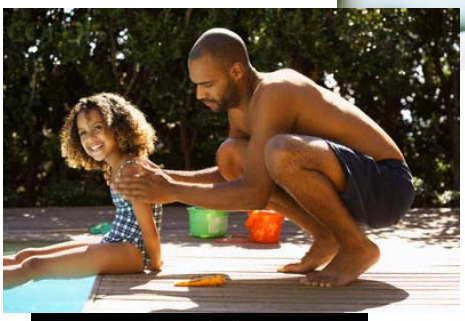
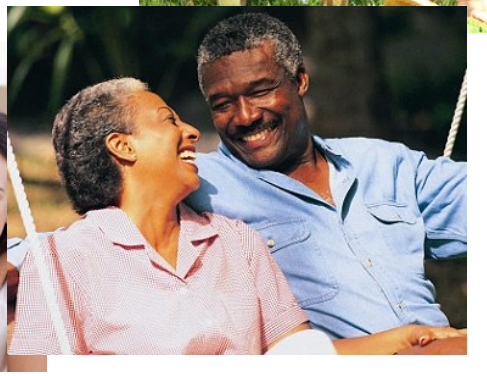
Sun Protection Strategies

For Kidney Transplant Recipients





Why Protect Against the Sun?

The main reason not to get sun is to keep from getting skin cancer. Too much sun or artificial light (tanning beds) can harm your skin. When the skin is burned, the top layer breaks open. The little cracks in the skin can lead to serious infection. After years of sun exposure, the skin can look old and get dark spots and wrinkles. You may also develop skin cancer.

What is Skin Cancer?

Skin cancer is a dangerous growth on the skin. There are three main types of skin cancer: basal cell carcinoma, squamous cell carcinoma and melanoma.

Where does skin cancer appear?
Even though skin cancer can appear anywhere, it most often occurs where you got your sunburn.

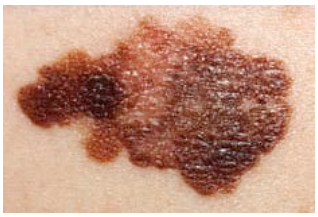
Basal Cell Carcinoma:

Basal cell carcinoma usually appears as a small, pink bump or patch on the head or neck. Untreated, they will bleed and scab repeatedly. They grow slowly and rarely spread to other parts of the body, but can cause a lot of damage if untreated.

Squamous Cell Carcinoma:

Squamous cell carcinoma is the most common skin cancer in kidney transplant patients. It may look similar to basal cell carcinoma. Squamous cell carcinoma tends to grow on the ears, lips and hands and arms. It is easily treated if found early, but can result in death if left untreated.

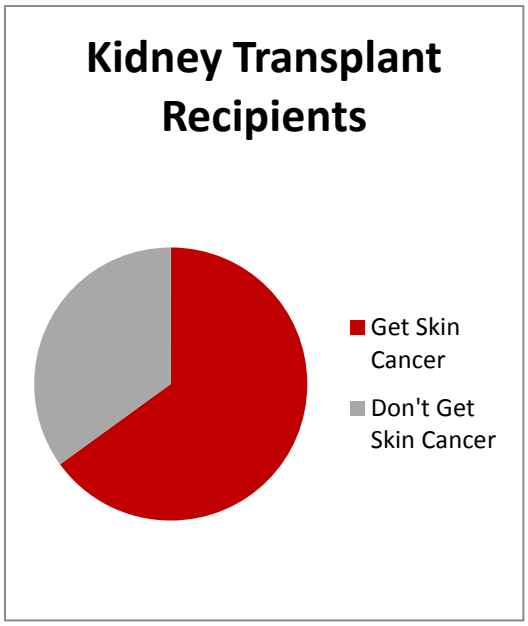
Melanoma:



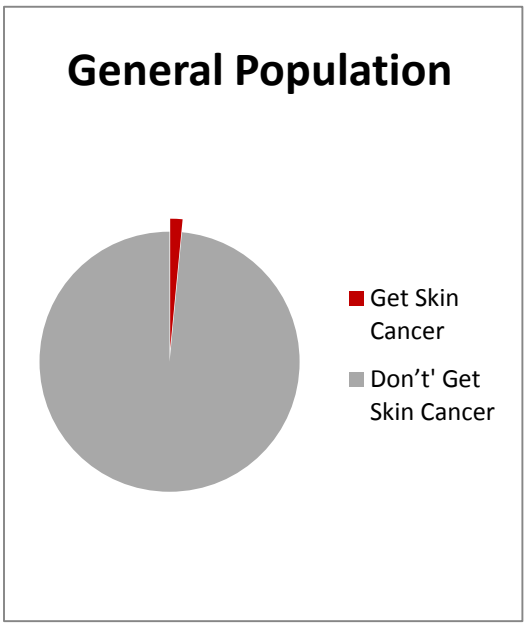
Melanoma usually appears as an irregular brown, black and/or red spot or as a changing mole. If caught early, melanoma is curable. If untreated, it can spread to other parts of the body and result in death.

Did You Know…?

About 65 out of 100 (65%) kidney transplant recipients get skin cancer



In the general public, fewer than 1 out of 100 (1%) people get skin cancer



How quickly can skin cancer develop after a kidney transplant?

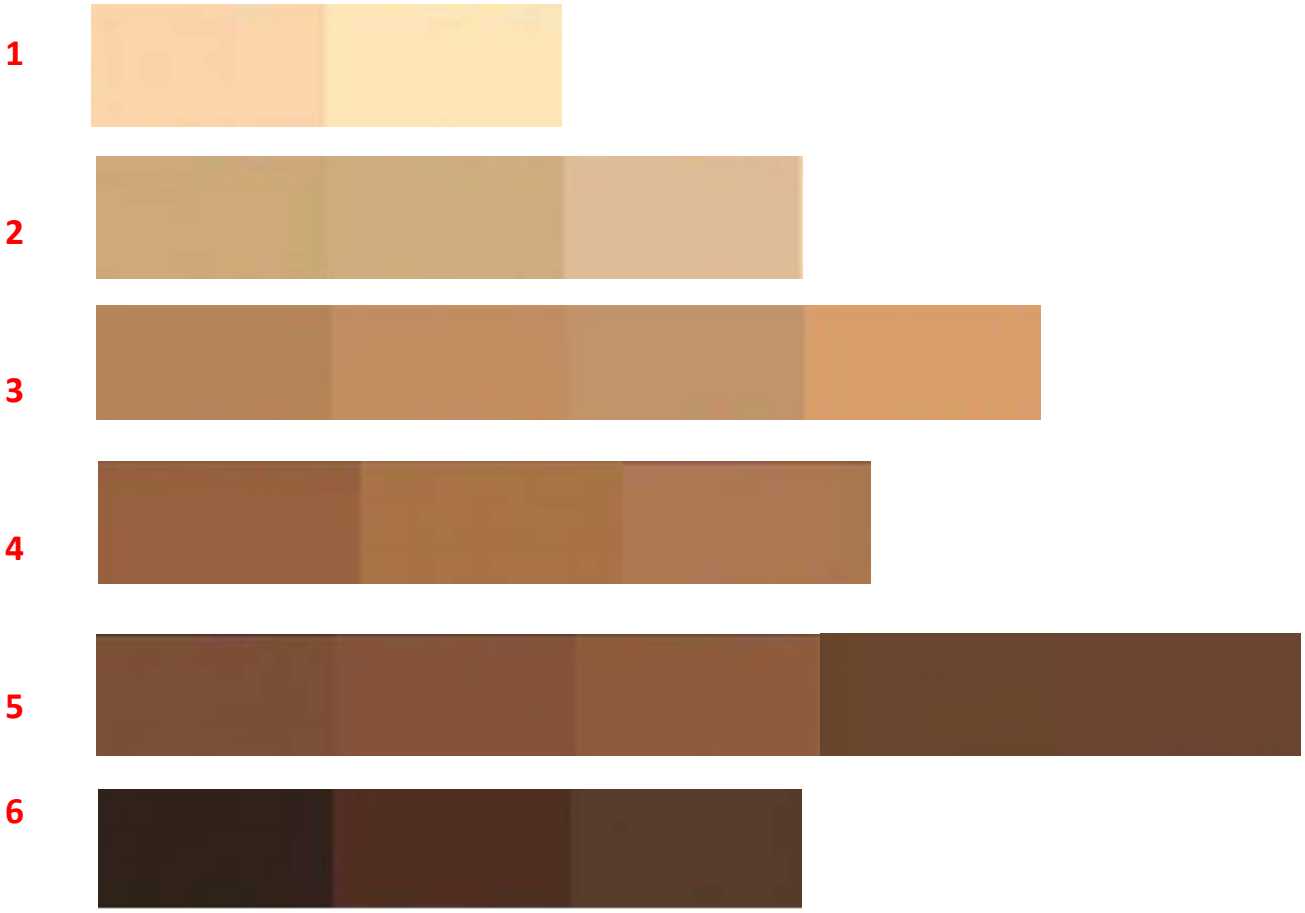
It generally takes 3-7 years for skin cancer to develop after your transplant, but it can depend on your personal risk factors, like how much sun exposure you got in the past and how much sun protection you use after your transplant.

Kidney transplant recipients have a greater chance of getting skin cancer than other people.

Why Do Kidney Transplant Recipients Have a Greater Chance of Getting Skin Cancer?

People commonly expect that having darker skin tone protects them from getting sunburn. When you take anti-rejection medicine, skin tone no longer protects you against harmful sun rays. Anti-rejection medicine makes your skin burn easier and faster than before you got your transplant. Getting many sunburns can lead to skin cancer. Every kidney transplant recipient has a greater chance of getting skin cancer, no matter the skin tone. The chances of getting skin cancer increase the longer you take your anti-rejection medicine. The anti-rejection medicine suppresses your immune system and makes it harder for you to fight skin cancer.

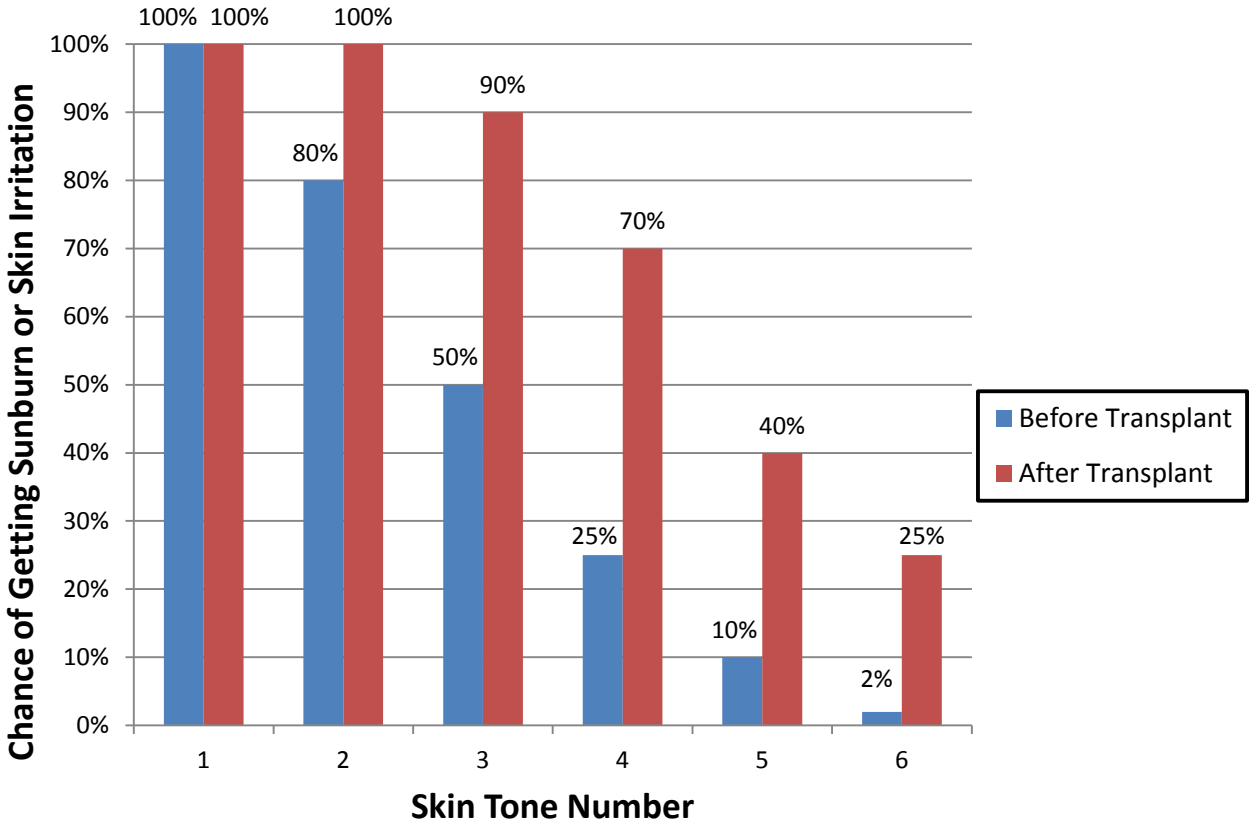
Compare your skin tone to these below. What color looks <u>most</u> like the skin tone on the inside of your upper arm?



Remember your skin tone number to use it on the next page

All Kidney Transplant Recipients Have a Higher Chance of Getting Sunburn or Skin Irritation from the Sun

Using your skin tone number, compare your chance of getting **sunburn or skin irritation from the sun** at noon if you are in strong sun without sun protection before and after your transplant.



Even if you did not get burned or skin irritation from the sun before your transplant, your skin is more sensitive to the sun now. So, if you are in strong sun for about **1 hour**, now your chance of getting sunburn has increased.

For example, if you have Skin Type 4, before you had a 25% chance of getting skin irritation from the sun. After the kidney transplant, you will have a 70% chance of getting skin irritation from the sun.

Patient Reflection: "Over the summer, I took my young daughter to the beach. I put sunscreen on her, but not myself. After 4 hours out in the sun, I was burned pretty badly. I didn't used to burn like this before my kidney transplant."

Protecting your skin from the sun reduces your chance of getting skin cancer.

People Get Sun Exposure More Than They Realize

After a kidney transplant, people can have an active life including being outdoors.

People usually think about sun protection when it is warm and sunny and when they plan on being outside for a long time. Take a moment to think about the activities you do outside.

Here are some ideas of common activities you may participate in:

<u>Outdoor activities that people expect to get sun:</u>

- Going to a baseball game
- Gardening
- Going to church festivals
- Going to outdoor malls
- Doing sports like biking, fishing, golf
- Sitting on a bench in the park
- Going to picnics

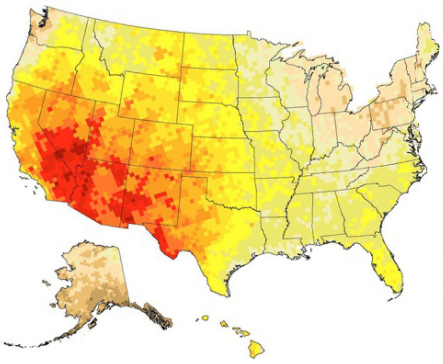
<u>Daily activities that people do NOT expect to get sun:</u>

- Washing your car
- Going for a walk
- Doing yard work like raking leaves, mowing the lawn, watering the grass
- Shoveling snow
- Walking through the parking lot at the store
- Getting mail from the mailbox

Do you take part in any of these activities? If so, you are getting some sun exposure.

Kidney transplant recipients are encouraged to exercise daily. The outdoors is a great place to exercise. Advance planning is needed to protect your skin from the sun. The next page will teach you about simple sun protection rules to make a daily habit. By keeping to a daily routine of sun protection, you can protect your skin from damage and cancer.

How to Protect Your Skin – the ABC's



Above is a map of the ultraviolet index of the United States. The red regions are where the sun is very strong.

Avoid

Keep from getting sun in the middle of the day. The sun's rays are strongest from 10am-4pm. If possible, try to avoid being outside or find shade when the sun is high in the sky. If you travel or live in a place with strong sun, take care to protect yourself.

Patient Reflection: "I took my family to Disney in Florida in March and my skin got irritated from the sun walking around the park on a cloudy day. I didn't think you could get sun irritation if the sun wasn't out!"

Block

Before going outside, apply sunscreen with sun protection factor (SPF) of 30 or higher to all areas of the body that are not covered by clothing. You should apply sunscreen all year long.

Patient Reflection: "I went to Taste of Chicago at about 3pm in the afternoon and stood in line for food. The next day, I noticed that the skin on my back and shoulders was irritated and pink. I really should have worn sunscreen that day."

Cover

When outdoors, cover your skin with protective clothing, sunglasses and hats.

Patient Reflection: "I took a long walk around my neighborhood. I was out for about one hour from 6-7 AM in August. My bald spot on the top of my head got blisters that hurt and took a while to heal. I should have worn a hat."

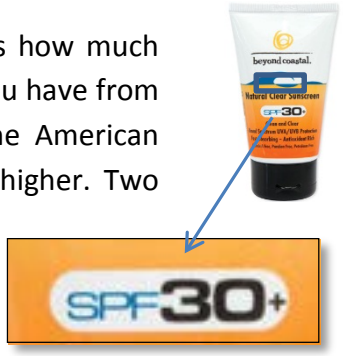
Frequently Asked Questions about Sunscreen

- ### Do I need to use sunscreen every day?

Yes. Even on a cloudy day, up to 80 percent of the sun's rays can pass through the clouds. You may not feel the sun's heat, but it can still give you sunburn. Even if you do not see a shadow, the sun's rays are enough to damage your skin.

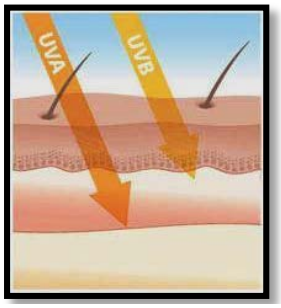
- ### What Does a Sunscreen's SPF Mean?

SPF means **S**un **P**rotection **F**actor. A sunscreen's SPF number tells us how much protection it gives. The higher the SPF number, the more protection you have from sunburn and skin irritation from the sun. It is recommended by the American Academy of Dermatology to use a sunscreen with an SPF of 30 or higher. Two hours after putting sunscreen on, the protection wears off and you need to put more on. **Using higher SPF does <u>not</u> allow you to stay in the sun longer.**

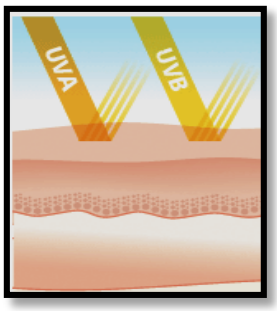


- ### What Does "Broad Spectrum" Mean?

A broad spectrum sunscreen protects against the two most important rays of the sun: ultraviolet A (UVA) (aging) and ultraviolet B (UVB) (burning) that cause cancer. Use sunscreen that protects against both kinds of rays.



Without sunscreen, both rays pass through and damage the skin.



With broad spectrum sunscreen, your skin is protected from both rays.

Should I use a Sunscreen Spray, Stick, Gel or Cream?

Screens come as lotions, creams, sticks, gels and sprays. Some kinds of sunscreen help protect your skin better for certain activities and body parts.

Lotions and Gels: Best for the larger body parts like the arms, legs and trunk, but can be used all over. Gels are best for oily skin.

Creams: Work well for the face, if you have dry or sensitive skin.

Sticks: Work well for small body parts like the face, the neck, and backs of hands. They stick to the skin and do not smear or drip into the eyes.

Sprays: Work well in hairy places.

How Much Sunscreen Do I Need to Use?

Put sunscreen on dry skin 20 minutes before going outside. Put sunscreen onto all the areas of the skin that will not be covered by clothing.

When applying lotions, gels or creams, you will need one teaspoon for each area of the body: 1) chest 2) belly 3) upper back 4) lower back 5) right leg and foot 6) left leg and foot 7) right arm and shoulder 8) left arm and shoulder 9) face, neck and ears. This is NINE teaspoons to cover the whole body. Nine teaspoons is about 1.5 ounces and fills the palm of the hand.

To make sure sunscreen is spread evenly on your skin, you should apply two coats of sunscreen. When using sprays, spray once and let it dry. Then, spray over the area again. Rub in the spray to make sure you cover all areas of your skin.

When applying sunscreen to your face: Put sunscreen on only up to the bone around the outside rim of your eyes to avoid getting it in your eyes. Use a lip balm with an SPF of 30 or greater to protect your lips. This can also be used around the eye to keep sunscreen from getting into the eyes.

It is important to RE-APPLY SUNSCREEN:

- Every two hours while outdoors.
- After being in water such as a pool or lake.
- If you are sweating a lot.
- Even if the sunscreen bottle says it is water resistant.

What Type of Clothing Should I Wear?

Clothing may be an easier way to protect your skin. Light colored clothing is better than dark colored clothing because it does not trap heat. Tightly woven fabrics give the most protection to skin. If you can see your hand through the clothing, there is a good chance that it will let sun rays pass through to your skin. On hot days, loose-fitting clothing allows your body to keep cool while still protecting your skin. If you cannot wear long-sleeved shirts, make sure to wear a shirt that at least covers your back and shoulders. Whenever possible, wear long pants to protect your legs from the sun.

Hats with a wide brim all the way around (not a baseball cap) give sun protection to the back of the neck, ears, and most of the face. If you do not like to put sunscreen on your face, you can rely on a hat, but be sure to check out how much of your face is shadowed by the brim when you stand outside. The parts of your face that are not covered, like the lower cheeks, lips, chin and side of the neck, need sunscreen.

Sunglasses are important to wear to protect your eyes from the sun. Make sure to get a pair that protects your eyes from UVA and UVB sun rays. This way you will not have to squint when you are in the sun. Sunglasses also stop the sun from damaging your eyes.

Remember to Protect Your Skin Everyday

Find ways to remind yourself to bring a hat or sunglasses with you when you go outdoors.

- Put your hat on a rack by the door so you can quickly grab it on your way out and always keep a pair of sunglasses nearby.
- If you travel by car, keep a bottle of sunscreen in your glove compartment.
- If you have a purse or a gym bag that you take with you, put sunscreen in the bag.

It is important now more than ever for you to practice sun protection strategies. The medications you must take for your transplant give you a greater chance of developing skin cancer than before you had the surgery.

After a transplant, sun protection can seem unimportant in comparison with other health matters. But the chance of developing skin cancer is real and very serious.

Remember the ABC rules: Avoid being out in the sun at midday, **B**lock the rays by using sunscreen daily and **C**over up your skin by wearing the appropriate clothes and accessories. By making a few changes to your daily routine, you can greatly reduce your chance of getting skin cancer.