



Spice

Street names: Fake Weed, Moon Rocks, Skunk

EXPAND ALL

Revised May 2017

What is spice?



Also known as: Black Mamba, Bliss, Bombay Blue, Fake Weed, Genie, K2, Moon Rocks, Skunk, Yucatan Fire, and Zohai

Spice is a mix of herbs (shredded plant material) and manmade chemicals with mind-altering effects. It is often called “synthetic marijuana” or “fake weed” because some of the chemicals in it are similar to ones in marijuana; but its effects are sometimes very different from marijuana, and frequently much stronger. Usually the chemicals are sprayed onto plant materials to make it look like marijuana.

Because the chemicals used in Spice have a high potential for abuse and no medical benefit, the Drug Enforcement Administration has made many of the active chemicals most frequently found in Spice illegal. However, the people who make these products try to avoid these laws by using different chemicals in their mixtures.

Spice is most often labeled “Not for Human Consumption” and disguised as incense. Sellers of the drug try to lead people to believe they are “natural” and therefore harmless, but they are neither. In fact, their actual effects can be unpredictable and, in some cases, severe or cause death.

How Spice is Used

Most people smoke Spice by rolling it in papers (like with marijuana or handmade tobacco cigarettes); sometimes, it is mixed with marijuana. Some users also make it as an herbal tea for drinking. Others buy Spice products as liquids to vaporize them in e-cigarettes.

What happens to your brain when you use Spice?

Some Spice users report extreme anxiety, feeling like someone is out to get them (paranoia), and seeing or hearing things that aren't there (hallucinations). They also sometimes report feeling relaxed and having only mild changes in perception.

Spice has only been around a few years, and research is only just beginning to measure how it affects the brain. What is known is that the chemicals found in Spice attach to the same nerve cell receptors as THC, the main mind-altering ingredient in marijuana. Some of the chemicals in Spice, however, attach to those receptors more strongly than THC, which could lead to a much stronger and more unpredictable effect. Additionally, there are many chemicals that remain unidentified in products sold as Spice and it is therefore not clear how they may affect the user. Moreover, these chemicals are often being changed as the makers of Spice alter them to avoid the products being illegal.

Learn more about [how the brain works and what happens when a person uses drugs](#).

What happens to your body when you use Spice?

In 2011, Spice was mentioned by patients in the emergency room 28,531 times. This is a dramatic increase over the 11,406 mentions in 2010.¹ People who have had bad reactions to Spice report symptoms like:

- fast heart rate
- throwing up
- feeling anxious or nervous
- feeling confused
- violent behavior
- suicidal thoughts

Spice can also raise blood pressure and cause less blood to flow to the heart. In a few cases, it has been linked with heart attacks and death. People who use Spice often may have [withdrawal](#) and addiction symptoms.

We still do not know all the ways Spice may affect a person's health or how toxic it may be, but it is possible that there may be harmful heavy metal residues in Spice mixtures.

¹ Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. *Drug Abuse Warning Network, 2011: National Estimates of Drug-Related Emergency Department Visits*. Rockville, MD, May 2013. Available at: <http://media.samhsa.gov/data/2k13/DAWN2k11ED/DAWN2k11ED.htm>.

Can you overdose or die if you use Spice?

Yes. Spice use has been linked to a rising number of emergency department visits and to some deaths.

Is Spice addictive?

Yes, Spice can be addictive. People who use Spice a lot may have [withdrawal](#) symptoms if they try to quit. This means they can't stop using it even when they really want to and even after it causes terrible consequences to their health and other parts of their lives. Withdrawal symptoms can include:

- headaches
- anxiety
- depression
- irritability

How many teens use Spice?

Spice is the second-most popular illegal drug used by high school seniors (marijuana is the first). Easy access and the misperception that Spice is "natural" and safe have likely contributed to these high rates of use.

Below is a chart showing the percentage of teens who use Spice.

Monitoring the Future Study: Trends in Prevalence of K2/Spice (Synthetic Marijuana) for 8th Graders, 10th Graders, and 12th Graders; 2016 (in percent)*

Drug	Time Period	8th Graders	10th Graders	12th Graders
K2/Spice (Synthetic Marijuana)	Past Year	2.70	3.30	3.50

* Data in brackets indicate statistically significant change from the previous year.

For more statistics on teen drug use, see [NIDA's Monitoring the Future study](#).

What should I do if someone I know needs help?

If you see or hear about someone misusing opioids, talk to a coach, teacher, or other trusted adult.

If you, or a friend, are in crisis and need to speak with someone now, please call:

- **National Suicide Prevention Lifeline at 1-800-273-TALK** (they don't just talk about suicide—they cover a lot of issues and will help put you in touch with someone close by).

If you need information on treatment and where you can find it, you can call:

- **Substance Abuse Treatment Facility Locator at 1-800-662-HELP** or visit www.findtreatment.samhsa.gov.

For more information on how to help a friend or loved one, visit our [Have a Drug Problem, Need Help? page](#).

Where can I get more information?

Drug Facts

NIDA:

- [DrugFacts: Spice \("Synthetic Marijuana"\)](#).

Statistics and Trends

NIDA:

- [DrugFacts: High School and Youth Trends](#)

Monitoring the Future (University of Michigan):

- [Monitoring the Future](#)

Substance Abuse and Mental Health Services Administration:

- [National Survey on Drug Use and Health](#)

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