

HARBOR-UCLA MEDICAL CENTER

SUBJECT: LASER SAFETY POLICY

POLICY NO. 450

PURPOSE

To outline the general safety requirements associated with the use of a Laser device and Laser generating equipment.

DEFINITION:

Laser Safety Officer (LSO): The LSO is an individual designated by management who has the responsibility and authority to manage the overall laser safety program. The Laser Safety Officer must ensure that all employees who operate, maintain, or service laser products are properly trained. The Laser Safety Officer is also responsible for establishing, monitoring, and enforcing laser controls, as well as evaluating laser hazards.

POLICY

ALL physicians and other personnel operating lasers shall follow appropriate safety precautions when working an area where a laser device(s) is (are) being used. All personnel using laser devices must be trained to use the devices. Fire precautions must be observed at all times during laser use. The Laser Safety Manual must be consulted for additional information and safety guidance.

PROCEDURE:

- 1. Ensure that laser equipment are properly maintained.
- 2.1 **Class I:** Lasers in this class are considered to be safe. No user or safety precautions are required.
- 2.2 **Class II:** Lasers in this class are considered to be safe because the blink response will normally protect the eye from damage. However, **DO NOT** stare into the laser beam or point the laser into someone's eye (except by or under the direction of a physician for medical purposes).
- 2.3 **Class III:** The same safety precautions as for Class II lasers apply. In addition, only trained personnel should operate the laser. All other individuals should be excluded from the area or remain at a safe distance from the laser. Appropriate protective goggles with side shields should be worn. Care should be taken to eliminate reflecting and light-scattering surfaces from the path of the laser beam.

EFFECTIVE DATE: 9/89

SUPERSEDES:

REVISED: 2/96, 3/99, 9/04, 8/11, 12/14, 12/17

REVIEWED: 10/92, 2/96, 3/99, 2/02, 9/04, 1/08, 12/14, 12/17

REVIEWED COMMITTEE:

APPROVED BY:

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2.4 **Class IV:** The same safety precautions as for Class III lasers apply. Protective goggles must be worn.

- Class III and IV lasers are designed with certain safety features built-in. For example, a shutter or other collimation device is used to enclose as much of the beam as possible. Also, these lasers have warning lights or buzzers to indicate when the beam is on. Further, they require key access to operate.
- An individual shall be designated the Laser Safety Officer (LSO) with the authority and responsibility to monitor and enforce the control of laser hazards and to effect the knowledgeable evaluation and control of laser hazards.
- The following are a few key LSO program factors:
 - Depending on the extent and number of laser installations, the position of LSO may or may not be a full time assignment.
 - In some instances designation of an LSO may not be required (i.e., operation and maintenance of Class 1 and Class 2 lasers and laser systems normally do not require the designation of an LSO). However, under some circumstances, it may be necessary to designate an LSO (i.e., if service is performed on a laser system having an embedded Class 3a, Class 3b, or Class 4 laser or laser systems).
 - In some instances, such as servicing embedded lasers, the designation of an LSO may be the responsibility of the organization requiring access to the embedded laser or laser system, such as the service company or organization.
 - There shall be a designated LSO for all circumstances of operation, maintenance, and service of a Class 3b or Class 4 laser or laser systems.
 - Surgical Lasers are typically Class IIIB or Class IV, and therefore a Laser Safety Officer (LSO) is required.

3. Operate laser equipment in a well ventilated area.

4. Laser beam must not be viewed directly by optical instruments unless special protective filters are used. If eye damage is suspected, an eye examination should be carried out by an ophthalmologist.

5. Personnel working with or around a Class III or Class IV laser, should be trained to:

- 5.1 Identify and correct, as applicable, unsafe conditions associated with the laser equipment or that are present in the laser use area.
- 5.2 Perform CPR, due to the electrical shock hazard associated with the laser's high voltage power supply and/or;
- 5.3 Use the laser in a safe manner.
 - For example, a physician wishing to use the laser to perform surgery on humans must have been granted privileges by, or work under the direct supervision of another physician who has been granted privileges by the Department of Surgery or the Medical Director's Office.

REFERENCE: https://secure-web.cisco.com/18xo27ilYWecQzv-PNDAdWBMzvwIFyZ9xcFpuK98CeVqE6nGp1YOeZnrQMe3qFFznzZCpvhNAZ3Yg9_utOM3NzSARNh4s0P_R4D_7ot1CmZcMdQslarjmQHKm4b6j_ol49OgknSmXJ5e5spKv45uRUpb_Dp8ntn17KdpLbL19MGNXUrX_rAH8Bz0oezQJehjEZzbkITves_PaJd1RM9zf7FCXO0-Y5OU59HBll9T4hieKeGfIi9HeA7ZFmFry6xnmN8-85kdBXNOZWRnNrpmi2Y-0bDHRIMemvUcPTbcbQlkiYdEz7DbOhTdXvuoXBRv3PJml0T7Z1bX8EXcITkAeCicOzfPbNuWKvFyiUYeFK_kY3y7bEUBJH7I5kZ50tibzV3VSqX-6-jxDL_TGxC-coA/https%3A%2F%2Fwww.rli.com%2Fresources%2Farticles%2Flaser_safety_officer.aspx

COUNTY OF LOS ANGELES

DEPARTMENT OF HEALTH SERVICES

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