

Date: Fri, 12 Sep 2003 10:15:31 -0500
From: Jim Withers <withers@ameslab.gov>
Subject: Red Alert: Laser Injury to Eyes

ESH&A is distributing information (below) on a recent accident at Brookhaven involving a serious eye injury that resulted from exposure to a laser beam. Ames Laboratory personnel are reminded of the importance of following all established procedures for working with lasers including the use of personal protective equipment. Questions on laser safety should be addressed to Jim Withers, G40 TASF, 294-4743. The ISU Laser Safety Manual contains specific information on programmatic requirements for the safe use of lasers at Ames Laboratory and can be viewed at:

<http://www.ehs.iastate.edu/publications/manuals/laser.pdf>

Office of Science

Chicago, Brookhaven National Laboratory (CH-BH-BNL-BNL-2003-0019)

Graduate Student Incurs Laser Injury to Eyes-

A graduate student at Brookhaven National Laboratory suffered a laser injury to both eyes while using a Pulsed Alexandrite Laser on an optical bench in Lab 1-127. The student was trying to align the laser beam onto a sample, while using a hand-held 2" x 3" inspection mirror to make the visual adjustments, when the beam was reflected by the mirror into both eyes. The student was not wearing protective laser lenses. The output from the laser itself was estimated to be about 0.5 watts average power (25 mJoules/pulse at 20 Hz). The actual output exiting the laser chamber, and hence, the student's actual eye exposure are unknown. The student was taken to the BNL Occupational Medicine Clinic for evaluation and treatment. An off-site lab-contracted ophthalmologist provided additional treatment to the student and found that the retina of both eyes was burned. The student was further referred to a retinal and vitreous eye specialist and the student's prognosis is uncertain. All laser work in the laboratory has been stopped pending further investigation of this event.