NTP Hearing on 9th Report on Carcinogens
3rd December 1998

Ethylene Oxide

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1. Known to be a Human Carcinogen

- "There is sufficient evidence of carcinogenicity from studies in humans which indicates a causal relationship between exposure to the agent, substance or mixture and human cancer."

2. Epidemiological Data - Dr. Jane Teta

- 12 independent studies.
- 33,000 males and females; 800 cancers.
- No evidence of increase in cancer overall.
- No increase at most organ sites of interest.
- data for leukemia and lymphoma are weak and inconclusive.
- do not support an upgrade to "Known" category.

3.Cytogenetic changes in workers - Dr. Julian Preston

- Studies are small, subject to confounding, or of questionable validity for other technical reasons.
- Chromosomal changes in peripheral lymphocytes are markers only of recent EO exposure, not predictors of carcinogenicity.
- Lack of consistency of chromosomal changes with cancer epidemiology data.

4. EOIC Summary Position

- Human data do not meet NTP's criteria for "known carcinogen":
  - Epidemiological evidence is limited.
  - Human cytogenetic data are not "sufficient" evidence to infer a causal relationship.
- Ethylene oxide should remain a "reasonably anticipated to be a human carcinogen".
- Defer inclusion in 9th Report to allow adequate review