Animal Biosafety Levels

Laboratory animal facilities are simply a special type of laboratory. As a general principle, the biosafety level (facilities, practices, and operational requirements) recommended for working with infectious agents in vivo and in vitro are comparable. In the microbiological laboratory, hazardous conditions are caused by personnel or by the equipment being used. In the animal room, the activities of the animals themselves can present new hazards. Animals may generate aerosols, they may bite and scratch and they may be infected with a zoonotic disease.

The recommendations detailed below describe common biosafety level facilities found at Florida State University. The biosafety level is based on a combination of practices, safety equipment, and facilities environments for experiments with animals infected with agents that cause, or may cause, human infection. These levels, designated Animal Biosafety Levels (ABSL) 1 and 2, provide increasing levels of protection and are recommended as minimal standards for activities involving infected laboratory animals.

The two ABSLs describe animal facilities and practices applicable to work with animals infected with agents assigned to Biosafety Levels 1 and 2, respectively. Inexperienced researchers should seek help in designing their experiments from individuals who are experienced in this special type of work.

Note that ABSL 3 and 4 guidelines can be obtained from the Biosafety in Microbiological and Biomedical Laboratories, Centers for Disease control and Prevention/National Institutes of Health.