Intervention Spectrum

Universal

Selective

Indicated

Case Identification

Standard Treatment for Known Disorders

Compliance with long-term treatment (goal: reduction in relapse and recurrence)

After-care (including rehabilitation)

Promotion

Public Health Framework

Define the Problem

Identify Risk and Protective Factors

Interventions

Program Implementation and Evaluation

Problem Response
# Risk Factors for Adolescent Problem Behaviors

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
<th>Violence</th>
<th>Depression &amp; Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of Drugs</td>
<td>✓</td>
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<td></td>
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<tr>
<td>Availability of Firearms</td>
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<tr>
<td>Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime</td>
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<td>✓</td>
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<tr>
<td>Media Portrayals</td>
<td>✓</td>
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<tr>
<td>Transitions and Mobility</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
<td>Low Neighborhood Attachment and Community Disorganization</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
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<tr>
<td>Extreme Economic Deprivation</td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
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</tbody>
</table>
## Risk Factors for Adolescent Problem Behaviors

### Risk Factors

| Family |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Family History of the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Family Management Problems | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Family Conflict | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Favorable Parental Attitudes and Involvement in the Problem Behavior | ✓ | ✓ | ✓ | ✓ | |

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
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<th>Depression &amp; Anxiety</th>
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<tbody>
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<td>Family History of the Problem Behavior</td>
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</table>

- ✓ indicates a positive association.
- ✓ indicates a negative association.
## Risk Factors for Adolescent Problem Behaviors

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
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<th>Depression &amp; Anxiety</th>
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<tr>
<td>Lack of Commitment to School</td>
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<td>✔</td>
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## Risk Factors for Adolescent Problem Behaviors

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
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<th>Depression &amp; Anxiety</th>
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<td><strong>Individual/Peer</strong></td>
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<td>✓</td>
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<td>Rebelliousness</td>
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<td>Friends Who Engage in the Problem Behavior</td>
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<td>Favorable Attitudes Toward the Problem Behavior</td>
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<td>Early Initiation of the Problem Behavior</td>
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<td>Constitutional Factors</td>
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<td>✓</td>
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</tbody>
</table>
Protective Factors

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
Communities Vary in Risk Exposure

Pollard, nd

No students in this area.

Insufficient number of students in this area.

Neighborhood #1

Neighborhood #2

Neighborhood #3

Pollard, nd
What We Now Know About Risk and Protective Factors

- Both level of risk and level of protection make a difference in predicting substance use and other problems
- Common risk and protective factors predict substance use and other problems
- Risk and protective factors show much consistency in effects across diverse groups and cultures (Beyers et al., 2004; Glaser et al., 2005; Hemphill et al., 2011; Solomon et al., 2011; Oesterle et al., 2011)
- Risk/protection vary by community
What is an efficacious program?

**Evaluation Quality**
- At least one randomized controlled trial OR a quasi-experimental trial without design flaws

**Intervention Specificity**
- Population of focus is clearly defined
- Risk and protective factors that program seeks to change are identifiable

**Impact**
- Impact on adolescent substance use and other problems
- Absence of any negative effects

**Implementation Tools**
- Training materials are available
- Information on the financial and human resources required
Wide Ranging Approaches Have Been Found To Be Efficacious

1. Prenatal & Infancy Programs
2. Early Childhood Education
3. Parent Training
4. After-school Recreation
5. Mentoring with Contingent Reinforcement
6. Youth Employment with Education
7. Organizational Change in Schools
8. Classroom Organization, Management, and Instructional Strategies
9. School Behavior Management Strategies
10. Classroom Curricula for Social Competence Promotion
11. Community & School Policies
12. Community Mobilization
### Summary of Benefits and Costs (2003 Dollars)

<table>
<thead>
<tr>
<th>Dollars Per Youth (PV lifecycle)</th>
<th>Benefits</th>
<th>Costs</th>
<th>B - C</th>
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<tbody>
<tr>
<td>Early Childhood Education</td>
<td>$17,202</td>
<td>$7,301</td>
<td>$9,901</td>
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<td>Nurse Family Partnership</td>
<td>$26,298</td>
<td>$9,118</td>
<td>$17,180</td>
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<td>Seattle Soc. Development Project</td>
<td>$14,246</td>
<td>$4,590</td>
<td>$9,837</td>
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<tr>
<td>Life Skills Training</td>
<td>$746</td>
<td>$29</td>
<td>$717</td>
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<tr>
<td>Guiding Good Choices</td>
<td>$7,605</td>
<td>$687</td>
<td>$6,918</td>
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<tr>
<td>Strengthening Families Program 10-14</td>
<td>$6,656</td>
<td>$851</td>
<td>$5,805</td>
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<tr>
<td>Teen Outreach Program</td>
<td>$801</td>
<td>$620</td>
<td>$181</td>
</tr>
</tbody>
</table>

Some Prevention Programs Have Demonstrated Benefit over Cost

Steve Aos, Associate Director  
Washington State Institute for Public Policy  
saos@wsipp.wa.gov  
www.wa.gov/wsipp
The Challenge

- How can we increase use of tested and effective prevention policies and programs...
  while recognizing that communities are different from one another and need to decide locally what policies and programs they use?
Why Community Mobilization to Prevent Substance Use?

- Risk/protective factors located in community, family, school, peer and individual
- Risk/protection vary by neighborhood
- Community coalitions representing multiple sectors of influence can coordinate multiple resources and actions
- Community coalitions may be more likely to reach all children and youth and may have population wide effect
Ineffective Preventive Community Mobilization Approaches

Providing resources to support community coalitions without a structure or process

Sources of failure (Hallfors et al. 2002; Klerman et al. 2005; Merzel & D’Afflitti, 2003):

- Lack of clearly defined goals based in data, with high-quality data sources to monitor progress;
- Lack of use of tested and effective programs,
- Inattention to monitoring of implementation quality and fidelity;
Effective Preventive Community Mobilization Approaches

- **CMCA**-Communities Mobilizing for Change on Alcohol *(no effect under age 18)* (Wagenaar et al., 2000)
- **CTI**-Community Trials Intervention to reduce high risk drinking *(no effect under age 18)* (Holder et al., 2000)
- **Project Northland** (Perry et al., 2002)
- **MPP**-Midwest Prevention Project – (Pentz et al., 2006)
- **KI**-Kentucky Incentives for prevention (Collins et al., 2007)
- **PROSPER**-Promoting school–community -university partnerships to enhance resilience (Spoth et al., 2007)
- **CTC**-Communities that Care (Hawkins et al., 2009; 2011; Feinberg et al., 2007)
<table>
<thead>
<tr>
<th>Cross-sector Community Mobilizing Program</th>
<th>Assess and Prioritize Risk and Protective Factors</th>
<th>Efficacious school prevention curriculum</th>
<th>Other efficacious preventive programs</th>
<th>Change norms and laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMCA</td>
<td><strong>Norms, laws, availability</strong></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>CTI</td>
<td><strong>Norms, laws, availability</strong></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Project Northland</td>
<td><strong>Norms, peers, family norms</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>MPP</td>
<td><strong>Norms, peers, family norms</strong></td>
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<td>✓</td>
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<tr>
<td>KI</td>
<td><strong>Comprehensive</strong></td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>PROSPER</td>
<td><strong>No</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>CTC</td>
<td><strong>Comprehensive</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>
Characteristics of Effective Coalitions with Impact on Youth

- Goals clearly defined, and manageable
- Planning time adequate
- Prioritization based on local data about community levels of risk, protection
- Prevention actions employed have evidence of efficacy from controlled trials
- Prevention actions monitored to ensure implementation quality
An Example: **Communities That Care**

- Get Started
- Get Organized
- Create a Plan
- Develop a Profile
- Implement and Evaluate

**Creating Communities That Care**

- Community readiness assessment.
- Identification of key individuals, stakeholders, and organizations.
The Communities That Care Operating System

- Get Started
  - Training key leaders and board in CTC
  - Building the community coalition.

- Implement and Evaluate

- Get Organized

- Create a Plan

- Develop a Profile
The Communities That Care Operating System

Creating Communities That Care

Get Started

Create a Plan

Develop a Profile

Implement and Evaluate

• Collect risk/protective factor and outcome data with CTC survey.
• Construct a community profile from the data.
The Communities That Care Operating System

Get Started

Creating Communities That Care

Get Organized

Create a Plan

Develop a Profile

- Define outcomes.
- Prioritize risk factors to be targeted.
- Select tested, effective interventions.
- Create action plan.
- Develop evaluation plan.
<table>
<thead>
<tr>
<th>Risk Factor Addressed</th>
<th>Program Strategy</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Healthy Beliefs &amp; Clear Standards</td>
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<tr>
<td>Rebelliousness</td>
<td>Family Therapy</td>
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<td>Classroom Curricula for Social Competence Promotion</td>
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<td>School Behavior Management Strategies</td>
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<td>Afterschool Recreation</td>
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<td></td>
<td>Mentoring with Contingent Reinforcement</td>
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<td>Youth Employment with Education</td>
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<tr>
<td>Friends Who Engage in the Problem Behavior</td>
<td>Parent Training</td>
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<tr>
<td></td>
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<td>Parent Training</td>
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<td>Classroom Organization Management and Instructional Strategy</td>
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<td>Community/School Policies</td>
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<tr>
<td>Constitutional Factors</td>
<td>Prenatal/Infancy Programs</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

© 1998 Developmental Research and Programs
Efficacious Classroom Curricula for Social and Emotional Competence Promotion (Secondary School)

- The Life Skills Training Program (Botvin et al., 1995)
- Project Alert Drug Prevention Curriculum (Ellickson et al., 1993; Ellickson and Bell, 1990)
- Alcohol Misuse Prevention (Maggs et al., 1998)
- Towards No Drug Use (Sussman et al. 2003; 2003)
The Communities That Care Operating System

- Form task forces.
- Identify and train implementers.
- Sustain collaborative relationships.
- Evaluate processes and outcomes for programs annually.
- Evaluate community outcomes every two years.
- Adjust programming.

Get Started

Create Communities That Care

Implement and Evaluate

Get Organized

Create a Plan

Develop a Profile
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

**Process and Timeline**
- 6-9 mos.
- 1 year
- 2-5 yrs.
- 3-10 yrs.
- 10-15 yrs.
Evidence of Effectiveness of CTC from Community Youth Development Study
A 24 Community Randomized Trial

PI: J. David Hawkins
Co-PI: Richard F. Catalano
Funded by:
- National Institute on Drug Abuse
- Center for Substance Abuse Prevention
- National Cancer Institute
- National Institute on Child Health and Development
- National Institute on Mental Health
- National Institute on Alcohol Abuse and Alcoholism
**Communities That Care**

**Theory of Change**

- Adoption of Science-based Prevention Framework
- Collaboration Regarding Prevention Issues
- Appropriate Choice and Implementation of Tested, Effective Prevention Programs

CTC Training and Technical Assistance

Decreased Risk and Enhanced Protection

Positive Youth Outcomes

(Brown et al., 2007)

(Quinby et al., 2008; Fagan et al., 2008)

(Hawkins et al., 2008)
Effects of CTC on Onset of Drug Use and Delinquency at Grade 8 and 10*

Compared with controls:
- 33% less likely to start smoking cigarettes.
- 32% less likely to start drinking alcohol.
- 25% less likely to start delinquent behavior.
- Results maintained through 10th grade one year post intervention

*Among 5th grade students who had not yet initiated. Significant at p<.05

Hawkins et al., 2009; 2011
Effects of CTC on Binge Drinking and Variety of Delinquency in the Panel at Grade 8

- 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

significant at p<.05

Hawkins et al., 2009
Investment in CTC Pays Off

(Kuklinski et al., 2011)
Communities That Care on the Web

All CTC materials are available at:
http://www.communitythatcare.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
Government Actions to Support Effective Community Mobilization for Prevention

- Develop database of tested, efficacious prevention programs and policies
- Educate policy makers, practitioners, scientists, and citizens about efficacious prevention
- Develop database of surveys to assess local risk, protection, substance use, and related problems
- Shift 2-5% of funds spent on children to efficacious prevention
Government Actions to Support Effective Community Mobilization for Prevention

Build capacity of community prevention staff to:
- Build coalitions
- Assess and prioritize risk, protection, substance use and related problems
- Match priorities to efficacious preventive interventions
- Support/sustain quality implementation of efficacious preventive interventions
Using Prevention Science for Community Mobilization

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.sdrq.org
# Tested, Effective Programs Selected in 2004-2008

<table>
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<th></th>
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<td>Life Skills Training (LST)</td>
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<td>Project Northland Class Action</td>
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<td>Stay SMART</td>
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<td>8*</td>
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*Program funded through local resources in one or two communities
Prevalence of 30 Day Alcohol Use by Number of Risk and Protective Factors

Six State Student Survey of 6th-12th Graders, Public School Students
Prevalence of Illicit Drug Use (Past 30 Days) By Number of Risk and Protective Factors

Six State Student Survey of 6th - 12th Graders, Public School Students

Prevalence of Illicit Drug Use

- Number of Risk Factors: 0 to 1, 2 to 3, 4 to 5, 6 to 8, 9 or More
- Number of Protective Factors: 0 to 1, 2 to 3, 4 to 5, 6 to 8, 9 or More

Graph showing the prevalence of illicit drug use in public school students from 6th to 12th grade, categorized by the number of risk and protective factors.
Prevalence of Other Problems by Number of Risk Factors

Bond, Thomas, Toumbourou, Patton, and Catalano, 2000
Number of School Building Risk Factors and Probability of Meeting WASL Standard (10th Grade Students)

Arthur et al., 2006
Number of School Building Protective Factors and Probability of Meeting WASL Standard (10th grade students)

Arthur et al., 2006
CTC Youth Survey

- 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
Effects of CTC on Cigarette Use Initiation Maintained Through Grade 10

Note: AOR = adjusted odds ratio from multilevel discrete time survival analysis controlling for student and community characteristics. (Hawkins et al., 2011)
Effects of CTC on Alcohol Use Initiation Maintained Through Grade 10

AOR = .62, p=.028 (in 10th grade)

Note: AOR = adjusted odds ratio from multilevel discrete time survival analysis controlling for student and community characteristics (Hawkins et al., 2011)
Effects of CTC on Delinquent Behavior
Initiation Maintained Through Grade 10

Note: AOR = adjusted odds ratio from multilevel discrete time survival analysis controlling for student and community characteristics. (Hawkins et al., 2011)
Effects of CTC on Current Drug Use and Delinquency in the Panel at Grade 8

- 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

significant at p<.05

Hawkins et al., 2009