

# LABORATORY SAFETY

Safety in a microbiology laboratory is very important, as some of the organisms being studied are **potential** pathogens. This means that although they may not cause disease in a normal healthy host, they might if the host were compromised. A human host can be compromised in a number of different ways: cuts and wounds; lowered resistance due to disease, surgery or stress (including the stress of lecture exams); and immune-system disability.

In addition to biohazardous material, there are some chemicals used in this laboratory which are potentially harmful. Finally, many procedures will involve glassware, open flame and sharp objects which can cause damage if used improperly.

To avoid the problems that might occur, the following precautions should be taken for the safety and convenience of everyone working in the laboratory:

1. Strict attention should be given to all instructions, and any precautionary statements given in laboratory protocols should be followed.
2. The location, purpose and use of emergency safety equipment should be known before starting any assignments.
3. Do not eat, drink, smoke, or chew pencils or pens in the laboratory.
4. Laboratory bench-tops should be wiped with a disinfectant before beginning and after finishing laboratory work.
5. Hands should be washed after any laboratory work.
6. Long hair should be tied back so that it does not catch fire in the Bunsen burner flame and does not fall into sterile media.
7. Gas burners must be turned off at the end of the laboratory period.

- 8.** All cultures should be properly labeled and properly discarded after use. No slides, tubes, culture plates, flasks, or other containers with viable organisms should be washed or discarded until after they have been properly sterilized.
- 9.** Spills of chemical reagents or material containing viable organisms should be reported to the laboratory instructors and cleaned immediately.