

# Evidence Based Strategies to Prevent Addiction: Perspectives from the National Institute on Drug Abuse

Amy B. Goldstein, PhD

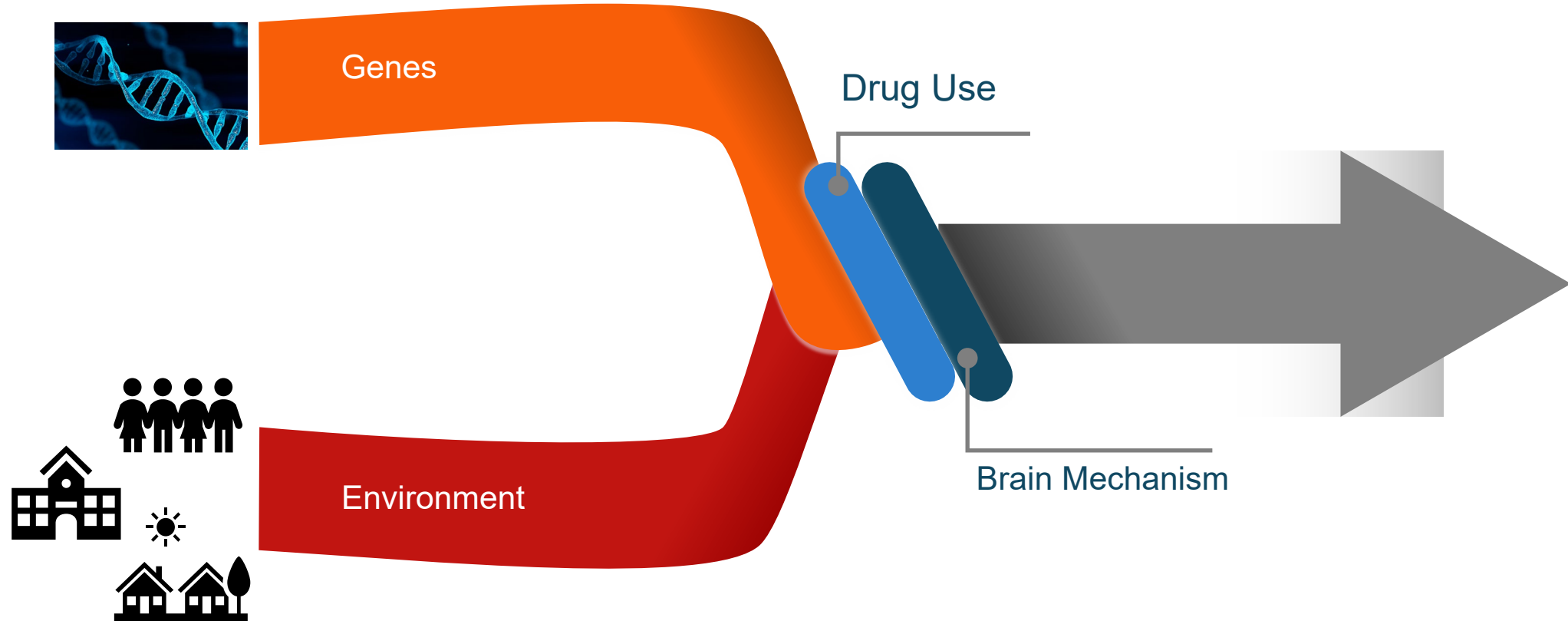
Shannon E. Nicks, PhD MPH

May 19, 2026

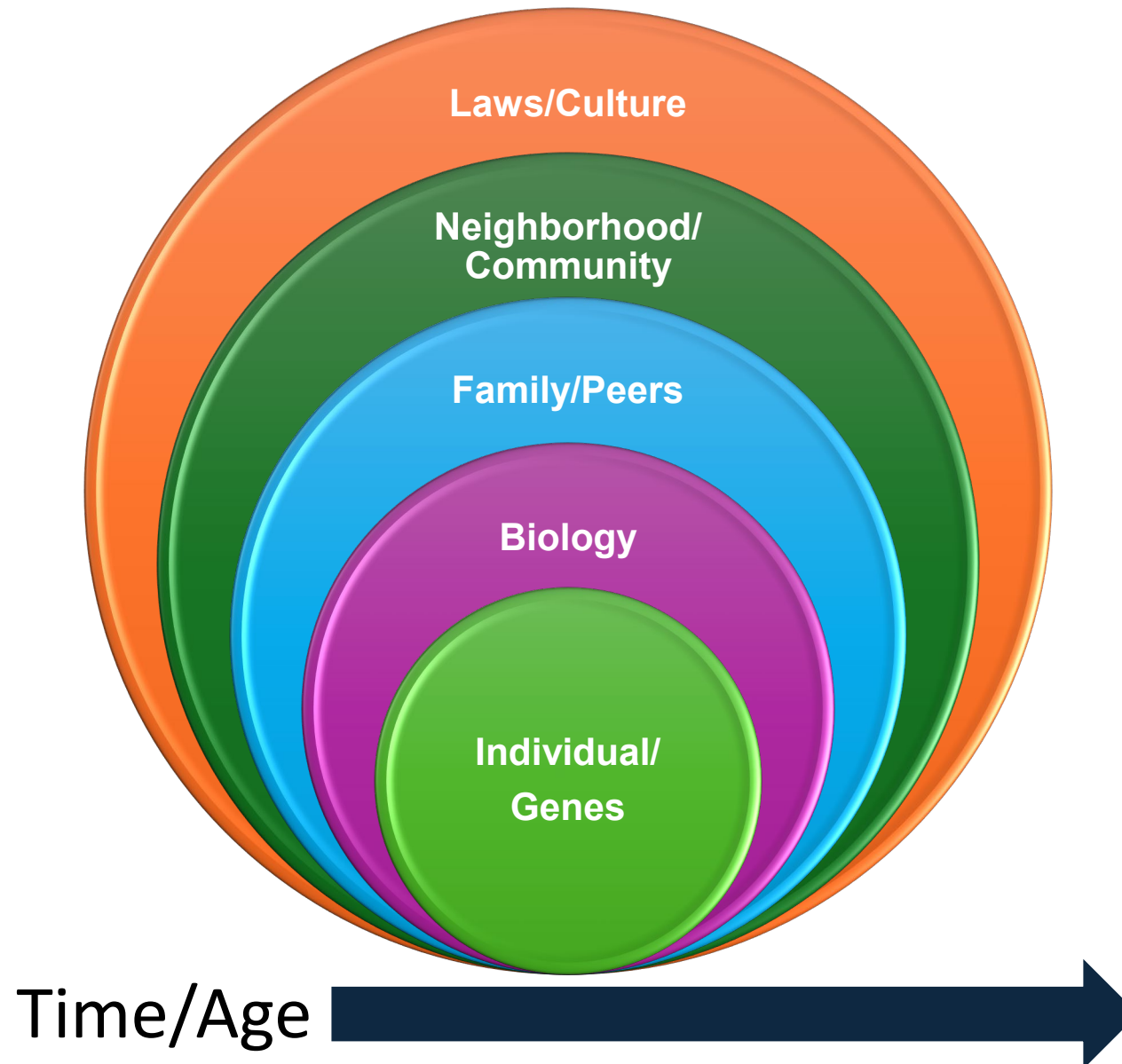
# OVERVIEW OF SUBSTANCE USE PREVENTION



# Addiction involves *multiple* factors

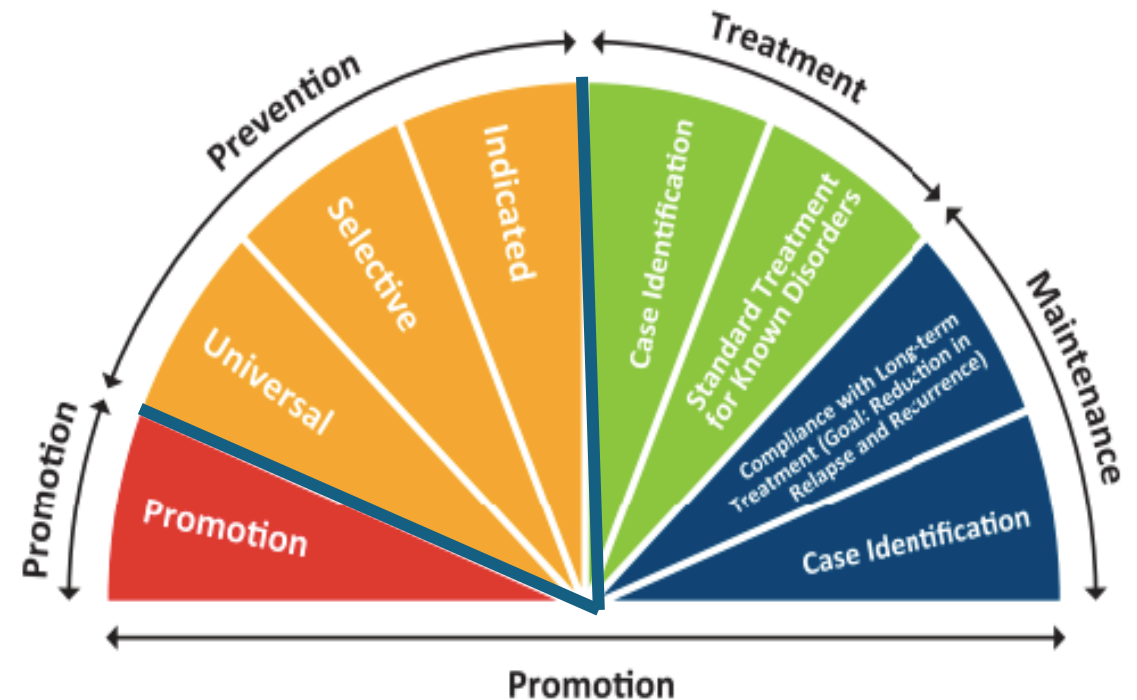


# There are multiple environmental influences

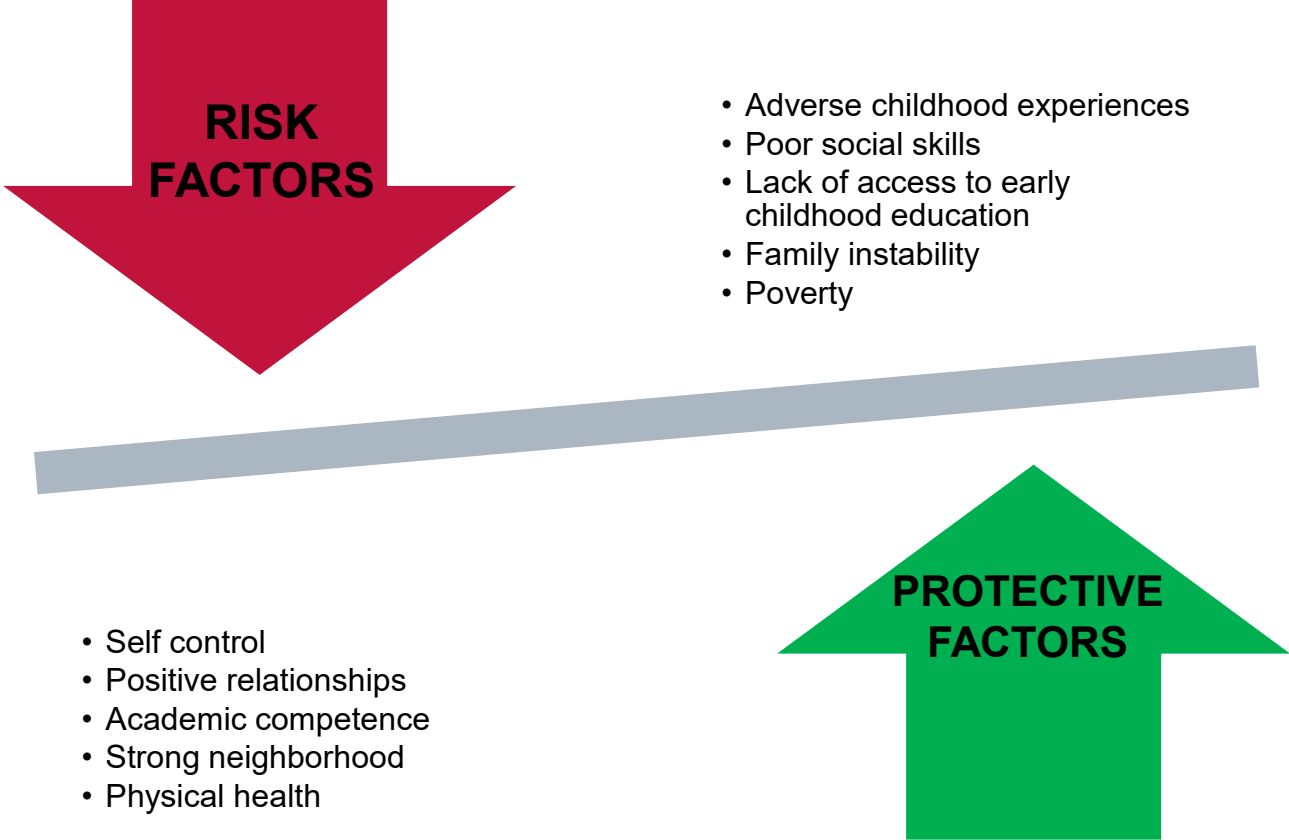


# Key Definitions

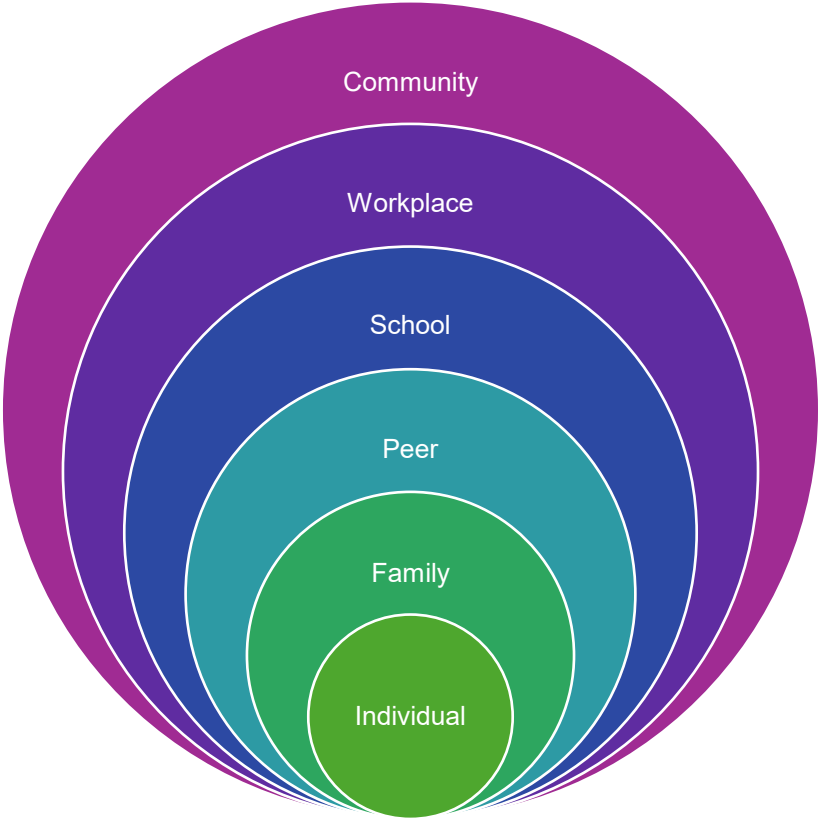
- **Primary prevention:** strategies that prevent onset of a new health condition by decreasing risk factors and enhancing protective factors
- **Secondary prevention:** strategies to prevent progression of a health condition
- **Behavioral Health:** mental health and substance use (alcohol, tobacco, other drugs)
  - Prevention of initiation of ATOD use, progression from use to misuse
  - Prevent the development or worsening of mental illness
  - Prevent suicide
- Definition of prevention varies for disease; e.g., smoking cessation is considered both treatment of substance use disorder and primary prevention of cancer



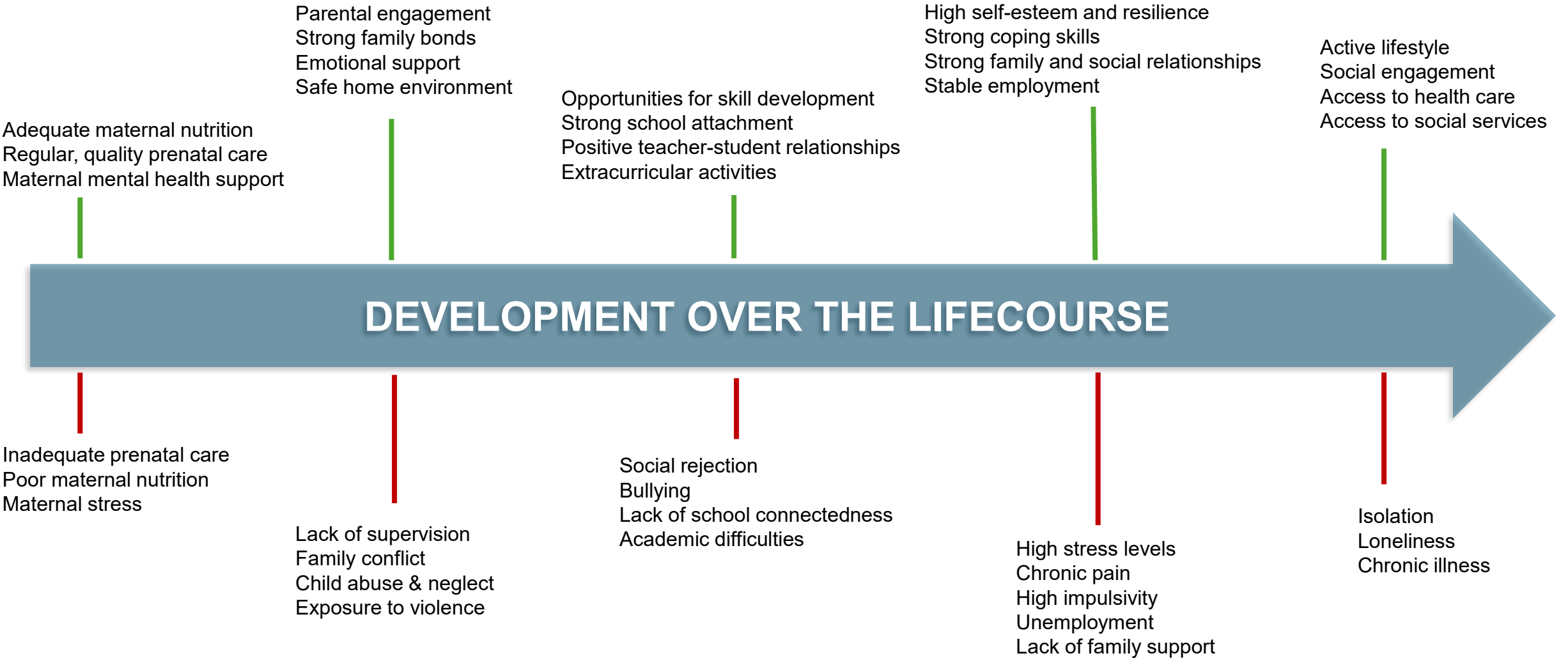
# How Prevention Interventions Work



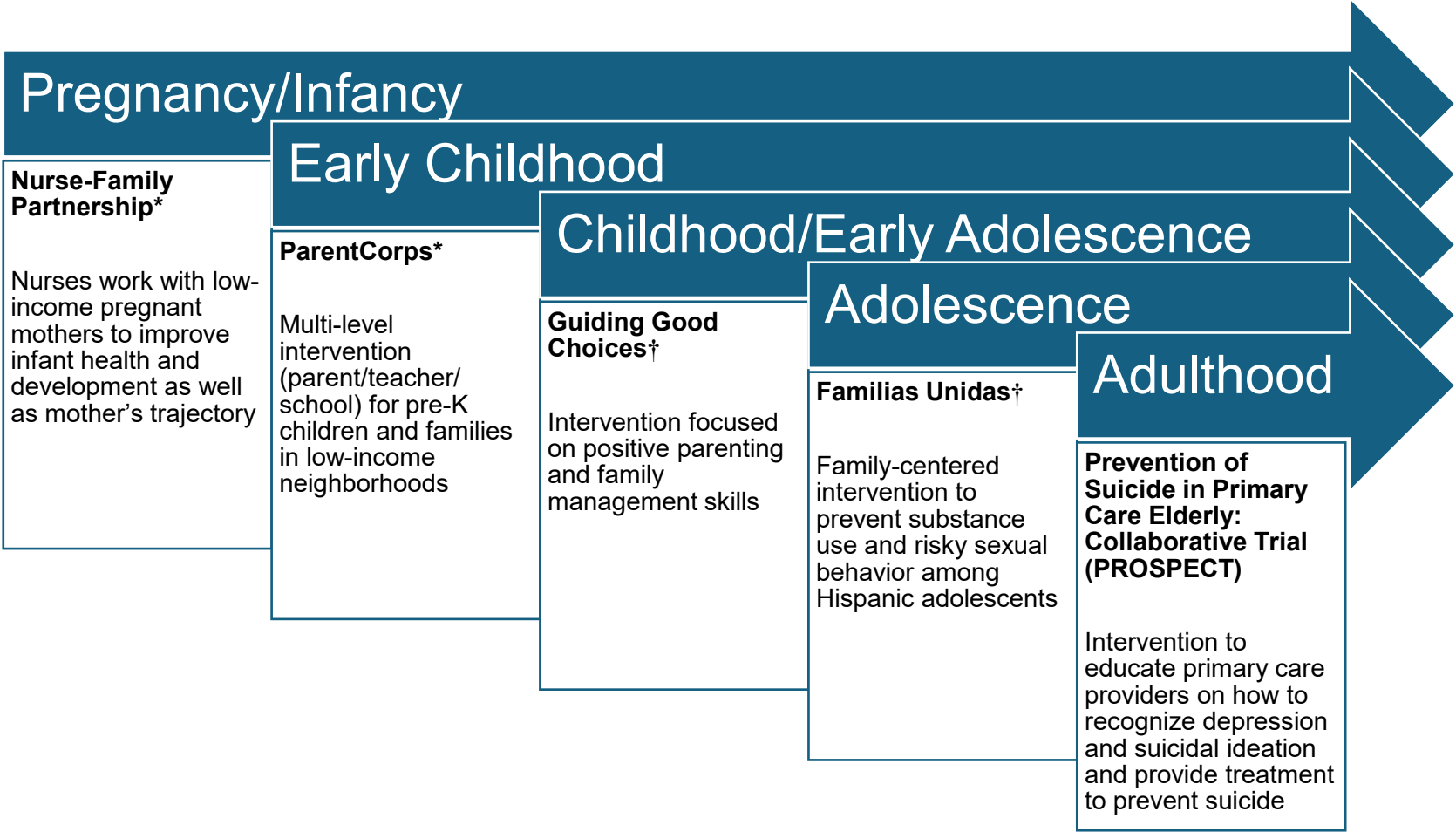
## Sphere of Influence



# Protective Factors



# Examples of Effective Behavioral Health Disorder Prevention Programs That Received NIH Funding

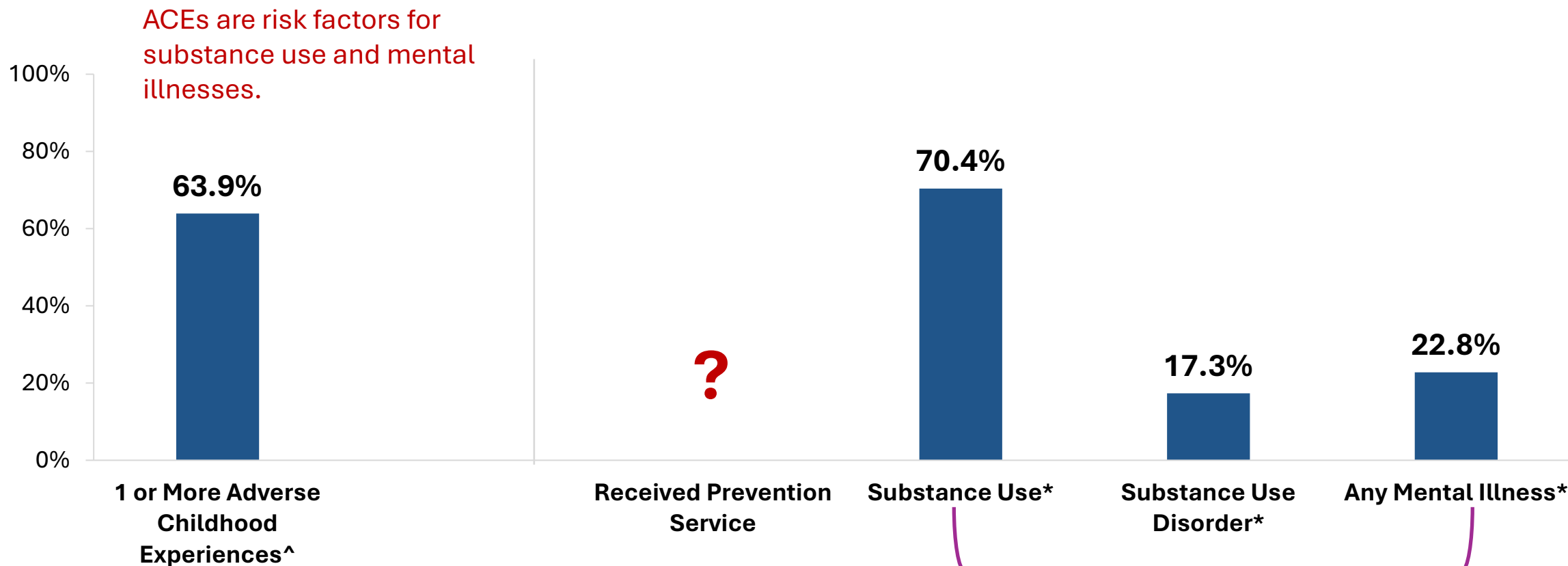


\*Certified Model Program, Blueprints for Healthy Youth Development;

†Well-supported, Title-IV-E Prevention Services Clearinghouse

# Gaps in Behavioral Health Disorder Prevention Infrastructure

## U.S. Adults, Ages 18+



^E.A. Swedo, et al. (2023). Data from the Behavioral Risk Factor Surveillance System, 2011-2020;

\*2021 National Survey on Drug Use and Health; Percentages include individuals who reported alcohol or drug use or who met criteria for an alcohol or drug use disorder in the past year. Does not include tobacco use/use disorder.

How much could these be reduced if there were greater access to and availability of prevention services?

# Why aren't prevention interventions implemented?

SUD is the only life-threatening disease where primary prevention is not billable to Medicaid

...no state line item in the budget for prevention...we rely on grants.

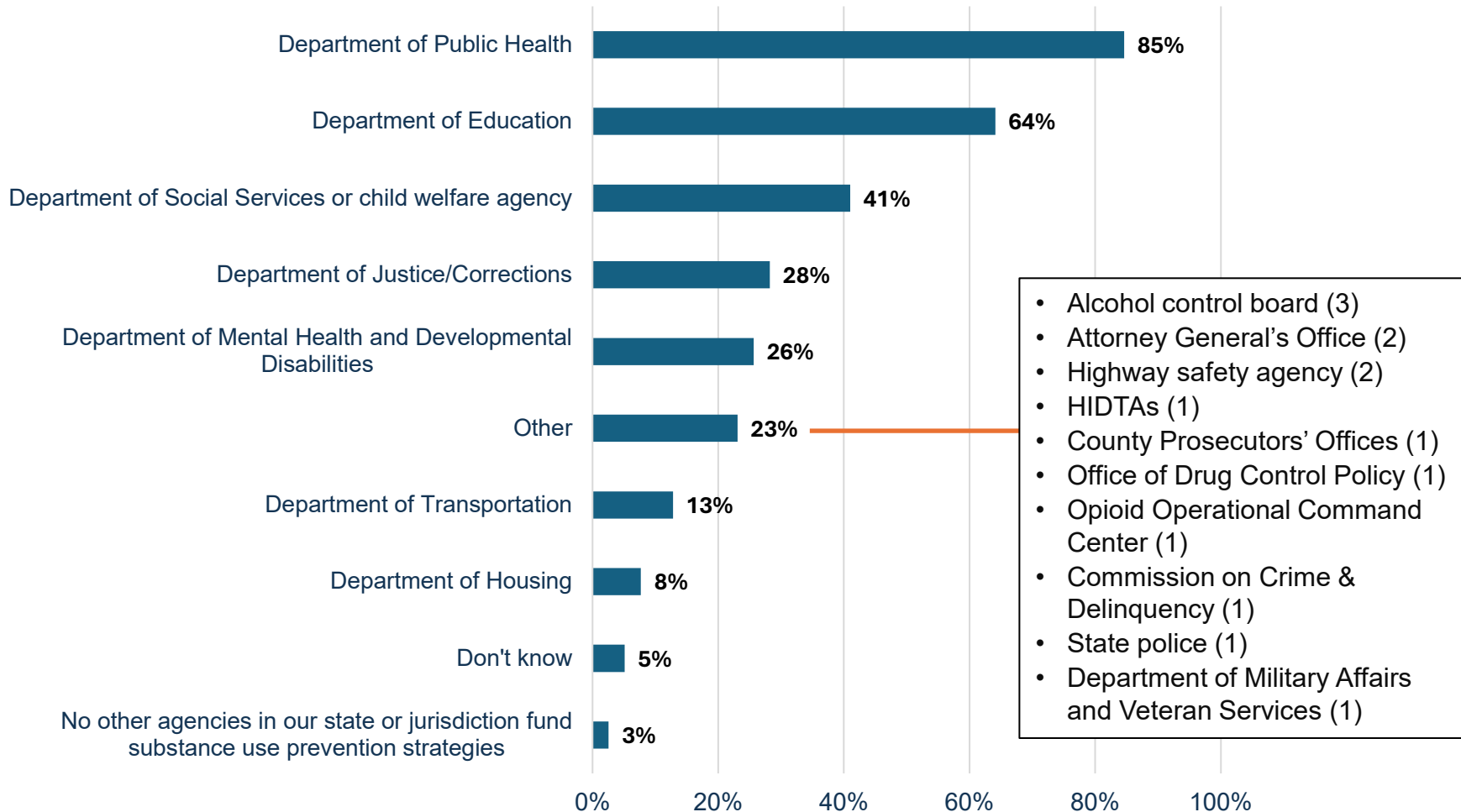
Q: What is the average length of time a prevention specialist stays in the field?

A: 2-3 years (life cycle of funding)

...siloeed funding is a problem even though we have a strong prevention network...

...new grantees at the local level have ideas but not the infrastructure, and we don't have the funds to help them build infrastructure...

# There is No Single Funding Agency for Prevention in States



**Many sources of funding are federal grant programs with different:**

- ✓ Priorities
- ✓ Reporting requirements
- ✓ Deliverables
- ✓ Timelines
- ✓ Staffing requirements
- ✓ Goals
- ✓ Accountability

We want communities to implement evidence-based programs, but identifying them through registries is not straightforward...there are **~35 registries**, all with different criteria and rating systems, evaluating the same or similar programs

- National Registry of Evidence-Based Programs and Practices (*currently archived*)
- SAMHSA Evidence Based Practice Resource Center
- OJJDP Model Programs Guide
- Suicide Prevention Resource Center
- California Evidence-Based Clearinghouse for Child Welfare
- Evidence Based Practices for Substance Use Disorders
- Blueprints for Health Youth Development
- Child Trends/What Works
- Youth.gov
- What works Clearinghouse
- Effective Child Therapy: Evidence Based Mental Health Treatment for Children and Adolescents
- Practice Wise
- Home Visiting Evidence of Effectiveness
- Crimesolutions.gov
- Cochrane Database of Systematic Reviews
- Pew Results First Clearinghouse Database
- Collaborative for Academic, Social and Emotional Learning
- And so on....

(Magura, R01DA042036)

# Additional Challenges

- Existing evidence-based programs may be too large/complicated/expensive to be implemented and sustained
- EBPs may not be designed for the settings in which they are implemented
- Lack of sufficient dedicated workforce
- Financing may be inconsistent and insufficient
- No data tracking system

# PREVENTION RESEARCH

NATIONAL INSTITUTE ON DRUG ABUSE



# Prevention Research Branch

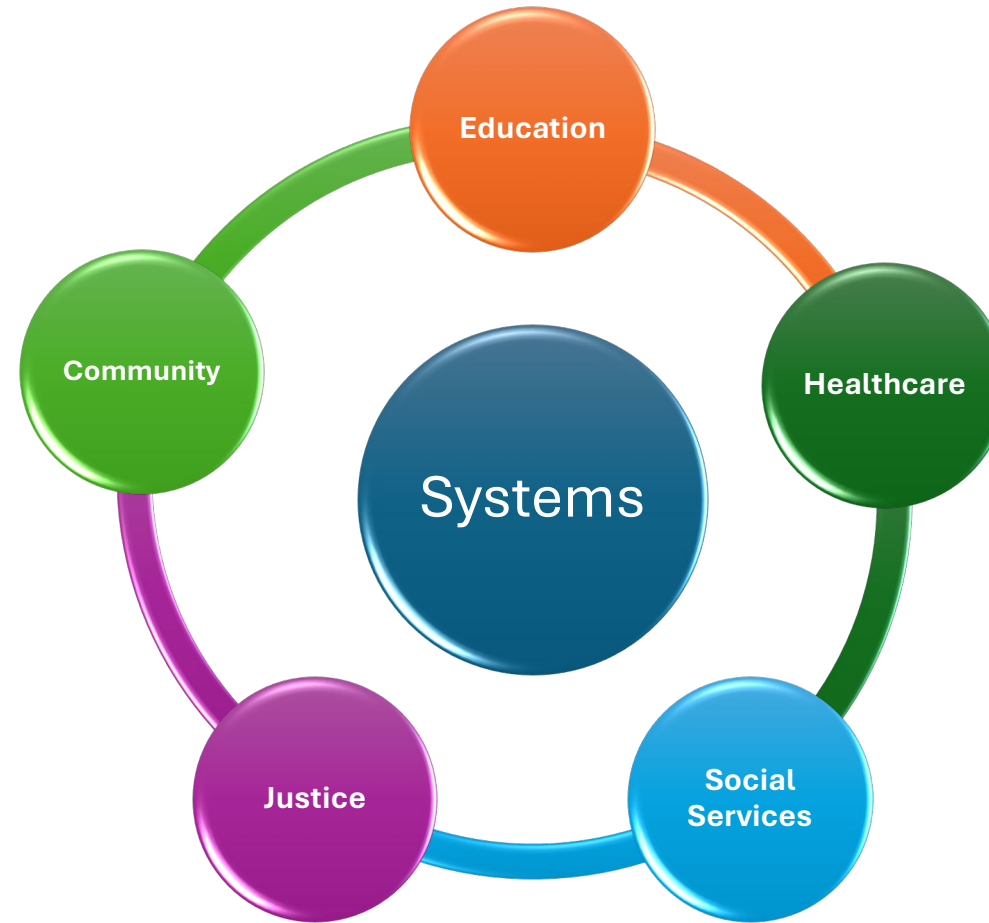
PRB supports place-based, community engaged research addressing gaps in the development, implementation, and sustainability of interventions to prevent substance use initiation and progression from use to misuse.

# Areas of research we support

- **Efficacy and effectiveness research** to examine intervention effects on initiation and progression of use
- Strategies to **minimize negative consequences**
- Research that develops and tests strategies, frameworks or tools to **disseminate, implement, and sustain** evidence-based interventions

# PRB

# PRB Portfolio Alignment



- Tobacco/ENDS
- Methodology
- HIV Prevention
- Translational Intervention Development

**Branch Chief:**  
Amy B. Goldstein, Ph.D.

**Deputy Branch Chief:**  
Shannon Gwin Mitchell, PhD.

**Program Officers:**  
Richard Jenkins, PhD  
Angela Lee-Winn, PhD  
Shannon E. Nicks, PhD

# SCIENTIFIC ACCOMPLISHMENTS

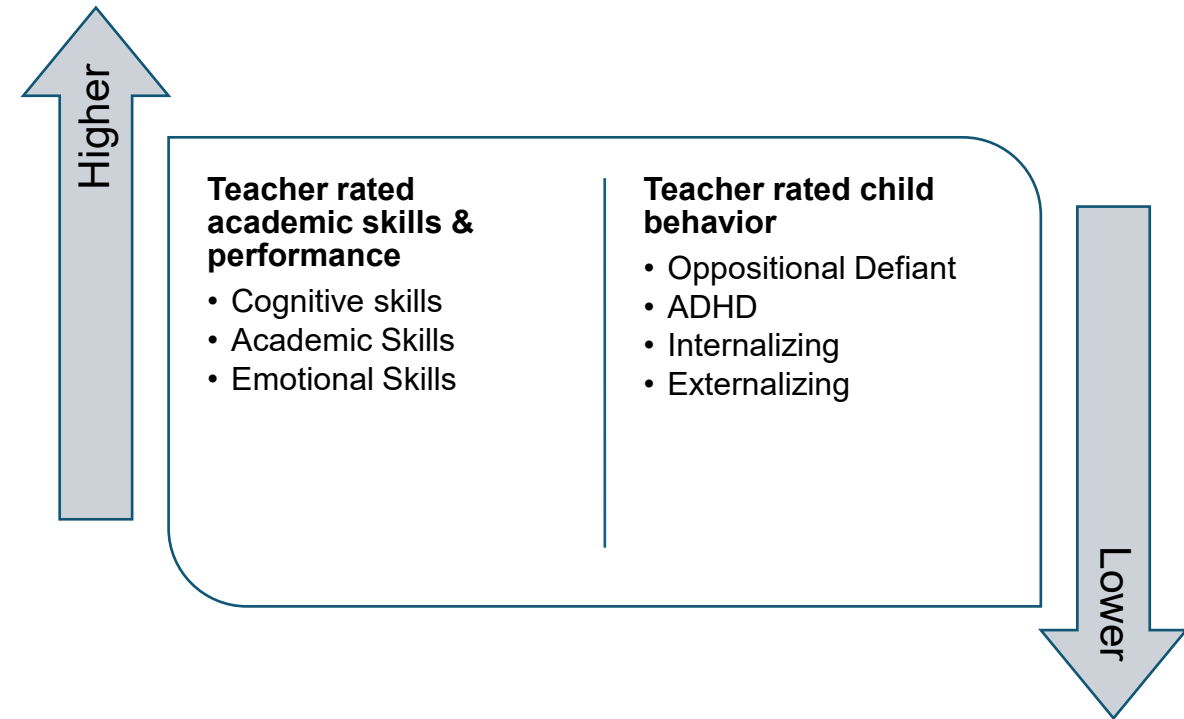
INFORMING FUTURE DIRECTIONS



# Universal prevention has intergenerational impacts

## Seattle Social Development Project<sup>1</sup>

- 5<sup>th</sup> grade students from high-risk elementary schools
- Teacher/staff development, child intervention, parent workshops
- **Parents who were in the intervention as children grow up to have children with lower youth self reported alcohol and drug onset, and...**



<sup>1</sup>Hill et al 2020

# Longitudinal studies help identify targets for future intervention

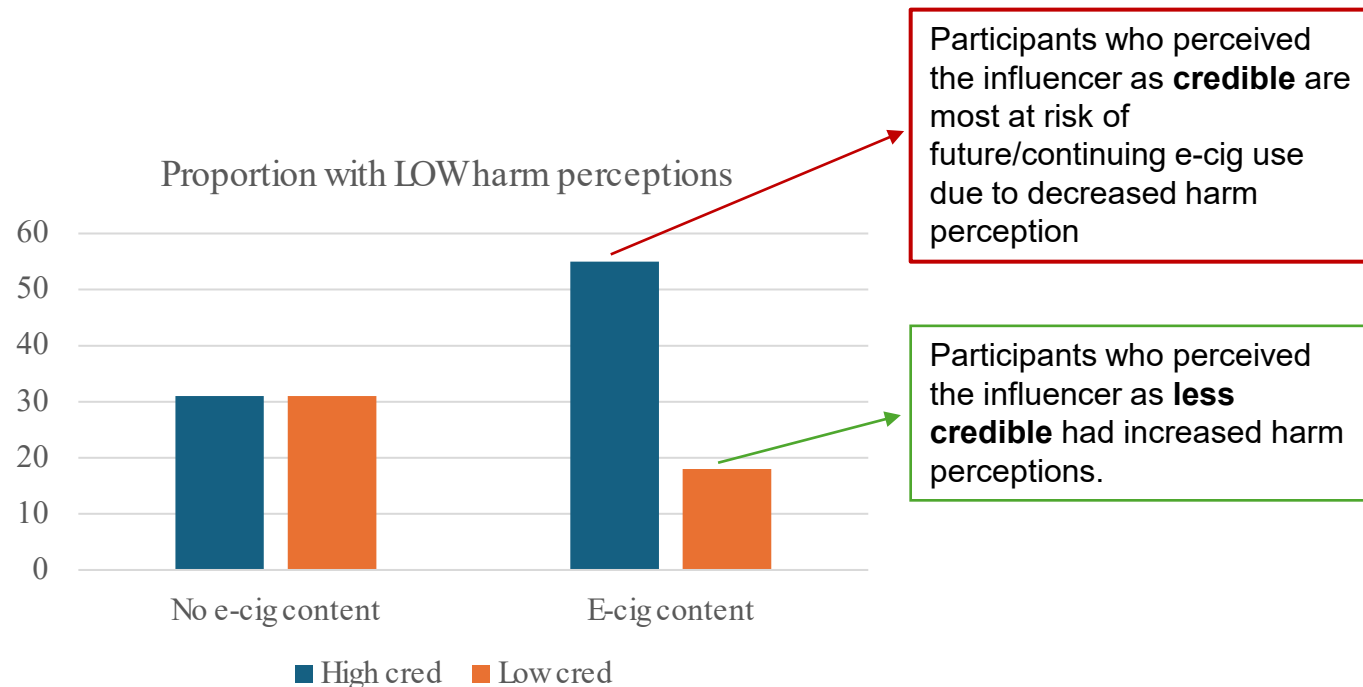
## *Opioid Prevention*<sup>1</sup>

- Longitudinal study of 580 youth (87% Black, 71% low SES) in Baltimore City
- Identified 4 trajectories of cannabis use
  - Adolescent onset of cannabis use was associated with opioid misuse in young adulthood
  - Those who chronically used cannabis were **8x more likely to misuse prescription opioids** and almost **5x more likely to use heroin** compared to non-cannabis users
- ***Implication: Adolescents using cannabis are a priority population for opioid prevention programs***

<sup>1</sup>Reboussin et al. 2020

# Social media is an important setting for SU prevention<sup>1</sup>

- Assessed impact of social media posts from micro influencers on perceived credibility, harm perceptions of and susceptibility to use e-cigarettes
- Impact of e-cig promotion on social media depends on views of influencer credibility
- Developing **credible counter-messaging** campaigns may be most effective way of ameliorating effects of industry social media marketing
  - **Implication: target the minority at risk – those that view the e-cig / health content as credible**

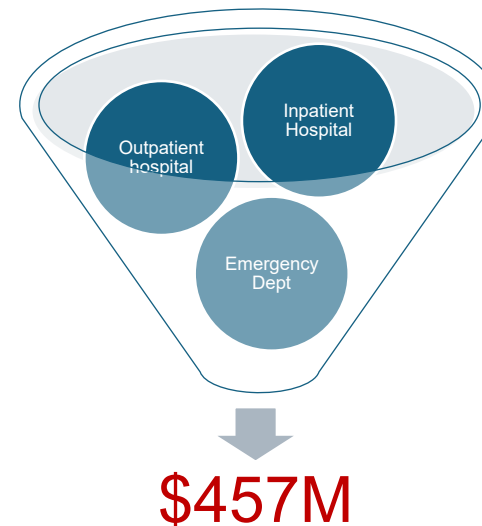


<sup>1</sup>Vassey et al 2025

# Screening and referral to prevention is a sound investment<sup>1</sup>

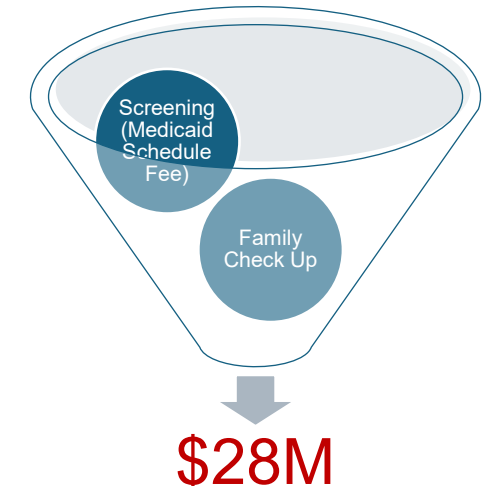
- Investigated potential cost savings of screening and referral to prevention in primary care settings and explored provider implementation barriers and facilitators
- **Cost of screening with family-based prevention was <10%** of hospital charges for risky behaviors
- **Implication: Use research to make the case to payors and providers for screening and prevention implementation**

Cost of Risky Behaviors\*



\*Risky behaviors = sexual activity, substance use, psychiatric disorders (conduct)

Cost of SRP

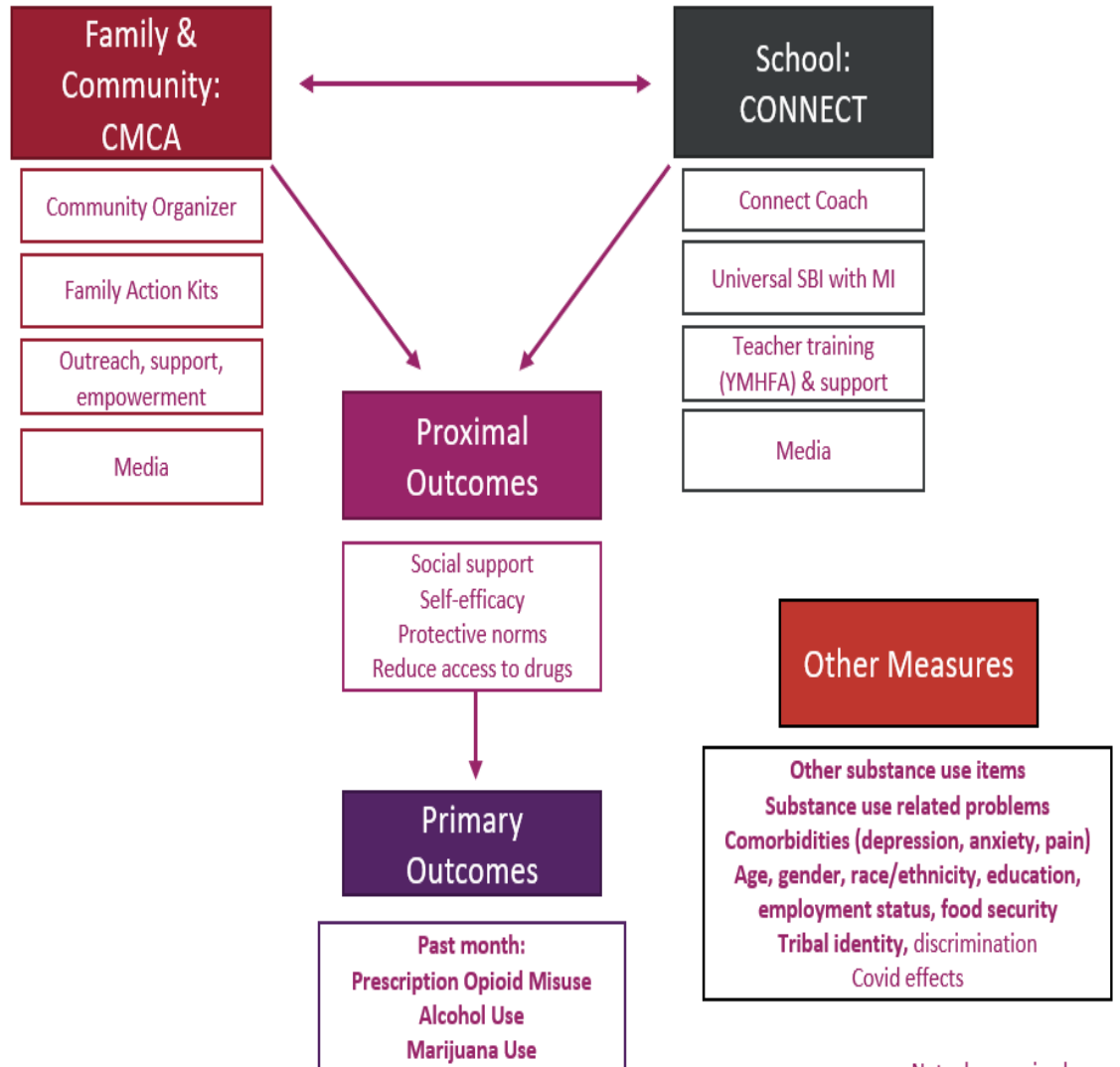


<sup>1</sup>Rydenour et al. 2022

# Community engagement is critical for SU prevention<sup>1</sup>

## CONNECT Intervention<sup>1</sup>

- Combined school and family drug use preventive intervention for rural, low resource, and tribal communities
  - CONNECT Kits
    - ▶ 9 kits mailed to caregivers over 3 years
    - ▶ ~500 families
    - ▶ Media campaign
- “The intervention **effectively prevented...typical escalation...of all 4 primary outcomes**, including **past 30-day frequency of alcohol use, binge drinking, cannabis use, and prescription opioid misuse.**”



<sup>1</sup>Komro et al 2025

# Expediting research → practice

## *Just Care for Families*

- Intervention for families involved in or at-risk for involvement with the child welfare system
  - Continuum of care model that depends on **building community partnerships**
  - Addresses a continuum of family needs within **6 core components**:
    - parenting
    - substance use
    - mental health
    - systems navigation
    - community building
    - addressing basic social needs (e.g., food insecurity)
- Dr. Lisa Saldana helped to launch the intervention at 5 clinics in the state of Oregon
- The intervention is **paid for by Medicaid**, and the state of Oregon has created a **braided funding model to support non-reimbursable intervention components**






# HEAL Preventing OUD Vision

Healthcare organizations and public systems will be able to make evidence-based preventive intervention services accessible to all persons who experience risk for opioid and other substance misuse or disorder.

## **Research in 4 strategic areas to prevent opioid use and use disorder:**

- ✓ Risk identification
- ✓ Social and environmental factors
- ✓ Intervention development
- ✓ Dissemination, implementation, scale up and sustainability

# Sample findings from HEAL Preventing OUD



International Journal of Drug Policy  
Volume 130, August 2024, 104522

Research Paper

## Higher unemployment benefits are associated with reduced drug overdose mortality in the United States before and during the COVID-19 pandemic

Silvia S. Martins<sup>a</sup>, Luis E. Segura<sup>a</sup>, Megan E. Marziali<sup>a</sup>, Emilie Bruzelius<sup>a</sup>, Natalie S. Levy<sup>a</sup>, Sarah Gutkind<sup>a</sup>, Kristen Santarin<sup>a</sup>, Katherine Sacks<sup>b</sup>, Ashley Fox<sup>c</sup>

Front. Child Adolesc. Psychiatry, 17 June 2024  
Sec. Interventions for Adolescent Mental Health  
Volume 3 - 2024 |  
<https://doi.org/10.3389/frcha.2024.1392541>

This article is part of the Research Topic  
Improving Impacts of Mental Health  
Treatment on Substance Misuse and Vice  
Versa

[View all 5 articles >](#)

## Adolescent-onset cannabis use and parenting young children: an investigation of differential effectiveness of a digital parenting intervention

Katherine A. Hails\*  
Anna Cecilia McWhirter  
Audrey C. B. Sileci  
Elizabeth A. Stormshak

Drug and Alcohol Dependence 276 (2025) 112921


Contents lists available at ScienceDirect

## Drug and Alcohol Dependence

journal homepage: [www.elsevier.com/locate/drugalcdep](http://www.elsevier.com/locate/drugalcdep)

### Cross sectional multi-sample study of nonfatal overdose in adolescents and young adults in the fentanyl era

Amy M. Yule<sup>a,\*</sup>, Amy S.B. Bohnert<sup>b,c</sup>, Ty A. Ridenour<sup>d,e,f</sup>, Barrett Montgomery<sup>c,g</sup>, Timothy E. Wilens<sup>g</sup>, Maureen Walton<sup>h</sup>, Erin E. Bonar<sup>h</sup>, Lisa Saldana<sup>i</sup>, Lynn E. Fiellin<sup>h</sup>, Danica K. Knight<sup>k</sup>, Yang Yang<sup>k</sup>, Jason Williams<sup>d</sup>, Sazid Khan<sup>d</sup>, Liann Tucker<sup>d</sup>, Feker Wondimagegnehu<sup>d</sup>, Kym Ahrens<sup>l</sup>



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Home » American Journal of Public Health (AJPH) » September 2025

### Primary Prevention of Drug Overdoses in Rural Low-Resource and Tribal Communities: A Cluster Randomized Trial

Kelli A. Komro PhD, MPH, Melvin D. Livingston PhD, Juli R. Skinner MSW, LMSW, Bethany J. Livingston BS, Terrence K. Kominsky PhD, Ashna Jagtiani MBBS, MPH, Caroline M. Barry PhD, MPH, Alexander C. Wagenaar PhD, Hannah L. F. Cooper ScD, Megan Harmon BA, Emily Ivanich MSPH, Hannah LaBounty LCSW, Ashley N. Gassaway MSW, and Sierra L. Talavera-Brown BS

# FUTURE DIRECTIONS

SUBSTANCE USE PREVENTION



# Strategies to address prevention challenges

## SHORT TERM STRATEGY

### CHALLENGE

No 'home' to scale up prevention

Limited funding for prevention

Silos



### SOLUTION

Fund research to develop interventions specific to systems

Fund research in partnership with 'end users'

Partnerships & Collaborations

## LONG TERM SOLUTION

NATIONAL ACADEMIES *Sciences Engineering Medicine*

**Blueprint for a National Prevention Infrastructure for Behavioral Health Disorders**

NATIONAL  
ACADEMIES

*Sciences  
Engineering  
Medicine*

## **Blueprint for a National Prevention Infrastructure for Behavioral Health Disorders**

NASEM ad hoc committee to develop a blueprint for building and sustaining an infrastructure for delivering prevention interventions for behavioral health disorders.

Sponsored by NIH, SAMHSA, CDC

# 'The Blueprint'



- A working document outlining the steps needed to take to make behavioral health disorder prevention **affordable**, **available** and **accessible** to all in the United States
- Areas to include:
  - Where to deliver prevention services
  - Data systems required to track prevention need, outcomes, and program delivery
  - Funding (costs and sources)
  - Workforce
  - Sources for evidence-based strategies
  - Federal and state level policy recommendations

# Key Elements to Statement of Task



- Identify best practices for creating a sustainable behavioral health disorder prevention infrastructure



- Identify funding needs and strategies for behavioral health disorder prevention



- Identify research gaps germane to the widespread adoption of evidence based behavioral health disorder prevention interventions



- Make actionable recommendations on how state or federal policies can be expanded or implemented to develop or sustain the infrastructure

# Committee

**Marcella Alsan (Cochair)**

Harvard Kennedy School

**Marthe R. Gold (Cochair)**

New York Academy of Medicine

**Rinad Beidas**

Northwestern University

**Camille C. Cioffi**

University of Oregon, Influenza  
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**Joseph P. Gone**

Harvard University

**Kyle L. Grazier**

University of Michigan

**Jeffrey Hom**

San Francisco Department of  
Public Health

**Margaret Kuklinski**

University of Washington

**David Mandell**

University of Pennsylvania

**Velma McBride Murry**

Vanderbilt University

**Anand Parekh**

Bipartisan Policy Center

**Lisa Saldana**

Chestnut Health Systems,  
Lighthouse Institute

**Paula Smith**

University of Utah

**Emily A. Wang**

Yale University

**Donald Warne**

Johns Hopkins University

*In Memoriam*

**Lonnie Snowden**

University of California Berkeley

**NAM EMERGING LEADER & FELLOW**

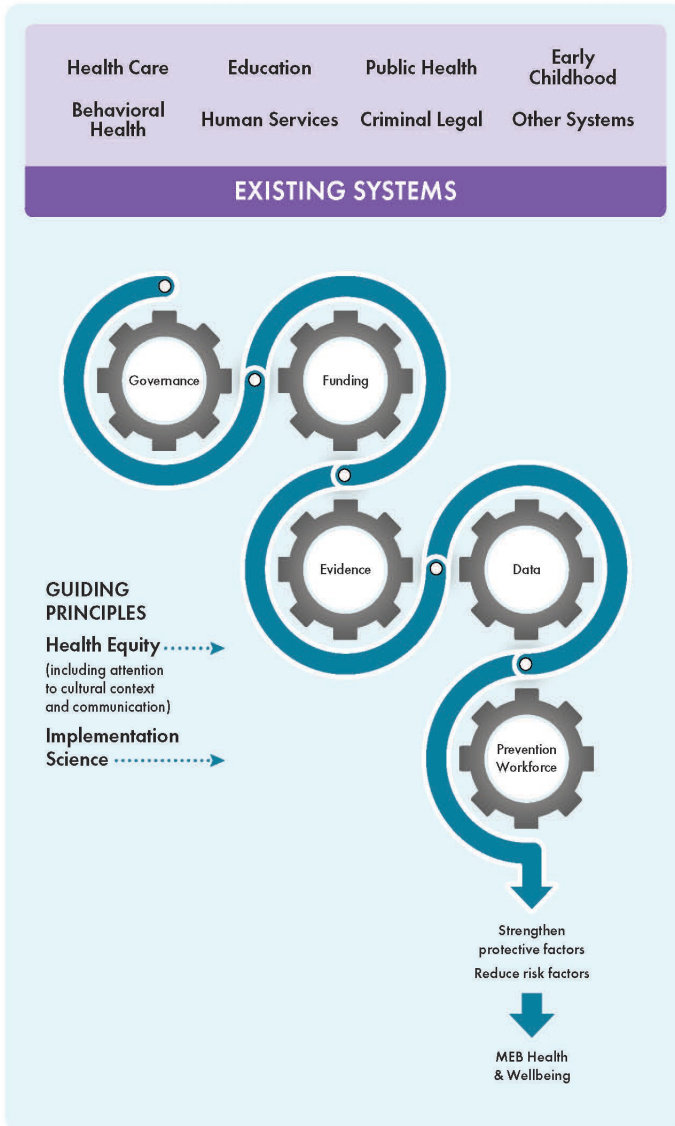
**Lucinda Leung**

National Academy of Medicine  
Emerging Leader in  
Health and Medicine Scholar, University  
of California, Los Angeles

**Sebastian Tong**

James C. Puffer American Board of  
Family Medicine/National Academy of  
Medicine Fellow, University of  
Washington, Seattle

# Blueprint for a National Prevention Infrastructure for Mental, Emotional and Behavioral Disorders: Consensus Study Report



- **Increase governance** centralizing MEB coordination within Executive Branch
  - Appoint Special Assistant on MEB disorder prevention to Domestic Policy Council
  - Establish federal coordinating office on MEB prevention
- **Provide adequate and sustained funding**
  - Congress should adopt and support new funding mechanisms – e.g., tax credits
  - Reimburse non-licensed non-clinical prevention workers
  - Medicaid 1115 waivers to implement new and evidence-based prevention approaches
- Enhance **data collection**: identify and adopt measures of population well-being; provide federal support for local data infrastructure; fund data collection, sharing, and collaboration
- Establish **workforce** coordinating office at the federal level
  - Delineate core competencies and certify positions as occupations
- Address **research gaps**, including lack of interventions for adults and longitudinal research to assess impacts
- Create a **centralized and dynamic clearinghouse** for MEB prevention programs that includes quality of evidence, generalizability of results and cost considerations

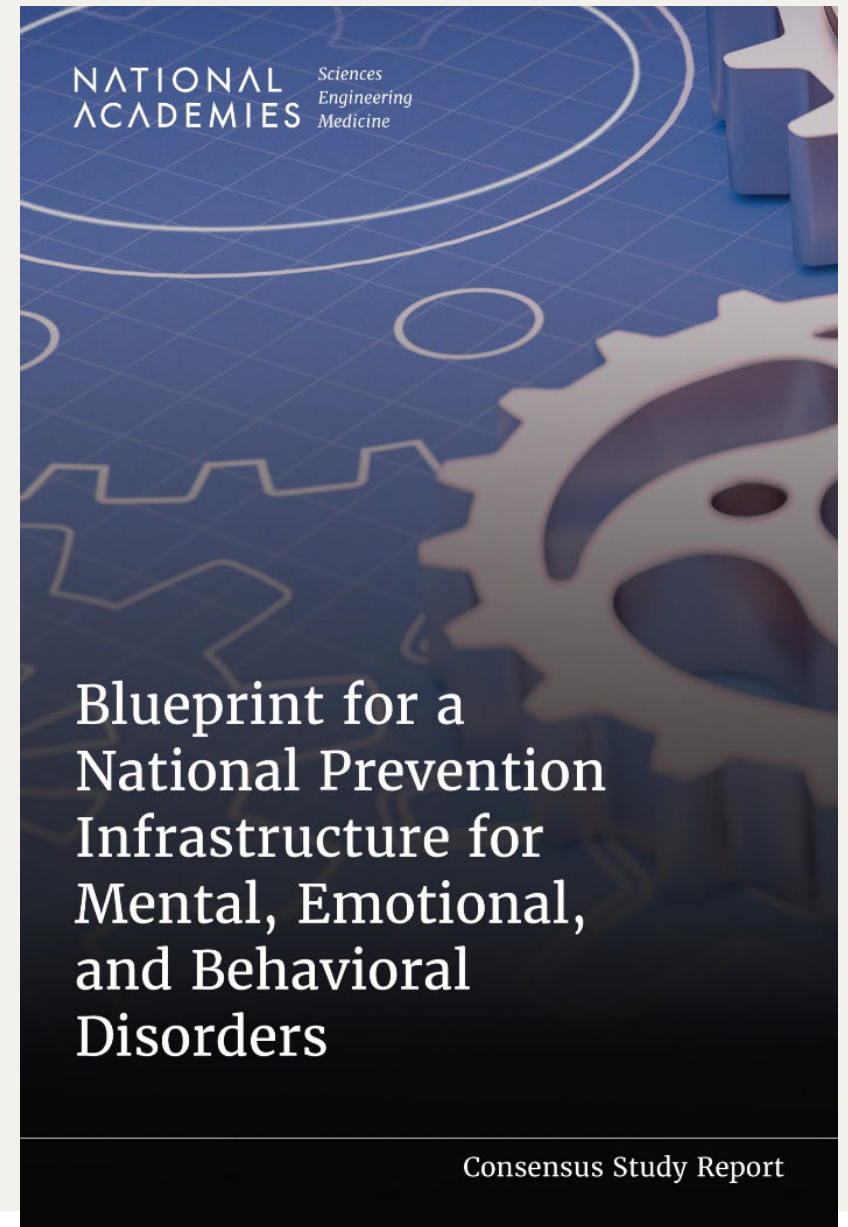
To access the report and supporting materials including a 4-pager, visit:

<https://www.nationalacademies.org/behavioral-disorder-prevention>

Check back for additional resources over the coming weeks.

For more information, contact:

[BHprevention@nas.edu](mailto:BHprevention@nas.edu)



# THANK YOU

Questions?