

## 19. How OSHA Health Standards Were Born

OSHA standards did not simply come from impartial scientists who were deeply concerned about our health. In fact, many of the standards were adopted from unpublished industry studies (which means nobody could verify them). Before OSHA had begun setting standards in 1970, threshold limit values (TLVs) were established by the American Conference of Governmental Industrial Hygienists (ACGIH). Despite the governmental sounding name, this is not a government organization.

Every year since 1946, ACGIH has published an annual report of TLVs. These TLVs were never meant to be mandatory standards; instead they were workplace exposure guidelines to be followed by government contractors. In 1971, OSHA adopted nearly all of the ACGIH 1968 standards. In 1989, OSHA updated the exposure standards based upon the 1987 ACGIH TLV list. One main problem with that process was that many of the ACGIH standards are based heavily or entirely on company information (the only information available at the time). A second major problem is that the standards were often modified to include economic considerations, where the final level of exposure takes into account what companies say is affordable.



Source: B. I. Castleman and G. E. Ziem, "Corporate Influence on Threshold Limit Values," *American Journal of Industrial Medicine* 13: 531-559, 1988.

## 20. How OSHA Standards Are Changed

Standard setting by OSHA is a political process. It usually takes a very strong effort from worker and public interest groups to get any of the standards changed. Often, power -- not just science -- determines which levels are changed and how much they change. (See case study below.)

### The Benzene Story

- 1974 When disturbing levels of leukemia appeared among Ohio tire builders exposed to benzene, NIOSH issued a criteria document urging further investigation.
- 1976 With more evidence from Ohio, NIOSH recommended that benzene be added to the list of carcinogens. NIOSH urged OSHA to issue an emergency temporary standard reducing the permissible time-weighted exposure limit from 10 ppm to 1 ppm, with a 5 ppm limit over any 15-minute period.
- 1977 OSHA issued the emergency standard.
- 1978 The American Petroleum Institute and other industry representatives went to court to challenge OSHA's standard. The Fifth Circuit Court of Appeals overturned the standard based on employer arguments that OSHA failed to estimate the costs to industry that would result from the regulation.
- 1980 Unions appealed this decision to the U.S. Supreme Court. The Supreme Court backed the lower court's decision.
- 1983 Armed with more data from NIOSH showing that workers exposed to benzene for even brief periods were six times more likely to die from leukemia, a coalition of unions and public health groups petitioned OSHA for a new emergency standard. OSHA issued a notice of proposed rule-making, the first step in a lengthy process of issuing a new regulation. The unions accused OSHA of ignoring a six-year history of efforts to lower the benzene standard.
- 1984 OSHA rejected the coalition's petition for an emergency temporary standard. The agency promised a standard by the end of the year. Nothing happened and in December a group of unions filed suit against OSHA with the Washington, D.C. Circuit Court.
- 1986 OSHA agreed to issue a standard by February 1987; the D.C. Court accepted this.
- 1987 In September, OSHA lowered the standard to 1 ppm with a short-term exposure limit (STEL) of 5 ppm.
- 1990 ACGIH published notice of intent to change limit to 0.1 ppm.

TWA

Source: Compiled by Cate Poe from interviews with Diane Factor and Peg Seminario, AFL-CIO Health and Safety Department, and from *The New York Times*, April 23, 1983 and *BNA Reporter*, March 29, 1984.