

General Safety Practices

I. PURPOSE

This policy sets minimum safety standards for laboratory employees that work with general laboratory equipment and compressed gas. This policy also covers minimum safety standards for **handling firearms in the** Crime Laboratory.

II. COMPRESSED GAS

- A. Storage, transportation, and utilization must comply with OSHA standards. Rules for the proper use of compressed gases include but are not limited to the following:
1. Always wear safety glasses when handling and using compressed gases.
 2. Handle cylinders of compressed gases as high-energy sources.
 3. Gas cylinders, empty or full, must be properly labeled and restrained individually in one of the two gas cylinder storage rooms.
 4. When storing or moving cylinders, have the protective caps securely in place to protect the valve stems.
 5. Never lubricate, modify, force, or tamper with cylinder valves.
 6. Do not extinguish a flame involving a combustible gas until the source of gas has been shut off; otherwise, it can re-ignite causing an explosion.
 7. Close the main cylinder valves tightly when not in use.
 8. Use the appropriate regulator on each gas cylinder. Promptly remove the regulators from empty cylinders and replace the protective caps.
 9. Never bleed cylinders completely empty. Leave a slight pressure to keep contaminants out.
 10. All pressurized gas lines should be labeled or color-coded. Accessible cylinders, lines, valves, and regulators should be routinely evaluated for unsafe mountings, or other hazardous conditions.

III. GENERAL PURPOSE LABORATORY EQUIPMENT

- A. Tools and instruments used in any forensic facility vary widely, from hot plates to grinding equipment. General laboratory equipment shall be properly maintained, cleaned on a regular basis and properly stored when not in use. In addition, the following procedures apply to the use of general laboratory equipment:
1. Proper personal protective equipment shall be worn when using equipment in the laboratory.
 2. Personnel will only be allowed to use equipment after it has been determined by the section supervisor that the employee is familiar with the equipment, its operation, safety features, and inherent hazard.
 3. Operational and safety lessons will be provided to employees regarding use of laboratory equipment on an as needed basis.
- B. Electrical
1. All electrical wiring and equipment must meet National Electrical Code Standards.
 2. Qualified personnel must perform all maintenance.
 3. Extension cords may not be used in place of permanent wiring unless no alternative exists.

General Safety Practices

4. Semiannual safety inspections should be performed to identify any hazards that might develop; e.g., worn or broken cords and broken grounding.

IV. HANDLING OF FIREARM EVIDENCE

A. Prohibited Practices

1. Use of live ammunition in firearms at the bench area.
2. Careless handling of firearms.
3. Any firearms-related horseplay.
4. Leaving loaded firearms unattended.

B. Required Practices

1. Only authorized personnel shall handle firearms (See QM 5.8.4.1).
2. Transport a handgun that is cocked and ready to fire in a steel transport box.
3. Firearms will be checked for safety by a member of the Firearm and Toolmark Section or properly trained laboratory staff.
4. Any firearm packaged in a steel-lined gun box will be unloaded by Firearm and Toolmark Section personnel.
5. If a firearm is found loaded in other than a steel-lined gun box, the following will apply:
 - a. the Firearm Section supervisor or his designee will be notified immediately
 - b. if necessary, the condition of the firearm will be documented photographically
 - c. the firearm will be unloaded safely by Firearm Section personnel
 - d. the submitting officer's supervisor will be notified of the event by the Firearm Supervisor
6. If the firearm is being resubmitted, no additional safety check is necessary as long as the package has not been opened since leaving the laboratory.
7. Treat every firearm as though it were loaded.
8. Maintain control of muzzle direction so that it is pointed in a safe direction when handling.
9. After the removal of a magazine, make sure the chamber is empty.
10. Keep your finger off the trigger unless you are authorized to do so.

V. FIREARM AND TOOLMARK SECTION

A. Required Practices

1. Be sure every firearm is clear of obstruction.
2. Ensure the compatibility of the ammunition with the firearm.
3. Keep your finger off the trigger until you are ready to fire the firearm.
4. All firearms must be unloaded and rendered safe before returning to the Property Control Bureau or sending to another laboratory section.
5. Anyone that has difficulty unloading a firearm must cease working on the firearm and properly submit it to a fully trained firearm examiner. Any pertinent information regarding the problem(s)/safety of the firearm will be given to the examiner that is receiving the firearm.

B. Firing Range Room

1. Only persons authorized by section personnel may fire into the recovery tank or in the bullet trap.
2. Close the door of the range room during test firing.
3. Be sure "Danger" light is on during the test firing. Do not enter the room while the light is on.

General Safety Practices

4. Wait until the bullet recovery tank is properly prepared and all other persons are behind or beside the shooter before loading the firearm. All firearms will be pointed at the bullet trap or into the shoot tank when a live cartridge is chambered.
5. All persons in the range room must wear ear protection and safety glasses when the firearm is discharged.
6. When a firearm is deemed to be unsafe for firing after being examined by a qualified Firearm Examiner; but must be fired for testing purposes, the remote firing equipment must be used.
7. When a firearm is deemed to be unsafe for use in the remote firing equipment, the examiner must use other examination techniques for examining the firearm.
8. The ventilation fan must remain on for several minutes after discharging firearms in the range room.