

**STATEMENT OF SIDNEY M. WOLFE, M.D., PUBLIC CITIZEN'S
HEALTH RESEARCH GROUP**

Dr. WOLFE. Thank you for the invitation to discuss our petitions to ban or severely restrict the use of propoxyphene, most commonly known as Darvon.

In the November petitions, we pointed out that Darvon led all other prescription drugs in the annual number of drug deaths, and, as was pointed out by N. Kozel of the National Institute for Drug Abuse, Darvon is probably related to even more deaths per year than heroin and morphine combined.

Since the original petitions, we have obtained more information, particularly about the toxicity in animals and humans of propoxyphene and especially its main metabolite, into which the body changes it, nor-propoxyphene.

We have also learned that a substantial portion of Darvon deaths are not due to suicide but are accidental and often occur in people chronically using the drug for pain or, in some cases, for its euphoric effects.

When people use propoxyphene, the drug is metabolized by the liver to nor-propoxyphene.

the metabolite nor-propoxyphene, because the person did not live long it takes to get to half the maximum concentration in the blood), is only 12 hours, the main metabolite, nor-propoxyphene, stays around much longer, having a half-life of 38 hours.

Because of this long half-life, people using Darvon on a chronic basis accumulate large amounts of the metabolite nor-propoxyphene in their blood.

Much of the early human toxicology on propoxyphene looked just at blood levels of the drug itself and unless the blood level was one or two micrograms per milliliter of blood, or more, the death was often not attributed to propoxyphene.

In cases of suicide where death occurs shortly after ingestion of sometimes 10 or 20 pills, the blood propoxyphene level is, in fact, usually above 1 or 2 micrograms per milliliter with much lower levels of the metabolite nor-propoxyphene, because the person did not live long enough to convert the drug into the metabolite.

In chronic users, however, there is much more nor-propoxyphene than propoxyphene in the blood. Someone regularly taking as little as two pills—65 milligrams per pill—three times a day can get a blood propoxyphene level of 0.68 microgram per milliliter, but a nor-propoxyphene level of 1.2 micrograms per milliliter.¹

A cancer patient, chronically using two 65 mg. pills every 4 hours—recommended dose in 1 pill every 4 hours—just twice the recommended dose, had a propoxyphene blood level of 0.87 microgram per milliliter and a nor-propoxyphene level of 3.1.¹

The fact that people using Darvon at or slightly above the recommended dose can get nor-propoxyphene blood levels of 1 to 3 micrograms per milliliter is particularly alarming in view of the following findings:

¹ Verbeley and Inturrisi, *J. Chromatography* 75:195, 1973.