Communities That Care: Using Prevention Science to Achieve Collective Impact on Youth Development

Richard F. Catalano, Ph.D.

Bartley Dobb Professor for the Study and Prevention of Violence
Director, Social Development Research Group
School of Social Work
University of Washington
www.sdrg.org
Objectives

- How does CTC incorporate the research base for prevention science?
- How does CTC build community capacity to use data in local decision making?
- How well does CTC achieve impact at scale?
Preventing Mental, Emotional and Behavioral Disorders Among Young People: Progress and Possibilities

A summary of the progress of prevention science
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.

Efficacy Trials
- Design and test preventive interventions to interrupt causal processes that lead to youth problems.
## Risk Factors for Adolescent Problems

### Community
- Availability of Drugs
- Availability of Firearms
- Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime
- Media Portrayals
- 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

### Risk Factors for Various Problems

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>School Drop-Out</th>
<th>Violence</th>
<th>Depression &amp; Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Family</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>School</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Individual/Peer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Protective Factors Also Affect Multiple Problems

**Individual Characteristics**
- High Intelligence
- Resilient Temperament
- Competencies and Skills

**In each social domain (family, school, peer group and neighborhood)**
- Prosocial Opportunities
- Reinforcement for Prosocial Involvement
- Bonding
- Healthy Beliefs and Clear Standards
Why a Place Based Approach? Communities Vary in Amount and Type of Exposure to Risk/Protection

John A. Pollard, Ph.D. Developmental Research and Programs

No students in this area.

Insufficient number of students in this area.

Neighborhood #1

Neighborhood #2

Neighborhood #3

Major roads
Interstate

Risk Factors

1.005 - 2.949
2.949 - 4.894
4.894 - 6.838
6.838 - 8.782
8.782 - 10.727

John A. Pollard, Ph.D. Developmental Research and Programs
Prevention interventions should target risk and protective factors for multiple problems

(Coire et al., 1994; Mrazek and Haggerty, 1984; Woolf, 2008; O’Connell, Boat & Warner, 2009)
“Failure to invest in the health of the largest generation of adolescents in the world’s history jeopardises earlier investments in maternal and child health, erodes future quality and length of life, and escalates suffering, inequality, and social instability.”

Adolescent Health
Series Article 3
Wide Ranging Approaches Have Been Found To Be Efficacious

<table>
<thead>
<tr>
<th>Prevention Programs/Policies</th>
<th>Violence</th>
<th>Drug Use</th>
<th>HIV/STI</th>
<th>Unintended Pregnancy</th>
<th>Vehicle Crash Risk</th>
<th>Obesity</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prenatal &amp; Infancy Programs (e.g., NFP)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Early Childhood Education</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Parent Training</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4. After-school Recreation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mentoring with Contingent Reinforcement</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cognitive Behavior Therapy</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>7. Classroom Organization, Management and Instructional Strategies</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>8. Classroom Curricula</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Wide Ranging Approaches Have Been Found To Be Efficacious

<table>
<thead>
<tr>
<th>Prevention Programs/Policies</th>
<th>Violence</th>
<th>Drug Use</th>
<th>HIV STI</th>
<th>Unintended Pregnancy</th>
<th>Vehicle Crashes</th>
<th>Obesity</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Community Based Skills Training/Motivational Interviewing</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Cash Transfer for School Fees/Stipend</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Multicomponent Positive Youth Development</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Policies (eg., MLDA, Access to Contraceptives)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Community Mobilization</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Medical Intervention</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Law Enforcement</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>16. Family Planning Clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
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 community capacity 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 use data to decide locally what prevention programs they use?
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 (NIDA, NIMH, NIAAA, CSAP, NCI, NICHD)
- CTC’s effects have been independently replicated in a statewide test in Pennsylvania.
- CTC is listed on Blue Prints for Healthy Youth Development
CTC Effects on Problem Behavior Initiation in a 24 Community Randomized Trial

In a panel of 4407 youth followed from grade 5, by grade 8 youth in CTC communities were:

- 33% less likely to start Smoking Cigarettes
- 32% less likely to start Drinking
- 25% less likely to start engaging in Delinquent Behavior

...than those from control communities

Effects sustained and extended to violence reduction in 10th grade
Six Trainings over 6-9 Months and Weekly TA Build Community Capacity to:

- Build coalition of diverse stakeholders and key leaders (2 trainings)
- Assess and prioritize risk, protection, and problems with a student survey
- Assess current implementation of tested, effective prevention programs
- Match locally prioritized risks with tested, effective preventive programs
- Support/sustain fidelity and reach monitoring of chosen preventive programs
How Does CTC Stay on Track?

Assess CTC Milestones and Benchmarks: Goals, steps, actions, and conditions needed for CTC implementation to build prevention infrastructure

Weekly TA calls review progress on milestones and benchmarks achievements and barriers
How Does CTC Assess Local Need?
The CTC Youth Survey

- Surveys all 6th, 8th, 10th, and 12th graders
- Identifies levels of 21 risk and 9 protective factors and academic and behavioral outcomes
- Guides planners to select tested, effective actions
- Monitors the effects of chosen actions
Why Assess Local Risk?
Communities Vary in Risk Priorities

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

19
Evidence Based Prevention Program Selection is Localized

CTC coalitions selected evidence based programs to address their priority risk factors from a menu of programs* that all:

~ Were evaluated in at least 1 high-quality study
~ Showed significant effects on risk/protective factors, drug use, delinquency, or violence
~ Targeted schools, families and children in grades 5-9 [the age focus of the CYDS]
~ Provided materials and training

*As described in the CTC Prevention Strategies Guide; now recommending the Blueprints for Healthy Youth Development list
### Number of CTC Communities Implementing Tested-effective Programs

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

*Program funded through local resources in some communities

---

(Fagan et al., 2009)
All CTC Sites had High Levels of Program 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)
How was High Fidelity Achieved?

- **Local monitoring and action**
  - Community Program Implementation Training
  - CTC coalitions routinely tracked implementation and provided 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
### Communities That Care

**Process and Timeline**

<table>
<thead>
<tr>
<th>Process</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Assess readiness, Mobilize the community</td>
<td>Increase in priority protective factors</td>
</tr>
<tr>
<td>- Assess risk, protection and resources, Develop strategic plan</td>
<td>Increase in positive youth development</td>
</tr>
<tr>
<td>- Implement and evaluate tested, effective prevention strategies</td>
<td>Decrease in priority risk factors</td>
</tr>
<tr>
<td></td>
<td>Reduction in problem behaviors</td>
</tr>
</tbody>
</table>

**Vision for a healthy community**

**Measurable Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>6-9 mos.</th>
<th>1 year</th>
<th>2-5 yrs.</th>
<th>3-10 yrs.</th>
<th>10-15 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Communities That Care**

Process and Timeline
Results of Testing Communities That Care

Spring '03
~ Start of Study
~ 3 years of CTC
~ 2nd year of programs

April '03
~ Begin of Study

Spring '06
~ Completed Year 5 of the study
~ Ended CYDS funding and technical assistance

Spring '07
~ 4 years of CTC
~ 3rd year of programs

Spring '08
~ Youth Outcomes in Grade 7:
  ~ Lower levels of targeted risk
  ~ Lower rates of initiation of delinquency

Spring '09
~ No CYDS funding and no technical assistance for 1 year

Spring '09
~ Youth Outcomes in Grade 8:
  ~ Higher levels of protection
  ~ Lower rates of initiation of use of alcohol, cigarettes, smokeless tobacco, and delinquency
  ~ Lower prevalence of alcohol, binge drinking, smokeless tobacco
  ~ Fewer delinquent behaviors

Hawkins et al. (2009) Archives of Pediatric Adolescent Medicine,
Hawkins, et al., (2012 Archives of Pediatric Adolescent Medicine,
CTC Builds Local Community Capacity to Use Data to Support and Sustain Impact at Scale

- Builds capacity and provides tools to assess and prioritize local risk, protection and youth outcomes
- Guides choice of evidence based programs matched to these priorities
- Builds capacity to insure program fidelity and engage target population
- Affects risk, protection, substance use, delinquency and violence community wide
Thank You!

More information on CTC can be found at:

CTC materials have been placed in the public domain and available for download at:

http://www.communitiesthatcare.net

Communities That Care on Facebook

http://www.facebook.com/pages/Communities-that-Care/169417303103839

Communities That Care on Wikipedia

http://en.wikipedia.org/wiki/Communities_That_Care

www.sdrg.org


Communities That Care: What is required?

- Commitment of key leaders and community members
- Funding for a community coordinator
- Training in the CTC strategy
- Assessment/survey every two years
- Funding for selected programs
- Training in selected programs
- Evaluation of implementation and outcomes
- Institutionalization requires
  - Monitoring and assessment system
  - Ongoing training and support for tested, effective actions
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
Leading Predictors of School Dropout

- Poverty
- Delinquency and Drug Abuse
- Academic Competence

Battin et al., 2000; Newcomb et al., 2002.
Academic Competence, Delinquency, and Drug Abuse

- Are the strongest predictors of dropout
- Are modifiable
- Share common predictors
**Benefits of CTC Compared to Costs**

### Net Benefit Per Child in CTC Community

<table>
<thead>
<tr>
<th></th>
<th>Delinquency</th>
<th>Smoking</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td>$4,982</td>
<td>$911</td>
<td>$5,893</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
<td>$1,112</td>
</tr>
<tr>
<td><strong>Net Benefit</strong></td>
<td></td>
<td></td>
<td>$4,780</td>
</tr>
</tbody>
</table>

### 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

Kuklinski et al., 2012
Why Assess Local Risk?

Risk Profile A

Survey Participation Rate 2002: 79.7%
Risk Profile B

Percentage of Youth at Risk

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Community  Family  School  Peer-Individual  Total

- Low Neighborhood Attachment
- Community Disorganization
- Laws & Norms Favor Drug Use
- Perceived Availability of Drugs
- Perceived Availability of Handguns
- Poor Family Management
- Family Conflict
- Family History of Antisocial Behavior
- Parent Attitudes Favorable to ASB
- Parent Attitudes Favor Drug Use
- Academic Failure
- Low Commitment to School
- Rebelliousness
- Early Initiation of ASB
- Early Initiation of Drug Use
- Attitude Favorable to ASB
- Attitude Favorable to Drug Use
- Perceived Risk of Drug Use
- Interaction with Antisocial Peers
- Friends' Use of Drugs
- Rewards for ASB
- Depressive Symptoms
- Intention to Use Drugs
- Gang Involvement
- Total Risk