ple ingestions. Mean duration of stay was 1.6 days with 50% being discharged directly home. In 222 adults ingesting 316 toxins, there was a male:female ratio of 1:1.25, a mean age of 34. 85% were suicidal in nature with tricyclics, benzodiazepines & ethanol accounting for 56% of admissions and 67% of complications. Complication rates for all ingestions included: coma (57.6%), seizures (9%), arrest (7.5%), pulmonary (12%), cardiovascular (13.5%). Mean duration of stay was 1.9 days with 31% being discharged directly home. Although ASA & theophylline ingestions accounted for 5% & 2.5% of admissions respectively, their mortality rates were 17% of each compared to 1.6% for tricyclics. Of the 5 deaths, one ASA & one theophylline resulted from immediate drug toxicity. The other 3 (tricyclic, ASA, hypoglycemic agent) were due to sepsis as a delayed complication of coma. While ICU supportive care generally results in favorable outcomes, there remains a significant risk of mortality associated with certain substances & prolonged coma.

81. THE CUTANEOUS IRRITANT AND SENSITIZING POTENTIAL OF 2-ETHYL-1,3-HEXANEDIOL: Ballantyne B, Reed ML, Napoli D, Reardon RC. Applied Toxicology Department, Union Carbide Corporation, Danbury, CT 06817 and TKL Research Inc., New York, NY 10022.

2-Ethyl-1,3-hexanediol (EHD) is used as an insect repellant. The major acute hazards are from swallowing and eye contact [Vet Human Tox., 27, 491 (1985)]. Single occluded skin contact in rabbits produced erythema and edema. The potential for skin irritation and immune-mediated hypersensitivity was investigated in human volunteers. A primary irritation patch test (30 subjects) showed barely perceptible erythema in 6, and definite erythema in 1 (with occlusion). For cumulative irritation, 15 patches of EHD were applied over 3 weeks. With occlusion, 22/27 subjects had minimal erythema, 2 definite erythema, and 1 definite erythema with edema. During the induction phase of a repeated insult patch test, 4/203 showed just detectable to definite cumulative erythema. At challenge, 2 subjects showed mild erythema. On rechallenge 1 gave no response, and the other a variable erythema. EHD produces marginal primary erythema and minor cumulative skin irritation. The evidence for sensitization is equivocal, but if it occurs, the activity is weak with respect to allergic contact dermatitis.

82. ACUTE TOXICITY AND PRIMARY IRRITANCY OF PROPOXYPROPANOL (PP). Ballantyne B, Myers RC, Losco PE. Bushy Run Research Center/Union Carbide Corporation, Export, PA 15632 and Danbury, CT 06817.

PP (CAS No 1569-01-3) is a widely used industrial solvent whose acute toxicity and primary irritancy was investigated.

LD_{50} values were as follows for PP:

Peroral (rat):	Male	4.92 (3.58-6.78) ml/kg
	Female	2.83 (1.61-4.98) ml/kg
Percutaneous (rabbit):	Male	4.29 (2.90-6.34) ml/kg
	Female	4.92 (3.58-6.78) ml/kg

Most deaths occurred within 1.5 to 24 hr postdosing. Signs of toxicity included comatose appearance and unsteady gait, with recovery in survivors by 1-2 days. A 6-hr exposure of rats to a statically generated saturated vapor atmosphere caused blepharospasm, ataxia, and conjunctival hyperemia, with recovery by 24 hr. By 4-hr occluded skin contact (rabbits) PP caused slight to moderate erythema and edema. Rabbit eye irritation tests (0.005-0.1 ml) showed a dose-dependent moderate to severe conjunctivitis and just detectable corneal injury. Thus, PP is of moderate acute peroral and percutaneous toxicity, irritant and narcotic by single high vapor concentration exposure, and a moderate skin and eye irritant. The irritant characteristics of the material suggest a potential for lung injury by aspiration.

83. NEUROTOXICITY AND BEHAVIOR ABNORMALITIES IN A COHORT CHRONICALLY EXPOSED TO TRICHLOROETHYLENE. Bernad PG, Newell S, Spyker DA. Department of Neurology, George Washington University and Neurology Services, Inc.; University of Michigan, Ann Arbor, MI; University of Virginia, Charlottesville, VA.

We examined 22 of a 28 persons cohort living in a Michigan town and exposed for 5-20 years to low levels of trichloroethelyne (TCE) via their well water (8-14 ppm). All patients completed a standard neurotoxicity questionaire, exam by a neurologist, and a computer controlled current perception threashold (CPT) measurement. CPT showed hyperesthesia in 21 of 22 patients tested.

For the 10 adults prevelent neurologic symptoms included fatigue, somnolence, lack of energy, numbness and tingling in 10/10, headache and dizziness in 8/10, and tremor in 4/10. Half (5/10) had been diagnosed as thoracic outlet syndrome and/or carpal tunnel syndrome (3 operated on), Bells palsy in 1/10, and 3/10 were also evaluated for cardiac arrhythmias.

Among the 12 children, 9 had major behavioral difficulties including poor learning (repeating grades), aggressive behavior, and poor attention span. One child was born with multiple congenital abnormalities.

We were impressed with abnormalities on standard tests but even more with general lack of well being in this group. These findings suggest low level chronic exposure to this ubiquitous solvent may pose a significant health risk and merit further study.

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84 ANALYSIS OF SEXUAL DISPARITY OF VIOLENT BEHAVIOR IN PCP INTOXICATION Leikin JB, Weiler M, Santangelo, MA, Marrs Simon F, Perry MT. University of Illinois, 840 S. Wood St,. Chicago, IL 60612

We performed a retrospective chart analysis of 33 patients with an Emergency Department discharge diagnosis of phencyclidine (PCP) intoxication. All 33 cases presented to the Emergency Department between November 1986 and April 1987. Thirty of the 33 patients (91%) were classified as mildly intoxicated (per clinical symptoms as described by Aronow and Done) while the remaining 3 patients (9%) were moderately intoxicated. Two of the patients (6%) required benzodiazepine therapy for agitation while an additional 3 patients (9%) required haloperidol for psychotic symptoms. Twenty-three patients (70%) did not require any medication.

Of particular interest was our finding that 11 of the 27 males (41%) required leather restraints for agitation or violent behavior while none of the 6 female patients required leather restraints (Fisher's exact test p=.00078). While nursing perception of physical strength may be a confounder, level of agitation and violent behavior is our primary indication for use of restraints. We believe that there is a sexual disparity in level of agitation and violent behavior induced by PCP. We hypothesize that this may be due to pharmokinetic factors (such as differences in body fat distribution between the sexes) or biological differences in the central nervous system.