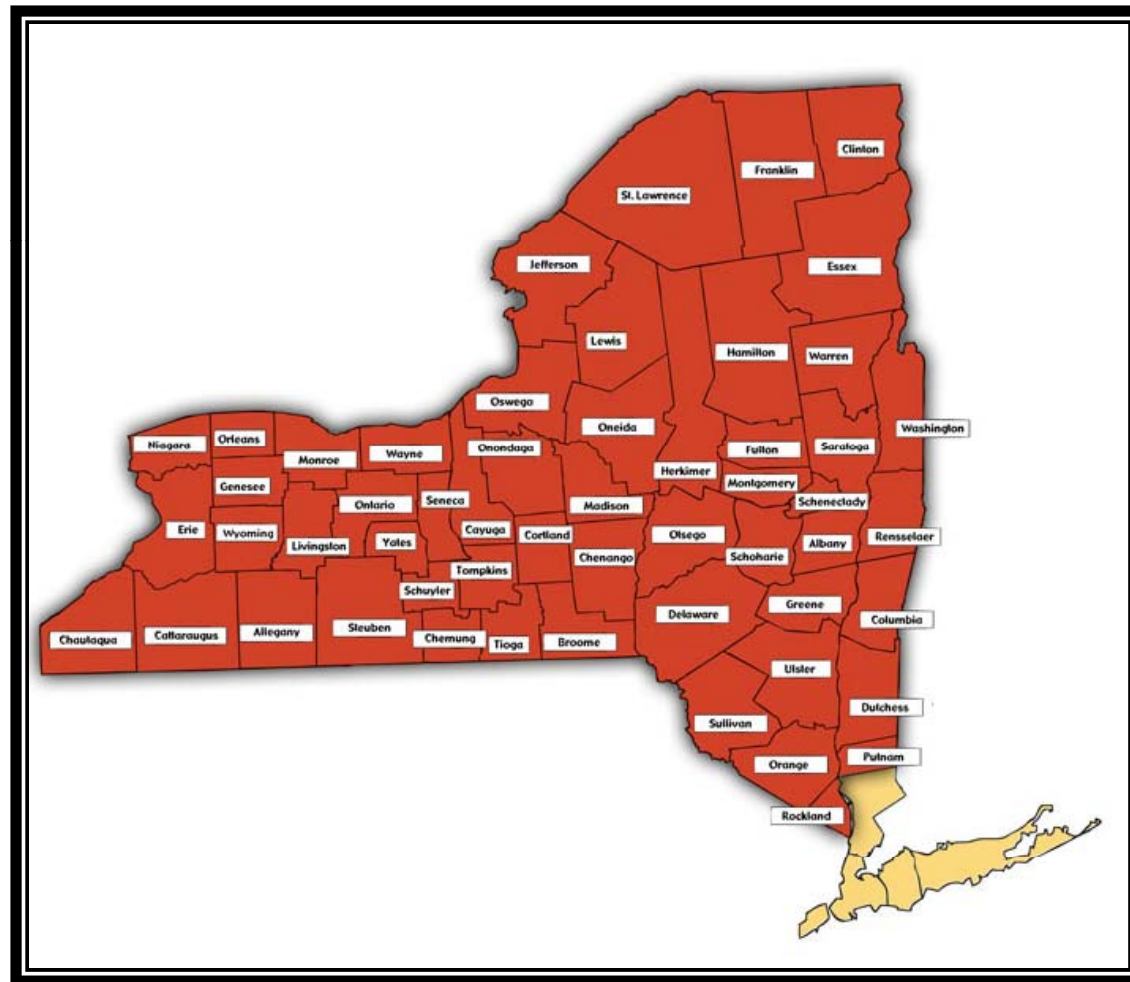


EMERGING DRUGS OF ABUSE: *SYNTHETIC
MARIJUANA, HEROIN AND MORE...*
WHAT IS TRENDING NOW?

The Upstate New York Poison Center of Upstate Medical University

Upstate New York Poison Center





What do THESE people have in common?



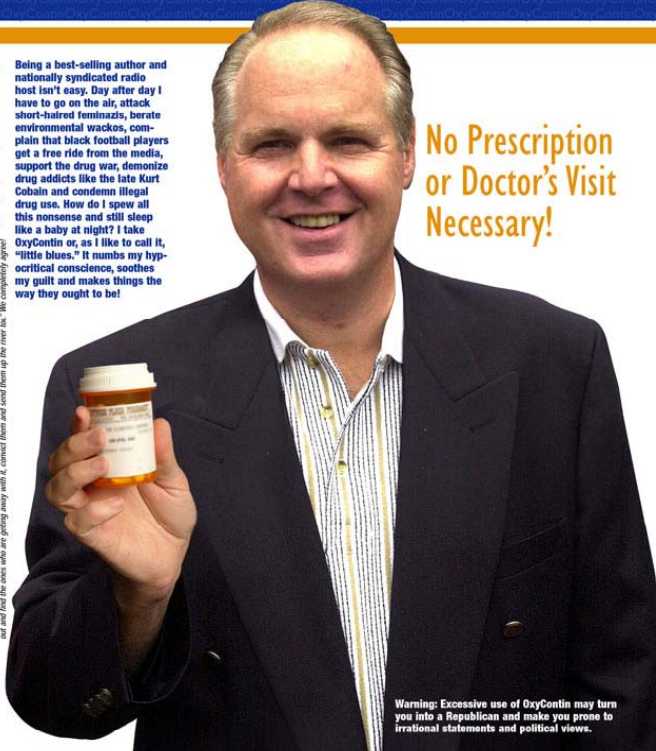
What do THESE people have in common?

Rush Limbaugh for OxyContin

“I couldn’t get through my day without it!”

Being a best-selling author and nationally syndicated radio host isn't easy. Day after day I have to go on the air, attack short-haired feminazis, berate environmental wackos, complain that black football players get a free ride from the media, support the drug war, demonize drug addicts like the late Kurt Cobain and condemn illegal drug use. How do I spew all this nonsense and still sleep like a baby at night? I take OxyContin or, as I like to call it, "little blues." It numbs my hypocritical conscience, soothes my guilt and makes things the way they ought to be!

No Prescription or Doctor's Visit Necessary!



Warning: Excessive use of OxyContin may turn you into a Republican and make you prone to irrational statements and political views.

PHOTO: AP/WIDE WORLD. RUSH LIMBAUGH'S WIFE, BEVERLY, SAID HE WAS TAKING OXYCONTIN FOR PAIN AFTER SURGERY ON HIS BACK IN 2005. "TOO MANY WRITERS ARE GETTING AWAY WITH DRUG USE... THE ANSWER IS TO GO TO COURT AND SUIT THEM AND GET THEM OUT OF THE BUSINESS." - RUSH LIMBAUGH



Synthetic Cannabinoids

- Are they back ?

SPIKE



Presenting Symptoms

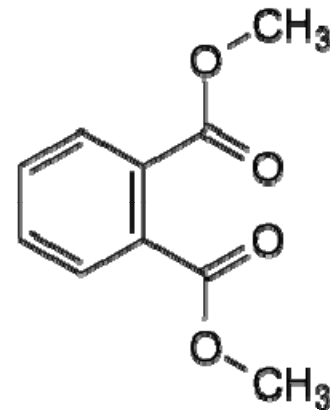
- Agitation
- Paranoia
- Hypertension
- Tachycardia
- Chest Pain
- Drowsy
- Pinpoint Pupils
- Bradycardia
- Nausea
- Vomiting

New Onset Psychosis



Challenges

- Not Detected on Urine Drug Screens
 - Gas Chromatography-Mass Spectrometry
- Chemical Configurations Vary
- Product Can Be Tested



U-47700



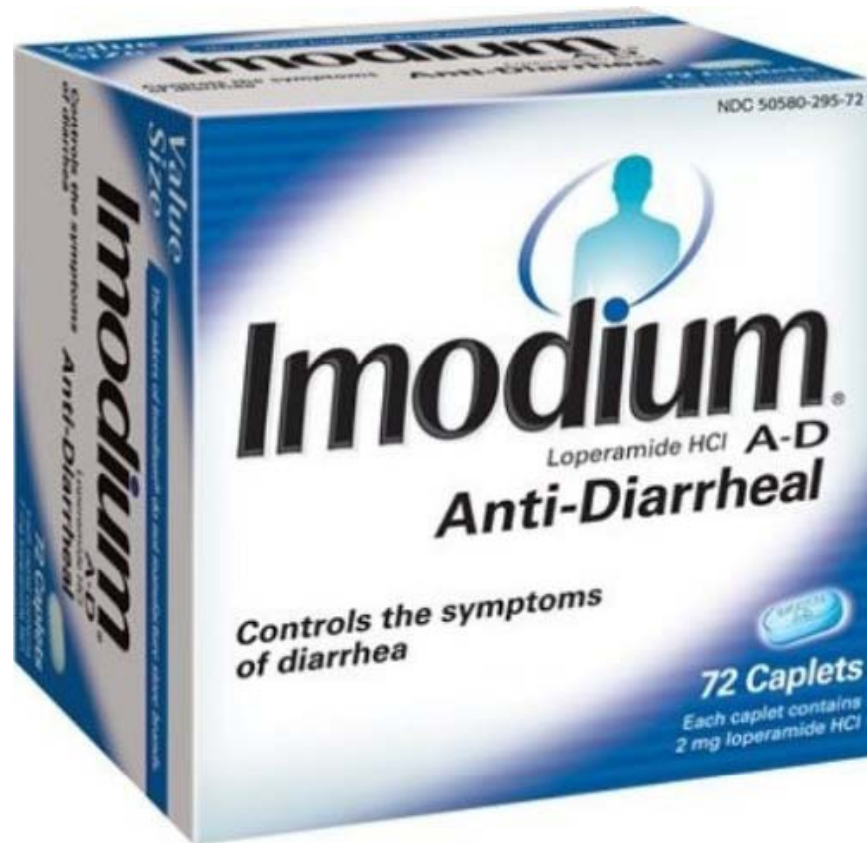
- 4-methoxy-butyryl fentanyl
- Synthetic opioid
- 30 deaths
- Much stronger

Cocaine- Still A Problem?

- Powder
- Crystal



Loperamide (Imodium®)



Liquid Nicotine



Honey Butane Oil

- Marijuana plant ground up, place in a tube extractor
- Pour butane through the extractor to remove marijuana resin
- Wait for the butane to evaporate before use



Hallucinogens

- Drugs that alter and distort perception, thought, and mood usually without clouding the ability to think



Salvia Divinorum



- ❑ Perennial herb grown in Mexico
- ❑ Currently popular for “legal hallucinations”, leaves can be smoked, chewed or infused
- ❑ Reports of “radically different” experience such as “switching realities”
- ❑ Erowid recommend: have a sitter and safe space when using
- ❑ Safe drug site www.Erowid.org



Other

- Antihistamines
- Jimson Weed
- Nutmeg
- Morning glory seeds
- Bufo toad



Designer Drug

Drugs that are manufactured or marketed to avoid laws or suspicion of drug trafficking

Names keep changing, chemical compounds keep changing



Are there still Raves?



MDM

A

- ***Ecstasy; XTC; E; M & M***
- One-tenth the stimulant effect of amphetamine
- “Hallucinogenic Amphetamir”



Methamphetamine

- Continues to be a growing problem in NYS
- Clandestine “Laboratories”
 - ▣ Rural
 - ▣ Urban



Volatile Substance Inhalation Abuse (VSIA)

- Hydrocarbon derivatives



Nitrous Oxides



Alcohol.....



Powdered Alcohol.....

- Equivalent to a shot
- Mixes with 5 ounces of liquid



Powdered Caffeine

- Safe Dose is 1/16 of a tsp
 - Comparable to a cup of coffee



Heroin: What is it

- ❑ An opioid- man made
- ❑ A depressant
- ❑ Can be white or black powder



Opium – Morphine - Heroin

- **Opium** has been used for centuries as a medicinal for severe pain
- In 1805 an organic alkaloid compound was isolated from the poppy plant that was 10 times more powerful than processed opium.
- The substance was named **morphine**, after Morpheus, the Greek god of dreams, for its tendency to cause sleep.



Heroin

- Heroin was first manufactured in 1898 by the Bayer pharmaceutical company of Germany and marketed as a treatment for tuberculosis as well as a remedy for morphine addiction.



Heroin: Who Abuses it?



Heroin: What does it cost?

- Heroin is cheap, cheaper than prescription pills/opioids
- As drugs arrive in states, diluted with fillers like baking soda, talc or even other cheaper drugs
- The \$10 bags are about 25 percent pure heroin



How does it all begin?



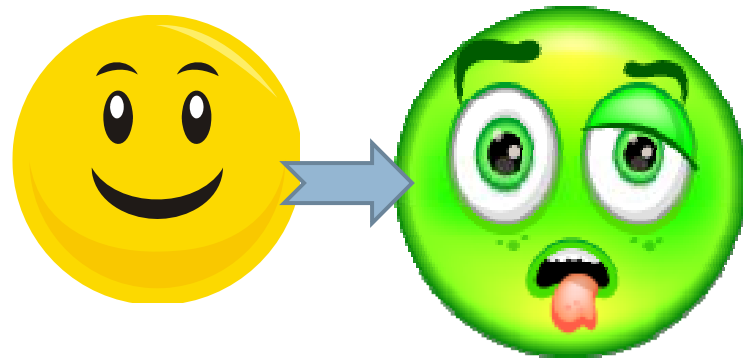
Heroin: Why is it abused?



It produces euphoria- a state of "well being"

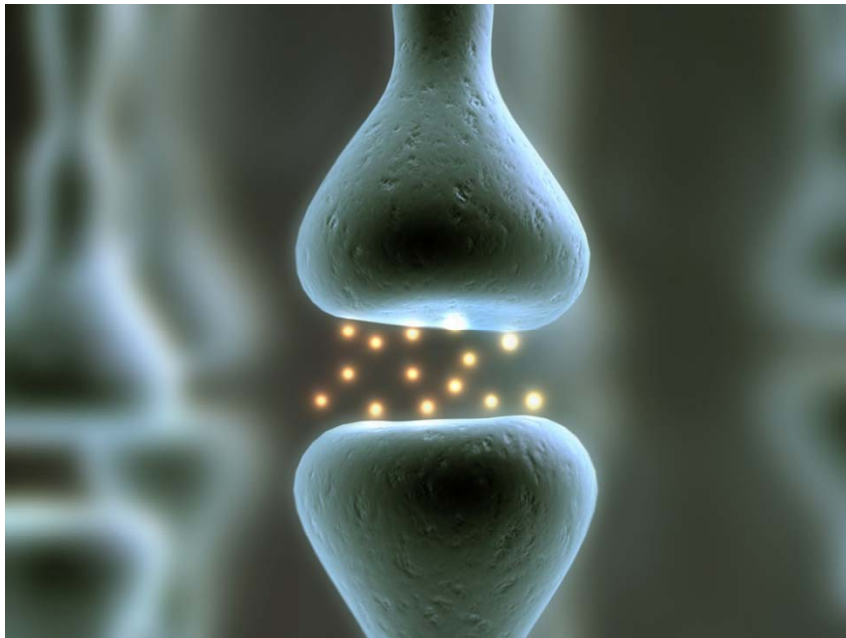
Impact.....

- ❖ Highly addictive- brain likes it,
becomes use to it, person feels very
sick without it



Neurons and Receptors

- **Opioid receptors in the brain have a high affinity for heroin**



Heroin

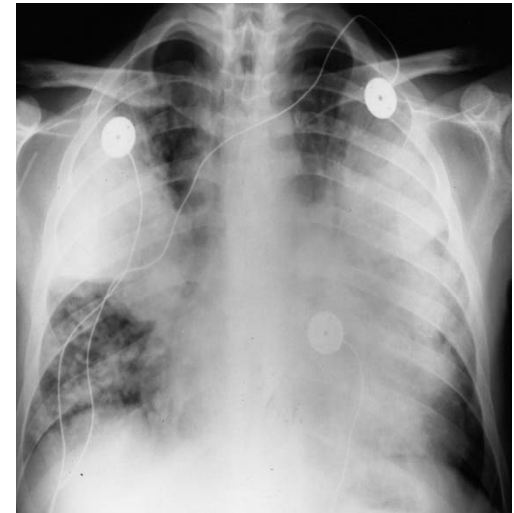
- **Heroin** is 2 to 3 times more potent than morphine.



Heroin: What happens?

Impacts the brain and the lungs

- Varying degrees of lethargy to coma
- Respiratory depression
- Pinpoint pupils
- May develop-
 - ▣ Seizures
 - ▣ Tachycardia
 - ▣ Hypertension



Complications...

- AIDS
- Endocarditis
- Hepatitis C

Naloxone



- Depending on route of administration delay in effects may be noted
- Staff need to protect themselves
- Withdrawal maybe precipitated
- Non medical staff are being trained to administer
 - ▣ Law enforcement
 - ▣ Police
 - ▣ School staff



family

Naloxone- Onset of Action

Route	Response Time
IV	1-2 min
Subcutaneous	5 min
Intranasal	3 min
IM	6 min

Narcan- complications?

- In a patient “naïve” to opioids- no effect
- In a patient who is dependent on opioids may precipitate withdrawal symptoms



Heroin: Excessive Craving

- Makes a person-
 - Do anything to get the drug
 - Steal from family and friends
 - Lie
 - Experiment with other drugs
 - Become violent
 - **Loose control over their life.....**

How is Addiction Treated ?

- Methadone
- Buprenorphine/Naloxone- Suboxone
- Buprenorphine alone- Subutex
- Naltrexone-Vivitrol *
- Behavioral Therapies
- A combination of medications and behavioral therapy
- * once a month injection



One Unintentional Outcome of abuse of Opioids

Babies Born with

Neonatal Abstinence Syndrome



Public Health Issue



- Newborns with NAS were more likely to have:
 - ▣ Low birth weight (19%)
 - ▣ Respiratory complications (30%)
- Estimated mean hospital charge for drug-dependent newborns exceeded \$53,000 (uncomplicated delivery \$10,891)
- The payer of hospital charges was more likely to be Medicaid (2009 -77%)

What is being done...



- NYS DOH have issued a ban on the sale of these products
- On a federal level legislation has been introduced
- On a state level legislation has been introduced
- Poison Center has launched a public and professional awareness campaign
- State and Federal Taskforces and Round Table Discussions
- Public Forums

National Efforts to Reduce Opioid Abuse/Misuse

- National Awareness Efforts
- National Drug Take Backs
 - ▣ Drug Enforcement Administration (DEA) Take Back Days

In 8 collections over 4 years, 4.1 million pounds collected
- I-Stop Prescription Monitoring Program
 - to detect prescription fraud and drug diversion
 - Since 2012 - 75% drop in patients seeing multiple doctors for same drug**



Governor Cuomo's Recommendations

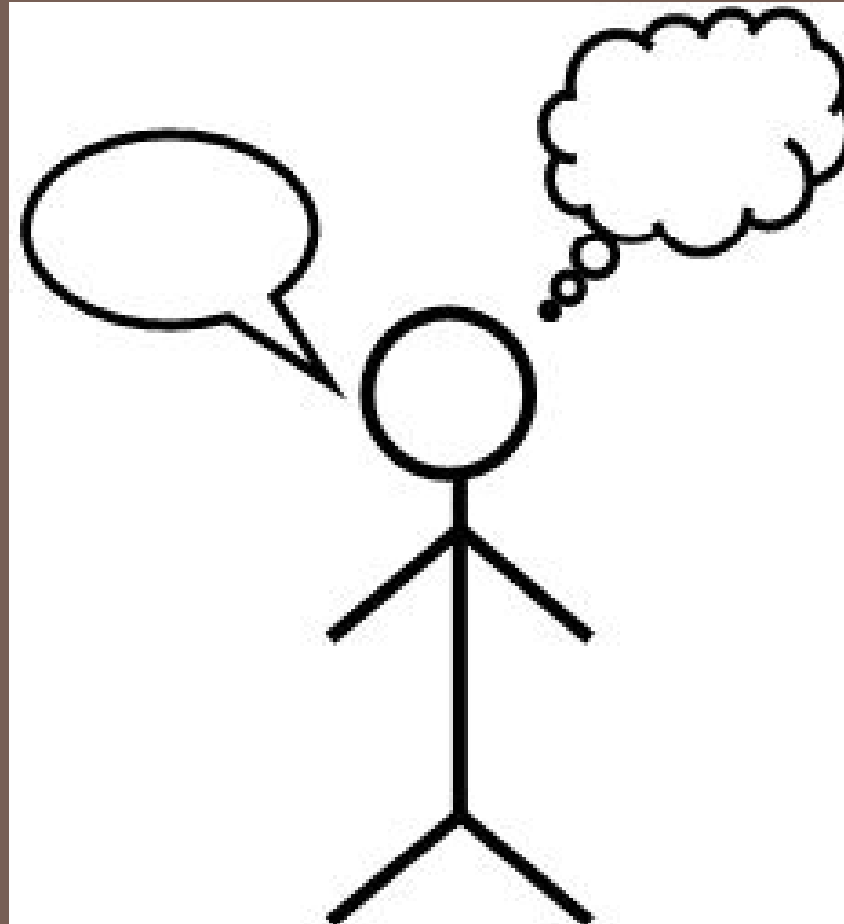
6/9/16

- Prescriber education
 - 7 days rather than 30 days
- Increase available treatments centers-beds
- Remove insurance barriers
- Encourage pharmacist to provide consumer education
- Expand Narcan education

Federal Initiatives



- 126 million allocated
 - CDC's-Prevention of Drug Overdose Program
 - SAMHSA
 - National Institute on Drug Abuse
 - NIH
 - Community Health Centers

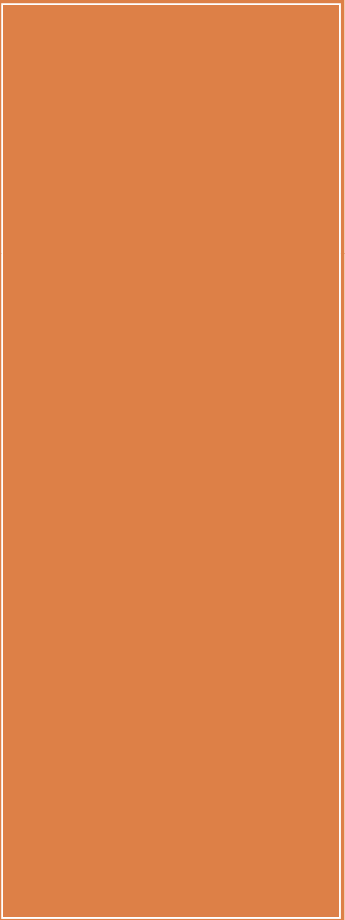



Thoughts.....

Contact the
Upstate New York Poison Center

www.upstatepoison.org

We are only a phone call away!



“This publication/presentation was supported by Grant from the Health Resources and Services Administration’s Division of Healthcare Preparedness, Poison Control Program (PCP), U.S. Department of Health and Human Services. The contents of this publication/presentation are solely the responsibility of the author(s) and do not necessarily represent the views of HRSA/PCP.”