

Synthetic drugs: 'For sale' doesn't always mean it's safe

By Natalie McGill

You may already know about the health risks that come with illegal drugs, but legally sold substances designed to mimic such drugs could be as close as your local convenience store — and they can be just as dangerous.

Synthetic drugs are human-made chemicals that have psychoactive effects similar to some illegal drugs. Two of the most popular synthetic drugs in the U.S. are synthetic cannabinoids — known as synthetic marijuana — and bath salts — known as synthetic stimulants. These new drugs are dangerous not just because of the risk for addiction, but because of the unknowns about their long-term effects to your health.

Synthetic cannabinoid products are made of chemicals that are sprayed onto plant material. They're marketed as "safe" alternatives to marijuana, says the National Institute on Drug Abuse. Bath salts — which are unrelated to products used in bathing — products contain synthetic versions of the drug cathinone — a stimulant that is similar to amphetamine, which can be dangerous in high doses.

There are still many questions about exactly how these synthetic drugs affect the body and what chemicals are in the products sold to consumers, says Michael Baumann, PhD, a staff scientist in the Designer Drug Research Unit at NIDA's Intramural Research Program.

In some cases, the chemicals in synthetic drugs may be legal, making it easier for products that contain them to be sold in places as accessible as gas stations or smoke shops,

NIDA says. But just because they're legally sold doesn't mean they're safe.

"We don't know the underlying mechanisms for many of these new drugs, and we don't know anything about their purity, or possible additives, because there's no quality control in the synthesis and packaging of the products," Baumann says. "So, there are a lot of unknowns here that provide for a substantial risk to public health."

Young adults may be at high risk for using synthetic drugs. Synthetic cannabinoids, for example, are one of the three most-used drugs among U.S. eighth graders and high school seniors, according to



NIDA. Health complications such as seizures, vomiting and high blood pressure after using synthetic marijuana have sent thousands of teens — especially teenage boys — to emergency rooms in the U.S., according to NIDA. In recent years, some states have passed laws

to make synthetic marijuana illegal.

Products containing synthetic drugs can be labeled with different names. Synthetic cannabinoids are also known as "K2" or "spice" to users, Baumann says.

Another health risk is the practice of putting synthetic cannabinoids into food. While putting marijuana into edible products may already affect your health, Baumann says using synthetic cannabinoids are especially dangerous



>> For more information on synthetic drugs, visit www.drugabuse.gov

because of their potency.

"One of the problems with synthetic marijuana is that it's so potent...even a small amount can have very robust effects and people get into trouble with that," he says. "They overdose inadvertently because the drugs are so potent."

Bath salts get their name from their appearance — they look like Epsom salts or bath crystals that some people use as bath additives, Baumann says. The effects of bath salts are similar to that of cocaine and methamphetamine — an increased heart rate, higher blood pressure and euphoria — and the drugs can be highly addictive.

Bath salts are often snorted, but can also be taken as pills, he says. Products containing bath salts are purposely mislabeled, making it easier for them to be sold and marketed, he says.

"After high doses of bath salts, you can get serious adverse effects, such as psychosis, hyperthermia, excited delirium and even death, in some cases," Baumann says.

Parents: Tips for talking to your teens

If you suspect your teen may be using drugs — synthetic or otherwise — there are ways to seek help. The Substance Abuse and Mental Health Services Administration's National Helpline has a toll-free number, 1-800-662-HELP.

You can call for advice on how to locate addiction and treatment services where you live. With the risk of experimenting with drugs more likely to begin while young, parents may also need help in how to start the conversation about drugs.

NIDA's website provides a resource for parents on how to talk with their kids and information about specific drugs. Visit www.teens.drugabuse.gov/parents/drugs-and-your-kids.



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