Understanding risk and protective factors for youth marijuana use is essential to effective prevention

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Youth marijuana use is widespread and can be associated with serious problems

- 46% of 12\textsuperscript{th} graders have ever used
- Among youth, associated problems include:
  - School failure, dropout, truancy
  - Poorer memory, attention, IQ
  - Other risk behavior
  - Justice system involvement
  - Mental health problems
  - Abuse and dependence

- Use before age 18 increases these risks
Isn’t there something we can do before kids develop these problems?

- Can we stop youth marijuana use before it starts?
- Can we delay the onset of marijuana use?
The premise of prevention science...

To prevent a problem before it happens, the factors that predict the problem must be changed.
Predictors are organized into two groups:

- **Risk Factors**
  - increase the likelihood of the problem

- **Protective Factors**
  - decrease the likelihood of the problem
The first step of prevention is to identify and understand the risk and protective factors that predict the problem.
OK, but can we really prevent youth marijuana use?

- Before 1980, nine experimental tests of delinquency prevention programs were conducted in the U.S.
  - None was effective

Today, there are over 50 effective delinquency prevention programs.

http://www.blueprintsprograms.com/
Early drug prevention programs were not very effective

- Drug information programs increased drug use in some studies (Tobler, 1986).

These programs were not adequately grounded in an understanding of risk and protective factors.
Risk factors for youth marijuana use

Community
- 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 Disprivation

Family
- Family History of the Problem Behavior
- Family Management Problems
- Family Conflict
- Favorable Parental Attitudes and Involvement in the Problem Behavior

School
- Academic Failure Beginning in Late Elementary School
- Lack of Commitment to School

Individual/Peer
- Early and Persistent Antisocial Behavior
- Alienation and 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 social domains of family, school, peer group and community
  - Prosocial Opportunities
  - Reinforcement for Prosocial Involvement
  - Bonding (connectedness, attachment)
  - Clear and Healthy Standards for Behavior
Risk and protective factors for youth marijuana use
### Risk factors are common across problems

<table>
<thead>
<tr>
<th>Community</th>
<th>Family</th>
<th>School</th>
<th>Individual/Pear</th>
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<tbody>
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<tr>
<td>Extreme Economic Deprivation</td>
<td></td>
<td>Violence</td>
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Legend: ✓ = Present

- **Substance Abuse**: Presence of substance abuse
- **Teen Pregnancy**: Presence of teen pregnancy
- **School Dropout-Out**: School dropout-out
- **Depression & Anxiety**: Depression and anxiety
- **Violence**: Presence of violence

Note: The table above shows the presence of risk factors across different domains (Community, Family, School, Individual/Pear) and various problems (Substance Abuse, Teen Pregnancy, School Dropout-Out, Depression & Anxiety, Violence).
Risk and protective factors operate in the same way across demographic groups

- Gender
- Race/ethnicity
- Socio-economic status
- Region (urban, suburban, rural)

The degree of exposure to risk may vary, but the effect of risk exposure on outcomes is the same.
I-502 may affect the levels of risk and protective factors for youth in Washington

- **Two factors will change:**
  - Availability
  - Norms

- **Other factors may change:**
  - Family management
  - Marijuana-specific parenting practices
  - Peer and sibling use
  - Parent use
  - Youth alcohol and cigarette use
Availability and norms are some of the strongest predictors of youth marijuana use

- Availability: OR 3.1
- Parent norms: OR 2.1
- Community norms: OR 2.5
- Perceived harm: OR 2.2
- Youth norms: OR 4.0
What does changing availability look like?
Changing availability may also look like this
Implications and work to be done

- Limit availability to youth
  - What to do about edibles that appeal to youth?
- Influence youth norms about use
- Influence adult norms
  - Parent norms
  - Norms about providing marijuana to youth and youth use
- Address other risk and protective factors
  - Timing and settings for intervention
Thank you.

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