The Surgeon General’s Report on Alcohol, Drugs, and Health: A Focus on Prevention

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Objectives

• Overview of the Surgeon General’s Report on Facing Addiction in America
• Provide key findings of the Prevention Chapter
• Illustrate the evidence with a couple of relevant examples
A Public Health Approach

“It’s time to change how we view addiction. Not as a moral failing but as a chronic illness... The way we address this crisis is a test for America.”

Former U.S. Surgeon General Vivek Murthy
Substance Use, Misuse and Addiction – The report was founded on the importance of all three

• **Use** – Any use of any substance
  – Driven largely by market forces

• **Misuse** – Use that can harm self or others
  – Driven by consequences

• **Addiction** – Compulsive use
  – Driven by genetic and brain changes
Process for development of the *Report*

- Development of the *Report* was overseen by the SAMHSA and the Office of the Surgeon General.
- 7 scientific editors
- Contributors, editors, and reviewers included internal subject matter experts from across the Department of Health and Human Services.
- External experts from academia and private research institutions also contributed to the report.
Introduction and Overview of the *Report*

- Describes the extent of the substance use, misuse and addiction in the United States. Also describes the purpose and focus of the *Report*, as well as key terms, concepts, and perspectives.
The Neurobiology of Substance Use, Misuse, and Addiction

- Addiction is a chronic brain disease with potential for recurrence and recovery.
- Describes the three main circuits in the brain involved in addiction, and how substance use can “hijack” the normal function of these circuits.
- Understanding this transformation in the brain is critical to understanding why addiction is a health condition, not a moral failing or character flaw.
Prevention Programs and Policies

- Describes a range of programs focused on preventing substance misuse including universal prevention programs that target the whole community as well as programs that are tailored to high-risk populations.

- Also describes population-level evidence-based policies that are effective for reducing underage drinking, drinking and driving, spread of infectious disease, and other consequences of alcohol and drug misuse.
Early Intervention, Treatment, and Management of Substance Use Disorders

- Describes the scientifically-proven clinical activities that are used to identify people who have a substance use disorder and engage them in treatment.
- Also describes the range of medications and behavioral treatments that can help people successfully address their substance use disorder.
Recovery: The Many Paths to Wellness

• Describes the construct of recovery as well as the number of people in recovery.

• Describes the growing array of effective services and systems that provide recovery support and the many pathways that make recovery possible, including treatment, recovery support services, and/or mutual aid.
Health Care Systems and Substance Use Disorders

• Explains why integrating general health care and substance use services can result in better outcomes.
• Describes policies and activities underway to achieve that goal.
• Discusses recent legislation that requires healthcare plans to offer substance use disorder services equitably with other health conditions.
• Innovative delivery system reforms and models of care coordination are also discussed, as well as the different financing systems that cover substance use prevention and disorder services.
Vision for the Future: A Public Health Approach

• Provides concrete, evidence-based recommendations on how based on the reports findings to reduce substance misuse and related harms in communities across the United States.

• Implications for policy and practice are discussed for each finding.

• Outlines the role of specific stakeholder groups in changing the culture, policies, and practices specific to addressing substance use.
Prevention Findings and Implications
“Although substance misuse problems and use disorders may occur at any age, adolescence and young adulthood are particularly critical periods. Preventing or even simply delaying young people from trying substances is important to reducing the likelihood of a use disorder later in life.”

Dr. Vivek Murthy
Former U. S. Surgeon General
40 Years of Prevention Science Research Advances: From Nothing Works to Effective Prevention

- Risk and protective factors that predict substance use problems are reliable targets for prevention
- Over 60 prevention programs and policies have been shown to prevent substance use problems in rigorous research
- Communities are an effective organizing force for bringing effective policies and programs to scale to improve the public health
Early Substance Abuse Prevention Efforts were Ineffective

• **Strategies:**
  – Information
  – Fear arousal
  – Just say “no”

• **Outcomes:**
  – No decreases in drug use
  – Some programs *increased* drug use (Tobler, 1986)

*Lesson: Untested good ideas can sometimes make things worse.*
Paradigm Shift
A Public Health Approach to Prevention

- To prevent a problem before it happens, address its predictors
- Longitudinal research identified predictors
  - Risk factors
  - Protective factors
- Develop and test in controlled trials programs and policies to target risk and protective factors for change
<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
<th>Depression &amp; Anxiety</th>
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<tbody>
<tr>
<td><strong>Community</strong></td>
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<td>Availability of Drugs</td>
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<td>Media Portrayals of Violence</td>
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<td>Transitions and Mobility</td>
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<td>Low Neighborhood Attachment and Community Disorganization</td>
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<tr>
<td>Extreme Economic Deprivation</td>
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<td><strong>Family</strong></td>
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<tr>
<td>Family History of the Problem Behavior</td>
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<td>Academic Failure Beginning in Late Elementary School</td>
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<td>Constitutional Factors</td>
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</table>
Much Commonality in Protective Factors for Behavioral Health Problems

<table>
<thead>
<tr>
<th>Protective Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Safe Sexual Behavior</th>
<th>School Drop-Out</th>
<th>Violence</th>
<th>Depression &amp; Anxiety</th>
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<td>Belief in the Future</td>
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<td>Opportunities for Positive Social Involvement</td>
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<td>Recognition for Positive Behavior</td>
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<td>Bonding to Prosocial Others</td>
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</table>
What We Now Know About Risk and Protective Factors

• Both an individual’s level of risk and level of protection influence whether a person will misuse substances

• Common risk and protective factors predict substance use and related behavioral health problems (violence, delinquency, school dropout, mental health problems, risky sex, risky driving)

• Risk and protective factors show much consistency in effects across diverse groups

• Different communities/neighborhoods have different levels of risk and protection, thus may need to access and utilize different effective prevention programs and policies
Effective Prevention Programs

• It’s never too early or too late
• Effective prevention programs have reduced substance misuse
  – Family-based
  – School-based
  – Brief motivational interventions in colleges and emergency rooms
  – Workplace
  – Primary care
• Several programs have shown effectiveness with multiple subpopulations or specific subpopulations and more work is needed
Effective Prevention Programs in the SGR

• **Ages 0-10:** Nurse Family Partnership, Raising Healthy Children, Good Behavior Game, Classroom Centered Intervention, Linking the Interests of Teachers and Families, Fast Track, Preventive Treatment Program

• **Ages 10-18:** Life Skills Training, School Health and Alcohol Harm Reduction Program, Preventure/Adventure, Unplugged, keepin’ it REAL, Atlas, **Strengthening Families 10-14,** Guiding Good Choices, Strong African American Families, SODAS City, I Hear What You are Saying, Familias Unidas, Bicultural Competence Skills Training, Project Chill, Positive Family Support, Keep Safe, Coping Power, Project Towards No Drug Use

• **Ages 18+:** BASICS, Parent Handbook, Yale Work and Family Stress Project, Brief Motivational Intervention in Emergency Departments, Team Awareness, Computerized Alcohol-Related Problems Survey, Project Share
Iowa Strengthening Families 10-14
Young Adult Outcomes
Lifetime Prescription Drug Misuse (PDM)


**Notes:** General=Misuse of narcotics or CNS depressants or stimulants.

**p<.01; ***p<.001; RRRs = 65-93%**
Life Skills Training combined with Strengthening Families 10-14 reduced the risk of Opioid Misuse by Grade 12

Source: NIDA Notes (December 2015)
## Benefit per Dollar Cost* of Illustrative Prevention Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Benefit per Collar Cost</th>
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</thead>
<tbody>
<tr>
<td>Nurse-Family Partnership</td>
<td>$1.61</td>
</tr>
<tr>
<td>Raising Healthy Children/(SSDP)</td>
<td>$4.27</td>
</tr>
<tr>
<td>Good Behavior Game</td>
<td>$64.18</td>
</tr>
<tr>
<td>LifeSkills Training</td>
<td>$17.25</td>
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<tr>
<td>keepin’ it REAL</td>
<td>$11.79</td>
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<tr>
<td>Strengthening Families Program 10-14</td>
<td>$5.00</td>
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<tr>
<td>Guiding Good Choices</td>
<td>$2.69</td>
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<tr>
<td>Positive Family Support/ Family Check Up</td>
<td>$0.62</td>
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<tr>
<td>Project Towards No Drug Abuse</td>
<td>$6.54</td>
</tr>
<tr>
<td>BASICS</td>
<td>$17.61</td>
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</tbody>
</table>

*Cost estimates are per participant, based on 2015 U.S. dollars

Effective Alcohol Policies in the SGR

Policies to reduce availability

- Increase price (tax)
- Reduce retail alcohol outlet density
- Commercial host liability for serving intoxicated or underage customers
- Limitation on hours or days of retail alcohol sales
- State control of alcohol sales

Policies to reduce underage drinking

- Increase the minimum legal drinking age
- Compliance checks on underage sales in retail establishments
- 0.0% blood alcohol level for those driving under 21
- Suspended drivers license for those with alcohol driving violations
- Social host liability for serving alcohol to minors
Effective Alcohol Policies in SGR

Policies to reduce drinking and driving
- .08% blood alcohol criminal per se laws
- Sobriety checkpoints

Policies for those convicted of a DUI
- Lower blood alcohol limit
- Mandatory ignition interlock
- Mandatory assessment and treatment
- DUI courts
- Continuous monitoring
- Vehicle impoundment or immobilization
Alcohol- Versus Non-alcohol-related Traffic Deaths, Per 100,000, All Ages 1982-2013

Source: Hingson & White, (2014)
Opioid Prevention Policies in SGR

- Prescription drug monitoring program (PDMP) with “pill mill control” policies (Rutkow et al., 2015)
- However PDMP as generally implemented in states has mixed effects (Meara et al., 2016; Patrick et al., 2016; DEA, 2015)
Despite the Evidence, Tested and Effective Prevention Programs and Policies Are Not Widely Used

In fact...

Prevention approaches that do not work or have not been evaluated are more widely used than those shown to be effective.
Community Coalitions can be Effective for Scaling Effective Prevention Programs and Policies

• Build a diverse, representative, cross-sector community coalition
• Assess and prioritize risk, protection and substance use and related problems
• Evidence based programs and policies chosen should address priorities and fit with community values
• Enhance implementation fidelity and implementers’ capacity to reach sufficient and diverse community members
• Plan for long-term sustainability
Effective Community Prevention Programs in the SGR

Communities that Care, PROSPER, Communities Mobilizing for Change on Alcohol, Project Northland, Project Star, Reducing Underage Drinking through State Coalitions, Safer California Universities, Saving Lives, Study to Prevent Alcohol Related Consequences, Sacramento Neighborhood Alcohol Prevention Project
# Communities That Care Randomized Trial

**Effects During and Post Intervention**

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
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</thead>
<tbody>
<tr>
<td>Randomize &amp; Train</td>
<td>Implementation (supported)</td>
<td>Sustainability (unsupported)</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td><strong>2003</strong></td>
<td><strong>2004</strong></td>
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<tr>
<td><strong>Youth Panel</strong></td>
<td><strong>Age 11 Grade 5</strong></td>
<td><strong>Age 12 Grade 6</strong></td>
</tr>
<tr>
<td><strong>Targeted Risk Factors</strong></td>
<td><strong>Onset: Delinquency</strong></td>
<td><strong>Onset: Delinquency</strong></td>
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<tr>
<td><strong>Protective Factors</strong></td>
<td><strong>Onset: Delinquency Alc, Cigs</strong></td>
<td><strong>Onset: Delinquency Alc, Cigs</strong></td>
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<tr>
<td><strong>Current: Delinquency Alc, Binge Smokeless Tobacco</strong></td>
<td><strong>Current: Delinquency Violence Cigarettes</strong></td>
<td><strong>Current: Delinquency Violence Cigarettes</strong></td>
</tr>
</tbody>
</table>

**Randomization and Implementation**

- Year 1: Randomize & Train
- Year 2: Implementation (supported)
- Year 3: Sustainability (unsupported)
- Year 4: Long-Term Effects

**Youth Panel by Age and Grade**

- Age 11 Grade 5: 2004
- Age 12 Grade 6: 2005
- Age 13 Grade 7: 2006
- Age 14 Grade 8: 2007
- Age 15 Grade 9: 2008
- Age 16 Grade 10: 2009
- Age 18 Grade 12: 2011
- Age 19: 2012
- Age 21: 2014
- Age 22: 2015
- Age 23: 2016

**Risk Factors**

- Targeted: Delinquency
- Protective: Delinquency
- Current: Delinquency

**Onset Dates**

- Male Onset: Delinquency
- Male Onset: Violence
- Marijuana
- Inhalants
- Gateway Drugs
Materials & Collateral Products

• Press Release
• Teaser Video and Flyer
• Press Kit (press release, agenda, fast facts, speaker bios, executive summary)
• Partner Toolkit
  – Web banners, images for social media
  – Blogs, Short messages articles
  – PowerPoint slides
  – Report Highlights
Fact sheets on *Report’s* key findings and recommendations

- Overall Highlights
- Individuals and Families
- Communities
- Health Professionals and Health Care Systems
- State, Local, and Tribal Governments
America CAN reduce substance misuse problems: Prevention and treatment can be effective if we develop a public health approach.
Federal Drug Control Spending 2008 through 2017

How Can we Advocate for Adequate Funding for Prevention of Substance Use/Problems?

- **Increase public understanding of the problem:** A public health problem, NOT a moral failing
- **Disseminate and further develop the science:** Biology, Epidemiology, Prevention, Treatment
- **Increase utilization of evidence-based Prevention programs and policies and Treatment:** school, family and community Prevention programs, alcohol policies and medication and other Treatment therapies
- **Increase trained workforce to deliver evidence-based Prevention and Treatment**
Implications

- Effective Prevention is within our Reach
  - We must **Increase Investment** in prevention programs and policies proven to work if we want to reduce substance misuse and related problems.

- Leverage Prevention Power
  - Combine interventions shown to prevent multiple behavioral health problems including Opioid Misuse.
Everyone Has a Role to Play

Improved Public Health