

# The U.S. EPA's SunWise Program



*A free skin cancer prevention and ozone layer education program for K-8 learners.*

## A Roadmap

*In this document, you'll find...*

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**SunWise**<sup>®</sup>  
a program that **radiates** good ideas

A Partnership Program of the U.S. Environmental Protection Agency  
[www.epa.gov/sunwise](http://www.epa.gov/sunwise)

# The SunWise Story



- ☀ Launched nationwide during the 2000–2001 school year, this award-winning program is available to schools and informal education organizations, to promote sustained sun-safe behaviors in children.
- ☀ As of 2008, more than 18,000 schools and one million students are SunWise.
- ☀ Schools and partners receive a free SunWise Tool Kit with over 50 standards-based, cross-curricular activities, a UV-sensitive Frisbee® for experiments, story and activity books, posters and more.
- ☀ The program is flexible and activities fit into what an educator is already doing. The time commitment can be as little as one to two hours during the entire school year.

## A Study in Sun Safety Awareness

Starting with a “pilot group” in 1999, the SunWise Program has undergone routine evaluations to determine its effectiveness on student sun safety knowledge, attitudes, practices, and intended practices using student responses to surveys.

- ☀ Teachers leading SunWise lessons have also completed program evaluations, in which three out of four have noted improvements in their own sun protection behaviors.
- ☀ The most recent study, conducted in 2006–2007, took the evaluation of changes in students’ sun safety behaviors one step further by analyzing the human health benefits of SunWise (e.g., fewer skin cancer cases and mortalities), then comparing these benefits to the program’s costs.<sup>1</sup>
- ☀ The study found that **using SunWise to teach children about sun safety saves lives and money.**<sup>1</sup>
- ☀ The study is unique because few studies to date have analyzed the benefits of school-based health programs in economic terms. This is the first study to review the cost-benefit of a school-based sun safety program.
- ☀ The study results were published in the May 2008 issue of *Pediatrics*, the official journal of the American Academy of Pediatrics and one of the leading publications for pediatric research. The full article, entitled “Economic Evaluation of the U.S. Environmental Protection Agency’s SunWise Program: Sun Protection Education for Young Children,” is available online at [www.pediatrics.org/cgi/content/full/121/5/e1074](http://www.pediatrics.org/cgi/content/full/121/5/e1074).

## SunWise Saves Lives and Money

The newest evaluation of SunWise assessed student survey responses from 1999–2005 to determine program effectiveness, benefit-to-cost ratio, and cost-effectiveness.

- ☀ Teachers can bring about modest changes in students’ sun protection behavior, such as wearing sunscreen or a hat more frequently, by taking 1–2 hours each year to use activities in the free, standards-based and cross-curricular SunWise Tool Kit. These modest changes can lead to significant health benefits in the future.<sup>1</sup>
  - ☀ As a result of teaching SunWise to children between the years 1999–2015, EPA estimates that **more than 50 premature deaths and 11,000 cases of skin cancer will be prevented.**<sup>1</sup>
  - ☀ By increasing federal spending by just a few pennies per person more over the next seven years, the SunWise Program could **save 20 more lives and prevent more than 4,000 more cases of skin cancer.**<sup>1</sup>
  - ☀ Every federal dollar invested in SunWise **saves \$2–\$4 in public health costs**, such as medical care costs and productivity losses associated with skin cancer.<sup>1</sup>
  - ☀ The larger the investment in SunWise, the greater the number of reduced skin cancer cases and mortalities, and the more cost-effective the program becomes.<sup>1</sup>
- ☀ **\$1 spent on SunWise saves \$2–\$4 in public health costs.**

## Lessons in Effectiveness

Surveys of children and teachers have taken place since the inception of the program in 1999. From 1999–2002, two special efforts evaluated the effectiveness of the SunWise classroom lessons on student knowledge, attitudes, practices, and intended practices using student responses to identical pre-test and post-test surveys.

- ☀️ As part of the first survey effort, students completed pre-test surveys between autumn and early spring and post-tests immediately after being taught the SunWise lessons (spring to early summer).<sup>2</sup>
- ☀️ A large school district also served as a control group for this study (the students at these schools *did not* receive SunWise education between the pre- and post-tests).<sup>2</sup>
  - ☀️ Among the more than 1,800 students aged 5–12 that received a SunWise education, **the percentage of students who knew the right number SPF of sunscreen to wear increased by 25%.**<sup>2</sup>
  - ☀️ Results also showed a **4% decrease in students who thought people look healthier with a suntan.**<sup>2</sup>
  - ☀️ Modest changes were observed in student practices from pre-test to post-test, and **intentions to both play in the shade and use sunscreen increased by 4% to 5%.**<sup>2</sup>
  - ☀️ This compared very favorably with control schools where no improvements in attitudes or practices were noted.<sup>2</sup>
- ☀️ As part of the second survey effort, a separate group of students received the pre-test and two post-tests from their school nurses: one post-test immediately after being taught SunWise and another the following fall to determine if students retained the SunWise lessons and maintained their SunWise behaviors.<sup>3,4</sup>
  - ☀️ 477 children completed the second set of post-tests, which indicated that **students maintained their gains in knowledge and attitudes.**<sup>3,4</sup>
  - ☀️ In addition, an **11% decrease in sunburning rates, particularly in frequent burns,** was noted from summer 2000–summer 2001.<sup>3,4</sup>

☀️ **11% decrease in sunburning rates, particularly frequent burns.**



