

Drug Dependence Treatment In Prison and Upon Release

Holly Catania, JD
International Center for Advancement
of Addiction Treatment
www.opiateaddictionrx.info

Satellite on HIV/AIDS in Prison Settings
18th International Conference to Reduce Drug Related Harm
Warsaw, Poland May 13, 2007

Types of Drug Treatment

- ❖ Long-Term Residential (therapeutic communities, "TCs")
 - ❖ 6-12 months
- ❖ Short-Term Residential
 - ❖ 3-6 weeks inpatient hospital followed by extended out-patient talk therapy and/or 12 step programs
- ❖ Medical Detox
 - ❖ Pts. withdrawn from drugs under physician's care, in-patient or out-patient (precursor to treatment)
- ❖ Outpatient "Drug Free"
 - ❖ Drug education/admonition/group & individual counseling
- ❖ Drug Substitution Treatment (opioid agonist therapy)

Which Medication (s)? Many Used Effectively

- ❖ Methadone
- ❖ Buprenorphine
- ❖ Codeine
- ❖ Slow-release morphine
- ❖ Opium
- ❖ Heroin
- ❖ Naltrexone*

What is Methadone and Buprenorphine/Subutex?

- ❖ Opioid substitution therapy for illicit dependence on opioids
- ❖ Synthetic opioids taken orally under physicians' care
- ❖ Can be used as a detox. tool in tapering doses or as maintenance (better outcomes)
- ❖ Long-acting (typically 24 hours)
- ❖ Blocks effects of other opioids like heroin
- ❖ Stops cravings: biggest factor in relapse

Why Methadone?

- ❖ **Methadone Maintenance** treatment is the most effective treatment available for heroin dependent injecting drug users (IDUs) for **reducing**
 - ❖ **Mortality** (Capelhorn, et al., 1994)
 - ❖ **Heroin consumption** (Gottheil, et al, 1993)
 - ❖ **Criminality** (Newman, et al., 1973) and
 - ❖ **HIV infection** (Blix and Gronbladh, 1981; Novick, et al. 1990)

Rationale for MMT in Prisons

- ❖ **Reducing the spread of HIV and other infections.** Injecting drug users are over-represented in prisons and they are at higher risk for contracting and spreading infections.
- ❖ **Continuity of medical care.** The increasing number of IDUs in community-based methadone programs means more prisoners in opioid withdrawal.
 - ❖ Pregnant IDUs at high risk.
- ❖ **Overdose Prevention.** Highest risk of overdose is after periods of abstinence or reduced use, incarceration.

Rationale for MMT in Prisons *(cont.)*

- ❖ The introduction or expansion of **methadone** in prisons has been **recommended** by a number of prominent medical & scientific organizations:
 - ❖ World Health Organization, 1993
 - ❖ UK's Advisory Council on the Misuse of Drugs, 1993
 - ❖ NIH Consensus Development Panel on Effective Treatment of Heroin Addiction, 1997 (U.S.A.)
 - ❖ World Health Organization/United Nations Office of Drugs and Crime, Joint United Nations Programme on HIV/AIDS, 2004
 - ❖ National Institute on Drug Abuse, 2006 (U.S.A.)

More Support for Methadone

INSTITUTE OF MEDICINE OF THE NATIONAL
ACADEMIES of SCIENCE:

*Preventing HIV Infection Among Injecting Drug Users in
High Risk Countries: An Assessment of the Evidence*

Commission by Global Fund and Gates Foundation
Released on: September 15, 2006

Institute of Medicine, National Academy Science Report, Sept 2006

“Programs that provide access to methadone therapy and clean syringes reduce the risk of transmission of HIV”

“We do not end [the Report] with ‘More research is needed.’ ... We say instead ‘Action is needed’.”

Principle of Equity

- ❖ Prisoners should have access to the same medical care and health care services as they would have in the community.
- ❖ External professional standards of care should be applied to prisons.

Countries with Methadone and Other Harm Reduction Interventions in Prison

- ❖ Albania
- ❖ Australia
- ❖ Austria (+ buprenorphine, morphine)
- ❖ Belgium (detox only)
- ❖ Canada
- ❖ Denmark
- ❖ England
- ❖ France (+ buprenorphine)
- ❖ Germany (+ NEX)
- ❖ Indonesia
- ❖ Iran (+NEX)
- ❖ Ireland
- ❖ Italy
- ❖ Kyrgyzstan
- ❖ Luxembourg
- ❖ Moldova
- ❖ Netherlands
- ❖ N. Ireland (detox only)
- ❖ Poland
- ❖ Portugal
- ❖ Puerto Rico
- ❖ Scotland
- ❖ Slovenia
- ❖ Spain
- ❖ Switzerland (+ heroin, NEX)
- ❖ United States (jail only)

❖ Additional Sources: Dolan 2001, EMCDDA 2002

The Evidence

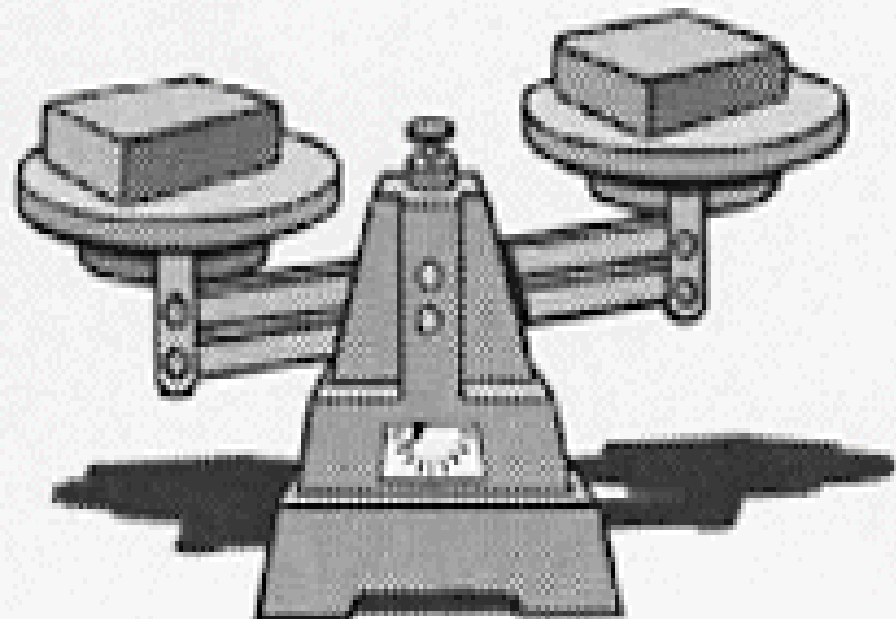


Methadone is Cost Effective

- ❖ MMT costs approx. \$4000 per patient per year
- ❖ Reduces criminal behavior associated with illegal drug use, promotes health, and improves social productivity, all of which serve to reduce the societal costs of drug addiction, i.e. re-incarceration, hospital stays and joblessness
- ❖ Cost benefit analyses indicate savings of \$4 to \$5 in health and social costs for every \$1 spent on MMT

Weighting the Costs Annual Cost per Drug Addict

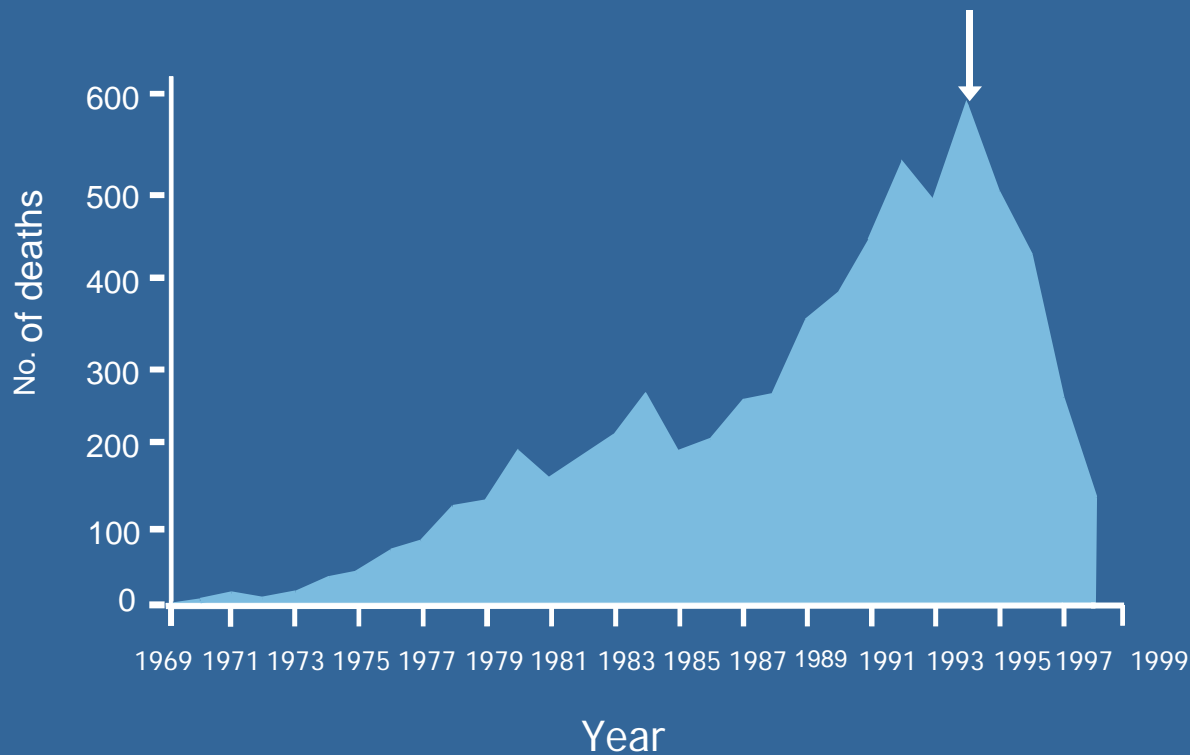
Regular Outpatient	\$1800
Intensive Outpatient	\$2500
Methadone Maintenance	\$3900
Short-term Residential	\$4400
Long-term Residential	\$6800
Incarceration	\$25 900



Source: Physician Leadership on National Drug Policy

Substitution Therapy Prevents Overdose

1996 Subutex and methadone



French population in
1999 = 60,000,000

Patients receiving buprenorphine
(1998): N= 55,000

Patients receiving methadone
(1998): N= 5,360

Auriacombe et al., 2001

Opioid Maintenance as Overdose Prevention

- ❖ Opioid maintenance with methadone or buprenorphine may decrease the risk of overdose by up to 75%
- ❖ Patients often stop using opioids, but if not, the daily dose prevents loss of tolerance

Heroin Overdose Epidemiology

- ❖ About 2% of heroin users die each year - many from heroin overdose
- ❖ 1990-98: 5,506 deaths in NYC
- ❖ Average of 1-2/day in NYC
- ❖ 1999: most common cause of death men age 25-54 in Portland OR and several other cities

Major Risk Factors

- ❖ Use following a period of abstinence
 - ❖ Incarceration
 - ❖ Hospitalization
 - ❖ Drug treatment/detox

- ❖ Mixing classes of drugs
 - ❖ Primarily other CNS depressants
 - ❖ Cocaine is involved in nearly 40% of NYC overdoses

Other Risk Factors

- ❖ Overdose is more likely in the presence of significant illness: cirrhosis, AIDS, coronary disease, pulmonary disease
- ❖ Major changes in opioid supply: >1000 deaths USA 2006 with fentanyl
- ❖ Depression
- ❖ History of previous overdose

Wang 2005, Darke 2006 Sporer 2006,
<http://www.whitehousedrugpolicy.gov/news/fentanyl%5Fheroin%5Fforum>

Who Overdoses?

- ❖ Most often it's dependent long term users with 5- 10 years of experience rather than new users - about 17% occur among new users

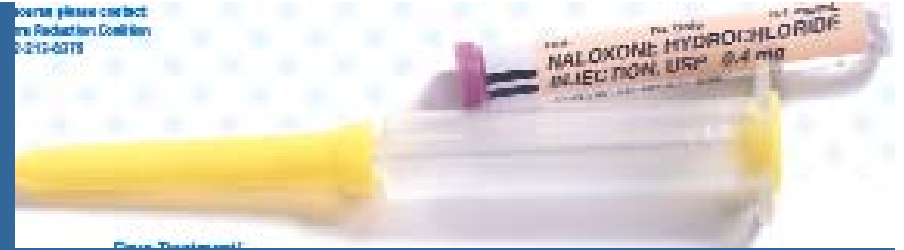
Physiology

- ❖ Generally happens over course of 1-3 hours- the stereotype “needle in the arm” death is only about 15%
- ❖ Opioids repress the urge to breath – decrease response to carbon dioxide - leading to respiratory depression and death

Death Following Incarceration

- ❖ Washington State Corrections Study of 30,237 inmates released
- ❖ Overall mortality: 2.5 times than expected
- ❖ First 2 weeks: 12.7 times than expected with overdose rate of 1840/100,000
 - ❖ Opioids: 60%
 - ❖ Cocaine and other stimulants: 74%

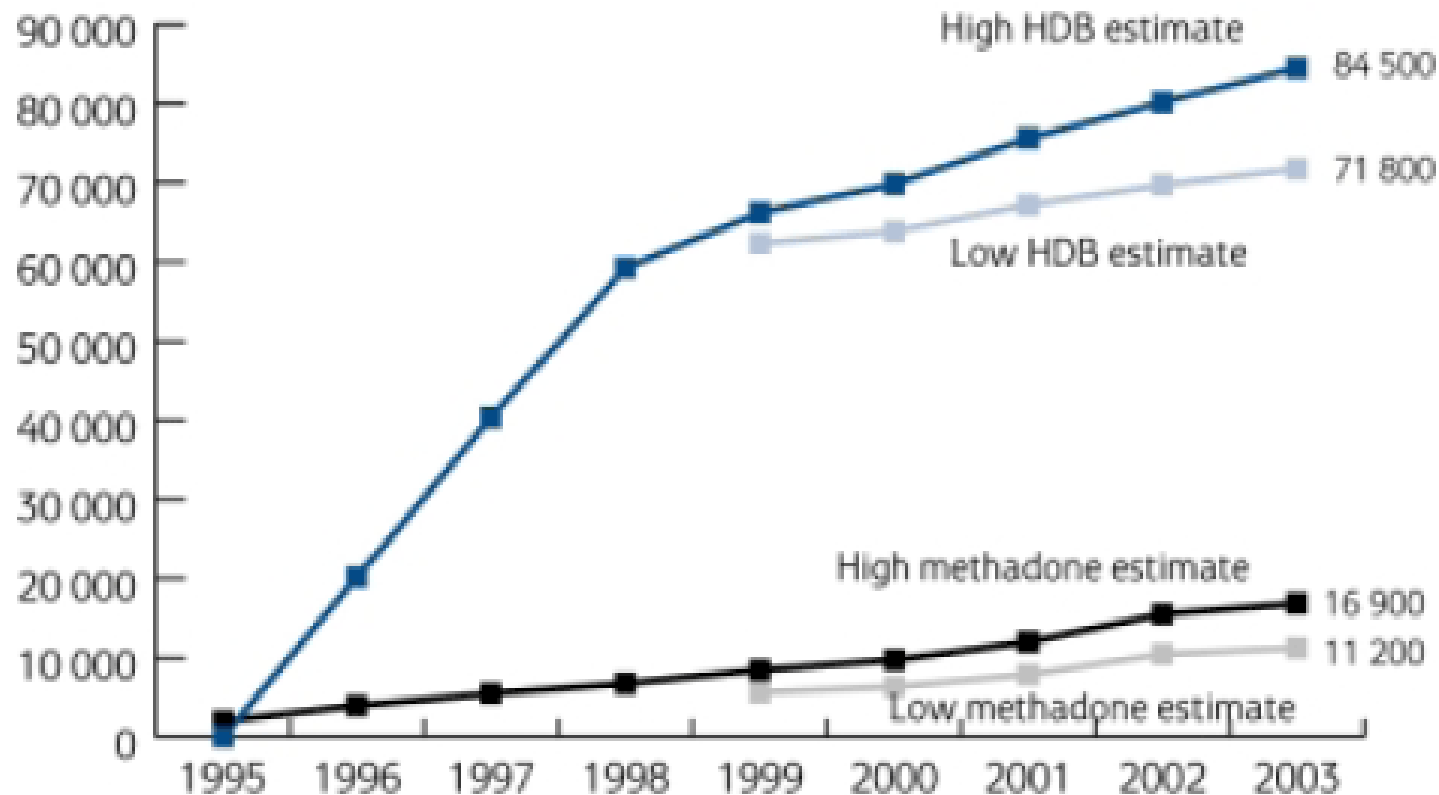
Naloxone (Narcan)



- ❖ Opioid antagonist which reverses opioid related sedation and respiratory depression and may cause withdrawal
- ❖ Displaces opioids from the receptors, then occupies the receptor for 30-90 minutes*
- ❖ No psychoactive effects
- ❖ Over the counter in Italy
- ❖ Routinely used by EMS

Only prerequisite: Commitment e.g., France, 1996-2003

Figure 1 – Estimates of the number of people receiving substitution treatment



Only prerequisite: Commitment e.g., long-term Rx in New York City 1970-72

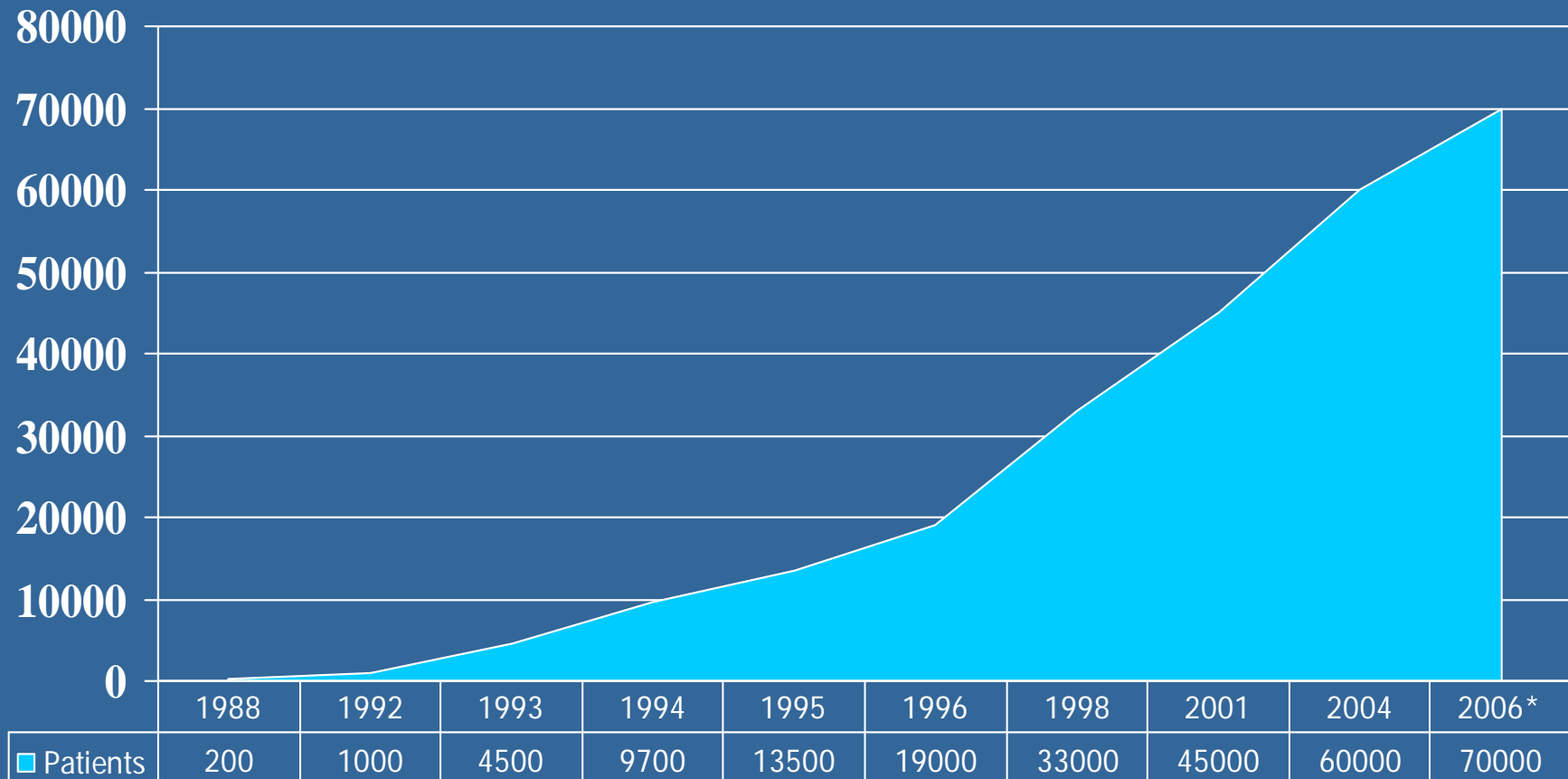
TYPE TREATMENT	Nov-70	Dec-72
All methadone	6,650	32,111
All drug-free	5,800	20,671
GRAND TOTAL	12,450	52,782

Only prerequisite: Commitment e.g., Hong Kong, 1975-76

- ❖ End 1974: one “pilot” program, 500 patients
- ❖ End 1975: approximately 2,000 enrolled
- ❖ End 1976: approximately 10,000 enrolled

(Admissions to **voluntary in-patient drug-free** programmes stable
1974-76: 2,300-2,500/year)

Only prerequisite: Commitment e.g., Germany, 1987-2006



* Götz, J.: Stellungnahme der DGS - Deutsche Gesellschaft für Suchtmedizin zur "Berliner Erklärung". In: Suchtmedizin in Forschung und Praxis 2006;8(3):156

Acknowledgements

- ❖ Ralf Jurgens, WHO, UNODC, UNAIDS
- ❖ Robert Newman, MD International Center for Advancement of Addiction Treatment
- ❖ Sharon Stancliff, MD Harm Reduction Coalition