#### Summary of the Outcomes of the Laser and Intense Pulsed Light Source Site Survey conducted in Queensland

## July 2015 – November 2015

A state-wide survey of businesses advertising laser and intense pulse light (IPL) cosmetic procedures was conducted to identify the lasers and IPL sources being used, the services provided, and any associated public health issues.

The results were used to determine compliance with the Radiation Safety Act 1999.

Around 345 sites were surveyed – i.e. 75% of the businesses offering cosmetic procedures in Queensland.

Over 100 different laser models (305 lasers), and 82 IPL source models (242 IPL sources), were recorded and checked.

# **Major Findings**

43% of businesses are required to be regulated under the Radiation Safety Act 1999



non-compliance with the *Radiation Safety Act 1999* was identified, 9% of regulated businesses were in possession without a licence and 47% of licensed businesses had acquired laser apparatus without approval



the majority of businesses used unregulated IPL sources for hair removal or skin rejuvenation

Public notification of the survey, the availability of the on-line public register of licensees, and social media activities contributed to an increase in licensing activities during the survey.

The survey did not cover skill assessment or other safety aspects of the businesses. Further compliance monitoring targeting skills and competency is required.



the majority of equipment was supplied by Australian distributors, but some had been imported directly from overseas, such as China, South Korea, Israel and the United States of America

Communication is required to ensure purchasers and suppliers are properly informed of the safety requirements and expectations in Queensland, and of action taken for non-compliance.



6 devices recorded as lasers were actually IPL sources

the classification of and technical details for 17 laser models were not able to be confirmed during the survey

2 lasers had no classification labelling, 1 model of laser had inconsistent labelling, and 1 class 4 laser was found to have been mislabelled as class 3

The classification, labelling and registration of multi-platform devices pose particular issues. Such devices have common power supplies and cooling arrangements but an owner may attach multiple 'handpieces' which may be an IPL source, class 3 laser, or class 4 laser.

- lasers and IPL sources may be used for multiple purposes
- no IPL sources were recorded as being used for tattoo removal
- lasers were typically used for a range of cosmetic procedures such as hair removal, superficial pigmented and vascular lesion removal, skin rejuvenation, and tattoo removal
- IPL sources were typically used for hair removal and skin rejuvenation some were also used for superficial pigmented or vascular lesion treatment
- pain relief was used at 28% of the sites visited, which the clients either brought themselves or was provided with on-site, during laser or IPL cosmetic procedures
- treatments such as cosmetic fillers, anti-wrinkle injections and skin needling were also provided at 62% of the sites visited

The meanings of the various types of cosmetic procedures undertaken to ensure consistency of terms used in the industry, and to ensure that the use is conducted within the scope of expected practice will need to be clarified.

#### **Conclusions**



Typically, business owners, users of lasers and suppliers of equipment were not adequately informed about their equipment and the procedures for which it was designed to be used.



The terms 'IPL' and 'laser' are often used interchangeably. Use of correct terminology is necessary to ensure operators and consumers are clear about the safety requirements and biological impacts of procedures.



Businesses should be cautious when purchasing lasers or IPL sources from unknown organisations as these devices may not comply with industry or consumer expectations and may have unknown safety and quality control issues.



There was a lack of knowledge about the regulatory requirements across the beauty and related industries. A broader communication strategy is required to minimise the likelihood of non-compliance in the longer term.

### **Advice**

Consumers need to:

- be aware that IPL sources and lasers are dangerous if not used correctly
- be aware that IPL sources are not suitable for tattoo removal
- satisfy themselves of the training and competency of the operators ensure that they discuss the proposed procedure with a medical practitioner before cosmetic procedures commence
- understand the treatment that they are seeking, including the short term and long term health consequences
- if harmed, ensure they seek urgent medical assistance

Suppliers or distributors need to:

- ensure that the equipment that they offer for sale or distribution in Queensland complies with the relevant national and international standards (e.g. obtain copies of test reports and certificates)
- provide copies of the test reports and certificates to purchasers of the equipment
- be aware of the limitations in use of the equipment
- ensure operating instructions and technical information is provided to equipment purchasers
- be aware of their obligations under the Radiation Safety Act 1999