ADVICE NOTICE

A new Core of Knowledge syllabus has been developed and approved by British Medical Laser Association, Institute of Physics and Engineering in Medicine, and Society for Radiological Protection.

This is an area where there are rapid technical advances and there is also a wide diversity of laser users. The updated syllabus reflects the changing needs of laser and IPL user

A new Laser and IPL Safety Awareness syllabus has also been produced. This is an innovation that recognises the value of providing awareness training to staff who are not directly operating the laser. This does not seek to deliver knowledge to the depth that is required in a full Core of Knowledge course.

Core of Knowledge

Core of Knowledge represents a body of knowledge that underpins the safe use of lasers in clinical practice. It is intended to be undertaken by all staff using laser (class 3 and 4) and non-laser (IPL and LED) light sources in a range of applications, including medical, surgical, dental and aesthetic practices. Its aim is to provide users with an understanding of the basic principles of laser safety. It is essential that Core of Knowledge is supplemented by additional training in specific applications. Although exact content may differ slightly, the following syllabus is considered to be the minimum course content that may be covered by training centres. Course duration should total at least 3 hours. After attending the course, each participant should understand

- Basic principles of laser generation and review of laser/IPL technology
- Laser hazard classification
- Meaning of associated warning labels
- Principles of quality assurance
- Emission characteristics of different types of equipment
- Laser-tissue interaction mechanisms
- Penetration of light of different wavelengths through skin and eye
- Dangers of central versus peripheral retinal damage
- Hazards to eye and skin from accidental exposure
- The concept of Maximum Permissible Exposure and Nominal Ocular Hazard Distance
- Principles of risk assessment
- Laser safety management including the role of the Laser Protection Adviser, Laser Protection Supervisor, Local Rules and Controlled Area
- Risks associated with accidental reflections
- Personal protection measures including eye protection
- Hazards to the patient, e.g. endotracheal tube ignition

- Incidental hazards, including electrical, fire explosion and plume emission
- Relevant legislation, standards and guidelines
- How to deal with an adverse event or accidental exposure

Course organisers should issue an attendance certificate and keep a record of attendees for a minimum of 5 years. There is merit in performing an assessment of understanding.

It is good practice for individuals to re-attend Core of Knowledge courses every 5 years, or sooner following an extended absence or if there have been significant changes to equipment or practices affecting the individual

It is recommended that the course should be approved by a recognised body such as the British Medical Laser Association.

It is the responsibility of the employer to ensure that adequate measures, including training, are in place to ensure safe use of lasers and IPL devices.

Approved by British Medical Laser Association, Institute of Physics and Engineering in Medicine, Society for Radiological Protection

Laser/IPL Safety Awareness

The ‘Core of Knowledge’ is intended for all staff using laser (class 3 and 4) and non-laser (IPL and LED) light sources in a range of applications, including medical, surgical, dental and aesthetic practices. Other staff present during laser or IPL use (e.g. nursing staff, Theatre Assistants, trainees) should have a basic understanding of the risks they may face and how they can be prevented. The aim of Basic Laser/IPL Safety Training is to provide those staff groups with an understanding of the key principles of laser/IPL safety. It is essential that the training is supplemented by additional training in specific applications. Although exact content may differ slightly, the following syllabus is considered to be the minimum course content that may be covered by training centres. Course duration should be at least 1 hour. After attending the course, each participant should have a basic understanding of the following:

- Laser safety management including the role of the Laser Protection Adviser, Laser Protection

  Supervisor, Local Rules, Controlled Area, Hazard Distance
- Emission characteristics of laser and IPL equipment
- Penetration of light of different wavelengths through skin and eye
- Dangers of central versus peripheral retinal damage
- Hazards to eye and skin from accidental exposure
- Risks associated with accidental reflections
- Personal protection measures including eye protection
- Hazards to the patient, e.g. endotracheal tube ignition
- Incidental hazards, including electrical, fire, explosion and plume emission

 How to deal with an adverse event or accidental exposure Course organisers should issue an attendance certificate and keep a record of attendees for a

minimum of 5 years. It is good practice for individuals to re-attend Basic Laser/IPL Safety Training courses every 5 years, or sooner following an extended absence or if there have been significant changes to equipment or practices affecting the individual

It is recommended that the course should be approved by a recognised body such as the British

Medical Laser Association. It is the responsibility of the employer to ensure that adequate measures, including training, are in place to ensure safe use of lasers and IPL devices.

Approved by British Medical Laser Association, and the Ultrasound and Non Ionising Radiation Special Interest Group of the Institute of Physics and Engineering in Medicine, Society for Radiological Protection

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