

*Facing Addiction in America:
The Surgeon General's Report on Alcohol,
Drug Abuse and Health*

**A New Agenda to
Turn Back the Drug Epidemic**

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Background

The Institute for Behavior and Health, Inc. (IBH) is a 501(c)3 non-profit substance use policy and research organization that was founded in 1978. Non-partisan and non-political, IBH develops new ideas and serves as a force for change.

Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs and Health was published in November 2016. Four months later, in March 2017, IBH held a meeting of 25 leaders in addiction treatment, health care, insurance, government and research to discuss the scope and implications of this historic document. The US Surgeon General, VADM Vivek H. Murthy, MD, was an active participant in the meeting. The significance of this new Surgeon General's Report is analogous to the historic 1964 Surgeon General's report, *Smoking and Health*, a document that inspired an extraordinarily successful public health response in the United States that has reduced the rates of cigarette smoking by over 64% and continues its impact even today, more than 50 years following its release.

The following is a summary of the discussion at the March 2017 meeting and the conclusions and recommendations that were developed.

Introduction: The 2016 Surgeon General's Report

The two primary objectives of the US Surgeon General's Report of 2016 are first to provide scientific evidence that shows that in addition to nicotine, other substance misuse and addiction issues (e.g., alcohol, opioids, marijuana, etc.) also are best understood and addressed as public health problems; and second to encourage the inclusion of addiction – its prevention, early recognition and intervention, treatment and active long-term recovery management – into the mainstream of American health care. At present these elements are not integrated either as a stand-alone continuum or within the general medical system. As is true for other widespread illnesses, addiction to nicotine, alcohol, marijuana, opioids, cocaine and other substances is a serious chronic illness. This perspective is contrary to the common perception that addiction reflects a moral failing, a personal weakness or poor parenting. Such opinions have stigmatized individuals who are suffering from these often deadly substance use disorders and have led to expensive and ineffective public policies that segregate prevention and treatment outside of mainstream medical care. A better public health approach encourages afflicted individuals and their family members to seek and receive help within the current health care system for these serious health problems.

An informed public health approach to reducing the prevalence and the harms associated with substance use disorders requires more than the brief treatment of serious cases. Particularly important are substance use prevention programs in schools, healthcare and in all other parts of the community to protect adolescents (ages 12 – 21), the group most at risk for the initiation of substance-related harms and substance use disorders.

Importantly, abundant tragic experience and accumulating science show that substance use disorders are not effectively treated with only short-term care. Because substance use disorders produce

significant long-lasting changes in the brain circuits responsible for memory, motivation, inhibition, reward sensitivity and stress tolerance, addicted individuals remain vulnerable to relapse years following specialized treatment.^{1,2,3} Thus, as is true for all other chronic illnesses, long periods of personalized treatment and monitoring are necessary to assure compliance with care, continued sobriety, and improved health and social function. In combination, science-based prevention, early intervention, continuing care and monitoring comprise a modern continuum of public health care. The overall goals of this continuum comport well with those of other chronic illnesses:

- sustained reduction of the cardinal symptom of the illness, i.e., substance use;
- improved general health and function; and,
- education and training of the patient and the family to self-manage the illness and avoid relapses.

In the addiction field achieving these goals is called “recovery.” This word is used to describe abstention from the use of alcohol, marijuana and other non-prescribed drugs as well as improved personal health and social responsibility.^{3,4} Over 25 million formerly addicted Americans are in stable, long-term recovery of a year or longer.⁴ Understanding how to consistently accomplish the life-saving goal of recovery must inform health care decisions.

The 2016 Surgeon General’s Report offers a science-informed vision and path to recovery in response to the nation’s serious addiction problem, including specifically the opioid overdose epidemic. Research shows that it is possible to prevent or delay most cases of substance misuse; and to effectively treat even the most serious substance use disorders with recovery as an expectable result of comprehensive, continuous care and sustained monitoring. To do this, substance use disorders must be recognized as serious, chronic health conditions that are both preventable and treatable. The nation must integrate the short-term siloed episodes of specialty treatment that now are isolated from mainstream healthcare into a fully integrated continuum of care comparable to that currently available to those with other chronic illnesses such as diabetes, hypertension, asthma and chronic pain.

Meeting Discussion and Conclusions

The Surgeon General’s Report and the meeting convened by the Institute for Behavior and Health, Inc. (IBH) to promote its recommendations are significant responses to the expanding epidemic of opioid

¹ US Department of Health and Human Services (HHS), Office of the Surgeon General. (2016). Chapter 2. The Neurobiology of Substance Use, Misuse, and Addiction. In: *Facing Addiction in America: The Surgeon General’s Report on Alcohol, Drugs, and Health*. Washington, DC: HHS. Available: <https://addiction.surgeongeneral.gov/>

² US Department of Health and Human Services (HHS), Office of the Surgeon General. (2016). Chapter 5. Recovery: The Many Paths to Wellness. In: *Facing Addiction in America: The Surgeon General’s Report on Alcohol, Drugs, and Health*. Washington, DC: HHS. Available: <https://addiction.surgeongeneral.gov/>

³ Betty Ford Institute Consensus Panel. (2007). What is recovery? A working definition from the Betty Ford Institute. *Journal of Substance Abuse Treatment*, 33(3), 221-228.

⁴ White, W. L. (2012). Recovery/remission from substance use disorders: An analysis of reported outcomes in 415 scientific reports, 1868-2011. Philadelphia, PA: Philadelphia Department of Behavioral Health and Intellectual Disability Services.

and other substance use disorders, an epidemic that struck nearly 21 million Americans aged 12 and older in 2015 alone.⁵ That year saw more than 52,000 overdose deaths.⁶ This drug epidemic has devastated countless families and communities throughout the US. Unlike earlier and smaller drug epidemics, the current opioid epidemic is not limited to a few regions or communities or a narrow range of ethnicities or incomes in the United States. Instead it afflicts all communities and all socioeconomic groups; its impacts include smaller communities and rural areas as well as suburban areas and inner cities. Fueled by the suffering of countless grieving families, the nation is in the early stages of confronting the new epidemic. A growing national determination to turn back this deadly epidemic has opened the door to innovation that is sustained by strong bipartisan political support for new and improved efforts in both prevention and treatment of substance use disorders.

Abstinence is an Achievable Goal, both for Prevention and for Treatment

Embracing and synthesizing the 30 years of science supporting the findings of the 2016 Surgeon General's Report, the group discussed a single goal for the prevention of addiction: *no use of alcohol, nicotine, marijuana or other non-prescribed drugs by youth for reasons of health*. This goal should be the core prevention message to all children from a very young age. Health care professionals, educators and parents should understand the importance of this simple, clear health message. They should continue to reinforce this message of no-use for health as children grow to adulthood. Even when prevention fails, it is possible for parents, other family members, friends, primary care clinicians, educators and others to identify and to intervene quickly to stop youth substance use from becoming addiction.⁷

The science behind this ambitious but attainable prevention goal is clear. Alcohol, nicotine products, marijuana and other non-prescribed drug use is uniquely harmful to the still-developing brains of adolescents. Thus any substance "use" among youth must be considered "misuse" – use that may harm self or others. The goal of no substance use is not just for the purpose of preventing addiction, though that is one clear and important byproduct of successful prevention. Addiction is a biological process that can take years to develop. In contrast, even a single episode of high-dose use of alcohol or other substance could immediately produce an injury, accident or even death. While it is true that most episodes of substance misuse among adults do not produce serious problems, it is also true that substance misuse is associated with 70% or more of the injuries, disabilities and deaths of young people.⁸ These figures are even higher for minority youth. Many adolescent deaths are preventable

⁵ Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Available: <http://www.samhsa.gov/data/>

⁶ Rudd, R. A., Seth, P., David, F., & Scholl, L. (2016, December 30). Increases in drug and opioid-involved overdose deaths – United States. *Morbidity and Mortality Weekly Report*, 65(50-51), 1445-1452. Available: <https://www.cdc.gov/mmwr/volumes/65/wr/mm65051e1.htm>

⁷ Levy, S. J., Williams, J. F., & AAP Committee on Substance Use and Prevention. (2016). Substance use screening, brief intervention, and referral to treatment. *Pediatrics*, 138(1), e20161211. Available: <http://pediatrics.aappublications.org/content/138/1/e20161211>

⁸ US Department of Health and Human Services (HHS), Office of the Surgeon General. (2016). Chapter 3. Prevention Programs and Policies. In: *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, DC: HHS. Available: <https://addiction.surgeongeneral.gov/>

because most are related to substance use – including substance-related motor vehicle crashes and overdose.⁹

Youth who use any one of the three most common “gateway” substances, i.e., alcohol, nicotine and marijuana, are many times more likely than those who do not use that single drug to use the other two substances as well as other illegal drugs.¹⁰ The use of any drug opens the door to an endless series of highly risky decisions about which drugs to use, how much to use, and when to use them. This perspective validates the public health goal for youth of no use of any drug.

Complete abstinence from the use of alcohol or any other drug among adolescents is not simply an idealistic goal – it is a goal that can be achieved. Data were presented at the meeting from the nationally representative Monitoring the Future study showing that 26% of American high school seniors in 2014 reported no use of alcohol, cigarettes, marijuana or other non-prescribed drugs in their lifetimes.¹¹ This is a remarkable increase from only 3% reported by American high school seniors in 1983. Moreover, in the same survey, 50% of high school seniors had not used any alcohol, cigarettes, marijuana or other non-prescribed substance in the past 30 days, up from 16% in 1982. These largely overlooked and important findings show that youth abstinence from any substance use is already widespread and steadily increasing.

In parallel with the goal of abstinence for prevention, the recommended goal for the treatment of those who are addicted is sustained abstinence from the use of alcohol and other drugs, with the caveat, explicitly acknowledged by the group, that individuals who are taking medications as-prescribed in the treatment of substance use disorders (e.g., buprenorphine, methadone and naltrexone) and who do not use alcohol or other non-prescribed addictive substances – are considered to be abstinent and “in recovery.” Abstinence from all non-prescribed substance use is the scientifically-informed goal for individuals in addiction treatment. This treatment goal is widely accepted in the large national recovery community. The long-lasting effects of addiction to drugs are easily seen among cigarette smokers: smoking only a single cigarette is a serious threat to the former smoker, even decades after smoking the last cigarette. There is incontrovertible evidence from brain and genetic research showing the long-term effects of substance misuse on critical brain regions.² It is unknown when or if these brain changes will return to being entirely normal following cessation of substance use; however, it is known that the recovering brain is particularly vulnerable to the effects of return to any substance use, often leading to overdose or rapid re-addiction.

⁹ Subramaniam, G. A., & Volkow, N. D. (2014). Substance misuse among adolescents. To screen or not to screen? *JAMA Pediatrics*, 168(9), 798-799. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4827336/>

¹⁰ Data analyzed by the Center for Behavioral Health Statistics and Quality. CBHS. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50).

¹¹ 2014 data obtained by IBH from the Monitoring the Future study. For discussion of data through 2013 see DuPont, R. L. (2015, July 1). It’s time to re-think prevention; increasing percentages of adolescents understand they should not use any addicting substances. Rockville, MD: Institute for Behavior and Health, Inc. Available: https://www.ibhinc.org/s/IBH_Commentary_Adolescents_No_Use_of_Substances_7-1-15.pdf

Participants in the IBH meeting supported the idea that abstinence is the high-value outcome in addiction treatment; and that while any duration of abstinence is valuable, longer-term, stable abstinence of 5 years is analogous to the widely-used standard in cancer treatment of 5-year survival. The scientific basis for the value of sustained recovery is validated by the experience of the estimated 25 million Americans now in recovery. This increasingly visible recovery community is a remarkable and very positive new force in the country.

Measuring and Attaining these Goals

The mantra from the IBH meeting was, *if you don't measure it, it won't happen*. The group of leaders recognized the paucity of current models for systematic integration of addiction treatment and general healthcare. The group encouraged the identification of promising models and the promotion of innovation to achieve the goal of sustained recovery. Even programs that include fully integrated care of other diseases, managed care and other comprehensive health programs do not reliably achieve the goal of sustained or even temporary recovery for substance use disorders. The meeting participants noted the absence of long-term outcome studies of the treatment of substance use disorders and encouraged all treatment programs not only to extend the care of discharged patients but also to systematically study the trajectories of discharged patients to improve their long-term treatment outcomes. The increasing range of recovery support services after treatment is an important and promising new trend that is now actively promoting sustained recovery.

Meeting participants noted one particularly promising model of public health goal measurement and attainment – the 90-90-90 goals for the treatment of HIV/AIDS: 90% of people with HIV will be screened to know their infection status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all patients receiving antiretroviral therapy will have viral suppression (i.e., zero viral load).¹² These measurable goals provide an operational definition of public health success for the country, states and individual healthcare organizations.

With this model as background, the IBH group concluded that a similar public health approach and similarly specific numeric goals should be established for preventing and treating substance use disorders. Examples of parallel national prevention goals could include 90% rates of screening for substance misuse among adolescents; 90% provision of interventions and follow-up for those screening positive; and 90% total abstinence rates among youth aged 12-21. While these are admittedly ambitious prevention goals, adoption of them could incentivize families, schools and communities to increase the percentage of youth who do not use any alcohol, nicotine, marijuana or other drugs every year.

A similar approach was adopted by the IBH group to improve the impact of addiction treatment. Again, there would be significant public health value if the US adopted the following goals: 90% of individuals aged 12 or older receive annual screening for substance misuse and substance use disorders; 90% of those who receive a diagnosis of a substance use disorder are referred and meaningfully engaged (at

¹² UNAIDS. (2014). 90-90-90: An Ambitious Treatment Target to Help End the AIDS epidemic. Geneva, Switzerland: Joint United Nations Programme on HIV/AIDS. Available: http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_0.pdf

least three sessions) in some form of addiction treatment; and 90% of those engaged in treatment achieve sustained abstinence as measured by drug testing, during and for six months following treatment.

The well-studied model of care pioneered by the state physician health programs (PHPs)^{13,14} and evaluations of the Human Intervention Motivation Study (HIMS),¹⁵ the similar program for commercial pilots, offer useful guidance on the elements of care management needed to produce lasting recovery as the expected outcome of substance use disorder treatment. These models of care management for professionals with substance use disorders may be considered coercive because of the substantial leverage and structure they use to encourage individuals to access and complete treatment and maintain continuing abstinence. Similarly, innovative monitoring strategies within the criminal justice system use coercion – including coerced treatment – to help high-risk individuals with substance use problems remain abstinent while under community supervision.¹⁶ For families of loved ones suffering from addiction, intervention can play a vital role in the engagement and retention in treatment that is appropriate and necessary to achieve sustained recovery.¹⁷ Each of these models includes opportunities to measure the impact of addiction treatment.

Next Steps

The meeting concluded by encouraging specifically targeted future meetings, inspired by the US Surgeon General's 2016 Report, with various specific stakeholders such as healthcare providers, health insurers, private foundations, families of overdose victims, the faith community and research organizations. Such meetings will provide vital opportunities to enlist these groups in implementing the recommendations included in the historic report. These stakeholders can make a dramatic impact on the prevalence of the serious, chronic disease of addiction – including specifically opioid overdose deaths – by engaging actively in prevention efforts with the goal of no use of any substances by young people, by integrating substance use disorders into routine medical practice and care, and by restructuring addiction treatment to achieve long-term abstinence. Practical timetables are needed to ensure effective and sustained community-wide implementation of new initiatives, and just not among small study populations. The drug epidemic is a national and, even international, health crisis. Responses to it must

¹³ DuPont R. L., McLellan A. T., White W. L., Merlo L., and Gold M. S. (2009). Setting the standard for recovery: Physicians Health Programs evaluation review. *Journal for Substance Abuse Treatment*, 36(2), 159-171.

¹⁴ McLellan, A. T., Skipper, G. E., Campbell, M. G. & DuPont, R. L. (2008). Five year outcomes in a cohort study of physicians treated for substance use disorders in the United States. *British Medical Journal*, 337:a2038.

¹⁵ Air Line Pilots Association, International (ALPA). 2009. Fiscal Year 2010 Appropriations. Written Submission of Air Line Pilots Association, International before the Subcommittee on Transportation, Housing and Urban Development, and Related Agencies Committee on Appropriations, United States House of Representatives. Washington, DC: Air Line Pilots Association, International. Available: http://www2.alpa.org/DesktopModules/ALPA_Documents/ALPA_DocumentsView.aspx?itemid=18590&ModuleId=1316&TabId=256

¹⁶ Kilmer, B., Caulkins, J. P., DuPont, R. L., & Humphreys, K. (in press). A large and promising opportunity: reducing substance use in criminal justice populations. In: S.C. Miller, D.A. Fiellin, R. N. Rosenthal, & R. Saitz (Eds.) *The ASAM Principles of Addiction Medicine* (6th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

¹⁷ E.g., Casey's Law in Kentucky aims to allow families to petition the court for treatment on behalf of a person with addiction and other significant substance use problems. <http://caseyslaw.org/>

be rapid, widespread and scaled to the epidemic. The IBH group called for the development of these initiatives, including public reporting of progress, to achieve the community-wide goals of standardized and quantified prevention and treatment outcomes.