ABSTRACT The number of people employed at workplaces with laser equipment is estimated in Poland on over 150,000. Actually high energy laser equipment for cutting and welding is largely applied to many technological processes, so the laser radiation hazards at workplaces with the relatively high risk level can be met quite often. The interaction of the direct laser beam or even the reflected laser light with eye or skin can make serious harm, so the workplaces with certain kind of laser equipment should be supervised by laser safety officers and the risk assessment for laser radiation hazards should be performed. This paper presents the nature of laser radiation, direct and non-direct laser radiation hazards coming from laser equipment and some aspects of risk assessment for workplaces equipped with the lasers. An example of risk assessment on the base of Maximum Permissible Limit (MPL) estimation for laboratory laser stand is given.

Keywords: laser radiation, laser safety officer, maximum permissible limit (MPL), risk on the workplaces