Adolescent Substance Use and Abuse

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Prepared for
380.623 Adolescent Health and Development
Trends Among America’s Youth

Trends in Annual Prevalence of an Illicit Drug Use Index
Eight, Tenth and Twelfth Graders

Source: Adapted by CTLT from Monitoring the Future, 2005
## Attitudes of 12th Graders Toward Licit and Illicit Drugs

<table>
<thead>
<tr>
<th></th>
<th>Percent Disapproving</th>
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</thead>
<tbody>
<tr>
<td>Smoke marijuana regularly</td>
<td>71.9</td>
</tr>
<tr>
<td>Have 5 or more drinks at least once a week</td>
<td>60.3</td>
</tr>
<tr>
<td>Smoke 1 or more packs per day of cigarettes</td>
<td>67.5</td>
</tr>
<tr>
<td>Take steroids</td>
<td>X</td>
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</table>
Cigarettes: Trends in 30-Day Use, Risk and Disapproval

Eighth, Tenth and Twelfth Graders
Cigarettes: Trends in 30-Day Use, Risk and Disapproval
Eighth, Tenth and Twelfth Graders

Risk
Percent Seeing “Great Risk” in Smoking a Pack or More Per Day

Year
'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Percentage
0 20 40 60 80 100

Twelfth grade
Tenth grade
Eighth grade
Cigarettes: Trends in 30-Day Use, Risk and Disapproval
Eighth, Tenth and Twelfth Graders

Disapproval
Percent Disapproving of Smoking a Pack or More Per Day

Year

Percentage

Twelfth grade
Tenth grade
Eighth grade
Three Brands of Cigarettes account for nearly all adolescent smoking

<table>
<thead>
<tr>
<th>Brand</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Marlboro</td>
<td>65.2</td>
</tr>
<tr>
<td>Newport</td>
<td>13.3</td>
</tr>
<tr>
<td>Camel</td>
<td>9.5</td>
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</table>
Smokeless Tobacco: Trends in 30-Day Use and Risk
Eighth, Tenth and Twelfth Graders

Use
Percent Who Used in Past 30 Days

Year
'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Percentage
0 6 12 18 24 30

- Twelfth grade
- Tenth grade
- Eighth grade
Smokeless Tobacco: Trends in 30-Day Use and Risk
Eighth, Tenth and Twelfth Graders

Risk
Percent Seeing “Great Risk” in Using Regularly

Year
'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Percentage
0 20 40 60 80 100

Twelfth grade
Tenth grade
Eighth grade
Marijuana: Trends in Annual Use, Risk, Disapproval and Availability
Eighth, Tenth and Twelfth Graders

Use
Percent Who Used in Last Twelve Months

Year
Twelfth grade
Tenth grade
Eighth grade
Marijuana: Trends in Annual Use, Risk, Disapproval and Availability

Eighth, Tenth and Twelfth Graders

Risk
Percent Seeing “Great Risk” in Using Regularly

Year
Percentage

Twelfth grade
Tenth grade
Eighth grade
Marijuana: Trends in Annual Use, Risk, Disapproval and Availability
Eighth, Tenth and Twelfth Graders

Disapproval
Percent Disapproving of Using Regularly

Year

Percentage

Twelfth grade
Tenth grade
Eighth grade
Marijuana: Trends in Annual Use, Risk, Disapproval and Availability
Eighth, Tenth and Twelfth Graders

Availability
Percent Saying “Fairly Easy” or “Very Easy” to Get

Year

Percentage

Twelfth grade
Tenth grade
Eighth grade
Crack: Trends in Annual Use, Risk and Availability
Eighth, Tenth and Twelfth Graders

Use
Percent Who Used in Last Twelve Months

Year
'76  '78  '80  '82  '84  '86  '88  '90  '92  '94  '96  '98  '00  '02  '04

Percentage
0     2     4     6     8     10

Twelfth grade
Tenth grade
Eighth grade
Crack: Trends in Annual Use, Risk and Availability
Eighth, Tenth and Twelfth Graders
Crack: Trends in Annual Use, Risk and Availability
Eighth, Tenth and Twelfth Graders

Availability
Percent Saying “Fairly Easy” or “Very Easy” to Get

<table>
<thead>
<tr>
<th>Year</th>
<th>Twelfth grade</th>
<th>Tenth grade</th>
<th>Eighth grade</th>
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<tbody>
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<td>'76</td>
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MDMA (Ecstasy): Trends in Annual Use, Risk and Availability
Eighth, Tenth and Twelfth Graders

Use
Percent Who Used in Last Twelve Months

Year
'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Percentage

Twelfth grade
Tenth grade
Eighth grade
MDMA (Ecstasy): Trends in Annual Use, Risk and Availability
Eighth, Tenth and Twelfth Graders

Availability
Percent Saying “Fairly Easy” or “Very Easy” to Get

<table>
<thead>
<tr>
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Percentage
Steroids: Trends in Annual Use, Risk, Disapproval and Availability
Eightth, Tenth and Twelfth Graders

Use
Percent Who Used in Last Twelve Months

Year
'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Percentage
0 1 2 3 4 5

- Twelfth grade
- Tenth grade
- Eighth grade
Steroids: Trends in Annual Use, Risk, Disapproval and Availability
Eighth, Tenth and Twelfth Graders

Risk
Percent Seeing “Great Risk” in Using Once or Twice

Percentage

Year

'76 '78 '80 '82 '84 '86 '88 '90 '92 '94 '96 '98 '00 '02 '04

Twelfth grade
Tenth grade
Eighth grade
Definitions of Terms

**USE:** Taking in of a psychoactive substance

**ABUSE:** Continued use despite persistent or recurrent social, occupational, psychological or physical consequences

**DEPENDENCE:** Habitual, compulsive use of a substance over a prolonged period of time
Dependence

- **Psychological:** emotional and mental preoccupation with the drug’s pleasurable effects.

- **Physiological:** physical dependence occurs when the body adjusts to the drug’s effects so that discomfort occurs when the drug is withdrawn.
Factors Influencing Severity

- Age
- Solitary drug use
- Means of acquiring drugs
- Motivation for use
- Multiple drug use
- Behaviors while using

**Principle 2.** Prevention programs should address multiple forms of drugs abuse, including the underage use of legal drugs (e.g. tobacco or alcohol); the use of illegal drugs (e.g. marijuana and heroin); and the inappropriate use of legally obtained substances (e.g. inhalants), prescription medications, or over-the-counter drugs. (Johnston et al., *Monitoring the Future National Survey Results on Drug Use*, 2002).
Principle 3. Prevention programs should be tailored to address risks specific to target population or audience characteristics, such as age, gender, and ethnicity. (Rural Substance Abuse: State of Knowledge and Issues. NIDA Research Monograph No 168., Washington, DC, 1997)

Principle 4. Prevention programs that target two or more levels can be more effective than those aimed at a single level. (Bauman, et al., American Journal of Public Health, 2001)
Principle 5. Prevention programs should be long-term with repeated interventions (i.e. booster programs) to reinforce the original prevention goals. (Scheier et al., *Journal of Drug Education*, 1999)

Principle 6. Prevention programs are most effective when they employ interactive techniques that encourage participation and provide students with structured opportunities to practice and reinforce new skills. (Botvin et al., *Journal of the American Medical Association*, 1995)
Strategies at the Individual Level

- Educational interventions that incorporate social and personal skills building curricula (Bell, Ellickson, & Harrison, 1993; Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995).

- Individual-oriented interventions should address the motivation for using substances (Flay & Sobel, 1983; Flynn et al., 1997; Paglia & Room, 1998).

- Knowledge-oriented interventions about harms and risks associated with substance use and abuse cannot, by themselves, produce measurable and long-lasting changes in substance abuse-related behavior and attitudes (Goodstadt, 1974; Hansen, 1992).
Strategies at the Peer Level

- Alternative activities that incorporate social and personal skills-building opportunities are more likely to be effective with high-risk youth who may not have adequate adult supervision or access to a variety of activities. (Tobler, 1986).

- More intensive alternative programs that include multiple concurrent approaches seem to be most effective. (Howard, 1993; Schaps, DiBartolo, Moskowitz, Palley, & Churgin, 1981; Tobler, 1986).
Effective approaches to addressing academic risk factors is prevention interventions involve academic skills building. (SAMHSA/CSAP, 1996).

Mentoring programs designed, in part, to foster the development of academic goals have shown a relatively strong degree of effectiveness in the area of substance abuse prevention (LoSciuto, Rajala, Townsend, & Taylor, 1996; Tierney, Grossman, & Resch, 1995).

Effective prevention strategies include school policies that communicate a commitment to substance use prevention include formal no-use policies for students, teachers, administrators, and other staff. (Paglia & Room, 1998).
Strategies at the Family Level

- Research shows that positive parenting approaches targeting the family (parents and children) can be effective in preventing adolescent substance use (Dishion, Andrews, Kavanagh, & Soberman, 1996; Hawkins & Catalano, 1992).

- Interactive techniques are important in promoting the development of new skills in programs that seek to improve communication within the family. (SAMHSA/CSAP, 1996).

- Indicated family counseling interventions (with substance-abusing parents) have been shown to improve parenting skills (Kumpfer et al., 1996).
Strategies at the Community Level

- Alternative activity events serve to establish strong community norms against misuse of alcohol and use of illicit drugs. (Paglia & Room, 1998; SAMHSA/CSAP, 1996)

- Use of mass media is an appropriate approach for influencing community awareness and community norms (Paglia & Room, 1998; Flynn et al., 1997).

- Community mobilization efforts have been shown to be effective in raising awareness about the problem of substance abuse and in coordinating prevention and treatment services (Phillips & Springer, 1997; Yin & Kaftarian, 1997).
Counter advertising campaigns that disseminate information about the hazards of a product or the industry that promotes it may help reduce cigarette and alcohol sales and consumption (Lewit, Coate, & Grossman, 1981; Schneider, Klein, & Murphy, 1981).

Deterrence laws and policies for impaired driving have been effective in reducing the number of alcohol-related traffic crashes (Hingson, Heeren, & Winter, 1994; Johnson, 1995).

More frequent enforcement operations lead to greater reductions in retailer noncompliance (Jason, Billows, Schnopp-Wyatt, & King, 1996; Preusser, et al., 1994).

At least for tobacco, excise tax decreases use.
Case Study 1.
Project Northland

❖ Program Strategy: Randomized Community Trial
  • Peer leadership (Personal, interpersonal)
    • Peer participation
    • Behavioral curricula
  • Parental involvement (Family-focused approach)
    • Parent involvement and education program
  • Community
    • Community activities

❖ Levels of Prevention:
  ▪ Individual (school-based)
  ▪ Family
  ▪ Community activities

❖ Settings:
  ▪ Middle school (K6 - K8, 10 -14 yrs.)
  ▪ Rural, Suburban & Urban
Case Study 1. Project Northland

- **Outcome**
  - 30% reduction in alcohol use by teens
  - 30% reduction in tobacco use
  - 8.6% reduction in marijuana use

- **Mediating variables**
  - ↓ peer-influence to use alcohol
  - ↑ functional meaning supportive of non-use
  - ↓ likelihood of developing alcohol/drug problems
  - ↑ parent-child alcohol-related communication around use

- **Adaptation to other areas**
Case Study 2.
Overview of D.A.R.E.

- D.A.R.E. = Drug Abuse Resistance Education

- Created in 1983. Trains law enforcement officers to teach a drug use prevention curriculum, targets youth at the end of elementary school, implemented in 70% of schools nationwide

- Lessons focus on providing information about drugs, teaching decision-making skills, building self-esteem, and choosing healthy alternatives to drug use.
Case Study 3.
Evaluation of D.A.R.E.

- Meta-analysis: 8 D.A.R.E. evaluations incorporating 234 schools and 9225 youth, using pooled effect sizes for each outcome:
  - Attitudes about drugs .42
  - Knowledge about drugs .11
  - Social skills .19
  - Self-esteem .06
  - Attitudes about police .13
  - Drug use .06 (not significant)
  - No long term benefits
Case Study 3.
Why D.A.R.E. Does Not Prevent Drug Use

- Not totally interactive teaching style
- Relies on police as educators, who may not connect with youth
- Targets kids at the wrong developmental point when drug use prevalence is very low
- Teaches skills in a sheltered environment
- Focuses solely at the individual level of intervention
- Doesn’t target other factors: based entirely on the idea of resistance

YET…
- D.A.R.E. remains the most widely implemented federally funded drug prevention program