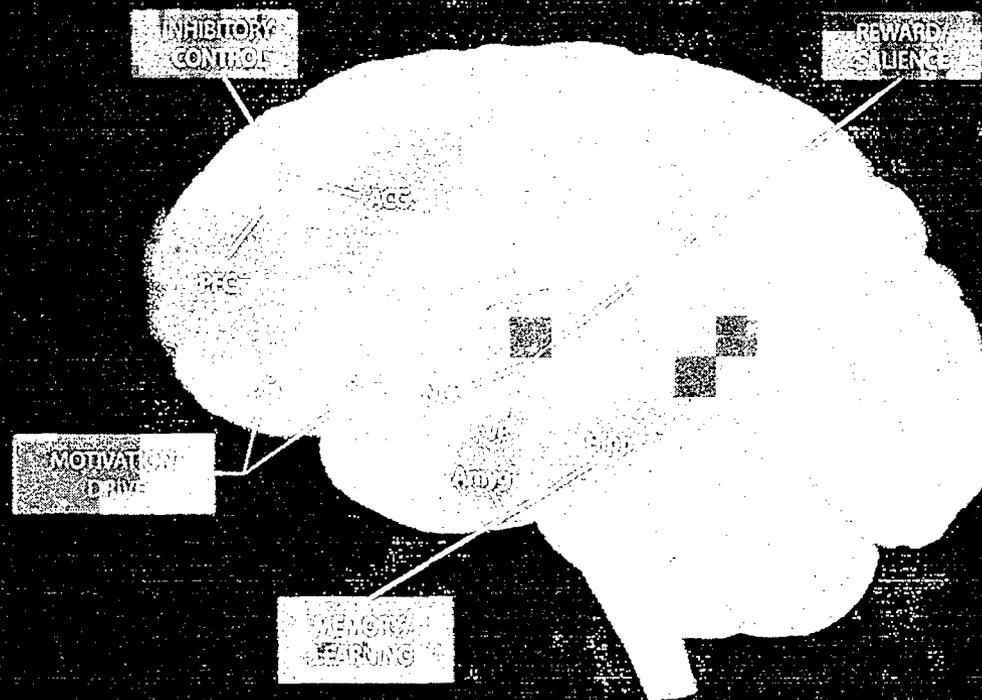


Circuits Involved In Drug Abuse and Addiction



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

NIDA

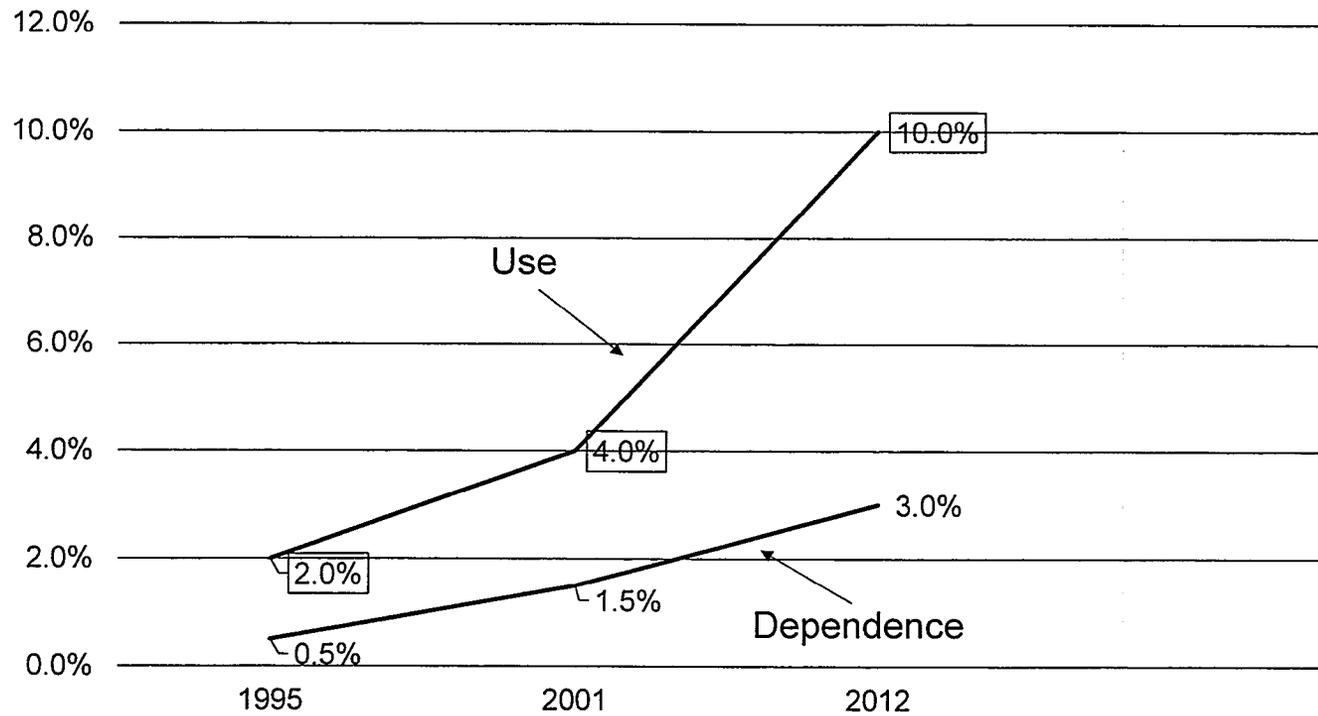
Cannabis Withdrawal Symptoms

- 1) irritability, anger, or increased aggression
- 2) nervousness or anxiety
- 3) sleep difficulty (insomnia)
- 4) decreased appetite or weight loss
- 5) restlessness
- 6) depressed mood
- 7) at least 1 physical symptom causing significant discomfort (stomach pain, shakiness/tremors, sweating, fever, chills, headache)

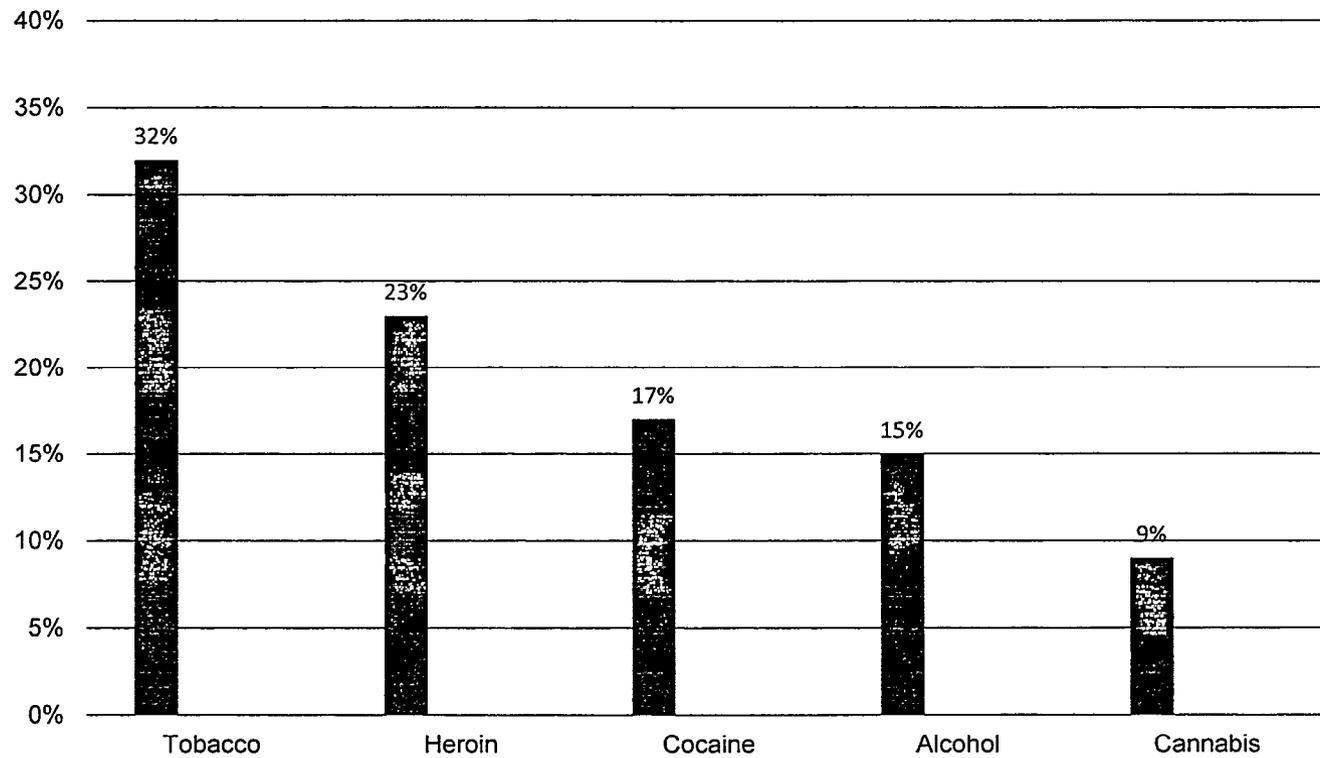
Cannabis Withdrawal

- Onset 1-2 days
 - Peaks 2-4 days
 - Duration 1-2 weeks
 - 44% of users
 - Due to absence of THC
 - Interferes with abstinence
-

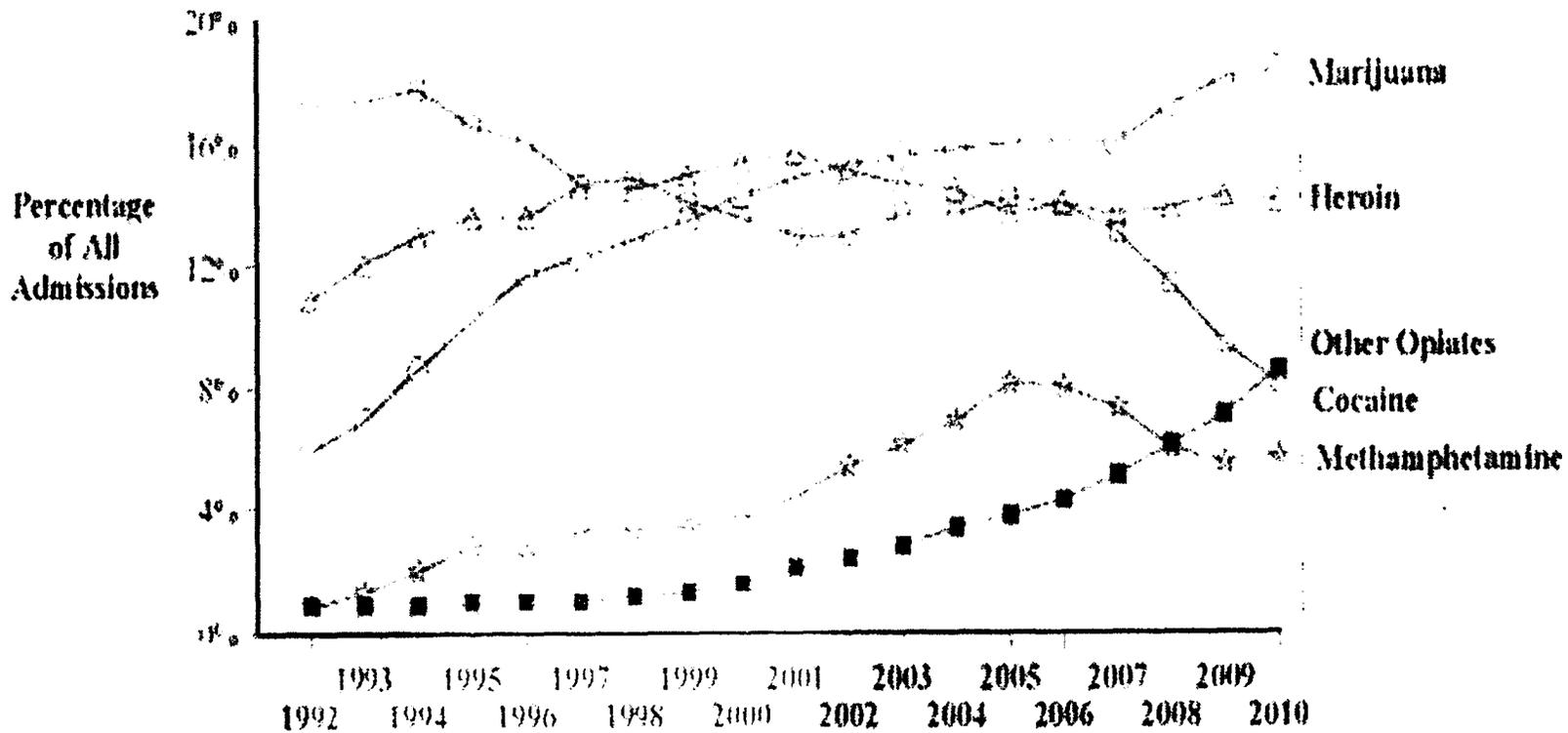
Prevalence of Current Use of and Dependence on Cannabis



Probability of Addiction Among Users



Primary Substance of Abuse (Other Than Alcohol) at Admission to U.S. State Licensed or Certified Substance Abuse Treatment Facilities, Ages 12 and Older, 1992 to 2010



Reasons for Quitting

Alcohol/Cocaine/Opioids: In trouble with social, legal, health, work, financial problems

Tobacco: Health concerns, embarrassment

Cannabis: Unfulfilled potential, amotivation, loss of control

Summary

- There is a plausible biological mechanism for cannabis dependence
 - There is a cannabis withdrawal syndrome
 - Cannabis dependence is increasing
 - Cannabis dependence may be less severe than alcohol, cocaine and opioid dependence
 - Many daily users of cannabis have difficulty stopping cannabis
 - Major harm of cannabis dependence is loss of potential
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