

Letter to the Editor

Sir:

Medical examiners are all too familiar with aerosols as a cause of death of boys—and a few girls—who seek a thrill or “high” by inhaling them after discharging a pressurized deodorant, air freshener, or whatever into a bag. The same medical examiners may not be aware that aerosols or even sprays can be a cause of death when they are used excessively but with no intention of misuse and with no intention of seeking a thrill.

Evidence that aerosols may be dangerous even without “sniffing” was found in a study of deaths in 1969 associated with pesticides. Examination of death certificates and correspondence with the physicians who had signed them showed that there were three deaths in that year clearly caused by a pesticide formulation but entirely unexplained by the active ingredients. I was consulted about a similar situation in another year. All four cases were consistent with death from cardiac arrhythmia following sensitization of the heart, and, in fact, arrhythmia was observed medically in two of the cases. In one, defibrillation was attempted seven times. Autopsy findings in the four deaths were few but entirely similar to those in persons who have died after sniffing aerosols.

In three instances, insecticidal aerosols were applied heavily in small rooms, specifically, a camper, a trailer, and a garage. In the fourth instance, both insecticidal and repellent aerosols were applied one after the other, and at least the first was applied outdoors. The four victims were men ranging in age from 29 to 72 years. They were seeking only the control of pests, mainly mosquitoes. These cases and the circumstances surrounding them have been described in a paper published in the March/April issue of *Archives of Environmental Health* (Vol. 31, 1976, pp. 61–72). I shall be glad to send a reprint to anyone who requests it.

Because air fresheners and perhaps other aerosols may be applied in as great a volume as is used with insecticides, it seems possible that a variety of formulations containing halogenated solvents and propellants occasionally may sensitize the heart and thus lead to sudden death even though no misuse is intended.

I hope that physicians responsible for the autopsy of persons who have died suddenly and without evident cause will keep in mind the possibility of aerosol deaths and write to me if they find an instance in which intentional sniffing was not involved.

Wayland J. Hayes, Jr., M.D., Ph.D.
Professor of Biochemistry
Center in Environmental Toxicology
Department of Biochemistry
School of Medicine
Vanderbilt University
Nashville, Tenn. 37232