

Background Information

- This curriculum was developed for elementary school teachers in conjunction with The SunSafe Project of Dartmouth Medical School, Hanover, NH. The SunSafe Project was a skin cancer prevention study funded by the National Cancer Institute. The project engaged health care professionals, elementary school teachers and administrators, child care providers, recreation department personnel, parents, and children. It effectively promoted sun protection for children ages 2-9 to reduce their risk of later developing of skin cancer.* In addition to this manual, child care sites participating in the SunSafe Project received a parent/teacher presentation on sun protection, supplementary materials such as posters and activity books, and any necessary follow-up support.

The Important Role Of Teachers In Delivering the SunSafe Message:



50 to 80% of each person's lifetime exposure to sunlight occurs before adulthood.

Children are most receptive to health messages during the preschool through fourth grade years. Preventive health habits developed at these young ages are likely to continue into adulthood. Children are particularly receptive to health messages received in an environment where they are comfortable, have peer support, and have their teachers as role models. Quality schools provide such an atmosphere.

Citations

Dietrich, AJ, AL Olson, CH Sox, CW Winchell, J Grant-Petersson, DW Collison. Sun protection counseling for children: New Hampshire primary care practice patterns and the impact of an intervention. (in press, Archives of Family Medicine)

*Grant-Petersson, J, AJ Dietrich, CH Sox, CW Winchell, & MM Stevens. Promotion of sun protection in elementary schools and child care settings: The SunSafe Project. Journal of School Health (slated for publication Spring 1999)

* Dietrich, AJ, Olson, AL, CH Sox, MM Stevens, TD Tosteson, T Ahles, CW Winchell, J Grant-Petersson, DW Collison, R Sanson-Fisher. 1998. A community-based randomized trial encouraging sun protection for children. Pediatrics 102(6): .

Olson, AL, AJ Dietrich, CH Sox, MM Stevens, CW Winchell, TA Ahles. 1997. Solar protection of children at the beach. Pediatrics 99(6): URL: <http://www.pediatrics.org/cgi/content/full/99/6/e2>



About this curriculum:

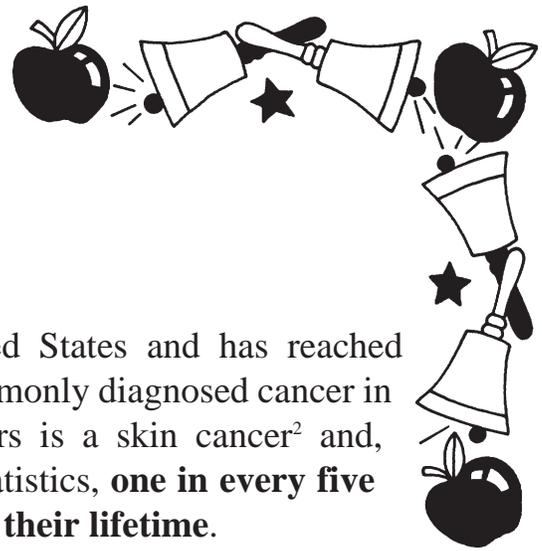
This manual is a sun protection curriculum for elementary school children. The curriculum includes Learning Objectives, Curriculum Overview, Suggested SunSafe Lesson Plans, and Support Activities.

We have provided the masters where appropriate so that you may make photocopies for your class.

The Suggested Lesson Plans are intended to provide you a starting point for introducing the SunSafe concepts. We suggest that you have two SunSafe classroom periods to introduce the concepts and follow up with weekly reminder activities. We encourage you to look through the **Plans and Activities** and choose those which are most appropriate for your classroom.

Thank you for teaching the SunSafe curriculum and taking a **leadership** role in addressing this increasingly serious public health problem.

Teacher Information



Why worry about skin cancer?

Skin cancer is increasing in the United States and has reached epidemic proportions. It is the most commonly diagnosed cancer in the world.¹ One in every three cancers is a skin cancer² and, according to Skin Cancer Foundation statistics, **one in every five Americans will develop skin cancer in their lifetime.**

Are all skin cancers the same?

Three types of Skin Cancer: basal cell carcinoma, squamous cell carcinoma, and malignant melanoma

There are three common types of skin cancer. The most common is **basal cell carcinoma, followed by squamous cell carcinoma.** These two cancers together are referred to as the nonmelanoma skin cancers and **more than half a million new cases are diagnosed annually in the United States.**² Frequent exposure to sunlight greatly increases the risk of developing these cancers.

The third type of skin cancer, **malignant melanoma,** is the most life-threatening. Once it begins to develop, it can spread quickly throughout the body. Painful, blistering sunburns received as a child or adolescent greatly increase the risk of developing malignant melanoma. Unfortunately, the incidence of malignant melanoma is also on the rise. An estimated 32,000 Americans are diagnosed with malignant melanoma annually³ and **the average American's lifetime risk of getting malignant melanoma is 1 in 86.**³



Citations

- ¹ Armstrong BK, Kricger A. Skin Cancer. *Dermatoepidemiology* 13(3): 583-594, 1995.
- ² Marks R. An Overview of Skin Cancers. *CANCER Supplement* 75(2): 607-612, 1995.
- ³ Brink S, Wu C. Sun Struck. *US News & World Report*: 62-68, June 24, 1996

Don't children need a certain amount of sunlight?

We do need some sunlight; the **ultraviolet (UV-B)** portion of the solar spectrum stimulates the production of vitamin D. Vitamin D is essential for healthy bones. However, **fifteen minutes of summer sun, three times a week**, is all that is needed to produce enough vitamin D. Vitamin D can also be obtained from milk or from multivitamins.



Holick, MF. Vitamin D Deficiency. Nutrition Action Healthletter 24(9): 3-6, October 1997

Won't a good base tan protect me from sunburns and damage?

This is one of the biggest myths. It is important to distinguish between natural pigmentation and pigmentation which is induced by exposure to UV rays. Natural pigmentation does protect individuals from sunburn and skin cancer; cancer rates are significantly lower for dark-skinned people than for fair-skinned people. When a fair person's skin is exposed to the sun, it turns brown because the skin is producing a pigment called **melanin**. Melanin is the skin's way of trying to protect itself from further injury. Unfortunately, the level of melanin that the skin produces is insufficient to protect it from the harmful effects of everyday exposure to sunlight. So while most people associate tanned skin with good health, it is really a sign of damage. In reality, there is **no such thing as a "healthy tan"**.

