

## Get the best sunscreen for babies and kids

How to choose the right product and apply it properly

The right sunscreen will not only spare children the pain of sunburn but could also lessen their risk of getting skin cancer later in life. Our advice will help you get the best sunscreen and show you how to apply it. For more details on sunscreens for everyone in your family, see our buying guide to and Ratings of sunscreens and read our report on new federal labeling guidelines.

Choosing a sunscreen

Ultraviolet (UV) radiation can promote skin cancer in by damaging DNA in skin cells and by weakening the body's natural defenses against cancer cells. UVA radiation penetrates deeper, tanning and aging skin; UVB radiation causes sunburn.

The sunscreens we tested have an SPF between 30 and 75+. (Note that the Food and Drug Administration doesn't have sufficient data to show that products with an SPF above 50 offer additional protection.) Most labels claim "broad spectrum" protection against both UVA and UVB rays.

All things being equal, if you sunburn after 20 minutes without sunscreen, an SPF 30 product would protect you for about 10 hours—20 minutes x 30. But in reality, the sun's intensity, your geographic location, your skin type, and other factors come into play, so the SPF is a relative measure of protection.

Also keep in mind that selecting a sunscreen with the highest SPF may not necessarily offer the protection you think, according to Sophie J. Balk, M.D., an attending physician at Children's Hospital at Montefiore in the Bronx, New York. "People think if they use an SPF 30 instead of 15, they are getting twice the protection, she says, "but the difference is actually much less."

In addition, "Nobody's getting the SPF they think because most people do not apply enough sunscreen," she says. "An adult would need to use about one ounce per sitting to get the full SPF."

Remember to check sunscreen ingredients when shopping. Oxybenzone may interfere with hormones in the body, and nanoscale zinc and titanium oxides have been linked to potential reproductive and developmental effects. In skin, retinyl palmitate converts readily to retinoids, which have been associated with a risk of birth defects in people using acne medication containing the substance. Pregnant women may want to avoid products with retinyl palmitate, noted in the sunscreen Ratings.

Test results

As part of our testing, we applied the sunscreens to people before and after they were in fresh water and, to test for a new standard mandated by the FDA, to clear plastic plates. (Products touted as providing broad-spectrum protection must have a minimum "critical wavelength.") We also checked whether each product stained cotton, polyester, rayon/spandex, and nylon/spandex.

No one type protected best, and price had anything to do with performance (La Roche-Posay, \$20.59 per ounce, rated below No-Ad, 59 cents). All but one sunscreen, Neutrogena Sensitive Skin, stained one or more fabrics.

Seven products were very good against UVA and excellent against UVB even after water immersion for 80 minutes, and passed the critical wavelength test. But Aveeno and Neutrogena Sensitive Skin were just OK for UVB protection, and some others were effective when dry but less so after a dunking.

Alba Botanica and Banana Boat Kids, whose labels claimed broad-spectrum protection, failed the wavelength test. Banana Boat Kids was also poor against UVA rays.

### Applying sunscreen on your kids

Don't use a spray. The FDA is exploring the risks of inhaling spray sunscreens, which are greatest among children. Until the agency completes its analysis, we recommend that spray sunscreens not be used on or by children unless you have no other product available. If that's the case, spray it on your hands first, then rub it on your child; and as with all sunscreens, be especially careful when applying it to his face, taking care to avoid his eyes and mouth.

Reapply often. When you and your child are in the sun, apply sunscreen on exposed areas and reapply at least every 2 hours, or according to product instructions for optimum protection. The FDA recommends applying every 90 minutes to 2 hours. Also reapply after swimming or sweating, and after toweling off.

Use sparingly on babies. The American Academy of Pediatrics recommends that you keep a baby under the age of 6 months out of the sun. When that isn't possible, prevent sun exposure by dressing your baby in lightweight long pants, long-sleeved shirts, and brimmed hats that shade the neck. You can apply a minimal amount of sunscreen with at least an SPF of 15 to small areas, such as the baby's face. Avoid getting sunscreen on your baby's hands, arms, or any part of the body that she can reach with her mouth.

### Protection beyond sunscreen

Cover up as much as possible. That's the best defense against skin cancer, according to the FDA, the Centers for Disease Control and Prevention, and the Environmental Protection Agency. Wear clothing that's tightly woven and can't be seen through. Children should wear a hat with a 3-inch brim or a forward-facing bill. Sunglasses are a good idea, too. They should offer 97 percent to 100 percent protection against both UVA and UVB rays.

Avoid peak sun times. Try to avoid sun exposure during midday hours or times when you're getting maximum UV radiation (10 a.m. to 4 p.m.).

Check the local UV Index. To help make your decision about spending time in the sun, plug in your ZIP code at the EPA website (<http://epa.gov/sunwise/uvindex.html>).

Assess the risk to you and your family. If you're fair-skinned with light eyes, you're at higher risk than someone with darker skin (although people with darker skin are also at risk). If there's a family history of skin cancer, you should be cautious about your sun exposure.