

ROUTES OF ADMINISTRATION

AN IMPORTANT FACTOR IN DETERMINING



-  How fast the Drug Acts
-  How long the Drug Acts
-  The intensity of the Action
-  The Degree of its Localization



Coatings/Binders/Fillers

- **Controlled-released formulations**
- **High percent consists of sugars and time-release ingredients**

Snorted



Bumped



Blown



Railed

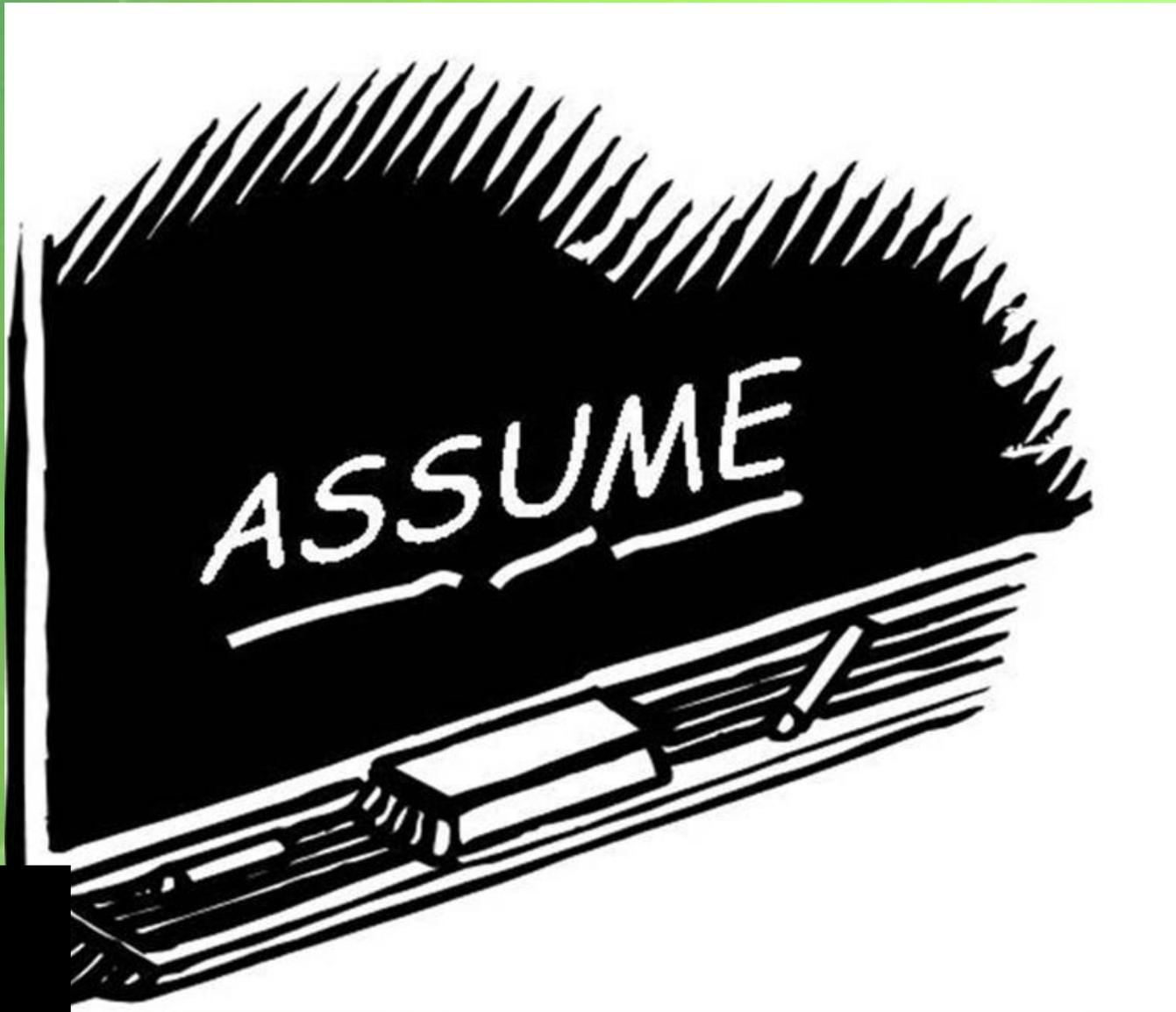


Cooking



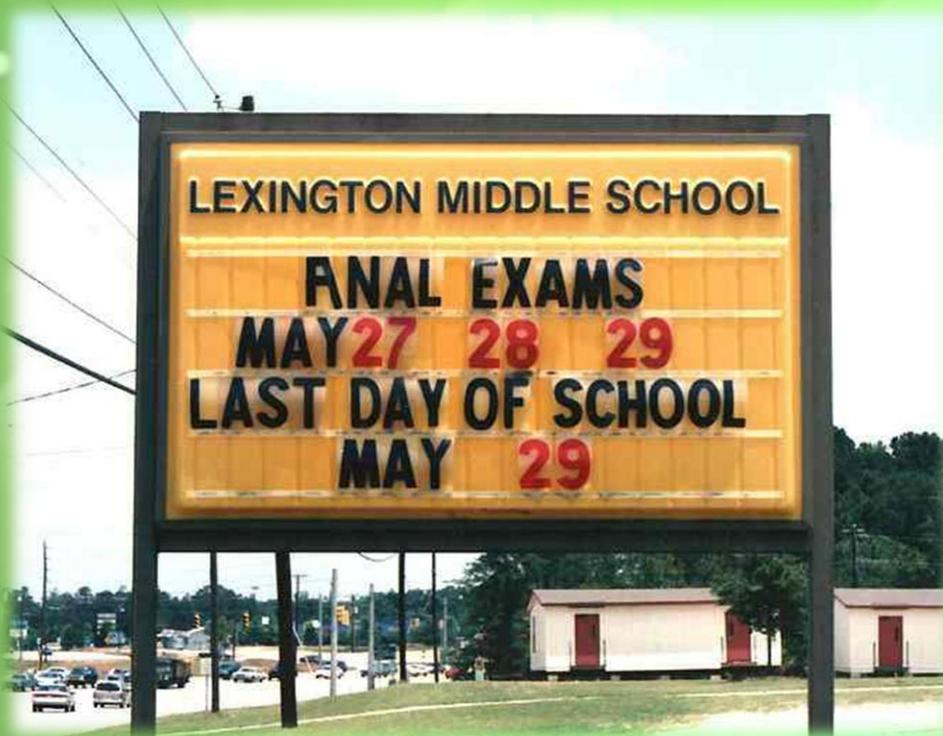
**Not
necessary
use heat
because
there are no
“impurities”**





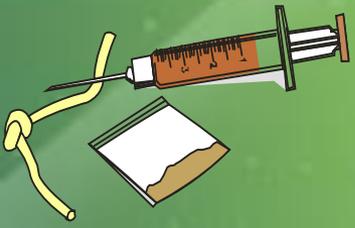
“Bum Nuts”

- ① insert the pill rectally or dissolve in water using an enema bottle





Methadone Programs



Methadone

Trade Name: Dolophine® & Methadose®

Methadone is used to withdraw heroin addicts. It is given in a cherry liquid and /or Methadose 40mg tablets dissolved in water.

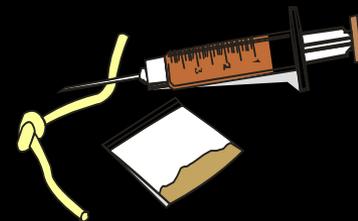
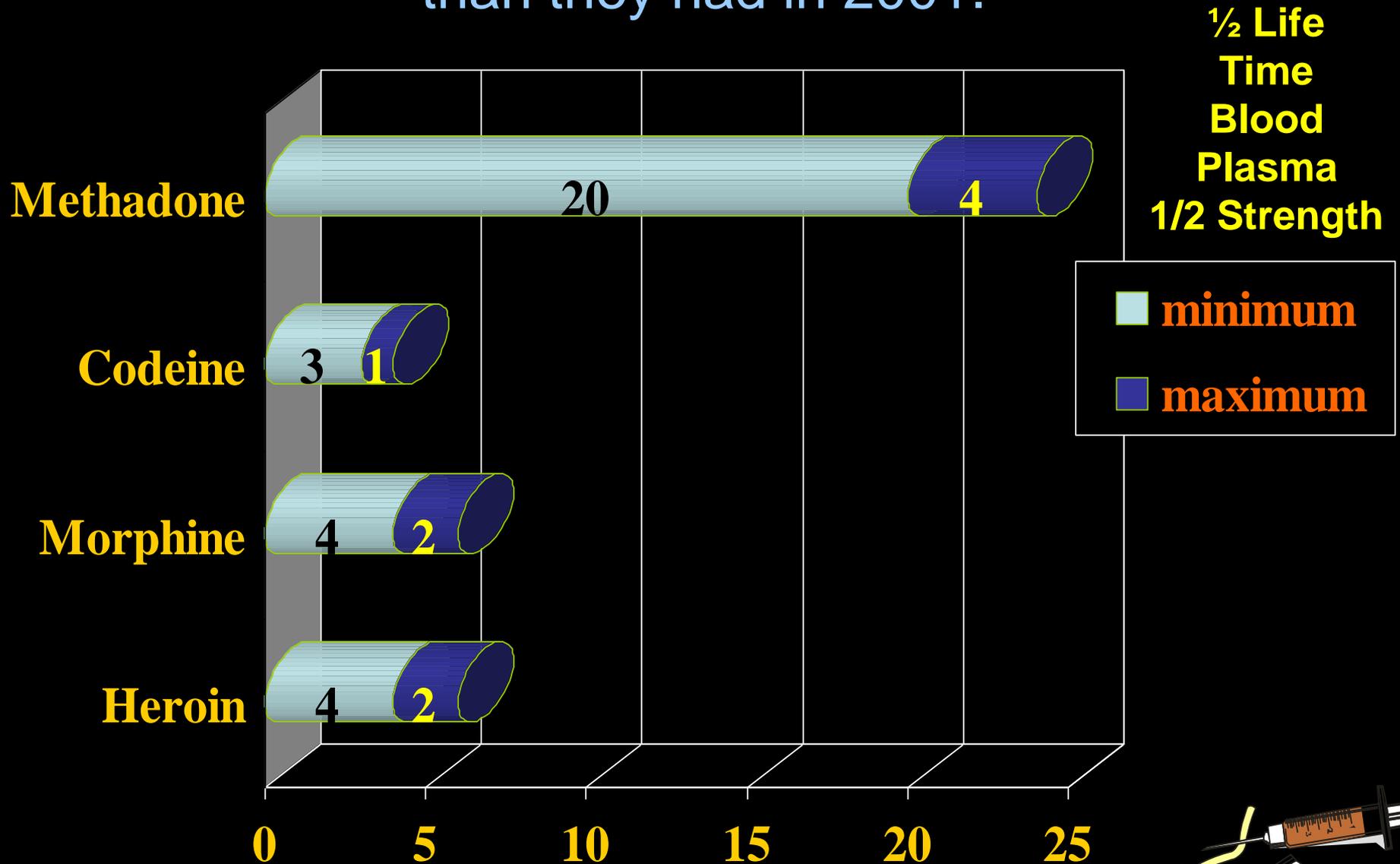


Available in:

- Solution
- Dissolvable Tablet
- Tablet



Doctors prescribed 715 % more methadone in 2006 than they had in 2001.



Methadone OD Deaths Up 390 Percent, Report Finds

December 6, 2007

Deaths from overdoses on methadone rose 390 percent **between 1999 and 2004**, and the trend is continuing, according to a new report from the National Drug Intelligence Center.

USA Today reported Dec. 6 that the **report attributes the trend mostly to increased use of methadone as a painkiller**; the drug is seen as a cheaper alternative to drugs like OxyContin, which also have more potential for abuse and diversion. Doctors prescribed 715 percent more methadone in 2006 than they had in 2001.

Methadone OD Deaths Up 390 Percent, Report Finds

December 6, 2007

The methadone overdose rate was highest among those ages

15 to 24; the rate was lower than that for other narcotic painkillers but is rising faster.

"The larger story is the widespread abuse of prescription painkillers in America," said Tom Riley of the White House Office of National Drug Control Policy. "The abuse and misuse of prescription drugs is far more dangerous and far more widespread than most Americans realize."

**PUT
METHADONE
AWAY**

**as soon as
you get home**



**keep
kids
safe
from
methadone**

Overdose

- 👁 Respiratory depressant effect can last longer than analgesic effect
- 👁 Cardiac conduction
 - 👁 Rate the heart conducts electrical impulses
- 👁 Prolonged QT intervals
 - 👁 How long it takes to “recharge” heart cells
- 👁 Arrhythmias

The QT interval represents repolarization, or “recharge,” of a cardiac cell



CAUTION

**Too many patients are never warned
on their prescription bottles about the
tricky nature of taking methadone**

Indication dose is toxic

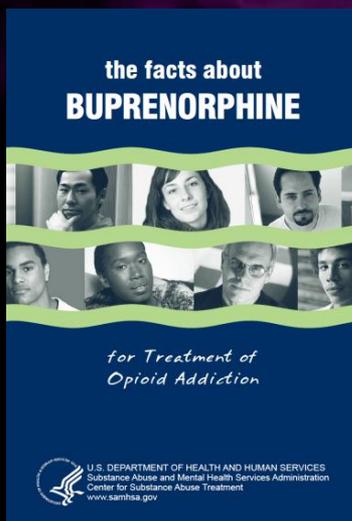
Methadone Snoring





What is BUPRENORPHINE?

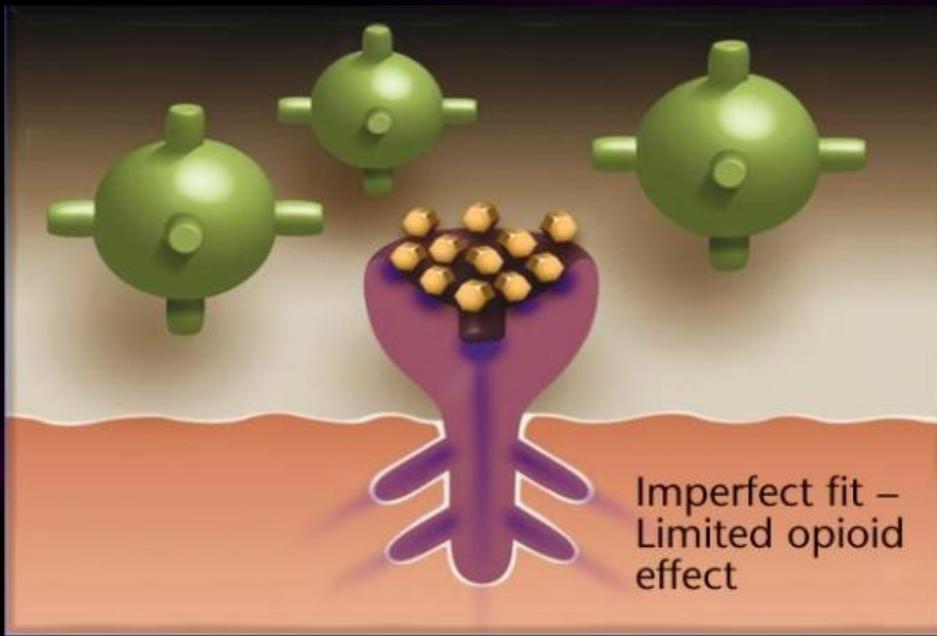
- Only opioid addiction med that is physician office prescribable
 - Two formulations, Subutex® & Suboxone®
- Partial opioid agonist compared to full agonist like oxy or heroin
 - =‘s Less of euphoric effect
 - Easier to discontinue use
- users can experience euphoria, especially if they do not take it regularly



An **agonist** is a chemical that binds to a receptor of a cell and triggers a response by that cell.

Buprenorphine

- Blocks receptor
- Stronger binding ability
- Expels existing opioids
- Blocks others
 - Partial agonist – limited effect



The half-life of buprenorphine is 24–60 hours

provides analgesic effects as well as blocks other narcotics effects

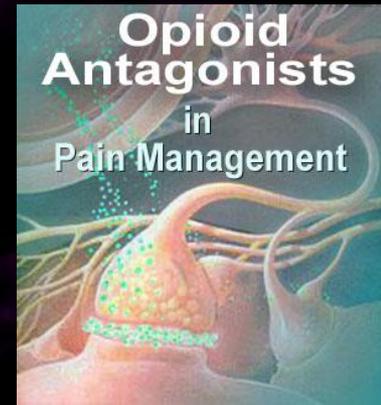
3 meds commonly used to treat opioid addiction:

1. Methadone
2. Buprenorphine
3. Naltrexone

An agonist is a chemical that binds to a receptor of a cell and triggers a response by that cell.

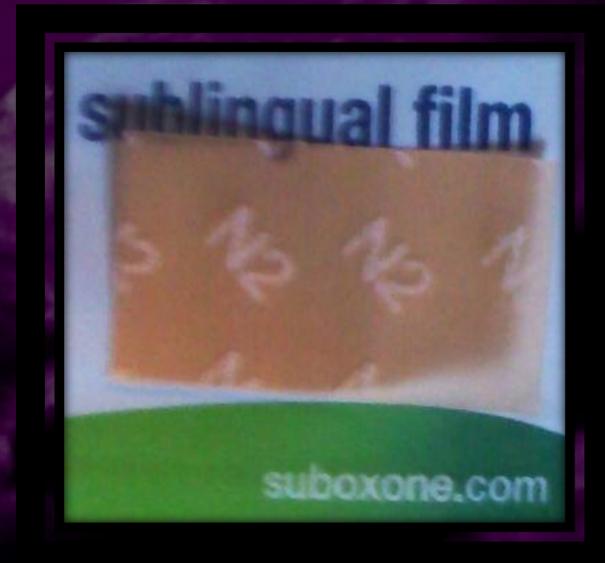
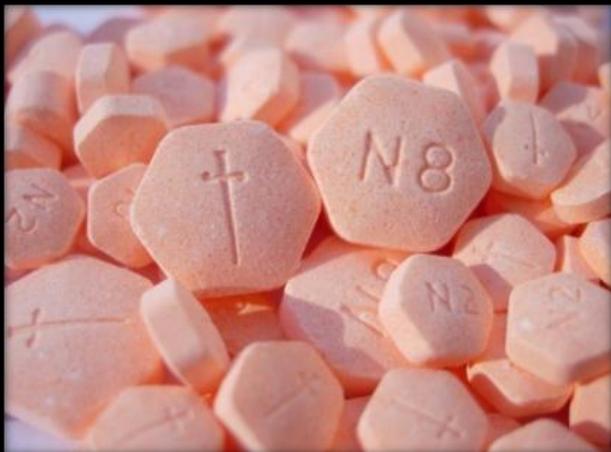
What is Naloxone?

- 🏆 An opioid antagonist
- 🏆 Included in Suboxone to discourage abuse
- 🏆 If injected, the naloxone will precipitates almost immediate withdrawal
- 🏆 When suboxone is placed under the tongue as directed very little naloxone reaches the bloodstream



Abuse of Suboxone

- 🏛️ **Street Abuse - unable to find drug of choice or to curtail withdrawal**
- 🏛️ **Prisons - especially in New England (commonly prescribed)**
 - **12% of all contraband discovered in Massachusetts state prisons**



Abuse of Suboxone

🏆 **More adaptable than other drugs to smuggle and manipulate**

🏆 **Film**

🏆 **Pills crushed and made into a paste**

🏆 **Spread under stamps or over colorings**

🏆 **Orange tint**

🏆 **Crayon scribblings, stickers, glitter glue, any “foreign substance”**



“On the Nod”

- **Semiconscious**
- **Droopy eyelids (Ptosis)**
- **Head slumped forward, chin on chest**
- **Easily awakened**
- **Alert to questions**



Valium



DXM



Meth



Heroin