

THE NUMBERS IN PERSPECTIVE

The largest number of propoxyphene-related deaths in any year in Oregon was thirty-nine (39), occurring during fiscal July 1977 to 1978. The population of the state is approximately 2,000,000 representing an incidence rate of 2 per 100,000 population. This is approximately one-third the homicide rate for the state.

Multnomah County includes the city of Portland and is the state's largest metropolitan area. The incidence of fatal propoxyphene abuse in Multnomah County is greater than the state at large. During the July 1977 to July 1978 year, almost one-half as many individuals died propoxyphene-related deaths as succumbed to homicidal violence.

DEATH INVESTIGATION IN OREGON

Oregon has a state-wide Medical Examiner System responsible for the investigation of violent and unexplained deaths throughout the state. This is in contradistinction to states retaining an elective coroner system in which frequently unqualified and untrained individuals are responsible for directing the death investigation program in an individual county.

Each Oregon county has an appointed trained physician responsible for the investigation of violent and unexplained deaths in that county. The program is under the state-wide control of two Board Certified Forensic Pathologists in Portland. All Medical Examiner cases are reviewed by one of the state pathologists.

Suspected drug-related deaths fall under the State Medical Examiner's Law and must be investigated by the physician-medical examiner in charge. This is true whether the death occurs at home or in a hospital. The medical examiner or his trained deputy visits the death scene, obtains a history, seizes medication and backchecks prescription dates, number of pills, etc., with the prescribing physician and the pharmacy. A complete postmortem examination is conducted by a certified pathologist and body tissues and fluids obtained for toxicologic analysis.

Drug analyses are done by the Department of Toxicology at the University of Oregon Medical School, under the direction of Dr. Jack Aitchison, a Forensic Toxicologist. The laboratory is equipped with the most advanced instrumentation, including a gas chromatograph/mass spectrograph set-up. Only a handful of laboratories on the west coast possess this degree of sophisticated instrumentation.

Following the completion of the background investigation, autopsy and toxicology studies, the medical examiner comes to a conclusion about the cause and manner of death and signs the death certificate.

SUICIDE, ACCIDENT OR UNDETERMINED?

Most fatal propoxyphene overdoses fall into three categories, and I will discuss each briefly in light of my experience as a Forensic Pathologist and Medical Examiner in Oregon.

Suicides.—Obviously, a person bent on destroying himself can take an overdose of almost anything. The short-acting barbiturates remain the drugs of choice in most suicides in Oregon, and deliberate self-destruction by propoxyphene is not common. I realize this conflicts with the Journal of Forensic Sciences article, Volume 21, No. 4 by Finkle-McCloskey, et al., in which they surveyed propoxyphene deaths from several jurisdictions and concluded that approximately 45 percent of these overdoses were of suicidal manner. I believe this conclusion is inaccurate because of incomplete toxicologic data. Propoxyphene is broken down to norpropoxyphene by the liver. The authors surveyed one thousand twenty-two (1,022) propoxyphene-related deaths, and the concentration of norpropoxyphene in the tissues was determined in only twenty-two. Experience in Oregon suggests that the relative concentrations of norpropoxyphene and propoxyphene in the tissues is of vital importance in distinguishing between suicidal and accidental manner of death. Between 20 and 25 percent of propoxyphene-related deaths are considered suicides. An approximately equal percentage of propoxyphene-related deaths were signed as "manner undetermined." This simply means that following thorough investigation, autopsy and toxicologic examination, the medical examiner was unable to determine whether the death represented an intentional act or an accidental overdose.