Welcome!

Office for State, Tribal, Local and Territorial Support

presents…

CDC *Vital Signs* Asthma in the United States

May 10, 2011
2:00pm – 3:00pm EST

Agenda

2:00 pm	**Welcome & Introductions** Dr. Judy Monroe, Deputy Director CDC , OSTLTS Director, CDC
2:02 pm	**Speaker Introductions** Lorine Spencer, RN, BSN, MBA, PhD, Facilitator Knowledge Management Branch, OSTLTS, CDC
2:04 pm	***Vital Signs* Overview** Hatice Zahran, MD, MPH Epidemiologist, Division of Environmental Hazards and Health Effects, National Center for Environmental Health, CDC
2:10 pm	**Presentations** **Peggy Gaddy, RTT, MBA** Missouri Asthma Program Coordinator Missouri Asthma Prevention **Charlotte Collins, JD** Vice President of Policy and Programs Asthma and Allergy Foundation of America
2:30 pm	**Q&A and Discussion** Lorine Spencer, RN, BSN, MBA, PhD, Facilitator
2:55 pm	**Wrap – up**
3:00 pm	**End of call**

Screen for life
National Colorectal Cancer Action Campaign

CDC Vitalsigns™ Teleconference

to support STLT efforts and build momentum around the monthly release of CDC *Vital Signs*

Vital Signs: Asthma

Hatice S. Zahran, MD, MPH
hbz4@cdc.gov

Air Pollution and Respiratory Health Branch,
National Center for Environmental Health, CDC

CDC Vital Signs Teleconference
May 10, 2011

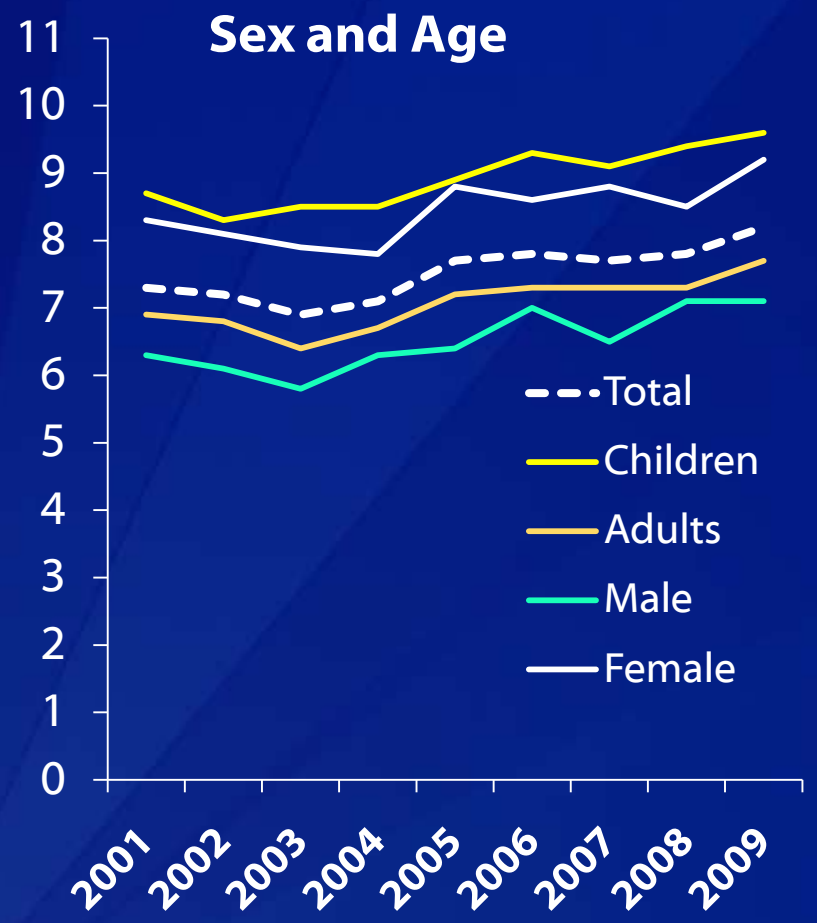
The Burden of Asthma in the United States

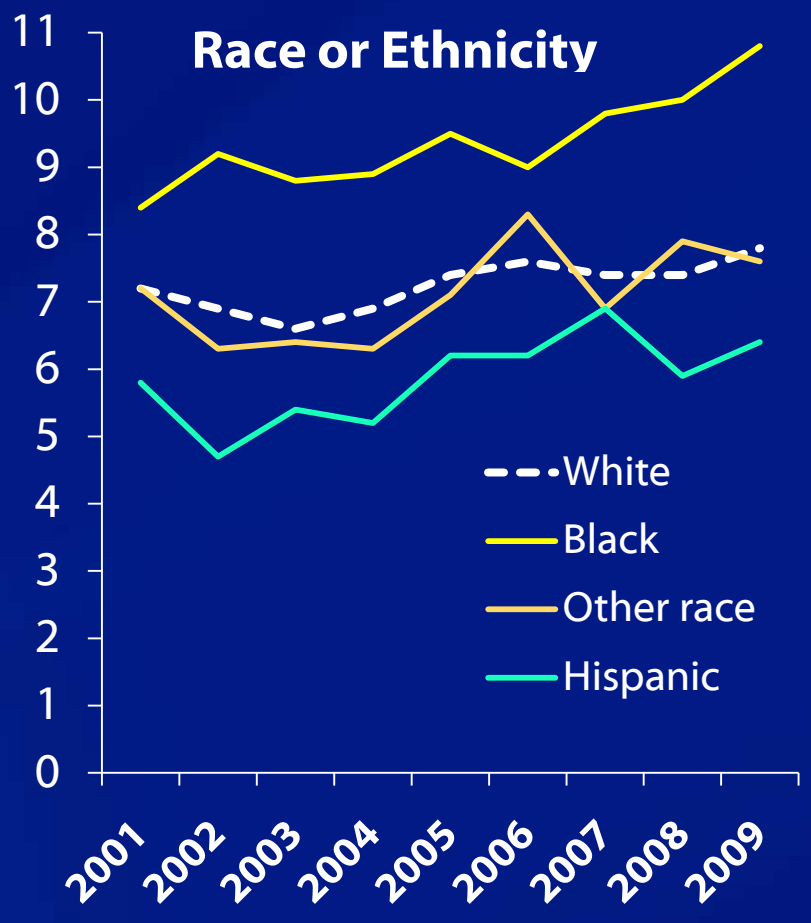
- **24.6 million people have asthma**
  - 17.5 million adults and 7.1 million children
- **3,447 deaths in 2007**
- **$56 billion in total annual cost of asthma in 2007**
  - Medical expenses
  - Productivity losses (missed school and work days)
  - Premature death
- **Medical expenses associated with asthma amounted to $3,259 per person per year during 2002–2007**

Prevalence of Asthma

- **Prevalence of current asthma was higher among:**
  - Children than adults
  - Boys than girls
  - Women than men
  - African Americans than whites
  - Income below the federal poverty level (FPL)
- **During 2001–2009, a rising trend in asthma prevalence was observed across all demographic subgroups; however, a greater rise in asthma prevalence was among non-Hispanic**
  - African-American children
  - African-American men
  - White women

Asthma Prevalence, United States, 2001-2009





Disease Characteristics

- **Health outcomes**
  - Asthma attack (53%)
  - Missed ≥1 days of school or work (20%)
  - Emergency Department/Urgent care visits (14%)
  - Fair-poor health (22% versus 9% for those without asthma)
- **Health care access and utilization (89%)**
  - More uninsured persons with asthma than insured could not afford to buy prescription medications (40.3% versus 11.5%)
  - Fewer uninsured persons reported seeing or talking with a primary-care physician (58.8% versus 85.6%) or specialist (19.5% versus 36.9%)
- **Asthma self-management education**
  - Taught to recognize early signs and symptoms of an asthma attack (60%)
  - Taught the appropriate response to an asthma attack (68%)
  - Fewer reported having a written action plan (34%) and taking a class to learn how to manage their asthma (12%)

Conclusion

- **Asthma is on the rise and the reasons for it are not fully understood**
- **Self-management of the disease is key for better health outcomes**
- **Health-care providers and public health officials at the local, state, and national levels should continue to**
  - Develop programs that empower persons with asthma to better control and manage their asthma
  - Address gaps in access to care
  - Support preventive measures that can improve asthma health outcomes

Thank you.

Hatice Zahran, MD, MPH
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For more information please contact Centers for Disease Control and Prevention

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Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Putting Excellent Asthma Care Within Reach

Missouri Asthma Prevention and Control Program
Peggy Gaddy, RRT, MBA
peggy.gaddy@health.mo.gov
(573) 522-2876

Surveillance in Missouri

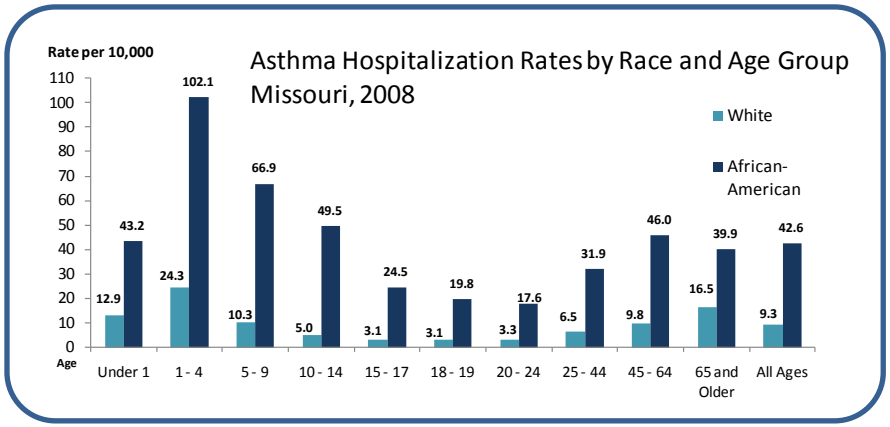
guided by data

Prevalence

- 9.5% MO adults current asthma (2009)
  - up from 7.2% (2000)
- 10.1% MO children current asthma

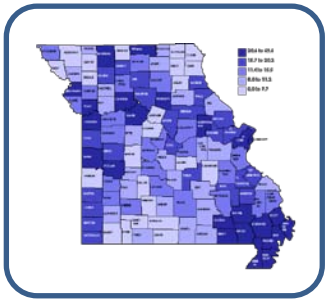
Disease Severity (Health Service Utilization)

- Highest hospitalization rates: ages 1-4
- Elevated rates until age 14, lower between age 15-44
- Significantly for African-Americans



Rural vs. Urban

- ER visits for children: 41%(rural) v. 59%(urban)
- High hospitalization rates in rural counties



Hosp. Rates for Asthma Children (age 0-14), 2006-2008

Medicaid (aka, MOHealthNet)

- Asthma prevalence FFS Medicaid: 14.1% [7.9% persistent] (2007)
- $1,589 paid per asthmatic (2007)
- 35% receive appropriate long-term medications (children 0-14)
- ↓7.4% ER visits for asthma
  … while total volume was up ↑23%
  (2000 to 2008)

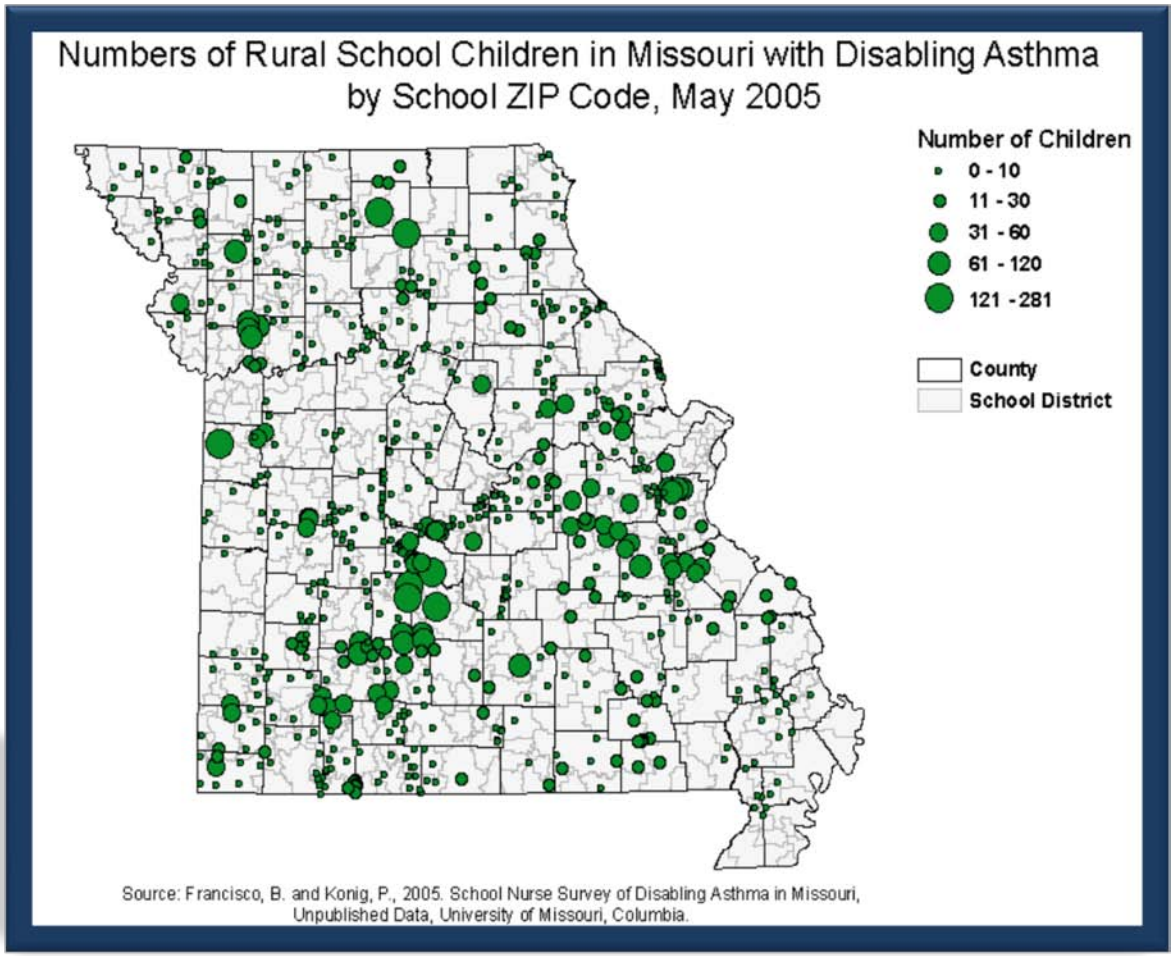
Missouri Department of Health and Senior Services. Behavioral Risk Factor Surveillance System. http://health.mo.gov/data/brfss/index.php

Surveillance in Missouri

guided by data

Informed by Diversified Data Sources and Analysis

- Disabling Asthma Study

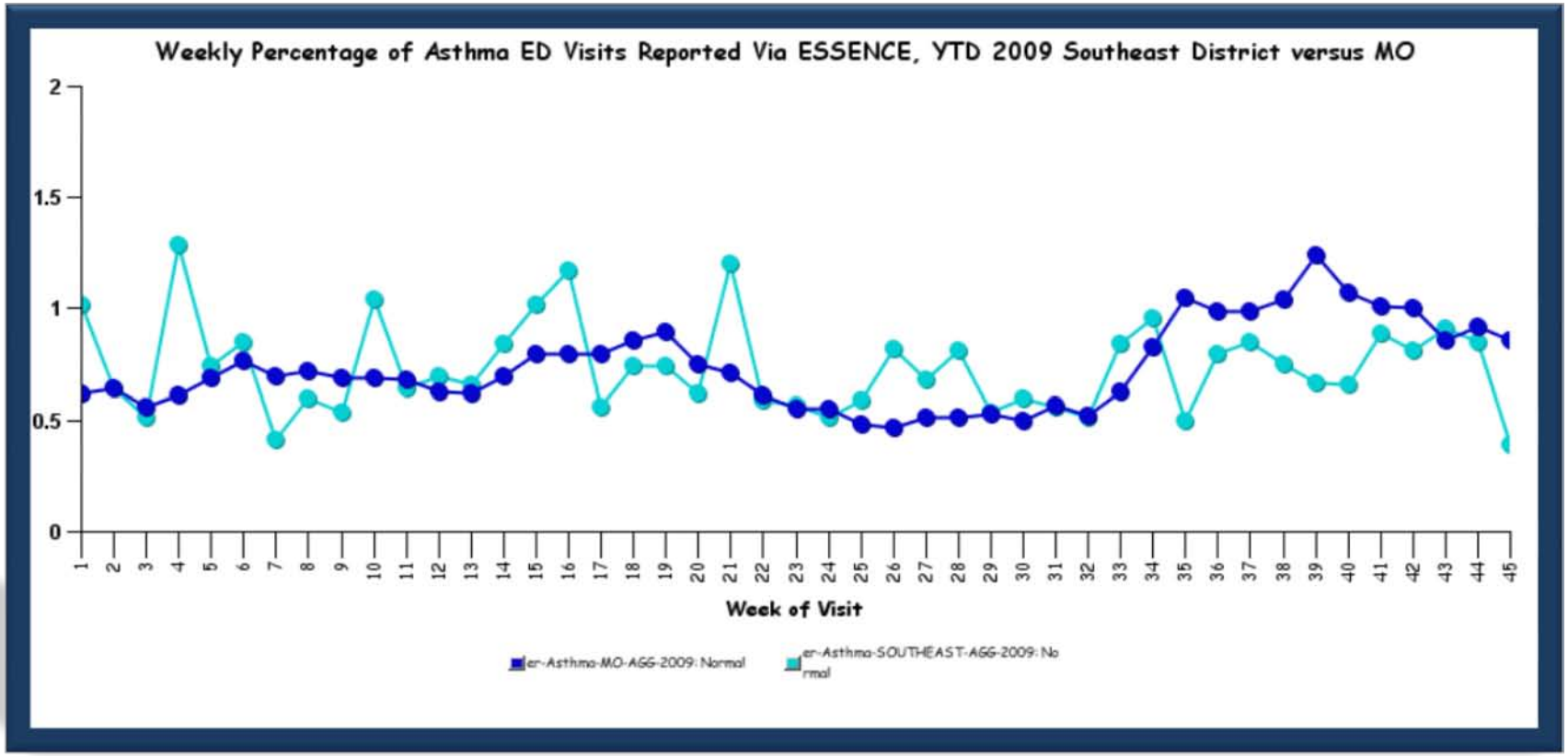


Surveillance in Missouri

guided by data

Informed by Diversified Data Sources and Analysis

- Disabling Asthma Study
- ESSENCE (Syndromic Surveillance System)



Surveillance in Missouri

guided by data

Informed by Diversified Data Sources and Analysis

- Disabling Asthma Study
- ESSENCE (Syndromic Surveillance System)
- Medicaid Surveillance Report (fee-for-service only)
- Midwest Health Initiative

Developing New Approaches for Understanding Disease Burden and Evaluating Program Effectiveness

- Strategic Evaluation Plan
- De-duplicated ER and Hospitalization Encounter Study
- Medicaid Claims + School (student achievement and attendance)
- Missouri Primary Care Association (EPR3-compliant EMR)

Partnerships

leveraged resources

MAPCP's Role: Link statewide and local partners

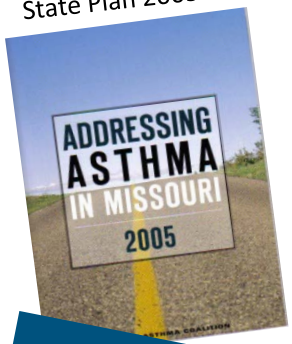
Our Little Secret : Everyone is welcome, but MAPCP strategically builds partnerships to reach target population

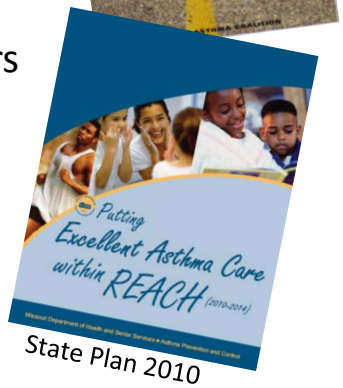
Our Purpose for Partnership: Leverage resources … to the max.

HOW DOES PARTNERSHIP IMPROVE ASTHMA CARE?

- *Interdisciplinary Sharing:* Expertise and resources
- *Coordination:* Activities are planned and implemented together
- *Innovation:* New ideas and collaborations are fostered between stakeholders
- *Priorities:* Partners set priorities for surveillance and interventions
- *Relevance:* Key asthma issues move to forefront of systems-based strategies and public health planning

State Plan 2005





State Plan 2010

Note:

CDC's $3.4 million investment in MAPCP (2001-2011) has helped produce a >$20 million investment from MAPCP partners in activities aligned with the State Plan *Putting Excellent Asthma Care Within Reach*.

Local + Statewide = Sustainable Interventions

systems thinking

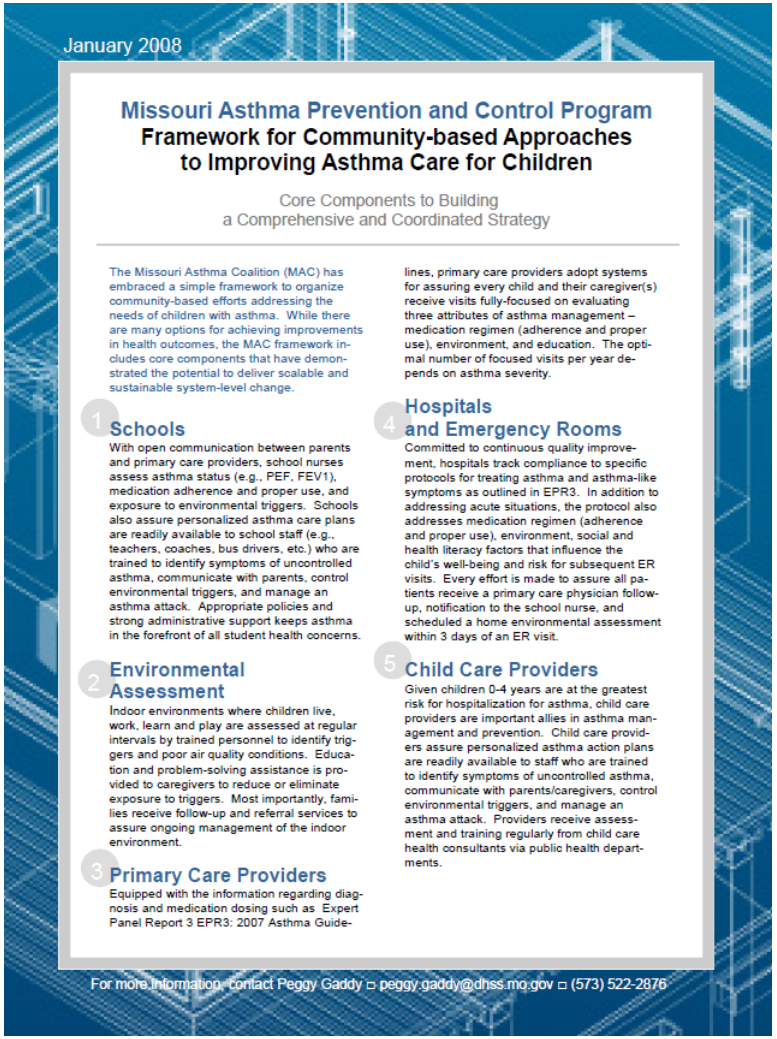
LOCAL STRATEGY EXAMPLE

Framework for Community-based Approaches to Improving Asthma Care for Children

- Simple, to-the-point, one-page summary
- Sets goals and interventions for integrating efforts in five areas: schools, home environment assessments, primary care providers, hospitals/emergency rooms, and child care

KEY CONCEPTS

1. Demonstrate success at local level
   - Kennett Public Schools (Dunklin County)
   - Springfield (Greene County)
2. Experience, testimonials and data drive expansion of successful ideas
3. Identify statewide policy change opportunities through community-based work (e.g., spacers)
4. Statewide workforce development produces system-level change (e.g., LPHA staff, school nurses)
5. Cultivate local leadership
   - Asthma School Nurse Award, Missouri Asthma Coalition



January 2008

Missouri Asthma Prevention and Control Program
Framework for Community-based Approaches to Improving Asthma Care for Children

Core Components to Building a Comprehensive and Coordinated Strategy

The Missouri Asthma Coalition (MAC) has embraced a simple framework to organize community-based efforts addressing the needs of children with asthma. While there are many options for achieving improvements in health outcomes, the MAC framework includes core components that have demonstrated the potential to deliver scalable and sustainable system-level change.

1 Schools
With open communication between parents and primary care providers, school nurses assess asthma status (e.g., PEF, FEV1), medication adherence and proper use, and exposure to environmental triggers. Schools also assure personalized asthma care plans are readily available to school staff (e.g., teachers, coaches, bus drivers, etc.) who are trained to identify symptoms of uncontrolled asthma, communicate with parents, control environmental triggers, and manage an asthma attack. Appropriate policies and strong administrative support keeps asthma in the forefront of all student health concerns.

2 Environmental Assessment
Indoor environments where children live, work, learn and play are assessed at regular intervals by trained personnel to identify triggers and poor air quality conditions. Education and problem-solving assistance is provided to caregivers to reduce or eliminate exposure to triggers. Most importantly, families receive follow-up and referral services to assure ongoing management of the indoor environment.

3 Primary Care Providers
Equipped with the information regarding diagnosis and medication dosing such as Expert Panel Report 3 EPR3: 2007 Asthma Guidelines, primary care providers adopt systems for assuring every child and their caregiver(s) receive visits fully-focused on evaluating three attributes of asthma management – medication regimen (adherence and proper use), environment, and education. The optimal number of focused visits per year depends on asthma severity.

4 Hospitals and Emergency Rooms
Committed to continuous quality improvement, hospitals track compliance to specific protocols for treating asthma and asthma-like symptoms as outlined in EPR3. In addition to addressing acute situations, the protocol also addresses medication regimen (adherence and proper use), environment, social and health literacy factors that influence the child's well-being and risk for subsequent ER visits. Every effort is made to assure all patients receive a primary care physician follow-up, notification to the school nurse, and scheduled a home environmental assessment within 3 days of an ER visit.

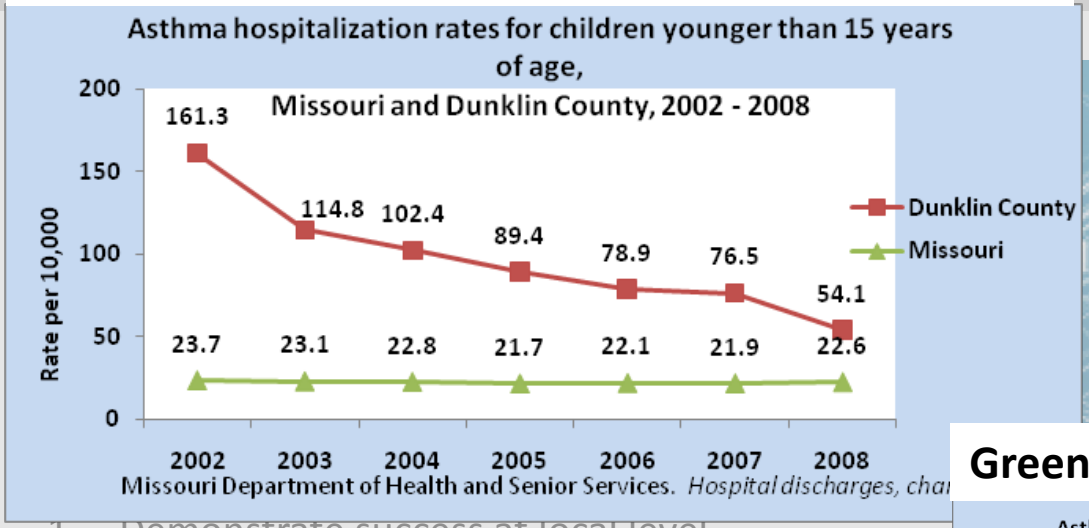
5 Child Care Providers
Given children 0-4 years are at the greatest risk for hospitalization for asthma, child care providers are important allies in asthma management and prevention. Child care providers assure personalized asthma action plans are readily available to staff who are trained to identify symptoms of uncontrolled asthma, communicate with parents/caregivers, control environmental triggers, and manage an asthma attack. Providers receive assessment and training regularly from child care health consultants via public health departments.

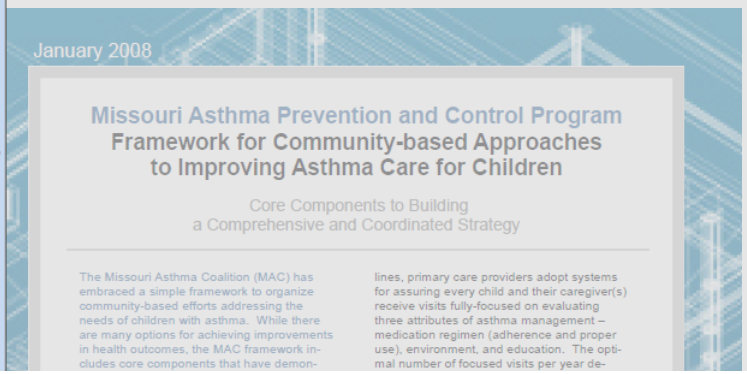
For more information, contact Peggy Gaddy ▫ peggy.gaddy@dhss.mo.gov ▫ (573) 522-2876

Local + Statewide = Sustainable Interventions

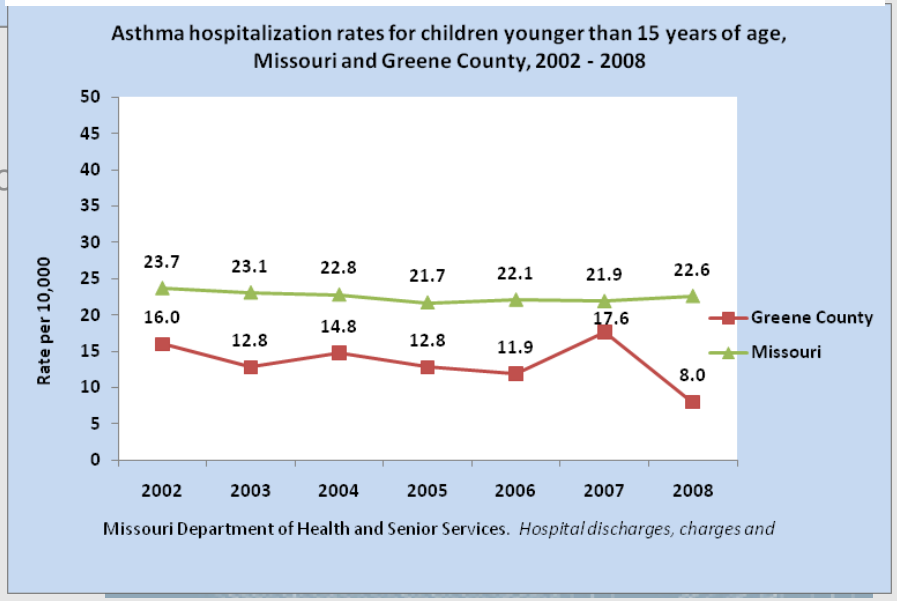
systems thinking

Dunklin Co. (Kennett) pop.= 31,039





Greene Co. (Springfield) pop.=269,630



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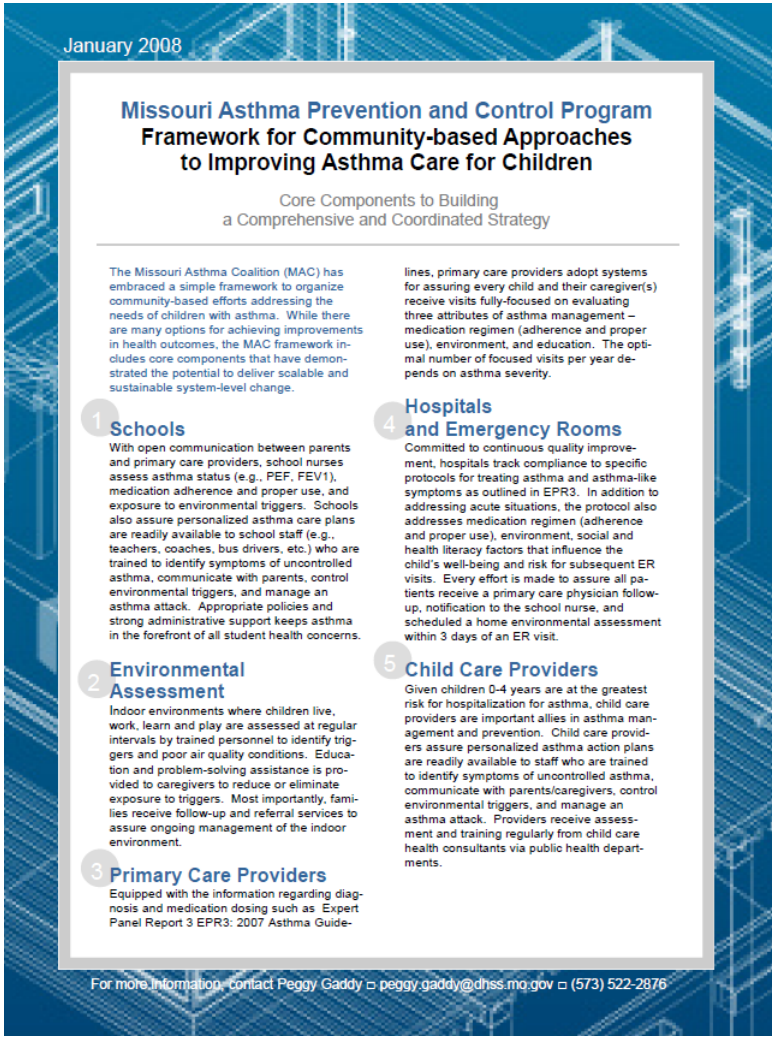

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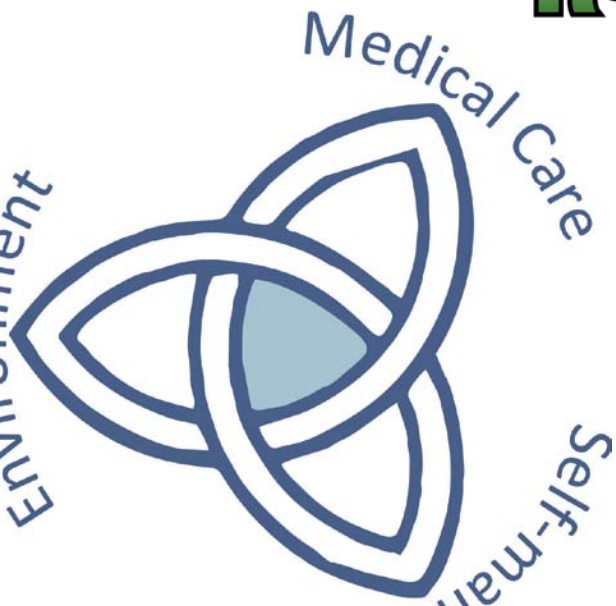
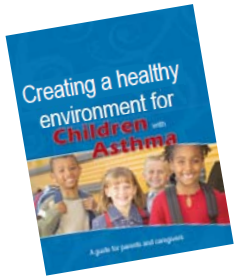
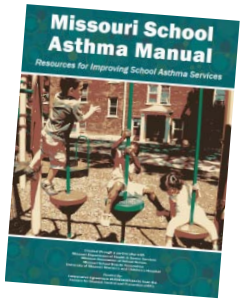
Successful Strategies
& Promising Interventions

just do it.

Tools for Schools







MAPCP interventions are designed to support sustainable asthma care improvements by focusing* on workforce development and community-based leadership.

* but not exclusively, of course

Behind the Strategy

philosophy matters

Behind the plans and interventions are people who share a common vision for asthma care and prevention in Missouri.

The MAPCP team believes that…

- *EPR3* is *the* best evidence available.
- *Evaluation* is a quality improvement strategy.
- *Health disparities* can be reduced.
- *Relationships matter* to develop and sustain successful interventions.
- *Data guides, and innovation drives* impactful work.
- *Return-on-investment* is measureable.

ENVIROCLINICAL

integrating environmental and clinical approaches to improve asthma care

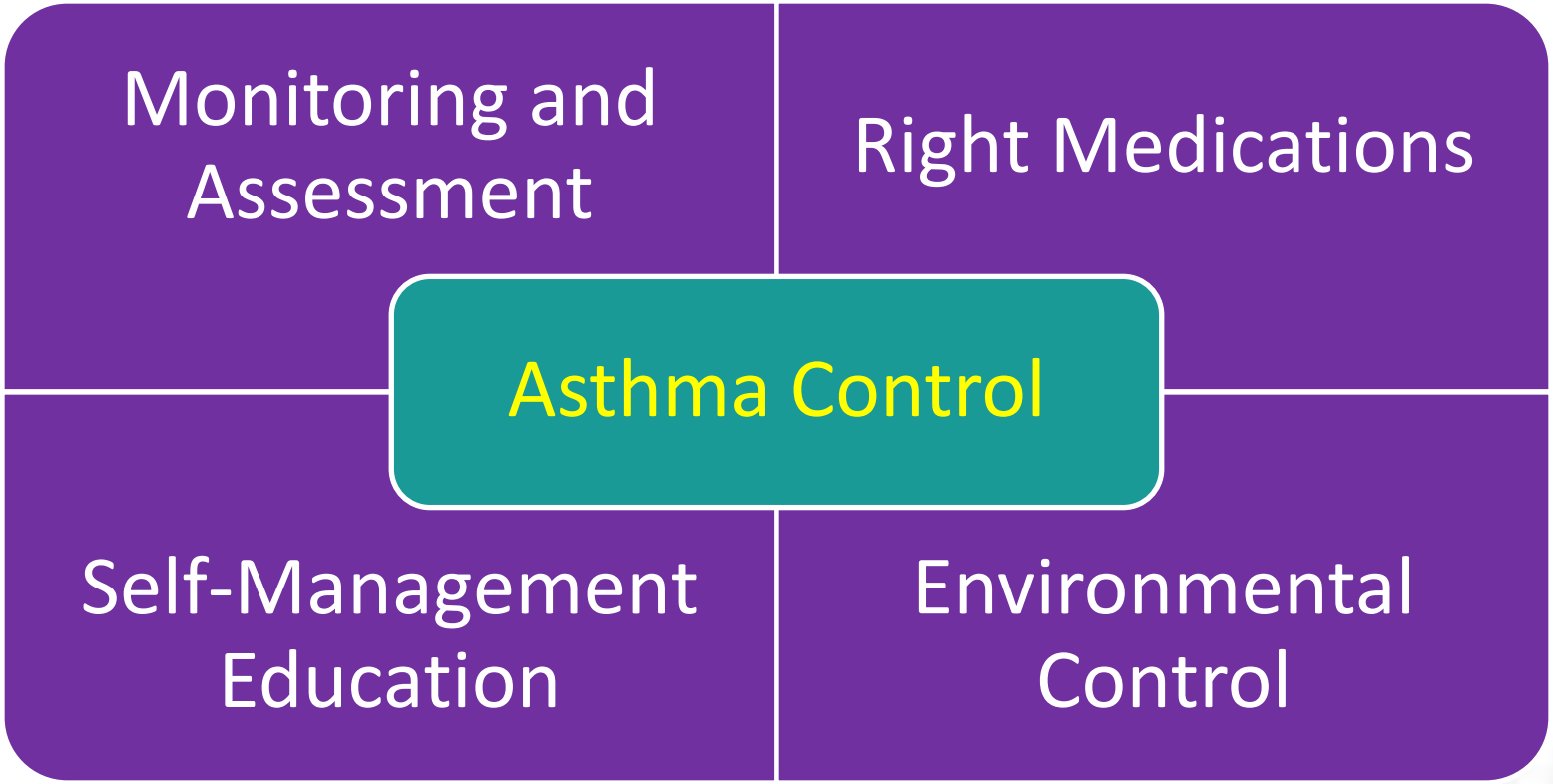
Asthma and Allergy Foundation of America

ASTHMA CONTROL INTERVENTIONS: *A WINNING PROPOSITION*

Charlotte W. Collins, JD

Vital Signs Town Hall Meeting
May 10, 2011

4 COMPONENTS OF ASTHMA CONTROL



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ASTHMA INTERVENTIONS IMPROVE HEALTH OUTCOMES AND REDUCE MEDICAL COSTS

- Proper asthma management has the potential to save at least 25% of total asthma costs—or close to $5 billion nationwide annually
- Asthma interventions can save up to $36 in health care costs and work days lost for every $1 spent
- The annual Medicaid spend on asthma medical costs ranges from $31 million (Hawaii) up to $158 million (Washington State)
- New York - Average Medicaid cost to treat asthma episode = $12,000

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NATIONAL ASTHMA CONTROL PROGRAM IMPACTS

- 84% of Americans with asthma live in states that have CDC-funded asthma programs
- From 2000 to 2007, the 34 states, 2 territories that received NACP funding realized a 10% decline in the rate of asthma-related hospitalizations
- CDC's partnership with health departments helps people
  - ✓ control their asthma
  - ✓ keeps them out of the hospital
  - ✓ helps them lead healthier, more productive lives
- *Asthma Call Back Survey* – used by 40 states

PARTNERSHIP SUCCESS

- **Missouri** - $20 million in partner investments with less than $3 million invested by CDC since 2001
- **Connecticut -** dramatically reduced number of emergency visits
- **Illinois** – reduced hospitalizations, school absences
- **New York –** sent treatment guidelines to 20,000, developed user friendly tool kit
- **Wisconsin** –pharmacists refer asthma patients who over utilize fast acting inhalers back to their primary care provider
- **Michigan, Utah and Washington State** - incorporate asthma into chronic disease self-management programs
- **Hawaii** - provides a 24-hour volcanic emission hotline

CDC Vital Signs Electronic Media Resources

Become a fan on Facebook-
http://www.facebook.com/cdc

Follow us on Twitter- http://twitter.com/cdcgov/

Syndicate Vital Signs on your Website-
http://tools.cdc.gov/register/cart.aspx

Vital Signs Interactive Buttons and Banners-
http://www.cdc.gov/vitalsigns/SocialMedia.html

Provide Feedback on this Teleconference:

OSTLTSFeedback@cdc.gov

Please mark your calendars for the next OSTLTS Town Hall Teleconference:

June 14, 2011
2:00pm – 3:00pm EST

For more information please contact Centers for Disease Control and Prevention

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