

“Meth Mouth”: A State of Decay

Learning Outcomes: At the end of the presentation, the dental professional will be able to:

- **R**ecognize the signs and symptoms of methamphetamine abuse, including the oral, systemic and mental health effects of the drug
- **C**ommunicate to patients the relationship between methamphetamine use and poor oral health and treatment outcomes
- **T**reat the dental needs of methamphetamine users safely and effectively

Key Concluding Points:

- The use of methamphetamine has become a *global epidemic*.
- Methamphetamine *negatively impacts* the oral health of users.
- Multiple teeth that are blackened with decay, fractured and/or missing are *diagnostic indicators* of methamphetamine use.
- The delivery of safe, effective, and realistic care requires that the dental team *know the drug use status of each patient* to:
 - Prevent drug to drug interactions
 - Develop appropriate treatment plans and realistic patient expectations
 - Avoid dental malpractice associated with drug-related treatment failures and prescription-related relapses.

NIDA (National Institute on Drug Abuse) Community Drug Alert Bulletin – Methamphetamine

Methamphetamine is...

- A powerfully addictive stimulant that dramatically affects many areas of the central nervous system. The drug can easily be made in clandestine laboratories from relatively inexpensive over-the-counter ingredients and can be purchased at a relatively low cost. These factors make methamphetamine a drug with a high potential for widespread abuse.
- Sometimes referred to as "speed," "meth," and "chalk." In its smoked form, it is often referred to as "ice," "crystal," "crank," and "glass."
- Comes in many forms and can be smoked, snorted, injected or orally ingested.

Populations using methamphetamine...

- Traditionally associated with white, male, blue-collar workers, is now reportedly being used by diverse groups in all regions of the country.
- Use is increasing among men who have sex with men and use other drugs, making this population more vulnerable to contracting and spreading sexually transmitted diseases, especially HIV/AIDS.
- Young adults who attend "raves" or private clubs also are increasingly using methamphetamine.
- Include notable increases among homeless and runaway youth.
- Increasing use of methamphetamine is reported among male and female commercial sex workers who also trade sex for drugs and among members of motorcycle gangs. Also, people in occupations (such as long-haul truckers) that demand long hours, mental alertness, and physical endurance, have been using this drug at increased rates.

New trends in methamphetamine use...

- There is emerging evidence that methamphetamine is being administered increasingly via the intravenous route. Injecting this drug puts the user at increased risk for engaging in behaviors (both sexual and non-sexual) that could increase his/her chance of contracting HIV/AIDS, hepatitis, and other infectious diseases.
- Methamphetamine is not usually sold and bought on the streets like many of the other known illicit drugs. Users report that they obtain their supplies of methamphetamine from friends and acquaintances. It is typically a more closed or hidden sale, prearranged by "networking" with those producing the drug. Often it is sold "by invitation only" at all-night warehouse parties or "raves."
- Because methamphetamine can be made with readily available inexpensive materials, there is great variation in the processes and chemicals used. This means that the final product that is sold as "methamphetamine" may not be methamphetamine at all, but rather a highly altered chemical mixture with some stimulant-like effects. Uncertainties about the drug's sources and the pharmacological agents used in its production makes it especially difficult to determine its toxicity, and resulting consequences and symptoms.
- Methamphetamine is often being used in dangerous combination with other substances, including cocaine/crack, marijuana, heroin, and alcohol.
- Long reported as the dominant drug problem in the San Diego, California, area, methamphetamine has become a substantial drug problem in other sections of the West and southwest as well. The drug has now been reported in both rural and urban areas of the South and Midwest. It is emerging in major urban areas in the East, but not to the extent seen in other regions of the country.

You can identify methamphetamine users by...

- Signs of agitation, excited speech, have decreased appetites, and increased physical activity levels. Other common symptoms include: dilated pupils, high blood pressure, irregular heartbeat, chest pain, shortness of breath, nausea and vomiting, diarrhea, and elevated body temperature.
- Occasional episodes of sudden and violent behavior, intense paranoia, visual and auditory hallucinations, and bouts of insomnia.
- A tendency to compulsively clean and groom and repetitively sort and disassemble objects, such as cars and other mechanical devices.

American Dental Association, Meth Mouth...

The rapid development of dental decay that is seen in individuals who use the drug methamphetamine.

Be on the lookout for:

- Unaccounted for and accelerated decay in teenagers and young adults
- Distinctive pattern of decay on the buccal smooth surface of the teeth and the interproximal surfaces of the anterior teeth that is blackened
- Malnourished appearance in heavy users, because methamphetamine acts as an appetite suppressant

What dental health-care providers can do when they suspect meth use:

- Obtain a health history of substance use
- Express concern regarding the dental findings
- If the patient is receptive to a medical consult, have the phone number of a local physician, clinic or rehabilitation facility available
- Use preventive measures such as topical fluorides
- Educate your patients about the risks associated with illicit drug use
- Do not treat if you suspect the patient is under the influence

Meth Mouth's Unique Characteristics:

- Color (blackened), Age (young adults), Surface Location (Class III/V), Teeth (Anterior teeth involvement)



3 years of meth use



5 years of meth use



15 years of meth use

Treating meth mouth...

- Use chemo-therapeutic agents, such as home/office fluorides to buffer the salivary acidity and to arrest the caries
- Use anti-microbials, such as chlorhexidine gluconate, to reduce the periodontal pathogens
- Address dietary issues and sources of added sugar
- Consider using direct restorative materials (composites, glass ionomers)
- Avoid complex restorative/prosthetic procedures

Preventing methamphetamine use...

- The general prevention principles established in NIDA's research-based booklet entitled "Preventing Drug Use Among Children and Adolescents" holds for all drugs of abuse, including methamphetamine and serve as a good starting point for establishing programs in your community. (Call 1-800-729-6686 for a free copy)

Where to get help for substance abusers...

Substance Abuse and Mental Health Services Administration (SAMHSA)

- Facility Locator, www.findtreatment.samhsa.gov
- **1-800-662-HELP**

Additional Resources...

- Brown R, Morisky D, Silverstein S. "Meth Mouth" severity in response to drug-use patterns and dental access in methamphetamine users. J Cal Dent Assoc, 41(6), 2013. <http://www.ncbi.nlm.nih.gov/pubmed/23875434>
- Patient Brochures on the Oral Effects of Methamphetamine
www.PreventMethMouth.com



Additional Resources... (cont.)

- Video Conferencing/Coaching for the dental team on the management of the addicted dental patient Ronni@DrRonniBrown.com
- Substance Abuse and Mental Health Services Administration, www.oas.samhsa.gov
- Montana Meth Project, www.montanameth.org
- National Institute on Drug Abuse, www.nida.gov/Infofacts/methamphetamine