

# Using Evidence-Based Prevention to Address the Needs of our Communities



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***National Institute on Drug Abuse***

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# Topics for Discussion

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- Prevention Research
- Evidence Based Prevention
  - Principles
  - Interventions (e.g., programs)
  - Systems Models (Prosper & Communities that Care)
- Cost-Effectiveness
- Resources

# Prevention Research at NIDA

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## Mission

Support a theory-driven program of basic, clinical, and services research across the lifespan to:

- Prevent/delay the **initiation** of drug use
- Prevent/delay **progression** of drug use to abuse
- Prevent drug-related **HIV acquisition, transmission and progression.**

# Prevention Principles

## Interventions - Levels of Risk

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### Universal

- Everyone in a general population regardless of risk

### Selective

- Groups at elevated risk - based on individual, family or contextual characteristics

### Indicated

- Individuals who have begun using and are at high risk for use/abuse

### Tiered

- Incorporates two or more levels



## EXAMPLES OF RISK AND PROTECTIVE FACTORS

Risk Factors	Domain	Protective Factors
Early Aggressive Behavior	Individual	Self-Control
Poor Social Skills	Individual	Positive Relationships
Lack of Parental Supervision	Family	Parental Monitoring and Support
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-Drug Use Policies
Poverty	Community	Strong Neighborhood Attachment

**Reduce these**

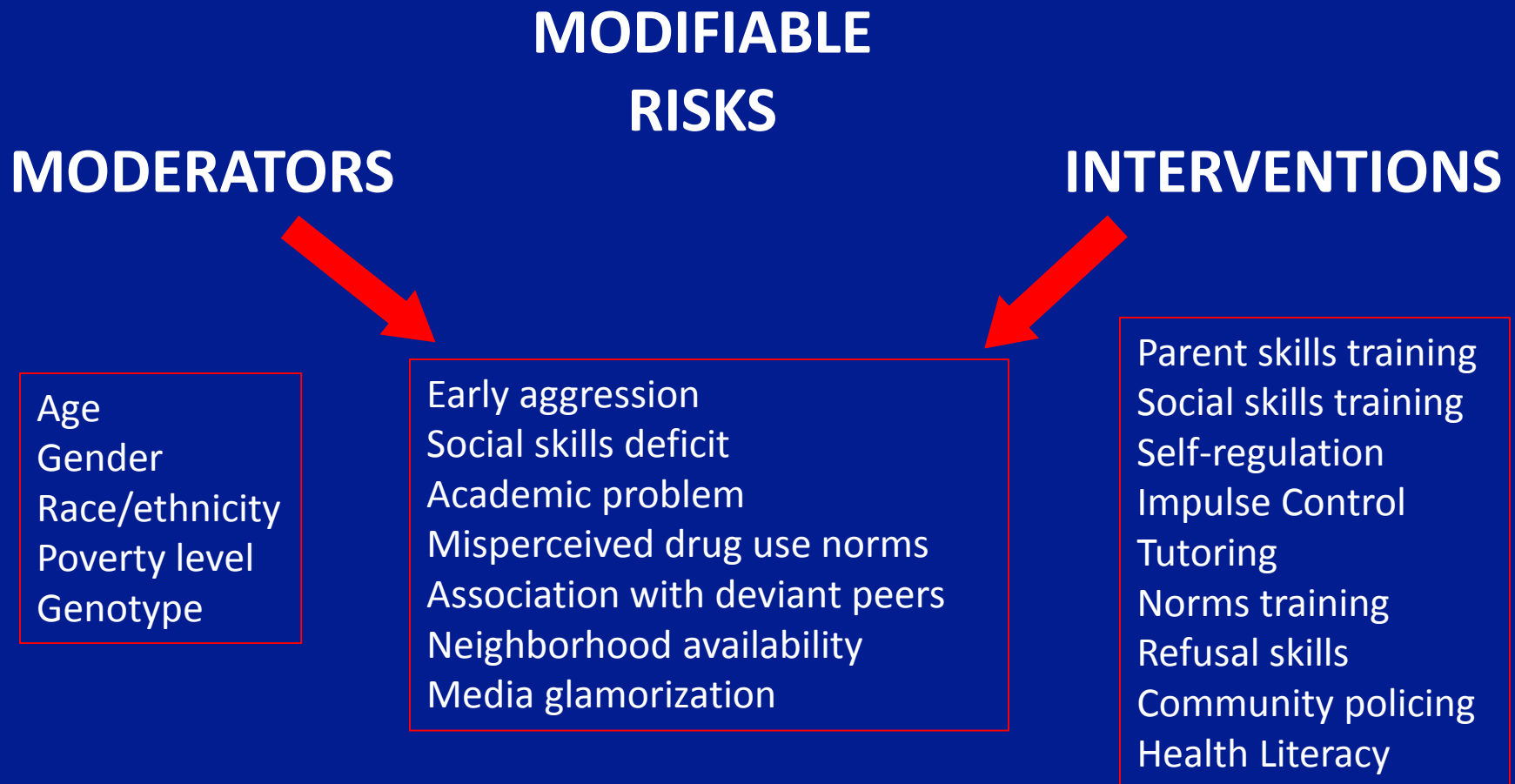


**Elevate these**



**Prevention Approaches Aim to  
Enhance Protective Factors & Reduce Risk Factors**

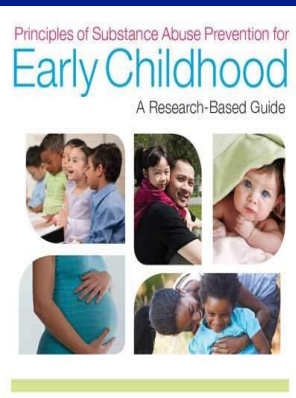
# How Prevention Interventions Work



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# Prevention Principles (2016)

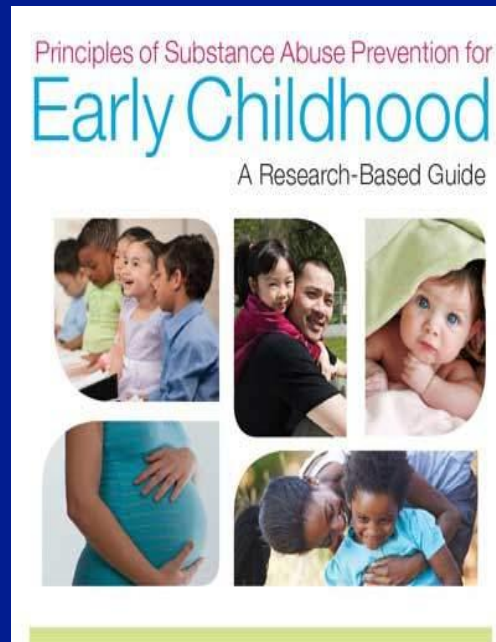
Examples of established substance use prevention principles for early childhood.

- Intervening early in childhood can alter the life course trajectory in a positive direction
- Intervening early in childhood can both increase protective factors and reduce risk factors
- Intervening in early childhood can have effects on a wide array of behaviors, even behaviors not specifically targeted by the intervention



# Principles of Substance Abuse Prevention for Early Childhood: A Research-Based Guide

- Table of Contents:
  - Why is Early Childhood Important to Substance Abuse Prevention?
  - Risk and Protective Factors
  - Intervening in Early Childhood
  - Research-Based Early Intervention Substance Abuse Prevention Programs
  - Selected Resources
  - Appendices
    - Developing Interventions
    - Implementing Interventions



<http://www.drugabuse.gov/publications/principles-substance-abuse-prevention-early-childhood/index>

# Prevention Interventions

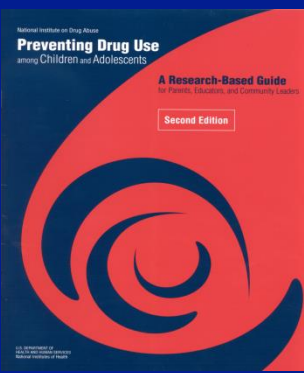
Program	Target Population or Setting	Level of Risk
<b>Infancy &amp; Toddlerhood</b>		
Durham Connects (Dodge, 2013)	Mother, Father (when possible), Child	Universal
Early Steps, Family Check Up (Shaw et al., 2006)	Mother, Child	Selective
Family Spirit (Mullany et al., 2012)	Mother, Child	Selective
Nurse Family Partnership (Olds, 2002)	Mother, Father (when possible), Child	Selective
<b>Preschool</b>		
Multidimensional Treatment Foster Care for Preschoolers (Fisher & Chamberlain, 2000)	Foster Family, Child	Selective

# Prevention Interventions

Program	Target Population or Setting	Level of Risk
<b>Transition to Elementary School</b>		
Caring School Community Program (Battistich et al., 1997)	School, Teacher, Family, Child	Universal
Classroom-Centered Intervention (Good Behavior Game) (Kellam & Rebok, 1992)	Classroom, Child	Universal
Linking the Interests of Families and Teachers (Reid et al., 1999)	Classroom, Child, Family	Universal
Raising Healthy Children (Catalano et al., 2003)	Family, Child, Classroom	Universal
SAFEChildren (Tolan et al., 2004)	Family, Child	Universal (in high risk communities)
Seattle Social Development Program (Hawkins et al., 1999)	School, Parent/Family, Child	Universal

# Prevention Interventions

Program	Target Population or Setting	Level of Risk
<b>Transition to Elementary School</b>		
Early Risers "Skills for Success" Risk Prevention Program (August et al., 2001)	Parent, Child	Selective
Kids in Transition to School (Pears et al., 2007)	Child	Selective
Fast Track Trial for Conduct Problems (CPPRG, 2000)	Family, School, Class, Child	Tiered
Incredible Years (Webster-Stratton et al., 2008)	Family, Child, Classroom	Tiered
Positive Action (Flay et al., 2001)	Family, School, Class, Child	Tiered
Schools and Homes in Partnership (Barrera et al., 2002)	Parent, Child	Tiered

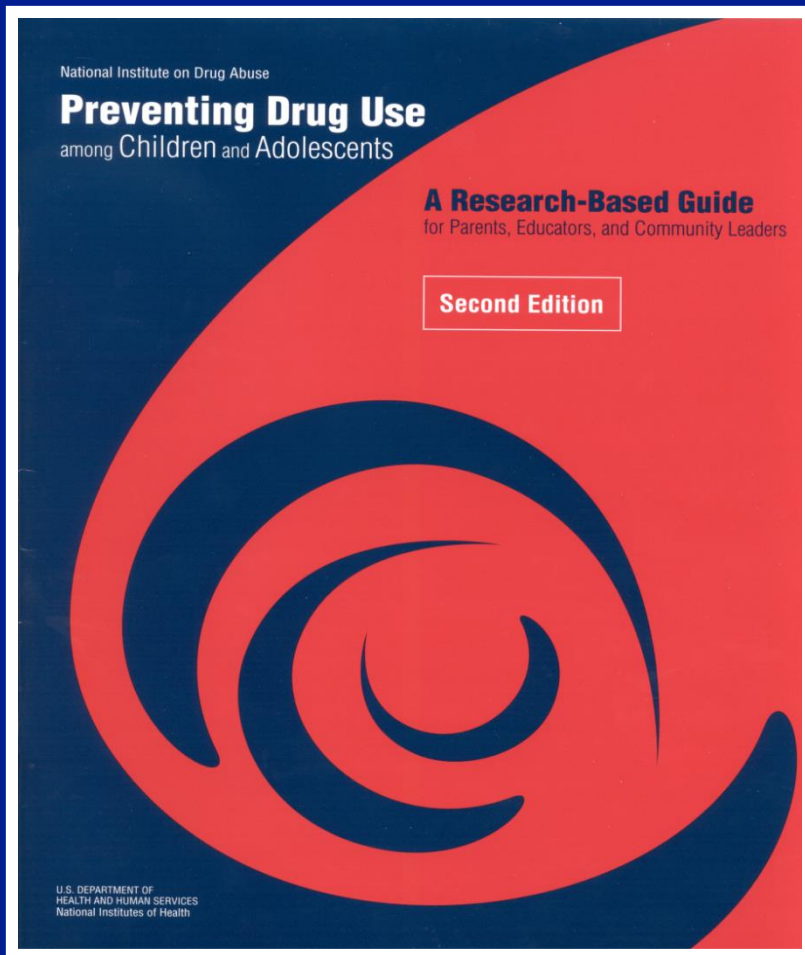


# Prevention Principles (2003)

Examples of established principles for preventing drug use among children and adolescents.

- Universal interventions: Universal interventions have impacts on higher risk youth.
- Cross-over effects: Prevention interventions can have an effect on multiple risk behaviors including those not a focus of the intervention
- Long-term effects: Prevention interventions implemented during earlier developmental periods have effects during adolescence and later developmental stages.

# Preventing Drug Use among Children & Adolescents



- Derived from an extensive literature review of published articles from NIDA funded research
- Reviewed by an expert scientific panel
- Reviewed by a professional practitioner panel
- Resulted in 16 principles

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/preface>

# Prevention Interventions

Program	Target Population or Setting	Level of Risk
<b>Elementary School</b>		
Caring School Community Program (Battistich et al., 1997)	School, Teacher, Family, Child	Universal
Classroom-Centered Intervention (Good Behavior Game) (Kellam & Rebok, 1992)	Classroom, Child	Universal
Promoting Alternative Thinking Strategies-PATH (Greenberg & Kusche et al., 1998)	Classroom, Child	Universal
Seattle Social Development Program (Hawkins et al., 1999)	School, Parent/Family, Child	Universal
Focus on Families-FOF (Catalano et al., 1999)	Family, Child	Selective
Early Risers "Skills for Success" Risk Prevention Program (August et al., 2001)	Parent, Child	Selective
Fast Track Trial for Conduct Problems (CPPRG, 2000)	Family, School, Class, Child	Tiered

# Prevention Interventions

Program	Target Population or Setting	Level of Risk
<b>Middle School</b>		
Guiding Good Choices-GGC (Hawkins et al. 1999)	Parent/Family	Universal
Life Skills Training (LST) Program (Botvin et al. 1995, 1997, 2003)	Classroom, Child	Universal
Lions-Quest Skills for Adolescence-SFA (Eisen et al., 2002)	School, Child	Universal
Project ALERT (U.S. Dept. of Education, 2001)	Classroom, Child	Universal
Project STAR (Chou et al., 1998)	Community, School, Parent/Family, Child	Universal
Strengthening Families Programs (Spoth, Redmond, & Shin, 2000,2001)	Parent/Family, Child	Universal
Coping Power (Lochman & Wells, 2002)	Parent/Family, Child	Selective
Adolescent Transitions Program-ATP (Dishion, et al. 2002)	School, Parent/Family, Child	Tiered



# Prevention Interventions

Program	Target Population or Setting	Level of Risk
<b>High School</b>		
Life Skills Training (LST) Program: Booster Program (Botvin et al. 1995, 1997, 2003)	Classroom, Child	Universal
Lions-Quest Skills for Adolescence-SFA (Eisen et al. 2002)	School, Child	Universal
Project ALERT Plus (U.S. Dept. of Education 2001)	Classroom, Child	Universal
Strengthening Families Programs (Spoth, Redmond, & Shin 2000,2001)	Parent/Family, Child	Universal
Adolescents Training and Learning to Avoid Steroids –ATLAS (Goldberg et al 2000)	Team, athlete, Parent/Family	Selective

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# Systems Models

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- Build infrastructure and sustainability at state and local levels
- Implement evidence based interventions in real world settings
- Demonstrate community/population level impacts
  - **Communities That Care (CTC)**
  - **PROSPER**
    - **PRO**moting **S**chool-community-university **P**artnerships to **E**nhance **R**esiliency

# The Communities That Care Prevention System



Build a coalition of diverse stakeholders to achieve collective impact.

Assess and prioritize for action- risk, protection, and health and behavior outcomes.

Address priority risks with evidence-based preventive interventions.

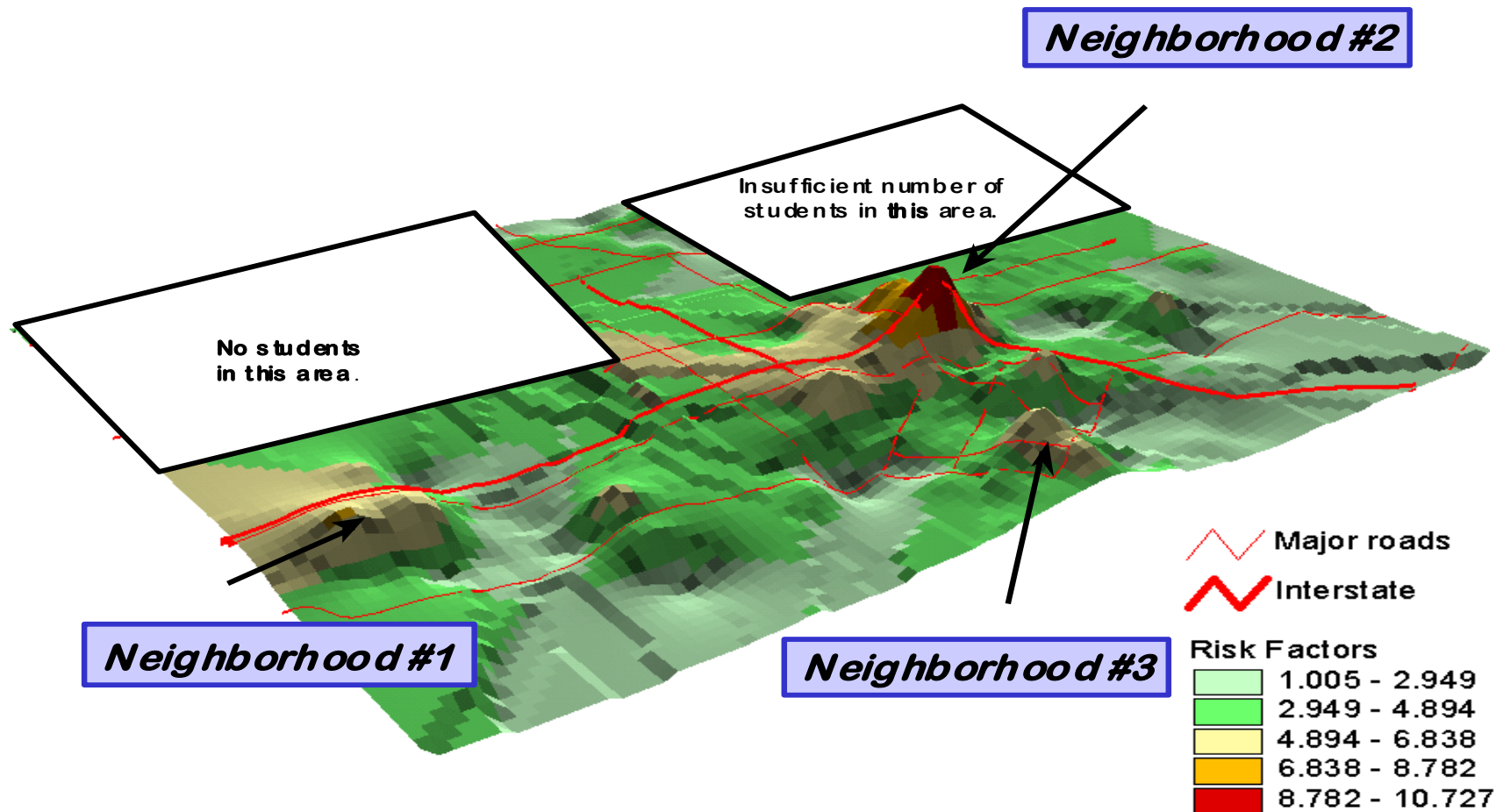
Sustain high fidelity implementation of preventive interventions to reach all those targeted.

# Communities That Care



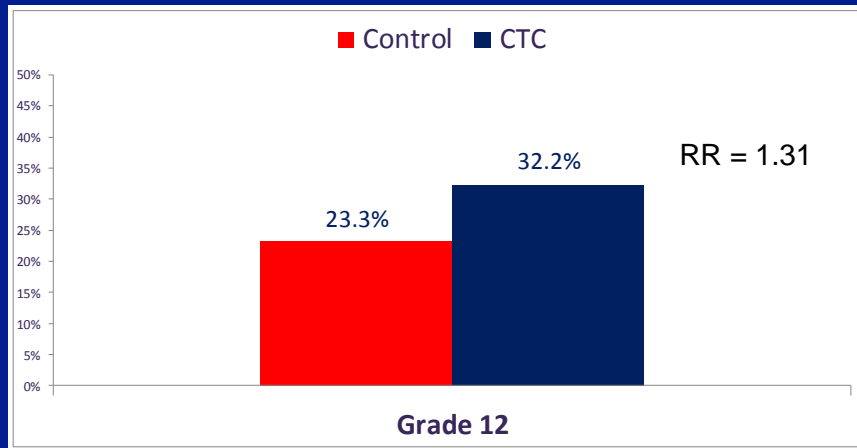
24 Communities; ~45,000 participants

# Distribution of Risk in a City

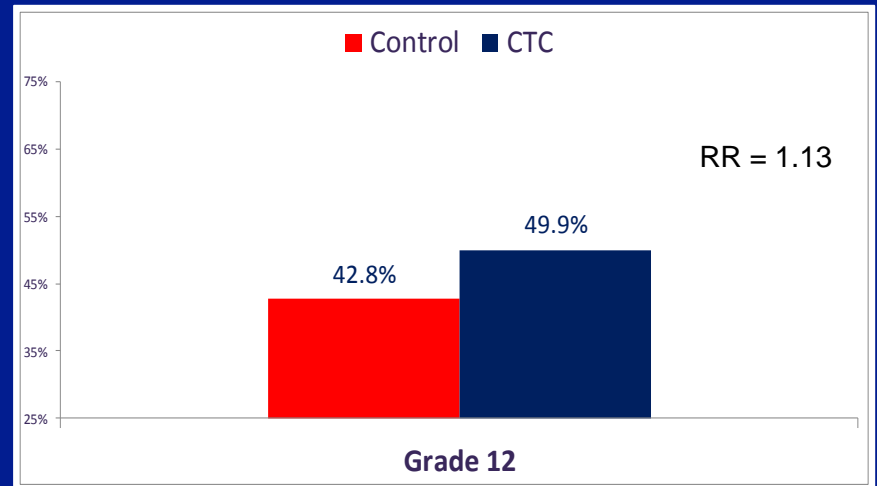


# Sustained Abstinence through Grade 12

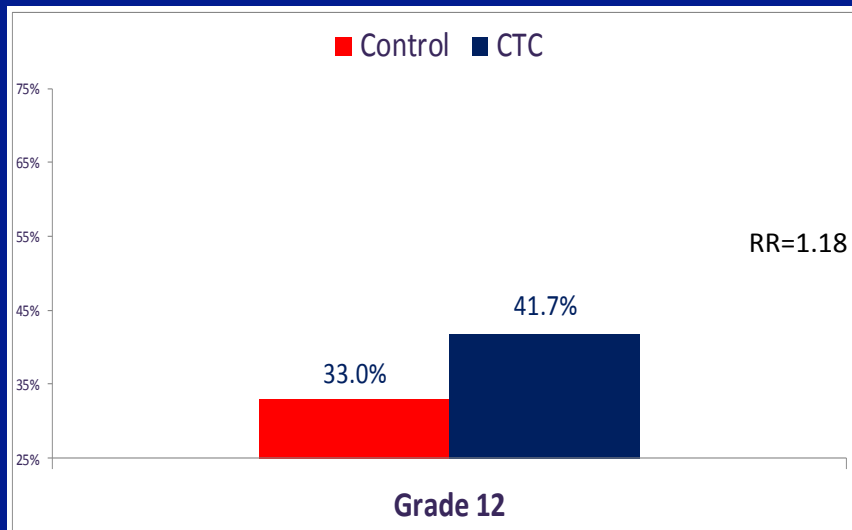
## Never Used Alcohol



## Never Smoked Cigarettes



## Never Engaged in Delinquency



Also, findings for sustained abstinence of:

- Any drugs (RR=1.32)
  - Gateway drugs (RR=1.31)
- And cumulative incidence of
- Violence (RR=0.86)

all  $p < .05$

# You can find CTC here:

<http://www.communitiesthatcare.net/>

The screenshot shows the homepage of the Communities That Care website. The header features the logo on the left, which consists of three stylized figures holding hands under a house icon, followed by the text "communities that care". To the right of the logo is the tagline "Strong Communities, Successful Kids". In the top right corner, there are social media icons for Facebook, Twitter, Google+, and YouTube, along with "Contact" and "Login" links.

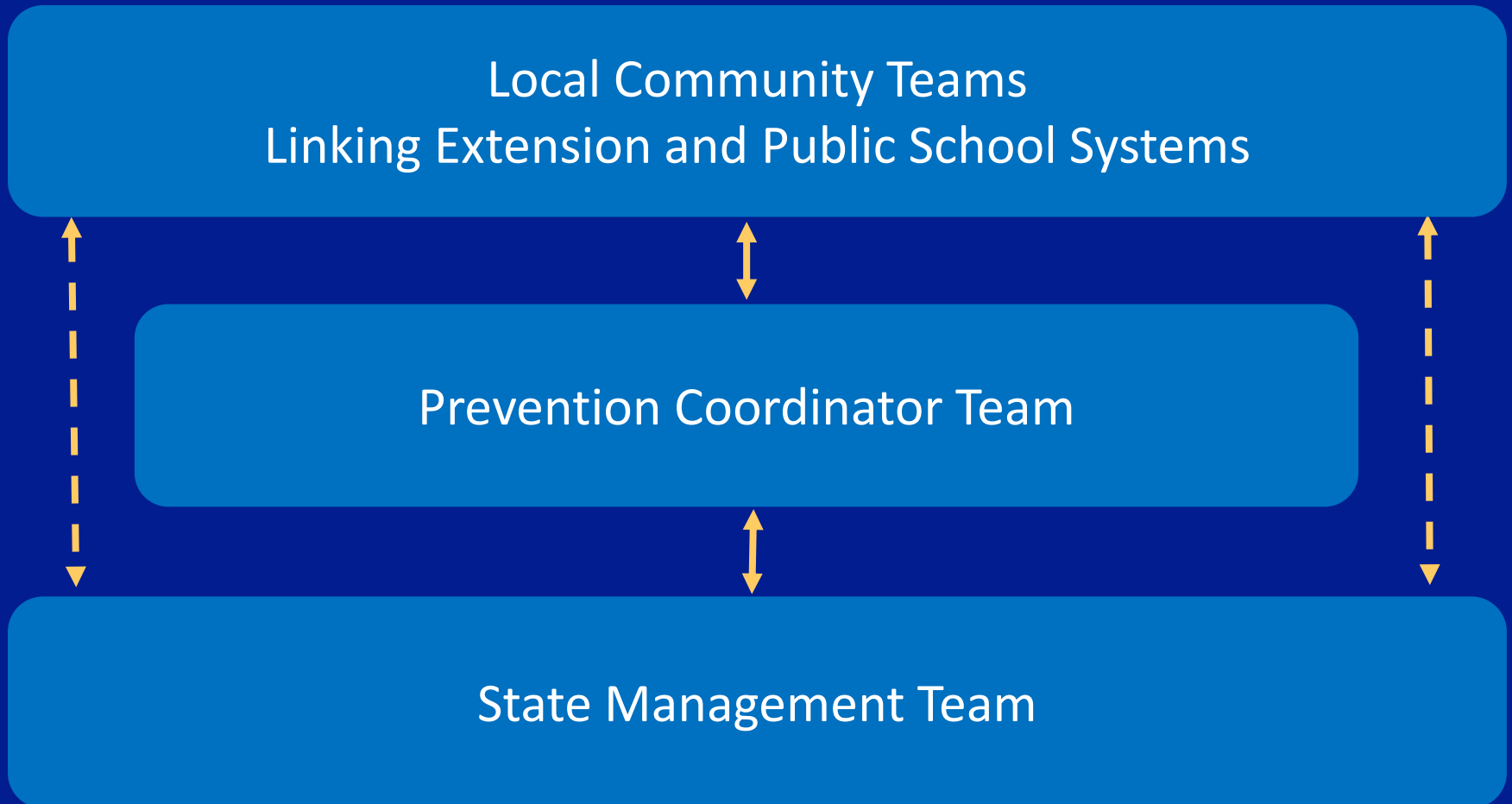
The navigation menu includes: Home, How It Works, Research & Results, Get Started, News, and About.

The main content area is divided into two columns. The left column features a large map of the United States with a play button icon in the center. Below the map is a text box that reads: "CTC can help you prevent problems before they start... » [Watch video](#)". Below this is a caption: "Communities That Care (CTC) employs a proven, community-change".

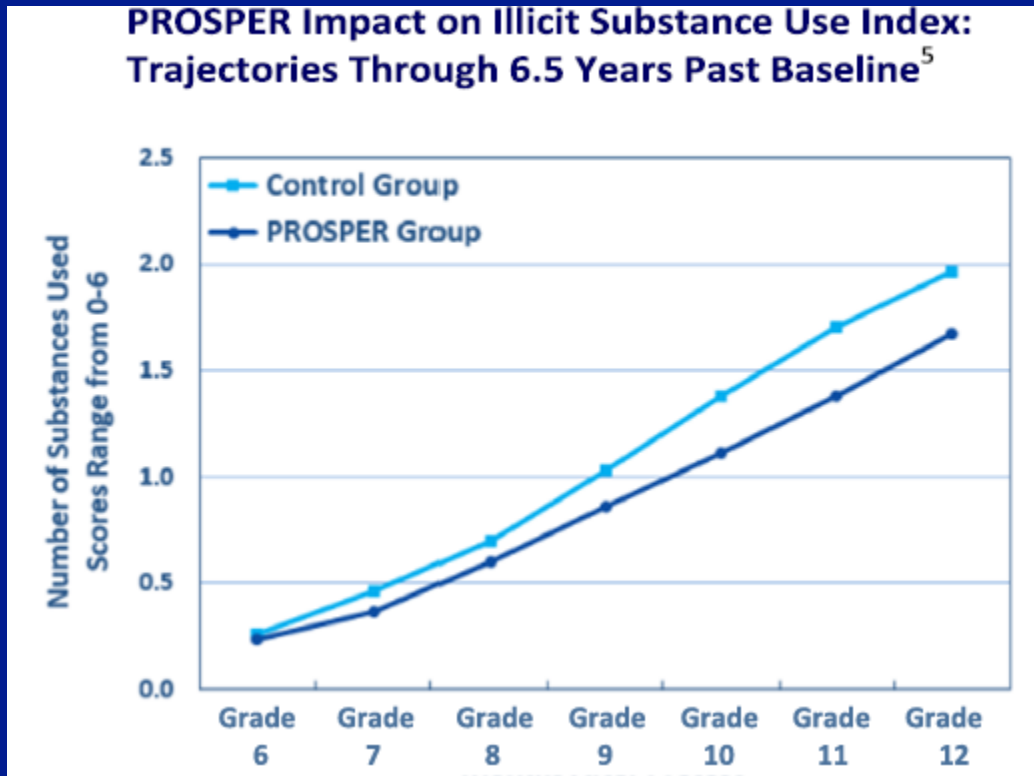
The right column has a section titled "SUPPORT OUR WORK" with the text: "Your donation to the University of Washington Center for Communities That Care will help kids thrive." Below this is an orange "Give Now!" button. Underneath is a section titled "FEATURED COMMUNITY" with a small image of a community project.



# PROSPER Partnership Model

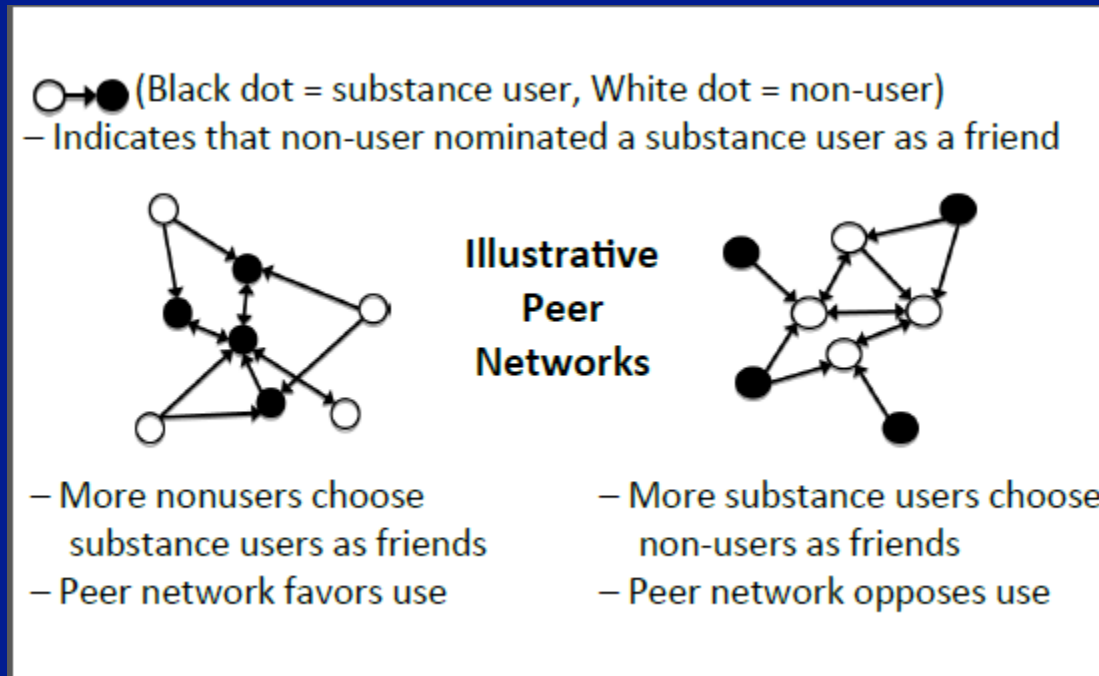


# PROSPER intervention results in long term reductions of substance use



Spoth, Redmond, Shin, Greenberg, Feinberg, Schinker (2013). PROSPER community- university partnerships delivery system effects on substance misuse through 6½ years past baseline from a cluster randomized controlled intervention trial. *Preventive Medicine*, 56, 190-196.

# PROSPER intervention shifts peer influence toward non-users.



Osgood, Feinberg, Gest, Moody, Ragan, Spoth, Greenberg & Redmond (2013). Effects of PROSPER on the influence potential of prosocial versus antisocial youth in adolescent friendship networks. *Journal of Adolescent Health, 53*(2), 174-179.

# You can find PROSPER here: <http://helpingkidsprosper.org/>



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We've Got Prevention Down To A Science

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Recognized by the **Coalition for Evidence-Based Policy**



## We've got prevention down to a science.

Most prevention programs for youth promise to reduce problem behaviors. And they can look good. On paper. But do they work?

Prevention scientists are discovering that results often fall far short of expectations. For some programs, it's because they were not tested. For



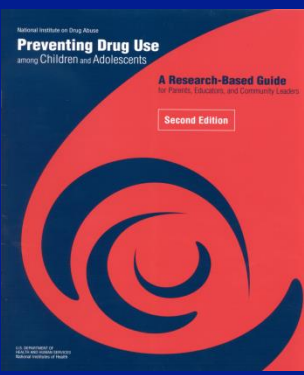
PROSPER was recently featured in the Office of Disease Prevention and Health Promotion's *Who's Leading the Leading Health Indicators? - Substance Abuse*.

[Click here to find out more](#)

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# Prevention Principles (2003)

Another example of established principles for preventing drug use among children and adolescents.

- Prevention interventions and systems can significantly reduce health and broader social costs.

# Is prevention cost-effective? YES!

## For every dollar spent... this could be saved

- Strengthening Families Program \$7.82
- Guiding Good Choices \$11.07
- Seattle Social Development Project \$3.14
- Life Skills Training (LST) \$25.61
- CTC \$4.23 - \$8.22
- PROSPER \$8.94 - \$26.74

Sources: S. Aos, R. Lieb, J. Mayfield, M. Miller, A. Pennucci. (2004) Benefits and Costs of Prevention and Early Intervention Programs for Youth. Olympia: Washington State Institute for Public Policy;  
Kuklinski, Margaret R., et al. "Cost-benefit analysis of Communities That Care outcomes at eighth grade." *Prevention Science* 13.2 (2012): 150-161;  
Overview of Evidence Base: Partnership Model and Delivery System at <http://helpingkidsprosper.org/>.

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# NIDA Resources

- **Principles of Substance Abuse Prevention for Early Childhood: A Research-Based Guide**

<http://www.drugabuse.gov/publications/principles-substance-abuse-prevention-early-childhood/index>

- **Preventing Drug Use among Children & Adolescents**

<https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/preface>

- **Infographics**

<https://www.drugabuse.gov/related-topics/trends-statistics/infographics>

# Where to find your local prevention researchers?

U.S. Department of Health & Human Services

NIH Research Portfolio Online Reporting Tools (RePORT)

Search

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Fiscal Year (FY): Active Projects SELECT  
Current FY is 2016

RESEARCHER AND ORGANIZATION

Principal Investigator (PI) / Project Leader: (Last Name, First Name) Use '%' for wildcard in PI names Enter several PI/Project Leader names OR PI Profile IDs

City: Use '%' for wildcard

Organization: LOOKUP Please enter at least 3 characters to use Lookup. Contains Begins with Exact

State: SELECT

Country: SELECT

Department: SELECT

Congressional District: SELECT

Organization Type: SELECT

DUNS Number:

TEXT SEARCH

Text Search (Logic): And Or Advanced

Search in: Projects Publications News

Limit Project search to: Project Title Project Terms Project Abstracts

Limit Publication search to: Start Year 2015 End Year 2016

PROJECT DETAILS

Project Number/ Application ID: Agency/Institute/Center: Admin Funding SELECT

# Additional Resources

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- **National Registry of Evidence-based Programs and Practices**  
<http://www.nrepp.samhsa.gov/Index.aspx>
- **Mentor International**  
<http://preventionhub.org/practice/examples-effective-practice>
- **UNODC International Standards on Drug Use Prevention**  
<https://www.unodc.org/unodc/en/prevention/prevention-standards.html>
- **Blueprints**  
<http://www.blueprintsprograms.com/programCriteria.php>

# Additional Resources

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- **Washington Cost Analysis Resource**

<http://www.wsipp.wa.gov/Reports/04-07-3901>

- **Society for Prevention Research**

<http://www.preventionresearch.org/>

- **Coalition for Evidence-Based Policy**

<http://coalition4evidence.org/>

- **National Prevention Science Coalition**

<http://www.npscoalition.org/>

# National Institute on Drug Abuse (NIDA) Prevention Research Branch

*Bethany Deeds* - Branch Chief

*Jacqueline Lloyd* – Deputy Branch Chief

- Adolescents, emerging and young adults, adults, selective & indicated interventions, DIDARPs

*Aria Crump* – Adolescents, emerging/young adults, universal interventions, NA/AI, prescription drug use

*Rich Jenkins* – HIV/AIDS, high risk HIV populations

*Belinda Sims* – Early childhood, dissemination & implementation, training mechanisms.

*Karen Sirocco* - Neuroscience, translation, tobacco control

*And a 192 current prevention research grantees!*

# Contact

Bethany Deeds

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“I alone cannot change the world, but I can cast a stone across the waters to create many ripples.”

— **Mother Teresa**