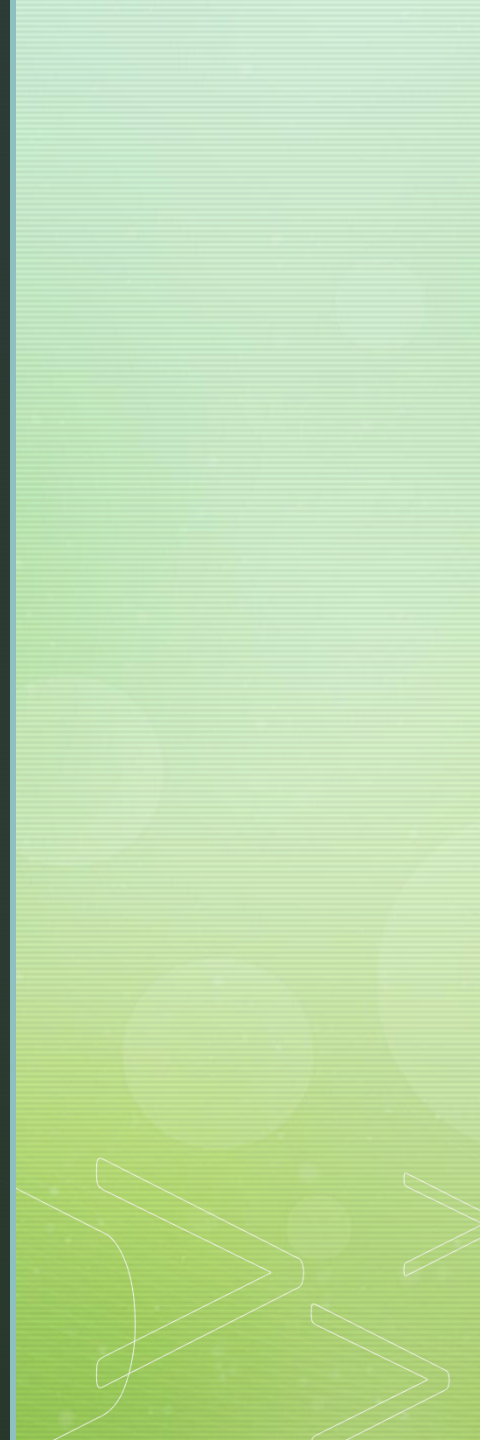


Ch. 13

Marijuana



Historical & Cultural Perspectives

2737 BC – Pen Ts'ao Ching

Tea - medicine



Historical & Cultural Perspectives

2000 - 1400 BC – Vedas, Hindu text

Shiva god, Lord of Bhang

“Guardian angel lived in its leaves”

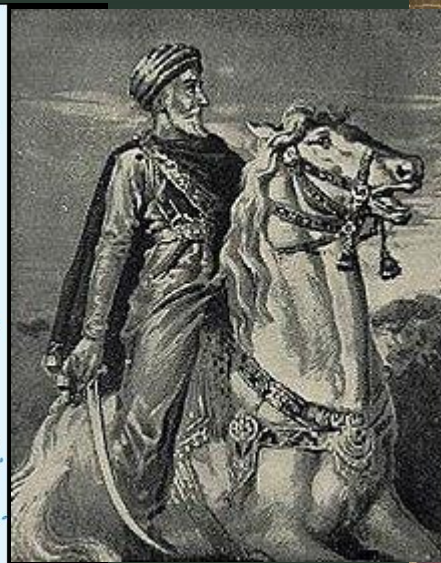
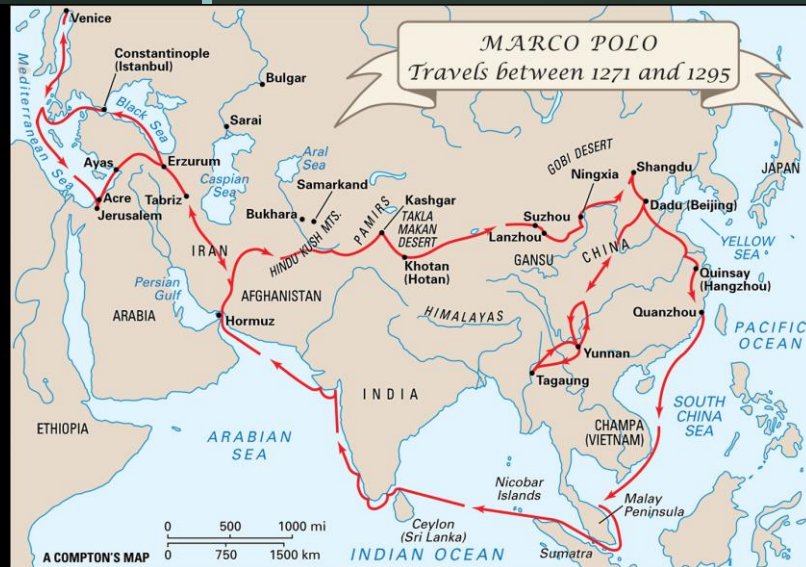
“happiness, joy-giver, lose fear”



Historical & Cultural Perspectives

1200s AD – Italy - Marco Polo

Arabian Hashishiyya



Historical & Cultural Perspectives

1800s AD – United State

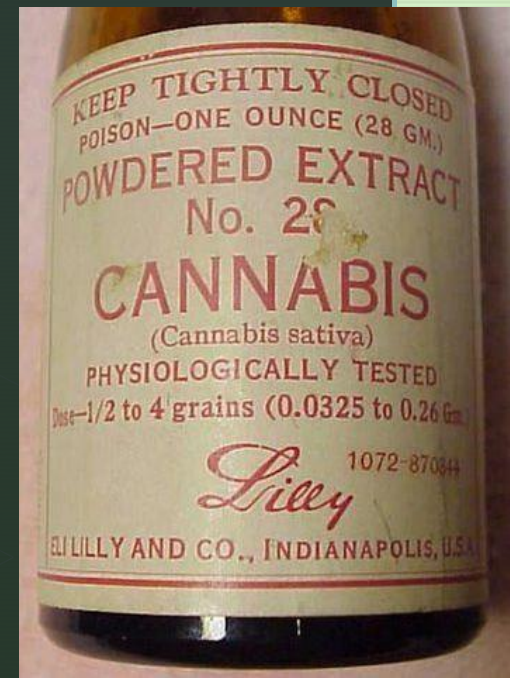
Tinctures, tonics

Sears & Roebuck

Tinctures.

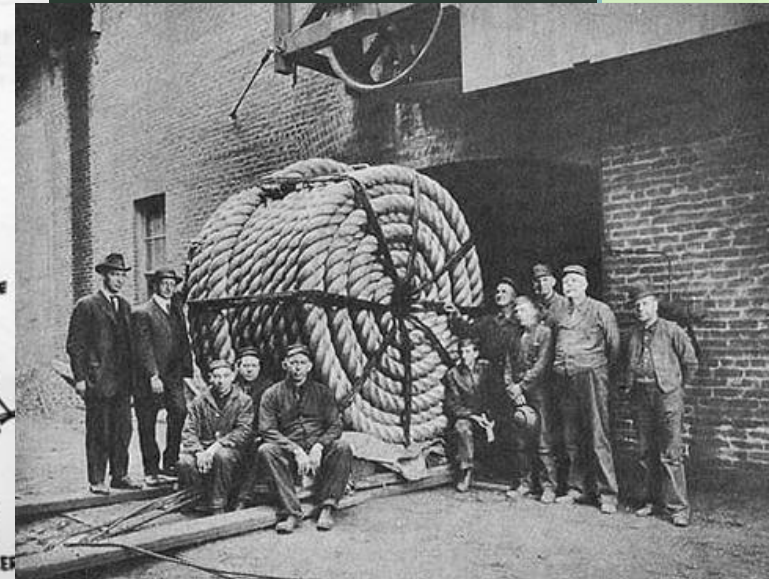
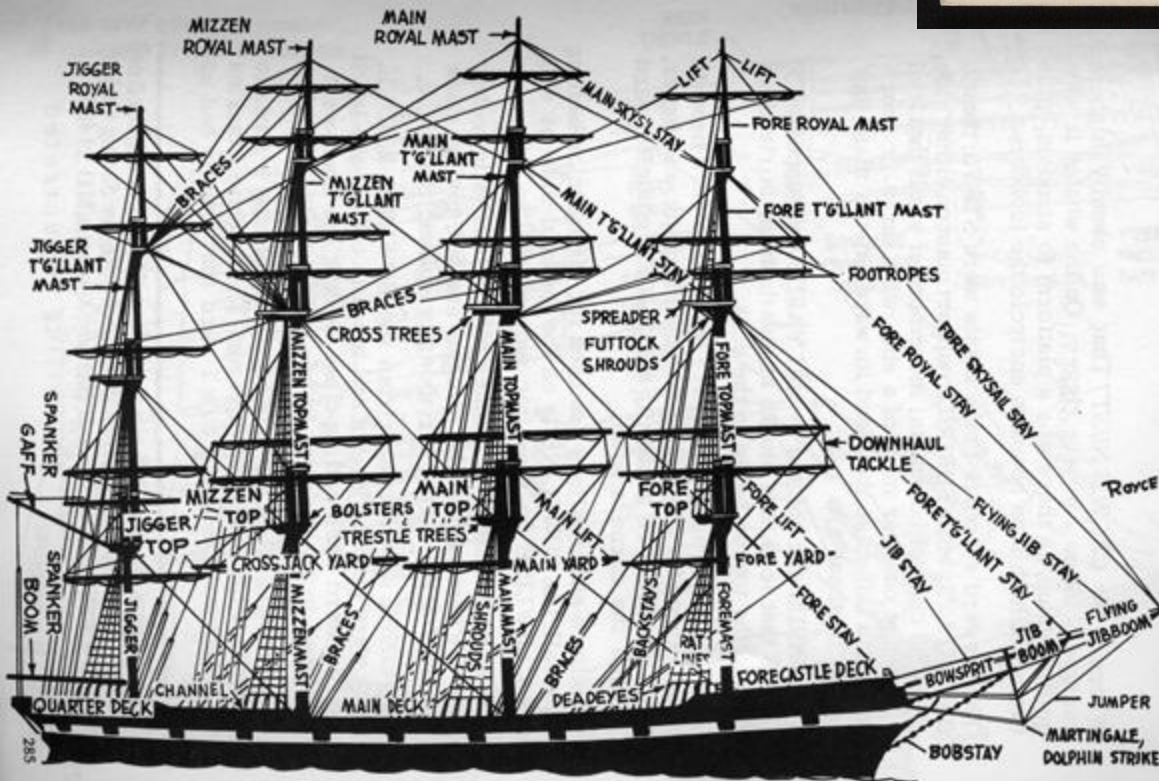
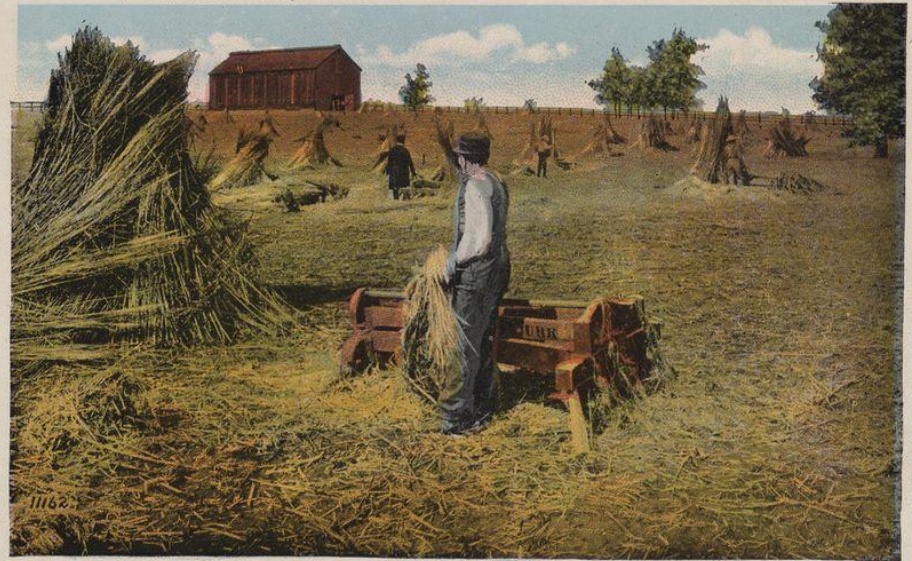
Our tinctures are carefully prepared in strict accordance with the U. S. Pharmacopeia and guaranteed of the best quality and strength. If sending for only one or two-ounce vials, calculate the price by the 16-oz. bottle and allow us 5c extra for the bottle.

		Per lb. bottle	Per 4-oz. bottle
No. 8R8914	Aconite Leaves.....	\$0 58	\$0 20
No. 8R8915	Aconite Root, U. S. P.....	75	25
No. 8R8935	Camphor.....	60	18
No. 8R8936	Cannabis Indica, U. S. P.....	1 00	29
No. 8R8937	Cantharides, U. S. P.....	00	00



1800s – cash crop
Hemp Rope

A Kentucky Hemp Field.



Historical & Cultural Perspectives

1800s – Immigration

Threat to American Ideals





THE HIGH TIDE OF IMMIGRATION—A NATIONAL MENACE.

Immigration statistics for the past year show that the influx of foreigners was the greatest in our history, and also that the hard-working peasants are now being supplanted by the venal and restless of all Europe.

Historical & Cultural Perspectives

- Alcohol Prohibition – 1919 – 1933
- Tea Pads



Cab Calloway



Historical & Cultural Perspectives

- 1930 – Federal Bureau of Narcotics
- Harry Anslinger

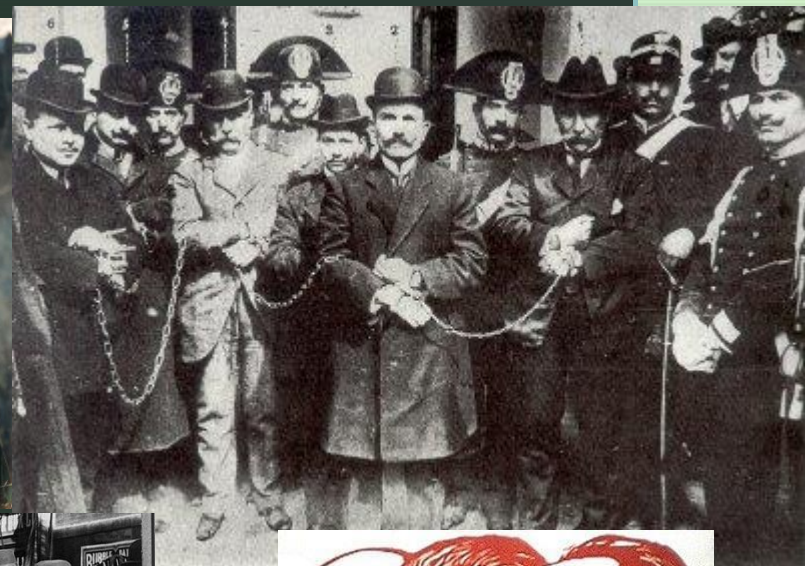


*"
MARIJUANA
IS THE MOST
VIOLENCE-
CAUSING DRUG
IN THE HISTORY
OF MANKIND
"*

- HARRY J. ANSLINGER -

Historical & Cultural Perspectives

1900s – threat, fear,





A weed that grows wild throughout the country is making dope addicts of thousands of young people

BY H. J. ANSLINGER
WITH COURTNEY RYLEY COOPER

SIN

DEGRADATION

VICE

INSANITY

DEBAUCHERY

A VICIOUS RACKET WITH IT'S ARMS AROUND YOUR CHILDREN!

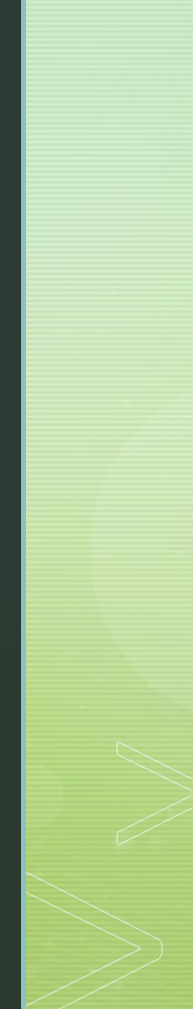
THE TRUTH ABOUT . . .

MARIJUANA

THE SMOKE OF HELL!

“DEVIL'S HARVEST”

The poster features a green devil with horns and a woman in a white dress. A large, lit cigarette is positioned horizontally across the middle. The background is black with green and white text and illustrations.



MARIHUANA

THE BURNING WEED WITH ITS ROOTS IN

Hell!

AMERICA'S NEWEST NARCOTIC MENACE

A PUFF OF SMOKE STARTED HER ON HER WAY

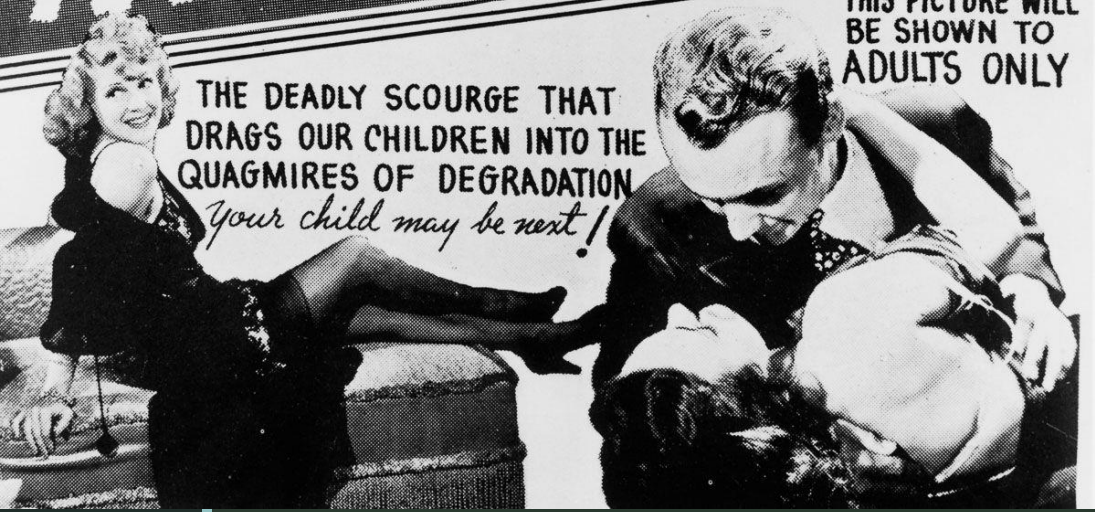


REEFER MADNESS

THIS PICTURE WILL BE SHOWN TO ADULTS ONLY

THE DEADLY SCOURGE THAT DRAGS OUR CHILDREN INTO THE QUAGMIRES OF DEGRADATION

Your child may be next!



Historical & Cultural Perspectives

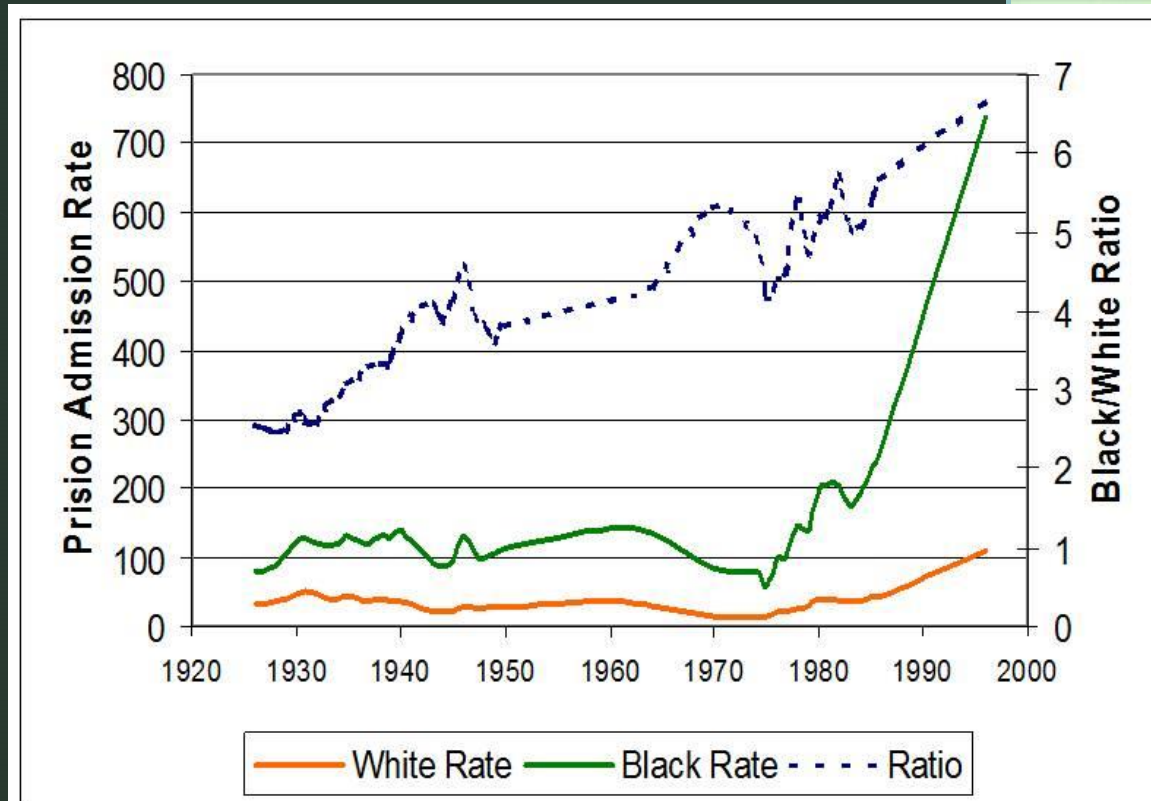
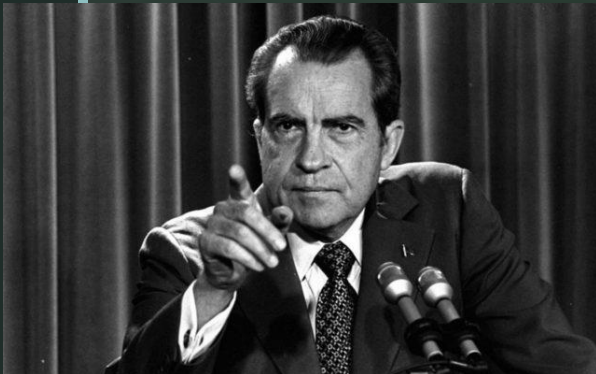
- Require prescription
- Tax stamp
- \$2000 fine + 5 years in prison





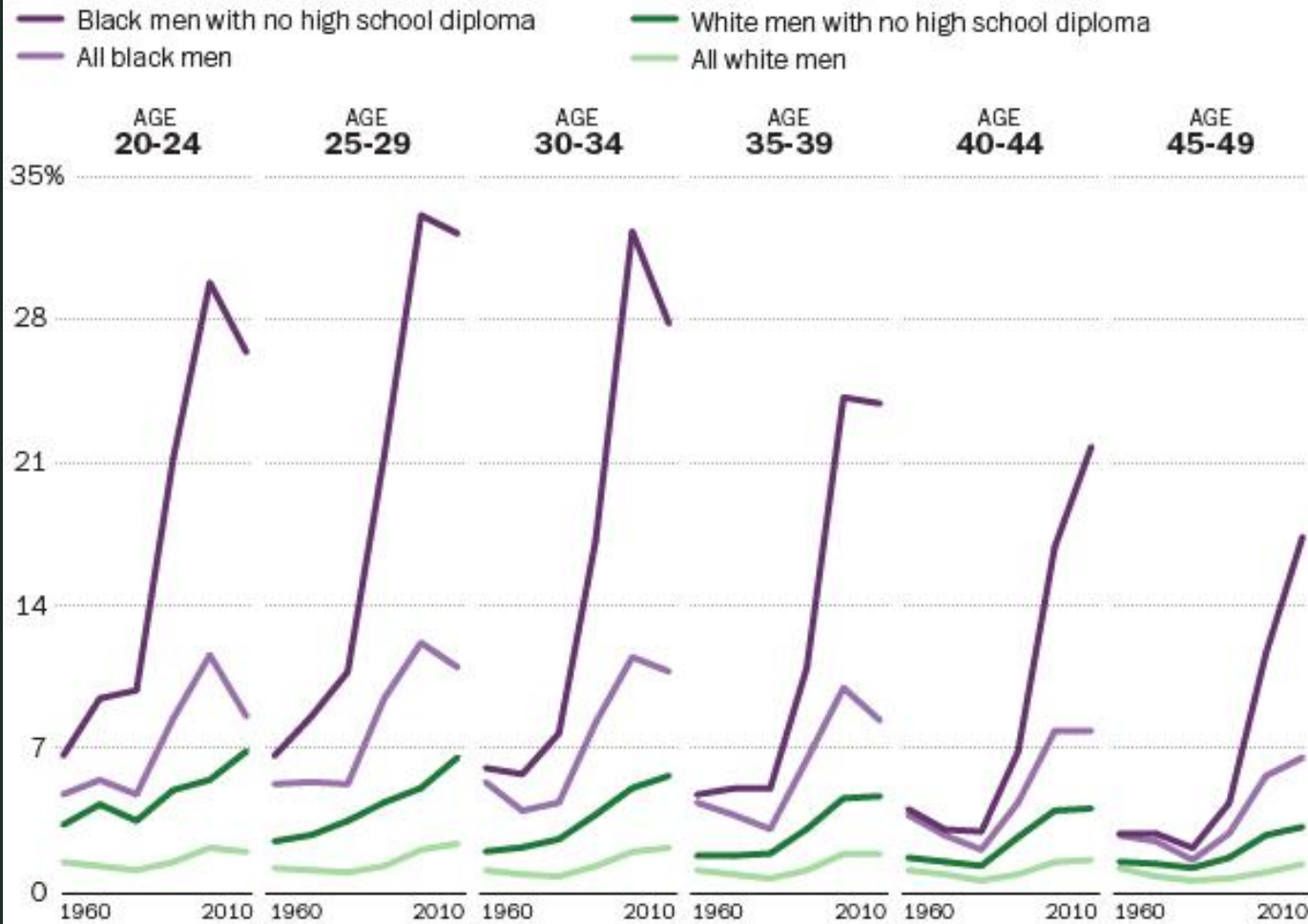
Historical & Cultural Perspectives

- 1970 – Controlled Substance Act
- Nixon = “War on Drugs”



Incarceration rates skyrocket in recent decades

% institutionalized, by race, age, education and year

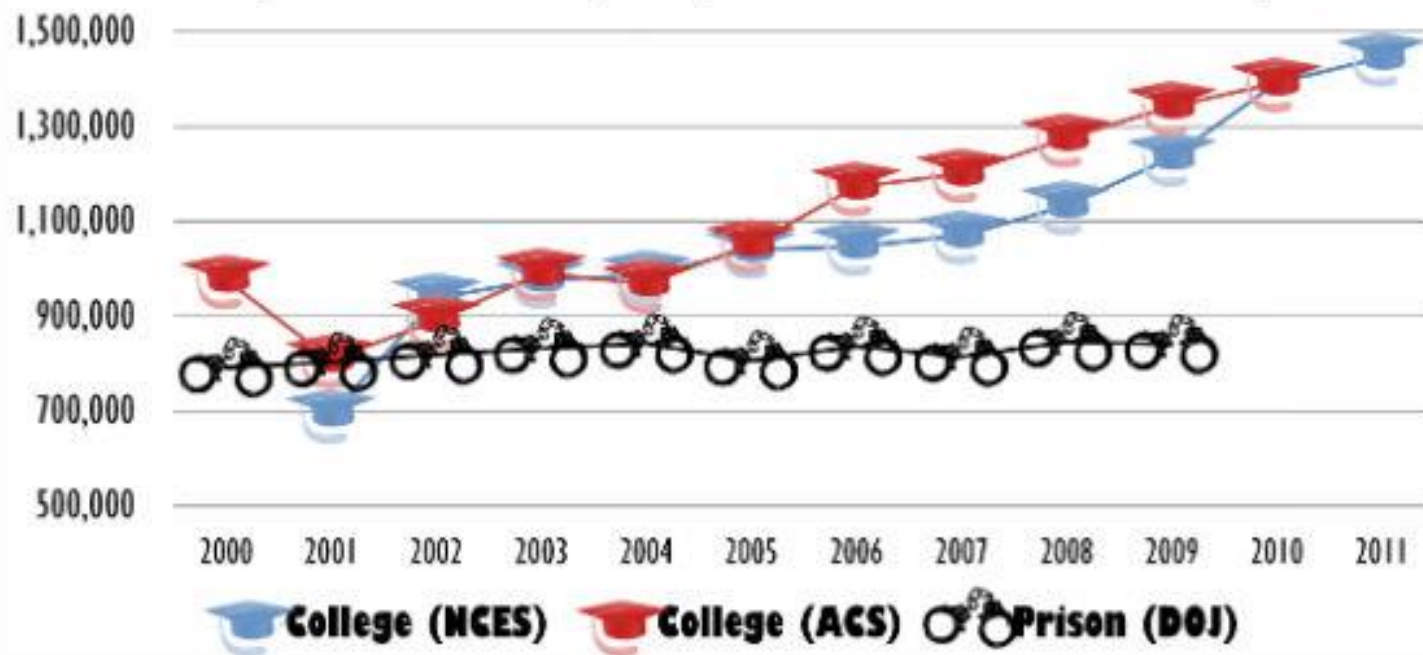


WASHINGTONPOST.COM/WONKBLOG

Source: Derek Neal and Armin Rick, U. of Chicago

Black Male College Enrollment and Incarceration from 2000 to 2011

Analyzed and Illustrated by: Ivory A. Toldson, Ph.D., Howard University



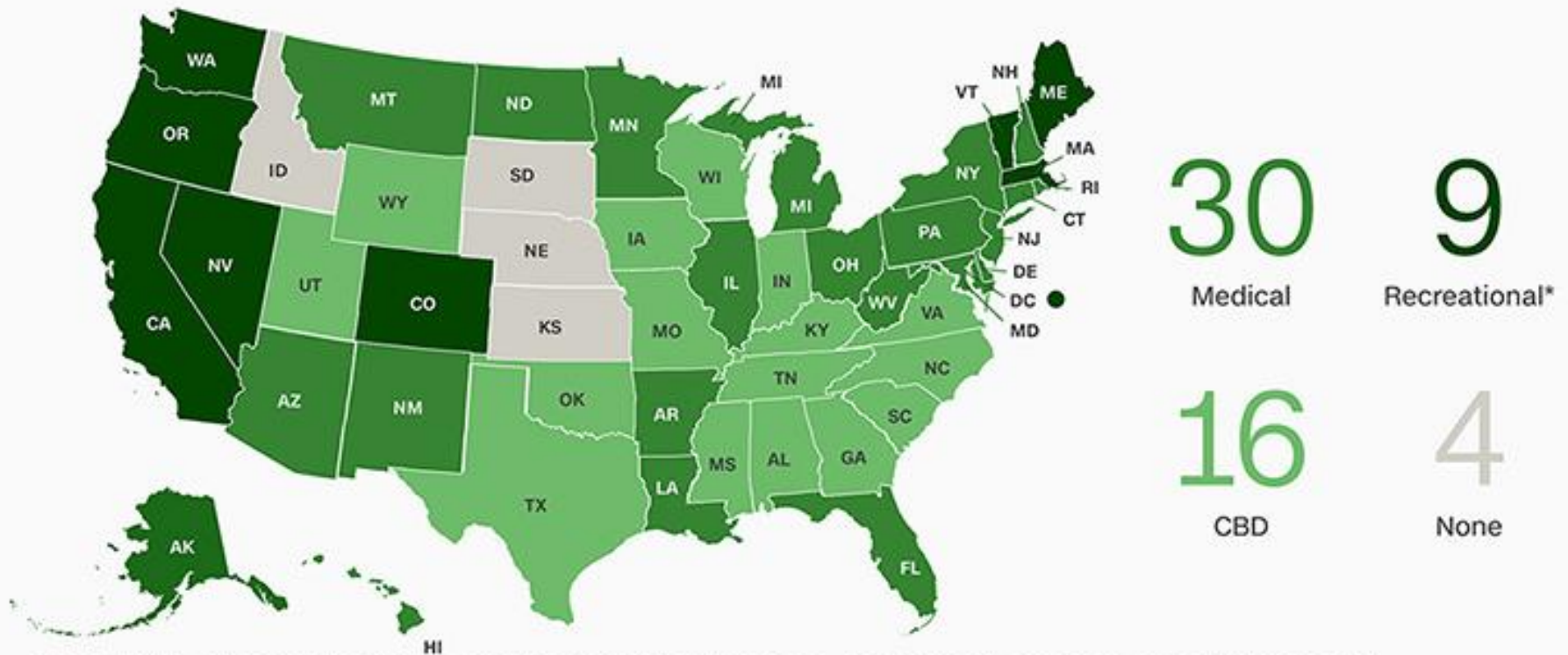
NCES: The National Center for Education Statistics, 12-month unduplicated headcount of non-Hispanic Black male students.

ACS: The American Community Survey, ongoing Census Bureau survey, estimate of Black male college enrollment.

DOJ: U.S. Department of Justice, estimated number of Black male inmates held in custody in state or federal prisons or in local jails.

United States of Marijuana

The state of the union is strong for marijuana, a \$9 billion industry. Recreational weed is legal in nine states and Washington, D.C. Medical marijuana is legal in 30 states, but it's still prohibited by the federal government.

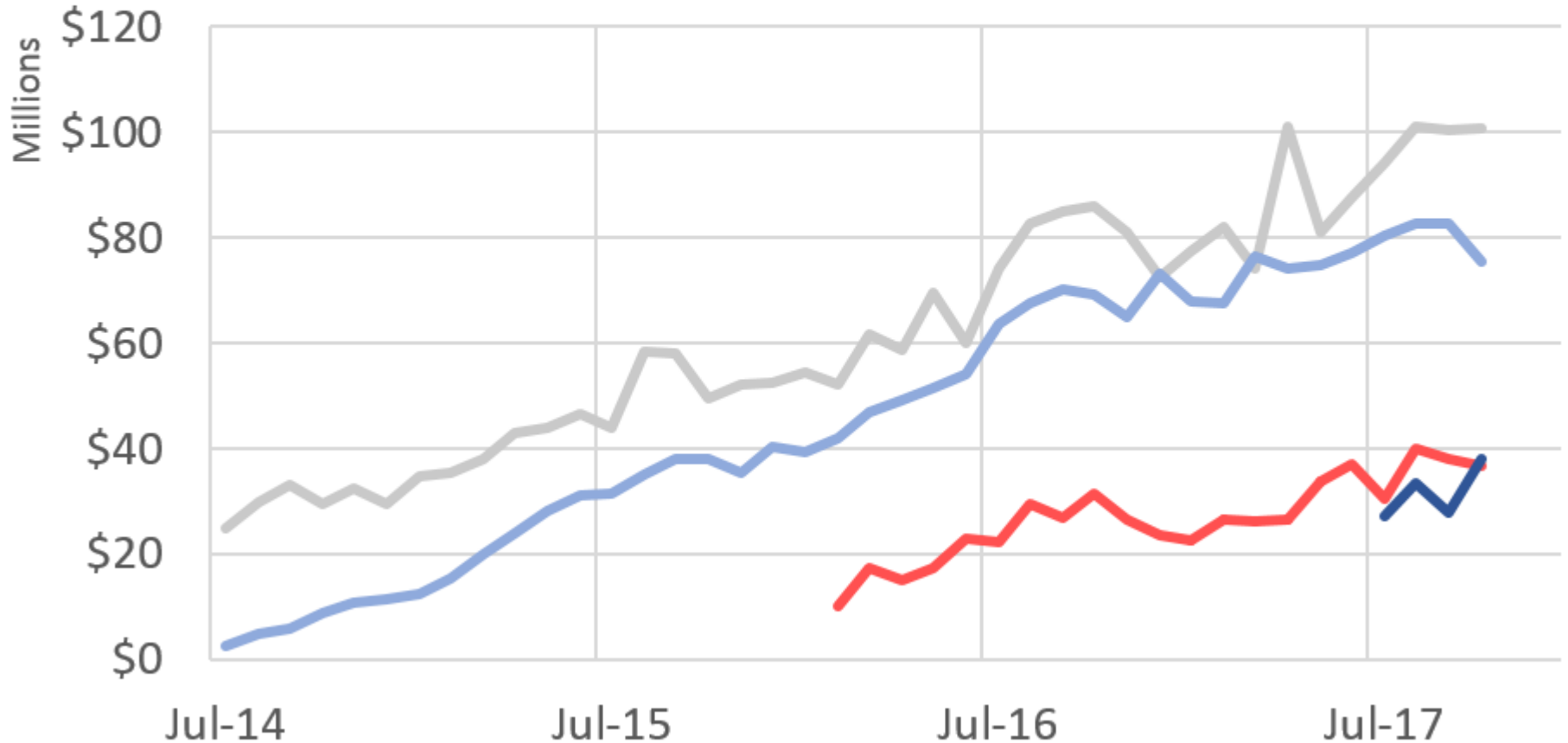


*RECREATIONAL STATES ARE ALSO INCLUDED IN THE 30 MEDICAL STATES FIGURE, \$9 BILLION INDUSTRY BASED ON BDS ANALYTICS DATA.

Recreational Marijuana Sales Base

Estimates, Based on Tax Receipts

— Colorado — Washington — Oregon — Nevada



Legalizing Recreational Marijuana Pros & Cons

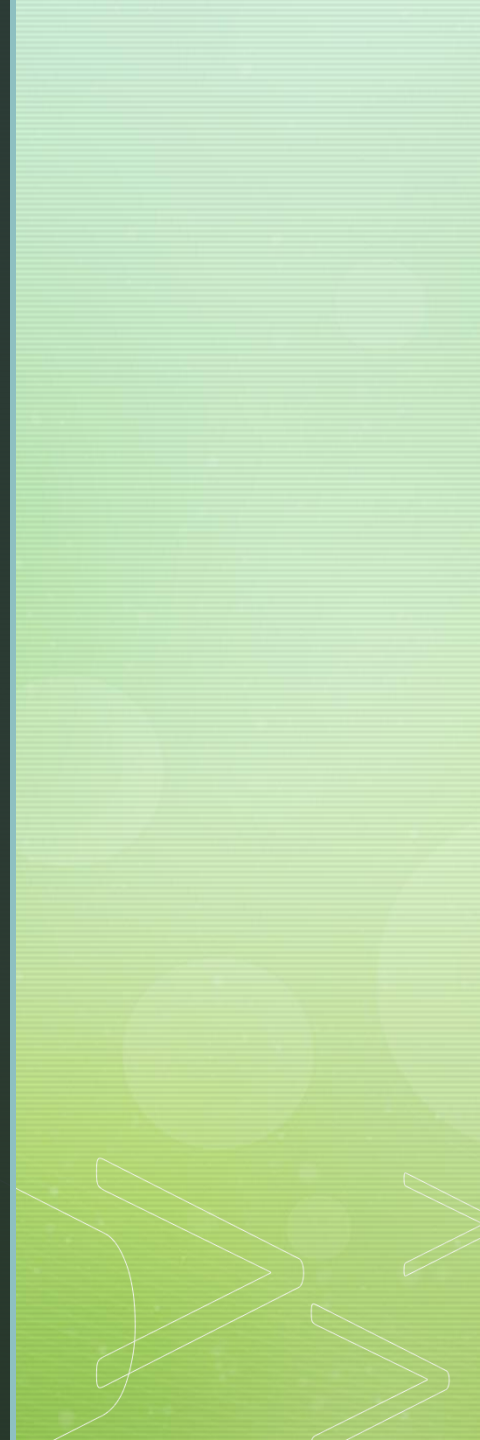
Pros

- Increase Tax Revenue
- Decrease in incarceration
- Less burden on law enforcement
- Increase in jobs
- Medicinal uses
- Dismantle the “Black Market”
- More standardization of product

Cons

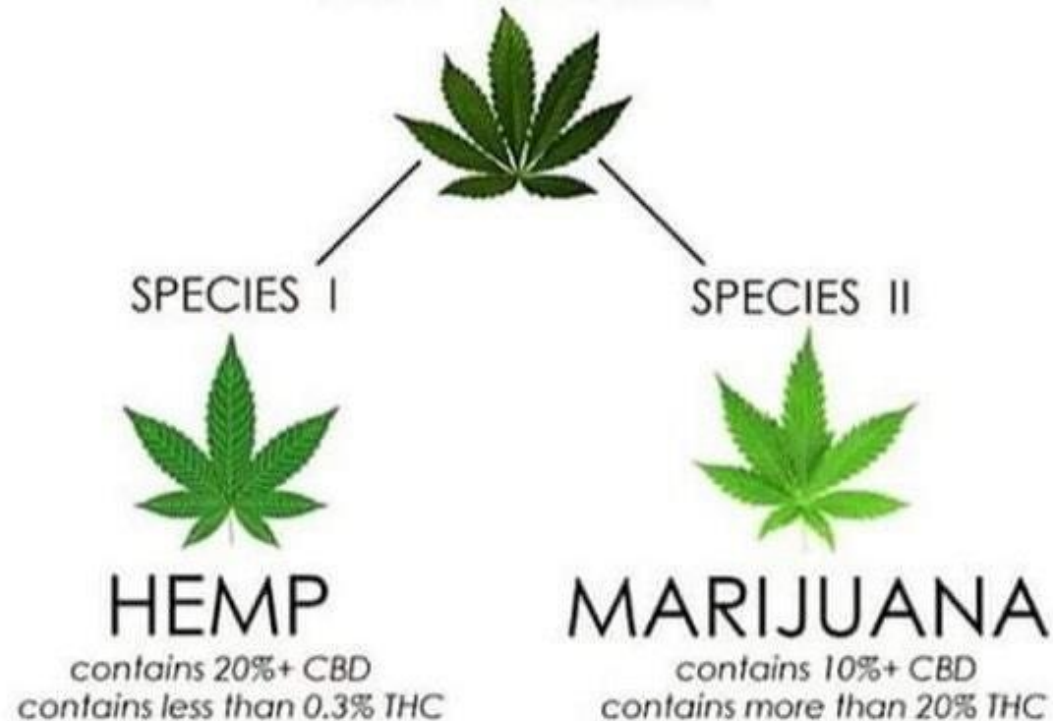
- Illegal distribution
- Negative health effects of smoking
- Addiction rate (daily use increase)
- Impaired driving (auto accidents increase)
- Over medication
-

Pharmacokinetics of Marijuana



The Confusion

CANNABIS
HAS TWO SPECIES



Species I is a Hemp extract with all the cannabinoids except for THC, which means it has all the beneficial properties of cannabis without the HIGH!

Phytocannabinoids

- > 400 chemicals
- 61 = cannabinoids
- Pyrolysis = 2000 chemicals
- Lipophilic

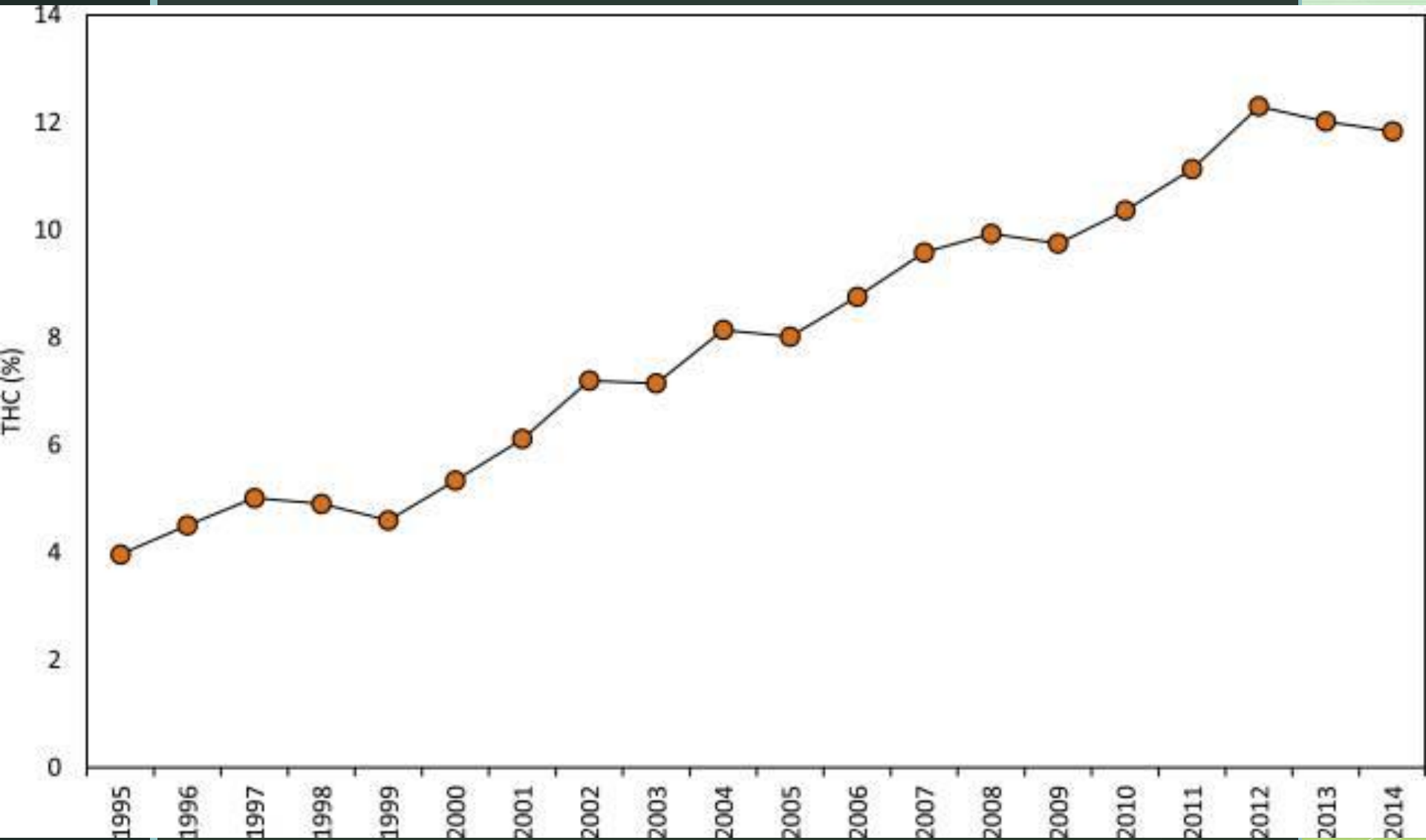
THC

- Tetrahydrocannabinol
- Psychoactive

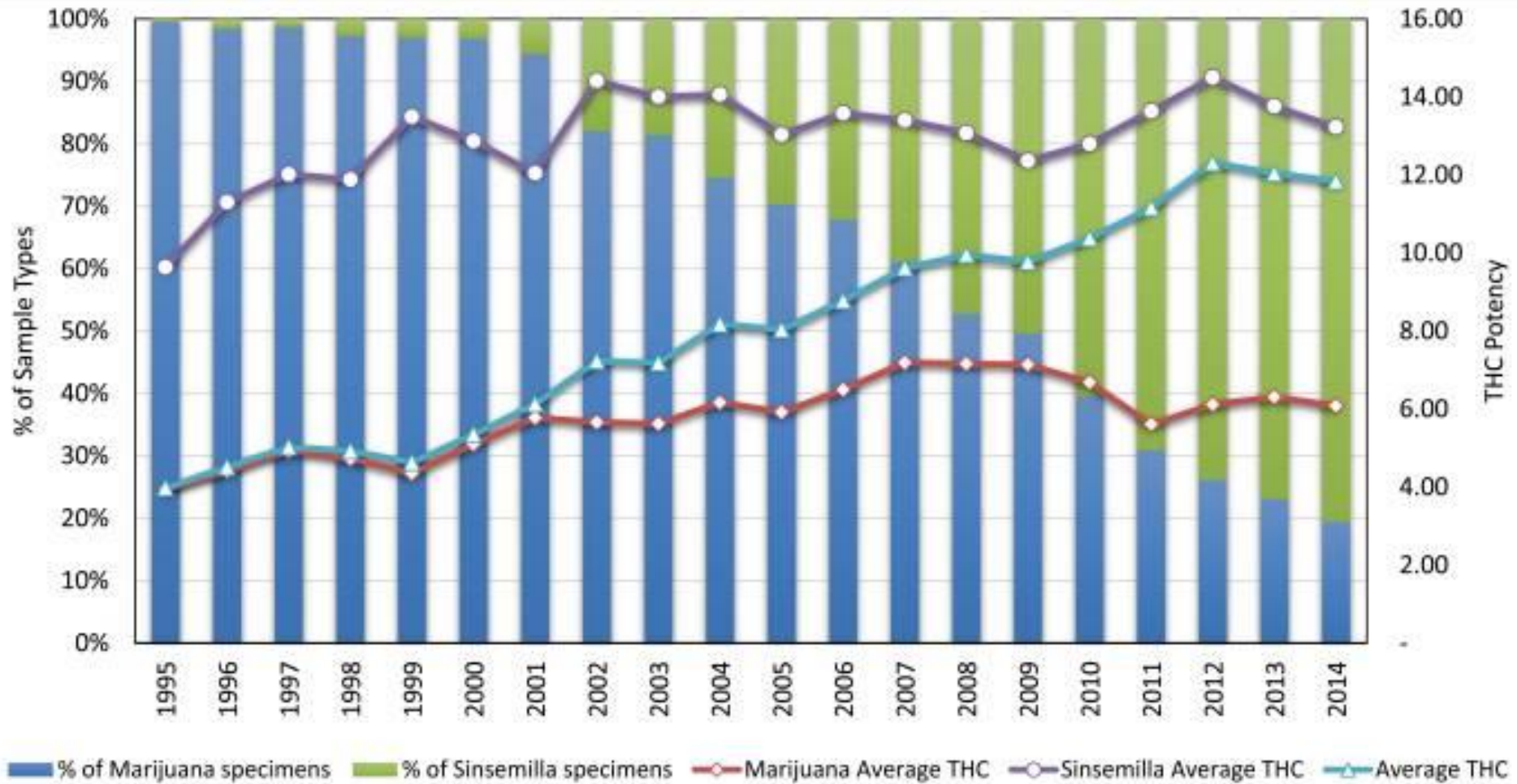
CBD

- Cannabidiol
- Non-psychoactive
- “medicinal” properties

% THC over 20 yrs



THC:CBD



Modes of Entry

Smoked

- THC enters blood from lungs “within seconds” after inhale
- Peaks in 3 – 15 minutes

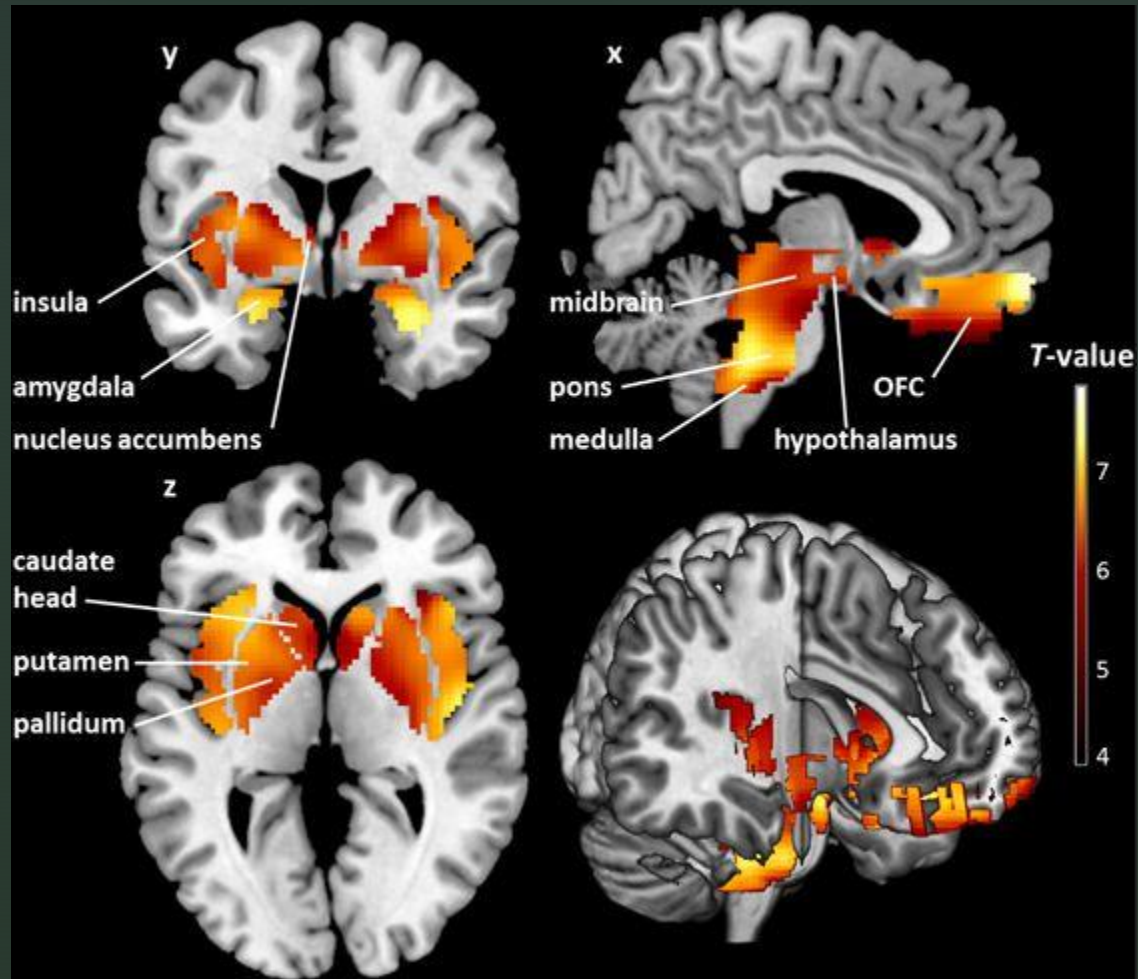
Ingestion

- THC enters blood from stomach & small intestine
- Peaks 1 – 2 hours

Half-Life = 1.3 days (chronic users = 6.7 days)

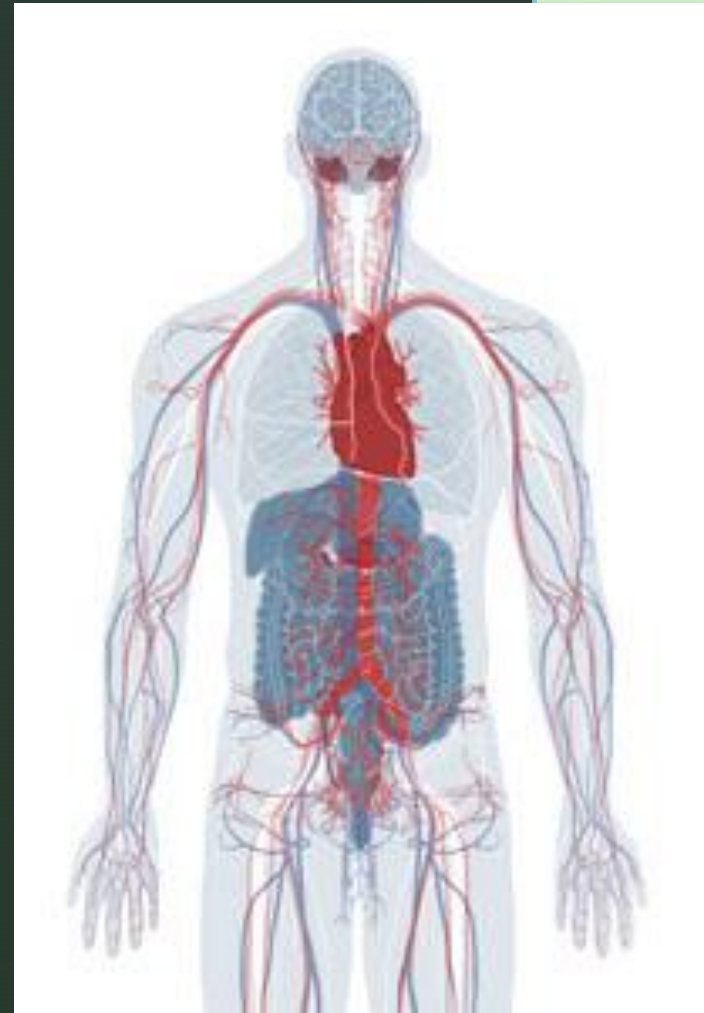
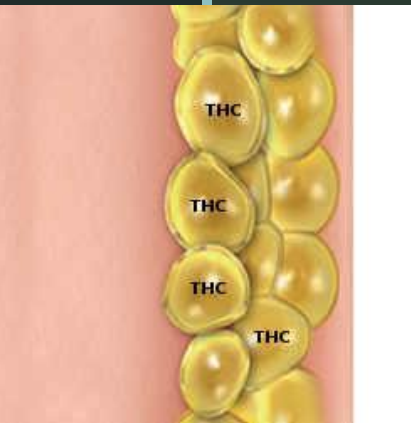
- 20mg → 10mg

Cannabinoid Receptor Sites

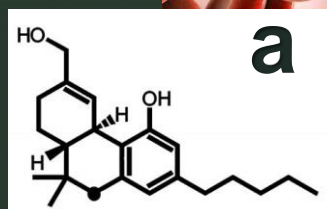
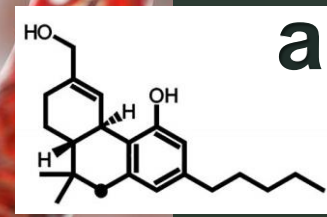
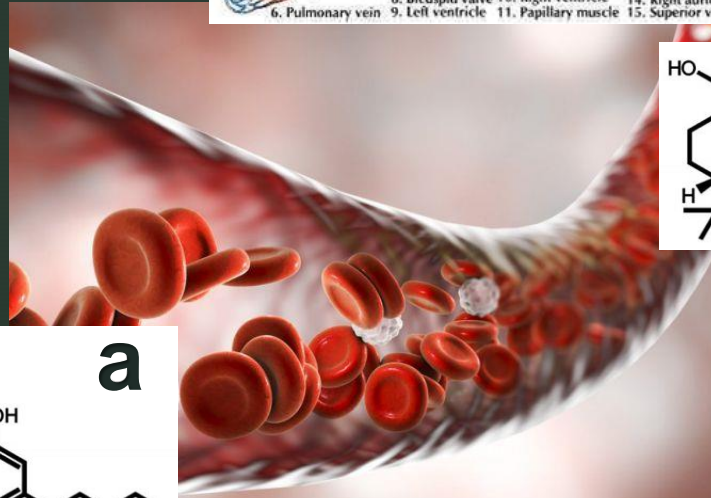
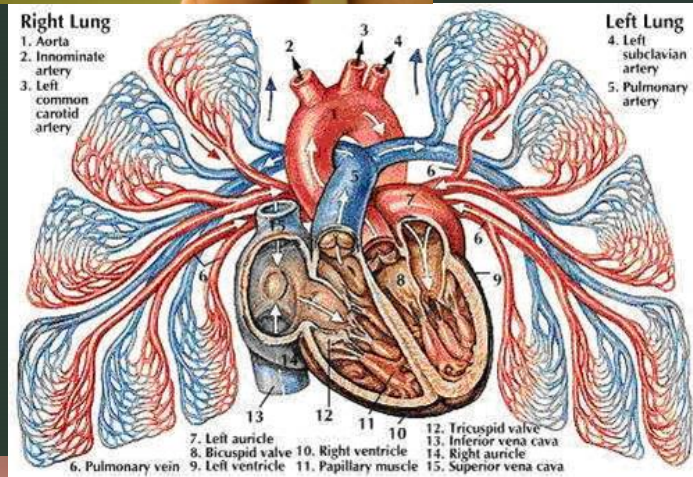


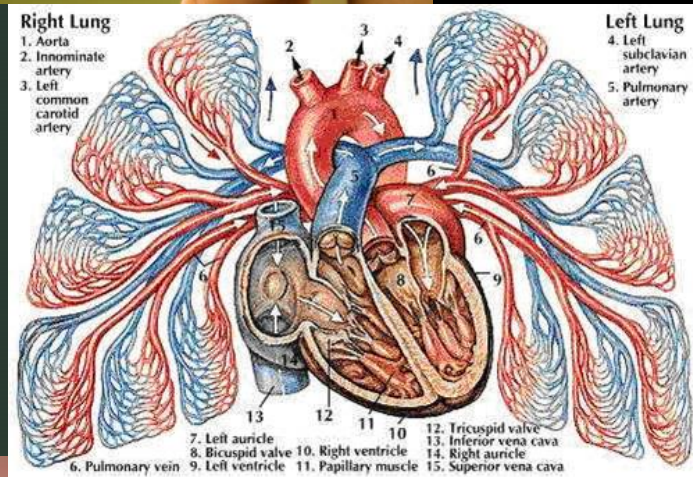
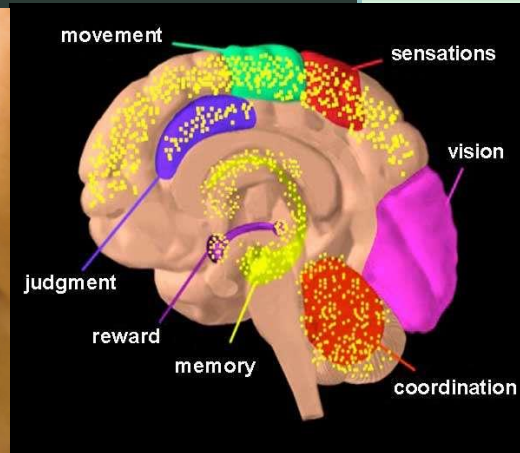
Lipophilic

- Liver,
- Lungs
- Spleen
- Genitals
- THC detectable 5 – 25 days following use

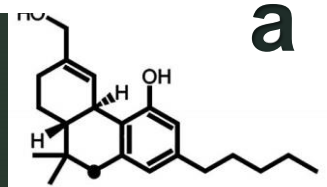
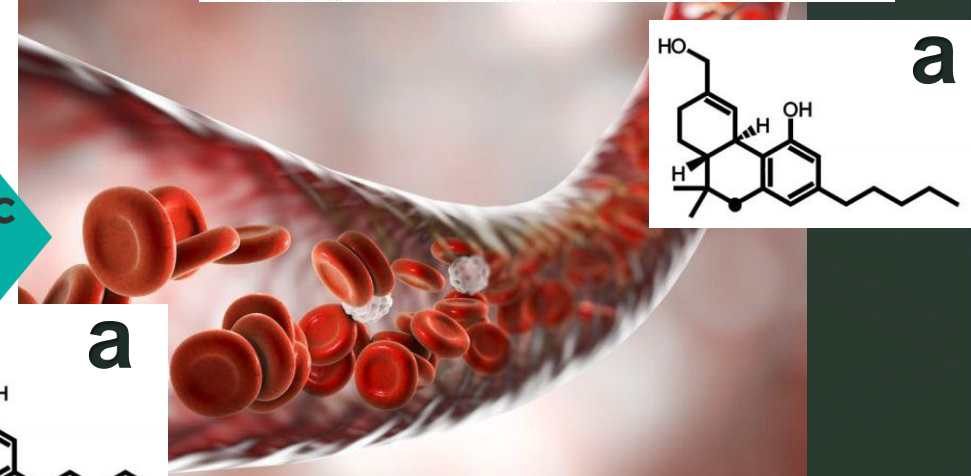
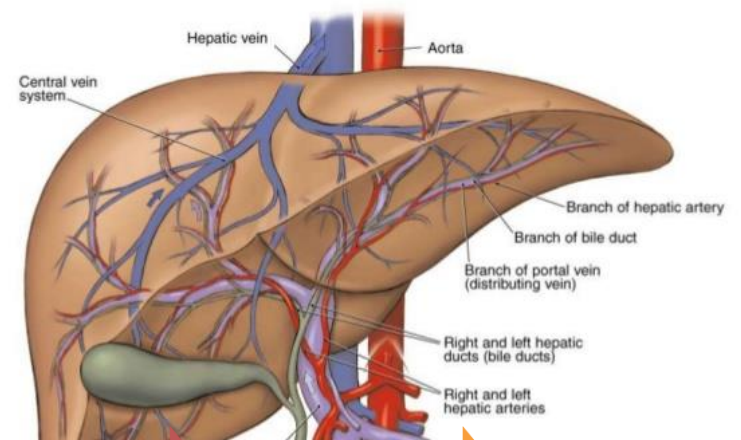




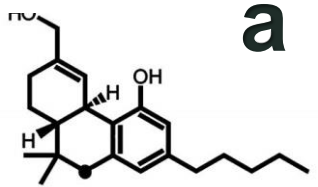
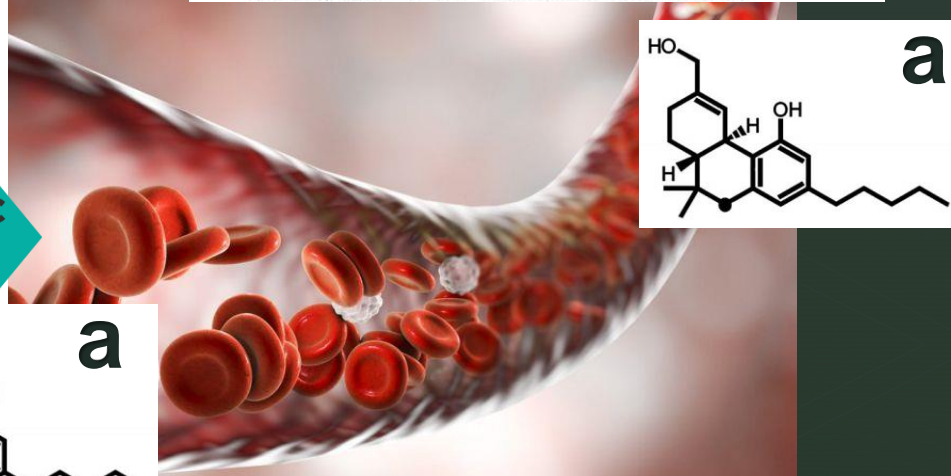
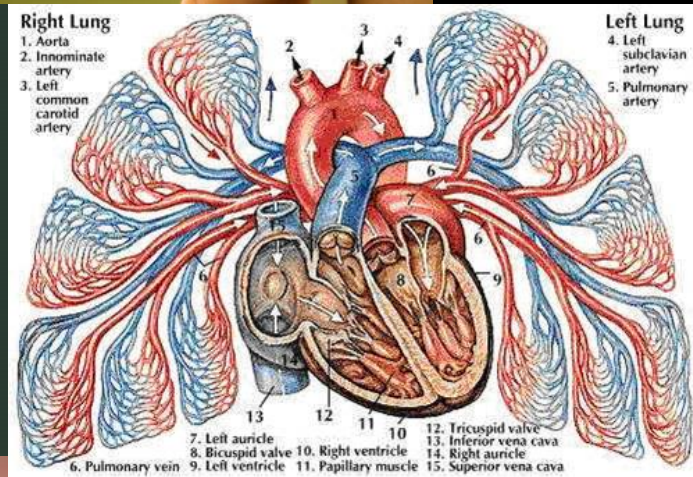
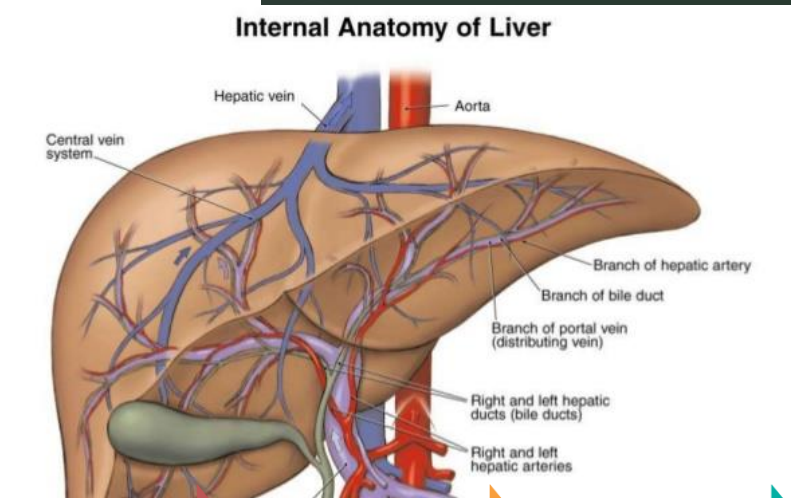
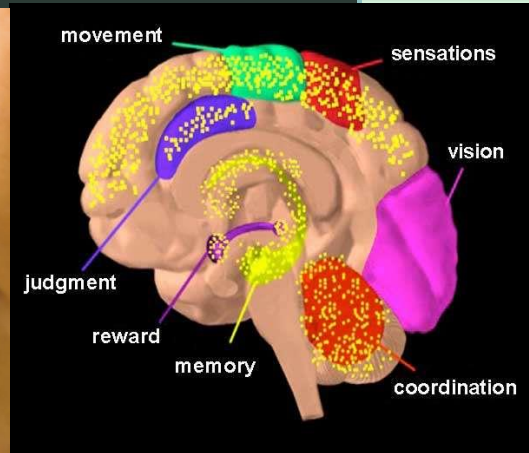
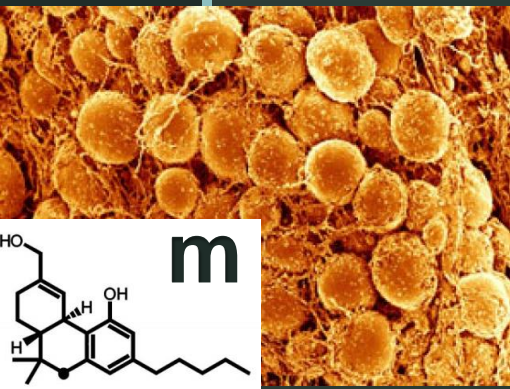


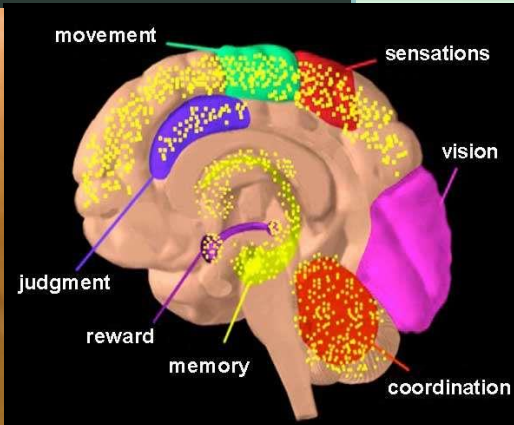
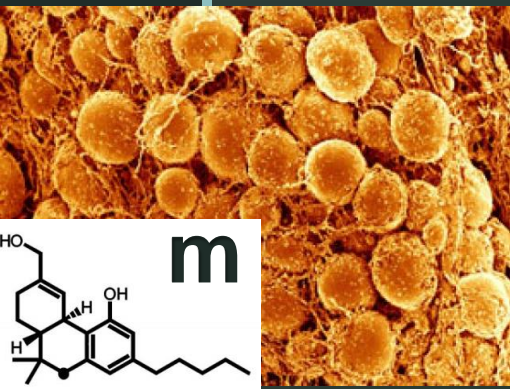


Internal Anatomy of Liver

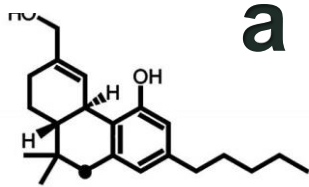
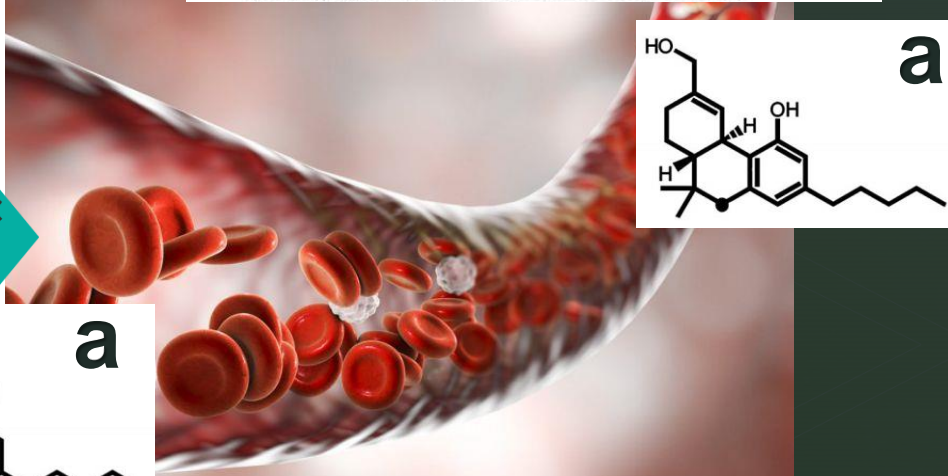
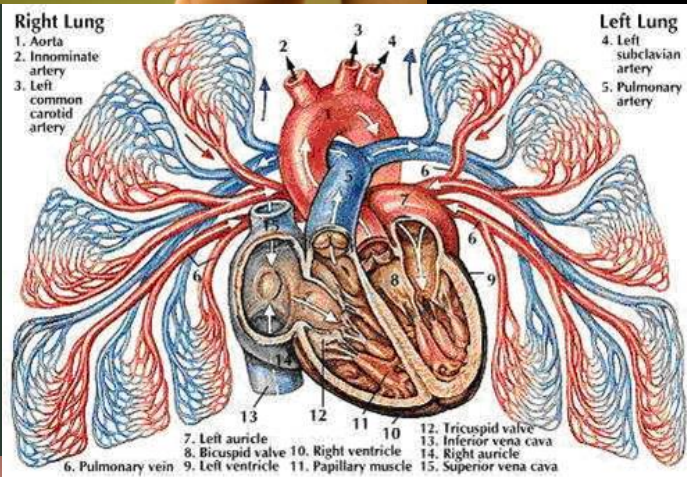
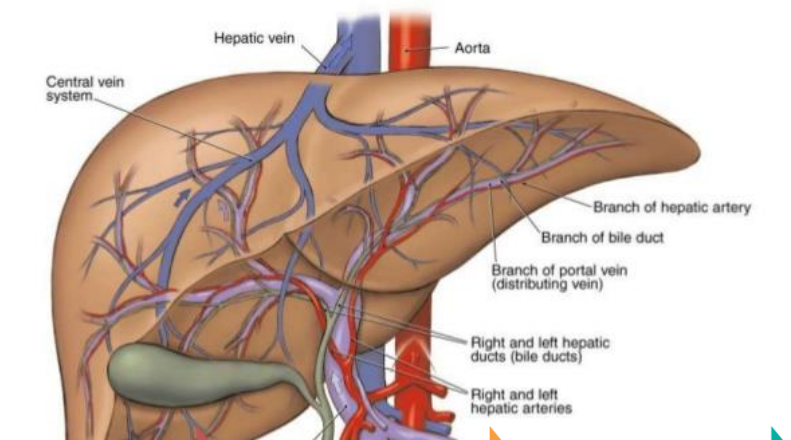


psychoactive



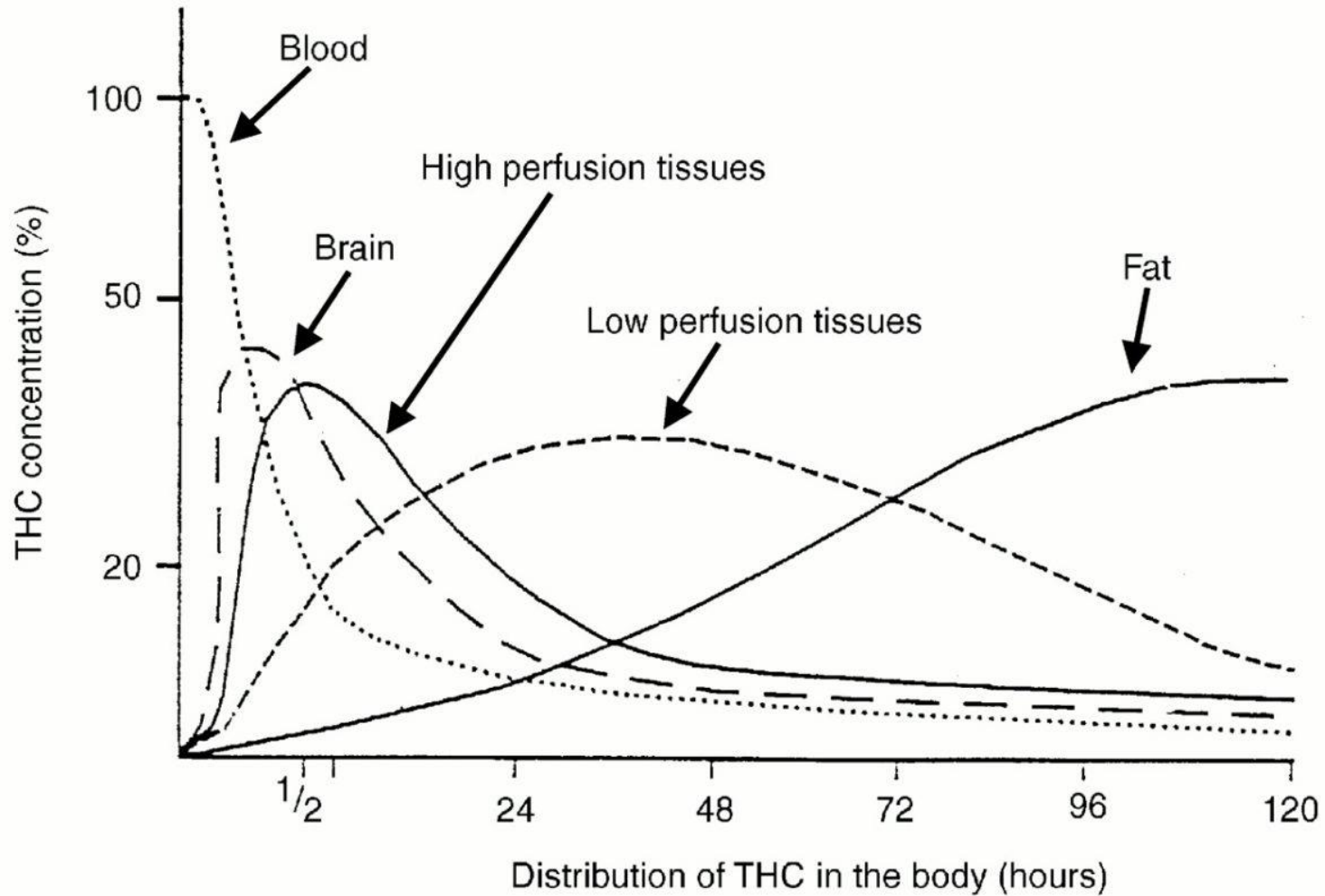


Internal Anatomy of Liver



THC Metabolism

- Plasma clearance
- Men ~ 15 hours
- Women ~ 12 hours
- > 30 metabolites in urine
- 8 – 9 days 90% excreted (feces & urine)
- Chronic users =





BRN - Bluegolds =
Major Factors Affecting Marijuana Use



BRN - Chargers =
Synthetic Marijuana



MAN - Phoenix =
Subjective Euphoric Effects

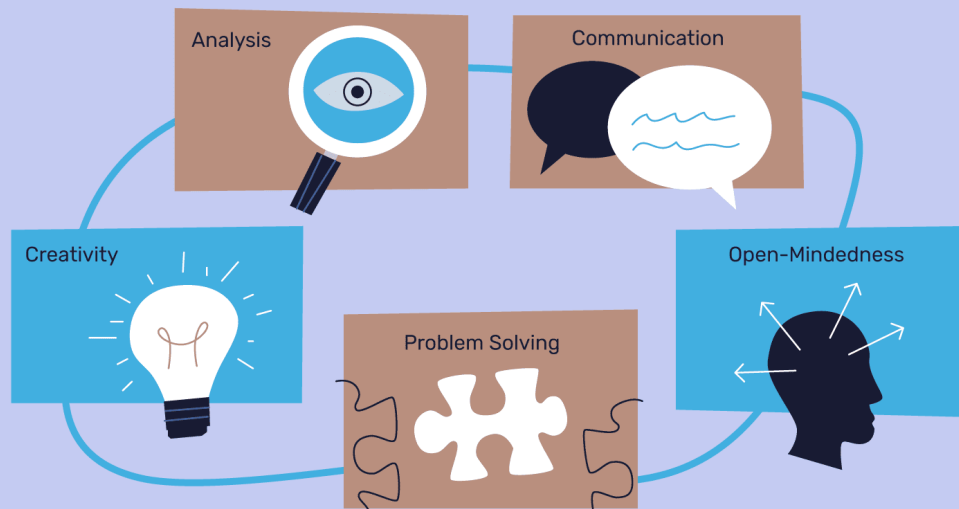


FOX - Cyclones =
Driving Performance



MNT - Buccaneers = Critical Thinking Skills

Critical Thinking Skills

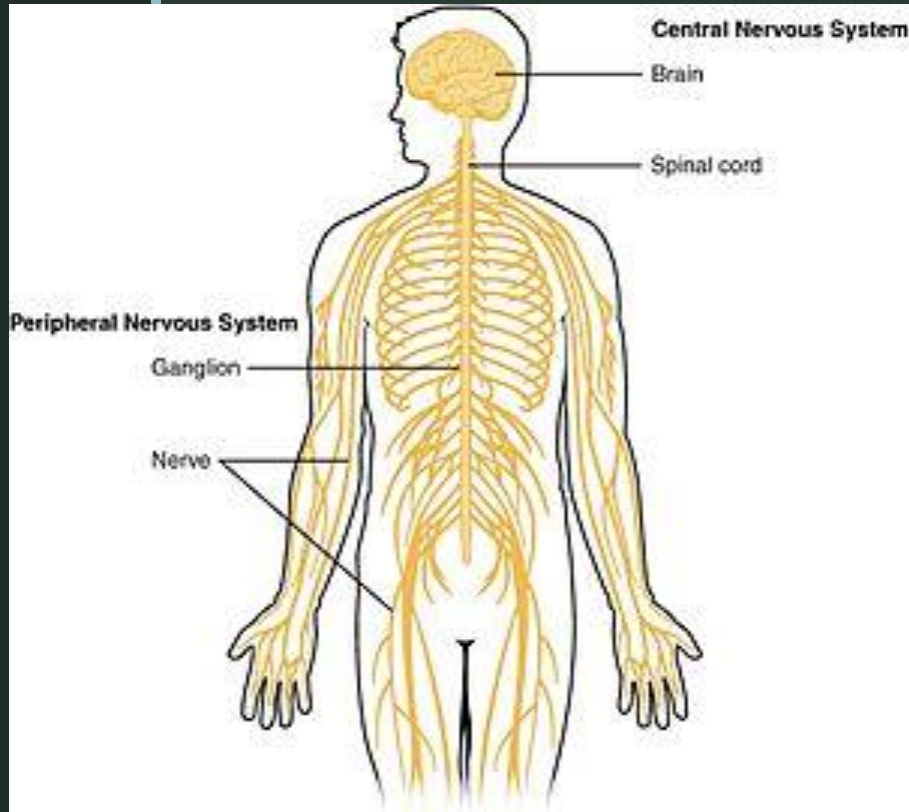


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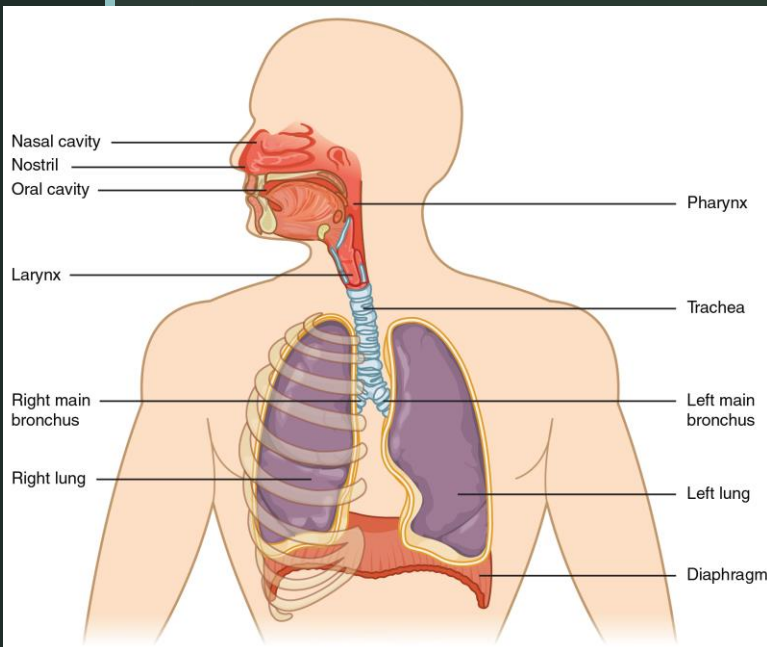
MNT - Phoenix = Amotivational Syndrome



FOX - Titans = Physiological Effects on the Brain and Central Nervous System



MAN - Blue Devils = Physiological Effects on the Respiratory System



Workgroups

Chapter 12

Page 383 – Learning Objectives

- FOX Titans = Explain why hallucinogens became so popular during the 1960s.
- MNT Phoenix = Describe how hallucinogens alter the senses.
- BRN Bluegolds = Describe why some psychotherapists believe that MDMA may be beneficial for their patients.
- BRN Chargers = Explain the reasons for Ecstasy's recent fluctuations in patterns of use.
- MAN Blue Devils = Explain how hallucinogens differ from other commonly abused drugs in terms of their addicting properties and their ability to cause dependence.
- MAN Phoenix = Explain what is meant by the term "club drugs" and describe particular problems associated with their use
- FOX Cyclones = Characterize PCP differs from other hallucinogens and why it is so dangerous.
- MNT Buccaneers = Describe the recreational and legal status of *Salvia divinorum*.