

Intense pulsed light

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Jump to: [navigation](#), [search](#)

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For other uses, see [IPL](#).

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Intense Pulsed Light (IPL), as most commonly employed by non-specialist medical practitioners and beauticians, is a method of [hair removal](#) from the body involving the use of a specially constructed [xenon flash lamp](#) and focusing optics.

The Intense Pulsed Light hair removal process has become very popular due to its cheaper and faster procedure compared to [laser hair removal](#), which is often more costly and time consuming. The comparison of effectiveness between Intense Pulsed Light and Laser Epilation is debated by scientists, equipment manufacturers and practitioners, but results are generally accepted to be roughly equivalent. IPL is generally advertised as "permanent hair

reduction " as opposed to "permanent hair
removal " (these phrases are misnomers when applied to laser or IPL hair
removal).

Hair removal mechanics: The focused, broad-[spectrum light](#) is applied to the surface of the [skin](#) by way of either a hand-held wand, or by an articulated arm. The intense light travels through the tissue of the skin until it strikes the [hair](#) shafts or the bulb (root) of the hair. The bulb is usually where the highest concentration of [melanin](#) is located, as opposed to the rest of the hair shaft. The light is converted to heat energy. The bulb and most of the hair shaft are instantly vaporized. The intense heat radiated by the hair also destroys the hair-producing [papilla](#) or the entire [hair follicle](#). It is also claimed that direct light-heat conversion occurs directly in the darker colored capillaries that bring nourishing blood to the follicle.

IPL technology is also employed in the treatment of medical disorders of the skin including sun damage induced dyspigmentation and vascular changes; poikiloderma of Civatte; acne [Rosacea](#); broken capillaries/telangiectases; vascular and pigmented birth marks. In terms of rosacea, IPL offers one of the few effective treatments to relieve the facial redness associated with the disorder. Such treatment is best administered by a specialist dermatologist. This new technology incorporates 'dual mode filtering' and other important advances which result in safer and more effective treatment than the older systems; which were initially designed for simple processes such as hair removal.

The pulses of light produced by IPL equipment are very short in duration, so discomfort and damage to non-target tissues is minor. Most people who undergo IPL epilation only experience slight irritation similar to that of a minor sunburn though under certain circumstances, blisters may occur. Men undergoing the procedure experience greater discomfort as male body hair is generally thicker than women's. Depending on the instrument settings and intensity, treating sensitive areas such as the chest and face can result in pain comparable to waxing the same areas; however this pain dissipates immediately. The light that emanates from the IPL wand is filtered to remove any ultraviolet components, eliminating the possibility of UV skin damage.

[\[edit\]](#) See also

- [Hair removal](#)
- [Electrolysis](#)
- [Laser hair removal](#)

[\[edit\]](#) External links

- [Hairfacts - IPL and Flashlamp](#)
- [FDA page on IPL and Laser epilation](#)

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Categories: [Depilation](#)

Hidden categories: [Articles lacking sources from January 2008](#) | [All articles lacking sources](#)

Views

- [Article](#)
- [Discussion](#)
- [Edit this page](#)
- [History](#)

Personal tools

- [Log in / create account](#)

Navigation

- [Main Page](#)
- [Contents](#)
- [Featured content](#)
- [Current events](#)
- [Random article](#)

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- [About Wikipedia](#)
- [Community portal](#)
- [Recent changes](#)
- [Contact Wikipedia](#)
- [Donate to Wikipedia](#)
- [Help](#)

Search

Toolbox

- [What links here](#)
- [Related changes](#)
- [Upload file](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Cite this page](#)

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