

Workplace Hazards to Reproduction and Development:

A Resource for Workers, Employers, Health Care Providers, and Health & Safety Personnel

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This booklet updates and replaces two documents published by SHARP in 1991: "Workplace Hazards to Reproductive Health – A Resource for Health Care Providers, Health and Safety Personnel, and Employers" and "Workplace Hazards to Reproductive Health – A Resource for Workers". The 1991 documents were prepared by Catherine Carr, M.S.; Mary Miller, M.N., A.R.N.P.; Eileen Kirkpatrick M.S.; Nicole Villacres; and James Hawk, J.D. The 1991 booklets were largely adapted from "Workplace Chemical Hazards to Reproductive Health: A Resource for Worker Health and Safety Training and Patient Education" and "Reproductive Hazards Training and Information Manual" produced by the Hazard Evaluation System and Evaluation Service (HESIS), California Department of Health Services, 1515 Clay Street, Suite 1901, Oakland, CA 94612. Portions of the HESIS documents were also adapted for use in this revised (1999) SHARP booklet.

We recommend two publications by the National Institute for Occupational Safety and Health (NIOSH): "The Effects of Workplace Hazards on Female Reproductive Health" (Publication No. 99-104) and "The Effects of Workplace Hazards on Male Reproductive Health" (Publication No. 96-132). These publications complement this booklet, insofar as they provide brief overviews of workplace reproductive and developmental hazards. Some graphics and portions of text were adapted from the NIOSH publications for use in this SHARP booklet.

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Executive Summary

This booklet updates and replaces two documents prepared by The Department of Labor & Industries' Safety & Health Assessment & Research for Prevention Program (SHARP) in 1991: "Workplace Hazards to Reproductive Health – A Resource for Health Care Providers, Health and Safety Personnel, and Employers" and "Workplace Hazards to Reproductive Health – A Resource for Workers."

Our goal was to provide an up-to-date review of reproductive and developmental issues in the workplace. The target audience is broad. We aimed to provide practical information to workers, employers, health & safety personnel, health care providers, and other individuals interested in this topic. The table presented at the end of this Executive Summary provides suggestions as to which sections would interest each reader group.

Readers who would prefer a relatively brief summary of these issues may be interested in two recent publications from NIOSH: "The Effects of Workplace Hazards on Female Reproductive Health" and "The Effects of Workplace Hazards on Male Reproductive Health". You can obtain these booklets from NIOSH by calling 1-800-35-NIOSH and their web site at <http://www.cdc.gov/niosh>.

The **Introduction** provides an overview of reproductive and developmental issues in the workplace.

Chapter 1, "Reproduction and Development: A Primer," provides basic background information on male and female

physiology, in addition to reproductive and developmental toxicology.

Chapter 2, "How Workplace Exposures Can Affect Reproduction and Development," describes the complexity and susceptibility of human reproductive and developmental processes. The spectrum of health problems is described and a few examples of hazardous chemicals, infectious agents, and physical conditions that can affect reproduction and development are provided.

Chapter 3, "Identifying and Evaluating Workplace Risks," provides background information and a step-by-step description of how to perform a risk assessment for reproductive and developmental health problems. Additional guidelines for conducting exposure assessments and designing appropriate intervention strategies are provided in Chapter 4.

Chapter 4, "Guidance for Health Care Providers," is designed to complement the previous chapter, by providing specific guidelines on responding to patient concerns, evaluating worker exposures, and formulating intervention strategies.

Chapter 5, "Guidelines for Workplace Health & Safety Personnel," describes approaches to reducing exposures in the workplace.

Chapter 6, "Responsibilities of Employers," describes how employers can evaluate workplace hazards, inform their employees about workplace risks, and protect them from hazards.

Chapter 7, “Focus on Selected Hazards,” provides descriptions of three topical issues in reproductive and developmental toxicology: *Ergonomic Considerations*, *Video Display Terminals*, and *Endocrine Disruptors*.

Chapter 8, “Workplace Regulations,” describes the role of the Washington State Department of Labor & Industries’ Washington Industrial Safety and Health Act (WISHA) in ensuring safe and healthful working conditions. Relevant regulations are summarized.

Chapter 9, “Workers’ Legal Rights and Responsibilities,” provides resources for employees.

“How Workers Can Protect Themselves” is a one-page fact sheet that may be copied and distributed or posted in the workplace.

“Conclusions.” Although the risks posed by most workplace agents have not been well-characterized, we suggest that work practices should be adopted that reduce or prevent exposures to any hazard.

“For More Information” provides contact information for several groups that can provide assistance in solving workplace problems. Also included are lists of databases and written references used to prepare this booklet.

The **“Glossary”** provides definitions of technical terms used in this booklet.

“Feedback” provides readers with the opportunity to let us know if this booklet was helpful.

SUGGESTIONS FOR CHAPTERS OF INTEREST TO DIFFERENT READERS

CONTENTS	WORKERS	EMPLOYERS	HEALTH & SAFETY STAFF	HEALTH CARE PROVIDERS
Introduction	●	●	●	●
Chapter 1: Reproduction and Development: A Primer	●	●	●	○
Chapter 2: How Workplace Exposures Can Affect Reproduction and Development	●	●	●	○
Chapter 3: Identifying and Evaluating Workplace Risks	○	●	●	●
Chapter 4: Guidance for Health Care Providers	○	○	○	●
Chapter 5: Guidelines for Workplace Health & Safety Personnel	○	○	●	○
Chapter 6: Responsibilities of Employers	○	●	○	○
Chapter 7: Focus on Selected Hazards	○	●	●	●
Chapter 8: Workplace Regulations	○	●	●	○
Chapter 9: Workers' Legal Rights and Responsibilities	●	●	●	○
How Workers Can Protect Themselves	●	○	○	○
Conclusions	●	●	●	●
For More Information	●	●	●	●
Glossary	●	●	●	○
Feedback	●	●	●	●
Appendix A: Classification of Workplace Hazards	○	○	●	●
Appendix B: Sample Letter Requesting Material Safety Data Sheets	○	○	○	○
Appendix C: Sample MSDS	○	○	○	○
Appendix D: Estimating Workplace Exposure	●	○	●	●
○ Suggested, but not essential reading				
● Recommended reading				