

CHAPTER I: INTRODUCTION

This manual seeks to increase awareness of biological hazards frequently encountered in research, clinical, and teaching laboratories at the University of Chicago (UC), and to provide guidance on recommended practices. Biological hazards include infectious or toxic microorganisms (including viral vectors), potentially infectious human substances, and research animals or their tissues, from which transmission of infectious agents or toxins is reasonably anticipated. Campus investigators contemplating research involving biological hazards or recombinant or synthetic DNA are required to register their research protocol with the Institutional Biosafety Committee (IBC) at <http://ibc.uchicago.edu/>.

The objective of safety awareness and practice is to assure laboratory personnel that—with proper precautions, equipment, and facilities—most biohazardous materials can be handled without undue risk to themselves, their associates, their families, or the environment.

This manual is intended for trained microbiologists as well as individuals handling human clinical materials in other laboratory disciplines, such as biochemistry, genetics, oncology, immunology, and molecular biology. Persons who have little microbiological training might not realize the potential hazard involved with their materials, and should seek additional information.

The safety principles described are based on sound safety practices, common sense, current data, good housekeeping, thorough personal hygiene, and tested accident-response plans. Laboratories that are well organized and procedurally disciplined are not only safe, but also scientifically effective.