K34 PCP and Drug Impaired Driving in San Francisco, California

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After attending this presentation, attendees will become aware of the effects that phencyclidine has on driving skills as demonstrated by case examples from drivers arrested for DUID by PCP in a three year period.

This presentation will impact the forensic science community by offering a set of reference data on PCP concentrations often measured in impaired drivers and epidemiological data of signs and symptoms associated with PCP intoxication and impairment.

In this study, demographic profiles, drug concentrations of PCP, and typical observed behaviors of subjects arrested for driving under the influence are presented where PCP was a significant toxicological finding from cases submitted to the Toxicology Laboratory of the Forensic Laboratory Division of the Office of the Chief Medical Examiner, City and County of San Francisco. Phencyclidine, PCP, was first developed in 1956 by Park Davis and investigated as a possible anesthetic. In clinical trials, some patients experienced a prolonged post- operative psychosis and it was withdrawn from clinical use in 1965. It is this adverse affect and the dissociative hallucinogenic properties of PCP which contributed to its popularity as a drug of abuse in the late

1960s. PCP use steadily declined over the next few decades, but recent data suggests there is resurgence in its use. The Drug Abuse Warning Network (DAWN) has presented data indicating that since 1999, there has been a general increase in PCP related visits to Emergency Departments.

All blood samples collected from impaired drivers are screened for ethanol and in those cases where ethanol concentrations are below 0.08 and drugs are suspected, a drugs abuse panel may be requested by the submitting agency. ELISA screening (Venture Labs, Inc.) was performed for amphetamine, barbiturates, benzodiazepines, cocaine, fentanyl, methadone, methamphetamine, opiates, oxycodone, phencyclidine, propoxyphene, and tricyclic antidepressants. Screened positives are confirmed by GC-MS.

In 2005, the SF-OCME's toxicology laboratory investigated 209 cases of suspected driving under the influence of drugs and 3 were positive for PCP (an incidence of 1.4%). In 2006 there were again 3 positive PCP drivers out of 183 submitted cases (an incidence of 1.6%) and in 2007 there were 6 PCP positive cases out of 170 submitted (an incidence of 3.5%). Reported here is the data from 13 PCP positive drivers, who were arrested for drug impaired driving. They were predominantly male (92%), had a mean and median age of 40, and in 62% PCP was the only psychoactive drug detected. The mean PCP concentration was 0.09 mg/L (range (0.03 – 0.20 mg/L). PCP positive drivers were significantly impaired with marked sedation, slurred speech, and when performed, subjects did poorly on field sobriety tests.

The incidence of driving under the influence of PCP in San Francisco is low but appears to be increasing (1.4% in 2005 to 3.5% in 2007), at the same time that the number of drivers for whom blood was submitted to the laboratory declined. The average age of PCP drivers is higher than the average age of other drug impaired drivers and higher than PCP impaired drivers reported from other jurisdictions. The drug concentrations appear to be higher in San Francisco than those reported in other studies. In conclusion, PCP continues to be found in San Francisco drivers arrested for DUID, thus making it important to continue screening suspected drug impaired drivers for PCP as they tend to be both severely impaired and have little or no ability to safely operate a motor vehicle.

PCP, Impaired Driving, San Francisco

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