

Heroin

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Please use the following links to access these Heroin sub-chapters:

Effects - " [Heroin - Effects](#) " *physiological and psychological effects of heroin, with the effect(s) in parentheses.*

Data - " [Heroin - Data](#) " *data concerning heroin ordered by data year and subject of the data in parentheses.*

Law and Policy - " [Heroin - Law and Policy](#) " *information concerning the legal issues surrounding heroin.*

Research - " [Heroin - Research](#) " *research studies about various issues concerning heroin, with the subject of the research in italicized parentheses.*

1.

(heroin - definition of opioid) "The term "opioids" denotes a family of pharmaceutical agents related to opium, a substance harvested from the poppy plant. ⁴⁴ Since ancient times, humans have used opioids for their analgesic (pain-relief), euphoric, and narcotic (sleepinducing) properties. This family of agents includes substances naturally derived from opium (e.g., opium, morphine, codeine), semi-synthetic opiate derivatives derived through complex chemical processing (e.g., heroin), as well as substances that are artificially synthesized to mimic the effects of opioids (e.g., fentanyl, methadone). ⁴⁵ As a function of their common pharmacological characteristics, these substances share key structural similarities."

Source:

Burris, Scott; Beletsky, Leo; Castagna, Carolyn; Coyle, Casey; Crowe, Colin; and McLaughlin, Jennie Maura, "Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose," Drexel Law Review

(Philadelphia, PA: Earle Mack School of Law, Spring 2009), Vol. 1, Number 2, p.281.

<http://www.earlemacklaw.drexel.edu/law/lawreview/v1n2/burris.pdf>

2.

(heroin - definition) "Heroin is a synthetic opiate drug that is highly addictive. It is made from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant. Heroin usually appears as a white or brown powder or as a black sticky substance, known as 'black tar heroin.'"

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services).

<http://www.nida.nih.gov/infofacts/heroin.html>

3.

(heroin - history) "Heroin (diamorphine) was the trade name of a drug launched by Bayer in 1898,¹ although it is now better known as an illicit drug responsible for infectious disease spread, fatal overdoses, and criminal activity.^{2,3}"

Source:

Kerr, Thomas; Montaner, Julio SG; and Wood, Evan, "Science and politics of heroin prescription," *The Lancet* (London, United Kingdom: May 29, 2010) Vol. 375, Issue 9729, p. 1849.

<http://www.thelancet.com/journals/lancet/article/PIIS0140673610605442/fu...>

4.

(medications to treat opiate addiction) "Medications to help prevent [opiate] relapse include:

" *Methadone* , which has been used for more than 30 years to treat heroin addiction. It is a synthetic opiate medication that binds to the same receptors as heroin; but when taken orally, as dispensed, it has a gradual onset of action and sustained effects, reducing the desire for other opioid drugs while preventing withdrawal symptoms. Properly prescribed methadone is not intoxicating or sedating, and its effects do not interfere with ordinary daily activities. At the present time, methadone is only available through specialized opiate treatment programs."

" *Buprenorphine* is a more recently approved treatment for heroin addiction (and other opiates). Compared with methadone, buprenorphine produces less risk for overdose and withdrawal effects and produces a lower level of physical dependence, so patients who discontinue the medication generally have fewer withdrawal symptoms than those who stop taking methadone. The development of buprenorphine and its authorized use in physicians' offices give opiate-addicted patients more medical options and extend the reach of addiction medication."

" *Naltrexone* is approved for treating heroin addiction but has not been widely utilized due to poor patient compliance. This medication blocks opioids from binding to their receptors and thus prevents an addicted individual from feeling the effects of the drug. Naltrexone as a treatment for opioid addiction is usually prescribed in outpatient medical settings, although initiation of the treatment often begins after medical detoxification in a residential setting. To prevent withdrawal symptoms, individuals must be medically detoxified and opioid-free for several days before taking naltrexone. Naloxone is a shorter acting opioid receptor blocker, used to treat cases of overdose."

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services, September 2009).

<http://www.nida.nih.gov/infofacts/heroin.html>

5. Heroin - Effects

(*heroin - characteristics of intoxication*) "Acute intoxication is characterized by euphoria and drowsiness. Mast cell effects (eg, flushing, itching) are common, particularly with morphine. GI [gastro-intestinal] effects include nausea, vomiting, decreased bowel sounds, and constipation."

Source:

"Opioids," The Merck Manual, Section 15: Psychiatric Disorders, Chapter 198: Drug Use and Dependence, Merck & Co. Inc. (July 2008).

<http://www.merck.com/mmpe/sec15/ch198/ch198f.html>

6.

(heroin - adulterants) "In addition to the effects of the drug itself, street heroin often contains toxic contaminants or additives that can clog the blood vessels leading to the lungs, liver, kidneys, or brain, causing permanent damage to vital organs."

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services, September 2009)

<http://www.nida.nih.gov/infofacts/heroin.html>

7.

(heroin - adulterants) "But when people take whatever they can off the street, they have no way of knowing how the drug is adulterated. And when they decide to augment heroin's effects, possibly because they do not want to take too much heroin, they may place themselves in the greatest danger."

Source:

Peele, Stanton, MD, (1998), "The persistent, dangerous myth of heroin overdose." The Stanton Peele Addiction Website.

<http://www.peele.net/lib/heroinoverdose.html>

8.

(opioids - long term effects) "Long-term effects of the opioids themselves are minimal; even decades of methadone use appear to be well tolerated physiologically, although some long-term opioid users experience chronic constipation, excessive sweating, peripheral edema, drowsiness, and decreased libido. However, many long-term users who inject opioids have adverse effects from contaminants (eg, talc) and adulterants (eg, nonprescription stimulant drugs); cardiac, pulmonary, and hepatic damage from infections such as HIV infection and hepatitis B or C, which are spread by needle sharing and nonsterile injection techniques."

Source:

"Opioids," The Merck Manual, Section 15: Psychiatric Disorders, Chapter 198: Drug Use and Dependence, Merck & Co. Inc. (July 2008).

<http://www.merck.com/mmpe/sec15/ch198/ch198f.html>

9.

(definition of opioid dependence) "According to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth edition, text revision (DSM-IV-TR)*, opioid dependence is defined as a maladaptive pattern of opioid use leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period [American Psychiatric Association 2000]:

"1. Tolerance, as defined by either of the following:

- a. A need for markedly increased amount of the substance to achieve intoxication or desired effect
- b. Markedly diminished effect with continued use of the same amount of substance

"2. Withdrawal, as manifested by either of the following:

- a. The characteristic withdrawal syndrome for the substance
- b. The same (or closely related) substance is taken to relieve or avoid withdrawal symptoms

"3. The substance is often taken in larger amounts or over a longer period than was intended

"4. There is a persistent desire or unsuccessful efforts to cut down or control substance use

"5. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects

"6. Important social, occupational, or recreational activities are given up or reduced because of substance use

"7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance

"A diagnosis of opioid dependence is based not merely on physical dependence on opioids, but also entails compulsive use despite harm."

Source:

"VIVITROL® (naltrexone for extended-release injectable suspension)," FDA Psychopharmacologic Drugs Advisory Committee Meeting (Waltham, MAP: Alkermes, Inc., September 16, 2010), p. 15.

<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMateria...>

10.

(medications to treat opiate addiction) "VIVITROL was approved in 2006 by the FDA as an extended-release formulation of naltrexone for the treatment of alcohol dependence in patients who are able to abstain from alcohol in an outpatient setting prior to initiation of treatment. VIVITROL is administered by intramuscular (IM) injection once per month."

"VIVITROL [naltrexone] is a non-scheduled, non-narcotic, non-addictive medication administered by health care professionals via a once-per-month long-acting IM injection. Abuse and diversion are not issues as it provides no euphoria, its effects cannot be boosted and it has no street value. VIVITROL poses no risk for CNS or respiratory depression and is not associated with withdrawal symptoms when discontinued."

"This study [ALK21-013], taken with the results and experience accumulated throughout the entire VIVITROL development program and many years of experience with oral naltrexone, demonstrates the safety and effectiveness of this product for the treatment of opioid addiction."

Source:

"VIVITROL® (naltrexone for extended-release injectable suspension)," FDA Psychopharmacologic Drugs Advisory Committee Meeting (Waltham, MAP: Alkermes, Inc., September 16, 2010), pp. 10-11.

<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMateria...>

11.

(heroin - overdose) "People rarely die from heroin overdoses - meaning pure concentrations of the drug which simply overwhelm the body's responses."

Source:

Peele, Stanton, MD, (1998), "The persistent, dangerous myth of heroin overdose." The Stanton Peele Addiction Website.

<http://www.peele.net/lib/heroinoverdose.html>

12.

(heroin - side effects) "Unlike alcohol or tobacco, heroin causes no ongoing toxicity to the tissues or organs of the body. Apart from causing some constipation, it appears to have no side effects in most who take it. When administered safely, its use may be consistent with a long and productive life. The principal harm comes from the risk of overdose, problems with injecting, drug impurities and adverse legal or financial consequences."

Source:

Byrne, Andrew, MD, "Addict in the Family: How to Cope with the Long Haul" Redfern, NSW, Australia: Tosca Press, 1996!, pp. 33-34, available on the web at <http://www.csdp.org/addict/> .

13.

(heroin - treatment) "A range of treatments exist for heroin addiction, including medications and behavioral therapies. Science has taught us that when medication treatment is integrated with other supportive services, patients are often able to stop using heroin (or other opiates) and return to stable and productive lives."

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services, September 2009).

<http://www.nida.nih.gov/infofacts/heroin.html>

14.

(heroin - treatment - prescription opioids) "Treatment providers anecdotally report that some prescription opioid abusers are switching to heroin as they build tolerance to prescription opioids and seek a more euphoric high. Further anecdotal reporting by treatment providers indicates that some prescription opioid abusers are switching to heroin in a few areas where heroin is less costly or more available than prescription opioids."

Source:

National Drug Intelligence Center, Drug Enforcement Administration, "National Prescription Drug Threat Assessment," (Washington DC, April 2009), p. V.

<http://www.justice.gov/ndic/pubs33/33775/33775p.pdf>

15.

(heroin - treatment - opioid replacement) "The shift toward less restrictive access to care is predicated not only on the aforementioned treatment gap but also on strong scientific evidence supporting the efficacy of opioid replacement therapy. There appears to be a specific neurologic basis for the compulsive use of heroin. Chronic heroin abusers end up with an endogenous opioid deficiency because of down-regulation of opioid production. This creates an overwhelming craving, which necessitates effective treatments that shift the addicted patient's interests from obsessive preoccupation with the timing and dose of an illicit substance to more ordinary topics and less dangerous behaviors. ³⁸ "

Source:

Mori J. Krantz, MD; Philip S. Mehler, MD, "Treating Opioid Dependence: Growing Implications for Primary Care," Archives of Internal Medicine, (Chicago, IL: American Medical Association, February 2004), Vol. 164, p. 278.

<http://archinte.ama-assn.org/cgi/reprint/164/3/277.pdf>

16.

(heroin - treatment for withdrawal) "The withdrawal syndrome is self-limited and, although severely uncomfortable, is not life threatening. Minor metabolic and physical withdrawal effects may persist up to 6 mo. Withdrawal is typically managed in outpatient settings, unless patients require hospitalization for concurrent medical or mental health problems.

"Options for management of withdrawal include: Allowing the process to run its course ('cold turkey') after the patient's last opioid dose and administering another opioid (substitution) that can be tapered on a controlled schedule. Clonidine can provide some symptom relief during withdrawal."

Source:

"Opioids," The Merck Manual, Section 15: Psychiatric Disorders, Chapter 198: Drug Use and Dependence, Merck & Co. Inc. (July 2008).

<http://www.merck.com/mmpe/sec15/ch198/ch198f.html>

17.

(heroin - withdrawal symptoms) "Chronic use of heroin leads to physical dependence, a state in which the body has adapted to the presence of the drug. If a dependent user reduces or stops use of the drug abruptly, they may experience severe symptoms of withdrawal. These symptoms, which can begin as early as a few hours after the last drug administration, include restlessness, muscle and bone pain, insomnia, diarrhea and vomiting, cold flashes with goose bumps ('cold turkey'), kicking movements ('kicking the habit'), and other symptoms. Users also experience severe craving for the drug during withdrawal, precipitating continued abuse and/or relapse. Major withdrawal symptoms peak between 48 and 72 hours after the last dose and typically subside after about a week; however, some individuals may show persistent withdrawal symptoms for months. Although heroin withdrawal is considered less dangerous than alcohol or barbiturate withdrawal, sudden withdrawal by heavily dependent users who are in poor health is occasionally fatal."

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services)

<http://www.nida.nih.gov/infofacts/heroin.html>

18.

(heroin - withdrawal symptoms) "The withdrawal syndrome usually includes symptoms and signs of CNS [Central Nervous System] hyperactivity. Onset and duration of the syndrome depends on the specific drug and its half-life. Symptoms may appear as early as 4 h after the last dose of heroin, peak within 48 to 72 h, and subside after about a week. Anxiety and a craving for the drug are followed by increased resting respiratory rate (> 16 breaths/min), usually with diaphoresis, yawning, lacrimation, rhinorrhea, mydriasis, and stomach cramps. Later, piloerection (gooseflesh), tremors, muscle twitching, tachycardia, hypertension, fever and chills, anorexia, nausea, vomiting, and diarrhea may develop. Opioid withdrawal does not cause fever, seizures, or altered mental status. Although it may be distressingly symptomatic, opioid withdrawal is not fatal."

Source:

"Opioids," The Merck Manual, Section 15: Psychiatric Disorders, Chapter 198: Drug Use and Dependence, Merck & Co. Inc. (July 2008).

<http://www.merck.com/mmpe/sec15/ch198/ch198f.html>

19.

(heroin - naloxone & overdose) "This pilot trial is the first in North America to prospectively evaluate a program of naloxone distribution to IDUs to prevent heroin overdose death. After an 8-hour training, our study participants' knowledge of heroin overdose prevention and management increased, and they reported successful resuscitations during 20 heroin overdose events. All victims were reported to have been unresponsive, cyanotic, or not breathing, but all survived. These findings suggest that IDUs can be trained to respond to heroin overdose by using CPR and naloxone, as others have reported. Moreover, we found no evidence of increases in drug use or heroin overdose in study participants. These data corroborate the findings of several feasibility studies recommending the prescription and distribution of naloxone to drug users to prevent fatal heroin overdose."

Source:

Seal, Karen H., Robert Thawley, Lauren Gee, Joshua Bamberger, Alex H. Kral, Dan Ciccarone, Moher Downing, and Brian R. Edlin, "Naloxone Distribution and Cardiopulmonary Resuscitation Training for Injection Drug Users to Prevent Heroin Overdose Death: A Pilot Intervention Study," *Journal of Urban Medicine* (New York, NY: New York Academy of Medicine, 2005), Vol. 82, No. 2, p. 308.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2570543/pdf/nihms67318.pdf>

20. Heroin - Data

(2009 - *global opium poppy cultivation*)

"□ The global area under opium poppy cultivation declined to 181,400 hectares (ha) in 2009 (15%) or by 23% since 2007.

"□ In line with declines in the area under cultivation, global opium production fell from 8,890 metric tons (mt) in 2007 to 7,754 mt in 2009 (-13%), and potential heroin production declined from 757 mt in 2007 to 657 mt in 2009."

Source:

UNODC, World Drug Report 2010 (United Nations Publication, Sales No. E.10.XI.13), p. 11.

http://www.unodc.org/documents/wdr/WDR_2010/World_Drug_Report_2010_lo-re...

21.

(2008 - *number of heroin users*) "According to the 2008 National Survey on Drug Use and Health, the number of current (past-month) heroin users aged 12 or older in the United States increased from 153,000 in 2007 to 213,000 in 2008. There were 114,000 first-time users of heroin aged 12 or older in 2008."

Source:

National Institute on Drug Abuse, InfoFacts: Heroin (Rockville, MD: US Department of Health and Human Services, March 2010).

<http://www.nida.nih.gov/infofacts/heroin.html>

22.

(2008 - *Russian Federation - heroin and HIV/AIDS*) "In terms of absolute numbers, the Russian Federation is particularly affected with its 1.5 million addict population. The hugely damaging threat of HIV/AIDS is directly related to heroin injection. To date, there are over a quarter of a million registered HIV cases (although the number of unregistered cases is estimated to be much higher than this) in the Russian Federation. Of these, over 80% are intravenous drug users. In the CARs, nearly 15 years of continuous heroin transit has created a local market of 282,000 heroin users, consuming approximately 11 mt of heroin annually. Local opium consumption is estimated at approximately 34 mt (although demand in Turkmenistan may be underestimated). This puts some Central Asian states on par with countries with the highest global opiate abuse prevalence."

Source:

UNODC, World Drug Report 2010 (United Nations Publication, Sales No. E.10.XI.13), pp. 52-53.

http://www.unodc.org/documents/wdr/WDR_2010/World_Drug_Report_2010_lo-re...

23.

(2007 - *opium cultivation*) "The total area under opium cultivation rose to 235,700 ha in 2007. This increase of 17% from 2006 puts global cultivation at just about the same level, though still marginally lower, than the 238,000 ha recorded in 1998. Although there was some growth in South-East Asian poppy cultivation, the global increase was almost entirely due to the 17% expansion of cultivation in Afghanistan, which is now 193,000 ha. With Afghanistan accounting for 82% of world opium cultivation, the proportion of South-East Asian expansion in overall cultivation was small. It is not unimportant, however, as it reverses six straight years of decline."

Source:

United Nations Office on Drugs and Crime, "World Drug Report 2008" (United Nations: Vienna, Austria, 2008), p. 7.

http://www.unodc.org/documents/wdr/WDR_2008/WDR_2008_eng_web.pdf

24.

(2006 - *geographic patterns of heroin use*) "In 2006, heroin abuse indicators decreased in 7 CEWG [Community Epidemiology Work Group] areas, were stable in 14, and mixed in 1 (Texas). Injection continued to be the preferred route of heroin administration among primary heroin admissions in most CEWG areas, particularly areas west of the Mississippi River where black tar heroin is the most available form of the drug. Heroin primary treatment admissions, as a percentage of total admissions (excluding primary alcohol admissions), were particularly high in Boston (approximately 76 percent), Baltimore

(54 percent), Chicago (47 percent), Detroit and New York City (each 38 percent). As shown in the Cocaine/Crack section (pages 11-20), high percentages of all primary heroin treatment admissions in 10 CEWG areas reported using cocaine as a secondary or tertiary drug, with the proportions ranging from 19 percent in Los Angeles to 43 percent in New York City. Deaths involving heroin or heroin/morphine continued to be high in the Albuquerque, Detroit, Philadelphia, and New York City areas. Purity of white powder heroin, the most likely form to be inhaled or snorted, increased in 2005 in eight CEWG areas after substantial declines in most of these areas from 1999, including a decline in 2004. The purity of Mexican black tar heroin varied across 10 CEWG areas but increased in 4 from 2002 to 2005. CEWG representatives cited changes in the patterns of heroin use, based on a number of factors, including purity levels, the way heroin was used, and the number and types of substances used with heroin."

Source:

"Epidemiologic Trends in Drug Abuse: Highlights and Executive Summary -- Proceedings of the Community Epidemiology Work Group, Vol. 1, June 2007" (Bethesda, MD: National Institute on Drug Abuse), NIH Publication No. 08-6200-A, March 2008, p. 21.

http://www.drugabuse.gov/PDF/CEWG/Vol1_607.pdf

25.

(1995-2005 - *opioid overdose deaths*) "There can be no doubt, however, that fatal opioid overdose, long a chronic health problem in the United States, is now a rapidly growing one. ⁷¹ National surveillance data suggest that almost 83,000 Americans died from this form of overdose between 1999 to 2005, with over 16,000 fatalities in 2005 alone. ⁷² Opioid overdose death has seen a sharp increase over the last decade, especially in the category of overdose from prescription medications. ⁷³ Because of gaps in the surveillance system, the actual figure is likely to be substantially higher."

Source:

Burris, Scott; Beletsky, Leo; Castagna, Carolyn; Coyle, Casey; Crowe, Colin; and McLaughlin, Jennie Maura, "Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose," Drexel Law Review (Philadelphia, PA: Earle Mack School of Law, Spring 2009), Vol. 1, Number 2, p. 284.

<http://www.earlemacklaw.drexel.edu/law/lawreview/v1n2/burris.pdf>

26.

(2005 - *Russian Federation - heroin and opium seizures*) "The proportion of heroin and opium seizures has increased every year since 1999 and seizures of these two drugs increased from 38 percent in 2005 to 67 percent in 2006. At the same time, the number of significant heroin and opium seizures (according to UNODC classification) has also increased."

Source:

UNODC, "Illicit Drug Trends in the Russian Federation" (UNODC Regional Office for Russia and Belarus, April, 2008), p. 8.

<http://www.unodc.org/documents/regional/central-asia/Illicit%20Drug%20Tr...>

27.

(**2007 - economics - global - price of heroin**) In 2007, a kilogram of heroin no. 3 typically sold for an average wholesale price of \$2,520 in Pakistan; the average 2005 per-kilogram wholesale price of heroin no. 4 in that country equaled approximately \$4,159. The 2007 wholesale price for a kilogram of heroin in Afghanistan ranged around \$2,405. In Colombia, a kilogram of heroin no. 4 typically sold for \$9,992 wholesale in 2006. In the United States in 2007, a kilogram of heroin no. 4 cost an average of \$71,200 wholesale.

Source:

United Nations Office on Drugs and Crime, World Drug Report 2009, Statistical Annex: Prices, (Vienna, Austria: UNODC, 2009), pp. 217-218.

http://www.unodc.org/documents/wdr/WDR_2009/WDR2009_eng_web.pdf

28. **Heroin - Law and Policy**

The U.S. Penal Code violations for heroin and possible sentences:

Violation: "1 kilogram or more of a mixture or substance containing a detectable amount of heroin"

Sentence: "not less than 10 years or more than life" ... "No person sentenced under this subparagraph shall be eligible for parole during the term of imprisonment imposed therein."

Violation: "100 grams or more of a mixture or substance containing a detectable amount of heroin"

Sentence: "not less than 5 years and not more than 40 years" ... "No person sentenced under this subparagraph shall be eligible for parole during the term of imprisonment imposed therein."

Source:

"21 USC Part D - Offenses and Penalties 1/22/02," U.S. Drug Enforcement Administration:
<http://www.usdoj.gov/dea/pubs/csa/841.htm#b> as of 1/24/10.

29. **Heroin Maintenance - Law and Policy**

(law - heroin maintenance) "Many countries believe (erroneously) that the international drug conventions prohibit the use of heroin in medical treatment. Furthermore, the International Narcotics Control Board (INCB) has exerted great pressure on countries to cease prescribing heroin for any medical purpose. Nevertheless, a few countries, including the UK, Belgium, the Netherlands, Iceland, Malta, Canada and Switzerland, continue to use heroin (diamorphine) for general medical purposes, mostly in hospital settings (usually for severe pain relief). Until recently, however, Britain was the only country that allowed doctors to prescribe heroin for the treatment of drug dependence."

Source:

Stimson, Gerry V., and Nicky Metrebian, Centre for Research on Drugs and Health Behavior, "Prescribing Heroin: What is the Evidence?" (London, England: Rowntree Foundation, 2003), p. 4.

<http://www.jrf.org.uk/sites/files/jrf/1859350836.pdf>

30.

(policy - methadone maintenance) In November 1997, the National Institutes of Health (NIH) convened a Consensus Panel on Effective Medical Treatment of Heroin Addiction. The panel of national experts concluded:

"□ Vigorous and effective leadership is needed within the Office of National Drug Control Policy (ONDCP) (and related Federal and State agencies) to inform the public that dependence is a medical disorder that can be effectively treated with significant benefits for the patient and society.

"□ Society must make a commitment to offering effective treatment for opiate dependence to all who need it.

"□ The panel calls attention to the need for opiate-dependent persons under legal supervision to have access to MMT [methadone maintenance treatment]. The ONDCP and the U.S. Department of Justice should implement this recommendation.

"□ The panel recommends improved training of physicians and other health care professionals in diagnosis and treatment of opiate dependence. For example, we encourage the National Institute on Drug Abuse and other agencies to provide funds to improve training for diagnosis and treatment of opiate dependence in medical schools.

"□ The panel recommends that unnecessary regulation of MMT and all long-acting agonist treatment programs be reduced.

"□ Funding for MMT should be increased.

"□ We advocate MMT as a benefit in public and private insurance programs, with parity of coverage for all medical and mental disorders.

"□ We recommend targeting opiate-dependent pregnant women for MMT.

"□ MMT must be culturally sensitive to enhance a favorable outcome for participating African American and Hispanic persons.

"□ Patients, underrepresented minorities, and consumers should be included in bodies charged with policy development guiding opiate dependence treatment.

"□ We recommend expanding the availability of opiate agonist treatment in those States and programs where this treatment option is currently unavailable."

Source:

"Effective Medical Treatment of Opiate Addiction," NIH Consensus Statement 1997, Nov 17-19 (Washington, DC: National Institutes of Health), 15(6), p. 24.

<http://consensus.nih.gov/1997/1998TreatOpiateAddiction108PDF.pdf>

31. **Heroin - Research**

(heroin deaths and alcohol) "The majority of drug deaths in an Australian study, conducted by the National Alcohol and Drug Research Centre, involved heroin in combination with either alcohol 40 percent! or tranquilizers 30 percent!.

Source:

Peele, Stanton, MD, (1998), "The persistent, dangerous myth of heroin overdose." The Stanton Peele Addiction Website.

<http://www.peele.net/lib/heroinoverdose.html>

32.

(heroin - naloxone) "Naloxone distribution programs in the US are ongoing in Chicago, Baltimore, San Francisco, New Mexico and New York City. Additional community-based organizations interested in minimizing the adverse consequences of drug use in several cities in the US, including Los Angeles, Providence, Pittsburgh and Boston, are in the process of planning and developing naloxone administration programs for drug users. The recommendations presented [in this study] are designed to assist other SEPs [Syringe Exchange Programs] and health promotion centers in their planning, implementation and evaluation of similar programs for opiate users

"First, take-home naloxone distribution programs for opiate users are feasible and both programmatic experience and data suggests that drug users can be trained to respond to heroin overdose by giving naloxone

"Second, flexibility is essential in the development, implementation and evaluation of naloxone administration programs. This flexibility means adapting overdose prevention training curriculum to be delivered quickly and effectively in numerous settings

"Third, evaluation components should be designed for feasibility and simplicity

"Fourth, the program is entirely dependent on opiate user participation—responding to and incorporating feedback from participants (i.e. multiple outreach strategies, flexible hours for naloxone prescription by the medical physician, an abbreviated training curriculum) is integral for program success.

Source:

Tinka Markham Piper, Sasha Rudenstine, Sharon Stancliff, Susan Sherman, Vijay Nandi, Allan Clear and Sandro Galea. "Overdose prevention for injection drug users: Lessons learned from naloxone training and distribution programs in New York City," Harm Reduction Journal (January 25, 2007).

<http://www.harmreductionjournal.com/content/pdf/1477-7517-4-3.pdf>

33.

(heroin vs. methadone maintenance) "The German model project for heroin-assisted treatment of opioid dependent patients is so far the largest randomised control group study that investigated the effects of heroin treatment. This fact alone lends particular importance to the results in the (meanwhile worldwide) discussion of effects and benefits of heroin treatment. For the group of so-called most severely dependent patients, heroin treatment proves to be superior to the goals of methadone maintenance based on pharmacological maintenance treatment. This result should not be left without consequences. In accordance with the research results from other countries, it has to be investigated to what extent heroin-assisted treatment can be integrated into the regular treatment offers for severely ill i.v. opioid addicts."

Source:

Naber, Dieter, and Haasen, Christian, Centre for Interdisciplinary Addiction Research of Hamburg University, "The German Model Project for Heroin Assisted Treatment of Opioid Dependent Patients -- A Multi-Centre, Randomised, Controlled Treatment Study: Clinical Study Report of the First Study Phase," January 2006, p. 122.

http://www.heroinstudie.de/H-Report_P1_engl.pdf

34.

(heroin - overdose) "A striking finding from the toxicological data was the relatively small number of subjects in whom morphine only was detected. Most died with more drugs than heroin alone on board, with alcohol detected in 45% of subjects and benzodiazepines in just over a quarter. Both of these drugs act as central nervous system depressants and can enhance and prolong the depressant effects of heroin."

Source:

Zador, Deborah, Sunjic, Sandra, and Darke, Shane, "Heroin-related deaths in New South Wales, 1992: toxicological findings and circumstances," The Medical Journal of Australia.

<http://www.mja.com.au/public/issues/feb19/zador/zador.html>

35.

(heroin - overdose) "If it is not pure drugs that kill, but impure drugs and the mixture of drugs, then the myth of the heroin overdose can be dangerous. If users had a guaranteed pure supply of heroin which they relied on, there would be little more likelihood of toxic doses than occur with narcotics administered in a hospital."

Source:

Peele, Stanton, MD, "The Persistent, Dangerous Myth of Heroin Overdose."

<http://www.peele.net/lib/heroinoverdose.html>

36.

(heroin - overdose) "Our findings that an ambulance was called while the subject was still alive in only 10% of cases, and that a substantial minority of heroin users died alone, strongly suggest that education campaigns should also emphasise that it is safer to inject heroin in the company of others, and important to call for an ambulance early in the event of an overdose. Consideration should also be given to trialling the distribution of the opioid antagonist naloxone to users to reduce mortality from heroin use."

Source:

Zador, Deborah, Sunjic, Sandra, and Darke, Shane, "Heroin-related deaths in New South Wales, 1992: toxicological findings and circumstances," The Medical Journal of Australia.

<http://www.mja.com.au/public/issues/feb19/zador/zador.html>

37.

(heroin - overdose) "The disadvantage of continuing to describe heroin-related fatalities as "overdoses" is that it attributes the cause of death solely to heroin and detracts attention from the contribution of other drugs to the cause of death. Heroin users need to be educated about the potentially dangerous practice of concurrent polydrug and heroin use."

Source:

Zador, Deborah, Sunjic, Sandra, and Darke, Shane, "Heroin-related deaths in New South Wales, 1992: toxicological findings and circumstances," The Medical Journal of Australia.

<http://www.mja.com.au/public/issues/feb19/zador/zador.html>

Related Chapters:

- [Hepatitis C](#)
- [Heroin Maintenance](#)
- [HIV/AIDS](#)