



CANNABIS

HISTORY, THERAPY, AND PUBLIC HEALTH POLICY IMPLICATIONS

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**We are
the Drug
Policy
Alliance.**

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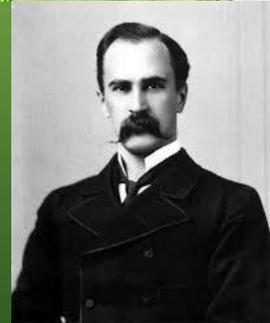
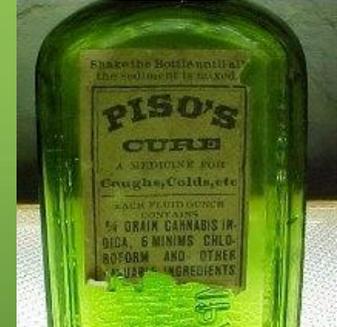
CANNABIS OVERVIEW

- Cannabis is the scientific classification (genus) of three different species of the plant
 - Cannabis Indica
 - Cannabis Sativa
 - Cannabis Ruderalis
- Cannabis plants produce chemical compounds called cannabinoids:
 - Δ^9 -tetrahydrocannabinol (THC)
 - cannabidiol (CBD)



HISTORY OF CANNABIS USE IN MEDICINE

- 2900 B.C. – First recorded evidence of cannabis use in medicine
- 1500 BC - Earliest Written Reference to Medical Marijuana in Chinese Pharmacopeia
- 1621 - Popular English Mental Health Book Recommends Cannabis to Treat Depression
- 1850 - Marijuana Added to US Pharmacopeia
- 1889 - Article in The Lancet Outlines Use of Cannabis for Opium Withdrawal
- 1930s - American Pharmaceutical Firms Sell Extracts of Marijuana as Medicines
- May 4, 1937 - American Medical Association Opposes the Proposed Marihuana Tax Act and Supports Research on Medical Cannabis
- Oct. 1937 - "Marihuana Tax Act" Leads to Decline in Marijuana Prescriptions
- 1942 - Marijuana Removed from US Pharmacopeia



METHODS OF CONSUMPTION

INHALATION

- Two different methods:
 - Smoking
 - Vaporization
- Onset of Action
 - 5-15 minutes
- Duration
 - Max Effect: 1 hour
 - Total Effect Time: 2 hours



ORAL DIGESTION

- Products come in many different forms:
- Onset of Action
 - 30-45 minutes
- Duration
 - Max effect: 2-3 hours
 - Total Effect Time: 4-6 hours



METHODS OF CONSUMPTION

ORAL - MUCOSAL /SUBLINGUAL

- Onset of Action:
 - 30 minutes - 1 hour
- Duration
 - Max Effect: 1-2 hours
 - Total Effect Time: 2-3 hours



TOPICAL

- Onset of Action:
 - 20-30 minutes
- Duration
 - 1-2 hours (balms and creams)
 - 1-2 days (transdermal patches)

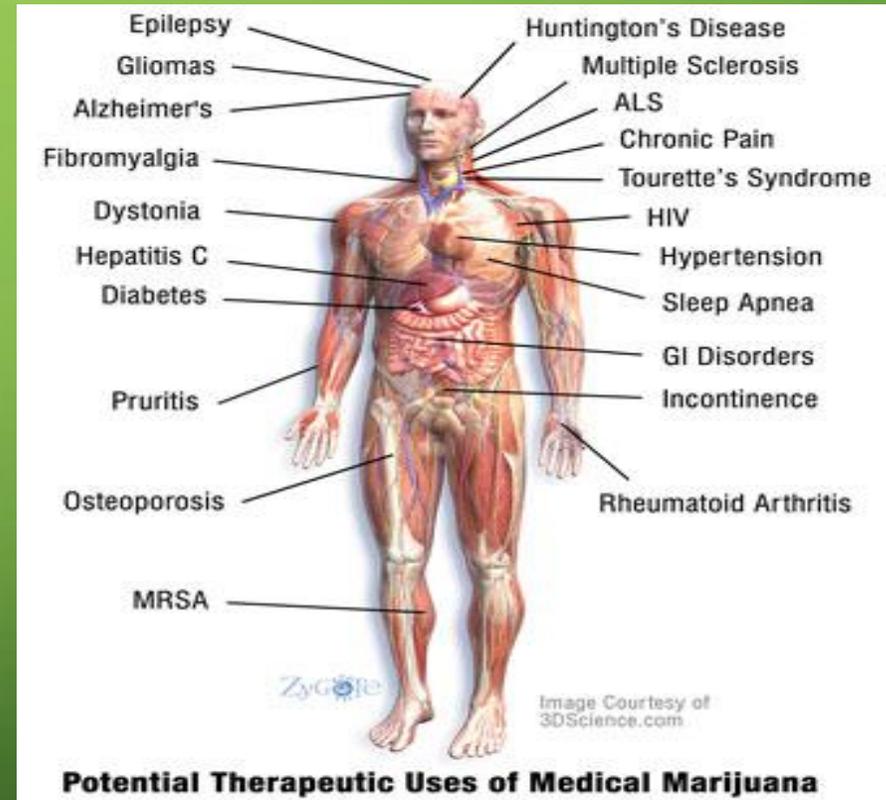


CANNABIS PHYSIOLOGY

- Cannabis is highly lipid soluble, primarily stored in adipose tissue
 - Positive urine drug screen results occur for up to 30 days after use
- Cannabis is metabolized by liver in the CYP450 system
 - No increased incidence of drug interactions among cannabis users
- Side Effects:
 - Mild tachycardia
 - Xerostomia (dry mouth)
 - Injected Conjunctiva (red eyes)
 - Anxiety
 - Increase Appetite

MEDICAL USES OF CANNABIS

- Multitude of therapeutic uses
- Popular Uses include:
 - HIV/AIDS
 - Cohn's Disease
 - ALS
 - MS
 - Hepatitis C
 - Parkinson's Disease
 - Cancer



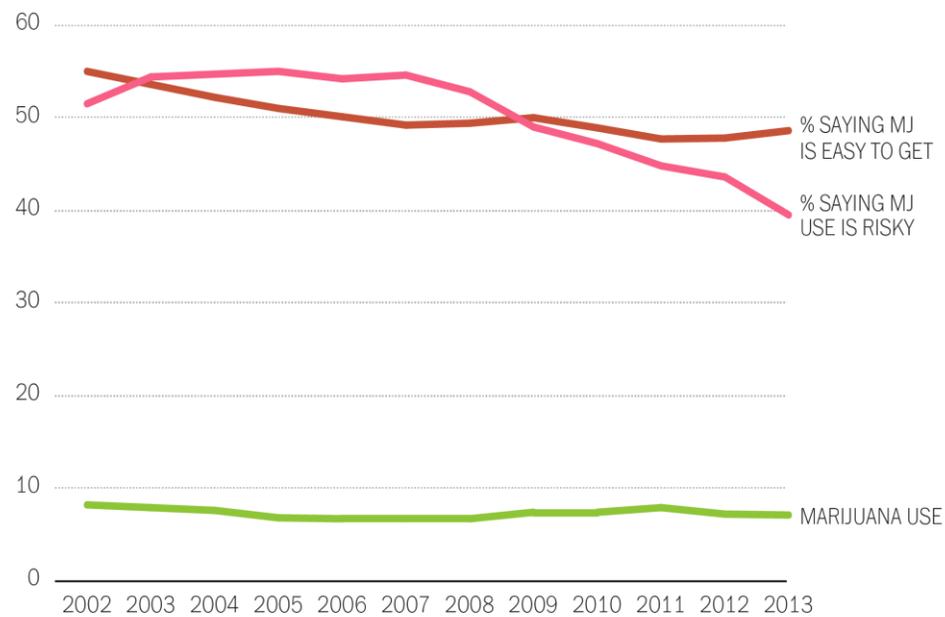
MAINTAINING THE INTEGRITY OF THE DOCTOR-PATIENT RELATIONSHIP



PUBLIC HEALTH IMPLICATIONS

Teen perception of marijuana risk declines

Teen use, perception of risk, and ease of obtaining marijuana



WASHINGTONPOST.COM/WONKBLOG

Source: NSDUH

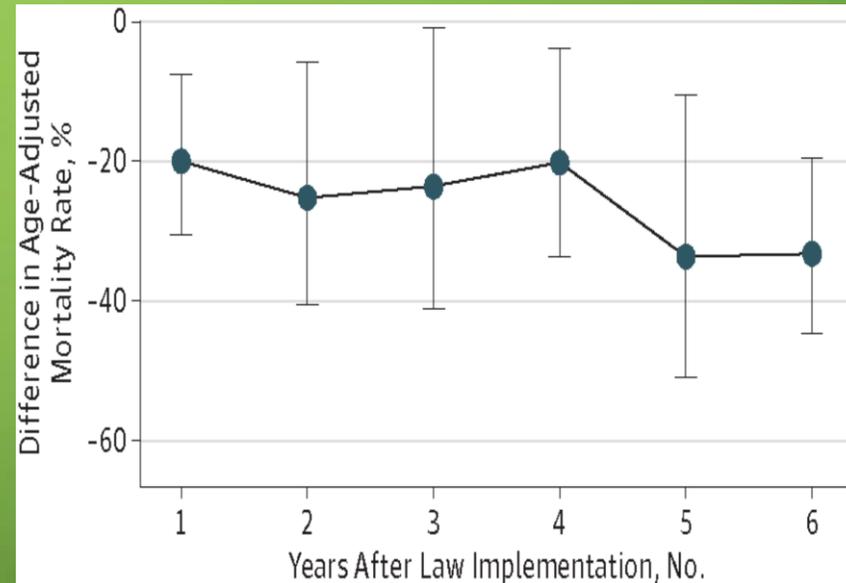


Figure Legend:

Association Between Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in Each Year After Implementation of Laws in the United States, 1999-2010 Point estimate of the mean difference in the opioid analgesic overdose mortality rate in states with medical cannabis laws compared with states without such laws; whiskers indicate 95% CIs.