

## Methylene Chloride: OSHA Sampling Intensity and Results

Adam M. Finkel, Sc.D., CIH

Methylene chloride (dichloromethane) is a solvent used to strip paint, degrease metal, glue urethane foam products, and in other commercial applications. About 250,000 workers, in more than 90,000 establishments, are exposed to MC. In 1997, OSHA issued a final regulation lowering the allowable concentration of MC in the workplace from 500 parts per million (ppm) to 25 ppm. At the new exposure limit, OSHA estimated that workers exposed for a lifetime would face about 3 chances per 1000 of developing cancer as a result.

Presumably, OSHA would be inspecting many more facilities looking for MC overexposures in the years after the new regulation took effect than it was beforehand. And if the regulation was achieving its needed purpose, the air concentrations found would be declining. Preliminary analysis of the complete OSHA sampling database suggests that neither of these assumptions holds true:

	1995	2007 (first 9 months)
# of samples taken	170	178
# of establishments visited	27	28
median MC concentration	10 ppm	21 ppm
# of establishments averaging > 100 ppm	5/27	8/28