

Advanced Medical Laser Safety Officer (MLSO) Workshop

www.LaserTraining.org

06/2018

Course Prerequisites: You must meet these in order to qualify for registration.

- 1) Accredited certificate of formal training as a medical laser safety officer, and/or a nationally recognized CERTIFICATION as a medical laser safety officer. CLASS LIMITED TO 9 PEOPLE.
- 2) Additionally a waiver will be required of each applicant acknowledging their own responsibility in understanding and managing laser hazards and holding harmless the course and Professional Medical Education Association from any potential injury. Regardless, safety issues will be discussed in detail.

Course Description and Purpose of Advanced MLSO training: Once a MLSO has obtained the required initial LSO training in the theoretical and didactic training in maintaining a safe working environment with lasers, they can then benefit with additional practical hands-on experience in this workshop with a wide variety of medical laser systems to become more familiar with the characteristics of the various lasers and their delivery systems, a consideration described in the ANSI Z136.3 standards as important to the LSO in establishing Nominal Hazard Zones (NHZ). Familiarity with the operating characteristics and practical safety considerations of each laser type enhances the MLSO's ability to make "informed judgments" (per ANSI) about laser safety issues. Secondly, the MLSO will learn practical hands-on "inanimate" laser lab exercises that the MLSO may teach to physician staff in their accreditation process to help them become more knowledgeable about the effective control of laser energy with these various lasers and delivery devices, separately from clinical procedure instruction and preceptorships. Such inanimate exercises are generally an initial stage in physician credentialing in many physician credentialing programs. You'll receive at the course a summary of how to set up individual laser stations, including suggested inanimate models to use, for inanimate lab training for physicians. Your workshop sessions will essentially duplicate this for your hands-on. Regardless, these exercises help the LSO become much more familiar with the characteristics of the lasers which is important for safety considerations.

For those that do not already hold an NCLC Medical Laser Safety Officer Certification (CLSO/M) we will offer the Certification review and exam the morning of the third day, at no additional cost.

Lasers/Modalities used in the training: The Advanced Medical Laser Safety Officer workshop may include, but not be limited to, hands-on practice with the following types of lasers/modalities:

- 1) CO₂ lasers with collimated beams, handpieces, laparoscopes and microscopes with appropriate inanimate models
- 2) CW Nd:Yag lasers to show fiber control and tissue effects
- 3) Ho:Yag lasers used with models to teach coordination in stone fragmentation and effects in bone ablation, and review of the actual measurements of the NHZ for these lasers
- 4) KTP lasers used on appropriate inanimate models
- 5) Ophthalmic Ion lasers for photocoagulation
- 6) Q-Switched Tattoo removal lasers including Nd:Yag, KTP and/or Ruby on appropriate models
- 7) Airway laser safety practice and demonstrations including creating live airway fires (inanimate model) and management steps taken in these emergencies
- 8) Practice with coordination of applying aesthetic lasers such as Alexandrite or Nd:Yag and special safety precautions taken around the bony orbit of the eye.

ADVANCED MLSO Workshop Outline:

www.LaserTraining.org

Day 1 - 8am-5pm.

7:45am - Coffee, sign-in

8:00 am - Lecture overview of workshop, and review of essential safety practices including laser safety glasses and options for establishment of NHZ's under ANSI Z136.3. Differentiation of the Nominal Ocular Hazard Distance (NOHD) from the Nominal Hazard Zone (NHZ) General discussion.

9 -12:30pm - BREAK INTO separate breakout groups for hands-on lab sessions, and rotate groups ea hr

Break at mid rotation around 10am

Group A - CO2 laser, burns, fires, Collimated free beam, other delivery devices, inanimate models

Group B - CW Nd:Yag laser, free beam fibers, contact fibers and tips, inanimate models

Group C - KTP laser, free beam fibers, inanimate models

12:30 - 1:30 PM - LUNCH - provided

1:30-5:00pm - BREAK INTO separate breakout groups for hands-on lab sessions and rotate groups ea hr

Break at mid rotation around 3:30pm

Group A - Ho:Yag laser, inanimate models, review actual NHZ measurements

Group B - Ophthalmic lasers

Group C - Q-switched Tattoo & Pigmented lesion removal lasers on inanimate models

5:00 pm Adjourn

Day 2 - 8am - 3pm

7:45am - Coffee, sign-in

8-8:30am - Review of previous days sessions and questions

8:30 - 11am - BREAK INTO separate breakout groups for hands-on lab sessions, and rotate ea 1hr 15 min

Break at mid rotation around 9:30am

Group A - Laser Airway Fires - actual fire simulations under oxygen, and staff responses

Group B - Aesthetic Laser use such as Alexandrite and Nd:Yag - inanimate objects for coordination practice, and eye safety precautions.

11 - 12:30pm - LUNCH - provided at local restaurant

12:30-1pm - Group DEMONSTRATION of refraction of laser light as related to laser eye safety

1-3pm - Discussion group on workshop sessions and individual case situations at participants facilities

3pm - Adjourn and AWARDING OF CERTIFICATES

Day 3 - 8am-12:30 pm OPTIONAL - NCLC MLSO Certification Exams

For those that do not hold an MLSO Certification, but otherwise qualify, we'll provide these NCLC exams at no additional charge on this third day, and conduct an intensive review session of the exam right before testing. You'll know before you leave how you did on the exam. You'll be finished whenever you're finished with the exam. Not everyone will go until 12:30.

Workshop held in the classrooms of The Laser Training Institute, Grove City Ohio (Columbus Ohio)
3142 Broadway, Ste 201, Grove City OH 43123. Info@LaserTraining.org, Tel: 01-614-883-1739