



# **Prescription Opioid Addiction and Chronic Pain: Non-Addictive Alternatives To Treatment and Management**

*Dr. Barbara Krantz*

*Medical Director*

*Diplomate American Board of Addiction Medicine*



# Learning Objectives

- Epidemiology of Prescription Opioid Abuse
- Definition of Prescription opioid abuse- Prescription opioid use disorder (POUD): A complex clinical challenge
- Description of Chronic Pain
- Which drugs are considered Prescription Opioids?
- What constitutes dependence with Opioids?
- What if I have Chronic pain?
- How much is too much?
- Clinical Options
- Medical Management

# Epidemiology

- Opioids are among the most commonly misused prescription drugs in the United States.<sup>1</sup>
- In 2008, poisoning was the leading cause of death from injury in the United States; roughly 90% of poisonings resulted from drug exposure, and >40% of these drug poisonings were from prescription opioids.<sup>2</sup>
- The Centers for Disease Control and Prevention estimates that the number of emergency department (ED) visits for nonmedical use of opioids increased 111% between 2004 and 2008, from 144,600 to 305,900 visits.<sup>3</sup>
- The highest number of visits were for use of oxycodone, hydrocodone, and methadone.<sup>3</sup>
- In 2010, 2 million people reported using prescription painkillers for the first time.



# What Do We Know?

## The role of prescription painkillers

Although many types of prescription drugs are abused, there is currently a growing, deadly epidemic of prescription painkiller abuse.

**Nearly three out of four prescription drug overdoses are caused by prescription painkillers—also called opioid pain relievers.**

The unprecedented rise in overdose deaths in the US parallels a 300% increase since 1999 in the sale of these strong painkillers.

**These drugs were involved in 14,800 overdose deaths in 2008, more than cocaine and heroin combined.**

CDC. Vital Signs: Overdoses of Prescription Opioid Pain Relievers—United States, 1999-2008. MMWR 2011; 60: 1-6



For every **1** death there are...



**10** treatment admissions for abuse<sup>9</sup>

**32** emergency dept visits for misuse or abuse<sup>6</sup>

**130** people who abuse or are dependent<sup>7</sup>

**825** nonmedical users<sup>7</sup>

## How Prescription Painkiller Deaths Occur

Prescription painkillers work by binding to receptors in the brain to decrease the perception of pain. Prescription painkillers cause sedation and repress a person's breathing.

Substance Abuse and Mental Health Services Administration. Drug Abuse Warning Network: selected tables of national estimates of drug-related emergency department visits. Rockville, MD: Center for Behavioral Health Statistics and Quality, SAMHSA; 2010.



Almost all prescription drugs involved in overdoses come from prescriptions originally; very few come from pharmacy theft.

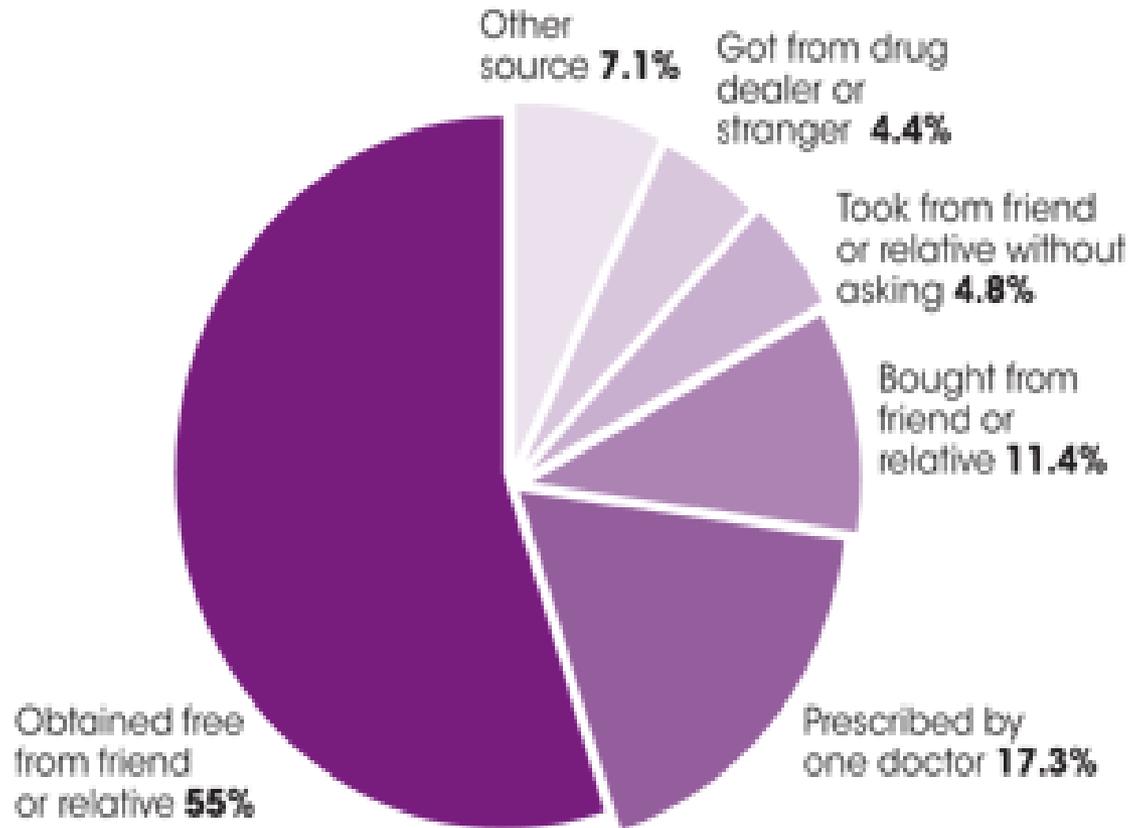
However, once they are prescribed and dispensed, prescription drugs are frequently diverted to people using them without prescriptions.

More than three out of four people who misuse prescription painkillers use drugs prescribed to someone else.

Most prescription painkillers are prescribed by primary care and internal medicine doctors and dentists, not specialists.

Roughly 20% of prescribers prescribe 80% of all prescription painkillers

## People who abuse prescription painkillers get drugs from a variety of sources<sup>7</sup>



Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: volume 1: summary of national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2011. Available from URL: <http://oas.samhsa.gov/NSDUH/2k10NSDUH/2k10Results.htm#2.16>.



# What Drugs are Considered Prescription Opioids: Drug Brand Names

- Buprenorphine
- Subutex /Suboxone
- Codeine
- Tylenol with codeine
- Fentanyl
- Duragesic
- Actiq
- Hydrocodone
- Lortab,
- Vicodin
- Methadone
- Dolophine
- Morphine
- Roxanol
- Oxycodone
- OxyContin
- Roxicodone



Figure 2. Prescription opioid source by age group

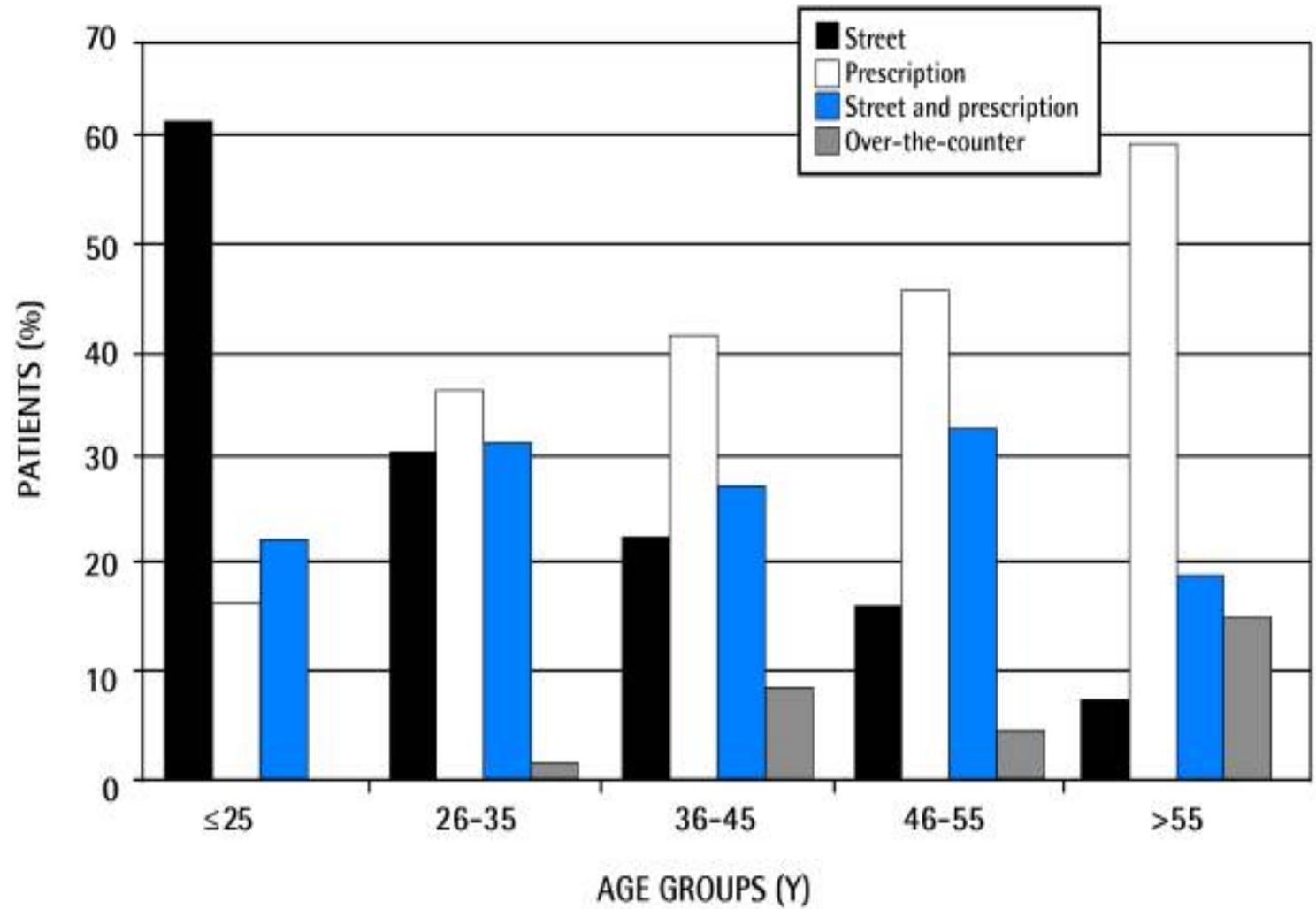
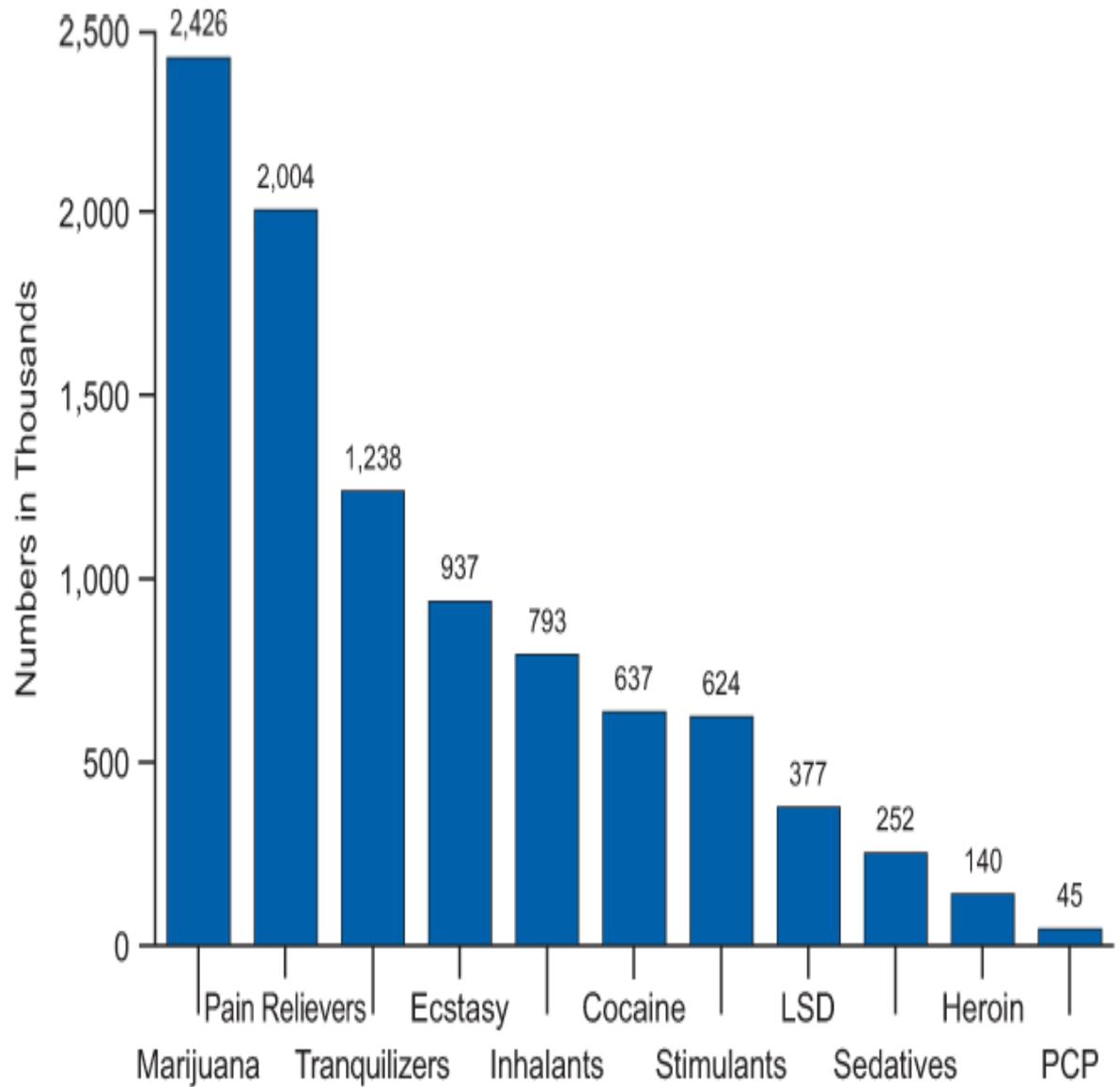


Figure 5.2 Past Year Initiates of Specific Illicit Drugs among Persons Aged 12 or Older: 2010



Note: The specific drug refers to the one that was used for the first time, regardless of whether it was the first drug used or not.

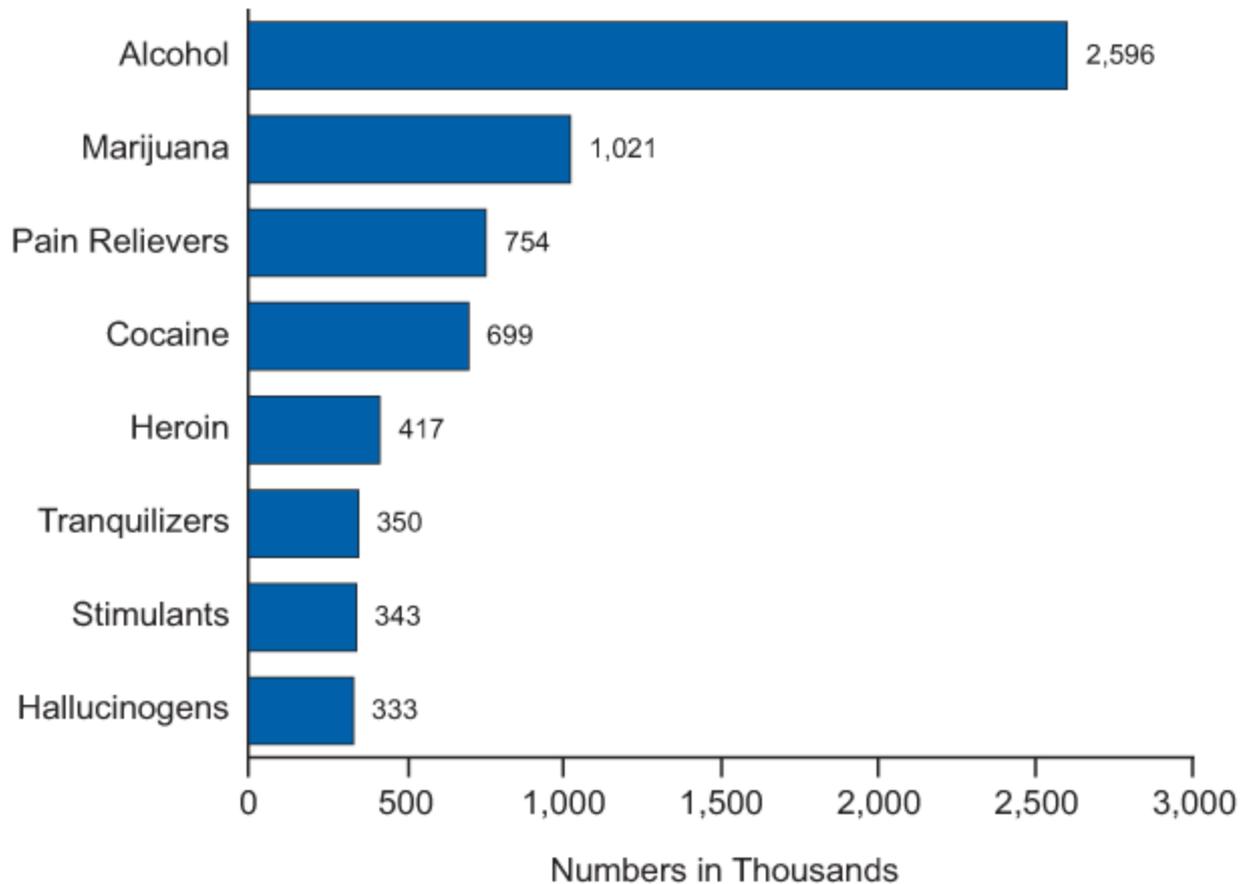
# Non-Medical Use of Opiates

In 2010, the number of new nonmedical users of OxyContin<sup>®</sup> aged 12 or older was 598,000, with an average age at first use of 22.8 years among those aged 12 to 49. These estimates are similar to those for 2009 (584,000 and 22.3 years, respectively).

In 2010, the mean age of first use for all prescription pain relievers was 21.0 years.

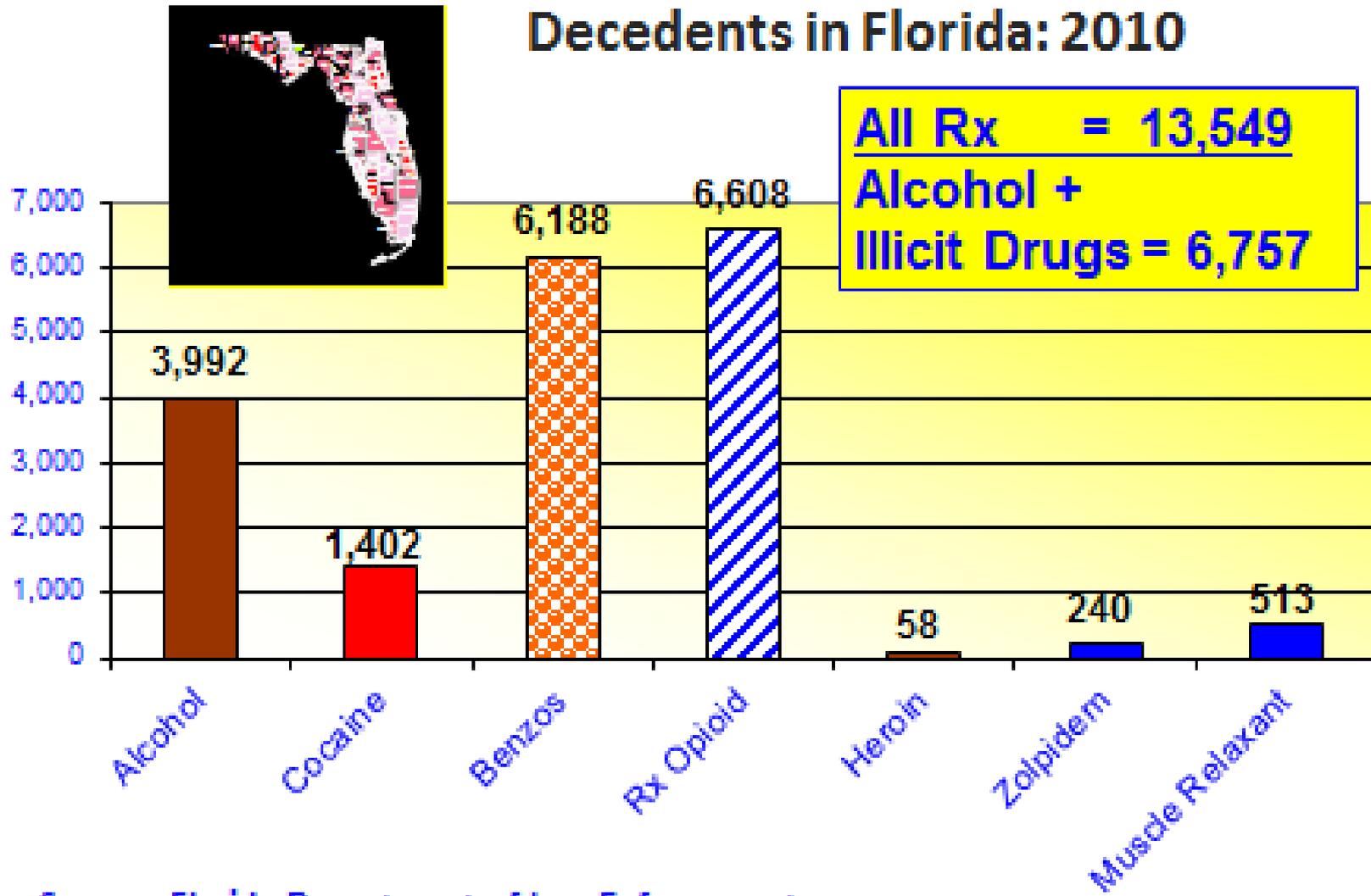


## Substances for Which Most Recent Treatment Was Received in the Past Year among Persons Aged 12 or Older: 2010



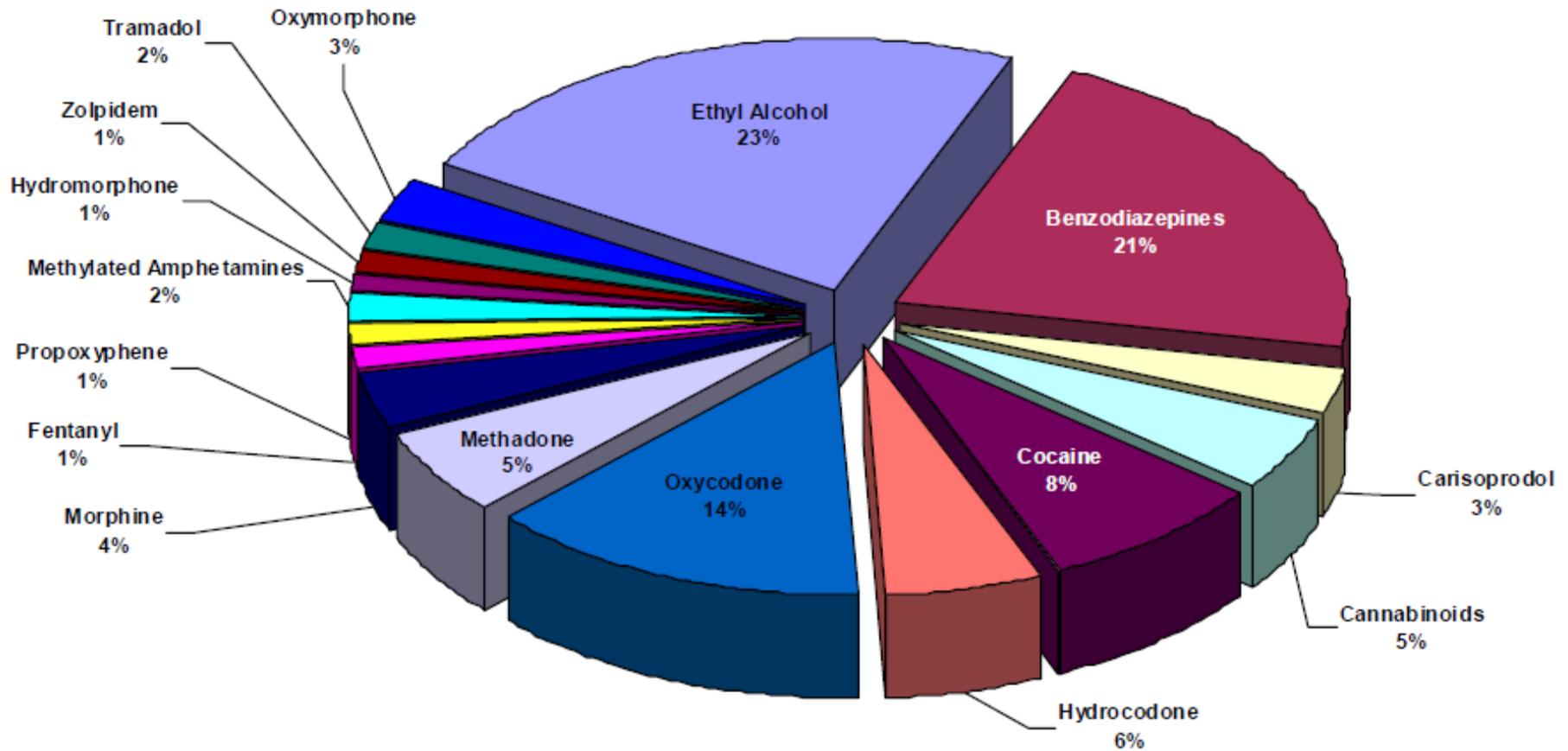
## Exhibit 1

# Numbers of Substances Identified among Decedents in Florida: 2010



Source: Florida Department of Law Enforcement:  
Florida Medical Examiners Commission Report 2010

# Frequency of Occurrence of Drugs in Decedents January - December 2010



Codeine, Heroin, GHB, Ketamine, Freon, Meperidine, and all inhalants constituted less than 1% of the drug frequencies.

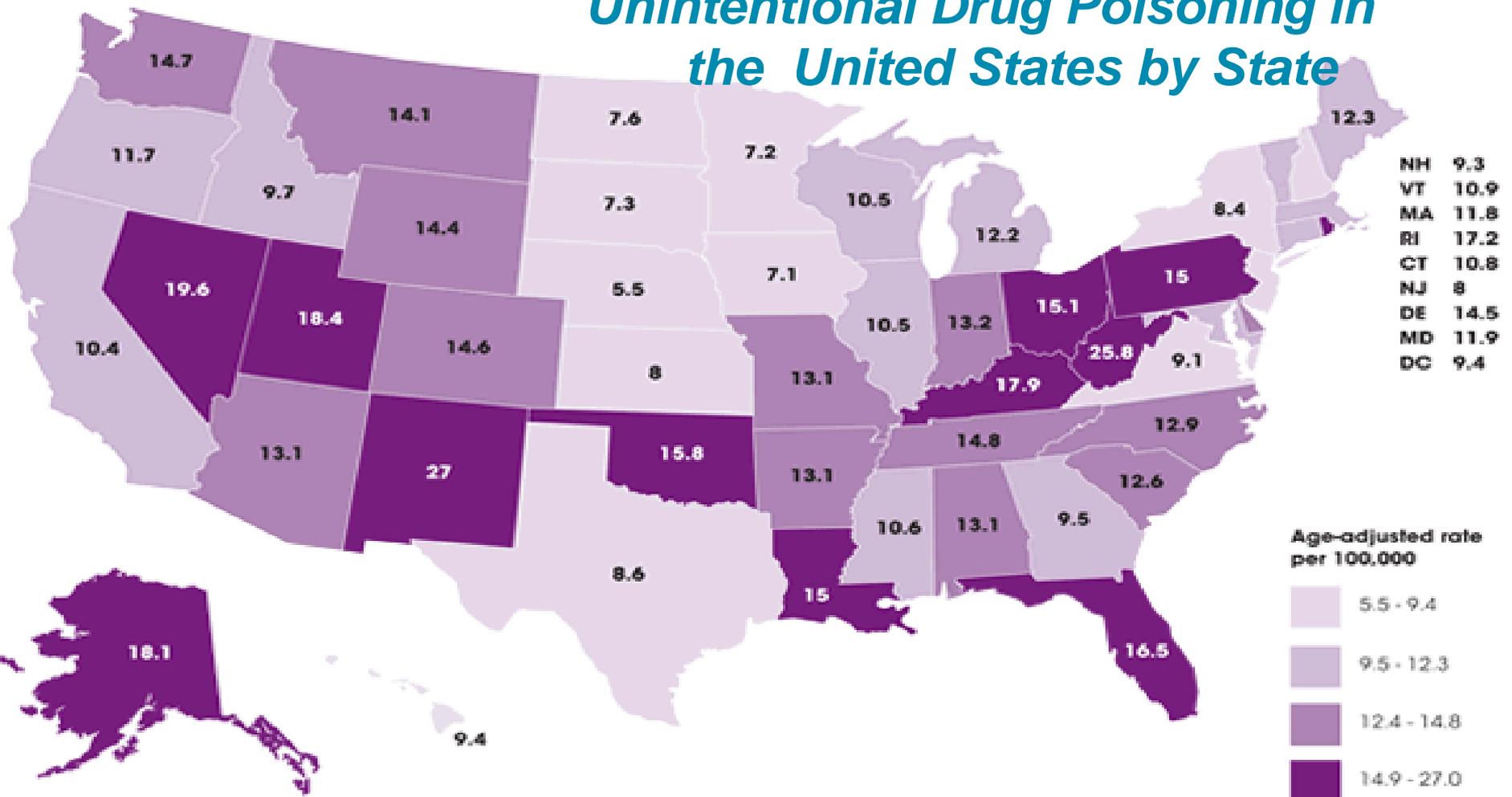
*Note: Many of the deaths have several drugs contributing to the death. The count of drugs listed is greater than the number of deaths. Do not add across drugs.*

# National Perspective on Drug Abuse: CDC

- Nationally, in 2010 CDC released a report titled “Unintentional Drug Poisoning Deaths in the US.
- It stated that there were 27,658 annual fatal unintentional drug poisonings as of 2008.
- Drug overdose deaths are second only to car crashes for unintentional injury deaths.
- Overdose is the number one injury-related killer among adults aged 35-54.
- Rates of unintentional drug overdose deaths have increased 5-fold since 1990.
- ***In 2010, more than 45,000 people died from drug overdoses, and most of these deaths were caused by prescription drugs.***



# Unintentional Drug Poisoning in the United States by State



States in the Appalachian region and the Southwest have the highest death rates.

The highest drug overdose death rates were found in New Mexico and West Virginia, which were nearly 15 times that of the state with the lowest drug overdose death rate, Nebraska.

Source: Unintentional Drug Poisoning in the United States ; [www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf](http://www.cdc.gov/HomeandRecreationalSafety/pdf/poison-issue-brief.pdf)



# What if I Have Chronic Pain?

- No one procedure or set of variables is sufficient to identify chronic pain pts. who may be at risk for addiction.
- However, a history of substance use disorder is a significant risk factor.
- 50% of pts. who complain of chronic pain may have primary dependence to sedatives, opioids or both.
- Few instruments/tools have been developed to identify those at risk.

# Risk Factors for Opioid Misuse

- Age < 45
- Having substance use disorder\*
- Having psychiatric use disorder
- Using tobacco

# Pain Definitions

- An unpleasant sensory and emotional experience with actual or potential tissue damage and modified by individual memory, expectations and emotions.
- Pain is whatever the experiencing person says it is. It is highly subjective.
- Need validation.

# Pain is A **Significant** Issue

- #1 admitting diagnosis in US
- #1 reason for missed work in US
- Chronic pain costs the US \$100B/year in direct medical costs, lost income and productivity.
- Pain is the 5<sup>th</sup> vital sign (JCAHO)
- Patients have a right to adequate pain control (JCAHO).

\*\*Stewart et al, Work-related cost of pain in the US, IASP/10<sup>th</sup> World Congress on Pain 2002, as cited by Dr. John Stamatou, Medscape.com.



# Physiological Effects of Pain

- Increased catabolic demands: poor wound healing, weakness, muscle breakdown.
- Decreased limb movement: increased risk of blood clots in the legs or lungs.
- Respiratory: shallow breathing, increased respiratory rate, cough suppression.
- Increased sodium and water retention (renal).
- Decreased gastrointestinal mobility.
- Increased heart rate and elevated blood pressure.



# Consequences of Untreated Pain

- Poor appetite and weight loss
- Withdrawal from social activities
- Physical and verbal aggression, wandering, acting-out behavior, resists care
- Difficulty walking or transferring; may become bed bound
- Skin ulcers
- Incontinence
- Decreased ability to perform activities of daily living
- Impaired immune function

# Prompt Pain Management is Vital

The sooner pain is managed the more likely  
patients are to return to normal daily living  
activities

J. McGill, J. Occupational Medicine, 1968

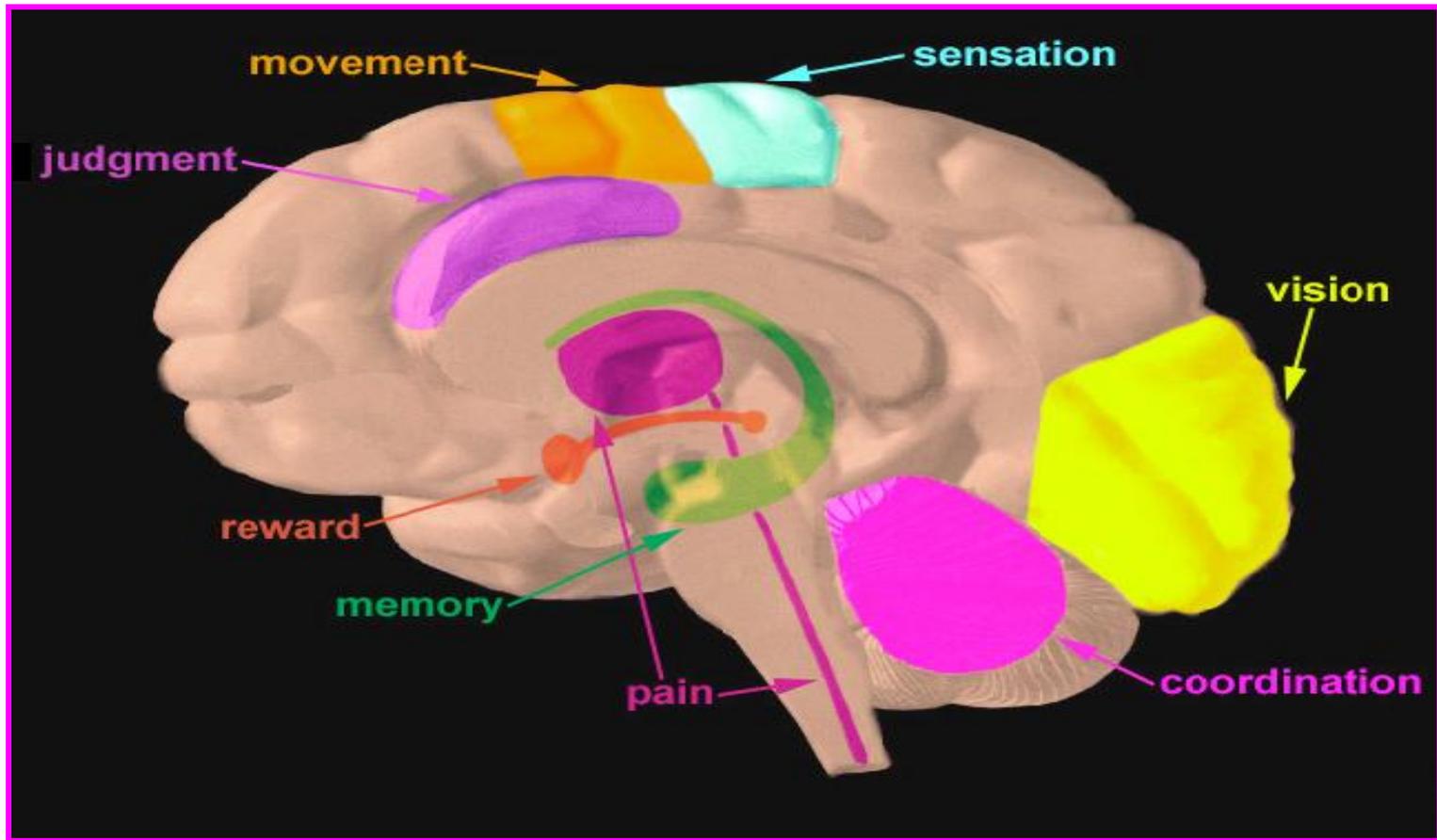


# Acute vs. Chronic Pain

Characteristic	Acute Pain	Chronic Pain
Cause	Generally known	Often unknown or pain that continues when it should not.
Duration of Pain	Short, well-characterized	Persists after healing, $\geq 3 - 6$ months
Treatment Approach	Resolution of underlying cause, usually self-limited	Underlying cause and pain disorder, outcome is often pain control, not cure.

# Chronic Pain

- 20% of the population in developed countries is afflicted with chronic pain.
  - 30-40% due to musculoskeletal and joint disorders
  - 30% neck and back pain
  - Headache and migraines  $\leq$  10%



Opioid dependence is associated with structural and functional changes in brain regions implicated in the regulation of affect and impulse control, as well as in reward and motivational functions.

# Domains of Chronic Pain

## Quality of Life

Physical functioning  
Ability to perform  
activities of daily living  
Work  
Recreation

## Psychological Morbidity

Depression  
Anxiety, anger  
Sleep disturbances  
Loss of self-esteem

## Social Consequences

- Marital/family relations
- Intimacy/sexual activity
- Social isolation

## Socioeconomic Consequences

- Healthcare costs
- Disability
- Lost workdays

# Managing Chronic Pain



# Treatment Objectives

- Decrease the frequency and/or severity of the pain.
- General sense of feeling better
- Increased level of activity
- Return to work, if applicable
- Elimination or reduction in medication usage

# Treatment of Pain

## Medications:

- Nonsteroidal anti-inflammatory drugs
- Acetaminophen
- Antidepressants and anticonvulsants
- Adjuvants



# Treatment of Pain

Non-medication modalities:

- Biofeedback
- Relaxation therapy
- Physical and occupational therapy
- Cognitive/behavioral strategies
  - meditation; guided imagery
- Acupuncture
- Transcutaneous electrical nerve stimulation
- Neuromuscular massage therapy

Lastly.....

- Consider checking a vitamin D level
- There is an association between Vitamin D levels and chronic pain in women.
- Women with levels of 75 – 99 nmol/L had less pain.

Ann Rheum Dis. August 12, 2008



# Teamwork

The diverse talents of physician, nurse, clinician, spiritual care, psychology, psychiatry, wellness experts working together offers comprehensive control of physical, emotional, and spiritual pain.

# HANLEY CENTER

933 45<sup>th</sup> Street

West Palm Beach, FL 33407

(Office) 561-841-1140

(Fax) 561-841-1099

Email: [bkrantz@hanleycenter.org](mailto:bkrantz@hanleycenter.org)

Website: [hanleycenter.org](http://hanleycenter.org)

Toll Free: 866-4HANLEY





# HANLEY CENTER