

Women and Stimulant Use

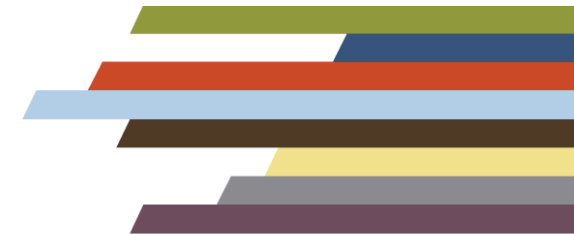
Project Echo Series

Current Trends and the Impact on the Brain and Body

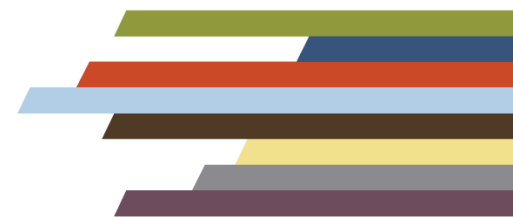
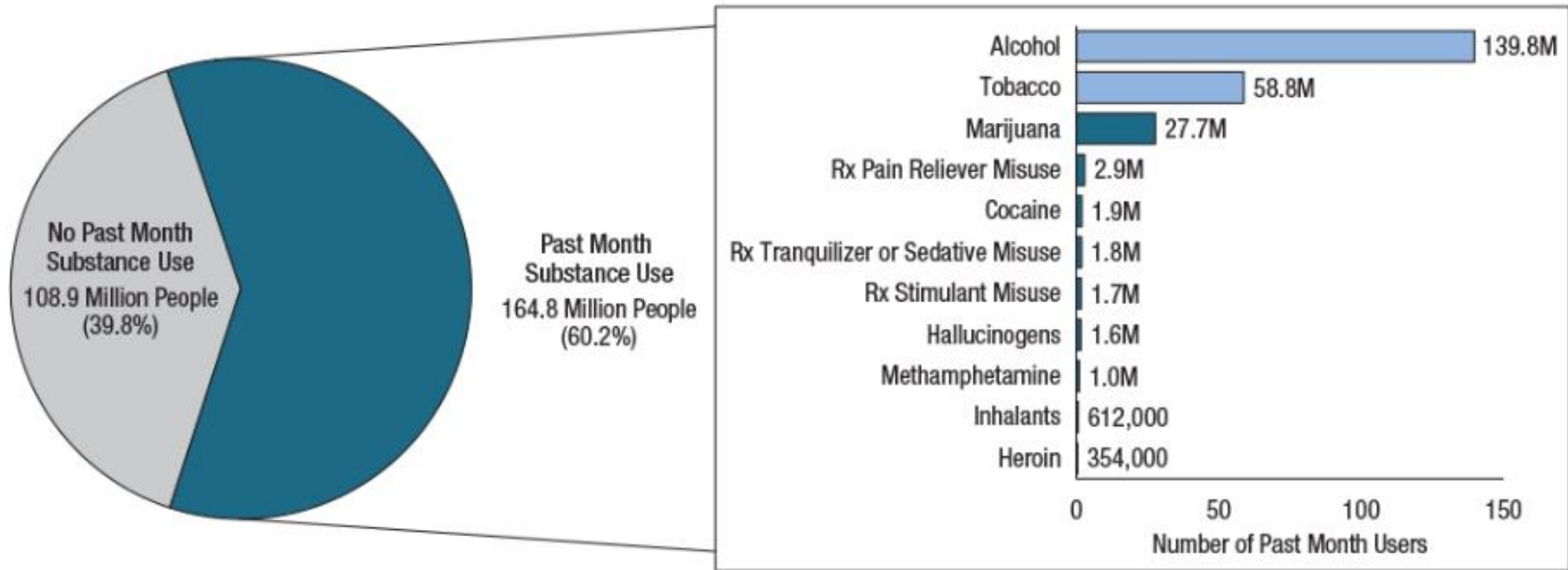
Beth A. Rutkowski, MPH

Co-Director, Pacific Southwest Addiction Technology Transfer Center

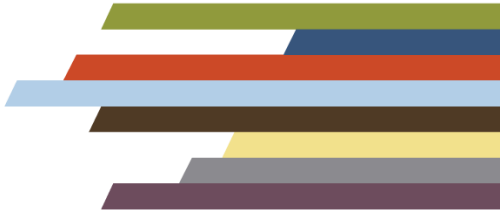
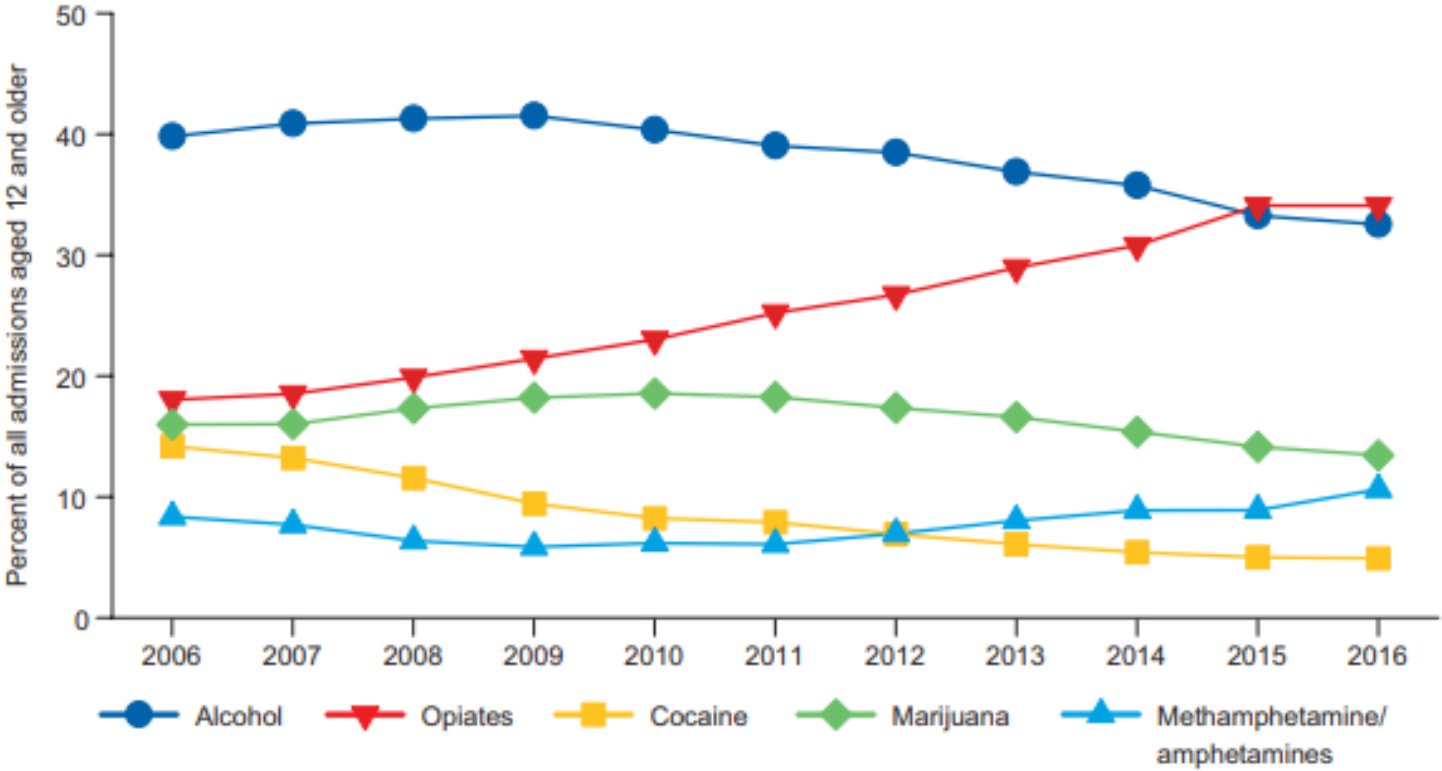
October 2, 2019



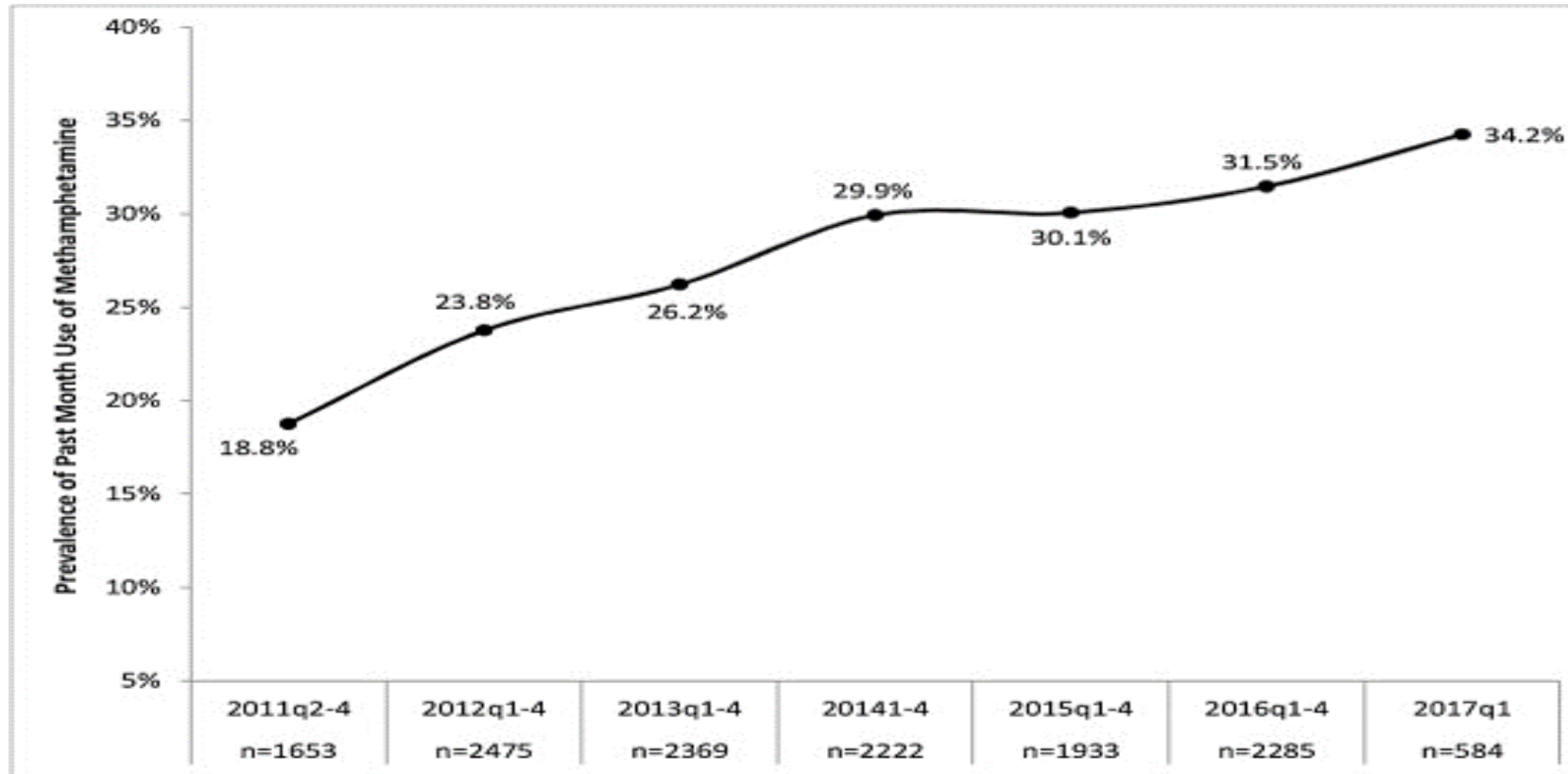
The Prevalence of Stimulant Use in the U.S.



Stimulant-Related Treatment Admissions



Meth Use among Patients with Chronic Opioid Use is on the Rise



Shifts in Methamphetamine Production

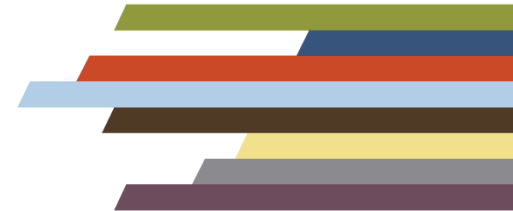


2004



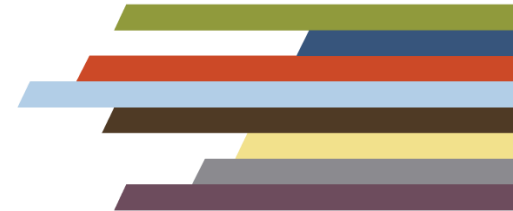
2014

Total of All Meth Clandestine Laboratory Incidents Including Labs, Dumpsites, Chem/Glass/Equipment

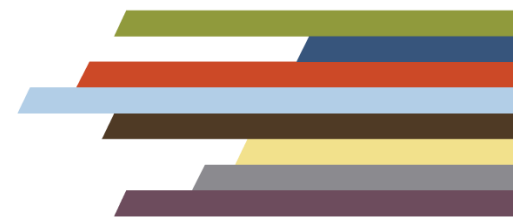


Changes in Meth Manufacturing Methods

1. Ephedrine/Pseudoephedrine Based
 1. “Nazi Method”
 2. Cold method
 3. “One Pot” / “Shake and Bake”
2. P2P/Phenylacetone
 1. Illegal in US, precursors legal in Mexico
3. New Synthetic Method
 1. P2P precursor and phenylacetic acid as pre-cursor - nitrostyrene

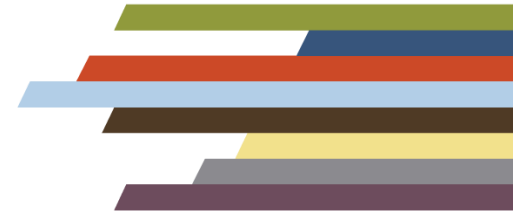


How Does Manufacturing Shifts Translate to Purity and Potency of Meth?

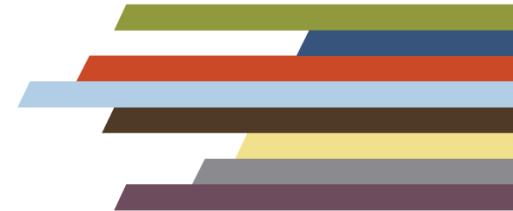
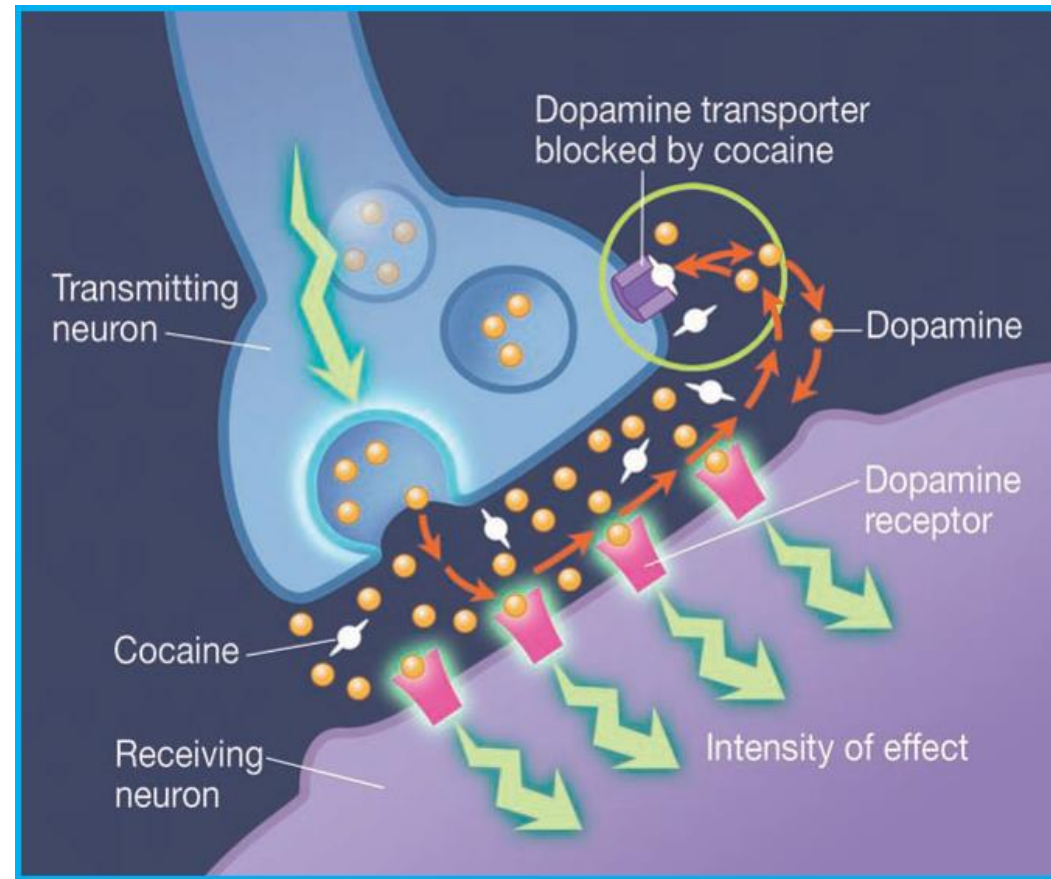


How Does Dopamine Transmission Work?

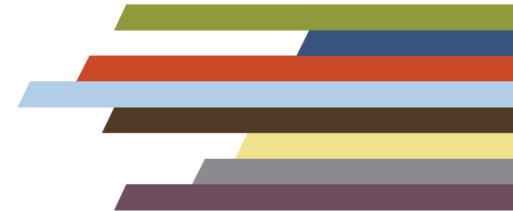
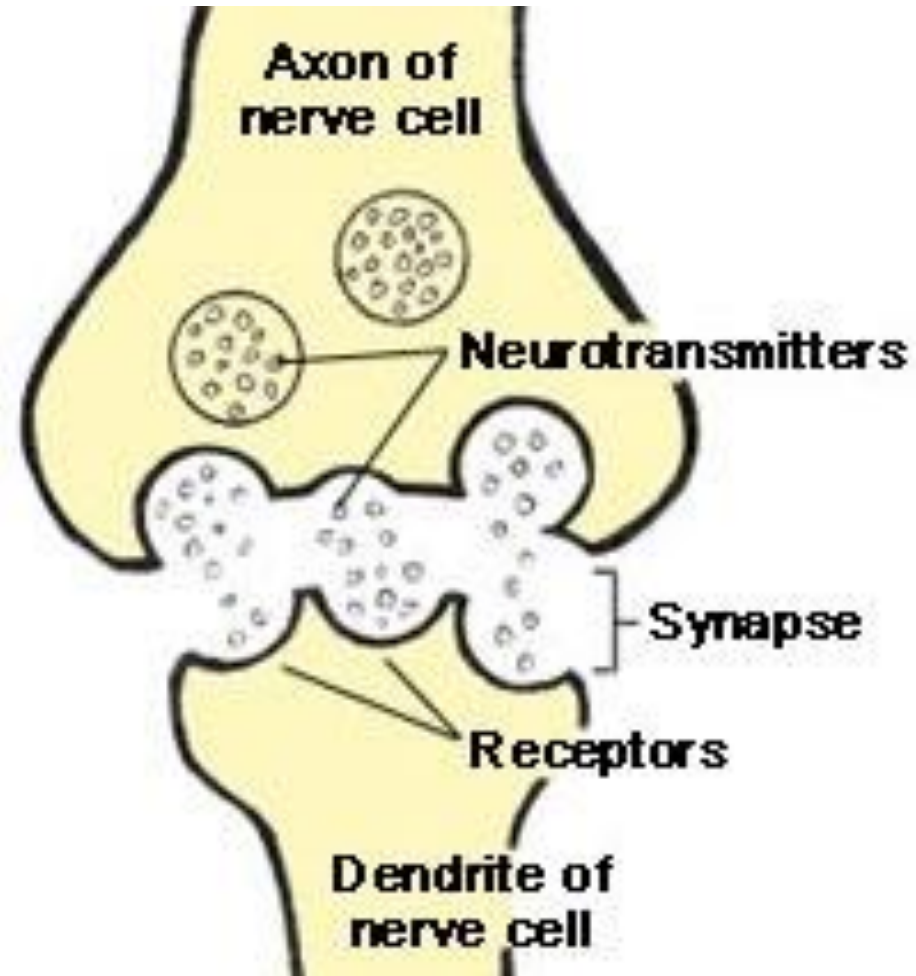
Video Source: Meth Inside Out,
<http://www.methinsideout.com/>



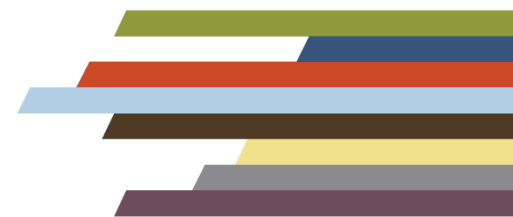
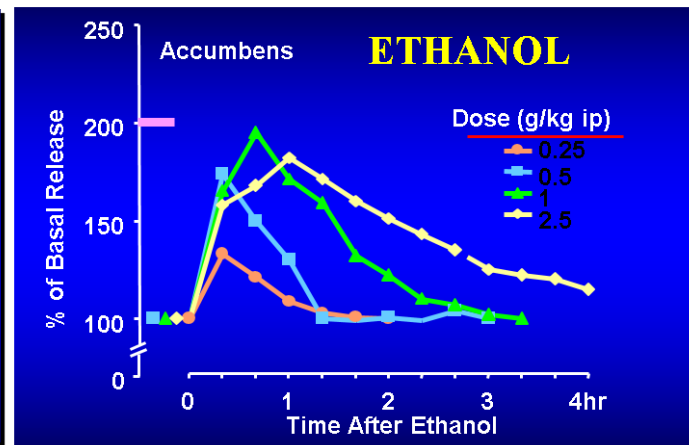
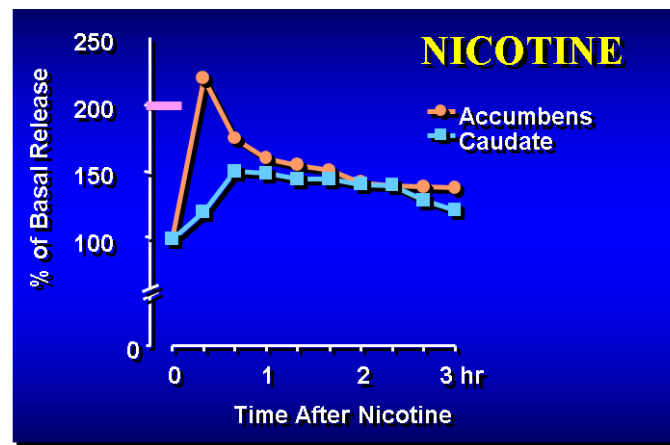
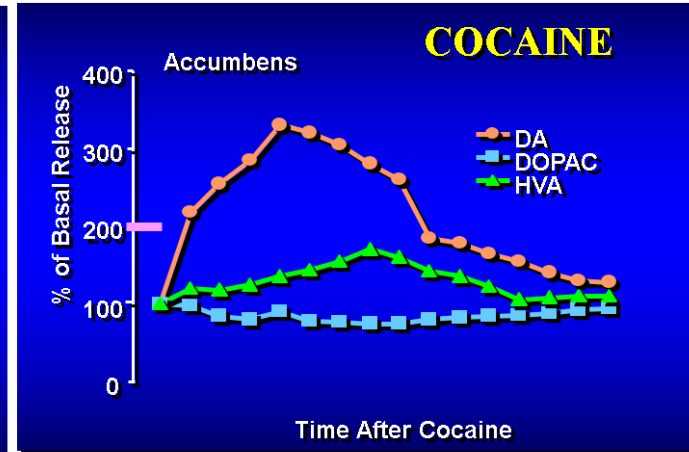
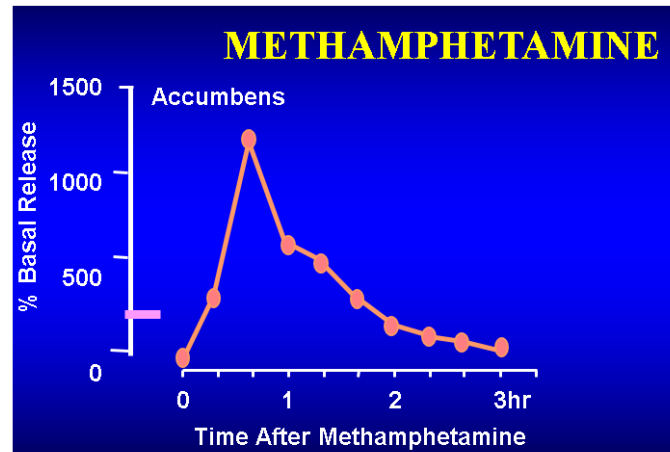
So How Does Cocaine Impact the Brain?



What about Methamphetamine?

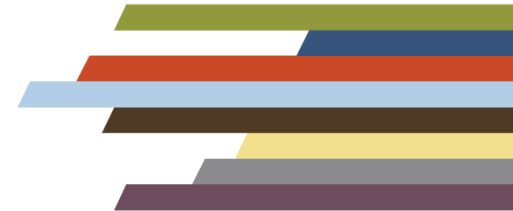


Effects of Drugs on Dopamine Release



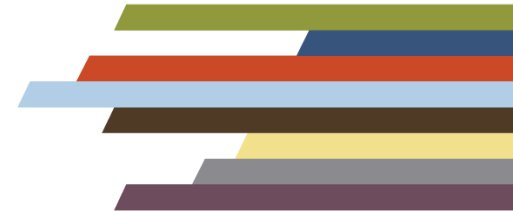
Acute Effects of Cocaine and Meth

- Euphoria or affective blunting
- Changes in socialability
- Hypervigilance
- Interpersonal sensitivity
- Anxiety, tension, or anger
- Impaired judgment
- Impaired social/work functioning
- Increased heart rate and blood pressure
- Increased pupil size
- Increased respiration
- Increased sensory acuity and energy
- Increased sex drive
- Decreases in appetite, sleep, and reaction time

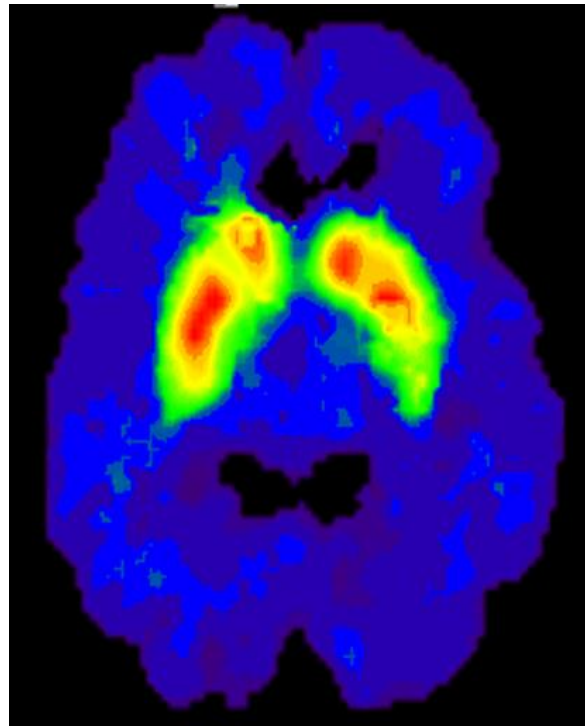


Chronic Effects of Cocaine and Meth

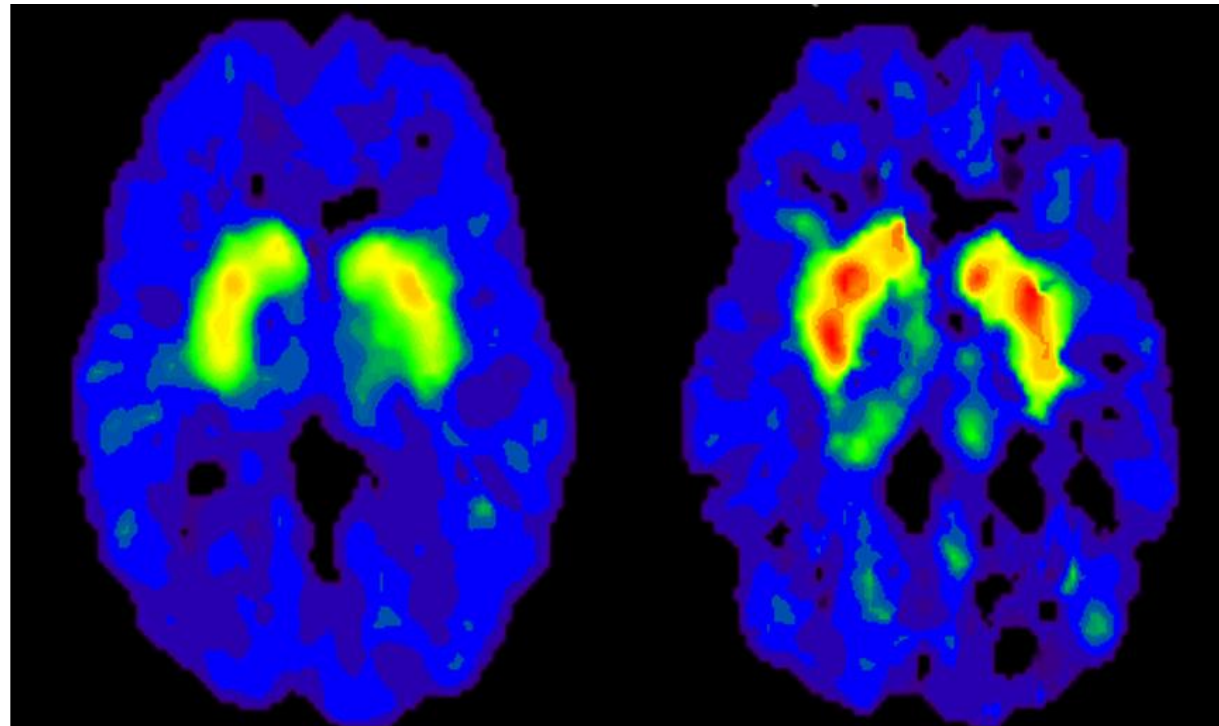
- Irritability and mood disturbances
- Restlessness
- Paranoia
- Auditory hallucinations
- Disturbances in heart rhythm/heart attacks
- Strokes, seizures, headaches
- Tremor
- Weakness
- Weight loss/anorexia
- Diarrhea
- Psychosis
- Memory loss
- Insomnia



The Brain Can Heal...Recovery is Possible

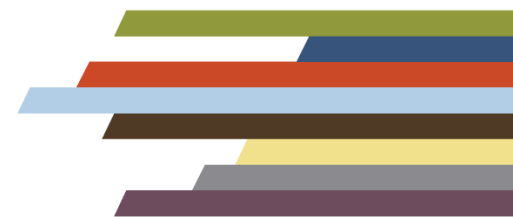


Normal Control



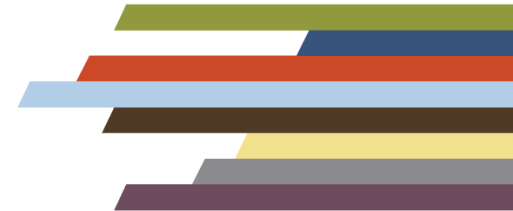
METH Abuser
(1 month detox)

METH Abuser
(24 months detox)



Thank you for your time!

- For questions, please contact me at:
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 - (310) 388-7647
 - <http://www.psattc.org>
 - <http://www.uclaisap.org>



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At the time of this presentation, Elinore F. McCance-Katz, served as SAMHSA Assistant Secretary. The opinions expressed herein are the views of Beth Rutkowski, MPH and do not reflect the official position of the Department of Health and Human Services (DHHS), SAMHSA. No official support or endorsement of DHHS, SAMHSA, for the opinions described in this document is intended or should be inferred.

