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Innovations in Design and Utilization of Measurement Systems to  
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# Measuring Implementation of Evidence-based Prevention to Improve Impact and Sustainability: Lessons from Communities that Care

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# Objectives

- How can communities incorporate the research base for prevention science into local prevention programming?
- How can communities build prevention infrastructure to ensure implementation fidelity?
- How does Communities That Care achieve fidelity of implementation, choose evidence based prevention programs, and implement them at scale with fidelity?

# *Preventing Mental, Emotional and Behavioral Disorders Among Young People: Progress and Possibilities*

A summary of the  
progress of  
prevention science

Preventing Mental, Emotional,  
and Behavioral Disorders  
Among Young People

Progress and Possibilities





# 40 Years of Prevention Science Research Advances

## Etiology/Epidemiology of Problem Behaviors

- Identify risk and protective factors that predict problem behaviors and describe their distribution in populations and communities.

## Efficacy Trials

- Design and test preventive interventions to interrupt causal processes that lead to youth problems.

## Prevention Services Research

- Understand how to build effective infrastructure to use prevention science to achieve community impact.

(O'Connell, Boat & Warner, 2009; Catalano et al., 2012)



## Despite this Progress...

Prevention approaches that do not work or have not been evaluated are more widely used than those shown to be effective.

(Ringwalt, Vincus et al., 2009)



# The Challenge

- How can we build prevention infrastructure to increase use of tested and effective prevention policies and programs **with fidelity and impact at scale...**

while recognizing that communities are different from one another and need to decide locally what policies and programs they use?



# Building Prevention Infrastructure to Use the Prevention Science Research Base

**Build capacity** of local coalitions to reduce common risk factors for multiple negative outcomes through:

- Assessing and prioritizing epidemiological levels of risk, protection and problems
- Choosing proven programs that match local priorities
- Implementing chosen programs with fidelity to those targeted



## Communities That Care: A Tested and Effective System for Community Wide Prevention

CTC is a *proven* method to **build community commitment and capacity** to prevent underage drinking, tobacco use, and delinquent behavior including violence.

- Idea developed in 1988, 15 years of implementation and improvement through community input prior to randomized trial
- CTC has been tested in a randomized controlled trial involving 12 pairs of matched communities across 7 states from Maine to Washington.
- CTC's effects have been independently replicated in a statewide test in Pennsylvania.







# Research Support from:

## Funders

**National Institute on Drug Abuse**

**National Cancer Institute**

**Center for Substance Abuse Prevention**

**National Institute on Child Health and**

**National Institute of Mental Health**

**Human Development**

**National Institute on Alcohol Abuse and Alcoholism**

## State Collaborators

**Colorado** DHS Alcohol & Drug Abuse Division

**Illinois** DHS Bureau of Substance Abuse Prevention

**Kansas** Dept. of Social & Rehabilitation Services

**Maine** DHHS Office of Substance Abuse

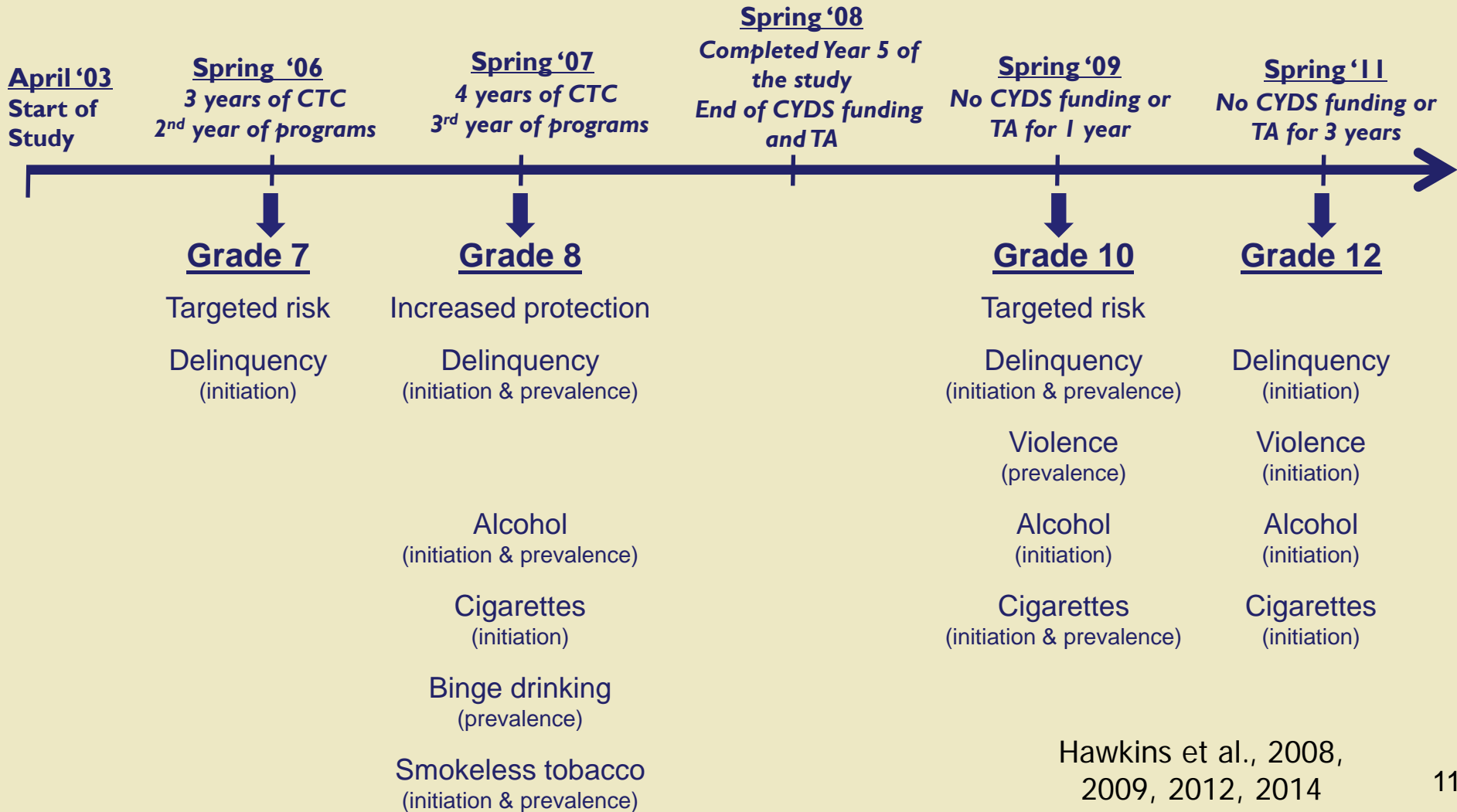
**Oregon** DHS Addictions & Mental Health Division

**Utah** Division of Substance Use & Mental Health

**Washington** Division of Behavioral Health & Recovery



# CYDS Timeline: Youth Outcomes





# *Communities That Care* Builds Prevention Infrastructure

## Develops capacity to:

- Build coalition of diverse stakeholders
- Assess and prioritize risk, protection, and behavior problems with a student survey
- Address locally prioritized risks with tested, effective preventive interventions
- Support/sustain high fidelity implementation of chosen tested, effective preventive interventions with impact at scale



# Communities That Care: What is required?

- ❖ Commitment of key leaders/community members
- ❖ Funding for a community coordinator
- ❖ Training in CTC strategy and **monitoring CTC implementation**
- ❖ Weekly phone technical assistance, 2 site visits a year
- ❖ **Assessment survey every two years**
- ❖ Funding for selected programs
- ❖ Training in selected programs
- ❖ **Fidelity and "reach" monitoring** of selected programs



# CTC Coalition Capacity Building Trainings

1. Key Leader Orientation
2. Community Board Orientation Training
3. Community Assessment Training
4. Community Resource Assessment Training
5. Community Planning Training
6. Community Program Implementation Training



# Communities That Care Process and Timeline

## Process

- Assess readiness, Mobilize the community
- Assess risk, protection and resources,
- Develop strategic plan

Implement and evaluate tested, effective prevention strategies

## Evaluation

Increase in priority protective factors

Decrease in priority risk factors

Increase in positive youth development

Reduction in problem behaviors

Measurable Outcomes

Vision for a healthy community

6-9 mos.

1 year

2-5 yrs.

3-10 yrs.

10-15 yrs.



# 1. Implementation Fidelity of CTC

CTC Milestones and Benchmarks Assess key components of CTC strategy

- Goals, steps, actions, and conditions needed for CTC implementation to build prevention infrastructure





## CTC Milestones & Benchmarks Capacity Building and Assessment

- Listed in CTC training manuals and discussed in training workshops
- Incorporated into the Community Coordinator job performance objectives
- Reviewed by technical assistance providers and Coordinators during weekly phone calls
- Assessed by community coordinator, CYDS TA Staff, CTC trainer



# Examples of CTC Milestones & Benchmarks

## Phase 1: Readiness for CTC

- Milestone: The community is ready to begin CTC
  - ~ *Benchmark: A Key Leader "Champion" has been identified to guide the CTC process*

## Phase 5: Implementing the Community Action Plan

- Milestone: Implementers of evidence based programs, policies, or practices have the necessary skills, expertise, and resources to implement with fidelity
  - ~ *Benchmark: Implementers have received needed<sup>18</sup> training and technical assistance*



# CTC Implementation Fidelity was Maintained over Time

Phase	% of Milestones Completed Across Communities & Raters			
	Year 1.5	Year 3	Year 4	Year 5
1	89	96	91	91
2	90	94	84	84
3	100	99	88	83
4	96	98	94	89
5	90	91	85	83



## 2. CTC Youth Survey

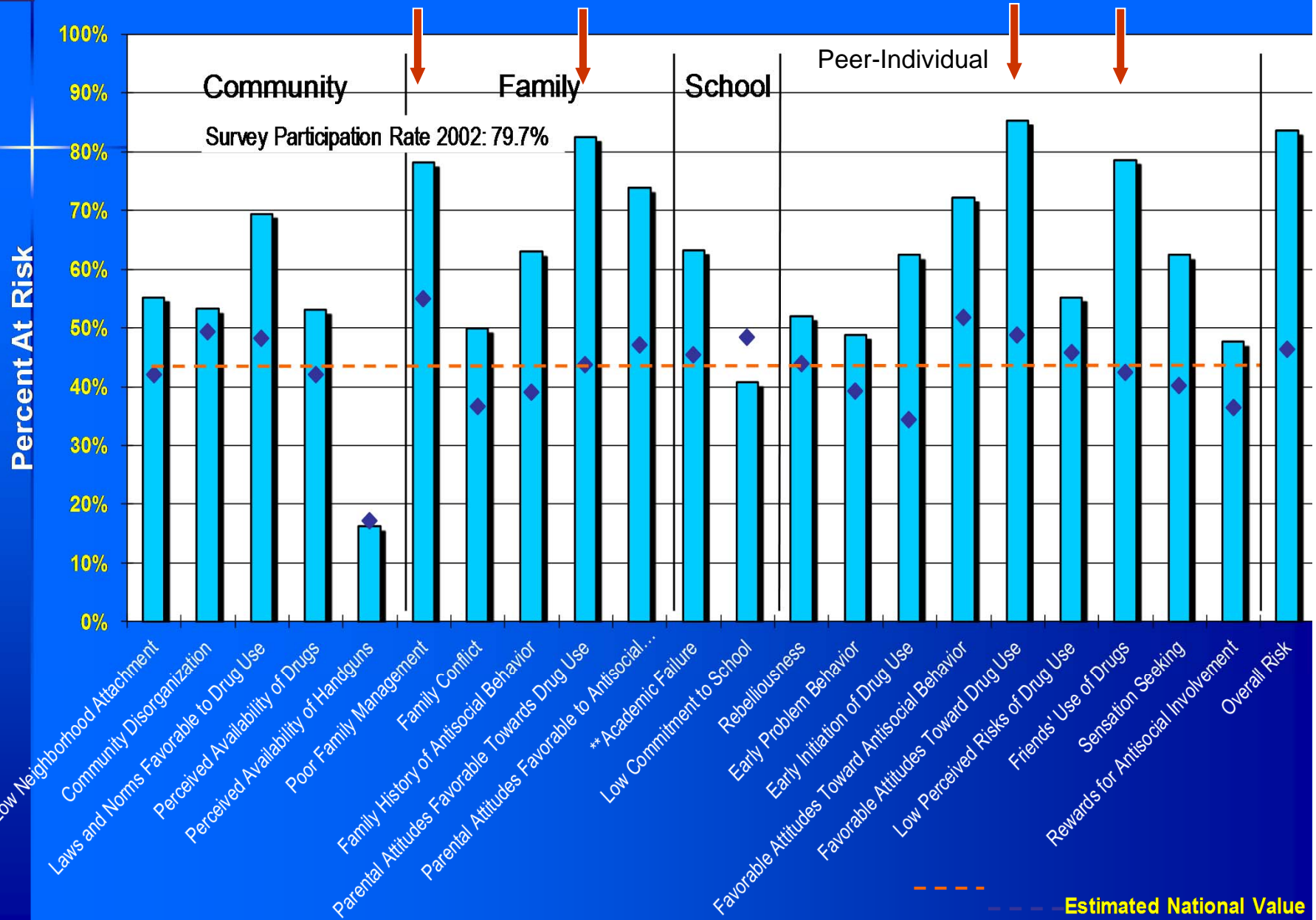
- Assesses young peoples' experiences and perspectives.
- Provides valid and reliable measures of risk and protective factors across state, gender, age and racial/ethnic groups. (Arthur et al., 2002; Glaser et al., 2005)
- Identifies levels of risk and protective factors and substance use, crime, violence and depression for state, district, city, school, or neighborhood.
- Provides a foundation for selection of appropriate tested, effective actions.
- Monitors effects of chosen actions by repeating surveys every two years.

The CTC Youth Survey is in the public domain  
[www.communitiesthatcare.net](http://www.communitiesthatcare.net)



# Why Assess Local Risk?

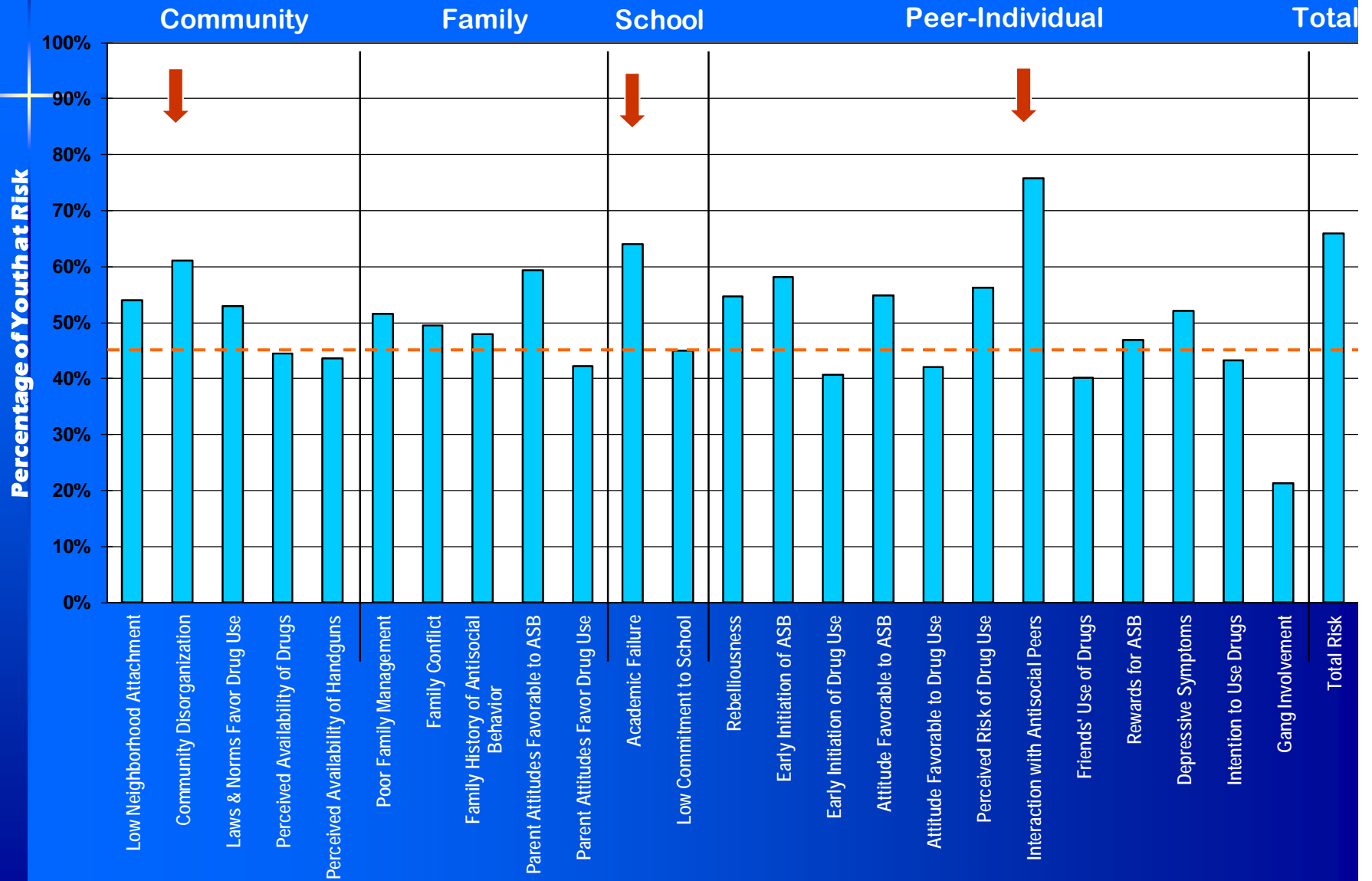
## Risk Profile A





# Communities have Different Priority Risks

## Risk Profile B





# Communities Targeted a Variety of Risk Factors

	CTC Community											
RISK FACTORS	1	2	3	4	5	6	7	8	9	10	11	12
Laws and norms favorable to drug use									X			
Low commitment to school		X	X	X		X	X	X	X		X	X
Academic failure				X	X			X		X	X	
Family conflict	X	X					X					
Poor family management			X	X						X		X
Parental attitudes favorable to problem behavior						X						
Antisocial friends	X	X			X				X	X	X	X
Peer rewards for antisocial behavior	X						X					
Attitudes favorable to antisocial behavior	X					X				X		
Rebelliousness	X							X	X			
Low perceived risk of drug use								X				X



# Community Choice Results in CTC Communities Implementing Different Tested-effective Programs

Program		2004-05	2005-06	2006-07	2007-08
<b>School-Based</b>	All Stars Core	1	1	1	1
	Life Skills Training (LST)	2	4*	5*	5*
	Lion's Quest SFA (LQ-SFA)	2	3	3	3
	Olweus Bullying Prevention Program	-	2*	2*	2*
	Program Development Evaluation Training	1	1	-	-
	Project Alert	-	1	1	1
	Project Northland-Class Action	-	-	-	1*
	Towards No Drug Abuse (TNDA)	-	-	-	2
<b>After-School</b>	Big Brothers/Big Sisters	2	2	2	1
	Participate and Learn Skills (PALS)	1	1	1	2
	Stay SMART	3	3	1	1
	Tutoring (generic programs)	4	6	6	7
	Valued Youth Tutoring Program	1	1	1	-
<b>Parent Training</b>	Family Matters	1	1	2	2
	Guiding Good Choices	6	7*	8*	7
	Parenting Wisely	-	1	1	2
	Parents Who Care	1	1	-	-
	Strengthening Families 10-14	2	3	3	2
Total number of programs		27	38	37	39

\*Program funded through local resources  
in some communities





# Balancing Research Goals and Community Practice

## The Challenge:

- Measure fidelity across a range of programs
- Encourage local ownership, high fidelity, and sustainability of prevention programs



## 3. Program Implementation Monitoring

All CTC sites were expected to achieve high levels of fidelity:

- ~ Adherence: implementing the core content and components
- ~ Delivery of Sessions: implementing the specified number, length, and frequency of sessions
- ~ Quality of Delivery: ensuring that implementers are prepared, enthusiastic, and skilled
- ~ Participant Responsiveness: ensuring that participants are engaged and retaining material

(Fagan et al., 2009)



# Fidelity Assessment Checklists

- Obtained from developers (9) or created by research staff (7)
- Provided similar information across programs
- Checklists were completed by program staff, coalition members, and reviewed locally as well as analyzed at the UW



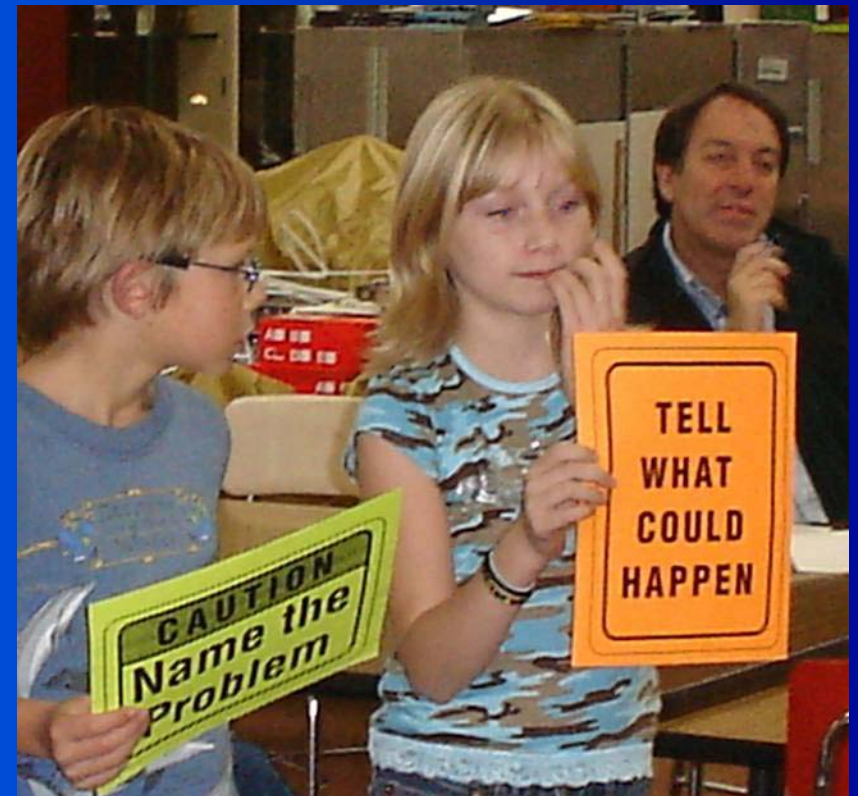
# Building Capacity to Achieve High Fidelity

- Local monitoring and action
  - Community Program Implementation Training
  - CTC coalitions routinely tracked implementation
  - CTC coordinators and agency administrators provided implementers with feedback
  - Changes were made as necessary
- External monitoring/technical assistance
  - Regular telephone, email, and in-person TA to CTC coordinators and coalitions
  - Semi-annual reports summarized program successes, challenges & potential solutions



# Building Commitment to Fidelity through Observation

- Coalition members and local volunteers observed 10-15% of most programs
- Completed fidelity checklists to assess adherence
  - ~ Rate of agreement w/implementers was 92-97%

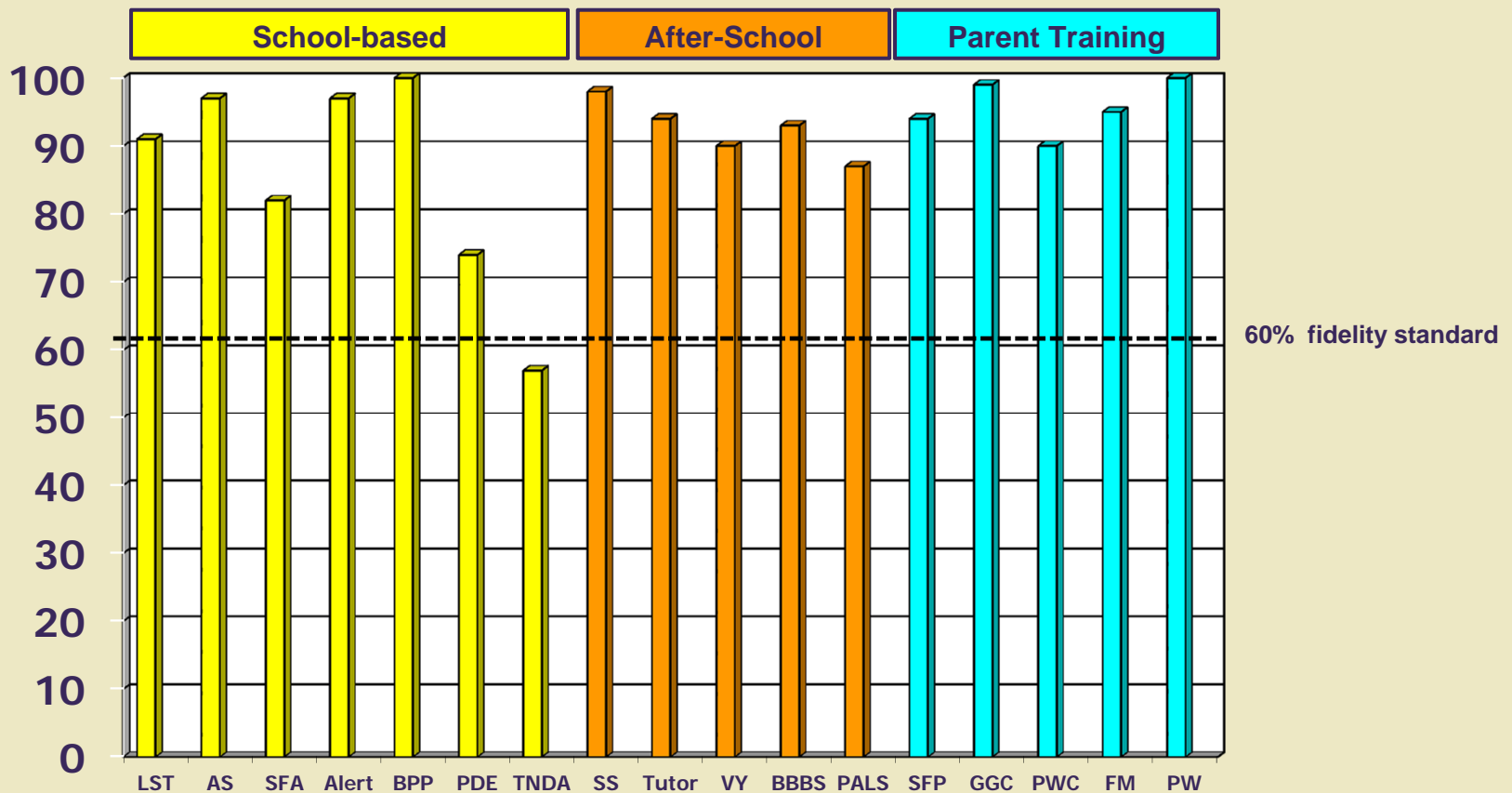




# Adherence Rates

## Averaged across four years

Percentage of material taught or core components achieved

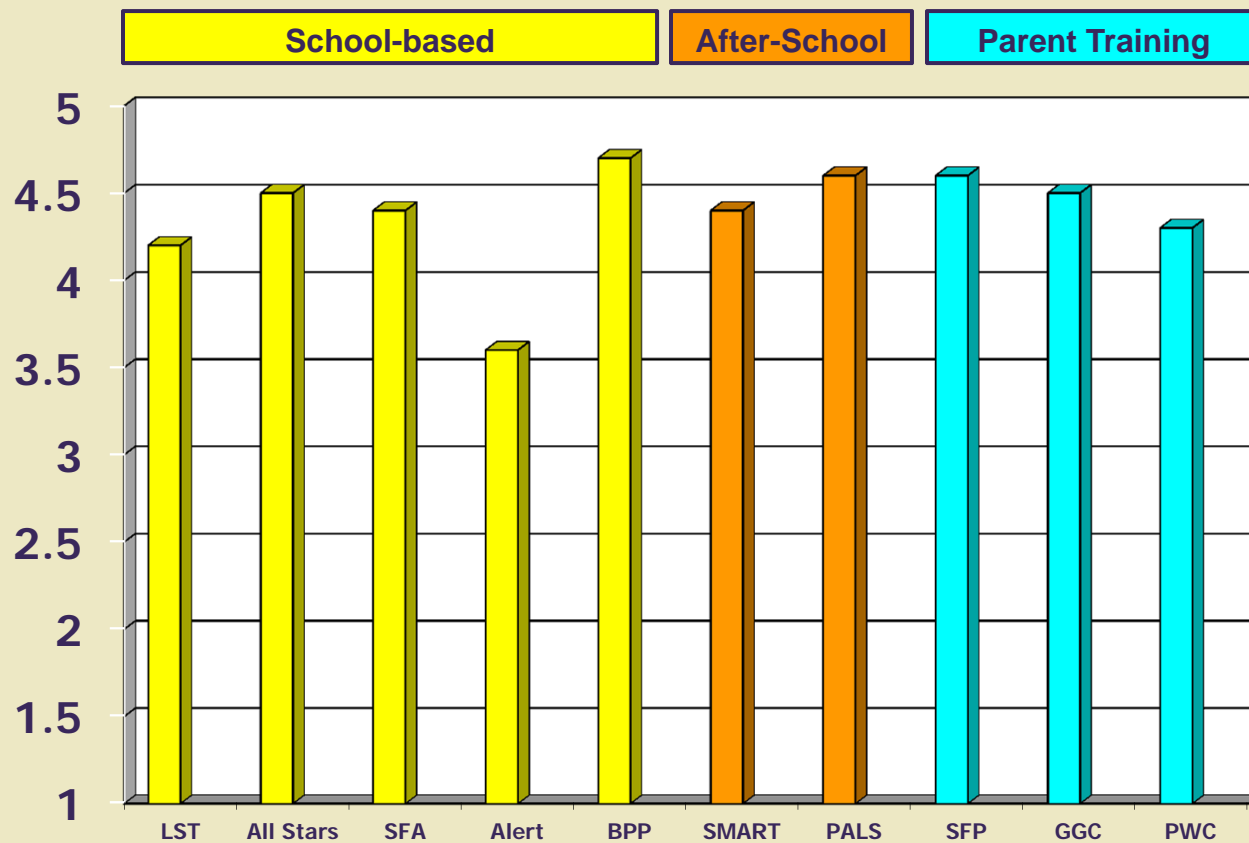




# Participant Responsiveness

## Averaged across all years

Average score on 2 items reported by program observers



S D

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## **Building Prevention Infrastructure: Capacity and Commitment Supports and Sustains Effective Prevention with Fidelity and Impact at Scale**

- Build capacity and provide tools (eg., CTC Milestones and Benchmarks) to achieve effective prevention infrastructure
- Build capacity and provide tools to assess and prioritize local risk, protection and youth outcomes, match priorities to evidence based programs, and repeat assessment periodically
- Build capacity and provide tools to insure program fidelity and engagement of target population
- Create citizen-advocates-scientists to affect risk, protection, substance use, delinquency and violence community wide





# Thank You!

CTC original materials are available for download and the new web streamed version of eCTC is described at:

<http://www.communitiesthatcare.net>

[www.sdr.org](http://www.sdr.org)