The diversion and abuse of methadone, a drug commonly used to treat heroin and other opiate addiction, appear to be increasing throughout the country. Drug Abuse Warning Network data reveal a rise in the number of methadone-related emergency department mentions, and many law enforcement agencies report increased occurrences of methadone abuse in their jurisdictions. This rise in methadone abuse corresponds to an increase in methadone availability. According to the Drug Enforcement Administration, the amount of methadone distributed by retail-level hospitals, retail pharmacies, practitioners, midlevel practitioners, and teaching institutions has increased from 692,675 grams in 1998 to 1,892,691 grams in 2001, the latest year for which data are available. Most methadone is used legitimately to treat opiate addiction and to relieve chronic pain; however, some is diverted and sold for illicit use. The number of methadone abusers who use the drug solely for its potential euphoric effect appears to be very low. Rather, those abusing methadone likely include chronic heroin users and a growing number of oxycodone abusers—particularly abusers of OxyContin, Percodan, and Percocet—seeking to ameliorate the effects of opiate withdrawal.

Background

Methadone, a Schedule II drug under the Controlled Substances Act, is a long-lasting synthetic opioid that, when used properly, reduces cravings for opiates—a leading cause in opiate abuse relapse. Methadone suppresses opiate cravings for 24 to 36 hours; thus, the drug can be administered once a day for the treatment of opiate addiction. Methadone also is prescribed as a narcotic analgesic to treat chronic pain. When abused, particularly in combination with other drugs, methadone causes effects in some users that are similar to those caused by the abuse of heroin and other opiates. Over time legitimate and illegitimate users may develop tolerance for and dependence on methadone.

Methadone is available in several forms including tablets, dispersible tablets (dissolvable in water or juice), liquid, liquid concentrate, and an
injectable solution. Only practitioners certified by the Substance Abuse and Mental Health Services Administration are permitted to prescribe and dispense methadone for treatment of opiate addiction. However, any physician may prescribe methadone as an analgesic for treatment of chronic pain. When prescribed as an analgesic, methadone may be dispensed by any licensed pharmacy.

Abuse

Emergency department and mortality data provided by the Drug Abuse Warning Network (DAWN) and reporting from law enforcement agencies indicate that methadone abuse is increasing. In addition, state-level public health agency data reveal increasing methadone abuse.

According to DAWN, the number of emergency department mentions for methadone increased overall from 3,832 in 1997 to 10,725 in 2001. Moreover, DAWN reports that 65 percent of methadone-related emergency department episodes also involved other drugs or alcohol in 2001. In that year alcohol was the substance most frequently used in combination with methadone, followed by cocaine and heroin.

DAWN mortality data for 2001 show that in most methadone-related deaths the drug was used in combination with other substances; however, those substances were not identified. Nevertheless, the data show that methadone ranked among the top 10 drugs mentioned in drug-related deaths in 24 of 33 DAWN reporting cities including Baltimore, Chicago, Detroit, Newark, and Phoenix.

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According to the Florida Department of Law Enforcement and the Florida Office of Drug Control, increased methadone abuse in Florida has resulted in an increase in overdose deaths involving the drug. The 2002 Report of Drugs Identified in Deceased Persons by Florida Medical Examiners indicates that methadone was found in 556 of the 5,816 decedents whose deaths were drug-related. Of these, methadone was determined to have contributed to the cause of death of 308 decedents. Furthermore, the number of drug-related deaths involving methadone increased 56 percent from 357 in 2001 to 556 in 2002, more than any other drug included in the report.

In North Carolina the number of single-drug deaths involving methadone—where methadone was determined to cause the death but was not necessarily the only drug found in the decedent—increased overall from 7 in 1997 to 58 in 2001. For all methadone-related deaths from 1997 to 2001, the source of the methadone was identified in 46 percent (92 deaths) of the medical examiner’s reports. Of these deaths, 73 decedents were found to have a prescription for methadone that had been written for them by a physician; 11 had methadone from a prescription that had been written for another person; 3 were known to have obtained their methadone illegally, and 5 were reported as having a combination of prescription methadone and methadone obtained illegally.

Methadone abuse also is a problem in other parts of the United States. Medical examiner data from Maine indicate that methadone increasingly is involved in overdose deaths. According to the report Maine Drug-Related Mortality Patterns: 1997-2002, methadone was the prescription drug most commonly identified in toxicology reports. The report shows that the number of cases in which methadone was listed as the cause of death or as a contributing factor fluctuated but increased overall from 4 in 1997 to 14 in 2001. In the first 6 months of 2002, 18 deaths were reported in which methadone was a cause of death or contributing factor. The report further indicates that in 2001
fewer than half of decedents whose deaths were caused by methadone or in which methadone was a contributing factor had a documented prescription for the drug. Most of them had not been enrolled in a methadone maintenance program. In 2001 an analysis of 14 cases in which methadone was a cause of death or contributing factor statewide indicated that only three individuals had been receiving treatment from a methadone maintenance clinic.

**Diversion**

Methadone often is diverted from opioid treatment programs. When administered for opioid treatment, methadone typically is dispensed under physician supervision in a methadone maintenance clinic. However, federal law permits opiate treatment programs to dispense a single take-home dose of methadone to patients for any day that the clinic is closed, including Sundays and state and federal holidays. In addition, treatment programs may dispense up to a 1-month supply of take-home doses of methadone for patients who have been in treatment for an extended period of time. Take-home doses of methadone sometimes are sold or traded for other drugs including heroin. Methadone also is diverted through misrepresentation and fraud. According to the Washington County Sheriff’s Office, some methadone patients in Maine mislead treatment providers into prescribing more methadone than is actually needed. They ingest the amount they need from their take-home doses and sell the remaining methadone for approximately $1 per milligram.

Methadone prescribed to treat chronic pain may also be diverted. Common diversion methods include fraudulent prescriptions, actions of unscrupulous or inexperienced physicians and pharmacists, and theft. On March 6, 2003, a Camp Springs, Maryland, dentist and a District Heights, Maryland, pharmacist were indicted by a federal grand jury and charged with illegally conspiring to dispense controlled substances including methadone by issuing, presenting, and filling fraudulent and stolen medical prescriptions.

**Outlook**

Methadone diversion and abuse will likely continue to increase as methadone is increasingly prescribed as an alternative to oxycodone for chronic pain maintenance, and as more oxycodone abusers, particularly OxyContin, Percodan, and Percocet abusers, seek relief from opioid withdrawal through illegal means. This may require greater supervision of those patients in methadone maintenance programs and, more importantly, increased scrutiny of methadone prescribed for the treatment of chronic pain.
Sources

State

Florida
Florida Department of Law Enforcement
Florida Office of Drug Control

Maine
Office of Substance Abuse
Office of the Maine Attorney General
    Office of the Chief Medical Examiner
Washington County Sheriff’s Office

Federal

Executive Office of the President
    Office of National Drug Control Policy
National Archives and Records Administration
    Office of the Federal Register
U.S. Department of Health and Human Services
    National Institutes of Health
        National Institute on Drug Abuse
        Substance Abuse and Mental Health Services Administration
            Drug Abuse Warning Network
U.S. Department of Justice
    Drug Enforcement Administration
    U.S. Attorney’s Office
        Northern District of Maryland

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It has been made available to provide access to historical materials.