Small Group of Substances Disproportionately Responsible for Majority of U.S. Inhalant Abuse Deaths

A small group of substances were disproportionately responsible for the majority of deaths resulting from the intentional inhalation of volatile substances, according to data from the Toxic Exposure Surveillance System of the American Association of Poison Control Systems. Between 1996 and 2001, 11,670 cases of volatile substance abuse (VSA) were reported. Three categories of drugs—gasoline, air fresheners, and propane/butane—comprised 53% of the total inhalant cases, yet were responsible for 82% of deaths. Gasoline was the most commonly reported abused substance (41%) as well as the leading cause of death (45%). Air fresheners and propane/butane each made up only 6% of all cases involving VSA, yet were responsible for 26% and 11%, respectively, of deaths. The majority of volatile substance abusers were youths age 13 to 19 years (54%) and 6 to 12 years (15%) (data not shown). According to the authors, “It is imperative that we continue to educate the public and healthcare professionals regarding risks of VSA and hopefully impact the incidence of VSA” (p. 156).

Percentage of Total Volatile Substance Cases and Fatalities Reported to U.S. Poison Centers, by Top Five Substances Abused, 1996-2001
(N=11,670)

![Percentage of Total Volatile Substance Cases and Fatalities Reported to U.S. Poison Centers, by Top Five Substances Abused, 1996-2001](image)

**NOTE:** Cases included in the sample had to meet the following criteria: 1) the reason for exposure was intentional, 2) the route of exposure was inhalation, and 3) the substance was nonpharmaceutical.