

# **British Photodermatology Group Position Statement:**

## **Sunbeds**

The British Photodermatology Group (BPG) and the British Association of Dermatology (BAD) advocate for a complete ban on commercial sunbeds in the United Kingdom to protect public health and reduce the incidence of skin cancer and eye disease.

### **Background:**

- Ultraviolet (UV) radiation, including that emitted by sunbeds, has been classified as carcinogenic to humans by the International Agency for Research on Cancer.<sup>1</sup>
- Sunbed use is associated with significant increased risk of melanoma and non-melanoma skin cancers, particularly for those who start using sunbeds at a young age.<sup>2,3</sup>
- Despite existing regulations in the UK restricting sunbed use for under-18s, compliance and enforcement is inadequate. A complete ban is the only way to ensure young people are protected from the significant health risks associated with sunbed use.
- Several countries including Australia and Brazil have already implemented successfully total bans on commercial sunbeds. The Republic of Ireland is currently working towards legislation implementing a ban on solarium too. The UK should follow their lead in prioritizing public health over commercial interests.

### **Key Evidence:**

#### **Cancer Risk:**

- Sunbed use before age 35 increases lifetime melanoma risk by as much as 75%.<sup>4</sup>
- Regular sunbed use in all users is associated with a 20% increased risk of melanoma.<sup>5</sup>
- The risk of squamous cell carcinoma is more than doubled in sunbed users compared to non-users.<sup>6</sup>
- It is estimated that sunbed use causes over 450,000 non-melanoma skin cancer cases and 10,000 melanoma cases annually in the US, Europe and Australia combined.<sup>6</sup>
- There are 17,500 new melanoma cases in the UK per year and 2300 deaths. 6% of these are estimated to be caused by sunbeds – roughly 100 deaths per year.<sup>7</sup>
- Over the past 30 years, malignant melanoma skin cancer incidence has roughly tripled in the UK.<sup>7</sup>
- Epidemiological studies have found an increased risk of ocular melanoma with sunbed use, especially for those who started artificial tanning before 20 years of age.<sup>8,9</sup>

#### **Young People at Risk:**

- Young people, particularly women, are vulnerable to the harms of artificial tanning.<sup>10,11</sup>
- Studies show that up to 28% of young adults in the UK have used a sunbed.<sup>10</sup>
- Early sunbed use is associated with the highest increase in skin cancer risk.<sup>2,3,12</sup>
- Sunbed use is addictive and associated with smoking, excessive alcohol consumption, and other unhealthy behaviours.<sup>13,14</sup>

**Lack of Health Benefits:**

- There are no proven health benefits from sunbed use that cannot be obtained more safely through other means.
- Claims of benefits like vitamin D production are not supported by evidence and do not outweigh the risks.<sup>15,16</sup>

**Ineffectiveness of Current Regulations:**

- Existing age restrictions and guidelines have proven difficult to enforce effectively.<sup>17</sup>
- Studies show poor compliance with regulations by sunbed operators.<sup>1,18,19</sup>
- Self regulation has proven ineffective: Only 16% of sunbed operators in Northern Ireland are currently members of the voluntary Sunbed Association.<sup>20</sup>
- This situation is mirrored across the UK where local authorities report that licensing sunbeds has proved impossible to implement.<sup>17</sup>
- A complete ban is the most straightforward way to eliminate this preventable cancer risk.

**Economic Impact:**

- Skin cancer treatment places a significant burden on the NHS.
- A ban would likely be cost-effective by reducing future healthcare expenditures related to skin cancer treatment.<sup>21,22</sup>
- The annual cost to the health system for avoidable skin cancer cases and deaths due to sunbed use is estimated to be in the millions of pounds.<sup>21,22</sup>

**Public Health Benefits of a Ban:**

1. Cancer Prevention: A ban would prevent thousands of skin cancer cases annually in the UK, including life-threatening melanomas.<sup>5</sup>
2. Protection of Young People: It would eliminate access to a known carcinogen for young people who are most vulnerable to the harms.<sup>10</sup>
3. Healthcare Cost Savings: Reducing skin cancer incidence would result in significant savings for the NHS in treatment costs.<sup>21,22</sup>
4. Clear Public Health Message: A ban would send an unambiguous message about the dangers of artificial tanning and help shift cultural attitudes to suntanning in general.
5. Simplified Enforcement: A complete ban is more straightforward to implement and enforce than complex regulations.

**Cost-Effectiveness Analysis:**

A cost-effectiveness analysis of implementing a nationwide ban on commercial indoor tanning combined with a public information campaign in England found:

- Reductions of 4.8% in melanoma cases (n=1,206), 4.6% in melanoma deaths (n=207) and 3.3% in numbers of keratinocyte cancers (n=3,987) over the lifetime of the 2019 cohort of 18-year-olds.<sup>21</sup>
- An additional 497 quality-adjusted life years (QALYs) with a cost-saving to NHS England of £697,858.<sup>21</sup>
- An incremental net benefit of £10.6 million and a net health benefit of 530 QALYs.

- At a cost-effectiveness threshold of £20,000 per QALY, there is a 99% likelihood of the intervention being cost-effective.<sup>21</sup>

### **Implementation Considerations:**

- There are an estimated 5200 tanning shops in the UK, with a higher density in deprived areas. There are hotspots in the Northwest and Northeast of England.
- Provide a transition period for businesses to adapt and offer support for shifting to safer services like spray tanning.
- Implement strong enforcement mechanisms and penalties for non-compliance.
- Pair the ban with public education campaigns on the risks of UV exposure and importance of sun protection.<sup>21,23,24</sup>
- Consider restrictions on private sunbed ownership and use to prevent shifting the risk.
- Empower local authorities to enforce the ban, with powers to inspect premises and issue fixed penalty notices.
- The success of the banning of sunbeds in Australia provides a model for us to copy.<sup>24</sup>

### **Public Support:**

A survey by Cancer Research UK suggested that 90% of the public supported a ban on under 18s using sunbeds. 77% of dermatologist support a ban in the UK and 94% agree that unregulated tanning salons contribute to skin cancer cases.<sup>25,26</sup>

### **Conclusion:**

Artificial tanning poses an unnecessary and preventable cancer risk, particularly to young people. Existing regulations have proven inadequate in protecting public health. A complete ban on commercial sunbeds is justified and necessary to reduce skin cancer incidence in the UK. We urge policymakers to take decisive action to protect public health by implementing a total ban on commercial sunbeds across the UK. This evidence-based, cost effective policy would prevent needless suffering, save lives, and reduce healthcare costs.

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