cent decline in propoxyphene-related deaths in Oregon was due to educational efforts and to what he called a "media blitz." A recent survey, conducted by IMS at Lilly's request, shows that 88 percent of physicians are aware of the warnings regarding the additive effects of alcohol and other central nervous system depressants when taken with propoxyphene.

Lilly has examined the results of Dr. Finkle's study and the data from DAWN in an effort to determine the reasons for propoxyphene abuse. This examination indicates, contrary to the assertions that have been made in these hearings, that propoxyphene-related deaths seldom result from accidents, abuse for psychic effects, "experimentation," or similar misuse. Instead, they are the consequence in the great majority of cases, of deliberate, suicidal motivation. There is widespread agreement that suicides are under-reported.

The DAWN medical examiner reports officially classify about 42 percent of propoxyphene-related deaths as suicides. Several factors indicate that these reports substantially understate the actual incidence of suicides. For example, on a city-by-city basis, the incidence of all propoxyphene-related deaths (whether officially attributed to suicide, accident, or other causes) is significantly correlated with overall suicide rates in those cities.

An evaluation of laboratory data from DAWN reports shows that, in a large proportion of cases not officially described as suicides, blood, or tissue concentrations of propoxyphene were detected that represent a quantity of drugs that could not reasonably have been ingested by accident. Dr. Finkle's study shows that the great majority of propoxyphene-related deaths involve persons with a history of alcoholism, emotional problems, psychiatric treatment, or a record of self-destructive behavior. Dr. Hudson's conclusion, reported to the subcommittee on Wednesday, is consistent with this information. He believes that as many as 80 percent of the propoxyphene-related deaths in North Carolina are suicides. In short, the facts do not support the contention that a significant number of propoxyphene-related deaths are accidents.

Nor do the facts support the contention that the deaths result from the accumulation of the metabolic product nor-propoxyphene in patients who take normal doses of propoxyphene over a period of time.

Lilly has conducted extensive studies of the manner in which the body metabolizes propoxyphene and the effects that the drug's metabolic byproducts can have. Those studies are summarized in detail in a memorandum we have submitted to the chairman of this committee.

The nor-propoxyphene metabolite has little of the central nervous system depressant action of propoxyphene, 1/20th to 1/40th, depending on the assay method used, and there is no reason to believe that nor-propoxyphene significantly increases any additive central nervous system depressant effects of alcohol or other drugs.

Nor-propoxyphene has local anesthetic properties which have effects on electroconduction in the heart muscles of laboratory animals that can be detected using extremely sensitive test methods. Many other drugs share these properties. Clinical observations of humans receiving propoxyphene in recommended doses—and in some cases, doses far in excess of the recommended dose—have shown no change in heart action, or in the electrocardiogram.