



Substance Abuse

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PROGRESS REVIEW



In the 26th in a series of assessments of *Healthy People 2010*, Acting Assistant Secretary for Health Cristina Beato chaired a focus area Progress Review on Substance Abuse, in which she was assisted by staff of the co-lead agencies for this *Healthy People 2010* focus area, the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Institutes of Health (NIH). Dr. Beato also welcomed representatives of the U.S. Department of Transportation's (DOT's) National Highway Traffic Safety Administration, the U.S. Department of Justice's (DOJ's) Office of Justice Programs, and the Office of National Drug Control Policy. She acknowledged and praised the vested interest those agencies have in seeing progress made toward the *Healthy People 2010* objectives for Substance Abuse. Among the areas in which significant advances have been made, Dr. Beato singled out as particularly noteworthy the heightened awareness, especially among youth, of the deleterious effects of drug and alcohol use and the increased understanding of how the brain is affected by substance abuse and how this may lead to addiction. Also participating in the Review were representatives of other U.S. Department of Health and Human Services (HHS) offices and agencies and of the U.S. General Accounting Office.

The complete text for the Substance Abuse focus area of *Healthy People 2010* is available at www.healthypeople.gov/document/html/volume2/26substance.htm. The meeting agenda, tabulated data for all focus area objectives, charts, and other materials used in the Progress Review can be found at www.cdc.gov/nchs/about/otheract/hpdata2010/focusareas/fa26-sa.htm.

Data Trends

Richard Klein of the National Center for Health Statistics/Centers for Disease Control and Prevention (CDC) quantified the societal burden of substance abuse (i.e., smoking, illegal drug use, and alcohol) as costing the nation more than \$484 billion per year. Such abuse is intertwined with a host of adverse effects, including infectious diseases, crime, unintentional injuries, teenage pregnancies, and chronic psychiatric disorders. In his overview of the status of objectives in the Substance Abuse focus area, Mr. Klein noted that progress toward the targets had been shown for a number of objectives: alcohol-related deaths

and injuries from motor vehicle crashes, cirrhosis deaths, adolescents riding with a driver who has been drinking, high school seniors who have never used alcohol or illicit drugs, binge drinking among high school seniors, low-risk drinking among both male and female adults, and disapproval of marijuana use as reflected among students in the 8th, 10th, and 12th grades. However, some objectives show a worsening trend: drug-induced deaths (from any drug), visits to hospital emergency rooms related to use of illicit drugs or abuse of legal drugs, average annual alcohol consumption, and steroid use

among adolescents. Mr. Klein provided details about objectives selected by the focus area workgroup for highlighting at the Review.

The proportion of high school seniors who reported never using illicit drugs increased from 46 percent in 1998 to 49 percent in 2003. Use of illicit drugs among this group was at higher levels in the early 1980s, but at lower levels in the early 1990s than later in that decade. The 2010 target is for 56 percent of high school seniors never to have used such drugs (Obj. 26-9d). The proportion of high school seniors who disapprove of trying marijuana or hashish once or twice showed little change between 1998 (52 percent) and 2003 (53 percent).

Over the last three decades, the proportion of high school seniors who disapprove of trying marijuana or hashish once or twice have correlated inversely with the proportion who had ever used these drugs: the proportion who had ever used was higher in the late 1970s and early 1980s, whereas the proportion who disapproved of such use was lower. The reverse was true in the early 1990s. The target is 72 percent (Obj. 26-16f). The proportion of adolescents age 12 to 17 years who reported using marijuana during the preceding 30 days decreased from 8.2 percent in 2002 to 7.9 percent in 2003. The proportion of females who reported such use remained the same—7.2 percent. Among racial and ethnic groups for whom data were available, the marijuana usage level in 2003 was highest, at 12.5 percent, among American Indian/Alaska Native adolescents.

The proportion of adolescents who used steroids illicitly showed a general increase in the late 1990s, then an overall decrease in the early years of the 21st century. For 8th graders, the decrease was from 1.7 percent in 2000 to 1.4 percent in 2003; for 10th graders, from 2.2 percent to 1.7 percent between those years. Among 12th graders, the proportion of illicit steroid users increased from 1.7 percent in 2000 to 2.5

percent in 2002, then decreased to 2.1 percent in 2003. The target is 0.4 percent for all three grades (Objs. 26-14a, -14b, and -14c).

The proportion of high school seniors who engaged in binge drinking (defined as having five or more drinks of alcohol in one session during the preceding 2 weeks) decreased from 32 percent in 1998 to 28 percent in 2003. The prevalence of binge drinking among this group was over 40 percent from 1978 to 1983. The target is 11 percent (Obj. 26-11a). In 2003, 69 percent of 12th graders disapproved of the practice of having one or two alcoholic drinks nearly every day, the same proportion as in 1998. The proportion of this group that disapproved was almost 10 percentage points higher in the early 1990s. The target is 83 percent (Obj. 26-16c).

Average annual alcohol (ethanol) consumption among persons age 14 years and older increased from 2.14 gallons per person in 1997 to 2.18 gallons per person in 2000. The target is 2.0 gallons per person (Obj. 26-12). In 2001–2002, 55 percent of females age 21 years and older who were current drinkers exceeded the guidelines for low-risk drinking, compared with 72 percent in 1992. Among men age 21 and older who are currently drinkers, 61 percent exceeded the guidelines in 2001–2002, compared with 74 percent in 1992. A higher level of educational attainment among adult men correlated generally with a lower propensity for men to exceed the guidelines for low-risk drinking. This relationship did not hold true for women.

Among racial and ethnic groups for whom data were available, American Indians/Alaska Natives had the highest proportion of excessive drinkers among both males and females, and Asians had the lowest. The targets are 50 percent (Obj. 26-13a, -13b). The death rate from alcohol-related motor vehicle crashes was 6.03 per 100,000 population in 2002, compared with 6.17 per 100,000 in 1998. The target is 4.0 deaths

per 100,000 (Obj. 26-1a). The decrease continues a decline lasting more than two decades in the rate of deaths from this cause. This decline reflects the general lowering of state-mandated, federally influenced permissible blood alcohol concentration (BAC) levels in motorists. The number of states—41—that have enacted administrative license revocation laws for persons who drive under the influence of intoxicants has remained the same since 1998. The target is 50 states and the District of Columbia (Obj. 26-24). As of July 2004, all 50 states and the District of Columbia have enacted laws mandating BAC levels of 0.08 or less for motor vehicle drivers age 21 years and older, thus meeting the objective's target (Obj. 26-25).

In 2003, 7.8 percent of persons age 18 years and older had used illicit drugs in the preceding 30 days, compared with 7.9 percent in 2002 (Obj. 26-10c). Adult males used such drugs at a rate of 9.8 percent, compared with 6 percent for adult females. In 2001, the primary substances of abuse among clients of substance abuse treatment facilities who were 55 years of age and younger were as follows: alcohol, 44 percent; opiates, 18 percent; marijuana, 15 percent; cocaine, 13 percent; and stimulants, 6 percent. Among clients age 55 and older, alcohol was the primary substance of abuse for 74 percent, opiates for 14 percent, and cocaine for 5 percent.

Key Challenges and Current Strategies

In the presentations that followed the data overview, the principal themes were introduced by SAMHSA and NIH representatives—Charles Curie, Administrator of SAMHSA; and Timothy Condon, Deputy Director of the National Institute on Drug Abuse (NIDA), NIH, and Faye Calhoun, Deputy Director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), NIH. These agency representatives and other participants in the review identified a number of barriers to achieving the objectives and discussed activities under way to meet these challenges, including the following:

- SAMHSA's 2003 National Survey on Drug Use and Health showed that an estimated 22 million people in the United States were struggling with a serious drug or alcohol problem, of whom almost 95 percent did not recognize their own problem. Of those who did recognize the problem, approximately 273,000 reported that they had made an effort to be treated but had not received treatment.
- Males may be at risk for alcohol problems if they drink more than 14 drinks per week or more than

4 drinks per occasion. The corresponding amounts for females are more than seven drinks per week or more than three drinks per occasion.

- The forepart of the brain matures late—on average around age 20. Because the forebrain is the seat of judgment and the inhibitory functions that go with it, such late maturation is believed to influence younger people toward a greater probability of committing risky behaviors, such as the use of illicit drugs and the abuse of alcohol.
- Advances in scientific instrumentation and its application over the last 10 years, particularly positron emission tomography (PET scanning), have clearly demonstrated that drug addiction is a disease that is characterized by long-term changes in the brain.
- Research indicates that administrative license revocation (ALR) laws reduce alcohol-related fatal crashes of motor vehicles by 6 to 13 percent. It has been estimated that 300 to 350 lives could be saved each year if the 9 states that have not enacted ALR laws would do so.

- The President's 2-year goal to reduce illicit drug use among youth by 10 percent has been exceeded: the actual reduction reached 11 percent, as shown by the NIH Monitoring the Future Survey.
- National Alcohol Screening Day, an annual event since 1999, is conducted by NIAAA, SAMHSA, DOT, and numerous partnering organizations. At thousands of sites across the country, participants can obtain free, anonymous screening for alcohol problems, information on the health consequences of at-risk drinking, the opportunity to talk with a health professional about concerns, and, if appropriate, referral to a treatment program. Locations include hospitals, community centers, senior programs, primary care offices, and colleges and universities.
- In 2003, then HHS Secretary Tommy G. Thompson introduced SAMHSA's Strategic Prevention Framework, which works through the states to implement programs at the community level for promoting positive youth development, reducing risk-taking behaviors, and preventing problem behavior in all areas of life—home, school, and community. Like *Healthy People 2010*, which it supports and complements, the success of the Framework will be measured by specific national outcomes.
- Under a new model of treatment for opioid dependence as a facet of mainstream medicine, patients are able to receive treatment services and medication (buprenorphine) in physicians' offices.
- SAMHSA and CDC have embarked on a joint undertaking to launch and evaluate a substance abuse/use prevention campaign—*Too Smart to Start*—designed to help 9- to 13-year-olds develop habits that foster good health over a lifetime and, specifically, to prevent alcohol use before the age of 21. Participating communities are permitted a high degree of flexibility in implementing the campaign, which will rely heavily on enhancing communication between parents and children about the harm of underage alcohol use.
- NIDA, in collaboration with other HHS agencies and DOJ, has established the National Criminal Justice Drug Abuse Treatment Study to test models for an integrated approach to the treatment of incarcerated persons with drug abuse or addictive disorders, including treatment both while in confinement and when re-entering the community.
- Since 1997, NIDA has partnered with The Robert Wood Johnson Foundation to stage and present the annual PRISM awards, which recognize and honor the most accurate depictions of drug, alcohol, and tobacco use and addiction in television programs, feature films, music, and comic books.

Approaches for Consideration

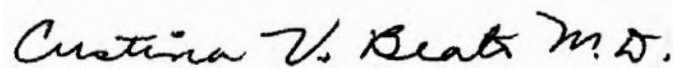
Participants in the review made the following suggestions for steps that health professionals, policymakers, and the research community could take to enable further progress toward achievement of the objectives for the Substance Abuse focus area:

- Expand research to identify and locate any genetic components that would predispose individuals to the risk of alcoholism and drug addiction. Such research should include studies of factors that may underlie male-female differentials in genetic makeup and expression.
- Encourage middle/junior high and senior high schools to use science classes to instruct students about the deleterious effects of alcohol and drug abuse on the body.

- Adopt strategies to counter and prevent substance abuse in young people that recognize various risky behaviors on their part as making up a complex whole, to which integrated and congruent approaches are required.
- Ensure that parents are integrated into national strategies against substance abuse by young people as partners on an equal footing with schools, communities, and other concerned elements of society.
- Support studies to determine the long-term biologic consequences for children who are born to mothers addicted to drugs or alcohol.
- Urge all agencies and individuals involved in acting to control substance abuse to begin interventions as soon as possible after the first offense, when success in preventing recurrence is more likely.
- Direct studies toward establishing whether youth exposure to advertisements for alcoholic beverages is altering attitudes about underage drinking and whether this in turn increases underage alcohol use.
- Increase research to explicate the nature and persistence of biologic and electrophysiologic changes in the brains of adolescent and adult abusers of alcohol and drugs.

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