

What Are Opiates and Why Are We Talking About Them?

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History of Opium

- Native to many regions
 - Middle East in areas bordering Mediterranean
 - Laos, Thailand, Afghanistan
 - Mexico & Colombia
- Use dates back 6000 years to Sumerians
- Egyptians used it medically 3500 years ago
- Common use among Islamic peoples for medical & recreational purposes



History of Opium

- Arab traders took to India & China
- Western Europe learned about it from Arabs during crusades
- 1680 Laudanum – Opium tincture (alcohol)
- Next 200 years, primary consumption of opium is as drink
- 18th century - development of opium smoking in China
- China - first laws against Opium use in 1729



Opium & the West

Western societies

- Opium use as common as aspirin
- Cheaper than liquor
- No negative public opinion
- No real problem with law enforcement
- Used to soothe infants & children
 - Teething, colic, or to keep them quiet
- Females used it more than males
 - Greater # addicted



Opium and the West

Collision of cultures

- Chinese laborers for the construction of the transcontinental railroad
- 1875 - San Francisco outlawed opium dens & opium smoking
 - Laws targeted not all opium (laudanum legal)
 - Federal laws prohibiting opium smoking followed in 1909



Morphine & the West



purer & safer,

- Used during Civil War for injuries (dependency known as “soldier’s disease”)

Heroin: From Bad to Worse

THE NEW YORK MEDICAL JOURNAL. 39

Am. J. Ph.] 7 [December, 1901

B
PHA
P

BAYER Pharmaceutical Products

HEROIN—HYDROCHLORIDE

is pre-eminently adapted for the manufacture of cough elixirs, cough balsams, cough drops, cough lozenges, and cough medicines of any kind. Price in 1 oz. packages, \$4.85 per ounce; less in larger quantities. The efficient dose being very small (1-48 to 1-24 gr.), it is

The Cheapest Specific for the Relief of Coughs
(In bronchitis, phthisis, whooping cough, etc., etc.)

WRITE FOR LITERATURE TO

FARBENFABRIKEN OF ELBERFELD COMPANY

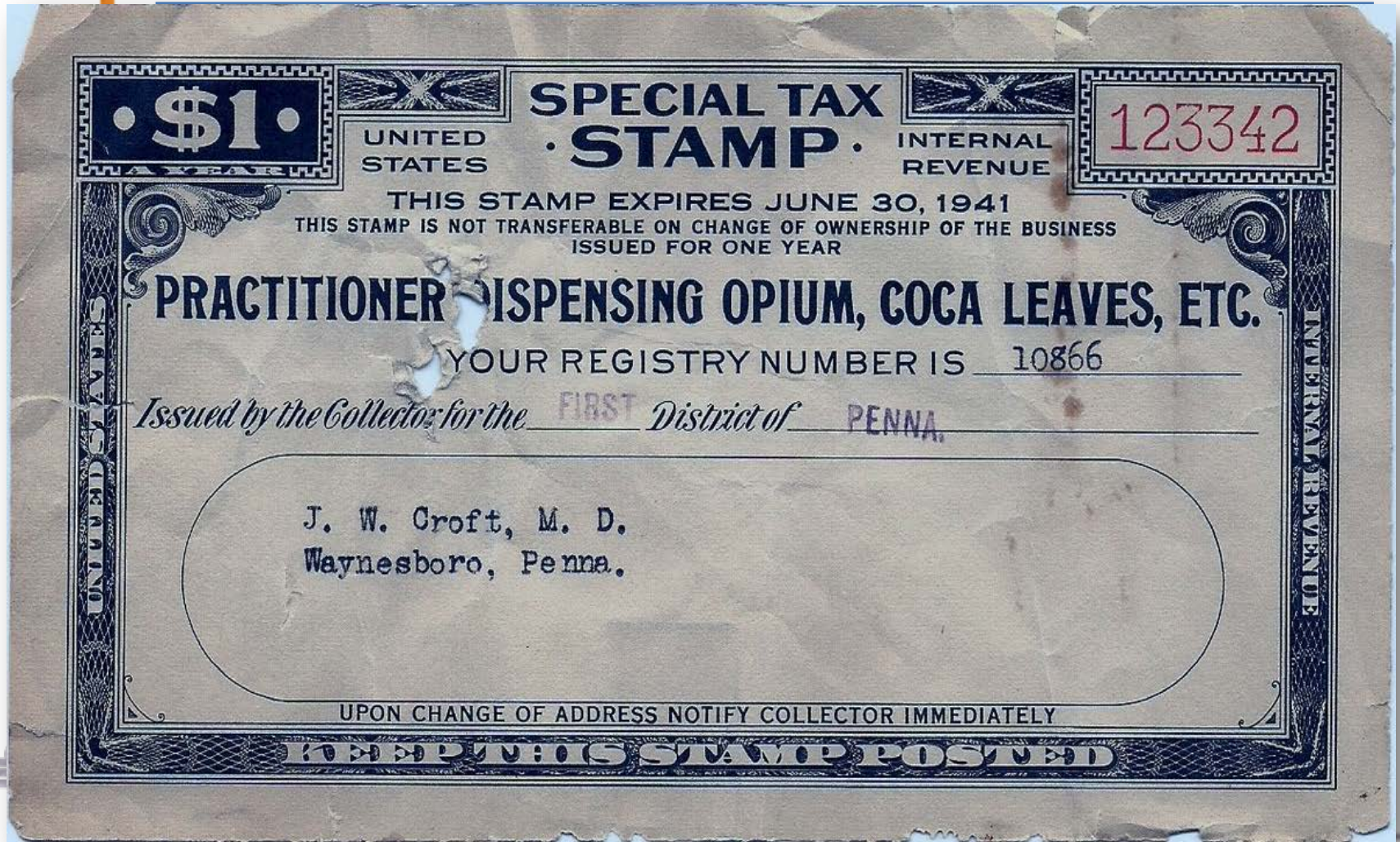
SELLING AGENTS

FAR P. O. Box 2160 40 Stone Street, NEW YORK T.

ELBERFELD CO. NEW YORK.



Opiates in US Early 1900s



Opiates Use in 1960s



1960s Counterculture

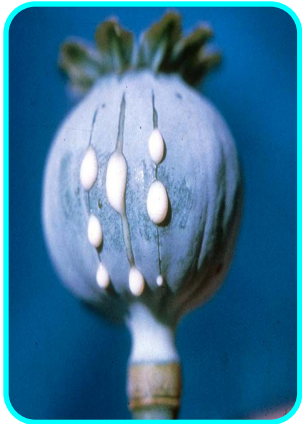


Opiates Use in 1980 -Today

- Heroin – Schedule I
- Morphine, hydrocodone – Schedule II
- Fentanyl “China White”
 - Surgical anesthetic & prescription painkiller
 - 10 to 10,000 X stronger than heroin
 - Growing illegal market = growing deaths
- Vast majority of therapeutic opiates are synthetic
- Huge illegal market and trade with large dependence problem in U.S. and abroad



Opiates



Natural alkaloids

morphine

heroin

codeine

oxycodone

hydrocodone

thebaine

buprenorphine

naloxone



Non-medical Use

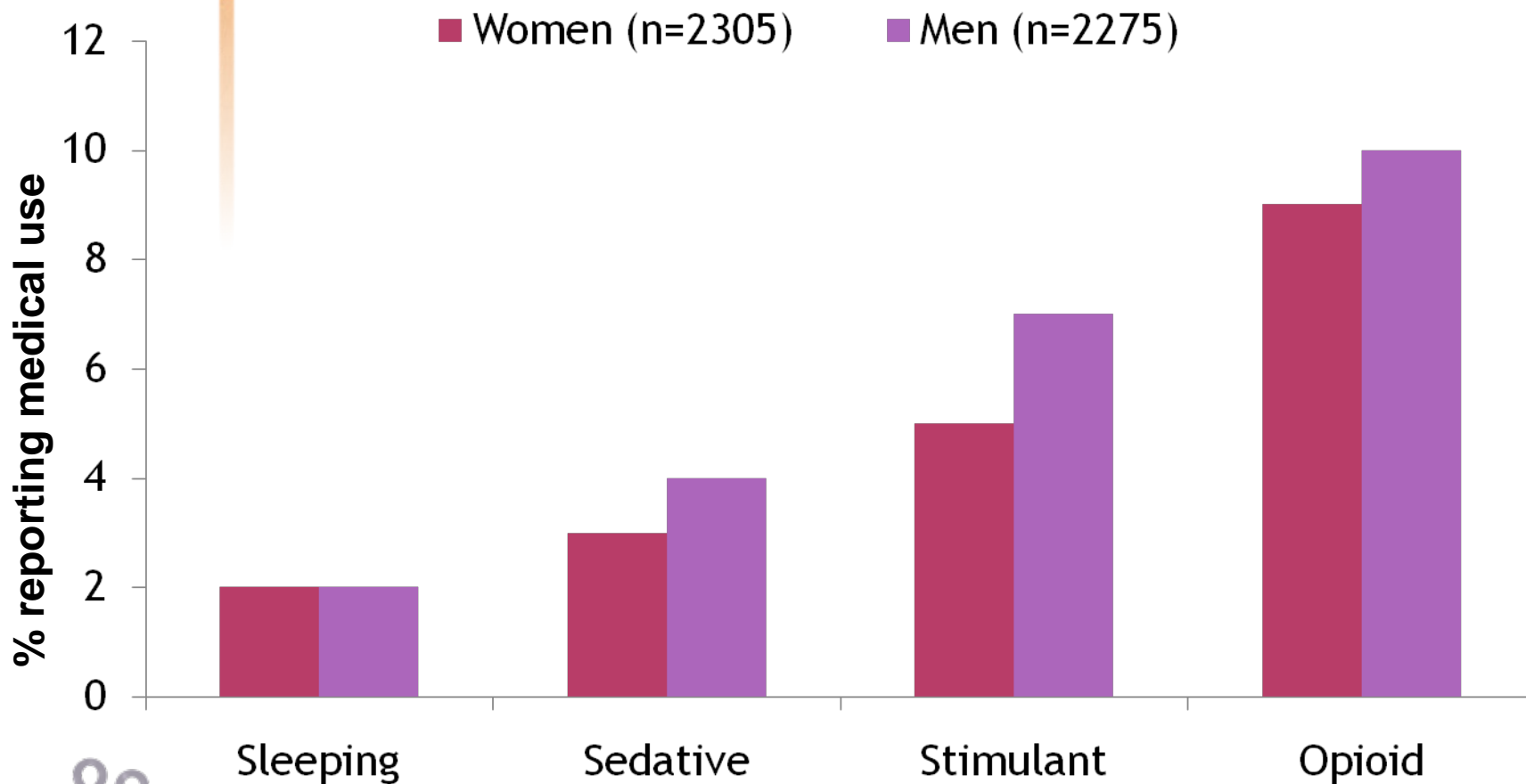
- ◎ Studies indicate that the nonmedical use of prescription medications is increasing in the U.S. among adolescents and young adults.
- ◎ The nonmedical use of prescription medications is associated with higher rates of tobacco, alcohol and other drug use
 - **5% of 12 to 17 year olds** reported nonmedical use of scheduled pain medications*;
 - **12% of 18 to 25 year olds** reported nonmedical use of scheduled pain medications*.



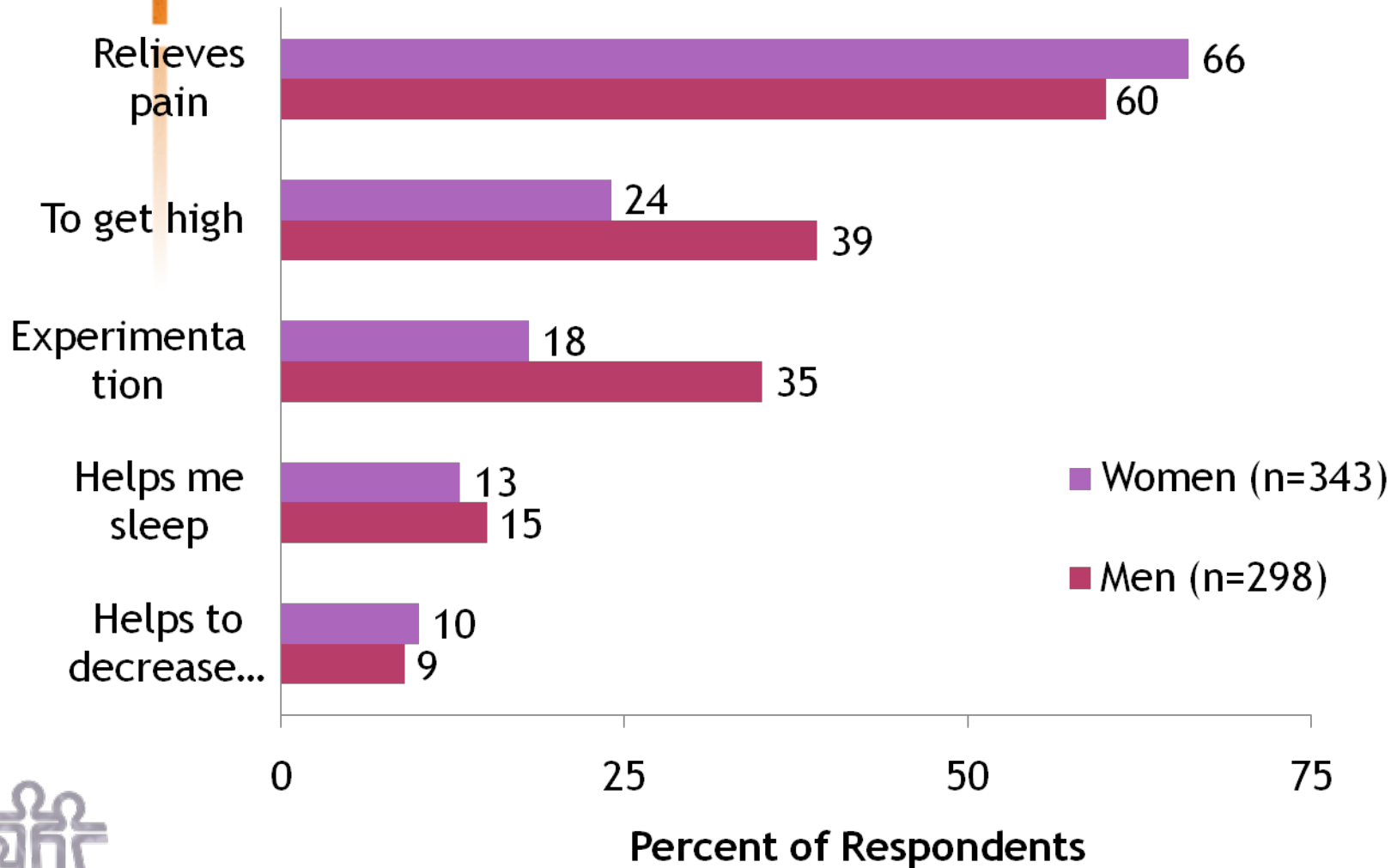
*lifetime



Past Year Nonmedical Use

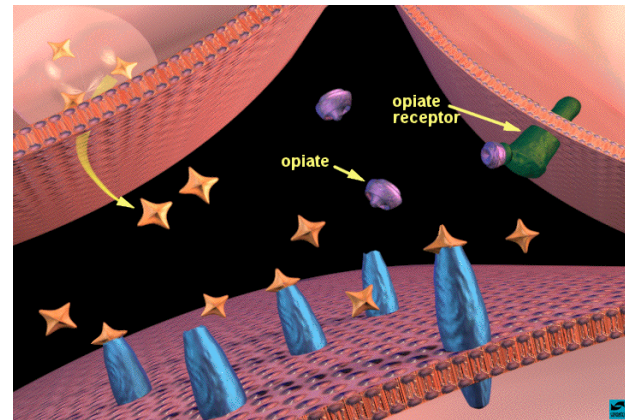
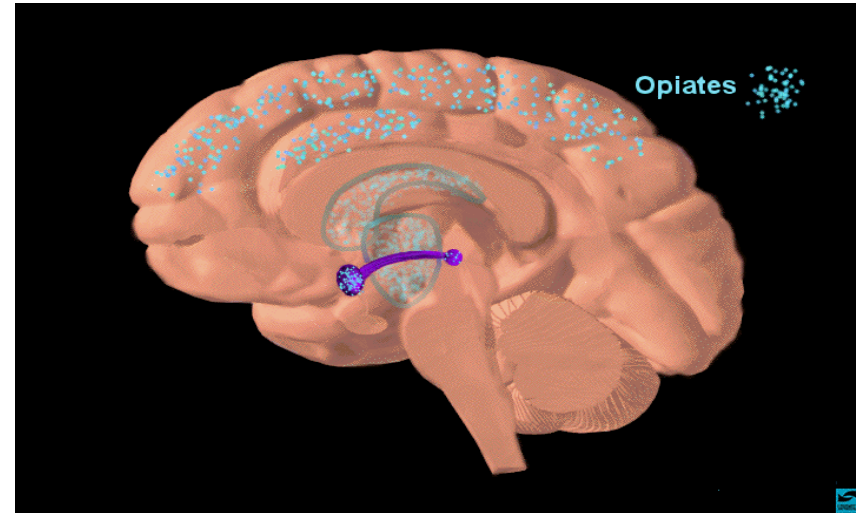


Gender Differences in Motives for nonmedical Use of Prescription Opioids



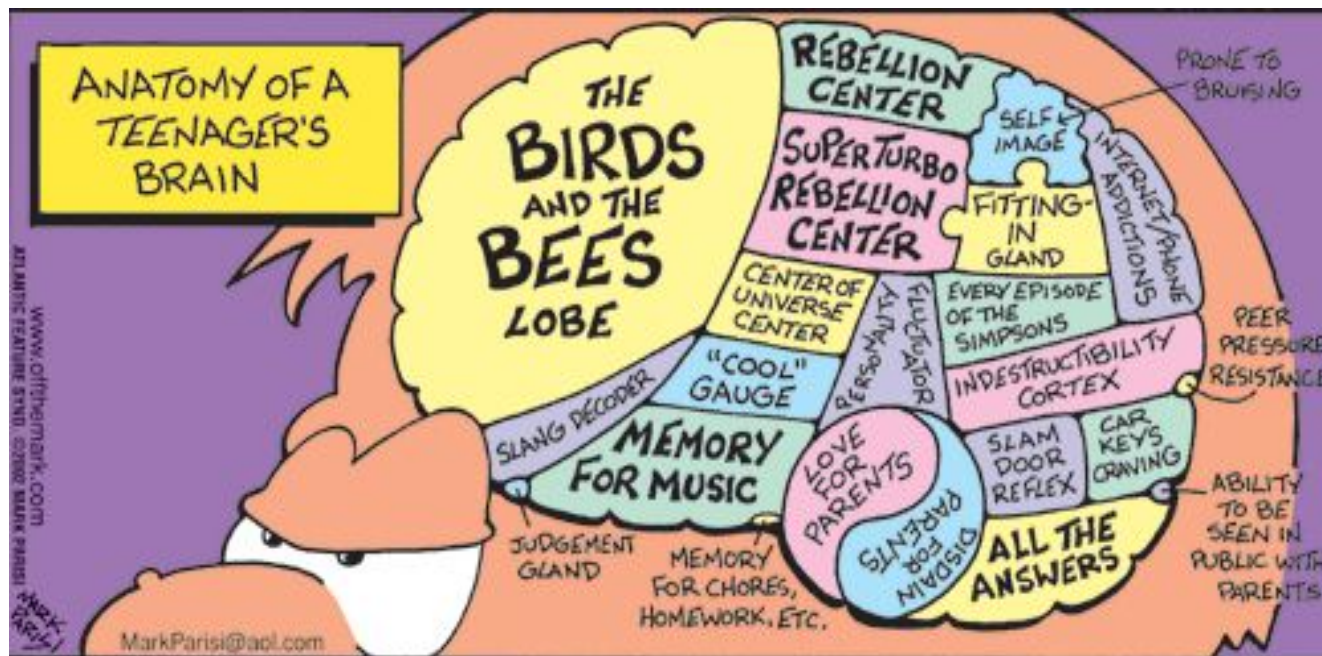
Mechanism of Action

- Act via the endogenous opiate system
 - 1960s - discovery of the opiate antagonist naloxone
- 1973 - discovery of "opiate receptors" in brain
- Led to discovery of several "endogenous opiates" in 1975
 - Endorphin
 - Enkephalin
 - Dynorphin



Adolescent Brain

The teenage brain is not just an adult brain with fewer miles on it.¹



¹Frances E. Jensen, Professor of Neurology



What is the worst opiate?

- All classical opioid drugs of abuse have a preference for μ sites (e.g., morphine, heroin, methadone, fentanyl etc.)



Why does this all matter?

- Can I get addicted to opiates?
- Yes
 - People who abuse opioids are at greater risk than people who take them as prescribed
 - People who are prescribed opioids by their doctor for a period of several weeks or more may develop a physical dependence.



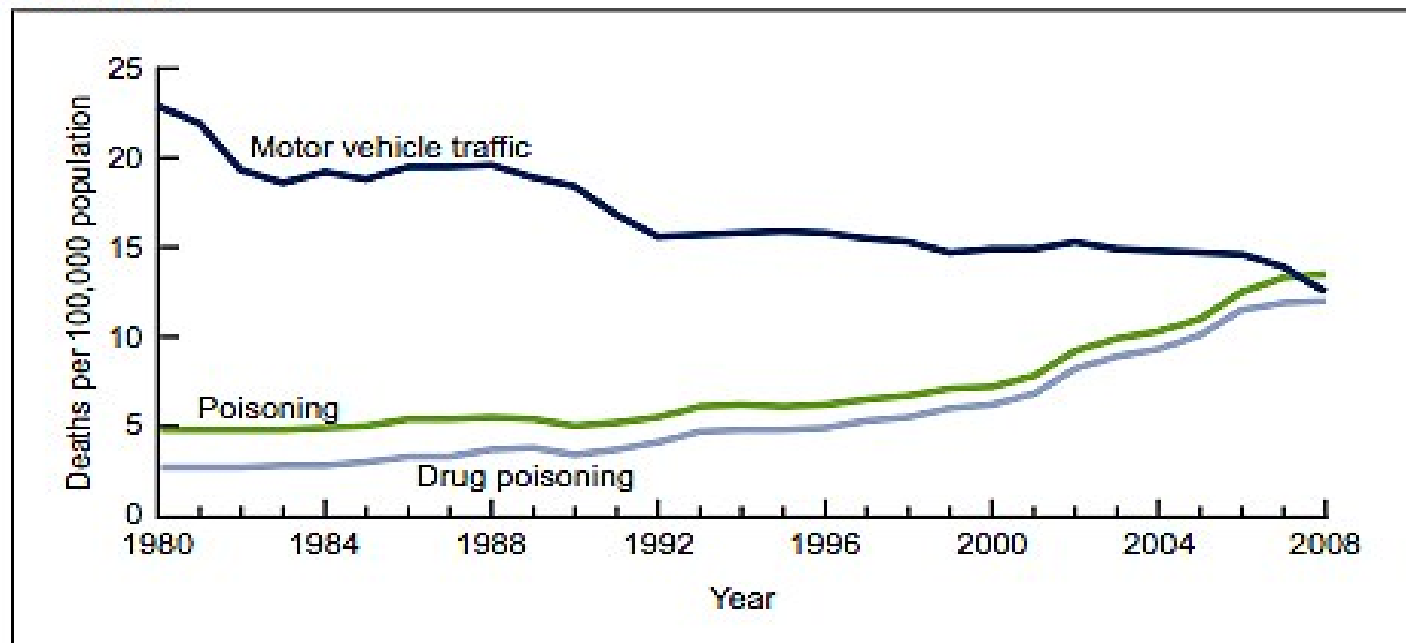
Addiction Vs Dependence

- Dependence is not the same as addiction.
- Dependence means that the body gets used to the presence of the drug.
- Addiction is when a person seeks out and uses the drug over and over even though they know it is damaging their health and their life.



Why does this all matter?

Figure 1. Motor vehicle traffic, poisoning, and drug poisoning death rates: United States, 1980–2008



NOTE: In 1999, the *International Classification of Diseases, Tenth Revision (ICD-10)* replaced the previous revision of the ICD (ICD-9). This resulted in approximately 5% fewer deaths being classified as motor-vehicle traffic-related deaths and 2% more deaths being classified as poisoning-related deaths. Therefore, death rates for 1998 and earlier are not directly comparable with those computed after 1998. Access data table for Figure 1 at http://www.cdc.gov/nchs/data/databriefs/db81_tables.pdf#1.

SOURCE: CDC/NCHS, National Vital Statistics System.



What Should I Do if Someone I Know Needs Help?

It can be really upsetting and scary to have friends who are struggling with drug abuse and addiction.

Here are some tips for helping them:

- Start by being a good friend
- Educate yourself about drugs and alcohol and the problems they can cause. Then, you can give your friend the facts and refer your friend to resources to help him or her learn more. A good place to start is on the NIDA for Teens Web site.
- Next, encourage your friend to talk to an adult who he or she can trust—maybe a teacher, coach, or a parent of another friend.



Resources



Washington
Recovery Help Line

24-Hr Help for Substance Abuse, Problem Gambling & Mental Health
Free and confidential support - Linkage to local treatment providers

part of Crisis Clinic **866.789.1511**
(206.461.3219 rx)

www.waRecoveryHelpLine.org

Help for teens: 866.TEENLINK (866.833.6546)

<http://teens.drugabuse.gov/>

