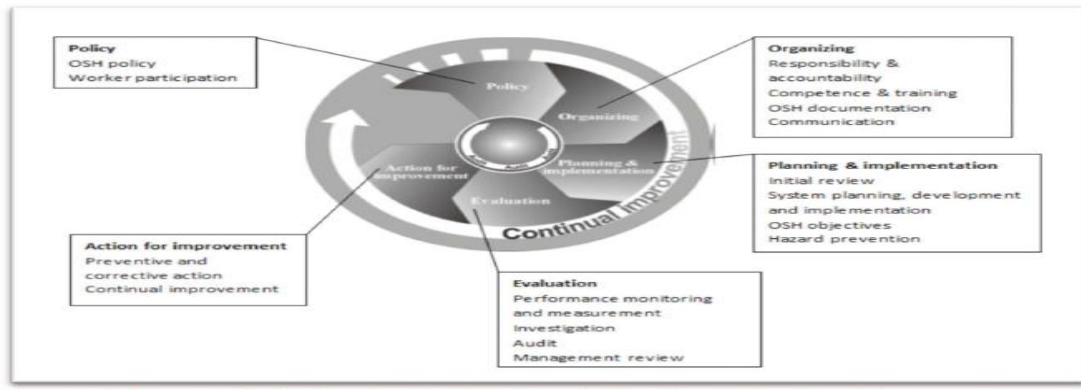


Introduction to biosafety:

Biosafety is the application of combinations of laboratory practice and procedures, laboratory facilities, and safety equipment when working with potentially biohazardous agents. Biosafety guidelines are a set of policies, rules, and procedures necessary to observe by personnel working in various facilities handling chemical and microbiological agents such as hazardous materials, bacteria, viruses, parasites, fungi, prions, and other related agents and microbiological products. Institutions requiring strict adherence to these biosafety guidelines include clinical chemical and microbiological laboratories, biomedical research facilities, teaching and training laboratories and other healthcare institutions (e.g., clinics, health centers, hospital facilities). These guidelines are intended to provide proper management and regulation of biosafety programs and practices implemented at all levels of the organization. The management of biological hazards through the proper application of engineered containment and administrative controls is referred to as bio-safety or biohazard control.

Essential components of the biosafety guidelines contain some or all the following, depending on the facility: microbiological risk assessment and identification; specific biosafety measures, which cover the code of practice, physical plant such as laboratory design and facilities, equipment acquisition and maintenance, medical surveillance, staff training, safe handling of chemicals, with fire, radiation and electricity safety, among others. Additional components may be included such as commissioning and certification guidelines for the facilities.

Biosafety guidelines must be made clear, practical and suitable for each facility and must be available for easy reference by all staff, must be reviewed, and updated regularly. While it provides guidance in the application of biosafety practices, this technical guide cannot solely ensure a safe working environment without the commitment of each person to adhere adequately to the biosafety guidelines at all times. Continuous research on biosafety can improve the development of future guideline.



The continual improvement cycle of the OSH (Occupational safety and health) management system

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