

Types of Biosafety Containment Fact Sheet

Biosafety Level (BSL1/BSL2)

The laboratory biosafety level criteria, designated in ascending order by degree of protection provided to personnel, the environment, and the community. The levels establish combinations of practices, safety equipment, and facility design requirements to address the increasing risk of handling agents requiring increasing levels of containment.

Animal Biosafety Level (ABSL1/ABSL2)

The vertebrate animal biosafety criteria which include combinations of practices, safety equipment, and facility design requirements for experiments with animals involved in infectious disease research. These ascending levels, provide increasing protection to personnel and the environment, and are recommended as minimal standards for activities involving infected lab animals.

Arthropod Containment Level (ACL1/ACL2)

These ascending levels of arthropod containment add increasingly stringent measures and are similar to biosafety levels. Each level includes a combination of practices, safety equipment, and facility design requirements. The arthropod containment levels address arthropods of public health importance, such as those that transmit pathogens.

Plant Biosafety Level (BLP-1/BLP*2)

These levels specify the physical and biological containment conditions and practices suitable to the greenhouse conduct of experiments involving recombinant DNA-containing plants, plant-associated microorganisms (i.e., viroids, virusoids, viruses, bacteria, fungi, protozoans, certain small algae, and microorganisms that have a benign or beneficial association with plants, such as certain Rhizobium species and microorganisms known to cause plant diseases), and plant-associated small animals (e.g., arthropods).