## **Laser Exposure with Injury Guide**

### Laser Exposure with Injury- Immediate Actions:

- 1. Stop work and turn off laser.
- 2. Warn others in the area if a hazard still exists.
- 3. Do not alter the laser setup (this allows analysis of the cause of the accident).
- 4. Seek medical attention for class 3b, 4 exposures to the eye or exposure resulting in injury to the skin (e.g. burns). Have a co-worker call for help, if needed. When speaking with medical or safety representatives, be sure to state the type and extent of injury, and to clearly request any assistance you might need.
  - For severe injuries such as total loss of vision, bleeding from the eye, 2<sup>nd</sup> or 3<sup>rd</sup> degree burns to the skin around the eye or to the face, call 911 and request transport to the nearest hospital emergency room accepting eye injuries. A co-worker may apply a light dressing to the involved eye(s) to control any drainage and/or protect the eye while applying a cold compress to reduce swelling, if applicable, for 5-minute periods while waiting for EMS transport. Do not apply any pressure to the eye.
  - For exposures not resulting in severe injury (headaches, photophobia, visual disturbance but otherwise medically stable, etc.), contact the University of Texas at Austin HealthPoint Occupational Health Program (OHP) to discuss the nature and duration of the exposure. OHP will partner with the employee to help determine the next steps for evaluation and treatment of the exposure, as applicable. This may include OHP scheduling a laser post-exposure evaluation with an ophthalmologist experienced in laser eye examinations during normal business hours or an immediate referral to a St. David's HealthCare affiliated emergency room.
  - Note: Not all eye injuries will have pain; laser retinal burns may be painless while laser burns to the cornea or sclera may have burning pain at the site of exposure.
- 5. Notify the laser user's work lead or supervisor and the UT Austin Laser Safety Officer.

After the immediate medical needs of the injured employee have been addressed, OHP will assist the employee with the necessary information required to report a confirmed work injury to the UT System Workers' Compensation Plan. Exposures without injury may not meet the criteria for compensable coverage and associated benefits under the workers' compensation plan. OHP will assist the employee in navigating the payment options for medical expenses associated with post-exposure laser eye evaluations and any resulting treatment. For this reason, employees are strongly discouraged from seeking laser post-exposure evaluations from their personal physicians unless they are certain their provider accepts workers' compensation insurance and is experienced with laser eye examinations.

Laser Safety Officer / EHS Contact: 512-471-3511 or EHS after hours pager: 512-935-9111

HealthPoint Occupational Health Program: 512-471-4(OHP) 4647 or

After hours, press 1 to reach the OHP on-call contact.

UT Police Department Contact: 512-471-4441, or 911

# Post-Accident Actions for the LSO and Laser Safety Committee

# LSO Notification and Reporting to the Texas Department of State Health Services

#### From 25TAC §289.301:

#### (z) Notification of injury other than a medical event.

- (1) Each registrant of Class 3b or 4 lasers or user of an IPL device shall immediately seek appropriate medical attention for the individual and notify the agency by telephone of any injury involving a laser possessed by the registrant or an IPL device, other than intentional exposure of patients for medical purposes, that has or may have caused:
  - (A) an injury to an individual that involves the partial or total loss of sight in either eye; or
  - (B) an injury to an individual that involves intentional perforation of the skin or other serious injury exclusive of eye injury.
- (2) Each registrant of Class 3b or 4 lasers or user of an IPL device shall, within 24 hours of discovery of an injury, report to the agency each injury involving any laser possessed by the registrant or IPL device possessed by a user, as applicable, other than intentional exposure of patients for medical purposes, that may have caused, or threatens to cause, an exposure to an individual with second or third degree burns to the skin or potential injury and partial loss of sight.

#### (aa) Reports of injuries.

- (1) Each registrant of Class 3b or 4 lasers or user of an IPL device shall make a report in writing, or by electronic transmittal, within 30 days to the agency of any injury required to be reported in accordance with subsection (z) of this section.
- (2) Each report shall describe the following:
  - (A) the extent of injury to individuals from radiation from lasers or IPL devices;
  - (B) power output of laser or IPL device involved;
  - (C) the cause of the injury; and
  - (D) corrective steps taken or planned to be taken to prevent a recurrence.
- (3) Any report filed with the agency in accordance with this subsection shall include the full name of each individual injured and a description of the injury. The report shall be prepared so that this information is stated in a separate part of the report.
- (4) When a registrant or user of an IPL device is required in accordance with paragraphs (1)(3) of this subsection to report to the agency any injury of an individual from radiation from lasers or IPL devices, the registrant or user of an IPL device shall also notify the individual. Such notice shall be transmitted to the individual at a time not later than the transmittal to the agency.

#### Accident Investigation

Upon notification of an accident, the LSO will conduct an investigation. The Laser Safety Committee (Committee) will be informed of the accident and will participate with the LSO in the investigation.

The LSO and the Committee will conduct an investigation of the event, working with the individuals involved, the PI, and the laser system supervisor. The laser system shall remain out of service pending the results of the investigation and completion of any corrective actions. The system may only be returned to service following approval by the LSO and the Committee.

Steps of the investigation will include:

- 1) LSO/Committee interviews injured workers and witnesses, and PI
- 2) LSO/Committee examines workplace for factors associated with the accident/exposure
- 3) LSO/Committee determines the possible causes of the accident/exposure
- 4) The LSO documents the findings and needed corrective actions in a written report.
- 4) PI initiates corrective action to prevent the accident/exposure from recurring
- 5) PI documents corrective actions taken in the lab
- 6) LSO/Committee will review corrective actions prior to resumption of laser operations.

The initial event information, nature of injury, accident investigation and supervisor compliance documents will be properly filed for future reference. Any legally protected privacy information will be handled in accordance with the law.