

## Drug Testing Update

### *K2 & Spice*

**K2 and Spice** are just a couple of the many popular "legal" drugs on the market today. These products are relatively new to the market of abused drugs. Because they act on the body in the same way that THCA does, we term them "synthetic cannabinoids".

The development of many of these synthetic cannabinoids is the work of Dr. John Huffman, of Clemson University. He was developing these compounds to investigate their potential medical applications. From the early 1980s until 2008, Dr. Huffman developed a minimum of 20 synthetic cannabinoids. In addition there are other, previously known, chemicals with the same effect on humans.

In 2008, labs outside the U.S. began producing these chemicals, lacing them into an herbal base and selling them as a "legal" and nearly undetectable high. Since late 2009, U.S. Customs and Border Protection has intercepted a number of shipments of bulk chemicals into the united states.

The Drug Enforcement Administration recently began the process of placing five of these synthetic cannabinoids on the controlled substances list. On Nov 24, 2010, the DEA published its intent to place the five compounds, JWH-18, JWH -73, JWH-200, CP-47, 497, and cannabicyclohexanol on the schedule 1 controlled substances list. *"Except as authorized by law, this action will make possessing and selling these chemicals or the products that contain them illegal in the U.S. for at least one year while the DEA and the United States Department of Health and Human Services (DHHS) further study whether these chemicals and products should be permanently controlled."*

These chemicals present some significant problems in drug testing:

1. Each parent chemical metabolizes in the body and can have up to 10 different metabolites. With 20+ parent compounds and each one having many metabolites, the number of potential combinations is huge.
2. Finding appropriate reference compounds is difficult. This is due to the short time they have been in use and to the number of potential compounds.
3. There is a lack of published research on use and effect of the compounds, the lack of validated instrument methods to detect the drugs, and the lack of information to identify drugs and metabolites when they are present.

ACM is sending these urine samples out to our reference lab for testing. Two of the most frequently found synthetic cannabinoids, JWH-018 and JWH-073, are identified by this test. Specimens may be collected and submitted at ambient temperature, as with other toxicology specimens. We expect to report results within seven (7) to fourteen (14) business days after submission.

Please contact me with any questions,

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