

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

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Memorial Sloan Kettering  
Cancer Center

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Age.

Personal history of skin cancer.

Exposure to industrial compounds.

Weakened immune system.

Other risk factors.

## Sun Exposure

Cumulative lifetime exposure to ultraviolet (UV) radiation from the sun is the major risk factor for skin cancer, including squamous cell carcinoma. The radiation reaches you by invisible rays from the sun. The 2 kinds of UV radiation are UVB and UVA.

UVB radiation causes sunburns and blistering. Scientists think UVB causes most skin cancers. Squamous cell carcinoma most often starts in people who were exposed to UVB radiation, especially if they had sunburns or blistering. People who work outside, spend time at the beach, or do outdoor sports have a higher risk for skin cancer.

UVA radiation also causes skin damage. UVA rays can travel through glass and clouds. Exposure to UVA rays can lead to early aging and skin cancer, according to the National Cancer Institute. Sun lamps and tanning beds also cause exposure to harmful UVA rays. You should avoid them.

## Sun-Damaged Skin and Actinic Keratosis

Squamous cell carcinoma can start as actinic keratosis (ak-TIH-nik KAYR-uh-TOH-sis), also called solar keratosis. Actinic keratosis is a precancerous lesion (skin that's not normal) caused by exposure to the sun. They look like rough, flat, grey or pink scaly patches of skin. Most don't become cancer. Lesions that become squamous cell carcinoma are usually raised above the skin's surface and feel firm.

## Fair Skin

You're at higher risk of getting skin cancer, including squamous cell carcinoma, if you have any of these:

Fair skin.

Blue or light-colored eyes.

Blond or red hair.

People with fair skin have less melanin, a skin pigment. Melanin gives skin, hair, and eyes their color. It also gives some natural protection from the sun. However, people with dark skin, who have more melanin, can still get squamous cell carcinoma. Skin that freckles or sunburns easily can be a warning sign you're at risk for squamous cell carcinoma.

## Age

It usually takes a long time from when your skin was exposed to harmful UV rays and when squamous cell carcinoma starts. This means older people are at a greater risk of getting the disease. As you age, it's also harder for your body to fix damage from the sun. This increases your cancer risk.

## Personal or Family History of Skin Cancer

You're at higher risk of getting squamous cell carcinoma if you already had skin cancer.

You're at higher risk of getting squamous cell carcinoma if family related to you by blood have had skin cancer. A family history of skin cancer in your blood relatives means your risk is higher than average.

## Exposure to Industrial Compounds

Less common risk factors include long-time exposure to:

Radiation

Coal tar

Arsenic

Other industrial compounds

## Weakened Immune System

People with a weakened immune system are at higher risk for basal cell carcinoma. This includes people who have HIV, [lymphoma](#), or [leukemia](#). It also includes people who are getting [chemotherapy](#), or drugs to prevent organ transplant rejection.

## Other Risk Factors for Squamous Cell Carcinoma

You're at higher risk if you have:

Long-term exposure to radiation.

A human papilloma virus (HPV) infection. This is a risk factor for squamous cell carcinoma on mucosal (mucus membrane) sites.

## Skin Cancer Prevention

The best way to protect yourself from skin cancer is to avoid ultraviolet (UV) light from the sun's rays. We recommend you:

Wear protective clothing such as long-sleeve shirts, wide-brimmed hats, and sunglasses.

Protect yourself from sun rays by wearing broad-spectrum sunscreen. Broad spectrum means it blocks both types of UV rays (UVA and UVB).

Apply sunscreen with an SPF of 30 or higher 30 minutes before going outside. Do this even on cloudy days and in the winter.

Apply a thick layer of sunscreen, about 2 tablespoons, on your face and body.  
Reapply sunscreen every 2 hours and after swimming, toweling, or sweating.  
Stay out of the sun from 10 a.m. to 4 p.m. when rays are the strongest.  
Get into the shade whenever possible.  
Do not use indoor tanning machines.

## Request an Appointment

Call [800-525-2225](tel:800-525-2225)

Available Monday through Friday, 8 a.m. to 6 p.m. (Eastern time)

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