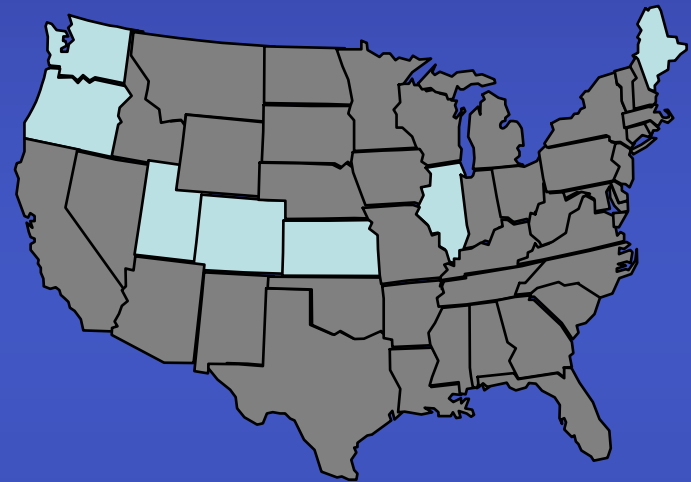


Science to Service: Creating Community Systems to Install Evidence Based Practice with Fidelity at Scale



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Overview

- **Advances in Prevention Science**
- **Describe CTC system for increasing use of tested & effective preventive interventions and its effects.**
- **Explore how federal agencies could install effective preventive interventions for MEB problems more broadly.**

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



The Premise of Prevention Science

To prevent a problem before it happens, the factors that predict the problem must be changed.

Two Major Advances in Prevention Science for MEB Disorders

- **Identification of predictors of MEB problems as targets for preventive intervention.**
- **Identification of tested and effective preventive policies and programs.**



Risk Factors for Adolescent Problems

Community

Family

School

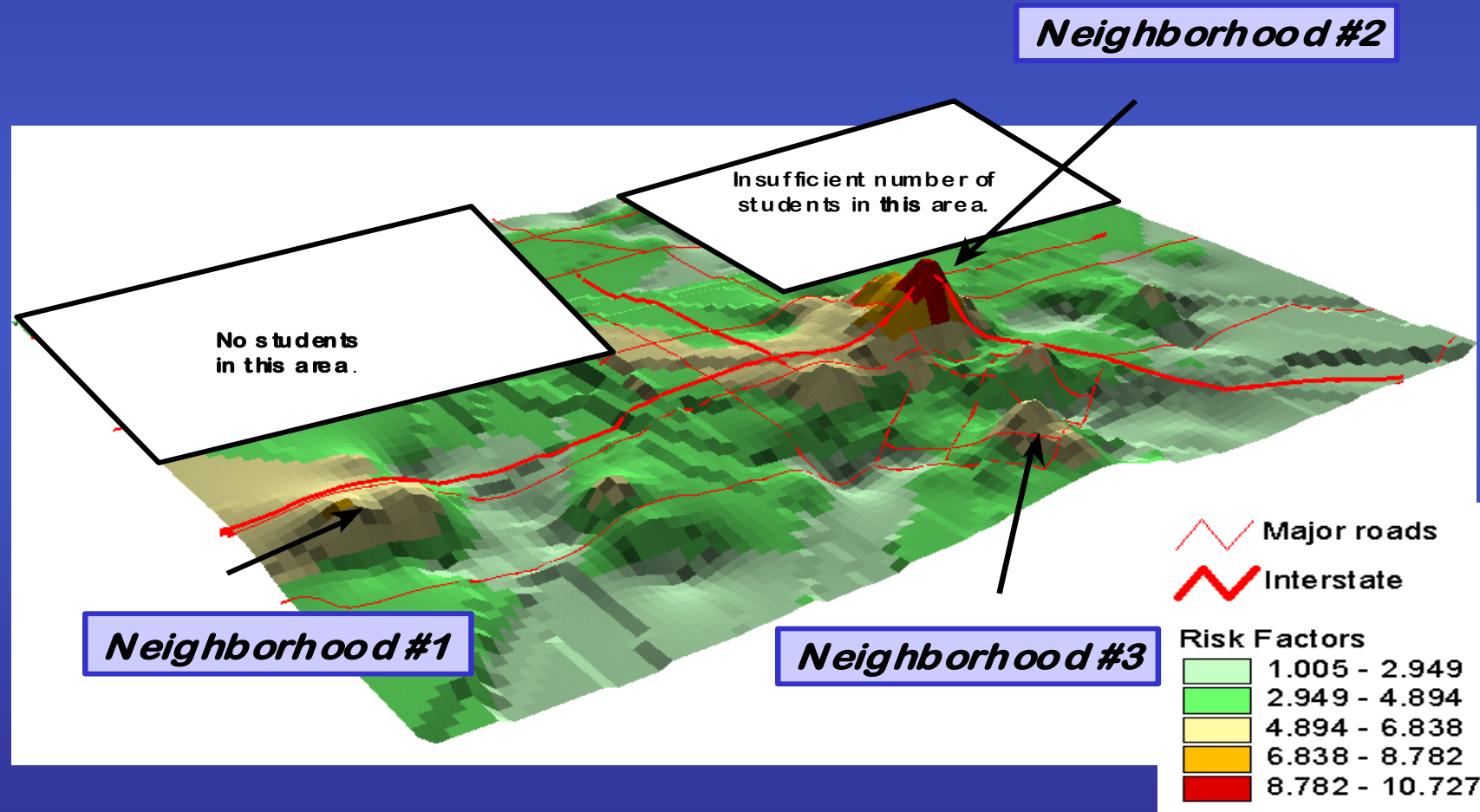
Individual/Peer

Risk Factors	Substance Abuse	Teen Delinquency	School Drop-Out	Depression & Anxiety	Violence	
Community						
Availability of Drugs	✓				✓	
Availability of Firearms		✓			✓	
Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	✓	✓			✓	
Media Portrayals of Violence	➡				✓	
Transitions and Mobility	✓	✓		✓		➡
Low Neighborhood Attachment and Community Disorganization	✓	✓			✓	
Extreme Economic Deprivation	✓	✓	✓	✓	✓	
Family						
Family History of the Problem Behavior	✓	✓	✓	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	➡
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement in the Problem Behavior	✓	✓			✓	
School						
Academic Failure Beginning in Late Elementary School	✓	✓	✓	✓	✓	✓
Lack of Commitment to School	✓	✓	✓	✓	✓	
Individual/Peer						
Early and Persistent Antisocial Behavior	✓	✓	✓	✓	✓	✓
Alienation and Rebelliousness	✓	✓		✓		
Friends Who Engage in the Problem Behavior	✓	✓	✓	✓	✓	
Favorable Attitudes Toward the Problem Behavior	✓	✓	✓	✓		
Early Initiation of the Problem Behavior	✓	✓	✓	✓	✓	
Constitutional Factors	✓	✓			✓	✓

Protective Factors

- **Individual Characteristics**
 - High Intelligence
 - Resilient Temperament
 - Competencies and Skills
- **In social domains of family, school, peer group and neighborhood**
 - Prosocial Opportunities
 - Reinforcement for Prosocial Involvement
 - Bonding (connectedness, attachment)
 - Clear and Healthy Standards for Behavior

A Place Based Approach is Needed Because Communities Vary in Amount of Risk Exposure



Preventive interventions that address shared predictors of different adolescent problem behaviors have produced reductions in multiple outcomes, including school dropout, drug use and crime.

(Hawkins et al., 2008; Botvin et al., 2002 ; Flay et al., 2004; Haggerty et al., 2007; Schweinhart et al., 2005).

Different Approaches Have Been Found To Be Effective

(Catalano et al. 2012 The Lancet)

Prevention Programs/Policies	Violence	Drug Use	HIV STI	Unintended Pregnancy	Vehicle Crash Risk	Obesity	Mental Health
1. Prenatal & Infancy Programs(eg., NFP)		✓		✓			
2. Early Childhood Education	✓	✓					
3. Parent Training	✓	✓			✓		✓
4. After-school Recreation	✓						
5. Mentoring with Contingent Reinforcement		✓					
6. Cognitive Behavior Therapy							✓
7. Classroom Organization, Management and Instructional Strategies	✓	✓		✓			✓
8. Classroom Curricula	✓	✓		✓		✓	✓

Different Approaches Have Been Found To Be Effective

(Catalano et al. ,2012, The Lancet)

Prevention Programs/Policies	Violence	Drug Use	HIV STI	Unintended Pregnancy	Vehicle Crashes	Obesity	Mental Health
9. Community Based Skills Training/Motivational Interviewing			✓	✓			
10. Cash Transfer for School Fees/Stipend				✓			
11. Multicomponent Positive Youth Development	✓			✓			
12. Policies (eg., MLDA)		✓			✓		
13. Community Mobilization	✓	✓					
14. Medical Intervention			✓	✓			
15. Law Enforcement					✓		
16. Family Planning Clinic				✓			

Cost-Benefit of Prevention Programs

Steve Aos, Director, Washington State Institute for Public Policy

www.wa.gov/wsipp

Program	Benefit	Cost ¹	Benefit Minus Cost	Benefit per Dollar Cost
Nurse-Family Partnership	\$30,325	\$9,421		
Chicago Child-Parent Centers	\$39,160	\$8,124		
Strengthening Families Program 10-14	\$6,656	\$851		
Functional Family Therapy	\$37,739	\$3,190		
Seattle Social Development Project	\$6,237	\$2,959		
Life Skills Training	\$1,415	\$34		

¹Cost estimates are per participant, based on 2003 U.S. dollars for SFP 10-14; 2007 U.S. dollars for the Chicago Child-Parent Centers; and 2010 U.S. dollars for all other interventions.

Cost-Benefit of Prevention Programs

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Chicago Child-Parent Centers	\$39,160	\$8,124	\$31,036	\$4.82
Strengthening Families Program 10-14	\$6,656	\$851	\$5,805	\$7.82
Functional Family Therapy	\$37,739	\$3,190	\$34,549	\$11.86
Seattle Social Development Project	\$6,237	\$2,959	\$3,279	\$2.11
Life Skills Training	\$1,415	\$34	\$1,382	\$42.13

¹Cost estimates are per participant, based on 2003 U.S. dollars for SFP 10-14; 2007 U.S. dollars for the Chicago Child-Parent Centers; and 2010 U.S. dollars for all other interventions

But...

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

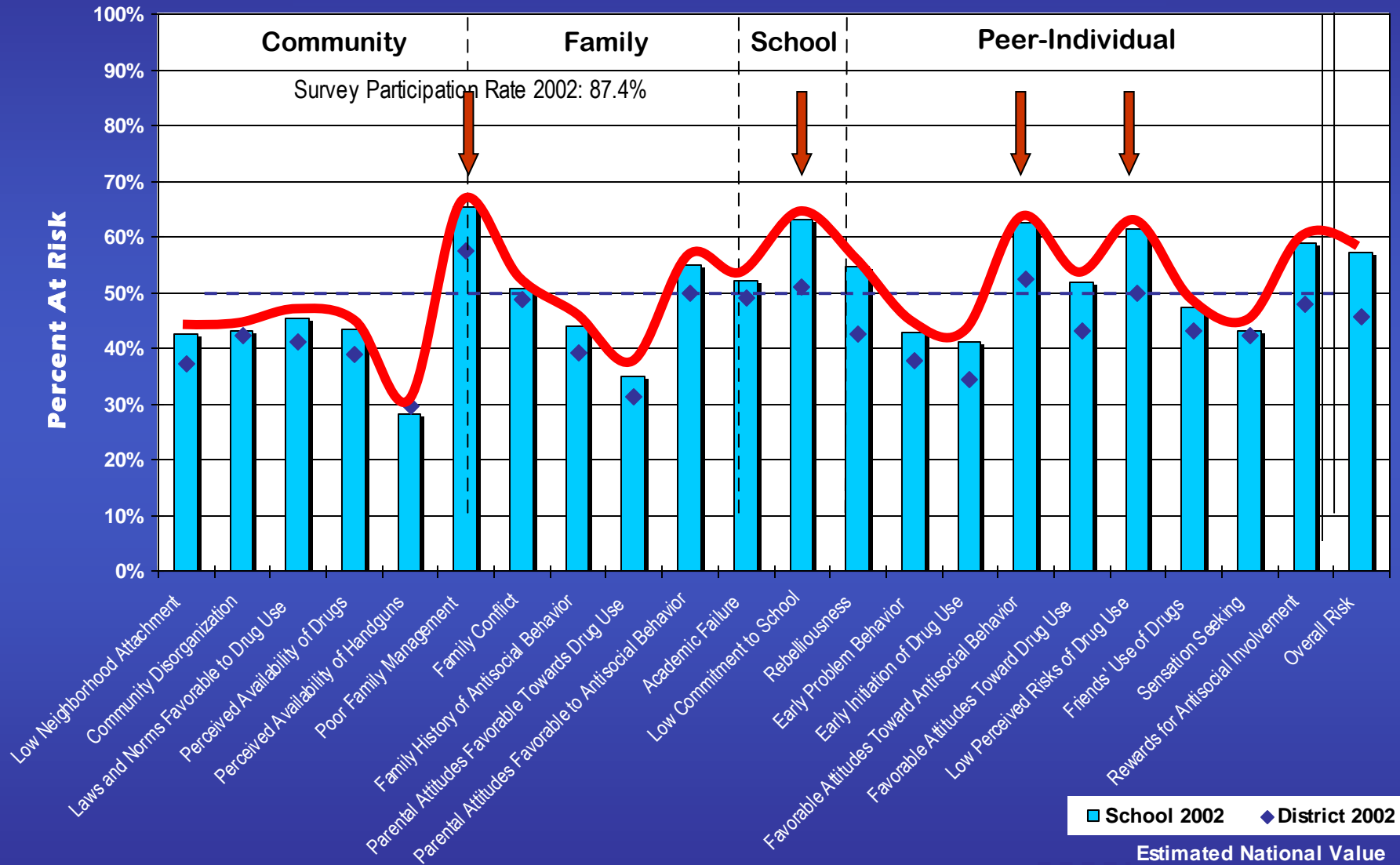
- To increase the use of tested and effective prevention policies and programs...

while recognizing that communities are different from one another and want to decide locally what preventive interventions they use.

Foundation Facts for Effective Community Level Prevention

- **Youths in different communities are exposed to different levels of risk and protection.**

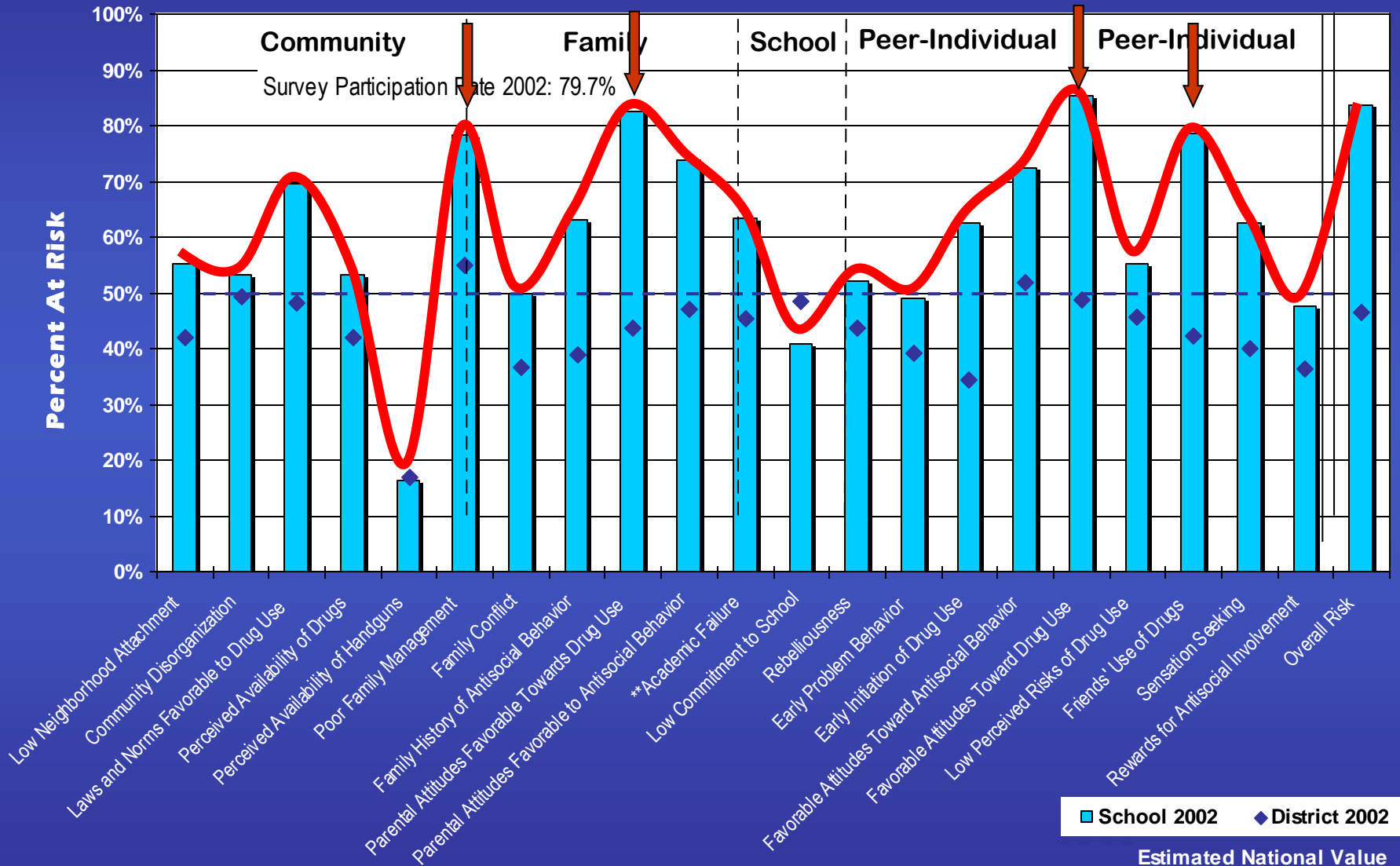
Madison Middle School Risk Profile 8th Grade



■ School 2002 ◆ District 2002

Estimated National Value

Nova High School Risk Profile 10th Grade



■ School 2002 ◆ District 2002

Estimated National Value

A Goal for Community Prevention Efforts Seeking Population Level Effects

To identify and address risk factors that are prevalent and protective factors that are low in a community with tested and effective policies and programs.

***The Communities That Care* Prevention Operating System**

Develops community capacity to:

- Build coalition of diverse stakeholders.**
- Assess and prioritize risk, protection, and behavior problems.**
- Address priority risks with effective preventive interventions.**
- Support/sustain high fidelity implementation of chosen preventive interventions seeking to reach all those targeted.**

The *Communities That Care* Prevention System

- **Community levels of protection and risk are measured by surveying young people themselves.**
- **Surveys repeated every other year assess changes in risk and protection levels and youth outcomes over time providing data for ongoing improvement cycle.**
- **Local control builds ownership to create sustainable change.**

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

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

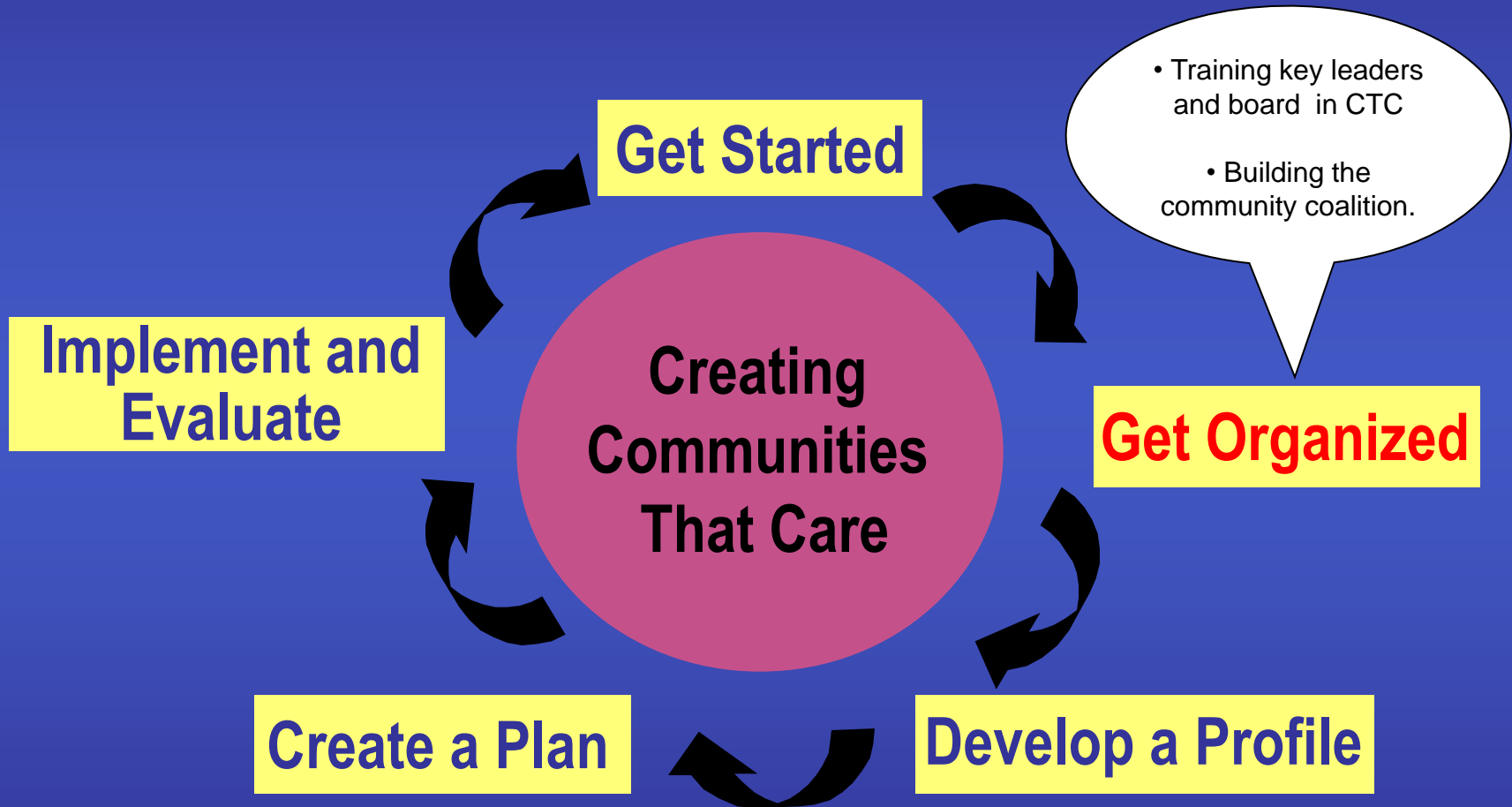
The Communities That Care Operating System



The Communities That Care Operating System



The Communities That Care Operating System



Organizations Represented by CTC Board Members in 12 CTC Communities

• Business	25	• Parent	13
• Citizen Advocacy Organization	13	• Religious Group	21
• Community Coalition	11	• School	104
• Community Member	17	• Substance Abuse Prevention Organization	8
• Health Agency	15	• State, Town, City or Municipal Government	20
• Human Service Agency	43	• Youth Member	15
• Juvenile Justice System	9	• Youth Recreation Program	24
• Law Enforcement	23	• Other	8
• Local Philanthropic Organization	3		
• Media	4		

Total: 376 Members

The Communities That Care Operating System

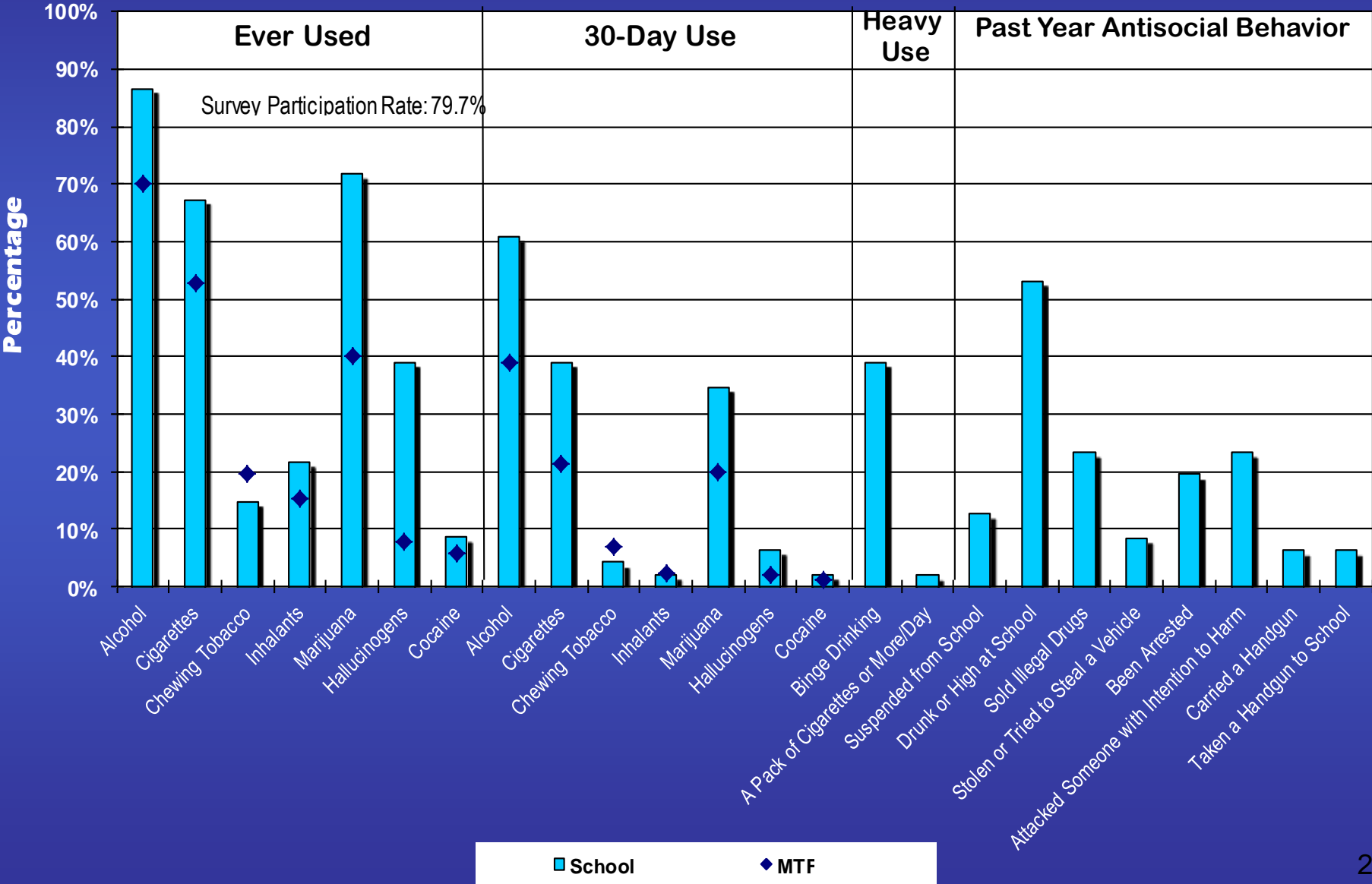


The CTC Youth Survey-

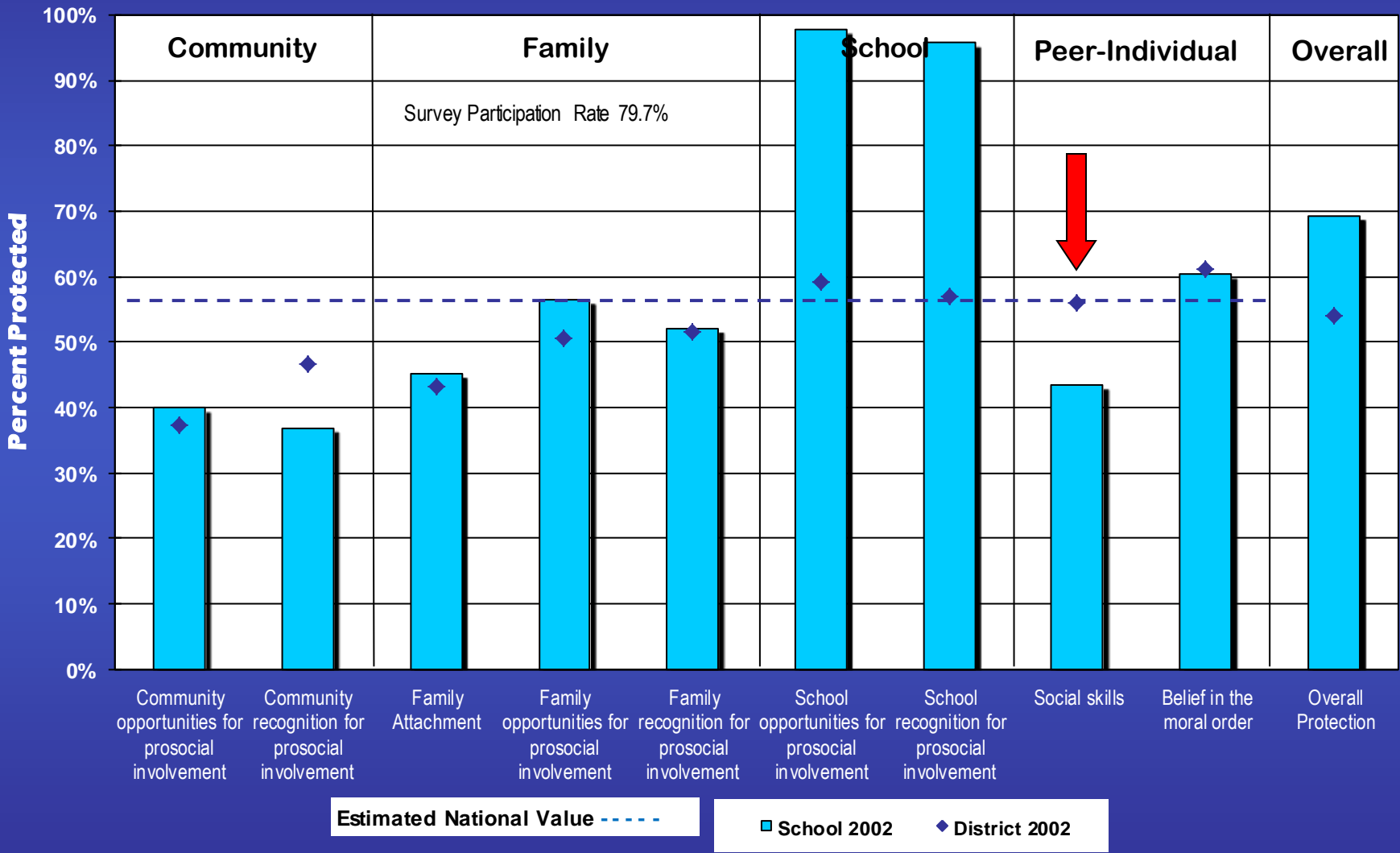
- **Assesses young peoples' experiences and perspectives.**
- **Provides valid and reliable measures of risk and protective factors across gender, age and racial/ethnic groups. (Arthur et al., 2002; Glaser et al., 2005)**
- **Identifies levels of risk and protective factors and MEB outcomes (including depressive symptoms) for district, city, school, or neighborhood.**
- **A foundation for selection of appropriate tested, effective actions.**
- **Repeat surveys every two years to monitor the effects of chosen actions.**

**The CTC Youth Survey is in the public domain
www.communitiesthatcare.net**

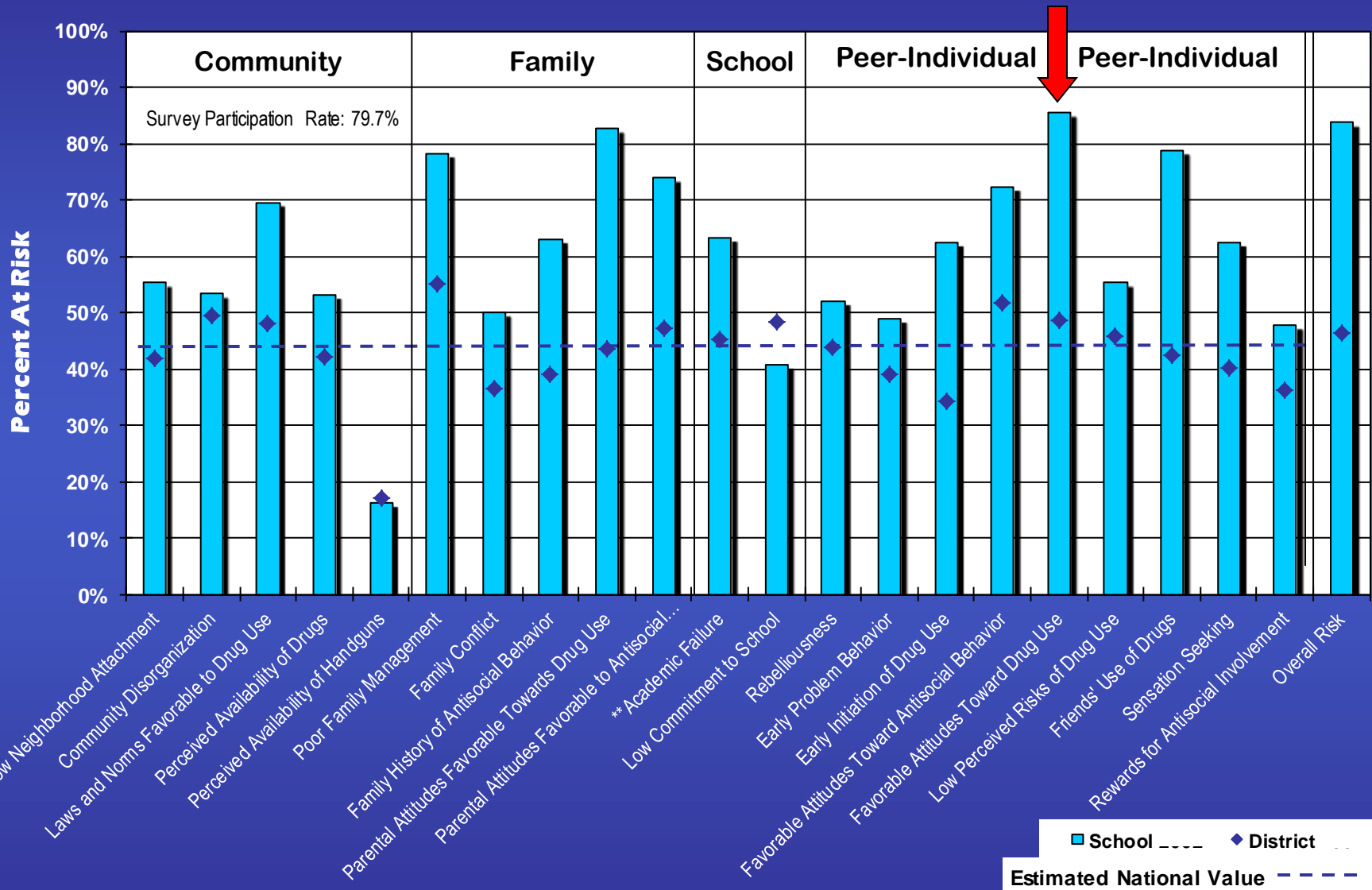
High School "N" Substance Use & Antisocial Behavior 10th Grade



High School "N" Protective Profile 10th Grade



High School "N" Risk Profile 10th Grade



The Communities That Care Operating System



Addressing Risk with Effective Action

Risk Factor Addressed	Program Strategy	Developmental Period
Favorable Attitudes Toward Drug Use 	Classroom Curricula for Social & Emotional Competence Promotion	6-18
	Community/School Policies	

Classroom Curricula for Social Competence Promotion

Life Skills Training (LST)

(Botvin et al., 1995; Botvin et al., 2001)

Positive Action

(Flay & Allred, 2003)

Lions' Quest Skills for Adolescence

• (Eisen, Zellman, Massett & Murray, 2002)

Project Towards No Drug Use

(Sussman et al. 2002)

The Communities That Care Operating System

- Form task forces.
- Identify and train implementers.
- Sustain collaborative relationships.
- Evaluate processes and outcomes.
- Adjust programming.



CTC Trainings

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

Implementation Takes Time

Major Implementation Initiatives occur in stages:

- **Exploration (Sustainability)**
 - **Installation (Sustainability)**
 - **Initial Implementation (Sustainability)**
 - **Full Implementation (Sustainability & Effectiveness)**
- 2 - 4 Years

Fixsen, Naoom, Blase, Friedman, & Wallace, 2005

Communities that Care Process and Timeline

Process

Measurable Outcomes

Assess risk,
protection and
resources

Implement and
evaluate
tested
prevention
strategies

Increase in
priority
protective
factors

Decrease in
priority risk
factors

Increase in
positive youth
development

Reduction in
problem
behaviors

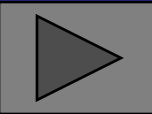
Vision for a
healthy
community

6-9 mos.

1 year

2-5 years

4-10 years



Community Youth Development Study: *A Test of Communities That Care*

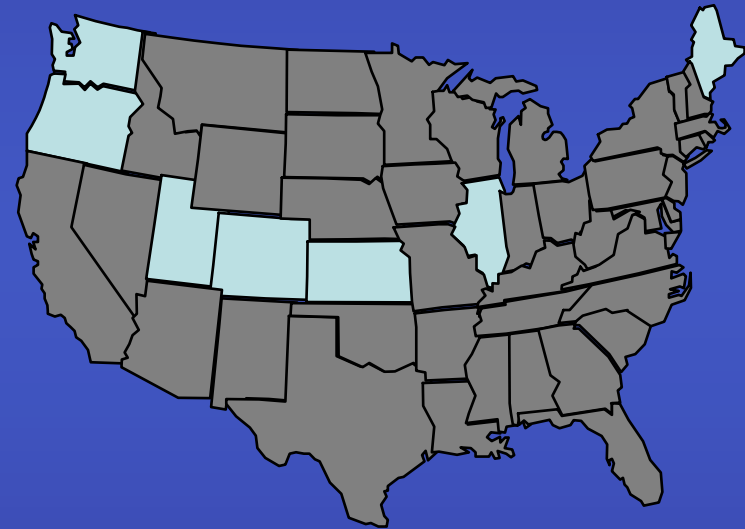
24 incorporated towns

- ~ Matched in pairs within state
- ~ Randomly assigned to CTC or control condition

5-year implementation

Longitudinal panel of students

- ~ 4,407 students
- ~ Surveyed annually starting in Grade 5



Funders & State Collaborators

Funders

National Institute on Drug Abuse
Center for Substance Abuse Prevention
National Institute of Mental Health
National Institute on Alcohol Abuse and Alcoholism

National Cancer Institute
National Institute on Child Health and
Human Development

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

Program Selection

CTC Community Boards selected prevention programs from the CTC Prevention Strategies Guide, a menu of programs that:

- ~ Showed significant effects on risk/protective factors, and drug use, delinquency, or violence
- ~ In at least one high-quality research study
- ~ Targeted children or families in grades 5-9
- ~ Provided materials and training

Programs Selected in 2004-2007

<u>PROGRAM</u>	<u>2004-05</u>	<u>2005-06</u>	<u>2006-07</u>
All Stars Core	1	1	1
Life Skills Training	2	4*	5*
Lion's-Quest Skills for Adolescence	2	3	3
Project Alert	-	1	1
Olweus Bullying Prevention Program	-	2*	2*
Program Development Evaluation Training	1	1	-
Participate and Learn Skills (PALS)	1	1	1
Big Brothers/Big Sisters	2	2	2
Stay SMART	3	3	1
Tutoring	4	6	6
Valued Youth Tutoring Program	1	1	1
Strengthening Families 10-14	2	3	3
Guiding Good Choices	6	7*	8*
Parents Who Care	1	1	-
Family Matters	1	1	2
Parenting Wisely	-	1	1
TOTAL	27	38	37

*Program funded through local resources in one or two communities

Exposure in the Community

Program Type	2004-05	2005-06	2006-07
School Curricula	1432	3886	5165
After-school*	546	612	589
Parent Training	517	665	476

Note: Total eligible population of 6th, 7th, and 8th-grade students in 2005-06 was 10,031.

*Includes PALS, BBBS, Stay SMART, and Tutoring programs

CTC Implementation Fidelity Monitoring Tools

- **Staff training**
- **CTC benchmarks and milestones**
- **Fidelity assessment checklists**
- **Observations of programs**
- **Attendance documentation**
- **Pre/post participant surveys**

CTC Benchmarks: Example

Stage 3: Develop a community profile

Stage 3 includes 5 benchmarks:

1. Has the coalition assessed risk and protective factors in the community?
2. ...using student surveys?
3. ...using archival indicators?
4. Has the coalition focused on specific risk/protective factors?
5. Has the coalition assessed prevention resources in the community?

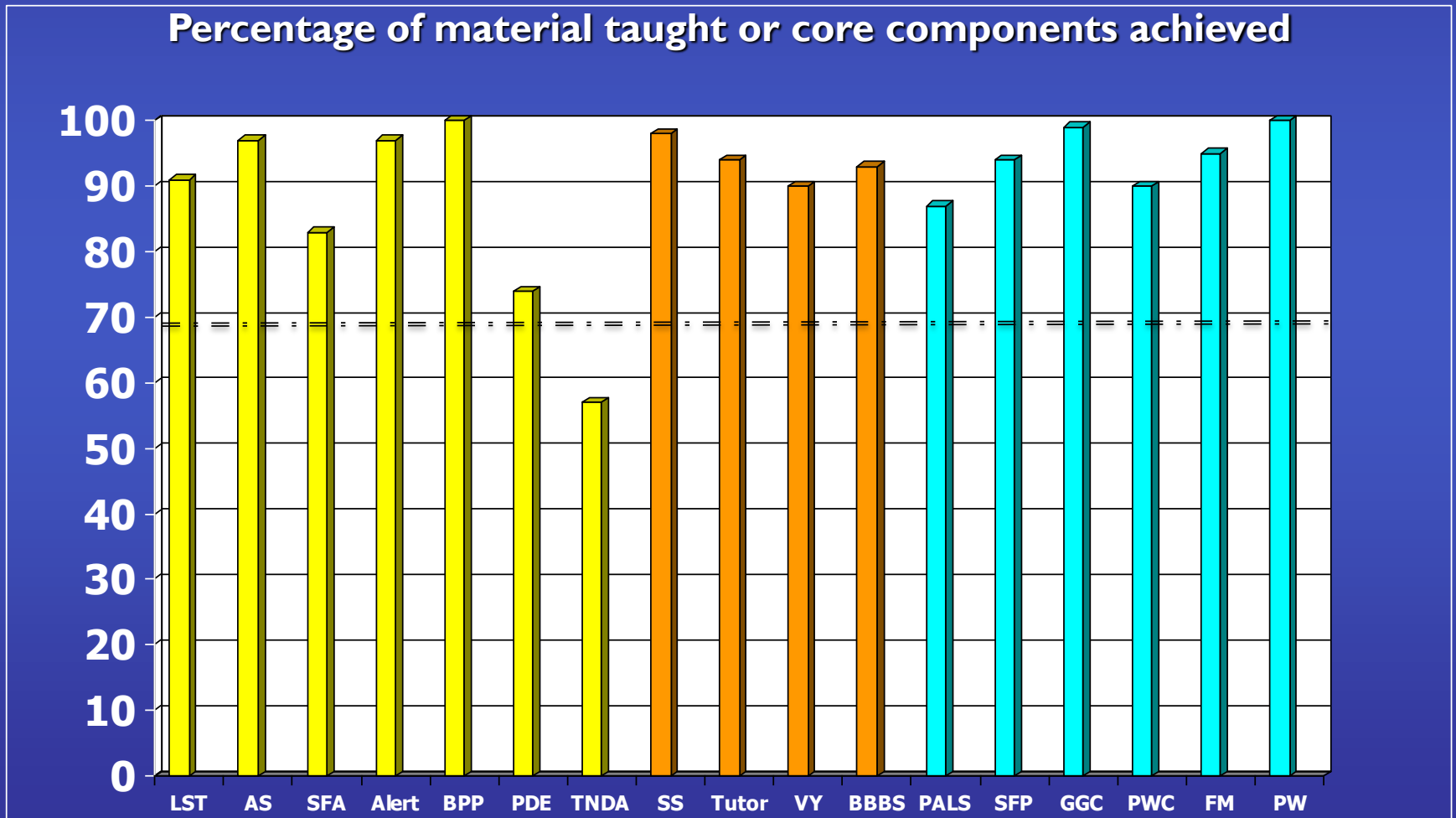
Benchmarks are summed to create a total score for each stage

CYDS Results for Prevention Program Implementation

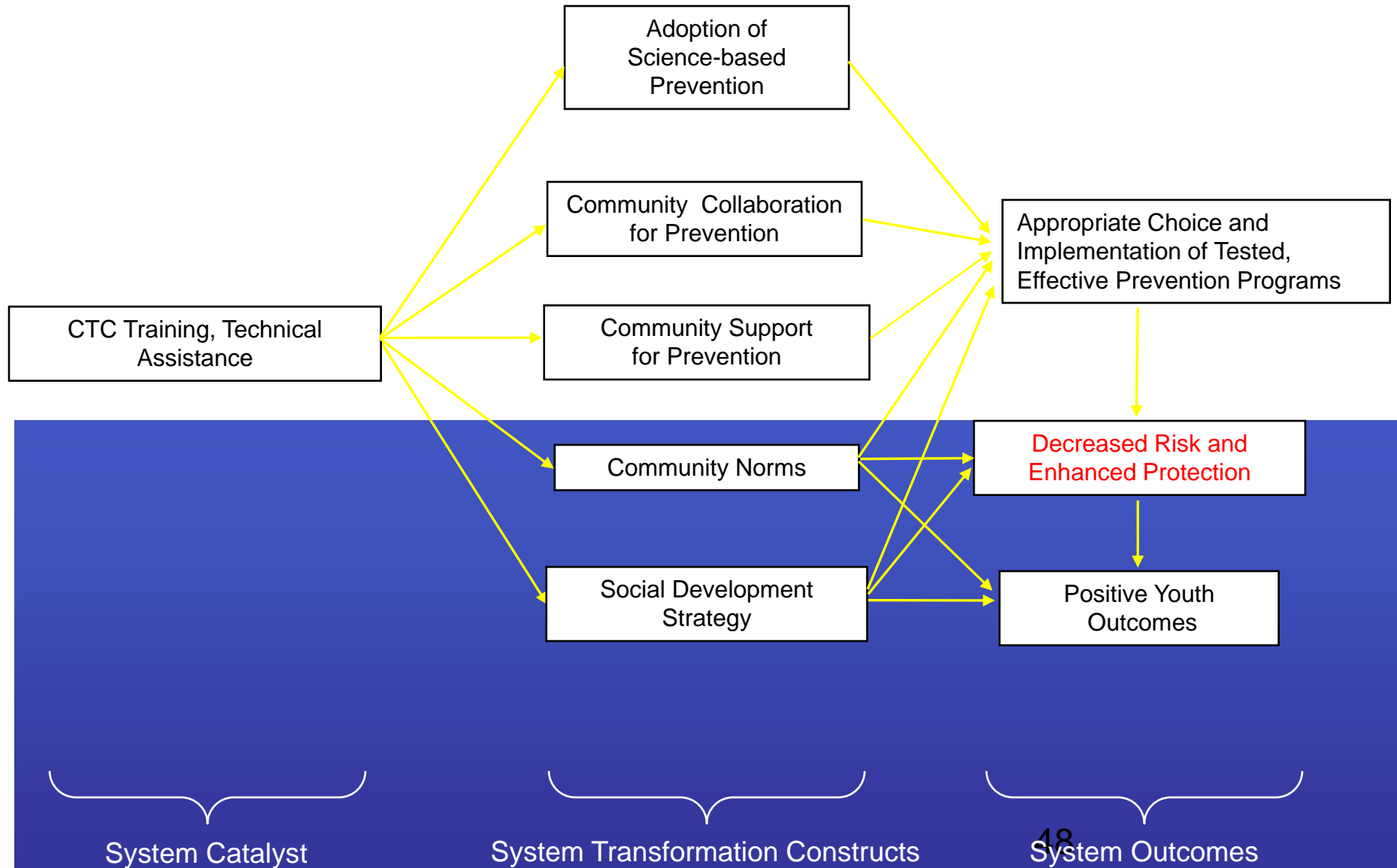
- Obtained **high rates** of implementation fidelity:
 - ~ Adherence: implementing the core content and components
 - ~ Delivery of Sessions: implementing the specified number, length, and frequency of sessions
 - ~ Quality of Delivery: ensuring that implementers are prepared, enthusiastic, and skilled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

Adherence Rates

Averaged across four years



Communities That Care Logic Model



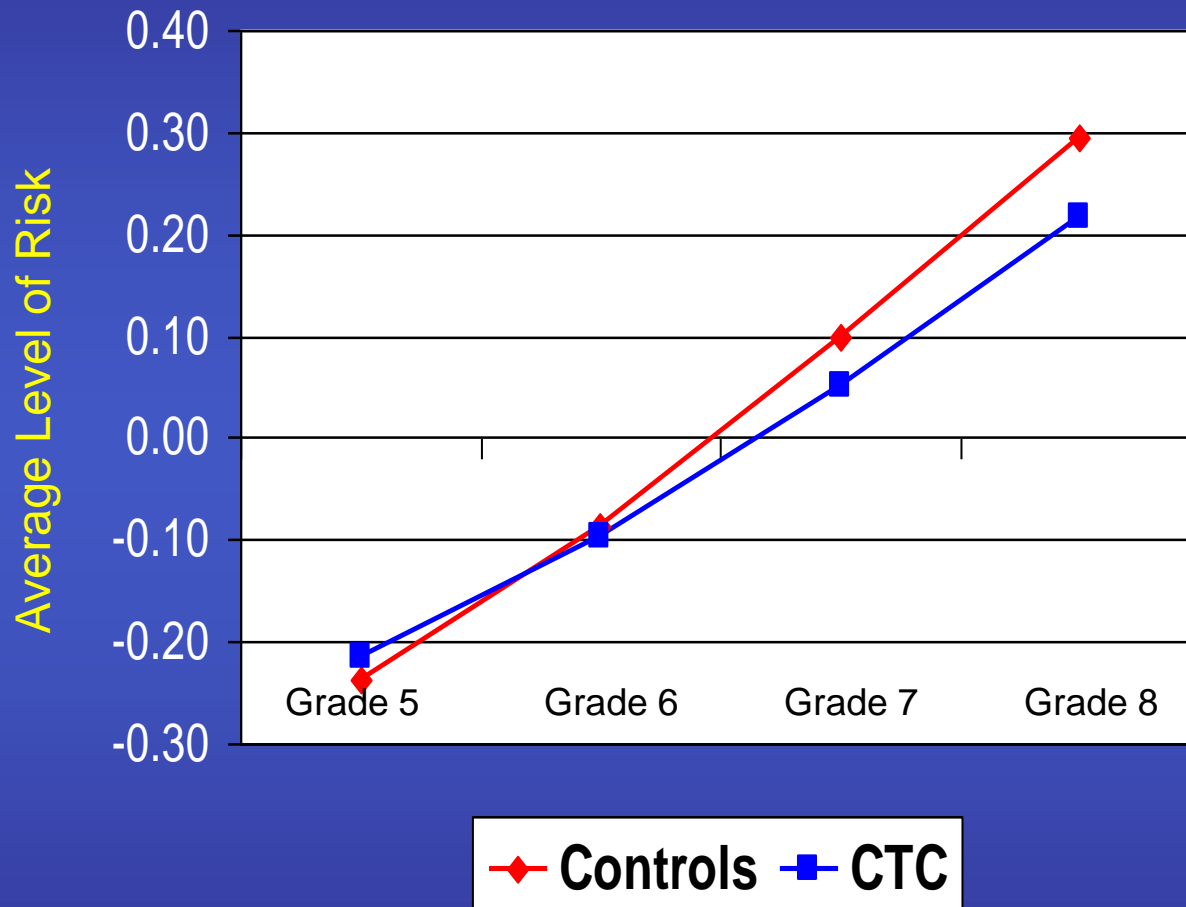
Targeted Risk

- **Communities targeted locally specific sets of elevated risk factors.**
- **They targeted 2 to 5 risk factors each year.**

Targeted Risk Factors

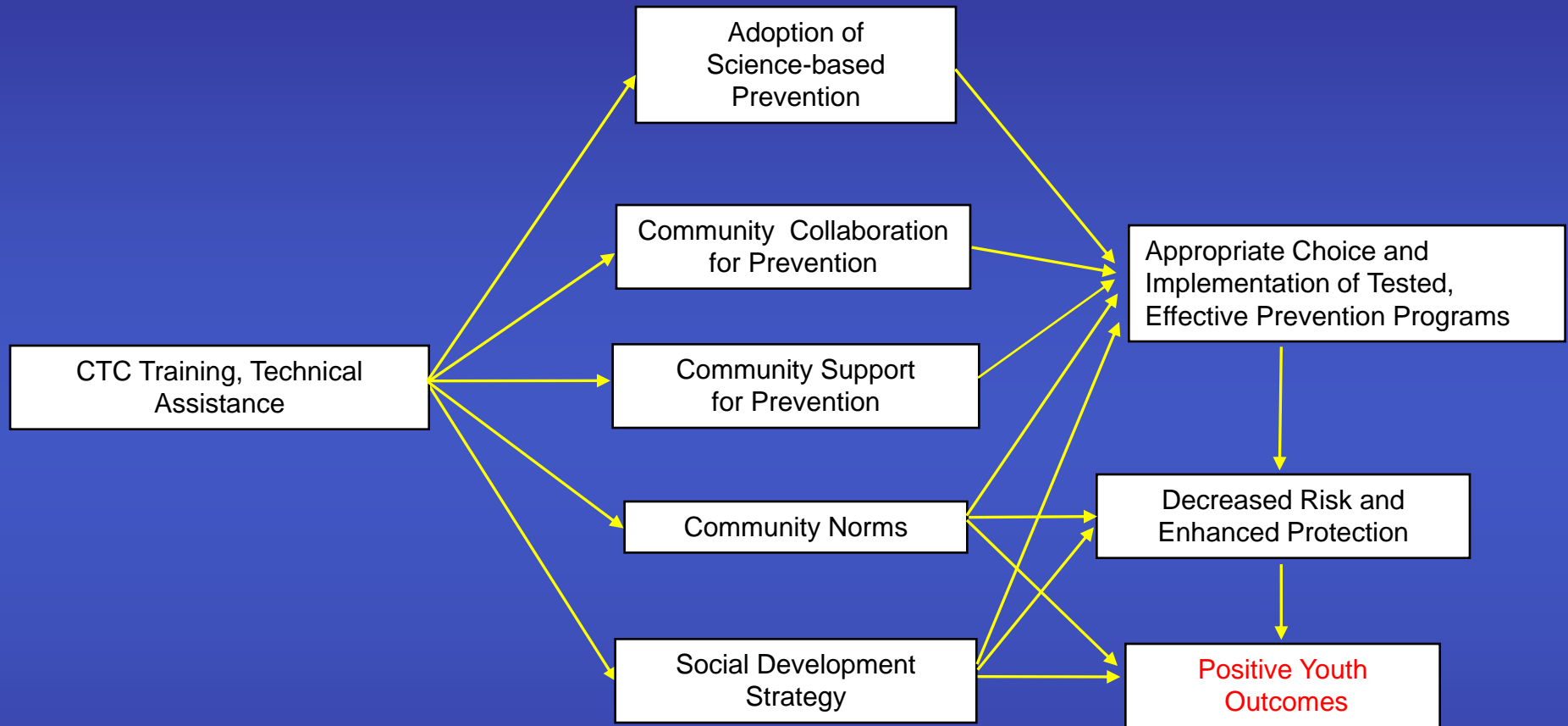
	CTC Community											
RISK FACTORS	1	2	3	4	5	6	7	8	9	10	11	12
Laws and norms favorable to drug use									x			
Low commitment to school		x	x	x		x	x	x	x		x	x
Academic failure				x	x			x		x	x	
Family conflict	x	x					x					
Poor family management			x	x						x		x
Parental attitudes favorable to problem 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

Results: Change in prioritized risk factors by end of eighth grade



Note. Results from a linear growth model with community matched pairs using data from YDS Grades 5 through 8 averaged across 40 imputed data sets; $\beta_{101} = 0.026$, $SE = 0.010$, $t(df = 9, N = 4407) = 2.54$, $p = 0.032$ for linear slopes; $\beta_{001} = -0.064$, $SE = 0.031$, $t(df = 9, N = 4407) = -2.10$, $p = 0.064$ for mean difference at Grade 8.

Communities That Care Logic Model



System Catalyst



System Transformation Constructs



System Outcomes

Effects of Communities That Care after Four Years

- Using CTC System significantly reduced the initiation of tobacco and alcohol use and delinquency among eighth grade students community wide in a panel followed from grade 5.

Compared with controls:

- 33% less likely to start smoking cigarettes.
- 32% less likely to start drinking alcohol.
- 25% less likely to start delinquent behavior.

➤ (Hawkins et al. , 2009)»»

Effects of Communities That Care

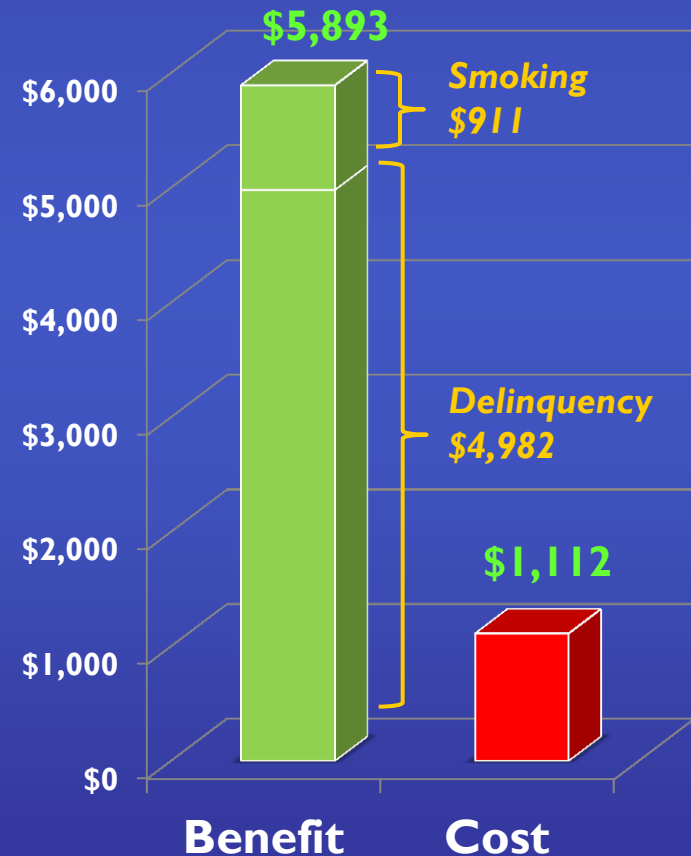
- Using CTC System significantly reduced current alcohol use and crime among eighth grade students in the panel:
 - 23% less likely to drink alcohol currently than controls.
 - 37% less likely to “binge” (5 or more drinks in a row) than controls.
 - Committed 31% fewer different delinquent acts in past year than controls.
 - (Hawkins et al., 2009, Archives of Pediatrics & Adol. Med.)

Sustained Significant Effects after Six Years of CTC (A Year after Project Funding Ended)

- In the panel, compared to controls, 10th graders from CTC communities had:
 - Lower levels of **targeted risk factors**.
 - Less initiation of **delinquent behavior**, **alcohol use**, and **cigarette use**.
 - Lower prevalence of past-month **cigarette use**.
 - Lower prevalence of past-year **delinquency**
 - Lower prevalence of past-year **violence**.

Benefits of CTC Compared to Costs

Net Benefit Per Child in CTC Community



	Delinquency	Smoking	Total
Benefits	\$4,982	\$911	\$5,893
Cost			<u>\$1,112</u>
Net Benefit			\$4,780

Benefit-Cost Ratio

$$\frac{\text{Benefit}}{\text{Cost}} = \frac{\$5,893}{\$1,112} = \$5.30$$

\$1.00 invested in CTC yields **\$5.30** in benefits

Summary of Significant Changes Produced by CTC:

- **Increased community adoption of tested and effective prevention programs.**
- **High quality implementation.**
- **Reduced targeted risk factors community wide.**
- **Reduced youth delinquency, violence, alcohol and tobacco use through grade 10, a year after intervention support ended.**

Pair and Share

What would it take to achieve and sustain these community wide outcomes more broadly across the nation?

What Works...

Successful implementation on a useful scale requires a **purveyor**

- **An individual or group of individuals representing a program or practice who actively work to implement that practice or program with fidelity and good effect**
- **Purveyors accumulate data & experiential knowledge, & become more effective and efficient over time**

Availability of manuals and materials is necessary...

All manuals and materials needed to implement **Communities That Care have been placed in the public domain by SAMHSA and are available at:**
<http://www.communitiesthatcare.net>

...but manuals and materials are not sufficient to ensure installation and implementation as intended. (Blase & Fixsen, 6/5/12).

Improved Outcomes for Adolescents

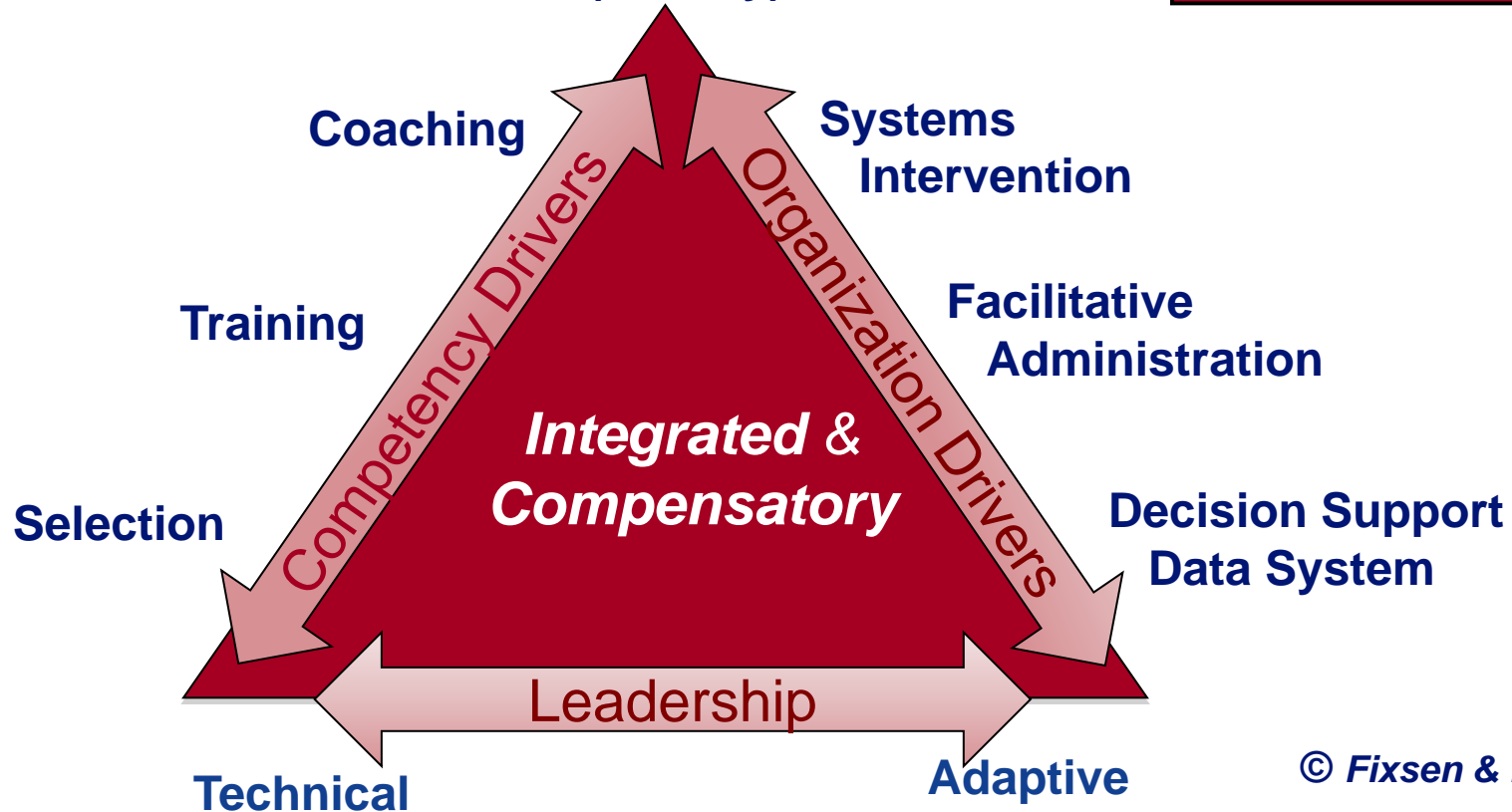


EBP/Program/Initiative/Framework for Effective Practices & Prevention System Change



Performance Assessment (Fidelity)

Funding for Infrastructure



Funding Required for Infrastructure

- **Training and coaching to build capacity of states to implement CTC**
- **National and state monitoring of fidelity of implementation of CTC and fidelity and reach of EBP's chosen**
- **National and state monitoring of outcomes**

How can federal agencies create infrastructure to support ‘drivers?’

- Provide transition resources to **states** to build capacity to provide CTC training and coaching to communities to install CTC and effective preventive interventions with fidelity.
- **Initial goal:** increase number and reach of tested and effective MEB preventive interventions in communities in state by end of third year through redirection of existing funds (including federal block grants and funds to states.)

Mechanism-Controlled Trial Capacity Building Grant

- **Follow OMB's Directives to Departments and Agencies to propose new evaluation (5/18/12).**
- **Three year competitive capacity building grants or cooperative agreements with states to build core competencies of the state implementation teams.**
- **Applicants must agree to random assignment for first round funding or comparison condition.**
- **Applicants judged against basic readiness, resource, capacity, commitment and CTC knowledge criteria. All states that exceed these requirements are eligible.**
- **From eligible states, randomly pick first implementers.**
- **Repeat in phases to provide support to comparison states if shown effective in increasing reach of effective interventions for preventing MEB problems.**

This sounds like what we do now. What's different?

- 1. Builds state capacity to install a tested and effective operating system** shown in randomized trial to have effects on risk levels, and adolescent health and behavior problems.
- 2. Rolled out in an experimental manner to test the effectiveness of the dissemination and implementation strategy itself** compared to business as usual.

Results of this trial

2 and 3 years – Are more people being reached by tested and effective preventive interventions in CTC versus comparison states?

At what cost?

4 and 5 years - Are risks and tobacco and alcohol use, delinquency and violence reduced in CTC states compared with original comparison states?

Another design?

- **Three condition study-CTC, PROSPER and comparison states.**
- **Strength: Tests which is better, CTC, PROSPER, Business as Usual**
- **The Result: Invest in the system with the best results in getting EBP's implemented with fidelity at scale in communities.**

OMB's Instruction to Departments and Agencies

- **“Infuse evidence into grant making”**
- **This plan builds on the evidence from a randomized trial that CTC increases the use and reach of evidence based programs in communities and reduces youth MEB problems.**

Conclusions

- **Prevention Science has identified risk and protective factors for multiple problems. Preventive policies and programs that address them have been found to be effective in reducing youth MEB problems in controlled trials.**
- **Effective community prevention should include a combination of locally chosen tested and effective preventive interventions.**
- **Achieving high quality implementation of EBPs at scale requires state and local capacity to chose, support and sustain them.**
- **CTC has achieved this degree of fidelity across multiple communities in a randomized controlled trial.**

Recommendations

- **Federal agencies should use tested, effective prevention operating systems to achieve OMB recommendations for 2014 budget.**
- **Federal agencies can test the impact of these systems through competitive grant randomized trials.**

Thank You!

J. David Hawkins

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Communities That Care

www.communitiesthatcare.net

Challenge: What criteria should be used for “evidence of effectiveness”?

Evaluation quality

Impact

Intervention specificity

System readiness

**Annie E. Casey Evidence 2 Success Initiative,
2011. (Abel Ortiz)**

Blueprints – U of Colorado (Del Elliott)

Issues

- **Different lists of “evidence based prevention programs” contain different programs, leading to concerns that lists reflect factors other than effectiveness in achieving outcomes.**
- **Pressure in and on agencies to include interventions supported by agency funding or current administration may lead to inclusion of programs that don’t meet standards of evidence.**

Which List of “Effective” Programs Should We Use?

- **DOE What Works Clearinghouse**
- **OJP Crime Solutions**
- **SAMHSA National Registry of Effective Prevention Programs NREPP**
- **OJJDP Model Programs Guide**
- **Blueprints Model and Promising Programs**
- **Coalition for Evidence Based Policy Top Tier**
- **Child Trends LINKS**
- **Communities That Care Prevention Strategies Guide**

Windows Internet Explorer browser window showing the URL: www.colorado.edu/cspv/blueprints/matrixfiles/matrix.pdf. The browser interface includes a search bar, navigation icons, and a toolbar with options like 'Collaborate', 'Sign', and 'Find'.

Matrix of Programs

A	B	C	D	E	F	G	H
Matrix of Programs (Updated 8/29/11)	Coalition for Evidence-Based Policy	Blueprints for Violence Prevention	NREPP-SAMHSA	Communities That Care	OJJDP Model Programs Guide	Office of Justice Programs Crimesolutions.gov	Child Trends / LINKS
Urban Aya Youth Project						Promising	Effective
Abecedarian Project							Effective
Academic Tutoring and Social Skills Training					Effective		
Acceptance and Commitment Therapy (ACT)			2.5-3.0				
Across Ages			2.4-3.1		Promising		
Active Parenting Now			2.2-3.3				
Adolescent Community Reinforcement Approach			3.0-3.7			Effective	
Adolescent Coping with			2.6-2.8				Effective

What can you do?

- **Encourage/ support the makers of lists of “effective” MEB prevention programs to come together to identify the top programs all agree are “top tier,” “tested and effective,” “proven,” or “model”...**
- **What programs do all agree are worthy of installation on the basis of evidence of effects in preventing MEB disorders?**
- **Choose / endorse a list (or lists) that your agency is confident uses adequate standards to determine what should be disseminated on the basis of evidence.**

Challenge: OMB's Instructions to Departments and Agencies

- **Use rigorous evidence on comparative cost effectiveness of programs to guide agency funding investments.**

Issues

- **Actual costs of MEB disorders vary across states.**
- **Varying assumptions used in different benefit cost analyses lead to different estimates of benefit to cost ratios of the same preventive interventions .**
 - **This can inhibit ability to compare benefit cost ratios across studies and cause policy makers to question objectivity of studies.**

Example

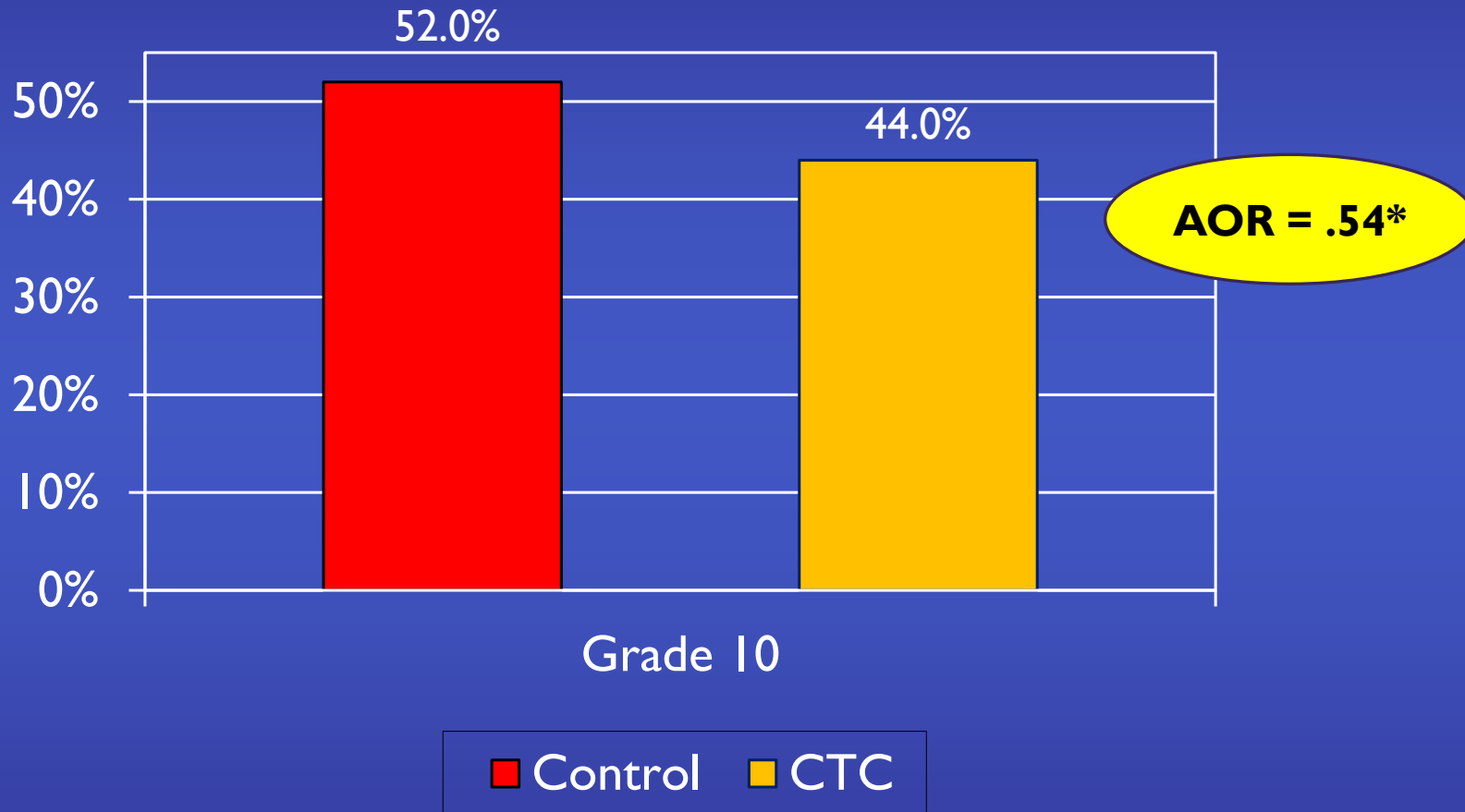
Nurse Family Partnership: Return on Investment

<u>Benefits Per Family</u>	<u>WSIPP Estimate</u>	<u>Unadjusted Estimate</u>
Child abuse and neglect	\$865	\$2,735
Earnings gains	\$16,425	\$17,978
Reduced crime	\$5,822	\$22,600
Health care & mental health	\$833	\$911
Public Assistance	\$572	\$1,076
K-12 costs	-\$1,735	-\$1,822
Total Benefits Per Family	\$22,782	\$43,478
Cost Per Family	\$9,600	\$9,600
Benefits Minus Cost (NPV)	\$13,182	\$33,878
Benefits Per Dollar of Cost	\$2.37	\$4.53
Rate of Return (ROI)	6%	10%
Risk: Odds of Negative NPV	20%	2%

What you can do

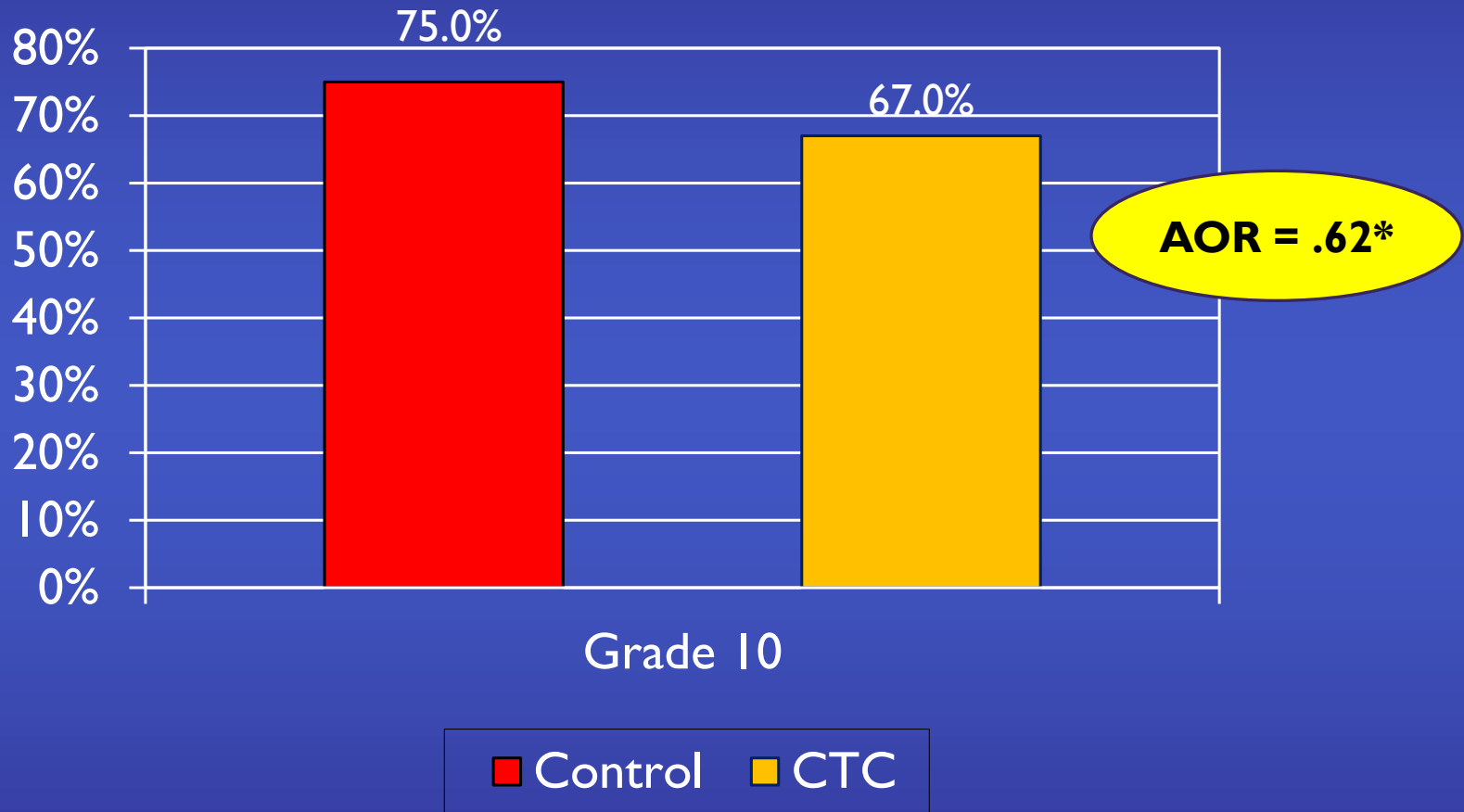
- **For now, across agencies, use existing benefit cost estimates of MEB preventive interventions from Washington State Institute for Public Policy which have applied consistent assumptions and standards across all analyses. (www.wsipp.wa.gov)**
- **Encourage and support states to create capacity for benefit cost analyses that account for actual costs of MEB disorders in that state. (Pew Charitable Trust Project example.)**
- **Support a consensus study by the Institute of Medicine to establish standards for benefit cost analyses of preventive interventions with children and families to be used consistently across studies. (Kimber Bogard- IOM KBogard@nas.edu)**

Percent of Panel Who Ever Smoked



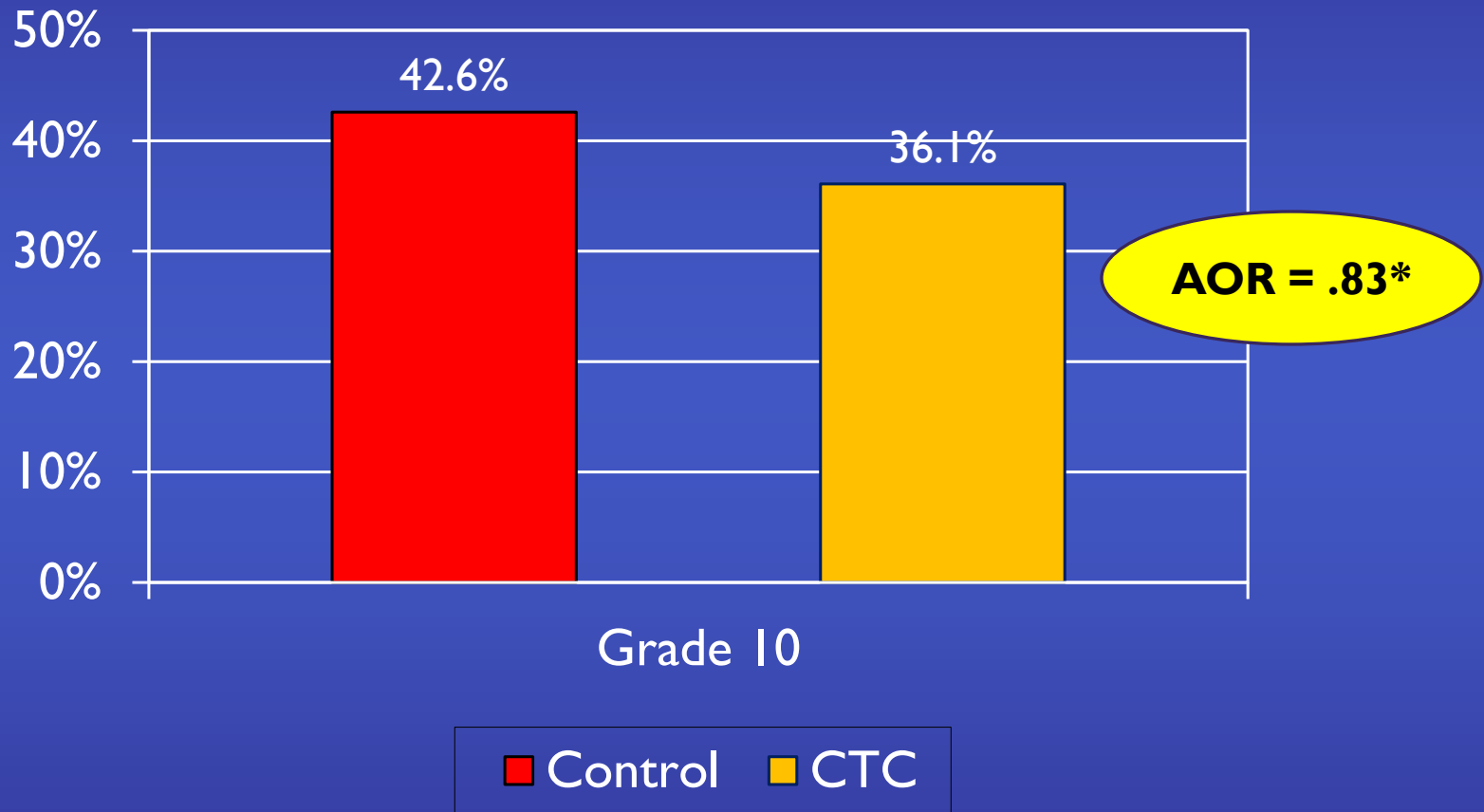
Note: AOR = adjusted odds ratio for smoking initiation in grade 10 from generalized linear mixed regression analysis controlling for student and community characteristics and grade 5 smoking.

Percent of Panel Who Ever Drank Alcohol



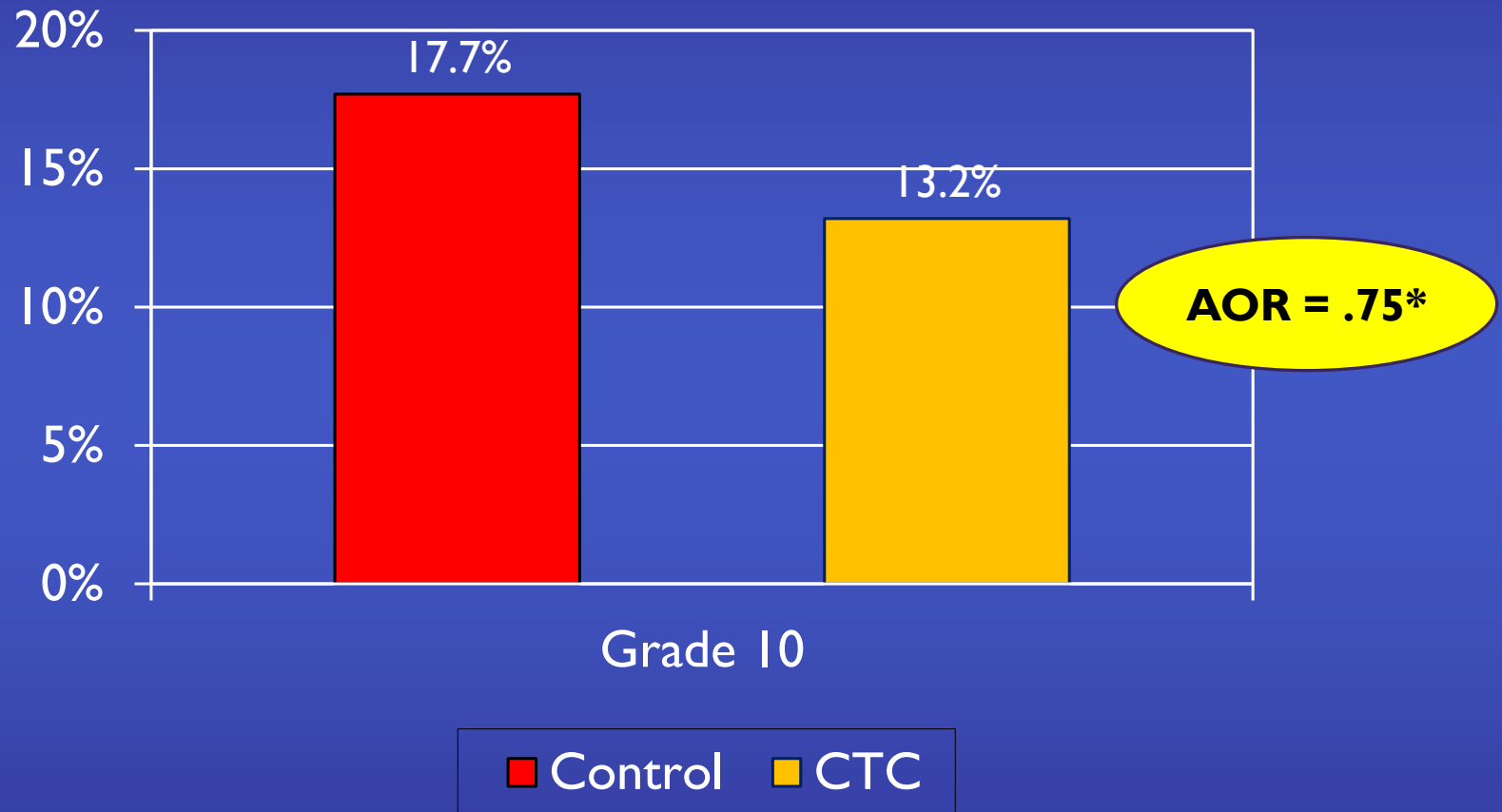
Note: AOR = adjusted odds ratio for drinking initiation in grade 10 from generalized linear mixed regression analysis controlling for student and community characteristics and grade 5 drinking.

Percent of Panel Who Engaged in Delinquency in Past Year



Note: AOR = adjusted odds ratio from generalized linear mixed regression analysis controlling for student and community characteristics and grade 5 delinquency.

Percent of Panel Who Engaged in Violence in Past Year



Note: AOR = adjusted odds ratio from generalized linear mixed regression analysis controlling for student and community characteristics and grade 5 delinquency.

Quality of Delivery

- Observers rated the quality of delivery on 10 items (alpha = .87-.90) using a 5-point scale (higher scores indicate better quality)
- Example Items:
 - ~ In general, how clear were the program implementer's explanations of activities?
 - ~ To what extent did the implementer keep on time during the session and activities?
 - ~ Rate the implementer on the following qualities:
 - Level of enthusiasm
 - Rapport and communication with participants
 - Effectively addressed questions/concerns

Some Approaches Do Not Work

- Information only
- Testimonials from recovered addicts
- Scare tactics (“Scared Straight”)
- Affective education (e.g., self-esteem building only)
- Alternative programming (e.g., recreation programs without social and emotional skills training)

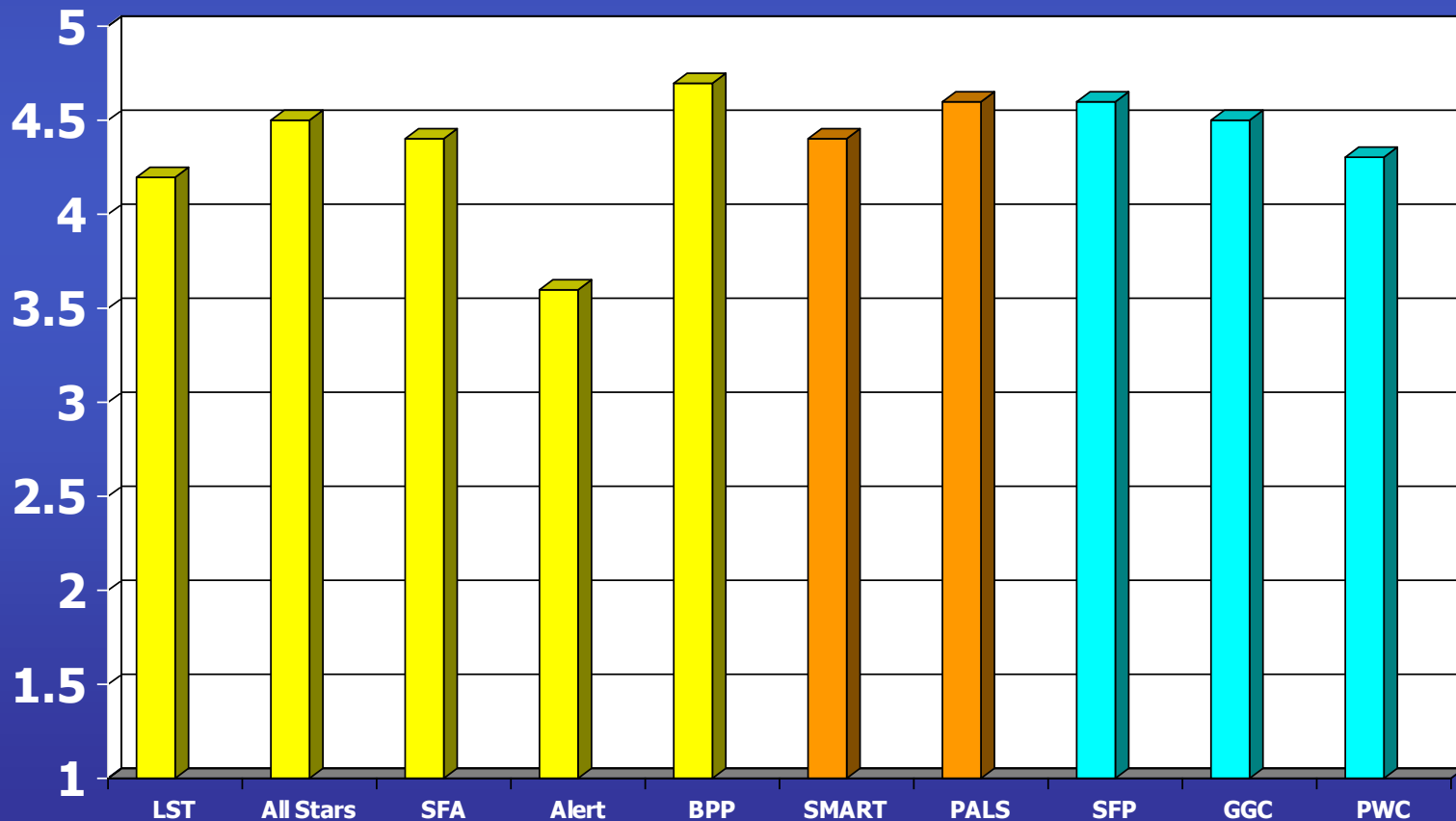
Participant Responsiveness

- **Observers rated participant responsiveness on two items, using a 1-5 scale (higher scores indicate better responsiveness):**
 - ~ **To what extent did the participants appear to understand the material?**
 - ~ **How actively did group members participate in discussions and activities?**

Participant Responsiveness

Averaged across four years

Average score on 2 items reported by program observers



Key Points

- Addressing common risk factors for diverse problems and disorders will have wide ranging and long term effects.

Fidelity Assessment Checklists

- **Provide similar information across programs to measure adherence and dosage**
- **Checklists completed by local implementing staff**
- **3,000-4,000 checklists completed annually during the trial**

Fidelity Assessment Checklist



Life Skills Training Level 1 Curriculum Self-Image and Self-Improvement

School ID: _____

Instructor ID(s): _____

Date: ____/____/____ Class Period: _____ Start time ____:____ End Time ____:____

Total number of participants: _____

IMPLEMENTATION CHECKLIST

Did this lesson begin in a prior session?

Yes No *If yes, draw a line above the first point made during today's lesson.*

For each major objective and corresponding points to make listed below, please check "yes" or "no" to indicate if it was covered when you taught the session (please do not mark in between boxes).

	Yes	No
Define self-image	<input type="checkbox"/>	<input type="checkbox"/>
<i>Self-image is the beliefs and attitudes we have of ourselves</i>	<input type="checkbox"/>	<input type="checkbox"/>
Discuss how self-image is formed	<input type="checkbox"/>	<input type="checkbox"/>
<i>Self-image is formed through what others think of us and past experiences</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>We tend to act like the person we believe ourselves to be</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Identify that individuals have many self-images</i>	<input type="checkbox"/>	<input type="checkbox"/>
Identify ways to increase self-image	<input type="checkbox"/>	<input type="checkbox"/>
<i>We can develop a more positive self-image by doing better in situations</i>	<input type="checkbox"/>	<input type="checkbox"/>
Identify something that makes you proud	<input type="checkbox"/>	<input type="checkbox"/>
<i>Become aware of past successes or accomplishments</i>	<input type="checkbox"/>	<input type="checkbox"/>

For of the topics and activities listed below, please check "yes" or "no" to indicate if it was covered when you taught the session (please do not mark in between boxes).

<i>How I See Myself</i> (Worksheet 1)	<input type="checkbox"/>	<input type="checkbox"/>
<i>Taking Stock</i> (Worksheet 2)	<input type="checkbox"/>	<input type="checkbox"/>
Setting and Achieving Personal Goals	<input type="checkbox"/>	<input type="checkbox"/>
Self-Improvement Project	<input type="checkbox"/>	<input type="checkbox"/>
<i>Recording My Progress</i> (Worksheet 3)	<input type="checkbox"/>	<input type="checkbox"/>
Session Summary	<input type="checkbox"/>	<input type="checkbox"/>

A Central Theme

- “The scientific foundation has been created for the nation to begin to create a society in which young people arrive at adulthood with the skills, interests, assets, and health habits needed to live healthy, happy, and productive lives in caring relationships with others.”

CTC Towns: Coalition of Stakeholders

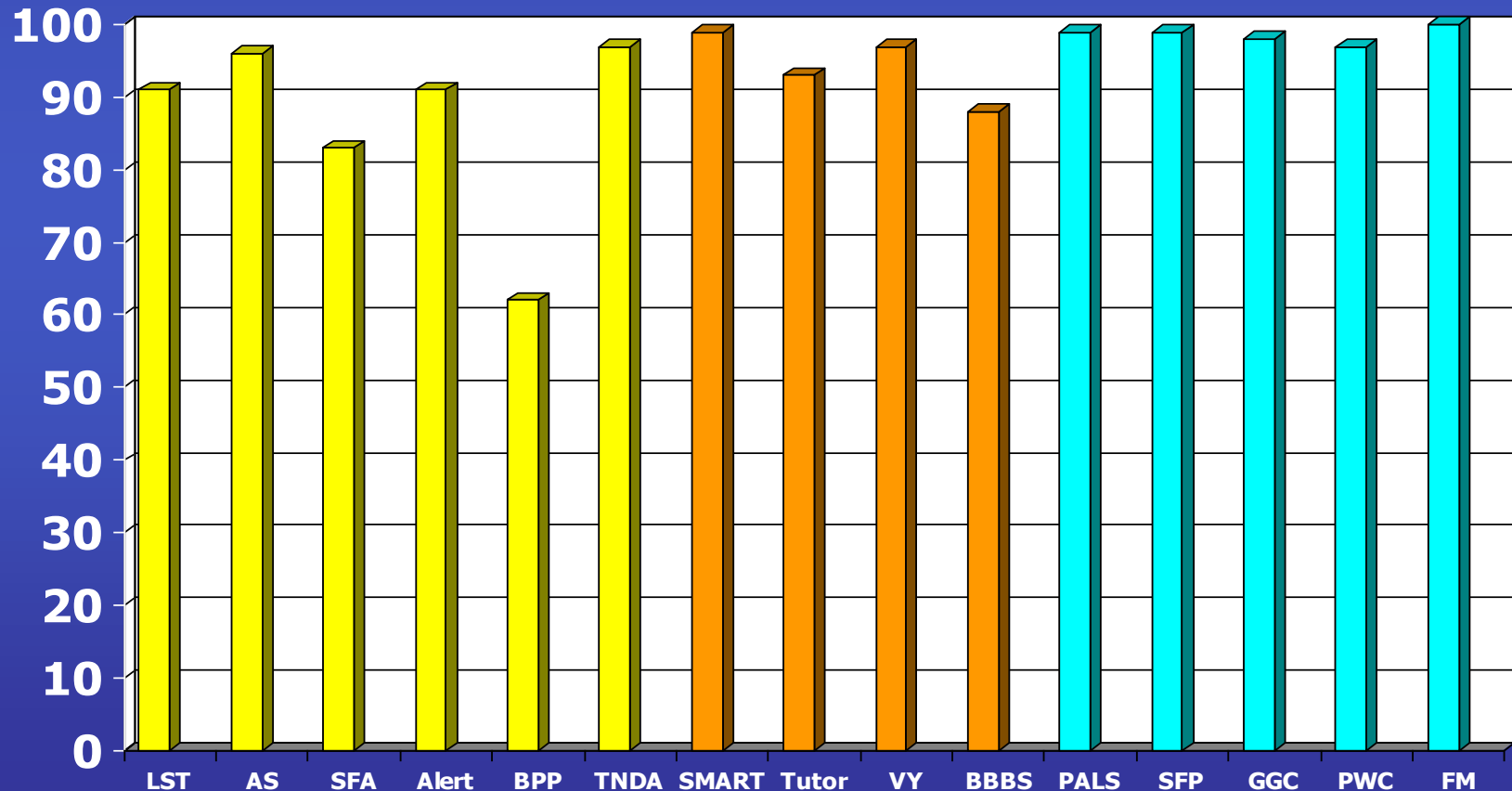
- Received CTC Training
 - 6 trainings over 12 months
- Collected Data on Local Levels of Risk and Protection
 - using CTC Youth Survey
- Prioritized Risk Factors to Address
- Implemented Tested Prevention Programs from CTC menu
 - on average 3 per community per year

Delivery of Lessons

Averaged across four years

(number, length, and frequency of required sessions)

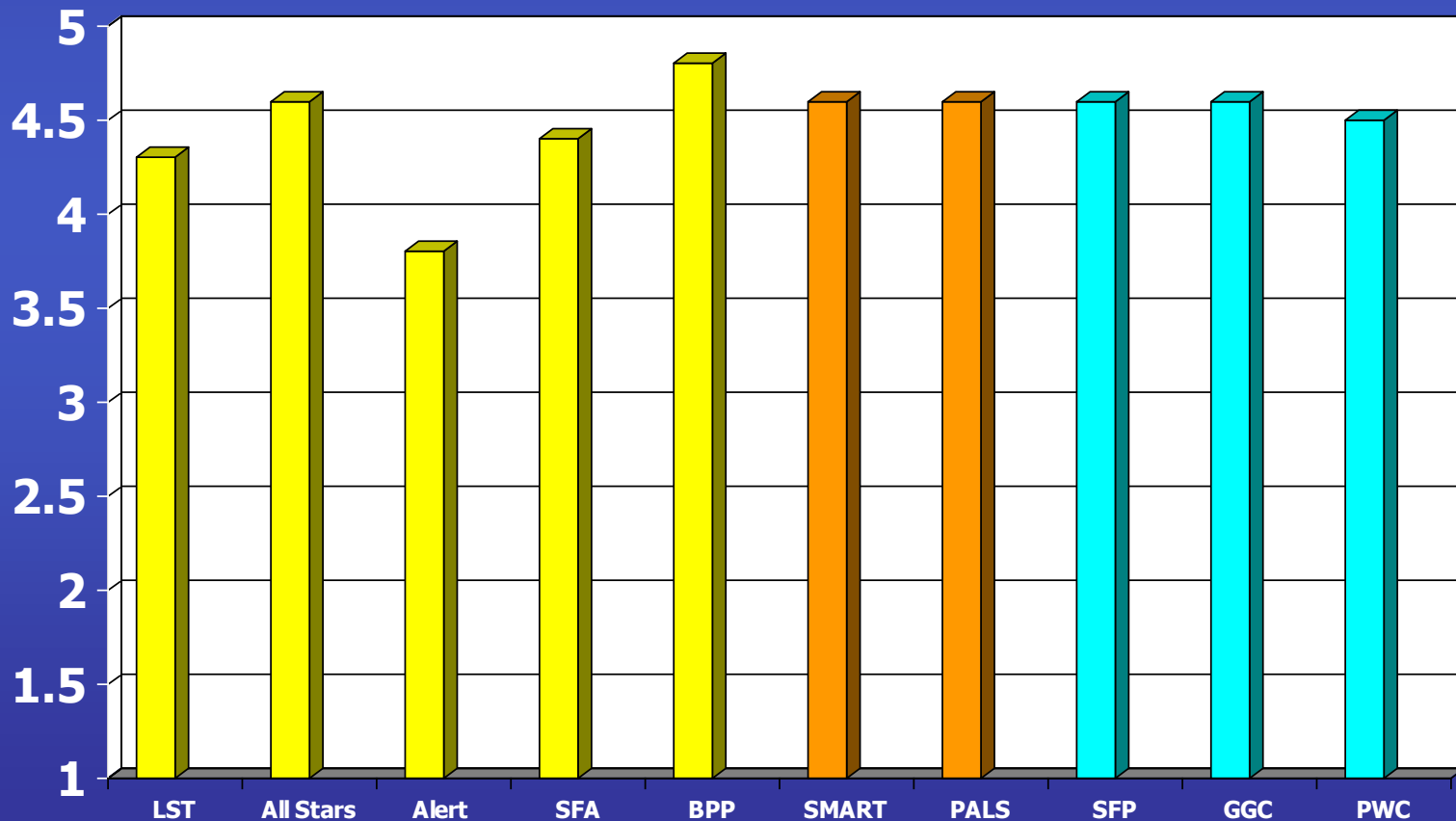
Percentage of delivery requirements met



Quality of Delivery

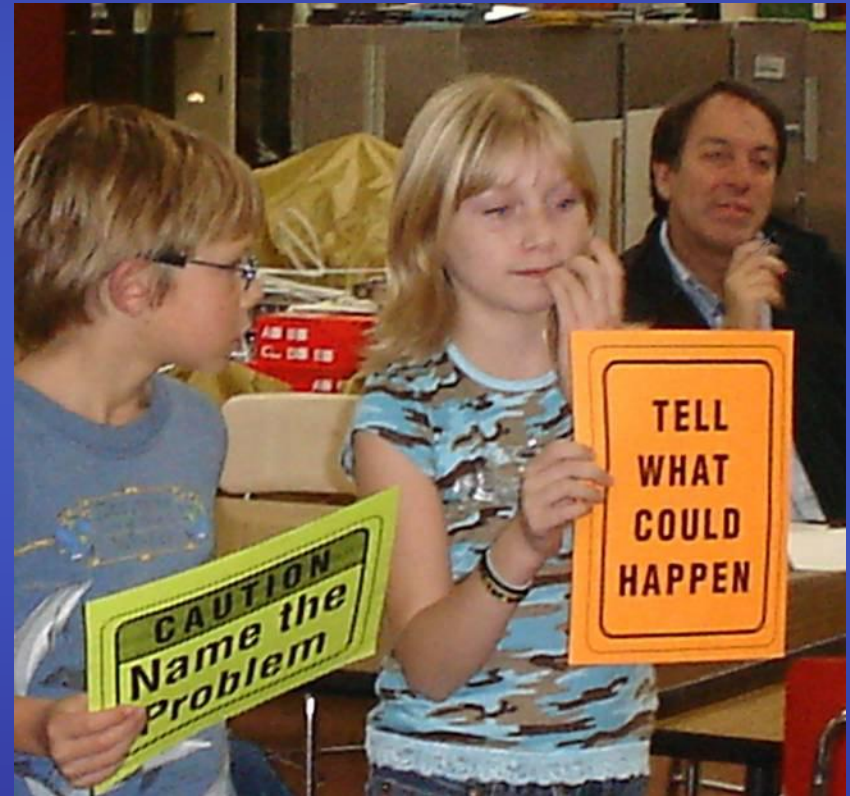
Averaged across four years

Average score on 10 items reported by program observers



Program Observations

- **Community volunteers observed 10-15% of sessions for 10 programs**
- **Completed fidelity checklists to assess adherence**
 - ~ **Rate of agreement w/ implementers was 92%-97%**



How would it be rolled out?

- Follow OMB's Directives to Departments and Agencies to propose new evaluation (5/18/12).
- Competitive announcement to states, but first round funding limited to X states and new funding limited to transition funding to build state capacity.
- Applicants judged against basic readiness, resource, capacity, commitment and CTC knowledge criteria. All those who exceed these requirements are eligible.
- Applicants must agree to random assignment for first round funding and agree to participate as comparison states providing data.)

Core Competency for Implementation Teams

A Team that:

- Knows the innovation very well (formal and practice knowledge)
- Knows implementation very well (formal and practice knowledge)
- Knows improvement cycles to make intervention and implementation methods more effective and efficient over time
- Promotes systems change at multiple levels to create hospitable cultures, policies, and funding streams