

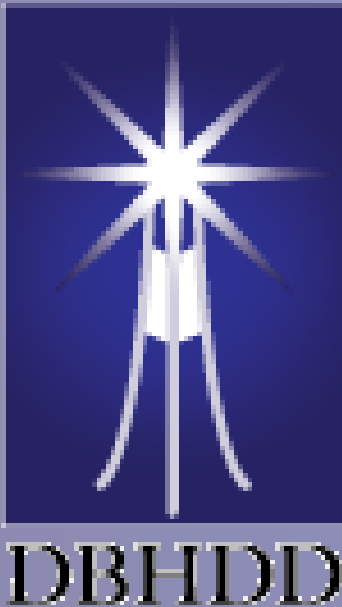
Rx Opioids & their Kissing Cousin Heroin:

“Strategies for Impacting a Georgia Crisis”

Developed by

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The Georgia Prescription Drug Abuse Prevention Initiative is made possible by the

Office of Behavioral Health Prevention

Division of Behavioral Health

**Georgia Department of Behavioral Health
& Developmental Disabilities**

Very Important!

Prescription drugs are useful in improving many conditions when used exactly as directed by a physician. Do not stop taking any prescription medication without first consulting with your physician.

Learning Objectives

- 1. Know the “Why” & Science of Rx Opioids & Heroin**

- 2. Identify the Driving Forces around Rx Opioids & Heroin**

- 3. Apply Practical Community & Environmental Strategies to Crisis**

- 4. The PDMP as an Environmental Tool to Prevent Rx Opioid Abuse**

Rx Opioids & It's Cousin Heroin

- **Most addictive and dangerous of all legal and street drugs**
- **Dr. Nora D. Volkow, Director of NIDA wrote on May 14, 2014 that, “It is estimated that between 26.4 million and 36 million people abuse opioids worldwide, with an estimated 2.1 million people in the United States suffering from substance use disorders related to prescription opioid pain relievers in 2012 and an estimated 467,000 addicted to heroin.”**

Top 10 Abused Drugs In Georgia

1. Nicotine
2. Alcohol
3. Marijuana/hashish (cannabinoids)
4. **Vicodin (hydrocodone) (Opioid) Rx Drug**
5. Cough med. (hydrocodone, Codeine) **Rx Drug**
6. Adderall (stimulant for ADHD) **Rx Drug**
7. Tranquilizers (Ativan, Xanax) **Rx Drug**
8. Salvia (dissociative drug)
9. Hallucinogens (Spice, K-2, LSD)
10. **OxyContin (oxycodone) (Opioid) Rx Drug**

Prescription Drug Abuse

129 OD Deaths a Day

<http://www.129aday.org/>

The equivalent of a jumbo jet full of passengers disappearing every two days.

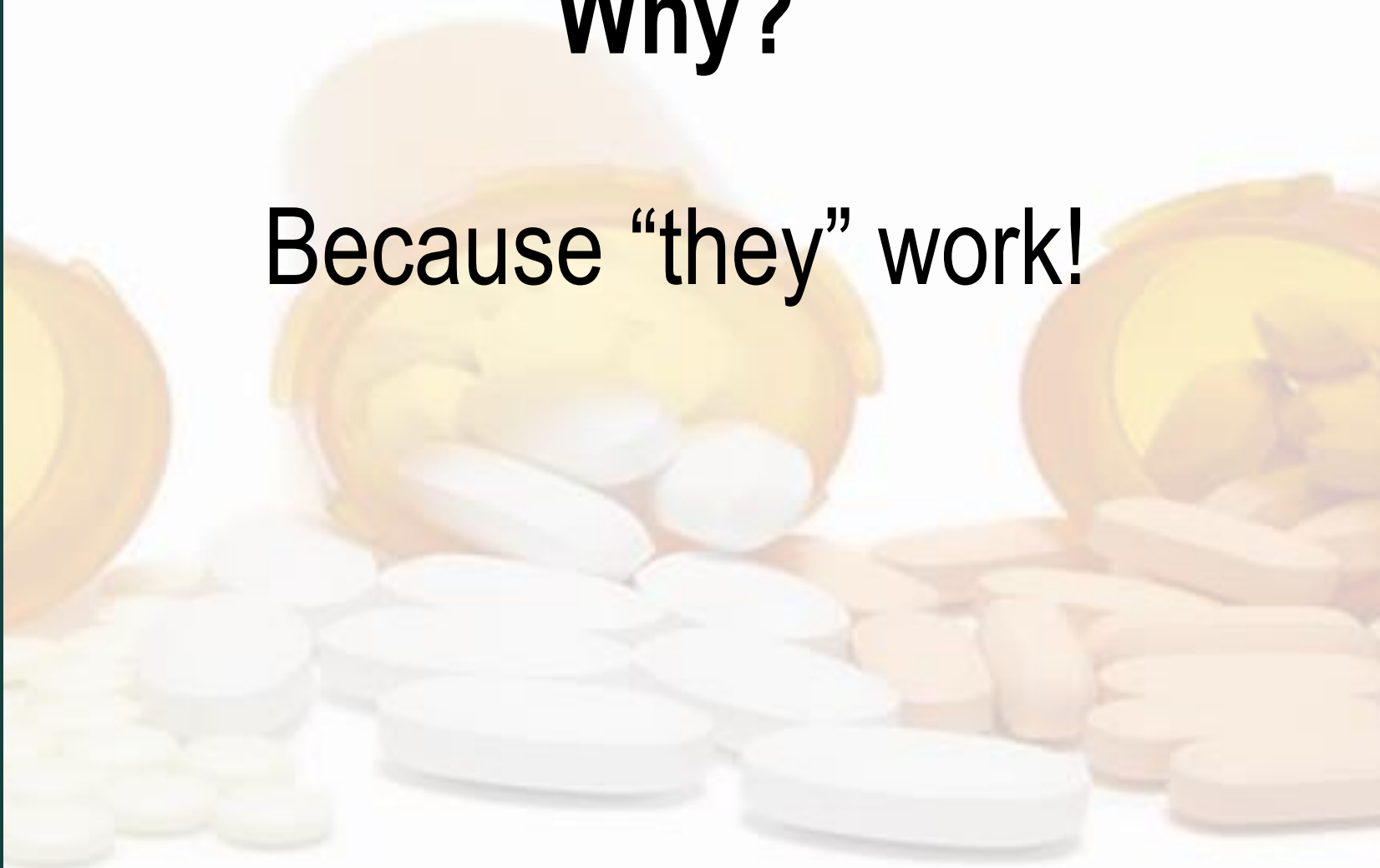




**“Why”
People use Rx drugs?**

Why?

Because “they” work!



Why?

Human beings everywhere regardless of race, religion, sexual orientation, profession, education, or any other characteristic, are motivated by the

***Experience of Pleasure
or
Avoidance of Pain.***

It is just that simple!

Brain Chemistry is Complex yet Simple

*...with biological,
environmental, sociological
and psychological
components*

Opioids & the Body

Opioids affect many places in the brain and nervous system, including:

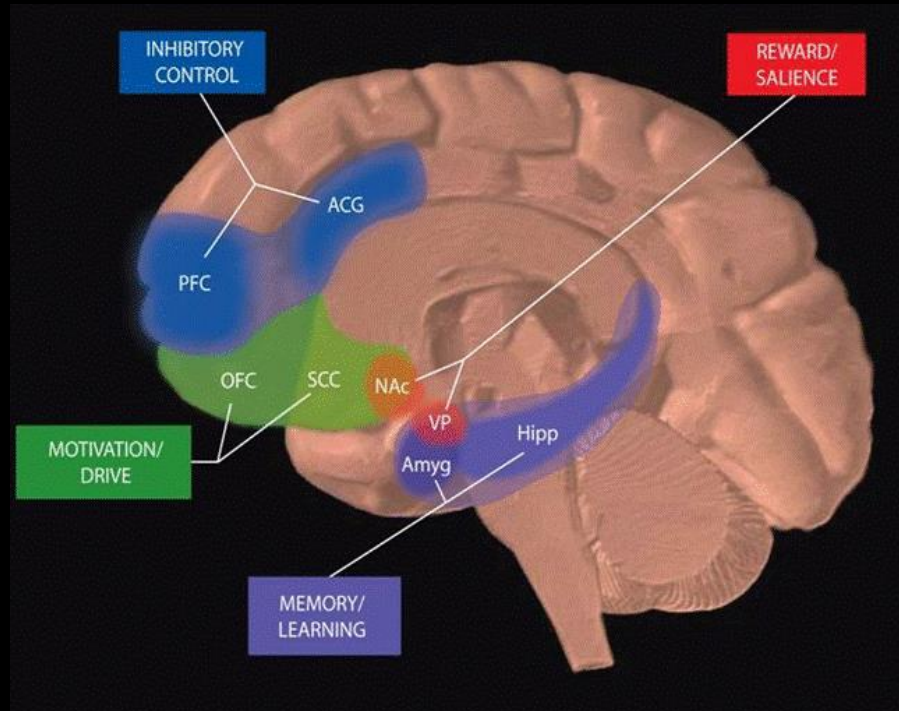
- the **limbic system**, which controls emotions. Opioids create feelings of pleasure, relaxation, and contentment.
- the **brainstem**, which controls things your body does automatically, like breathing. Opioids slows breathing, may stop coughing, and reduce feelings of pain.
- the **spinal cord**, which receives sensations from the body before sending them to the brain. Opioids decrease feelings of pain.

Rx Drugs Take Over The Brain

- Repeated Rx drug exposure results in synaptic changes
- Synapses in the brain are where brain cells or neurons signal to each other by releasing and receiving neurotransmitters, like dopamine.
- These synaptic changes cause the drug user to rely on the drug to the point where if they do not take the drug they will experience withdrawal symptoms and cravings.

Opioids & Addiction

Circuits Involved in Drug Abuse and Addiction



All of these brain regions must be considered in developing strategies to effectively prevent addiction.

Addictive drugs can stimulate the reward pathway in the brain which triggers the release of dopamine.

The release of dopamine will cause the person to crave the drug more.

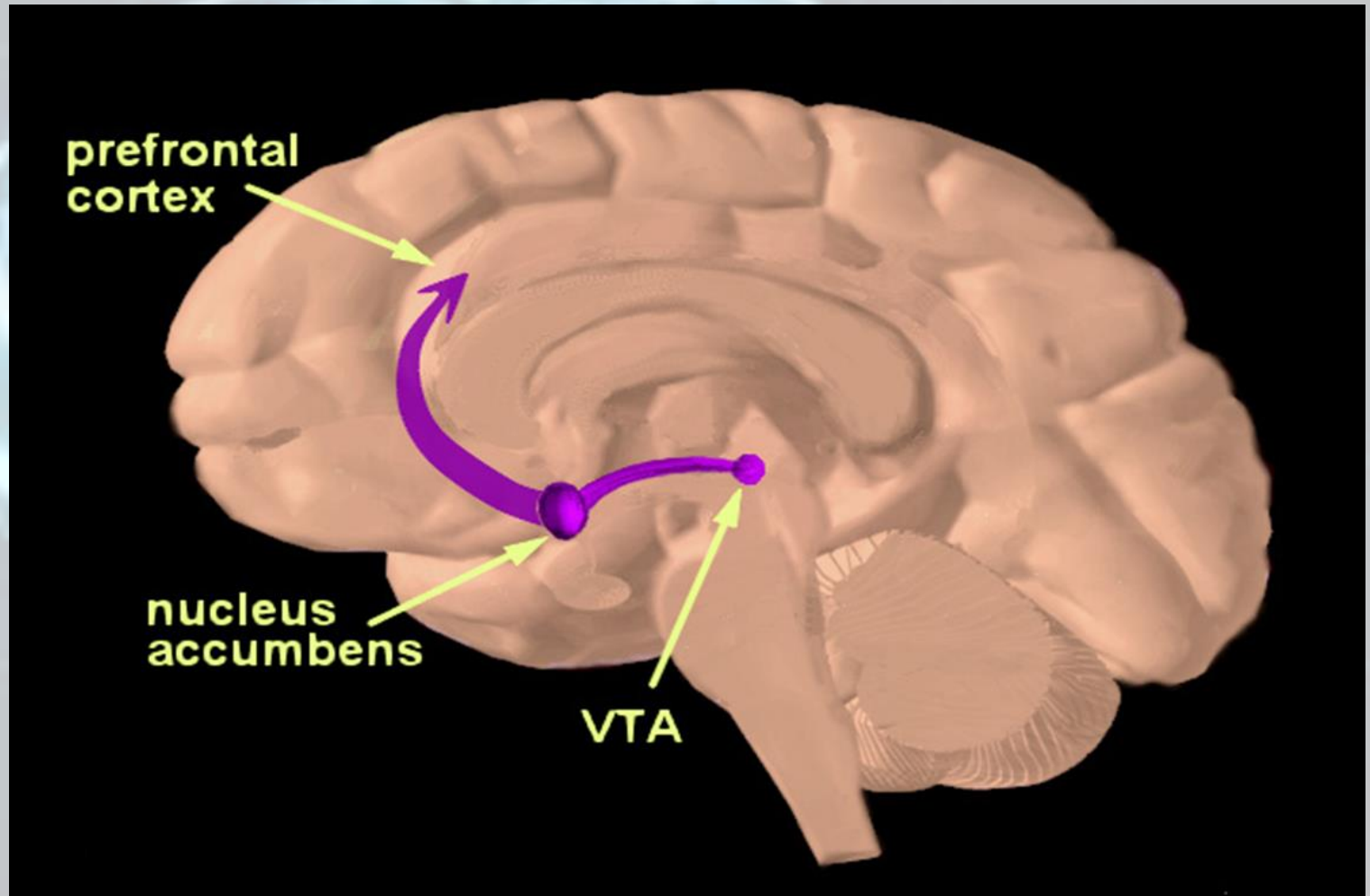
Prescription Drugs Can Cause Addiction

After an unpredictable amount of time of taking an addictive drug, the brain can no longer make dopamine on its own.

Without the drug the person will feel *Dis-eased* & usually *De-pressed* & will need the drug just to feel normal.

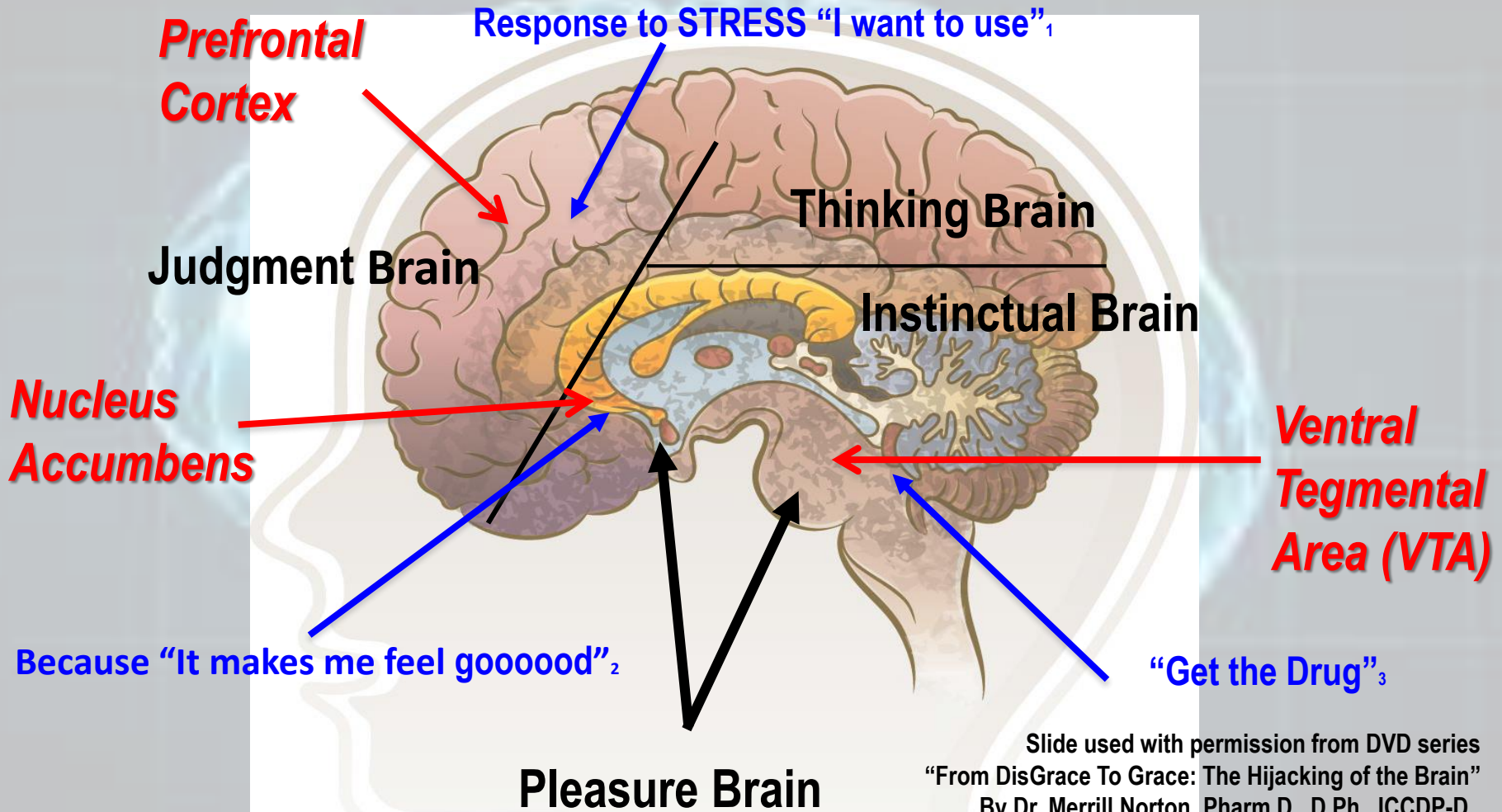
A common reframe from some that uses drugs is, “It makes me feel RIGHT, GOOD or NORMAL!”

Brain Reward Pathways



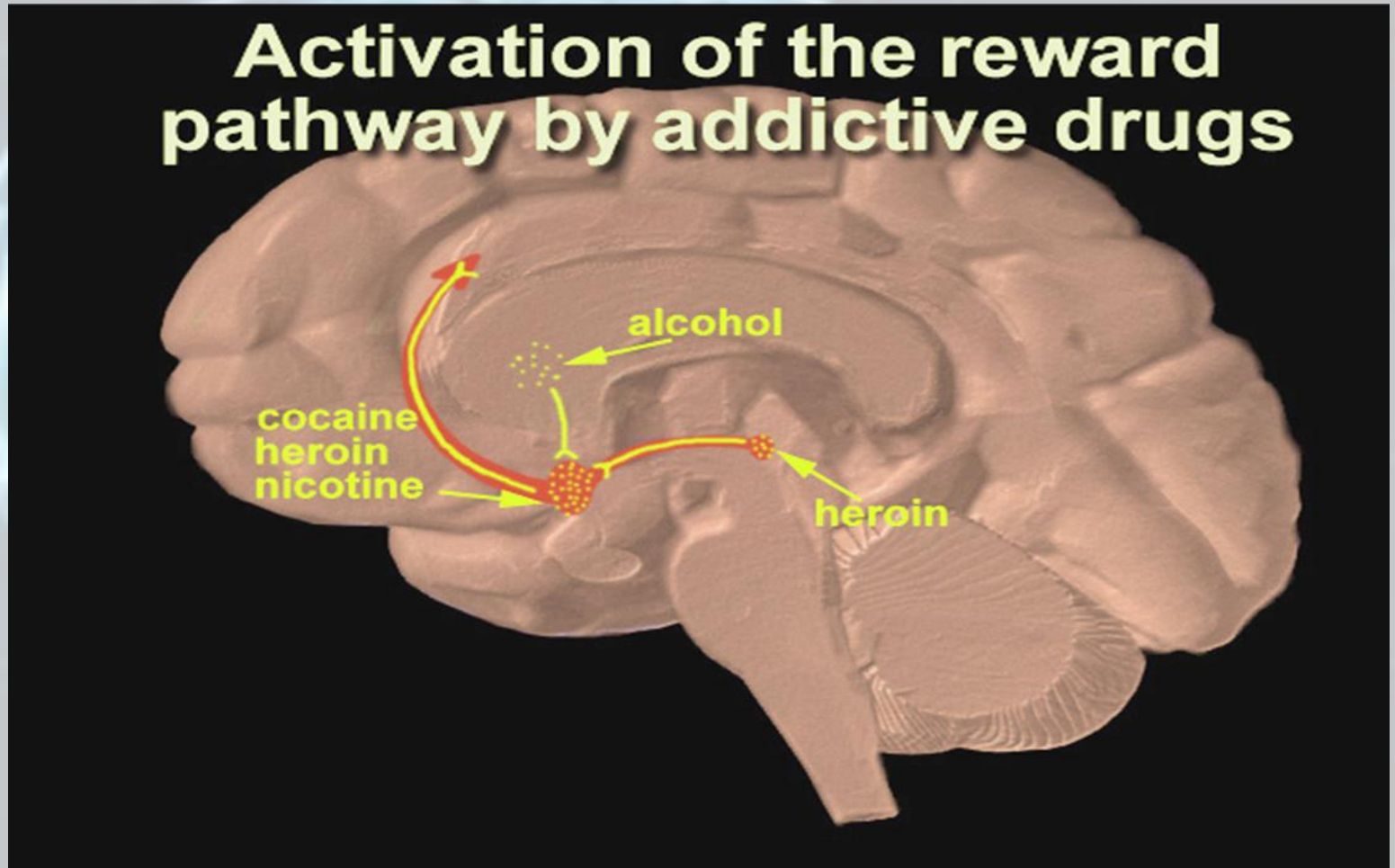
Brain Reward Pathways

"Starts with 'Stressful Event'"



Slide used with permission from DVD series
"From DisGrace To Grace: The Hijacking of the Brain"
By Dr. Merrill Norton, Pharm.D., D.Ph., ICCDP-D,
University of Georgia, College of Pharmacy
Athens, Georgia

Activation of Reward



Drugs Hijack Brain Circuits & Motivational Priorities



Rx Drugs and Heroin: Driving Forces

- Rx Opioids Access going Down & Price going Up
“Supply vs. Demand”

While Heroin Ease of Access going Up & Cheap Price



- Brain Chemistry: A “New High”
Reward Brain vs. Anti-Reward Brain?

Long-term medical effects of opioid dependence¹⁻³

Psychiatric/Neurological

- Depression
- Hallucination
- Confusion/reduced concentration
- Drowsiness
- Headache
- Dizziness

Cardiovascular

- Arrhythmia
- Infection of cardiac lining/
valves

Gastro/Hepatic

- Nausea/vomiting
- Constipation
- Reduced liver function

Dermatologic

- Hives/rash
- Hyperhidrosis

Behavioral

- Addiction
- Tolerance
- Dependence
- Mood swings

Respiratory

- Difficulty breathing
- Slowed breathing

Muscular

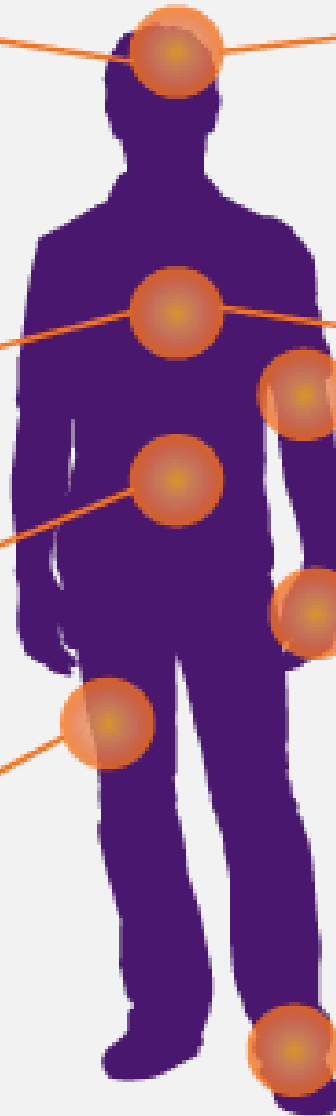
- Seizures
- Weakness

Extremities

- Swelling

Trauma/Infections

- Hepatitis
- HIV/AIDS



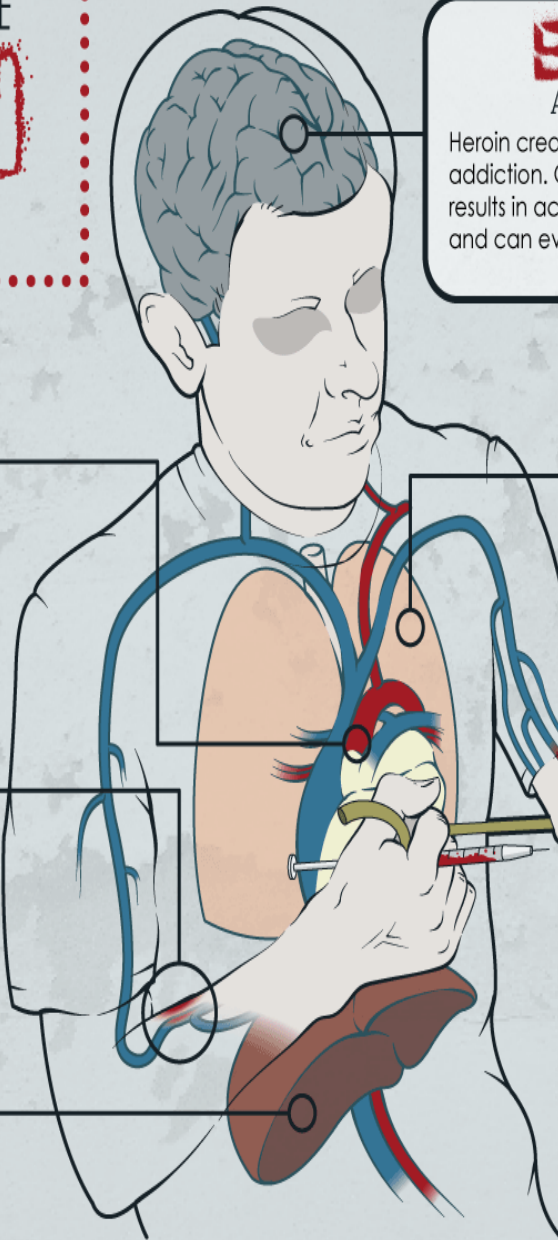
Driving Forces: Opioids & Heroin

What 30 Days of **HEROIN** Does to You

HEART
Infection of Valves
Bacteria from dirty syringes attach to the heart valves and cannot be removed by the body. Fatigue and fever are a result.

VEINS
Collapsed Veins
Veins at the site of repeat injections swell and cut off circulation. Poor technique greatly increases the chance of vein collapse.

LIVER
Hepatitis C
An infectious disease transmitted blood-to-blood that, if left untreated, can lead to cirrhosis and liver failure.



BRAIN
Addiction
Heroin creates an especially strong addiction. Quitting cold turkey results in aches, diarrhea, vomiting, and can even cause death.

LUNGS
Pneumonia
The lungs swell and breathing is restricted. Cough, fever and chest pain result.

SKIN
Abscesses
Puss collects inside a cavity of dead skin.



Sources: drugfree.org/drug-guide/heroin
drugabuse.gov/researchreports/heroin/heroin3.html
emedicine.medscape.com/article/216650-overview
alcoholism.about.com/od/heroin/a/effects.-LvN.htm

Opioids

“Our Pain is Killing Us”



<http://www.drugfree.org/heroin>



<https://www.youtube.com/watch?v=UtMi9ciJN70>

Prescription Drugs & the Heroin Connection



- **Heroin** - a narcotic (opiate) - extracted from the poppy plant. *White / brown powder or black sticky substance, known as “black tar heroin.”*



- **Fentanyl** - a narcotic (opiate) painkiller (analgesic) 50 to 100 Xs more potent than morphine. *Typically used after surgery or to treat patients with severe pain.*



Fentanyl-laced heroin - In March, 2015 the Drug Enforcement Agency (DEA) issued a nationwide alert in response to a surge in OD deaths. *Up to 100 times more powerful than morphine and 30-50 times more powerful than heroin alone.*

Prescription Drugs & the Heroin Connection

A Possible Correlation

due to a prescription medication formulation change



- As gov. regulation of Rx opioids increased the use of cheap readily available heroin increased. This coupled with the user of Rx opioids needed “a better HIGH” so they turn to heroin that is 50x more powerful than Rx opioids (intravenous).
- *** Now available in Canada via prescription.

Prescription Drugs & the Heroin Connection

Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and **death** for users.

People who are addicted to...



are

2x



are

3x



are

15x



are

40x

...more likely to be addicted to heroin.

SOURCE: National Survey on Drug Use and Health (NSDUH), 2011-2013.

Prescription Drugs & the Heroin Connection

ABUSE OF PRESCRIPTION PAIN MEDICATIONS RISKS HEROIN USE

In 2010 almost 1 in 20 adolescents and adults – 12 million people – used prescription pain medication when it was not prescribed for them or only for the feeling it caused¹. While many believe these drugs are not dangerous because they can be prescribed by a doctor, abuse often leads to dependence. And eventually, for some, pain medication abuse leads to heroin.



PEOPLE WHO TAKE NON MEDICAL
PRESCRIPTION PAIN RELIEVERS WILL TRY
HEROIN WITHIN 10 YEARS²

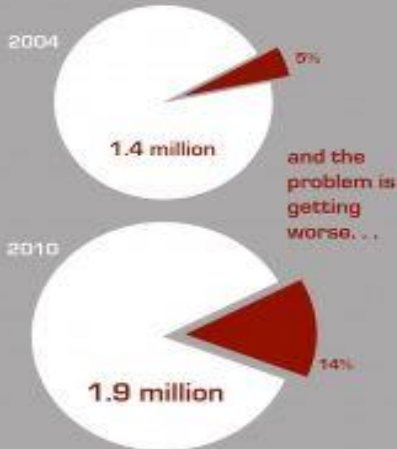
4 out of 5 heroin users



had previously used *painkillers*.

Source: White House Office of National Drug Control Policy

Number of People Who Abused or were
Dependent on Pain Medications and
Percentage of Them that Use Heroin³



Heroin users are **3X** as likely
to be dependent

14% of non medical prescription
pain reliever users are dependent
54% of heroin users are dependent⁴

Heroin Emergency Room Admissions Are Increasing⁵

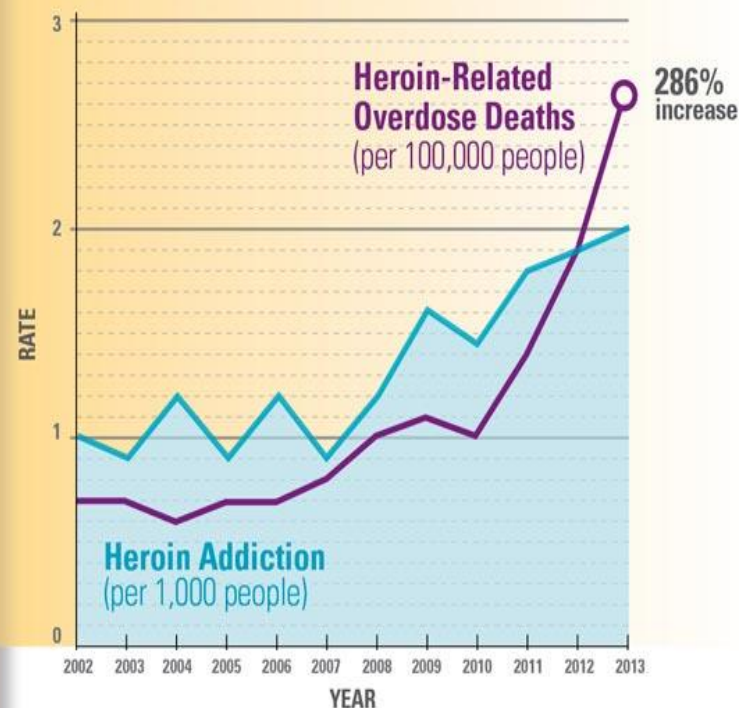


Prescription Drugs & the Heroin Connection

Heroin Use Has INCREASED Among Most Demographic Groups

	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than \$20,000	3.4	5.5	62%
\$20,000-\$49,999	1.3	2.3	77%
\$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

Heroin Addiction and Overdose Deaths are Climbing



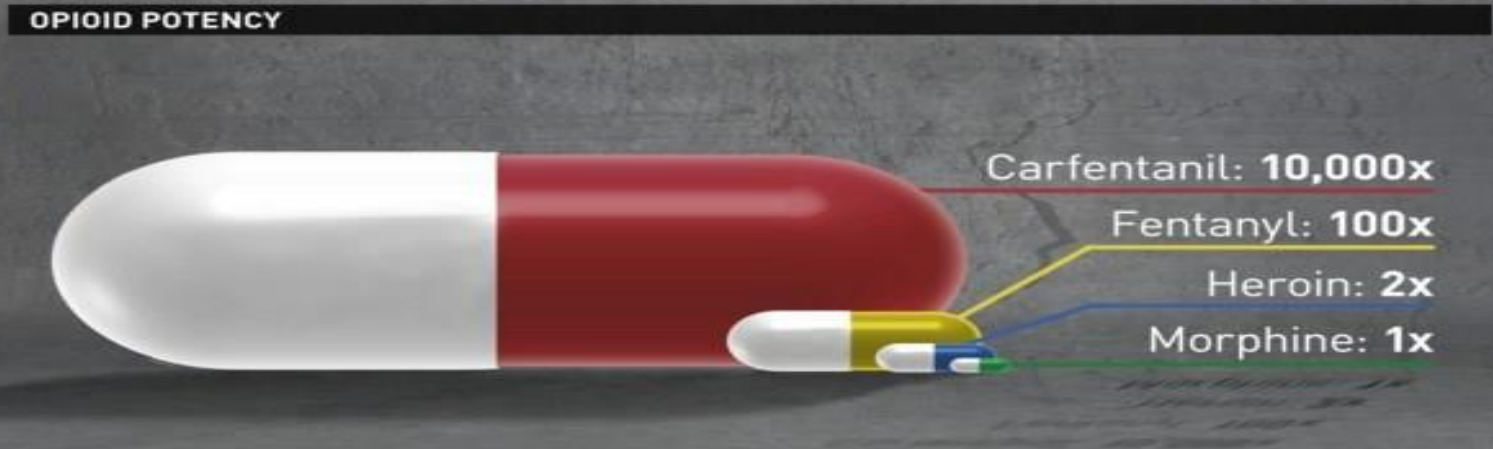
SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013.
National Vital Statistics System, 2002-2013.

Rx Opioids - Heroin - Carfentanil Connection



September 22, 2016 - (Washington, D.C.)

The “DEA has issued a public warning to the public and law enforcement nationwide about the health and safety risks of **Carfentanil**. **Carfentanil** is a synthetic opioid that is 10,000 times more potent than morphine and 100 times more potent than fentanyl, which itself is 50 times more potent than HEROIN.”



Community's Role in Decreasing Rx Opioid Abuse

- **Example** - “Example is not the Main Thing
it is the Only Thing”
 - **Coping** – Show them
- **Educate** - Social Norms – “Society’s Unwritten Rules”
 1. If it’s Legal it must be Safe - 3 drugs that kill the most are all legal tobacco, alcohol & Rx Drugs
 2. Don’t deal with your Suffering or Pain directly
Because it will overwhelm you
 3. Pills are the Answer to Human Suffering & Confusion

Community's Role in Decreasing Rx Opioid Abuse

- **See only one primary physician and one pharmacy whenever possible.**

-
- **If U R unsure about taking opioids ask for help.**



Community's Role in Decreasing Rx Opioid Abuse

- **NO sharing U Rx “It is not nice”**
-

- **Follow the directions and dosage provided by their physician.**
-

- **Properly STORE and DISPOSE**

Community's Role in Decreasing Rx Opioid Abuse

- **Ask friends and family to safeguard meds by “Locking Them Up”**

- **Report any individuals who are selling Rx drugs or forging Rx to the police.**

- **Be aware you may be in close contact with someone that abuses or is addicted to Rx drugs.**

Environmental Strategies: Decreasing Rx Opioid Abuse

- Decrease youth ACCESS to Rx Drugs
- Presence
- Advocacy
- Organizational Example (Drug Free Workplace)
- Provide positive alternatives



DID YOU KNOW?

The **PDMP** as an Environmental Tool to Prevent Rx Opioid Abuse



als currently addicted to Heroin, 82% began misusing prescription opioids. Many which began with a legitimate medical necessity for pain relief

Thank you for your Time & Attention!



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