The presentation will begin shortly.

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Addressing the Needs of our Communities through Evidence-Based Prevention

Bethany Deeds, PhD, MA
Chief, Prevention Research Branch
National Institute on Drug Abuse

January 19, 2017
Topics for Discussion

• Evidence Based Prevention
  – Principles
  – Interventions (e.g., programs)
  – Systems Models (Prosper & Communities that Care)

• Cost-Effectiveness

• Resources
Research Lens: Interventions - Levels of Risk

Universal
  • Everyone in a general population regardless of risk

Selective
  • Groups at elevated risk - based on individual, family or contextual characteristics

Indicated
  • Individuals who have begun using and are at high risk for use/abuse

Tiered
  • Incorporates two or more levels
**Research Lens: Risk & Protective Factors**

**Examples of Risk and Protective Factors**

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Domain</th>
<th>Protective Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Aggressive Behavior</td>
<td>Individual</td>
<td>Self-Control</td>
</tr>
<tr>
<td>Poor Social Skills</td>
<td>Individual</td>
<td>Positive Relationships</td>
</tr>
<tr>
<td>Lack of Parental Supervision</td>
<td>Family</td>
<td>Parental Monitoring and Support</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>Peer</td>
<td>Academic Competence</td>
</tr>
<tr>
<td>Drug Availability</td>
<td>School</td>
<td>Anti-Drug Use Policies</td>
</tr>
<tr>
<td>Poverty</td>
<td>Community</td>
<td>Strong Neighborhood Attachment</td>
</tr>
</tbody>
</table>

**Prevention Approaches Aim to**

**Enhance Protective Factors & Reduce Risk Factors**
Research Lens: How Prevention Interventions Work

MODIFIABLE RISKS

Early aggression
Social skills deficit
Academic problem
Misperceived drug use norms
Association with deviant peers
Neighborhood availability
Media glamorization

INTERVENTIONS

Parent skills training
Social skills training
Self-regulation
Impulse Control
Tutoring
Norms training
Refusal skills
Community policing
Health Literacy

MODERATORS

Age
Gender
Race/ethnicity
Poverty level
Genotype
Examples of established substance use prevention principles for early childhood:

- Intervening early in childhood can alter the life course trajectory in a positive direction.
- Intervening early in childhood can both increase protective factors and reduce risk factors.
- Intervening in early childhood can have effects on a wide array of behaviors, even behaviors not specifically targeted by the intervention.
Principles of Substance Abuse Prevention for Early Childhood: A Research-Based Guide

• Table of Contents:
  – Why is Early Childhood Important to Substance Abuse Prevention?
  – Risk and Protective Factors
  – Intervening in Early Childhood
  – Research-Based Early Intervention Substance Abuse Prevention Programs
  – Selected Resources
  – Appendices
    • Developing Interventions
    • Implementing Interventions

## Prevention Interventions

<table>
<thead>
<tr>
<th>Program</th>
<th>Target Population or Setting</th>
<th>Level of Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy &amp; Toddlerhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durham Connects (Dodge, 2013)</td>
<td>Mother, Father (when possible), Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Early Steps, Family Check Up</td>
<td>Mother, Child</td>
<td>Selective</td>
</tr>
<tr>
<td>(Shaw et al., 2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Spirit</td>
<td>Mother, Child</td>
<td>Selective</td>
</tr>
<tr>
<td>Mullany et al., 2012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Family Partnership</td>
<td>Mother, Father (when possible), Child</td>
<td>Selective</td>
</tr>
<tr>
<td>(Olds, 2002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preschool</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multidimensional Treatment</td>
<td>Foster Family, Child</td>
<td>Selective</td>
</tr>
<tr>
<td>Foster Care for Preschoolers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Fisher &amp; Chamberlain, 2000)</td>
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</tr>
</tbody>
</table>
## Prevention Interventions

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<tr>
<th>Program</th>
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</thead>
<tbody>
<tr>
<td><strong>Transition to Elementary School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caring School Community Program (Battistich et al., 1997)</td>
<td>School, Teacher, Family, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Classroom-Centered Intervention (Good Behavior Game) (Kellam &amp; Rebok, 1992)</td>
<td>Classroom, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Linking the Interests of Families and Teachers (Reid et al., 1999)</td>
<td>Classroom, Child, Family</td>
<td>Universal</td>
</tr>
<tr>
<td>Raising Healthy Children (Catalano et al., 2003)</td>
<td>Family, Child, Classroom</td>
<td>Universal</td>
</tr>
<tr>
<td>SAFEChildren (Tolan et al., 2004)</td>
<td>Family, Child</td>
<td>Universal (in high risk communities)</td>
</tr>
<tr>
<td>Seattle Social Development Program (Hawkins et al., 1999)</td>
<td>School, Parent/Family, Child</td>
<td>Universal</td>
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<tr>
<td>Early Risers &quot;Skills for Success&quot; Risk Prevention Program (August et al., 2001)</td>
<td>Parent, Child</td>
<td>Selective</td>
</tr>
<tr>
<td>Kids in Transition to School (Pears et al., 2007)</td>
<td>Child</td>
<td>Selective</td>
</tr>
<tr>
<td>Fast Track Trial for Conduct Problems (CPPRG, 2000)</td>
<td>Family, School, Class, Child</td>
<td>Tiered</td>
</tr>
<tr>
<td>Incredible Years (Webster-Stratton et al., 2008)</td>
<td>Family, Child, Classroom</td>
<td>Tiered</td>
</tr>
<tr>
<td>Positive Action (Flay et al., 2001)</td>
<td>Family, School, Class, Child</td>
<td>Tiered</td>
</tr>
<tr>
<td>Schools and Homes in Partnership (Barrera et al., 2002)</td>
<td>Parent, Child</td>
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</tbody>
</table>
Examples of established principles for preventing drug use among children and adolescents.

• Universal interventions have impacts on higher risk youth.

• Prevention interventions can have an effect on multiple risk behaviors including those not a focus of the intervention

• Prevention interventions implemented during earlier developmental periods have effects during adolescence and later developmental stages.
Preventing Drug Use among Children & Adolescents

- Derived from an extensive literature review of published articles from NIDA funded research
- Reviewed by an expert scientific panel
- Reviewed by a professional practitioner panel
- Resulted in 16 principles

# Prevention Interventions

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<td>Classroom, Child</td>
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<tr>
<td>Promoting Alternative Thinking Strategies-PATH (Greenberg &amp; Kusche et al., 1998)</td>
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<td>Seattle Social Development Program (Hawkins et al., 1999)</td>
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<td>Focus on Families-FOF (Catalano et al., 1999)</td>
<td>Family, Child</td>
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<td>Guiding Good Choices-GGC (Hawkins et al. 1999)</td>
<td>Parent/Family</td>
<td>Universal</td>
</tr>
<tr>
<td>Lions-Quest Skills for Adolescence-SFA (Eisen et al., 2002)</td>
<td>School, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Project STAR (Chou et al., 1998)</td>
<td>Community, School, Parent/Family, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Strengthening Families Programs (Spoth, Redmond, &amp; Shin, 2000,2001)</td>
<td>Parent/Family, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Coping Power (Lochman &amp; Wells, 2002)</td>
<td>Parent/Family, Child</td>
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<td>Parent/Family, Child</td>
<td>Universal</td>
</tr>
<tr>
<td>Adolescents Training and Learning to Avoid Steroids –ATLAS (Goldberg et al 2000)</td>
<td>Team, athlete, Parent/Family</td>
<td>Selective</td>
</tr>
</tbody>
</table>

**High School**
Systems Models

- Build infrastructure and sustainability at state and local levels
- Implement evidence based interventions in real world settings
- Demonstrate community/population level impacts
  - Communities That Care (CTC)
  - PROSPER
    - PROMoting School-community-university Partnerships to Enhance Resiliency
The Communities That Care Prevention System

Build a coalition of diverse stakeholders to achieve collective impact.

Assess and prioritize for action- risk, protection, and health and behavior outcomes.

Address priority risks with evidence-based preventive interventions.

Sustain high fidelity implementation of preventive interventions to reach all those targeted.
Distribution of Risk in a City

- Neighborhood #1
  - No students in this area.

- Neighborhood #2
  - Insufficient number of students in this area.

- Neighborhood #3

Legend:
- Major roads
- Interstate

Risk Factors:
- 1.005 - 2.949
- 2.949 - 4.894
- 4.894 - 6.838
- 6.838 - 8.782
- 8.782 - 10.727

John A. Pollard, Ph.D. Developmental Research and Programs
Sustained Abstinence through Grade 12

Never Used Alcohol

- Control: 23.3%
- CTC: 32.2%
- RR = 1.31

Never Smoked Cigarettes

- Control: 42.8%
- CTC: 49.9%
- RR = 1.13

Never Engaged in Delinquency

- Control: 33.0%
- CTC: 41.7%
- RR = 1.18

Also, findings for sustained abstinence of:
- Any drugs (RR=1.32)
- Gateway drugs (RR=1.31)

And cumulative incidence of:
- Violence (RR=0.86)

all p<.05

You can find CTC here:
http://www.communitiesthatcare.net/
PROSPER Partnership Model

Local Community Teams
Linking Extension and Public School Systems

Prevention Coordinator Team

State Management Team
PROSPER intervention shifts peer influence toward non-users.

You can find PROSPER here: http://helpingkidsprosper.org/
Another example of established principles for preventing drug use among children and adolescents.

- Prevention interventions and systems can significantly reduce health and broader social costs.
Is prevention cost-effective? YES!
For every dollar spent... this could be saved

- Strengthening Families Program $7.82
- Guiding Good Choices $11.07
- Seattle Social Development Project $3.14
- Life Skills Training (LST) $25.61
- CTC $4.23 - $8.22
- PROSPER $8.94 - $26.74

Where to find your local prevention researchers?
Additional Resources

• National Registry of Evidence-based Programs and Practices
  http://www.nrepp.samhsa.gov/Index.aspx

• Mentor International
  http://preventionhub.org/practice/examples-effective-practice

• Blueprints
  http://www.blueprintsprograms.com/programCriteria.php

• Washington Cost Analysis Resource
  http://www.wsipp.wa.gov/Reports/04-07-3901

• Society for Prevention Research
  http://www.preventionresearch.org/

• National Prevention Science Coalition http://www.npscoalition.org/
**National Institute on Drug Abuse (NIDA)**

Prevention Research Branch

**Bethany Deeds** - Branch Chief, deedsb@nida.nih.gov

**Jacqueline Lloyd** – Deputy Branch Chief

  – Adolescents, emerging and young adults, adults, selective & indicated interventions, DIDARPs

**Aria Crump** – Adolescents, emerging/young adults, universal interventions, NA/AI, prescription drug use

**Rich Jenkins** – HIV/AIDS, high risk HIV populations

**Belinda Sims** – Early childhood, dissemination & implementation, training mechanisms.

**Karen Sirocco** - Neuroscience, translation, tobacco control

And a 192 current prevention research grantees!
Preventing Prescription Opioid Misuse

A PUBLIC PRIVATE PARTNERSHIP

CRAIG POVEY, UTAH DIVISION OF SUBSTANCE ABUSE AND MENTAL HEALTH

LISA NICHOLS, INTERMOUNTAIN HEALTHCARE
Utah’s Prevention System
Carefully Planned, Strategic Process

State “SSA”

Hospitals ↔ Coalitions
Ground Level Work
(at the top floor)

• National Prevention Network
• Federally Qualified Health Care Centers
• Substance Abuse and Mental Health Services Administration
Every day across America, behavioral health problems in childhood and adolescence, from anxiety to violence, take a heavy toll on millions of lives. For decades the approach to these problems has been to treat them only after they’ve been identified—at a high and ongoing cost to young people, families, entire communities, and our nation. We can reduce the incidence and prevalence of behavioral health problems in this population by 20 percent from current levels.

Drs. Jeffery Jenson, Richard Catalano, Gilbert Botvin, David Hawkins, & Brian Bumbarger
Connections

• Attended “Unleashing the Power of Prevention” Summit
  – Provided meeting space for Unleashing in Weber County
• Attended Utah Coalition Summit
• Underage Drinking Prevention Effort
• Prescription Drug Prevention Effort
  – Legislative Process
• Connecting/supporting Communities That Care
MORE THAN JUST A MEDIA CAMPAIGN, A COMMUNITY INITIATIVE

MASTER STRATEGIC PLAN

1. DESIGN
2. MOBILIZATION
3. HARM
4. DAN JONES SURVEY
Intermountain Healthcare & Murray City
Intermountain Healthcare & Murray City
Press Conference Done Well => $50,000.00


https://www.facebook.com/search/top/?q=univision_Utah

Communities That Care (CTC)

- Evidence based, Owned by SAMHSA, Highlighted by NIDA,
- DSAMH office provides incentives for using CTC – fidelity
- Moab Utah and Moab Regional Hospital mobilizing CTC
  - Prevention worker presented data to key leaders
  - The Hospital CEO was there – discussion about Community Health Needs Assessment
    - The hospital is not the expert at community substance abuse prevention/ mental illness prevention, yet that’s where their assessment was leading them.
Moab

- Moab Regional Hospital proposed a transition in their staffing patterns
- Their community development director & marketing director dropped the marketing and picked up “coalition coordinator”
Use Only As Directed Campaign

DON’T ADD ADDICTION TO INJURY
Not all #fails need opioids.
Video
Drug poisoning is the **leading cause** of injury deaths in Utah.
The Opioid Community Collaborative

The charter of the OCC is to plan and implement strategies to decrease the burden of pharmaceutical drug, misuse, abuse and overdose in the state of Utah.
Opioid Community Collaborative

Offer provider education regarding the dangers of prescription opioids and monitor prescribing

Support public awareness messaging regarding the risks of opioids

Identify and treat individuals at risk for opioid use disorders

Provide treatment to individuals with opioid use disorders

% of prescribers prescribing fewer opioids

% increase in the number of people who believe prescription opioids are dangerous*

Increase in the pounds of medication safely disposed of through medication drop boxes

# of individuals participating in Chronic Disease Self Management for chronic pain

# of Naloxone kits distributed

# of individuals receiving MAT

% decrease the supply of prescription opioids prescribed

Decrease in the number of people using prescription opioids

Decrease in overdose rates

Decrease in individuals with prescription opioid use disorders

# of individuals using an alternative to opioids

# of opioid overdose reversals

# of opioid overdose reversals

Abstinence rate of those in treatment

Decrease in death rates

*As measured through a random telephone survey of 600 people conducted by Dan Jones & Associates.
Intermountain Healthcare Support

- Contributing to Leadership
  - Intermountain staff co-chair each of the committees
  - a community partner
- Host meetings
- Financial Support
  - $3.5 million dollars over the course of three years to support public awareness messaging and treatment
- Training
  - Offering training to other organizations regarding prescribing practices and medication assisted treatment
Partners

- Commission on Criminal and Juvenile Justice
- Federally Qualified Health Center
- Intermountain Healthcare
- Local and State Behavioral Health Authorities
- Local Prevention Coordinating Councils
- Local Pharmacies
- Local Police Department
- Poison Control Center
- SelectHealth
- University of Utah
- Use Only As Directed
- Utah Department of Health
Raising Awareness

There are 7,000 opioid prescriptions filled in Utah every day.
IT'S NO SECRET

Opioids can cause physical dependence after just seven days of use. Talk to your doctor about possible opioid alternatives.

SPEAK OUT

UTAH NEEDS A BREAK-UP

There are 7,000 opioid prescriptions filled daily in Utah. Ask your doctor about other effective painkillers.

OPT OUT

THERE'S NO SUCH THING AS SAFE LEFTOVERS

Leftover prescriptions are responsible for much of Utah's opioid abuse. Use the hospital pharmacy's drop box to safely dispose of leftover medications.

THROW OUT
Limiting the Supply - Prescription Drop Boxes

- 21 Intermountain community pharmacies have installed medsafe receptacles
- Over 11,000 pounds of medication disposed of
- Financial support for eleven new community-based drop boxes in 2017

35% of individuals surveyed in 2016 used drop boxes as compared to 16% in 2011
Identify and Manage Individuals at Risk

Provision of Naloxone rescue kits to those in treatment and their family members

Funding to and collaboration with Utah Naloxone to distribute rescue kits

214 kits have been dispensed through Intermountain Pharmacies through the Collaborative Practice Act
 Chronic Disease Self Management

Chronic disease self-management is an education program developed at Stanford for individuals with chronic diseases including chronic pain. The workshops are designed to improve self-confidence and a person’s ability to control symptoms.

The Opioid Community Collaborative will work with community partners to offer up to 21 new courses in community-based settings annually.
Treating Individuals with Opioid Use Disorders

Number of Patients Treated (End of Month)

Number of Patients Treated, by Clinic (End of Month)

<table>
<thead>
<tr>
<th>Category</th>
<th>Jul. 15</th>
<th>Oct. 15</th>
<th>Jan. 16</th>
<th>Apr. 16</th>
<th>Jul. 16</th>
<th>Oct. 16</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Treatment</td>
<td>112</td>
<td>80</td>
<td>192</td>
<td></td>
<td></td>
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<tr>
<td>Successful Discharge</td>
<td>10</td>
<td>6</td>
<td>16</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Unsuccessful Discharge</td>
<td>11</td>
<td>14</td>
<td>25</td>
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<td>Transferred</td>
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<td>2</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Deceased</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>134</strong></td>
<td><strong>102</strong></td>
<td><strong>236</strong></td>
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</tbody>
</table>

Aim: 150 Patients

Graph showing the number of patients treated from July 2015 to October 2016, with a focus on the increase over time and the goal of treating 150 patients.
Rapid Access to Treatment

Average Number of Days to Medication Assisted Treatment (End of Month)

Average Number of Days to Medication Assisted Treatment, by Clinic (End of Month)

- Davis Behavioral Health
- Weber Human Services

Graph showing the trend in average days to medication assisted treatment for Davis Behavioral Health and Weber Human Services from July 2015 to October 2016.
Abstinence Rates

% Patients Abstinent via Urine Analysis, at Davis Behavioral Health
(Month of Test since Program Start)

- Opioids
- All substances

-1 0 1 2 3 4 5 6 7 8 9 10 11 12 13

29% 47% 77% 54%
Risk Levels 6+ Months Medication Assisted Treatment

- Initial Risk: 65
- Current Risk: 5
The Opioid Community Collaborative received the 2016 Governor’s Award for outstanding achievement in substance use disorder treatment
What’s Next?

• Hospital in Salt Lake City looking at teaming up with county prevention system to kick off a prescription drug abuse prevention effort
• BCTC is writing a grant to provide funding for additional work and public awareness in their area- including Intermountain’s Utah Orthopedics Center
• Map is being made showing local coalitions overlaid with Intermountain Facilities.
Thank you!

Questions?
Please click the link below to take our webinar evaluation. The evaluation will open in a new tab in your default browser.

https://www.surveymonkey.com/r/hpoe-webinar-01-19-17
Upcoming HPOE Live! Webinars

• March 2, 2017
  – Progress at the Intersection of Patient Safety and Medical Liability

For more information go to hpoe.org