

WORKSHOP: DESIGNER DRUGS

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Introduction

“Designer drugs” are not new. Analogs of amphetamine, DMA, DOM, DOB, MDA, MDMA, and TMA, appeared in the 1960s and were widely used and abused. Phencyclidine analogs appeared in the 1970s. These drugs were taken in milligram amounts and we could usually find them in the blood following a single dose.

Then as we were ready to usher in the 1980s, a new drug problem surfaced in Orange County, California where I serve as toxicologist for the Sheriff and Coroner. Just several days after Christmas 1979, two deaths occurred in two different cities in the county which appeared to the investigators to be just two more heroin deaths. Syringes and other paraphernalia were found by the bodies and both had histories of heroin use. Packets of white powder resembling heroin were found and submitted to the laboratory. Using our routine methods for the analysis of such samples, including gas chromatography/mass spectrometry, we failed to detect any drug. We never suspected that a drug so potent that microgram doses could kill was available on our streets. Still other deaths followed from the use of this drug later identified by chemists at the Drug Enforcement Administration’s Special Testing and Research Laboratory as methylfentanyl. Dr. Gary Henderson developed methods for the determination of this analog of fentanyl from biological specimens and has analyzed every fatal case occurring in California. I am not sure more than several cases have occurred outside our state. We are fortunate to have Dr. Henderson to discuss his work.

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