

SunWise

# monitor

An Update on EPA's SunWise School Program

## Welcome to the SunWise Monitor

by Bob Perciasepe, Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency (EPA)

**W**elcome to the first issue of the *SunWise Monitor*! Through the *Monitor*, EPA will share important information about the SunWise School Program and sun protection with participating Partner Schools and communities across the country. The SunWise Program is designed to teach schoolchildren and their caregivers how to avoid overexposure to the sun. SunWise is already under way in more than 100 pilot schools and is preparing for a national launch in Fall 2000.

Why is EPA championing sun safety today? Many of us are becoming more aware of our impact on the environment, but some might not realize that the consequences of human behavior stretch far beyond Earth's surface.

Years ago, you probably didn't think twice about using an aerosol spray or turning on an air-conditioner in your car or home. Back then, we didn't know that the chlorofluorocarbons (CFCs) released from these products deplete the ozone layer, which absorbs the sun's harmful ultraviolet (UV) radiation.

Since 1996, CFCs and other ozone-depleting substances have been banned from new production in the United States and other developed countries, but it will still take years to repair the damage already inflicted on the ozone layer. In the meantime, increased levels of harmful UV radiation are likely to reach the Earth, causing skin cancer, cataracts, immune suppression, and other health effects. Already, skin cancer is the most common form of cancer in the United States, with more than one million cases reported annually.

In this time of increased risk, EPA's SunWise School Program is an important tool for the protection of our health and the health of our children.

On behalf of EPA, I would like to thank you for your continued support of this vital program. Through our combined efforts, SunWise will play an integral role in assuring the health and awareness of children and caregivers. ☺



**A**re you keeping yourself and your children safe in the sun? The sun-safety tips below are the cornerstone of the SunWise School Program and a good way for anyone to reduce the risk of UV-related health damage. Other than staying indoors, no single step can fully protect you from overexposure to UV radiation, so follow as many of the action steps as possible.

### Limit Time in the Midday Sun

The sun's rays are strongest between 10 a.m. and 4 p.m. Whenever possible, limit exposure to the sun during these hours.

### Wear Sunglasses That Block 99 to 100 Percent of UV Radiation

Sunglasses that provide 99 to 100 percent UVA and UVB protection will greatly reduce sun exposure that can lead to cataracts and other eye damage. Check the label when buying sunglasses.

### Wear a Hat

A hat with a wide brim offers good sun protection for your eyes, ears, face, and the back of your neck—areas particularly prone to overexposure to the sun.

### Seek Shade

Staying under cover is one of the best ways to protect yourself from the sun. Remember the shadow rule: "Watch Your Shadow—No Shadow, Seek Shade."

### Cover Up

Wearing tightly woven, loose-fitting, and full-length clothing is a good way to protect your skin from the sun's UV rays.

### Always Use Sunscreen

Apply sunscreen liberally on exposed skin and reapply every 2 hours when working or playing outdoors. Even waterproof sunscreen can come off when you towel off sweat or water.

### Watch for the UV Index

The UV Index provides important information to help you plan your outdoor activities in ways that prevent overexposure to the sun. Developed by the National Weather Service (NWS) and EPA, the UV Index is issued daily in selected cities across the United States.

### Avoid Sunlamps and Tanning Salons

The light source from sunbeds and sunlamps damages the skin and unprotected eyes. It's a good idea to avoid artificial sources of UV light.



## Sunscreen Does Not Cause Blindness

Don't believe everything you hear! An e-mail story disseminated widely this past spring claimed that waterproof sunscreen causes blindness in numerous children every year. Neither the American Academy of Ophthalmology, the Poison Control Center, the U.S. Food and Drug Administration (FDA), nor any sunscreen manufacturers, have ever heard of a person being blinded by sunscreen.

The most severe eye injury that sunscreen could cause is an abrasion of the surface of the eye, which could result in moderate discomfort during the healing process but no long-term effects. If sunscreen does get in the eye, the Academy suggests rinsing with water and seeing an eye doctor if the pain does not subside.

According to the American Academy of Dermatology, a person receives approximately 80 percent of his or her lifetime sun exposure by the age of 18. Preventing over-exposure in childhood by following the action steps for sun protection, therefore, is essential to preventing skin cancer later in life. (See "Take Action," p.1.) ☉

## Shop SunWise: Look For Changes in Sunscreen Labels

Sunscreen already tops the shopping list of any SunWise consumer. Now, new labeling changes aim to help shoppers make a more informed decision on sun protection.

In May 1999, FDA finalized labeling requirements for over-the-counter sunscreen products. While the regulations call for the discontinuation of terms that might be misleading, such as "sunblock," or "waterproof," the most important label change will be the appearance of FDA's three new sun protection cate-

gories. Devised to help consumers choose the right SPF level for their needs, the optional rankings will appear as follows:

- **Minimal**—SPF levels from 2 to below 12.
- **Moderate**—SPF levels from 12 to below 30.
- **High**—SPF levels of 30 and higher.

Specific SPF numbers will continue to appear on product labels, though the highest category will be "30+" for values above 30.

Under these new labeling regulations, you'll also

start seeing a "sun alert" statement on products discussing the important role of sunscreen in overall sun-related health protection. Products that won't screen out the sun's harmful rays must be marked as well. Labels on tanning lotions, which do not contain sunscreen, must feature a warning about their lack of protection against sun exposure.

For more information on FDA's new regulations, consult its Web site at <[www.fda.gov](http://www.fda.gov)>. ☉

# In the SunWise

Read about SunWise in action! The following SunWise stories from students and teachers in

## Sun Scientists Use Technology

Students in Glendora, California, are using technology to explore the science behind SunWise.

Greg Morrison's science class at Goddard Middle School uses many tools, including the Internet, CD-ROMs, videos, and laboratory experiments to collect, report, and analyze UV-related data. In a favorite class activity, students use hand-held UV monitors, available from EPA, to measure the intensity of UV rays at ground level. After gathering these

data, the students can upload results to the SunWise Web site.

With the help of the local SunWise Club's Teacher Mini Grant, Greg Morrison runs another program using UV-sensitive beads to teach students about the sun's UV rays and the effects of UV radiation on skin and health. Outside, students observe the beads changing color from light colors to darker colors corresponding to the strength of UV rays. The students then



For more information, contact Mary Ann Moore at Brownstown Middle School, 20135 Inkster Road, Brownstown, MI 48103. Email: [matuckermoores@brownstown.k12.mi.us](mailto:matuckermoores@brownstown.k12.mi.us)

## SunWise Milestones

### Winter 1996

Conceived SunWise School Program.

### Early 1998

Examined other sun protection programs and developed tenets of SunWise School Program.

### Summer and Fall 1998

Held meetings with community planning teams. Began promoting SunWise School Program to teachers.

### Spring 1997

Held initial brainstorming meeting with stakeholders.

### Mid 1998

Partnered with a number of health and weather organizations and held stakeholder meeting to develop and implement SunWise School Program.

### Winter 1999

Launched SunWise Web Site: <[www.sunwise.org](http://www.sunwise.org)>

# Spotlight...

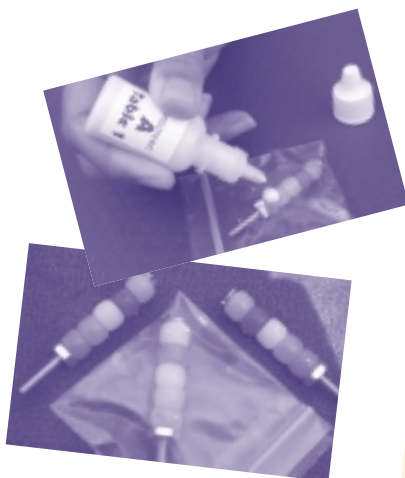
Articles share some exciting stories from partner schools across the country.

load their Web site.

Rotary Program, popular experiments to teach about UV rays and on human students from clear, and the sun's examine

and record the effectiveness of different types of sun protection, covering the beads with sunscreens of various SPF levels, sunglasses, wet and dry clothing, and plastic.

In addition, Morrison uses video tapes of national newscasts about the ozone layer, which further demonstrate the scope and breadth of the subject. All these sun-science activities and students' work are featured on Morrison's class Web site, <www.morrisonlabs.com>. ☺



**For more information:**  
**Greg Morrison**  
**Goddard Middle School**  
**859 E. Sierra Madre**  
**Glendora, CA 91741**  
**gm@morrisonlabs.com**

## Having a SunWise Field Day

SunWise seventh graders in Brownstown, Michigan, took the sting out of an annual school event by encouraging fellow students to practice sun-safe behavior. Every June at Brownstown Middle School, students spend a "field day" competing in outdoor events. Unfortunately, just as field day was a Brownstown tradition, so were the many sunburned students in school the following Monday.

This year was different, however, thanks to the SunWise School Program and the students in 6th grade and the 7th grade health classes. As participants in the SunWise pilot, the students launched a sun-safe campaign for the field day, encouraging their schoolmates to use sunscreen, hats, and sunglasses during the event. To spread the safety message, the classes created posters to hang in the school's hallways and asked local businesses to donate sunscreen for the students to use on the field day. According to Mary Ann Moore, the 7th grade teacher, there were no occurrences of severe sunburns at this year's field day.

The Brownstown students put their SunWise knowledge into practice again this past Arbor Day when they planted 3-foot oak saplings on the school grounds. Eventually, these trees will provide protective shade for students participating in outdoor activities. ☺

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## SunWise Lessons Hit Home

Students at Medway Middle School in Medway, Massachusetts, witnessed first-hand the effects of overexposure to the sun. They remember seeing teacher Cheryl Cook walking the halls after her reconstructive facial surgery due to skin cancer.

"Due to the size and placement of the tumor, I was quite a sight. Even kids who weren't in my class knew who I was," explained Cook. "That's why my efforts to educate kids about the sun have been so successful; they don't want what happened to me to happen to them."

Cook—along with her teaching assistant Maureen Leighton—has incorporated numerous SunWise activities into the lessons of her two seventh-grade classes. In addition to using many of the ideas provided by the SunWise School Program, she invented "SunWise Bingo" and has helped students develop skits, posters, commercials, and songs about sun protection. One skit was called "Sizzle News," and another took the form of a talk show with special guest "U.T. Violet."

Cook's students volunteer each day to take measurements of UV intensity outside, and post results twice a day on a bulletin board. She also encourages the Weather Service Club to announce the UV Index each morning.

As a culminating activity for the 1998-1999 school year, Cook created a video documenting students' performances and creative initiatives. "I am pleased to be part of the SunWise program," she says, "because it is a good life lesson for my students." ☺

**For more information:**  
**Cheryl Cook**  
**Medway Middle School**  
**45 Holliston Street, Medway, MA 02053**  
**508 533-7654 ext. 5328**

### May 1999

Conducted pilot testing (phase I) with 25 participating schools.

### Summer 1999

Evaluated SunWise progress to date and make improvements to the program.

### May 2000

Hold press event to announce debut of SunWise School Program across the country.

1998

SunWise School Program  
[www.epa.gov/sunwise](http://www.epa.gov/sunwise)

### September 1999 to June 2000

Conduct pilot testing (phase II) with more than 100 participating schools.

### Fall 2000

Launch SunWise School Program nationwide.



## RESOURCES

### SunWise School Program

**SunWise School Program Internet Learning Site**  
[www.epa.gov/sunwise](http://www.epa.gov/sunwise)

An excellent source for information on the SunWise School Program, this Web site includes general information on ozone depletion, UV radiation, UV health effects, and sun-safety tips. The site also includes an online registration form for joining the SunWise Program, as well as links to other informative educational sites.

Students and teachers can currently use the site to report and interpret daily measurements of UV data. As the SunWise Program develops, additional features and activities, including games and experiments, will be added to the site.

### SunWise School Program Guide

This guide provides information about the SunWise School Program, details how to become a Partner school, describes tools available to Partner schools, and explains how the program will be evaluated. The guide may be downloaded as a 322K Adobe Acrobat (PDF Format) file from the SunWise School Program Web site (see address above). To order a hard copy of the guide, contact EPA's Stratospheric Ozone Information Hotline at 800 296-1996. For additional information, contact Linda Rutsch of the SunWise School Program at 202 564-2261.

Looking for more information on the SunWise School Program, general sun safety, or the science behind UV radiation and the ozone layer? Check out the many electronic and print resources EPA makes available to the public free of charge.

### General Sun-Safety and Ozone Science

#### **The Sun, UV, and You: A Guide to SunWise Behavior**

This newly updated booklet presents the science behind UV radiation and stratospheric ozone and the health risks associated with overexposure to the sun. It also provides steps for protecting yourself and your children, defines the UV Index, and provides a list of additional resources.

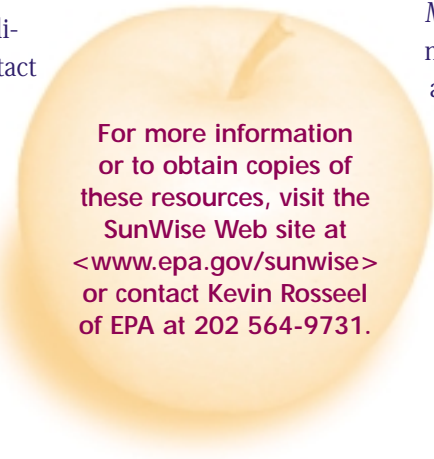
### SunWise Fact Sheets

A number of short, informative factsheets also are available:

- *Health Effects of Overexposure to the Sun*
- *Action Steps for Sun Protection*
- *Ozone Depletion*
- *Ultraviolet Radiation*

### Kids Korner

Teachers and their SunWise students are invited to submit articles about their activities, story ideas, artwork, and sun-safety project ideas to be featured in future issues of the *SunWise Monitor*. You can send materials to Linda Rutsch at <[rutsch.linda@epa.gov](mailto:rutsch.linda@epa.gov)> or U.S. EPA (Mailcode 6205J), 401 M Street, SW., Washington, DC 20460.



**For more information or to obtain copies of these resources, visit the SunWise Web site at <[www.epa.gov/sunwise](http://www.epa.gov/sunwise)> or contact Kevin Rosseel of EPA at 202 564-9731.**

The SunWise School Program is an Environmental Monitoring for Public Access and Community Tracking (EMPACT) project.



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