

The Public Health Crisis of Methamphetamine Use and the HIV Epidemic

Wisconsin HIV Prevention Community Planning Council
Summer 2005

Introduction

Methamphetamine (meth) use is a major public health threat to individuals, families, and communities. It is a problem that affects many segments of society regardless of gender, age, sexual orientation, socioeconomic status, or race/ethnicity.

Research and anecdotal reports indicate that meth use is associated with sexual risk and injection drug use behaviors that are a major challenge in preventing and controlling HIV infection and other sexually transmitted diseases (STDs), especially among men who have sex with men (MSM).

Three studies reported at the 2004 National STD Prevention Conference indicated that meth use was associated with high-risk behaviors and STD infections among MSM in San Francisco. A Center for Disease Control and Prevention (CDC) study of 388 MSM found that 16 percent used meth the last time they had anal sex.¹ Meth users in this study were twice as likely as non-users to engage in unprotected receptive anal intercourse. Researchers at the San Francisco Department of Public Health (SFDPH) found that MSM who used meth and Viagra together were 6.1 times more likely to be diagnosed with syphilis than those who did not use either drug.² Another study from SFDPH found that 17.4 percent of 1,263 MSM who attended the city's public STD clinic had used meth in the four weeks before their visit.³ Those who used the drug were more than twice as likely as non-users to be HIV infected, 4.9 times as likely to be diagnosed with syphilis, and 1.7 times as likely to test positive for gonorrhea.

Overview of meth

Meth is a recreational drug that acts as a powerful and addictive stimulant resulting in increased activity, decreased appetite, and a general sense of well-being or euphoria. These effects can last 6 to 8 hours or longer and can result in hyperexcitability, prolonged periods of sleeplessness, compulsive sexual behaviors, and periods of binge use followed by acute depression. Prolonged use at high levels results in dependence.

Meth is relatively inexpensive and easy to manufacture by using common household products and over-the-counter cold medications containing ephedrine or pseudoephedrine. Research demonstrates regional variations in the manner in which meth is consumed. The most common routes are snorting, smoking, injecting or swallowing. Survey research for the years 2000 and 2001 found that 60% of meth users in San Diego smoked the drug while a majority of users in Minneapolis sniffed it and 60% of users in Texas injected it.⁴ Nationally, meth use is reported to be the second most frequent reason for seeking substance abuse treatment, behind alcohol.

Although some illicit meth has been manufactured in home-made or noncommercial labs, legislation restricting access to over-the-counter cold and allergy products containing pseudoephedrine has usually deterred the operation of such labs. While eliminating home-based labs is an important priority, the federal Drug Enforcement Administration (DEA) estimates that 80% of meth in the U.S. comes from "superlabs" controlled by Mexican drug cartels.

Recent reports, both nationally and in Wisconsin, indicate that the illegal manufacturing, distribution, and use of meth is well established in the state. The DEA reports that meth production and abuse are expanding from Minnesota and Iowa into northwestern and southwestern Wisconsin.⁵ The Wisconsin Department of Justice reports that seizure of meth labs in Wisconsin grew from 8 in 1999 to a high of 112 in 2003. Most recently, 91 meth labs were seized in 2004.

Legislation restricting access to meth-related products in Iowa and Minnesota has likely contributed to the development of meth labs in rural areas in western and southwestern Wisconsin. Local media have reported a relatively high level of public concern about meth in the western part of the state, particularly in counties in close proximity to the Minneapolis/St. Paul metro area. At a public hearing conducted by the Wisconsin Assembly on Criminal Justice and Homeland Security in February 2005, the Chief of the City of Eau Claire Police Department reported that meth cases in the Eau Claire area increased from nine to more than 80 over the past two years.

Meth related admissions to publicly supported AODA treatment centers in Wisconsin increased from 194 in 2001 to 347 in 2003. Over fifty percent of meth related admissions to these treatment centers occurred in the rural northwestern Wisconsin counties of Barron, Chippewa, Douglas, Dunn, Polk, and St. Croix in 2003. The Pride Institute in Eden Prairie, Minnesota, nationally known for addiction treatment services for gay, bisexual, and transgender persons, estimates that 60-70% of gay and bisexual men seeking treatment services at Pride indicate meth use as their primary or secondary drug of choice. Pride staff report that very few Wisconsin residents receive treatment services through the Institute.

Meth as a threat to environmental health

Because of the volatile nature of the production process, persons with home-made meth labs and those in close proximity to such labs face serious health hazards and exposure to toxic substances.^{6,7} Substances used in meth labs are corrosive, explosive, flammable, and noxious. These materials create environmental health hazards that are costly and difficult to contain. Small municipalities with limited resources frequently face the challenge of removing environmental hazards from makeshift meth labs in rural areas.

Meth as a threat to personal health

Users of meth face serious health problems including hypertension, stroke, and a broad range of other cardiovascular problems; dehydration; hyperthermia; central nervous system disorders; severe periodontal disease; psychiatric illnesses; communicable diseases; problems with adherence to drug therapy regimens; and death from overdose or polydrug use.⁸ All of these health threats present major economic challenges to individuals and society, both in terms of increased health care costs and lost productivity.

Persons with sexual compulsions or sexual addictions may experience heightened sexual arousal and intense sexual pleasure when initially using meth. After prolonged and habitual use, sexual pleasure may diminish and sexual dysfunction may occur. HIV-positive meth users who develop erectile dysfunction (ED) and are successfully treated may place HIV negative partners at risk through unprotected sex. Meth use has also been associated with intense (rougher) sexual activity that may result in increased risk for transmission of communicable diseases such as HIV and other STDs.

Persons who are HIV positive and use meth may face life-threatening problems, including:

- faster HIV progression
- neurologic damage
- further compromised immune function
- higher viral loads

Fatal interactions have been reported between meth and antiretroviral medications, particularly protease inhibitors.^{9,10}

Research literature has suggested that irreversible changes in neuron structure and function occurs in meth users. Recent research suggests that these changes associated with long term use may not be permanent and may partially recover following prolonged abstinence.¹¹

Cognitive behavioral interventions are recognized as the most effective treatments for meth addiction.¹² Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Improvement Protocol (TIP) 33 addresses best practice guidelines for the treatment of stimulant use disorders, including methamphetamine use.¹³ One of the many challenges faced by mental health care providers is their limited knowledge regarding treatment of meth addiction, particularly when a meth user exhibits severe psychiatric symptoms.¹⁴ There is a need for expanded treatment resources that include clinicians trained and experienced in treating persons with meth addiction, funding to support adequate inpatient and outpatient care, and training of health care providers in identifying and managing the acute and chronic health problems of persons with meth addictions.

Meth as a unique public health threat to men who have sex with men

Meth is the fastest growing recreational drug in the gay community and it is believed to be contributing to the further spread of HIV among MSM. The gay press frequently describes meth as the party/sex drug of choice in large metropolitan areas of the east and west coast. A study of New York City MSM who use meth found that they were three times more likely to contract HIV through receptive anal intercourse than MSM not using the drug.¹⁵ For some MSM, particularly those with sexual compulsivity or sexual addiction, meth use is associated with intense, uninhibited, and unprotected sex which may occur over the course of a few minutes, several hours, or many days.

Recent media attention focused on a report by New York City health officials regarding a rare strain of multidrug-resistant HIV in a male whose medical status rapidly progressed to AIDS.¹⁶ This individual was reported to have engaged in unprotected sex with multiple partners while using meth. This has raised the level of public awareness of meth and HIV but has also raised concern within the gay community about public misperception that meth use and HIV are primarily problems of gay men.

Researchers suspect that meth may play a role in suppressing immunity, thereby predisposing certain persons to HIV infection, and increasing viral loads in HIV positive users. A long-term study of more than 4,000 MSM sexually active with more than one partner found increased risk of contracting HIV while using meth, independent of other risk factors.¹⁷ Even after controlling for unprotected sex and injection drug use, men who were taking meth were twice as likely to contract HIV.

Data released from the CDC in 2004 indicated that a rapidly increasing percent of new syphilis infections in gay men are linked to meth use. In a study of 1,263 MSM visiting the San Francisco Health Department between November 2002 and March 2003, 17% reported meth use in the four weeks preceding their clinic visit.¹⁸ Within this group, meth users were 2.2 times more likely to be diagnosed as HIV-positive and 4.9 times as likely to be diagnosed with syphilis. In another San Francisco study, syphilis rates were more than 6-fold higher among MSM who used meth and Viagra together.¹⁹ In 1999, CDC estimated that only five percent of all reported syphilis cases in the U.S. occurred among MSM. By 2003, the percentage increased to 60 percent.²⁰

In summary, meth use by MSM has been associated with a number of risk factors related to the transmission of HIV, including multiple sex partners and increased numbers of casual sex partners, high rates of sexually transmitted diseases, lower rates of condom use, increased desire for anal sex, and prolonged and intense sexual activity.

National HIV and STD-related meth efforts

In November 2004, the National Alliance of State and Territorial AIDS Directors (NASTAD) and the National Coalition of STD Directors (NCSDD) jointly developed an Eight Step Action Plan that addresses meth use by MSM. The Plan calls for a heightened and coordinated response by a variety of federal agencies and organizations to address evidence suggesting that meth contributes to increased risky sexual behaviors and higher rates of HIV/STD transmission among MSM. The Action Plan is incorporated in a joint NASTAD and NCSDD fact sheet located on the Internet at <http://www.nastad.org/pdf/crystalmethcta.pdf>.

Wisconsin meth control efforts

Legislation combating the rise in meth use has been enacted and additional legislative proposals have been introduced in the Wisconsin legislature.

In May 2005, the Senate and Assembly passed legislation (Senate Bill 78 and companion Assembly Bill 183) that classifies pseudoephedrine hydrochloride, with the exception of liquid and liquid filled gel caps, as a Schedule V controlled substance. This limits the amount, frequency, and age at which a person may purchase drugs with this ingredient, requires a photo ID to be presented to the pharmacist, and creates a penalty for attempted theft of anhydrous ammonia. Governor Doyle signed SB 78 into law on June 7, 2005.

2005 Senate Bill 21 and its companion bill 2005 Assembly Bill 45 would allow all 72 counties (rather than only Milwaukee County) to enact an ordinance prohibiting the possession, manufacture, or delivery of drug paraphernalia.

2005 Assembly Bill 48 increases the penalty for a person using, or possessing with intent to use, drug paraphernalia related to methamphetamine, if the person is 18 years of age or older and uses or possesses the drug paraphernalia in the presence of a child who is 14 years of age or younger. In such a case, the person may be sentenced to a term of imprisonment of not more than 10 years or fined not more than \$25,000 or both.

In spring 2005, the Wisconsin Department of Justice convened regional meth summits. These meetings were a call to action to focus on a comprehensive, multi-faceted approach to the spread of meth in Wisconsin. The summits served as public forums that gathered representatives of law enforcement, prosecutors, educators, social workers, child protection

workers, treatment specialists, public health and medical professionals, hazardous materials specialists and state and local drug crime professionals. The purpose of the regional summits was to gather information for the Wisconsin Department of Justice to craft law enforcement strategies combating the proliferation of meth in Wisconsin. Similar efforts have been undertaken by various local community-level meth/drug task forces.

Community and organizational responses

In areas where meth use has been identified as a community-wide problem, residents have organized community responses in the form of task forces and other groups. Many of these efforts have focused on issues directly related to law enforcement, child protection, and public health management of environmental hazards of home-based meth labs.

Groups and organizations such as NASTAD,²¹ the Gay Men's Health Crisis,²² and the New York AIDS Coalition²³ have developed position statements and recommendations addressing the meth problem among MSM.

Increased prevalence of HIV in Wisconsin MSM

Wisconsin HIV surveillance data for 2004 raises concern about an increase in reported cases of HIV infection, especially in MSM.²⁴ The 417 new cases of HIV infection reported in 2004 was the highest number of reported cases in Wisconsin since 1997 and represented an increase of 24% compared to 2001. The entire increase can be attributed to an increase among men who have sex with men (MSM).

Data from the Wisconsin HIV Counseling Testing and Referral Program shows that between 2001 and 2003, the number of MSM tested increased by 27% and the number of MSM that tested HIV positive increased by 31%. It is possible that some part of the increase in reported cases may be attributed to an increase in HIV testing among MSM.

Meth use has been implicated in a resurgence of high-risk sexual behavior among MSM nationally. Surveillance data do not capture information that would assist in determining the degree to which meth has played a role in the increased incidence of HIV in Wisconsin MSM.

While empiric data and anecdotal reports do not substantiate the degree to which meth is contributing to the transmission of HIV in Wisconsin, HIV prevention efforts should include a focus on risk reduction measures to eliminate the actual or potential role of meth in the transmission of HIV now and in the future.

COUNCIL RECOMMENDATIONS

Assessment of meth use among Wisconsin MSM

Adequate measures of meth use by Wisconsin MSM are currently lacking. To assist in assessing the prevalence of this risk behavior, the following survey instruments and questionnaires should include questions regarding meth use:

- CDC MSM Rapid Behavioral Assessment Survey at 2005 Pride Fest (Milwaukee)
- Client questionnaires used in publicly funded Wisconsin HIV counseling, testing, and referral sites

- Client and partner questionnaires utilized in the Wisconsin HIV Partner Counseling and Referral Services Program
- Client questionnaires used in sexually transmitted disease clinics

The Council also recommends that HIV-related behavioral risk assessments be conducted among Wisconsin MSM to better measure and plan HIV prevention interventions. These risk assessments should be comprehensive and assess HIV-related risk behaviors that include but are not limited to meth use.

Prevention education

HIV prevention education efforts should incorporate risk reduction information on meth use and should be disseminated through venues that reach MSM, transgender persons, and GLBT youth. These materials should be culturally appropriate for specific target audiences and should include risk reduction education for HIV positive persons regarding risk associated with meth use and the medical management of HIV infection. Social venues commonly used by the gay community should prominently display meth prevention education materials/messages. Meth prevention education should also be included in all school health education curricula.

Education and training of health and social service providers

There is need for education and training on the medical management of acute and chronic health problems of meth users. Training and education should be directed to a broad range of health and human service providers, including but not limited to mental health clinicians, emergency health service staff (first responders and emergency room staff), primary care providers, correctional health service staff, AIDS service organization and CBO case managers and HIV prevention staff. Training should be comprehensive and address the areas of prevention, treatment, and harm reduction.

Leadership by the gay community

The gay community is a powerful and extremely effective force in leading efforts to combat the HIV epidemic, especially among MSM. The gay community can play a key role in promoting, advocating for, and implementing meth prevention education, risk reduction, and treatment services. This focus should be prominent on the agendas of gay-affiliated national, state, and local organizations.

Collaboration

Health and human service providers, law enforcement professionals, and representative of the justice/legal system at state and local levels should collaborate in establishing and implementing community and state level plans regarding meth prevention and intervention services. Collaborative efforts should focus not only on law enforcement and hazardous waste management/remediation but also address community coordinated efforts supporting risk reduction and treatment services for persons with meth addiction.

Information and referral services

Wisconsin information and referral service providers must have current information on meth-related prevention and treatment services, including local referral resources for persons seeking assistance with related risk reduction and treatment services. The Wisconsin HIV/STD/Hepatitis C Information and Referral Center should actively promote these efforts among other Wisconsin information and referral service providers.

Funding to support treatment services

Recovery from meth addiction is an ongoing process and one that takes many months of intensive follow-up services. Health and human service providers, legislators, health insurance plans, and consumers should advocate for increased funding/coverage for comprehensive inpatient and outpatient treatment services that address the specific needs of persons with meth addiction.

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SELECT WEB-BASED INFORMATION RESOURCES ON METH USE

The following are select web sites that address the topic of methamphetamine use, prevention, risk reduction, and treatment. For additional information on information sources that address specific subpopulations or topics such as harm reduction, contact the Wisconsin HIV/STD/Hepatitis C Information and Referral Center at 800-334-2437 (toll-free); www.irc-wisconsin.org (website); or irc-wisconsin@arcw.org (e-mail).

Crystal Meth Anonymous

<http://crystalmeth.org/>

Gay Men's Health Crisis

Crystal: what you need to know

<http://www.gmhc.org/programs/crystal.html>

KCI: The Anti-Meth Site

<http://www.kci.org/>

Life or Meth

<http://www.lifeormeth.com>

Methamphetamine Treatment Project

<http://www.methamphetamine.org/>

National Institute of Drug Abuse

NIDA Research Report – Methamphetamine Abuse and Addiction

<http://www.nida.nih.gov/ResearchReports/Methamph/Methamph.html>

New York Crystal Meth Anonymous

<http://www.nycma.org/literature.html>

Office of National Drug Control Policy

Fact Sheet November 2003

<http://www.whitehousedrugpolicy.gov/publications/factsht/methamph/index.html>

San Francisco AIDS Foundation

Frequently Asked Questions About Crystal Methamphetamine

http://www.sfaf.org/aboutaids/faq_meth.html

Substance Abuse and Mental Health Services Administration

Methamphetamine Fact Sheet

<http://store.health.org/catalog/facts.aspx?topic=6&h=drugs>

Tips for Teens

<http://www.ncadi.samhsa.gov/govpubs/PHD861/>

University of California San Francisco Center for AIDS Prevention Studies

How do club drugs impact HIV prevention?

<http://www.caps.ucsf.edu/publications/clubdrugs.html>

U.S. Department of Justice, Drug Enforcement Administration

Methamphetamines and Amphetamines

<http://www.usdoj.gov/dea/concern/amphetamines.html>