

## Chapter 15 The Laboratory Building

Laboratories are obviously just a portion of a whole building, and the PI and lab workers should familiarize themselves with all aspects of the building which can impact their work or their neighbors' work. Included among such building issues are the following:

[Access](#)

[Ventilation](#)

[Plumbing](#)

[Emergency Equipment](#)

### **Access**

Corridors, stairways and exits are important to all persons in the building. Of special interest in the biohazard laboratory is control of access to the laboratory; doors must be kept closed while all BL-2 or greater work is in progress.

### **Ventilation**

Laboratories are designed to be negatively pressured with respect to areas of lower hazard, such as corridors and offices.

Where building design permits, it is the policy of the IBC that all work which requires BL-2 or higher containment be conducted in laboratories which are negatively pressured with respect to their surroundings. As a rule, this includes work involving human/primate tissue culture.

### **Plumbing**

About one liter of water should be poured down each of the drains regularly (once per month) to ensure that the traps do not dry out.

Vacuum systems must be fitted with filters to prevent biohazardous materials from being sucked into the system.

Industrial water is normally used in laboratories. If, however, domestic water is plumbed into a laboratory, a valve that prevents back flow must be installed on each line that feeds into the sinks. This

is essential to protect others on campus, as well as the community at large.

## **Emergency Equipment**

Fire alarms and detection systems, fire sprinkler systems, eyewashes, douse showers and emergency shut-offs are all installed to make University of Arizona buildings safer places to work. Each person should familiarize themselves with the location and use of the emergency equipment provided in their building. Since these resources are subject to communal use, all the PI's and lab workers who share the building carry equal responsibility for their proper use and operation.