

J Occup Env Med. 2011. 53(11):1302-1309.

## **An Assessment of the Occupational Hazards Related to Medical Lasers.**

Pierce, J.S., S.E. Lacey, J.F. Lippert, R. Lopez, J.E. Franke, and M.D. Colvard.

### **Objective**

Occupational hazards associated with medical laser applications remain poorly understood and uncharacterized.

### **Methods**

A literature search was performed using PubMed, and all articles relevant to beam and nonbeam medical laser hazards were reviewed. The Rockwell Laser Industries Laser Accident Database was searched for medical laser injuries and abstracted.

### **Results**

Eye injuries, skin burns, injuries related to the onset of fires, and electric shock have been reported in relation to medical laser use. It is probable that both acute and chronic health effects have been experienced by medical personnel as the result of exposure to laser generated air contaminants.

### **Conclusions**

Because of the clinical benefits they provide, the growth of laser technologies and applications are anticipated to result in an increase in the number and type of medical personnel with future exposure to laser hazards.