# Mississippi Toxicology Bulletin

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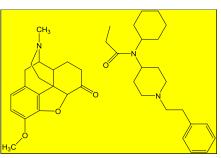
SPRING 2018

### SPECIAL POINTS' OF INTEREST:

- A Focus on Fentanyl
- Top Drugs Seized by Law Enforcement
- Case Report: Spicy Kisses

## A Focus on Fentanyl

The music artist known as Prince died from an overdose of fentanyl. Prince, 57, was found unresponsive on his estate in 2016 after taking counterfeit Vicodin that contained fentanyl. Authorities related that Prince did not have any prescriptions for Vicodin or fentanyl. They found numerous counterfeit Vicodin tablets in Aleve and Bayer (aspirin) bottles. Each tablet had the same numerical imprint as Vicodin (Watson 853), and each was the same color



Chemical Structures of Hydrocodone (left) and Fentanyl (right)

and shape as Vicodin. During a news conference, Mark Metz, Carver County prosecutor stated, "In all likelihood, Prince had no idea he was taking a counterfeit pill that could kill him." https://www.usatoday.com/story/life/2018/04/19/prince-death-investigation/524513002/

The FDA requires all prescription and over-the-counter solid dose medications sold in the U.S. to have a unique imprint. The purpose is to enable identification of the ingredients, strength, and manufacturer by health care providers, patients and law enforcement officials. Unfortunately, drug dealers will purchase illegal drugs in powdered form, and use pill presses to make counterfeit tablets. Fentanyl is often used as the active ingredient due to its high potency and profit margin. Tablets on the street often contain 0.1-0.2 mg fentanyl each. Dealers can pur-

chase a kilogram of fentanyl for \$1,000-\$2,000 and turn it into tablets sold for \$100,000 on the street. Drug users often seek out prescription drugs for their known qualities and effects, so dealers have begun making counterfeit tablets. While the FDA controls the sale of pill presses domestically, many presses are being shipped from overseas. Many are confiscated by the U.S. Customs Service.



Authentic oxycodone tablet (top) and a counterfeit containing fentanyl (bottom)

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Monday - Friday

After Hours Operator

Technologists are always on call for emergencies Fentanyl is also being mixed with or substituted as heroin, which has resulted in many deaths nationwide. Unsuspecting users often overdose because fentanyl is 50 times more potent than heroin. It has been reported that many drug dealers actually want a customer to die every few weeks. This way they (Continued)

#### Fentanyl (continued)

get known as dealers with the "good stuff" that is potent and in high demand. Each of the four specimens on the right were sold on the street as "heroin" before being confiscated by law enforcement. Drug analysis revealed that none of these contained heroin, but contained either fentanyl or fentanyl analogues. Mississippi Forensics Lab personnel indicate that "the active ingredients of heroin currently being sold on the street cannot be determined by its color or consistency."



#### Top Drugs seized by Mississippi Law Enforcement

Law enforcement personnel relate the top drugs detected in recent seizures include:

- 1) Methamphetamine
- 2) Marijuana
- 3) Fentanyl and synthetic opioids\*
- \*Heroin seized throughout Mississippi often contains Fentanyl, Acetyl Fentanyl, or Butyrl Fentanyl.

#### **Case Report: Spicy Kisses**

An inmate at an undisclosed Mississippi correctional facility began seizing unexpectedly. Upon being treated at a local hospital, several round objects were noted in his small intestine. Inspection after surgical removal revealed balls approximately one inch diameter composed of plant material wrapped in plastic wrap. Analysis by mass spectrometry revealed the presence of two synthetic cannabinoids: 5-Fluoro ADB and MMB-FUBINACA (aka K2, Spice). The case worker related that, hours before becoming symptomatic, the inmate had a female visitor. During the visitation, the two kissed for some time, and they apparently transferred the drug balls during their kisses. The inmate intended to retrieve the balls from the toilet and either sell the material to others or smoke it himself.



The Mississippi Toxicology Bulletin is a semiannual newsletter published by the Analytical Toxicology Laboratory at the University of Mississippi Medical Center. Articles, reports or case studies for publication may be submitted to Dr. Patrick Kyle at <a href="mailto:pkyle@umc.edu">pkyle@umc.edu</a>.