

## Prevention of Skin Cancer by Reducing Exposure to UV Light through Educational and Policy Approaches in Secondary Schools and Colleges

Skin cancer is one of the most common cancers in the United States. The strongest, preventable risk factor for developing skin cancer is exposure to the sun's ultraviolet (UV) rays. However in a study released in 2002, at least 70% of adolescents report having at least one summer sunburn and only 30% report routinely protecting themselves adequately from UV exposure. The question is what are effective strategies to decrease sunburns or improve sun protective behaviors among adolescents at secondary schools and colleges?

A systematic review of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found that there was insufficient evidence (i.e. studies) to determine whether or not educational and policy approaches in secondary schools and colleges are effective in: 1) improving "covering up" behavior [i.e. wearing protective clothing such as a shirt, long pants, and hat], or 2) increase in shade use or staying out of the sun during peak UV hours]. Sunscreen use was considered a secondary outcome meaning that a change in sunscreen use alone would not result in a recommendation but it should have accompanied one of the two recommendation outcomes). It is important to remember that **this finding does not mean this intervention does not work**, but rather indicates that additional research is needed to determine its effectiveness.

### Background on educational and policy approaches in secondary schools and colleges

- Educational and policy approaches in secondary schools and colleges were designed to decrease sunburns and increase sun-protective knowledge, attitudes, intentions, and behaviors among adolescents (?)
- Interventions reviewed within this category included didactic classroom teaching combined with:
  - some interactive and home based activities
  - internet-based activities
  - small media (e.g. brochures, fact sheets)
  - provision of sunscreen samples
  - extra class credit
  - cash incentives

### Findings from the systematic review

#### Search results:

- 6000+ titles and citations screened
- 159 articles reviewed
- 85 studies included in one of the 9 interventions reviewed
- 13 qualifying studies
- In its review of available studies on the effectiveness of this intervention, thirteen (13) studies were identified that addressed the effectiveness of educational or policy approaches in secondary schools and colleges in decreasing sunburns or improving sun protective behaviors. These studies were not considered sufficient for the Task Force to base a recommendation, given the small number of studies and limitations in their design and execution and the limited number of outcomes that were examined in the qualified studies.
- Along with the issue of effectiveness, other issues regarding this intervention were identified during this review. These include:
  - What attributes of this intervention contribute to effectiveness?
  - How can this intervention be implemented with minimal administrative burden and little disruption to the primary mission of the school?
- Additional detail regarding key components of research in this area that could be improved so as to increase the body of evidence of effectiveness is available as part of a broader set of research questions.

### **Action Items**

- Studies similar to those that were done in primary schools would help show effectiveness in this population. More interventions in this setting should include policy interventions.
- Information on current school guidelines is available at: <http://www.cdc.gov/cancer/nscpep/skin.htm>
- Use this finding and suggestions for improvement in research components and contact information from [Cancer Control PLANET \(http://cancercontrolplanet.cancer.gov\)](http://cancercontrolplanet.cancer.gov) to find local cancer prevention partners to conduct or seek resources for further research.

### **Publications:**

- **MMWR/Recommendations and Reports** – Fall 2003. A summary report on findings.

---

**The Guide to Community Preventive Services** (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see [www.thecommunityguide.org](http://www.thecommunityguide.org) and for more information about Task Force findings on skin cancer prevention see [www.thecommunityguide.org/cancer/](http://www.thecommunityguide.org/cancer/)

This information is in the public domain. Copying and disseminating freely is encouraged. However, citation to source is appreciated.  
Updated – September 11, 2003