

### Covert Drug Use at a Continuation High School

Nicklaus Brandehoff<sup>1</sup>, Michael Darracq<sup>1</sup>, Jirair Gevorkyan<sup>2</sup>, Robert Torres<sup>2</sup>, Patil Armenian<sup>1</sup>

<sup>1</sup>UCSF-Fresno, Fresno, Ca, USA, <sup>2</sup>Central Valley Toxicology, Clovis, Ca, USA

**Intro:** Clandestine drug use by high school students is a persistent problem and has recently been on the rise, especially on school premises. Many drugs can be dissolved in liquid and inhaled via vaporizers in an attempt to hide drug use from authorities. Furthermore, many of these liquids are flavored, making scent identification less reliable. We aimed to determine if 10 confiscated items from a continuation high school in the Central Valley of California contained illicit drugs.

**Methods:** Items were confiscated under school policy stating schools are a “drug and alcohol free zone”. At the time of confiscation, there was little to no suspicion of illicit drug use. Residue suspected to have active ingredients were isolated from each item and were analyzed in non-targeted fashion by liquid chromatography-time-of-flight-mass spectrometry (LC-TOF/MS) (TOF 6230-LC1200, Agilent) for drugs of abuse. Tetrahydrocannabinol (THC) analysis was performed with tandem liquid chromatography-mass spectrometry (LC-MS/MS, Agilent 6460 QQQ LC/MS).

**Results:** Ten specimens were analyzed following confiscation. Illegal or suspected illicit drug residues were found in 9/10 items. A cigarette and cigar contained nicotine. White pill “Lilly 3227/10mg” was atomoxetine. A fake lipstick cannister contained methamphetamine and THC. A wrench “socket” device contained nicotine and THC. Zig Zag 1g nicotine e-liquid bottles “Dragonberry” and “Mango” contained nicotine, pseudoephedrine, and methaqualone. Lush Vapor nicotine e-liquid bottles “Belly Dancer” and “Rescue Me” contained nicotine and oxcarbamazepine.

**Conclusion:** A variety of prescription and illegal drugs were found in this small sampling of confiscated items at a continuation high school. These drugs were found in containers that had alternative labeling or uses. This observational study demonstrates creativity in obscuring illicit drug use by high school students.