



PRINCIPLES OF BIOSAFETY FACT SHEET

Biosafety is a practice. Biosafety practices are used in the proper handling of biohazardous organisms. Human, animal and plant materials may harbor biohazardous organisms or agents and such materials must be handled accordingly.

Biohazardous organisms are microorganisms with an infectious potential for man, animals and plants in the environment. These microorganisms include procaryotic and eucaryotic microbes, viruses, subviral infectious agents and recombinant organisms with any potential for survival in the environment or in living materials and can cause a health risk. Biohazardous agents also include nonreplicating recombinant vectors which are capable of delivering and expressing recombinant gene products that can cause a health risk.

TWELVE VALUABLE RULES OF BIOSAFETY

- 1.) SUPERVISORS MUST PROPERLY TRAIN THEIR EMPLOYEES **BEFORE** PERMITTING THEM TO CONDUCT BIOHAZARDOUS WORK.
- 2.) KNOW AND UNDERSTAND THE BIOLOGY AND INFECTIOUS POTENTIAL OF BIOHAZARDOUS AGENTS YOU HANDLE.
- 3.) HANDLE ALL BIOLOGICAL MATERIAL (TISSUES AND BODY FLUIDS) RECOGNIZED TO BE CAPABLE OF POTENTIALLY HARBORING BIOHAZARDOUS ORGANISMS OR AGENTS ***AS IF THE INFECTIOUS AGENT IS PRESENT.***
- 4.) ALWAYS USE GOOD STANDARDS OF MICROBIOLOGICAL PRACTICE IN HANDLING BIOHAZARDOUS AGENTS OR MATERIALS OR ANY ***MICROORGANISM.***
- 5.) USE THE BIOSAFETY LEVEL CONTAINMENT AND PRACTICES SPECIFIED FOR THE INFECTIOUS AGENT BY THE CENTERS FOR DISEASE CONTROL AND PREVENTION, ATLANTA, GEORGIA.
- 6.) DO NOT WORK WITH A MICROORGANISM OR AGENT IF THE REQUIRED LEVEL OF PHYSICAL CONTAINMENT DESIGNATED FOR THE BIOHAZARDOUS MATERIAL BEING USED IS NOT AVAILABLE .
- 7.) EACH WORKER HANDLING BIOHAZARDOUS MATERIAL IS RESPONSIBLE FOR FOLLOWING SAFETY RULES TO PREVENT INJURY TO SELF AND OTHERS.
- 8.) VIGILANCE AND MONITORING OF BIOSAFETY PRACTICES ARE ESSENTIAL IN ANY BIOSAFETY PROGRAM.
- 9.) ASSUME THAT ACCIDENTS ***WILL*** OCCUR AND PLAN FOR SAFELY MANAGING THOSE EVENTS WHEN HANDLING BIOHAZARDOUS MATERIALS AND AGENTS.
- 10.) REPORT ALL ACCIDENTS OR INCIDENTS TO YOUR SUPERVISOR IMMEDIATELY.
- 11.) USE DISINFECTANTS OR STERILANTS WITH PROVEN EFFICACY AGAINST THE SPECIFIC BIOHAZARDOUS AGENT(S) YOU ARE USING.
- 12.) NEVER PERMIT BIOHAZARDOUS MATERIALS TO LEAVE THE LABORATORY **UNSTERILIZED** UNLESS BEING TRANSPORTED TO ANOTHER LABORATORY FOR ADDITIONAL WORK AND PACKAGED ACCORDING TO APPROPRIATE REGULATIONS.

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