

Guidance Document For The Use of Lasers and Intense Pulse Light in Licensed Special Treatment Premises Within The London Borough of Brent

This guidance document relates to lasers and intense pulsed light (IPL). The aim is to provide sufficient guidance to the reader for the safe use of the laser and IPL Equipment. This is a guidance document; it should not be regarded as an authoritative statement of law, nor having any legal status.

Nature of hazards

Lasers and Intense Pulse Light equipment are known as Optical radiation devices. The optical radiation emitted by lasers and IPL's can have potentially hazardous effects on patients, clients and equipment users. Effect can be direct and include damage to eyes or skin. Lasers and IPL's also pose the potential risk of fires or explosions from ignition of gases or fabrics, there is also the problem of inhalation of the smoke given off when lasers/IPL's are used. The potential hazard is determined by the type of laser used.

The Laser Protection Advisor - LPA

The role of the LPA is to provide expertise, knowledge and assistance in matters related to the laser/IPL safety. The LPA is given responsibility by the licence holder to oversee laser/IPL safety at the premises. The licence holder must provide the LPA with adequate information and the scope of the advice which is required from the LPA. The LPA should also be provided with adequate space and facilities while at the premises in order to perform their work effectively .

The LPA will be responsible and have direct access to the licence holder and can be fully employed or externally consulted. Advice and guidance must be obtained from a certificated LPA

The employer should give the LPA adequate information, including a statement of the scope of advice required, and facilities to perform the work effectively.

The duties of the LPA will be defined by the licence holder, and should include undertaking hazard analysis and risk assessment for each laser and IPL installation and ensuring that suitable local rules are drawn up and implemented for each Installation

This is **not** an exhaustive scope of duties and should be used only as a guide.

- Undertake risk assessments before the laser or IPL is operated.
- Identification of the Laser Controlled Area.
- Oversee the commissioning of the laser or IPL i.e. post installation testing.
- Ensure that suitable local rules and working practices are drafted.
- Liaise with all appropriate Laser Protection Supervisors and Authorised Users.
- Undertake regular equipment and personnel safety reviews.
- Investigate any adverse events, including reporting the incident to their employer and if necessary, external bodies.

The Laser Protection Supervisor

The Laser Protection Supervisor (LPS) is an individual employed at the premises and is responsible for supervising the work of personnel who operate lasers/IPL and is also responsible for supervising the local rules and ensuring that they are followed on a day-to-day basis.

The LPS is expected to have achieved a certain level of equipment understanding, practical experience and knowledge of the laser/IPL with which they are working.

The individual must be able to satisfy the requirements to prove that they have the relevant expertise to fulfill the role; this will normally be achieved through an interview by you to assess competency levels, provision of documentary evidence, and an appropriate safety course attendance certificate. Competency levels will also be assessed at the time of your licensing inspection.

The recommended level of knowledge that a Laser Protection Supervisor should have achieved when they commence their duties is detailed as follows:

- Understand the general nature of optical radiation.
- Understand the laser classification scheme.
- Understand the meaning of warning labels associated with laser/IPL equipment.
- Know about the health hazards, including effects on tissue that can arise from the use of laser, IPL or other optical radiation equipment.
- Be familiar with the principles of evaluating laser/IPL equipment related risks.
- Understand hazard control procedures, including the use of personal protection.
- Be familiar with the intended purpose of the laser/IPL equipment.
- Be familiar with the organisations' procedures and policies governing laser/IPL equipment use, including emergency action and accident reporting procedures.
- Oversee training, equipment and safety documentary records.

The above list is not exhaustive and should be fully supported by a certificated Core of Knowledge course.

Authorised Users

An Authorised User is the individual who operates the laser or IPL. A register of Authorised Users of all lasers and IPL systems must be held at the premises. The licence holder must specify those lasers or IPL systems and/or procedures that each user is permitted to undertake.

The Authorised User must receive suitable laser/IPL equipment training and should also have attended an appropriate 'Core of Knowledge' safety course. The Authorised User must be knowledgeable in the operation of the device.

Staff Training

Generally training will cover the following two areas: equipment-based training and safety training.

Equipment training

The manufacturer or their supplier will usually provide the equipment-based training to the Authorised User(s) at the time of installation. In the case of new or upgraded equipment, training must be provided by the manufacturer or supplier.

This training will include specific detail on how to carry out the treatment procedure using the laser, and should also include instruction and awareness of all documented procedures which relate to the safe use of lasers/IPL's at the premises.

Safety Training

The 'Core of Knowledge' course provides the basic knowledge component for staff that work directly with lasers and/or IPL systems. The course may be specific to cosmetic applications but in general they are broad-based courses.

The course should have a specific predetermined content, which includes optical radiation types and risk management. The list below details the content of an appropriate course syllabus. The list is not conclusive and may include more or less than what is listed;

- Understand the characteristics of optical radiation emitted from different types of equipment.
- Be familiar with the intended purpose of the laser/IPL equipment.
- Awareness of the meaning of the warning labels associated with the equipment.
- The effects of exposure and health hazards, including eye, skin and tissue, which can arise from the use of laser, IPL or other optical radiation equipment.
- Equipment related hazards, which can arise from the use of laser, IPL or other optical radiation devices, including equipment malfunctions.
- Hazards related to individuals through use of lasers/IPL's, including electrical hazards, fire risks and smoke plume effects.
- Hazards to clients associated with optical radiation treatment procedures, and methods of minimising risks.
- Hazard control procedures, including the use of personal protection.
- Hazards from reflections or absorption of the optical radiation beam with respect to instruments or surfaces or other equipment.
- Aware of the basic principles of the maximum permissible exposure levels and the precautions required to ensure that exposure of unprotected skin and eyes of those present is less than the maximum permissible levels.
- Understand the role of the Laser Protection Advisor and Laser Protection Supervisor.
- Principles of risk assessment.
- Be familiar with the basic principles of the administration of safe

The Local Rules

This document assist the licence holder in complying with the requirements of the Health and Safety at Work Act 1974, section 2(3)

The Local Rules should reflect the safe working practices adhered to on a daily basis.

The local rules must be specific to each type of device on the premises and should be drawn up by the LPA.

The local rules are put in place and implemented to ensure that all employees are working in a safe environment and all clients are treated safely. All staff who are involved with laser/IPL equipment must read the document.

The document must be easily available in the treatment area. A copy should also be held by the LPS and the LPA.

The local rules should either directly address the following issues or refer to any separate supporting documentation:

- Management safety structure (e.g. manager, consultant, LPA, LPS and users)
- Contact point for LPS and LPA
- Arrangements for safe keeping and issue of laser/IPL keys
Defined region and limits of the equipment Controlled Area
- Nature of hazard to persons (users and patients)
- Controlled and safe access to the equipment area
- Training requirements for persons assisting in or undertaking laser/IPL use
- Equipment user's responsibilities
- Methods of safe working, including layout of equipment
- Personal protective equipment, especially protective eyewear
Prevention of use by un-authorized persons
- Adverse event and equipment fault procedures and logs
- Use of loan or demonstration equipment
- Temporary staff
- Visiting engineers.

The Treatment Protocol

The treatment protocol must be drawn up to include the areas detailed below. You may wish to consult an expert medical practitioner or your LPA for guidance. The treatment protocol sets out the necessary pre - treatment checks to be carried out and should include the following;

Treatment technique
Cleanliness and infection control
Client contraindications
Treatment related problems
Pre treatment tests
Post treatment care
Obtaining client consent prior to treatment

Adverse event procedure
Equipment failure procedure
Permitted variation of the equipments intended use

Treatment Register

A treatment register must be held on site and completed prior to treatment each time the laser/IPL is used. The register must contain the following information;

The name and date of birth of the person treated
The date of treatment
The operator of the equipment
The treatment which is given
Any accident or adverse effects