



*Communities in Action*



NATIONAL ASTHMA FORUM

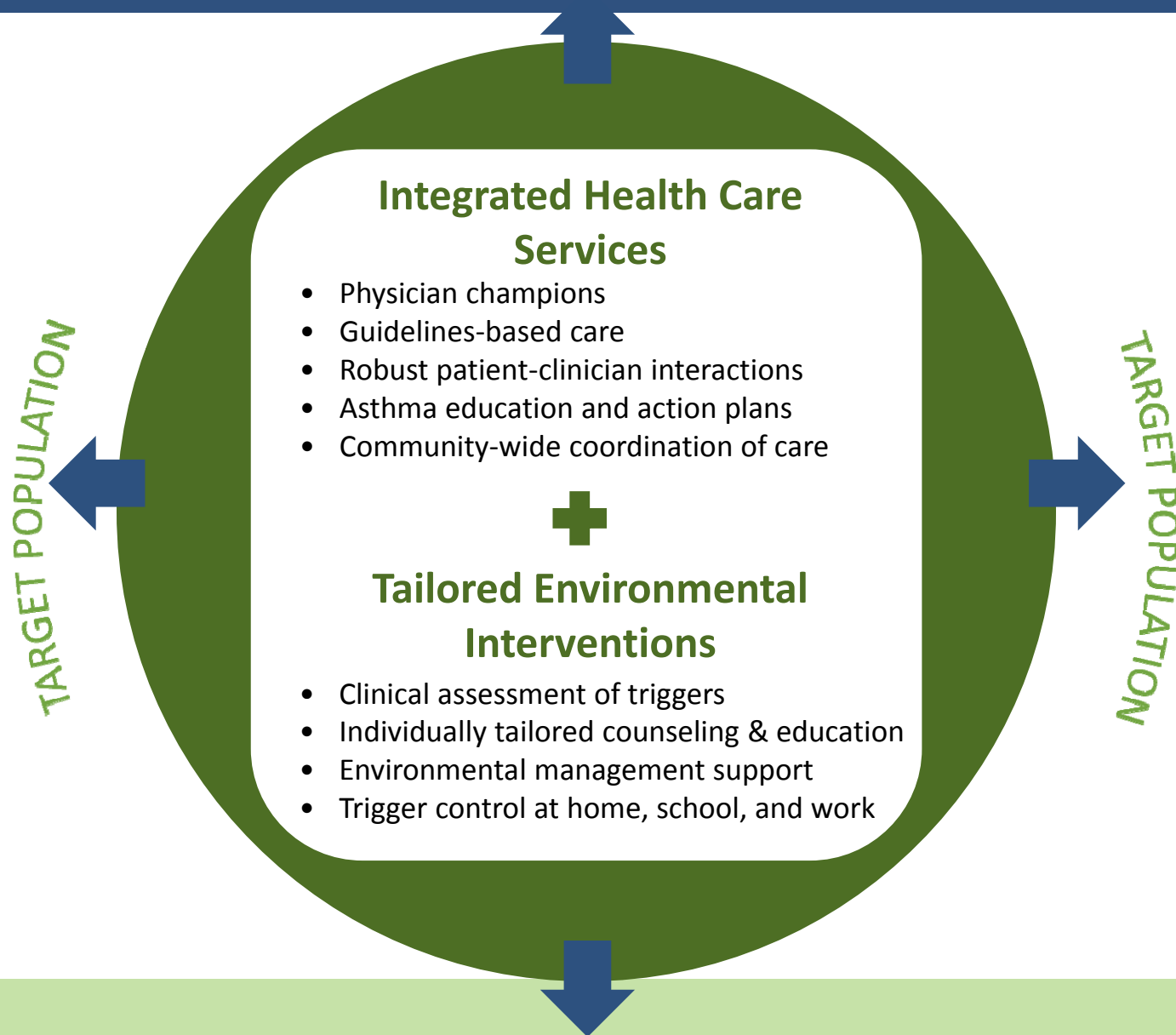
WASHINGTON, DC JUNE 9-10, 2011

# A System in Action – King County Asthma Program

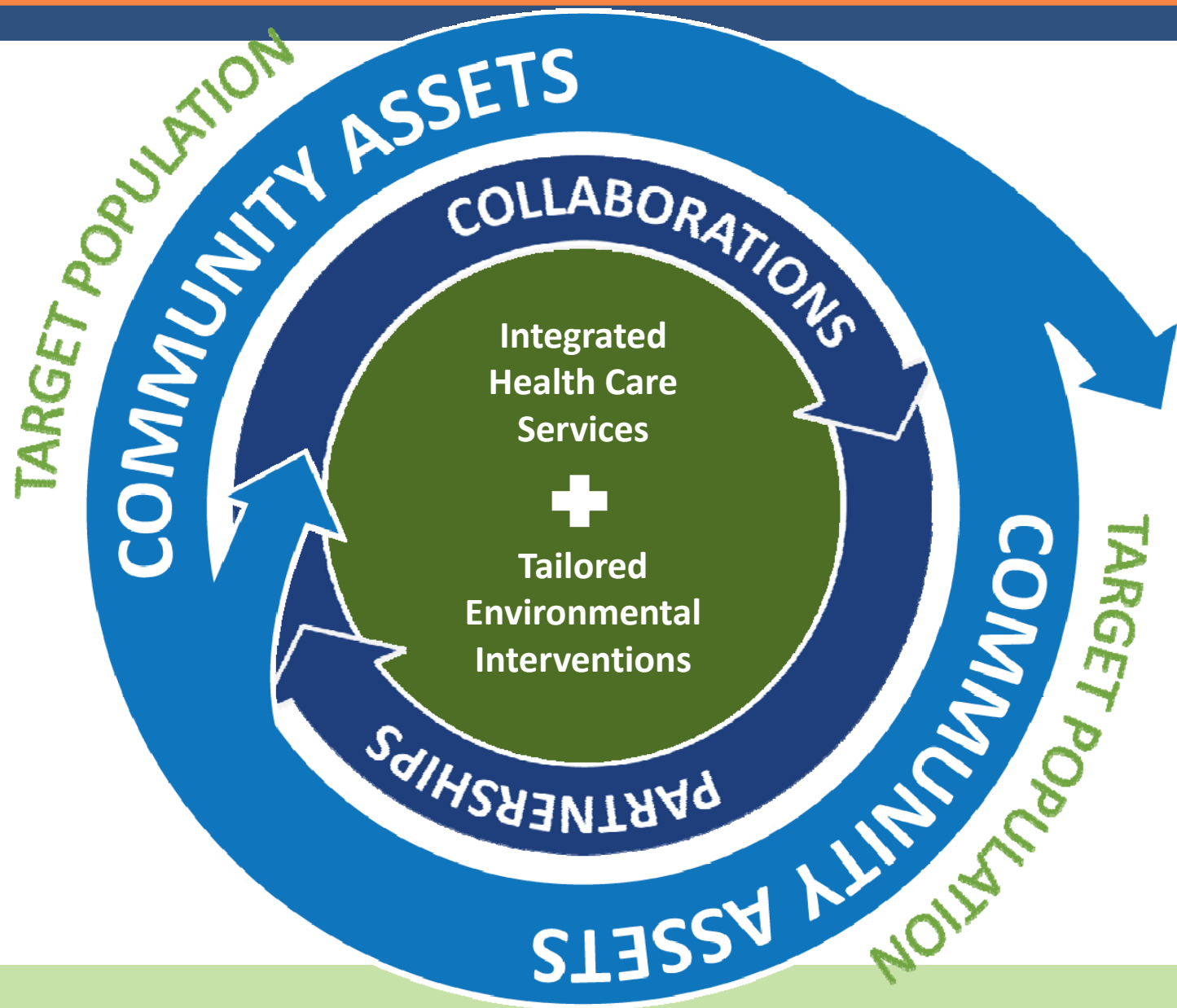
# Connecting to the *System*



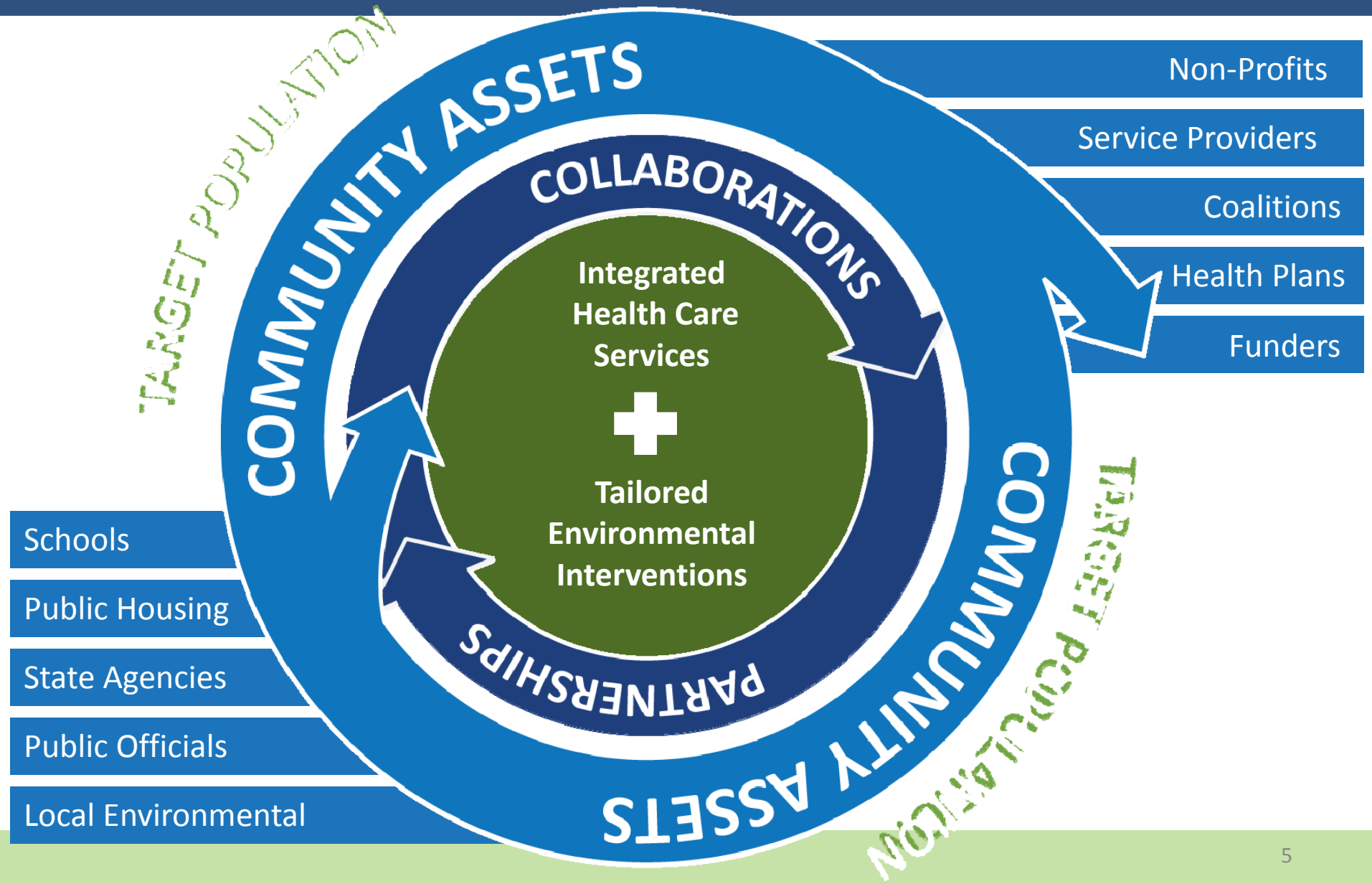
## What: Delivering Comprehensive High-Quality Asthma Care



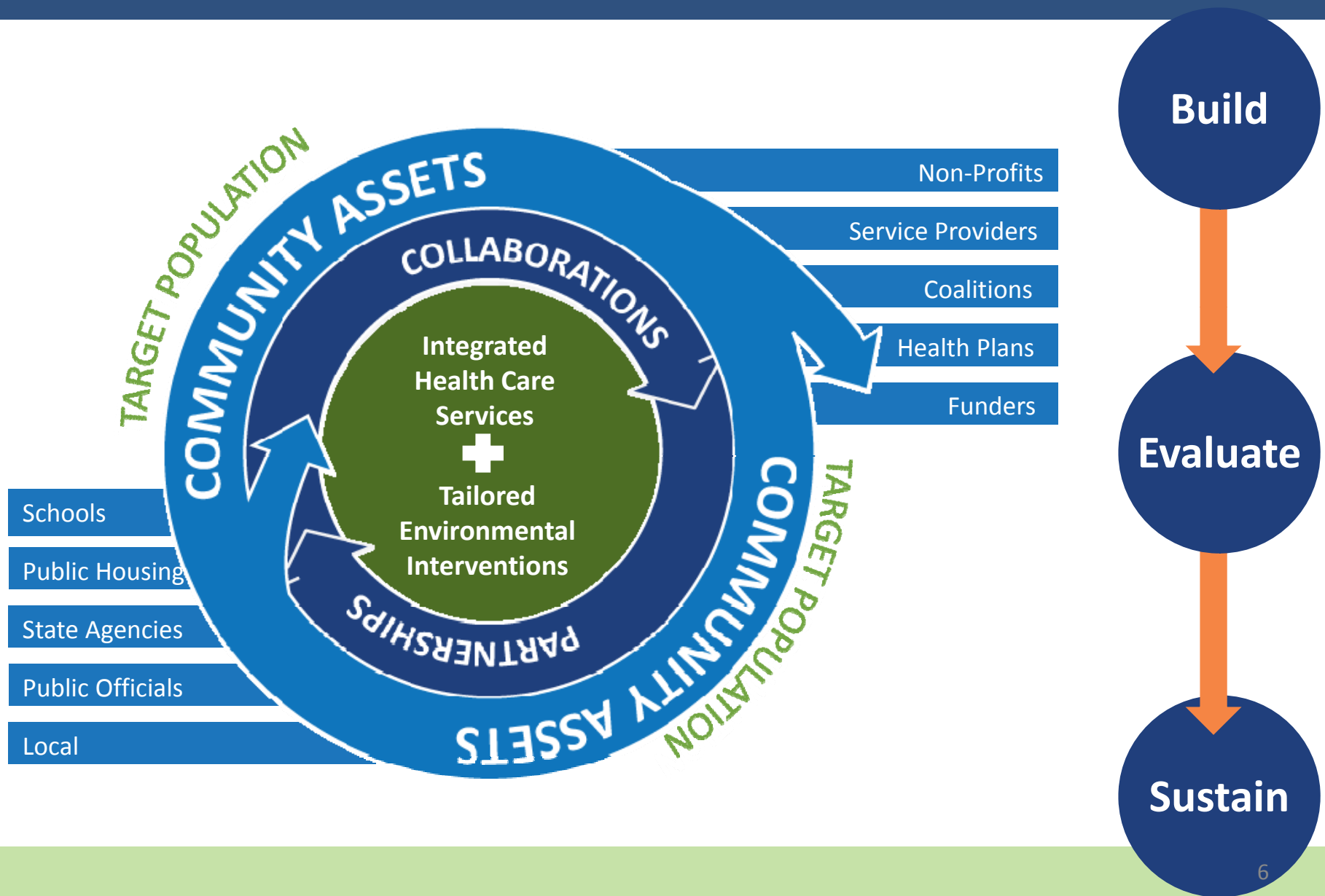
**How:** Through an Integrated, Collaborative, Community-Based System



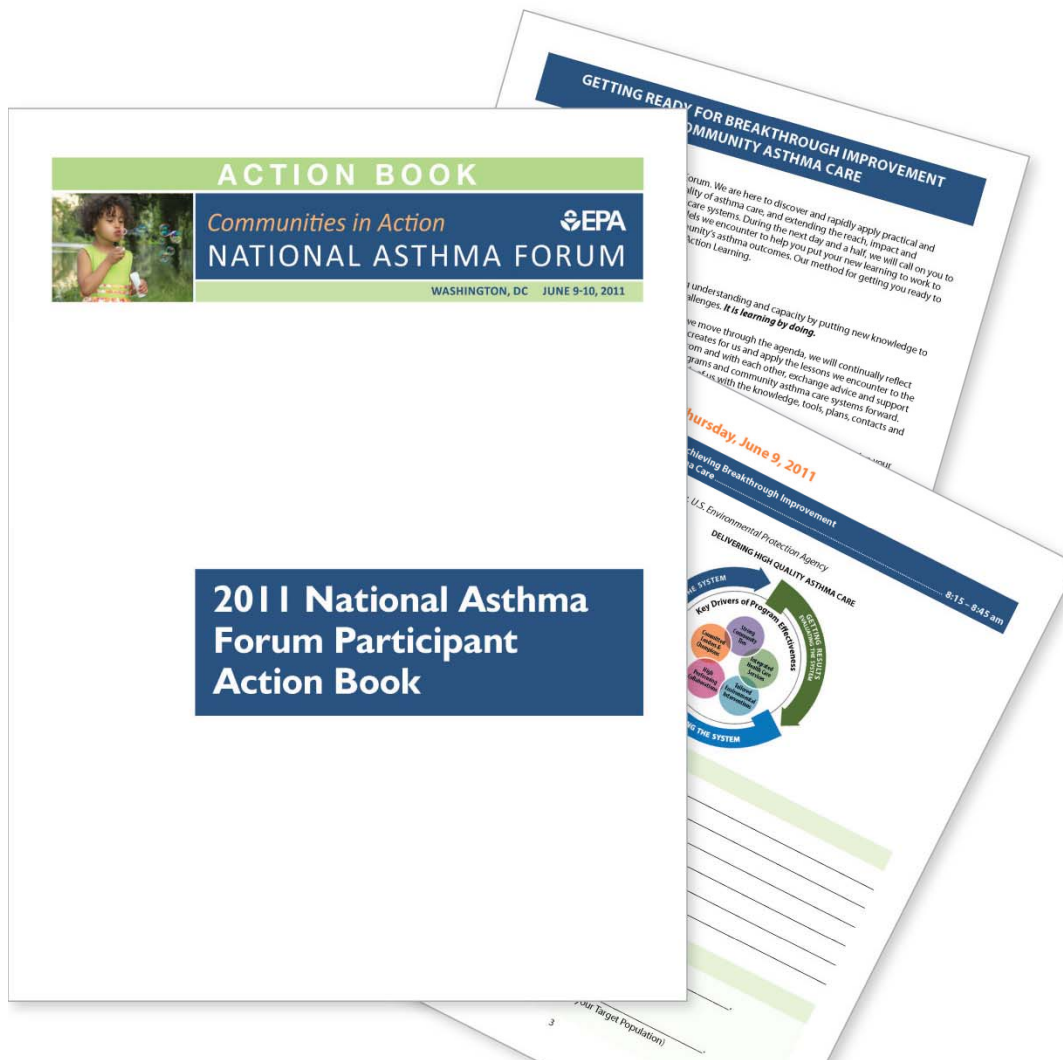
## Who: Champions and Leaders of Community Asthma Assets



## How: Through an Integrated, Collaborative, Community-Based System



# How to Listen



- What elements of this *System* are emerging in this program's story?
- What am I hearing that resonates with me?
- What can I take away to use in my work?





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# King County Asthma Program

Chronic Disease and Injury  
Prevention Section, Public Health  
Seattle and King County

Dr. Jim Krieger

Public Health  
Seattle & King County





# King County Asthma Program - Overview

- **Location: Seattle/King County, Washington**
- **Type of Program: City Public Health Department**
- **Service Area: King County**
- **Target Population: Low-income people with asthma**



## KCAP's Bold Goals

**The King County Asthma Program  
will support every person with  
asthma in King County in leading a  
full and active life, free of  
limitations from asthma, especially  
low-income people and people of  
color who bear a disproportionate  
burden of disease.**

# Long Term Impacts and Outcomes

- **The long-term impacts we target include:**
  - Symptom-free days
  - Quality of life
  - Urgent health care utilization
- **The outcomes we track include:**
  - Medication technique and adherence
  - Trigger reduction behaviors
  - Action plan use
  - Self-efficacy

# Activities and Outcomes

- **The major activities we pursue to drive towards target outcomes include:**
  - Home visits for self-management support
  - Improving quality of clinical care
  - Improving housing quality
  - Asthma education in community settings
  - Supporting asthma-friendly childcare
  - Integration of asthma activities across sectors

# Collaborations and Partnerships

- **Healthy Homes (1997 – present)**
- **King County Asthma Forum (1998-2004)**
- **Steps to Health (2003-2008)**
- **Washington Asthma Initiative (1997 – present)**

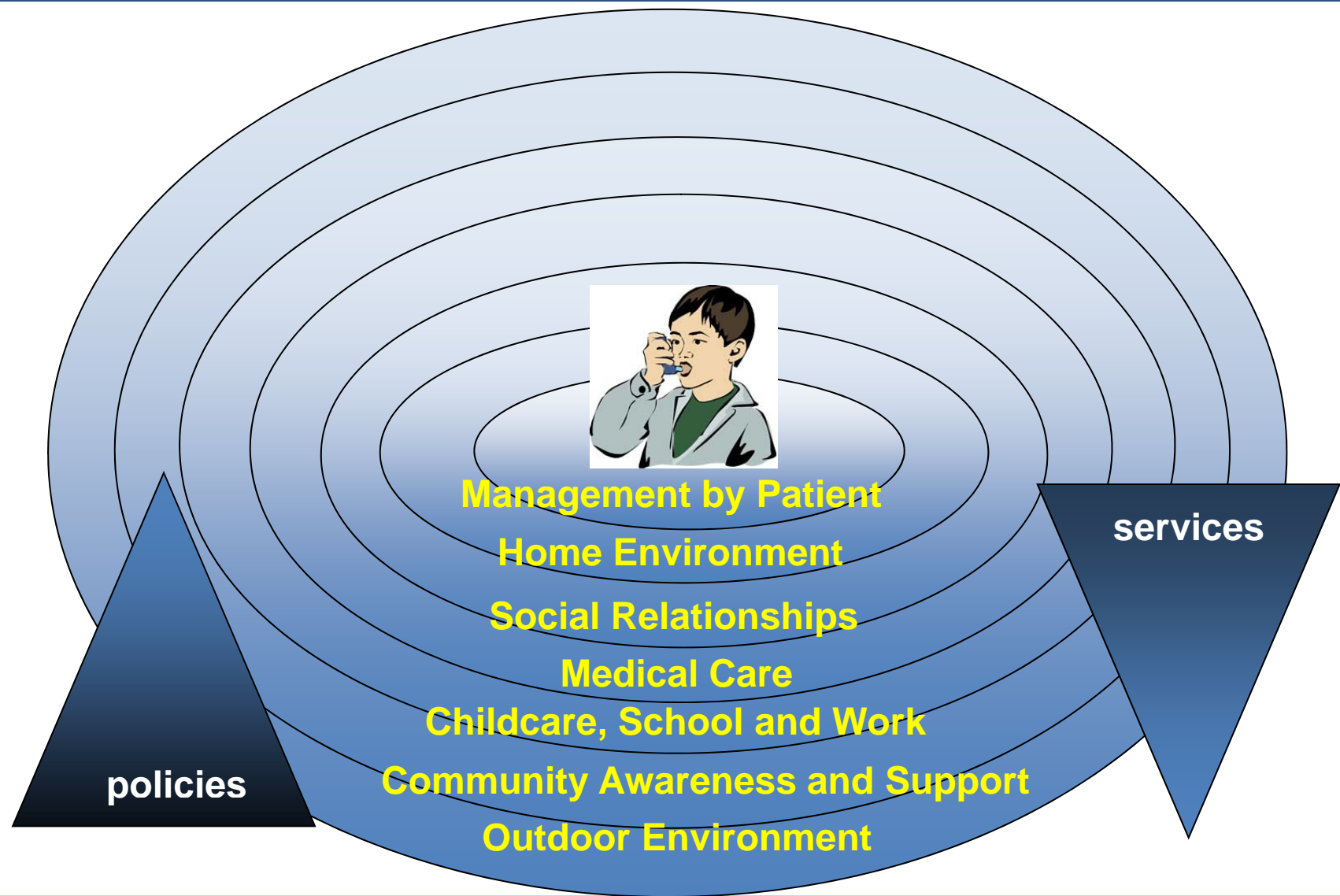


# We Focus on Key Tasks...

- **Making the diagnosis**
- **Assessing severity**
- **Using appropriate medications**
- **Reducing exposure to triggers**
- **Supporting self-management**
- **Reducing disparities**



# ...Across Multiple Levels





# Self-Management



# Community Asthma Classes

- **ACT (Asthma Care Training)**
  - 3 educational sessions
  - Children with asthma between 7 and 12 and their caregivers
  - Held at community clinics or community-based organizations
- **Wee Wheezers**
  - 4 small group sessions
  - Parents of young children under the age of seven
  - Held at community clinics or community-based organizations



# Healthy Homes: Home Visits for Asthma



# Overview

- Home visits by Community Health Workers
- Healthy Homes I
  - RCT of 274 low-income households with children with asthma
  - Focus on home environmental triggers
- Healthy Homes II
  - RCT of 309 low-income households with children with persistent/poorly controlled asthma
  - Focus on self-management of medical and environmental aspects of asthma control
  - Compare clinic-based education by nurse to CHW home visits



# Home Visits

- **CHW makes 3-5 visits over one year**
- **Asthma self-management skills**
  - Medication use
  - Self monitoring
  - Action plan use
- **Home environment assessment and trigger reduction**
- **Provide asthma trigger control resources (bedding covers, vacuum, door mat, cleaning supplies)**
- **Asthma Control Plan**
- **Provider-patient communication**
- **Health system navigation**
- **Social support**
- **Advocacy/referral (housing, food, furniture, jobs, etc.)**



# Patient's Perspective

## Success Story - Jose Gets Well

When community health worker, Maria, first met one year old Jose, he had been hospitalized as well as treated in the emergency room for severe asthma symptoms. His asthma symptoms woke him up at night constantly. He was sleeping on the floor, surrounded by stuffed animals. His home contained lots of clutter that encouraged the presence of dust, dust mites and roaches. Jose's mother was confused about how to give him his medications and

she used undiluted bleach to clean the home.

Maria worked with Jose's mother to help her understand that Jose's asthma was triggered by dust mites, roaches and bleach. She helped the mother learn to give Jose's asthma medications correctly, assisted the family with the roach abatement process and helped her substitute other cleaning agents for the bleach she had been using. Two months from Jose's enrollment in the Medicaid Asthma Program, he had improved so much that he had not suffered from any asthma symptoms.



Maria R.

# Breathe Easy Homes



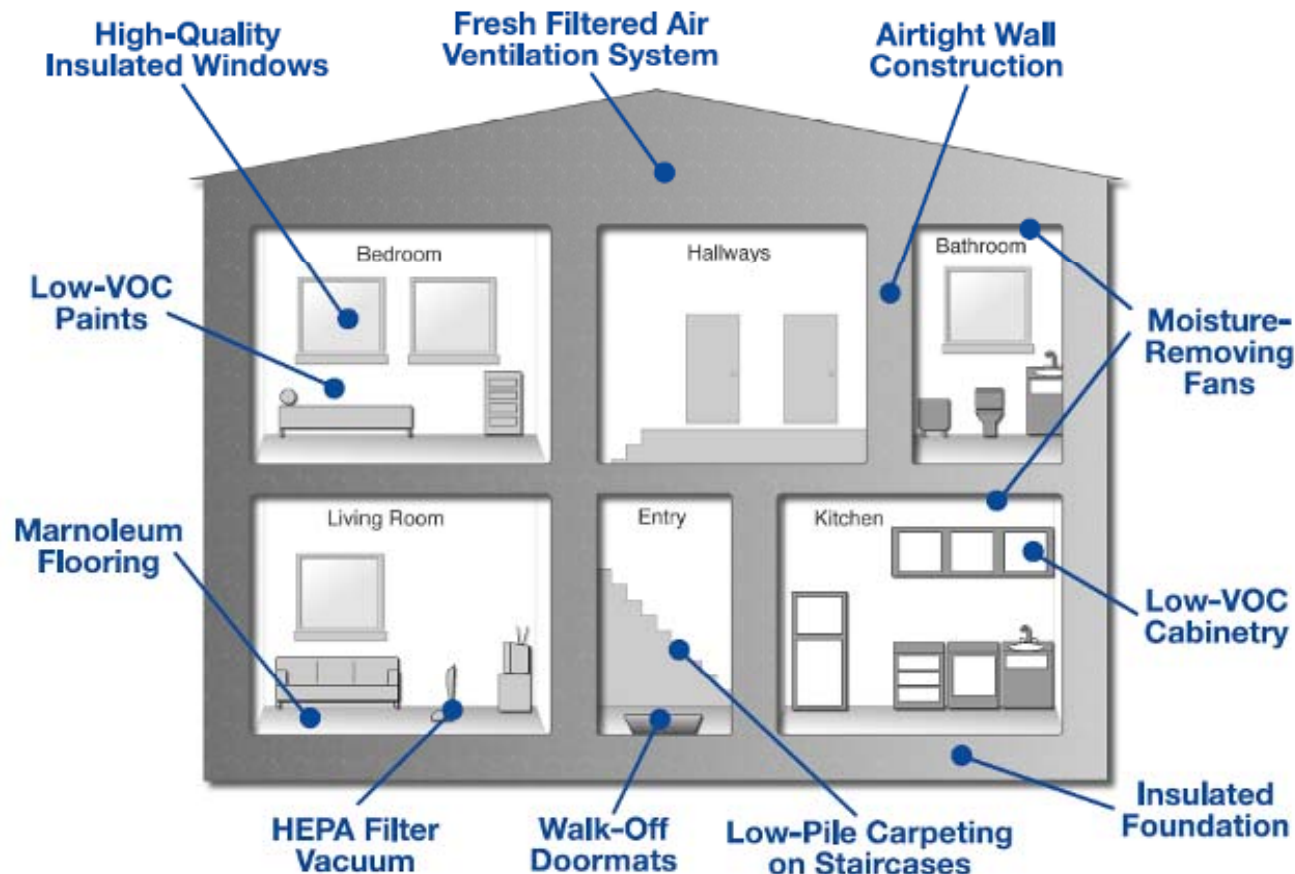
**Old Housing**

**New Breathe  
Easy Home**





# Build 60 Breathe Easy units for children with asthma at High Point Public Housing site



**HIGH POINT BREATHE EASY HOMES**

# Medical Care



# The “Collaborative” Method

- 4 clinics participated in a quality improvement, shared learning project
- Components
  - Asthma champions
  - Teams to improve quality of care using Chronic Care Model
  - Measurable goals
    - e.g., all patients with persistent asthma will use inhaled steroids
  - Registry
  - Small cycles of change (PDSA), then spread

# Example: Columbia Health Center

- **Health Department Pediatric Clinic**
- **Multidisciplinary team**



# Asthma Week Planned Visits

- **Assessment of control**
- **Visit with provider to tailor medications as needed**
- **Update of action plan**
- **Review of MDI/diskus technique by pharmacist or RN**
- **Session with asthma educator, including home self-management goals**
- **School coordination and/or referral to outside resources if applicable**
- **Flu shot**

# Link to Community Resources

- **Linked more than 200 patients with community resources**
- **Improved communication with school and childcare**
- **Medication and action plan availability at school regularly reviewed and updated**



# Registry

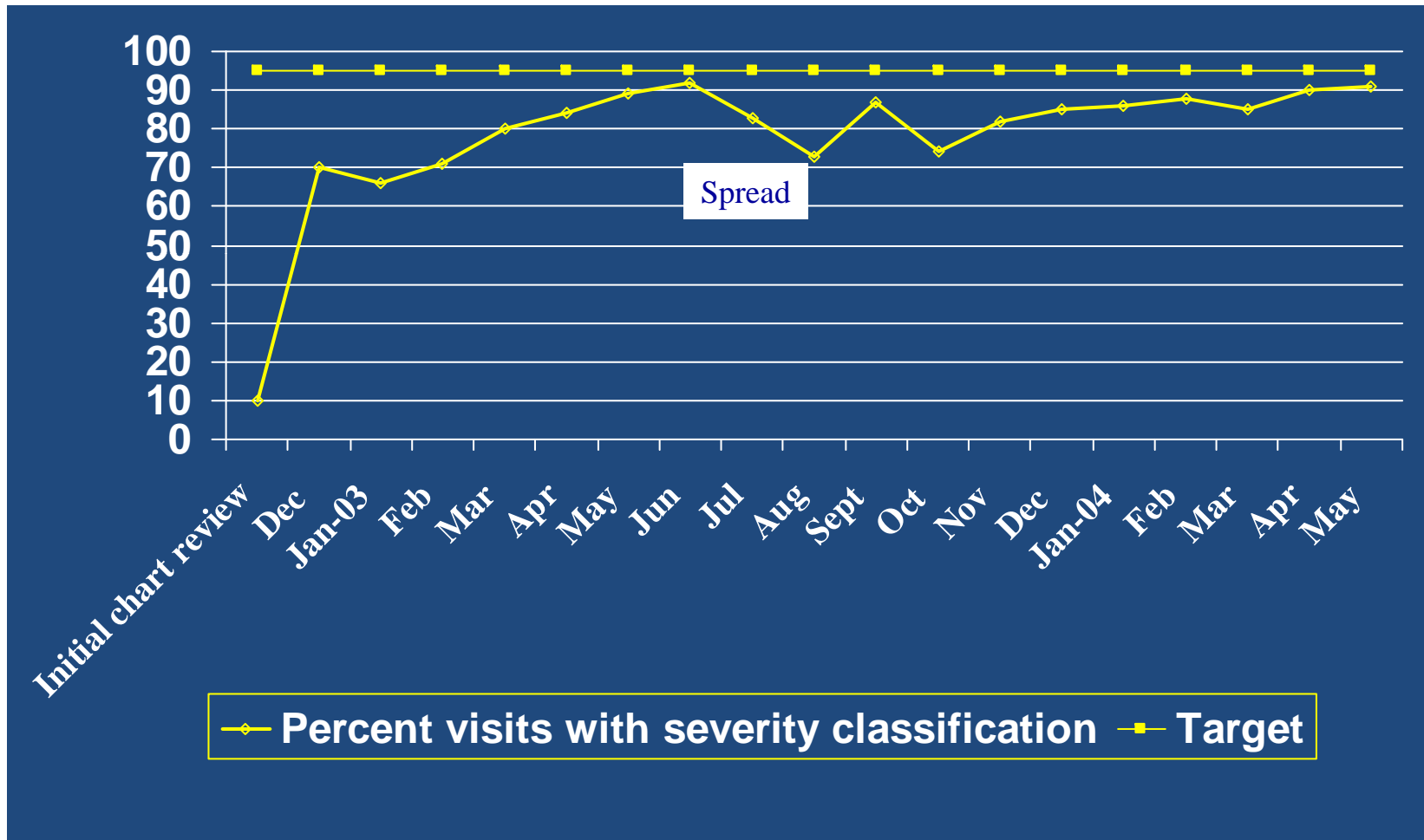
- **Registry with over 850 patients**
- **Functions**
  - **Yearly planned visits for ALL asthmatics**
  - **Flu shot recall**
  - **Document and monitor quality of care**
  - **Feedback on individual patients to providers**



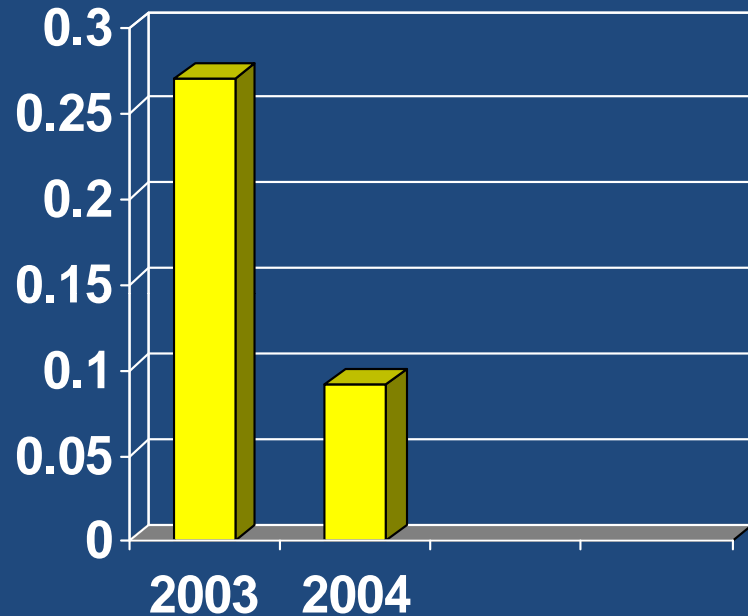


# Asthma Severity Classification

Goal: 95% of asthma visits will have documented asthma severity



# Emergency Department Visits

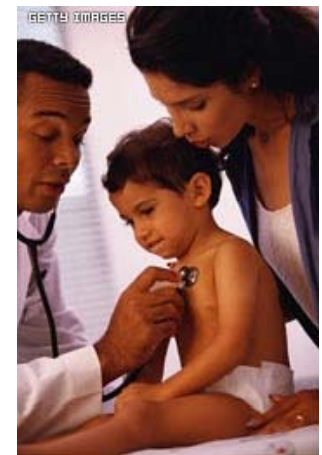


■ Emergency Department Visits per patient (January through June)

- Reduction in ED visits for asthma patients by 66% (n=186 patients)

# PACE: Physician Asthma Care Education

- Directed at primary care providers
- Focuses on compliance with NHLBI guidelines
- Seminars include 8 to 12 clinicians
- Interactive adult learning
  - Case presentations
  - Communication and teaching skills
  - Coding and reimbursement
- RCT: decreased hospitalization and ED use



(NM Clark, 2000)

# Childcare and School



# Childcare

- **Childcare provider training**
  - CE credits
  - On-site and central locations
  - Well attended and well received
- **Checklists**
- **Action plans**
- **Site visits and audits**
- **Needs evaluation**



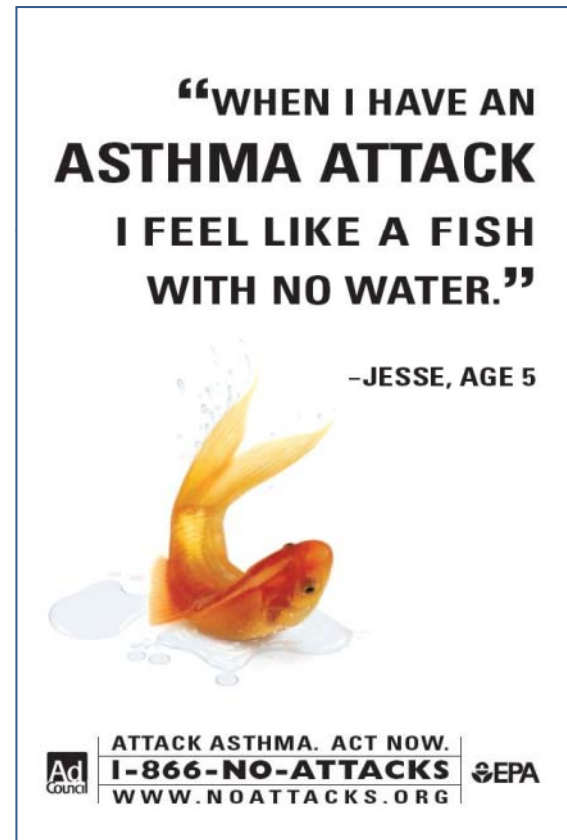
# Schools

- Asthma education (OAS)
- School siting relative to sources of exposure
- Idling policies
- Team Asthma Goes to School



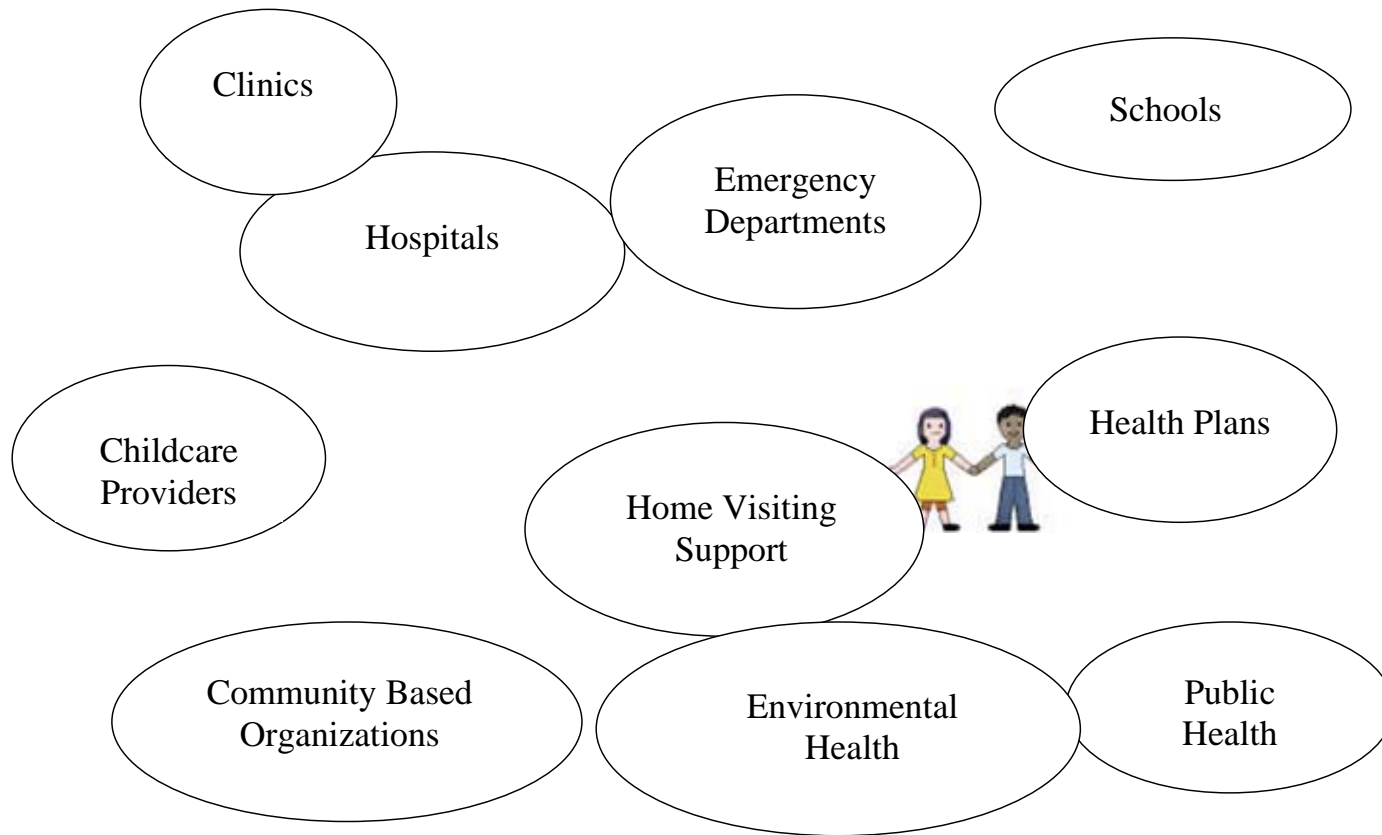
# Increasing Asthma Awareness

- **Asthma triage line for referral to programs in English, Spanish, Vietnamese**
- **Website**
- **Media**
- **Community Events**
  - **Health Fairs**
  - **Asthma Play**
  - **Asthma Summits**

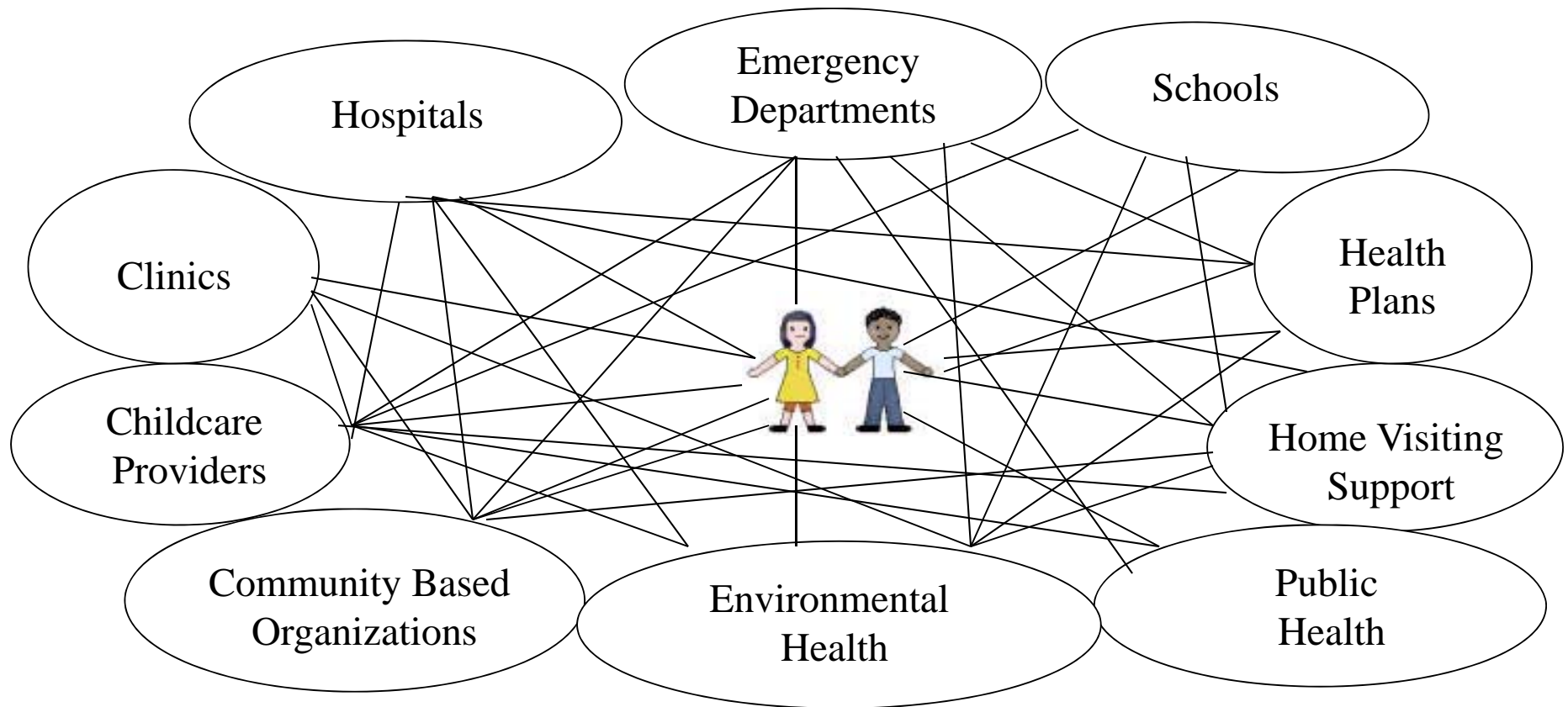




# Integration: Where We Started...



# Where We Want to Be...



# Integrating Care For Individuals

- **Community Health Workers**
  - Link families with schools, childcare, health providers, public housing
- **Care Coordinators**
- **Shared Asthma Action Plans**
  - Provider
  - School/childcare
  - Home visitors
- **Triage Line (CHWs)**



# Integration Across Organizations

- Common tools, guidelines and messaging
  - Shared educational resources and programs
  - Consistent asthma control protocols and guidelines
  - Consistent key asthma messages
- Inter-organizational cross-referral mechanisms

Public Health  
Health & Aging Center  
Healthy People 2020  
Healthy People 2020  
Healthy People 2020

HEALTHY PEOPLE 2020  
Healthy People 2020  
Healthy People 2020

ASTHMA ACTION PLAN

Appendix 7.1.DC

Name: \_\_\_\_\_  
Date updated: \_\_\_\_\_ Personal best: \_\_\_\_\_  
Dates reviewed: \_\_\_\_\_

**GREEN ZONE means GO ahead with your activities. You are doing well.**

• You peak flow is more than \_\_\_\_\_ 80% of personal best.  
• You have no coughing, wheezing or other asthma symptoms.  
• You can do your usual activities with no difficulty breathing.  
• Your asthma does not wake you up at night.

Take your daily preventive medicine.  
Take \_\_\_\_\_ medicine 1-2 minutes before you exercise.  
Avoid your asthma triggers: ☐ smoke ☐ dust ☐ mold ☐ pollen  
☐ pet ☐ strong odors ☐ cold air ☐ moisture ☐ cold/flu viruses.  
Most of your asthma management goals.

**YELLOW ZONE means SLOW DOWN**

• You peak flow is between \_\_\_\_\_ and \_\_\_\_\_ 50% to 80% of personal best, or  
• You have asthma symptoms - cough, wheeze, feel short of breath, or  
• You have asthma symptoms that wake you up at night, or  
• You have asthma warning symptoms:  
☐ itchy throat ☐ sore throat ☐ headache  
☐ stomach ache ☐ sneezing ☐ runny nose  
☐ watery eyes ☐ not eating well  
☐ other \_\_\_\_\_

Take your rescue medicine.  
Take 2 puffs with spacer OR 1 inhaler treatment.  
(2) Get away from your triggers, try to relax and be calm.  
If you are not better, your symptoms continue or  
your peak flow stays in the yellow zone, then:  
Call your provider or clinic for advice at: \_\_\_\_\_  
Take your rescue medicine every 4-6 hours for 1-2 days.  
Continue the usual dose of your daily preventive medicine, OR  
Take twice the usual number of puffs of your daily preventive medicine  
each time you use it for 7-10 days.  
Call \_\_\_\_\_

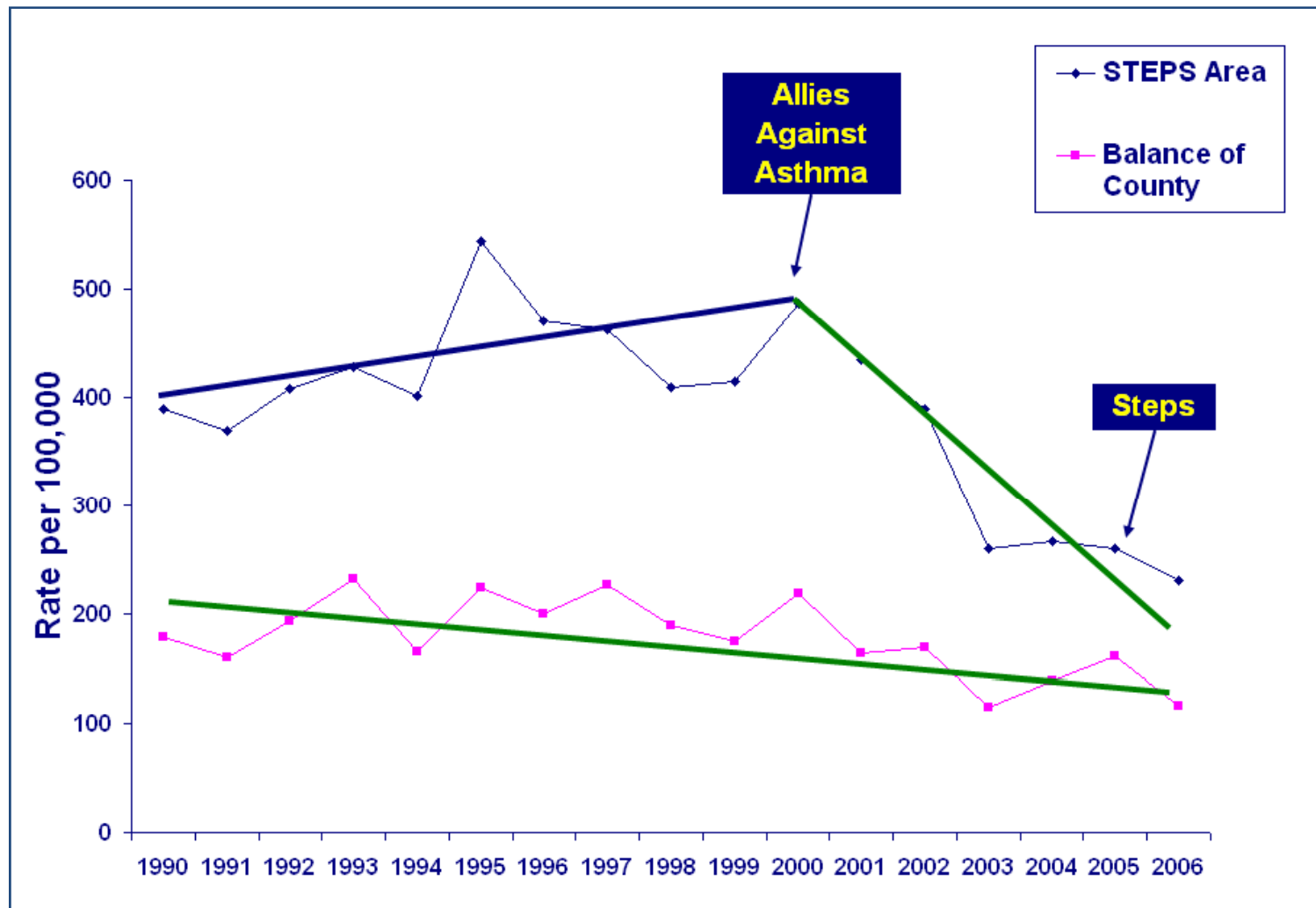
**RED ZONE means DANGER. Your asthma is now a serious problem that needs immediate attention!**

• You peak flow is less than \_\_\_\_\_ 50% of personal best, or  
• You are very short of breath and may be breathing very fast, or  
• You cannot do your usual activities, or  
• You have trouble talking, walking or playing, or  
• You're dizzy when you take a breath.

Take 2 puffs of your rescue medicine now for 1 inhaler treatment.  
Call your provider or clinic right away if it is after hours or clinic hours,  
call \_\_\_\_\_  
Take your rescue medicine again in 20 minutes and then again in 20  
minutes if you need it.

**EMERGENCY! CALL 911 or get to the emergency room right away!**

# What Did We Accomplish?



# What Has Worked? What is the Evidence?

| Evidence | Feasibility     |   |   |
|----------|-----------------|---|---|
|          | Low             | Medium  | High  |
| High     | Group education | 1:1 clinical education  | Indoor trigger reduction<br>Appropriate medications<br>Home visits<br>Smoke-free policies |
| Medium   |                 | QI processes<br>Skill-based provider education<br>Housing quality<br>Registries | Severity/Control assessment   |
| Low      | Awareness       | School interventions<br>Action plans  | Childcare   |

# Lessons

- **Control of asthma is complex and must address medical, environmental and social issues**
- **Allow 18-24 months for developing and initiating a complex action plan**
- **Champions greatly accelerate change**
- **Partners and communities must be *ready* to act**
- **Multi-sector collaborations bring needed expertise and resources**



# Lessons

- Take simpler and smaller steps rather than do it all at once
- Focus intensively on small, well-defined communities
- Policy change may be more resource-effective than services
  - Direct services and events reach limited numbers
  - Policy change affects populations





# Lessons

- **Use evidence-based strategies when available**
- **Use and evaluate innovative strategies when not available**
- **Think integration**
- **Pilot and develop infrastructure before taking to scale**

# Lessons Learned: Coalition Development

- Hire paid coalition staff
- Engage diverse, committed leaders from *several* organizations
- Define structure and governance and modify over time
- Distribute equitably opportunities for resources and recognition
- Value respectful communication
- Praise altruism, but also recognize the power of self-interest



# The End...Thanks



***Question: Which of these areas of the *System* surface most strongly for you in the King County story?***

- 1. Collaborations and Partnerships**
- 2. Integrated Health Care Services**
- 3. Tailored Environmental Interventions**
- 4. Strong Community Ties**
- 5. Community Leaders and Program Champions**
- 6. Using Evaluation and Data**

# Tailored Environmental Interventions

- **Strategies for Action:**
  - **Educate care teams to deliver environmental trigger assessment and management**
  - **Assess trigger sensitivity and exposure in clinical interviews**
  - **Provide tailored education and counseling during clinical visits**
  - **Make environmental management a reality at home, school and work**

***Question:*** For your program, rate the strength of your environmental intervention component.

- 1. No significant effort**
- 2. Small effort**
- 3. Moderate effort**
- 4. Significant, growing**
- 5. Large scale, aggressive, well funded**

# Integrated Health Care Services

- **Strategies for Action:**
  - **Educate and support clinical care teams to facilitate consistent, high-quality care**
  - **Support continuous clinical improvement**
  - **Promote robust patient/provider interaction**
  - **Facilitate communication across the care team**

***Question:*** For your program, rate the strength of your Integrated Health Care Services component.

- 1. No significant effort**
- 2. Small effort**
- 3. Moderate effort**
- 4. Significant, growing**
- 5. Large scale, aggressive, well funded**



# High-Performing Collaborations

- **Strategies for Action:**
  - **Build on what works: partner with collaborators active in your target community**
  - **Collaborate to build credibility**

***Question:*** For your program, rate the strength of your High-Performing Collaborations.

- 1. No significant effort**
- 2. Small effort**
- 3. Moderate effort**
- 4. Significant, growing**
- 5. Large scale, aggressive, well funded**

# Strong Community Ties

- **Strategies for Action:**
  - Include your community in program planning
  - Engage your community ‘where it lives’
  - Make it easy to accept services

***Question:*** For your program, rate the strength of your Strong Community Ties.

- 1. No significant effort**
- 2. Small effort**
- 3. Moderate effort**
- 4. Significant, growing**
- 5. Large scale, aggressive, well funded**

# Committed Leaders and Champions

- **Strategies for Action:**
  - Use outcomes data to promote change
  - Institutionalize the focus on outcomes
  - Create program champions

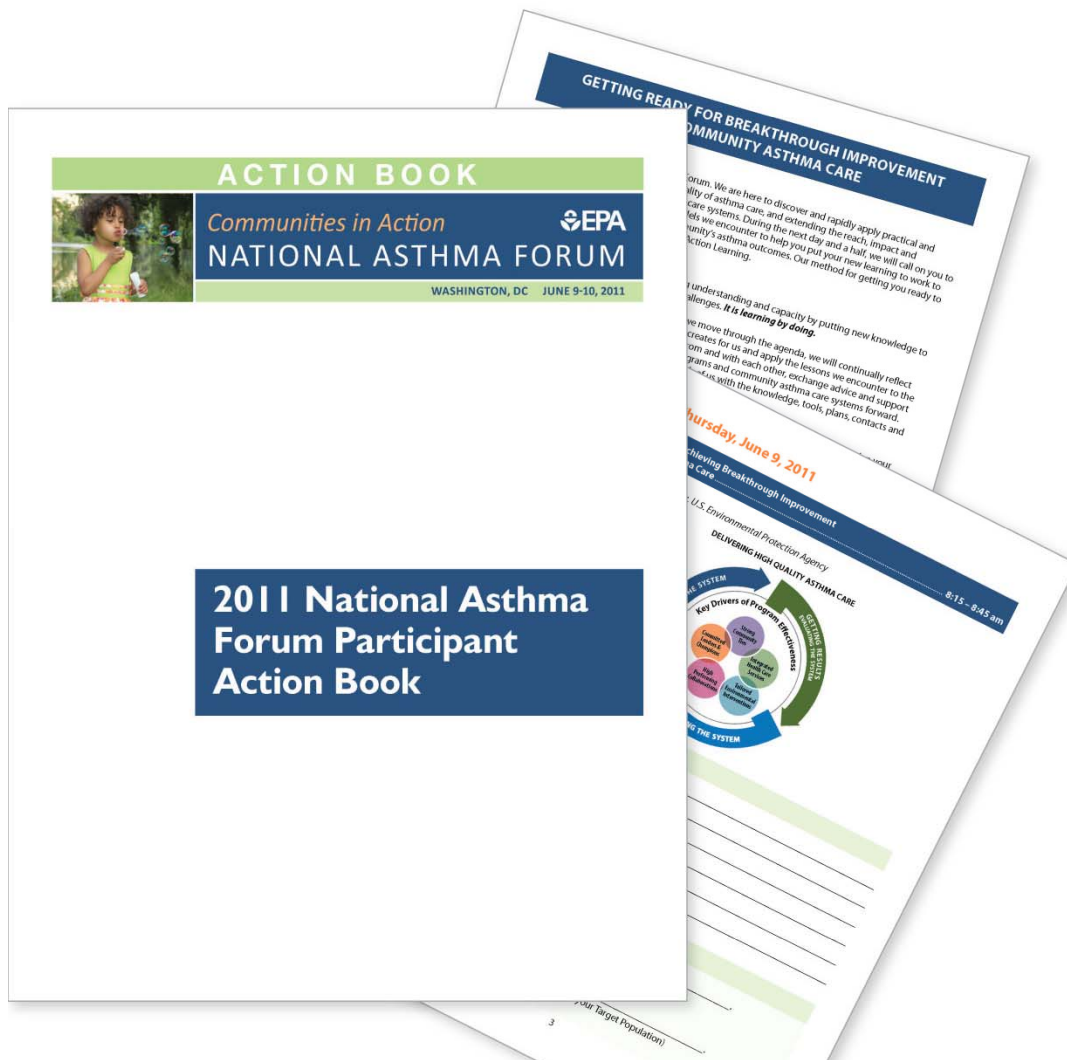
***Question:*** For your program, rate the strength of your efforts to have Committed Leaders and Program Champions.

- 1. No significant effort**
- 2. Small effort**
- 3. Moderate effort**
- 4. Significant, growing**
- 5. Large scale, aggressive, well funded**

***Question:* Does your program have an evaluation component?**

- 1. Don't have it**
- 2. Under development**
- 3. In place, adequate**
- 4. Very well developed, a model for others**
- 5. N/A**

# Connect for Action



On what areas of the *System* are you now excited to take action?



***Question: Which of these areas do I feel ready to take action on and want to learn more about?***

- 1. Collaborations and Partnerships**
- 2. Integrated Health Care Services**
- 3. Tailored Environmental Interventions**
- 4. Strong Community Ties**
- 5. Community Leaders and Program Champions**
- 6. Using Evaluation and Data**