

# Taking Evidence-based Prevention to Scale: Impact, Cost-effectiveness, and Lessons Learned



Brian K. Bumbarger
Family Impact Seminar
North Carolina Legislature
February, 2009



It is not enough to be busy. So are the ants. The question is: What are we busy about?

**Henry David Thoreau** 

Right now, in communities across the country, people are working hard to reduce and prevent youth violence, delinquency, drug use, and school failure...

Hundreds of millions of taxpayer dollars and countless hours are being invested...

Much of this effort and investment will have absolutely no impact

...some of it will even be harmful

# Why don't communities see greater success in prevention?

- Chasing money rather than outcomes
- No single guiding philosophy (many separate but disconnected efforts)
- The lack of good data to drive decision-making and resource allocation
- Reliance on untested (or ineffective) programs
- Poor implementation quality
- Inability to sustain programs
- Little accountability

# There are a number of proven-effective delinquency prevention programs

- Effectiveness demonstrated in rigorous scientific evaluations (randomized controlled trials)
- Large longitudinal studies or multiple replications (results that are generalizable)
- Significant effects on aggression, youth violence, delinquency, substance use, school failure

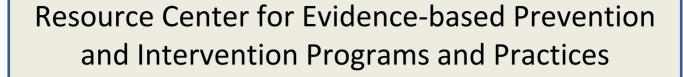
These evidence-based programs give us great confidence that if implemented well they will be effective at promoting better youth outcomes

## The challenges

- Increase (carefully planned) adoption of EBPs by more communities
- Ensure high quality implementation
- Sustain programs long-term

### Pennsylvania's EBP Initiative

- Follows from earlier CTC initiative that promotes community coalitions, risk & resource assessment
- Nearly 200 EBP's funded since 1998
- Strong emphasis on implementation quality & fidelity, impact assessment, and sustainability planning



CJJT&R
Support to
CTC Coalitions



NCJJ
Local Innovative
Programs and
Practices

A unique partnership between policymakers, researchers, and communities to bring science to bear on issues of public health and public safety

The EPISCenter is a project of the Prevention Research Center, College of Health and Human Development, Penn State University, and is funded by the Pennsylvania Commission on Crime and Delinquency and the Pennsylvania Department of Public Welfare as a component of the Resource Center for Evidence-Based Prevention and Intervention Programs and Practices.

Resource Center for Evidence-based Prevention and Intervention Programs and Practices

CJJT&R
Support to
CTC Coalitions



NCJJ Local Innovative Programs and Practices

- Conduct Outreach and Advocacy
- Strengthen the tie to local coalitions
- Provide Proactive Technical Assistance
- Develop and Provide Training and Resources
- Facilitate better data collection and reporting
- Create and Facilitate Peer Networks
- Conduct Translational Research

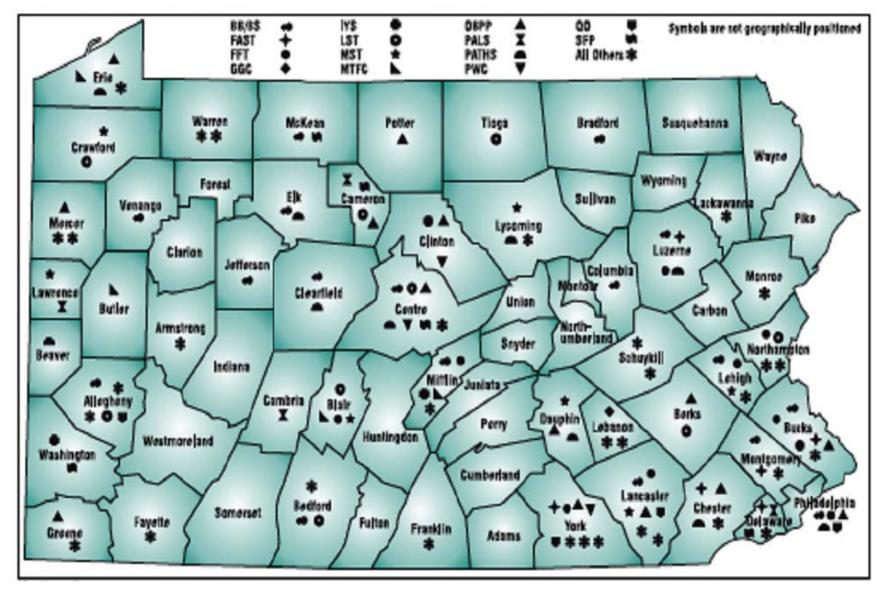
# The EPISCenter currently supports 10 EBPs

- Big Brothers/Sisters
- PATHS
- LifeSkills Training
- Project TND
- Strengthening Families
   10-14

- MST
- FFT
- MTFC
- Incredible Years
- Olweus Bullying Prevention

Other Commonwealth agencies also support some of these and other EPBs

#### Evidence-based Programs Funded Throughout Pennsylvania\*



<sup>\*</sup>programs funded under the EBP initiative since 1998

### Creating Fertile Ground for EBPs Risk-focused Prevention Planning

(the Communities That Care model)

Form local coalition of key stakeholders



on risk and protective factors

Re-assess risk and protective factors

Leads to community synergy and focused resource allocation

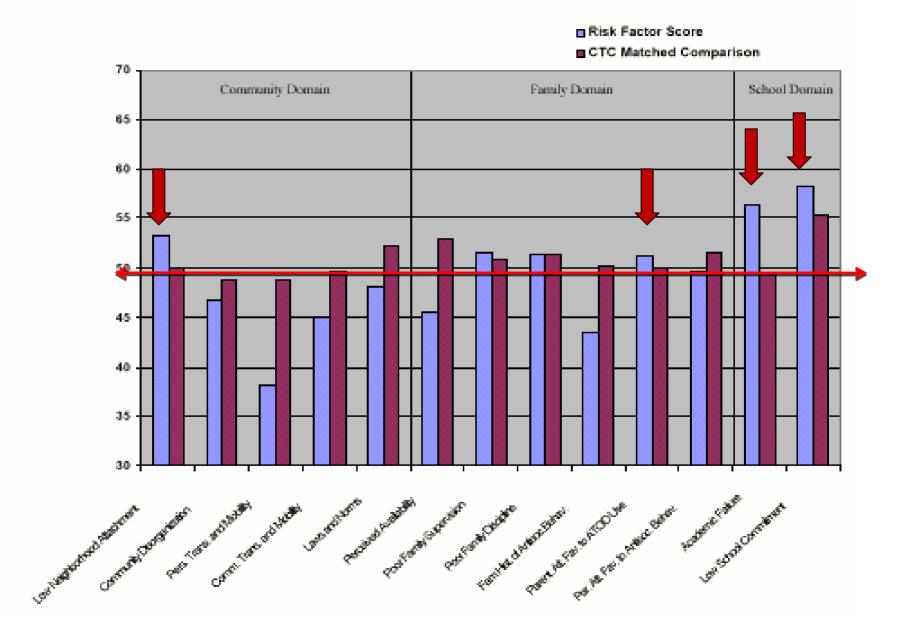


Use data to identify priorities



Select and implement evidence-based program that targets those factors

Graph 7: Risk Factor Scores for Centre County: Community, Family, and School Domains.



# Community Prevention Planning and Evidence-based Programs are wise investments of taxpayer resources

- Communities with EBPs embedded in the context of community mobilization/readiness have lower levels of delinquency and youth drug use\*
- EBPs produce an overall return of \$5 for every \$1 invested a return measured in hundreds of millions\*\*

<sup>\*</sup> Feinberg, M.E., Greenberg, M.T., Osgood, W.O., Sartorius, J., Bontempo, D.E. (In Press). Can Community Coalitions Have a Population Level Impact on Adolescent Behavior Problems? CTC in Pennsylvania, Prevention Science.

<sup>\*\*</sup> Jones, D., Bumbarger, B., Greenberg, M., Greenwood, P., and Kyler, S. (2008). The Economic Return on PCCD's Investment in Research-based Programs:

A cost-benefit assessment of delinquency prevention in Pennsylvania. Prevention Research Center, Penn State University.

## Determining Program Cost-Benefit

### **Program Benefits**

- \$ Crime Reduction
- \$ Drug Use
- \$ School Dropout
- \$ Child Abuse and Neglect
- \$ Welfare and Social Services, etc.

(adjusted for strength of evidence and timing of program)

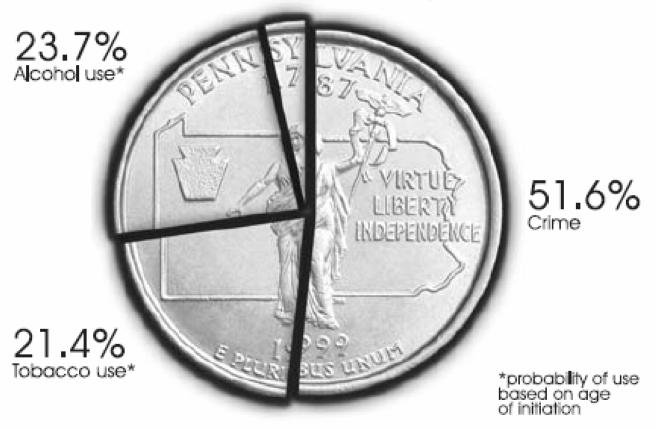
Program Costs

#### An Example: Strengthening Families Program

Example site:	McKean County	
Number served:	410 families	
Benefit minus costs per family:	\$6,541	
Per dollar return on investment:	\$7.82	
Total economic benefit resulting from McKean County implementation:	\$2,950,180	
Estimated number of SFP programs statewide:	15	
Estimated number of families being served statewide:	2,000	
Total potential economic benefit statewide:	\$13,082,000	

#### Strengthening Families 10-14 Percent economic benefit by outcome

3.4% Nicit drug use\*



Approximately half of the economic benefits from Strengthening Families are based on crime outcomes; the remaining benefit is related to substance abuse outcomes.

# The Cost-effectiveness of Evidence-based Prevention in Pennsylvania

(measured benefits and cost per youth)

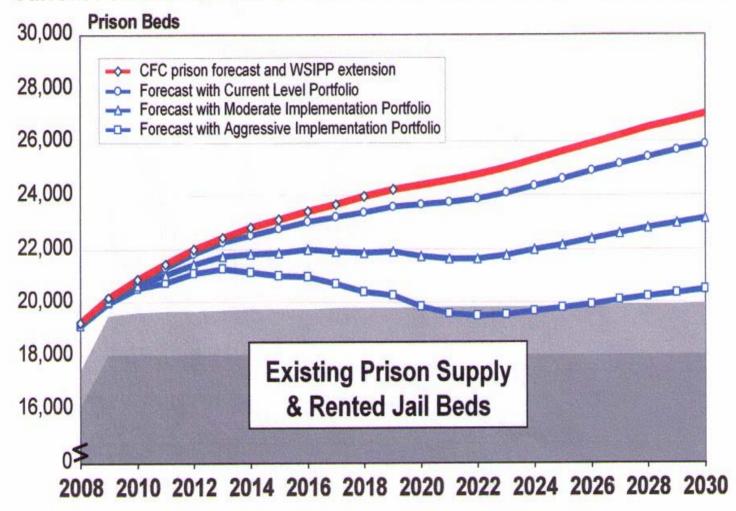
Program	Cost	Benefits	Benefit – cost, per youth	Return per Dollar Invested
Big Brothers/Sisters	\$4,519	\$4,573	\$54	\$1.01
LifeSkills Training	\$33	\$841	\$808	\$25.72
Multi. Treatment Foster Care	\$7,826	\$87,157	\$79,331	\$11.14
Multisystemic Therapy	\$6,402	\$23,117	\$16,716	\$3.61
Functional Family Therapy	\$2,411	\$35,119	\$32,707	\$14.56
Nurse-Family Partnership	\$10,411	\$47,289	\$36,878	\$3.59
Strengthening Families	\$959	\$7,500	\$6,541	\$7.82

# The Cost-effectiveness of Evidence-based Prevention in Pennsylvania

(measured benefits and costs per community and statewide)

Program	B-C per youth	Avg. Return/ Community	# Programs Statewide	
Big Brothers/Sisters	\$54	\$13,500	28	\$378,000
LifeSkills Training	\$808	\$161,600	100	\$16,160,000
Multi. Treatment Foster Care	\$79,331	\$475,986	3	\$1,427,958
Multisystemic Therapy	\$16,716	\$2,507,400	12	\$30,088,800
Functional Family Therapy	\$32,707	\$12,395,953	11	\$136,355,483
Nurse-Family Partnership	\$36,878	\$4,782,976	25	\$119,574,400
Strength. Families	\$6,541	\$872,133	15	\$13,082,000
TOTAL				\$317,066,641

#### Adult Prison Supply and Demand in Washington: 2008 to 2030, Current Forecast and the Effect of Alternative Evidence-Based Portfolios



Steve Aos, Marna Miller, and Elizabeth Drake. (2006). *Evidence-Based Public Policy Options to Reduce Future Prison Construction, Criminal Justice Costs, and Crime Rates.* Olympia: Washington State Institute for Public Policy.

#### Some Lessons Learned

- Focus on risk and protective factors rather than problems
- Good community-specific data to drive decision making and resource allocation
  - Single state epidemiological survey
  - Becomes community needs assessment tied to multiple agency RFPs
- Community needs assessment and mobilization, as well as EBP implementation, requires proactive Technical Assistance

## Some Lessons Learned (cont.)

- Fix community readiness and infrastructure issues first
- Find a small number of things that work, and do them well
- Multi-year funding is necessary to get to stable effective services
- Tie funding to quality implementation and outcomes
  - objective criteria de-politicizes the process
- Build in evaluation for continuous quality improvement

## Thank You!

For more information on our research, contact:

#### Brian K. Bumbarger

Director, Evidence-based Prevention and Intervention Support Center (EPISCenter)

Penn State University

403 S. Allen St

State College, PA 16801

bkb10@psu.edu

(814) 865-2617

For more information on Pennsylvania's delinquency prevention initiatives, contact:

Michael Pennington

Director, Office of Juvenile Justice and Delinquency Prevention

Pennsylvania Commission on Crime and Delinquency

P.O. Box 1167 Harrisburg, PA 17108-1167

mpenningto@state.pa.us

(717) 265-8461