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A close-up photograph of a glass vial containing a dark liquid, with a white pill marked "LEVA 40" in the background. The scene is lit with dramatic, low-key lighting, creating strong highlights and deep shadows.

**Methadone Diversion,
Abuse, and Misuse:
Deaths Increasing at Alarming Rate**

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Assessment

Product No. 2007-Q0317-001

Methadone Diversion, Abuse, and Misuse: Deaths Increasing at Alarming Rate

November 16, 2007

Introduction

From 1999 through 2006 the number of methadone-related deaths increased significantly. Most deaths are attributed to the abuse of methadone diverted from hospitals, pharmacies, practitioners, and pain management physicians. Some deaths result from misuse of legitimately prescribed methadone or methadone obtained from narcotic treatment programs, including use in combination with other drugs and/or alcohol. Methadone is a safe and effective drug when used as prescribed; however, when it is misused or abused—particularly in combination with other prescription drugs, illicit drugs, or alcohol—death or nonfatal overdose is likely to occur. This assessment analyzes increases in

methadone diversion, abuse, and misuse that have occurred since 1999.

Methadone poisoning deaths increased 390 percent from 1999 through 2004 (the most recent data available; see Figure 1.) Additionally, selected state health department data indicate methadone poisoning deaths increased through 2006. The percentage increase in methadone deaths exceeds the percentage increase in “other opioid” (including oxycodone, morphine, hydromorphone, and hydrocodone) deaths during the same period. Other opioid deaths increased 90 percent during that time and accounted for a much larger percentage of total opioid-related deaths. Methadone deaths receive more media attention than do oxycodone- or hydrocodone-related deaths, very likely because

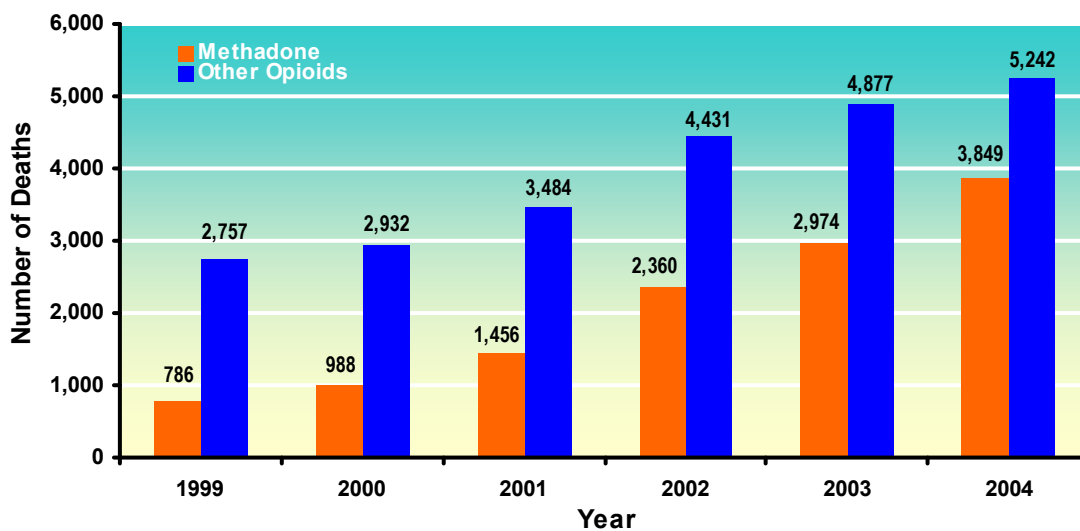


Figure 1. Methadone and other opioid deaths, 1999–2004.

Source: Centers for Disease Control and Prevention.

of the drug's association with narcotic treatment programs (NTPs). A 2004 Substance Abuse and Mental Health Services Administration (SAMHSA) study reported that most methadone deaths involve abuse or misuse of methadone diverted in ways other than from NTPs and taken in combination with other drugs and/or alcohol.

Various methods are used to divert methadone. Wholesale-level quantities of methadone are stolen from delivery trucks and reverse distributors, and midlevel quantities are stolen from businesses such as hospitals and pharmacies. Retail-level quantities frequently are obtained through traditional prescription drug diversion methods such as doctor-shopping, prescription fraud and, to a much lesser extent, rogue Internet pharmacies. Methadone can be misused by patients being treated for chronic or cancer pain who obtain the drug using legitimate prescriptions. Following increases in OxyContin (oxycodone) addiction and death rates, many practitioners began using methadone to manage chronic pain and pain associated with cancer. Methadone is a safe and effective drug when used as prescribed; however, patients who are prescribed methadone need to be monitored by a physician well trained in the pharmacodynamic and pharmacokinetic properties of the drug, particularly if the patients have no prior history of opioid use for pain management.

Key Judgments

- The total amount of methadone legitimately distributed to businesses increased from 2001 through 2006; the greatest percentage change occurred at the practitioner level, indicating that pain management and general practitioners are dispensing the

drug more frequently in the management of pain.

- Theft of methadone during transit from the manufacturers to businesses and theft from businesses and reverse distributors¹ increased the availability of methadone at the midlevel and retail level.
- Diversion from pain management facilities, hospitals, pharmacies, general practitioners, family and friends and, to a lesser extent, NTPs increased availability, primarily at the retail level.
- Retail-level distribution of diverted methadone may be occurring more frequently than law enforcement reporting indicates.
- Methadone poisoning² deaths rose at a higher rate than such deaths involving any other prescription opioid from 1999 through 2004, although the total number of methadone deaths was far fewer than the number of deaths involving other prescription opioids (morphine, oxycodone, hydrocodone, and hydromorphone).
- Most methadone deaths are the result of methadone diverted from hospitals, pharmacies, practitioners, pain management physicians and, to a much lesser extent, NTPs and used in combination with other drugs and/or alcohol.
- Some methadone deaths and nonfatal overdoses are the result of misuse of legitimately prescribed methadone by individuals who may not have been properly counseled by their physicians about the dangers of taking the drug in ways other than those prescribed, including in combination with other drugs and/or alcohol.

1. Reverse distributors are authorized by the Drug Enforcement Administration (DEA) to receive outdated or surrendered controlled substances for return to the manufacturer or destruction.

2. The Centers for Disease Control and Prevention (CDC) uses the term poisoning to describe deaths resulting from accidental overdoses of a drug, being given the wrong drug, taking the wrong drug in error, or taking a drug inadvertently, whether unintentional, intentional, or of undetermined intent.

Background

Methadone has been used primarily in opioid addiction treatment for the past 50 years; however, its use in management of certain types of pain has steadily increased since the late 1990s. Methadone, a Schedule II Controlled Substance under the federal Controlled Substances Act, is a synthetic opioid that was first used in the United States in the late 1940s in the management of pain before becoming more widely used in opioid addiction treatment in the 1960s. Methadone suppresses withdrawal symptoms, reduces cravings for opioid drugs, and blocks the euphoric effects of opioids for 24 to 36 hours. In the late 1990s methadone became widely prescribed to treat acute and chronic pain because physicians sought an alternate analgesic to oxycodone (OxyContin) and hydrocodone (Vicodin), which were being increasingly diverted and abused. Additionally, methadone can be dosed less frequently, is less costly than most other opioid analgesics,³ and is a reasonable option for patients (particularly the elderly and those without prescription drug insurance coverage) who choose prescription drugs based on their ability to pay.

Methadone is effective in both opioid addiction treatment and pain management when used as prescribed; however, improper dosing or use in combination with other drugs and/or alcohol can be fatal. Methadone is dispensed from NTPs⁴ once daily because it is metabolized slowly and remains in the body for 24 to 36 hours. Opioid abusers seeking treatment enter NTPs with some level of opioid tolerance, lessening the likelihood of an overdose or poisoning death while in treatment. However, proper dosing during the initial stage of treatment, even among opioid-tolerant

individuals, is critical to ensuring that an overdose does not occur. Additionally, any physician may prescribe methadone as an analgesic for management of pain, and when used properly, it is an effective pain reliever. Methadone is particularly useful for pain management patients (including those who develop a tolerance for other prescription opioids) whose pain does not decrease when they use other prescription opioids, for those who develop toxicity to other prescription opioids, and for those who cannot tolerate other prescription opioids. However, unlike some other opioid analgesics, methadone has a variable half-life and no sustained-release properties. Consequently, when methadone is used improperly (such as too frequently during the initial stages of treatment), concentrations of the drug in the body can accumulate, resulting in toxicity. Physicians who monitor methadone patients closely during the induction phase of treatment lessen the risk of death or nonfatal overdose for those patients. Individuals in opioid addiction treatment or pain management also are counseled to refrain from taking their methadone in combination with other drugs and/or alcohol, which can lead to a poisoning death. Patients who are properly counseled by physicians who have received adequate training in the pharmacokinetic⁵ and pharmacodynamic⁶ properties of methadone are less likely to overdose or misuse the drug.

Substantial Increase in Legitimate Distribution

The total amount of methadone legitimately distributed to businesses has increased, with the greatest percentage change occurring at the

3. In September 2007 the price of 90 tablets of 5-milligram methadone ranged from \$14.82 to \$20.22, the price of 90 tablets of 5-milligram oxycodone ranged from \$65.52 to \$65.77, and the price of 90 tablets of 5-milligram hydrocodone ranged from \$88.58 to \$121.04. Prices were retrieved from the prescription drug cost comparative web site www.cu.destinationrx.com, endorsed by Consumer Reports.

4. Only those programs certified by the Substance Abuse and Mental Health Services Administration (SAMHSA) are permitted to prescribe and dispense methadone for treatment of opioid addiction.

5. Pertaining to the biochemical and physiological effects of drugs, the mechanisms of drug action, and the relationship between drug concentration and effect.

6. Pertaining to the process by which a drug is absorbed, distributed, metabolized, and eliminated by the body.

practitioner level. Legitimate distribution of methadone to pharmacies, hospitals, and practitioners increased from 2001 through 2006 (the most current data available; see Table 1), according to the Drug Enforcement Administration (DEA).⁷ This increase indicates that a growing number of practitioners are dispensing methadone to manage pain. Many practitioners began to dispense methadone as a pain reliever following the negative publicity surrounding OxyContin’s high potential for addiction and abuse.

Table 1. Legitimate Distribution of Methadone to Businesses (in Grams) and Percent of Change, 2001–2006

Year	Practitioners	Pharmacies	Hospitals
2001	6,260	1,660,432	225,368
2002	10,381	2,328,287	310,027
2003	15,113	3,274,059	393,957
2004	35,466	4,228,660	466,028
2005	43,199	4,810,467	509,138
2006	51,046	5,986,488	584,144
Percent of Change 2001–2006	715	261	159

Source: Drug Enforcement Administration.

Substantial Increase in Forensic Laboratory Submissions

Methadone is one of the narcotic analgesics⁸ most frequently submitted to state and local forensic laboratories; the number of submissions increased overall in all areas of the country from 2001 through 2006. Data from the

DEA National Forensic Laboratory Information System (NFLIS)⁹ indicate that methadone was the third most frequently identified narcotic analgesic submitted to state and local forensic laboratories from 2001 through 2006. The number of methadone submissions increased overall during that time in all regions, although submissions in the Northeast fluctuated each year, while submissions in the Midwest increased overall but decreased by one from 2004 to 2005. (See Figure 2 on page 5.) According to NFLIS data, methadone was not listed among the 25 most frequently identified drugs in 2000 but progressed in rank from sixteenth in 2001 to tenth in 2006, indicating an increase in diversion and illicit availability.

Diversion

Theft of methadone during transit from the manufacturers to businesses and theft from businesses and reverse distributors increased the availability of methadone at the midlevel and retail level. The number of reported lost-in-transit thefts involving methadone en route to pharmacies, hospitals, and distributors increased from approximately 28 in 2004 to 39 in 2005 and 68 in 2006. Approximate dosage units¹⁰(du) reported stolen in these lost-in-transit incidents were 18,547 in 2004, 22,201 in 2005, and 67,867 in 2006 (108,615 total du). An additional 9,125 tablet/capsule dosage units were lost in transit to methadone clinics in 2006. The number of reported methadone thefts (burglaries, armed robberies, employee pilferage, and customer theft) from pharmacies, hospitals, and distributors decreased from 2004 (210) through 2006 (138). The number of dosage units stolen

7. http://www.deadiversion.usdoj.gov/mtgs/drug_chemical/2007/methadone_gfeussner.pdf

8. Narcotic analgesics are opioid-based pain medications, which include not only methadone but also hydrocodone and oxycodone. Only hydrocodone and oxycodone products were identified more frequently in forensic laboratory submissions.

9. The National Forensic Laboratory Information System (NFLIS) systematically collects results from drug analyses conducted by state and local forensic laboratories that analyze controlled and noncontrolled substances secured during law enforcement operations.

10. Tablet and capsule dosage units only.

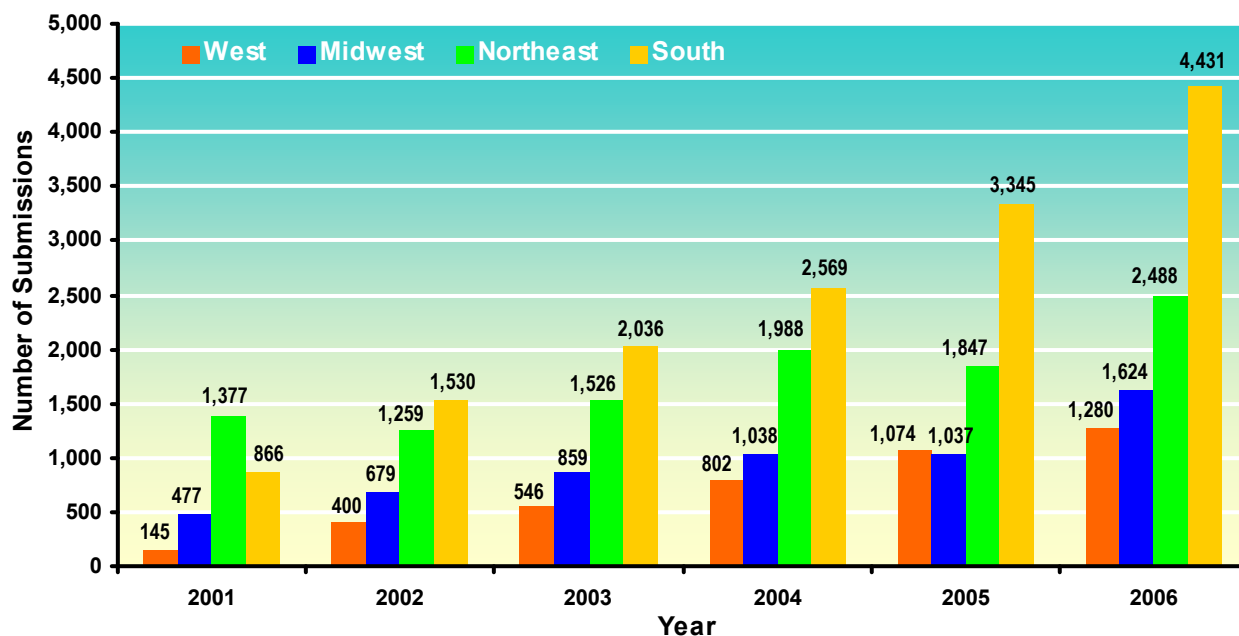


Figure 2. National and regional estimates for methadone submissions to state and local forensic laboratories, 2001–2006.

Source: National Forensic Laboratory Information System.

in these thefts also decreased during that time; however, the quantity of methadone diverted through theft remained substantial (112,478 du in 2004, 100,390 in 2005, and 71,119 in 2006), according to DEA. An additional 18,536 dosage units of methadone tablet/capsules were diverted through theft from clinics in 2006. Theft from reverse distributors very likely increases availability at the midlevel and retail level; however, the extent to which this type of theft occurs is unknown. Most manufacturers authorize the reverse distributors to destroy the drugs in accordance with the law, and the reverse distributors are required to report to DEA quarterly and document the quantity of drugs returned as well as the disposal of the substances. Some of the methadone sent to reverse distributors very likely is stolen before it is destroyed, particularly in instances where the returned drugs are stored in warehouses before incineration, flushing (where permitted), or another acceptable destruction method is implemented.

Diversion from pain management facilities, hospitals, pharmacies, general practitioners,

family and friends and, to a lesser extent, NTPs increased availability primarily at the retail level. Personal use quantities of methadone commonly are diverted through prescription fraud, theft of prescription pads from doctors' offices, theft from pharmacies, and theft from family and friends. Additionally, some patients with legitimate methadone prescriptions sell a portion of their prescribed allotment to friends, family, and strangers. Methadone diversion from NTPs has been a concern for law enforcement and public health officials for decades. That concern heightened in 2001 when SAMHSA implemented new regulations that permitted NTP personnel to dispense take-home doses of methadone to certain well-established patients in advanced courses of treatment. However, the growth in the number of NTPs administering methadone and in the number of individuals receiving treatment has been modest, according to SAMHSA. Conversely, legitimate distribution of methadone to pharmacies, hospitals, and practitioners increased 250 percent from

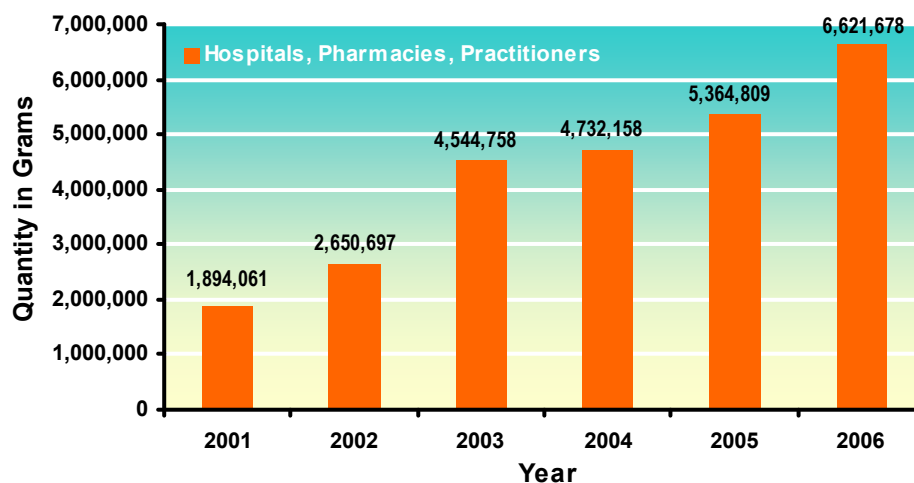


Figure 3. Increases in legitimate distribution of methadone to hospitals, pharmacies, and practitioners, 2001–2006.

Source: Drug Enforcement Administration.

nearly 1.9 million grams in 2001 to over 6.6 million grams in 2006 (the most current data available; see Figure 3), according to DEA.

Retail-level distribution of diverted methadone may be occurring more frequently than law enforcement reporting indicates. A 2005 survey¹¹ of prescription opioid abusers indicates that most obtained their drugs either exclusively from dealers or from dealers and two or more other sources (59 percent of the respondents reported two or more sources for their primary drug). The 2,174 survey respondents—individuals enrolled in federally approved NTPs who indicated that their primary opioid drug of abuse was a prescription opioid—listed the following as their most frequent sources of supply: 86 percent reported dealers, 54 percent reported friends or relatives, 28 percent reported a doctor’s prescription, 13 percent reported an emergency room, and 7 percent reported theft. Few respondents reported that they had obtained their primary opioid from the Internet or forged prescriptions (3% each) or in

other ways (2%). Enrollees with chronic pain were less likely to report a dealer as a source (82% versus 89%) and were more likely to report a doctor’s prescription as a source (31% versus 25%). The responses are similar for sources of supply for specific prescription opioids, including methadone, according to the study. (In this survey, 58 percent of respondents reported lifetime abuse of methadone, and 40 percent reported that they had abused methadone in the 30 days prior to seeking treatment.) It is possible that retail-level methadone distributors are obtaining the drug from criminals involved in bulk theft from tractor-trailers and local courier trucks and from criminals involved in pharmacy burglaries and armed robberies. Other sources of supply for retail-level distributors may be the Internet or poly-drug trafficking organizations based in Canada and Mexico, which obtain the drug from corrupt pharmacists and doctors in those countries. Additionally, unscrupulous doctors and pharmacists in the United States most likely divert methadone to retail-level dealers.

11. *Drug and Alcohol Dependence, Volume 90, Issue 1, September 2007: “Prescription opioid abuse among enrollees into methadone maintenance treatment.”* Survey administered by the National Development and Research Institutes, Inc.; the American Association for the Treatment of Opioid Dependence (AATOD); and Purdue Pharma L.P.

Methadone Prescribing Practices

The Food and Drug Administration (FDA) approved the 40-milligram methadone tablet (also known as a “diskette”) for use in NTPs, but not for the management of pain. However, physicians can prescribe a drug for other uses (referred to as “off-label”), and some do use the 40-milligram methadone tablet off-label for the management of pain. According to DEA, distribution of 40-milligram methadone tablets to pharmacies is increasing in response to increased prescribing by practitioners. Some medical experts believe that methadone should not be a practitioner’s first choice in the treatment of acute pain or management of chronic pain because the drug is more complicated for patients—particularly those who have not been treated with opioids in the past—to use during the initial stages of treatment. Hydrocodone and oxycodone products, when used appropriately, are less complicated pain medications with regard to dosing and side effects. Many physicians, however, do prescribe methadone more often than other opioid medications because of increased negative publicity surrounding the abuse of oxycodone products (primarily OxyContin), increased law enforcement scrutiny of OxyContin prescribing practices, and pressure from insurers to prescribe less expensive medications. General practitioners and pain specialists can limit misuse or diversion of prescribed methadone by requiring frequent patient checkups and prescribing smaller quantities of methadone to patients, lessening the likelihood that they will sell a portion of their prescription to friends, relatives, or strangers or take more than is medically safe.

Misuse of Prescribed Methadone

Some methadone deaths and nonfatal overdoses are the result of misuse of legitimately prescribed methadone by individuals who may not have been properly counseled by their physicians about the dangers of taking the drug in ways other than those prescribed. Methadone is an effective pain reliever, as are

all opioid analgesics when used as prescribed. It is also potentially addictive and is particularly dangerous when taken in combination with other drugs and/or alcohol. Patients who are properly counseled by physicians who have received adequate training in the pharmacokinetic and pharmacodynamic properties of methadone are less likely to overdose or misuse the drug. Physicians who legitimately specialize in pain management receive the extensive training necessary to prescribe opioid-based pain medications and effectively monitor their patients, particularly during the initial stages of treatment. Patients treated at pain management clinics also enter into a contractual agreement with the physician, during which time the dangers of any prescribed medications and the patients’ responsibility in taking the medication as prescribed are discussed.

Some general practitioners and novice pain management physicians may lack the training necessary to adequately monitor patients to whom they prescribe methadone. Washington State health officials were the first in the nation to issue guidelines to help practitioners better evaluate and monitor opioid medications for their patients. The guidelines and a web site, which were unveiled in March 2007, provide practitioners with the tools necessary to ensure the safety of patients to whom they prescribe opioid medications, including methadone. Dosages are not dictated in the guidelines; however, a 120-milligram limit is suggested if both pain and physical function are not improving in the patient. Moreover, the guidelines recommend that a general practitioner seek a second opinion from a pain management specialist if the patient is not improving and the recommended dosage limit has been met. The guidelines were designed under an educational pilot program; short- and long-term evaluation is needed to determine the success of the pilot program.

Public Health Advisory

The FDA issued a public health advisory in November 2006 to provide patients and their caregivers and health care professionals with safety information to prevent serious complications from methadone use. The advisory stated: “Prescribing methadone is complex. Methadone should only be prescribed for patients with moderate to severe pain when their pain is not improved with other non-narcotic pain relievers. Pain relief from a dose of methadone lasts about 4 to 8 hours. However, methadone stays in the body much longer, from 8 to 59 hours after it is taken. As a result, patients may feel the need for more pain relief before methadone is gone from the body. Methadone may build up in the body to a toxic level if it is taken too often, if the amount taken is too high, or if it is taken with certain other medications or supplements.”

Exposure Incidents and Deaths Increase

The number of individuals calling poison control centers to report adverse reactions or nonfatal overdoses from unintentional misuse

of prescription and diverted methadone increased from 2,747 in 2002 to 4,311 in 2005 (the year for which most current data are available), and most of those incidents (1,956 in 2002 and 3,388 in 2005) resulted in visits to healthcare facilities, according to the American Association of Poison Control Centers (AAPCC). (See Figure 4.) It should be noted that AAPCC data sets do not distinguish between methadone used for opioid addiction treatment and methadone prescribed for pain.

Methadone poisoning deaths nationwide increased significantly from 1999 through 2004, and data indicate that the number of deaths in many states continued to increase in 2005 and 2006. Poisoning deaths in which methadone was mentioned increased 390 percent—from 786 in 1999 to 3,849 in 2004 (the latest year for which such data are available); however, the number of deaths involving methadone was far lower than the number of deaths involving other prescription opioids (hydrocodone, hydromorphone, morphine, and oxycodone; see Table 2 on page 9), according to the National Center for Health Statistics (NCHS). The highest rate of increase for

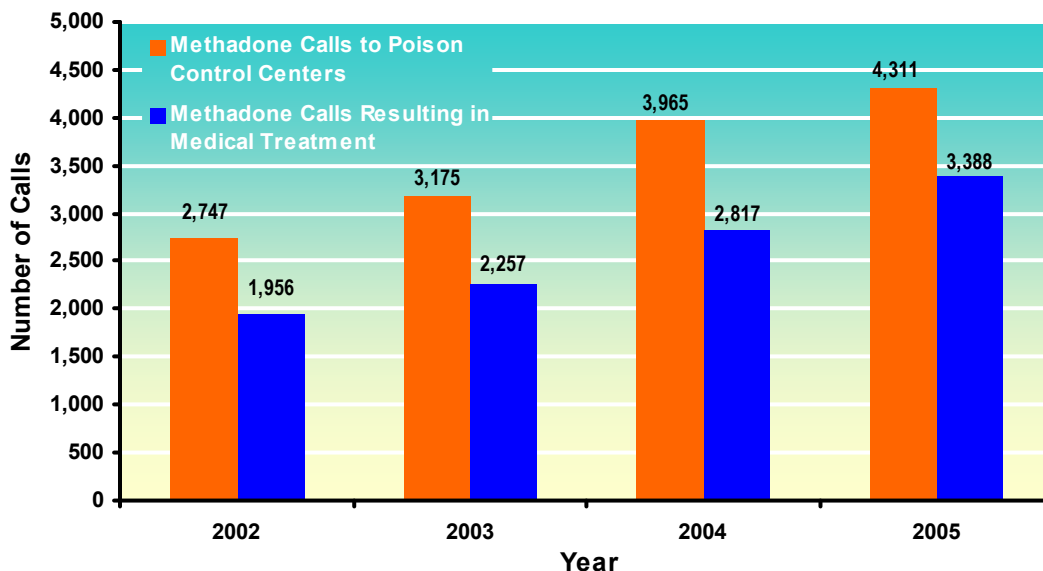


Figure 4. Methadone calls to poison control centers and calls resulting in medical treatment, 2002–2005.

Source: American Association of Poison Control Centers.

methadone poisoning deaths was among individuals 15 to 24 years of age—the rate in 2004 was 11 times higher than that in 1999. In comparison, among those 35 to 44 and 45 to 54 years of age, the rate of increase in 2004 was seven times higher than the rate in 1999, according to NCHS.

SAMHSA studies indicate that a large number of methadone deaths were reported nationwide prior to the 2001 change in the dispensing regulations. For example, data from the FDA Safety Information and Adverse Event Reporting Program indicate that 1,114 methadone-associated deaths were reported from 1970 through 2002. Methadone deaths often do not involve individuals who had access to methadone dispensed through treatment programs, according to SAMHSA. A 2004 SAMHSA national assessment of methadone poisoning deaths determined that most deaths involved one of three scenarios:

- The accumulation of methadone to toxic levels during the start of opioid treatment or pain management caused by an overestimation of tolerance and methadone's long, often variable, half-life.
- The misuse of diverted methadone by individuals with little or no opioid tolerance who may have taken excessive doses in an attempt to achieve euphoric effects.
- The synergistic effects of methadone in combination with other central nervous system depressants (alcohol, benzodiazepines, or other prescription opioids) among individuals with little or no tolerance.

The eight states with the highest numbers of methadone deaths reported to the Centers for Disease Control and Prevention (CDC) in 2002, 2003, and 2004 included Florida, North Carolina, New York, Washington, Texas, California,

Table 2. Number of Poisoning Deaths in Which Specific Narcotic Substances Are Mentioned, 1999–2004 and Percent of Change

Year	Methadone	Other Prescription Opioids
1999	786	2,757
2000	988	2,932
2001	1,456	3,484
2002	2,360	4,431
2003	2,974	4,877
2004	3,849	5,242
Percent of Change 1999–2004	390	90

Source: National Center for Health Statistics.

Virginia, and Kentucky. Also in the top 10 in 2002 were Oregon and Illinois; Oklahoma and West Virginia/Pennsylvania (each had 67 deaths) replaced Oregon and Illinois in 2003, and in 2004 Ohio replaced West Virginia/Pennsylvania in the rankings. The number of reported deaths increased in most states between 2002 and 2005, as shown in [Figures 5, 6, and 7 on pages 10 and 11](#). The states with the highest percentage increase in deaths from 1999 through 2004 are shown in [Table 3 on page 12](#).

The following health department data collected from selected states¹² indicate that methadone poisoning deaths increased from 2004 through 2005 or from 2005 through 2006 (in each case, the most current data available):

- The Florida Department of Law Enforcement reported 620 deaths caused by methadone in 2005 and 716 in 2006.
- The Kentucky State Medical Examiner reported 192 deaths in which methadone was mentioned in 2005 and 197 in 2006.

12. State data may not always correlate with federal (CDC) data because of many factors, including terminology used in defining the type of death on the death certificate and whether additional information was sent from the states to CDC after the reporting period had been closed.

- The Maryland Office of the Chief Medical Examiner reported 141 deaths caused by methadone in 2005 and 179 in 2006.¹³
- The New Mexico Department of Health reported 34 deaths in which methadone was mentioned in 2005 and 47 in 2006.
- The North Carolina State Center for Health Statistics reported 273 deaths in which methadone was mentioned in 2004 and 318 in 2005.
- The Virginia Office of the Chief Medical Examiner reported 118 deaths in which methadone was present in decedents in 2004 and 128 in 2005.
- The Washington State health department reported 259 deaths with methadone present in 2005 and 278 in 2006.

Outlook

Pain management physicians and general practitioners will continue to prescribe methadone to patients suffering from acute or chronic pain because it is one of the less costly opioid pain medications, has a longer duration of action than many other prescription opioids, and is effective. However, practitioners will become better educated on the dangers of prescribing methadone, particularly to those patients who are not opioid-tolerant. Poisoning deaths and exposures involving medical use of methadone will very likely begin to decrease over the next few years as more practitioners update their training regarding methadone's pharmacokinetic and pharmacodynamic properties and become better able to counsel their patients about the dangers of taking the drug in ways other than those prescribed.

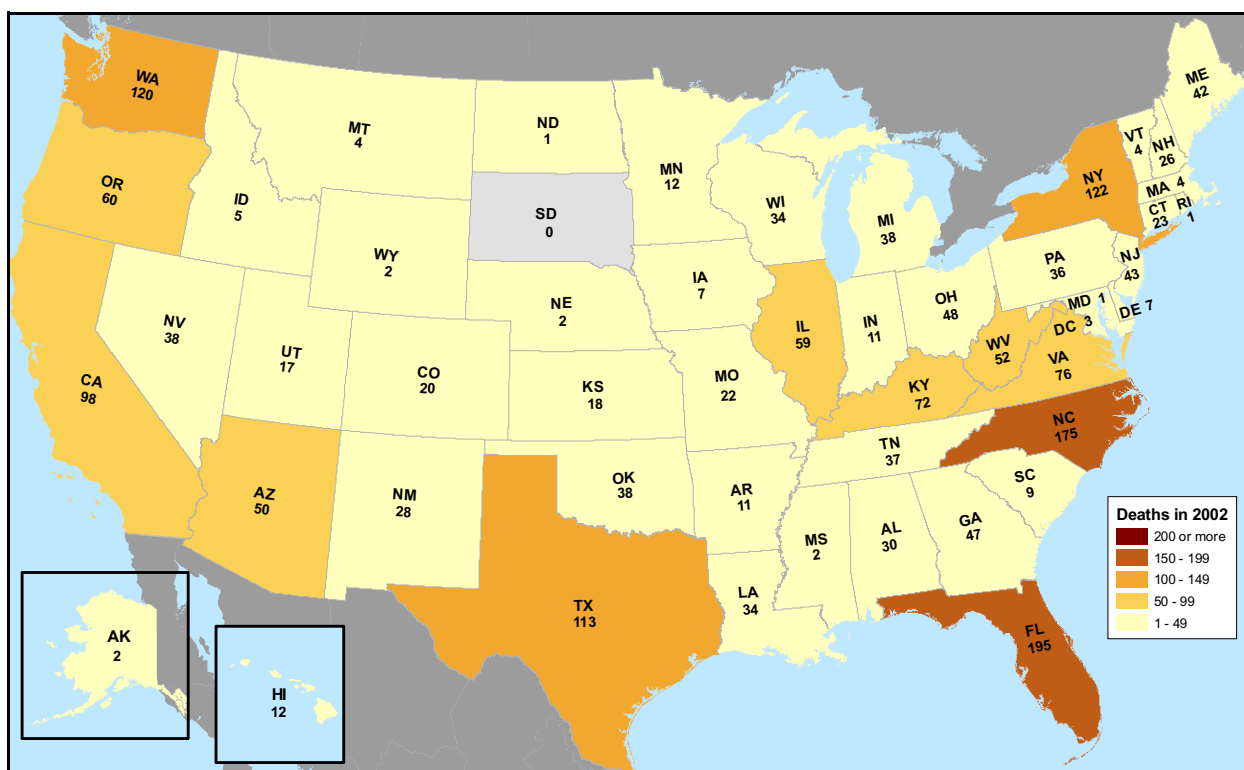


Figure 5. Unintentional methadone poisoning deaths, 2002.

Source: National Center for Health Statistics.

13. Fifty-nine percent of the deaths in Maryland were attributed to a lethal dose of methadone only. Maryland is the first state to report deaths resulting from methadone taken alone and not in combination with other drugs and/or alcohol.

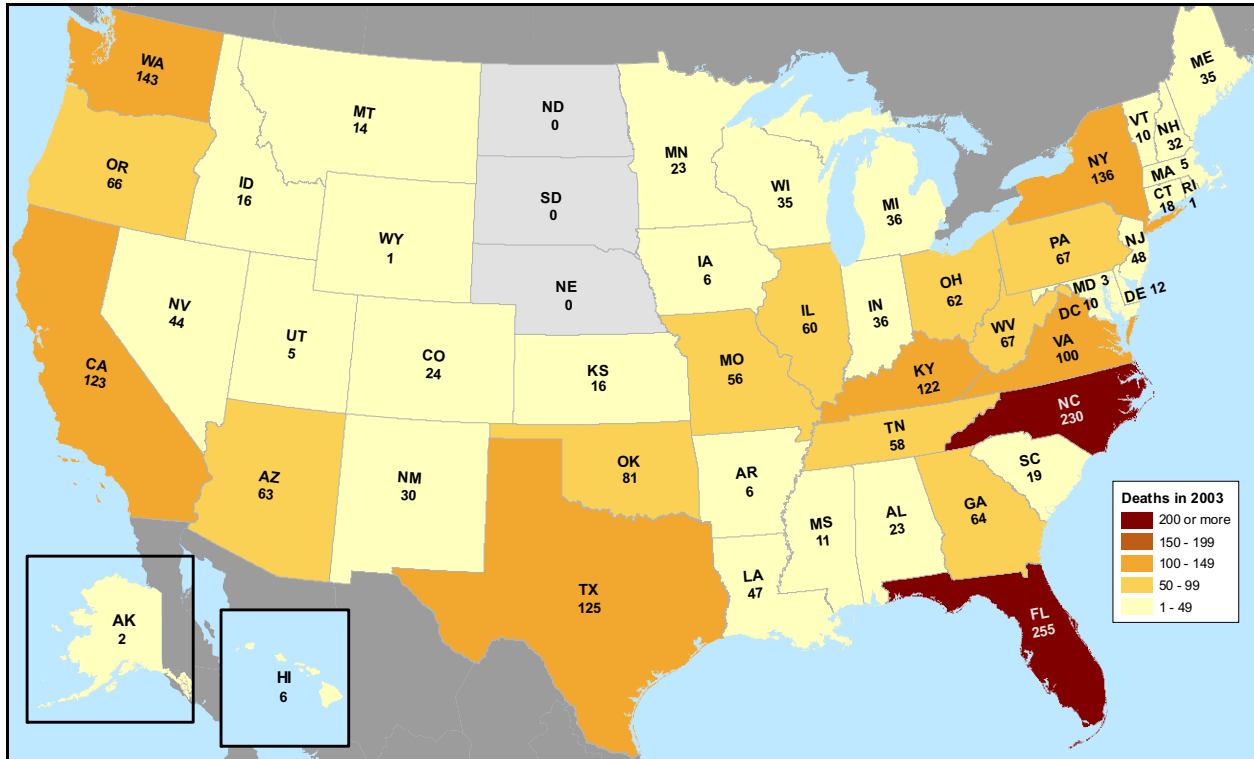


Figure 6. Unintentional methadone poisoning deaths, 2003.

Source: National Center for Health Statistics.

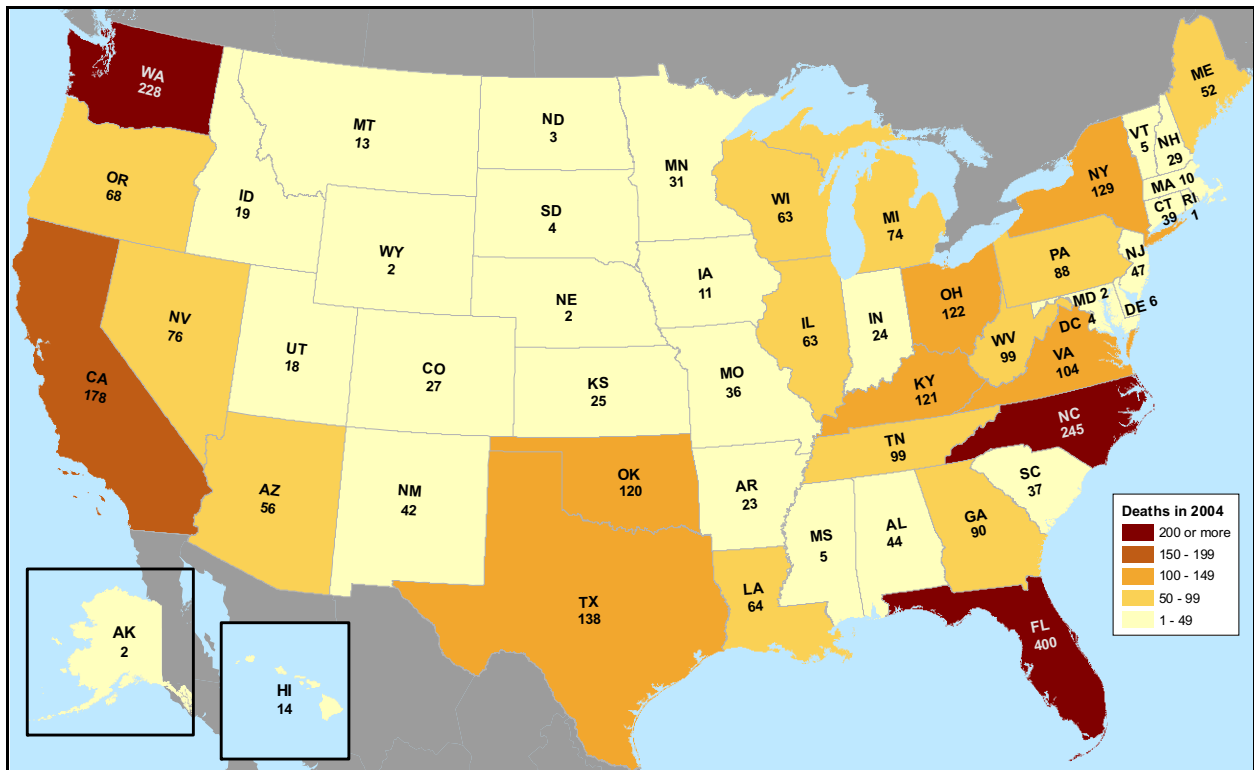


Figure 7. Unintentional methadone poisoning deaths, 2004.

Source: National Center for Health Statistics.

Table 3. Top 10 States With the Highest Percent of Increase in Methadone Poisoning Deaths, 1999–2004

State	1999	2000	2001	2002	2003	2004	Approximate Percent of Increase
West Virginia	4	3	25	52	67	99	2,400
Ohio	7	14	30	48	62	122	1,650
Louisiana	4	4	19	34	47	64	1,500
Kentucky	8	28	46	72	122	121	1,400
New Hampshire	2	7	11	26	32	29	1,350
Florida	29	47	117	195	255	400	1,300
Oregon	5	18	24	60	66	68	1,250
Pennsylvania	7	17	14	36	67	88	1,150
Tennessee	8	10	14	37	58	99	1,150
Wisconsin	6	16	18	34	35	63	950

Source: Centers for Disease Control and Prevention.

Public health officials will very likely respond to the increase in methadone diversion and poisoning deaths by establishing prevention programs that specifically target those most at risk of misusing, abusing, becoming addicted to, or overdosing on methadone. Diversion will remain a problem until demand for the drug decreases, which will be accomplished by directing prevention education at teens and young adults who have not begun to misuse or abuse the drug. Moreover, adults who learn the dangers of taking methadone improperly need to educate their children as well, which will help decrease the number of nonfatal and fatal overdoses in the future. Additionally, methadone education aimed at opioid abusers participating in NTPs will help decrease death rates among that population.

Law enforcement targeting of theft of wholesale and midlevel quantities of methadone will decrease the amount of diverted methadone available at the midlevel and retail level. Law enforcement investigations, particularly those involving lost-in-transit theft from tractor-trailers and courier trucks, will identify the manner in which criminals are able to infiltrate the transportation chain from

manufacturers to legitimate businesses. Decreasing that specific type of theft will reduce the amount of diverted methadone available at the midlevel and retail level.

Opioid abuse, including heroin abuse, is likely to increase if methadone misuse and abuse are not curbed significantly. As the dangers of becoming addicted to or overdosing on methadone (particularly when the drug is used in combination with other drugs and/or alcohol) become more widely known, those who have become dependent on methadone either during pain management or through recreational use may turn to other prescription opioids, such as hydrocodone or oxycodone, and may eventually switch to heroin. Opioid abusers generally seek out the highest-purity, most inexpensive form of the drug, and in many instances, heroin will be the drug to which prescription opioid abusers turn.

Intelligence Gaps

Actual methadone diversion and abuse levels could be more accurately determined if the following intelligence gaps could be resolved:

1. To what extent is methadone abused medically or nonmedically?
2. What factors cause an opioid abuser to choose methadone over hydrocodone or oxycodone products, which are more readily available and more predictable in their effects and dosing?
3. To what extent is methadone diverted from pain management clinics?
4. To what extent is methadone diverted from treatment centers?
5. To what extent is methadone diverted from reverse distributors (destruction facilities)?
6. To what extent is methadone stolen from someone with a prescription?
7. To what extent is methadone illicitly obtained on the Internet?
8. To what extent are employees diverting methadone from pharmacies?
9. To what extent are drug distributors selling methadone at the retail level, and to what extent are abusers purchasing the drug from retail-level distributors?

Surveys usually are the most reliable method used to determine the extent of drug abuse and the drugs most commonly abused over time. Surveys currently used to determine the extent of pharmaceutical abuse, the types of pharmaceuticals abused, and the sources of supply for diverted pharmaceuticals often use the general term “narcotic” and do not specifically mention oxycodone, hydrocodone, methadone, or morphine, which makes it difficult to obtain data on the gaps mentioned above. At least one new survey was initiated in 2005 that will help close some of these intelligence gaps; however, trend analysis will not be possible until several years’ worth of data have been obtained.

Many of these intelligence gaps can best be answered by drug abusers, although abusers may not be the most reliable sources of information. Their level of honesty often is based on their own needs and perceptions during law enforcement debriefings, counseling sessions, or treatment interviews. Additionally, survey data are not always based on the respondents’ actual experiences because they fear that being honest will result in some negative repercussions.

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Sources

Federal

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
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National Vital Statistics System
Food and Drug Administration
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment
Drug Abuse Warning Network

U.S. Department of Justice
Drug Enforcement Administration
Automation of Reports and Consolidated Orders System
National Forensic Laboratory Information System

State

Florida

Department of Law Enforcement
Office of the Medical Examiner

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Other

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