The Component Model of Infrastructure

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The findings and conclusions in this presentation are those of the author and do not necessarily represent the official views of the Centers for Disease Control and Prevention.
What I’ll Cover

- Define program infrastructure
- Clarify the utility of program infrastructure in the context of public health and tobacco prevention and control
- Describe the methodology used to develop the Component Model of Infrastructure
- Provide an overview of the elements within the Component Model of Infrastructure
What is “Program Infrastructure”? 

- Definition: “The foundation or platform that supports capacity, implementation, and sustainability of program initiatives”

Role of Program Infrastructure in Public Health

- Inputs/Infrastructure
- Activities
- Outputs
- Outcomes
- Sustainability

Capacity
Program Infrastructure in Tobacco Prevention and Control

Preventing Initiation of Tobacco Use: Outcome Indicators for Comprehensive Tobacco Control Programs – 2014

Sustainability

Inputs/Infrastructure Activities Outputs
Program Infrastructure in Tobacco Prevention and Control
Role of Program Infrastructure in Public Health

- Inputs/Infrastructure
- Outputs
- Outcomes

Sustainability
Capacity

The Role of Program Infrastructure in Public Health
OSH Infrastructure-Related Evaluation Questions

• What is the foundation for effective tobacco prevention and control programs?

• What elements drive beneficial environmental change?
Overview of Data Collection during the Three Phases of Infrastructure Evaluation Study

<table>
<thead>
<tr>
<th>States participating</th>
<th>Colorado, Massachusetts, Michigan, Washington</th>
<th>Kansas, Kentucky, Minnesota, Mississippi, Oklahoma, Oregon, Texas, Utah</th>
<th>Idaho, New Hampshire, North Carolina, North Dakota, Ohio,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection methods</td>
<td>60-90 minute in-person group discussions</td>
<td>60-90 minute telephone group discussions</td>
<td>30 minute to 8 hour in-person discussions</td>
</tr>
<tr>
<td>Data</td>
<td>Recorded and transcribed verbatim conversations and field notes</td>
<td>Recorded and transcribed verbatim conversations and field notes</td>
<td>Field notes</td>
</tr>
<tr>
<td>Number of interviews conducted</td>
<td>43 (Including one combined group discussion with all 4 sites at a CPPW technical assistance meeting in Atlanta, Georgia)</td>
<td>9 phone calls with each state plus 4 group calls with 2-3 of the same 9 states participating on each call</td>
<td>5 site visits (ranging from 2-4 days)</td>
</tr>
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</table>
Component Model of Infrastructure

Outcomes
- Managed Resources
- Engaged Data

Multi-Level Leadership

Responsive Plans/Planning

Managed Resources

Engaged Data

Networked Partnerships

Core Components

Continued Support

Capacity

Sustainability

Strategic Understanding

Contextual Influences

Operations

Responsive Plans/Planning

Managed Resources

Engaged Data

Networked Partnerships

Multi-Level Leadership
Multi-Level Leadership

- Includes both people and processes
- Multiple levels of interaction and impact
- Includes both internal and external decisionmakers
Managed Resources
Engaged Data

- Promotes action
- Promotes public health goals
- Requires development, support and use of data sources at multiple levels
Responsive Plans and Planning

“A dynamic process that evolves and responds to contextual influences such as changes in the science, health department priorities, funding levels, and external support from the public and leadership.”
Networked Partnerships

- Strategic partnerships
- All levels (national, state, local)
- Multiple types of organizations
- Multiple content areas
- Interconnected to promote achievement of public health goals
Component Model of Infrastructure

Core Components:
- Operations
- Managed Resources
- Engaged Data
- Multi-Level Leadership
- Responsive Plans/Planning
- Networked Partnerships

Outcomes:
- Managed Resources
- Engaged Data
- Multi-Level Leadership
- Networked Partnerships
- Responsive Plans/Planning

Capacity:
- Strategic Understanding

Continued Support
- Sustainability

Contextual Influences
Component Model of Infrastructure

Outcomes

Managed Resources
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Multi-Level Leadership
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Responsive Plans/Planning
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Capacity

Core Components
Managed Resources
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Strategic Understanding

Contextual Influences
Operations
Component Model of Infrastructure

Core Components:
- Managed Resources
- Engaged Data
- Multi-Level Leadership
- Networked Partnerships
- Responsive Plans/Planning

Outcomes:
- Continued Support
- Capacity
- Sustainability

Contextual Influences:
- Strategic Understanding
- Operations
Program infrastructure is the foundation that supports capacity, implementation, and sustainability of program initiatives.

A multi-phase infrastructure evaluation study was launched to develop the Component Model of Infrastructure.

The core components of the Component Model of Infrastructure interact with each other and with the supporting components to create the capacity to successfully implement evidence-based activities and achieve public health goals.
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Preventing Initiation of Tobacco Use: Outcome Indicators for Comprehensive Tobacco Control Programs–2014. Atlanta, Georgia: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.

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