




## Logic Models as a Platform for Program Evaluation

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Session 20: Monday AM



“... If you blindfold someone,  
put them in a large field, and  
tell them to walk forward in a  
straight line. Within minutes  
and without fail...



“... they will walk in a circle.

Robert Krulwich, NPR,  
*All Things Considered*, 11/23/10

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### Objectives: Be able to...

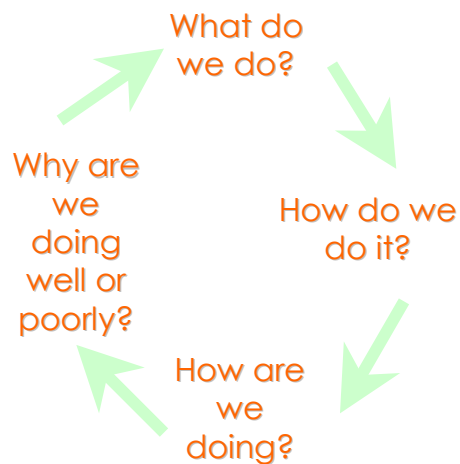
- State CDC Evaluation Framework steps and standards
- State the purpose of and components of logic models
- Construct simple logic models
- Elaborate simple logic models and describe the added additional components to model
- State how logic models help guide questions in program planning and evaluation

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## Integrating Processes to Achieve Continuous Quality Improvement

### ■ Continuous Quality Improvement (CQI) cycle

- **Planning**—What actions will best reach our goals and objectives.
- **Performance measurement**—How are we doing?
- **Evaluation**—Why are we doing well or poorly?

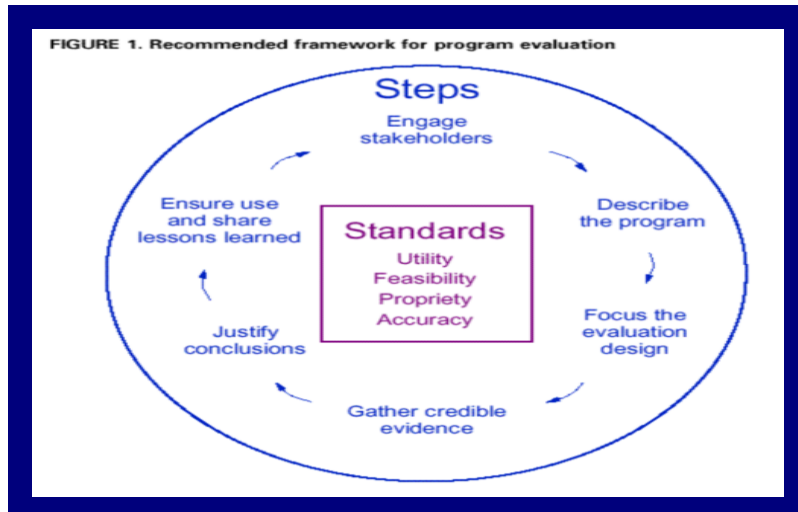


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- “Research seeks to **prove**, evaluation seeks to **improve**...”

*M.Q. Patton*

## Enter the CDC “Evaluation” Framework

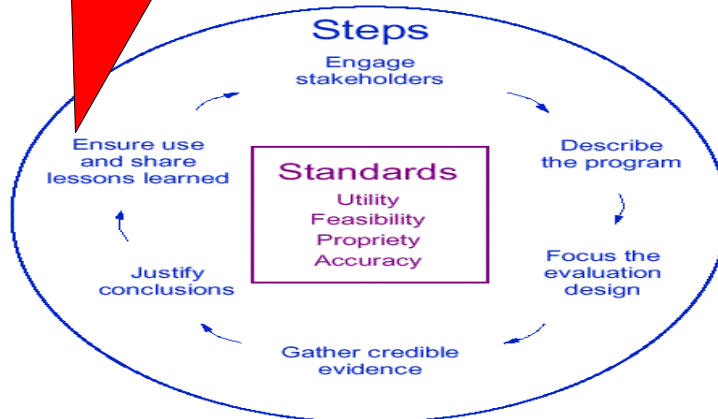


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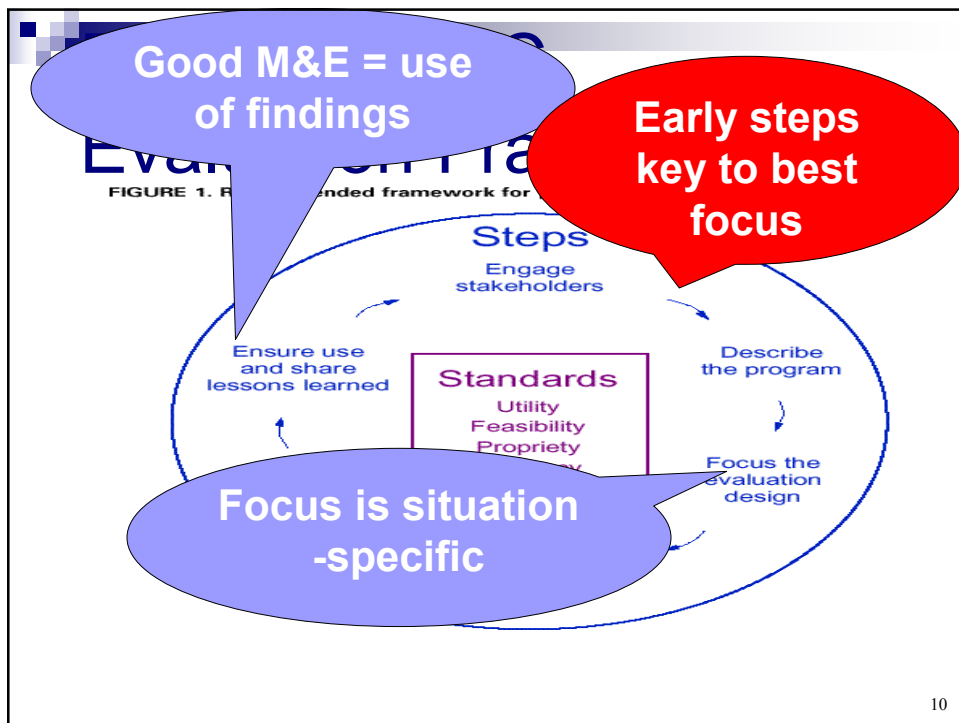
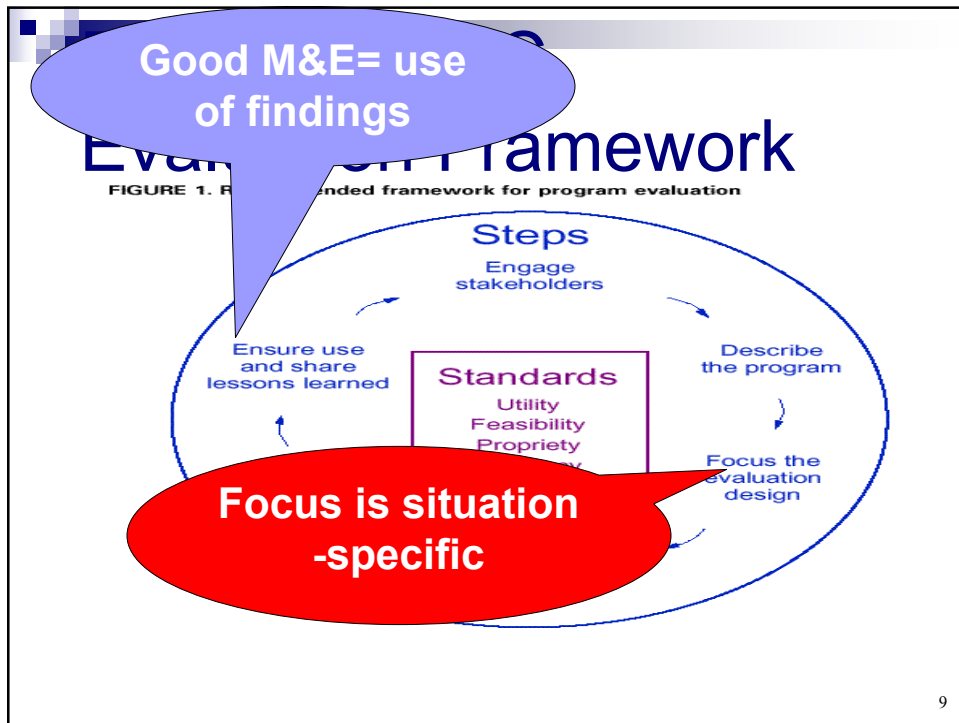
Good M&E = use  
of findings

## Evaluation Framework

FIGURE 1. Recommended framework for program evaluation



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## Logic Models and Program Evaluation

### Constructing Simple Logic Models



You Don't **Ever** Need a Logic Model, BUT,  
You **Always** Need a Program Description

**Don't jump into planning or evaluation without clarity on:**

- The big **“need”** your program is to address
- The key **target group(s)** who need to take action
- The kinds of actions they need to take (your intended **outcomes** or objectives)
- **Activities** needed to meet those outcomes
- “Causal” **relationships** between activities and outcomes

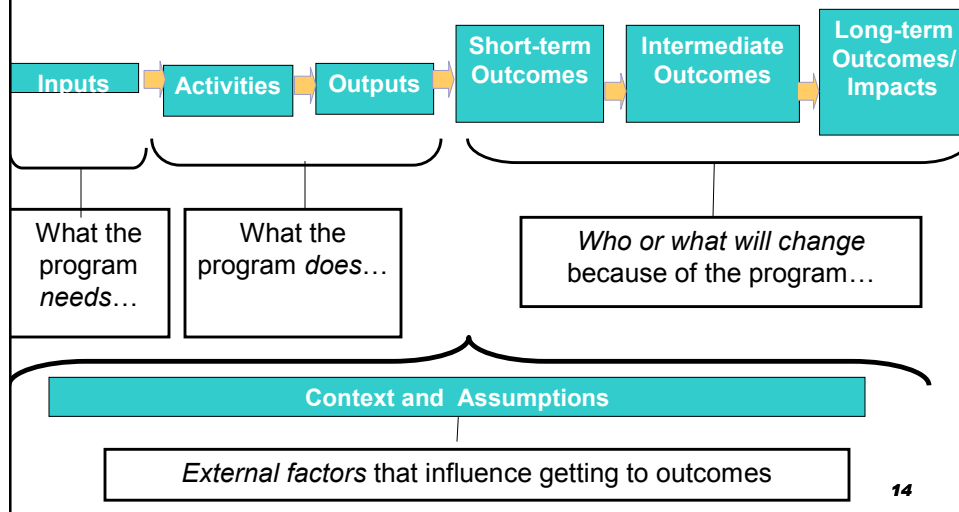
## Logic Models and Program Description

### ■ **Logic Models**

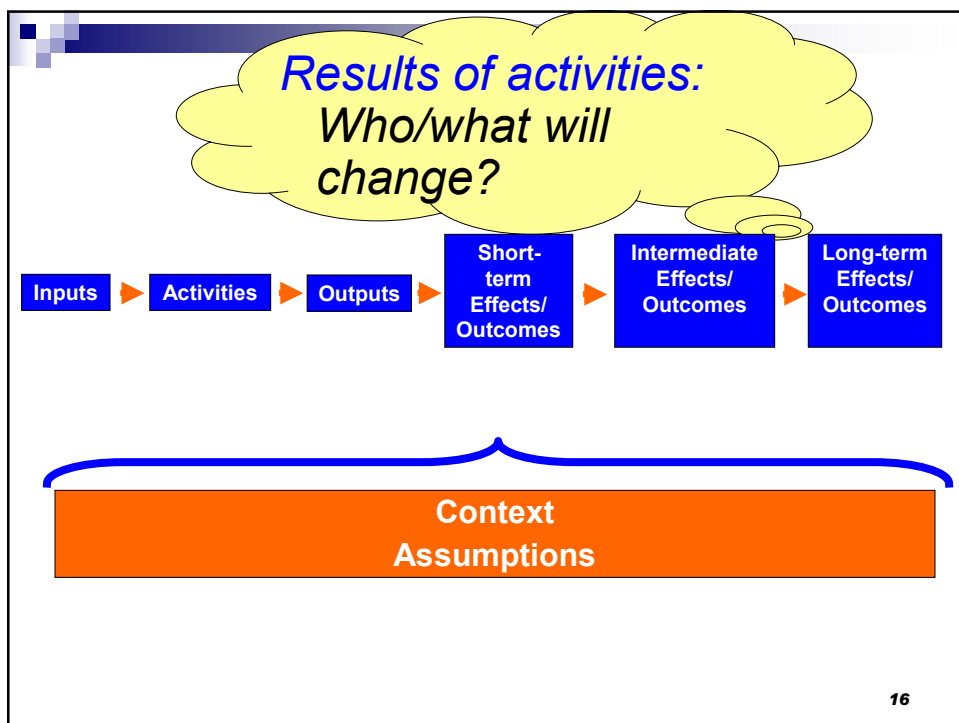
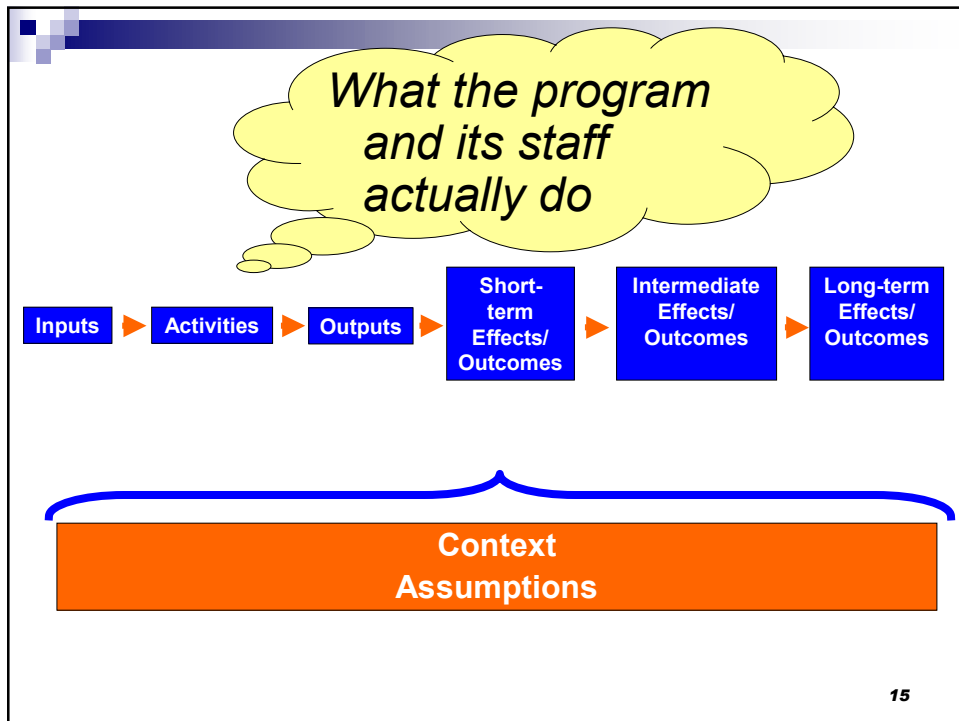
*Graphic depictions of the **relationship** between your program's activities and its **intended** effects*

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## “Complete” Logic Model

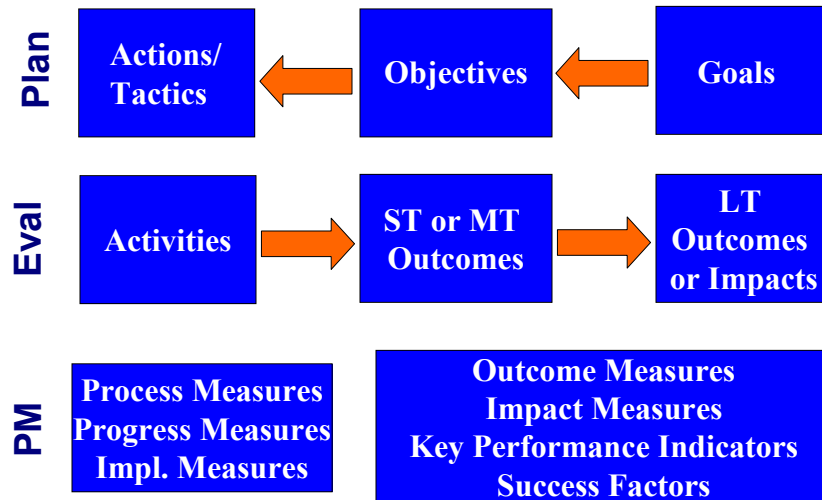


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## Finding Activities and Outcomes



## Finding Activities and Outcomes

Office of Workforce and Career Development  
(OWCD) Mission

**To improve health outcomes by developing a competent, sustainable and diverse public health workforce through evidence-based training, career and leadership development, and strategic workforce planning.**

## Implicit Logic Model



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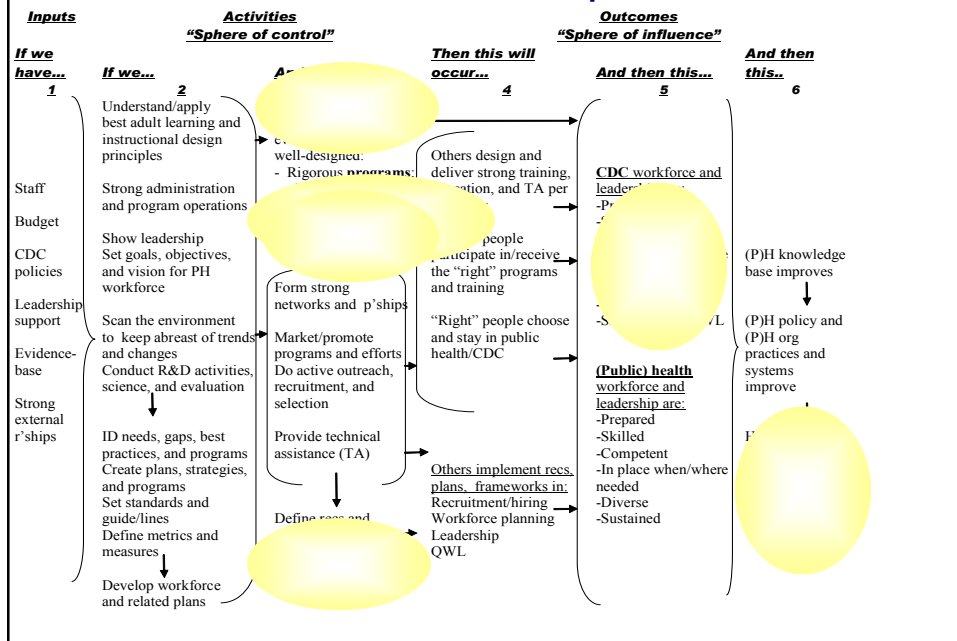
## Process Use

- When influence/program improvement comes *not* from findings of an evaluation, but from insights gleaned during the tasks involved in *doing* an evaluation

*Process Use in Theory, Research, and Practice:*  
New Directions for Evaluation, No. 116, 2008

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## Case—OWCD “Roadmap”



## Finding Activities and Outcomes

### Refugee Family Services (RFS) Mission

To support the efforts of refugee women and children to achieve economic and social self-sufficiency in the United States through education, direct service, and economic opportunity



## Logic Models and Program Evaluation

Example—Activities and Outcomes



### Constructing Logic Models:

*Identify Activities and Outcomes by....*

1. **Examining program descriptions, MISSIONS, VISIONS, PLANS**, etc. and extracting these from the narrative, **OR**
2. **Reverse mapping**—Starting with outcomes, ask “how to” in order to generate the activities which produce them, **OR**
3. **Forward mapping**—Starting with activities, ask “so what” in order to generate the outcomes that are expected to result

## Then...Do Some Sequencing...

- Divide the **activities** into 2 or more columns based on their **logical** sequence.
  - Which activities have to occur before other activities can occur?
- Do same with the **outcomes**.
  - Which outcomes have to occur before other outcomes can occur?

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## Listing Activities and Outcomes

### Lead Poisoning

#### Activities

- Outreach
- Screening
- Case management
- **Referral** for medical tx
- Identification of kids with elevated lead (EBLL)
- Environmental assessment
- **Referral** for env clean-up
- Family training

#### Effects/Outcomes

- Lead source identified
- **Families** adopt in-home techniques
- **Providers** treats EBLL kids
- **Housing Authority** eliminates lead source
- *EBLL reduced*
- *Developmental “slide” stopped*
- *Q of L improved*

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Global Logic Model: Childhood Lead Poisoning Program			
Early Activities	Later Activities	Early Outcomes	Later Outcomes
<i>If we do...</i>	<i>And we do...</i>	<i>Then....</i>	<i>And then...</i>
Outreach	Case mgmt of EBLL kids	EBLL kids get medical treatment	EBLL reduced
Screening	Refer EBLL kids for medical treatment	Family performs in-home techniques	Develop'l slide stopped
ID of elevated kids	Train family in in-home techniques	Lead source identified	Quality of life improves
	Assess environment of EBLL child	Environment gets cleaned up	
	Refer environment for clean-up	Lead source removed	

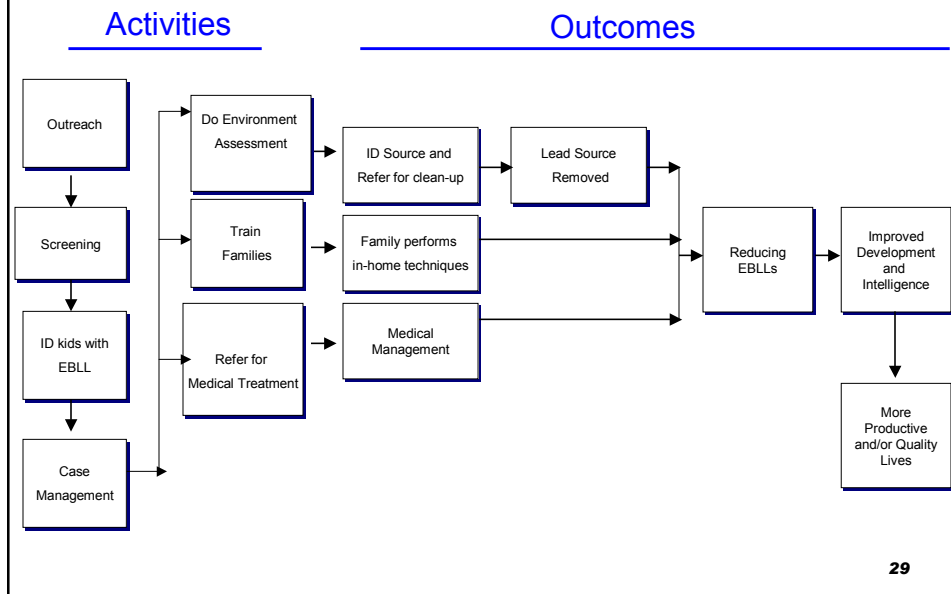
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For Planning and Evaluation  
“Causal” Arrows Can Help

- **Not** a different logic model, but same elements in different format
- Arrows can go from:
  - **Activities to other activities**
    - **Which** activities feed **which** other activities?
  - **Activities to outcomes**
    - **Which** activities produce **which** intended outcomes?
  - **Early effects/outcomes to later ones**
    - **Which** early outcomes produce **which** later outcomes

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## Lead Poisoning: "Causal" Roadmap

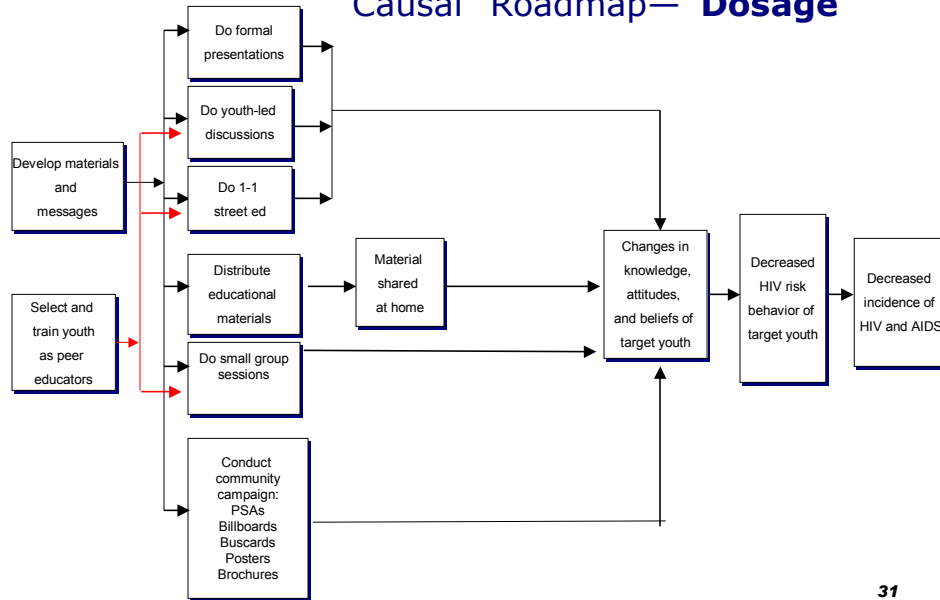


## Group Exercise

### Constructing Simple Program Logic Model

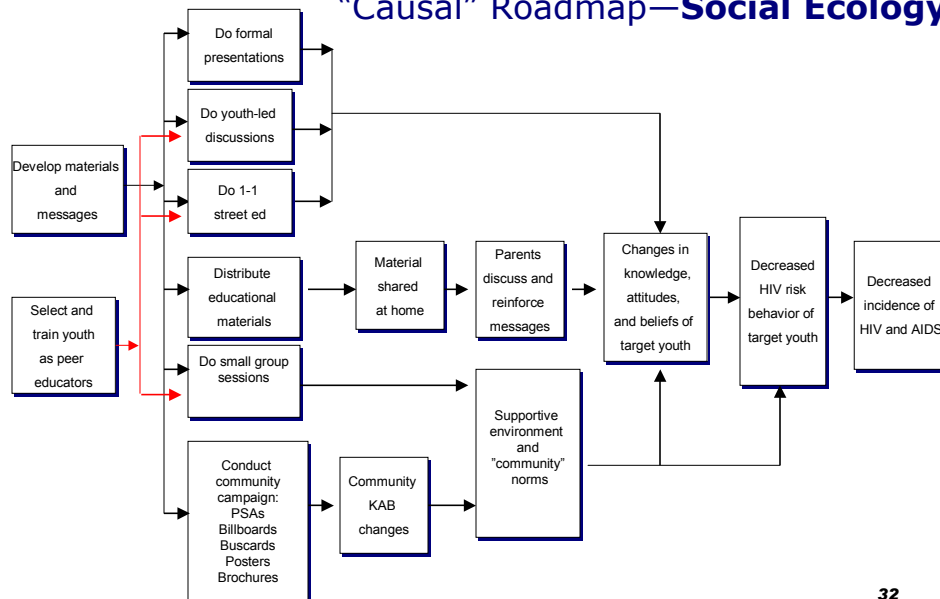
- Review list of activities and outcomes for your assigned case
- DON'T WORRY ABOUT OUTPUTS, INPUTS, AND MODERATORS YET
- Tweak as needed
- Draw lines to show causal connections

## Eastside HIV/AIDS Prevention Program "Causal" Roadmap—"Dosage"



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## Eastside HIV/AIDS Prevention Program "Causal" Roadmap—**Social Ecology**



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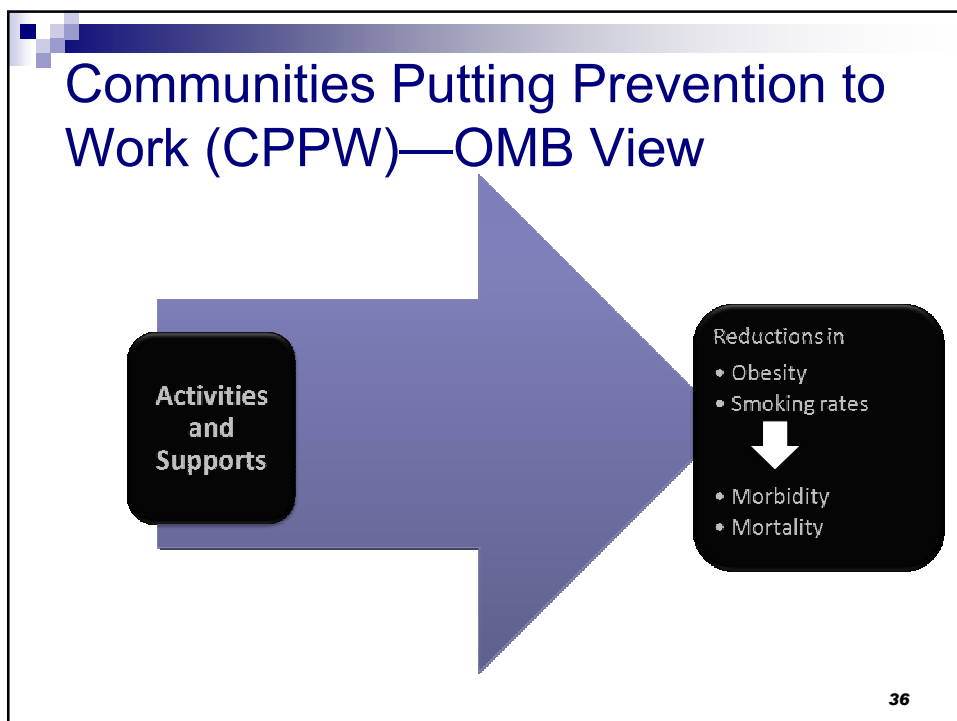
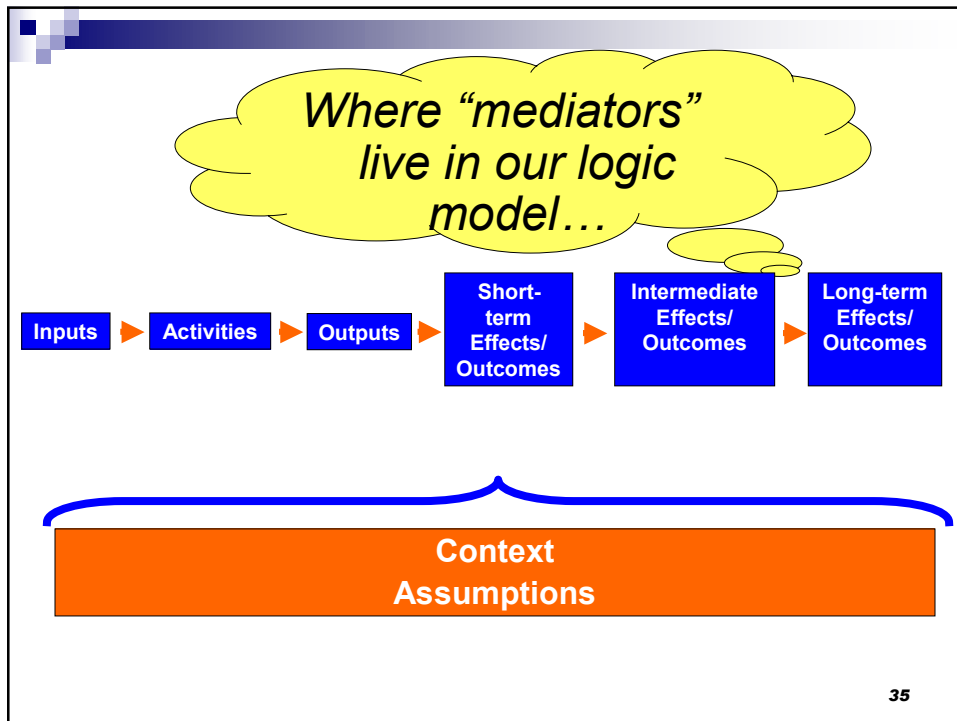


# Logic Models and Program Evaluation

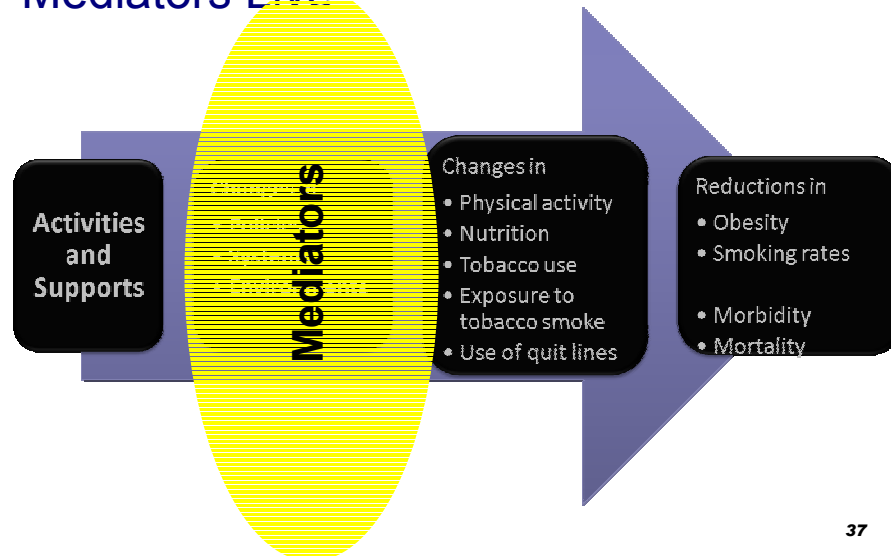
## Elaborating Our Program "Theory"—Mediators

### Filling in the Blanks....



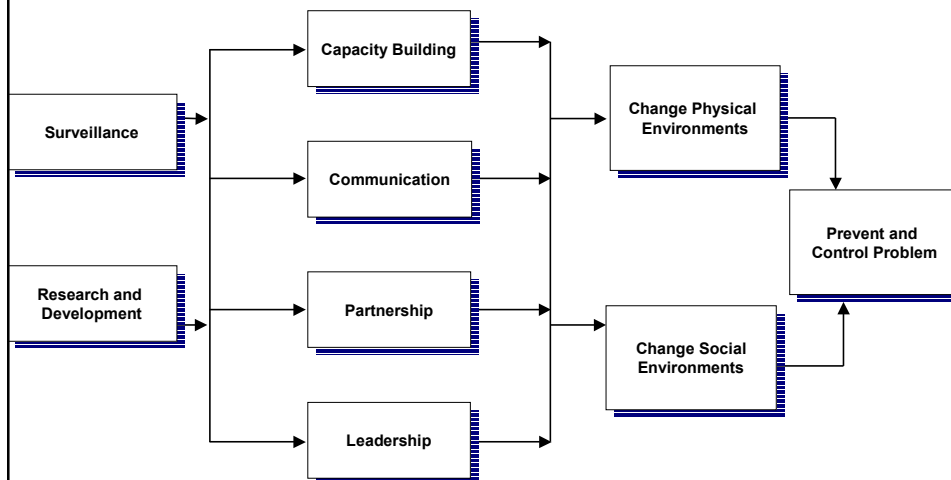


## Basic CPPW Logic Model—Where Mediators Live



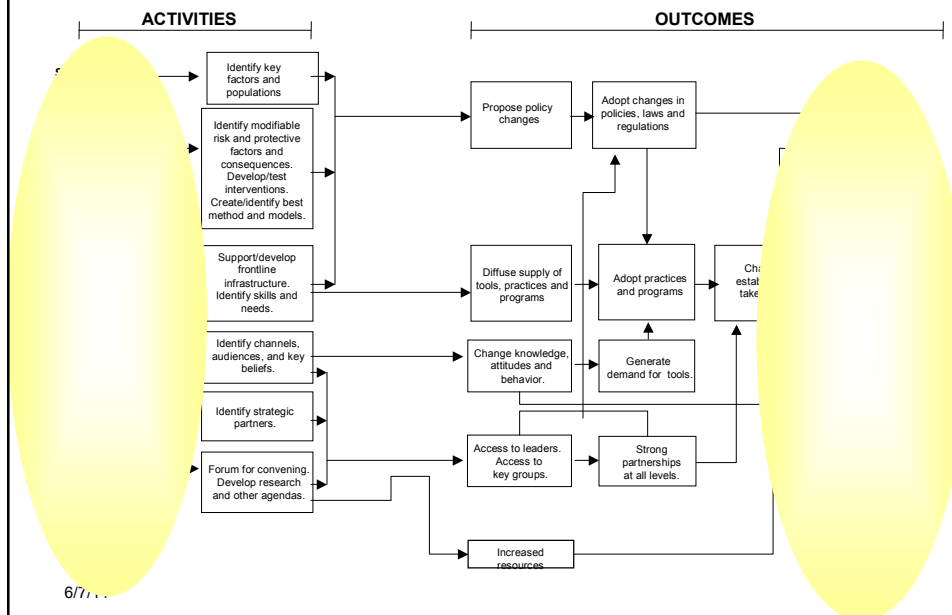
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## Prevention Program—Simple Logic Model



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## Prevention Program—Elaborated Logic Model



## Implicit Logic Model

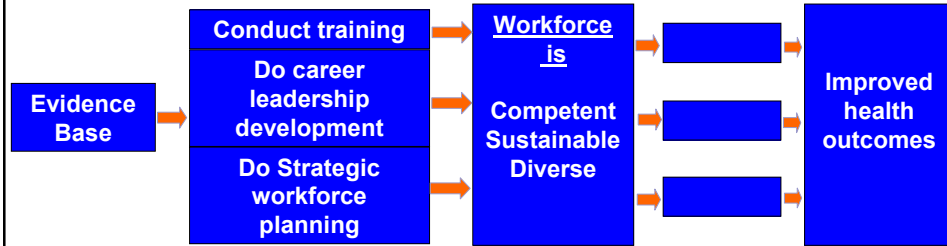


## Implicit Logic Model

### Inputs

### Activities

### Outcomes



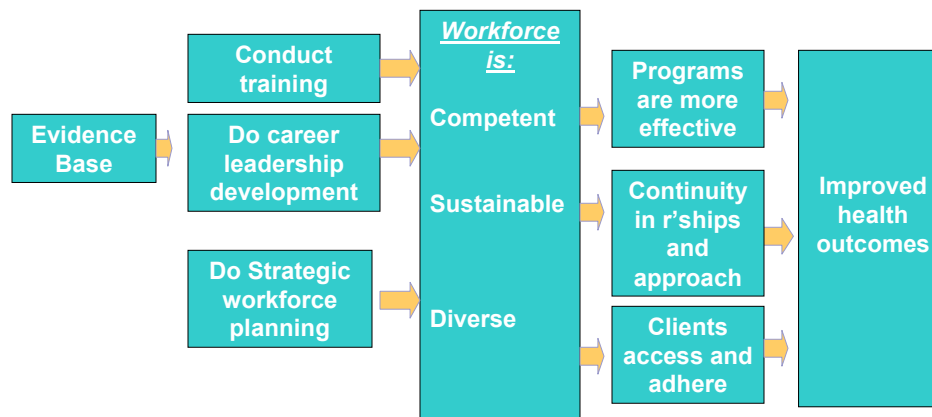
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## Implicit Logic Model—Mediators

### Inputs

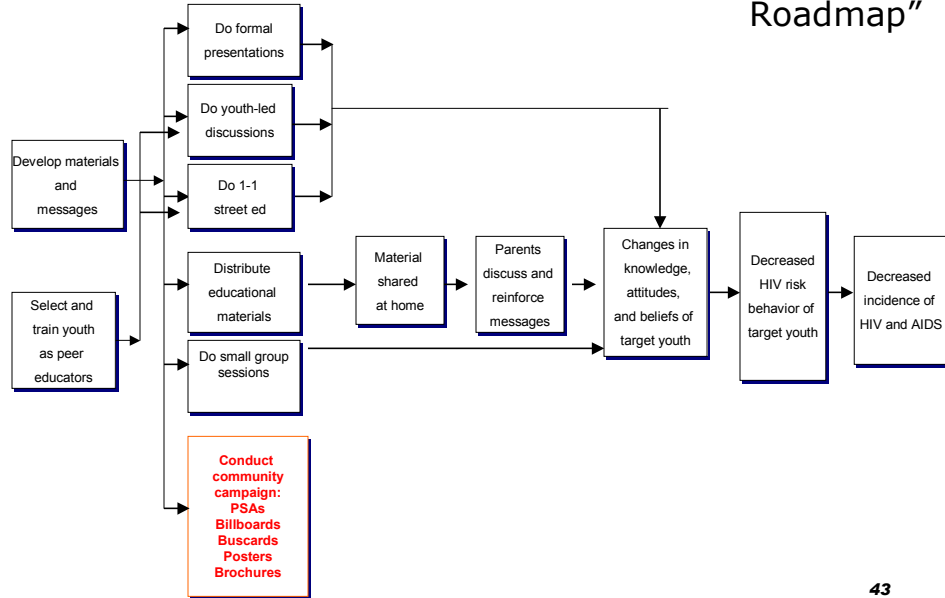
### Activities

### Outcomes



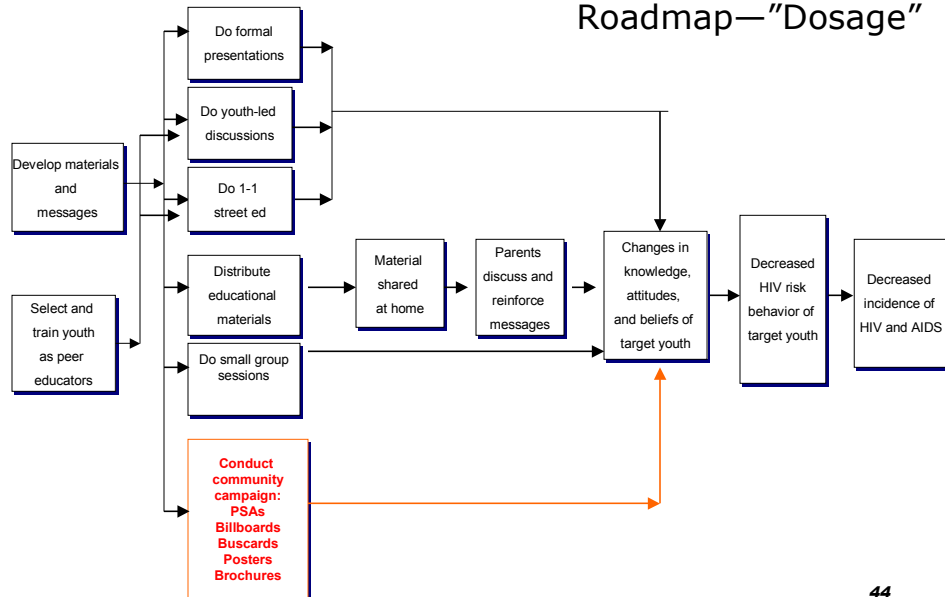
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## Eastside HIV/AIDS Prevention Program: "Causal" Roadmap



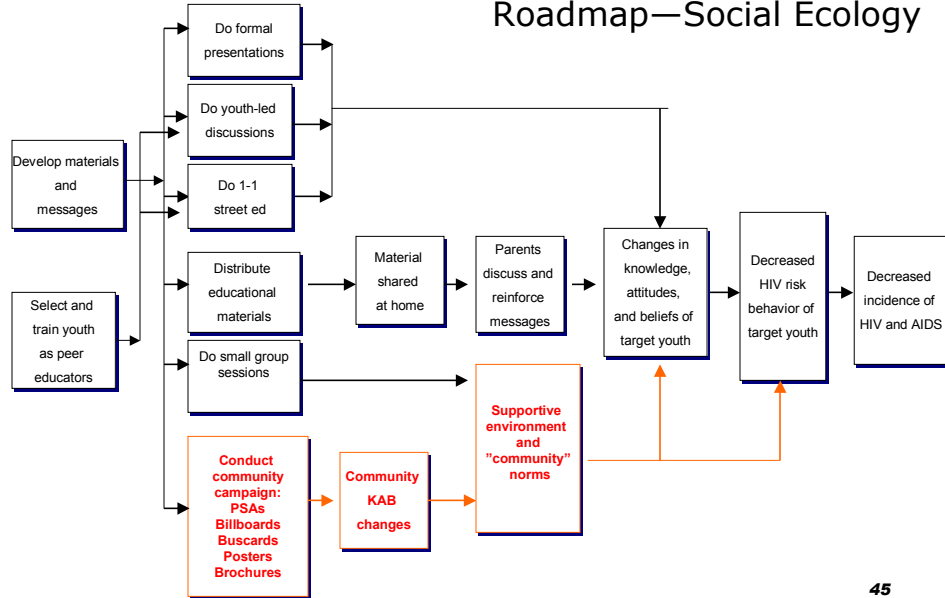
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## Eastside HIV/AIDS Prevention Program: "Causal" Roadmap—"Dosage"



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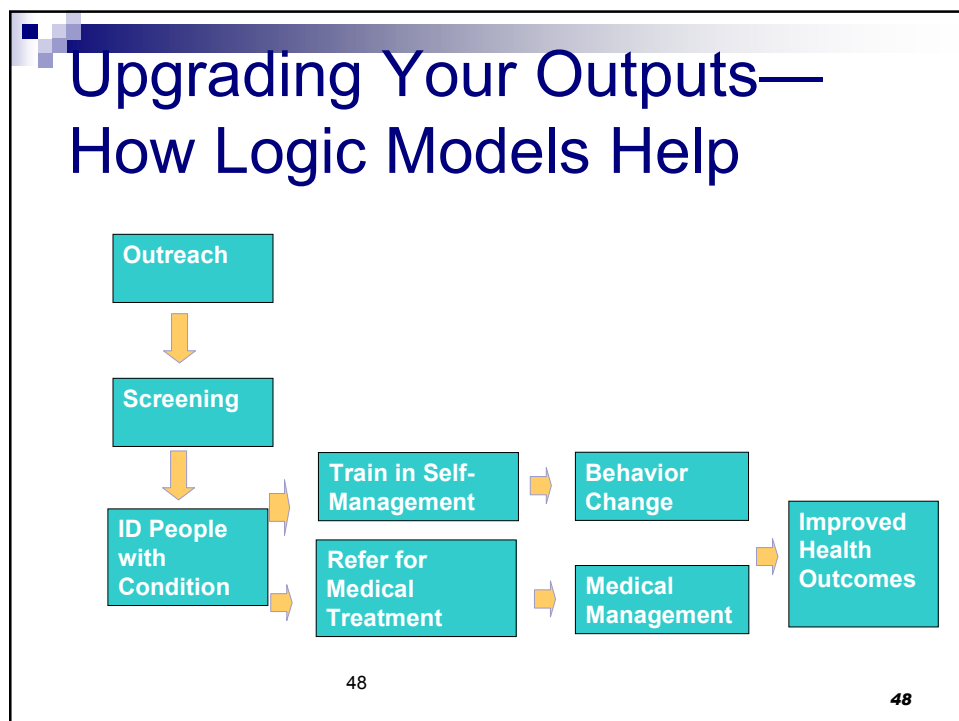
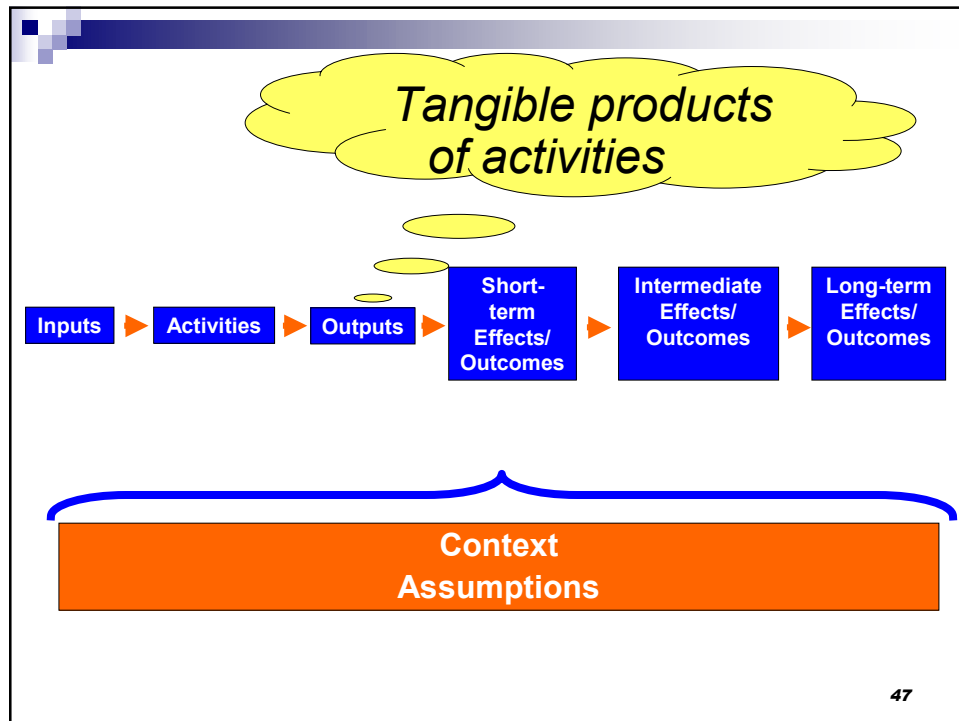
## Eastside HIV/AIDS Prevention Program: "Causal" Roadmap—Social Ecology



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## Logic Models and Program Evaluation

Elaborating Our Program  
"Theory"—Outputs, Inputs,  
and Moderators



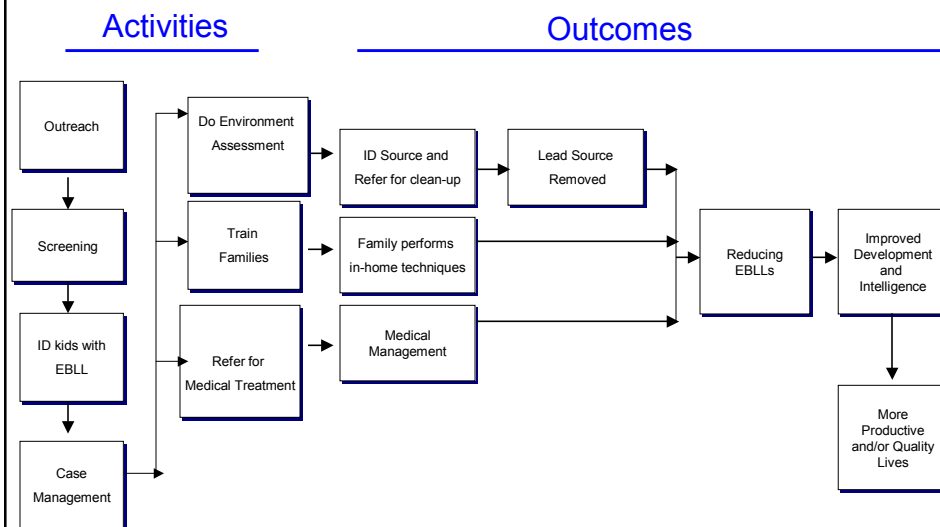


## Traditional Outputs— Lead Program

- *Screening:* Pool (#) of screened kids
- *Training:* Pool (#) of clients trained
- *Referrals:* (#) referrals to medical treatment

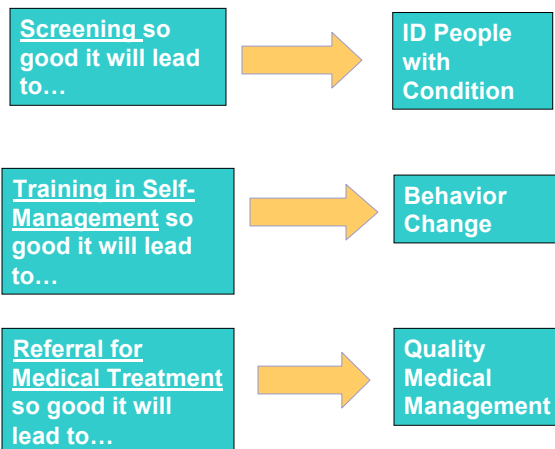
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## Lead Poisoning: “Causal” Roadmap



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## The Plot Thickens



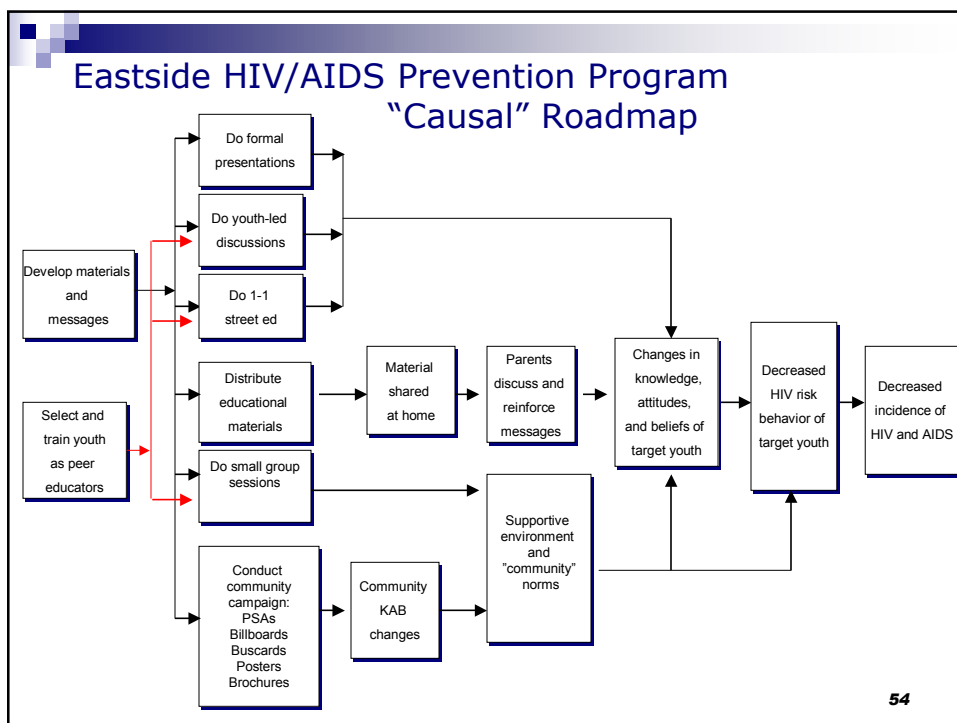
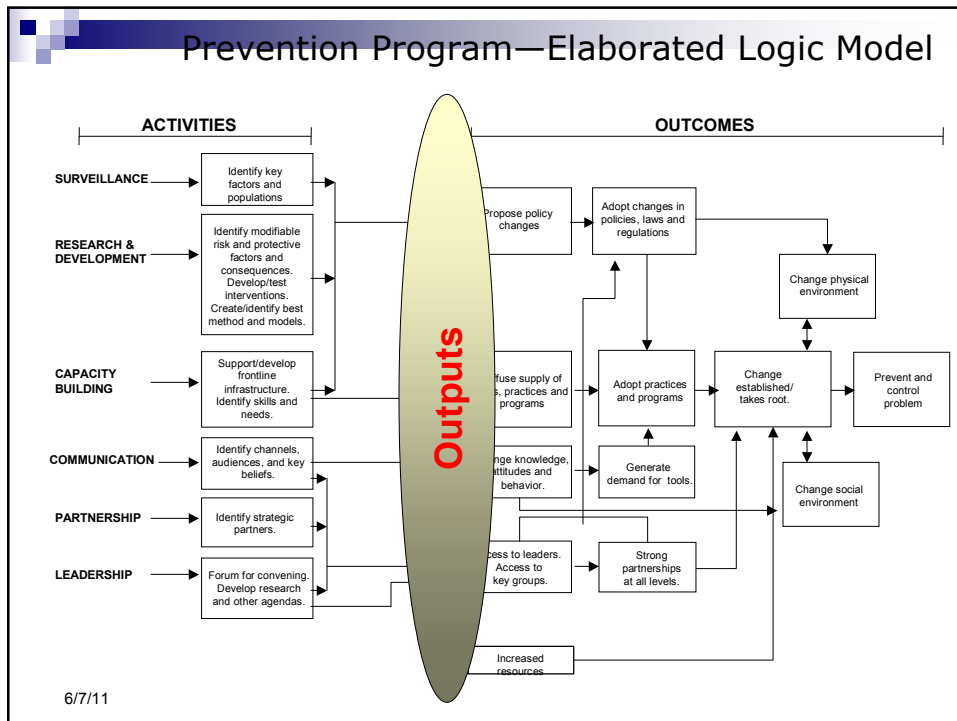
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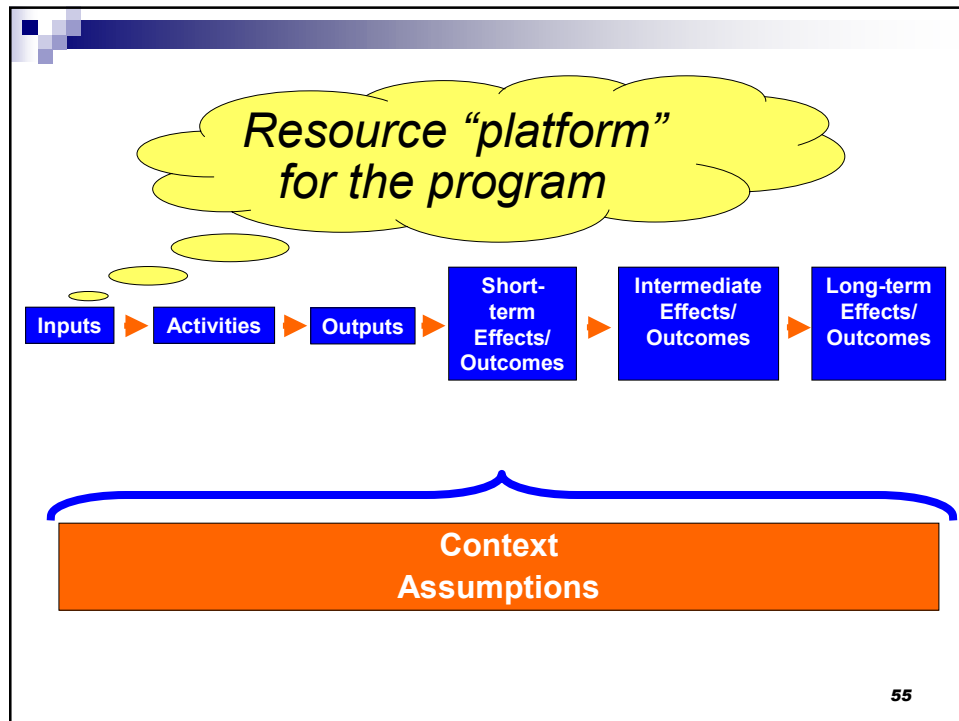
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## “Upgraded” Outputs: *More than Simple Counts*

- **Screening:** Pool (#) of screened kids (*meeting likely risk profile*)
- **Training:** Pool (#) of clients trained using culturally-competent curriculum and with appropriate supports
- **Referrals:** Pool(#) of referrals to (*qualified or willing*) medical treatment providers

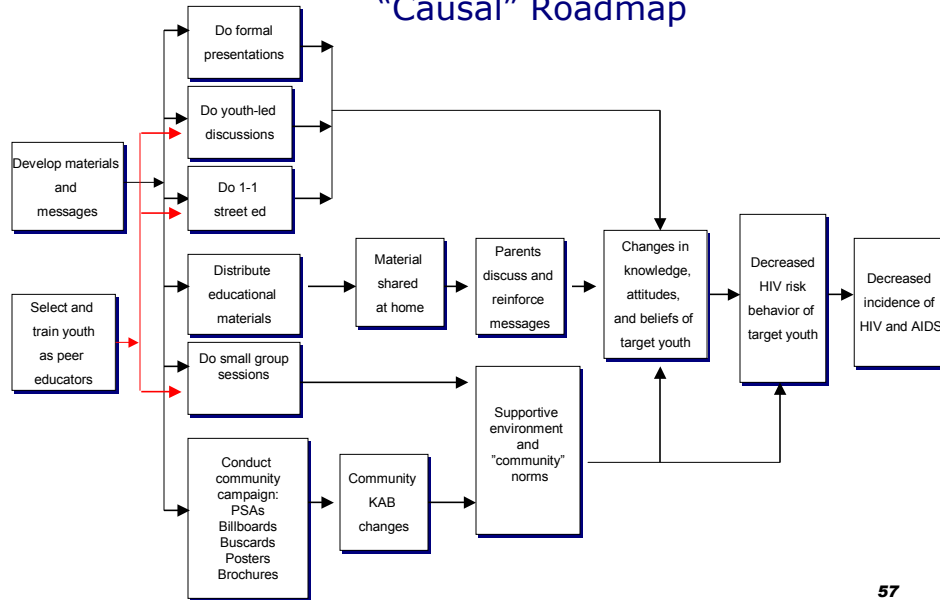
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- ### Lead Poisoning: Sample Inputs
- Funds
  - Trained staff
  - Legal authority to screen
  - *Relationships with orgs for med treatment and environmental clean-up*
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## Eastside HIV/AIDS Prevention Program "Causal" Roadmap



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**Moderators:**  
Contextual factors  
that will facilitate or  
hinder getting our  
outcomes

Inputs



Activities

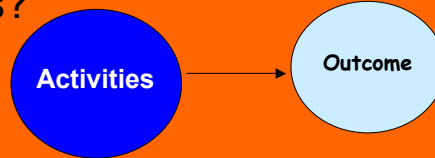
Outcomes

Context  
Assumptions

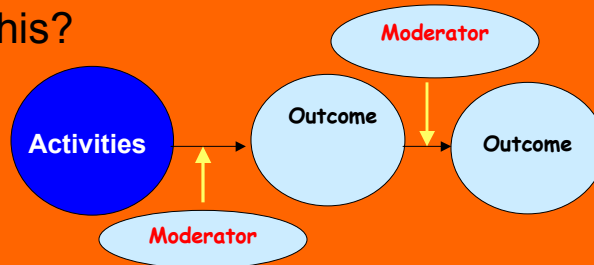
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## Moderator Relationships

This?



Or this?



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## Contextual Factors

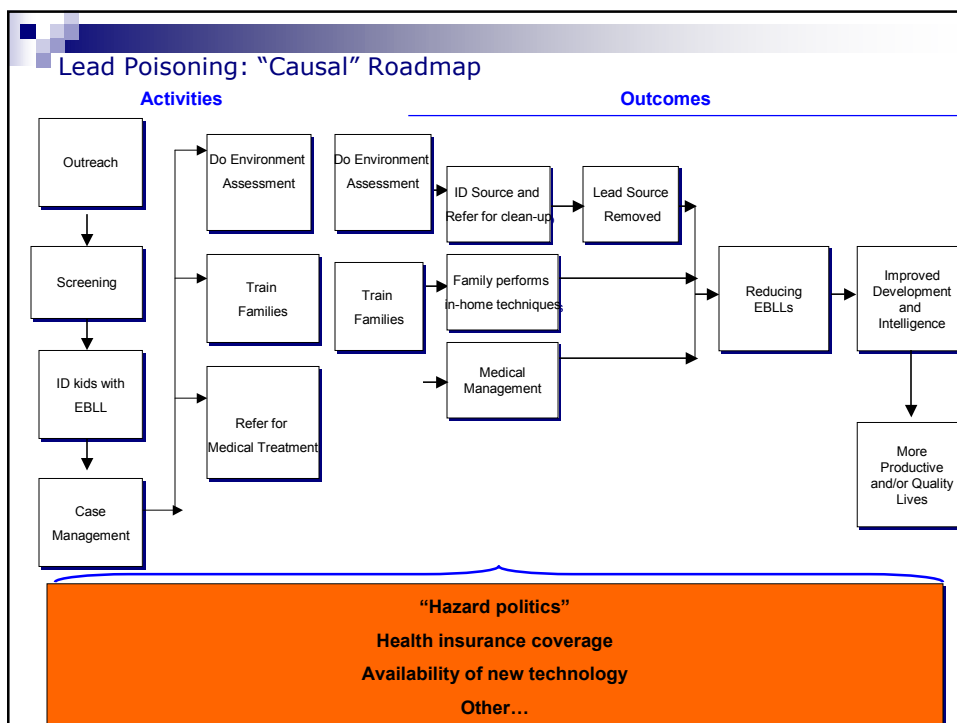
- Political
- Economic
- Social
- Technological

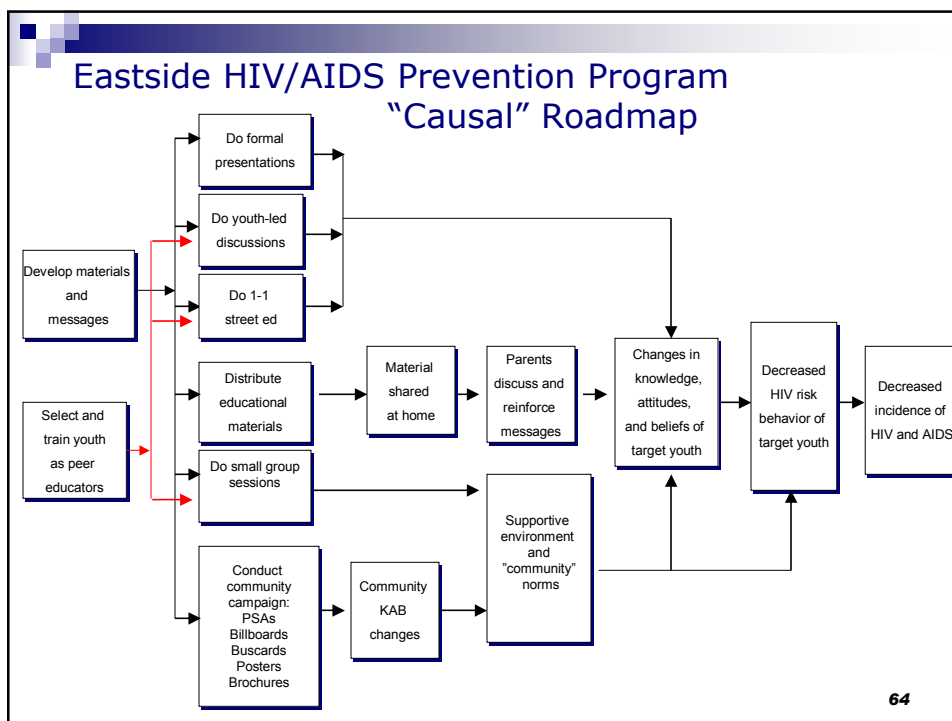
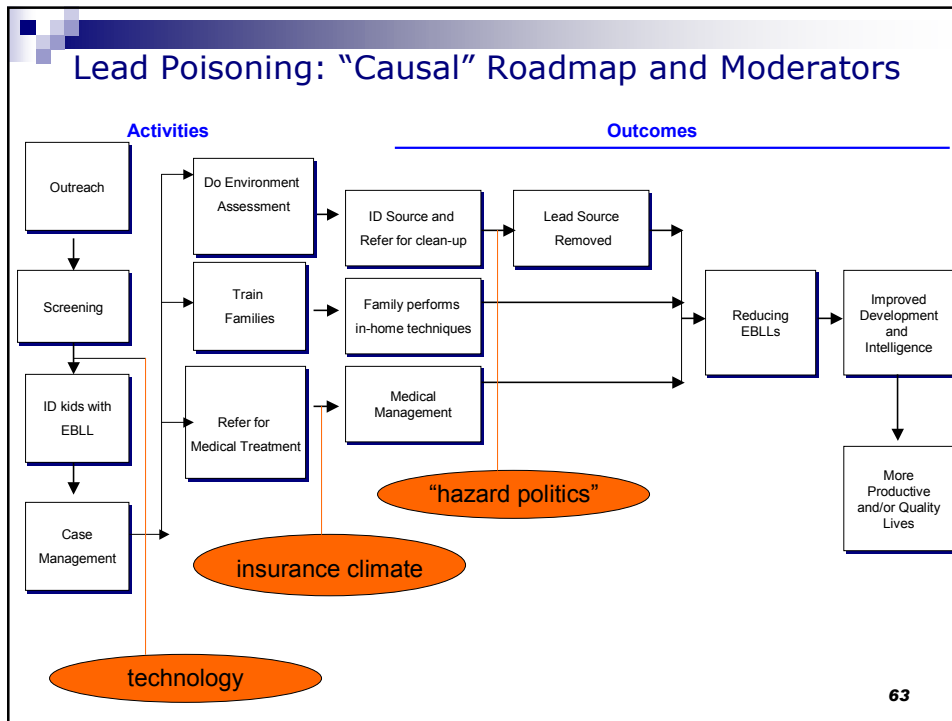
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## Moderators—Lead Poisoning

- **P**olitical—*“Hazard” politics*
- **E**conomic—*Health insurance*
- **T**echnological—*Availability of hand-held technology*

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## Note!

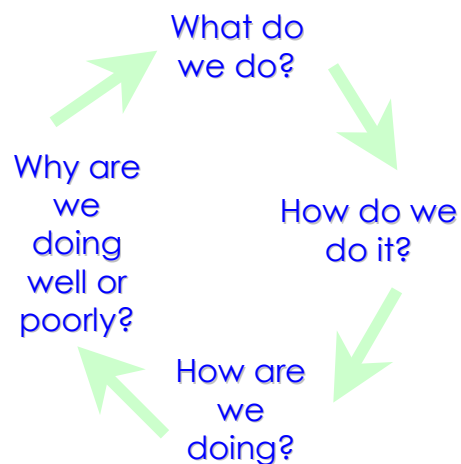
Logic Models make the  
program theory clear,  
not true!

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## Avoiding “garbage in, garbage out” in your logic model—An inductive approach

### Continuous Quality Improvement (CQI) cycle

- **Planning**—*What* actions will best reach our goals and objectives.
- **Performance measurement**—How are we doing?
- **Evaluation**—*Why* are we doing well or poorly?



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## Logic Models and Program Evaluation

Putting Your Logic Model to Use



### Which S'holders Matter Most?

Who is

- Affected by the program?
- Involved in program operations?
- Intended users of evaluation findings?



**Of these, who do we most need to:**

Enhance credibility?

Implement program changes?

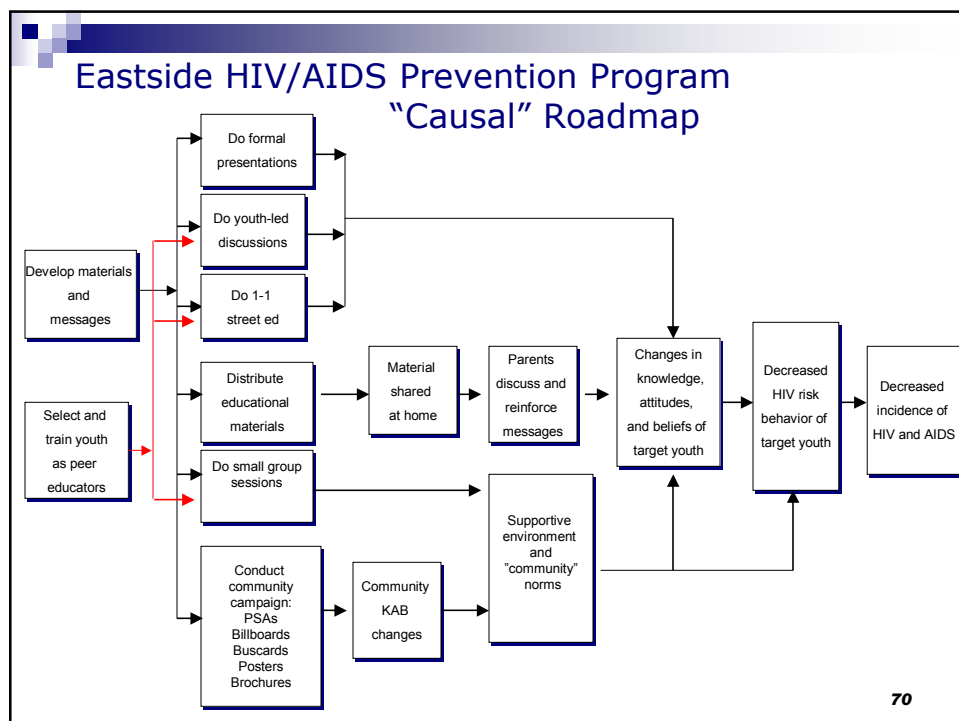
Advocate for changes?

Fund, authorize, expand program?

## Setting Evaluation

### Focus: (Some) Potential Purposes

- Show accountability
- Test program implementation
- “Continuous” program improvement
- Increase the knowledge base
- Other...
- Other...

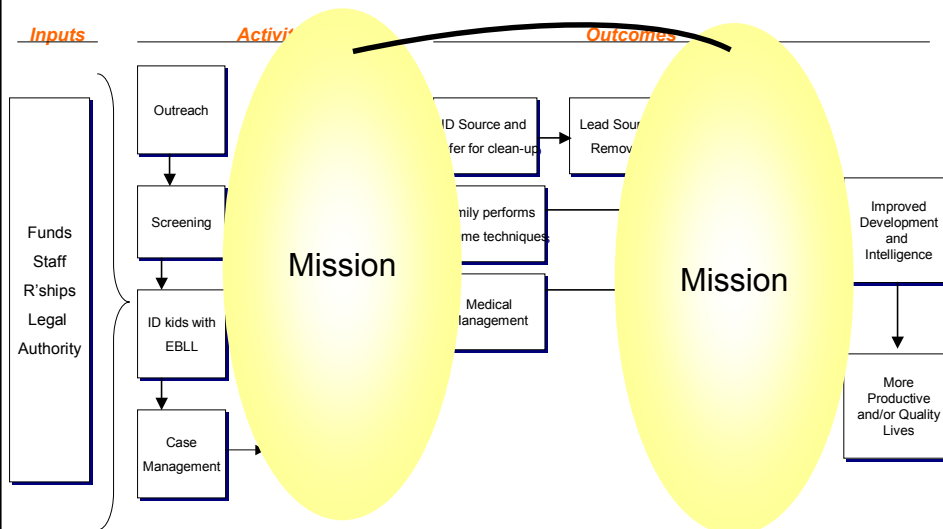


## Logic Models and Strategy and Planning

- By Clarifying Sequence of Activities → Outcomes, Helps With...
  - Identifying/refining mission
  - Developing consensus on key intended outcomes—the “staked claim”
  - Defining goals and objectives, strategies and actions

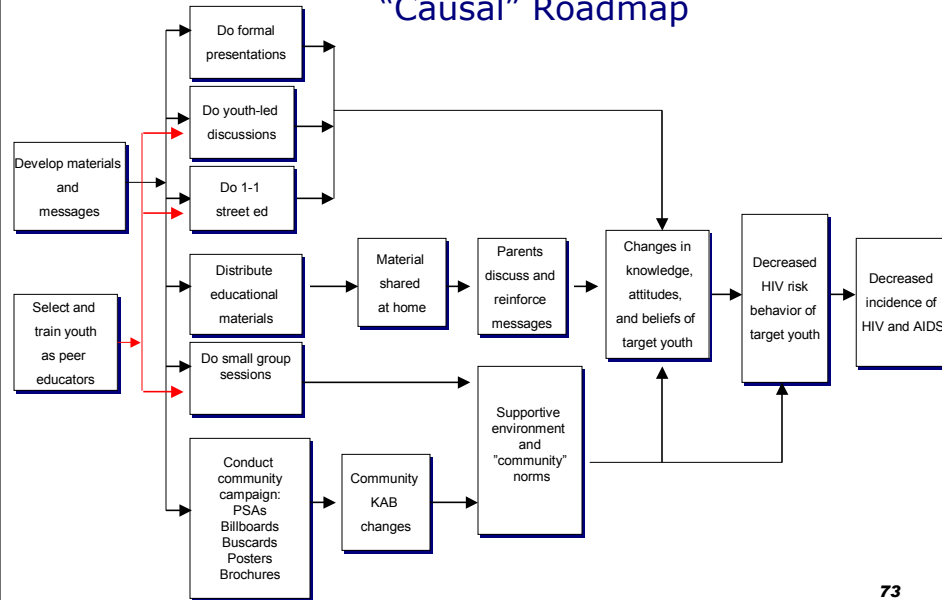
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## Lead Poisoning: “Causal” Roadmap—Mission



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## Eastside HIV/AIDS Prevention Program “Causal” Roadmap



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## Choosing Key Outcomes— “Staking Our Claim”

- Want to include outcome(s) that is (are):
  - **Relevant**—sufficiently **“downstream”** to matter to stakeholders
  - **Responsive**—sufficiently **“upstream”** that program’s efforts can be expected to make a difference

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## The Problem

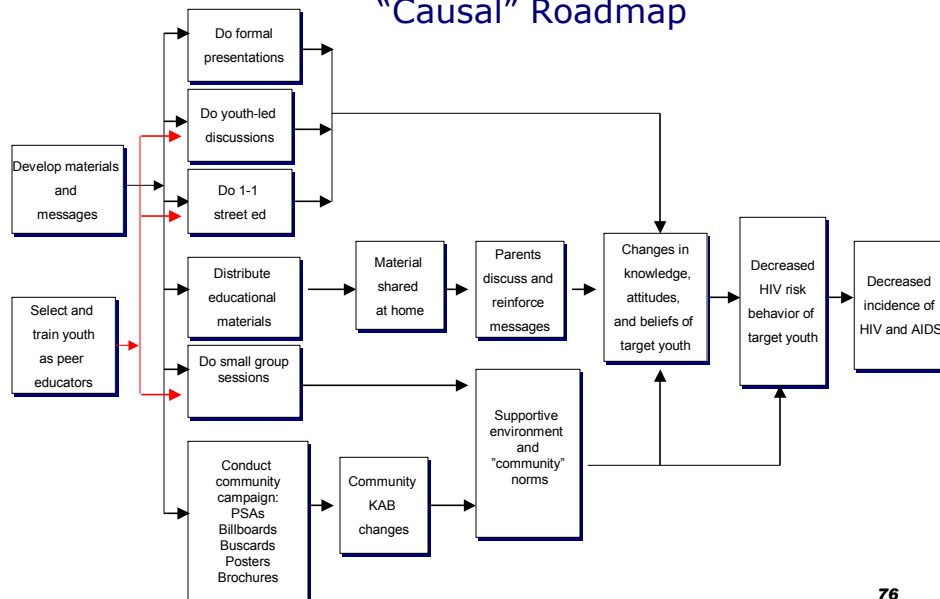
**Program Responsiveness**

**Stakeholder Relevance**

Sequence of Outcomes →

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## Eastside HIV/AIDS Prevention Program "Causal" Roadmap



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## Why We Evaluate...

“... The gods condemned Sisyphus to endlessly roll a rock up a hill, whence it would return each time to its starting place. They thought, with some reason...

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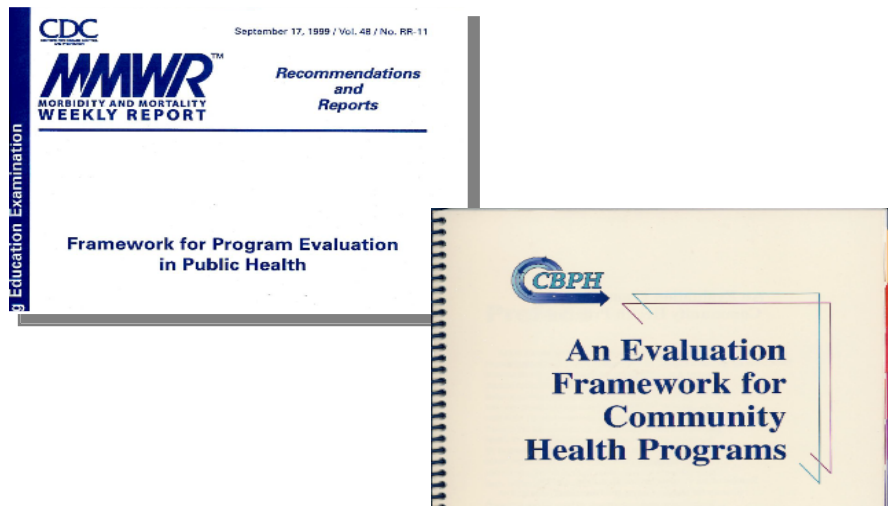
## Why We Evaluate...

***...there was no punishment  
more severe than eternally  
futile labor....”***

*The Myth of Sisyphus*

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## Helpful Publications @ [www.cdc.gov/eval](http://www.cdc.gov/eval)



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## Helpful Resources

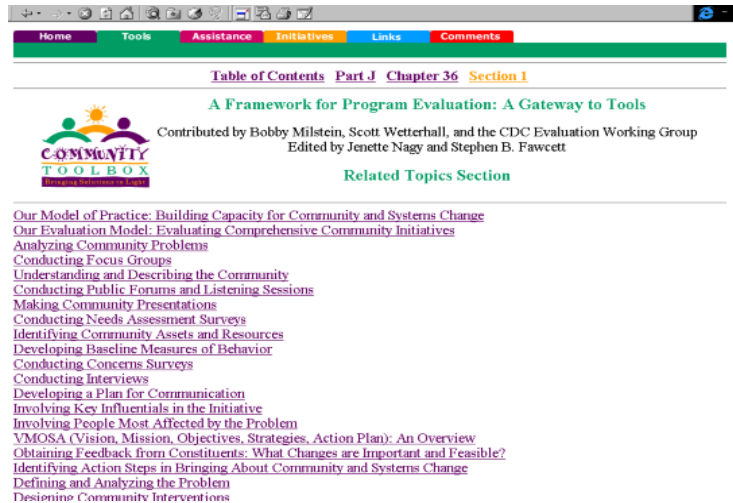
- NEW! Intro to Program Evaluation for PH Programs—A Self-Study Guide:  
<http://www.cdc.gov/eval/whatsnew.htm>
- Logic Model Sites
  - Innovation Network: <http://www.innonet.org/>
  - Harvard Family Research Project: <http://www.gse.harvard.edu/hfrp/>
  - University of Wisconsin-Extension: <http://www.uwex.edu/ces/lmcourse/>
  - CDC/DASH: <http://www.cdc.gov/healthyyouth/evaluation/resources.htm#4>
  - CDC/STD: <http://www.cdc.gov/std/program/progeval/TOC-PGprogeval.htm>
- Texts
  - Kellogg Foundation Logic Model Development Guide:  
[www.wkkf.org](http://www.wkkf.org)
  - W.K. Kellogg Foundation Evaluation Resources:  
<http://www.wkkf.org/programming/overview.aspx?CID=281>
  - Rogers et al. Program Theory in Evaluation. New Directions Series: Jossey-Bass, Fall 2000
  - Chen, H. Theory-Driven Evaluations. Sage. 1990

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# Community Tool Box

<http://ctb.ku.edu>



The screenshot shows a web browser window displaying the Community Tool Box website. The browser's address bar shows the URL <http://ctb.ku.edu>. The website has a navigation bar with tabs: Home, Tools, Assistance, Initiatives, Links, and Comments. Below the navigation bar, there is a breadcrumb trail: [Table of Contents](#) [Part J](#) [Chapter 36](#) [Section 1](#). The main heading is "A Framework for Program Evaluation: A Gateway to Tools". Below this, it says "Contributed by Bobby Milstein, Scott Wetterhall, and the CDC Evaluation Working Group" and "Edited by Jenette Nagy and Stephen B. Fawcett". There is a logo for the "COMMUNITY TOOL BOX" with the tagline "Research, Resources, and Tools for Change". Below the logo, there is a "Related Topics Section" with a list of links: [Our Model of Practice: Building Capacity for Community and Systems Change](#), [Our Evaluation Model: Evaluating Comprehensive Community Initiatives](#), [Analyzing Community Problems](#), [Conducting Focus Groups](#), [Understanding and Describing the Community](#), [Conducting Public Forums and Listening Sessions](#), [Making Community Presentations](#), [Conducting Needs Assessment Surveys](#), [Identifying Community Assets and Resources](#), [Developing Baseline Measures of Behavior](#), [Conducting Concerns Surveys](#), [Conducting Interviews](#), [Developing a Plan for Communication](#), [Involving Key Influentials in the Initiative](#), [Involving People Most Affected by the Problem](#), [VMOSA \(Vision, Mission, Objectives, Strategies, Action Plan\): An Overview](#), [Obtaining Feedback from Constituents: What Changes are Important and Feasible?](#), [Identifying Action Steps in Bringing About Community and Systems Change](#), [Defining and Analyzing the Problem](#), and [Designing Community Interventions](#).