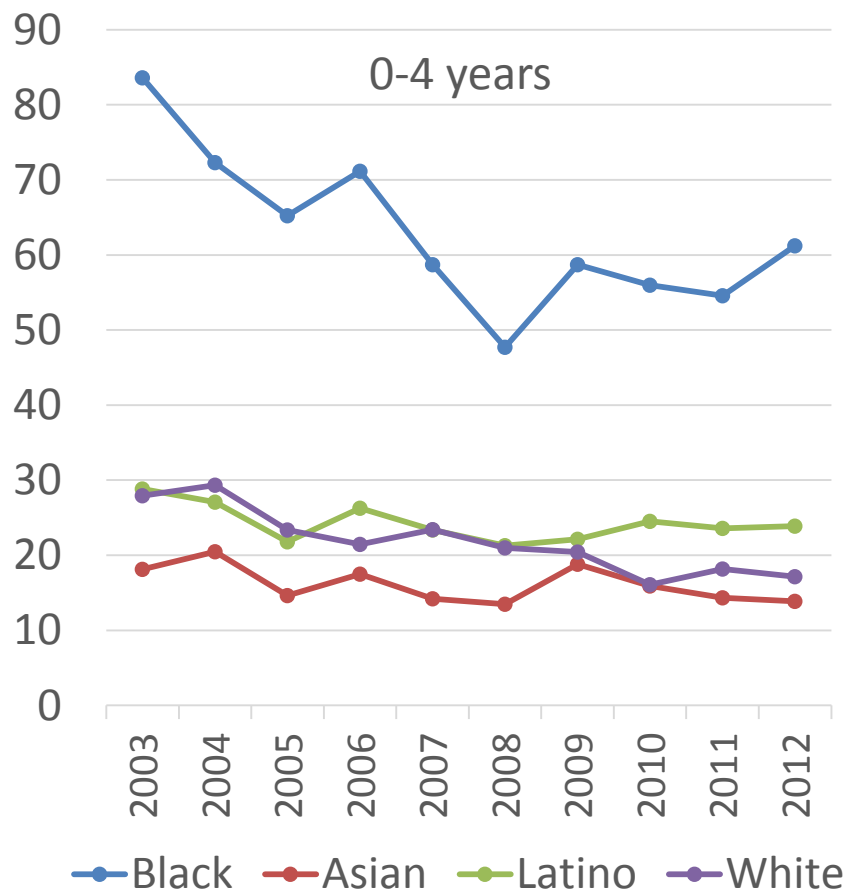


Data Source: Office of Statewide Health Planning and Development (OSHPD) ED Databases.

*Please note that graphs have different scales for the axes.

Asthma Hospitalizations, L. A. County

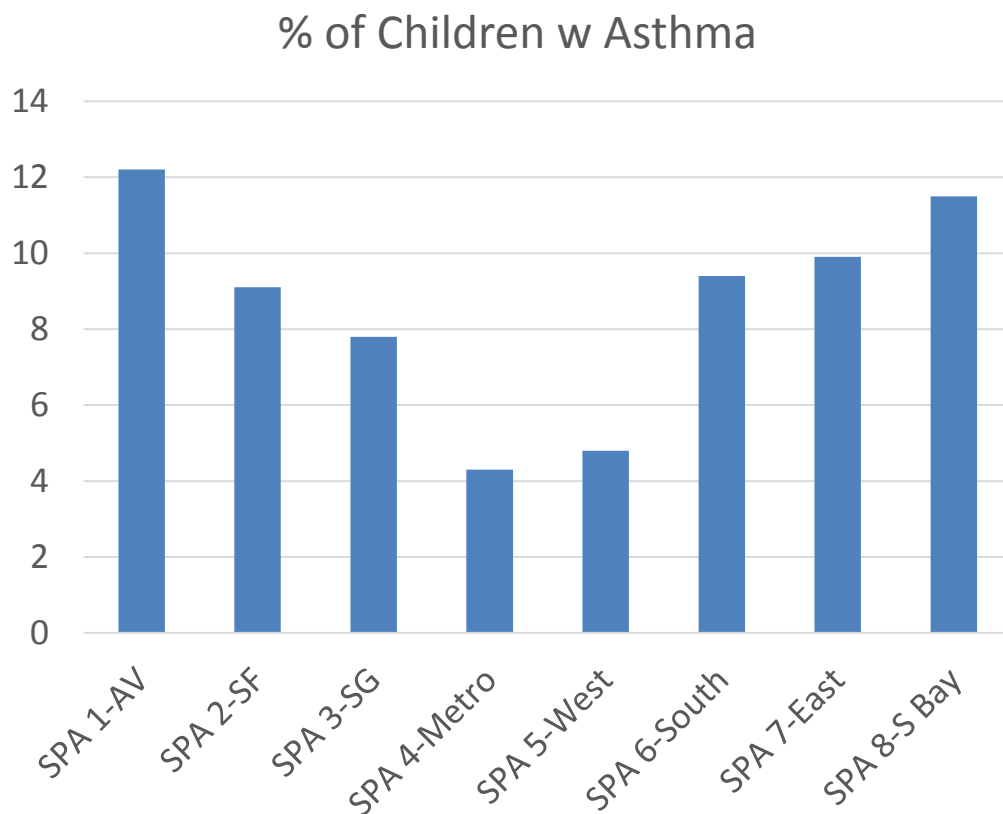
(Age-Adjusted Rates per 10,000 Population)



Data Source: Office of Statewide Health Planning and Development (OSHPD) Patient Discharge Databases

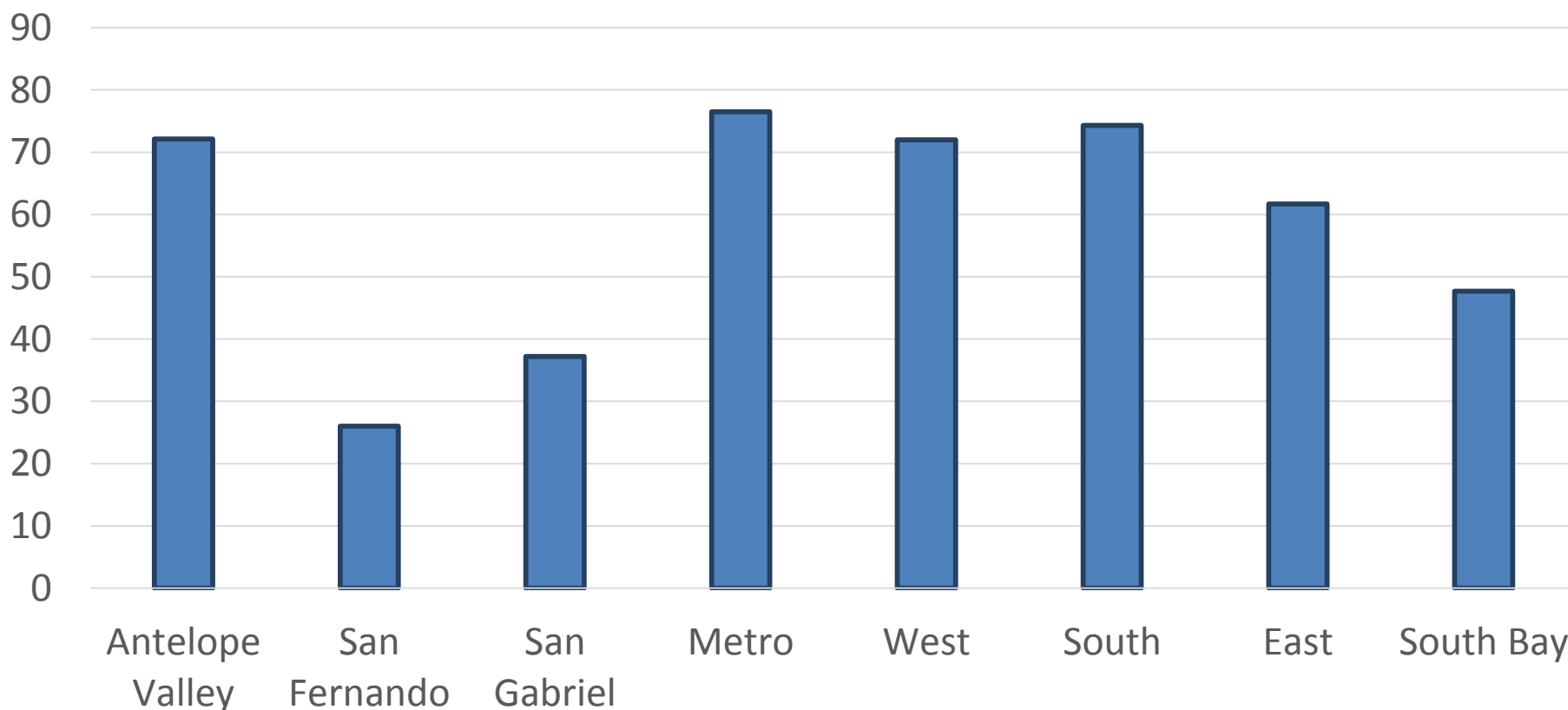
*Please note that graphs have different scales for the axes.

Childhood Asthma in Los Angeles County by SPA

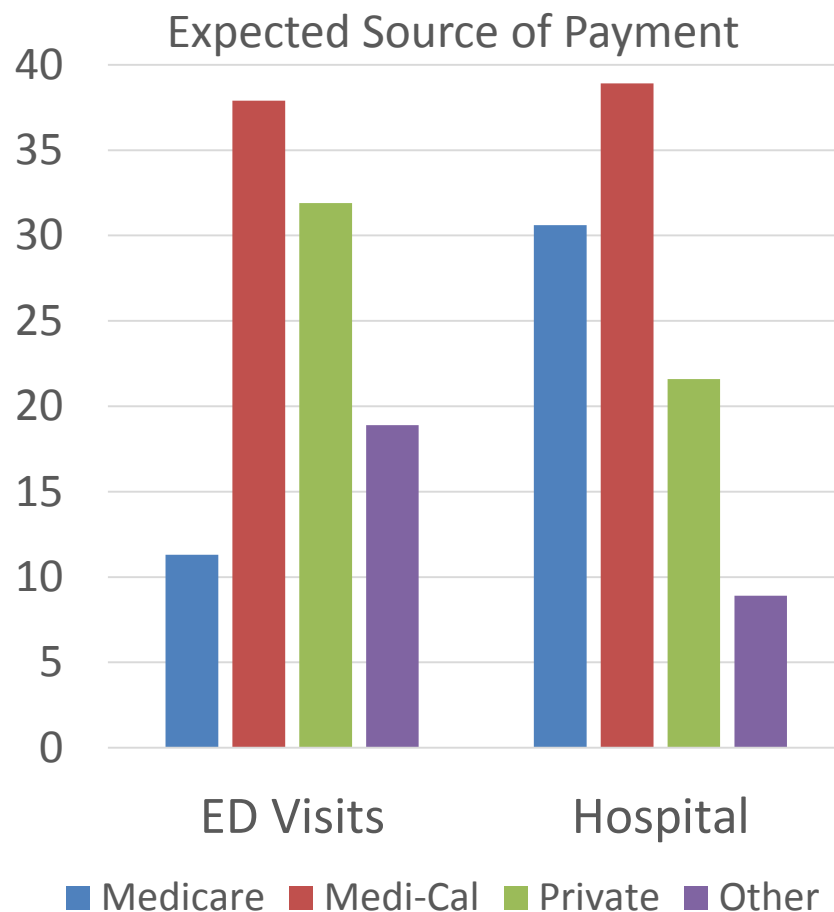
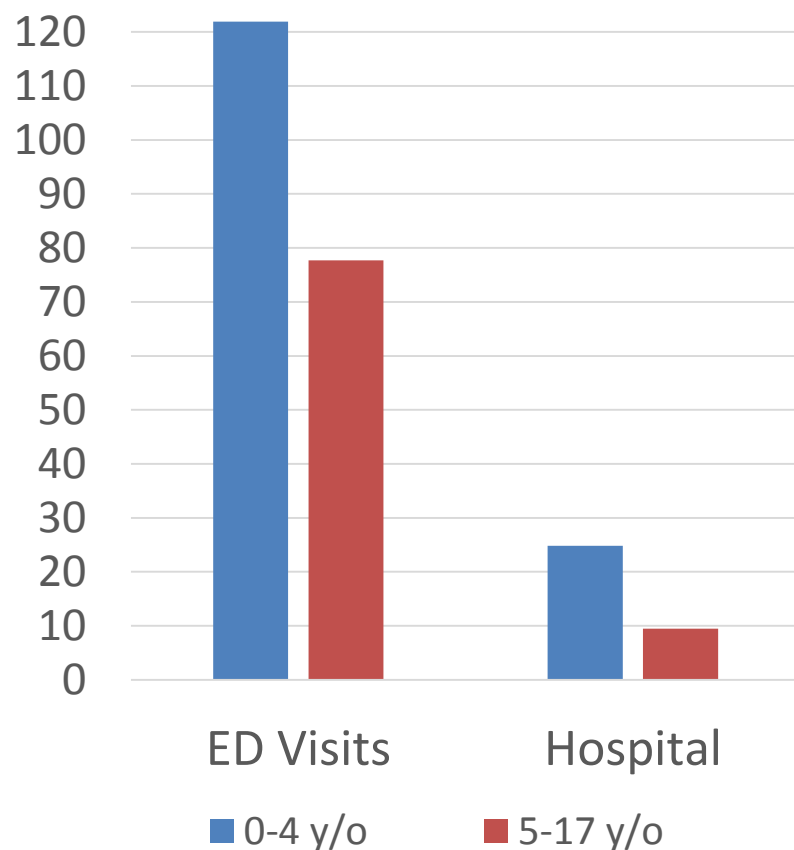


Missed School Days by Service Planning Area (SPA)

Percent of Children with Asthma Who Missed School or Daycare
Due to Asthma in Los Angeles County

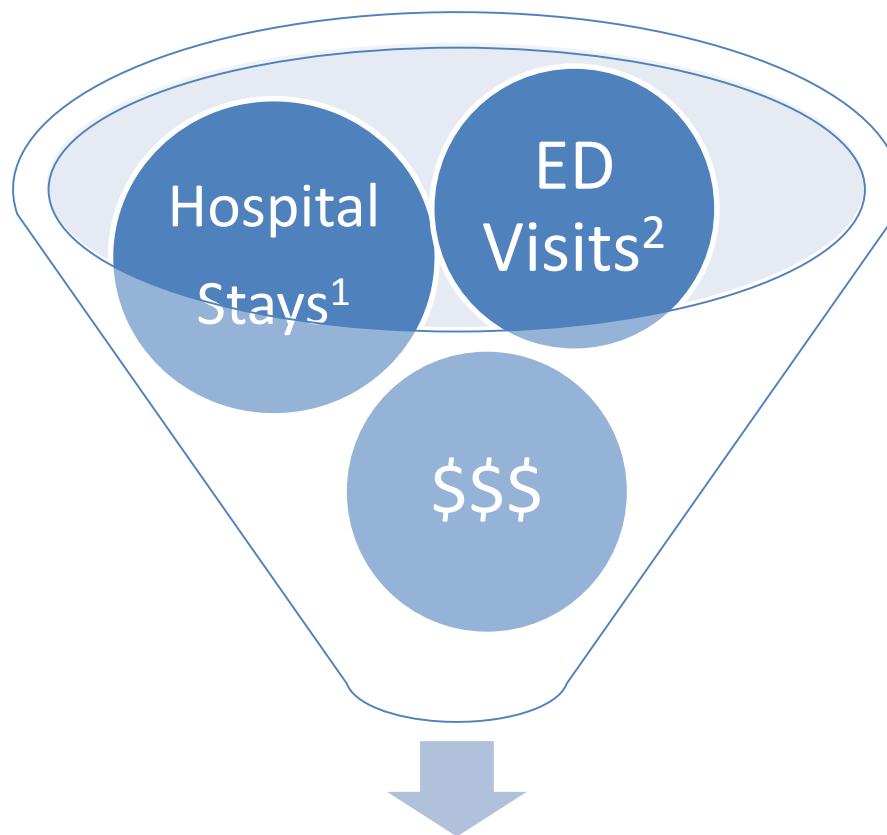


Number of ED Visits and Hospitalizations Due to Asthma with Expected Source of Payment (per 10,000 residents)



Average cost of pediatric asthma hospitalization is **\$19,172**

Cost for Pediatric Asthma ED Visits and Hospitalizations



Over \$92 Million in Los Angeles County

1. Office of Statewide Health Planning and Development (OSHPD), 2012

2. Wang, T., Srebotnjak. (2014). Emergency Department Charges for Asthma-Related Outpatient Visits by Insurance Status.
Journal of Health Care for the Poor and Underserved

Complexities Exist in Causes of Asthma Exacerbations

- Poverty and substandard housing
- Persistently high levels of indoor and outdoor pollution
- Limited reach of programs that seek to manage symptoms or prevent indoor triggers
- Inadequate insurance coverage
- Limited number of health care providers with expertise in national guidelines for the care of asthma
- Improperly administered medications, or lack of medication

Environmental Factors Impacting Quality Housing

MOLD

6.9%
(220,000) LA
County
households
experience
mold concerns

Second Hand Smoke

16.7%
(199,000) of
households
with children
were exposed
to second
hand smoke

PESTS

11.5%
(368,000) of
households
reported
having pests
like
cockroaches
or mice

The Asthma Coalition of Los Angeles County is a collective, powerful voice for policy and systems change to prevent, minimize and manage the burden of asthma.



Increase access to and improve quality of health care

- Provider training
- Promote Asthma Action Plans

Improve asthma management in schools

- Policy and protocol training
- Ensure student AAPs on file

Improve indoor air quality

- Promote Integrated Pest Management
- Educate inspectors, tenants, landlords
- Educate families on indoor air triggers
- Connect CHWs with clinical staff

Improve outdoor air quality

- Educate and inform legislators
- Offer policy support and testimony

Indoor Air Quality Workgroup: Highlights Related to Indoor Environments



Educate Community Health Workers and Healthcare Staff on Healthy Homes and Asthma

- Conducted two Healthy Homes and Asthma workshops for Community Health Workers in 2014
- Conducted one Healthy Homes and Asthma training for nurses
- Integrated Healthy Homes information into all three health care staff trainings completed in 2014/2015

Media Events

- Press events highlighting health impacts of substandard housing during Asthma Awareness Month

Public Education

- Los Angeles County Asthma Brief: Childhood Asthma in LAC
- Indoor Air Trigger Infographic
- Conference and health resources fairs
- Develop Speaker's Bureau Asthma 101 curriculum for a Train-the-Trainer event in November

Help Patients Reduce Indoor Triggers



10 WAYS TO PREVENT ASTHMA TRIGGERS AT HOME



1. KEEP AREA DRY

Use fans and open windows to reduce moisture. Lack of ventilation creates mold and mildew!



2. AVOID STRONG ODORS

Do not use scented candles, air fresheners, or cleaning products with a strong smell.



3. ELIMINATE PESTS

Patch any holes and cracks, and fix leaks.



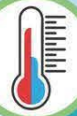
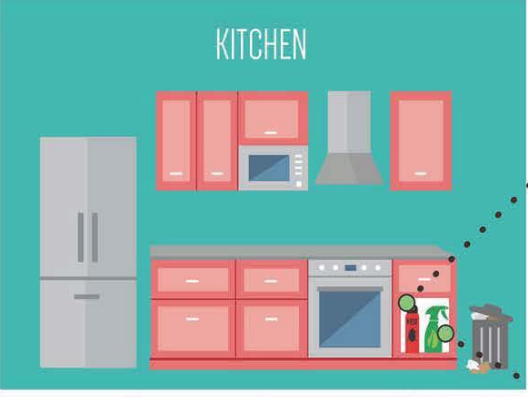
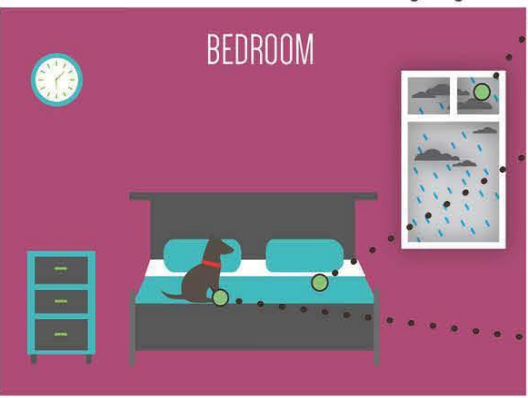
4. NO SMOKING

If you need to smoke, smoke outside and away from the home.



5. VACUUM OFTEN

Do not sweep carpet. If possible, replace carpet with hard flooring



6. BEWARE OF SEASONAL TEMPERATURE CHANGES

Dress appropriately and modify activities, especially when hot.



7. REDUCE DUST

Wash bedding and curtains in hot water often.



8. KEEP PETS OUT OF THE HOME

At least make sure to keep them out of any sleeping areas.



9. AVOID USING CHEMICAL PEST REMOVAL

Use least-toxic chemicals (like boric acid or gel baits) or seek professionals that use least-toxic pest removal methods.



10. USE SAFE CLEANING SUPPLIES

No bleach. Instead, use hydrogen peroxide, baking soda, and other safe alternatives.



Recommendations:

- Increase number of primary care providers referring to home visitation programs
- Reduce number of people living in substandard housing
- Increase in-home environmental assessments for people living with asthma
- Improve community interventions to advance home environments and patient adherence
- Reduce emergency room visits and reduce asthma exacerbations utilizing a comprehensive team approach to Whole-Person Care

Contact information:

Robert Gilchick, MD, MPH
Director, Child & Adolescent Health Program and Policy
Maternal, Child, & Adolescent Health Programs
(213) 639-6402
rgilchick@ph.lacounty.gov



Why We Need to Be Invested in this Work

Jim Mangia, President and CEO
St. John's Well Child and Family Centers



Why We Need to Be Invested in this Work

Questions?

