

Pediatric skin cancer

While skin cancer is the most common type of cancer in adults, it is rare in children. Some children are more likely to get skin cancer because of factors in their health or family history. This handout discusses what you need to know about recognizing, treating and preventing pediatric skin cancer.

1 WHO IS AT INCREASED RISK FOR SKIN CANCER?

Many factors increase the chances of getting skin cancer. Some of the most common are:

- » Solid organ (kidney, heart, lung, etc.) or hematopoietic stem cell (bone marrow) transplantation
- » Cancer and cancer treatments, like radiation and chemotherapy
- » Genetic syndromes that make the skin sensitive to sun damage
- » Hereditary cancer syndromes
- » Family history of skin cancer (especially melanoma)
- » Medications that suppress the immune system
- » Medications that make the skin burn more easily (such as voriconazole, an antifungal medication)
- » Past history of sunburns or extensive sun exposure
- » Use of tanning beds/indoor tanning

2 WHAT ARE THE TYPES OF SKIN CANCER?

Melanoma is a dangerous form of skin cancer because it can rapidly spread to other areas inside of the body. It can occur *anywhere* on the skin, including areas that are usually protected from the sun.

Basal cell carcinoma (BCC) and **squamous cell carcinoma (SCC)** are referred to collectively as "non-melanoma skin cancer" (NMSC). They can occur at younger ages and be more problematic in children who are immunosuppressed.

3 HOW CAN I FIND A SKIN CANCER OR SUSPICIOUS SPOT ON THE SKIN?

Skin self-exams are a great way to check the skin between regular doctor visits. For children at risk for skin cancer, it is good to examine the skin periodically at home. (See right column for **SELF-DETECTION TIPS** and **WHAT DOES A SUSPICIOUS SPOT LOOK LIKE?**)

Evaluation and screening by dermatology: If you notice any of the warning signs mentioned at right, you should go see your child's doctor right away. Children with any of risk factors for skin cancer should talk with their doctor about having a skin exam and consider seeing a dermatologist. Your doctor will decide how often you should have skin exams.

SELF-DETECTION TIPS

How to do a skin self-exam:

- » Stand in front of a full-length mirror.
- » Look at the front of the body (including head, scalp and groin).
- » Turn around and look at the back of the body.
- » Use a hand mirror to help see areas that are difficult to see.

WHAT DOES A SUSPICIOUS SPOT LOOK LIKE?

The ABCDEs of moles or spots that are abnormal:

- » **Asymmetry** or **amelanotic:** Asymmetry means the two halves of the mole do not match. Amelanotic means abnormal spots might be pink or red instead of brown or black (melanotic).
- » **Border** or **bleeding** or **bump:** The border of a melanoma can blend into the normal skin. Bleeding spots or bumps that appear quickly can also be signs of skin cancer.
- » **Color:** Different colors within a mole, or the development of dark black, blue, or red areas in a preexisting mole.
- » **Diameter:** Size greater than 0.6 cm (the size of a pencil eraser), though many normal moles may be larger. Also, skin cancers can be smaller than 0.6 cm, especially in children.
- » **Evolving:** A change or new symptom, such as bleeding, itching or crusting. New spots/bumps or rapid growth of a new or old mole can be concerning.

Also look for the "ugly duckling," or a spot that looks different from others:

In children, melanoma, BCC and SCC may also appear as pink, growing, and bleeding bumps that appear on previously normal skin. Itching, non-healing sores, chronic crusty bumps and burning can also be signs of skin cancer. A spot like this that lasts longer than eight weeks could be a skin cancer.

4 HOW ARE SKIN CANCERS TREATED?

Treatment for skin cancer depends on many factors, including the type, size and location of a skin cancer. Creams that trigger the immune system to fight off the skin cancer may be used for some cancers. Other cancers are treated with surgery to scrape off or cut out the skin cancer. If you have a skin cancer, your doctor will help you decide which is the best treatment for you.

5 HOW CAN I PREVENT SUN DAMAGE AND SKIN CANCER?

We know that the sun can damage the skin causing early aging and skin cancer in high-risk children, and in children without risk factors. Prevention is key. These are some strategies for preventing sun damage:

COVER UP AND STAY IN THE SHADE

Wear long sleeves and pants, sun-protective clothing like rash guards (swim shirts), or clothes with a high UPF.* Wear sunglasses and hats. Find or create shade whenever possible. Avoid being in the sun during peak sun hours of 10am to 4pm.

WEAR SUNSCREEN – QUICK SUNSCREEN FACTS:

- » Sunscreens are applied directly to the skin to block harmful ultraviolet (UV) rays from the sun. Both UVA and UVB rays can damage the skin. "Broad spectrum" sunscreens block both UVA and UVB rays.
- » Sunscreens with SPF of 30 or higher are preferred.
- » Sunscreens come as lotions, creams, gels, sprays, sticks and powders.
- » Most sunscreens work for 90–120 minutes, so they must be reapplied every 1.5–2 hours. Reapply more often when sweating or in water.
- » Children over six months old should wear sunscreen and reapply as needed. Children under six months old can use sunscreen on small areas if there is no other way to protect the skin.
- » Different sunscreens have different ingredients to provide protection from the sun. There are two categories of sunscreens: "physical" and "chemical" blockers.

* UPF is ultraviolet protection factor – a rating of how much the clothing protects the skin from the sun. UPF is similar to sun protection factor (SPF) for sunscreen.

TYPES OF SUNSCREEN	COMMON INGREDIENTS	WHEN THEY START WORKING	HOW THEY WORK
Physical block	Zinc oxide Titanium dioxide	Immediately after application	Reflect sunlight
Chemical screen [†]	Avobenzone Oxybenzone Homosalate Octisalate Octocrylene Octinoxate	Approximately 15 minutes after application	Absorb sunlight

[†] New active ingredients may be under review by the FDA for approval for use in the United States.

See the Society for Pediatric Dermatology's Sun Protection handout for additional information:
<http://pedsderm.net/for-patients-families/patient-handouts/#SunProtection>



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