

## Biological Safety

As a leading research, medical, and educational institution, The Florida State University is morally and legally obligated to provide a safe working environment for all its employees, students, and guests.

With the great diversity of activities on campus, it is impossible for any one laboratory to have defined standard operating procedures (SOPs) for every possible activity related to biological safety. For this reason, these resources have been developed to provide information that can be used to protect workers and the surrounding environment from possible exposure to biohazardous agents.

These online resources make it possible to construct a general framework that can be used by individual departments or laboratories. They are designed to provide general information applicable to most laboratories, with specific information and procedures to be added as needed for each laboratory. Implementation of these procedures is the responsibility of the Principal Investigator and depends largely on the efforts of PI's, supervisors and employees. It is essential that staff and students seek additional advice and training when dealing with biohazardous agents to assure the safety of employees, students and the surrounding community. To assist in this, the services and resources of the Department of Environmental Health & Safety (EH&S) are available.

The Biological Safety Office has developed these resources based on guidelines developed by the Center for Disease Control ([CDC](#)) and the National Institute of Health ([NIH](#)), Biosafety in Microbiological and Biomedical Laboratories ([BMBL](#)), with the endorsement of the University's Biological Safety Committee. It is intended to provide information to protect workers and the surrounding environment from possible exposure to biohazardous agents. The information also serves to protect experiments and research by controlling the unwanted spread of contamination.

The premise is that no experiment should be considered so important that it jeopardizes the well-being of the worker or the environment. The planning and implementation of safety protocols to prevent laboratory-acquired infections and to eliminate the spread of contamination must be part of every laboratory's routine activities.

The handling of biological agents and recombinant DNA requires the use of precautionary measures dependent on the agents involved and the procedures being performed. It is the purpose of these resources to provide background information and guidelines to be used in conjunction with other resources for the evaluation, containment and control of biohazardous materials in the research laboratory.

The Biological Safety Office can be reached at 644-5374 or 644-9117.

- [Glossary of Terms-Biological Safety](#)
- [Biological Safety in Research](#)
- [Biological Safety-Duties and Responsibilities](#)
- [Registration of Biohazardous Materials](#)
- [Select Agents](#)
- [Principles of Biosafety](#)
- [Biological Safety Laboratory Practices and Techniques](#)
- [Primary Barriers-Safety Equipment](#)

- [Secondary Barriers-Facility Design](#)
- [Risk Assessment](#)
- [Biosafety Levels](#)
- [Biosafety Level Criteria](#)
- [Biological Safety Personal Protective Equipment](#)
- [Laboratory Equipment and Safety Equipment](#)
  - [Biological Safety Cabinets](#)
  - [Centrifuges](#)
  - [Aerosol Creating Equipment](#)
  - [Autoclaves](#)
  - [Fumehoods](#)
- [Biological Safety Guidelines for Animal Use](#)
- [Pathogenic Organism Work at FSU](#)
- [Working with Laboratory Animals](#)
- [Human Blood and Body Fluids](#)
- [Recombinant DNA](#)
- [Field Work and Environmental Samples](#)
- [Reproductive Hazards-Infectious Agents](#)
- [Importation and Interstate Shipment of Pathogens](#)
- [Biohazard Laboratory Inspections](#)
- [Biohazard Signs and Labels](#)
- [Biological Spills, Contamination, Potential Infection](#)
- [Universal Precautions](#)
- [Biohazardous Waste](#)
- [Exposure Control Plan](#)
- [Other Biosafety Issues and Information](#)