

## Bath Salts & Synthetic Drugs: Deadly Psycho-stimulants

By

John G. Peters, Jr., Ph.D., CLS

The media reporting of the Miami “face-eating” incident and of other flesh-eating incidents helped to globally publicize synthetic drugs and “Bath Salts,” although none was found in the toxicology analysis of the Miami face-eater. Bath Salts and other synthetic drugs pose an impending epidemic of “new” psycho-stimulant drugs, which have caused psychoses in many individuals and in some cases have caused deaths of the people who had ingested them. Synthetic drugs (e.g., Bath Salts) are appearing with greater frequency, and with fatal results (Penders, Gestring, & Vilensky, 2012; Healy, 2012; Prosser & Nelson, 2012). American Poison Control Centers reported the following increase in calls related to Bath Salts: 303 call in 2010 compared to 2,371 calls in 2011 (Prosser & Nelson, 2012, p. 35).

Many of the synthetic compounds being abused for non-medical purposes are legally available as substitutes for illegal drugs like marijuana, cocaine, and Ecstasy. The National Conference of State Legislatures report that 32 states have enacted legislation to control various synthetic cannabinoids and other substances while another 18 have legislation in the works (Paynter, 2011). The Drug Enforcement Administration (DEA) has banned 5 formulations from commercial products in March 2011 including JWH-018, JWH-073, JWH-200, CP-47.497 and cannabicyclohexanol. JWH stands for John W. Huffman, a Clemson University professor in the 1990s; CP refers to Charles Pfizer (Paynter, 2011). These cathinone derivatives (e.g., methylmethcathinone [mephedrone]) have been known to “produce a substance-induced psychosis marked by vivid hallucinations with congruent paranoid delusions” (Penders, Gestring, & Vilensky, 2012, p. 1). One category of synthetic drugs is called “Bath Salts.”

Bath Salts are not the skin-softening crystals that are often added to bath water before a person takes a relaxing soak. Rather, “Bath Salts” is a category of synthetic drugs being marketed under names such as K2, Spice, Ivory Soft, Foot Powder, Bath Salts; Blaze; Red X Dawn (Alvarez, 2011, p. 1; Healy, 2012, p. 1). Many of these

synthetic drugs can be purchased at truck stops, convenience stores, etc. and are often sold to people of all ages, often targeting teenagers and college-age. Bath Salts were compared to the “very worst” effects of LSD, Ecstasy, and PCP for their hallucinogenic-delusional properties of superhuman strength, aggressiveness, and combativeness by Mark Ryan of the Louisiana Poison Center.

**K2 or Spice** is really an herb-based alternative to cannabis (Karch, 2012). Although cannabis is never listed on the label, “K2” or “Spice” is a synthetic marijuana that can be 40 times more potent than “organic” marijuana. Developed in 1984, the synthesized analogues and metabolites of marijuana were to be prescribed for multiple sclerosis, AIDS, and chemotherapy (Karch, 2012).

The synthetic cannabis, when taken, can produce the same symptoms as THC but the symptoms last much longer (Karch, 2012). One reason the effects of the synthetic cannabis last longer is because active principles bind to the cannabinoid receptors in the brain and stay bound to them longer. Although there is currently no field test to identify “K2” or “Spice,” the synthetic drug is easy to detect using gas chromatography. There have been several deaths from ingesting the synthetic cannabis.

Bath Salts, other than “K2” and “Spice,” are really synthetic “designer” amphetamines. Law enforcement officers need to be informed that Bath Salts, including synthetic drugs, can produce many of the behavioral cues and symptoms of cocaine, methamphetamine, and MDMA (Prosser & Nelson, 2012; Penders, Gestring, & Vilensky, 2012). Behavioral cues and symptoms include, but are not limited to: heart palpitations, shortness of breath, altered mental status, acute renal failure, etc. (Prosser & Nelson, 2012, p. 37).

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Administration pathways include, but are not limited to: "Bombing," where mephedrone powder is wrapped in cigarette paper and swallowed; "Keying," dipping the powder and then insufflating; rectally; gingival; inhalation; intramuscular; and intravenous (Prosser & Nelson, 2012, p. 35). Users of synthetic drugs that contain mephedrone have reported a bad or adverse effect 20% of the time, and also reported the effects lasting 60% to 75% longer than cocaine (p. 36).

People who have taken Bath Salts or other synthetic drugs are in a state of medical emergency, and need to be taken to the hospital because some individuals have died who have ingested such substances (Alvarez, 2011). Law enforcement officers need to be trained about synthetic drugs, including Bath Salts, and also be taught to write an inclusive report that describes all observed behaviors, actions attempted, including those actions that were successful and any that were unsuccessful. They also need to be reminded these incidents are medical emergencies.

#### References

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