

COMMITTEE REPORT

ACOEM Reproductive Hazard Management Guidelines

These guidelines were drafted by M. Joseph Fedoruk, MD, Chairman of the American College of Occupational and Environmental Medicine's (ACOEM) Occupational and Clinical Toxicology Committee. The guidelines were reviewed, modified, and adopted by the Committee and approved by the ACOEM Board of Directors on April 18, 1994.

General Considerations

The purpose of the American College of Occupational and Environmental Medicine's (ACOEM) Reproductive Hazard Management Guidelines is to provide occupational medicine physicians, other health professionals, labor, and management with guidelines for managing potential occupational reproductive health hazards. Reproductive health hazards are defined as chemical, physical, or biological agents that can cause either reproductive impairment or adverse developmental effects. The ACOEM guidelines propose that persons responsible for workplace health and safety should assess their workplaces for potential reproductive hazards and implement appropriate responses for managing such hazards.

Reproductive toxicity can be defined as "the occurrence of adverse effects on the reproductive system that may result from exposure to environmental agents." Reproductive toxicity may be expressed as alterations to the reproductive organs and/or the related endocrine system. Developmental toxicity can be defined as "the occurrence of adverse effects on the developing organism that may result from exposure before conception (either parent), during

prenatal development, or postnatally to the time of sexual maturation. Adverse developmental effects may be detected at any point in the life span of the organism."^{1,2} Developmental toxicity can include fetal death, structural abnormalities or birth defects, and functional deficiencies or altered growth.

The ACOEM Reproductive Guidelines are based upon the following principles:

1. Reproductive health represents one of the major aspects of human life.
2. The magnitude of occupational and environmental reproductive and developmental health risks in modern society is not well characterized.
3. Scientific, epidemiological and toxicological data concerning the reproductive and developmental health risks of many chemicals, physical agents, and biological agents are limited and, in some instances, nonexistent.
4. Industrial exposure limits for most chemical agents, which have been promulgated by the *Occupational Safety and Health Act (OSHA Act)*, ie, permissible exposure limits (PELs), or the American Conference of Governmental Industrial Hygienists (ACGIH), ie, threshold limit values (TLVs), have been established without consideration of protection from adverse reproductive or developmental health effects. Consequently, compliance with the Occupational Safety and Health Administration (OSHA) or ACGIH exposure limits for many compounds does not assure protection of reproductive health.

5. Employees have a fundamental right to work in an environment that is free of significant reproductive health risks.
6. Employees have a fundamental right to know about potential reproductive health risks encountered in the workplace.
7. Reproductive policies must avoid sex discrimination and must consider potential adverse effects on males, females, and offspring. In some instances, previous reproductive policies have resulted in the exclusion of woman from jobs because of concern over fetal effects.

This report describes guidelines for occupational health professionals to manage reproductive and developmental risks and uncertainties. The guidelines have been established with the recognition that scientific data concerning the reproductive health effects of many occupational exposures is very limited, and consequently, there is considerable uncertainty about what action should be taken to adequately manage many potential workplace reproductive health hazards.

These guidelines describe measures to be used to assess the magnitude of potential reproductive risks in the workplace and options that can be taken to manage the uncertainty associated with these risks. The objective of the guidelines is to facilitate the protection of workers' reproductive health.

Reproductive and Developmental Toxicity

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