

Asthma Health Outcomes Project (AHOP)

Characteristics of Success

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Goals of AHOP

- Identify characteristics of successful asthma programs that include an environmental component
- Codify success characteristics
- Inform ongoing asthma efforts
- Guide future funding and research
- Facilitate information-sharing and outcome achievement in the asthma community



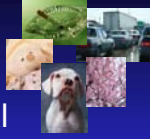
Project Phases

- Phase I: Program Identification
 - ◆ Retrieve articles published in peer-reviewed literature describing interventions and their outcomes
 - ◆ Solicit nominations of programs from over 2500 key informants around the world



Program Inclusion Criteria

- Focus on asthma
- Include an environmental component
 - ◆ e.g., education about asthma triggers, trigger remediation, system or policy change
- Measure health outcomes
 - ◆ e.g., asthma symptoms, ED visits, hospitalizations



Project Phases

Phase II: Data Collection

- ◆ In depth interviews with representatives of 169 programs
- ◆ Creation of program profiles with all extant information

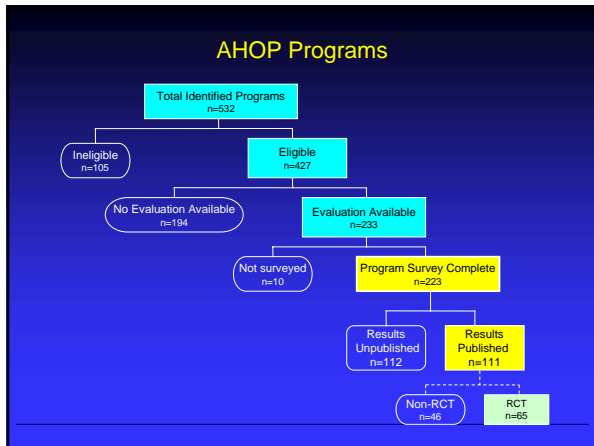



Project Phases

Phase III: Data Analysis

- ◆ Quantitative
 - ◆ Frequencies of 223 programs; bivariate analyses of 111 published programs, with confirmation among the 65 published programs that evaluated with randomized controlled trial designs
- ◆ Qualitative
 - ◆ Analysis of responses to open-ended questions about program challenges, strengths, and unintended impacts from the set of all 223 programs





- ### Data Analysis
- Bivariate analysis to identify programmatic factors associated with positive health and environmental outcomes using published programs only (n=111)
 - χ^2 statistics using Fisher's exact test at .05 significance level
 - Bivariate analysis among published RCT only programs (n=65) to confirm findings among all published programs
 - Calculation of frequencies of identified programmatic factors among all surveyed programs (n=223)
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Community Centered

Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Had an office located within the target community	Hospitalizations	53	0.04	9.71 [1.00, 94.78]
	ED visits	44	0.04	10.18 [1.02, 101.52]
	Health care utilization	59	0.01	15.64 [1.58, 154.28]

Community Centered				
Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Involved community-based organizations in program planning	Health care utilization	13	0.03	30.00 [1.47, 611.80]
Collaborated with community-based organizations	Health care utilization	16	0.04	21.00 [1.50, 293.25]

Responsive to Need				
Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Conducted a needs assessment	School absences or work loss	22	0.02	22.09 [2.25, 216.6]
Designed program to target a particular race or ethnic group	Quality of life for parents	16	0.02	18.3 [imputed]
Assessed trigger exposure	Quality of life for adults	25	0.02	15.60 [1.48, 164.38]

Responsive to Need				
Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Tailored content or delivery based on individual participant's health or educational needs	Symptoms	54	0.03	4.81 [1.26, 18.31]
	Quality of life for adults	22	<0.01	121 [imputed]
	Quality of life for children, adults or parents	42	0.01	12.08 [1.88, 77.66]

Responsive to Need

Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Tailored intervention based on assessed trigger sensitivity	Quality of life for children	8	0.04	65 [imputed]
	Quality of life for children, adults or parents	14	<0.01	161 [imputed]

Collaborative

Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Collaborated with other agencies or institutions	Hospitalizations	43	0.02	8.75 [1.42, 53.91]
Collaborated with governmental agencies	ED Visits	29	0.04	10.00 [1.02, 95.23]
Collaborated with community-based organizations	Health care utilization	16	0.04	21.00 [1.50, 293.25]

Collaborative

Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Collaborated with other agencies or institutions on technical assistance	Health care utilization	15	0.04	17.50 [1.22, 250.36]
Collaborated with other agencies or institutions on policy action	Medication use	27	0.04	10.00 [1.03, 97.50]
	School absences	18	0.01	24.56 [imputed]

Clinically Connected

Programmatic Factor	Associated Outcome	n	p-value	Odds Ratio [95% CI]
Component took place in a physician's office or clinic	ED Visits	55	0.01	4.92 [1.48, 16.34]
Educated health care providers (including school nurses)	School Absences	25	0.02	13.50 [1.75, 103.88]

Programmatic Factors, by Health Outcome



Health Care Utilization

- An office located in the target community
- Component took place in doctor's office or clinic
- Involved CBOs in program planning
- Collaborated with other agencies or institutions, especially CBOs and governmental agencies
- Collaborated on technical assistance



Quality of Life

- Tailored intervention based on an assessment of trigger sensitivity
- Tailored content based on individual's health or educational needs
- Assessed trigger exposure
- Designed program to target particular race or ethnicity



School Absences and/or Work loss

- Educated health care providers, including school nurses
- Conducted a needs or resource assessment
- Collaborated with other agencies on policy action



Asthma Symptoms

- Tailored content based on individual's health or educational needs




Medication Use

- Collaborated with other agencies on policy action



How extensive is effective program planning and implementation?

Among the 14 factors reviewed:

-  ♦ 4 were implemented by more than 75% of programs
-  ♦ 7 were implemented by 50 to 75% of programs
-  ♦ 3 were implemented by less than 50% of programs

Themes of Success



- Community-Centered
- Responsive to Need
- Collaborative
- Clinically Connected

Significance of Findings and Importance of Community Efforts



Challenges to Conferees:

- Explore how to strengthen collaborations between government, community-based groups, voluntary organizations, the private sector, universities, medical facilities



Challenges to Conferees:

- Consider ways to get the word out to key stakeholders regarding the characteristics that accompany program success
- Find and support leaders whose perspectives and leadership style reflect an understanding of success characteristics





AHOP is a project of the Center for Managing Chronic Disease at the University of Michigan



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Asthma Health Outcomes Project Team

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Products

- Complete list of all identified programs (>500) with contact information
- Comprehensive description of each surveyed program
- AHOP survey instrument
- Project Reports



available on

AlliesAgainstAsthma.net/ahop

Supplemental Slides

Program Survey

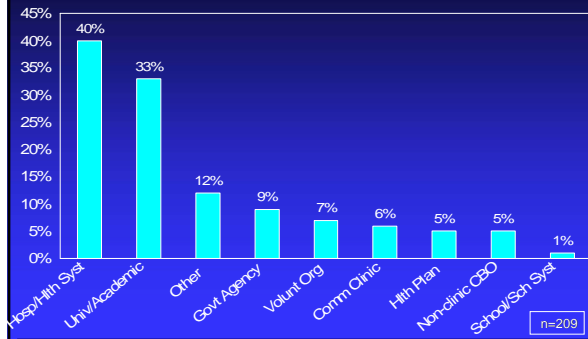
- Context
- Planning and Design
- Implementation
- Outcomes Evaluation
 - ◆ Health Outcomes
 - ◆ Environmental Outcomes
- Administration
- Impact and Sustainability



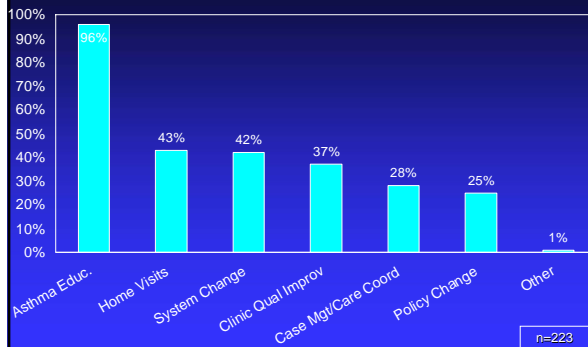
Descriptive Data from 223 Evaluated Programs

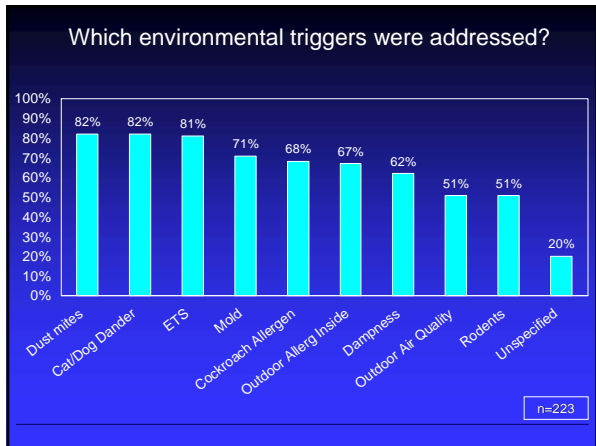


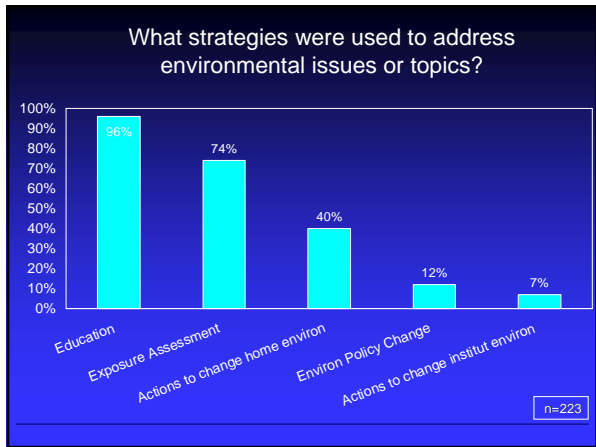
What type of agency is the managing organization?

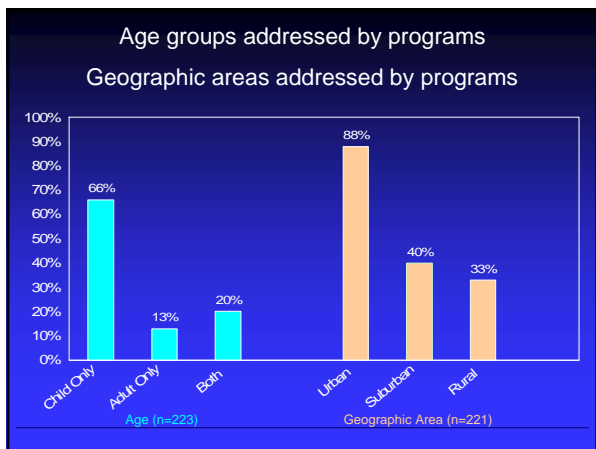


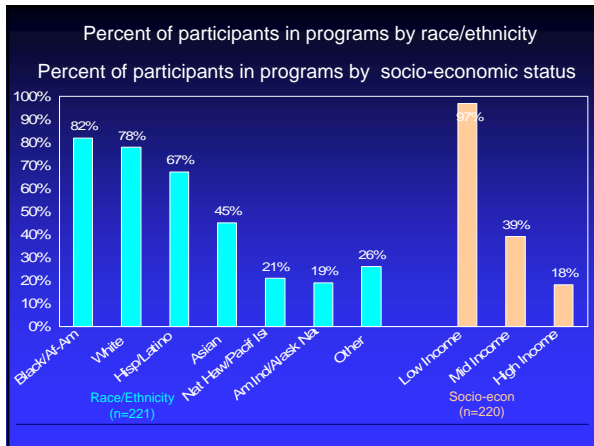
What strategies were used in the program overall?











Percent of programs reporting community centered programmatic factors



- 93% had an office located in the target community
- 41% collaborated with community-based organizations*
- 68% involved community-based organizations in planning the program

* among those collaborating with other agencies or organizations

Percent of programs reporting programmatic factors that are responsive to need



- 72% conducted a needs or resource assessment
- 20% were designed to target a particular race or ethnic group
- 84% tailored their content or delivery based on individual participants' health or educational needs

Percent of programs reporting programmatic factors that are responsive to need (cont.)

83% of programs that assessed trigger sensitivity tailored the intervention based on the assessment

74% assessed trigger exposure as an environmental strategy



Percent of programs reporting collaborative programmatic factors

90% collaborated with other agencies or institutions

56% collaborated with governmental agencies*

41% collaborated with community-based organizations*

59% collaborated on technical assistance*

60% collaborated on policy action*



* among those collaborating with other agencies or organizations

Percent of programs reporting programmatic factors that are clinically connected



51% educated healthcare providers (including school nurses)

49% reported a component in a MD office or clinic
