Testimony of
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before the
United States Senate Committee on Governmental Affairs
"Ecstasy Use Rises: What more needs to be done by the government to combat the problem?"
Monday, July 30, 2001

Introduction

Chairman Lieberman, Senator Thompson, distinguished members of the committee:

I would like to thank you for the opportunity to testify today about methylenedioxymethamphetamine, or MDMA for short. MDMA is a mind-altering synthetic drug that was originally patented as a treatment for obesity, but because of its adverse side effects, was never marketed. Today MDMA is clandestinely manufactured in Western Europe, primarily in the Netherlands and Belgium, which produce 90 percent of the MDMA consumed worldwide. Although estimates vary, the cost of producing a single MDMA tablet is between 50 cents and one dollar. Once MDMA reaches the United States, it is aggressively marketed. Here, it is known as "Ecstasy"—a name that means overwhelming emotion, or rapturous delight. It is also known as the Love Drug, and the Hug Drug, and is said to promote feelings of love, closeness, and empathy. Manufacturers imprint the tablets with "designer" labels, to make them more attractive.

Some people are making a lot of money by selling this drug to our kids. It is in their financial interest to downplay any harmful effects of MDMA. Indeed, the popular myth surrounding this drug is that it is harmless, and that any deaths or adverse medical conditions brought on by MDMA use were actually a result of not knowing how to use the drug responsibly, or of thinking you took MDMA when in fact you took another drug. The truth is, as we will hear from Dr. Leshner, that MDMA is a Schedule I drug for good reason—it has no known medical use in the United States, and a high potential for abuse.

MDMA is one of the most problematic drugs that has emerged in recent years. MDMA is a public health problem that is behaving like an epidemic. Taking cues from past epidemics, including drug epidemics, many researchers view a four phase cycle: incubation, expansion, plateau, decline. MDMA is now in the expansion phase; it is expanding to new/other drug users. No single solution can effectively address the multifaceted challenge posed with this drug. The Office of National Drug Control Policy, as part of the national drug control strategy, insists on a comprehensive response to all emerging drug epidemics, and MDMA in particular. Drug prevention, treatment, research, law enforcement, protection of our borders, supply reduction, and international cooperation remain necessary components of our efforts. In this regard our

agency is uniquely positioned to integrate public health, public safety, and a public policy perspective in the face of the spread of synthetic drugs such as MDMA. We applaud Congress in its continued efforts to focus on preventing the continued emergence of this drug.

I would also like to recognize our partners in our integrated approach to this problematic drug. The Drug Enforcement Administration (DEA), United States Customs Service (USCS), and state and local law enforcement heroically pursue the increasing numbers of cases brought to their attention. I would like to thank the young people who testified here today. The youth of our nation are most vulnerable to the grave dangers of MDMA. Those who came here today are courageous, and I commend them for all that they represent for themselves, their peers, and their community.

Thank you to our collaborators at the Department of Health and Human Services particularly the Substance Abuse and Mental Health Services Administration (SAMHSA) for their exemplary work in the prevention arena. Thank you also to Dr. Alan Leshner, Director of the National Institute on Drug Abuse, one of the world's leading authorities on drug abuse. NIDA plays a critical role in shaping and conducting research necessary for our understanding of the complexities of this drug and its effects on the brain and we are indebted to his leadership.

Public Health Impact of MDMA: The Problem

ONDCP bases sound drug policy on scientific research consistent with the goals of the *National Drug Control Strategy*. Research in areas of neurobiology, ethnography, epidemiology, behavioral change, death rates, and other health effects encompass some of the foundation upon which the Nation's drug policy is based. Increasingly available data on MDMA assists in our understanding of this emerging drug.

MDMA increases awareness of the senses, and is marketed as a way to enhance the techno music experience at raves and clubs. Loud, pounding music, psychedelic lights, and glow-sticks are part of the scene. Young people are willing to pay between $25 and $40 for a tablet that costs under a dollar to manufacture. Huge profits can be made from the sale of Ecstasy paraphernalia, too. Since MDMA use may cause an increase in body temperature and dehydration, bottled water is sold at prices far above normal. Pacifiers to alleviate teeth clenching, glow-sticks to enhance the visual experience, mentholated rub to smear on the inside of surgical masks to open the bronchia---these are some of the things sold along with Ecstasy.

Epidemiological trends. Manifestations of the health consequences cited above can be seen in a sampling of hospital emergency room admissions documented in *the Drug Abuse Warning Network* (DAWN) summary data. The DAWN survey captures data from emergency department episodes that are related to the use of an illegal drug or the nonmedical use of a legal drug.[1] The survey revealed that the number of mentions of MDMA has grown from 250 in 1994 to 1,143 in 1998 to 2,850 in 1999 and 4,511 in 2000. The 2000 data represents a significant increase showing a 58 percent increase from 1999. These data since 1994 represents nearly a

[1] A drug episode is an emergency department visit related to the use of an illegal drug(s) or the nonmedical use of a legal drug for patients aged six years or older. A "drug mention" refers to a substance that was mentioned (as many as four) during a single drug-related episode.

twenty-fold increase in a 6-year period. It should be noted that the total number of MDMA mentions comprises less than half of one percent (0.4%) of the total number of drug-related emergency mentions (1,100,539) in 2000. More than seventy percent of emergency department episodes involving any substances known as "Club Drugs" (e.g., MDMA, GHB, Ketamine, LSD or Rohypnol), involve more than one drug.[2] The data also indicate that young adults are disproportionately represented in emergency department visits involving Club Drugs.

Deaths attributed to MDMA. An increasing number of deaths have occurred as a result of malignant hypethermia or idiosyncratic reactions to the drug, but these remain rare. From 1994 through 1999, the number of deaths nationwide attributed to MDMA was a total of 71 (out of a total of 58,595 drug-related deaths nationally). However, of that total, the number of deaths related to MDMA use in 1999 alone was 42 (over 60 percent of the total number of deaths over the entire 5-year period sampled) indicating a disproportionate increase in recent years. It is highly probable that the number of MDMA related fatalities are currently underreported due to the fact that MDMA is often used in conjunction with a variety of drugs, including alcohol, which contributes to fatalities in automobile accidents and multiple-drug overdoses. Further, problems in accurate drug testing for MDMA impede proper detection. Many states have not fully implemented adequate testing regimens to screen for MDMA in cases of intoxication at time of death, especially when used in conjunction with other substances.

Data suggest that greater availability of MDMA is contributing to its popularity and increased use. Federal law enforcement agencies report a surge in MDMA seizures between 1998 and 2000. The DEA and the US Customs Service will provide testimony that demonstrates increasing amounts of the drug have been seized in each of the past three years.

Other health consequences. MDMA's immediate effects last approximately 3 to 6 hours (although they can last up to 24 hours). The drug's effects vary with the individual taking it, the dose and purity, and the environment in which it is taken. Physical effects may include muscle tension, involuntary teeth clenching, nausea, blurred vision, rapid eye movement, faintness, and chills or sweating. Users may experience increases in heart rate and blood pressure, a special risk for people with circulatory or heart disease. The stimulant effects of MDMA may also lead to dehydration, hypertension, and heart or kidney failure. MDMA also induces a state characterized as "excessive talking" (loquacity). Side effects including anorexia, psychomotor agitation, difficulty in achieving orgasm, and profound feelings of empathy, can all be explained as results of the flooding of the serotonin system.

Some of the short-term health effects become the targets of exploitation and the "culture" of using the drug such as selling bottled water at exorbitant prices or selling pacifiers to mitigate the effects of teeth clenching; other health effects are less recognizable and are dangerous. MDMA impacts the cardiovascular system, respiratory system, the central nervous system, and the musculoskeletal system with deleterious effects. There are a number of documented health risks associated with MDMA including severe dehydration and death from heat stroke or heart failure.[3] A review of several studies by the National Institute on Drug Abuse (NIDA) concludes that heavy MDMA users have significant impairments in visual and verbal memory as a long-

[2] Office of Applied Studies, SAMHSA, The DAWN Report: Club Drugs, December 2000.
[3] National Institute on Drug Abuse www.nida.nih.gov

term effect compared to non-users.[4] Further, findings by Johns Hopkins University and the National Institute of Mental Health (NIMH) suggest that MDMA use may lead to impairment in other cognitive functions, such as the ability to reason verbally or sustain attention.[5] From a public health perspective, the misnomer "Ecstasy" — which implies a benign substance —is one of the most harmful aspects of this drug epidemic.

Community data. Both ONDCP's Pulse Check[6] and NIDA's Community Epidemiology Work Group (CEWG) report that MDMA use is based on availability and that concurrent use of other drugs, either consciously or unwittingly through adulterated products, is prevalent. In March, 2001 ONDCP released its latest *Pulse Check: Trends in Drug Abuse Mid-Year 2000.* The special topic of the report was MDMA and other club drugs. The report chronicled changes in drug use between 1999 and 2000. Key report findings are: 1) Availability of MDMA has increased dramatically in nearly every Pulse Check survey location; 2) MDMA is often used and sold in combination with other drugs, such as hallucinogens, cocaine, heroin, marijuana, methamphetamine and prescription drugs; 3) MDMA users and sellers are extending beyond white, middle class males and females to other demographic groups; 4) the drug is expanding beyond nightclubs and raves to high schools and street markets; and 5) as MDMA consumption increases, the use of adulterants, especially stimulants, is also increasing (used to moderate the dysphoric effects experienced after MDMA use). While it appears we are containing the use of heroin and cocaine which generate the highest healthcare, criminal justice and social costs, MDMA use has the fastest accelerating illicit drug trend in the past few years. What is also disturbing is that the negative health affects are not appreciated by the user.

School data. MDMA has surpassed inhalants as the third most widely used illicit drug among high school seniors, (marijuana remains the most commonly used illicit drug among high school students, followed by the non-medical use of amphetamines including methamphetamine). According to the 2000 *Monitoring the Future* (MTF) survey, past-year use of MDMA by 8th graders increased from 1.7 percent to 3.1 percent between 1999 and 2000; past-month use increased from 0.8 percent to 1.4 percent. Past-month use of MDMA by 10th graders increased from 1.8 percent to 2.6 percent and past-year use by 12th graders increased from 5.6 percent to 8.2 percent. Among 12th graders, the perceived availability of MDMA rose sharply – an increase from 40.1 percent to 51.4 percent. This is the largest one-year percentage point increase in the availability measure among 12th graders for any drug class in the 26-year history of the MTF study.

Tests for detection of MDMA. We have identified the need to improve testing for MDMA. Although the technology for detecting MDMA in urine samples already exists, and can be commercially requested, this technology is cost-prohibitive for any large-scale operation. Members of the drug testing industry are responding to the urgent need for cost effective initial screening tests for MDMA and its analogues. The Food and Drug Administration (FDA), which

[4] See Hatzidimitriou, G., McCann, U.D., and Ricaurte, G.A. "Altered Serotonin Innervation Patterns in the Forebrain of Monkeys Treated with (±)3,4-Methylenedioxymethamphetamine Seven Years Previously: Factors Influencing Abnormal Recovery," *The Journal of Neuroscience*, June 15, 1999, 19(12):5096-5107 and McCann, U.D., Eligulashivili, V., Ricuarte, G.A., "Cognitive Performance in (+/-) 3,4 Methylenedioxymethamphetamine Users: A Controlled Study," *Psychopharmacology*, April 1999, 143(4):417-25.

[5] Ibid.

[6] Pulse Check is an ONDCP commissioned document published semiannually that provides a snapshot of local drug abuse situations throughout the country focusing on a specific drug within a six-month period. It is a critical qualitative measure that complements other reports and studies.

has the responsibility for clearing such diagnostic tests for commercial sale, will be involved in reviewing products for MDMA testing. Members of the drug testing industry have expressed interest in MDMA testing, and may submit their own products for FDA review and clearance in the near future. The SAMHSA-based National Laboratory Certification Program (NLCP), that supports federal drug-free workplace testing, has met with the FDA, and together they are exploring ways to speed up review and approval of a MDMA test, and other tests that may become available in the future. We have a responsibility to protect the public safety, and must therefore test workers in safety-sensitive positions whose memory or judgment may be affected by MDMA use. In addition, drug-testing has proven to be a deterrent to drug use.

MDMA Availability: The Sources, Trafficking and Interdiction

Approximately eighty percent of United States MDMA seizures are drugs produced in the Netherlands. In the near-term, predominantly Israeli organized crime entrenched in the Netherlands will likel force in facilitating the distribution of the drug for destinations in Europe and the U.S. European traffickers appe transporting MDMA to the U.S. through Mexico. Although MDMA tablets are exported worldwide, the United States is the main country of destination with more than forty percent of all MDMA tablets destined for American markets.[7]

Production of MDMA. MDMA production is a multi-stage process that requires a full laboratory setup. Precursor chemicals include safrole/isosafrole, MDP2P (3,4 methylenedioxyphenyl-2-propanone), methylamine, and piperonal. These precursor chemicals are regulated List I chemicals. The main precursor chemical source countries are Poland, Germany, China, and India. The key transshipment countries include Canada, Dominican Republic, France, Germany, Israel, and Spain. Precursor chemicals are readily available throughout Europe, as are professionally-trained chemists. Production lab equipment, including pill presses, are widely available as well. Internet-markets facilitate the sale of these items.

Distribution and Organized Crime. In the Netherlands, various organized crime syndicates produce synthetic drugs. Israeli drug trafficking organizations currently dominate the MDMA distribution channels, while domestic criminal groups appear to be increasing their networks with their own supply sources in Europe. In the last few years, couriers were used over forty percent of the time to transport the drugs. Parcel post, used fifteen percent of the time, represented the next largest mode of transport.[8] Production of MDMA is not widespread within the United States.

Along with the proliferation of new laboratories in Europe and Asia sophisticated distribution channels and aggressive marketing methods by drug trafficking organizations continue to increase worldwide supply. The increase in supply--coupled with proven marketing techniques directed at venues of vulnerability, such as dance clubs, vacation spots and youth recreational areas--has helped make MDMA readily available in the United States. This phenomenon has been reported not just domestically, but in Europe, Asia and in some Latin American countries. Synthetic drugs, including Ecstasy, amphetamine, and methamphetamine are now widely available in throughout Europe, the U.S. and Asia.

[7] Interpol memo, December 15, 2000.
[8] Ibid.

Supply reduction efforts have continued to emphasize 1) precursor chemical control and 2) identification and prosecution of drug trafficking organizations. The law enforcement and intelligence recommendations identified in the interagency Club Drug Conference hosted by DEA in August 2000 suggest a basis for the leveraging of law enforcement and intelligence cooperation in Europe. In the interim, additional investigation is needed to fully identify other vulnerable "nodes" in the production/distribution network while providing more emphasis on each of its components, such as production labs, organized crime and methods of transshipment. To form a working model of MDMA production as a system, information such as revenues generated, production estimates and flows need to be developed.

Federal Efforts

ONDCP has convened a Federal Interagency Demand Reduction Working Group Subcommittee to address MDMA. This group consists of representatives from agencies such as the Departments of Education, Labor, Interior, Transportation, Veterans Affairs, Health and Human Services, Defense, and Justice. Through the information gathering and exchange that occurred during the meetings we identified the need for a screening tool and the development of cost-efficient testing systems. One product of this collaboration is the identification of gaps in the prevention and treatment fields, such as the need for more MDMA testing, to adequately address MDMA.

In August 2000, the National Youth Anti-Drug Media Campaign launched a nationwide radio and Internet initiative focused specifically on MDMA. The initiative is designed to educate people about the drug's dangers and change the widespread misperceptions that it is harmless. This is in keeping with a research-based prevention principle that recommends intensifying anti-drug messages when a new drug threat emerges. A total of $5 million in purchased messages was allocated to this effort. The campaign targets both youth and adults through a combination of national radio ($3 million), spot (local) radio ($1.5 million) and Internet activity ($.5 million). Local radio activity includes 14 markets: Chicago, Denver, Miami, Atlanta, New Orleans, San Francisco, Austin, Seattle, Boston, Detroit, New York, St. Louis, Dallas, and Washington, D.C. In addition to the purchased messages, $3.9 million in pro bono media-match messages are being targeted at parents.

The Media Campaign also has an entertainment industry outreach component which educates the creative community about drug abuse and addiction issues. As part of this outreach, the Campaign convened *Ecstasy 101*, to provide scientific information and data to entertainment writers, network executives, and magazine feature writers. An MDMA Media Campaign roundtable was also held with invited directors, writers from television networks and news media that frequently cover the entertainment industry, medical experts, undercover narcotics officers, and selected youth drug use victims who told their own stories about their experience with MDMA. The roundtable was held in Los Angeles in September 2000 and repeated in New York in December 2000.

ONDCP's High Intensity Drug Trafficking Area (HIDTA) Program is a strategy-driven drug enforcement effort. The HIDTA Program facilitates the coordination and leveraging of resources of over 900 local, 172 state, and 35 Federal law enforcement agency resources, including 86 other participating organizations. Each of the 28 HIDTAs develops annual

strategies based on yearly regional threat assessments of the illicit drug conditions. These HIDTAs have also been directed to evaluate the MDMA threat relevant to each region. In those regions experiencing significant threat increases, appropriate shifts in enforcement strategies have already been implemented. One of the salient attributes of the HIDTA Program is its ability to quickly adjust to emerging drug threats, such as the evolving MDMA problem.

In partnership with the National Guard Bureau, Center for Substance Abuse Prevention (CSAP), Community Anti-Drug Coalitions of America (CADCA) and the National Institute on Drug Abuse (NIDA), ONDCP is participating in a four-part series of satellite broadcasts on specific drugs of abuse. A 90-minute broadcast on MDMA was held on May 24, 2001. The broadcast set a record for audience size, and reached over 800 sites in 50 states, 5 in the District of Columbia, and one in Canada. The show was also picked up by 55 public access stations with a potential audience of over 3 million viewers. The broadcast reached a live audience of 11,834 and a video taped audience of over 55,000. The broadcast was simultaneously webcast by SAMHSA's Clearinghouse at www.health.org, and is still available for viewing at that site. In addition to marketing through CADCA, the Higher Education Center advertised the broadcast through its listserve, which includes college campuses throughout the nation. From the broadcast, CSAP is producing a 30-minute video, a Power Point presentation, and a booklet about MDMA. These materials are available through the National Clearinghouse for Alcohol and Drug Information (NCADI, http://www.health.org/)

Conclusion

Mr. Chairman, MDMA is toxic and in some instances lethal, and must be addressed from a public health, public safety, and public policy perspective. ONDCP remains committed to overseeing the federal effort to reduce use and availability of this drug, and determined to reverse the threat posed by MDMA and through our drug policy efforts. I commend the committee on its efforts to protect the American people from this dangerous drug and thank you for the opportunity to speak about the facts.