



### E2 Methamphetamine: Peanut Butter to Ice

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After attending this presentation, attendees will understand the different forms of methamphetamine. The analysis of the samples will determine how to charge the defendant and which sentencing guidelines apply.

This presentation will impact the forensic science community by providing key aspects of how the collaboration of the forensic scientist and the attorney is vital for appropriate court outcome. The attorney's understanding of the analysis of a methamphetamine sample will result in the proper charging and sentencing.

Methamphetamine is still a major drug of abuse. Although recent regulation of pseudoephedrine by most states has decreased the number of clandestine laboratories, it is still a significant problem. The 2008 availability and seizure data indicate a strengthening in domestic methamphetamine availability and domestic methamphetamine production, and an increase in the flow of methamphetamine into the United States from Mexico (*National Methamphetamine Threat Assessment 2009*, National Drug Intelligence Center, December 2008).

Legally, methamphetamine is a schedule II controlled substance (21 C.F.R. 1308.12(d)(2); 49 F.R. 12734 (7/791)). The salts, isomers and salts of isomers of methamphetamine are controlled (21 C.F.R. 1308.12(d)) with the term isomer meaning the optical isomer (21 C.F.R. 1308.02(d)). Thus, any amount of any form of methamphetamine is a schedule II controlled substance unless it is one of the listed pharmaceutical preparations. The Federal Sentencing Guidelines for methamphetamine have separate levels for (1) a substance containing methamphetamine; (2) actual methamphetamine; and, (3) ice (S.G. 2D1.1) Actual methamphetamine is a measure of purity and is defined to be pure, uncut, unadulterated, (*U.S. vs. Patrick* 983 F.2d 206(1993)), and does not include the weight of impurities, (*U.S. vs. Spencer* 4 F.3d 115(1993); *U.S. vs. Stoner* 927 F.2d 45(1991)). The amount of actual methamphetamine is determined by multiplying the net weight of the sample by the percent purity determined by the forensic chemist.

Ice is a special form of methamphetamine. It is a slang term for a very pure form of methamphetamine that is almost clear crystal chunks like ice (frozen water), or rock salt. However, the Federal Sentencing Guidelines defines "ice" as *d*-methamphetamine hydrochloride at 80% or greater purity. The definition of the term specifies the isomer and the salt form of the molecule. Both of these must be specifically, unambiguously determined by the forensic chemist. The definition does not describe the appearance of the sample. Thus methamphetamine known as peanut butter because of its color and tacky consistency can be charged as "ice" if it is *d*-methamphetamine hydrochloride at 80% or greater.

The legal definition of ice has a variety of possible legal consequences. For example ecstasy tablets often contain multiple drugs along with the MDMA. It is not uncommon to find methamphetamine. Charging decisions a prosecutor faces includes whether to charge a case as possession of ecstasy, or the more serious charge of methamphetamine. This determination can be made after a discussion with the scientist as to the chemical makeup of the drugs seized.

Methamphetamine is a generic term, which specifies neither the isomer nor the salt form of the molecule. Both of these must be specifically identified by the chemist so that one may unambiguously know the exact form of the molecule. The attorney's understanding of the analysis of a methamphetamine sample will result in the proper charging and sentencing.

#### Methamphetamine, Ice, Sentencing Guidelines