



Improving Community Responses to the Risks We See Everyday  
Jackson County COMBAT  
Kansas City, Missouri  
September 24, 2010

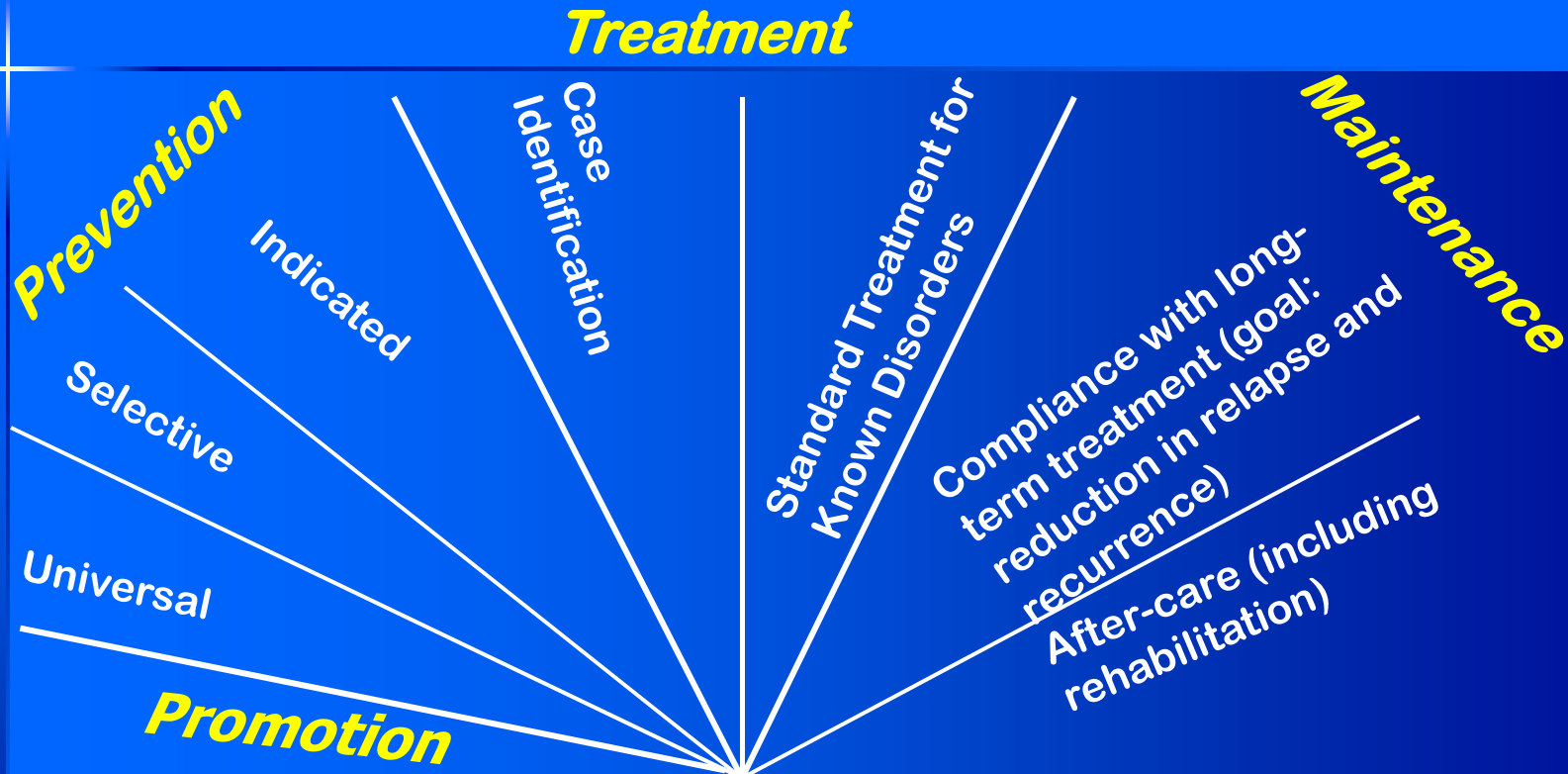
## The Knowledge Base for Prevention Science

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# Intervention Spectrum



Source: Institute of Medicine (2009). Preventing Mental, Emotional and Behavioral Disorders Among Young People. O'Connell, Boat & Warner (eds.) Washington DC: National Academy Press

# Prevention Makes Sense!

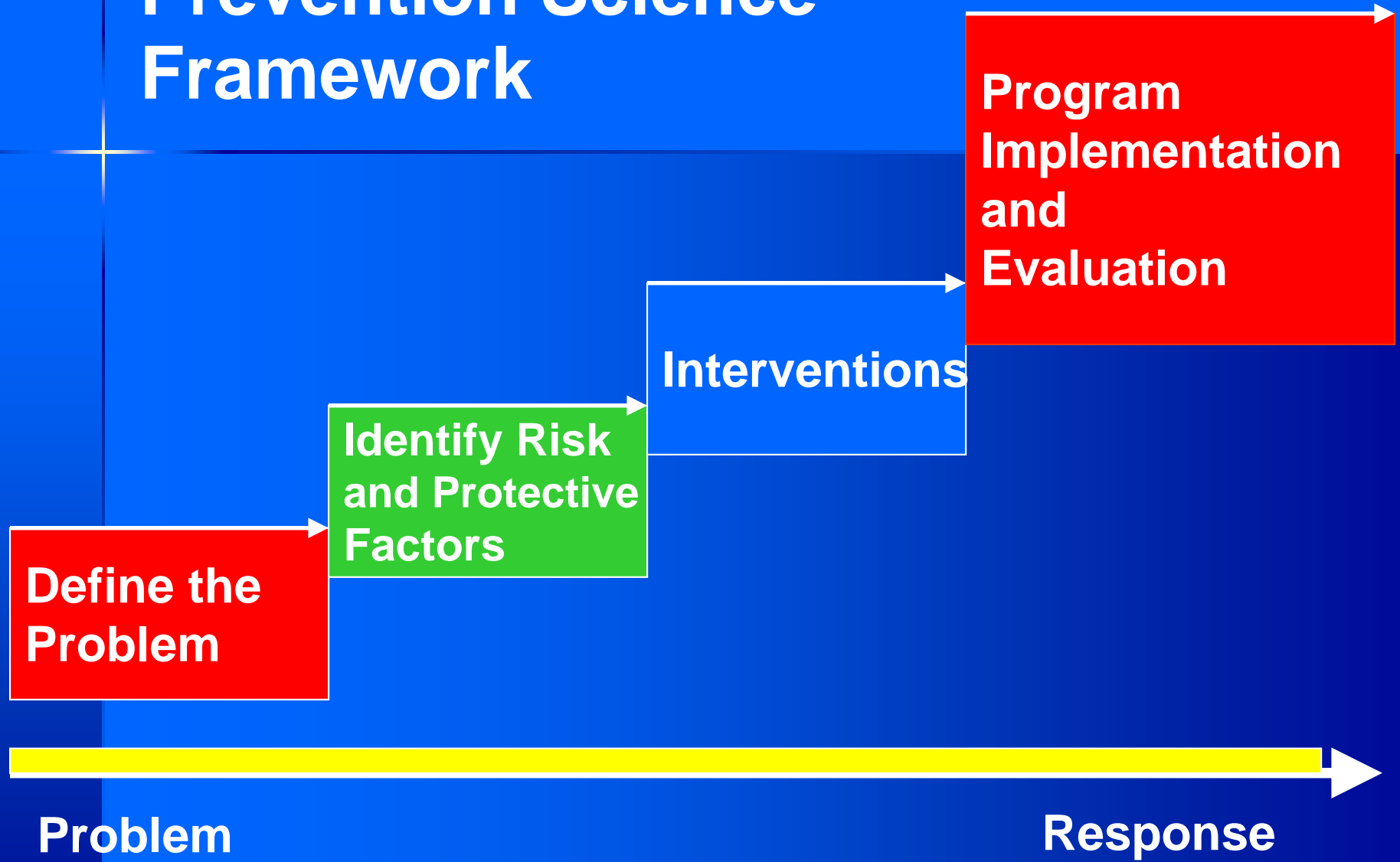


YOU NEVER KNOW HOW LONG YOU'VE GOT! YOU COULD STEP INTO THE ROAD TOMORROW AND -WHAM- YOU GET HIT BY A CEMENT TRUCK! THEN YOU'D BE SORRY YOU PUT OFF YOUR PLEASURES!



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# Promotion and Prevention Science Framework



# 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.

## Prevention Services Research

- Apply lessons learned about etiology and effective interventions in real world settings.

# Advances in Prediction

- Longitudinal studies have identified the predictors of substance abuse, violence, and other problems...
- As well as the predictors of positive outcomes like success in school.



# Risk Factors for Adolescent Problem Behaviors

Risk Factors	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
<b>Community</b>						
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	✓	✓	✓	✓	✓	



# Risk Factors for Adolescent Problem Behaviors

## Risk Factors

	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
<b>Family</b>						
Family History of the Problem Behavior	✓	✓	✓	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	✓
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement in the Problem Behavior	✓	✓			✓	



# Risk Factors for Adolescent Problem Behaviors

Risk Factors	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
School						
Academic Failure Beginning in Late Elementary School	✓	✓	✓	✓	✓	✓
Lack of Commitment to School	✓	✓	✓	✓	✓	



# Risk Factors for Adolescent Problem Behaviors

Risk Factors	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
<b>Individual/Peer</b>						
Early and Persistent Antisocial Behavior	✓	✓	✓	✓	✓	✓
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 each social domain (family, school, peer group and neighborhood)

- Prosocial Opportunities
- Reinforcement for Prosocial Involvement
- Bonding
- Healthy Beliefs and Clear Standards

# The Social Development Strategy

**The Goal...** **Healthy Behaviors** **...for all children and youth**

**Start with...**

Healthy Beliefs and Clear Standards

...in families, schools, peer groups, and communities

**Build...**

Bonding  
-Attachment  
-Commitment

...to families, schools, peer groups, and communities

**By providing...**

Opportunities Skills Recognition

...in families, schools, peer groups, and communities

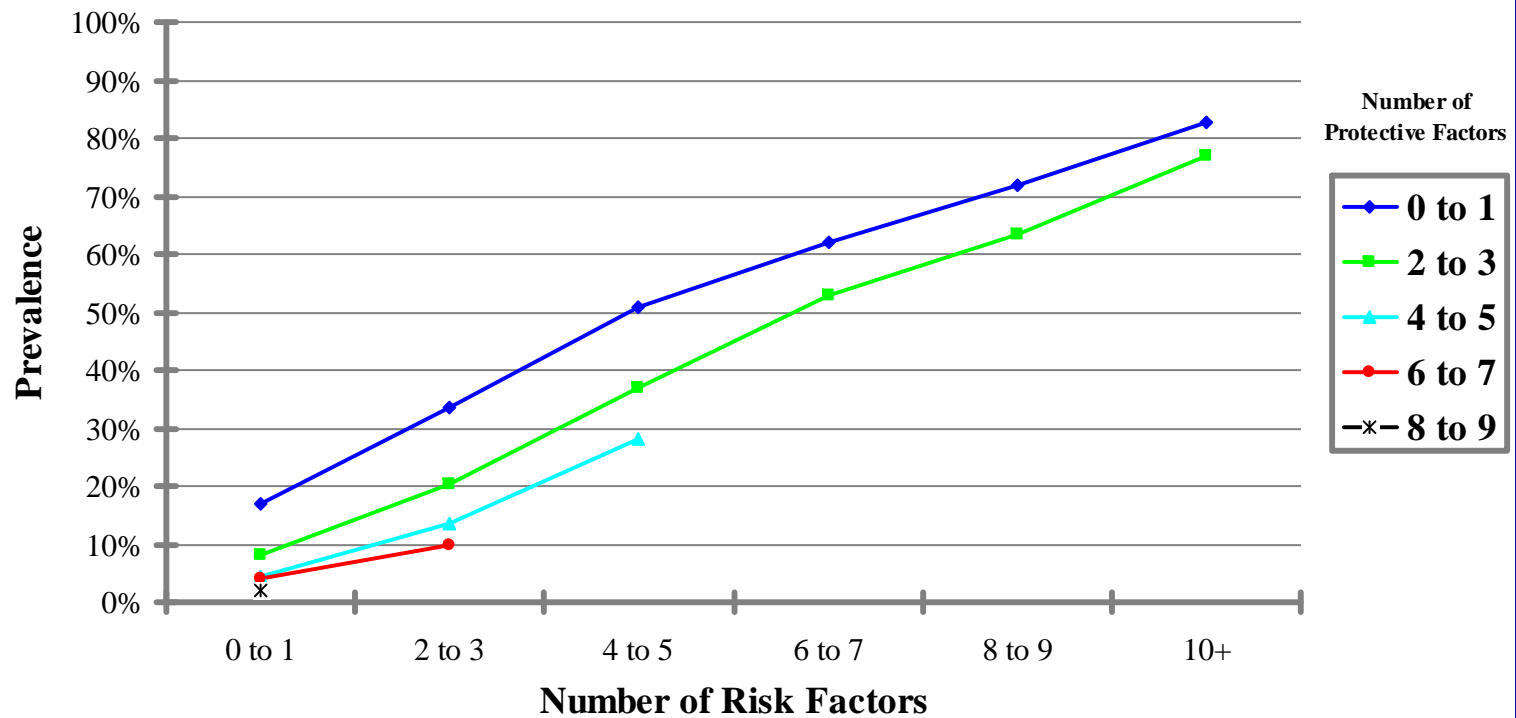
**Be Aware of...**

Individual Characteristics



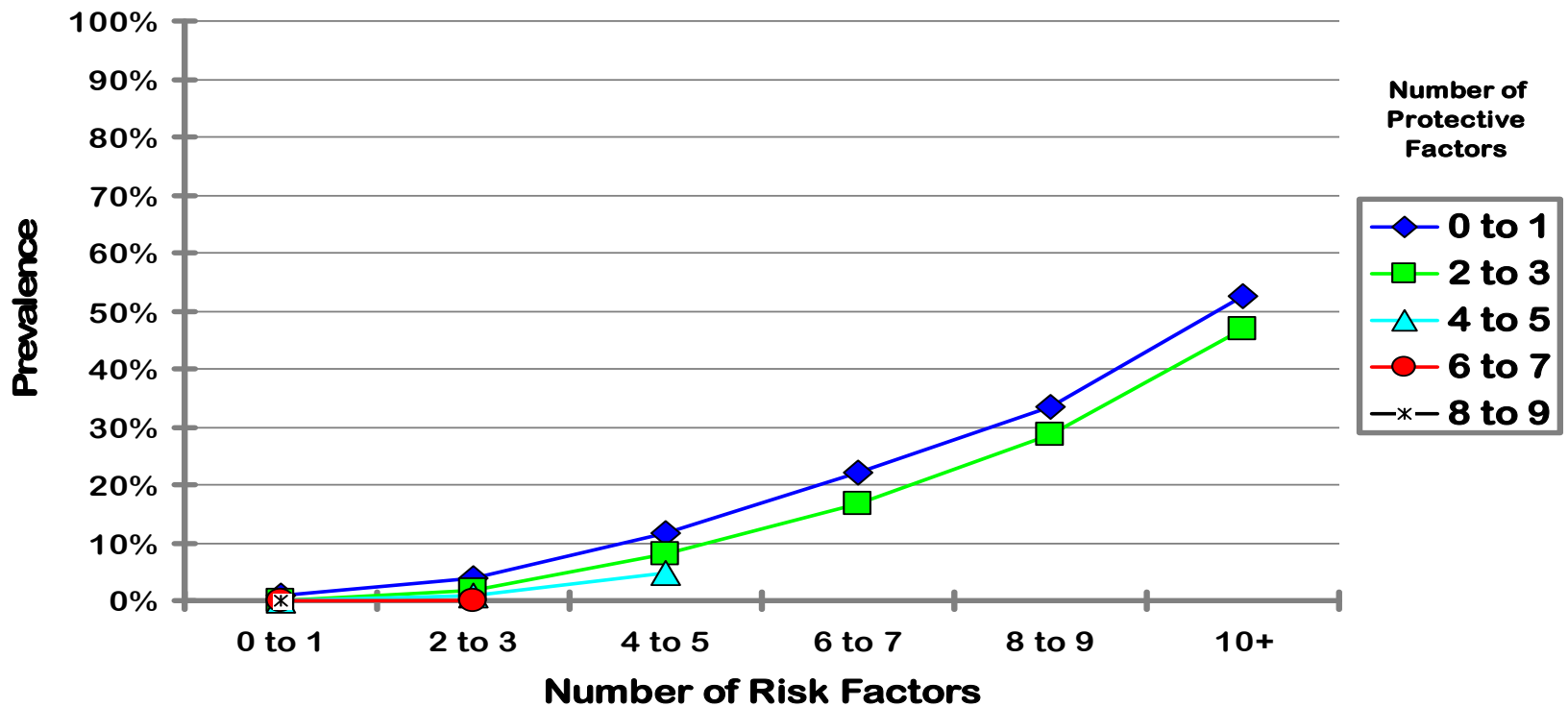
# Prevalence of 30 Day Alcohol Use by Number of Risk and Protective Factors

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



# Prevalence of 30 Day Marijuana Use By Number of Risk and Protective Factors

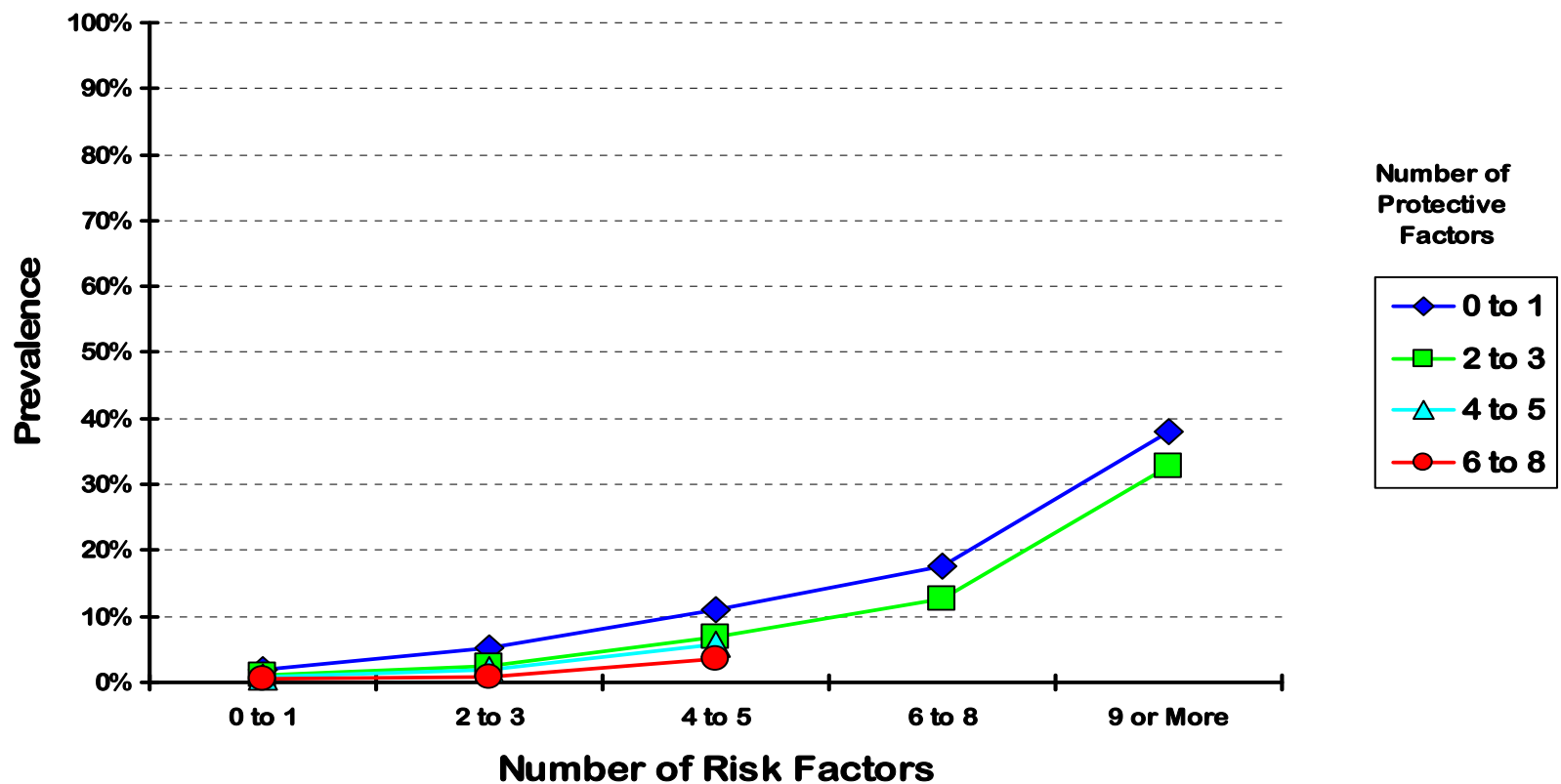
**Six State Student Survey of 6th-12th Graders,  
Public School Students**





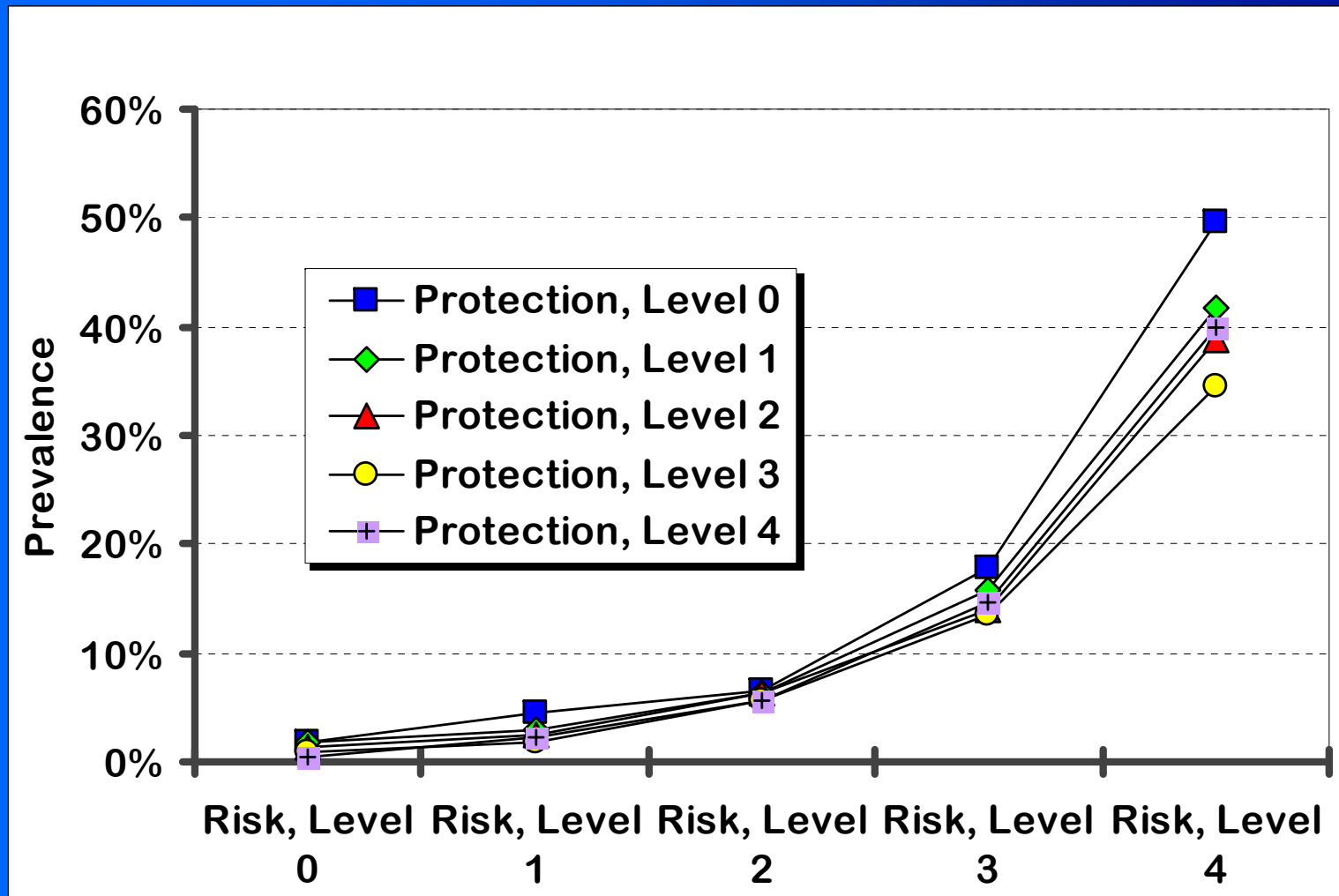
# Prevalence of Any Other Illicit Drug Use (Past 30 Days) By Number of Risk and Protective Factors

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

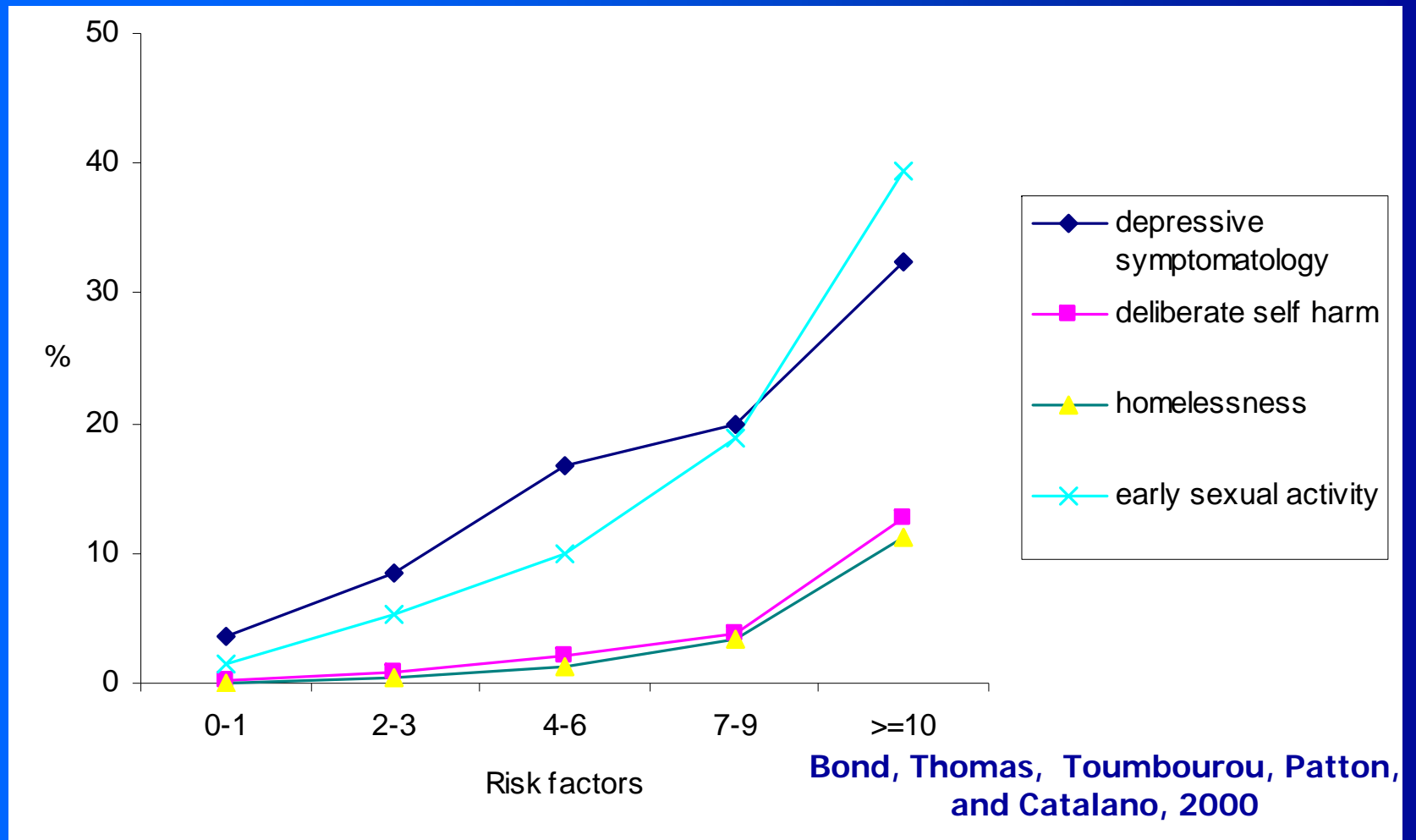




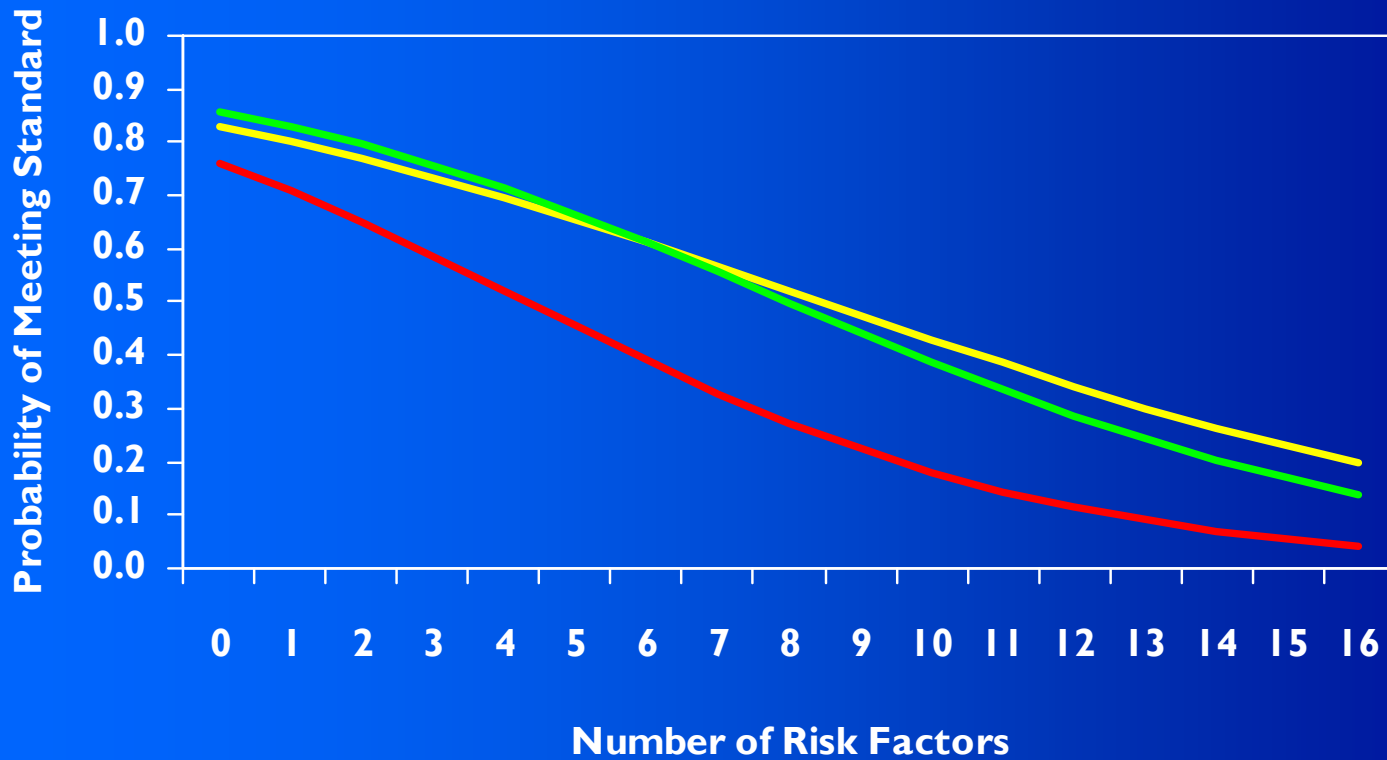
# Prevalence of "Attacked to Hurt" By Number of Risk and Protective Factors



# Prevalence of Mental and Social Problems by Number of Risk Factors



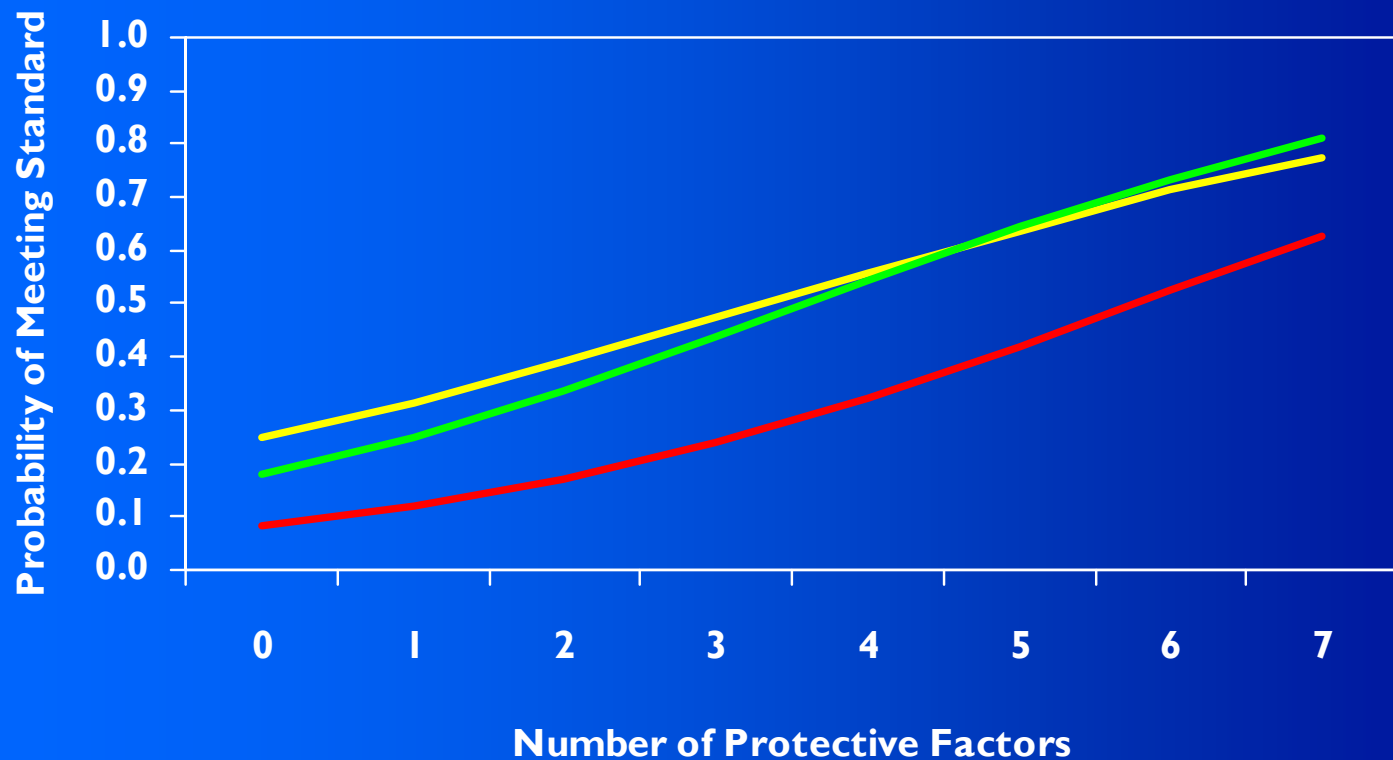
# Number of School Building Risk Factors and Probability of Meeting WASL Standard (10<sup>th</sup> Grade Students)



— **Math** — **Reading** — **Writing**

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# Number of School Building Protective Factors and Probability of Meeting WASL Standard (10<sup>th</sup> grade students)



— Math — Reading — Writing

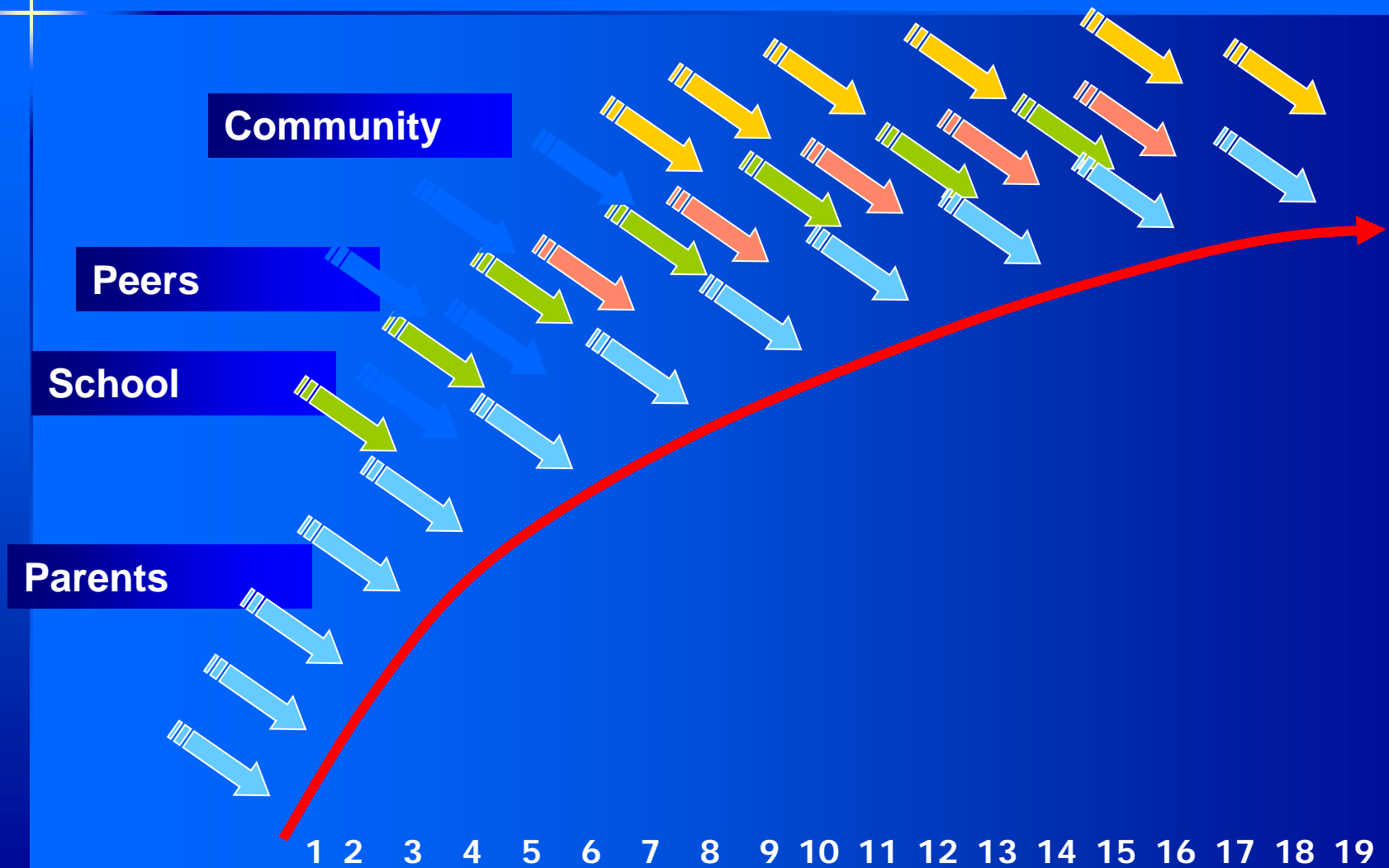
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# Prevention Partnerships with Schools are Necessary to Enhance Achievement and Reduce Problems

- If students are to achieve their best, schools must address risk and protection to remove barriers to learning and enhance school commitment

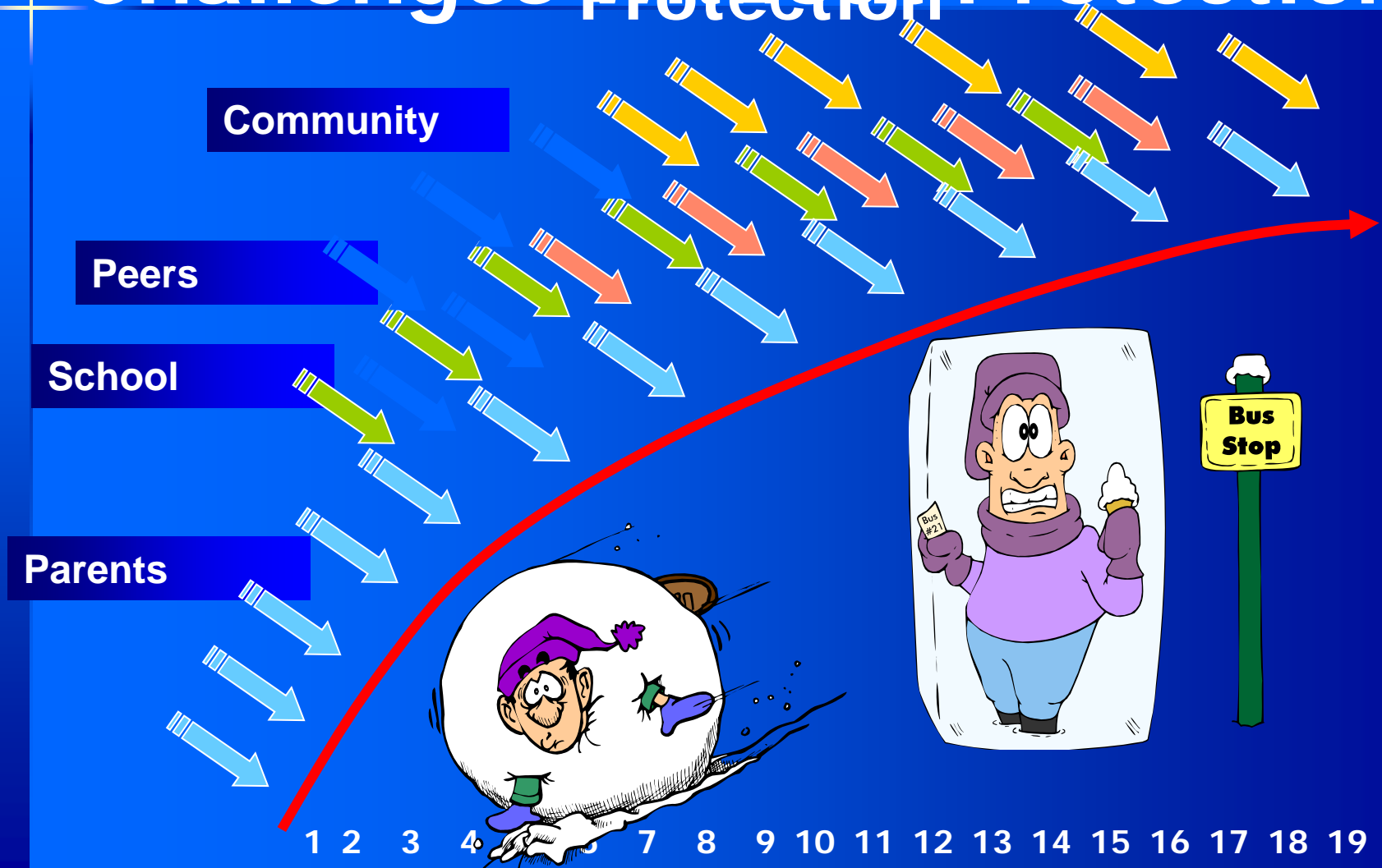
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# Factors Shaping Child and Adolescent Development



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# Snowball: Extending Environmental Positive Substance Use Norms and Challenges without Protection

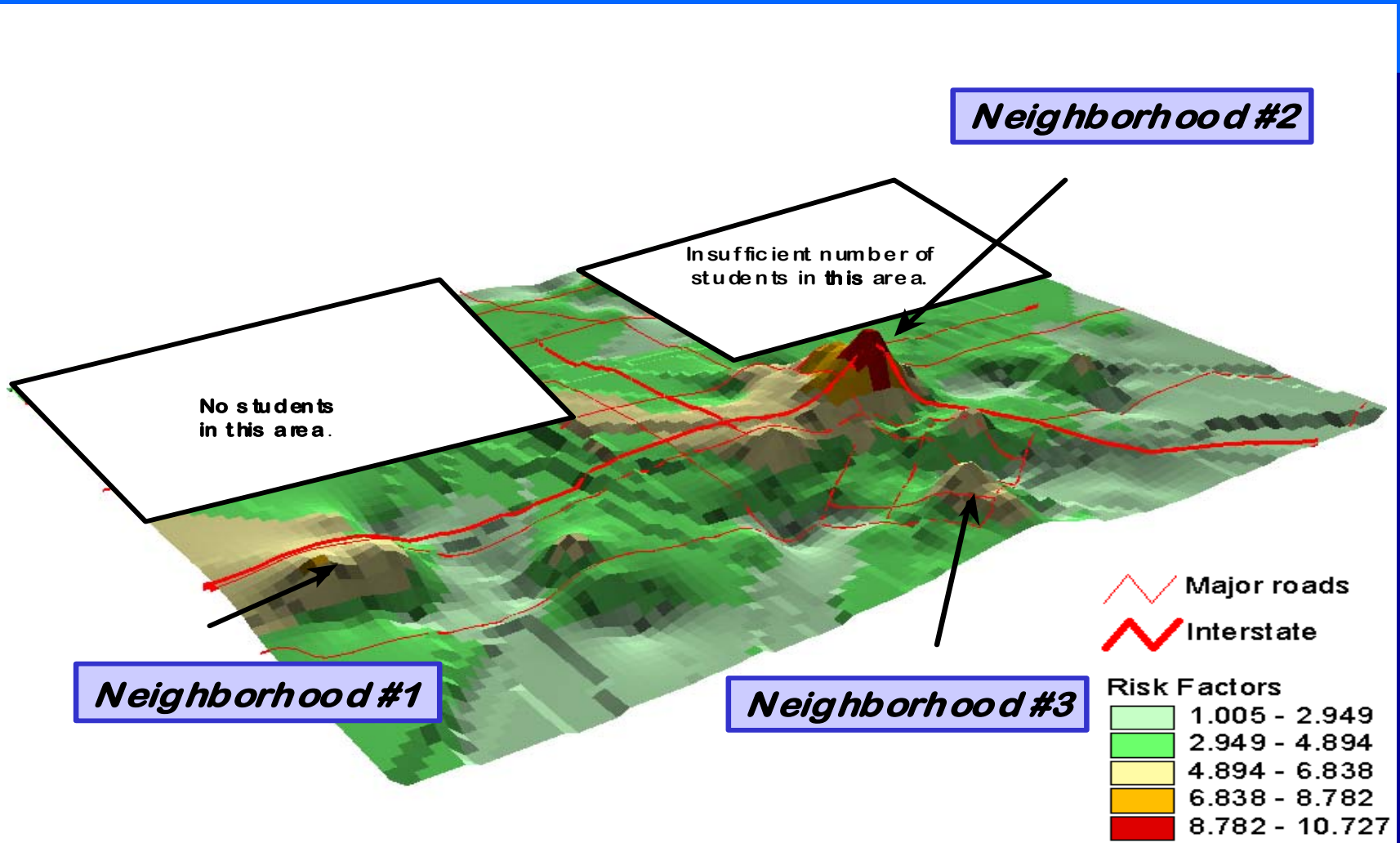


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# Epidemiology

- Different neighborhoods have different profiles of risk, protection, and outcomes.

# Distribution of Risk in a City



# 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 positive norms and models of problems with little protection (**Snowstorm**)
- Different neighborhoods have different levels of risk and protection

# Prevention Science Research Advances

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## Prevention Services Research

- Apply lessons learned about etiology and effective interventions in real world settings

# Ineffective Prevention Strategies

## *Universal Prevention*

- Peer counseling, mediation, positive peer culture
- Non-promotion to succeeding grades
- After school activities with limited supervision, programming
- Drug information, fear arousal, moral appeal.
- DARE

## *Selected, Indicated Prevention*

- Gun buyback programs
- Firearm training
- Mandatory gun ownership
- Redirecting youth behavior
- Shifting peer group norms
- Neighborhood Watch

# Wide Ranging Approaches Have Been Found To Be Effective

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

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# Benefits and Costs of Prevention and Early Intervention Programs for Youth

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Institute Publications: [www.wa.gov/wsipp](http://www.wa.gov/wsipp)

# Selected Findings

## Summary of Benefits and Costs (2003 Dollars)

Dollars Per Youth (PV)	Benefits	Costs	B - C
<b>Early Childhood Education</b>	\$17,202	\$7,301	\$9,901
<b><u>Nurse Family Partnership</u></b>	\$26,298	\$9,118	\$17,180
<b><u>Life Skills Training</u></b>	\$746	\$29	\$717
<b><u>Seattle Soc. Dev. Project</u></b>	\$14,246	\$4,590	\$9,837
<b><u>Guiding Good Choices</u></b>	\$7,605	\$687	\$6,918
<b><u>Multi-D Treat. Foster Care</u></b>	\$26,748	\$2,459	\$24,290
<b><u>Intensive Juv. Supervision</u></b>	\$0	\$1,482	-\$1,482
<b><u>Big Brothers/Sisters</u> (all costs</b>	\$4,058	\$4,010	\$48
(taxpayer costs only)	\$4,058	\$1,283	\$2,775



# Prevention Science Advances

## Epidemiology/Etiology of Problem Behaviors

- Identify Risk and Protective Factors that Predict Problem Behaviors.

## 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.

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Implementation Fidelity is  
Required if Tested Programs  
are to be Effective in  
Community Settings

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## What Boosts Implementation Fidelity?

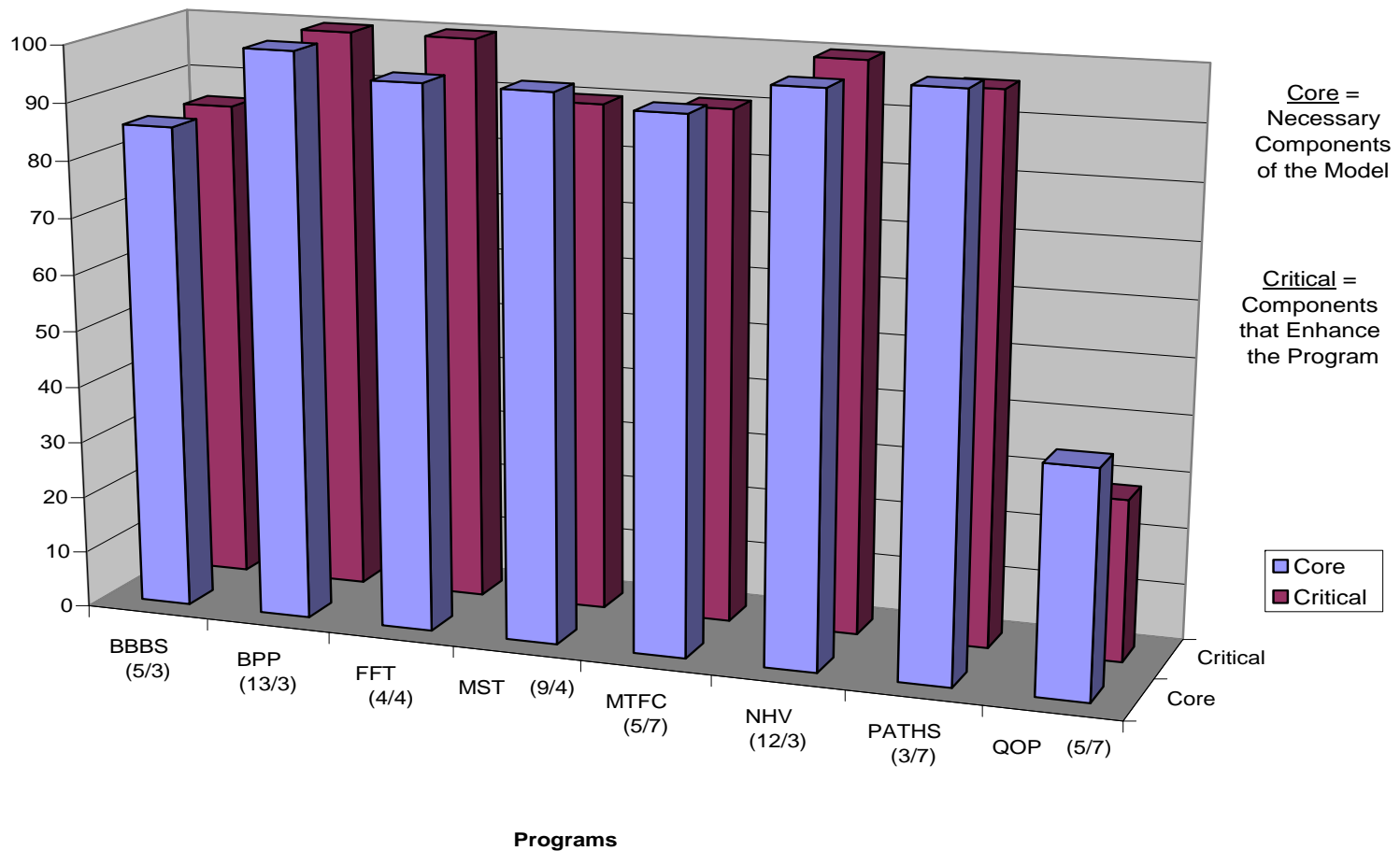
- Published material including manuals, guides, curricula.
- Certification of trainers.
- High quality, readily available technical assistance.
- Dissemination organization committed to distribution and delivery of tested program.
- Data monitoring system to provide feedback on implementation fidelity and outcomes.



# 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



## But...

- **Prevention approaches that do not work or have not been evaluated have been more widely used than those shown to be effective.**

(Gottfredson et al 2000, Hallfors et al 2000, Hantman et al 2000, Mendel et al 2000, Silvia et al 1997; Smith et al 2002)

# Challenges for States and Communities in Using Prevention Science

- Assessing and prioritizing local risk and protective factors and youth problems
- Matching tested, effective programs to local priorities and delivering to those targeted
- Tested, effective programs compete with “best” or usual practice
- Tested, effective programs require training, TA, and monitoring to be delivered with fidelity
- Communities need coordinated planning, funding and accountability to overcome these challenges
- Achieving population wide outcomes

# History of Models for Science- Practice Interface Early Models

Scientists know best-Experts  
inform communities what to do

Communities know best-Providing  
resources to support community  
coalitions without a structure or  
process



# What Has NOT Worked in Community Based Preventive Trials ?

## Communities Know Best

**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):

- clearly defined goals based in data, with high-quality data sources to monitor progress;
- use of tested and effective programs, with attention to monitoring of implementation quality and fidelity;
- evaluation of impacts on outcomes meaningful to the community



# History of Models for Science- Practice Interface

## More Recent Models

### **Mutual self interest**

collaboratively identifying,  
generating and testing potential  
solutions focused on locally  
relevant risk/protective factors

### **Community capacity building**

providing the skills and tools for  
community decision making  
focused on locally relevant  
risk/protective factors

# What Has Worked in Randomized Community-Based Prevention Trials? **Mutual Self Interest**

- Communities Mobilizing for Change on Alcohol- (Wagenaar et al., 2000)
- Community Trials Intervention to Reduce High Risk Drinking- (Holder et al., 2000)
- Project Northland- (Perry et al., 2002)
- Midwestern Prevention Project – (Pentz et al., 2006)

# What Has Worked in Randomized Community-Based Prevention Trials? **Community Capacity Building**

**PROSPER - PROmoting School-  
community university Partnerships  
to Enhance Resilience-(Spoth et al.,  
2007)**

**Communities that Care-(Hawkins et al.,  
2009; Feinberg, Greenberg, and Osgood, 2007)**



# Communities that Care Model for Science-Practice Interface Community Capacity Building

Provides the education, skills and tools to build community capacity to change youth outcomes through choosing and implementing tested, effective programs matched to their needs

Further description in 11 AM workshop

# Summary

- There is a strong research base of predictors of substance abuse and other problems as well as positive outcomes like academic success.
- Both early prevention and prevention during adolescence are needed to address Snowball and Snowstorm patterns of risk and protection
- Programs and policies that address these risk and protective factors have demonstrated efficacy
- Prevention approaches that do not work or have not been evaluated have been more widely used than those shown to be effective.
- To effectively prevent problems and promote youth development communities can assess and prioritize local levels of risk, protection and outcomes, match local need with effective prevention strategies, and implement selected strategies with fidelity.



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