

# Light Amplification by Stimulated Emission of Radiation or LASER

Avoiding accidents, especially those of the eye, is what **laser safety** is all about. Because even limited amounts of exposure can result in permanent injury, sale and usage of lasers is usually subject to regulations.

Someone exposed to laser radiation, particularly invisible radiation, may not even be aware that damage is occurring. Some lasers are so powerful that even the diffuse reflection from a surface can create an injury causing hazard.

Retinol and cornea injuries as well as skin damage can occur in less than a blink of the eye so great caution is recommended with all laser usage regardless of the work site.

## Laser Safety for Health Physicists

will provide foundation information and a reference point for creating and ensuring safety in the workplace when using lasers according to the American National Standard for Safe Use of Lasers: ANSI Z136.1

This workshop was developed with support from the National Institute for Occupational Safety and Health, the Centers for Disease Control and Prevention, the Public Health Service, the US Department of Health and Human Services.

Southwest Center for Occupational & Environmental Health

PO Box 20186, RAS W1038  
Houston, TX 77225-0186  
Toll Free: 866-394-8700  
Phone: 713-500-9451  
Fax: 888-760-6962  
E-mail: SWCOEHCE@uth.tmc.edu  
The Center for Health, Safety  
& Well Being

# Laser Safety

For Health Physicists

Tuesday, November 11, 2008

8:30am - 12:30pm

Houston, TX

Register Securely Online at:

<http://giving.uthouston.org/SWCOEHLSC112008>



# Laser Safety

for Health Physicists

This four-hour essentials course provides a terrific overview of laser physics, biological effects, hazards, and control measures as well as concise distillation of the requirements in the ANSI Z136.1-2007 Standard for the Safe Use of Lasers. Non-beam hazards, emerging issues, and accident histories with lessons learned will be included. The final portion of the course will address the special safety considerations associated with health care laser use.

Course attendees will learn how to apply laser safety principles in the developing and conducting laser safety training, in the performance of safety evaluations, in completing hazard calculations and in effectively managing an institutional laser safety program.

Although some knowledge of laser hazards will be helpful, both the experienced and the novice health physicist who have laser safety responsibilities will benefit from this course.

While scientific calculators for a "walk through" exercise and copies of the ANSI Z135.1-2007 will be available for participant use in the classroom, individuals are encouraged to bring their own.

### Continuing Education Credit

ABIH Fundamental IH CM points and AAHP CE credits for *Laser Safety for Health Physicists* have been applied for.

**Ben Edwards, MS, CLSO, RRPT;**  
 Duke University Medical Center  
 course director

Ben Edwards is a health physicist at the Duke University Medical Center in Durham, North Carolina. A BLS Certified Laser Safety Officer, Ben holds a BS in Physics and an MS in Occupational Safety. He has practiced and applied laser safety nearly two decades in such diverse fields as medicine, biomedical research and academic environments. Ben has conducted research and published several papers on operational laser safety. A member of the Laser Institute of America (currently serving on the Board of



Directors), the Health Physics Society (on the Program Committee), and the American Society of Safety Engineers. He serves on the ANSI Z136 Committee (currently as vice-chair of the Non-beam Hazards technical subcommittee), the Board of Laser Safety and as a conference chair for the 2009 International Laser Safety Conference.

### Registration and Cancellations

The registration fee includes all course materials, speaker fees, continental breakfast and break refreshments. Cancellations must be in writing and refunds (minus a \$50 administration fee) will only be issued up to 2 weeks prior to the course. Participant substitutions are permitted with prior written notice.

## Laser Safety for Health Physicists

The University of TX Health Science Center  
 Operations Center Building, Rio Grande Rm.  
 1800 Crosspoint Ave., Houston TX  
 Tuesday, November 11, 2008  
 8:30am – 12:30pm

Fees are Per Person	10/27/08	After 10/27/08
<input type="checkbox"/> Regular	\$75	\$100
<input type="checkbox"/> UT/TMC Affiliate	\$65	\$90

Name \_\_\_\_\_  
 Position / Title \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_  
 Email \_\_\_\_\_  
 Phone: Work, Mobile \_\_\_\_\_

Area of Specialization: \_\_\_ Ind. Hyg. \_\_\_ Safety \_\_\_ Doctor  
 \_\_\_ Nurse Other: \_\_\_\_\_

Employer: \_\_\_ Fed. Gov \_\_\_ State Gov \_\_\_ Local Gov  
 \_\_\_ Academic \_\_\_ Private \_\_\_ Other: \_\_\_\_\_

**Registration options:** complete this form in its entirety and mail with check (payable to SWCOEH) to the address below, or register online securely with your credit card at :

[http://giving.uthouston.org/SWCOEH\\_LSCII2008](http://giving.uthouston.org/SWCOEH_LSCII2008)

Note - credit card payments must be entered online; we can not take info over the phone.



**THE UNIVERSITY of TEXAS**  
 HEALTH SCIENCE CENTER AT HOUSTON  
 School of Public Health  
 PO Box 20186, RAS W1038  
 Houston, TX 77225-0186

Toll Free: 866-394-8700  
 Phone: 713-500-9451  
 Fax: 888-760-6962  
 E-mail: [SWCOEH.CE@uth.tmc.edu](mailto:SWCOEH.CE@uth.tmc.edu)  
 The Center for Health, Safety  
 & Well Being