INTRODUCTION

Ergonomics has been defined as the science of fitting the task to the worker. Doing so increases the worker's physical comfort and reduces the possibility of injury. Ergonomics involves assessing biological and engineering data and using that data to make changes in the workplace that will keep work-related injuries to a minimum.

Ergonomics can save an organization money. By implementing an ergonomics program, an organization can reduce costs related to issues such as workers' compensation, staff turnover, and absenteeism. Work can also be made more efficient by workplace designs that create fewer errors.

Although workers in manufacturing are at the greatest risk, workers in libraries are at some risk because they often use a keyboard or a mouse for more than four hours a day (technical services and reference); they work with the back, neck, or wrists bent or twisted as many as two hours a day (shelvers, photocopier operators, book repairers); or they lift 50 or more pounds more than 10 times a day (receiving room).

This report focuses on preventing musculoskeletal disorders (MSDs): injuries to the nerves, muscles, tendons, and supporting structures of the body. These injuries are most often sustained by repeating the same motion throughout the workday, working in an awkward position, or rapidly moving the hand and wrist, or the repeated lifting of objects. Work in libraries often involves one or a combination of these, therefore, injuries occur—injuries that are avoidable.

Chapter 2 looks into the problem of workplace injury and includes a general explanation of ergonomics, with details about identifying and solving ergonomic problems. Chapter 3 discusses the various types of MSDs to aid in the identification and treatment of problems. Chapter 4 discusses ergonomics basics and demonstrates how to compose an ergonomic checklist for your library; such a checklist is necessary for beginning a survey of the workplace to either solve or prevent problems. Chapter 5 summarizes ergonomic standards, both American and international, to provide guidance in establishing a plan in your workplace. Chapter 6 identifies useful ergonomics products, including cost, vendors, and availability. Chapter 7 describes the components of an effective ergonomics program, providing a loose model for customization.

A glossary has been included as Appendix A, a list of sources of information as Appendix B, a directory of ergonomics consultants as Appendix C, and the ergonomic hazards checklist prepared by the Occupational Safety and Health Administration (OSHA) as Appendix D.