

RESOURCES

Selecting & Implementing Upstream Interventions within a System of Prevention

Karl Hill, PhD

Director, Prevention Science Program Professor, Psychology & Neuroscience Institute of Behavioral Science, University of Colorado Boulder

Pamela Buckley, PhD

Senior Research Associate Institute of Behavioral Science, University of Colorado Boulder Principle Investigator, Blueprints for Healthy Youth Development









PRESENTER BIO

Karl Hill, PhD



Dr. Karl G. Hill is director of the Prevention Science Program, Co-Principal Investigator of the Blueprints for Healthy Youth Development registry, and Professor of Psychology and Neuroscience at the University of Colorado Boulder. Dr. Hill's work over the last thirty years has focused on understanding two questions: What are optimal family, peer, school and community environments that encourage healthy youth and adult development? And how do we work with communities to make this happen?

Prior to CU Boulder, he worked for 23 years at the University of Washington as a professor and prevention scientist where he sought to understand the development and consequences of prosocial outcomes as well as antisocial behaviors such as drug use and dependence, crime, and gang membership, and the mechanisms of continuity and discontinuity in these behaviors across generations. In addition, his work has focused on developing and testing interventions to shape these outcomes, and on working with communities to improve youth development and to break intergenerational cycles of problem behavior.









PRESENTER BIO

Pamela Buckley, PhD



Dr. Pamela Buckley is a senior research associate in the Institute of Behavioral Science at the University of Colorado Boulder. She is also Principal Investigator of Blueprints for Healthy Youth Development, a globally recognized registry of experimentally proven interventions promoting rigorous scientific standards for certification that serves as a resource for governmental agencies, foundations, community organizations, and practitioners seeking to make informed decisions about their investments in preventive interventions.

Her expertise is in testing social programs designed to prevent antisocial behavior and promote a healthy course of youth development. She has extensive knowledge of the prevention science literature and expertise in the design and implementation of evaluation research projects.

A former school psychologist, she also has considerable experience consulting in classrooms with teachers, students, families, and communities.









2022 HIDTA Prevention Summit October 2022



Selecting and Implementing Upstream Interventions within a System of Prevention

Karl G. Hill Professor, Psychology & Neuroscience Director, Prevention Science Program CU Boulder

Karl.Hill@Colorado.edu

Talk Overview

- My Background



- Basic Prevention Principles (relevant to Community Based Prevention)
- Community Based Prevention
- Discussion



2022 HIDTA Prevention Summit October 2022



Selecting and Implementing Upstream Interventions within a System of Prevention

Karl G. Hill Professor, Psychology & Neuroscience Director, Prevention Science Program CU Boulder

Karl.Hill@Colorado.edu

About 75 people working across 10 projects



Co-Director Blueprints for Healthy Youth Development



A web-based registry of *experimentally proven programs* (EPPs) promoting the most rigorous scientific standard and review process for certification.



www.blueprintsprograms.org

ng a comprehensive, trusted registry of evidence-based interventions (programs, practices and policies) that are

My story: from treatment to prevention

I started my career in the 80s in treatment. It was a fabulous and important job, but over time I became frustrated because no matter how good a job I did, I was not stopping the pipeline of new people through my door.



I became convinced that we needed to work upstream on youth development and problem prevention to prevent kids from getting involved in drugs and crime in the first place.



All of these factors influence this teen's addiction.



Seattle Social Development Project followed 808 kids from elementary school into midlife (still ongoing)

For 23 years I ran a Community longitudinal study of 808 School/Work kids followed from Peer Family elementary school into adulthood, exploring the family peer, school/work and neighborhood factors that affected their 10 11 12 13 18 27 33 35 14 15 16 21 30 24 development. 808 5th graders average 90% retention



We moved to CU Boulder in 2017



Karl G. Hill, PhD Director, Prevention Science Program Co-Principal Investigator, *Blueprints for Healthy Youth Development* Professor Psychology and Neuroscience Institute of Behavioral Science University of Colorado Boulder

Talk Overview

- My Background



- Basic Prevention Principles (relevant to Community Based Prevention)
- Community Based Prevention
- Discussion



What is Prevention Science



Karl G. Hill, PhD Director, Prevention Science Program Co-Principal Investigator, *Blueprints for Healthy Youth Development* Professor Psychology and Neuroscience Institute of Behavioral Science University of Colorado Boulder

400-350 BCE Aristotle Biology, Physics, Astronomy, Geology Hippocrates - Medicine







Think about it. Other sciences like biology, physics, astronomy, geology, medicine, etc. have been around for 2400 years!

That's a long time to develop knowledge.

1900 2000



What are the root causes of addiction and related problems?



Seattle Social Development Project followed 808 kids from elementary school into midlife (still ongoing)



RAI

Using data from our longitudinal studies we can "turn the clock back" and see what their childhood and adolescence was like.

What distinguished who went down which pathway?



At some point we all start out pretty much the same.

What happens along the way to push kids off track?





The <u>root causes</u> of prosocial and problematic development reach across all domains.









What are the one or two big causes that we can focus on to reduce addiction?

Root Causes

Risk and protective factors exist across every area of life: family, peer, school, neighborhood and individual characteristics.

Hawkins.	Catalano	&	Miller	(1992)
110,001,000,000,000,000,000,000,000,000	catalano	\sim	1 VIII CI	(1)))

RISK FACTORS Risk factors increase the likelihood young people will develop health and social problems.	DOMAIN	PROTECTIVE FACTORS Protective factors help buffer young people with high levels of risk factors from developing health and social problems.
 Low community attachment Community disorganisation Community transitions and mobility Personal transitions and mobility Laws and norms favourable to drug use Perceived availability of drugs Economic disadvantage 	COMMUNITY	 Opportunities for prosocial involvement in the community Recognition of prosocial involvement
 Poor family management and discipline Family conflict A family history of antisocial behaviour Favourable parental attitudes to the problem behaviour 	FAMILY	Attachment and bonding to family Opportunities for prosocial involvement in the family Recognition of prosocial involvement
 Academic failure (low academic achievement) Low commitment to school Bullying 	SCHOOL	Opportunities for prosocial involvement in school Recognition of prosocial involvement
Rebelliousness Early initiation of problem behaviour Impulsiveness Antisocial behaviour Favourable attitudes toward problem behaviour Interaction with friends involved in problem behaviour Sensation seeking Rewards for antisocial involvement	PEER / INDIVIDUAL	• Social skills • Belief in the moral order • Emotional control • Interaction with prosocial peers





Anti-Drug Educational Campaigns are important, but alone are not sufficient to prevent use and addiction.

These campaigns need to be part of a **comprehensive strategy** to address the root causes of addiction across multiple domains.







However, they add up.

In how many domains was the child in the worst 25% during adolescence?

Cumulative Risk

Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk





Source: Institute of Medicine (2009). Preventing Mental, Emotional and Behavioral Disorders Among Young People. O'Connell, Boat & Warner (eds.) Washington DC: National Academy Press A prevention strategy that focuses only on youth at high-risk will fail to "move the needle" on substance use disorder in a community.



Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk



Predicting Substance Use Disorder in Adulthood from Adolescent Risk





With "selective" or "indicated" interventions you try to identify those individuals who are at greatest risk of addiction.

In Universal Prevention, we seek to turn down the heat.



Shifting the Curve



Distribution of problems in a population of youths.

Shifting the Curve



Small shifts in the population result in large changes in the "tails".

What have we learned in the last 30 years?

- 1. The causes of disordered and of positive development <u>reach across</u> <u>all areas of influence</u>: family, school, peer, community, individual.
- 2. These same factors affect a <u>wide range of outcomes</u>.
- 3. Each of these causes has about the same impact, however together they have a large <u>cumulative</u> impact.
- 4. For a number of reasons (e.g., the prevention paradox & shifting the curve) a strong community prevention strategy embeds a <u>selective</u> intervention within a <u>universal</u> strategy. If funds are limited, do not neglect Universal.
- 5. Getting communities to select and implement tested, effective interventions takes planning, but we have many successes.

Talk Overview

- Basic Prevention Principles
- Community Based Prevention
- What do we still not know?

The Olive of Prevention



Unfortunately, most of what has historically been implemented in communities to prevent substance abuse and other problems has little to no evidence of effectiveness.

Community-Based Prevention

Two general sorts of communitybased prevention strategies

- 1) Population Strategies
- 2) Community Mobilization



Community-Based Prevention

Two general sorts of communitybased prevention strategies

1) Population Strategies

Seek to **change features of communities** as a whole, for example:

- Policy changes: smoking/vaping/ cannabis laws
- Improving access to health care
- Improved access to recreational spaces
- Community wide health initiatives

Changes in tobacco marketing example: point of sale display bans

The "Power Wall"



Changes in tobacco marketing example: point of sale display bans

The "Power Wall"



Global evidence on the effect of point-of-sale display bans on smoking prevalence

Yanyun He,¹ Ce Shang,² Jidong Huang,³ Kai-Wen Cheng,^{1,2} Frank J Chaloupka^{1,2}

ABSTRACT

Background Since Iceland became the first country to

displays in 2001, 20 countries have implemented POS display bans as of 2016. This study examined the effect that POS display bans have on smoking prevalence.

Methods Data were sourced from Euromonitor International and the WHO MPOWER package for 2007–2014 from 77 countries worldwide. generalised linear models with country and year fixed effects were estimated to analyse the effect of POS display bans on smoking prevalence.

Results Having a POS display ban reduced overall adult daily smoking, male smoking and female smoking by about 7%, 6% and 9%, respectively.

conclusions Having a FO3 display ban is likely to reduce smoking prevalence and generate public health benefits. He, Yanyun, Shang, Ce, Huang, Jidong, Cheng, Kai-Wen, & Chaloupka, Frank J. (2018). Global evidence on the effect of point-of-sale display bans on smoking prevalence. *Tobacco Control*, 27(E2), E98-E104. doi:10.1136/tobaccocontrol-

2017-053996

Changes in tobacco marketing example: point of sale display bans



Ford, A., et al. (2018). Tobacco Induced Diseases

Population Strategies to Reduce Smoking

Smoking restrictions

- Point of Sale Displays
- In restaurants
- On airplanes
- Vending machines
- Labeling
- Advertising constraints
- Taxation

FIGURE 1. Annual adult per capita cigarette consumption and major smoking and health events — United States, 1900–1998



Sources: United States Department of Agriculture; 1986 Surgeon General's Report.

Community-Based Prevention

 Two general sorts of community- based prevention strategies 1) Population Strategies 	 Seek to change features of communities as a whole, for example: Policy changes: smoking/vaping/ cannabis laws Improving access to health care Improved access to recreational spaces Community wide health initiatives
2) Community Mobilization	Seeks to involve members of the
Population Strategies can be effective, but are not sufficient to get a handle on addiction.	 community in the planning, development, implementation, and evaluation of programs and strategies. Actual interventions may be at any level: individual, family school or community

Community Mobilization



- You're not necessarily mandating laws across a whole community.
- You're <u>mobilizing communities</u> <u>to work together</u> to implement tested, effective prevention programs.

Communities That Care (CTC)

www.CommunitiesThatCare.net



CTC is NOT an intervention.

It is <u>a strategy</u> to guide communities through the steps of science-based prevention.

Community Mobilization: Example Communities that Care (CTC)



Communities That Care (CTC)

www.CommunitiesThatCare.net



CTC is NOT an intervention.

It is <u>a strategy</u> to guide communities through the steps of science-based prevention.





Champions

Juvenile Court



Superintendent

Police Chief



Key Leaders



Children's Services CTC Community Coordinator



CTC Board



Community Members



Community Youth













Community Risk Profile 10th Grade













How do community members know what works?

Define clear, measurable outcome

Select tested, effective policies and programs



Blueprints!

Blueprints

FIND PROGRAMS BLUEPRINTS CERTIFICATION NEWS & EVENTS FAQS ABOUT BLUEPRINTS



A web-based registry of *experimentally proven programs* (EPPs) promoting the most rigorous scientific standard and review process for certification.

The Blueprints for Healthy Youth Development mission is to promote interventions that work. We do this by providing a comprehensive, inutated registry of evidence-based interventions (programs, practices and policies) that are effective in reducing antisocial behavior and promoting a healthy course of youth development and adult maturity. We als advoce the free reliefness-based interventions for the and enablest and renders publications on the importance of advortes advoce the free reliefness-based interventions for the and enablest and renders publications on the importance of advortes for the providence of advortes of the second se

www.blueprintsprograms.org



Blueprints What is Blueprints for Healthy Youth Development?



Goal:

To provide communities with a trusted guide to interventions that work.

www.BlueprintsPrograms.org



Blueprints Each Certified Intervention has a Fact Sheet including

- Program Name and Description
- Developmental/Behavioral Outcomes
- Risk/Protective Factors Targeted
- Risk/Protective Factors Impacted
- Contact Information/Program Support
- Target Population
- Program Rating and Effect Size
- Operating Domain: Individual, Family, School, Community

- Logic/Theory Model
- Program Costs: Unit Costs, Start-Up, Implementation, Fidelity Monitoring, **Budget Tool**
- Cost Benefit/Return On Investment (When Available): Net Unit Cost-Benefit, **Benefits**
- Funding Overview, Financing Strategies
- Program Materials
- References

Programs with <u>little or weak evidence</u> have been, <u>and still are</u>, very popular.





Sloboda and colleagues (2009) found that Taking Charge of Your Life (The new DARE) participants had worse outcomes than control group participants who did not receive the program.

Programs with <u>little or weak evidence</u> have been, and still are, very popular.

Military Schools and Boot Camps in Colorado State

Home - Military Boarding Schools for Troubled Boys

Military Boarding Schools for Troubled Boys near Greeley, CO

Military Boarding Schools for troubled boys of Greeley, CO are and vlable alternatives to boot camps or wilderness therapy programs. Military boarding schools utilize a focus on discipline, physical training, military science (leadership training), and academics. Military boarding schools for troubled boys are designed to redirect and restore the lives of the struggling teens. Restoring Troubled Teens represent the top therapeutic programs throughout the country.

For immediate help researching military boarding schools options in Greeley, CO please contact our Educational Consultants. We can help you find the perfect military style program option. We have coached thousands of parents, supporting them through their decision making process. Our staff are standing by to help you assess your situation. Our job is to save you thousands of dollars and years of heartache. Call 866-452-6016





"Correctional" military style boot camps when evaluated showed no effect on crime or substance use.

Programs with <u>little or weak evidence</u> have been, <u>and still are</u>, very popular.

- Information Dissemination (telling kids about the dangers of drugs)
- Boot Camps
- D.A.R.E.
- Scare Tactics & Moralistic Appeals
 - "Scared Straight" "This is your brain on drugs"
- Punitive and Zero Tolerance Approaches
- After school activities with limited supervision and absence of more potent programming
- Delinquent Group Peer Counseling and Mediation
- Gun Buyback Programs
- Firearm Training

Howell, James C. (2003) "What Doesn't Work in Preventing and Reducing Juvenile Delinquency." In Preventing and Reducing Juvenile Delinquency: A Comprehensive Framework. Thousand Oaks, CA: Sage Publications., 130-147.

Programs with <u>little or weak evidence</u> have been, <u>and still are</u>, very popular.

Communities must work together to implement programs that have been proven to work!

Like what?



- Nurse-Family Partnership
- Prenatal through age 2yrs
- Selective
- Parent training for firsttime, low-income Moms









Regarding opioid & other illicit drug prevention specifically, the Blueprints Registry lists 24 certified prevention programs that have shown positive reductions in illicit drug outcomes.





CTC is Scaling Up Across the US and Globally



www.CommunitiesThatCare.net

CTC is currently successfully operational in

- over 130 communities in the US
- dozens of communities around the world...
- including Germany, Sweden,
 Denmark, The Netherlands, the
 United Kingdom, Croatia, Austria,
 Switzerland, Canada, Mexico,
 Colombia, Chile, Panama and
 Australia

Talk Overview

- Basic Prevention Principles
- Community Based Prevention
- Discussion

If we have effective interventions for youth development...

and registries documenting what works...

why aren't they being used?







Spending Priorities

The US is spending less on prevention than any other drug control strategy.

Source: National Drug Control Budget: FY 2023 Funding Highlights. Washington, DC: Office of National Drug Control Policy, March 2022.

Spending Priorities

29% of the Federal Budget goes to Discretionary Spending

Spending Priorities

Over half of US discretionary spending goes to the military.

Spending Priorities (my own 2¢)

In accumulated wealth, the US is the richest country on earth.

We should prioritize creating healthy places for kids to grow up and live.

Current Prevention Challenge: Dissemination (Marketing)

- Local
- •State
- National
- International

- Publications
- Press
- Social Media

Great Chicago Fire, 1871 – 17,000 buildings destroyed

Great San Francisco Fire, 1906 – 30,000 buildings destroyed

Following major devastating fires in America we established a fireprevention infrastructure.

In America, our house is on fire.

We need to develop a prevention infrastructure in America.

Shapiro, V. B., & Bender, K. (2018). Seven Action Steps to Unleash the Power of Prevention. *Journal of the Society for Social Work and Research*, *9*(4), 499-509. doi:10.1086/700395

Take-home points for today

- 1) Addiction and related outcomes develop through a range of family, peer, school and neighborhood influences.
- 2) These influences span from prenatal to late life.
- 3) To get ahead of the curve and actually prevent addiction and related problems before they happen we must focus on upstream prevention.
- 4) Most of what is currently implemented in America as "prevention" either doesn't work or is untested.
- 5) Registries of "what works" exist and should be used.

Take-home points for today

- 6) These preventive interventions are cost-effective: more than paying for themselves in reduced arrest, adjudication, incarceration & treatment costs, and improved academic completion and occupational functioning.
- Community Mobilization strategies such as Communities That Care also exist to guide communities through the prevention planning and implementation process.
- 8) Collectively, collaboratively, we can cost-effectively improve the lives of people in our communities.

2022 HIDTA Prevention Summit October 2022

By working together, we can prevent substance abuse and related problems before they happen.

2022 HIDTA Prevention Summit October 2022

Selecting and Implementing Upstream Interventions within a System of Prevention

Karl G. Hill Professor, Psychology & Neuroscience Director, Prevention Science Program CU Boulder

Karl.Hill@Colorado.edu

