Youth Running Guidelines:
Preventing Sports Injuries

Adapted from "Youth Movement," a Runner's World article by Marc Bloom, 2007, author of Young Runners: The Complete Guide to Healthy Running for Kids from Ages 5-18.

Why is it important to moderate children's running:

Children ages 5-14 account for 40 percent of all sports-related injuries, with female runners having the highest rate of injury (over even football players).

Frequency, Intensity, Time and Balance:

-2-3 sessions a week
-Start 5-10 minutes, gradually increasing to 20-30
-Keep distance and intensity moderate
-Include exercises that incorporate alternate muscle groups

Age level recommendations:

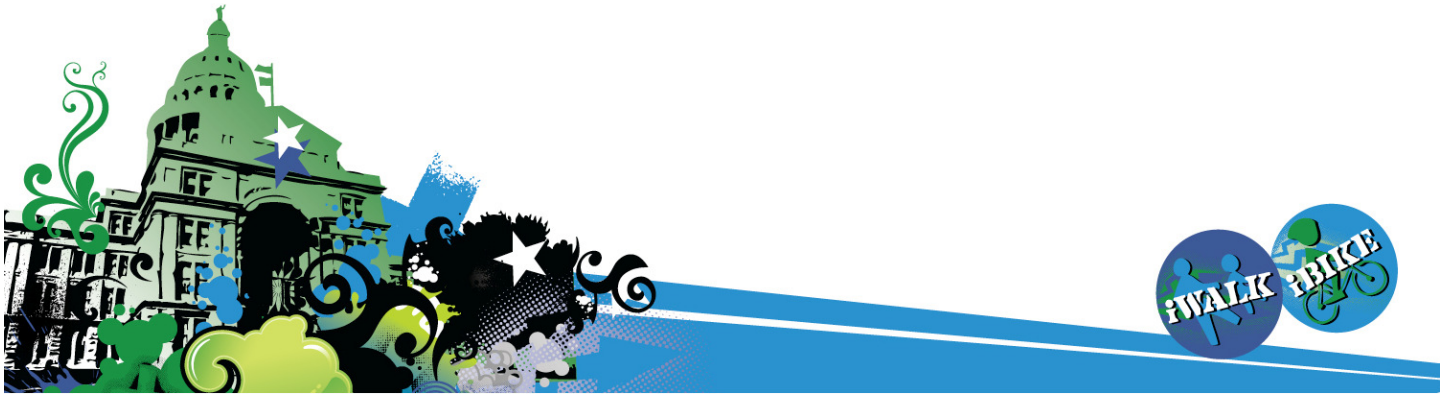
Preschoolers: Preschoolers should only run for play.

Ages 5-8: Running spurts should be short with many breaks (walking, listening to stories, stretching, performing exercises). Running should involve play. Example: incorporating exercises for alternating muscle groups, running, and walking, start small with 5-10 minutes of exercise, and build to 20-30 minutes, running up to half a track-distance (200 meters) at a time.

Ages 9-12: This age group can handle training for a one-mile event with an emphasis on pacing and enjoyment. It is key to balance running with other sports and exercises. At this age, children's long bones are in growth and are sensitive. Be careful to increase distances gradually. At the upper limits of this age group, children can begin to work towards a 5k distance.

Ages 13-14: Many young teens are still in a growing-phase and precautions should be taken to ease into mileage. This group can comfortably work on 5k distances and as they pass into puberty, their bodies are better able to handle longer, more competitive racing. With certified coaches, young teens can aim for 10K distances, with 2-3 runs a week.

Ages 15-18: With certified coaches, teenagers can safely increase distances and intensity adapted to individual abilities. Emphasis should be placed on whole body fitness.



Safety Tips for Walking, Running and Biking

1. **Walk or Bike Together Safely**
   - ☆ Always walk or bike with a parent or a friend.
   - ☆ When walking, use safe routes with sidewalks.
   - ☆ If no sidewalk available, walk on the left side of the street (facing traffic).
2. **Be Bright! Be Seen!**
   - ☆ Wear bright color clothing or reflective materials so others will see you.
   - ☆ Use lights and reflectors on your bike.
3. **Watch Out!**
   - ☆ Be aware of cars that are turning or backing out of driveways.
   - ☆ Make eye contact with drivers.
4. **Cross Safely**
   - ☆ Cross at a crosswalk or a corner.
   - ☆ Look both ways and make sure there are no cars coming before you cross.
   - ☆ Keep looking for traffic until you finish crossing.
5. **Follow the Rules!**
   - ☆ Obey all traffic signs, signals and crossing guards when walking or biking.
   - ☆ Always wear your helmet, even if going for a short ride.

Parents' and Coaches' Guide to Dehydration and Other Heat Illnesses in Children

These guidelines were developed to help parents and coaches increase the safety and performance of children who play sports in hot weather. Children who play sports or are physically active in hot weather can be at risk for heat illnesses. The good news is heat illnesses can be prevented and successfully treated.

Children sweat less than adults. This makes it harder for children to cool off. Parents and coaches must make sure that children take it slow to be sure they can get used to the heat and humidity gradually.

There are other reasons why a child may become ill from a heat illness. Those who have a low level of fitness, who are sick, or who have suffered from dehydration or heat illness in the past should be closely watched. A medical professional such as a certified athletic trainer (ATC) should be on site to monitor the health and safety of all participants during games and practice, especially when it is very hot and humid.

Dehydration

Children get dehydrated if they do not replace body fluids lost by sweating. Being even a little dehydrated can make a child feel bad and play less effectively. Dehydration also puts children at risk for more dangerous heat illnesses.

Signs and Symptoms

- Dry mouth
- Thirst
- Being irritable or cranky
- Headache
- Seeming bored or disinterested
- Dizziness
- Cramps
- Excessive fatigue
- Child not able to run as fast or play as well as usual

Treatment

- Move child to a shaded or air-conditioned area.
- Give him or her fluids to drink.

"When can I play again?"
A child may be active again as soon as he or she is symptom-free. However, it's important to continue to watch the child.

National SAFE KIDS Campaign®

NATA

Heat Cramps

Heat cramps are a mild heat illness that can be easily treated. These intense muscle spasms usually develop after a child has been exercising for a while and has lost large amounts of fluid and salt from sweating. While heat cramps are more common in children who perform in the heat, they can also occur when it's not hot (for example, during ice hockey or swimming).

Children who sweat a lot or have a high concentration of salt in their sweat may be more likely to get heat cramps. Heat cramps can largely be avoided by being adequately conditioned, getting used to the heat and humidity slowly, and being sure a child eats and drinks properly.

Signs and Symptoms

- Intense pain (not associated with pulling or straining a muscle)
- Persistent muscle contractions that continue during and after exercise

Treatment

- The child should be given a sports drink to help replace fluid and sodium losses.
- Light stretching, relaxation and massage of the cramped muscles may help.

"When can I play again?"

A child may be active again when the cramp has gone away and he or she feels and acts ready to participate. You can help decrease the risk of recurring heat cramps by checking whether the child needs to change eating and drinking habits, become more fit, or get better adjusted to the heat.

Heat Exhaustion

Heat exhaustion is a moderate heat illness that occurs when a child continues to be physically active even after he or she starts suffering from ill effects of the heat, like dehydration. The child's body struggles to keep up with the demands, leading to heat exhaustion.

Signs and Symptoms

- Child finds it hard or impossible to keep playing
- Loss of coordination, dizziness or fainting
- Dehydration
- Profuse sweating or pale skin
- Headache, nausea, vomiting or diarrhea
- Stomach/intestinal cramps or persistent muscle cramps

Treatment

- Move child to a shaded or air-conditioned area.
- Remove any extra clothing and equipment.
- Cool the child with cold water, fans or cold towels (replace towels frequently).
- Have child lie comfortably with legs raised above heart level.
- If the child is not nauseated or vomiting, have him or her drink chilled water or sports drink.
- The child's condition should improve rapidly, but if there is little or no improvement, take the child for emergency medical treatment.

"When can I play again?"

A child should not be allowed to return to play until all symptoms of heat exhaustion and dehydration are gone. Avoid intense practice in heat until at least the next day, and if heat exhaustion was severe, wait longer. If the child received emergency medical treatment, he or she should not be allowed to return until his or her doctor approves and gives specific return-to-play instructions.

Parents and coaches should rule out any other conditions or illnesses that may predispose the child for continued problems with heat exhaustion. Correct these problems before the child returns to full participation in the heat, especially for sports with equipment.

Exertional Heat Stroke

Heat stroke is a severe heat illness that occurs when a child's body creates more heat than it can release, due to the strain of exercising in the heat. This results in a rapid increase in core body temperature, which can lead to permanent disability or even death if left untreated.

Signs and Symptoms

- Increase in core body temperature, usually above 104°F/40°C (rectal temperature) when the child falls ill
- Central nervous system dysfunction, such as altered consciousness, seizures, confusion, emotional instability, irrational behavior or decreased mental acuity

Other possible indicators include:

- Nausea, vomiting or diarrhea
- Headache, dizziness or weakness
- Hot and wet or dry skin
- Increased heart rate, decreased blood pressure or fast breathing
- Dehydration
- Combativeness

Treatment

If there are no on-site medical personnel:

- Call emergency medical services for immediate transport to the nearest emergency medical facility. Begin cooling the child while waiting for and during transport to the emergency facility.

If there are on-site medical personnel:

- Locate medical personnel immediately. Remove extra clothing or equipment. Begin aggressive whole-body cooling by immersing the child in a tub of cold water. If a tub is not available, use alternative cooling methods such as cold water, fans, ice or cold towels (replaced frequently), placed over as much of the body as possible.
- Call emergency medical services for transport to the nearest emergency medical facility.

"When can I play again?"

No child who has suffered heat stroke should be allowed to return until his or her doctor approves and gives specific return-to-play instructions. Parents should work with the child's doctor to rule out or treat any other conditions or illnesses that may cause continued problems with heat stroke. The child should return to physical activity slowly, under the supervision of an ATC or other qualified health care professional, especially for sports with equipment.

Parents: How Much Should Your Child Drink When Active?

- Before activity in the heat, record your child's body weight. (Remember if your child has already been exercising in the heat, he or she may already be dehydrated.)
- Weigh your child again, after the activity is over.
- Compare your child's pre-activity body weight to his or her post-activity body weight.

If post-activity weight is less than pre-activity weight, your child is not drinking enough fluids while active. A loss of as little as 1 percent of body weight can cause a decrease in performance. Because scientists have proven that children replace less of their fluid losses when drinking water, you may want to offer a flavored sports drink to increase the amount of fluid your child consumes.

Tips for Parents

- Before your child starts playing a sport, he or she should have a physical examination that includes specific questions about any history of heat illness.
- Tell your child's coach about any history of heat illness.
- Make sure your child is properly hydrated before he or she heads out the door to practice or a game. Give your children their own water bottles.
- Make sure your child's coach has your emergency contact numbers.
- Check that your child's league/team has an emergency action plan.

Tips for Coaches

- Be aware of temperature and humidity levels. Change practice length, intensity and equipment use as the levels rise.
- It should be easy for children to drink fluids during practice, and you should remind them to drink regularly. Fluid breaks should be scheduled for all practices and become more frequent as the heat and humidity levels rise.
- Every athletic organization should have an emergency action plan for obtaining emergency medical services if needed.
- Always have contact information for parents available.

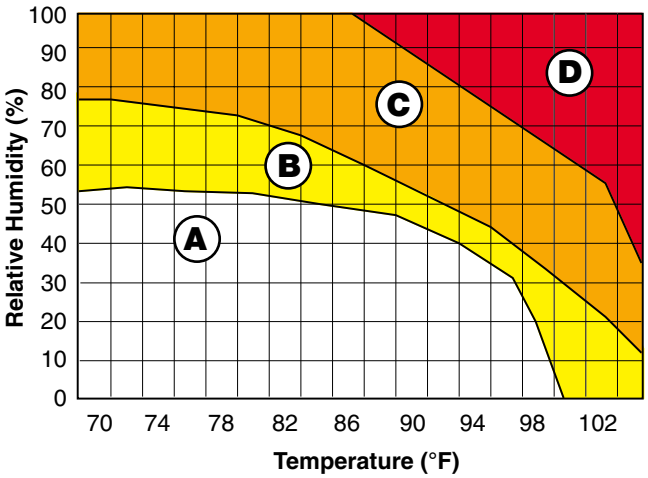
Activity Guidelines

Fluid breaks should be scheduled for all practices and become more frequent as the heat and humidity levels rise.

Add 5°F to the temperature between 10:00 a.m. and 4:00 p.m. from mid-May to mid-September on bright, sunny days.

A. Children should receive a 5-10 minute rest and fluid break after every 25 to 30 minutes of activity.

B. Children should receive a 5-10 minute rest and fluid break after every 20 to 25 minutes of activity. Children should be in shorts and t-shirts (with helmet and shoulder pads only, not full equipment, if worn for activity).



C. Children should receive a 5-10 minute rest and fluid break after every 15 to 20 minutes of activity. Children should be in shorts and t-shirts only (with all protective equipment removed, if worn for activity).

D. Cancel or postpone all outdoor practices/games. Practice may be held in an air-conditioned space.

This document was adapted from: *Inter-Association task force on exertional heat illnesses consensus statement.* June 2003. National Athletic Trainers' Association. The full document can be obtained at www.nata.org/industryresources/heatillnessconsensusstatement.pdf.

THE UNIVERSITY OF ARIZONA CANCER CENTER

Skin Cancer Institute

1 in 5 Americans will get skin cancer in their lifetime and even young people are at risk of getting skin cancer.

Skin cancer is caused by too much exposure to the sun's harmful ultra-violet (UV) rays.

But YOU have the POWER to PREVENT most skin cancers if you…

Remember to be an ACE!

Avoid

- Avoid sun exposure between the hours of 10am and 4pm, when the sun's UV rays are the strongest.
- Avoid tanning beds. The UV rays in tanning beds are even stronger than the sun!!
- Avoid reflective surfaces like water, glass, sand and cement. These make UV rays more dangerous.

Cover-up

- Wear long sleeved shirts and pants
- Cover your exposed skin with SPF 30 sunscreen
- Protect your face with a wide-brimmed hat
- Shield your eyes with 100% UV-blocking sunglasses
- Keep your lips smooth with SPF-containing chapstick

Examine

- Examine your skin every month for new or changing moles, spots, or bumps.
- Skin cancers can leave scars when removed.
- Skin cancer can be deadly!!

THE UNIVERSITY OF ARIZONA CANCER CENTER

Skin Cancer Institute

Allow the University of Arizona to bring Sun Safety to you. Choose from the appropriate grade level below and contact Denise Spartonos, the Community Outreach Coordinator at the Arizona Cancer Center's Skin Cancer Institute, at (520)626-1037 or email at DSpartonos@azcc.arizona.edu.

PreK - 3

The Rainbow Way Healthy Children Arizona

Healthy Children Arizona

Objective:

Expose young children to cancer, diabetes, and heart disease prevention.

Delivery: A total of 5 lessons over 5 weeks

3 lessons on Nutrition, 1 on Physical Activity*, and 1 on Sun Safety*

*Includes an interactive puppet show

The Sun Safety lesson can be taught alone during summer months.

Grades 3-6

SunSMARTS!

SunWise a program that radiates good ideas

SunSmarts

Objective:

1. Raise awareness for the damaging effects of excess exposure to ultraviolet radiation to prevent skin cancer.
2. Empower students to take the steps needed to keep their skin healthy.

Delivery:

1 45-minute interactive lesson with Sunwise UV Frisbee Activity, Sun Safe Action Steps, and picture quiz

Grades 6-12

SASS STUDENTS ARE SUN SAFE

Project SASS

Objective:

1. Raise awareness on the damaging effects of excess exposure to ultraviolet radiation to prevent skin cancer.
2. Empower students to take the steps needed to keep their skin healthy.

Delivery:

One 25 minute interactive, multimedia lesson followed by 3 5-minute activity rotation. Activities include Sunwise sunscreen exploration, Sunwise fabric activity, and the ultraviolet skin analyzer. Optional polleverywhere.com text-messaging survey at the end.

FEEL LIKE SIZZLING?

That's what you're doing when **you don't cover up in the sun.**

Why?

Because the OZONE LAYER — the Earth's protective shield against the sun's harmful UV rays — is thinner today than it was 25 years ago.

Why is that dangerous?

Because today's more intense UV rays can cause:

- Skin cancer (which can kill you)
- Premature wrinkling
- Eye damage
- Weakening of the immune system (which keeps us from getting sick).

You say this doesn't apply to you?

YOU'RE WRONG.

It doesn't matter what your skin color is — everyone needs protection.

Here's what you can do:

- Do Not Burn
- Avoid Sun Tanning and Tanning Beds
- Generously Apply Sunscreen
- Wear Protective Clothing, Including a Hat, Sunglasses and Full-Length Clothing
- Seek Shade
- Use Extra Caution Near Water, Snow and Sand
- Watch for the UV Index
- Get Vitamin D Safely

Early detection of melanoma can save your life. Carefully examine ALL of your skin once a month. A new or changing mole in an adult should be evaluated by a dermatologist.

Are You SunWise or SunFoolish?

True or False?

1. The thicker the ozone layer, the more it protects us from the sun's ultraviolet rays.
2. Chlorofluorocarbons (CFCs) are chemicals that are eating away at the ozone layer.
3. Sun protection isn't needed on cloudy days because clouds block ultraviolet rays.
4. I can get a safe tan in a tanning parlor.
5. Early morning and late afternoons are the worst times for exposure to UV rays.

Answers: 1-T, 2-T, 3-F, 4-F, 5-F

Don't Wait 'Til It's Too Late –

Be SunWise NOW

www.epa.gov/sunwise

EPA United States Environmental Protection Agency

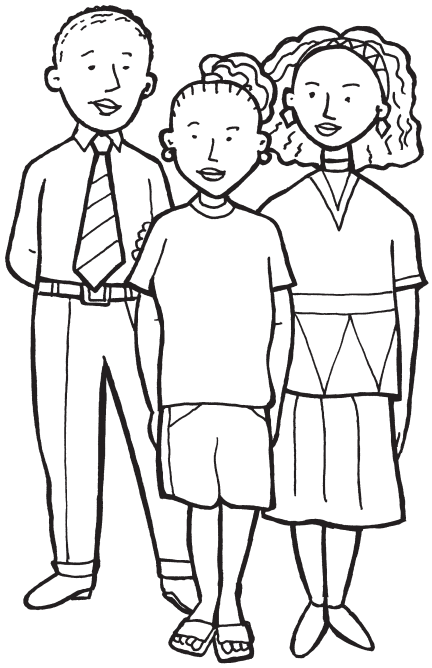
Recycled/Recyclable—Printed with Vegetable Oil Based Inks on 100% Postconsumer, Process Chlorine Free Recycled Paper

United States
Environmental Protection Agency

Air and Radiation
(6205J)

EPA 430-H-06-001
September 2006
www.epa.gov/sunwise

Hello Family!



Did you know …

… that **much of your child's lifetime sun exposure** can occur before he or she graduates from high school?

… that any change in the natural color of your child's skin after time outside indicates damage from the sun's ultraviolet (UV) rays?

… that all people, regardless of skin or eye color, are equally at risk for eye damage from overexposure to the sun?

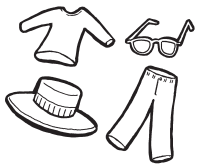
The Environmental Protection Agency's SunWise Program needs you to help reinforce the important sun safety messages your child is learning in school. You can help your son or daughter learn the difference between being **SunWise** and **SunFoolish** by…

- Being SunWise yourself! Children learn from the behavior you model.
- Always having and using a sunscreen with a Sun Protection Factor (SPF) of at least 15. Make sure a bottle of SPF 15+ sunscreen is easily available year-round. It's not just for days at the beach!
- Reminding your children to follow these SunWise action steps:

Do Not Burn

Avoid Sun Tanning and Tanning Beds

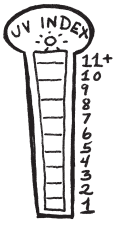
Generously Apply Sunscreen



Wear Protective Clothing, Including a Hat, Sunglasses and Full-Length Clothing

Seek Shade

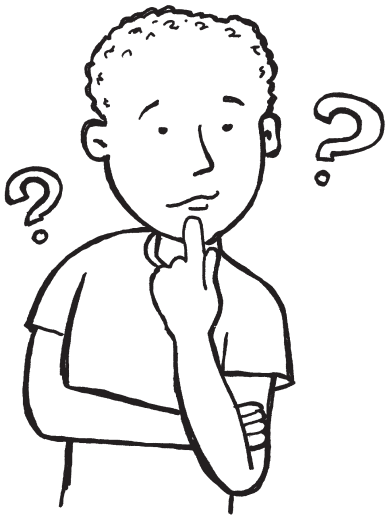
Use Extra Caution Near Water, Snow and Sand

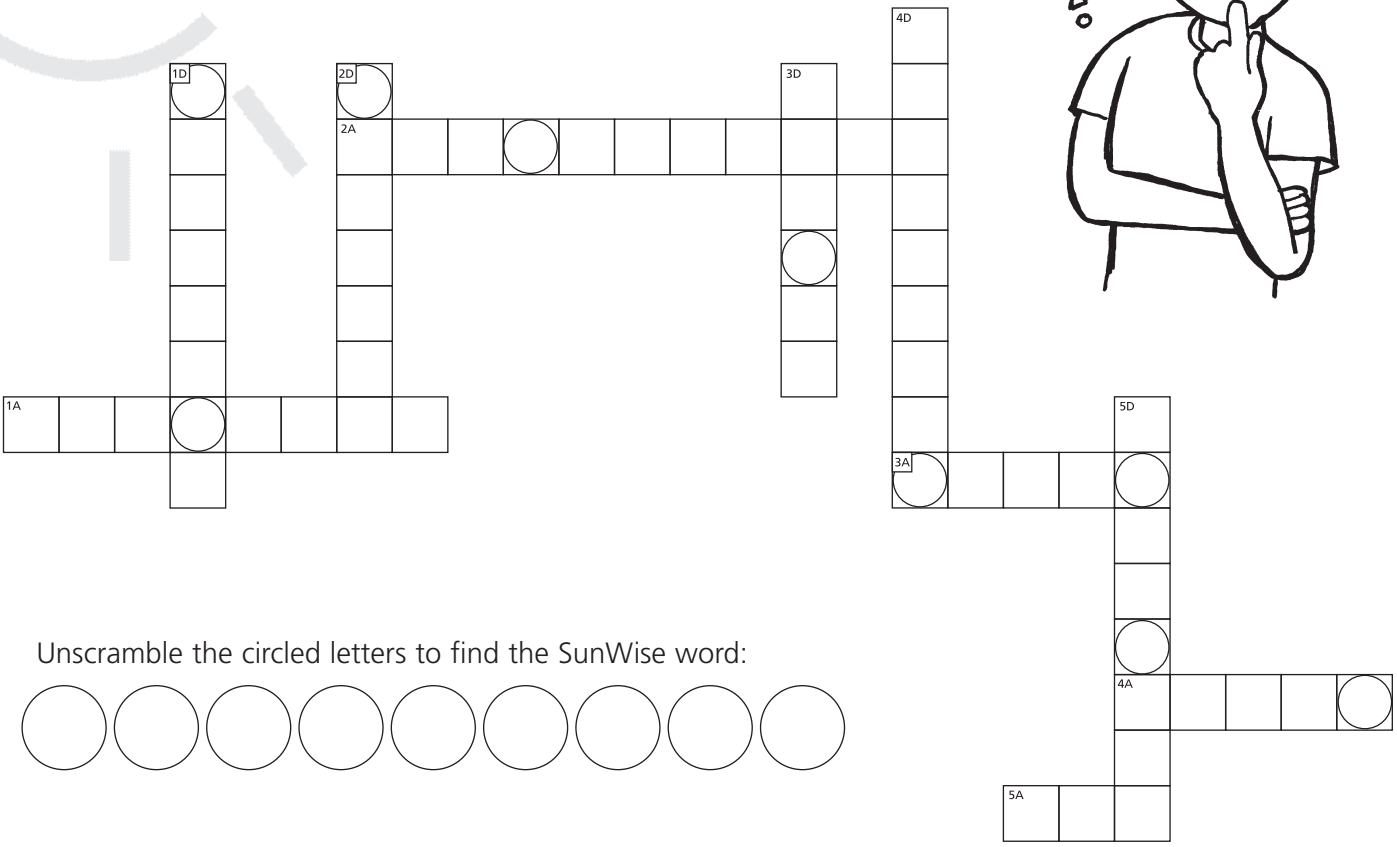


Watch for the UV Index

Get Vitamin D Safely

SunWise SunScramble





Unscramble the circled letters to find the SunWise word:

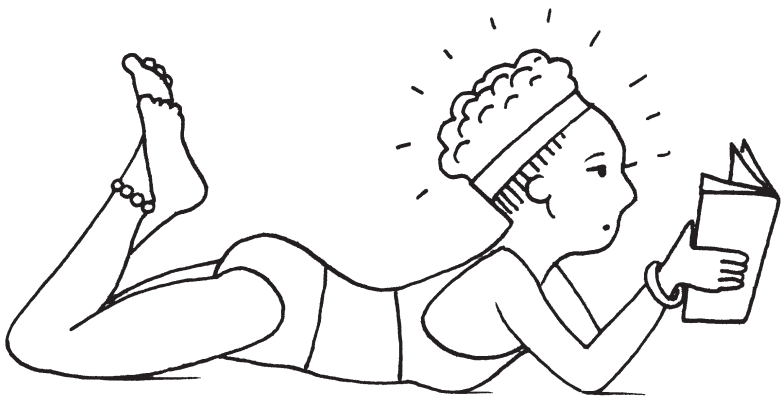
Cross Word Puzzle Clues

ACROSS:

1. Overexposure to the sun can cause skin cancer, eye damage, and these
2. UV stands for _____.
3. A natural source of sun protection
4. Naturally occurring gas that is found in two layers of the atmosphere
5. Type of dangerous ultraviolet radiation associated with sunlamps in tanning parlors

DOWN:

1. The gas from CFCs that attacks ozone
2. EPA school program that promotes sun safety
3. _____ may reduce UV levels, but not completely
4. Eye damage that occurs as a result of sun overexposure
5. The most serious form of skin cancer



Answers:

ACROSS:
1. wrinkles
2. ultraviolet
3. shade
4. ozone
5. UVA

DOWN:
1. chlorine
2. SunWise
3. clouds
4. cataracts
5. melanoma

SCRAMBLE: Sunscreen

Are you **SunWise** or **SunFoolish?**

TRUE OR FALSE?

1. The thicker the ozone layer, the more it protects us from the sun's ultraviolet (UV) rays. . . . . **True** **False**

2. Chlorofluorocarbons (CFCs) are chemicals that are eating away at the ozone layer. . . . . **True** **False**

3. Ozone layer damage is permanent. . . . . **True** **False**

4. Sun protection isn't needed on cloudy days because clouds block ultraviolet rays. . . . . **True** **False**

5. I can get a safe tan in a tanning parlor. . . . . **True** **False**

6. Early morning and late afternoons are the worst times for exposure to UV rays. . . . . **True** **False**

7. UV rays are blocked by cold weather. . . . . **True** **False**

8. African Americans and Latinos don't need to worry about sun damage to their skin. . . . . **True** **False**

9. UV rays can damage your eyes. . . . . **True** **False**

10. A blistering sunburn when you're young can greatly increase your risk of skin cancer. . . . . **True** **False**

11. You should always choose sunscreen with a Sun Protection Factor (SPF) of 15 or greater . . . . . **True** **False**

12. The key to protecting your skin and eyes is to keep them covered. . . . . **True** **False**

ANSWERS: 1-T, 2-T, 3-F, 4-F, 5-F, 6-F, 7-F, 8-F, 9-T, 10-T, 11-T, 12-T

1. TRUE – Ozone in the upper atmosphere (stratosphere) blocks harmful ultraviolet rays; if it's too thin, more UV rays can slip through. Don't confuse stratospheric ozone with ground-level ozone, a primary component of smog. Remember, "Ozone: good up high, bad nearby."

2. TRUE – Ozone-depleting chemicals such as CFCs can be found in air conditioners, refrigerators and other places. When these chemicals leak into the atmosphere they damage the ozone layer, making it thinner so it doesn't block as many harmful UV rays.

3. FALSE – The ozone layer is expected to repair itself in the latter half of the 21st century if the United States and over 189 countries that signed the Montreal Protocol continue to fulfill their obligations to stop producing and using chemicals that deplete ozone.

4. FALSE – Clouds only block a portion of harmful UV rays. You still need to protect yourself on cloudy days.

5. FALSE – Sunlamps in tanning parlors emit UVA rays, which are linked to serious health effects such as skin cancer. There is no such thing as a safe tan! Any change in your natural skin color is a sign of skin damage.

6. FALSE – The middle of the day (between 10:00 a.m. and 4:00 p.m.), when the sun is most intense, is the worst time for sun exposure.

7. FALSE – It doesn't matter whether it's summer, fall, winter or spring, UV rays can harm you all year round. Don't wait for a hot, sunny day at the beach to protect yourself. Remember that UV rays are not associated with the sun's heat or brightness.

8. FALSE – Though it is true that darker skin has more natural pigment, which acts as a protectant, darker skin is still susceptible to many of the damaging effects of UV radiation.

9. TRUE – UV rays can increase your risk of cataracts, which, if left untreated, can rob you of your vision.

10. TRUE – Doctors have discovered that you are much more likely to get skin cancer if you've had a bad sunburn.

11. TRUE – Sunscreens that are less than SPF 15 simply don't cut it, so why settle for something less that doesn't give you good protection? Be sure to reapply the sunscreen every 2 hours or after swimming or sweating.

12. TRUE – Sunscreen, long-sleeve shirts, hats and UV-blocking sunglasses do a much better job at sun protection than baby oil, tank tops, and no hat or sunglasses.

HOW DID YOU DO?

Give yourself 1 point for each correct answer. If you scored…

10–12 points:
YOU'RE SUNWISE! Make sure you use your "SunWisdom" when you're outside!

6-9 points:
YOU'RE SUN-SO-SO. You know some of the basics, but need some brushing up.

0-5 points:
YOU'RE SUNFOOLISH. Watch out – what you don't know CAN hurt you!

SunWise Facts

How Can Too Much Sun Harm You?

It's fun to play in the sun, but did you know that too much sun can be dangerous?

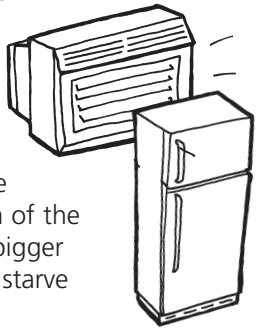
- If you've ever had a painful sunburn, you've experienced one of the harmful effects of overexposure to the sun's ULTRAVIOLET (UV) RADIATION.
- In addition to causing premature and excessive wrinkling of the skin, overexposure to UV can cause more serious health effects, too, such as skin cancer and eye damage, including cataracts.
- Young people are particularly at risk if appropriate precautions are not taken, because much of the average person's lifetime exposure can occur before the age of 18.
- The good news is that UV-related health effects are largely preventable by establishing sun protection habits while you're young and staying sun-safe throughout your life.

Why Is Being SunWise Even More Important Now Than When Your Parents Were Your Age?

To answer this question, you need to know a little about the earth's environment.

The OZONE layer is a thin shield in the atmosphere that protects us from the sun. It wraps all the way around the Earth, and can be found about 6 to 30 miles straight up.

As long as humans have been on Earth, the OZONE layer has blocked much of the sun's dangerous UV rays from reaching us, and it continues to keep most UV RADIATION from harming life on the planet.



The ozone layer's biggest enemies are chemicals used in air conditioners, refrigerators, and other common products. The CHLORINE or BROMINE in these chemicals eats away at the ozone layer. As the OZONE layer gets thinner, more and more harmful UV RAYS reach the Earth's surface. That's not only bad for humans, but also for plants and animals. It can cause a chain reaction among many things that live and breathe in the oceans or on land: if tiny fish and plants that are on the bottom of the food chain are destroyed or damaged by the UV RADIATION, bigger fish and animals that rely on these smaller things for food could starve and die, too.

Humans are taking steps to reduce the amount of ozone-depleting chemicals that leak into the atmosphere. This should help "repair" the ozone layer, but unfortunately that could take years. In the meantime, the OZONE LAYER is thinner, and more harmful UV RAYS are reaching you than when your parents were your age.

SO WHAT CAN YOU DO?

Don't Wait 'Til It's Too Late – Be SunWise Now!