Reducing Fear and Loathing of Evaluation: Making Good Evaluation Choices for EPHTN Efforts

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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...

Why We Evaluate...

...there was no punishment more severe than eternally futile labor...."

The Myth of Sisyphus

Objectives

- Typical "roadblocks" in doing good evaluation
- CDC's Evaluation Framework as way to surmount roadblocks
- How to apply key Framework steps to ensure strongest program evaluation
- Set-up for afternoon TA session...



Today's Focus

Top Roadblocks on the Road to Good Evaluation



Defining "program evaluation" too narrowly...



Defining Evaluation

Evaluation is the systematic investigation of the merit, worth, or significance of any "object"
Michael Scriven

<u>Program</u> is any organized public health action/activity implemented to achieve some result



Not understanding where evaluation "fits in" ...



- 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?





Making the "perfect" the enemy of the "good"

Every Little Bit Helps...

"...The biggest mistake is doing nothing because you can only do a little..." "

Anonymous



Evaluating only what you can "measure"...

Measuring the Right Thing...

"...Sometimes, what counts can't be counted. And what can be counted doesn't count...."

Albert Einstein

You Get What You Measure...

"...In Poland in the 1970s, furniture factories were rewarded based on pounds of product shipped. As a result, today Poles have the world's heaviest furniture..."

(New York Times, 3/4/99)



Neglecting intermediate outcomes....

Forgetting Intermediate Outcomes



Good evaluation broadens our focus:



Not just: Did it work?

How many tomatoes did I get?



But also: Is it working?

Are planting, watering, and weeding taking place?

Have the blossoms "set"?

Are there nematodes on the plants?



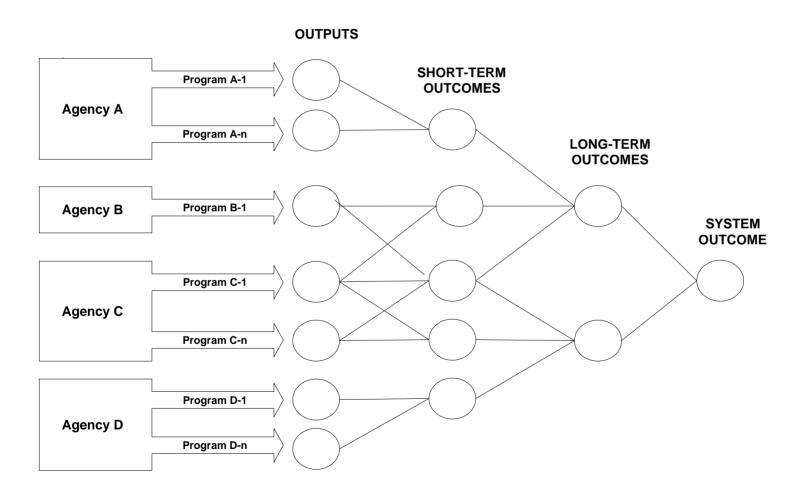
Finding Intermediate Outcomes

- What is the ultimate outcome I'm seeking?
- Who (besides me)needs to take action to achieve it?
- What action do they need to take?



Confusing attribution and contribution...

"Networked" Interventions



Roadblock #1

Not asking: "Who (else) cares...."

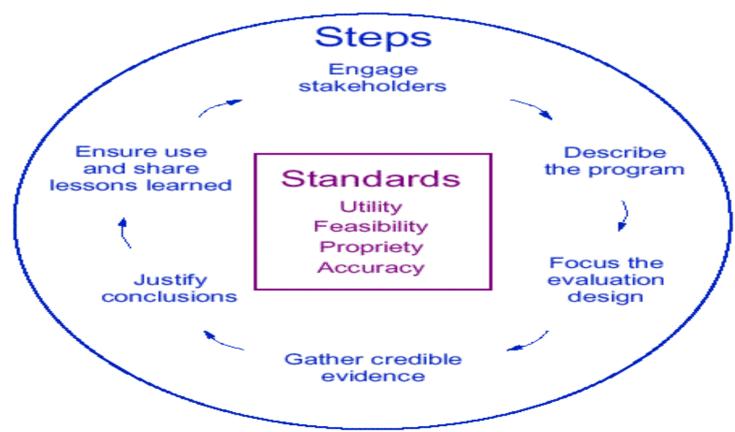
Reducing Fear and Loathing of Evaluation

The CDC Evaluation Framework



Framework for Program Evaluation

FIGURE 1. Recommended framework for program evaluation



Underlying Logic of Steps

- No eval is good unless... results are <u>used</u> to make a difference
- No results are used unless... a market has been created prior to creating the product
- No market is created unless.... the eval is well-focused, including most relevant and useful questions
- And...

Establishing the Best Focus Means...

- Engaging Stakeholders—Framework Step 1: Identifying who cares about our program besides us? Do they define program/"success" as we do?"
- Program Description—Framework Step 2: What are milestones and markers on the road to my main PH outcomes?

The Four Standards: Matching Evaluation to the Situation

Best options at each step maximize:

- Utility: Who needs the info from this evaluation and what info do they need?
- Feasibility: How much money, time, and effort can we put into this?
- Propriety: Who needs to be involved in the evaluation to be ethical?
- Accuracy: What design will lead to accurate information?

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

- The big <u>"need"</u> your program is to address
- The key <u>target group(s)</u> who need to take action
- The kinds of <u>actions they need to take</u> (your intended outcomes or objectives)
- Activities to make those outcomes happen
- "Causal" relationships between activities and outcomes

Logic Models and Program Description

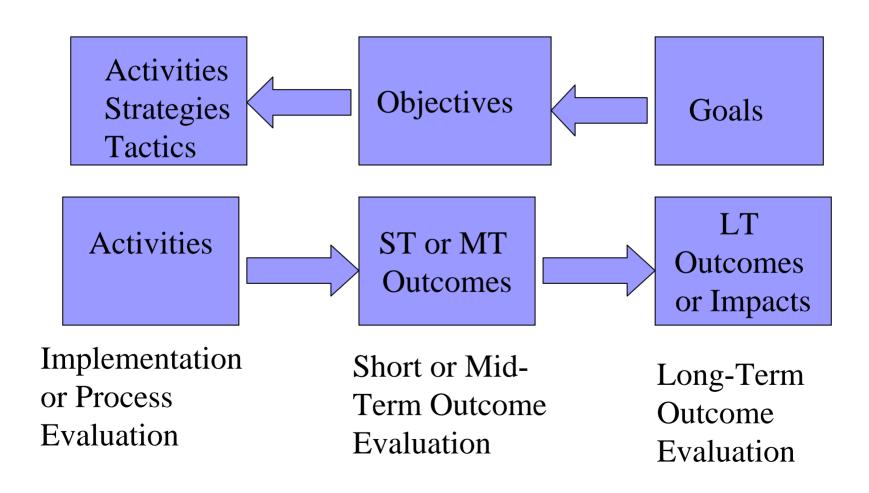
Logic Models: Graphic depictions of the <u>relationship</u> between your program's activities and its <u>intended</u> effects

Constructing Logic Models: Start with a Simple Table...

Column 1: Activities:

- What does the "program" and its staff do?
- Column 2: Targets and Outcomes:
 - Who are we trying to change?
 - How do we want them to change?

Linking Planning and Evaluation: Evaluation



Case Example: Lead Poisoning—The Issue

Lead poisoning is a widespread environmental hazard facing young children, especially in older inner-city areas. The main sources of lead poisoning in children are paint and dust in older homes with lead-based paint. Lead poisoning effects can be ameliorated through a combination of medical and nutritional interventions. But, ultimately, the source of lead in the environment must be contained/eliminated through renovation or removal of the lead-based paint by professionals, although some reduction can be realized through various intensive housekeeping practices.

Case Example: Lead Poisoning—The Program

County X has a problem with high numbers of leadpoisoned children and has received money from CDC for a Childhood Lead Poisoning Prevention Program. The program aims to screen children, identify those with elevated blood lead levels, assess their environments for sources of lead, and case manage both their medical treatment and the correction of their environment. While as a grantee they can assure medical treatment and reduction of lead in the home environment, the grant cannot directly pay for medical care or for renovation of homes.

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

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?

Global Logic Model: Childhood Lead Poisoning Program

Early Activities	
If we do	

Later Activities

Early Outcomes

Later Outcomes

And we do...

Then....

And then...

Outreach

Case mgmt of EBLL kids

Providers treat EBLL kids

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 inhome techniques

Lead source identified

Quality of life improves

Assess environment of EBLL child

Housing authority removes lead source

Refer environment for clean-up

You May Be Done: Less is More...

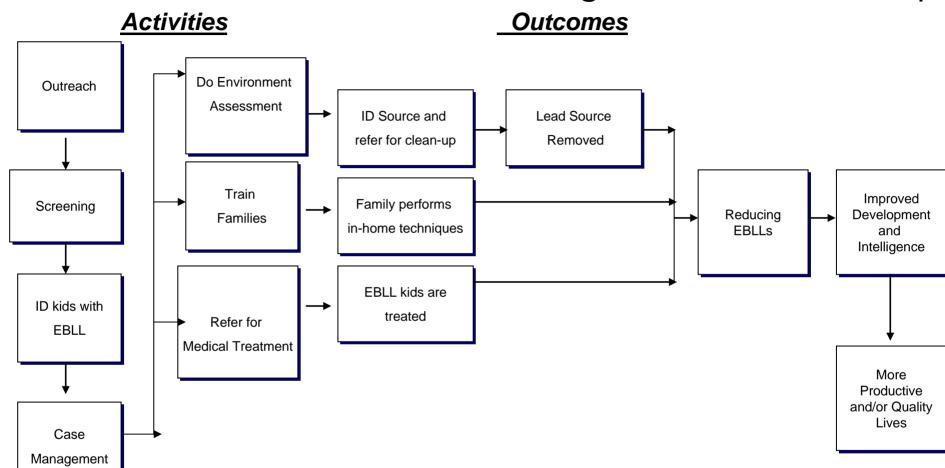
Some move to "flow chart" logic models

- Not a different logic model, just different formatting of the same information
- Conveys more detail on "cause" and relationship

Global Logic Model: Childhood Lead Poisoning Program

Inputs	Early Activities	Later Activities	Outputs	Early Outcomes—	Later Outcomes
Funds Trained	Outreach Screening	Do case mgmt	Pool (#) of eligible kids	Providers treat EBLL kids	EBLL reduced
R'ships with orgs for med tx and clean up	ID of elevated kids	Refer for medical treatment Train family in in-home	Pool (#) of screened kids Referrals (#) to medical	Family performs inhome techniques Lead source	Develop'l slide stopped Quality of life
Legal authority		Assess environ't Refer house for clean-up	treatment Pool (#) of "leaded" homes Referrals (#) for clean-up	identified Housing authority removes lead source	improves

Lead Poisoning: "Causal" Roadmap



Why Bother?

- Clarity on the program and what "success" means
- Consensus among team and stakeholders on the program and what "success" means
- Makes it easier to address planning and eval questions <u>you must address anyway</u>
 - Where should I focus my evaluation?
 - What is my vision/mission and goals and objectives?
 - Where is my critical path?

EPHTN Logic Model: Raw Material

- Vision: Communities are better protected from adverse health effects because of/through the integration of public health and environmental information systems.
- Mission: To provide information from a nation-wide network of integrated environmental monitoring and public health data systems so that all sectors can take action to prevent and control environmentally related health effects.

EPHTN Logic Model: Raw Material

- Goals: A mix of insights on our "activities" and our "intended outcomes"
 - Build and Maintain a Sustainable, National Environmental Public Health Tracking Network.
 - 2. Increase Environmental Public Health "Tracking" Capacity.
 - 3. Disseminate Credible Information
 - 4. Advance Environmental Public Health Science and Research.
 - Bridge the Gap Between Public Health and the Environment.

EPHTN Activities

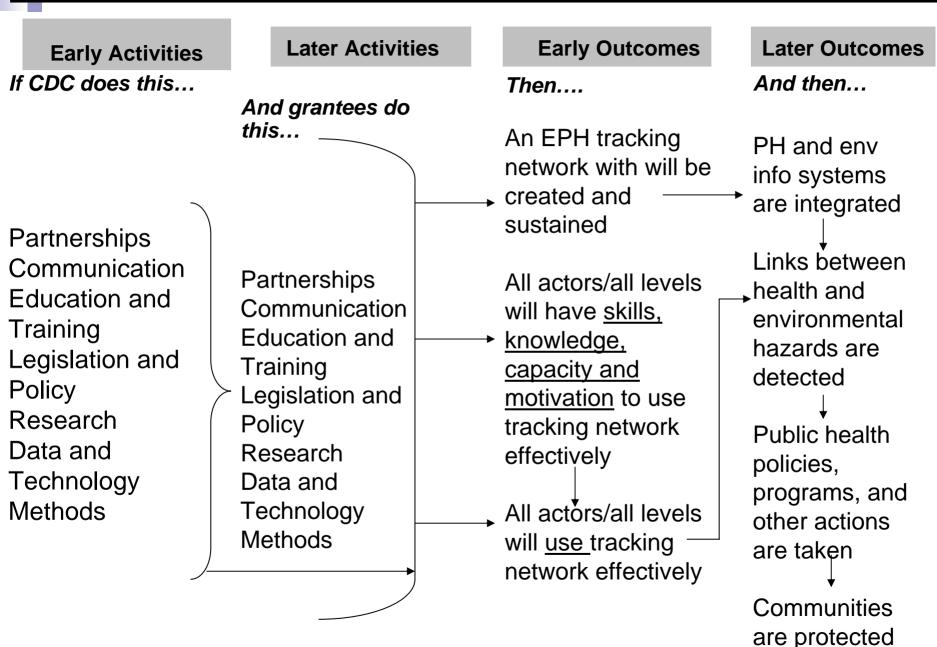
- CDC and Grantee Activities:
 - □ Partnerships (G-5)
 - □ Communication (G-3)
 - Education and Training
 - □ Legislation and Policy
 - □ Research (G-4)
 - □ Data and Technology
 - Methods

EPHTN Outcomes

- An EPH tracking network with will be created and sustained (G-1)
- All actors/all levels will have <u>skills</u>, <u>knowledge</u>, <u>capacity and motivation</u> to use tracking network effectively <u>(G-2)</u>
- All actors/all levels will <u>use</u> tracking network effectively
- PH and env info systems are integrated (Vision, G-5)
- Links between health and environmental hazards are detected (G-4, G-5)
- Public health policies, programs, and other actions are taken (Mission)
- Communities are protected (Vision)

Early Activities	Later Activities	Early Outcomes	Later Outcomes
If CDC does this	And grantees do this	Then	And then
Partnerships	Partnerships	An EPH tracking network with will be	PH and env info systems are
Communication	Communication	created and sustained	integrated
Education and Training	Education and Training	All actors/all levels will have skills,	Links between health and environmental
Legislation and Policy	Legislation and Policy	knowledge, capacity and motivation to use	hazards are detected
Research	Research	tracking network effectively	Public health policies,
Data and Technology	Data and Technology	All actors/all levels will use tracking network effectively	programs, and other actions are taken
Methods	Methods		Communities are protected

Early Activities	Later Activities	Early Outcomes	Later Outcomes
If CDC does this	And grantees do this	Then	And then
Partnerships	Partnerships	An EPH tracking network with will be	PH and env info systems are
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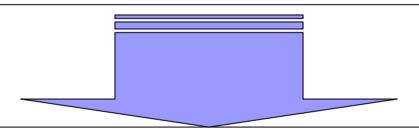




Which S'holders Matter Most?

Who is:

<u>Affected</u> by the program? <u>Involved</u> in program operations? Intended *users* of evaluation findings?



Of these, who do we most need to:

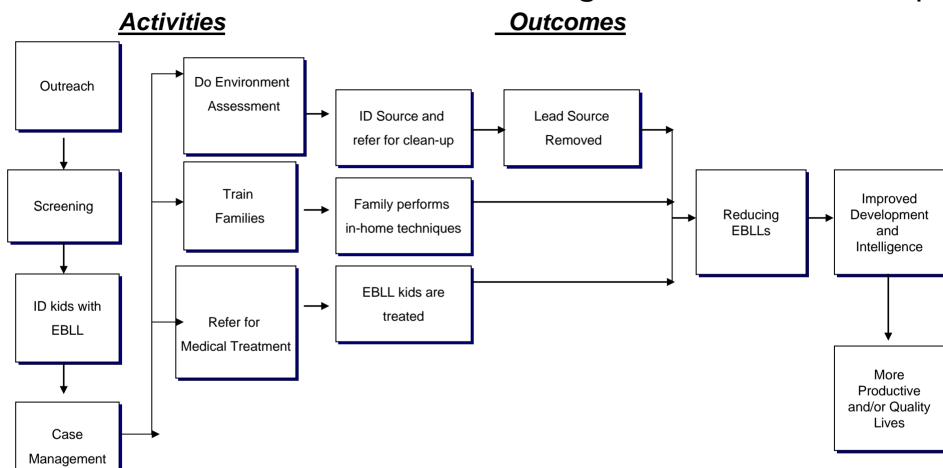
Enhance *credibility?*

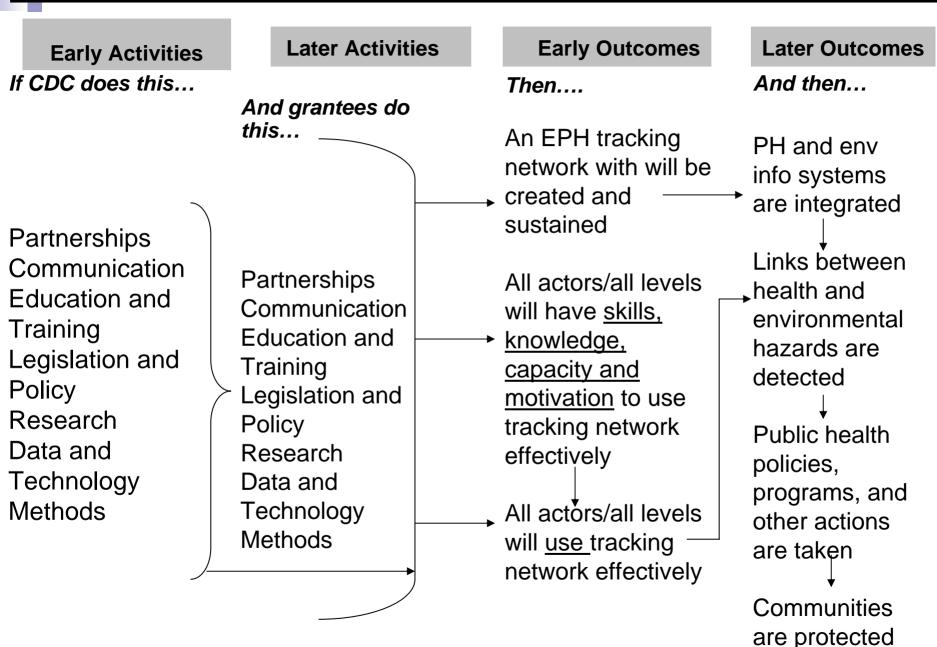
Implement program changes?

Advocate for changes?

Fund, authorize, expand program?

Lead Poisoning: "Causal" Roadmap





Using the Logic Model with Stakeholders

- Who are major stakeholders for our efforts?
- What do we know about them and their preferences/opinions re:
 - What outcomes mean "success"?
 - □ How much progress on an outcome means "success"?
 - □ Preferences on data collection methods?
 - Standards and values they bring to judgment of evaluation results?
- Logic model can make the conversation easier



Some Stakeholder Preferences:

- Cost and cost-benefit
- Efficiency of delivery of services
- Health disparities reduction
- Population-based impact, not just impact on those participating in the intervention
- Zero-defects

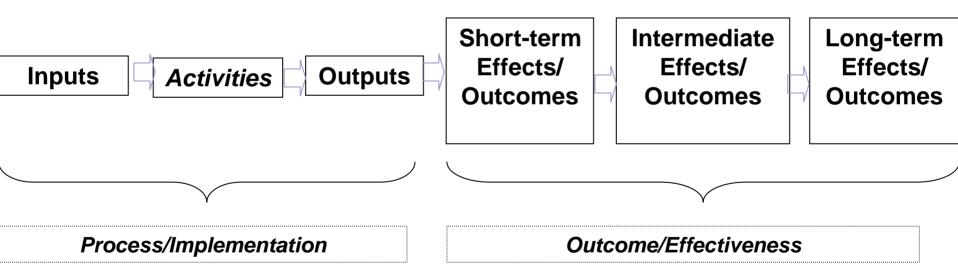
Eval Plan vs. Eval Focus

- Eval <u>Plan</u>: How I intend to measure <u>all</u> aspects of my program---all the boxes (and arrows) in my logic model?
- Eval <u>Focus</u>: The part of my program that needs to be measured in <u>this</u> <u>evaluation</u>, this time?
- Over life of the program:
 - □Eval plan may never change
 - □Eval focus is always changing

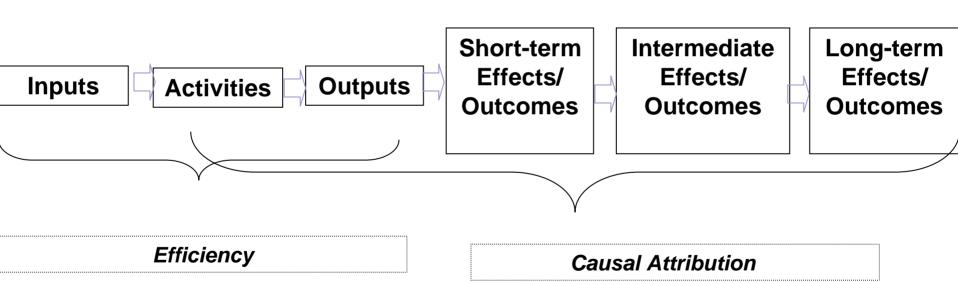
Step 3. Key Domains in Eval Focus

- Implementation (Process)
 - □ Is program in place as intended?
- Effectiveness (Outcome)
 - Is program achieving its intended short-, mid, and/or long-term effects/outcomes?
- Efficiency
 - How much "product" is produced for given level of inputs/resources?
- Causal Attribution
 - Is progress on outcomes due to your program?

Evaluation Domains: Boxes



Evaluation Domains: Arrows



Setting Focus: Some Rules

Based on "utility" standard:

- Purpose/User: Who wants the info and what are they interested in?
- Use: How will they use the info?
- Needs of Key S'holders: What are key s'holders most interested in?

Setting Focus: "Reality Checking" the Focus

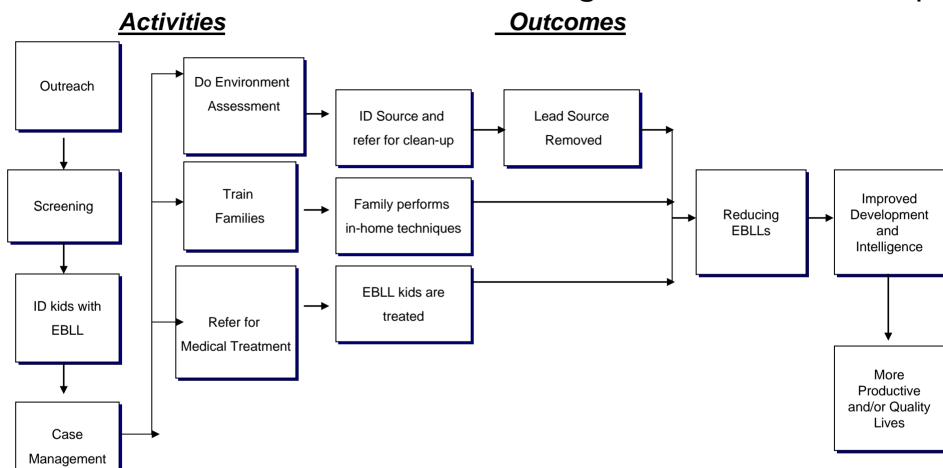
Based on "feasibility" standard:

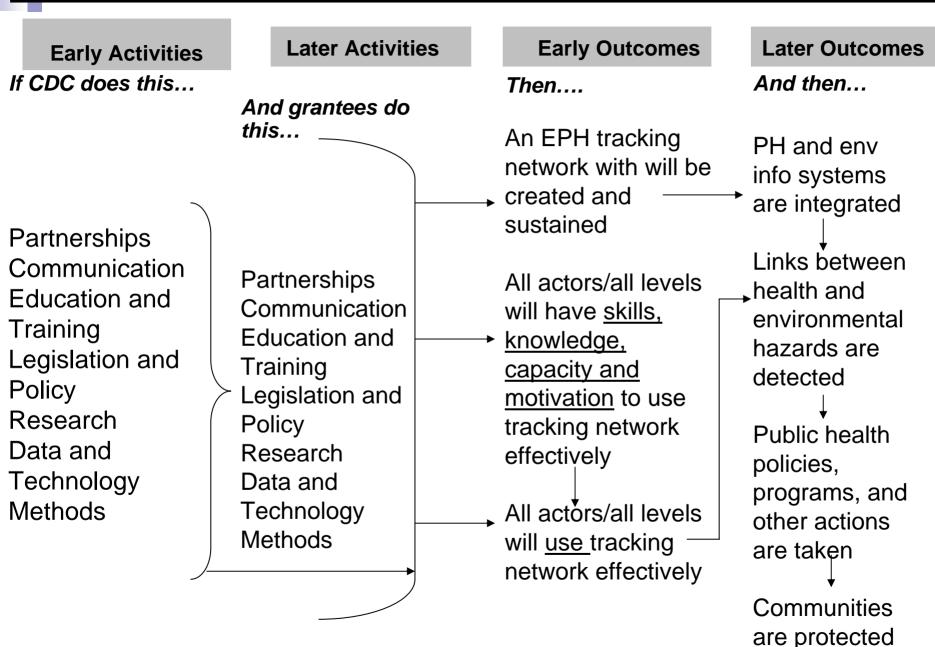
- Stage of Development: How long has the program been in existence?
- Program Intensity: How intense is the program? How much impact is reasonable to expect?
- Resources: How much time, money, expertise are available?

Some Program Evaluation Foci

- Year 1: YOU want to see if the model and approach is "ready for prime time"...
- Year 3: ANOTHER ORG/COMMUNITY wants to adopt your approach but wants to know "what are they in for?"...
- Year 5: YOU want to lure in another FUNDER to support expansion...

Lead Poisoning: "Causal" Roadmap





Reducing Fear and Loathing of Evaluation

Next Steps

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Where We've Been...

What we know:

- What our program is about
- Who care about it besides us
- What we need to measure in short and long run

Where Next....

- Identify evaluation questions
- Define indicators and data sources for questions
- Analyze data
- Draw conclusions and results
- Turn results into action



But...

Good results from Steps 4-6 more likely because we did a good job on Steps 1-3!!!

Reducing Fear and Loathing of Evaluation

Life Post-Session

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Helpful Resources: Web Based

NEW! Intro to Program Evaluation for PH Programs—A Self-Study Guide:

http://www.cdc.gov/eval/whatsnew.htm

Innovation Network:

http://www.innonet.org/

- W.K. Kellogg Foundation Evaluation Resources:
 http://www.wkkf.org/programming/overview.aspx?CID=2
 81
- University of Wisconsin-Extension: http://www.uwex.edu/ces/lmcourse/

Helpful Publications @ www.cdc.gov/eval



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Recommendations and Reports

Framework for Program Evaluation in Public Health



An Evaluation Framework for Community Health Programs

Community Tool Box http://ctb.ku.edu

