



### **G49 A Comparison of Drug-Related Deaths in Tarrant County, Texas, With Law Enforcement Seizures of Illicit Substances Over a Similar Time Frame**

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After attending this presentation, attendees will have an awareness of the most recent pattern of abuse of illicit substance use in Tarrant County and understand which substances are responsible for the most lethal intoxications in this Texas county.

This presentation will impact the forensic science community by sharing recent information on substance abuse and lethal intoxication in one community. It should also encourage similar studies and the sharing of this information between law enforcement and forensic laboratory personnel.

**Hypothesis:** There is a change in the pattern of drug-related deaths and substance abuse in Tarrant County.

**Methods:** Information covering the last twelve months, from three laboratories which do testing for law enforcement agencies in Tarrant County, Texas have been gathered and synthesized. These laboratories perform toxicological analysis on autopsy fluid and tissue, and on evidence seized by law enforcement officers. The results and pattern of substances in fatal intoxications and in drug seizures over a related period of time have been compared.

**Results:** Tarrant County is a Texas county with a population of approximately 1.7 million which includes its largest two cities, Fort Worth and Arlington which have populations of approximately 650,000 and 650,000 respectively. The county covers an area of 897 square miles, over thirty incorporated cities and towns and covers urban and rural territory. The demographics of the population include a diverse racial and age makeup and includes more than fifteen different school districts. The Tarrant County Medical Examiner's Office, along with two regional labs serves over 100 county law enforcement agencies. All three labs have cooperated to produce this data.

Although there are differences in the statistics gathered by each laboratory, all have seen a distinct change in the pattern of drug abuse over the last few years. These changes include the emerging popularity of certain prescription drugs as well as illicit drugs, and the appearance of new designer drugs such as "cheese", benzylpiperazine (BZP), 3-trifluoromethylphenylpiperazine (TFMPP) and others. The three laboratories serve different size towns and cities and the drugs seized from these communities follow certain trends, so the laboratories see a different spread of cases in seizures from the small towns than in seizures from the larger communities. In the small towns, law enforcement seizures tend to yield the highest incidence of methamphetamine, ecstasy and pharmaceuticals. The larger towns and cities' cases more frequently involve cocaine and heroin. These findings are consistent with national reports.

**Conclusion:** The pattern of drug-related deaths and abuse of illicit substances has changed through the years. This study reports some of the changes seen recently. These include the increase in popularity of certain prescription drugs and the appearance of "new" drugs of abuse and a change in the drugs responsible for acute intoxication and fatal overdose.

**Substance Abuse, Lethal Intoxication, Illegal Substances**