



### K24 Liquid Codeine: New Drug, Same Old Song

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The goals of this presentation are to increase the awareness of the presence and high abuse statistics of liquid codeine, e.g., cough syrup, and to emphasize the need for laboratories and law enforcement agencies to analyze for this drug and track its abuse, respectively.

There has been a significant rise in the manipulation of liquid codeine from its licit pharmaceutical use to a new drug of abuse. Its abuse has received great popularity in recent years for young minorities in the Harris County area. Songs have been written encouraging such practices. The trend is most evident among African-American males. The laboratory has noted this trend based upon physical evidence and biological samples received from various law enforcement agencies and forensic pathologists, respectively.

The liquid codeine submitted to the Controlled Substance Laboratory has increased approximately two hundred fifty percent in both 2000 and 2001 as compared to the total for 1999. Liquid exhibits are received as bulk pharmaceutical containers, individual prescription bottles, or diluted in a variety of soda flavors. Over 90% of the typical abusers or possessors are African-American males who range in age from 16-40 years old.

In addition to this increase of confiscated drugs, the Toxicology Laboratory has witnessed an increased presence of codeine with promethazine in specimens submitted for suspected driving under the influence (DUI) and death investigation cases. Three deaths are described and two alleged DUI cases presented to the Medical Examiners Office in Harris County, TX within eight months of time.

The first postmortem case is a 29-year-old African-American male who was found dead in his recording studio. According to friends, he had been drinking cough syrup and possibly using other illegal drugs. The decedent was last seen alive in the early morning hours when everyone fell asleep. Toxicological analysis revealed codeine present at 1.74 mg/L in the blood. Phencyclidine was also present in the blood and urine. The cause of death was ruled a codeine overdose with mixed drug intoxication.

In the second case, a 61-year-old white female was found dead in her home by her daughter. She had made prior suicide attempts and was reportedly depressed. A large bottle of alcohol was found half empty near her body. Toxicological analysis of blood found toxic levels of codeine present at greater than 20.0 mg/L. The cause of death was ruled as codeine toxicity.

In the third case, a 16-year-old Hispanic male was reportedly playing “Russian Roulette” at a party at a friend’s house and shot himself with a revolver he had displayed earlier. Friends asserted that he appeared to have been drinking before he arrived. Toxicological analysis revealed codeine present at 1.29 mg/L in the blood. Ethanol was also detected in the blood, urine and vitreous humor.

The abuse of codeine has also risen in driving under the influence cases. In the first case, a 19-year-old white male was stopped for a routine traffic violation. The officer detected an odor of marijuana. He also noticed the defendant to be unsteady, having red eyes and slurred speech. Laboratory analysis of urine identified codeine, promethazine, marijuana metabolite and alprazolam.

In the second DUI case, a 22-year-old black male was seen driving a badly wrecked vehicle when an officer tried to pull him over. He was evading arrest and committed several moving violations. The defendant fled on foot carrying a soda bottle with liquid, and smelled of marijuana. Laboratory analysis of the liquid confirmed positive for codeine, while analysis of the urine detected codeine, promethazine, marijuana metabolite and alprazolam.

As this laboratory system continues to analyze for codeine and other related drugs, it is noted that a substantial abuse pattern in the greater Houston area during a relatively short period of time. In accordance with the toxicological cases presented, there is a tendency of abusing other drugs in addition to codeine. Knowing the behavioral and toxicological effects of liquid codeine, the community and law enforcement agencies must be educated about the prevalence of this unsuspecting cough syrup. The authors recommend that crime laboratories incorporate standardized drug screening to include liquid codeine for drug or alcohol related incidents.

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