Senator Nelson. Let me interrupt you. I thought the first figure was 30 and the combination deaths were 25. That ought to be 55, not 65.

Dr. Finkle. That is correct, Senator.

In fact, in a number of the mixed drug deaths the propoxyphene was present only in small, therapeutic amounts and was only incidental.

Part of the epidemic of propoxyphene deaths being reported is that until fairly recently many toxicology laboratories were deficient in their ability to detect propoxyphene. Therefore, such deaths were being missed for many years. Some of the cases in which the propoxyphene was taken intravenously were considered as morphine deaths. To go on:

I am afraid that I also doubt your contention on page 2 of your letter that propoxyphene was associated with more deaths than heroin/morphine in the first half of 1977.

While methods of deaths from propoxyphene are readily available and used by toxicology laboratories, many of these laboratories are unable to detect morphine in the blood. Thus, they will miss rapid deaths from morphine or heroin injections and if so, and some propoxyphene is found they may attribute such deaths to propoxyphene rather than morphine.

I want to include this letter because Dallas was part of the followup study that I conducted. Essentially, the facts that are in this letter are supported by my findings when I went to Dallas and examined their cases file by file, and I would like to further state that in my opinion the medical/legal investigation system in Dallas City and County is one of the best in the country and that their toxicologists and their toxicology laboratory certainly ranks in the top three or four in the country.

I ended my statement by saying that the current trend indicates a decrease in propoxyphene cases and that this is important. Further, it

is clear that suicides continue to dominate in these cases.

Several questions must be addressed. Most victims are suicides; can

legislation prevent suicidal ingestion of multiple drugs?

What needs to be done to better understand the toxicology of multiple drug usage? Research is desperately needed in this area. What is the role of alcohol—the drug of abuse and death—in combination with propoxyphene?

If this analgesic is removed from medical use, what will take its

place?

Are there safe, toxicologically benign alternatives? This is a critical question to be answered before any precipitant action is taken. Few medical-science problems are solved by negative action; there is need to maximize the medical assets of propoxyphene and minimize its liabilities through decisions based on clinical and pharmacological understanding, and with a refined, focused system designed to care-

fully monitor its performance prospectively.

The Center for Human Toxicology staff have carried out retrospective studies at great labor and cost on four or five different agents to date. If only there were established a refined system of monitoring these drugs and some other like-drugs prospectively as they were used in the medical context by physicians and patients, then this kind of retrospective panic data gathering with all its loose ends would not be necessary, and we would be in a much better position to provide your committee, FDA, and other agencies with the kind of information you truly need.