K47 A Decade of Deaths in the OC Where Drugs Were Detected

Ines B. Collison, PhD, Orange County Sheriff-Coroner's Office, 320 North Flower Street, Santa Ana, CA 92703; Wayne Moorehead, MS, 320 North Flower Street, Santa Ana, CA 92703; Robert D. Bunney, BS, Terry L. Baisz, BS, and Jan C. Jones, BS, Orange County Crime Lab, 320 North Flower Street, Santa Ana, CA 92703; Jennifer Harmon, BS, Orange County Sheriff – Coroner's Office, Orange County Crime Lab, 320 North Flower Street, Santa Ana, CA 92703; and Robin L. Kott, DVM, Mary J. Stanford, BS, Nick E. Casassa, BS, Chelsea E. Johnson, Stacy A. Wilkinson, BS, Taylor R. Wilkinson, and April C. Denison, BS, Orange County Crime Lab, 320 North Flower Street, Santa Ana, CA 92703*

After attending this presentation, attendees will understand the compilation of information assembled from the last 10-years of postmortem cases where drugs were present. The attendees will be introduced to the use of the compilation involving cases where drugs were both associated and not associated with the coroner cause of death.

This presentation will impact the forensic science community by introducing a supplemental set of data to the currently used texts and references. The data summarizes the recent decade (2000-2009) in Orange County, California, where drugs were present in postmortem cases. The compilation of drug levels and associated types of death will provide an additional resource for toxicologists during examination and comparison against related casework.

Many current references used by toxicologists have limited numbers of subjects in order to interpret drug levels associated with postmortem cases. These references include levels from clinical and hospital submissions involving relatively few subjects or cases. To supplement this data, a compilation of postmortem investigations where drugs were detected during the 2000 to 2009 period was initiated. The results will be presented from cases involving trauma, natural death, overdose of the drug of interest, and poly-drug deaths for 52 of the most common drugs in Orange County, California (population 3 million). Furthermore, information is included from central blood, peripheral blood, and where possible, liver and brain tissue. In some of the natural and trauma cases where the drug was not the cause of death, liver or brain tissue levels are included. This additional information can assist in

cases where blood is not available. Not included as a specific drug are alcohol and carbon monoxide, but these were included in the classification of poly-drug cases. The database will include half-life, structure, and other reference material for convenience, when available from literature sources.

Toxicology, Drug Level, Database

 ** Presenting Author*