

Biosafety Levels

Four biosafety levels (BSLs) are described in this section, which consist of combinations of the use of laboratory practices and techniques, safety equipment, and laboratory facilities. Each combination is specifically appropriate for the operations performed, the documented or suspected routes of transmission of the infectious agents, and the laboratory function or activity.

The recommended biosafety level(s) for the organism in Section VII (Agent Summary Statements) of the [BMBL](#) represent those conditions under which the agent ordinarily can be safely handled. The PI is specifically and primarily responsible for assessing the risks and appropriately applying the recommended biosafety levels. The Biological Safety Office can assist by verifying the recommended biosafety levels.

Generally, work with known agents should be conducted at the biosafety level recommended in the appropriate BMBL section. When specific information is available to suggest that virulence, pathogenicity, antibiotic resistance patterns, vaccine and treatment availability, or other factors are significantly altered, more (or less) stringent practices may be specified.

- [BSL1](#)
- [BSL2](#)
- [BSL3](#)
- [BSL4](#)

Four biosafety levels are also described for activities involving infectious disease work with experimental animals. These four combinations of practices, safety equipment, and facilities are designated Animal Biosafety Levels 1, 2, 3, and 4, and provide increasing levels of protection to personnel and the environment. (For further information refer to [BMBL](#), Section IV: Animals in the Laboratory).

- [Animal Biosafety Levels](#)
- [ABSL-1](#)
- [ABSL-2](#)