The Dark Side of Tanning: Regulation on the Use of Sunbeds
Regulation of sunbed use

The use of sunbeds for cosmetic tanning is not new. For white-skinned races at least, there has been a popular interest in a ‘healthy tan’ for decades and this has seen the widespread use of tanning salons. Unfortunately, this is not without risk.

UV tanning has been associated with increased risk of skin cancer, cataracts and skin aging. Whilst no-one likes to look twice their age as a result of having damaged skin, the first two are of greatest concern. Susceptibility varies and depends on many things, including age and skin type. In 2003, the World Health Organisation (WHO) published recommendations for governments (see references) to assist in the development of public health policy. They recommended that certain groups of people, such as children and those with fair skin that easily burns, should avoid UV tanning.

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Of particular concern is the growing popularity of sunbed use among children. A survey conducted by Cancer Research UK in 2009 estimated that, in England, around 250,000 children (aged 11-17 years) regularly used sunbeds.

Many countries where artificial tanning is widespread have introduced either guidelines or legislation covering such use. For example, USA, Canada and Australia. Controls on sunbed lamp emissions are also widespread. This technical update will concentrate on recent changes to sunbed control in the UK but it clearly has wider, international relevance.
UV tanning

Tanning salons offer accelerated cosmetic skin tanning using lamps that emit Ultra-violet (UV) radiation. UV radiation is broadly broken into three regions – UVA, UVB and UVC, based on the wavelength range. Tanning lamps emit mainly UVA but also some UVB, some attempting to mimic the characteristics of natural sunlight (though at a much greater intensity). The lamps can be configured vertically (tanning booths) or horizontally (sunbeds).

Some people appear to be addicted to tanning, just like some are addicted to other forms of cosmetic alteration. It makes them feel good and they may easily overdo it, getting high doses that can lead to short-term suffering (skin burns) and/or long-term damage (like skin cancer).

People may respond differently to UV. One important factor is skin type. Skin types are divided into six broad categories*, some being more susceptible than others. Types I and II are those who tend to easily burn in the sun and don’t easily develop a tan - artificial tanning isn’t really for you. For other skin types, it’s important to limit the amount of time you spend under the lamp.

*See table in Useful references for overview of skin types and the UV Burn Risk Table compiled by Cancer Research UK

Sunbed regulation in the UK

After many years of reliance on good practice guidance, the UK has more recently resorted to legislation to control sunbed use. The UK has introduced this in two basic forms:

- **Acts of Parliament**
  Set the overall framework.

- **Regulations**
  Fill in some of the detail.

There is the added complication of regional differences between Scotland, Wales and England.

Scotland enacted a new **Public Health Act in 2008** which included controls on sunbed use, supported by more specific regulations on information requirements, in 2009. England and Wales followed in 2010 by the introduction of the **Sunbeds (Regulation) Act 2010** (which came into force in April 2011). The Welsh regional government has gone even further and introduced more specific regulations from October 2011.

The provisions for England, Scotland and Wales are broadly similar in intent. The detailed requirements and extent to which they are actually implemented varies between the regions, legislation in England currently lagging behind that of Scotland and Wales.
The broad topics are summarised in the following table and where there are regional differences, the more restrictive has been used (the greater restrictions are bound to be rolled out to other regions in time).

<table>
<thead>
<tr>
<th>Commercial sunbed operators must:</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Not allow children (those under 18 years old) to use their sunbeds</td>
<td>Reasonable checks on a person’s age (e.g. passport) are required. There is an exemption for medical use. Welsh regulations extend this duty even to where a commercial operator uses domestic premises (e.g. home visits).</td>
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<tr>
<td>Not sell or hire a sunbed to a child</td>
<td>This includes remote sale or hire.</td>
</tr>
<tr>
<td>Provide information and display notices to sunbed users on health risks of sunbed use</td>
<td>Specific regional regulations (Scotland and Wales) describe the content and form of the information (leaflets and notices).</td>
</tr>
<tr>
<td>Provide protective eyewear to sunbed users</td>
<td>And take reasonable measures to enforce use.</td>
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<tr>
<td>Supervise use of sunbeds</td>
<td>This doesn’t mean watching you on the sunbed, which might be considered creepy or at least an invasion of privacy. But, it does mean that you at least need a competent supervisor on the premises when customers are present. The Welsh legislation sets out a wide range of supervisor duties, aimed at protecting the sunbed user: age verification; skin type assessment; use guidance (based on skin type assessment etc); tanning equipment safe operation; providing health risk information; providing and ensuring use of protective eyewear.</td>
</tr>
</tbody>
</table>

The duties on sunbed operators largely follow from those ideas published by the WHO. These have been around on an informal basis for nearly a decade.
And Finally...

If you prefer natural rather than artificial sources of UV radiation, remember that it can lead to the same kind of harm. Yes, we need a bit of sunlight to keep us healthy and happy but too much of that too can be dangerous.

We usually think about sun protection when we’re on holiday, in a hot climate or intense sunshine. But anyone working or taking part in social activities outside should protect themselves from excess exposure to the Sun. Those people who are particularly at risk (based on skin types) should be especially careful.

The UK HSE have produced some basic rules to help you stay safe in the sun.

### Sun protection six-point code

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Keep your top on. Clothing forms a barrier to the sun’s harmful rays - especially tightly woven fabrics.</td>
</tr>
<tr>
<td>2</td>
<td>Wear a hat with a brim or flap that covers the back of neck and ears - avoiding sunburn.</td>
</tr>
<tr>
<td>3</td>
<td>Stay in the shade, whenever possible, especially at lunchtime.</td>
</tr>
<tr>
<td>4</td>
<td>Use a high factor sunscreen of at least factor SPF 15 on exposed skin. Apply as directed on the product.</td>
</tr>
<tr>
<td>5</td>
<td>Drink plenty of water to avoid dehydration.</td>
</tr>
<tr>
<td>6</td>
<td>Check your skin regularly for unusual spots or moles which may have changed. See a doctor immediately if you see anything that is changed in shape, size, colour, itching or bleeding.</td>
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</tbody>
</table>

Source: http://www.hse.gov.uk/temperature/issuesandrisks/sunprotection.htm

In conclusion, a little bit of sunshine in our lives can be nice but too much (either artificial or natural) is just trouble. For more information on sunbeds and UV protection, see the references at the end of this guide.
Useful references

Guidance

- *Reducing the Health Risks Associated with UV Tanning Equipment*, INDG209, HSE

Cancer Research UK

- Skin cancer risk factors: [http://info.cancerresearchuk.org/cancerstats/types/skin/riskfactors/#sunbeds](http://info.cancerresearchuk.org/cancerstats/types/skin/riskfactors/#sunbeds)
- UV Burn Risk Table

<table>
<thead>
<tr>
<th>UV Index</th>
<th>I and II</th>
<th>II and IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2</td>
<td>low</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>3 4</td>
<td>medium</td>
<td>low</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>5</td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>6</td>
<td>high</td>
<td>medium</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>7 8 9</td>
<td>very high</td>
<td>high</td>
<td>medium</td>
<td>medium</td>
</tr>
<tr>
<td>10</td>
<td>very high</td>
<td>high</td>
<td>high</td>
<td>medium</td>
</tr>
</tbody>
</table>

- **Low risk** - no protection is needed.
- **Medium risk** - take care around midday and do not spend too long in the sun unprotected.
- **High risk** - cover up and spend time in the shade between 11 and 3. Use least factor 15 sunscreen on exposed skin.
- **Very high risk** - be sure to cover up and in the shade between 11 and 3. And use at least factor 15 sunscreen.

- **Skin types**
  - **Type I** - Often burns, rarely tans. Tends to have freckles, red or fair hair, and blue or green eyes
  - **Type II** - Usually burns, sometimes tans. Tends to have light hair, and blue or brown eyes
  - **Type III** - Sometimes burns, usually tans. Tends to have brown hair and eyes
  - **Type IV** - Rarely burns, often tans. Tends to have dark brown eyes and hair
  - **Type V** - Naturally black-brown skin. Often has dark brown eyes and hair
  - **Type VI** - Naturally black-brown skin. Usually has black-brown eyes and hair
Bristish Medical Journal

The full article of the research is published in the British Medical Journal and is available from: http://www.bmj.com/content/340/bmj.c877.full

Legislation

- Public Health etc (Scotland) Act 2008 – sections 95-101
- Public Health etc (Scotland) Act (Sunbed) Regulations 2009
- Sunbeds (Regulation) Act 2010 (Wales) Regulations 2011