Women and Stimulant Use

Project Echo Series

Current Trends and the Impact on the Brain and Body

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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/Phenylacetonone
   1. Illegal in US, precursors legal in Mexico

3. New Synthetic Method
   1. P2P precursor and phenylacetic acid as pre-cursor - nitroestyrene
How Does Manufacturing Shifts Translate to Purity and Potency of Meth?
How Does Dopamine Transmission Work?

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 socialbility
- 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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