

* Primary Containment: BSCs are the primary means of containment for biohazardous materials. This is a fundamental aspect of bio risk management.* Risk Mitigation: By containing biohazards, BSCs minimize the risk of exposure to infectious agents, toxins, or other harmful biological substances.* Standard Practices: The use of BSCs is a standard practice in bio risk management laboratories, outlined in biosafety guidelines and regulations. They provide a controlled environment for working with biohazards, minimizing the risk of exposure and contributing significantly to the overall safety of the laboratory and its personnel. They use HEPA filters to remove harmful particles and aerosols, preventing their release into the lab.* Biosafety Levels: Bio risk management laboratories are classified into biosafety levels (BSL-1 to BSL-4) based on the risk of the biological agents they handle. In summary, safety cabinets, especially BSCs, are indispensable tools in bio risk management laboratories. BSCs are essential for laboratories at BSL-2 and above, where the risk of exposure is higher. Their proper use, maintenance, and certification are essential for ensuring safety. The selection of the appropriate BSC is a critical part of bio risk assessment and management.* Types of BSCs: Different classes and types of BSCs exist, each designed for specific levels of risk and types of biological agents.