Chronic propoxyphene use sometimes results in physical and psychological dependence of a type similar in nature but not degree, to that produced by morphine. Intravenous "street" use by drug addicts was popular in the late 1960's but waned, particularly because of its ability to cause vascular and other tissue destruction, and because of formulation changes in the product.

This pattern of abuse resulted in overdose deaths that resembled those seen with heroin and methadone, for example, respiratory de-

pression and pulmonary edema.

As a result of these problems, DEA placed it under schedule IV of

the Controlled Substances Act (CSA) in 1977.

Our analysis of the available data on propoxyphene fatalities shows that the majority of associated deaths occurred because of deliberate overuse or abuse, as shown in the two tables in appendix B. Propoxyphene is one of the most frequently used drugs in suicides and suicide gestures; in absolute incidents it follows only the barbiturates and nonbarbiturate sedative-hypnotics in associations with drug-induced suicide. However, when viewed in relation to the number of prescriptions issued, the relative number of deaths from propoxyphene is lower than that for a number of other drugs.

We know of no cases at present in which death was caused by propoxyphene products alone when taken in customary doses and in

which neither alcohol nor tranquilizers were also involved.

There are, however, a number of "accidental" deaths which have apparently occurred as a result of the consumption of propoxyphene in quantities smaller than those used in suicide, yet still in excess of recommended therapeutic dosage and usually combined with alcohol and/or

tranquilizers.

Mr. Chairman, let me emphasize that mentioned in this chart, combinations of agents are often involved in these deaths. There is no implication because propoxyphene is mentioned in a coroner's report or in an emergency room report that it is, in fact, the cause of death. It may be a participant in a combination death or might, indeed, have

little or nothing to do with it.

Senator Nelson. In the testimony last week, one of the witnesses made the point that many laboratories across the country lack the ability to detect and measure the presence of propoxyphene in the blood with accuracy at either low or lethal concentrations. The witness said that means many cases of propoxyphene overdose are probably missed. Where the drug is established as a cause of death, there is the question of classifying the death as accidental or suicidal or, failing such judgments, as undetermined.

However, the forensic pathologist from Oregon took a view that was opposite from yours and several other witnesses who had said it was the intentional overdose that was causing deaths; people intending to commit suicide. He took an opposite view, that that was not the case.

He thought well over 50 percent were accidental.

Are you familiar with his testimony on that point?

Commissioner Kennedy. Yes; in a general way I am, Senator Nelson.

At the risk of responding at tedious length, let me begin by saying it is not an easy problem. First of all, the measurement of blood pro-