**“Bath Salts” Abuse: What You Need to Know Part I**

By Sullivan Smith, MD | April 3, 2012 | 3 Comments | Filed in Addiction, Drugs& Treatment

In the first half of a two-part column, Sullivan Smith, MD, Medical Director of the Cookeville (Tennessee) Regional Medical Center, discusses the basics of “bath salts” and “plant food,” and what substance abuse professionals need to know about these popular synthetic drugs. Today, he talks about the history of bath salts, what they do to people who take them and why they are probably significantly underreported.

Bath salts and plant food, while they have been in the news lately, are nothing new. They were originally explored in attempt to find new and better antidepressants by universities and pharmaceutical companies as long ago as the 1920’s. For whatever reason, they were not re-discovered until recently.

The little that we know about these drugs comes mostly from European literature, where they have been a problem for several years before they made their way to the United States. After becoming illegal in the European Union, clandestine labs began to surface in order to supply them. While the manufacture of these drugs is quite different than methamphetamine, the same precursor is used to produce these drugs—pseudoephedrine.

The first important point is that they are not any sort of bath salt nor plant food. Both of these terms come from some of the trade names when they were originally being marketed. These drugs are various derivatives of methcathinone, also known as khat. As a derivative of a Schedule I drug, the federal Controlled Substances Act would then designate these drugs as schedule I “to the extent that they are intended for human consumption.”

These synthetic drugs are sold with the labeling “Not intended for human consumption,” clearly circumventing the Controlled Substances Act. With this labeling, drug dealers can and do call their products whatever they choose. Marketing websites report that these drugs are legal in all 50 states. The craze to use them was in part fueled by the fact that they were legally sold over the counter in places like convenience stores and head shops.

Because they were sold legally, many people thought that these drugs had to be safe. There are literally dozens and dozens of names used to market them, and the list continues to grow. Some of the common names you may have heard are: Molly’s Plant Food, Super Molly’s, Ivory Snow, Scarface, Jamaican Me Crazy, Charlie Sheen, Sprinkles, Sprinklezz, Lucky, Purple Monkey and a whole host of others.

The second important point is what happens when people take these drugs. They represent a class of chemicals with common chemical central structures, and they work at the serotonin receptors in the brain. While there are nuances in the effects of these drugs when compared to one another, the effects are similar and comparable to those of Ecstasy early after consumption. Internet sites report the drugs produce a very euphoric feeling which is much better than Ecstasy, and legal. As time goes by, the effects look more and more like methamphetamine. Common effects are euphoria, a sense of well being, a sense of empathy, teeth grinding, jerking eye movements, profuse sweating, high blood pressure, high body temperature, fast heart rate,

anorexia, diminished thirst, paranoia, hallucinations, seizures, significant violent outbursts, self injurious behaviors and suicidal thoughts and acts. Deaths have been reported as the direct result of the abuse of these drugs. The European literature and the early experience in the United States demonstrates a clear potential for addiction.

The third important point is that this problem is probably significantly underreported. Most likely, it is because these drugs do not show up on standard toxicology tests. As such, many cases are suspected to be related to these drugs, yet are never scientifically proven. In my Center, it was once unusual to see patients who had taken bath salts; it is now an easily recognized and regular event.

**Part 2:**

**"Bath Salts" Abuse: What You Need to Know Part II**

By Sullivan Smith, MD | April 6, 2012 | Leave a comment | Filed in Drugs &Healthcare

In the second half of a two-part column, Sullivan Smith, MD, Medical Director of the Cookeville (Tennessee) Regional Medical Center, talks to health care professionals about how to treat "bath salts" patients, and what you can do to help address the growing problem of abuse.

Because bath salts are relatively new in the United States, many health care professionals are grappling with how to treat these acutely intoxicated patients.

There are a few basic principles. First, provide for your own safety. These patients can become explosively violent, phenomenally strong and do not feel pain. The potential for serious bodily injury to you or your staff is very real. Always deal with these patients in groups and in the calmest and quietest environment possible.

Treatment consists of intravenous fluids and sedation. It will often take very large amounts of both in order to stabilize these patients. IV fluid volumes on the order of those used to treat sepsis are a good idea. That's a lot of fluid, but these patients are usually significantly volume depleted.

Even more startling is the amount of sedation required to control these patients. A benzodiazepine such as midazolam (Versed) is an excellent choice. Very large amounts are often required, to the point that many practitioners are very uncomfortable with the doses required. On several occasions in our Center, doses of more than 100 mg of intravenous midazolam have been required in order to resuscitate and control these patients. This high-dose benzodiazepine and intravenous fluid therapy not only controls the delirium, it also corrects the high body temperatures, high blood pressures, fast heart rates and seizures. Some patients will require chemical paralysis and mechanical ventilation because of persistent violence or in order to protect their airway because of very high-dose sedation. All of these patients will require admission to an intensive care unit, sometimes for several days.

This is clearly a national problem. It is growing rapidly. It is costing our health care system significant dollars. It is killing people. These designer drugs we call bath salts and plant food are truly a health care crisis.

Currently, there are a couple of plans to address the bath salts problem. First, there is legislation in Congress to address the rapidly growing abuse of these drugs. The House bill, HR 1254 (the Synthetic Drug Control Act of 2011, sponsored by Representative Dent of Pennsylvania), passed out of the House last month and has now moved into the Senate, where the companion bill is currently stalled in the Senate Judiciary Committee.

There are also three Senate bills that have passed and are now winding their way through the House: SB 409 (the Combating Dangerous Synthetic Stimulants Act of 2011, sponsored by Senator Schumer of New York), SB 605 (the Dangerous Synthetic Drug Act of 2011, sponsored by Senator Grassley of Iowa) and SB 839 (the Combating Designer Drugs Act of 2011, sponsored by Senator Klobuchar of Minnesota).

I encourage you to contact your representative and senators and tell them to support this very important legislation.

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