

28
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- In the German railway system carbon tetrachloride (CCl_4) is widely used for cleansing purposes and as a fire extinguisher. In telephone installations, where a non-inflammable solvent is necessary in the event of sparking of the relay circuit, automatic exhaust ventilation is provided, but when the work is done by hand the operator's nose and mouth are about 30 cm. from the vessel containing the solvent and the movement of the brush cause a fine spray. The solvent, under the harmless-sounding name of Benzinoform, is sometimes used carelessly. The case is quoted of a foreman aged 54 years using CCl_4 in these conditions for 4 years. He complained of headache of a year's duration, and during clinical examination, of colic. The liver was enlarged and soft, and under laparoscopy yellow-red, with indefinite lobular markings. Serum transaminase was increased and there was a slightly increased retention of bromophthalein, but electrophoretic and serum lability tests showed no deviation from normal. After treatment, liver biopsy 14 months later showed a fatty liver; there was no disturbance of renal function. The atmospheric concentration of CCl_4 during cleaning at the breathing level was 25 ppm. It is now suggested that for these purposes, CCl_4 shall be substituted by benzine, perchloroethylene or a mixture of these. Floor polishes containing CCl_4 are no longer used in the German railway system. In the cleaning of oxygen containers, fittings and pipes, it is suggested that in spite of the explosive properties of trichloroethylene it is preferable to CCl_4 .
-- Cond. from Bull. Hyg.

- Studies were carried out to determine the health hazards associated with the use of two of the more toxic chlorinated hydrocarbon pesticides, endrin and dieldrin, under conditions of some of their agricultural uses in the Pacific Northwest. Dermal exposure of spray-equipment operators was determined by exposing absorbent alpha-cellulose pads on various parts of their bodies for one or more complete cycles of spraying or dusting. Contamination of hands was measured either by rinsing in alcohol in a polyethylene bag or by swabbing with alcohol-impregnated gauze swabs. Respiratory exposure was estimated from the contamination of filter pads of respirators worn during pesticide application operations. The calculated exposure to endrin while dusting potato fields was 1.8% of a toxic dose per hour of exposure. While spraying endrin on orchard cover crops for mouse control, and while spraying dieldrin on pear orchards, the calculated exposure was only 0.2% and 0.3% of a toxic dose per hour, respectively, for each of the operations. Added exposure to endrin as a result of smoking while spraying orchard cover crops was found to be no more than 0.002 mg. per cigarette, even when cigarettes were handled with hands wet with the dilute spray. Endrin residues on sprayed orchard grass and fescue were very persistent during cool conditions encountered in fall and winter months. Grass sprayed in late October at the recommended dosage, resulting in initial residues of 60 to 240 ppm, still showed 25 to 100 ppm 5 months later. During this period, the grass remained somewhat palatable to livestock, but animals, especially milk cows, should not be allowed to feed on such treated cover crops.
- Cond. from authors' summary

- A severe case of occupational parathion poisoning occurred in a tree sprayer after 7 years of intermittent exposure with no reasonable explanation of exposure sufficient to cause illness other than exposure by the oral route. The paranitrophenol excretion pattern was consistent with this premise. This case is believed to be the first that has been reasonably established as oral occupational poisoning associated with parathion. A cholinesterase reactivator, 2-pyridine aldoxime methiodide, was used, with excellent results, to supplement atropine therapy, which had failed to control convulsions or to restore neuromuscular function. The administration of succinylcholine in a dosage usually producing only short-term, incomplete muscle relaxation in a normal person resulted in profound, prolonged flaccidity and apnea in this patient with prior cholinesterase depletion. Neuromuscular blockade was at least additive

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