



Critical Components of Using a Systems Approach to Effect Environmental Asthma Policies and Reduce Health Disparities: an Evaluation of the Community Action to Fight Asthma Initiative in California

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Overview of Presentation

- CAFA Initiative,
- Evaluation approach,
- Systems Change Concepts Applied to the CAFA Initiative,
- Policy Accomplishments,
- Challenges,
- Key Findings and Next Steps.

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Community Action to Fight Asthma is a network of asthma coalitions in California working to shape local, regional and state policies to reduce the environmental triggers of asthma for school-aged children where they live, learn, and play.

Focus areas:

- Schools,
- Housing, and
- Outdoor air.

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Selected Evaluation Questions

- What are the challenges in focusing traditionally healthcare-oriented coalitions on primary prevention?
- What contributes to Local Coalitions developing financial sustainability?
- How do we strengthen the Network and create synergy?
- How do Coalition members and partners contribute to Coalition stability and contribute to policy advocacy?

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Evaluation Methodology

- Process and Outcome Evaluation using:
 - Structured site visits,
 - Collection and analysis of process data,
 - Technical assistance and feedback regarding the collection of outcome data,
 - Collaborative survey,
 - Policymaker interviews, and
 - Contextual analysis of the political and economic environment.

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Theory of Change

**Build infrastructure & capacity at local,
regional & state levels**



**Use environmental data and asthma benchmarks to
create community interventions**



**Develop policies addressing environmental triggers in
homes, schools, outdoor air**



**Healthier Environment and Children and
Reduced Health Disparities**

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Mechanisms of change

- Clear emphasis on Community- level mobilization and activities to address all levels of policy advocacy.
- Coalitions at local, regional, and state-levels were used as an engine of change.
- Technical assistance provided to Local Coalitions from Regional and Statewide partners including policy, media, and evaluation expertise.
- Networking across sectors, developing joint projects, vision and common goals.

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For Systems Change, Evaluation is a Critical Component

- Asking questions,
- Collecting data,
- Making decisions,
- Solving problems in applied settings,¹
- Reflecting upon the quality of the endeavor to determine future lessons and adaptations.

¹ Churchman American Public Health Association Meetings: Washington D.C., 2007

Understanding Root Causes Enables Focus on Prevention and Designing Systems Change Endeavors

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Sample Problem with Precursors and Consequences

Sample Problem (Dental Carries) with Precursors and Consequences *							
<i>Tertiary and More Remote Precursors</i>	<i>Secondary Precursors</i>	<i>Direct Precursors</i>	<i>Problem</i>	<i>Direct Consequences</i>	<i>Secondary Consequences</i>	<i>Tertiary Consequences</i>	<i>More Remote Consequences</i>
<ul style="list-style-type: none"> Ignorance, Cultural factors, Lack of money, Bad housing, Poor markets, Poor transport, Social maladjustment, Disrupted homes. 	<ul style="list-style-type: none"> Malnutrition, Deficiencies of calcium, protein, Soft diet, Sweets, Acid foods, Fluoride deficiency, Inadequate brushing, No toothbrush. Neglect, Culture, Poverty, Ignorance. Manpower shortage, Transport deficiency, No Funds, Fear, Neglect, Ignorance, No child care. 	<ul style="list-style-type: none"> Improper nutrients. Deficient oral hygiene and other bad habits. Inadequate dental care. Injury, Bacterial flora, Genetics and race. 	<p>D</p> <p>E</p> <p>N</p> <p>T</p> <p>A</p> <p>L</p> <p>C</p> <p>A</p> <p>R</p> <p>R</p> <p>I</p> <p>E</p> <p>S</p>	<ul style="list-style-type: none"> Pain. Infection. Loss of Teeth. Other carious teeth. 	<ul style="list-style-type: none"> Distress and inattention at school. Pain. Loss of more teeth. Cosmetic effect. Tooth displacement. Further tooth loss. 	<ul style="list-style-type: none"> Waste of schooling. Waste of time and money. Psychological effects. Cosmetic effect. Speech changes. Hearing changes. Masticatory difficulties. 	<ul style="list-style-type: none"> Dropout rate increases. Poverty. Social isolation. Unemployment. Malnutrition. Debility.

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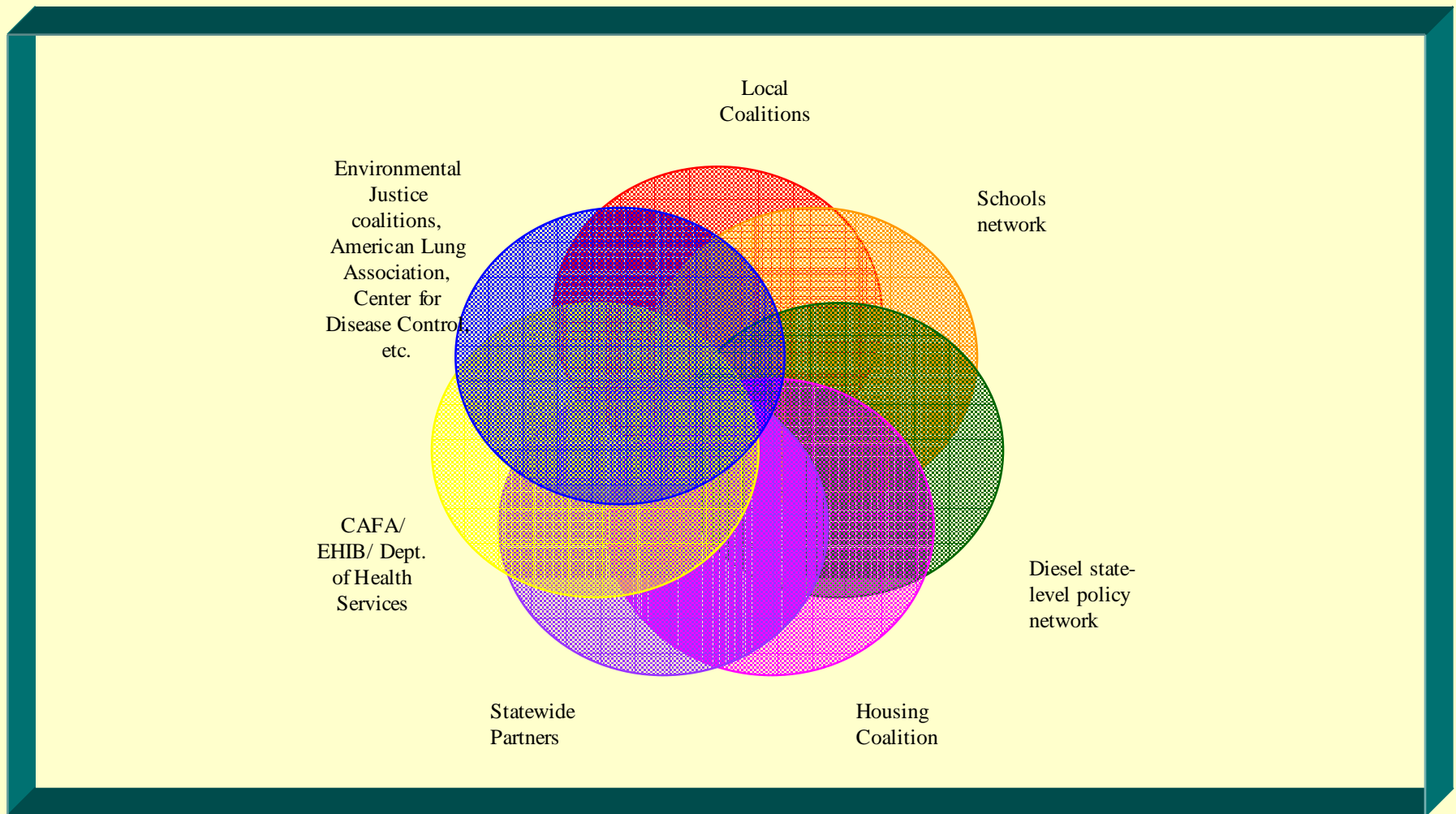
Antecedent Risk and Protective Factors at Seven Contextual Levels

Health Outcomes

Antecedent factors at each of the following levels:

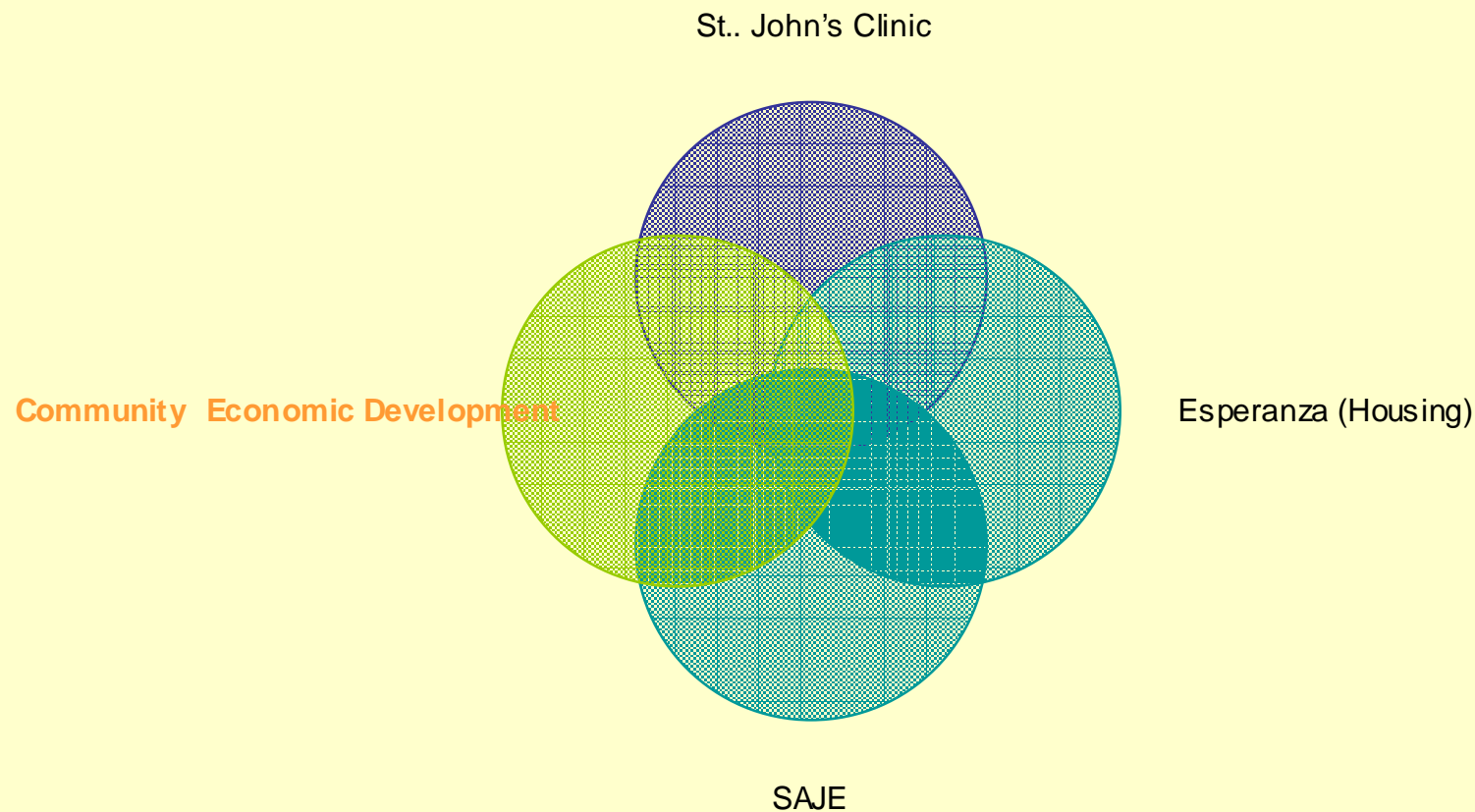
- Individuals, Families, Caregivers
- Schools
- Housing
- Communities and Neighborhoods
- Social and Economic Factors
- Physical Environment
- Public Policy

Statewide Model of Initiative



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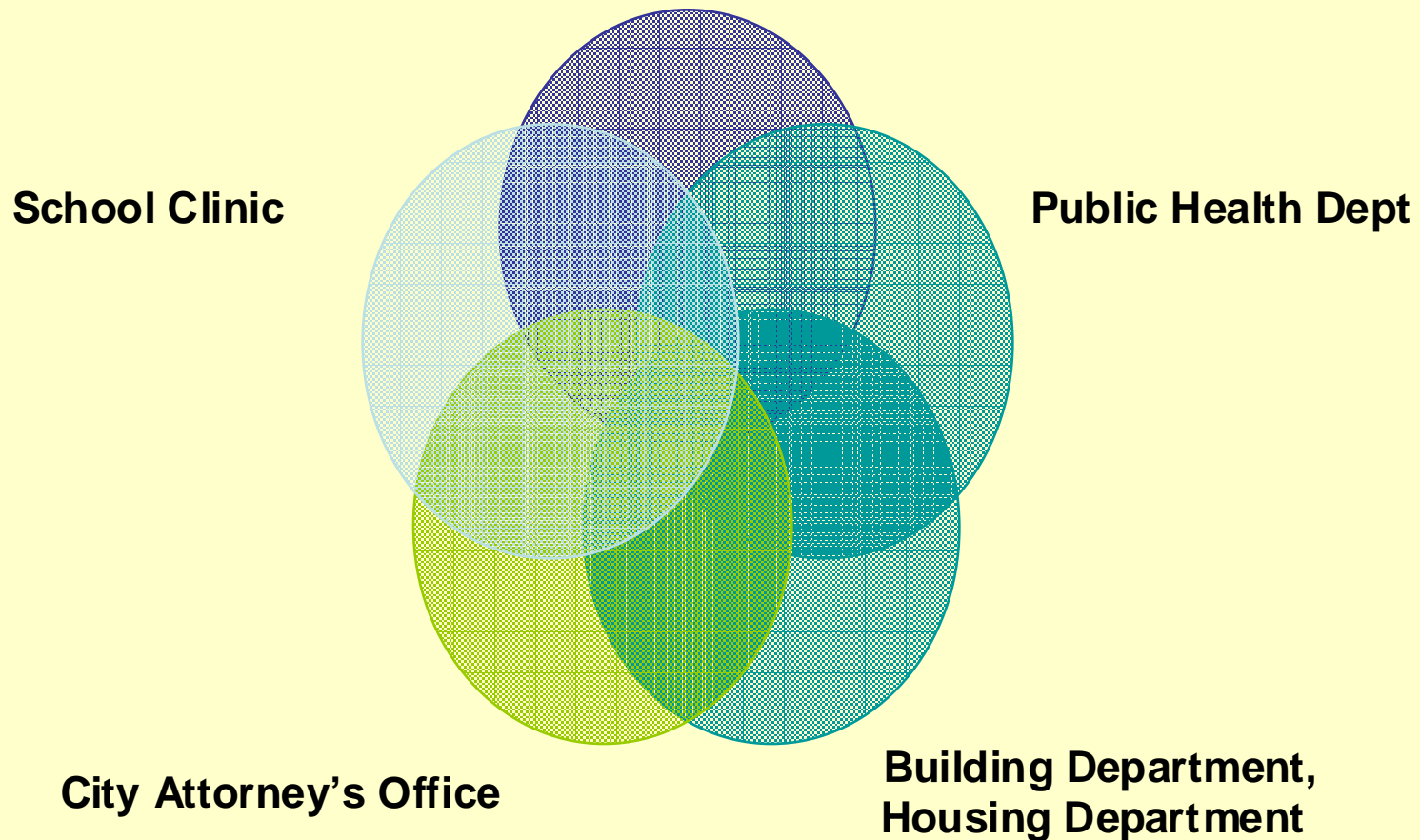
Sample Local Coalition: Los Angeles Coalition Structure



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Los Angeles Coalition Strategic Partners for Addressing Slum Housing

**Community Clinic, (clinicians, Community Health Workers)
build medical evidence form and database for health and housing information
Use for referrals and to link housing and health**



Successes: Housing, Local Level

- Educating Housing Authority Personnel re: environmental triggers of asthma
 - Mold, smoke, cockroaches, need for good ventilation.
- Code enforcement to remove mold and other asthma “triggers” from public housing and enforce regulations with private slum lords.
- Using medical record to document the housing connection to health (an unhealthy housing environment exacerbating asthma in children).
- Using data to make the case to public agencies and the County Attorney Generals’ Office about the seriousness of the issue.

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Successes: Schools, Local Level

- Creation of asthma emergency plans to connect schools, providers, and caregivers.
- Implementation of portion of Tools for Schools
 - Walk-through to inspect for risk factors,
 - Implementation of green cleaning products,
 - Implementation of integrated pest management programs.

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Successes: State-Level

- Diesel reduction strategies,
 - Anti-idling legislation, replacement of older vehicles and modifications on trucks to reduce pollution.
- Port pollution strategies being explored:
 - Ports, trucks that pick-up and distribute goods from the ports.
 - Working on strategy to employ truck drivers by port, regulate vehicles.
- Expansion of citizens' roles in Air District Board.

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Key Facilitating Factors

- **Organizational Factors Important to Supporting the Success of Coalitions and the Initiative**
 - Professional staff in Local Coalitions (depending on volunteers is difficult for a full-time organization),
 - Grassroots community participation,
 - Use of a strategic plan, to focus on environmental policies to reduce risk factors,
 - Forming strategic partnerships with other community or policy groups (environmental justice, Universities, environmental policy groups, City Attorney's Office),
 - Use the Evaluation Team as a “mirror,” assisting Grantees to view their activities and to make appropriate modifications.

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Additional Factors

- Integrating the community and the coalitions to focus on policy work.
 - Requires in-depth training on subject matter (environmental asthma triggers) and
 - Policy process (each arena has its own rules and procedures),
 - Schools, Housing, Local Government, or State Government, Air Quality Regulations, etc.

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Challenges

- Building Credibility
 - Using the precautionary principle and data,
 - Interpretation of environmental, medical, and scientific data.
 - Example: Some Coalitions worked with their local hospitals, health departments, or Air Resources Boards to enhance their credibility.

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Challenges

- Recruiting and Managing diverse collaborative members and strategic partners– at all levels
 - Diversity of function, expertise, population: requires time, coordination, and trust, and choosing partners for specific issues.
 - Example: Central Valley Coalitions included organic farms and agribusinesses in their planning efforts.
 - Example: Businesses joined the Coalition’s efforts in San Diego to keep housing out of an industrial park knowing there would be toxics and pollution too close the housing units.

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Key Findings

- Coalitions with a strong clinical and community base were able to build upon their experiences and move into environmental policy work more quickly than Coalitions that primarily conducted education and lacked the strong community ties.
- Some other Coalitions were able to “catch-up” by incorporating community members into the Coalition and building a strong policy focus.
 - In some cases this caused tension between “agency members” and community members.
 - A policy focus can seem abstract to individuals focused on individual education.

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Key Findings

- Integrating community members into data collection and media usage opportunities empowers members beyond the scope of the Coalitions.
 - Coalition members have transferred these skills into employment opportunities.
- Training of community members in policy work is ongoing due to the above processes.

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Next Steps

- Ongoing work on outcomes, including refining indicators at multiple levels to gauge progress,
- Additional focus on schools and housing endeavors to define strategies that facilitate progress on environmental policies.
- Connecting the dots: what facilitates synergy across the levels of systems
 - Schools, housing, outdoor air, transportation and land use policies.

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