The Research Base for Prevention Science

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www.sdrg.org
President, Society for Prevention Research

The Coalition for the Promotion of Behavioral Health
Objectives

- Why should we care about prevention?
- What is the research base for prevention science?
- How have these efforts evolved over the past 40 years?
- Can multiple state agencies collaborate to Unleash the Power of Prevention?
Shift in Causes of Mortality

- There has been a shift in the leading causes of mortality from infectious to non-communicable diseases and conditions.
- Behavioral health problems are implicated in this shift.
<table>
<thead>
<tr>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Motor Vehicle Crashes</td>
<td>15.9</td>
</tr>
<tr>
<td>2 Accidents</td>
<td>11.5</td>
</tr>
<tr>
<td>3 Intentional self harm (suicide)</td>
<td>10.7</td>
</tr>
<tr>
<td>4 Assault (homicide)</td>
<td>10.3</td>
</tr>
<tr>
<td>5 Malignant neoplasms</td>
<td>3.7</td>
</tr>
<tr>
<td>6 Diseases of heart</td>
<td>2.2</td>
</tr>
<tr>
<td>7 Congenital malformations, deformations and abnormalities</td>
<td>1.0</td>
</tr>
<tr>
<td>8 Influenza and pneumonia</td>
<td>0.5</td>
</tr>
<tr>
<td>9 Cerebrovascular diseases</td>
<td>0.4</td>
</tr>
<tr>
<td>10 Pregnancy, childbirth and the puerperium</td>
<td>0.4</td>
</tr>
<tr>
<td>All other causes (Residual)</td>
<td>11.1</td>
</tr>
</tbody>
</table>

48.8/100,000 or 72% of all deaths
# Leading Causes of Mortality 15-24 Year Olds

**African Americans (2014, U.S.)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assault (homicide)</td>
<td>36.3</td>
</tr>
<tr>
<td>2</td>
<td>Accidents</td>
<td>20.7</td>
</tr>
<tr>
<td>3</td>
<td>Intentional self harm (suicide)</td>
<td>7.4</td>
</tr>
<tr>
<td>4</td>
<td>Diseases of heart</td>
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</tr>
<tr>
<td>5</td>
<td>Malignant neoplasms</td>
<td>3.7</td>
</tr>
<tr>
<td>6</td>
<td>HIV</td>
<td>1.7</td>
</tr>
<tr>
<td>7</td>
<td>Chronic low respiratory disease</td>
<td>1.0</td>
</tr>
<tr>
<td>8</td>
<td>Congenital malformations, deformations and</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>abnormalities</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Anemias</td>
<td>0.9</td>
</tr>
<tr>
<td>10</td>
<td>Diabetes Mellitus</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>All other causes (Residual)</td>
<td>13.0</td>
</tr>
</tbody>
</table>

**66.1/100,000 or 74% of all deaths**

CDC WISCARS 2014 accessed 4/28/16
### Leading Causes of Mortality 15-24 Year Olds, American Indian/Alaskan Natives (2010, U.S.)

<table>
<thead>
<tr>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Intentional self harm (suicide)</td>
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</tr>
<tr>
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<td>3.2</td>
</tr>
<tr>
<td>6 Alcohol-related overdose and disease</td>
<td>2.6</td>
</tr>
<tr>
<td>7 Malignant Neoplasms</td>
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</tr>
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<td>8 Diseases of Heart</td>
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</tr>
<tr>
<td><strong>All other causes (Residual)</strong></td>
<td><strong>9.7</strong></td>
</tr>
</tbody>
</table>

66.8/100,000 or 82.6% of all deaths

CDC WISCARS 2010 accessed 5/20/12
Should Public Systems, for example Juvenile Justice and Child Welfare, Care about Community-based Prevention?
Number Exposed to 10 or more Behavioral Health Risk Factors
Foster Care and Juvenile Justice v. General Population
Medium Sized Eastern City

6th, 8th, 10th, 12th grade youth
Total N surveyed = 4842

Ever FC or JJ, High risk, 242
71% of system involved kids are high risk

Never FC or JJ, High risk, 1582
35% of non-system involved kids are high risk

Never FC or JJ, Low risk, 2918

FC=Foster care
JJ= Juvenile justice
87% of Youth Exposed to 10 or more Behavioral Health Risk Factors are not in Foster Care or Juvenile Justice

High risk youth
- Ever in FC or JJ: 13%
- Never in FC or JJ: 87%

Never FC or JJ, High risk: 1582
Never FC or JJ, Low risk: 2918
Ever FC or JJ, High risk: 242
Ever FC or JJ, Low risk: 100
Without Effective Prevention, the Public System may be Overwhelmed
Should Health Care Professionals, eg., Accountable Care Organizations, be Concerned about Prevention?
Keeping the Population Healthy
(Hacker & Walker, 2013: AJPH)

- Only 10% of health outcomes are a result of the medical care system
- 50% to 60% of health outcomes are due to behavioral health problems
- Preventive activities must reach beyond the clinical setting and incorporate community and public health systems
- We must enhance our capacity to assess, monitor, and prioritize risk factors that impact patient health outcomes in local communities
Prevention is Critical for Health and Well-being

- Behavioral health problems cause harm in childhood and adolescence
- Behavioral health problems established in adolescence cause harm into adulthood
- Preventing these behavioral health problems during childhood and adolescence can reduce mortality and morbidity over the life course
Intervention Spectrum

What Do we Know about the Effectiveness of Prevention?
Early Prevention Efforts: Drug Abuse Prevention as Case Study

- Knowledge and Attitude Change
- Ineffective: No Decrease in Drug Use
- Some Drug Information Programs Increased Drug Use (Tobler, 1986)

Lesson: Untested good ideas can sometimes make things worse.
Public Health Framework

1. Define the Problem
2. Identify Risk and Protective Factors
3. Interventions
4. Program Implementation and Evaluation

Problem Response
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 behavioral health problems and describe their distribution in populations.

Efficacy Trials
- Design and test preventive interventions to interrupt causal processes that lead to behavioral health problems.

Prevention Services Research
- Apply lessons learned about etiology and efficacious interventions in real world settings.
## 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>Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Availability of Drugs</td>
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<tr>
<td>Availability of Firearms</td>
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<td>Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime</td>
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<td>Media Portrayals</td>
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<td>Transitions and Mobility</td>
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<tr>
<td>Low Neighborhood Attachment and Community Disorganization</td>
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<td>Extreme Economic Deprivation</td>
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<tr>
<td><strong>Family</strong></td>
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<tr>
<td><strong>Lack of Commitment to School</strong></td>
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<tr>
<td>Individual/Peer</td>
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<td>Early and Persistent Antisocial Behavior</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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<tr>
<td>Favorable Attitudes Toward the Problem Behavior</td>
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<tr>
<td>Early Initiation of the Problem Behavior</td>
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<td>Constitutional Factors</td>
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<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
The Social Development Strategy

The Goal...

Ensure...

Build...

By providing...

Be Aware of...

Healthy Behaviors

- Bonding
  - Attachment
  - Commitment

- Healthy Beliefs and Clear Standards

- Opportunities
- Skills
- Recognition

...for all children and youth

...in families, schools, and peer groups

...to families, schools, and peer groups

...in families, schools, and peer groups

Individual Characteristics

Healthy Behaviors for all children and youth...

Building bonds, attachment, and commitment...

By providing opportunities, skills, and recognition...

Ensure healthy beliefs and clear standards...

Be aware of individual characteristics.
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
- Number of Risk Factors
- Number of Protective Factors

Graph showing the relationship between the number of risk and protective factors and the prevalence of 30-day alcohol use among public school students.
Prevalence of 30 Day Marijuana Use By Number of Risk and Protective Factors

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

Number of Risk Factors

Prevalence

0 to 1 2 to 3 4 to 5 6 to 7 8 to 9

Number of Protective Factors

0 to 1 2 to 3 4 to 5 6 to 7 8 to 9
Prevalence of Any Other Illicit Drug Use (Past 30 Days) By Number of Risk and Protective Factors

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

Number of Risk Factors

Prevalence

Number of Protective Factors

0 to 1
2 to 3
4 to 5
6 to 8
9 or More
Prevalence of “Attacked to Hurt” By Number of Risk and Protective Factors

![Graph showing the prevalence of attacked to hurt by risk and protective factors. The x-axis represents the level of risk (0 to 4), and the y-axis represents the prevalence (%). The graph includes lines for different levels of protection (0 to 4), with each line indicating a higher prevalence as the level of risk increases.]
Prevalence of Other Problems by Number of Risk Factors

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

Arthur et al., 2015
The Challenge for Community Prevention
Different Communities, Different Needs

- Different Norms & Values
- Different youth problem behaviors
- Different levels of risk and protection
- Different resources & capacity
Types of Risk may Vary by Community or School

High School A Risk Profile

Percent At Risk

- Community
- Family
- School
- Peer-Individual

Risk factors such as low neighborhood attachment, community disorganization, favorable norms towards drug use, perceived availability of hard drugs, poor family management, family conflict, parental attitudes towards drug use, parental attitudes towards antisocial behavior, favorable attitudes towards drug use, low commitment to school, low perceived risks of drug use, friends' use of drugs, sensation seeking, and overall risk are shown.
Types of Risk may Vary by Community or School

High School B Risk Profile

- Low Neighborhood Attachment
- Community Disorganization
- Laws & Norms Favor Drug Use
- Perceived Availability of Handguns
- Parent Attitudes Favorable to ASB
- Parent Attitudes Favor Drug Use
- 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
Science Guided Prevention

Prevention interventions should target malleable risk and protective factors

(Coie et al., 1994; Mrazek and Haggerty, 1984; Woolf, 2008; O’Connell, Boat & Warner, 2009)
What We Now Know About Risk and Protective Factors

- Both an individual’s level of risk and level of protection make a difference
- Common risk and protective factors predict diverse problems and academic outcomes
- Risk and protective factors show much consistency in effects across diverse groups
- Different factors affect youth as they develop, some are affected by accumulated early challenges *(Snowball)*, others by extended exposure to norms and models of problem behaviors with little protection *(Snowstorm)*
- Different neighborhoods have different levels of risk and protection
Reflect and Share

- What surprises you about the information presented so far?
- How could you use these ideas in your own work whether administration, treatment or prevention?
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 (policies and programs) to interrupt causal processes that lead to youth problems.

Prevention Services Research
- Apply lessons learned about etiology and efficacious interventions in real world settings.
What is an efficacious intervention?

**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 or policy seeks to change are identifiable

**Impact**
- Impact on adolescent problem behavior
- Absence of any negative effects

**Implementation Tools**
- Training materials are available
- Information on the financial and human resources required
- Benefit-cost information desirable
Traffic Crashes
Risky Alcohol Use

Drink Driving

Problem

Wagenaar and Toomey, 2002

Response

Prevention Policy Example
Raising the Minimum Legal Drinking Age

Raise Min. Legal Drinking Age

Reduced Alcohol Consumption, Reduced Crashes, Crash Injury, and Fatalities
Prevention Program Example
Nurse Family Partnership

Problem: Poor Birth And Early Childhood Outcomes

Risk: Poor Diet And Drug Use
Prot.: Parenting Competence And Bonding

Protocol for Nurse Visits During Pregnancy And 2 yrs. Post Birth

Mom: Less welfare, More employment, Fewer arrests and subsequent births, problems with drug use
Child: Less child abuse/neglect, Less arrests at 15

Response

Olds et al., 2002
Prevention Research From Nothing Works to Effective Prevention

- Controlled Trials have identified over 60 effective policies and programs

- A number of behavioral health problems have been prevented
  - Substance abuse, delinquency and violence, dropout, risky sexual behavior
  - Mental health problems (depression, anxiety)

- Effective Prevention Saves Money

- Sources
  - Effective programs: www.blueprintsprograms.com
  - Effective policies: Catalano et al. 2012, Hingson & White 2013, Vuolo et al., 2015
  - Cost Savings: www.wsipp.wa.gov/
Some EBPs Prevent Multiple Behavioral Health Problems

- Many Problems Share Risk Factors
- Addressing Shared Risk Factors Can Prevent Multiple Problems
- Some EBPs Prevent Multiple Problems
- Increasing Efficiency and Saving Money
- Three Examples: Nurse Family Partnership, Seattle Social Development Project, Life Skills Training
Nurse Family Partnership
David Olds, Ph.D.

- Home visitors are trained public health nurses
- Guideline-driven and family-centered
- Visit from pregnancy through child age 2
- Visit 2-4 times a month: weekly during 1st mo., every other week through pregnancy, weekly for 1st 6 weeks postpartum, & every other week until 2nd birthday
- Caseload of 25 families per full-time nurse
Evidence of NFP Effects: Elmira Follow-Up

Produced reductions of 40% - 60% in...

- Child abuse and neglect
- Arrest rate and convictions of the mothers (for poor, unmarried women only)
- Arrest rate of juveniles (for children of poor, unmarried women only)
- Problems associated with drug and alcohol abuse by mothers (poor, unmarried women only)
- 25% reduction in smoking during pregnancy (poor, unmarried)
- Benefit over cost: $3.23 return on $1 invested (WSIPP, 2011).
Seattle Social Development Project

Intervention Components

- Teacher Training in Classroom Instruction and Management
- Parent Training in Behavior Management and Academic Support
- Child Social, Emotional and Cognitive Skill Development
SSDP Eliminates Disparity in STI Diagnosis

![Graph showing Lifetime STI Diagnosis]

- AA C age 24: 55%
- AA F: 12%
- AA C age 27: 61%
- AA F: 16%

Intervention x Race
- Age 24: p = .01
- Age 27: p = .01

Solid marker notes Con-Full difference within race of p < .05

Legend:
- Con-EurAm
- Con-AfrAm2
- Full-EurAm
- Full-AfrAm
SSDP Reduces Racial Disparity in Household Income

AA F $55,594
AA C $35,288

Intervention x Race
Age 24: \( p = .63 \)
Age 27: \( p = .04 \)

Solid marker notes Con-Full difference w/in race of \( p < .05 \)
LST Program Elements

- Middle/JHS School
- Year 1: 15 sessions
- Year 2: 10 sessions
- Year 3: 5 sessions
- Interactive methods
- Provider Training
- Technical Assistance
Effectiveness

- 32 published studies
- Randomized Trials
- Short and long-term
- SA and violence
- Diverse populations
- Different providers
- Multiple replications
- $42 benefit: $1 cost

**Worldwide application of the prevention science research base in adolescent health**

Adolescent Health Series Article 3

“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.”
All these behavioral health problems have been prevented in controlled trials.

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Depression</th>
<th>Autistic behaviors</th>
<th>Alcohol, tobacco, other drug use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risky driving</td>
<td>Aggressive behavior and conduct problems</td>
<td>Delinquent behavior</td>
<td>Violence</td>
</tr>
<tr>
<td>Self-inflicted injury</td>
<td>Risky sexual behavior</td>
<td>School dropout</td>
<td></td>
</tr>
</tbody>
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### Cost-Benefit of Selected Programs*

*Steve Aos, Associate Director, Washington State Institute for Public Policy www.wa.gov/wsipp

<table>
<thead>
<tr>
<th>Program</th>
<th>Benefit</th>
<th>Cost¹</th>
<th>Benefit Minus Cost</th>
<th>Benefit per Dollar Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse-Family Partnership</td>
<td>$30,325</td>
<td>$9,421</td>
<td></td>
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</tr>
<tr>
<td>Chicago Child-Parent Centers</td>
<td>$39,160</td>
<td>$8,124</td>
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<tr>
<td>Seattle Social Development Project</td>
<td>$6,237</td>
<td>$2,959</td>
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<td>Strengthening Families Program 10-14</td>
<td>$6,656</td>
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<td>Life Skills Training</td>
<td>$1,415</td>
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<td>Functional Family Therapy</td>
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<td>$3,190</td>
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</tr>
</tbody>
</table>

¹Cost estimates are per participant, based on 2003 U.S. dollars for SFP 10-14;¹⁹ 2007 U.S. dollars for the Chicago Child-Parent Centers;¹¹⁵ and 2010 U.S. dollars for all other interventions¹¹⁴
## Cost-Benefit of Selected Programs*

*Steve Aos, Associate Director, Washington State Institute for Public Policy [www.wa.gov/wsipp](http://www.wa.gov/wsipp)*

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<th>Benefit</th>
<th>Cost¹</th>
<th>Benefit Minus Cost</th>
<th>Benefit per Dollar Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse-Family Partnership</td>
<td>$30,325</td>
<td>$9,421</td>
<td>$20,905</td>
<td>$3.23</td>
</tr>
<tr>
<td>Chicago Child-Parent Centers</td>
<td>$39,160</td>
<td>$8,124</td>
<td>$31,036</td>
<td>$4.82</td>
</tr>
<tr>
<td>Seattle Social Development Project</td>
<td>$6,237</td>
<td>$2,959</td>
<td>$3,279</td>
<td>$2.11</td>
</tr>
<tr>
<td>Strengthening Families Program 10-14</td>
<td>$6,656</td>
<td>$851</td>
<td>$5,805</td>
<td>$7.82</td>
</tr>
<tr>
<td>Life Skills Training</td>
<td>$1,415</td>
<td>$34</td>
<td>$1,382</td>
<td>$42.13</td>
</tr>
<tr>
<td>Functional Family Therapy</td>
<td>$37,739</td>
<td>$3,190</td>
<td>$34,549</td>
<td>$11.86</td>
</tr>
</tbody>
</table>

¹Cost estimates are per participant, based on 2003 U.S. dollars for SFP 10-14;¹⁹ 2007 U.S. dollars for the Chicago Child-Parent Centers;¹¹⁵ and 2010 U.S. dollars for all other interventions¹¹⁴
Conclusions and Implications

- We now have effective prevention policies and programs (EBI)
- Power of prevention within our grasp
  - Implement programs proven to work
- Leverage that power
  - Combine EBI shown to prevent multiple health behavior problems
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 substance abuse and other problems.

**Prevention Services Research**
- Apply lessons learned about etiology and efficacious interventions in real world settings.
Keys to Diffusion of Innovation

- Effective Program that makes a difference
- Capacity to disseminate with fidelity
- Market demand - funders, practitioners and consumers must want it.

Orleans, Gruman, and Anderson (1999)
Agency Recognition of Evidence-Based Programs
Implementation Fidelity is Required if Efficacious Programs are to be Effective in Community Settings
What Boosts Implementation Fidelity?

- Published material including manuals, guides, curricula.
- Certification of trainers.
- High quality, readily available technical assistance.
- Dissemination organization committed to distribution and delivery of tested program.
- Data monitoring system to provide feedback on implementation fidelity and outcomes.
With these Elements in Place
Implementation Fidelity Can Be Achieved
(Elliott & Mihalic –Blueprints Project)

Chart 2
Core and Critical Component Progress - 2 years
Percentage of All Core and Critical Components Achieved

Core = Necessary Components of the Model

Critical = Components that Enhance the Program
Ok, so it’s possible to implement evidence based prevention programs with fidelity, but can we afford it?
Example: One urban neighborhood invests nearly $55 million annually on children and families.

- **Public Elementary and Middle School**: 42.5%
- **Pre-K/Headstart**: 4.7%
- **Title I**: 2%
- **Medicaid/Peach Care**: 10.4%
- **Foster Care**: 0.6%
- **Public Health**: 0.5%
- **Child Protective Services**: 6.7%
- **Child Care**: 1.6%
- **Mental Health**: 0.8%
- **Supplemental Nutrition Assistance**: 6.8%
- **Other Programs**: 2.4%
- **Work Assistance**: 3.2%
- **After School Programs**: 1.0%
- **Public High School**: 16.5%

**Population**: 15,500
**Children**: 4,100
**Expenditure**: $54,890,000
A small percent--1–2% ($549K-1.1M)-- of this investment can have a major impact

<table>
<thead>
<tr>
<th>Age Group</th>
<th># Youth</th>
<th>Target Group and Outcomes</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4 years</td>
<td>864</td>
<td>All children at risk of behavior problems c. 30% = 250 Improved behavior, academics, delinquency</td>
<td>Incredible Years BASIC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$2,022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 25% of target group (N=63)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Return on Investment (per dollar spent)</td>
</tr>
<tr>
<td>5-10 years</td>
<td>1,360</td>
<td>ALL Improved behavior, academics, emotional regulation</td>
<td>Promoting Alternative Thinking Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$112</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 100% of target group (N=1360)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(for 3 years)</td>
</tr>
<tr>
<td>10-14 years</td>
<td>840</td>
<td>ALL Reduced substance abuse, violence, risky driving</td>
<td>Life Skills Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$34</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 50% of target group (N=420)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Return on Investment (per dollar spent)</td>
</tr>
<tr>
<td>10-16 years</td>
<td>1,400</td>
<td>Young people at risk of detention = 100 Reduced substance abuse, recidivism, improved mental health</td>
<td>Functional Family Therapy (FFT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3,190</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 90% of target group (N=90)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Return on Investment (per dollar spent)</td>
</tr>
<tr>
<td>14-19 years</td>
<td>650</td>
<td>Pregnant girls and young women = 25 Improved prenatal health. Fewer childhood injuries, improved school readiness</td>
<td>Nurse Family Partnership (NFP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$9,42</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 88% of target group (N=22)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(for 2 years)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total Investment (per year)</td>
</tr>
</tbody>
</table>
Despite this progress...

- Tested and effective interventions for preventing behavioral health problems are not widely used.

In fact...

- 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)
Need for Advocacy
Unleashing the Power of Prevention

An Action Plan to Advance
Prevention Practice and Policy

The Coalition for the Promotion of Behavioral Health
Unleashing the Power of Prevention

- A summary of evidence pertaining to behavioral health problems and an action plan aimed at increasing the widespread use of preventive interventions
- Developed by the Coalition for the Promotion of Behavioral Health
  - Published as a Discussion Paper by the National Academy of Medicine in June, 2015
Unleashing the Power of Prevention
10 Year Goals!

- Reduce the incidence and prevalence of behavioral health problems in the population of young people from birth through age 24 by 20%

- Reduce racial and socioeconomic disparities in behavioral health problems by 20%
Action Steps

1. Increase public awareness of the advances and cost savings of effective preventive interventions that promote healthy behaviors for all

2. Increase the percentage of all public funds that are spent on effective prevention programs

3. Implement capacity-building tools that guide communities to assess and prioritize risk and protective factors, and select evidence-based prevention programs
Action Steps

4. All States establish criteria for preventive interventions that are effective, sustainable, equity-enhancing, and cost-beneficial.

5. Increase infrastructure to support the high-quality implementation of preventive interventions.

6. Monitor and increase access of children, youth, and young adults to effective preventive interventions.

7. Create workforce development strategies to prepare practitioners for new roles in promotion and preventive interventions.
The Prevention Pay-Off!

- Tested and effective prevention programs prevent problems and save lives.
- Effective preventive interventions are cost-effective and have the potential to save millions of dollars annually.
Unleashing the Power of Prevention is published as a Discussion Paper by the National Academy of Medicine. It is available at: http://nam.edu/perspectives-2015-unleashing-the-power-of-prevention/

Unleashing the Power of Prevention is also available at the Academy of Social Work and Social Welfare website: http://aaswsw.org/grand-challenges-initiative/
Conclusions

- Behavior problems are significant causes of adolescent morbidity and mortality
- Risk and protective factors that predict behavior problems are potential targets for intervention
- There is sufficient evidence from controlled trials that EBIs that target these factors can prevent adolescent behavior problems
- Community based prevention should include a combination of locally prioritized and chosen efficacious preventive policies and programs in the first two decades of life
The Research Base for Prevention Science

Richard F. Catalano, Ph.D.

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www.sdrq.org
President, Society for Prevention Research

The Coalition for the Promotion of Behavioral Health